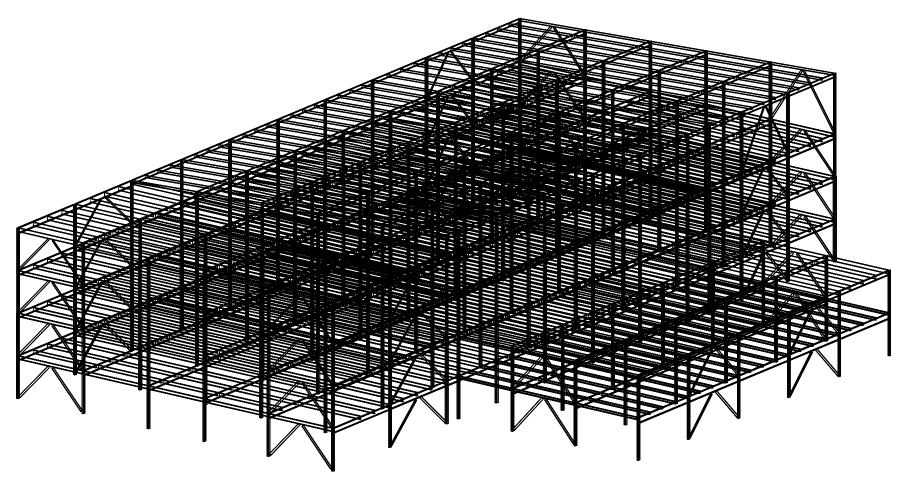
FRUITLAND VERTICAL FARM AND MARKETPLACE

1 FRUITLAND RD, STONEY CREEK, ON L8E 5A6



PRODUCED BY AN AUTODESK STUDENT VERSION

	LIST OF DRAWING
SHEET	TITLE
S1	GENERAL NOTES
S2	LEVEL 1 FRAMING PLAN
S3	LEVEL 2 FRAMING PLAN
S4	LEVEL 3 FRAMING PLAN
S5	LEVEL 4 FRAMING PLAN
S6	ROOF FRAMING PLAN
S7	EAST AND WEST ELEVATION
S8	NORTH AND SOUTH ELEVATION
S9	JOIST AND GIRDER SCHEDULE
S10	COLUMN SCHEDULE
S11	CONNECTION DETAILS

CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND JOB SITE CONDITIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO COMMENCING CONSTRUCTION. ALL DRAWINGS AND SPECIFICATIONS AND RELATED 1 20/01/20 ISSUED FOR REVIEW DATE DESCRIPTION PRODUCED BY AN AUTODESK STUDENT VERSION greentech KEVIN LUONG DAVID MOORE REGAN O'HENLY OLIVIA PARSONS DESMOND YEUNG DAN ZHAO LOCATION STONEY CREEK, ON PROJECT FRUITLAND VERTICAL FARM AND MARKETPLACE DRAWING TITLE TITLE PAGE PROJECT No: DRAWING No 001 DATE: MARCH 9 2020 SCALE: DRAWING BY: KL & DM APPROVED BY:

KL & DM

GENERAL NOTES

1. GENERAL

- 1.1. BEFORE PROCEEDING WITH THE WORK, VERIFY ALL DIMENSIONS WITH THE ACTUAL CONDITIONS AND REPORT DISCREPANCIES TO THE CONSULTANT.
- 1.2. PROVIDE LABOUR, MATERIALS, PLANT AND EQUIPMENT TO COMPLETE ALL STRUCTURAL WORK INDICATED ON THE CONTRACT DOCUMENTS.
- 1.3. THESE DRAWINGS SHOW THE COMPLETED STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR SAFETY ON THE JOB SITE, AND DESIGN, INSTALLATION AND SUPERVISION OF ALL TEMPORARY BRACING, SHORING, FORM WORK AND FALSE WORK, REQUIRED TO COMPLETE THE WORK.
- 1.4. ANY DAMAGE TO EXISTING BUILDING OR TO NEIGHBORING PROPERTIES IS NOT PERMITTED. THE CONTRACTOR IS RESPONSIBLE FOR MAKING GOOD ALL UNAVOIDABLE DAMAGE.
- 1.5. THE USE OF THESE DRAWINGS SHALL BE STRICTLY LIMITED TO THE INSTRUCTIONS IN THE REVISIONS BLOCK. BUILDING FROM THESE DRAWINGS SHALL PROCEED ONLY WHEN MARKED "FOR CONSTRUCTION".

2. REFERENCE STANDARDS/CODES AND ACTS:

- 2.1. CONFORM WITH THE ONTARIO BUILDING CODE LATEST EDITION AND AMENDMENTS, AND ANY APPLICABLE ACTS OF ANY AUTHORITY HAVING JURISDICTION, AND THE FOLLOWING:
- 2.2. ALL MATERIALS, CONSTRUCTION AND WORKMANSHIP SHALL CONFIRM TO CSA S16-14 AND CSA G40.21.
- 2.3. DO WELDING WORK TO CSA W59-18 UNLESS SPECIFIED OTHERWISE.
- 2.4. COMPLY WITH OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS.
- 2.5. WHERE THERE ARE DIFFERENCES IN REQUIREMENTS OF THE DOCUMENTS AND THE STANDARDS, CODES AND ACTS, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN.

