

CONVERTUS YORK BIOFUEL LTD.

CONVERTUS BIOFUEL FACILITY 50 GARFIELD WRIGHT BOULEVARD EAST GWILLIMBURY, ONTARIO

JANUARY 2024



OVERALL SITE LOCATION

SOURCE:
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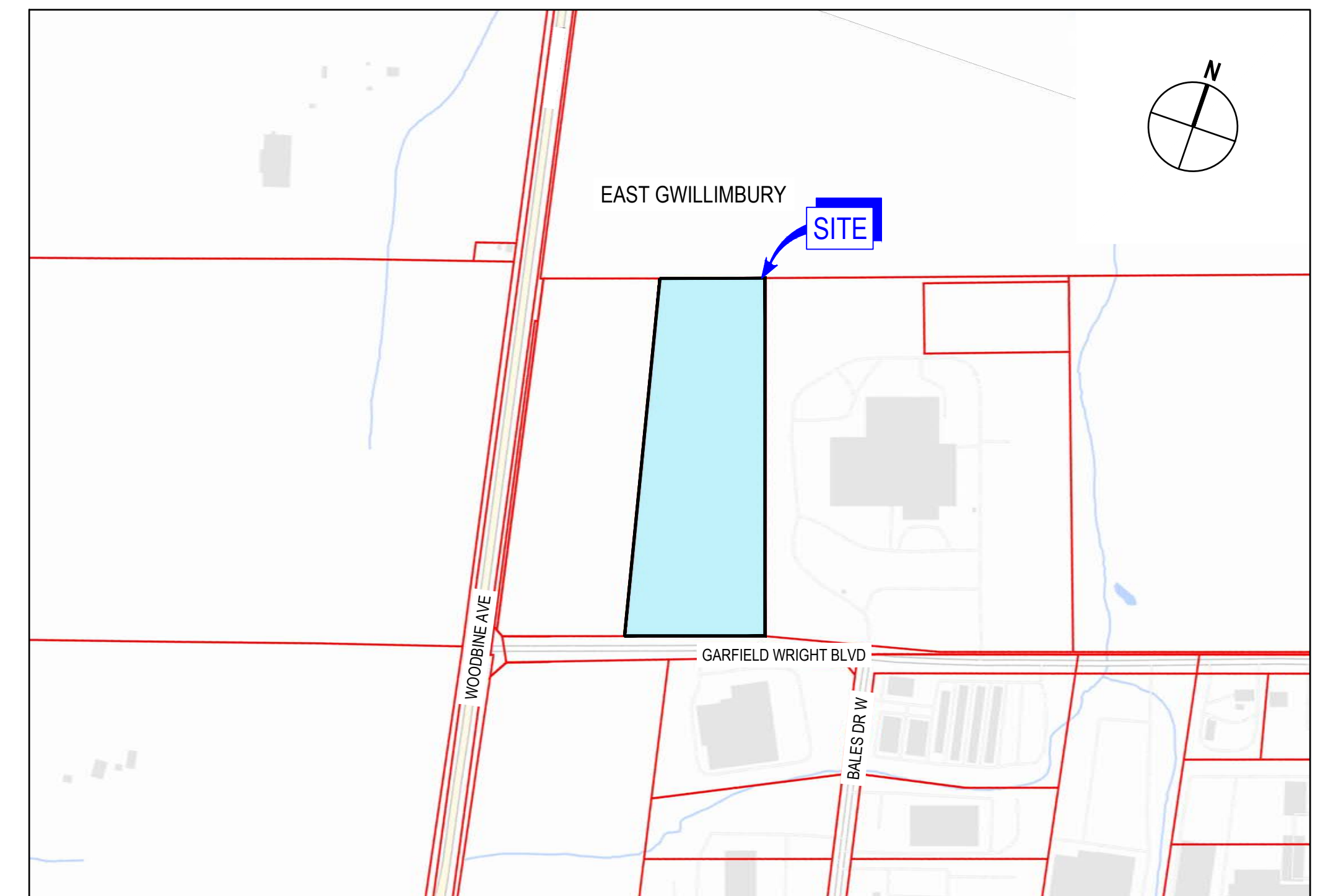
APPLICANT: CONVERTUS



PREPARED BY: GHD



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Waterloo, Ontario N2L 3X2 Canada
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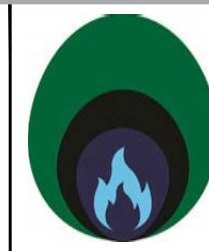
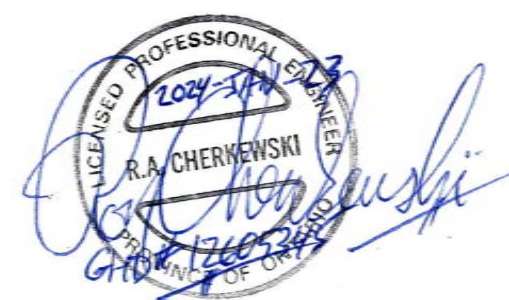
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P01 ISSUED FOR SPA				R.A / R.C	R.L	2024-01-23
No.	Issue	Checked	Approved	Date		
Author	S.HOLLAND	Drafting Check	A. WRIGGLESWORTH	Project Manager	R.LOVEDAY	
Designer	R.AZZAM / R.CHERKEWSKI	Design Check	A. WRIGGLESWORTH	Project Director	M.DI NIRO	

Bar is 25mm on original size sheet
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Client **CONVERTUS YORK BIOFUEL LTD.**

Project **CONVERTUS BIOFUEL FACILITY**

Project No.
12605345

Date
2024-01-23

Scale
N.T.S.

Title **GENERAL - COVER SHEET**

Sheet No.
12605345-GHD-10-10-DRG-CI-D001

Size
ANSI D

SHEET INDEX	
SHEET NUMBER	SHEET TITLE
10-10 SERIES - SPA / OVERALL - GHD	
12605345-GHD-10-10-DRG-CI-D001	GENERAL - COVER SHEET
12605345-GHD-10-10-DRG-CI-D002	GENERAL - DRAWING INDEX
12605345-GHD-10-10-DRG-CI-D101	GENERAL - KEY PLAN
12605345-GHD-10-10-DRG-CI-D102	GENERAL - SITE PLAN EXISTING CONDITIONS
12605345-GHD-10-10-DRG-CI-D103	GENERAL - SITE PREPARATION AND REMOVALS
12605345-GHD-10-10-DRG-CI-D104	GENERAL - SITE PLAN PROPOSED CONDITIONS
12605345-GHD-10-10-DRG-CI-D105	GENERAL - SITE PLAN PROPOSED CONDITIONS NOTES
00-00 SERIES -- ARCHITECTURAL PLANS -- GHD	
12605345-GHD-00-00-DRG-AR-D002	ARCHITECTURAL LEGEND AND NOTES
12605345-GHD-00-00-DRG-AR-D101	GENERAL ARRANGEMENT - GROUND FLOOR - PROCESS BUILDING
12605345-GHD-00-00-DRG-AR-D201	BUILDING ELEVATIONS - PROCESS BUILDING
12605345-GHD-00-00-DRG-AR-D401	ENLARGED PLANS - GROUND FLOOR
12605345-GHD-00-00-DRG-AR-D402	ENLARGED PLANS - MEZZANINE
10-10 SERIES - LANDSCAPE - TROPIC DESIGN	
12605345-GHD-10-10-DRG-LA-D101	LANDSCAPE PLAN 1 OF 2
12605345-GHD-10-10-DRG-LA-D102	LANDSCAPE PLAN 2 OF 2
12605345-GHD-10-10-DRG-LA-D103	PLANTING PLAN
12605345-GHD-10-10-DRG-LA-D501	LANDSCAPE DETAILS 1 OF 3
12605345-GHD-10-10-DRG-LA-D502	LANDSCAPE DETAILS 2 OF 3
12605345-GHD-10-10-DRG-LA-D503	LANDSCAPE DETAILS 3 OF 3
10-20 SERIES - GRADING PLANS - GHD	
12605345-GHD-10-20-DRG-CI-D101	OVERALL SITE GRADING PLAN
12605345-GHD-10-20-DRG-CI-D102	SITE GRADING PLAN 1 OF 4
12605345-GHD-10-20-DRG-CI-D103	SITE GRADING PLAN 2 OF 4
12605345-GHD-10-20-DRG-CI-D104	SITE GRADING PLAN 3 OF 4
12605345-GHD-10-20-DRG-CI-D105	SITE GRADING PLAN 4 OF 4
12605345-GHD-10-20-DRG-CI-D301	TANK FARM GRADING SECTION
10-30 SERIES - SERVICING PLANS - GHD	
12605345-GHD-10-30-DRG-CI-D101	OVERALL SITE SERVICING PLAN
12605345-GHD-10-30-DRG-CI-D102	SITE SERVICING PLAN 1 OF 4
12605345-GHD-10-30-DRG-CI-D103	SITE SERVICING PLAN 2 OF 4
12605345-GHD-10-30-DRG-CI-D104	SITE SERVICING PLAN 3 OF 4
12605345-GHD-10-30-DRG-CI-D105	SITE SERVICING PLAN 4 OF 4
12605345-GHD-10-30-DRG-CI-D502	SITE SERVICING NOTES
10-32 SERIES - SEPTIC SYSTEM - GHD	
12605345-GHD-10-32-DRG-CI-D101	ONSITE SEPTIC SYSTEM DESIGN
10-34 SERIES - STORMWATER - GHD	
12605345-GHD-10-34-DRG-CI-D101	EXISTING CONDITIONS PLAN AND CATCHMENTS
12605345-GHD-10-34-DRG-CI-D102	PROPOSED CONDITIONS PLAN AND CATCHMENTS
12605345-GHD-10-34-DRG-CI-D103	PROPOSED CONDITIONS PLAN
12605345-GHD-10-34-DRG-CI-D104	PROPOSED CONDITIONS STORMWATER MANAGEMENT POND
12605345-GHD-10-34-DRG-CI-D105	PROPOSED CONDITIONS EROSION AND SEDIMENT CONTROL
12605345-GHD-10-34-DRG-CI-D301	STORMWATER MANAGEMENT POND PLAN AND PROFILE
12605345-GHD-10-34-DRG-CI-D303	STORMWATER MANAGEMENT POND OUTLET STRUCTURE
12605345-GHD-10-34-DRG-CI-D501	STORMWATER DETAILS
12605345-GHD-10-34-DRG-CI-D502	STORMWATER EROSION AND SEDIMENT CONTROL DETAILS
12605345-GHD-10-34-DRG-CI-D503	GROUNDWATER COLLECTION SYSTEM AND LINER DETAIL
10-39 SERIES - SITE LIGHTING - GHD	
12605345-GHD-10-39-DRG-CI-D001	SITE LIGHTING LAYOUT
12605345-GHD-10-39-DRG-CI-D002	SITE LIGHTING PHOTOMETRICS
12605345-GHD-10-39-DRG-CI-D501	SITE LIGHTING DETAILS 1 OF 2
12605345-GHD-10-39-DRG-CI-D502	SITE LIGHTING DETAILS 2 OF 2
10-60 SERIES - TRAFFIC - GHD	
12605345-GHD-10-60-DRG-CI-D101	TRUCK ROUTES AND MOVEMENTS PLAN 1 OF 2
12605345-GHD-10-60-DRG-CI-D102	TRUCK ROUTES AND MOVEMENTS PLAN 2 OF 2
12605345-GHD-10-60-DRG-CI-D103	TRAFFIC MANAGEMENT AND IMPLEMENTATION PLAN
OUTSIDE SOURCE - OLS PLANS - SCHAEFFER DZALDOV PURCELL LTD, OLS	
OLS Job/File... 23-009, G2-M3843-BLOCK 1	PLAN OF SURVEY WITH TOPOGRAPHY, PART OF BLOCK 1, PLAN 65M-3843, TOWN OF EAST GWILLIMBURY
OLS Job/File... 23-010, G2-M3843-BLOCK 1	PLAN OF SURVEY OF BLOCK 1, PLAN 65M-3843, TOWN OF EAST GWILLIMBURY, ALL-OF-PIN-03440-0249

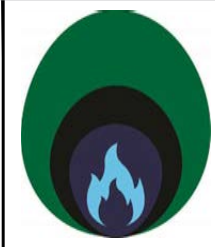
PREPARED BY: GHD

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No.	Issue	Checked	Approved	Date		
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Designer	R. AZZAM / R. CHERKEWSKI	Design Check	A. WRIGGLESWORTH	Project Director	M. DI NIRO	

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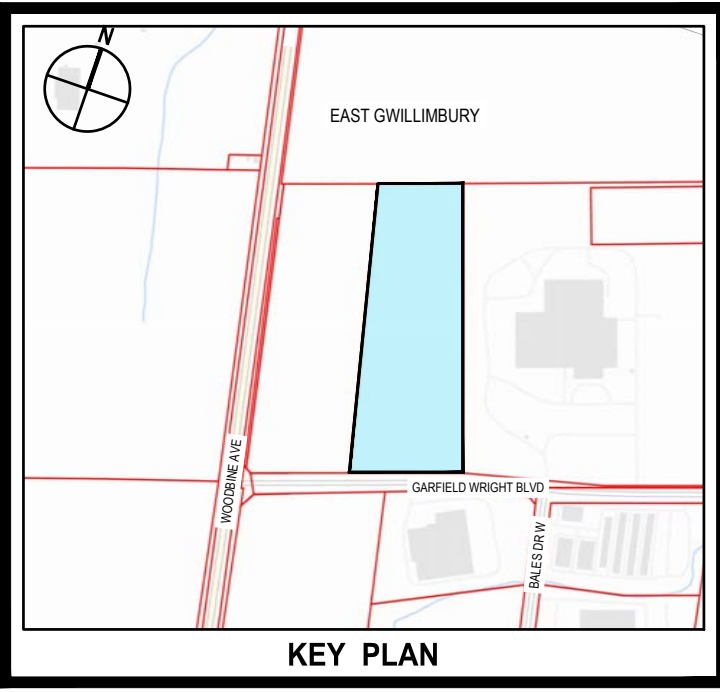
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Client	CONVERTUS YORK BIOFUEL LTD.	
Project	CONVERTUS BIOFUEL FACILITY	
Project No.	Date	Scale
12605345	2024-01-23	

Title	GENERAL - DRAWING INDEX
Size	ANSI D
Sheet No.	12605345-GHD-10-10-DRG-CI-D002



LEGEND:
SITE LOCATION

SOURCE & BENCHMARKS

LEGAL SURVEY "PART 1, BLOCK 1, PLAN 65M-3843, TOWN OF EAST GWILLIMBURY, REGIONAL MUNICIPALITY OF YORK, PROVINCE OF ONTARIO", AND EXISTING TOPOGRAPHY AND SITE FEATURES, COMPILED BY SCHAEFFER DZALDOV PURCELL LTD (OLS), CONCORD, ONTARIO. SDP JOB 23-009 & 23-010, FILE "G2-M3843-BLOCK-1", 2023-MARCH. UTM ZONING 17, NAD-83 (CSRS-2010); CGVD-1928:1978, STATION 00820118077, BENCHMARK, ELEVATION 290.976 METRES GEODETIC, LOCATED AT THE INTERCHANGE OF PROVINCIAL HWY-404 AND YORK REGION ROAD-31 (DAVIS DRIVE), APPROXIMATELY 1400-METRES SOUTH-WEST OF SUBJECT SITE.

ADDITIONAL TOPOGRAPHY AND SITE FEATURES SURVEY, NORTH-EAST / EAST OF SITE LIMITS, COMPILED BY GHD LTD, WATERLOO, ONTARIO. GHD JOB 12605345, FILE "12605345(SOURCE)V001 FILE 2 EXISTING CONDITIONS", 2023-NOVEMBER. UTM ZONING 17, NAD-83 (CSRS-2010), CGVD-1928:1978, YORK REGION VERTICAL CONTROL BENCHMARK 56-131, TABLET, ELEVATION 284.55, LOCATED 21.8 METRES SOUTH AND 82.4 METRES WEST OF THE CENTRELINE OF THE INTERSECTION OF YORK REGION ROAD-31 (DAVIS DRIVE), AND YORK REGION ROAD-8 (WOODBINE AVENUE), APPROXIMATELY 500-METRES SOUTH-WEST OF SUBJECT SITE.

