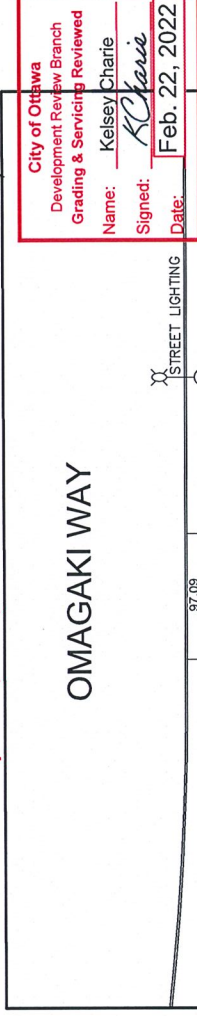


No excess drainage to be directed towards adjacent properties
Top of Foundation to be min. 0.15m above final grade
USF to have min. 1.5m cover around foundation or foundation shall be insulated

Match existing elevations with abutting properties
Grading to be 2-7%.
Grading over 7% to be terraced (max. 3H:1V)
Sleeved services required under retaining walls / footings / garage, and are recommended under porches, decks, and similar structures



Owner/Applicant

DCR/PHOENIX HOMES
Telephone # 723-9227
Plan # 4M-1618
Project name: PATHWAYS
Civic Address: 920 OMAGAKI WAY
House model: MADISON A

Bldg. Ht. _____ m
Lot coverage 39.87 %
Scale 1:250
Sod Area 259.55 m²
Asphalt Area 58 m²

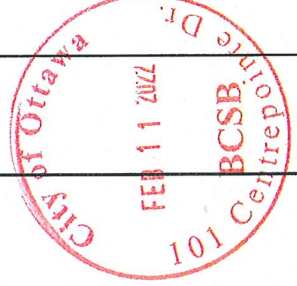
CHECKED/APPROVED BY: T.L.MAK ENG.
JAN 27, 2022



LOT 269 SITE/GRADING PLAN PATHWAYS PHASE 2

INDIVIDUAL LOT GRADING REVIEW SUMMARY FOR SITED HOUSE AS COMPARED WITH OVERALL SUBDIVISION PLAN

NOTE: THIS PLAN IS NOT A SURVEY PLAN OR SUBDIVISION PLAN WITHIN THE MEANING OF PLANNING ACT.



CHECKED/APPROVED BY: T.L.MAK ENG.
JAN 27, 2022

Adverse Soils Conditions

Address(&lot):spreading way, Omakigi, Dun Skipper, Miikana, ninaatik, Paakanaak, gartersnake, esban (only 4)
Subdivision, Phase, Builder: 4800 Bank St, Pathways, Phase 2, SRR-19-000006
Geotechnical Memo (s) & Report (s): Golder Associates 20145976(1147) dated June 30, 2020, ref Golder's geotech report, Remer and Iodone lands, 13-1121-0083 (1046)
Notes: grade raise only listed, no special considerations for pools or decks, additions required P.Eng per the geotech report, LWF only req'd if grade raise exceeded

September 20, 2021

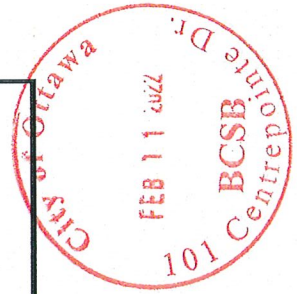
Permit Approvals - requirements at permit application	
Site Class A,B,C,D,E or F	REVIEWED By Terri Hunt at 2:44 pm, Sep 20, 2021 A, B, C, D - Standard Procedure unless dictated by other factors
Bearing Capacity Kpa	75 kPa or greater, part 9 fdtm - Standard Procedure unless dictated by other factors
Maximum Permissible Grade Raise Identified	Part 9 & 4 Foundation Requirements Geotechnical Engineer - Confirmation of part 9/4 foundation - Part 9 only - Lot specific bearing capacity values at the USF as a function of founding elevation, including footing restrictions - Part 4 only - Soil design bearing capacity, SLS and ULS at USF as a function of founding elevation, including footing restrictions - Footing sizes and the effects of long term groundwater lowering accounted for - Existing grade elevation, proposed finished grade elevation, maximum allowable grade raise, actual grade raise, proposed USF elevation - Calculated post construction settlements (include special requirements for foundation construction where calculated settlements are more than 25mm total and 20mm differential)
Additional for part 4	N/A
Light Weight Fill Required	Part 9&4 Foundation Requirements Geotechnical Engineer - Confirmation of part 9 Foundation (site conditions may dictate part 4 design as determined by geotechnical engineer) - Lot Specific, backfill, engineered fill details - Calculated post construction settlements, (include special requirements for footing and foundation wall construction where calculated settlements are more than 25mm total and 20mm differential).