3. MATERIALS:

- 3.1. STRUCTURAL STEEL FOR SECONDARY BEAMS (JOISTS) AND GIRDERS TO BE ASTM GRADE A992
- 3.2. CSA G40.21 350W STEEL ANGLES TO BE USED FOR BRACING
- 3.3. COLUMNS TO BE ASTM GRADE A992 STEEL
- 3.4. BASE PLATES TO BE CAN/CSA G40.20/G40.21 GRADE 300W STEEL
- 3.5. ALL BOLTS TO BE $\frac{3}{4}$ " ASTM A325 BOLTS

4. QUALITY CONTROL:

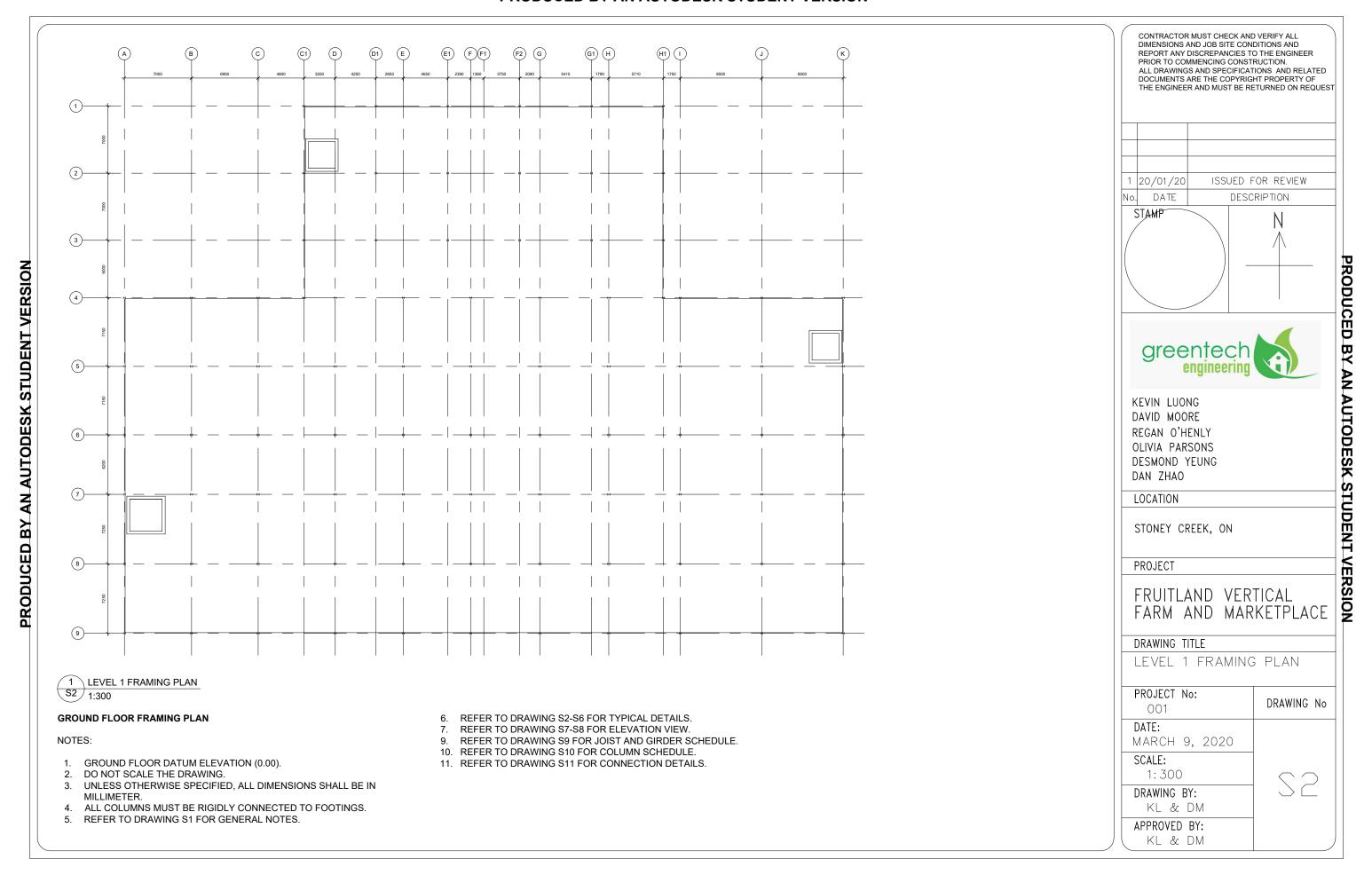
- 4.1. IMPLEMENT A SYSTEM OF QUALITY CONTROL TO ENSURE THAT MINIMUM STANDARDS SPECIFIED HEREIN ARE ATTAINED.
- 4.2. BRING TO ATTENTION OF ENGINEER ANY DEFECTS IN THE WORK OR DEPARTURES FROM CONTRACT DOCUMENTS, WHICH MAY OCCUR DURING CONSTRUCTION. ENGINEER WILL DECIDE UPON CORRECTIVE ACTION AND GIVE RECOMMENDATIONS IN WRITING.
- 4.3. ENGINEER'S GENERAL REVIEW DURING CONSTRUCTION AND INSPECTION AND TESTING BY INDEPENDENT INSPECTION AND TESTING AGENCIES REPORTING TO ENGINEER ARE BOTH UNDERTAKEN TO INFORM THE OWNER/CLIENT OF CONTRACTOR'S PERFORMANCE AND SHALL IN NO WAY RELIEVE CONTRACTOR OF CONTRACTUAL RESPONSIBILITIES.

