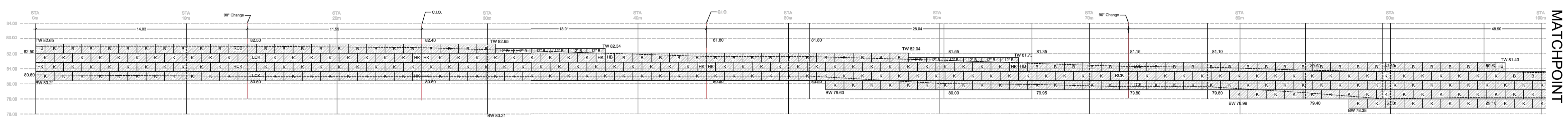
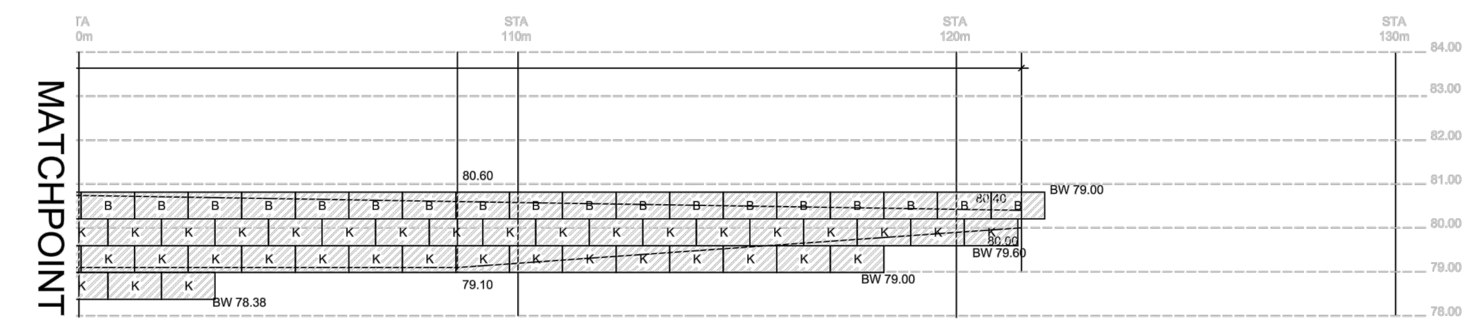
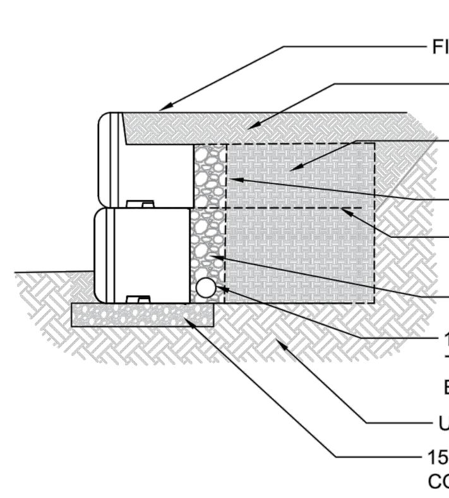
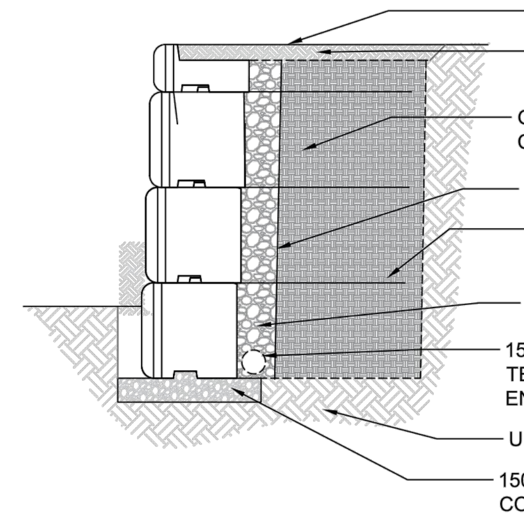
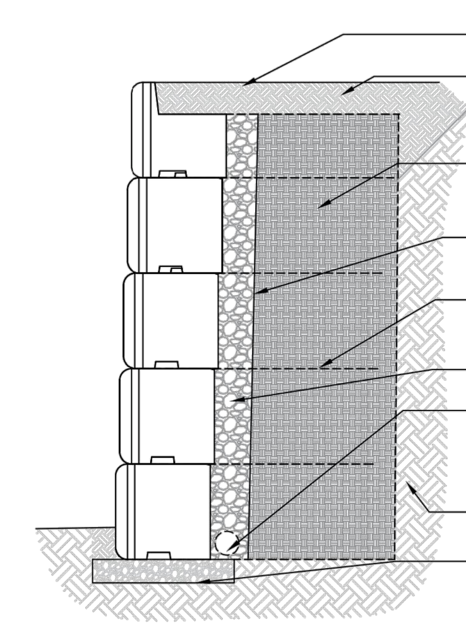










