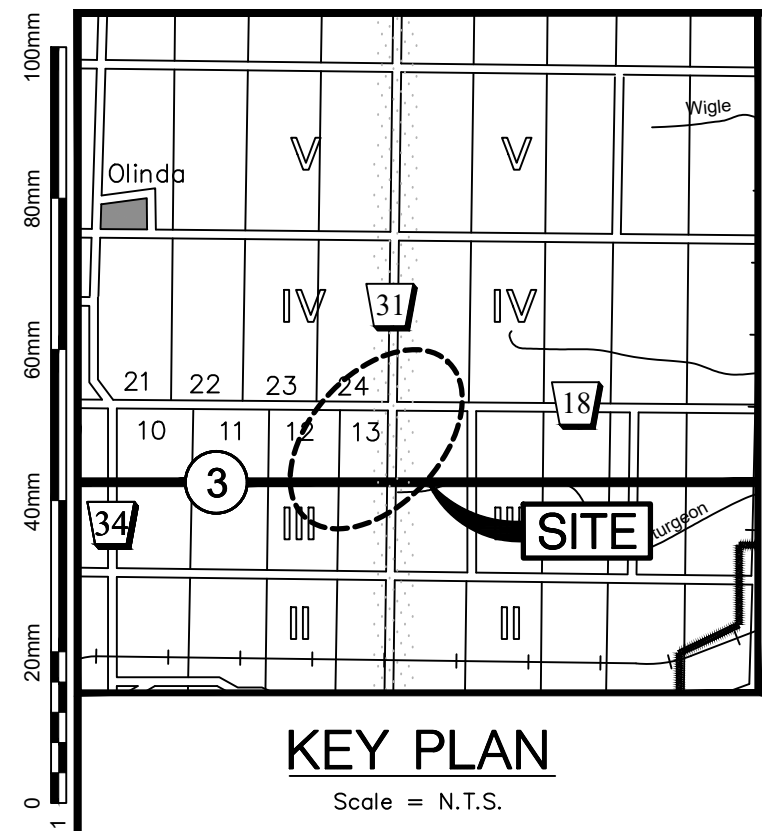
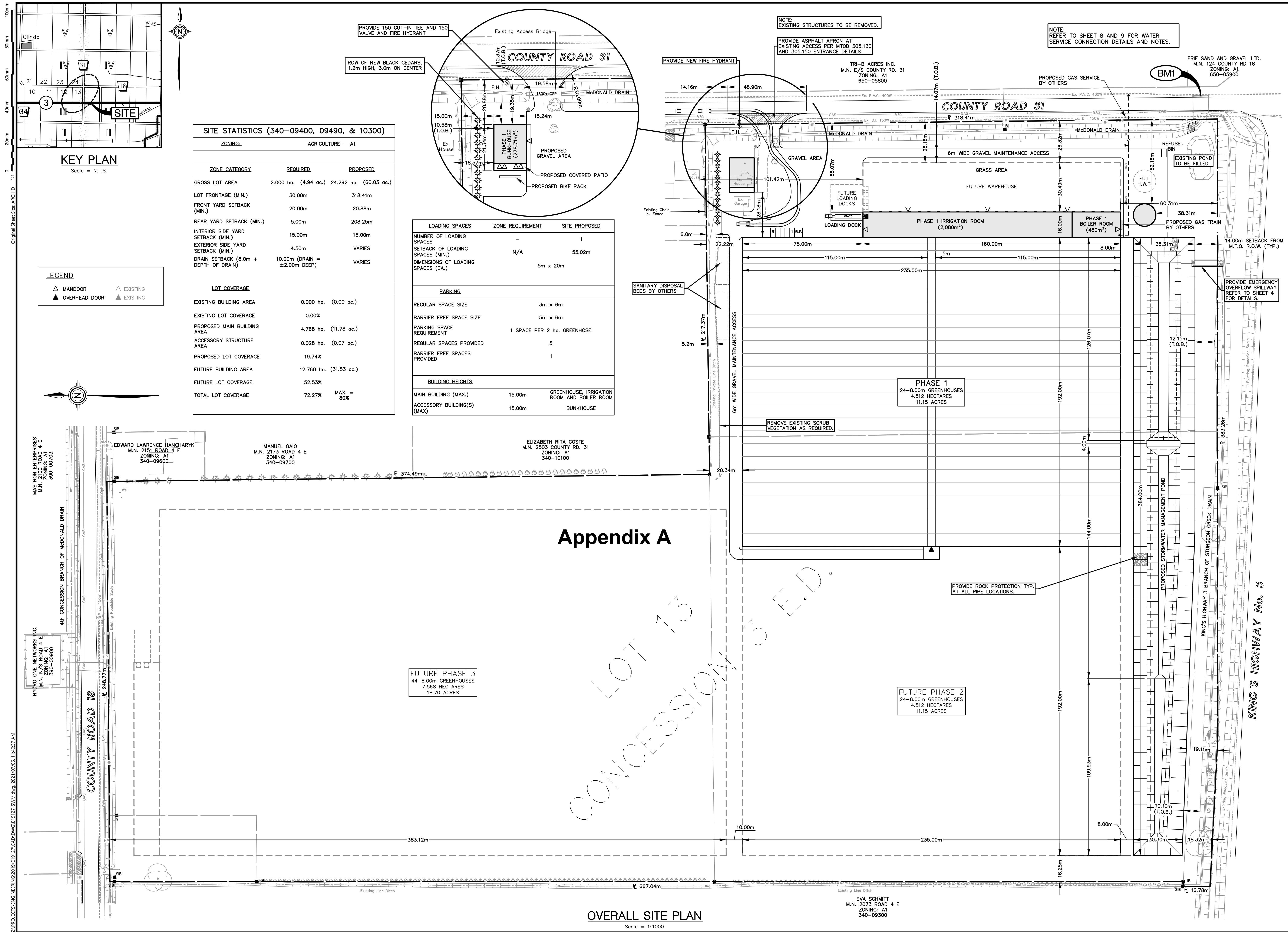




SITE STATISTICS (340-09400, 09490, & 10300)			
<u>ZONING:</u>		AGRICULTURE - A1	
<u>ZONE CATEGORY</u>	<u>REQUIRED</u>	<u>PROPOSED</u>	
GROSS LOT AREA	2,000 ha. (4.94 ac.)	24,292 ha. (60.03 ac.)	
LOT FRONTAGE (MIN.)	30.00m	318.41m	
FRONT YARD SETBACK (MIN.)	20.00m	20.88m	
REAR YARD SETBACK (MIN.)	5.00m	208.25m	
INTERIOR SIDE YARD SETBACK (MIN.)	15.00m	15.00m	
EXTERIOR SIDE YARD SETBACK (MIN.)	4.50m	VARIES	
DRAIN SETBACK (8.0m + DEPTH OF DRAIN)	10.00m (DRAIN = ±2.00m DEEP)	VARIES	
<u>LOT COVERAGE</u>			
EXISTING BUILDING AREA	0.000 ha. (0.00 ac.)		
EXISTING LOT COVERAGE	0.00%		
PROPOSED MAIN BUILDING AREA	4.768 ha. (11.78 ac.)		
ACCESSORY STRUCTURE AREA	0.028 ha. (0.07 ac.)		
PROPOSED LOT COVERAGE	19.74%		
FUTURE BUILDING AREA	12.760 ha. (31.53 ac.)		
FUTURE LOT COVERAGE	52.53%		
TOTAL LOT COVERAGE	72.27%	MAX. = 80%	

LOADING SPACES	ZONE REQUIREMENT	SITE PROPOSED
NUMBER OF LOADING SPACES	-	1
SETBACK OF LOADING SPACES (MIN.)	N/A	55.02m
DIMENSIONS OF LOADING SPACES (E.A.)	5m x 20m	
PARKING		
REGULAR SPACE SIZE	3m x 6m	
BARRIER FREE SPACE SIZE	5m x 6m	
PARKING SPACE REQUIREMENT	1 SPACE PER 2 ha. GREENHOUSE	
REGULAR SPACES PROVIDED	5	
BARRIER FREE SPACES PROVIDED	1	
BUILDING HEIGHTS		
MAIN BUILDING (MAX.)	15.00m	GREENHOUSE, IRRIGATION ROOM AND BOILER ROOM
ACCESSORY BUILDING(S) (MAX.)	15.00m	BUNKHOUSE

Appendix A



NOTES:

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- ALL DIMENSIONS AND ELEVATIONS SHOWN IN METRES UNLESS OTHERWISE NOTED.
- SITE GRADING, STORM DRAINAGE, AND DETENTION DESIGN ARE BASED ON THE SITE LAYOUT ESTABLISHED AND APPROVED BY OWNER. ADEQUACY OF SITE PLAN AND LAYOUT IS THE RESPONSIBILITY OF THE OWNER OR THEIR REPRESENTATIVE.
- THIS DRAWING DOES NOT CONTAIN ANY STRUCTURAL, BUILDING DESIGN INFORMATION. THE ADEQUACY OF THE STRUCTURES AND THEIR FIELD LAYOUT IS THE RESPONSIBILITY OF THE OWNER AND/OR THEIR REPRESENTATIVE.
- ALL BARRIER FREE PARKING SPACES TO BE SIGNED WITH R0-83.
- ALL EXTERIOR LIGHTS TO BE DARK SKY COMPLIANT.

BENCHMARKS

- TOP 6" OF EAST CONC. HEADWALL OF BRIDGE OVER STURGEON CREEK OF COUNTY ROAD 31.
ELEV. = 212.387m
- TOP NUT OF FIRE HYDRANT (K451) LOCATED ON WEST SIDE OF COUNTY ROAD 31, IN FRONT OF M.N. 2481 COUNTY ROAD 31.
ELEV. = 213.319m

REVIEW AND APPROVAL	W.L.L.	06 JULY 2021
TOWN COMMENTS	W.L.L.	23 JUNE 2021
S.W.M. REPORT	W.L.L.	09 APR. 2021
OWNER REVIEW	W.L.L.	12 MAR. 2021
OWNER REVIEW	W.L.L.	29 JAN. 2021
ISSUED FOR:	BY:	DATE:

REVISIONS:

N. J. Peralta
Engineering Ltd.
Consulting Engineers

45 Division Street North
Kingsville, ON N9Y 1E1
P: 519-733-6587
www.peraltaengineering.com

ENGINEERING STAMP:

LICENSED PROFESSIONAL ENGINEER
W. L. LEBEL
100117904
21-07-06
PROVINCE OF ONTARIO

RIDGE FARMS

PHASE 1
GREENHOUSE
DEVELOPMENT

2461 COUNTY ROAD 31
KINGSVILLE, ON

SHEET TITLE:

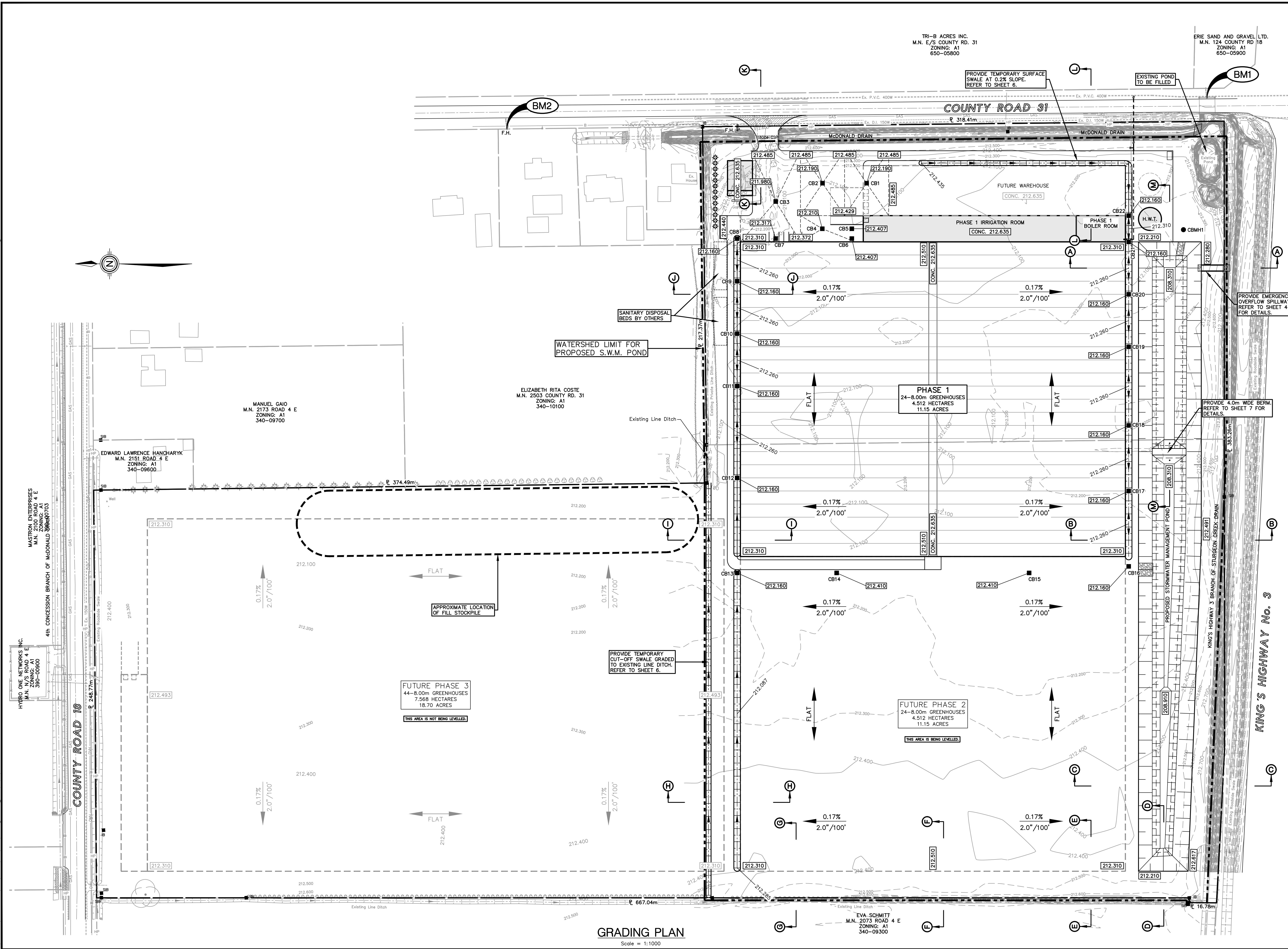
OVERALL SITE PLAN

DESIGNED BY:	DATE:
H.C.M.	JAN. 29th, 2021
DRAWN BY:	SCALE:
J.A.C.	AS SHOWN
SHEET:	OF:
1	9

PROJECT NO.:

E19-127

100mm
80mm
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NOTES:

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- APPROXIMATE PROPOSED TOP ELEVATION OR SITE GRADE.
- APPROXIMATE PROPOSED INVERTS. I.L. DENOTES APPROXIMATE PROPOSED TOP ELEVATION.
- APPROXIMATE PROPOSED SWALE GRADES.
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- PROVIDE RODENT GRATES ON ALL DRAIN OUTLETS.
- TOP ELEVATION OF DETENTION POND TO BE NO LESS THAN 212.210m.
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- STORM DRAINAGE AND DETENTION DESIGN BASED ON SITE LAYOUT ESTABLISHED AND APPROVED BY OWNER. ADEQUACY OF SITE LAYOUT IS THE RESPONSIBILITY OF THE OWNER.
- THE OWNER AND/OR CONTRACTOR IS RESPONSIBLE TO PROVIDE ADEQUATE SEDIMENT CONTROL MEASURES DURING CONSTRUCTION. FOR DETAILS SEE O.P.S.S. 971.
- DETAILS FOR SEDIMENT CONTROL MEASURES ARE AVAILABLE IN APPENDIX 'D' OF THE STORMWATER MANAGEMENT REPORT.
- CATCH BASINS WITHIN PARKING LOTS AND TRAVELLED AREAS TO BE PRECAST CONCRETE WITH CAST IRON FRAME AND GRATE ON GRADE.

BENCHMARKS

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TOWN COMMENTS	W.L.L.	23 JUNE 2021
S.W.M. REPORT	W.L.L.	09 APR. 2021
ISSUED FOR:	BY:	DATE:

REVISIONS:

NO.	DESCRIPTION	DATE
1	ISSUED FOR: 19127 SWM.dwg	06 JULY 2021

N. J. Peralta Engineering Ltd.
Consulting Engineers

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PROVINCE OF ONTARIO

RIDGE FARMS

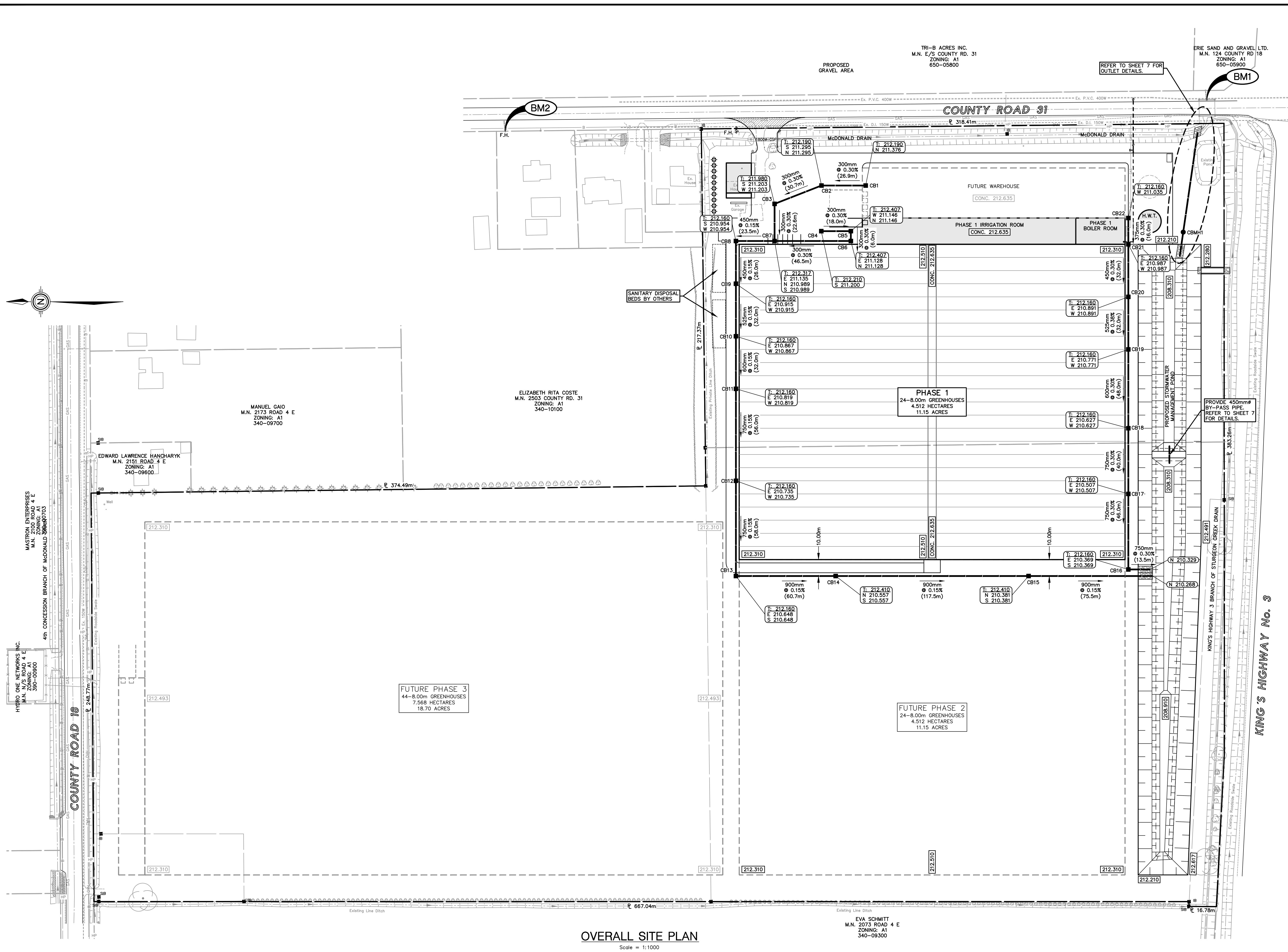
PHASE 1 GREENHOUSE DEVELOPMENT

2461 COUNTY ROAD 31
KINGSVILLE, ON

SHEET TITLE:

GRADING PLAN

DESIGNED BY:	DATE:
H.C.M.	JAN. 29th, 2021
DRAWN BY:	SCALE:
J.H.	AS SHOWN
SHEET:	OF:
2	9
PROJECT NO.:	E19-127



- NOTES:**
1. THE ACCURACY OF THE UTILITIES SHOWN ON THIS DRAWING ARE NOT GUARANTEED BY THE OWNER OR J. J. PERALTA ENGINEERING LTD. UTILITIES MAY BE LOCATED AT OTHER DEPTHS. THE UTILITIES SHOWN MAY DIFFER IN SIZE AND LOCATION FROM THE ACTUAL UTILITIES SHOWN.
 2. ALL DIMENSIONS AND ELEVATIONS SHOWN IN METRES UNLESS OTHERWISE NOTED.
 3. IDENTIFY THE EXISTING SITE ELEVATIONS.
 4. APPROXIMATE PROPOSED TOP ELEVATION OR SITE GRADE.

191.405
 5. APPROXIMATE PROPOSED INVERTS.

190.860

191.000

W 190.610
 6. APPROXIMATE PROPOSED SNAKE GRADES.
 7. ALL POND SIZES ARE TO BE NO DEEPER THAN 400m. (1 1/4m) UNLESS OTHERWISE NOTED.
 8. 400m. (4' 6") (1500mm) THICK TOPSOIL ON ALL POND BANKS AND DISTURBED AREAS, AND SLOD TO GRADE.
 9. 150mm PROTECTION TO BE 300mm THICK QUARDED LIMESTONE RIP RAP ON 150mm WOVEN FILTER FLYP MINIMUM 2.0m WIDE.
 10. PROVIDE ROUNDER GRATES ON ALL DRAIN LINES AVAILABLE IN APPLICABLE AREAS.
 11. TOP ELEVATION OF DETENTION POND ON DRAIN BASIN TO BE 212.210m.
 12. STORMWATER DETENTION OF THE 1-YEAR FLOOD YEAR MAY CAUSE FLOODING.
 13. THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE SITE LAYOUT MANAGER REPORT DATED APRIL 9th, 2021.
 14. STORM DRAINAGE AND DETENTION DESIGN BASED ON SITE LAYOUT MANAGER REPORT APPROVED BY OWNER, AGENCY/OF SITE LAYOUT IS THE RESPONSIBILITY OF THE OWNER.
 15. THE OWNER AND/OR CONTRACTOR IS RESPONSIBLE TO PROVIDE SEDIMENT CONTROL MEASURES DURING CONSTRUCTION. FOR DETAILS SEE O.P.S.S. 577.
 16. DETAILS FOR SEDIMENT CONTROL MEASURES TO BE PROVIDED TO THE PROJECT AND THE STORMWATER MANAGEMENT REPORT.
 17. CATCH BASINS WITH PARKING LOTS AND DRIVEWAYS AREAS TO BE CONCRETE WITH CAST IN FRAME AND GRATE, OR EQUIVALENT.

BENCHMARKS

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OVER STURGEON CREEK OF COUNTY ROAD 31.