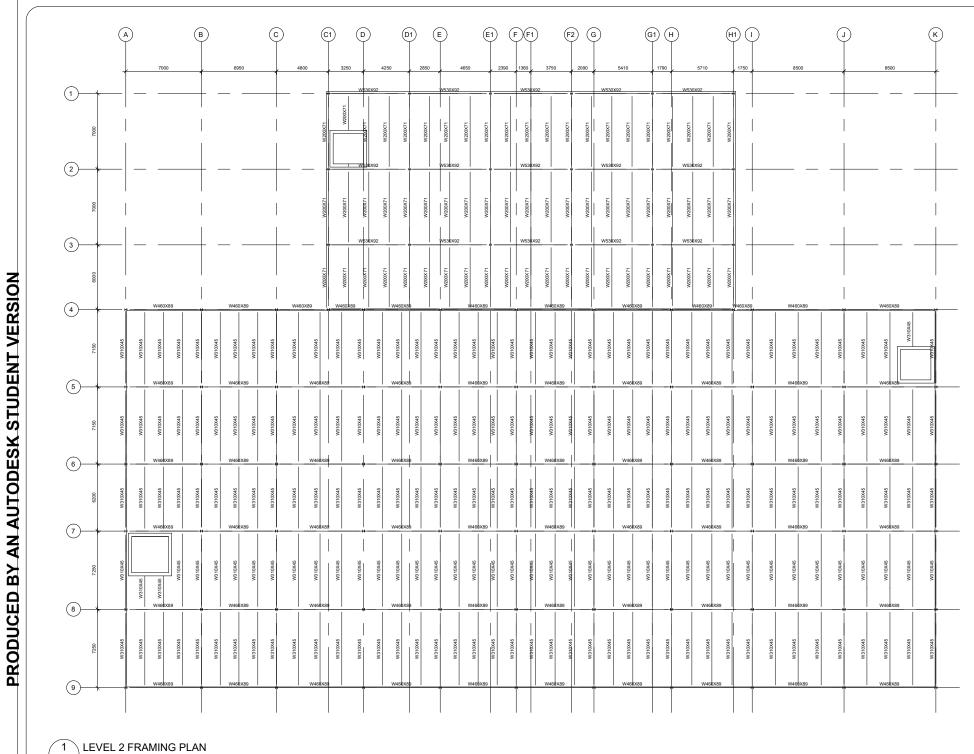
DRAWING LIST

- S1 GENERAL NOTES
- S2 LEVEL 1 FRAMING PLAN
- S3 LEVEL 2 FRAMING PLAN
- S4 LEVEL 3 FRAMING PLAN
- S5 LEVEL 4 FRAMING PLAN
- S6 ROOF FRAMING PLAN
- S7 EAST AND WEST ELEVATION
- **S8 NOTH AND SOUTH ELEVATION**
- S9 JOIST AND GIRDER SCHEDULE
- S10 COLUMN SCHEDULE
- **S11 CONNECTION DETAILS**

CONTRACTOR MUST CHECK AN DIMENSIONS AND JOB SITE CO REPORT ANY DISCREPANCIES I PRIOR TO COMMENCING CONS' ALL DRAWINGS AND SPECIFICA DOCUMENTS ARE THE COPYRIG THE ENGINEER AND MUST BE R	NDITIONS AND TO THE ENGINEER TRUCTION. ITIONS AND RELATED GHT PROPERTY OF
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Greentech engineering KEVIN LUONG DAVID MOORE REGAN O'HENLY OLIVIA PARSONS DESMOND YEUNG DAN ZHAO	
LOCATION	
STONEY CREEK, ON	
FRUITLAND VER FARM AND MAF	
GENERAL NOTES	
PROJECT No:	DRAWING No
DATE: March 9, 2020	
SCALE: DRAWING BY:	- - \$1
KI & DM	

APPROVED BY: KL & DM





(S3)_{1:300}

SECOND FLOOR FRAMING PLAN

NOTES:

- 1. SECOND FLOOR DATUM ELEVATION +4000.00 mm RELATIVE TO THE GROUND FLOOR, EXCEPT OTHERWISE STATED.
- 2. DO NOT SCALE THE DRAWING.
- 3. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS SHALL BE IN MILLIMETER.
- 4. SUPERIMPOSED LOADS USED IN DESIGN: DEAD LOAD: 1.72 kPa

- LIVE LOAD: 4.8 kPa
- 5. SELF WEIGHT OF STRUCTURE USED IN DESIGN:

DECK & SLAB: 1.84 kPa

FRAMING: 0.5 kPa

6. THICKNESS OF STEEL DECK AND CONCRETE SLAB: STEEL DECK: 1.12 mm

CONCRETE SLAB: 90 mm

- MAINTAIN THE SLAB THICKNESS, EXCEPT OTHERWISE STATED.
- REFER TO DRAWING S1 FOR GENERAL NOTES.
- 9. REFER TO DRAWING S2-S6 FOR TYPICAL DETAILS.
- 10. REFER TO DRAWING S7-S8 FOR ELEVATION VIEW.