City of Ottawa
Building Services Branch

MAY 04 2022

Building Code Reviewed

Signature



Adverse Soils Conditions

Address(&lot):spreadwing way, Omakigi, Dun Skipper, Miikana, ninaatik, Paakanaak, gartersnake, esban (only 4)
Subdivision, Phase, Builder: 4800 Bank St, Pathways, Phase 2, SRR-19-000006
Geotechnical Memo (s) & Report (s): Golder Associates 20145976(1147) dated June 30, 2020, ref Golders geotech report, Rem
Notes: grade raise only listed, no special considerations for pools or decks, additions required P.Eng per the geotech report, LWF only req'd if grade raise exceeded

September 20, 2021

Building Inspection - requirements at key inspection stages	
Site Class A,B,C,D,E or F	A, B, C, D - Standard Procedure unless dictated by other factors
Bearing Capacity Kpa	75 kPa or greater, part 9 fdtm - Standard Procedure unless dictated by other factors
Maximum Permissible Grade Raise Identified	Part 9 or 4 fdtm Excavation Inspection - Geotechnical Engineer Confirm bearing capacity at USF meets/exceeds minimum design requirements. Final Inspection - Geotechnical Engineer • Lot specific letter signed under professional seal confirming that the grade raise, is as recommended (reference all geotechnical reports) • Expected post construction settlement limits of 25 mm total and 20 mm differential will not be exceeded.
Additional for part 4	N/A
Light Weight Fill Required	Part 9 or 4 foundation design Excavation Inspection - Geotechnical Engineer Confirm bearing capacity at USF meets/exceeds minimum design requirements. Framing Inspection - Geotechnical Engineer/Designate Lot specific site review memo confirming light weight fill has been placed in accordance with geotechnical engineers recommendations. Final Inspection - Geotechnical Engineer • Lot specific letter signed under professional seal confirming that the installed backfill, lightweight fill, granular fill are installed as recommended (reference all geotechnical reports) • Expected post construction settlement limits of 25 mm total and 20 mm differential will not be exceeded.

REVIEWED

By Terri Hunt at 2:44 pm, Sep 20, 2021

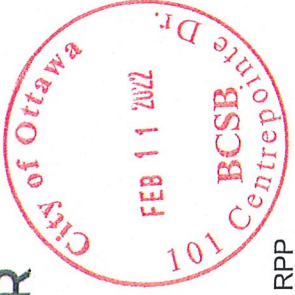




GOLDER

REVIEWED

By Terri Hunt at 2:44 pm, Sep 20, 2021



DATE

June 30, 2020

TO

Erin O'Connor, MCIP, RPP
Leitrim South Holdings Inc.

FROM

Ali Ghirian, P.Eng.; Bill Cavers, P.Eng.

**GRADE RAISE REVIEW (REV. 2)
PATHWAYS AT FRIENDLY CREEK RESIDENTIAL DEVELOPMENT – PHASE 2
4800 BANK STREET, OTTAWA, ONTARIO**

Project No.
20145976(1147)

EMAIL Ali_Ghirian@golder.com;
William_Cavers@golder.com

City of Ottawa
Services Branch
MAY 04 2022
Building Code Reviewed

This technical memorandum provides a detailed geotechnical review of the proposed site grading including a summary table for each individual lot/block, for Phase 2 of the Pathways residential development located at 4800 Bank Street in Ottawa, Ontario

The attached Summary of Design Details table, as well as the following sections provides our geotechnical recommendations pertaining to the grading of the site.

Subsurface Conditions

Golder Associates previously carried out a geotechnical investigation for the proposed development and the results of that investigation were provided in the following report:

- *Golder report titled "Geotechnical Investigation, Proposed Residential Development, Remer and Idone Lands, Ottawa, Ontario", dated January 2017 (report number 13-1121-0083 (1046)).*

Based on the results of the geotechnical investigation, in general, the subsurface conditions on this site consist of topsoil or peat (at the western portion of the site) overlying sands, silts, and followed by bouldery glacial till, which is in turn underlain by bedrock. Localized thin layers of silty clay were encountered below the peat or topsoil within the extreme southwest portion of the site.

The depth to the bedrock surface varies from about 2 m to greater than 7 m below the ground surface, generally increasing in depth from east to west.

Grading Plan Review

The street, block, lot or part numbering used in the attached Summary of Design Details tables was obtained from the following grading plans prepared by IBI Group for this site, and associated civic addressing plan:

- Grading Plan, Project No. 33956, Drawing Nos. 210 to 214, Revision 10, dated April 28, 2020.

The existing and finished grades as well as the Underside of Footing (USF) elevations for the proposed development are provided on the grading plan drawing referenced above.

Based on recommendations provided in our geotechnical report, the maximum permissible grade is 2.5 m for the proposed development.

Golder Associates Ltd.
1931 Robertson Road Ottawa, Ontario, K2H 5B7 Canada

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golder.com

REVIEWED

By Terri Hunt at 2:44 pm, Sep 20, 2021

The finished grades were reviewed for each individual block/lot in comparison to the permissible grade raises and the proposed grading plan for the proposed Phase 2 development was found to be in accordance with the guidelines and recommendations provided in the geotechnical report prepared for this site and, as such, are considered acceptable from a geotechnical point of view.