DNM Stone Terra™ PRELIMINARY BLOCK COUNT

12" BENCH	12" B	12
FULL BENCH	B	83
HALF BENCH	HB	4
LEFT BENCH	LCB	1
RIGHT BENCH	RCB	1
12" KEYED	12" K	0
FULL KEYED	K	254
HALF KEYED	HK	9
LEFT KEYED	LCK	3
RIGHT KEYED	RCK	2

SG350 - 5 ROLLS

GENERAL NOTES:

1. THE FOLLOWING NOTES SHALL GOVERN UNLESS NOTED OTHERWISE ON THE DRAWINGS.
2. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL PROJECT DRAWINGS AND CONTRACT DOCUMENTS.
3. PRIOR TO COMMENCING WORK THE CONTRACTOR WILL VERIFY ALL MEASUREMENTS AND CONDITIONS ON SITE AND REPORT TO THE ENGINEER ANY DISCREPANCIES OR UNSATISFACTORY CONDITIONS THAT MAY AFFECT THE PROPER COMPLETION OF WORK.
4. SEE FIELD CONSTRUCTION MANUAL FOR INSTALLATION DETAILS.
5. DRAWINGS ARE METRIC AND NOT TO BE SCALED.
6. OUTSIDE CURVES WILL REQUIRE BACKS OF BLOCKS TO BE TRIMMED.
7. CONTRACTORS CONSTRUCTION LOADS MUST NOT EXCEED THE ABOVE DESIGN LOADS. DESIGN LOADS MAY ONLY BE APPLIED AFTER THE WALL HAS BEEN INSTALLED AND APPROVED.

SOIL AND BACKFILL:

1. SPECIFIED SOIL BEARING CAPACITY MUST BE VERIFIED BY A GEOTECHNICAL ENGINEER PRIOR TO COMMENCING CONSTRUCTION OF THE FOUNDATION. CONDITIONS FOUND TO BE UNSATISFACTORY IN BEARING CAPACITY MUST BE REPORTED TO THE PROJECT GEOTECHNICAL ENGINEER.
2. FOUNDATIONS MUST BEAR ON SUITABLE MATERIAL.
3. BACKFILL TO BE INSTALLED AND COMPACTED IN LIFTS NOT GREATER THAN 200mm WHERE HEAVY EQUIPMENT IS USED AND 150mm WHERE HAND OPERATED EQUIPMENT IS USED. HAND OPERATED EQUIPMENT MUST BE USED WHEN WITHIN 1m OF THE WALL.

R0	2021-01-26	ISSUED FOR APPROVALS
NO.	DATE	DESCRIPTION

REVISION/ISSUED:

..\..\DNM General\AJW logo.jpg

100 MATHESON BLVD. E., UNIT #201,
MISSISSAUGA, ON. L4Z 2G7
Phone: (905)-840-0530
Fax: (905)-212-9012

Retaining Wall Systems

4795 19TH SIDEROAD
KING, ON L7B 0E4
Phone: (905)-864-9808
Fax: (905)-864-9818

PROJECT: OLIGO DEVELOPMENTS

C:\Users\Estimator\Desktop\DNM General\DNM_LOGO.jpg

LOCATION: 996-B ST. AUGUSTIN RD. EMBRUN, ON

DRAWING DESCRIPTION: ELEVATION, CROSS SECTIONS, & LAYOUT

REFERENCE FILE: BASED ON INFORMATION FOUND ON: GRADING PLAN/20-035-C200/DRAWN BY: BF+GB/DATE:02-2021

DRAWN BY: DS

CHECKED BY:

DATE STARTED: 2021-02-26

PROJECT NO. EST12897

SHEET NO. 1

Systems Ltd
Retaining Walls

REA Analysis

Project: Olgin Development
Location: Ottawa
Designer: ds
Date: 2021-02-26
Section: Section 1
Design Method: CAN_CSA_S6
Design Unit: StoneTerra

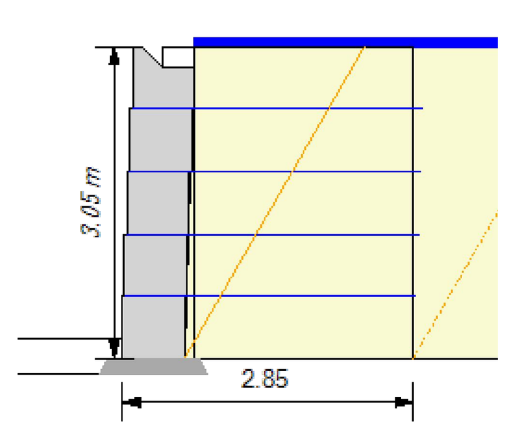
SOIL PARAMETERS

	φ	coh	γ
Reinforced Soil:	30 deg	0.00 kNpsm	18.85 kNpcm
Retained Soil:	30 deg	0.00 kNpsm	18.85 kNpcm
Foundation Soil:	30.00 deg	0.00 kNpsm	18.85 kNpcm