- 11. REFER TO DRAWING S9 FOR JOIST AND GIRDER SCHEDULE.
- 12. REFER TO DRAWING S10 FOR COLUMN SCHEDULE.
- 13. REFER TO DRAWING S11 FOR CONNECTION DETAILS.

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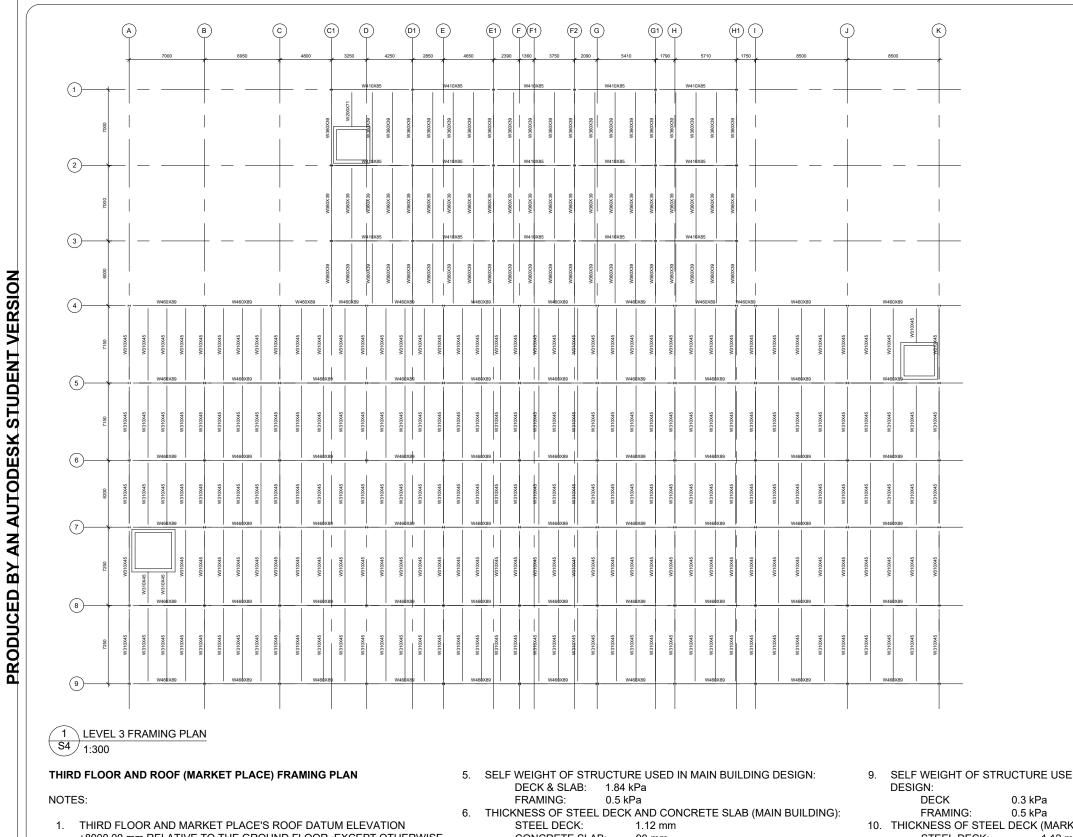
LOCATION

STONEY CREEK, ON

PROJECT

FRUITLAND VERTICAL FARM AND MARKETPLACE

DRAWING TITLE	
LEVEL 2 FRAMINO	G PLAN
PROJECT No: 001	DRAWING No
DATE: March 9, 2020	
SCALE: 1: 300	
DRAWING BY: KL & DM	
APPROVED BY:	



CONCRETE SLAB: 90 mm

MAINTAIN THE SLAB THICKNESS, EXCEPT OTHERWISE STATED.