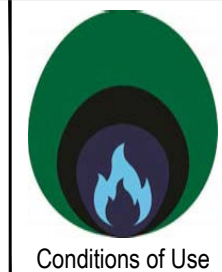
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Author	S. HOLLAND	Drafting Check	A. WRIGGLESWORTH	Project Manager	R. LOVEDAY	
Designer	R. AZZAM / R. CHERKEWSKI	Design Check	A. WRIGGLESWORTH	Project Director	M. DI NIRO	

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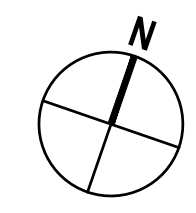
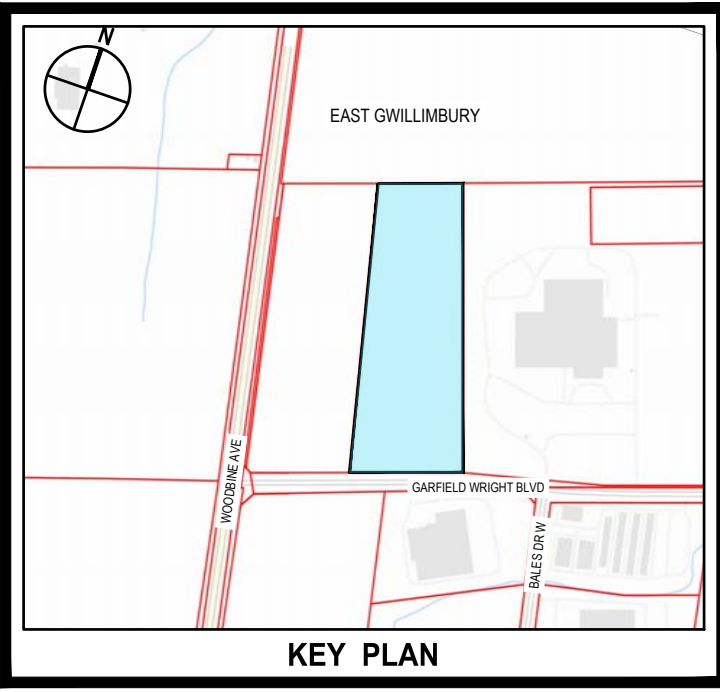
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Client	CONVERTUS YORK BIOFUEL LTD.		Title	GENERAL - KEY PLAN	Size	ANSI D
Project	CONVERTUS BIOFUEL FACILITY		Project No.	12605345	Date	2024-01-23
			Scale	1:2500	Sheet No.	12605345-GHD-10-10-DRG-CI-D101