Frost Protection

The soils at this site are considered to be highly frost susceptible. All exterior perimeter foundation elements or foundation elements in unheated areas should therefore be provided with a minimum of 1.5 m of earth cover for frost protection purposes. Isolated, unheated exterior footings adjacent to surfaces which are cleared of snow cover during winter months should be provided with a minimum of 1.8 m of earth cover.

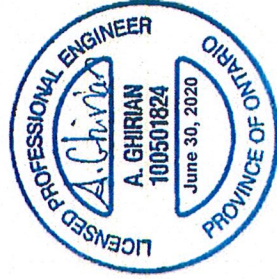
Based on the review of the proposed finished grades and the USF elevation, as highlighted on the attached Summary of Design Details table, Block 35 does not meet the minimum frost cover requirements, and as such, equivalent insulation needs to be provided at the rear of Block 35.

Closure

We trust that this memo provides sufficient information for your present requirements. If you have any questions concerning this memo, please do not hesitate to contact the undersigned.

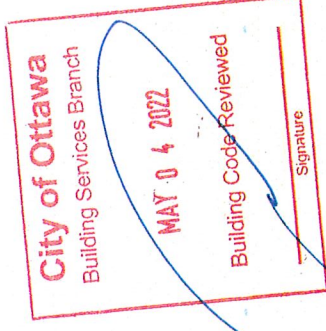
Yours truly,

Golder Associates Ltd.



A. Ghirian

Ali Ghirian, P.Eng.
Geotechnical Engineer



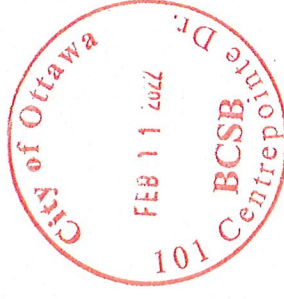
Bill Cavers

Bill Cavers, P.Eng.
Associate, Senior Geotechnical Engineer

AG/WC/hdw

[https://golderassociates.sharepoint.com/sites/126333/project/files/6 deliverables/tech memo/20145976 \(1147\)-001-tm-rev2- pathways phase 2 grade raise review 30-06-2020.docx](https://golderassociates.sharepoint.com/sites/126333/project/files/6%20deliverables/tech%20memo/20145976%20(1147)-001-tm-rev2-pathways%20phase%20grade%20raise%20review%2030-06-2020.docx)

Attachments: Table 1 – Summary of Design Details (Rev. 2)



Grading Plan Summary for
Pathways Phase 2
Leitrim South Holdings Inc.

REVIEWED
By Terri Hunt at 2:44 pm, Sep 20, 2021

SUMMARY OF DESIGN DETAILS

Grating Plan Summary for
Pathways Phase 2
Lottim South Holdings Inc.

JOB #: 20142688-1147
DATE: 6/30/2020

REVIEWED
By Terri Hunt at 2:44 pm, Sep 20, 2021

Reference	Street Name	Street #	Block #	Part #	Lot #	Existing Grades				Proposed Finished Grades				Calculated Grade Raises				USF				Front Grade	Rear Grade	Limit	Drawing No.	
						FL	FR	RR	AVE	FL	FR	RR	AVE	FL	FR	RR	AVE	FL	FR	RR	AVE					FL
210	Mikana Road	713	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	717	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	719	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	721	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	723	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	725	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	727	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	729	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	731	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	733	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	735	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	737	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	739	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	741	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	743	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	745	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	747	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	749	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	751	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	753	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	755	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	757	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	759	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	761	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	763	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	765	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	767	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	769	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	771	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	773	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	775	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	777	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	779	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	781	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	783	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	785	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	787	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	789	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	791	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	793	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	795	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	797	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	799	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	801	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	803	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	805	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	807	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	809	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	811	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	813	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	815	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	817	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	819	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	821	52			94.26	93.93	94.16	93.80	94.04	93.10	95.10	94.80	94.64	2.50	0.84	1.17	0.94	1.00	No	No	No	2.0	2.0	1.7	Yes
210	Mikana Road	823	52			94.26	93.93	94.16</																		



REVIEWED
By Terri Hunt at 2:44 pm, Sep 20, 2021

JOB #: 20142688-1147
DATE: 6/30/2020

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REVIEWED

Grading Plan Summary for
Pathways Phase 2
Lettim South Holdings Inc.

REVIEWED

1

JOB #: 20142688-1147
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Grading Plan Summary for
Pathways Phase 2
Lettim South Holdings Inc.

SUMMARY OF DESIGN DETAILS

Grading Plan Summary for

2

Leitrim South Holdings Inc.

JOB #: 20142688-1147
DATE: 6/30/2020

REVIEWED

By Terri Hunt at 2:44 pm, Sep 20, 2021

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