SUPERIMPOSED LOADS USED IN ROOF (MARKET PLACE) DESIGN: DEAD LOAD: 0.32 kPa

LIVE LOAD: 1.0 kPa SNOW & RAIN LOAD: 5.48 kPa SELF WEIGHT OF STRUCTURE USED IN ROOF (MARKET PLACE)

10. THICKNESS OF STEEL DECK (MARKET PLACE): STEEL DECK: 1.12 mm

11. REFER TO ARCHITECTURAL DRAWING FOR ROOF SLOPE. 12. REFER TO DRAWING S1 FOR GENERAL NOTES.

13. REFER TO DRAWING S2-S6 FOR TYPICAL DETAILS. 14. REFER TO DRAWING S7-S8 FOR ELEVATION VIEW.

17. REFER TO DRAWING S11 FOR CONNECTION DETAILS

15. REFER TO DRAWING S9 FOR JOIST AND GIRDER SCHEDULE. 16. REFER TO DRAWING S10 FOR COLUMN SCHEDULE.

REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO COMMENCING CONSTRUCTION. ALL DRAWINGS AND SPECIFICATIONS AND RELATED DOCUMENTS ARE THE COPYRIGHT PROPERTY OF THE ENGINEER AND MUST BE RETURNED ON REQUEST 1 20/01/20 ISSUED FOR REVIEW DATE DESCRIPTION STAMP PRODUCED BY AN AUTODESK STUDENT VERSION KEVIN LUONG DAVID MOORE REGAN O'HENLY OLIVIA PARSONS DESMOND YEUNG DAN ZHAO LOCATION STONEY CREEK, ON

CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND JOB SITE CONDITIONS AND

PROJECT

DRAWING TITLE

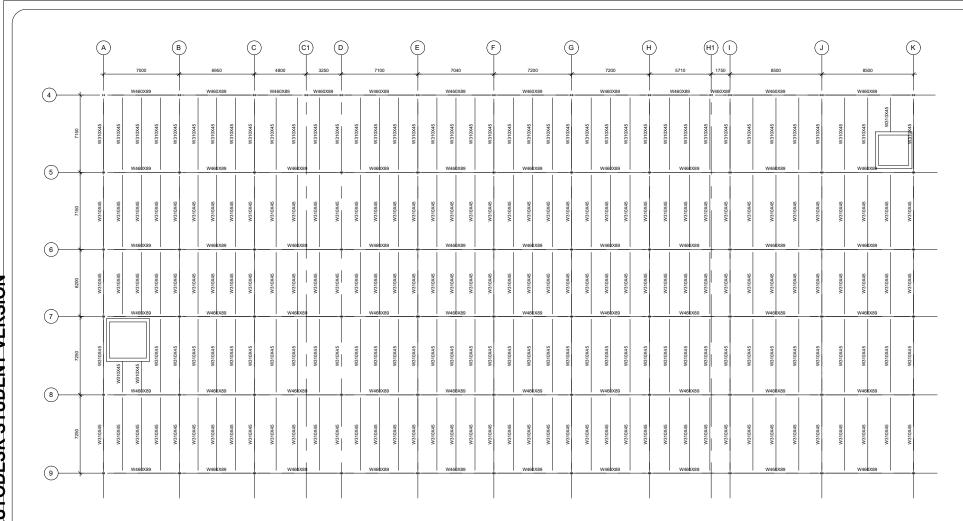
KL & DM

FRUITLAND VERTICAL FARM AND MARKETPLACE

LEVEL 3 FRAMIN	G PLAN
PROJECT No:	DRAWING N
DATE: March 9, 2020	
SCALE: 1: 300	
DRAWING BY: KL & DM	34
APPROVED BY:	

- +8000.00 mm RELATIVE TO THE GROUND FLOOR, EXCEPT OTHERWISE
- 2. DO NOT SCALE THE DRAWING.
- UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS SHALL BE IN MILLIMETER.
- SUPERIMPOSED LOADS USED IN MAIN BUILDING DESIGN: DEAD LOAD: 1.72 kPa

LIVE LOAD: 4.8 kPa



1 LEVEL 4 FRAMING PLAN S5 1:300

FOUR FLOOR FRAMING PLAN

NOTES:

- 1. FOUR FLOOR DATUM ELEVATION +12000.00 mm RELATIVE TO THE GROUND FLOOR, EXCEPT OTHERWISE STATED.
- 2. DO NOT SCALE THE DRAWING.
- 3. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS SHALL BE IN MILLIMETER.
- 4. SUPERIMPOSED LOADS USED IN DESIGN:

DEAD LOAD: 1.72 kPa LIVE LOAD: 4.8 kPa

5. SELF WEIGHT OF STRUCTURE USED IN DESIGN:

DECK & SLAB: 1.84 kPa

0.5 kPa FRAMING:

6. THICKNESS OF STEEL DECK AND CONCRETE SLAB:

STEEL DECK: 1.12 mm

CONCRETE SLAB: 90 mm

- 7. MAINTAIN THE SLAB THICKNESS, EXCEPT OTHERWISE STATED.
- REFER TO DRAWING S1 FOR GENERAL NOTES.
- REFER TO DRAWING S2-S6 FOR TYPICAL DETAILS.
- 10. REFER TO DRAWING S7-S8 FOR ELEVATION VIEW.
- 11. REFER TO DRAWING S9 FOR JOIST AND GIRDER SCHEDULE.
- 12. REFER TO DRAWING S10 FOR COLUMN SCHEDULE.
- 13. REFER TO DRAWING S11 FOR CONNECTION DETAILS.