- LEGEND:**
- - - - - PROJECT LOT LIMIT
 - - - - - ADJACENT LOT LEGAL LIMIT
 - 282 — MAJOR CONTOUR (1M INTERVAL)
 - — — — — MINOR CONTOUR (0.2M INTERVAL)
 - - - - - FENCE LINE
 - ==== ROAD
 - - - - - ROAD (APPROXIMATE)
 - - - - - E OVERHEAD ECLECTIC
 - - - - - W WATERMAIN
 - ~~~~~ TREE LINE
 - TREE
 - M.H. MAINTENANCE HOLE
 - C.B. CATCHBASIN
 - F.H.D. FIRE HYDRANT
 - W.V. WATER VALVE
 - V.C.H. VALVE CHAMBER
 - L.S. LIGHT STANDARD
 - H.P. HYDRO POLE
 - H.P.L. HYDRO POLE & LIGHT
 - H.P.T. HYDRO POLE & TRANSFORMER

SOURCE & BENCHMARKS

LEGAL SURVEY "PART 1, BLOCK 1, PLAN 65M-3843, TOWN OF EAST GWILLIMBURY, REGIONAL MUNICIPALITY OF YORK, PROVINCE OF ONTARIO", AND EXISTING TOPOGRAPHY AND SITE FEATURES, COMPILED BY SCHAEFFER DZALDOV PURCELL LTD (OLS), CONCORD, ONTARIO. SDP JOB 23-009 & 23-010, FILE "G2-M3843-BLOCK-1", 2023-MARCH. UTM ZONE 17, NAD-83 (CSRS-2010); CGVD-1928:1978, STATION 00820118077, BENCHMARK, ELEVATION 290.976 METRES GEODETIC, LOCATED AT THE INTERCHANGE OF PROVINCIAL HWY-404 AND YORK REGION ROAD-31 (DAVIS DRIVE), APPROXIMATELY 1400-METRES SOUTH-WEST OF SUBJECT SITE.

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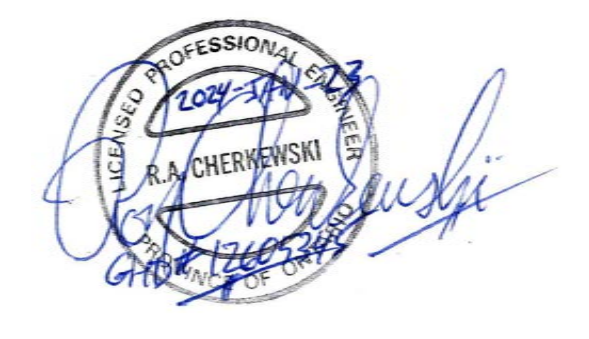
PREPARED BY: GHD



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No.	Issue	Checked	Approved	Date
P02	ISSUED FOR SPA	R.A / R.C	R.L	2024-01-23
P01	ISSUED FOR SPA PRE-CONSULTATION	R.A	R.L	2023-05-18
Author S. HOLLAND Drafting Check A. WRIGGLESWORTH Project Manager R. LOVEDAY				
Designer R. AZZAM / R. CHERKEWSKI Design Check A. WRIGGLESWORTH Project Director M. DI NIRO				

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Client	CONVERTUS YORK BIOFUEL LTD.
Project	CONVERTUS BIOFUEL FACILITY
Project No.	12605345
Date	2024-01-20
Scale	1:1000

Title	GENERAL - SITE PLAN EXISTING CONDITIONS	Size	ANSI D
Project No. 12605345 Date 2024-01-20 Scale 1:1000			Sheet No. 12605345-GHD-10-10-DRG-CI-D102

TREE PROTECTION AND TREE REMOVAL

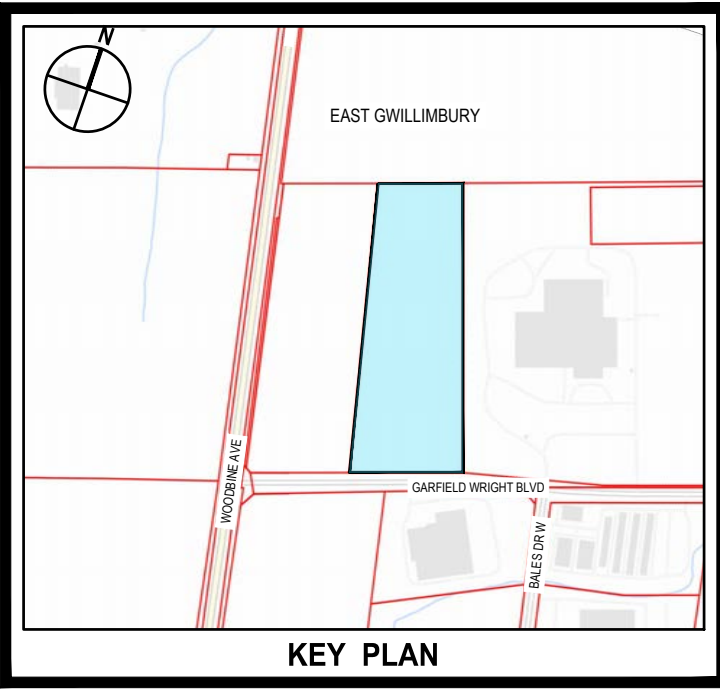
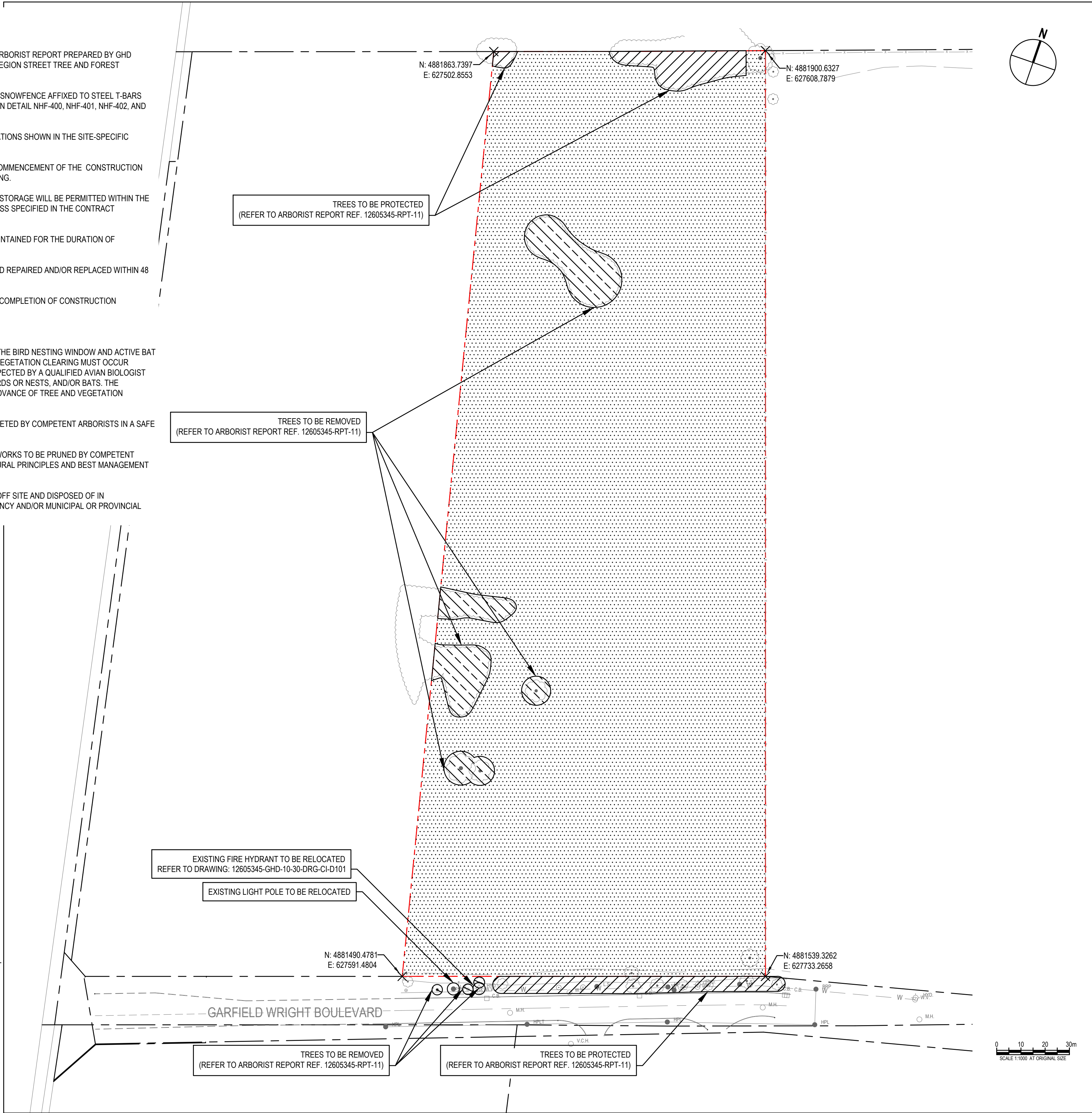
1. TREE PROTECTION BARRIER:
 - 1.1 THE CONTRACTOR SHALL ADHERE TO THE SITE-SPECIFIC ARBORIST REPORT PREPARED BY GHD (JANUARY 2024) AND GUIDELINES OUTLINED IN THE YORK REGION STREET TREE AND FOREST PRESERVATION GUIDELINES (GUIDELINES)
 - 1.2 TREE PROTECTION BARRIER TO CONSIST OF ORANGE WEB SNOWFENCE AFFIXED TO STEEL T-BARS AND A 2 X 4' WOODEN FRAME, INSTALLED PER YORK REGION DETAIL NHF-400, NHF-401, NHF-402, AND THE GUIDELINES.
 - 1.3 TREE PROTECTION BARRIER TO BE INSTALLED IN THE LOCATIONS SHOWN IN THE SITE-SPECIFIC ARBORIST REPORT PREPARED BY GHD (JANUARY 2024)
 - 1.4 TREE PROTECTION BARRIER TO BE INSTALLED PRIOR TO COMMENCEMENT OF THE CONSTRUCTION PHASE AND SITE TREE REMOVAL/GRUBBING AND/OR PRUNING.
 - 1.5 NO CONSTRUCTION ACTIVITIES, EQUIPMENT, OR MATERIAL STORAGE WILL BE PERMITTED WITHIN THE TPZ OR BEYOND/BEHIND TREE PROTECTION BARRIER UNLESS SPECIFIED IN THE CONTRACT DOCUMENTS.
 - 1.6 TREE PROTECTION BARRIER TO BE LEFT IN PLACE AND MAINTAINED FOR THE DURATION OF CONSTRUCTION ACTIVITIES.
 - 1.7 TREE PROTECTION BARRIER TO BE INSPECTED WEEKLY AND REPAIRED AND/OR REPLACED WITHIN 48 HOURS OF IDENTIFIED DAMAGE OR DEFICIENCIES.
 - 1.8 ALL TREE PROTECTION MATERIALS TO BE REMOVED UPON COMPLETION OF CONSTRUCTION ACTIVITIES OR AS DIRECTED BY THE ENGINEER/OWNER.
2. TREE REMOVAL, TREE CANOPY PRUNING, AND TIMING:
 - 2.1 TREE AND VEGETATION REMOVAL TO OCCUR OUTSIDE OF THE BIRD NESTING WINDOW AND ACTIVE BAT SEASON (APRIL 1 THROUGH SEPTEMBER 30); IF TREE AND VEGETATION CLEARING MUST OCCUR BETWEEN APRIL 1 AND SEPTEMBER 30, THE SITE MUST BE INSPECTED BY A QUALIFIED AVIAN BIOLOGIST OR ECOLOGIST TO CONFIRM THE ABSENCE OF NESTING BIRDS OR NESTS, AND/OR BATS. THE INSPECTION MUST OCCUR NOT MORE THAN 48 HOURS IN ADVANCE OF TREE AND VEGETATION CLEARING.
 - 2.2 TREE REMOVAL AND TREE CANOPY PRUNING TO BE COMPLETED BY COMPETENT ARBORISTS IN A SAFE AND CONTROLLED MANNER.
 - 2.3 ANY TREE BRANCHES DAMAGED DURING CONSTRUCTION WORKS TO BE PRUNED BY COMPETENT ARBORISTS IN ACCORDANCE WITH CURRENT ARBORICULTURAL PRINCIPLES AND BEST MANAGEMENT PRACTICES.
 - 2.4 ALL BRUSH, CHIPPED MATERIAL, AND WOOD TO BE TAKEN OFF SITE AND DISPOSED OF IN ACCORDANCE WITH THE CANADIAN FOOD INSPECTION AGENCY AND/OR MUNICIPAL OR PROVINCIAL REGULATIONS/GUIDELINES.

SOURCE & BENCHMARKS

LEGAL SURVEY "PART 1, BLOCK 1, PLAN 65M-3843, TOWN OF EAST GWILLIMBURY, REGIONAL MUNICIPALITY OF YORK, PROVINCE OF ONTARIO", AND EXISTING TOPOGRAPHY AND SITE FEATURES, COMPILED BY SCHAEFFER DZALDOV PURCELL LTD (OLS), CONCORD, ONTARIO. SDP JOB 23-009 & 23-010, FILE "G2-M3843-BLOCK-1", 2023-MARCH. UTM ZONE 17, NAD-83 (CSRS-2010); CGVD-1928:1978, STATION 00820118077, BENCHMARK, ELEVATION 290.976 METRES GEODETIC, LOCATED AT THE INTERCHANGE OF PROVINCIAL HWY-404 AND YORK REGION ROAD-31 (DAVIS DRIVE), APPROXIMATELY 1400-METRES SOUTH-WEST OF SUBJECT SITE.

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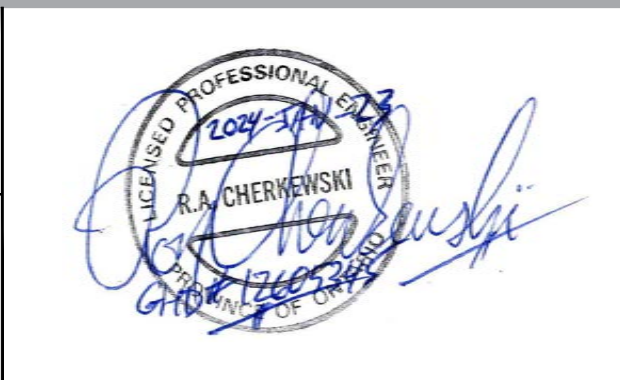
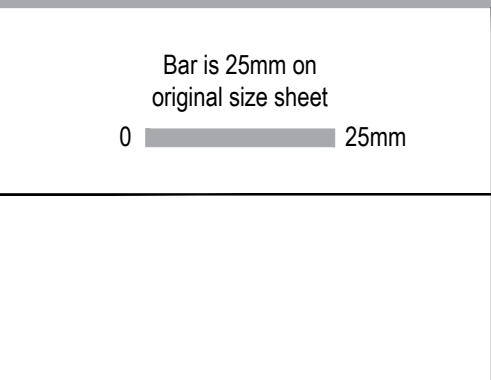
PREPARED BY: GHD



- LEGEND:**
- PROJECT LOT LIMIT
 - ADJACENT LOT LEGAL LIMIT
 - FENCE LINE
 - ROAD
 - ROAD (APPROXIMATE)
 - E --- OVERHEAD ELECTRIC
 - W --- WATERMAIN
 - TREE LINE
 - TREE
 - MH --- MAINTENANCE HOLE
 - CB --- CATCHBASIN
 - HYD --- FIRE HYDRANT
 - W.V. --- WATER VALVE
 - V.CH --- VALVE CHAMBER
 - L.S. --- LIGHT STANDARD
 - HP --- HYDRO POLE
 - HPL --- HYDRO POLE & LIGHT
 - HPT --- HYDRO POLE & TRANSFORMER
- REMOVALS AND RELOCATIONS LEGEND**
- ▨ TREES TO BE PROTECTED
 - ▨ TREE REMOVAL
 - ▨ CLEARING AND GRUBBING

NOT FOR CONSTRUCTION

P01 ISSUED FOR SPA			
No.	Issue	Checked	Approved