ELEV. = 212.387m

2. TOP NUT OF FIRE HYDRANT (K451) LOCATED
ON WEST SIDE OF COUNTY ROAD 31, IN FRONT
OF M.N. 2481 COUNTY ROAD 31.

REVIEW AND APPROVAL	W.L.L.	06 JULY 2021
TOWN COMMENTS	W.L.L.	23 JUNE 2021
S.W.M. REPORT	W.L.L.	09 APR. 2021
ISSUED FOR:	BY:	DATE:

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Consulting Engineers

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P: 519-733-6587
www.peraltaengineering.com

ENGINEERING STAMP:



RIDGE FARMS

PHASE 1 GREENHOUSE DEVELOPMENT

2461 COUNTY ROAD 31
KINGSVILLE, ON

SHEET TITLE:

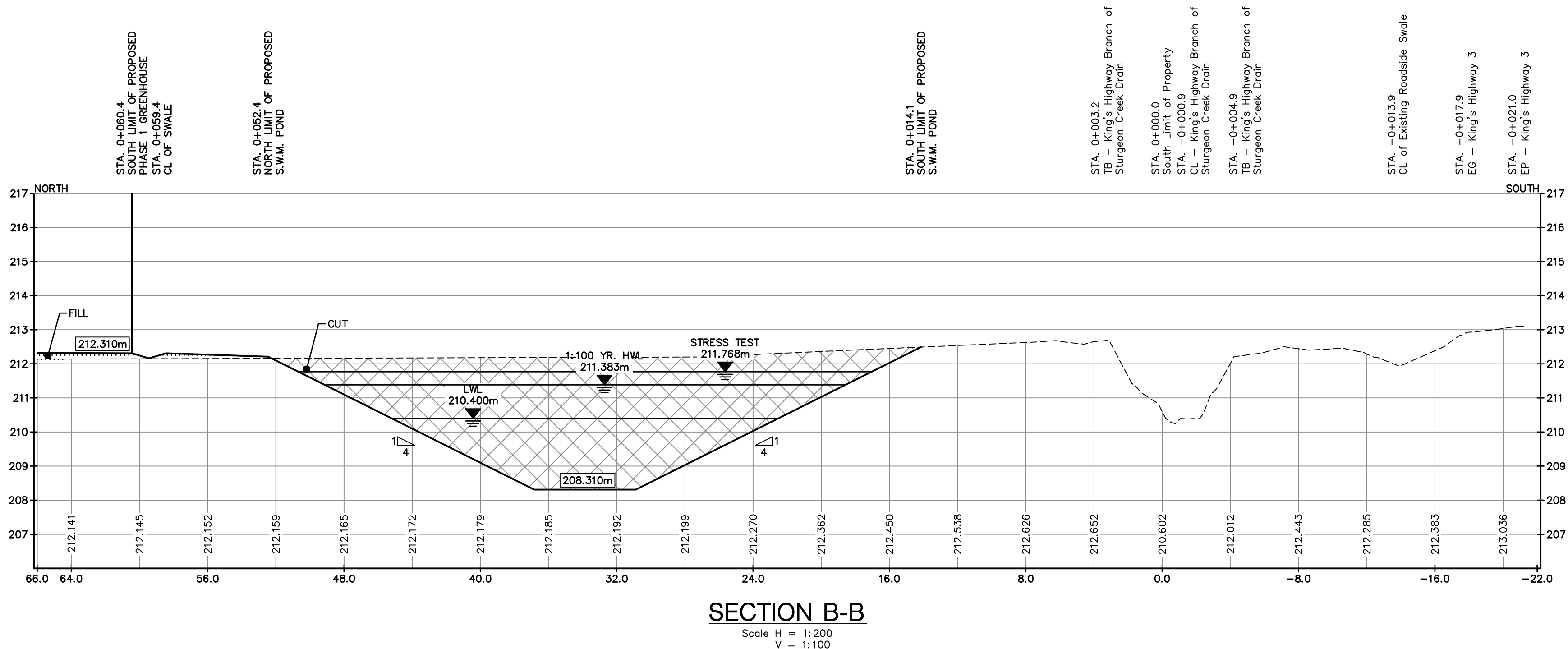
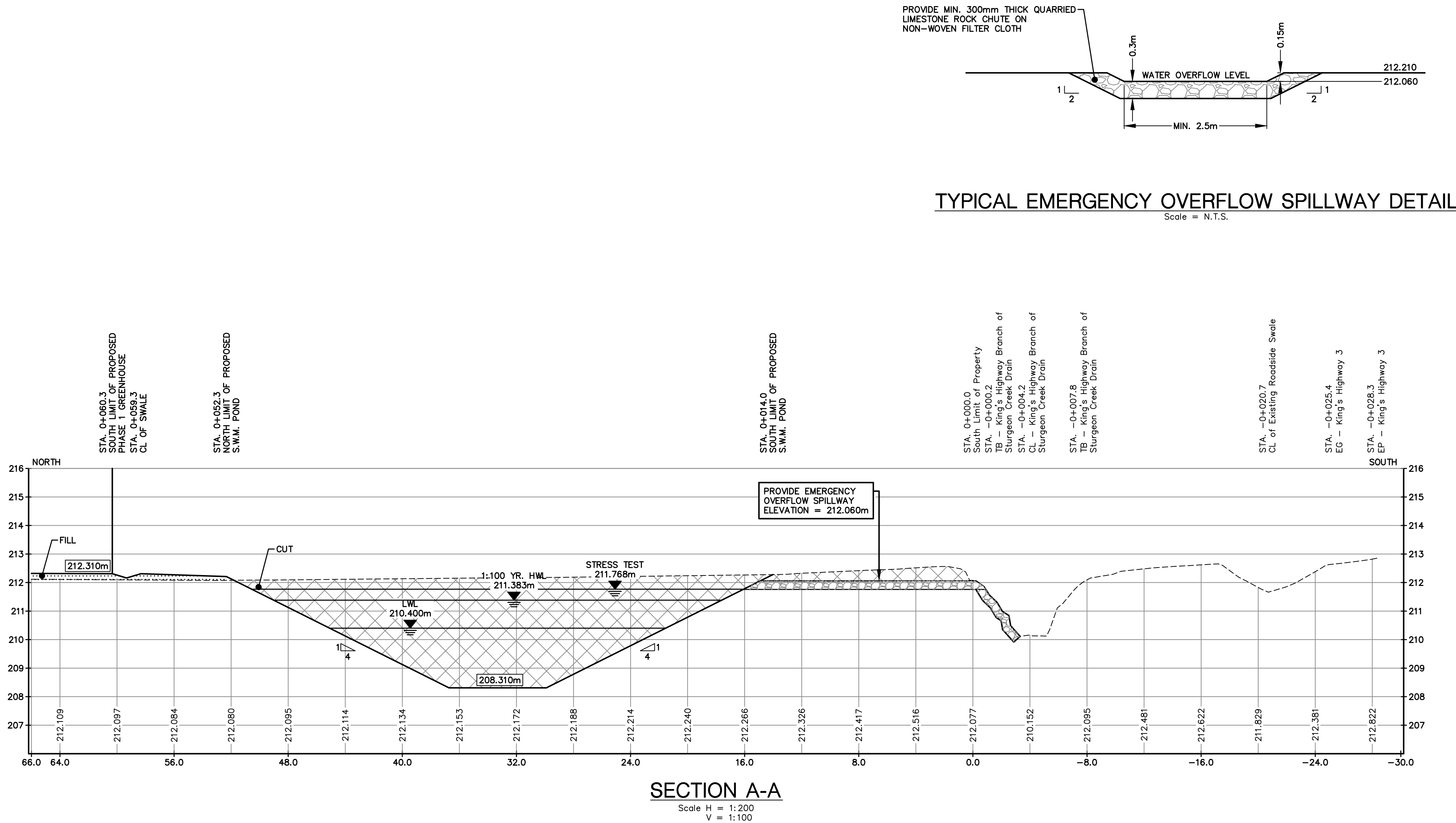
UNDERGROUND DRAINAGE PLAN

DESIGNED BY:	DATE:
H.C.M.	JAN. 29th, 202

DRAWN BY:	SCALE:
J.H.	AS SHOWN

SHEET:	OF:
3	9

PROJECT No.: E19-127



NOTES:

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REVIEW AND APPROVAL	W.L.L.	06 JULY 2021
TOWN COMMENTS	W.L.L.	23 JUNE 2021
S.W.M. REPORT	W.L.L.	09 APR. 2021
ISSUED FOR:	BY:	DATE:

N. J. Peralta
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Consulting Engineers

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Kingsville, ON N9Y 1E1
P: 519-733-6587
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ENGINEERING STAMP:



RIDGE FARMS

PHASE 1
GREENHOUSE
DEVELOPMENT

2461 COUNTY ROAD 31
KINGSVILLE, ON

SHEET TITLE:

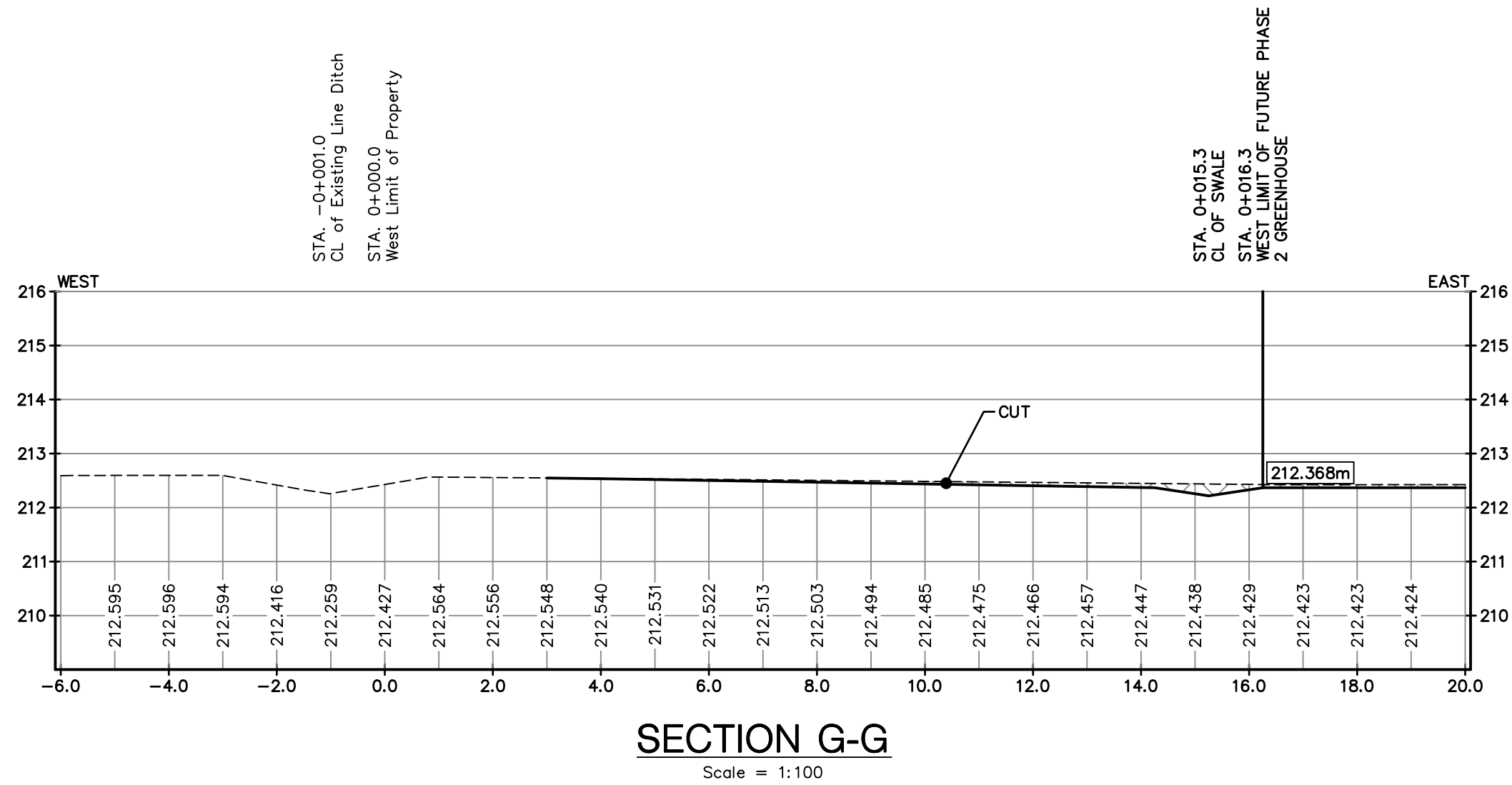
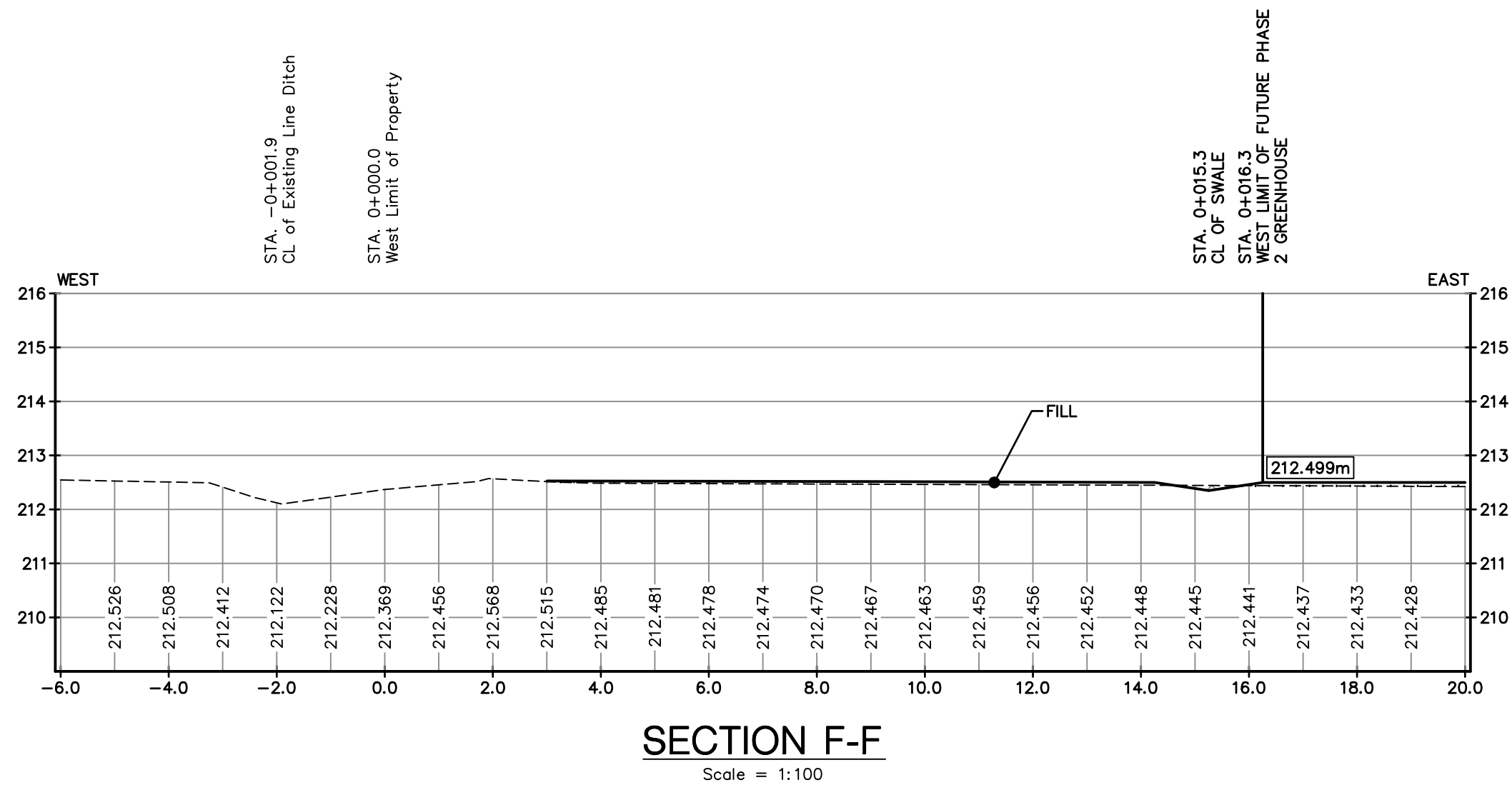
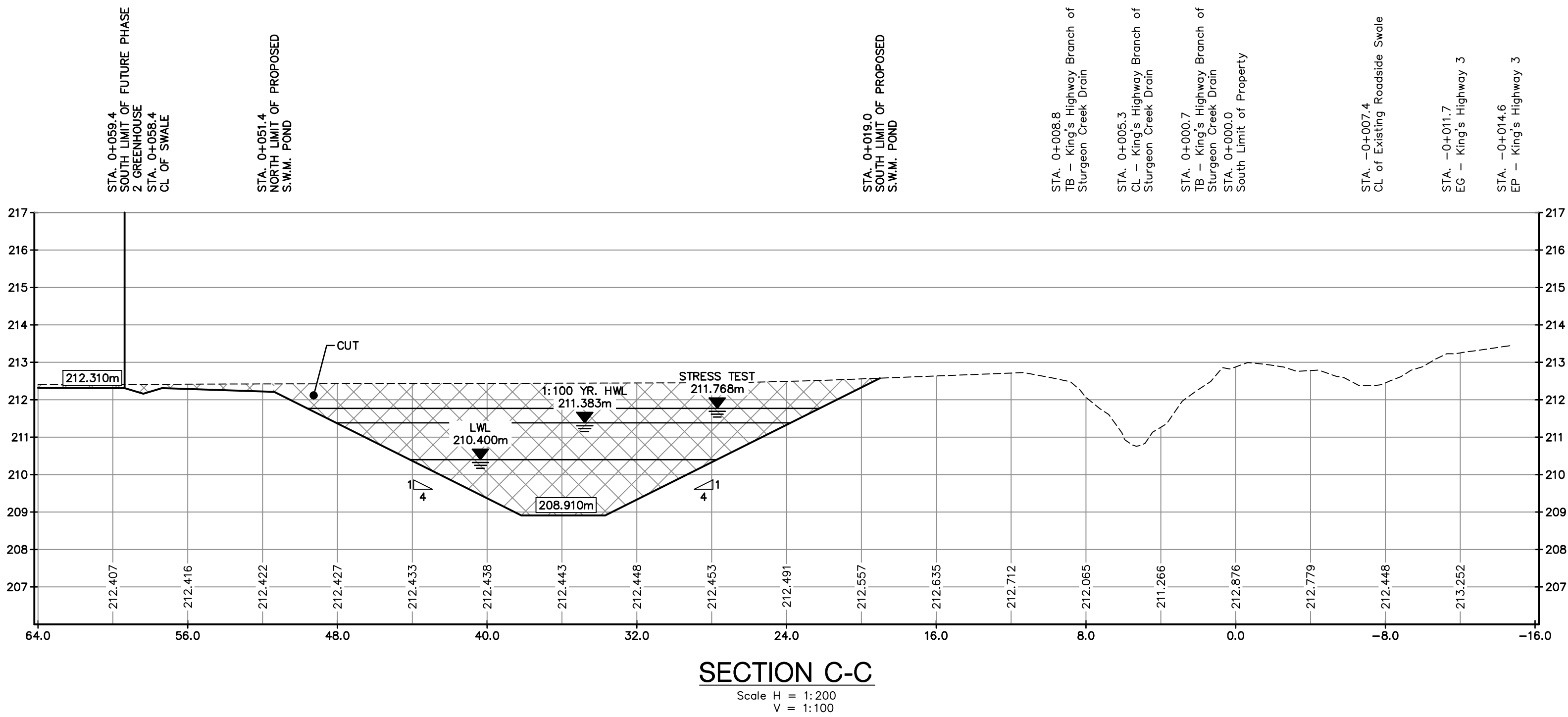
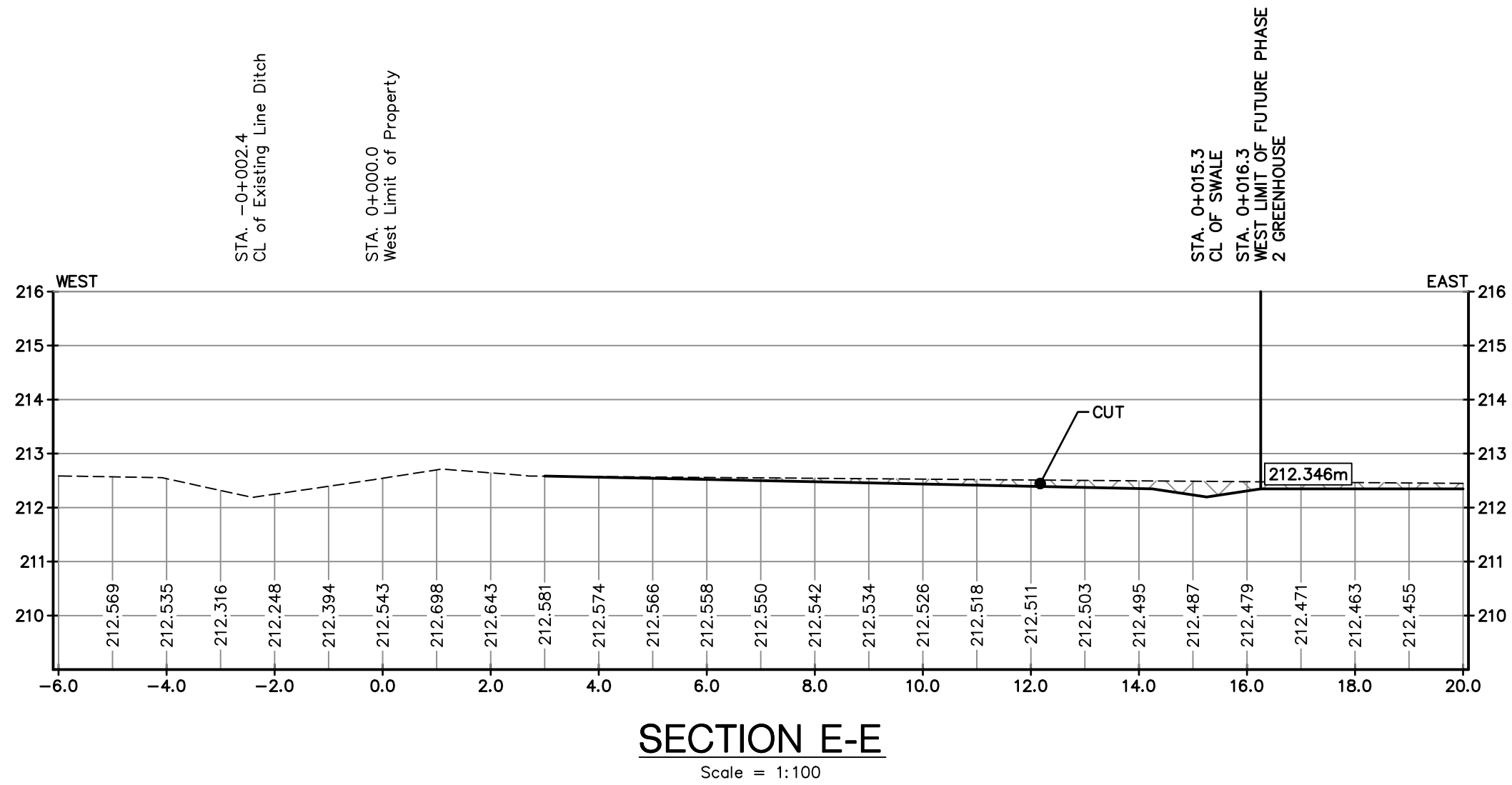
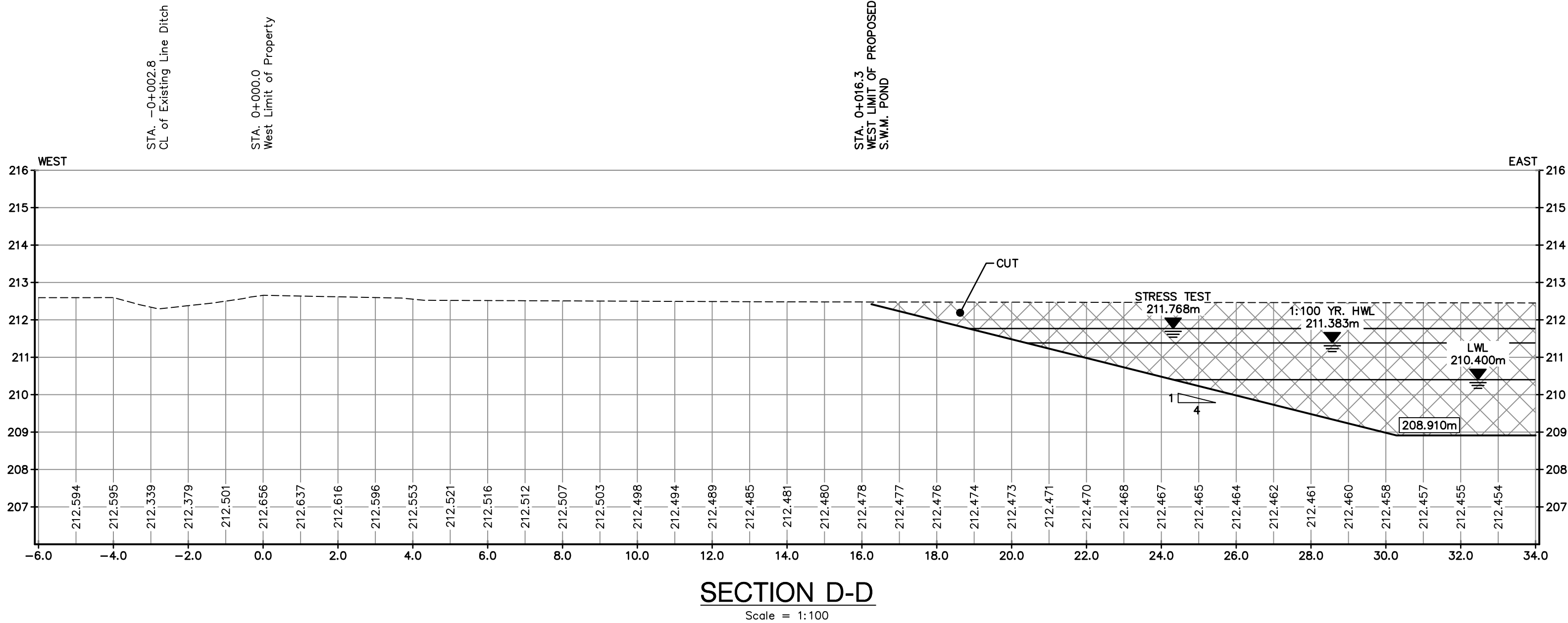
SECTIONS