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KEVIN LUONG DAVID MOORE REGAN O'HENLY OLIVIA PARSONS DESMOND YEUNG DAN ZHAO

LOCATION

STONEY CREEK, ON

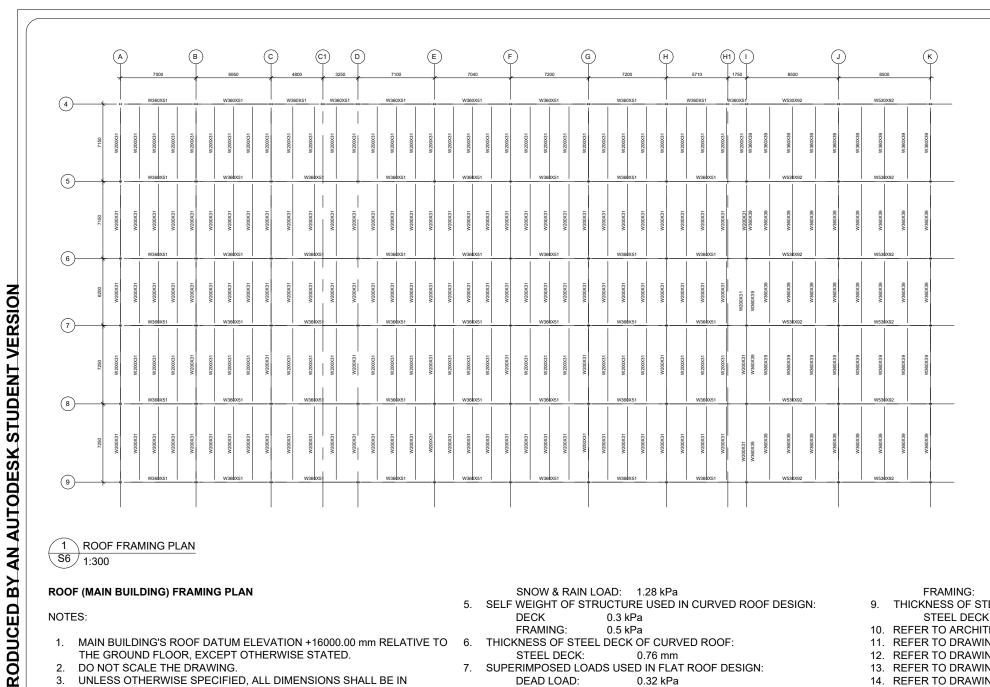
PROJECT

DRAWING TITLE

KL & DM

FRUITLAND VERTICAL FARM AND MARKETPLACE

LEVEL 4 FRAMINO	G PLAN
PROJECT No: 001	DRAWING No
DATE: March 9, 2020	
SCALE: 1: 300	
DRAWING BY: KL & DM	
APPROVED BY:	



1 ROOF FRAMING PLAN S6 1:300

ROOF (MAIN BUILDING) FRAMING PLAN

NOTES:

1. MAIN BUILDING'S ROOF DATUM ELEVATION +16000.00 mm RELATIVE TO 6. THICKNESS OF STEEL DECK OF CURVED ROOF: THE GROUND FLOOR, EXCEPT OTHERWISE STATED.

2. DO NOT SCALE THE DRAWING.

3. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS SHALL BE IN

LIVE LOAD: 1.0 kPa SNOW & RAIN LOAD: 1.28 kPa

5. SELF WEIGHT OF STRUCTURE USED IN CURVED ROOF DESIGN:

DECK 0.3 kPa FRAMING: 0.5 kPa

STEEL DECK: 0.76 mm

7. SUPERIMPOSED LOADS USED IN FLAT ROOF DESIGN:

DEAD LOAD: 0.32 kPa LIVE LOAD: 1.0 kPa SNOW & RAIN LOAD: 5.48 kPa

8. SELF WEIGHT OF STRUCTURE USED IN FLAT ROOF DESIGN:

0.3 kPa DECK

9. THICKNESS OF STEEL DECK OF FLAT ROOF:

STEEL DECK: 1.21 mm

10. REFER TO ARCHITECTURAL DRAWING FOR ROOF SLOPE.

11. REFER TO DRAWING S1 FOR GENERAL NOTES.

12. REFER TO DRAWING S2-S6 FOR TYPICAL DETAILS.

14. REFER TO DRAWING S9 FOR JOIST AND GIRDER SCHEDULE.

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KEVIN LUONG DAVID MOORE REGAN O'HENLY OLIVIA PARSONS DESMOND YEUNG DAN ZHAO

LOCATION

STONEY CREEK, ON

PROJECT

FRUITLAND VERTICAL FARM AND MARKETPLACE

DRAWING TITLE	
ROOF FRAMING F	PLAN
PROJECT No:	DRAWING N
DATE: March 9, 2020	
SCALE: 1: 300	
DRAWING BY: KL & DM	
APPROVED BY: KL & DM	

MILLIMETER.