Author	S. HOLLAND	Drafting Check	A. WRIGGLESWORTH Project Manager
Designer	R. AZZAM / R. CHERKEWSKI	Design Check	A. WRIGGLESWORTH Project Director
			R. LOVEDAY
			M. DI NIRO



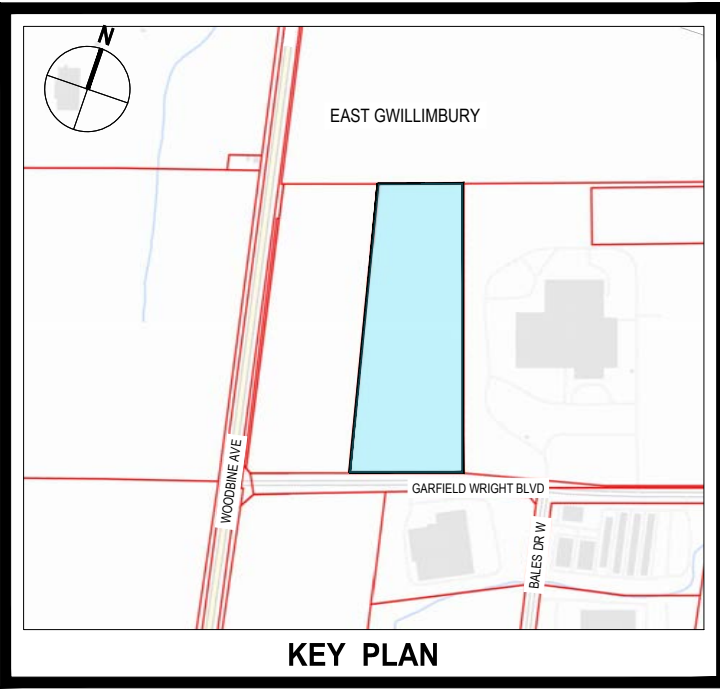
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Project No.	12605345
Date	2024-01-23
Scale	1:1000

Title	GENERAL - SITE PREPARATION AND REMOVALS
Sheet No.	12605345-GHD-10-10-DRG-CI-D103
Size	ANSI D



- LEGEND:**
- PROJECT LOT LIMIT
 - SETBACK LIMIT
 - ADJACENT LOT LEGAL LIMIT
 - FENCE LINE
 - ROAD
 - ROAD (APPROXIMATE)
 - OVERHEAD ELECTRIC
 - WATERMAIN
 - TREE
 - M.H. MAINTENANCE HOLE
 - C.B. CATCHBASIN
 - HYD. FIRE HYDRANT
 - W.V. WATER VALVE
 - V.C.H. VALVE CHAMBER
 - L.S. LIGHT STANDARD
 - HP. HYDRO POLE
 - HPL. HYDRO POLE & LIGHT
 - HPT. HYDRO POLE & TRANSFORMER
 - C.B. PROPOSED CATCHBASIN
 - D.C.B. PROPOSED DOUBLE CATCHBASIN
 - D.C.B. M.H. PROPOSED DOUBLE CATCHBASIN MAINTENANCE HOLE
 - C.B. M.H. PROPOSED CATCHBASIN MAINTENANCE HOLE
 - M.H. PROPOSED MAINTENANCE HOLE
 - M.H. PROPOSED MAINTENANCE HOLE WITH 2 ACCESS COVERS
 - U.P. PROPOSED UTILITIES POLE
 - PROPOSED TREE
 - HYD. PROPOSED HYDRANT
 - PROPOSED LIGHTING
 - PROPOSED EDGE OF ASPHALT
 - PROPOSED ROAD MARKINGS
 - PROPOSED CURB
 - PROPOSED SWALE
 - PROPOSED FENCE LINE
 - PROPOSED ACCESS GATE
 - O.H. PROPOSED OVERHEAD ELECTRIC
 - U.E. PROPOSED UNDERGROUND ELECTRIC
 - S.T.M. PROPOSED STORM SEWER
 - W. PROPOSED WATERMAIN
 - F. PROPOSED FIRE WATERMAIN
 - S.A.N. PROPOSED SANITARY FORCEMAIN
 - N.G. PROPOSED NATURAL GAS
 - U.T. PROPOSED UNDERGROUND TELECOM
 - U.T. PROPOSED SPARE CONDUIT FOR FUTURE TELECOM
 - PROPOSED PERFORATED GROUNDWATER LATERAL COLLECTOR
 - PROPOSED PERFORATED GROUNDWATER MAINLINE COLLECTOR
 - PROPOSED BUILDING
 - PROPOSED HARD SURFACE
 - PROPOSED GRAVEL AREA
 - PROPOSED CONCRETE
 - PROPOSED GRANULAR (SNOW STORAGE AREA)
 - PROPOSED RIP-RAP



SOURCE & BENCHMARKS

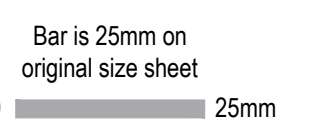
LEGAL SURVEY "PART 1, BLOCK 1, PLAN 65M-3843, TOWN OF EAST GWILLIMBURY, REGIONAL MUNICIPALITY OF YORK, PROVINCE OF ONTARIO", AND EXISTING TOPOGRAPHY AND SITE FEATURES, COMPILED BY SCHAEFFER DZALDOV PURCELL LTD (OLS), CONCORD, ONTARIO, SDP JOB 23-009 & 23-010, FILE "G2-M3843-BLOCK-1", 2023-MARCH. UTM ZONE 17, NAD-83 (CSRS-2010); CGVD-1928:1978, STATION 00820118077, BENCHMARK, ELEVATION 290.976 METRES GEODETIC, LOCATED AT THE INTERCHANGE OF PROVINCIAL HWY-404 AND YORK REGION ROAD-31 (DAVIS DRIVE), APPROXIMATELY 1400-METRES SOUTH-WEST OF SUBJECT SITE.

ADDITIONAL TOPOGRAPHY AND SITE FEATURES SURVEY, NORTH-EAST / EAST OF SITE LIMITS, COMPILED BY GHD LTD, WATERLOO, ONTARIO, GHD JOB 12605345, FILE "12605345(SOURCE)001 FILE 2 EXISTING CONDITIONS", 2023-NOVEMBER. UTM ZONE 17, NAD-83 (CSRS-2010), CGVD-1928:1978, YORK REGION VERTICAL CONTROL BENCHMARK 56-131, TABLET, ELEVATION 284.55, LOCATED 21.8 METRES SOUTH AND 82.4 METRES WEST OF THE CENTRELINE OF THE INTERSECTION OF YORK REGION ROAD-31 (DAVIS DRIVE), AND YORK REGION ROAD-8 (WOODBINE AVENUE), APPROXIMATELY 500-METRES SOUTH-WEST OF SUBJECT SITE.

PREPARED BY: GHD

No.	Issue	Checked	Approved	Date
P06	ISSUED FOR SPA	R.A / R.C	R.L	2024-01-23
P05	ISSUED FOR REVIEW AND COMMENTS	R.A	R.L	2023-12-06
P04	ISSUED FOR REVIEW AND COMMENTS	R.A	R.L	2023-11-27
P03	ISSUED FOR REVIEW AND COMMENTS	R.A	R.L	2023-07-04
P02	ISSUED FOR CLIENT REVIEW	R.A	R.L	2023-06-19
P01	ISSUED FOR SPA PRE-CONSULTATION	R.A	R.L	2023-06-06

Author: S. HOLLAND Drafting Check: A. WRIGGLESWORTH Project Manager: R. LOVEDAY
 Designer: R. AZAM / R. CHERKEWSKI Design Check: A. WRIGGLESWORTH Project Director: M. DI NIRO



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Client	CONVERTUS YORK BIOFUEL LTD.	
Project	CONVERTUS BIOFUEL FACILITY	
Project No.	Date	Scale
12605345	2024-01-23	1:1000

NOT FOR CONSTRUCTION

Title: GENERAL - SITE PLAN
PROPOSED CONDITIONS

Sheet No.
12605345-GHD-10-10-DRG-CI-D104

CONVERTUS YORK BIOFUEL LTD, CONVERTUS BIOFUEL FACILITY

MUNICIPAL ADDRESS:
50 GARFIELD WRIGHT BOULEVARD, EAST GWILLIMBURY, ONTARIO, CANADA

LEGAL DESCRIPTION:
PART LOT 2, CONCESSION 4, EAST GWILLIMBURY TOWNSHIP, YORK REGION, PROVINCE OF ONTARIO PART 1, BLOCK 1, PLAN 65M-3843, TOWN OF EAST GWILLIMBURY, REGIONAL MUNICIPALITY OF YORK PART OF PIN 03440-0249

GIS PARCEL ID: 409 528 **TAX ASSESSMENT ROLL NUMBER:** 19540 00107 47002 **PIN:** 03440-0362 (<VERIFY)

SUMMARY EXCERPTS/REQUIREMENTS FROM ZONING BY-LAW:

ZONING M2, EMPLOYMENT GENERAL PERMITTED USES IN ZONING M2, EMPLOYMENT GENERAL (SELECT LISTING)
--INDUSTRIAL USE
--WASTE PROCESSING STATION
--WASTE TRANSFER STATION

PROPOSED USE:
--WASTE PROCESSING STATION

	REQUIRED	PROVIDED
MINIMUM LOT FRONTAGE	15.0 m	150.0 m
MINIMUM FRONT YARD	6.0 m	31.0 m
MINIMUM REAR YARD	7.5 m	248.4 m
MINIMUM INTERIOR SIDE YARD	3.0 m	33.4 m
MINIMUM EXTERIOR SIDE YARD	3.0 m	N/A

MAXIMUM BUILDING HEIGHT N/A ~13.7 m
LOT DEPTH (MID-FRONT TO MID-REAR) N/A ~382.5 m

LOT AREA (WITHIN LOT LINES) 50,073 m²

LOT COVERAGE (MAIN BLDG TO EXTERIOR OF WALL) 3,811 M2 7.6-PERCENT

MINIMUM LANDSCAPING AREA
10-PERCENT ~26,000 M2 ~52-PERCENT SOFT/GREEN-AREAS, INCL WALKWAYS/PAVERS
~22,200 M2 ~44-PERCENT ASPHALTED AREAS, INCLUDING TANK FARM
~1,800 M2 ~4-PERCENT GRANULAR AREAS (PADS/ACCESS LANEWAY)

A MINIMUM 3.0 METRE WIDE PLANTING STRIP ABUTTING THE FULL LENGTH OF A LOT LINE IS REQUIRED ON A LOT IN ANY MIXED USE, INSTITUTIONAL, COMMERCIAL OR EMPLOYMENT ZONE THAT ABUTS AN INTERIOR SIDE OR REAR LOT LINE OF A LOT IN ANY RESIDENTIAL ZONE
--NOT APPLICABLE TO SITE (NO RESIDENTIAL), BUT A VARIABLE WIDTH PLANTING STRIP IS PROVIDED

MAIN BLDG	ACCESSORY
FLOOR AREA, GROSS (TOTAL) 4,080-M2	N/A -- VARIOUS OUTDOOR EQUIPMENT SKIDS/ENCLOSURES/TANKS NOT INCLUDED; BUILDING ONLY