DESIGNED BY: H.C.M. DATE: JAN. 29th, 2021

DRAWN BY: J.H. SCALE: AS SHOWN

SHEET: 4 OF: 9

PROJECT No.: E19-127

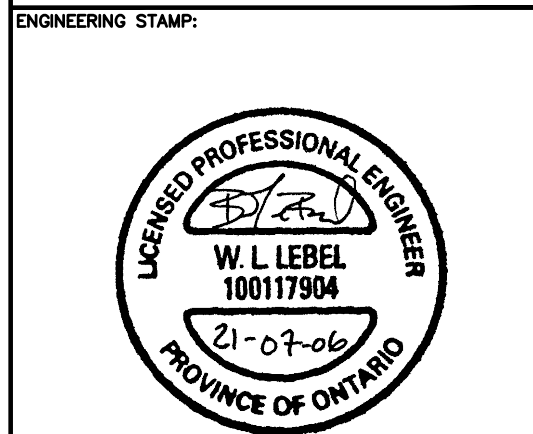


- NOTES:
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REVIEW AND APPROVAL	W.L.L.	06 JULY 2021
TOWN COMMENTS	W.L.L.	23 JUNE 2021
S.W.M. REPORT	W.L.L.	09 APRIL 2021
ISSUED FOR:	BY:	DATE:

N. J. Peralta
Engineering Ltd.
Consulting Engineers

45 Division Street North
Kingsville, ON N9Y 1E1
P: 519-733-6587
www.peraltaengineering.com



RIDGE FARMS

**PHASE 1
GREENHOUSE
DEVELOPMENT**

**2461 COUNTY ROAD 31
KINGSVILLE, ON**

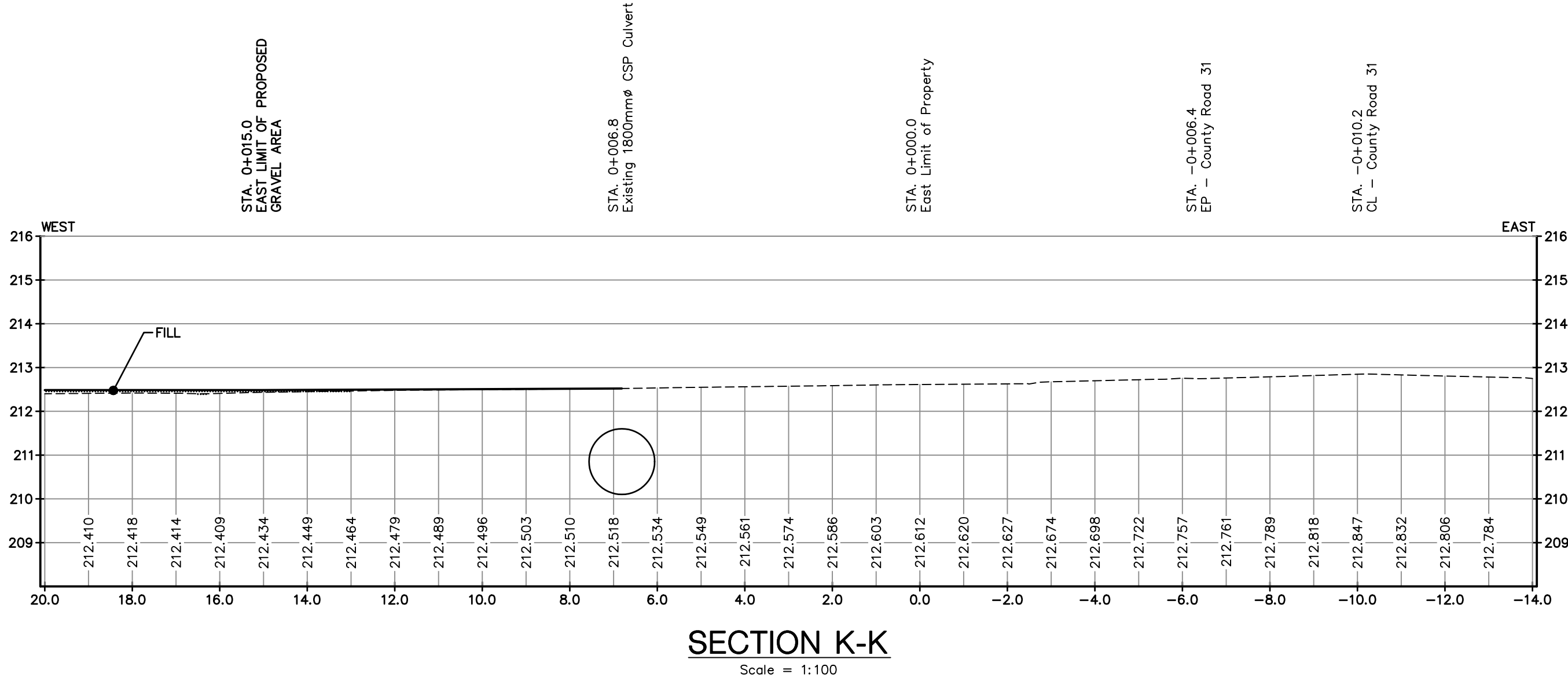
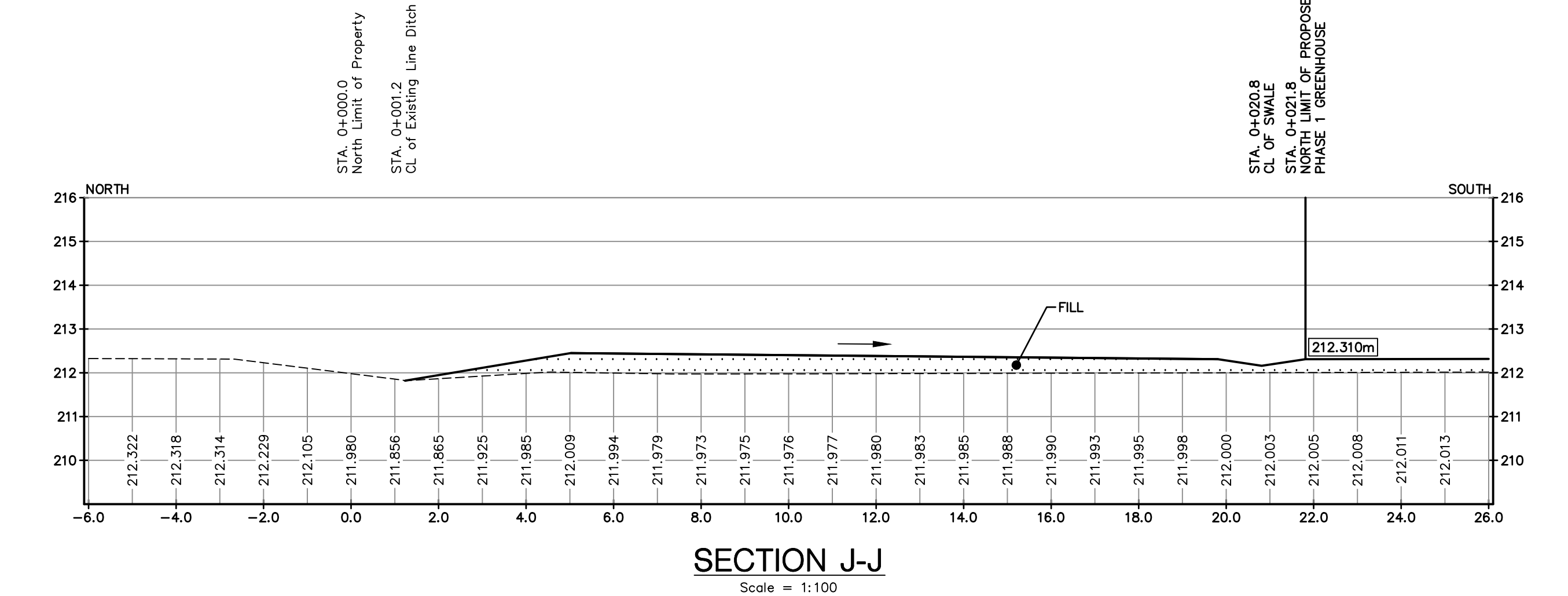
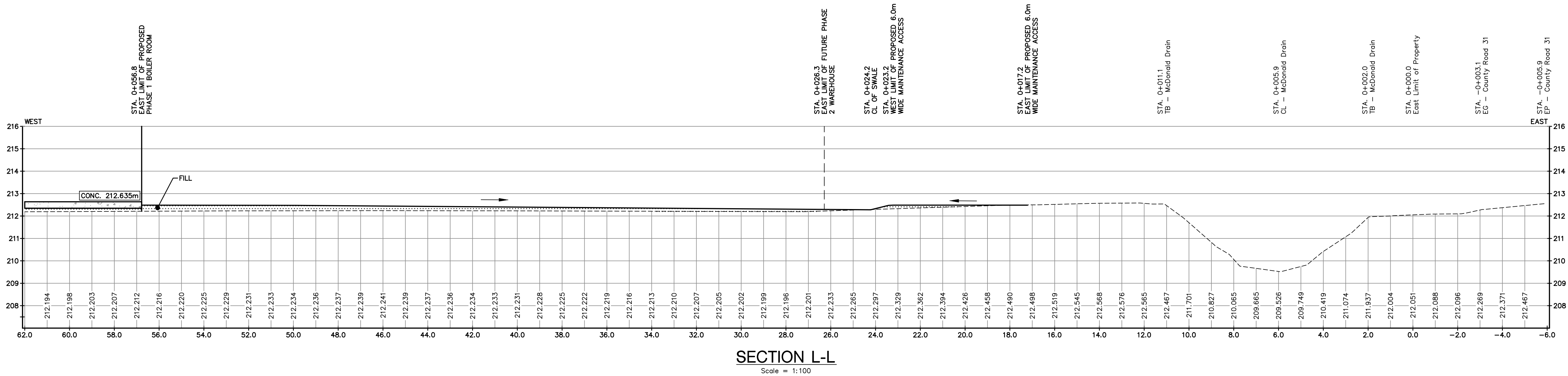
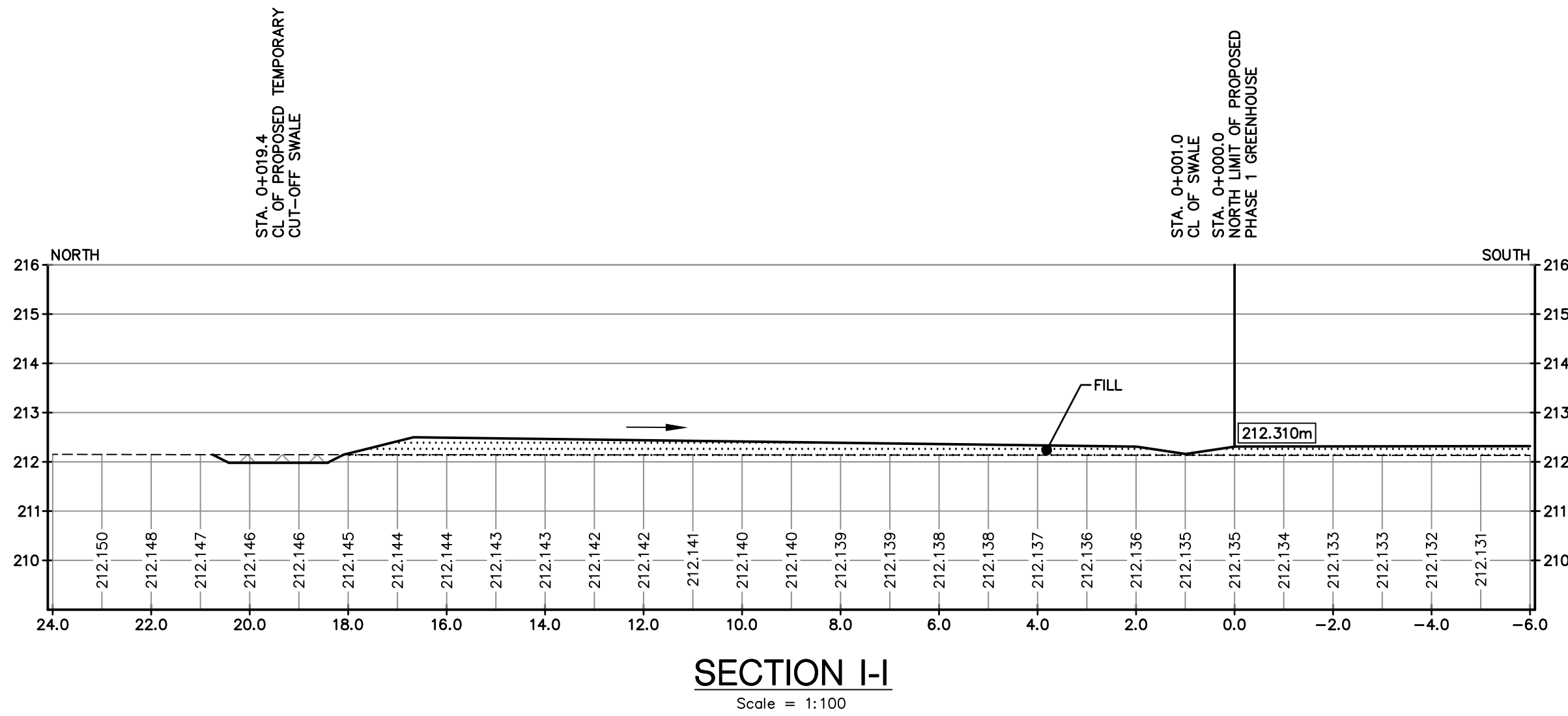
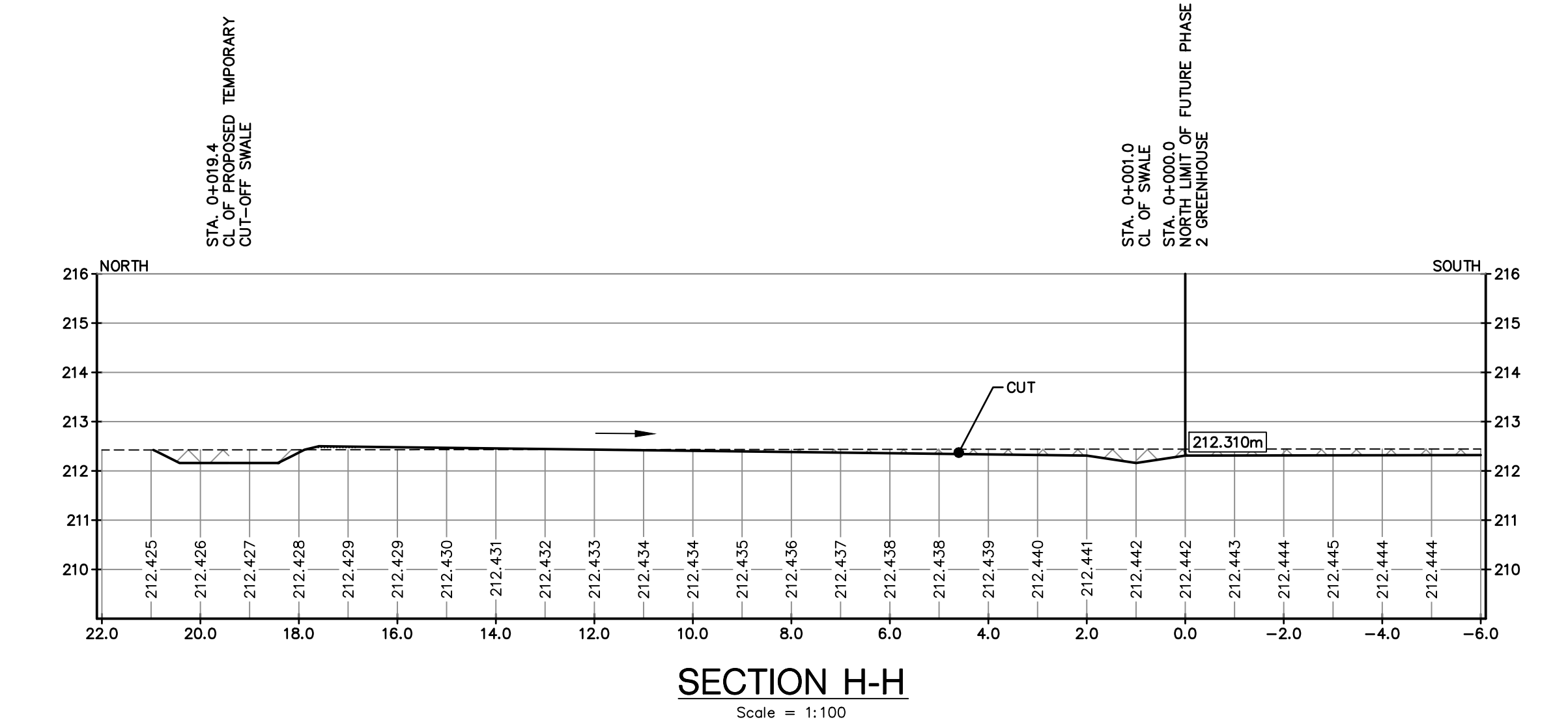
SHEET TITLE:

SECTIONS

DESIGNED BY:	DATE:
H.C.M.	JAN. 29th, 2021
DRAWN BY:	SCALE:
J.H.	AS SHOWN
SHEET:	OF:
5	9
PROJECT No.:	E19-127

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- NOTES:
1. THE ACCURACY OF THE UTILITIES SHOWN ON THIS DRAWING ARE NOT GUARANTEED BY THE OWNER OR N. J. PERALTA ENGINEERING LTD. OTHER UTILITIES MAY BE PRESENT OR THE UTILITIES SHOWN MAY DIFFER IN SIZE AND/OR LOCATION SHOWN.
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REVIEW AND APPROVAL	W.L.L.	06 JULY 2021
TOWN COMMENTS	W.L.L.	23 JUNE 2021
S.W.M. REPORT	W.L.L.	09 APR. 2021
ISSUED FOR:	BY:	DATE:

Revisions:

N. J. Peralta
Engineering Ltd.
Consulting Engineers

45 Division Street North
Kingsville, ON N9Y 1E1
P: 519-733-6587
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RIDGE FARMS

PHASE 1 GREENHOUSE DEVELOPMENT

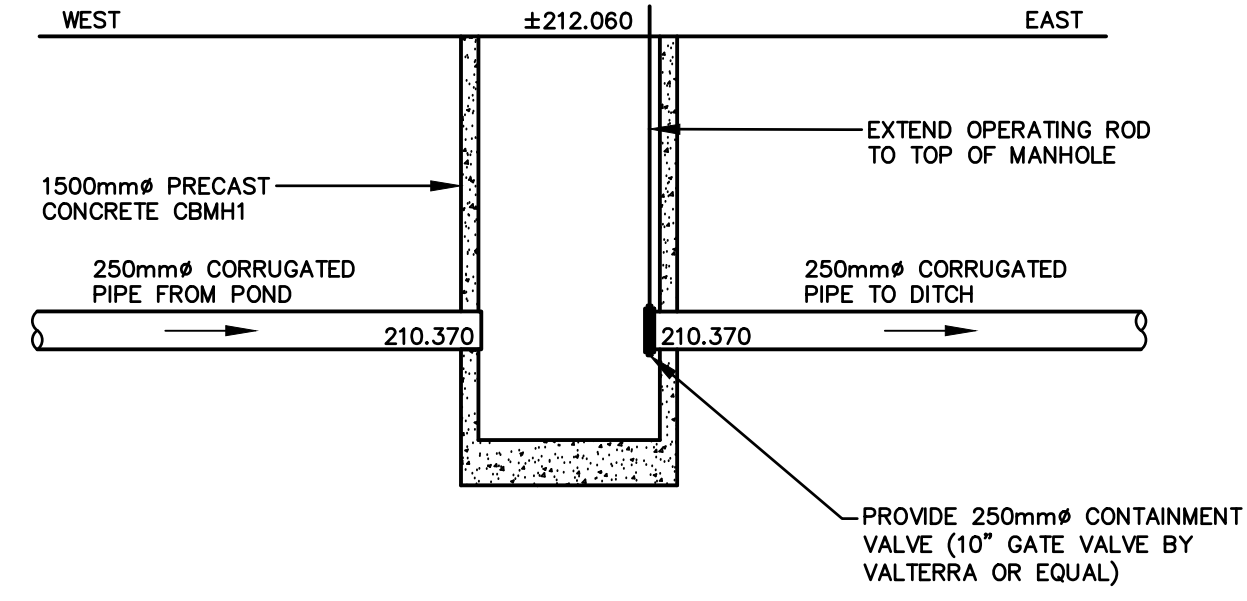
**2461 COUNTY ROAD 31
KINGSVILLE, ON**

SHEET TITLE:

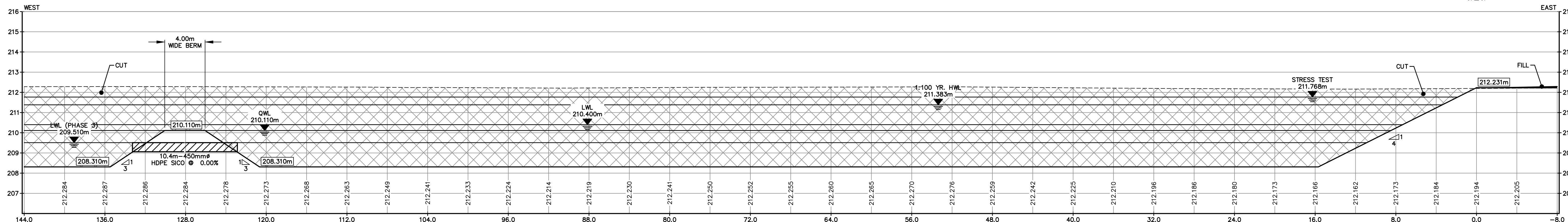
SECTIONS

DESIGNED BY:	DATE:
H.C.M.	JAN. 29th, 2021
DRAWN BY:	SCALE:
J.H.	AS SHOWN
SHEET:	OF:
6	9
PROJECT NO.:	E19-127

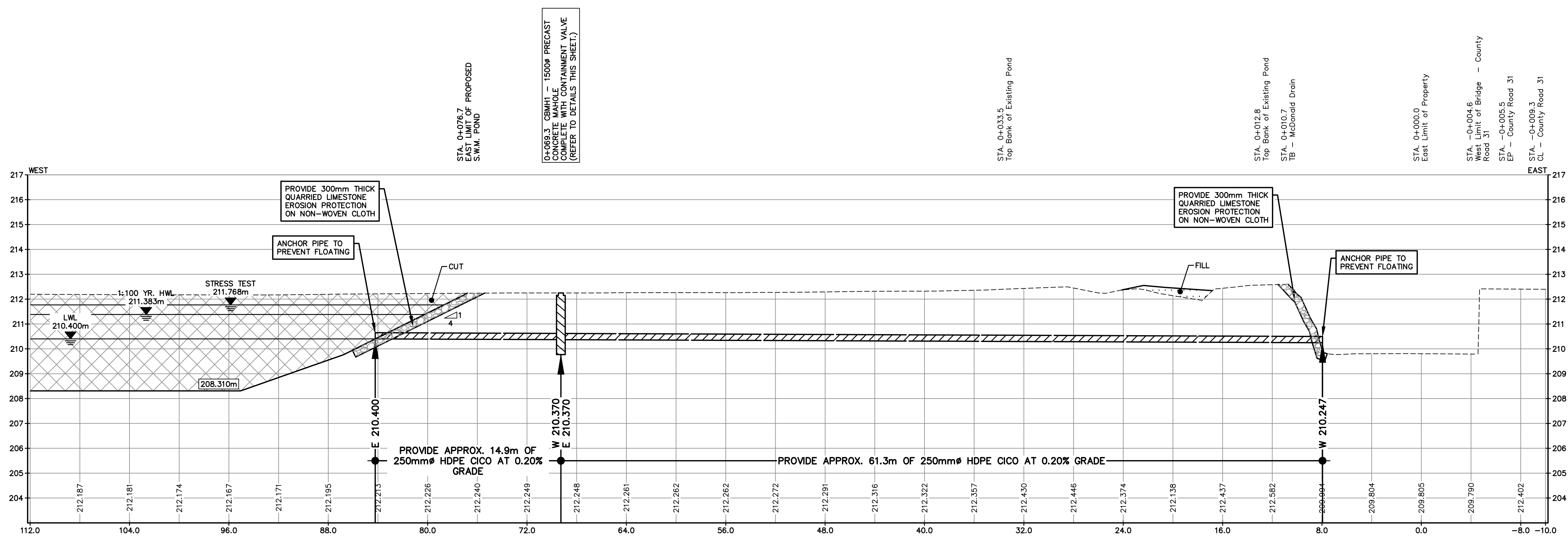
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N.T.S.