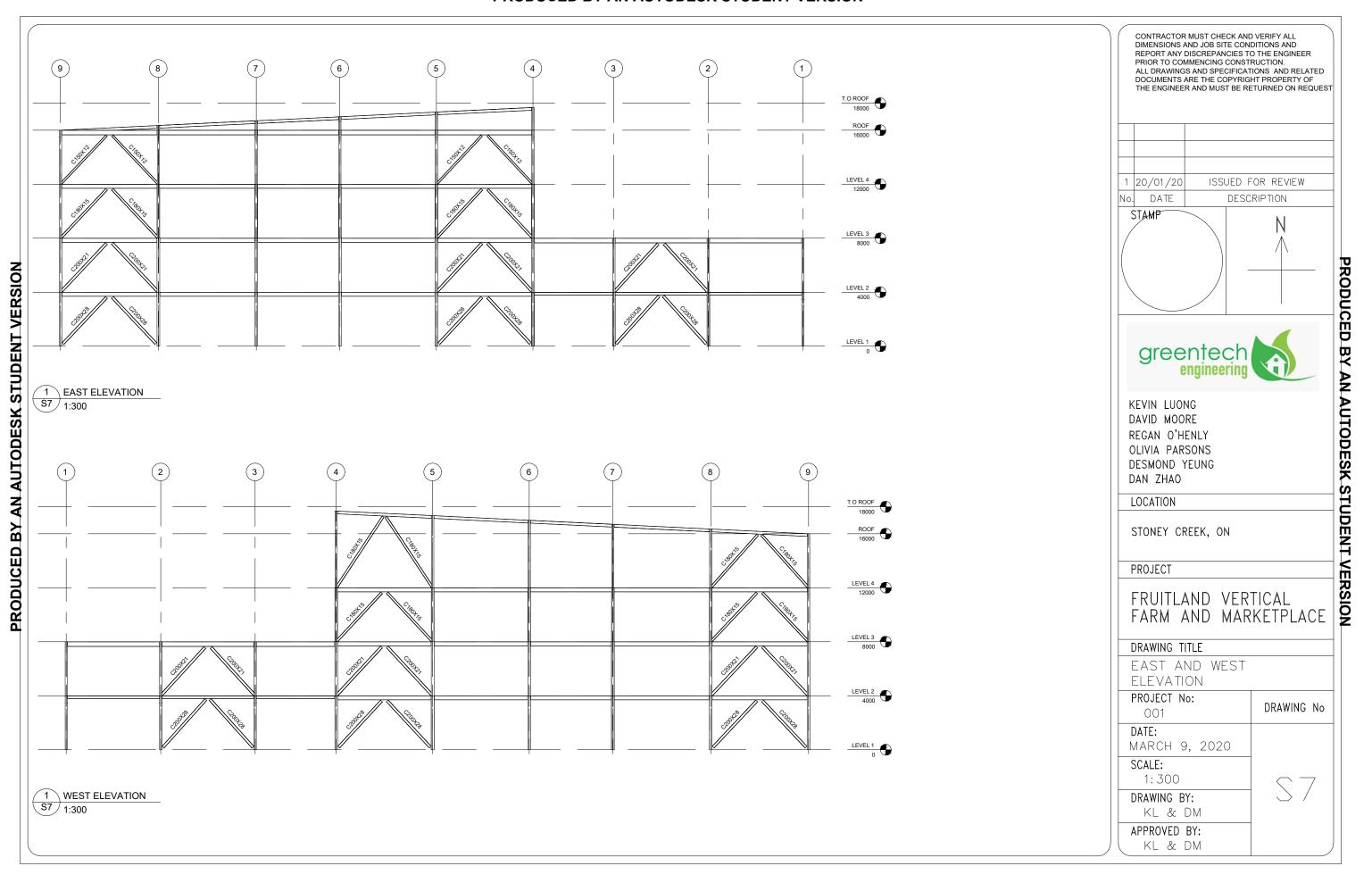
4. SUPERIMPOSED LOADS USED IN CURVED ROOF DESIGN: DEAD LOAD: 0.32 kPa

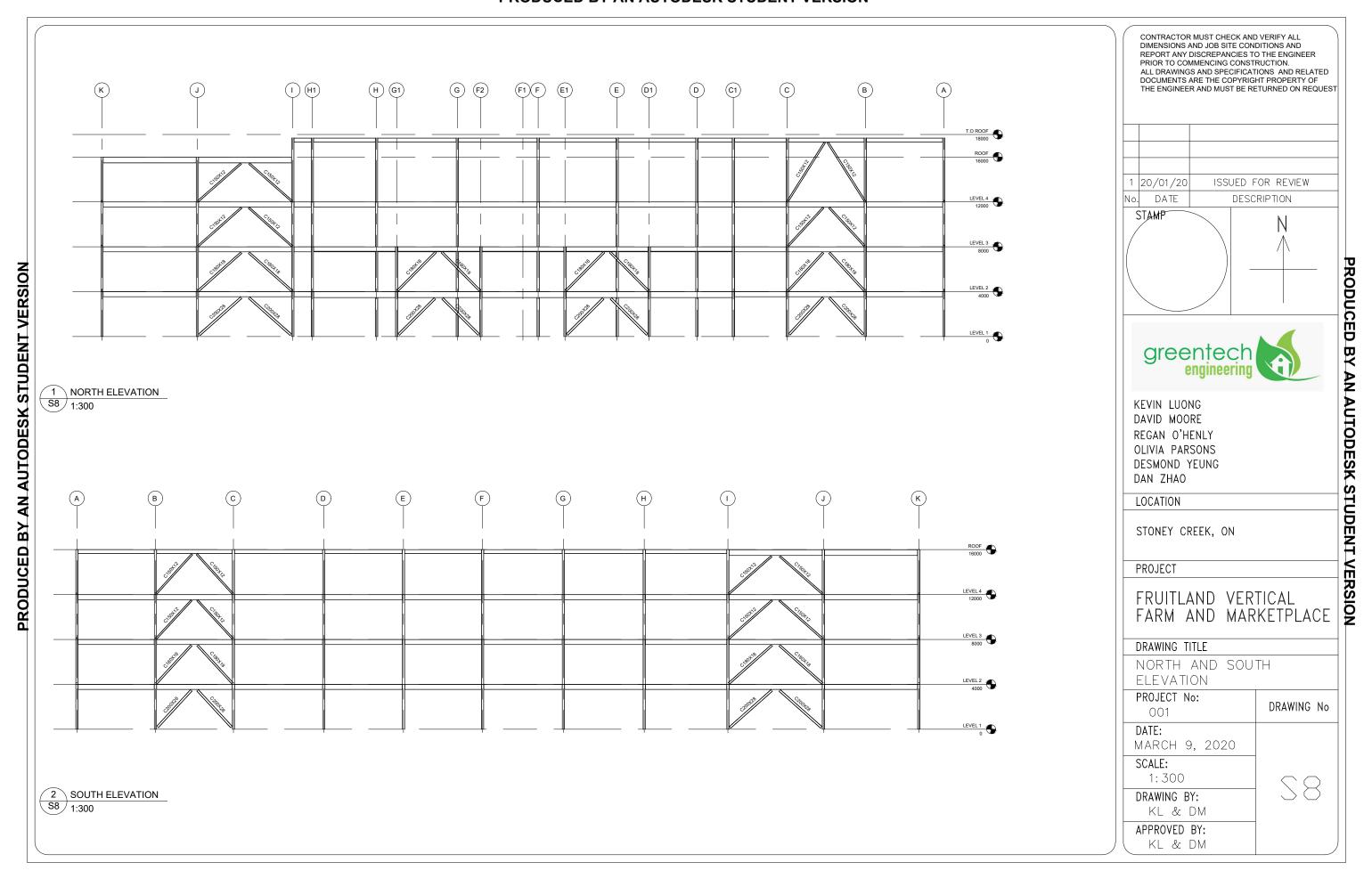
FRAMING: 0.5 kPa

13. REFER TO DRAWING S7-S8 FOR ELEVATION VIEW.

15. REFER TO DRAWING S10 FOR COLUMN SCHEDULE.

16. REFER TO DRAWING S11 FOR CONNECTION DETAILS.





JOIST SCHEDULE									
REGION	SECTION	LOAD TYPE	M _f (kNm)	M _r (kNm)	V _f (kN)	V _r (kN)	Δ _{max} (mm)	Δ _{limit} (mm)	
FLOOR (MARKET PLACE)	W200x71	GRAVITY	141	249	81	542	13.8	19.4	
FLOOR (MAIN BUILDING)	W310x45	GRAVITY	172	219	95	423	18.5	20.1	
CURVED ROOF (MAIN BUILDING)) W200x31	GRAVITY	58	104	32	275	13.3	20.1	
CORVED ROOF (MAIN BOILDING)		UPLIFT	17	38	10	275	-	-	
FLAT ROOF (MAIN BUILDING)	W360x39	GRAVITY	149	205	82	470	18.4	20.1	
FLAT ROOF (MAIN BUILDING)		UPLIFT	10	45	6	470	-	-	