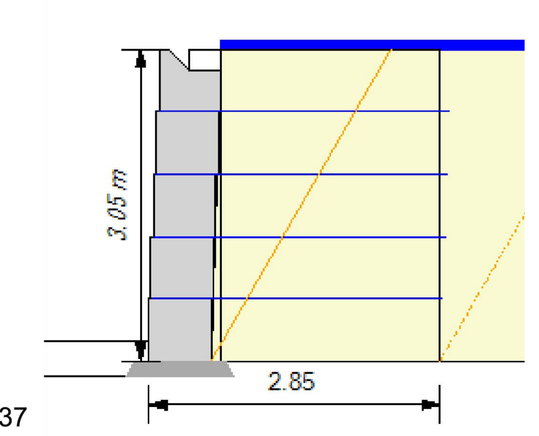
Leveling Pad: Crushed Stone

GEOMETRY

Design Height:	3.05 m	Live Load:	2.40 kNpsm
Wall Batter/Tilt:	2.4/ 0.00 deg	Live Load Offset:	0.00 m
Embedment:	0.20 m	Live Load Width:	6.00 m
Leveling Pad Depth:	0.15 m	Dead Load:	0.00 kNpsm
Slope Angle:	0.0 deg	Dead Load Offset:	0.0 m
Slope Length:	0.0 m	Dead Load Width:	0.0 m
Slope Toe Offset:	0.0 m	Leveling Pad Width:	0.91 m



Systems Ltd
Retaining Walls



RESULTS

CDR Sliding:	1.54 (fnd)	CDR Bearing:	3.61
Eccentricity (e/L):	0.13	Bearing:	83.09; srvc 71.37
FoS Connection:	1.68		

ID	Height	Length	Geogrid.	Tr (Ta*Rf)	% Cvrg	EP (Pa)	LL (Pql)	DL (Pqd)	TMax	CDR Str	Tallow Cn	CDR Pk	CDR PO/	CDR Sldg	Grid
4	2.44	2.85	SG350	32.04	100	3.30	1.25	0.00	4.54	7.05	11.31	2.49	1.74/[3.30]	93.20	0.93
3	1.83	2.85	SG350	32.04	100	5.85	0.83	0.00	6.68	4.80	15.62	2.34	2.64/[5.85]	29.74	1.26
2	1.22	2.85	SG350	32.04	100	8.77	0.83	0.00	9.59	3.34	19.93	2.08	3.33/[8.77]	14.87	1.59
1	.61	2.85	SG350	32.04	100	11.68	0.83	0.00	12.51	2.56	21.06	1.68	2.74/[11.68]	9.07 [1.54]	1.91

Column Descriptions:

- Ta: allowable geogrid strength
- Rc %: percent coverage for geosynthetics
- EP (Pa) internal active earth pressure
- LL (Pql) earth pressure due to live load surcharge
- DL (Pqd) earth pressure due to dead load surcharge
- Tmax maximum earth pressure on geosynthetic layer
- FSstr factor of safety on geogrid strength (Ta/Tmax)
- Ta cn allowable tension on the connection
- FS Pkcn, factor of safety on the connection (Ta cn/Tmax)
- FS PO, factor of safety on pullout (Ta pullout/(Tmax - LL)
- Grid Embedment, depth of embedment beyond the theoretical failure plane.

ENGINEERING STAMP

NO.	REVISION	DATE (DD/MM/YYYY)
#8		
#7		
#6		
#5		
#4		
#3		
#2	ISSUED FOR SPA	04 / 02 / 2022
#1	ISSUED FOR SPA	19 / 03 / 2021

BLANCHARD LETENDRE
ENGINEERING
767, Notre Dame, Local 42, Embrun, Ontario, K0A 1W1
(613) 693-0700 blengineering.ca

CLIENT:

BRIDOR DEVELOPMENTS
996-B ST. AUGUSTIN RD.
EMBRUN, ON

PROJECT:

NEW RESIDENTIAL DEVELOPMENT
2396 CLEROUX CRES,
OTTAWA, ON

DRAWING:

DETAILS - 1

PAPER FORMAT:	24x36
DRAWN BY:	BF + GB
CHECKED BY:	GB
DATE:	02-2022
SCALE:	
PROJECT NUMBER:	20-305

PAGE: C502

D07-12-21-0081

DWG # **18569**