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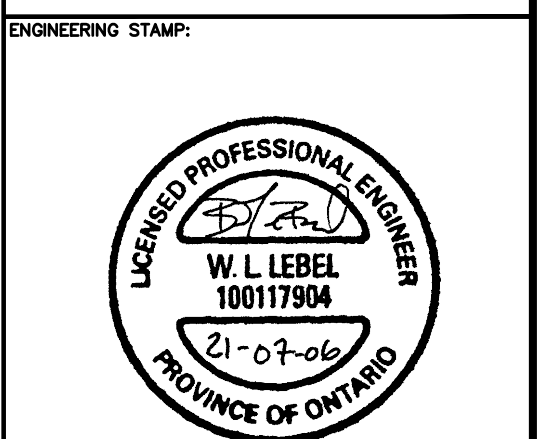


OUTLET TO THE STURGEON CREEK DRAIN
Scale H = 1:200
V = 1:100

- NOTES:
1. THE ACCURACY OF THE UTILITIES SHOWN ON THIS DRAWING ARE NOT GUARANTEED BY THE OWNER OR N. J. PERALTA ENGINEERING LTD. OTHER UTILITIES MAY BE PRESENT OR THE UTILITIES SHOWN MAY DIFFER IN SIZE AND/OR LOCATION SHOWN.
 2. ALL DIMENSIONS AND ELEVATIONS SHOWN IN METRES UNLESS OTHERWISE NOTED.
 3. DENOTES EXISTING SITE ELEVATIONS.
 4. APPROXIMATE PROPOSED TOP ELEVATION OR SITE GRADE.
 5. APPROXIMATE PROPOSED INVERTS, I.L. DENOTES APPROXIMATE PROPOSED INVERT ELEVATION.
 6. APPROXIMATE PROPOSED S.W.M. POND.
 7. ALL POND SLOPES TO BE NO STEEPER THAN 4(Hor.) TO 1(Ver.) UNLESS OTHERWISE NOTED.
 8. PLACE MIN. 6" (150mm) THICK TOPSOIL ON ALL POND BANKS AND DISTURBED AREAS, AND SEED TO GRASS.
 9. EROSION PROTECTION TO BE 300mm THICK QUARRIED LESTONE RIP RAP ON NON-WOVEN FILTER CLOTH MINIMUM 2.0m WIDE.
 10. PROVIDE RODENT GRATES ON ALL DRAIN OUTLETS.
 11. TOP ELEVATION OF DETENTION POND TO BE NO LESS THAN 212.210m.
 12. STORM EVENTS IN EXCESS OF THE 1:100 YEAR STORM MAY CAUSE FLOODING.
 13. THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE STORMWATER MANAGEMENT REPORT DATED APRIL 9th, 2021.
 14. STORM DRAINAGE AND DETENTION DESIGN BASED ON SITE LAYOUT ESTABLISHED AND APPROVED BY OWNED. ADEQUACY OF SITE LAYOUT IS THE RESPONSIBILITY OF THE OWNER.
 15. THE OWNER AND/OR CONTRACTOR IS RESPONSIBLE TO PROVIDE ADEQUATE SEDIMENT CONTROL MEASURES DURING CONSTRUCTION. FOR DETAILS SEE O.P.S.S. 371.
 16. DETAILS FOR SEDIMENT CONTROL MEASURES ARE AVAILABLE IN APPENDIX 'D' OF THE STORMWATER MANAGEMENT REPORT.
 17. CATCH BASINS WITHIN PARKING LOTS AND TRAVELLED AREAS TO BE PRECAST CONCRETE WITH CAST IRON FRAME AND GRATE OR EQUIVALENT.

REVIEW AND APPROVAL	W.L.L.	06 JULY 2021
TOWN COMMENTS	W.L.L.	23 JUNE 2021
S.W.M. REPORT	W.L.L.	09 APR. 2021
ISSUED FOR:	BY:	DATE:

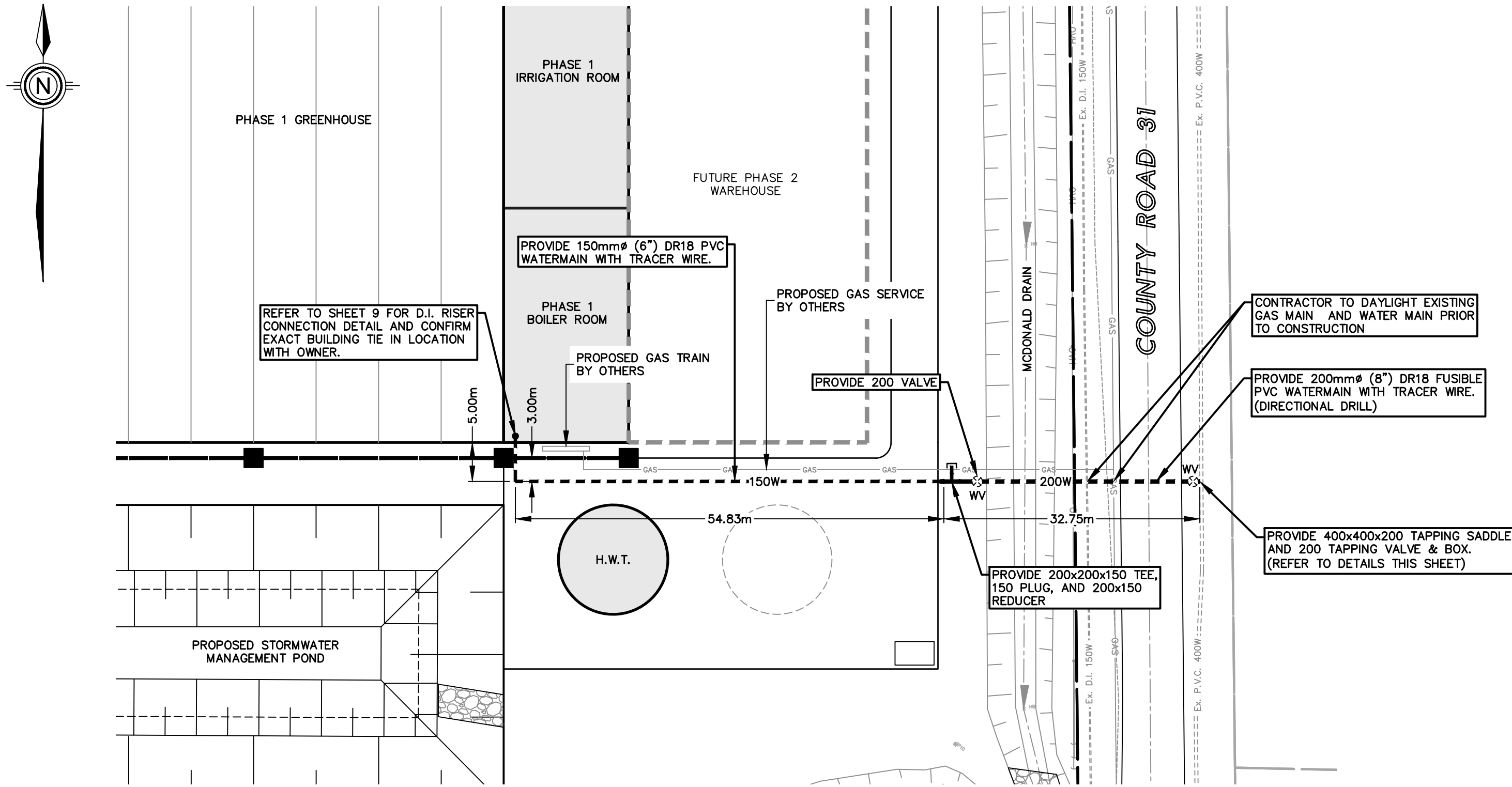
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RIDGE FARMS
PHASE 1
GREENHOUSE
DEVELOPMENT
2461 COUNTY ROAD 31
KINGSVILLE, ON

SHEET TITLE:
SECTIONS

DESIGNED BY:	DATE:
H.C.M.	JAN. 29th, 2021
DRAWN BY:	SCALE:
J.H.	AS SHOWN
SHEET:	OF:
7	9
PROJECT No.:	E19-127



Scale = 1:500

THE LOCATION OF UTILITIES AS SHOWN ON THE DRAWING ARE IN ACCORDANCE WITH THE MOST CURRENT INFORMATION AVAILABLE FROM THE VARIOUS UTILITIES AND ARE NOT CERTIFIED TO BE ACCURATE. THE ONUS LIES WITH THE CONTRACTOR TO VERIFY THE LOCATION OF UTILITIES PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL REQUIRED PERMITS FROM AUTHORITIES HAVING JURISDICTION TO PERFORM THE WORK AND THE COST SHALL BE INCLUDED IN THE PRICE QUOTED. ALL EXCAVATION WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT FOR CONSTRUCTION PROJECTS. INSTALLATION OF WATER SERVICES SHALL BE INSPECTED AND APPROVED BY THE KINGSVILLE BUILDING DEPARTMENT AND KINGSVILLE WATER DEPARTMENT PRIOR TO BACKFILL IN ALL CASES.

PROVIDE DOWATERING FACILITIES TO KEEP THE EXCAVATION REASONABLY DRY.

THE CONTRACTOR SHALL EXERCISE CARE WHILE EXCAVATING THE TRENCH TO ENSURE THAT DAMAGE TO PUBLIC AND PRIVATE PROPERTY IS KEPT TO THE ABSOLUTE MINIMUM. USE RUBBER TIRE EQUIPMENT FOR BACKFILLING THE TRENCH.

RESTORE ALL AREA AFFECTED BY CONSTRUCTION IN ACCORDANCE WITH RESTORATION DETAILS SHOWN HEREIN TO MEET OR BETTER. THE OWNER IS RESPONSIBLE FOR REPLACING STONE OR SAND ON PRIVATE PROPERTY.

UPON COMPLETION, THE WORK SITE SHALL BE THOROUGHLY CLEANED AND ALL SURPLUS MATERIAL REMOVED OFF SITE. ALL SURPLUS EXCAVATED MATERIAL SHALL BE HAULED AND DISPOSED OFF SITE (OWNER HAS 1ST RIGHT TO SURPLUS FIL) BY THE CONTRACTOR AND SHALL BE INCLUDED IN THE PRICE QUOTED.

MATERIAL SPECIFICATION:

PVC

CSA B137.3 CERTIFIED, FM APPROVED UL LISTED, AWWA C-900 AND NSF 61 CERTIFIED, CLASS 150, DR18, PR235PSI, CAST IRON O.D., BLUE IN COLOR, IPEX BLUE BRUTE OR APPROVED EQUIV.

DUCTILE IRON: MANUFACTURE TO AWWA/ANSI C151/A21.5 AND B131.3 AND NSF 61 SPECIAL CLASS 54 CEMENT LINING TO AWWA/ANSI C104/A21.4

JOINTS: JOINTS TO BE GASKETED AND SUPPORT AS SHOWN

FINISH – INSULATED ASPHALTIC COATING 1mm THICK

ALL DUCTILE IRON PIPE INSULATED UNDERGROUND SHALL BE SEALED IN A 6mm THICK POLYURETHANE GASKET TO MEET AWWA C105

CANADA PIPE OR APPROVED EQUIV.

FITTINGS:

DUCTILE IRON: DUCTILE IRON: CEMENT LINING, CLASS 250, AWWA C155/A21.53, MECHANICAL JOINT BELOW GRADE, FLANGED ABOVE GRADE. ALL DUCTILE IRON FITTINGS INCLUDING FASTENERS AND MECHANICAL RESTRAINT SYSTEMS INSTALLED UNDERGROUND SHALL BE SEALED IN DENSIO TAP OR APPROVED EQUIV.

FASTENERS:

ALL FITTING TIE BOLTS SHALL BE DUCTILE IRON TO AWWA C111 AND ANSI A21.11 UNLESS OTHERWISE NOTED ON THE DRAWING.

INSTALL PROTECTOR SACRIFICIAL NUTS OR CAPS ON EVERY BOLT ON EVERY FITTING.