POOE (MARKET DI ACE)	W360×30	GRAVITY	123	205	70	170	14.0	19.4	
ROOF (MARKET PLACE)	W360x39	UPLIFT	16	49	9	170	-	-	

GIRDER SCHEDULE									
REGION	SECTION	LOAD TYPE	M _f (kNm)	M _r (kNm)	V _f (kN)	V _r (kN)	Δ _{max} (mm)	Δ _{limit} (mm)	
FLOOR (MARKET PLACE)	W460x89	GRAVITY	608	624	243	996	8.6	20.8	
FLOOR (MAIN BUILDING)	W530x92	GRAVITY	663	732	234	1114	20.4	23.6	
CURVED ROOF (MAIN BUILDING)	W360x51	GRAVITY	258	277	96	523	15.4	22.4	
CURVED ROOF (MAIN BUILDING)		UPLIFT	27	90	10	523	-	-	
ELAT POOE (MAIN BLIII DING)	W530x92	GRAVITY	697	732	246	1114	20.9	23.6	
FLAT ROOF (MAIN BUILDING)		UPLIFT	30	262	11	1114	-	-	
POOE (MARKET DI ACE)	\M/410v81	GRAVITY	525	534	210	931	20.5	20.8	
ROOF (MARKET PLACE)	W410x81	UPLIFT	23	251	9	931	-	-	

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DATE: March 9	9, 2020		
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