



# **J.R. Paine & Associates Ltd.**

CONSULTING AND TESTING ENGINEERS

EDMONTON – GRANDE PRAIRIE – PEACE RIVER

2304 119 Avenue NE  
Edmonton, Alberta  
T6S 1B3

December 5, 2024  
File No. 3179-599

WSP CANADA INC.  
Suite 1200, 10909 Jasper Avenue NW  
Edmonton, Alberta  
T5J 3L9

**ATTENTION: Larissa McClure, P. Eng.**

Dear Madam:

**Re:   Engineered Fill Construction  
      Goodridge Corners Phase 3  
      Edmonton, Alberta**

J.R. PAINE & ASSOCIATES LTD. (JRP) has undertaken the construction quality control testing and monitoring of engineered fill constructed in the above noted subdivision. The objective of the engineered fill was to accommodate residential housing construction utilizing footing foundations. Authorization to proceed was granted by WSP Canada Inc. Site grading for Goodridge Corners Phase 3 was completed in June through July, 2024.

Prior to the placement of engineered fill, our firm checked stripping on a part-time, as-required basis. The engineered fill requirements applied to all lot fill placed to finished construction elevation, which is understood to be 0.5 metres lower than the design finished front of lot elevation.

The placement of the engineered fill was monitored to verify material suitability and to ensure compliance with the specified compaction requirements. The recommended compaction of the engineered fill was specified as a minimum of 98 percent of the corresponding Standard Proctor Density. Lift thickness was specified as 150 millimetres or less. A description of the lots in the subject subdivision containing engineered fill is as follows:

**Block 3: Lots 13 to 47 inclusive**

**Block 4: Lots 2 to 25 inclusive & Lots 44 to 55 inclusive**

On the basis of the test results obtained and the monitoring conducted for lot fill placed below 0.5 metres of design finished front of lot elevation, engineered fill compliance has been achieved for the lots described previously. Footing foundations bearing directly on the engineered fill are deemed adequate. An allowable bearing value of 100 kilopascals for continuous footings and 120 kilopascals for spread footings may be applied to the design of footing foundations. In addition, the recommended foundation design for the subject engineered fill lots is as follows.

- Strip Footings - minimum 450 millimetres wide by 150 millimetres deep
- Basement Walls - minimum 200 millimetres thick, reinforced with 2-10M horizontal rebar placed top and bottom
- Spread Footings - designed by others utilizing above bearing capacity

This design applies to wood-framed single family houses of maximum 2 storey. It is reiterated that these values and designs apply only to footings bearing directly on engineered fill at least 0.5 metres below the design finished front of lot elevation, and only in the lots described previously.

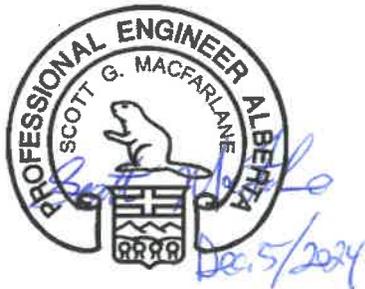
As a reminder, the lot purchasers should be made aware of the engineered fill and foundation design recommendations prior to house construction. Normally, provided the footing elevation is as stated, no further site inspection is envisioned to be required by our firm during house construction on these subject lots. However, if soft or organic soil is observed at footing elevation after the basement excavation is complete, our firm should be contacted to inspect the site and provide foundation recommendations. Please endeavour to note the engineered fill situation during all future communications with our firm with respect to the subject lots.

We trust this information is satisfactory. If you should have any further questions, please contact our office.

Respectfully Submitted:

Cory Watson, C.E.T., Senior Technologist  
Engineered Fill Manager

Reviewed by,



Scott MacFarlane, P.Eng.

APEGA Member #89667

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<b>PERMIT TO PRACTICE</b>	
<b>JR PAINE &amp; ASSOCIATES LTD.</b>	
RM SIGNATURE:	<u><i>[Signature]</i></u>
RM APEGA ID #:	<u>46743</u>
DATE:	<u>Dec 5 2024</u>
<b>PERMIT NUMBER: P000401</b>	
The Association of Professional Engineers and Geoscientists of Alberta (APEGA)	