FLOOR AREA, 2ND-FLOOR / MEZZANINE 269-M2	N/A
FLOOR AREA, GROUND (FOOTPRINT) 3,811-M2	N/A
FLOOR AREA, NET (WORKING/OCCUPIED-AREA, SERVICE AREAS DEDUCTED) 1,725-M2 (APPROX.)	N/A

NON-RESIDENTIAL PARKING REQUIREMENT...
--MINIMUM PARKING SPACES REQUIRED (NET FLOOR AREA UNLESS OTHERWISE NOTED)
...INDUSTRIAL USES IN A SINGLE-USE BUILDING: 1/100 M2 FOR THE FIRST 10,000 M2 OF FLOOR AREA
REQUIRED : 18+1 PROVIDED : 23 (INCLUDING ACCESSIBLE), ADDITIONAL CONTRACTOR/STAFF-SPACE AVAILABLE AT REAR
(THIS VALUE SATISFIES PROJECTED OWNER/OPERATOR ACTUAL-PARKING REQUIREMENTS)

PARKING, LOADING, AND DRIVEWAY DETAILS...

--MUST BE SURFACE TREATED WITH ASPHALT, CONCRETE, CONCRETE PAVERS, BRICK OR SIMILAR HARDSCAPED MATERIAL
--PARKING AREAS MUST BE SET BACK A MINIMUM OF 1.5 METRES FROM ANY BUILDING ON THE SAME LOT
--MINIMUM WIDTH OF A PARKING AISLE WITHIN A PARKING AREA OR PARKING GARAGE SHALL BE 6.0 METRES
--DRIVEWAYS ACCESSING A PARKING AREA OR PARKING GARAGE MUST BE A MINIMUM OF 3.8 METRES IN WIDTH FOR ONE-WAY TRAFFIC AND A MINIMUM OF 6.5 METRES IN WIDTH FOR TWO-WAY TRAFFIC (AND MIN 6.0 FOR FIRE ROUTE)

--PARKING SPACE SHALL HAVE UNOBSTRUCTED WIDTH NOT LESS THAN 2.75 METRES AND LENGTH NOT LESS THAN 5.8 METRES
--PARALLEL PARKING SPACE SHALL HAVE A MINIMUM WIDTH 2.75 METRES AND A MINIMUM LENGTH 6.5 METRES
--LOADING SPACE MUST BE MIN 3.5 METRES WIDTH, 12.0 METRES LENGTH, WITH A MIN VERTICAL CLEARANCE 4.2 METRES

--NUMBER OF ACCESSIBLE PARKING SPACES BASED ON RATIO OF TOTAL NUMBER PARKING SPACES REQUIRED
...AT TOTAL NUMBER PARKING SPACES REQUIRED 13-TO-100, 4-PERCENT (ROUNDED-UP) TO BE ACCESSIBLE; 1-REQUIRED
...WHERE 12 OR MORE TOTAL PARKING SPACES REQUIRED, ACCESSIBLE SPACES ARE IN ADDITION TO TOTAL NUMBER
--ACCESSIBLE PARKING SPACE, TYPE-A SHALL HAVE A MINIMUM WIDTH 3.4 METRES AND A MINIMUM LENGTH 5.8 METRES
--ACCESSIBLE PARKING SPACE, TYPE-B SHALL HAVE A MINIMUM WIDTH 2.4 METRES AND A MINIMUM LENGTH 5.8 METRES
...MINIMUM ONE TYPE-A, EVEN NUMBER OF SPACES, EQUAL NUMBER EACH TYPE, ODD NUMBER MAY BE TYPE-B
...MINIMUM SEPARATION OF 1.5 METRES REQUIRED ABUTTING ENTIRE LENGTH OF ONE SIDE OF ACCESSIBLE PARKING SPACE
...MINIMUM DISTANCE SEPARATION MAY BE SHARED BY TWO ACCESSIBLE PARKING SPACES

--PARKING AREAS THAT HAVE 20 PARKING SPACES OR MORE MUST CONTAIN A MINIMUM OF 5 PERCENT OF THEIR AREA AS LANDSCAPING AREA. LANDSCAPING AREAS MUST BE CALCULATED ON THE BASIS OF THE NET PARKING FACILITIES, WHICH INCLUDES PARKING STALLS, ACCESS DRIVES, AISLES, AND WALKWAYS, BUT DOES NOT INCLUDE REQUIRED LANDSCAPING ADJACENT TO STREETS: PROVIDED VIA PLANTING/LANDSCAPE STRIPS ADJACENT TO DRIVEWAYS/PARKING/WALKWAY AREAS

BICYCLE PARKING REQUIREMENTS: NOT REQUIRED FOR GENERAL EMPLOYMENT ZONES
--MOTOR VEHICLE PARKING REQUIREMENTS MAY BE REDUCED IN EMPLOYMENT ZONES AT THE RATE OF 1 MOTOR VEHICLE PARKING SPACE REQUIRED FOR EVERY 5 BICYCLE PARKING SPACES PROVIDED
--BICYCLE PARKING SPACES TO BE A MINIMUM OF 0.6 METRES WIDE AND 1.8 METRES LONG

OTHER...

BARRIER-FREE ACCESS
--PROVIDED FOR OFFICE AREAS: FULLY-ACCESSIBLE
--PLANT/PROCESS AREAS: BASIC-ACCESS ONLY (REQUIRES ABLE-PERSONS TO SAFELY COMPLETE MOST TASKS)

ROOFTOP MECHANICAL EQUIPMENT, IF NOT FULLY ENCLOSED WITHIN A MECHANICAL PENTHOUSE OR SCREENED BY AN ARCHITECTURAL FEATURE, SHALL BE SET BACK A MINIMUM OF 5.0 METRES FROM ALL EDGES OF A ROOF
--PARAPET-SCREENING MINIMUM 1.2-M IN HEIGHT TO BE PROVIDED (IF/AS/WHERE-REQUIRED)

ROOFTOP MECHANICAL EQUIPMENT, INCLUDING ANY APPURTENANCES THERETO, THAT EXCEEDS 2.0 METRES IN HEIGHT, SHALL BE FULLY ENCLOSED
--ALL ROOFTOP MECH-EQUIPMENT TO BE LESS THAN 2.0-M IN HEIGHT, OR FULLY ENCLOSED

ALL WASTE GENERATED BY THE OCCUPANTS OF 6 OR MORE DWELLING UNITS ON A LOT, OR FROM ANY COMMERCIAL, INDUSTRIAL OR INSTITUTIONAL USE, MUST BE STORED INSIDE A BUILDING
--WASTE TO BE STORED INDOORS

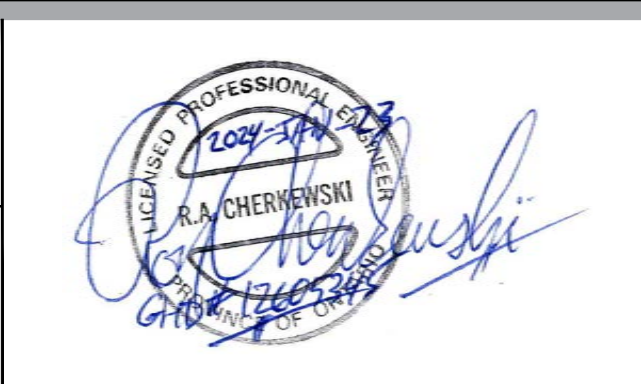
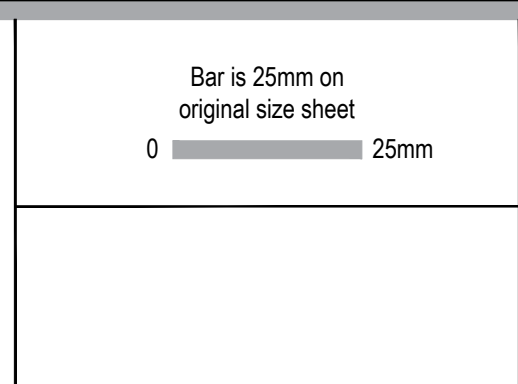
OUTDOOR STORAGE SHALL BE SCREENED BY OPAQUE FENCING OR A MASONRY WALL WITH A MINIMUM HEIGHT OF 1.8 METRES OR A BERM WITH A MINIMUM HEIGHT OF 3.0 METRES
--SCREENING WILL BE PROVIDED

PREPARED BY: GHD

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P01 ISSUED FOR SPA			
No.	Issue	Checked	Approved
Author	S. HOLLAND	Drafting Check	A. WRIGGLESWORTH
Designer	R. CHERKEWSKI	Design Check	A. WRIGGLESWORTH
		Project Manager	R. LOVEDAY
		Project Director	M. DI NIRO

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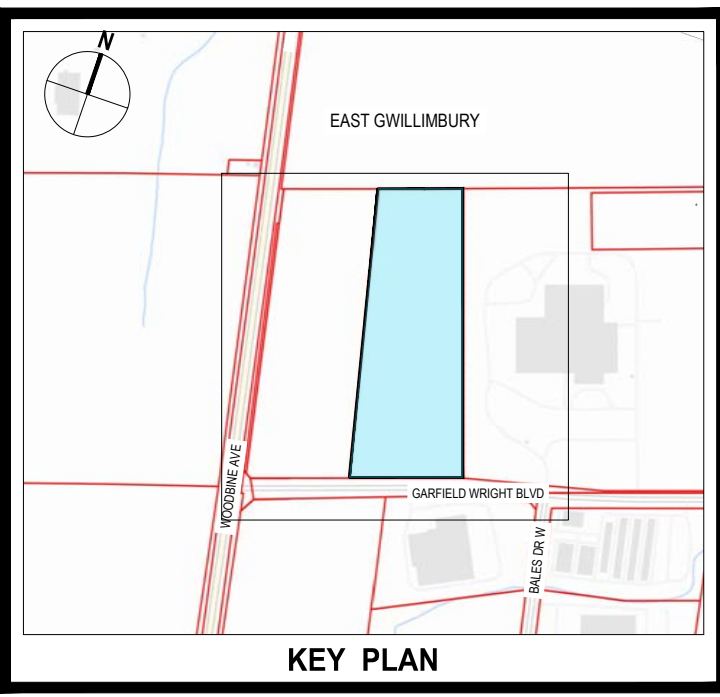
Client	CONVERTUS YORK BIOFUEL LTD.
Project	CONVERTUS BIOFUEL FACILITY
Project No.	12605345
Date	2024-01-23

Title	GENERAL - SITE PLAN PROPOSED CONDITIONS NOTES
Sheet No.	12605345-GHD-10-10-DRG-CI-D105

Size
ANSI D



- LEGEND:**
- PROJECT LOT LIMIT
 - SETBACK LIMIT
 - ADJACENT LOT LEGAL LIMIT
 - FENCE LINE
 - ROAD
 - ROAD (APPROXIMATE)
 - OVERHEAD ELECTRIC
 - WATERMAIN
 - W ---
 - M.H. MAINTENANCE HOLE
 - C.B. CATCHBASIN
 - HYD. FIRE HYDRANT
 - W.V. WATER VALVE
 - V.C.H. VALVE CHAMBER
 - L.S. LIGHT STANDARD
 - HP. HYDRO POLE
 - HPL. HYDRO POLE & LIGHT
 - HPT. HYDRO POLE & TRANSFORMER
 - C.B. PROPOSED CATCHBASIN
 - D.C.B. PROPOSED DOUBLE CATCHBASIN
 - D.C.B. M.H. PROPOSED DOUBLE CATCHBASIN MAINTENANCE HOLE
 - C.B. M.H. PROPOSED CATCHBASIN MAINTENANCE HOLE
 - M.H. PROPOSED MAINTENANCE HOLE
 - M.H. PROPOSED MAINTENANCE HOLE WITH 2 ACCESS COVERS
 - U.P. PROPOSED UTILITIES POLE
 - TREE PROPOSED TREE
 - HYD. PROPOSED HYDRANT
 - EL. 283.80 PROPOSED ELEVATION
 - 1.0% GRADE SLOPE ARROW
 - PROPOSED EDGE OF ASPHALT
 - PROPOSED ROAD MARKINGS
 - PROPOSED CURB
 - PROPOSED SWALE
 - PROPOSED FENCE LINE
 - PROPOSED ACCESS GATE