ALL EXPOSED FASTENERS USED ON FLANGES TO BE STAINLESS STEEL TYPE 316 CONFORMING TO ASTM A193, GRADE 88M, CLASS 1 FOR BOLTS AND ASTM 194, GRADE 8M FOR NUTS.

TRACER WIRE:

ALL PLASTIC PIPE TO INCLUDE TRACER WIRE #12 AWG COPPERHEAD C/W DRYCONN CONNECTORS OR EQUIV.

SOLDER WIRE, TWO FLAME SAE LWR LAID ALONG SIDE OF PIPE, NOT TO TOP. LOOP WIRE UP THE EXTERIOR SIDE OF ALL VALVE BOXES AND PROTRUDE (BY DRILLING) INTO THE VALVE BOX JUST BELOW THE COVER. SPLICES NOT GENERALLY ALLOWED, HOWEVER, IF ABSOLUTELY NECESSARY, USE BURNDY KS-90 16-10 CONNECTORS WRAPPED WITH INSULATING MASTIC TAP (POLYMOUTH BISHOP 10 POLYSEAL).

PIPE AND JOINTS RESTRAINTS:

ORIGINAL STAR PIPE: STAR SERIES 3000

DUCTILE IRON PIPE: STAR SERIES 3000

PROVIDE SACRIFICIAL NUTS ON ALL FASTENERS OF WHICHEVER RESTRAINT SYSTEM IS USED.

ALTERNATIVELY, THREADED ROD THRU RESTRAINT SYSTEM SHALL BE STAINLESS STEEL INCLUDING ROD, WASHERS AND NUTS.

GALVANIZED FINISH IS ACCEPTABLE PROVIDED IT IS ENCASED WITH A TAPTEC PROTECTION SYSTEM. (IE. DENSIO OR TRENTON WAX TAPE)

SHOCK WIRE: PIPE RESTRAINT ON ALL FITTINGS SUCH AS VALVE, BENDS, TEES, PIPE BELLS THAT ARE UNABLE TO DRAW OR BLOW OFF IN ACCORDANCE WITH DRAWINGS AND DETAILS HEREIN AND AS DIRECTED BY THE ENGINEER IN THE FIELD AT THE TIME OF CONSTRUCTION.

GATE VALVE (FOR ISOLATION):

RESILIENT SEAT GATE VALVE, MECHANICAL JOINT x MECHANICAL JOINT, FM & UL APPROVED, AWWA C509, CLASS 250, COAT REPAIR EXTERIOR AND INTERIOR WITH EPOXY. MAIN FLANGE FOR 1/4" SERVICE SUITABLE FOR POTABLE WATER. CONFORMING TO AWWA C550/ASTM B78, MNS 1000, OPERATING NUT, OPEN COUNTER-CLOCKWISE, CLOSURE COUNTER-CLOCKWISE.

VALVE BOX:

BIBBY – SITE – CROIS FOUNDARIES – 130mm DIA, 3-PIECE, SCREW TYPE.

HYDRANTS:

HYDRANTS SHALL BE MULLER "CUTTER" WITH DRAIN OUTLETS PLUGGED, CONFORMS TO AWWA C502 AND FM & UL APPROVED. ALL FASTENERS ON FLANGES AND BOLT ASSEMBLY TO BE STAINLESS STEEL TYPE 316.

EACH HYDRANT SHALL HAVE 50mm hose NOZZLES AND ONE 117mm pump nozzle with "STORZ" TYPE PUMPER OUTLET CONFIGURATION.

HYDRANTS SHALL BE SHOP PAINTED IN ACCORDANCE WITH TOWN OF KINGSVILLE NFPA STANDARD NO. 13 PAINT COLOUR CODED. EXTERIOR DUCTILE IRON UNDERGROUND PORTION COATED WITH BUTIFEN OR EPOXY SHALL BE ENCASED WITH DENSIO TAP OR APPROVED EQUIV.

AWWA BUTTERFLY VALVE:

ISOLATION VALVE INSIDE SERVICE BUILDING SHALL BE 150 DIA. FLOWMATIC MODEL 45 AWWA BUTTERFLY VALVE, CLASS 150, FLXFL WITH GEAR OPERATOR AND HANDWHEEL AS SUPPLIED BY SCOTT BEVERLY AT INNOVATION PROCESS CONTROL LTD. 1-905-337-9100. ALL FLANGE BOLTS TO BE TYPE 316 STAINLESS STEEL, NO. Q145-1016-SB.

INSTALLATION AND COMMISSIONING:

INSTALLATION AND COMMISSIONING BY THE OWNER AND HIS CONTRACTOR TO THE SATISFACTION OF THE ENGINEER AND THE TOWN OF KINGSVILLE.

INSTALLATION OF WATER SERVICE SHALL BE INSPECTED AND APPROVED BY THE TOWN OF KINGSVILLE BUILDING DEPARTMENT PRIOR TO BACKFILL IN ALL CASES.

ALL CONNECTIONS TO EXISTING WATERMAIN SHALL BE MADE UNDER THE SUPERVISION OF THE ENGINEER AND /OR TOWN OF KINGSVILLE WATER DEPARTMENT.

THE CONTRACTOR SHALL USE A TEMPORARY TESTED BACKFLOW PREVENTER AND CHLORINATION TAP BETWEEN EXISTING VALVE AND NEW CONNECTION AND REMOVE UPON SATISFACTORY PRESSURE TESTING AND SAMPLES.

UPON COMPLETION OF THE NEW WATER SERVICE, THE NEW WATER SERVICE SHALL BE SWABBED A MINIMUM OF ONE TIME WITH THREE (3) OPEN CELL POLYURETHANE FOAM PIGS WITH MIN. DIAMETER OF 50mm LARGER THAN THE PIPING TO BE CLEANED. THE CONTRACTOR SHALL PROVIDE A WRITTEN REPORT TO THE TOWN OF KINGSVILLE REQUIREMENTS AND MINISTRY OF ENVIRONMENT REGULATION "PROCEDURE FOR DISINFECTION OF DRINKING WATER IN ONTARIO" UNDER THE SAFE DRINKING WATER ACT JUNE 2003 AND AWWA C615-99.

DISINFECTION SHALL BE USING CHLORINATION. THE CONTRACTOR SHALL PROVIDE A WRITTEN REPORT SHALL BE DECHLORINATED DURING FLUSHING OPERATIONS PRIOR TO DISCHARGE TO THE ENVIRONMENT.

SAMPLES OF THE WATER FOLLOWING FLUSHING SHALL BE TAKEN BY THE TOWN OF KINGSVILLE AND CONTRACTOR/OWNER IN THE PRESENCE OF THE ENGINEER AND SENT TO A PRIVATE LAB FOR ANALYSIS. RESULTS OF WATER SAMPLES SHALL REPORT ON TOTAL COLIFORM BACTERIA, E-COLI, HETEROTROPHIC AND BACKGROUND COUNTS.

THE NEW WATER SERVICE CAN BE PRESSURE TESTED PRIOR TO LAB SAMPLES GIVEN THE BACKFLOW PREVENTER IS INSTALLED AND THE TOWN OF KINGSVILLE WATER DEPARTMENT IS NOTIFIED.

IF THE SAMPLES ARE FOUND TO BE NOT POTABLE, THE DISINFECTION AND FLUSHING PROCEDURE SHALL BE REPEATED UNTIL THE WATER IS POTABLE.

UPON SUCCESSFUL COMPLETION OF DISINFECTION WORK, THE CONTRACTOR SHALL PRESSURE TEST THE NEW WATER SERVICE WITH WATER TO OPSI 701 TO 150 PSI FOR 2 HOURS WITH ZERO (0) LEAKAGE ALLOWANCE.

THE CONTRACTOR/OWNER IS RESPONSIBLE FOR COORDINATING WITH THE TOWN OF KINGSVILLE, THE SWABBING, PRESSURE TESTING AND DISINFECTION TESTING WORK DESCRIBED ABOVE.

ALL WORK INCLUDING SWABBING, FLUSHING, DISINFECTION AND PRESSURE TESTING SHALL BE CARRIED OUT UNDER THE SUPERVISION OF THE ENGINEER AND/OR TOWN OF KINGSVILLE.

SHOUT OUTS SHALL BE OBTAINED FROM THE TOWN OF KINGSVILLE WATER DEPARTMENT WITH THE PERMISSION AND AT THE DISCRETION OF THE TOWN OF KINGSVILLE WATER DEPARTMENT AND BUILDING DEPARTMENT.

THE CONTRACTOR/OWNER IS PROHIBITED FROM OPERATING ANY VALVES OR HYDRANTS ON THE EXISTING MUNICIPAL WATER SYSTEM, ARRANGE TO HAVE THE TOWN OF KINGSVILLE OPERATE ANY VALVES OR HYDRANTS OF THE EXISTING SYSTEM IF REQUIRED.

TAPPING NOTES:

PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY EXIST LOCATION, ELEVATION AND DIMENSION OF EXISTING 400 DIA. WATER MAIN. TAPPING RING W/ 1/4" SERVICE SHALL BE USED.

THE CONTRACTOR SHALL ENGAGE THE SERVICES OF A QUALIFIED TAPPING CONTRACTOR, APPROVED BY THE TOWN OF KINGSVILLE, TO SUPPLY AND INSTALL THE TAPPING SADDLE ON THE EXISTING 400 DIA. P.V.C. TRUNK MAIN AND PERFORM THE TAP. THE TAPPING CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK WITH THE TAPPING CONTRACTOR. ALL WORK TO BE PERFORMED TO THE SATISFACTION OF THE ENGINEER. THE PIPE COUPON MUST BE RETRIEVED AND HANDED OVER TO THE ENGINEER OR TOWN IN HIS PRESENCE PRIOR TO DISCHARGE OF THE TAP. THE MEDICAL WORK TO RETRIEVE A LOST COUPON WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AT HIS EXPENSE.

THE TAPPING SADDLE SHALL BE PRESSURE TESTED TO 150 PSI PRIOR TO CORING THE EXISTING MAIN USING THE FITTING PROVIDED ON THE SADDLE. TAPPING CAN PROCEED ONLY ON SUCCESSFUL PRESSURE TEST AND WITH THE APPROVAL OF THE ENGINEER AND/OR TOWN OF KINGSVILLE WATER DEPARTMENT.

TAPPING WORK SHALL BE SCHEDULED AND COORDINATED WITH THE TOWN OF KINGSVILLE.

BEDDING AND BACKFILL FOR THE TAP, FITTING AND VALVES SHALL BE COMPACTED GRANULAR "A" UNLESS SHOWN OTHERWISE.

UNLESS OTHERWISE INDICATED ON DRAWINGS, SUPPLY AND CONSTRUCT PROTECTION SYSTEMS AS REQUIRED TO MAINTAIN STABILITY OF EXCAVATION FOR THE CONSTRUCTION OF UNDERGROUND STRUCTURES, SEWERS AND UTILITIES. PROTECTION SYSTEMS MUST BE DESIGNED AND CERTIFIED BY A LICENCE PROFESSIONAL ENGINEER IN ONTARIO.

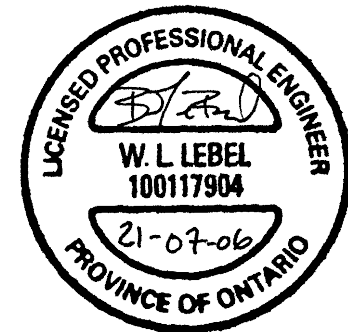
- ## BENCHMARKS
1. TOP E. OF EAST CONC. HEADWALL OF BRIDGE
OVER STURGEON CREEK OF COUNTY ROAD 31.
- ELEV. = 212.387m
2. TOP NUT OF FIRE HYDRANT (K451) LOCATED
ON WEST SIDE OF COUNTY ROAD 31, IN FRONT
OF M.N. 2481 COUNTY ROAD 31.
- ELEV. = 213.319m

REVIEW AND APPROVAL	W.L.L.	06 JULY 2021
TOWN COMMENTS	W.L.L.	23 JUNE 2021
S.W.M. REPORT	W.L.L.	09 APR. 2021
ISSUED FOR:	BY:	DATE:
REVISIONS:		

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ENGINEERING STAMP:



RIDGE FARMS

**PHASE 1
GREENHOUSE
DEVELOPMENT**

**2461 COUNTY ROAD 31
KINGSVILLE, ON**

SHEET TITLE

WATER SERVICE PLAN
NOTES AND DETAILS

DESIGNED BY: H.C.M.	DATE: JAN. 29th, 2021
DRAWN BY: J.H.	SCALE: AS SHOWN
SHEET: 8	OF: 9
PROJECT No.: E19-127	