 - O/H --- PROPOSED OVERHEAD ELECTRIC
 - U/E --- PROPOSED UNDERGROUND ELECTRIC
 - S/W --- PROPOSED STORM SEWER
 - PROPOSED PERFORATED GROUNDWATER LATERAL COLLECTOR
 - PROPOSED PERFORATED GROUNDWATER MAINLINE COLLECTOR
 - PROPOSED BUILDING
 - PROPOSED HARD SURFACE
 - ○ ○ ○ PROPOSED GRAVEL AREA
 - PROPOSED LANDSCAPE SURFACE
 - PROPOSED CONCRETE
 - ○ ○ ○ PROPOSED GRANULAR (SNOW STORAGE AREA)
 - PROPOSED RIP-RAP



SOURCE & BENCHMARKS

LEGAL SURVEY "PARK 1, BLOCK 1, PLAN 65M-3843, TOWN OF EAST GWILLIMBURY, REGIONAL MUNICIPALITY OF YORK, PROVINCE OF ONTARIO", AND EXISTING TOPOGRAPHY AND SITE FEATURES, COMPILED BY SCHAEFFER DZALDOV PURCELL LTD (OLS), CONCORD, ONTARIO. SDP JOB 23-009 & 23-010, FILE "G2-M3843-BLOCK-1", 2023-MARCH. UTM ZONE 17, NAD-83 (CSRS-2010); CGVD-1928:1978, STATION 00820118077, BENCHMARK, ELEVATION 290.976 METRES GEODETIC, LOCATED AT THE INTERCHANGE OF PROVINCIAL HWY-404 AND YORK REGION ROAD-31 (DAVIS DRIVE), APPROXIMATELY 1400-METRES SOUTH-WEST OF SUBJECT SITE.

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P01 ISSUED FOR SPA			
No.	Issue	R.A / R.C	R.L
		Checked	Approved
Author	S. HOLLAND	Drafting Check	A. WRIGGLESWORTH
Designer	R. AZAM / R. CHERKEWSKI	Design Check	A. WRIGGLESWORTH
		Project Manager	R. LOVEDAY
		Project Director	MI. DI NIRO

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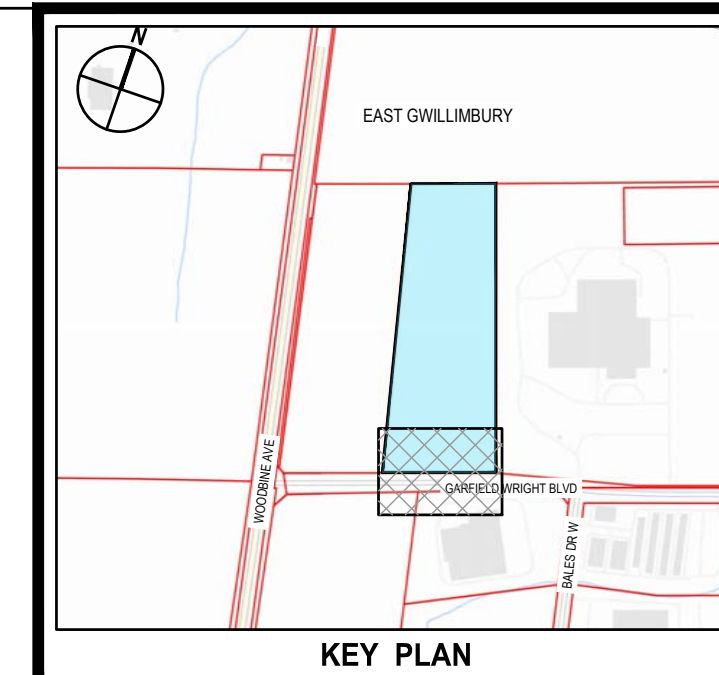
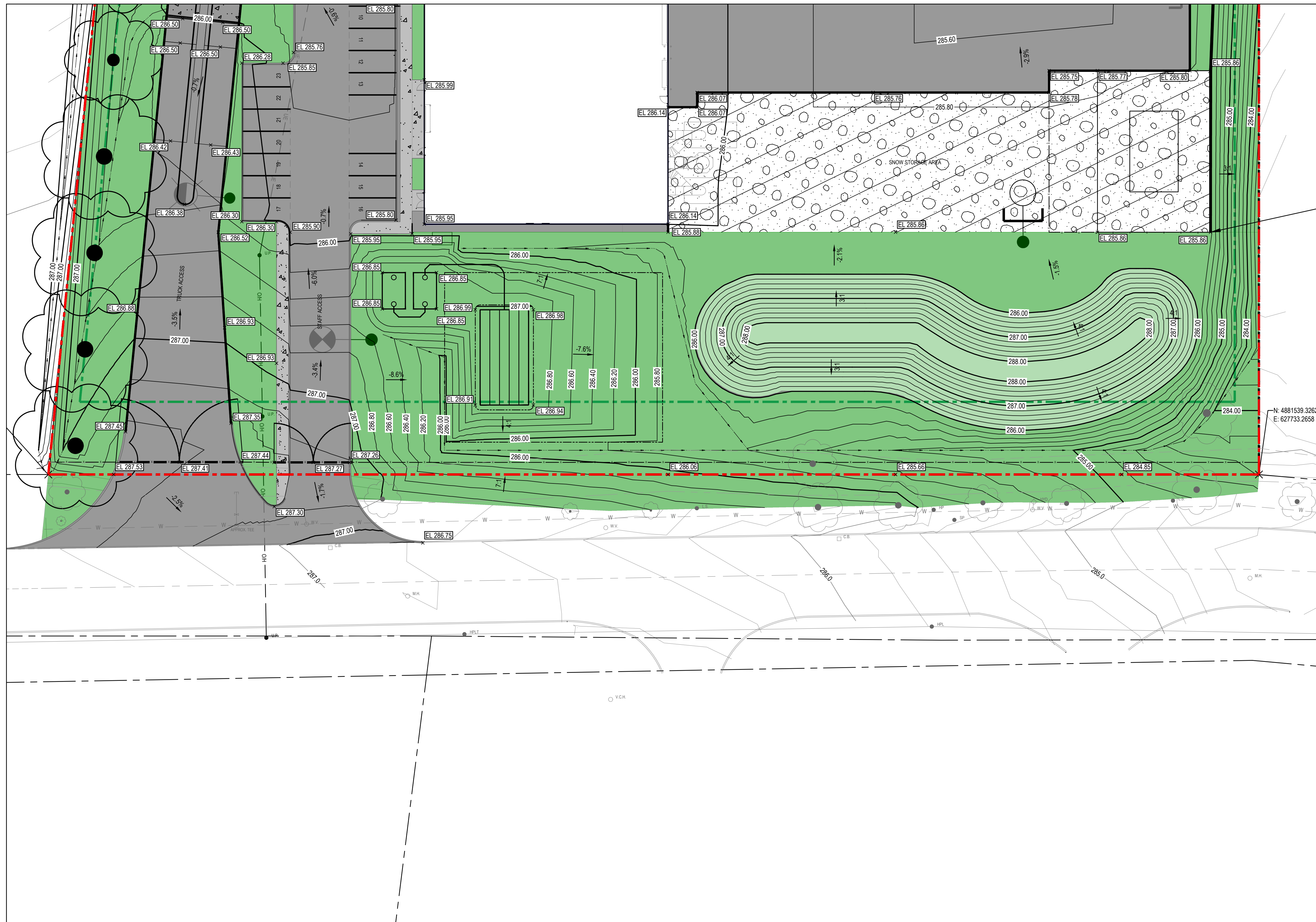


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Project	CONVERTUS BIOFUEL FACILITY	
Project No.	Date	Scale
12605345	2024-01-23	1:1000

Title	OVERALL SITE GRADING PLAN
Sheet No.	12605345-GHD-10-20-DRG-CI-D101



STORMWATER RUNOFF CONTAINMENT
PEAK ELEVATION 285.86m
TOP OF EARTH GRADING (EAST BERM)

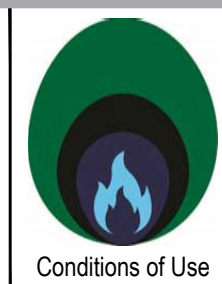
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No.	Issue	Checked	Approved	Date		
Author	S. HOLLAND	Drafting Check	A. WRIGGLESWORTH	Project Manager	R. LOVEDAY	
Designer	R. AZAM / R. CHERKEWSKI	Design Check	A. WRIGGLESWORTH	Project Director	M. DI NIRO	

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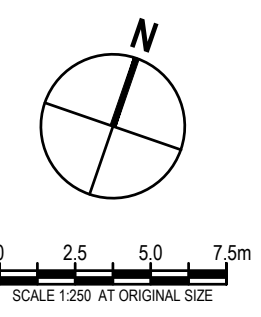
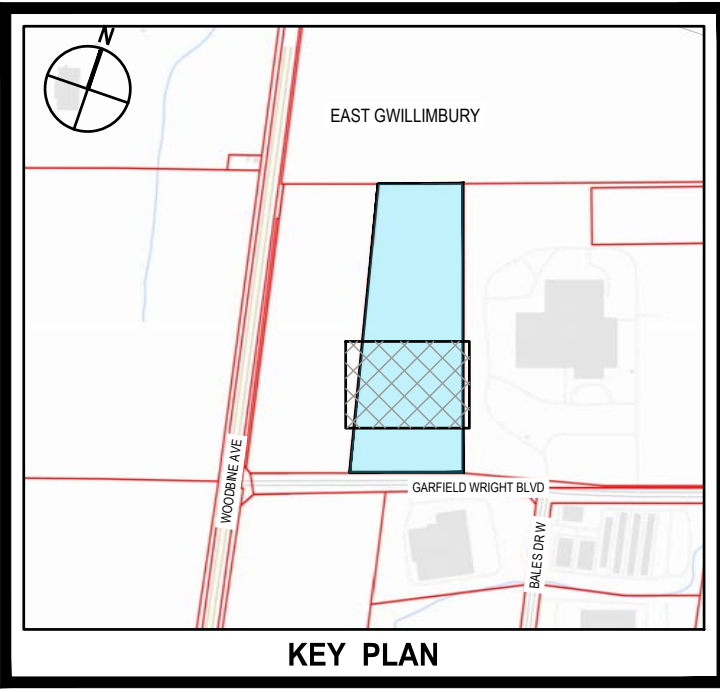
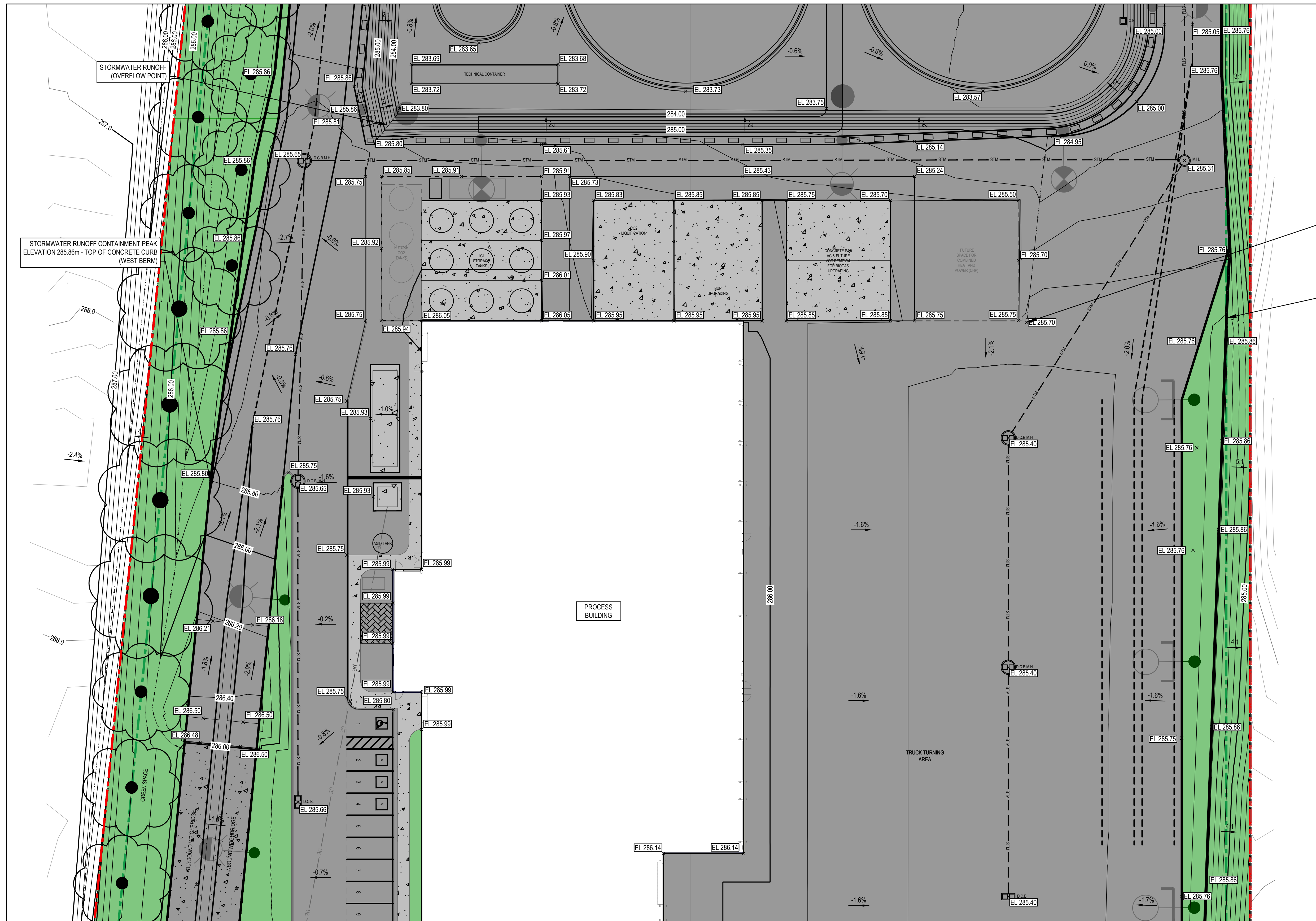


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Client	CONVERTUS YORK BIOFUEL LTD.
Project	CONVERTUS BIOFUEL FACILITY
Project No.	12605345
Date	2024-01-23
Scale	1:250

Title	SITE GRADING PLAN
	1 OF 4
Sheet No.	12605345-GHD-10-20-DRG-CI-D102



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Author	S. HOLLAND	Drafting Check	A. WRIGGLESWORTH	Project Manager	R. LOVEDAY	
Designer	R. AZAM / R. CHERKEWSKI	Design Check	A. WRIGGLESWORTH	Project Director	M. DI NIRO	

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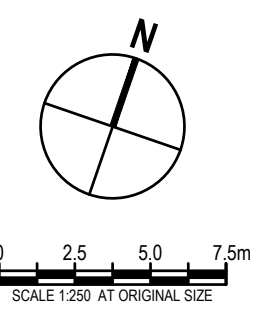
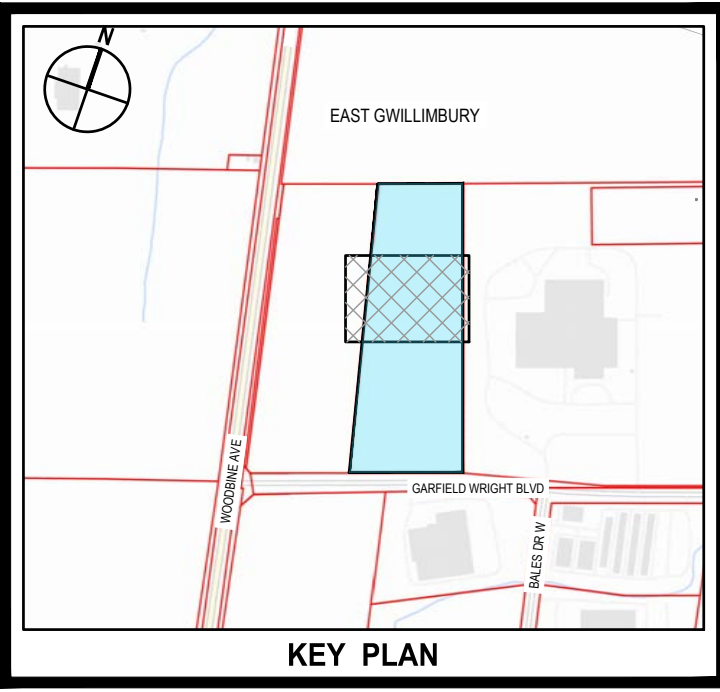
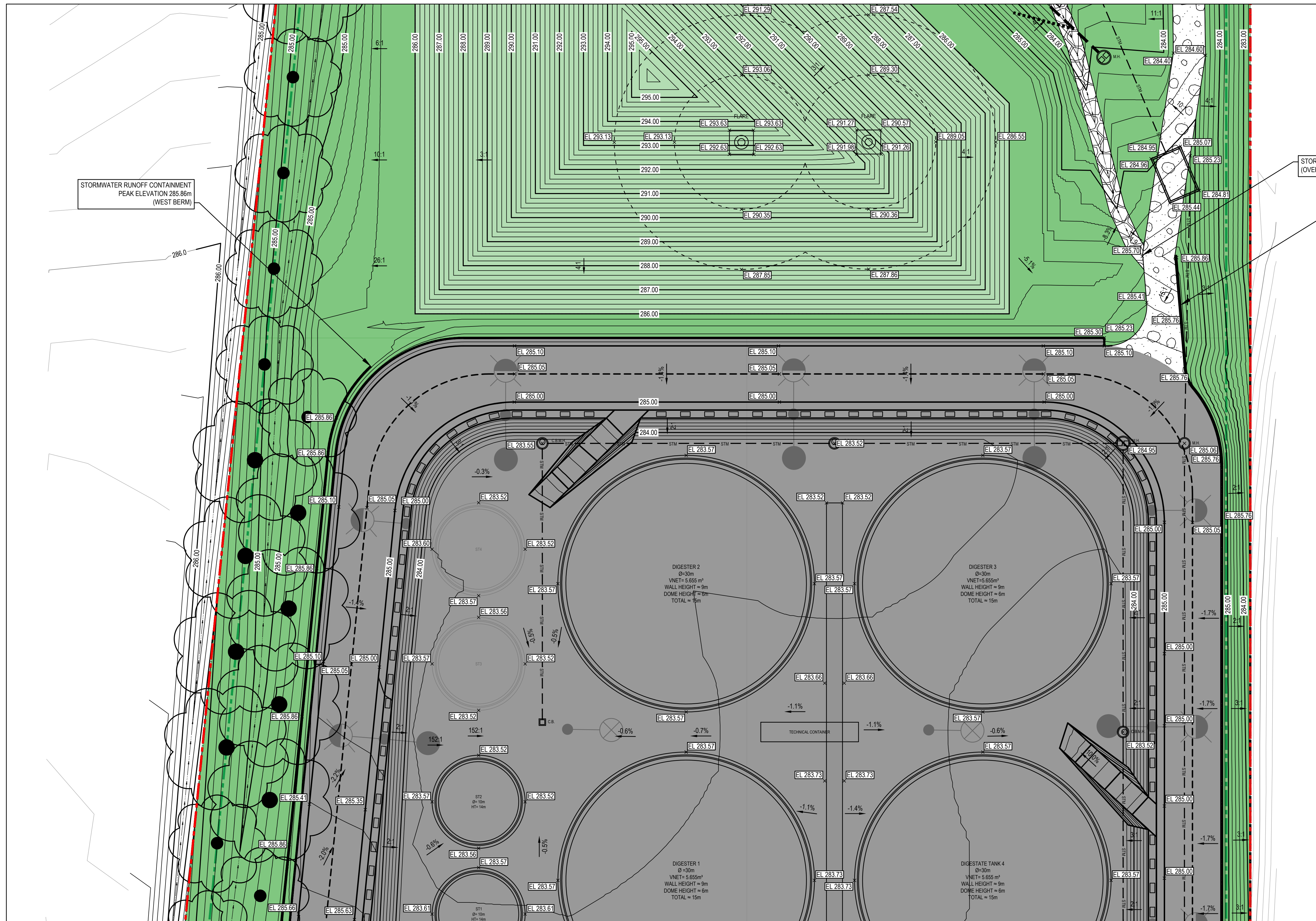
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Client	CONVERTUS YORK BIOFUEL LTD.
Project	CONVERTUS BIOFUEL FACILITY
Project No.	12605345
Date	2024-01-23
Scale	1:250

Title	SITE GRADING PLAN
	2 OF 4
Sheet No.	12605345-GHD-10-20-DRG-CI-D103

SEE DRAWING 12605345-GHD-10-20-DRG-CI-D105 FOR CONTINUATION



SEE DRAWING 12605345-GHD-10-20-DRG-CI-D103 FOR CONTINUATION

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P01 ISSUED FOR SPA				R.A / R.C	R.L	2024-01-23
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Author	S. HOLLAND	Drafting Check	A. WRIGGLESWORTH	Project Manager	R. LOVEDAY	
Designer	R. AZAM / R. CHERKEWSKI	Design Check	A. WRIGGLESWORTH	Project Director	M. DI NIRO	

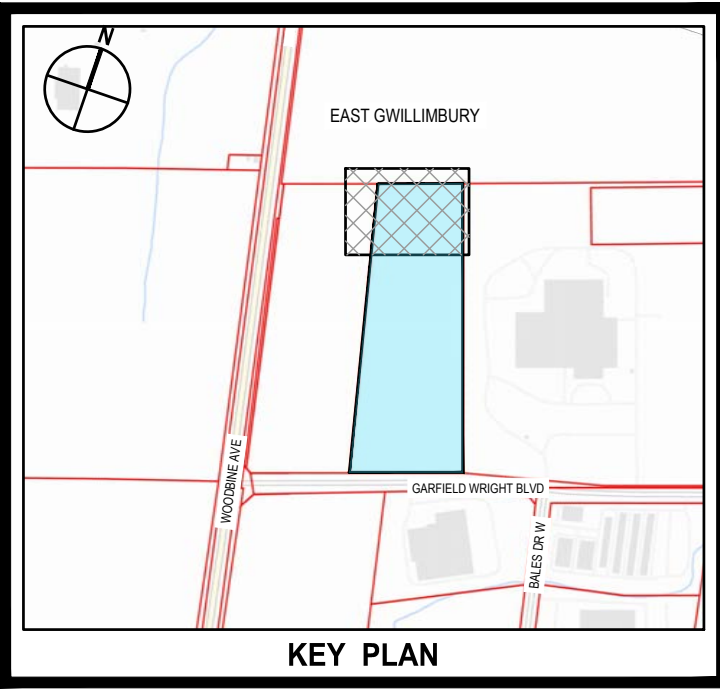
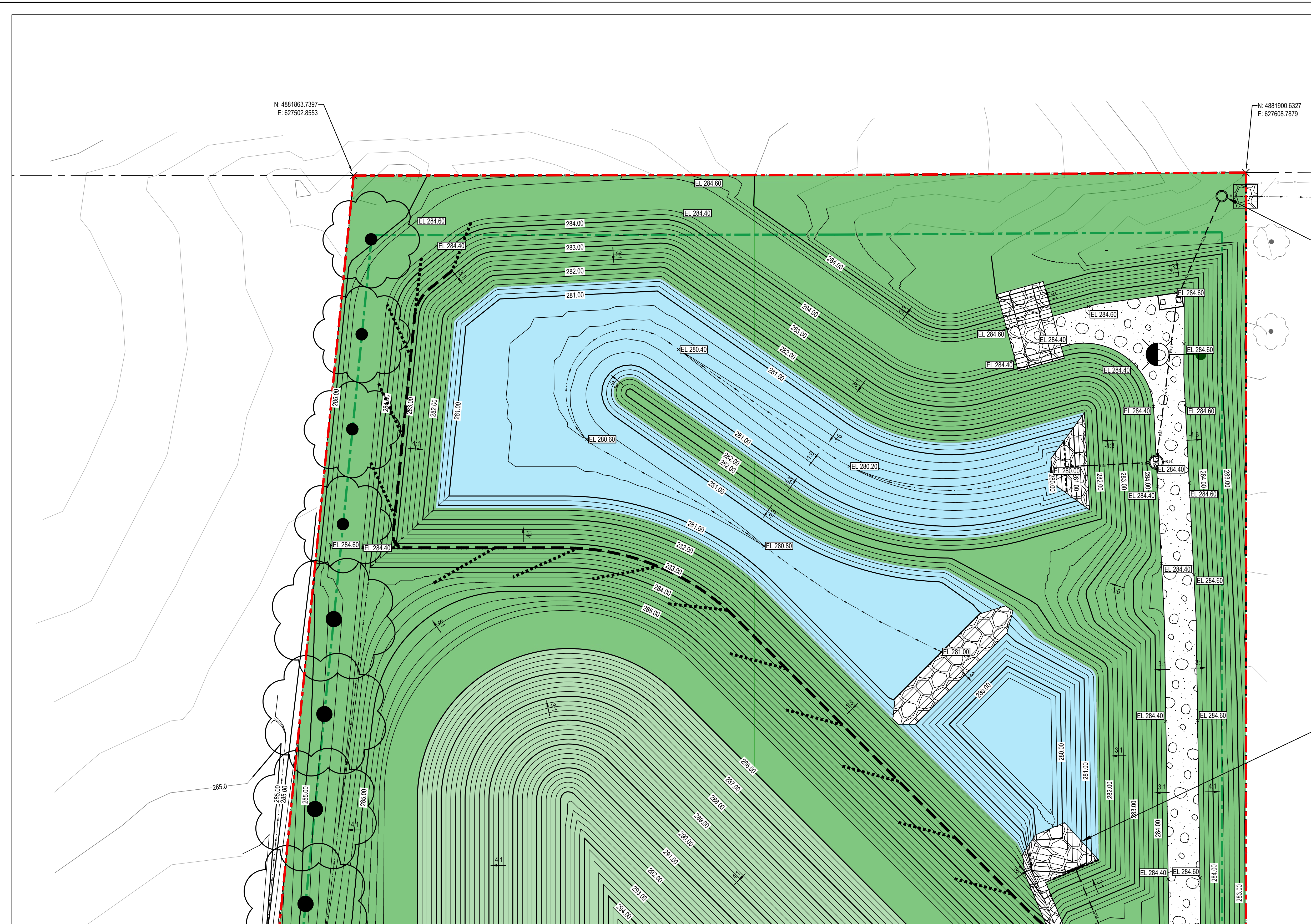
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Client	CONVERTUS YORK BIOFUEL LTD.	Title	SITE GRADING PLAN
Project	CONVERTUS BIOFUEL FACILITY	Sheet No.	3 OF 4
Project No.	12605345	Date	2024-01-23
Scale	1:250	Sheet No.	12605345-GHD-10-20-DRG-CI-D104



281.0m (INVERT SWALE)

2m WIDE RIP-RAP ALONG SWALE
6m x 4m RIP-RAP AT HEADWALL OUTLET TO POND

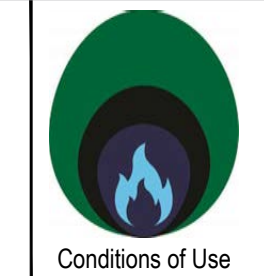
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Author	S. HOLLAND	Drafting Check	A. WRIGGLESWORTH	Project Manager
Designer	R. AZAM / R. CHERKEWSKI	Design Check	A. WRIGGLESWORTH	Project Director
			R. LOVEDAY	
			M. DI NIRO	

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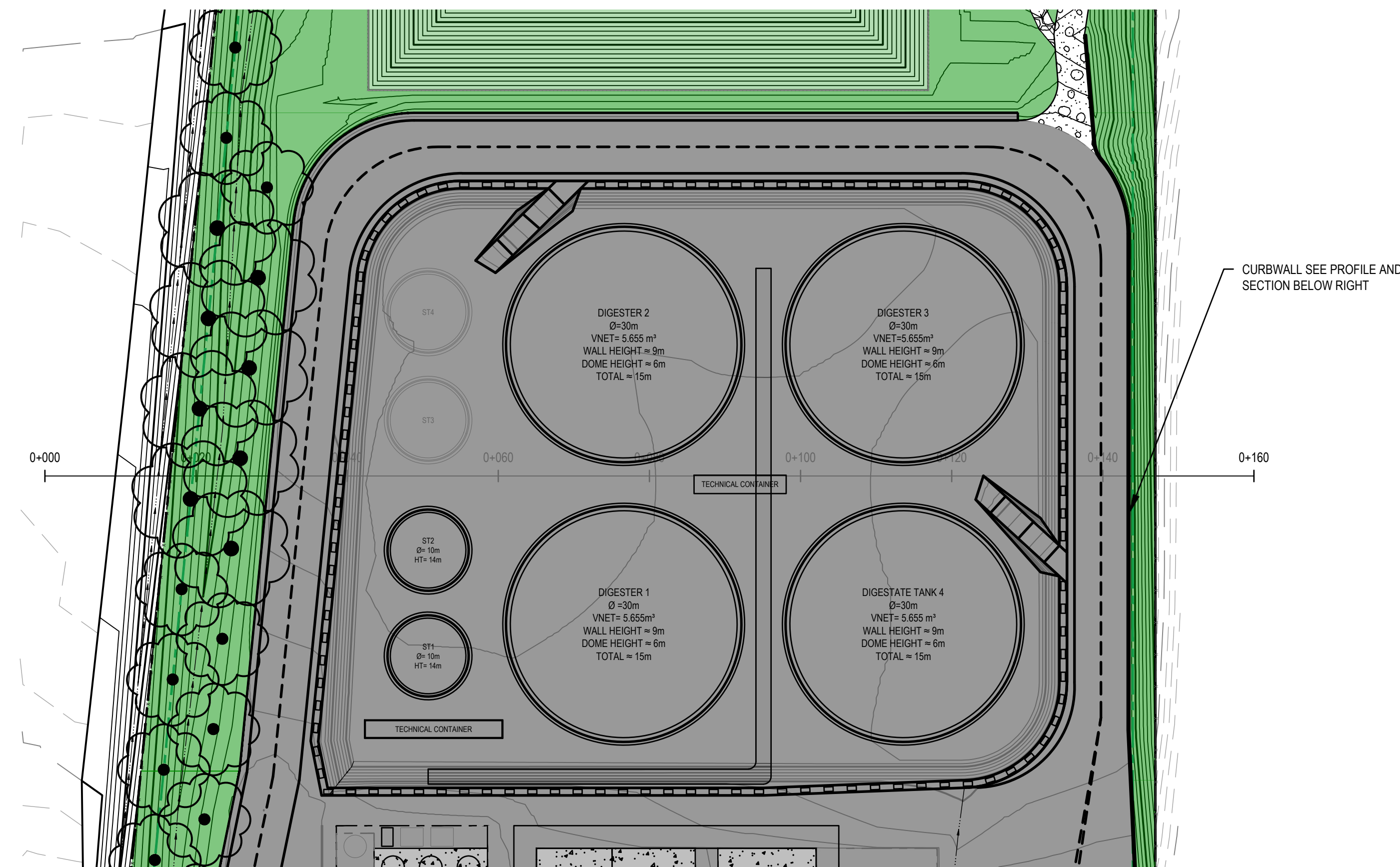


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Client	CONVERTUS YORK BIOFUEL LTD.
Project	CONVERTUS BIOFUEL FACILITY
Project No.	12605345
Date	2024-01-23
Scale	1:250

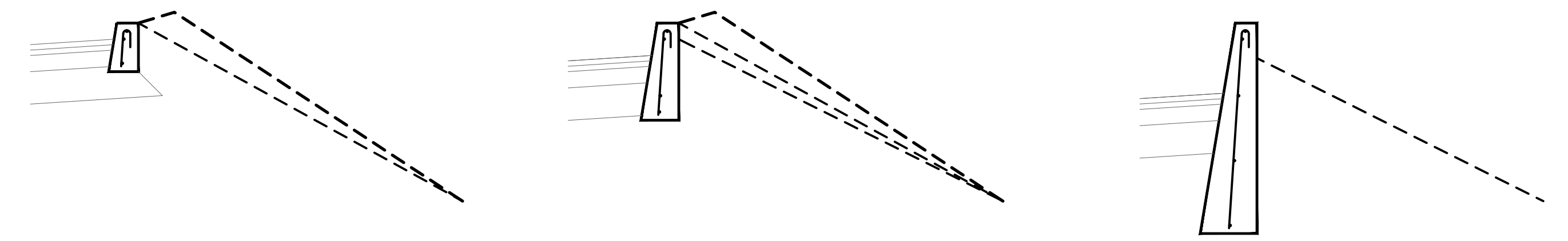
Title	SITE GRADING PLAN
	4 OF 4
Sheet No.	12605345-GHD-10-20-DRG-CI-D105



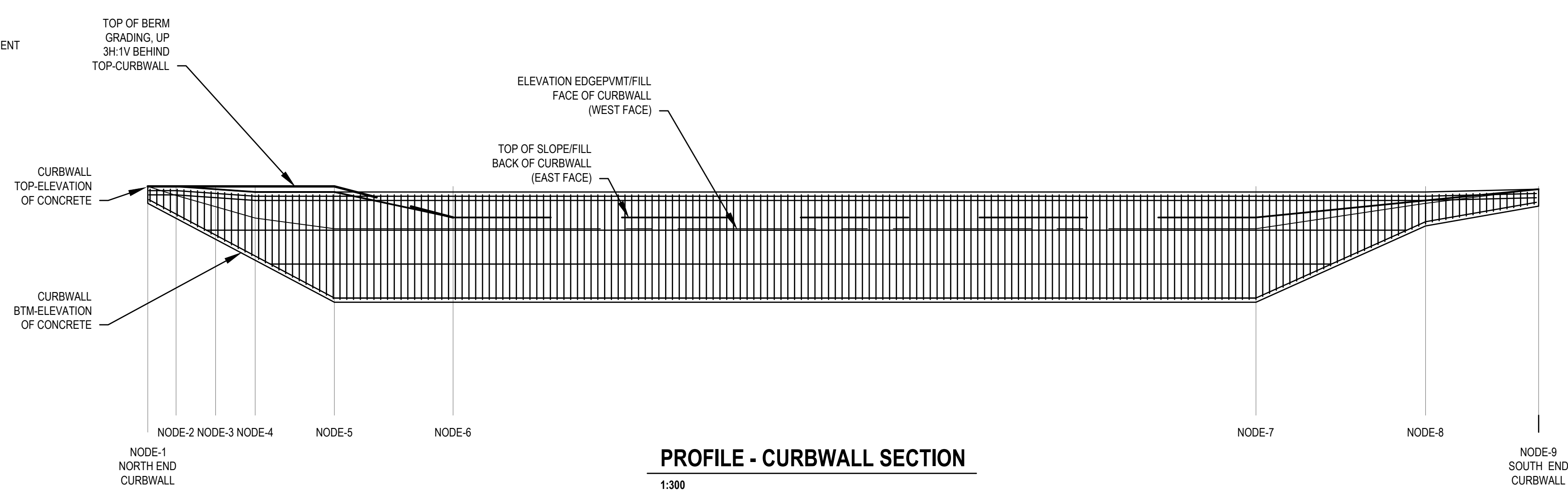
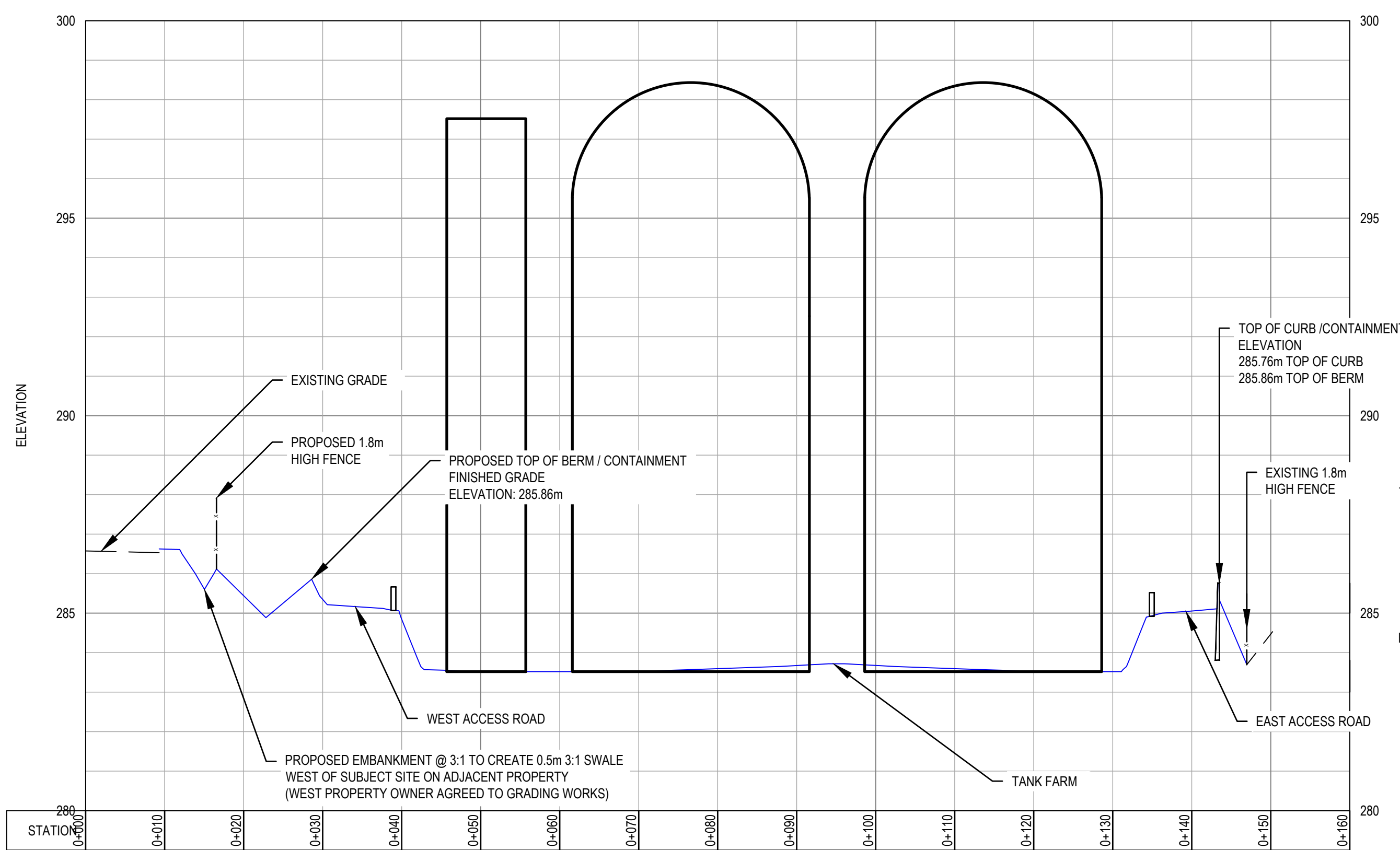
East-side Curb-Wall...	1	2	3	4	5	6	7	8	9
NODE:									
Station:	0.0	2.5	6.0	9.5	16.5	27.0	98.0	113.0	123.0
Top-Slope-Berm	285.86	285.86	285.86	285.86	285.86				
Top-Slope-Fill	285.86	285.86	285.81	285.76	285.76	285.31	<>	285.31	285.61
Curb-Top-elevation	285.86	285.86	285.81	285.76	285.76	285.76	<>	285.76	285.76
Curb-Front-face-gutter	285.86	285.71	285.51	285.31	285.11	285.11	<>	285.11	285.56
Curb-Base-elevation	285.41	285.14	284.91	284.41	283.81	283.81	<>	283.81	285.16
Curb-Overall-Ht	0.45	0.72	0.90	1.35	1.95	1.95	<>	1.95	0.60
Curb-Exposed-Ht	0.00	0.15	0.30	0.45	0.65	0.65	<>	0.65	0.20
Curb-Top-Width	0.200	0.200	0.200	0.200	0.200	0.200	<>	0.200	0.200
Curb-Btm-Width	0.275	0.320	0.350	0.425	0.525	0.525	<>	0.525	0.300
Wall-XSection-area, m ²	0.11	0.19	0.25	0.42	0.71	0.71	<>	0.71	0.15
Conc-Segment-volume, m ³	0.4	0.8	1.2	4.0	7.4			50.2	6.4

72 <= approx m3-concrete

Rebar: Carbon-steel bars to CSA-G30.18-09, 400-MPa, Grade-400R; 15M at 600 Each-Way-Mid, extra bar at top, full-runner/tie bar along base, min 75-cover all faces
Detailing: Standard 180-hook all vertical bars at top, Std-180-hook all horizontal bars at each end, lap all splices and horizontal terminations minimum 500-mm
Concrete: 32-MPa at 28-days, GU-cement, 20-mm max aggregate, C1-exposure class, Cat1-air (5-8-pt); smooth-face or broom-finish all exposed faces



SECTIONS - TYPICAL CURBWALL
1:200



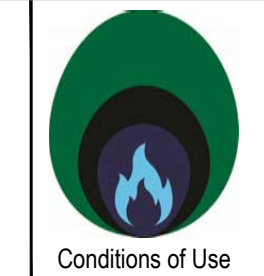
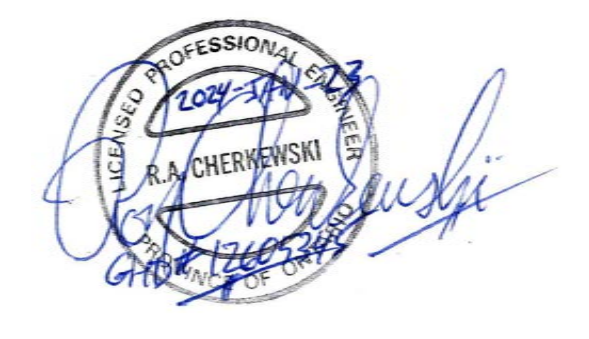
PROFILE - CURBWALL SECTION
1:300

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PREPARED BY: GHD

P01	ISSUED FOR SPA	R.C	R.L.	2024-01-23
No.	Issue	Checked	Approved	Date
Author	S.HOLLAND	Drafting Check	A. WRIGGLESWORTH	Project Manager
Designer	R. CHERKEWSKI	Design Check	A. WRIGGLESWORTH	Project Director
			M. DI NIRO	

Bar is 25mm on original size sheet
0 25mm



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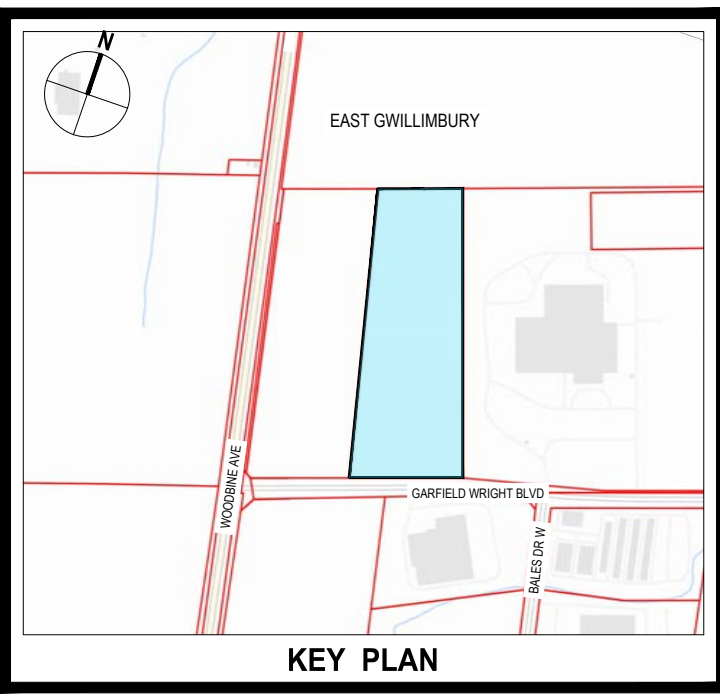


Client	CONVERTUS YORK BIOFUEL LTD.	
Project	CONVERTUS BIOFUEL FACILITY	
Project No.	12605345	Date
		2024-01-23
Scale	1:500	Sheet No.
		12605345-GHD-10-20-DRG-CI-D301

Title	TANK FARM GRADING SECTION
Size	ANSI D



- LEGEND:**
- PROJECT LOT LIMIT
 - SETBACK LIMIT
 - ADJACENT LOT LEGAL LIMIT
 - FENCE LINE
 - ROAD
 - ROAD (APPROXIMATE)
 - OVERHEAD ELECTRIC
 - WATERMAIN
 - TREE
 - M.H. MAINTENANCE HOLE
 - C.B. CATCHBASIN
 - H.Y.D. FIRE HYDRANT
 - W.V. WATER VALVE
 - V.C.H. VALVE CHAMBER
 - L.S. LIGHT STANDARD
 - H.P. HYDRO POLE
 - H.P.L. HYDRO POLE & LIGHT
 - H.P.T. HYDRO POLE & TRANSFORMER
 - C.B. PROPOSED CATCHBASIN
 - D.C.B. PROPOSED DOUBLE CATCHBASIN
 - D.C.B. M.H. PROPOSED DOUBLE CATCHBASIN MAINTENANCE HOLE
 - C.B.M.H. PROPOSED CATCHBASIN MAINTENANCE HOLE
 - M.H. PROPOSED MAINTENANCE HOLE
 - M.H. PROPOSED MAINTENANCE HOLE WITH 2 ACCESS COVERS
 - U.P. PROPOSED UTILITIES POLE
 - PROPOSED TREE
 - H.Y.D. PROPOSED HYDRANT
 - PROPOSED LIGHTING
 - PROPOSED EDGE OF ASPHALT
 - PROPOSED ROAD MARKINGS
 - PROPOSED CURB
 - PROPOSED SWALE
 - PROPOSED FENCE LINE
 - PROPOSED ACCESS GATE
 - O.H. PROPOSED OVERHEAD ELECTRIC
 - U.E. PROPOSED UNDERGROUND ELECTRIC
 - S.T.M. PROPOSED STORM SEWER
 - W. PROPOSED WATERMAIN
 - F. PROPOSED FIRE WATERMAIN
 - S.A.N. PROPOSED SANITARY FORCEMAIN
 - N.G. PROPOSED NATURAL GAS
 - U.T. PROPOSED UNDERGROUND TELECOM
 - U.T. PROPOSED SPARE CONDUIT FOR FUTURE TELECOM
 - PROPOSED BUILDING
 - PROPOSED HARD SURFACE
 - PROPOSED GRAVEL AREA
 - PROPOSED LANDSCAPE SURFACE
 - PROPOSED CONCRETE
 - GRANULAR (SNOW STORAGE AREA)
 - PROPOSED RIP-RAP



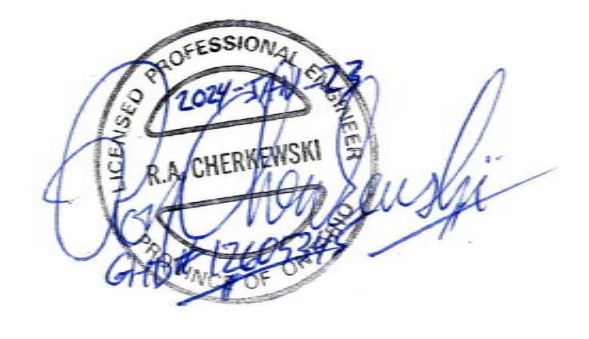
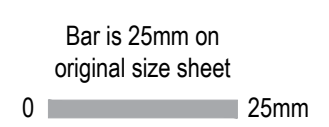
SOURCE & BENCHMARKS

LEGAL SURVEY "BLOCK 1, PLAN 65M-3843, TOWN OF EAST GWILLIMBURY, REGIONAL MUNICIPALITY OF YORK, PROVINCE OF ONTARIO", AND EXISTING TOPOGRAPHY AND SITE FEATURES, COMPILED BY SCHAEFFER DZALDOV PURCELL LTD (OLS), CONCORD, ONTARIO. SDP JOB 23-009 & 23-010, FILE "G2-M3843-BLOCK-1", 2023-MARCH. UTM ZONE 17, NAD-83 (CSRS-2010); CGVD-1928-1978, STATION 00820118077, BENCHMARK, ELEVATION 290.976 METRES GEODETIC, LOCATED AT THE INTERCHANGE OF PROVINCIAL HWY-404 AND YORK REGION ROAD-31 (DAVIS DRIVE), APPROXIMATELY 1400-METRES SOUTH-WEST OF SUBJECT SITE.

ADDITIONAL TOPOGRAPHY AND SITE FEATURES SURVEY, NORTH-EAST / EAST OF SITE LIMITS, COMPILED BY GHD LTD, WATERLOO, ONTARIO. GHD JOB 12605345, FILE "12605345(SOURCE)001 FILE 2 EXISTING CONDITIONS", 2023-NOVEMBER. UTM ZONE 17, NAD-83 (CSRS-2010), CGVD-1928-1978, YORK REGION VERTICAL CONTROL BENCHMARK 56-131, TABLET, ELEVATION 284.55, LOCATED 21.8 METRES SOUTH AND 82.4 METRES WEST OF THE CENTRELINE OF THE INTERSECTION OF YORK REGION ROAD-31 (DAVIS DRIVE), AND YORK REGION ROAD-8 (WOODBINE AVENUE), APPROXIMATELY 500-METRES SOUTH-WEST OF SUBJECT SITE.

PREPARED BY: GHD

No.	Issue	R.A / R.C	R.L.	2024-01-23
P01	ISSUED FOR SPA	Checked	Approved	Date
Author	S. HOLLAND	Drafting Check	A. WRIGGLESWORTH	Project Manager
Designer	R. AZAM / R. CHERKEWSKI	Design Check	A. WRIGGLESWORTH	Project Director
			M. DI NIRO	



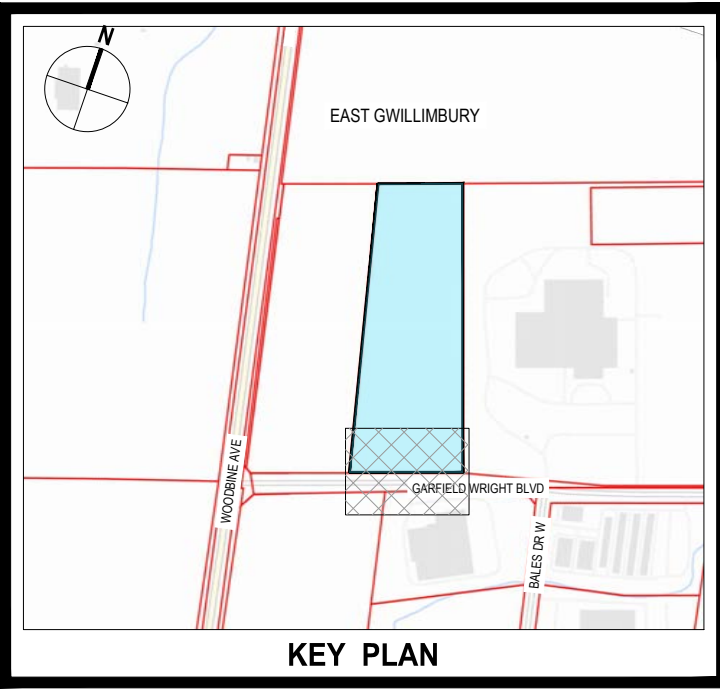
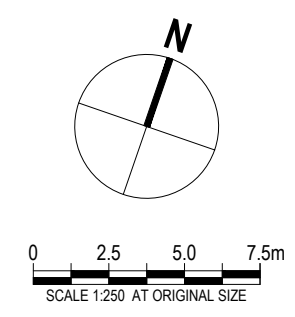
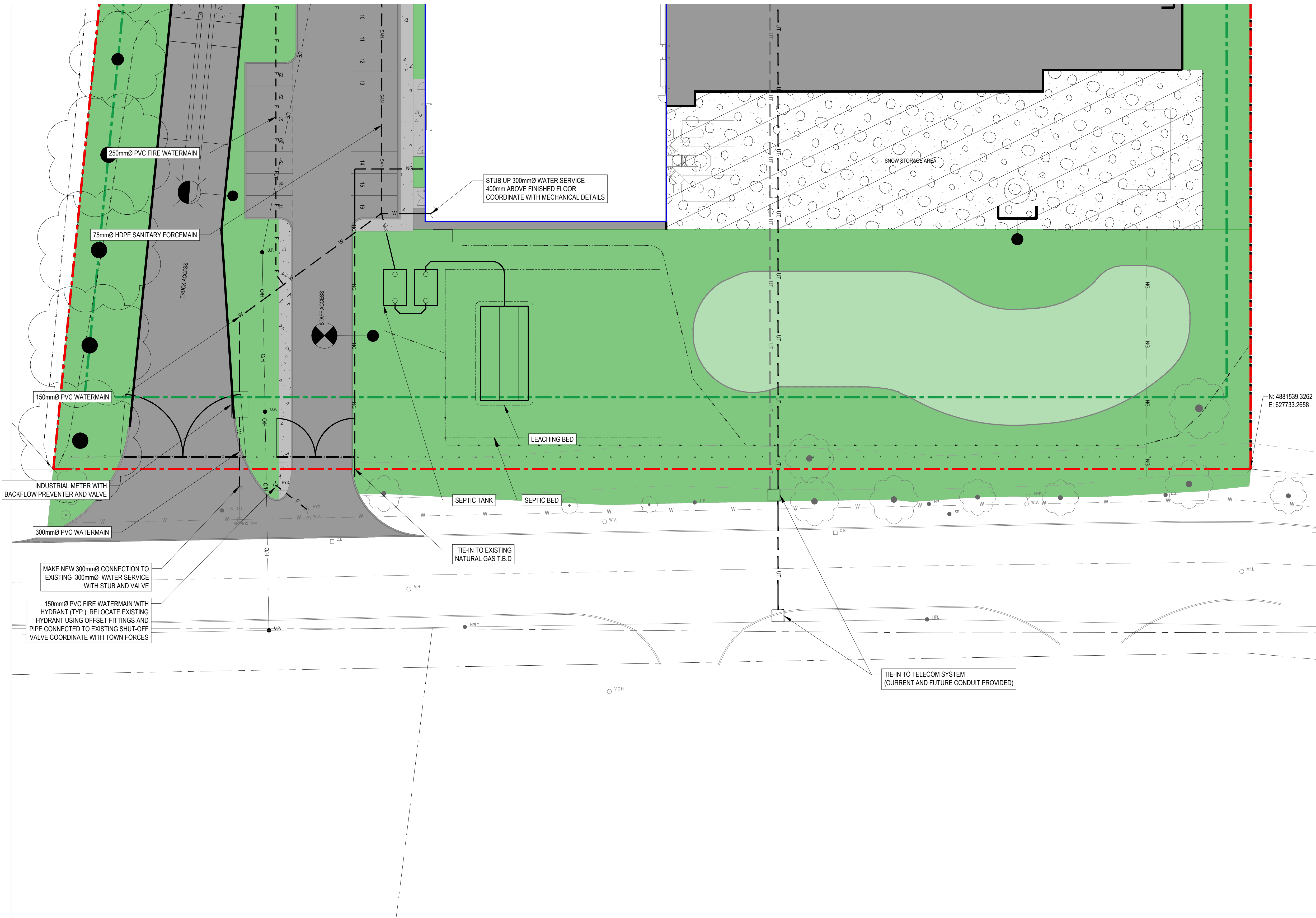
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Project	CONVERTUS BIOFUEL FACILITY		
Project No.	Date	Scale	Sheet No.
12605345	2024-01-23	1:1000	12605345-GHD-10-30-DRG-CI-D101

NOT FOR CONSTRUCTION

Title	OVERALL SITE SERVICING PLAN		
Size	ANSI D		

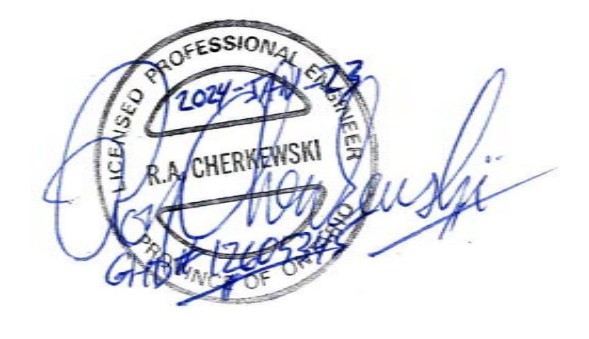


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No.	Issue	Checked	Approved	Date		
Author	S. HOLLAND	Drafting Check	A. WRIGGLESWORTH	Project Manager	R. LOVEDAY	
Designer	R. AZAM / R. CHERKEWSKI	Design Check	A. WRIGGLESWORTH	Project Director	M. DI NIRO	

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0 25mm

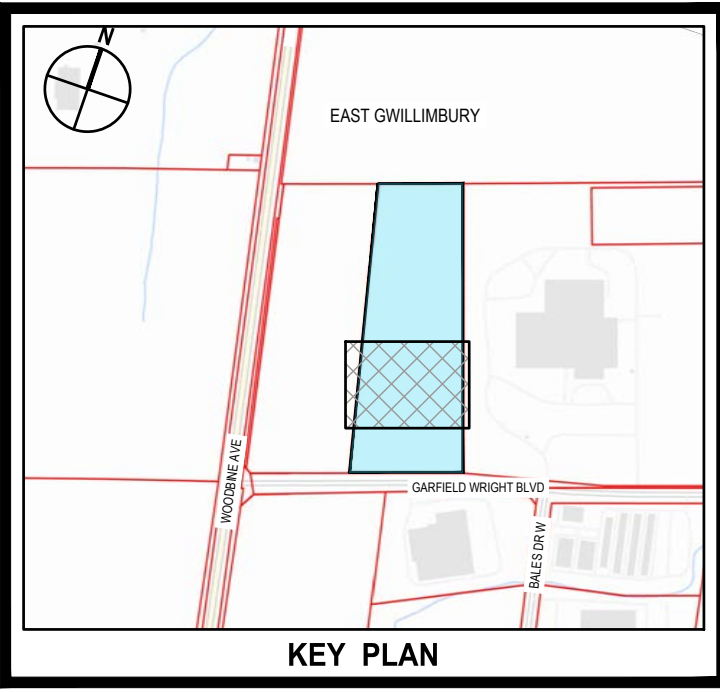
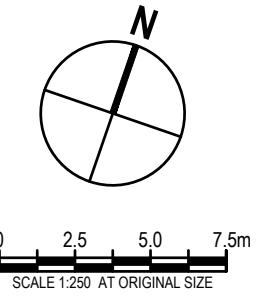
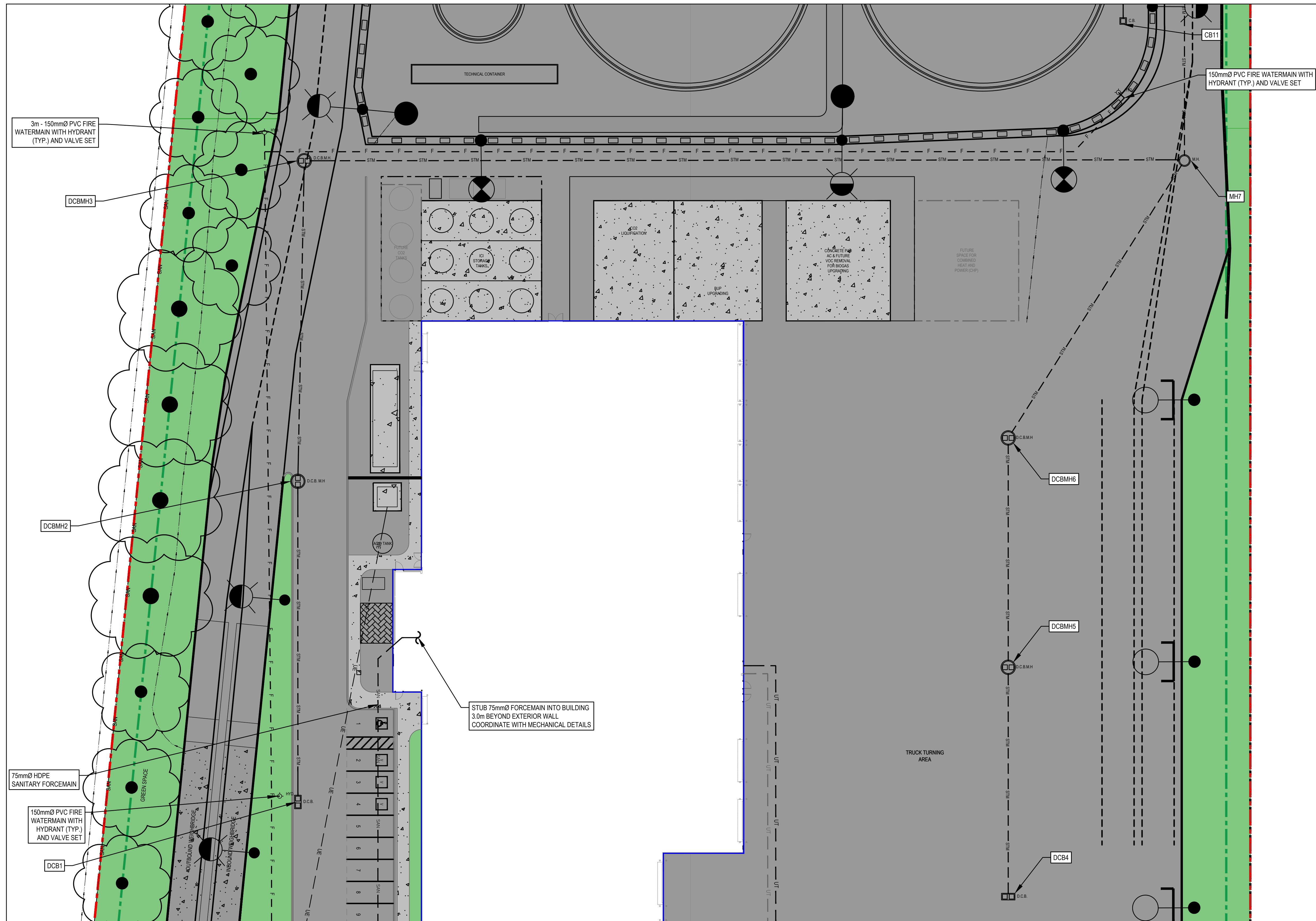


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Client	CONVERTUS YORK BIOFUEL LTD.
Project	CONVERTUS BIOFUEL FACILITY
Project No.	12605345
Date	2024-01-23
Scale	1:250

Title	SITE SERVICING PLAN
	1 OF 4
Sheet No.	12605345-GHD-10-30-DRG-CI-D102



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Author	S. HOLLAND	Drafting Check	A. WRIGGLESWORTH	Project Manager	R. LOVEDAY	
Designer	R. AZAM / R. CHERKEWSKI	Design Check	A. WRIGGLESWORTH	Project Director	M. DI NIRO	

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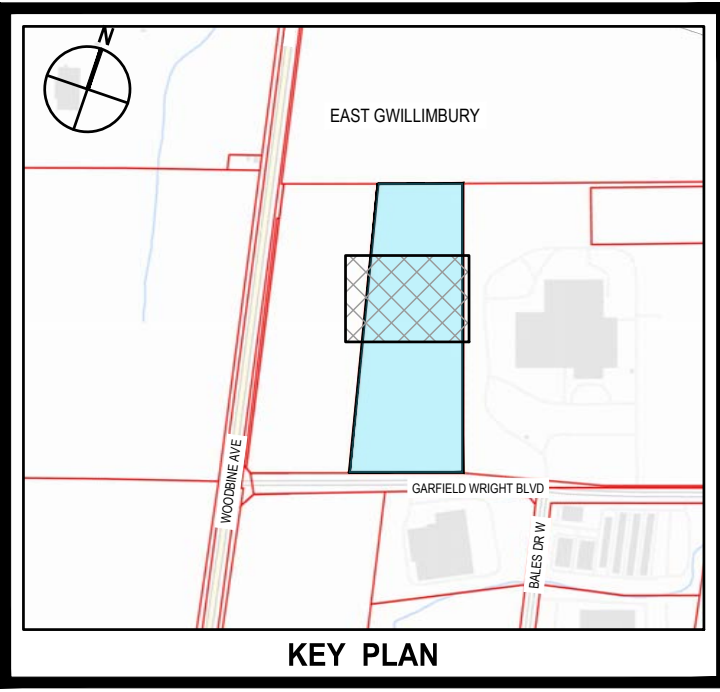
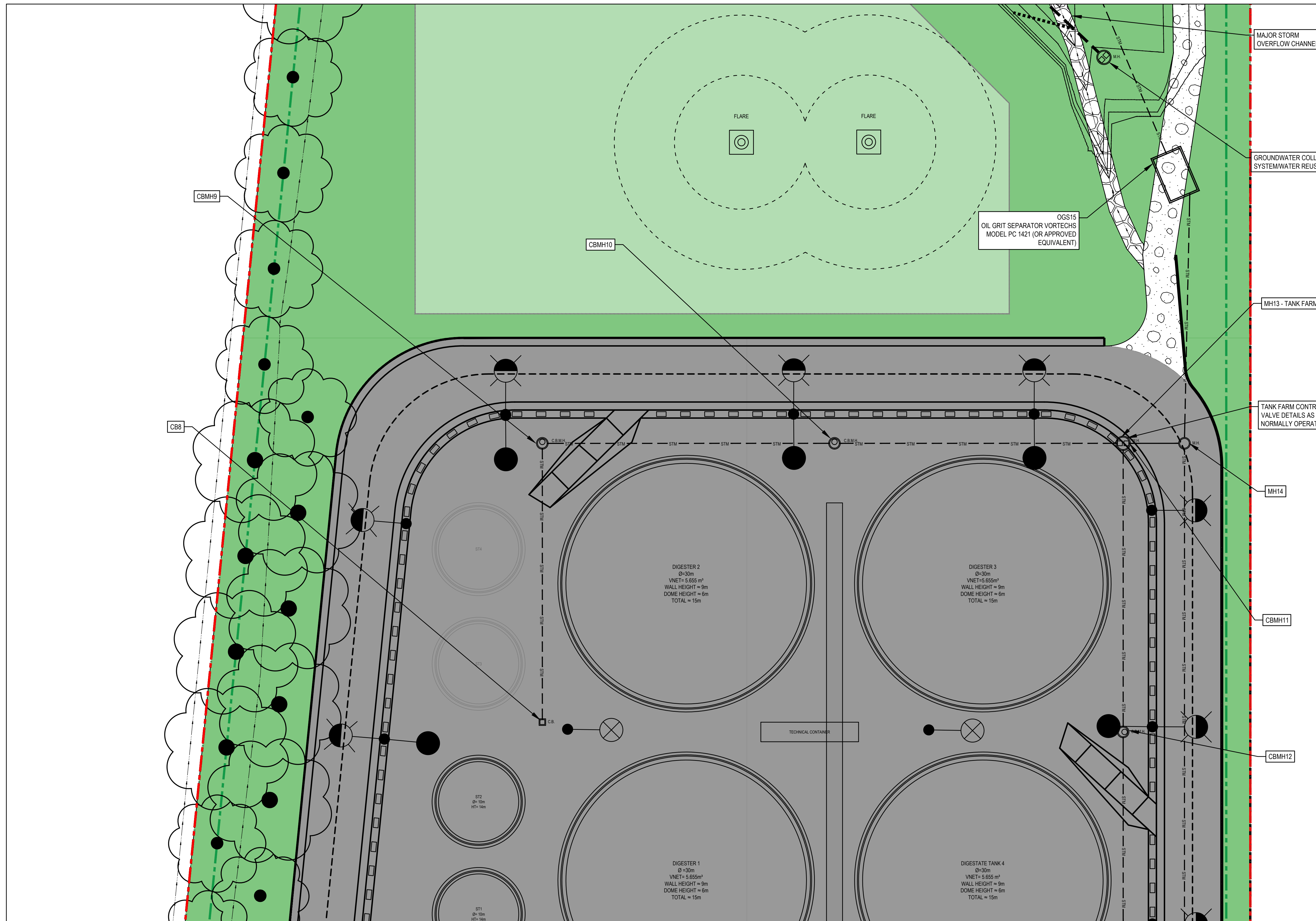


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Project	CONVERTUS BIOFUEL FACILITY	
Project No.	Date	Scale
12605345	2024-01-23	1:250

Title	SITE SERVICING PLAN	
	2 OF 4	
Sheet No.	12605345-GHD-10-30-DRG-CI-D103	

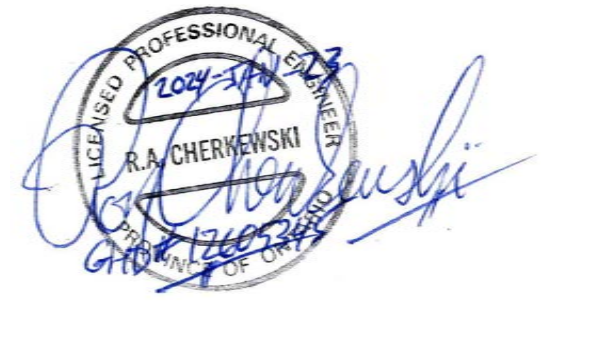


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Author	S. HOLLAND	Drafting Check	A. WRIGGLESWORTH	Project Manager	R. LOVEDAY	
Designer	R. AZAM / R. CHERKEWSKI	Design Check	A. WRIGGLESWORTH	Project Director	M. DI NIRO	

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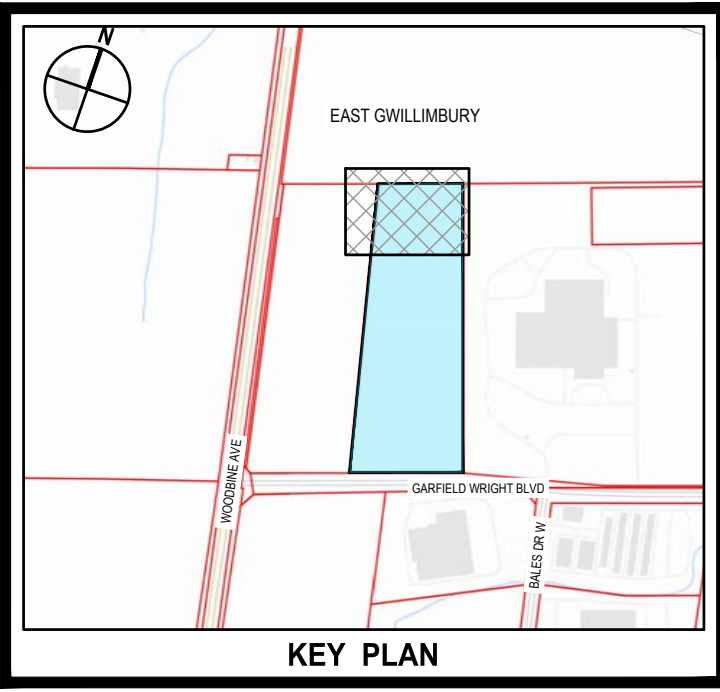
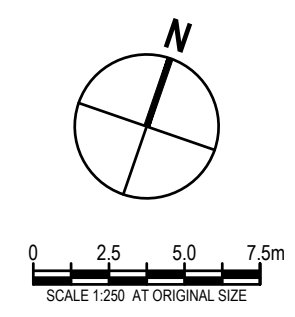
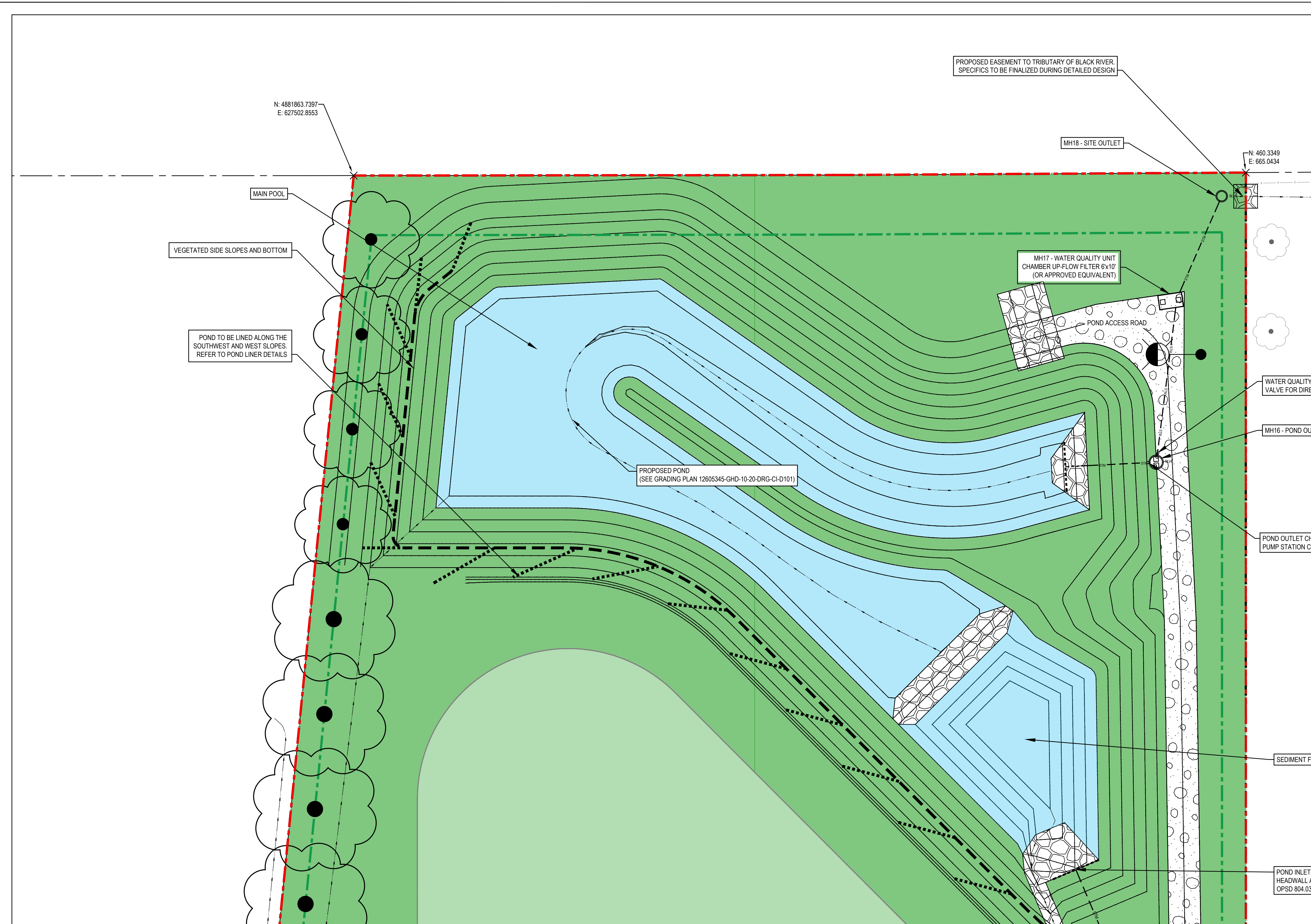


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Project	CONVERTUS BIOFUEL FACILITY
Project No.	12605345
Date	2024-01-23
Scale	1:250

Title	SITE SERVICING PLAN
	3 OF 4
Sheet No.	12605345-GHD-10-30-DRG-CI-D104



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SEE DRAWING 12605345-GHD-10-30-DRG-CI-D104 FOR CONTINUATION

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P01	ISSUED FOR SPA			
Author	S. HOLLAND	Drafting Check	A. WRIGGLESWORTH	Project Manager
Designer	R. AZAM / R. CHERKEWSKI	Design Check	A. WRIGGLESWORTH	Project Director
				R. LOVEDAY
				M. DI NIRO

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Project	CONVERTUS BIOFUEL FACILITY		
Project No.	Date	Scale	
12605345	2024-01-23	1:250	

Title	SITE SERVICING PLAN	
	4 OF 4	
Sheet No.	12605345-GHD-10-30-DRG-CI-D105	

1. GENERAL NOTES

- 1.1 ALL RIGHT-OF-WAY WORKS TO BE TO THE TOWN OF EAST GWILLIMBURY ENGINEERING DEPARTMENT STANDARDS AND SPECIFICATIONS AND TO THE SATISFACTION OF THE TOWN ENGINEER.
- 1.2 LOCATIONS OF EXISTING SERVICES NOT GUARANTEED - CONTRACTOR TO NOTIFY UTILITY COMPANIES. MINIMUM FORTY-EIGHT (48) HOURS NOTICE REQUIRED PRIOR TO COMMENCEMENT OF ANY WORK.
- 1.3 FOR DIMENSIONS AND DETAILS NOT SHOWN, SEE STANDARD DRAWING REFERRED TO ON THE DRAWINGS.
- 1.4 ALL EXCAVATIONS MUST BE CARRIED OUT ACCORDING TO THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS (LATEST EDITION).
- 1.5 SEWER AND WATERMAIN TRENCHES TO BE BACKFILLED AND COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY.
- 1.6 ALL STANDARD DRAWINGS ARE TO BE OPSD (MOST RECENT REVISION) UNLESS OTHERWISE SPECIFIED.

2. MEASUREMENTS

- 2.1 ALL DIMENSIONS IN METRES, EXCEPT PIPE DIAMETER, WHICH IS IN MILLIMETRES, UNLESS OTHERWISE SPECIFIED.

3. ROADWORKS

- 3.1 COMPACTION - ROAD SUBGRADE TO BE COMPACTED TO MINIMUM 95% STANDARD PROCTOR DENSITY - GRANULAR MATERIALS TO BE SPREAD AND COMPACTED IN MAXIMUM 200 mm. ASPHALT TO BE COMPACTED TO MINIMUM OF 92 TO 96.5 PERCENT OF MAXIMUM RELATIVE DENSITY (MRD) PER OPSS.MUNI-310.

ITEM	COMPACTION REQUIRED
GRANULAR "B"	MINIMUM 95%
GRANULAR "A" OR 16mm CRUSHER RUN STONE	MINIMUM 100%

- 3.2 ROAD /PARKING DESIGN

LAYER MATERIAL	HD-ASPHALT (TRUCKS)	MD-ASPHALT (STAFF)	LD-ASPHALT (TANK FARM)
HL-3 ASPHALT (SURFACE)	40mm	40mm	40mm
HL-8 ASPHALT (BASE)	2 X 50mm	50mm	40mm
GRANULAR "A"	150mm	150mm	150mm
GRANULAR "B"	500mm	400mm	300mm

CONFIRM WITH GEOTECHNICAL REPORT

- 3.3 CURBS - OPSD 600.110 BARRIER CURBS
- 3.4 INTERSECTIONS OF CURBS AND SIDEWALKS SHALL BE DEPRESSED, AS PER STANDARD OPSD 310.030.
- 3.5 ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE REINSTATED TO ORIGINAL CONDITION OR BETTER BY THE CONTRACTOR.

4. STORM SEWERS

- 4.1 PIPE - ALL CONCRETE PIPE SHALL HAVE SEALED JOINTS WITH GASKETS AND CLASS AS SHOWN ON DRAWINGS.
- 4.2 ALL PVC GRAVITY SEWER PIPE SHALL CONFORM TO CSA SPECIFICATION B182.1 OR B182.2 (OR MOST RECENT REVISION) DR 35 WITH "LOCK-IN" RUBBER SEALING RING.
- 4.3 MANHOLES:
 - 4.3.1 MANHOLES AND CATCHBASINS TO BE STANDARD DRAWINGS OPSD 700 SERIES AS NOTED.
 - 4.3.2 ALL STORM MANHOLES TO BE BENCHED THROUGHOUT ON A VERTICAL PROJECTION TO SPRING LINE, AS PER STANDARD DRAWINGS, EXCEPT AS OTHERWISE NOTED.
- 4.4 BEDDING - SEWER BEDDING TO BE TO STANDARD DRAWING OPSD 802.030 CLASS "B".
- 4.5 ALL PVC JOINTS AT MANHOLES SHALL BE DONE BY MEANS OF A MANHOLE ADAPTER.

5. WATERMAIN

- 5.1 PIPE - WATERMAIN TO BE AWWA C900 (THICK WALL PIPE) MINIMUM CLASS 150 (DR 18). WATERMAIN IS TO BE STRAPPED WITH 14-GAUGE STRAND COPPER WIRE TO BE BROUGHT TO GRADE AT ALL MAINLINE VALVES AND HYDRANT SECONDARY VALVES. ALL SPLICES ARE TO BE DONE ABOVE GRADE OR USING A MOISTURE-PROOF SEAL. TOP OF WATERMAIN SHALL BE MINIMUM 1.7 M BELOW CENTRELINE OF ROAD GRADE.
- 5.2 HYDRANTS AND VALVES - AS PER STANDARDS DRAWING NO. OPSD 1105.010. ALL HYDRANTS ARE TO BE SELF-DRAINING (UNLESS IN AREAS WITH HIGH WATER TABLE). ALL HYDRANTS ARE TO BE EQUIPPED WITH ONE (1) FOUR-INCH (4") PUMPER PORT WITH MANUFACTURER'S "STORTZ" FITTING. APPROVED HYDRANTS ARE CANADA VALVE (CANVAL) - **ONLY**.
- 5.3 ALL BENDS AND TEES MUST BE OPSD 1103.010 AND 1103.020 AND BLOCKED TO UNDISTURBED GROUND. MECHANICAL RESTRAINING JOINTS ARE PERMITTED.
- 5.4 WHEN WATERMAIN DOES NOT HAVE SUFFICIENT COVER DUE TO OTHER APPURTENANCES, I.E. CATCHBASINS, ETC., THE WATERMAIN MUST BE INSULATED, AS PER OPSD - 1109.030
- 5.5 ALL MECHANICAL CONNECTIONS TO BE PROTECTED AGAINST CORROSION THROUGH THE USE OF CORROSION PROTECTION NUTS. NUTS TO BE USED ON 50% OF ALL T-BOLTS PER CONNECTION AND ARE TO BE USED IN ADDITION TO STANDARD FASTENING NUTS, **NOT** IN PLACE OF STANDARD NUTS.

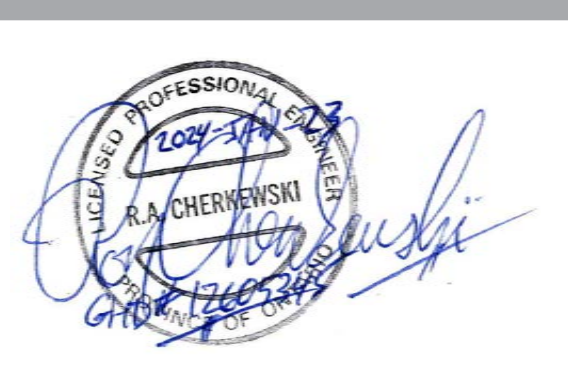
PREPARED BY: GHD

6. SANITARY SEWERS - FORCEMAIN

- 6.1.1 ALL SEWER CONNECTIONS TO MANHOLES SHALL BE DONE BY MEANS OF A MANHOLE ADAPTER.
- 6.1.2 THE BEDDING MATERIAL SHALL EXTEND TO 300 MM ABOVE THE PIPE AND COMPACTION TESTS ARE REQUIRED BEFORE THE TRENCH IS BACKFILLED. BACKFILL TO BE COMPACTED TO MINIMUM 95% STANDARD PROCTOR DENSITY.
- 6.2 MANHOLES:
 - 6.2.1 MANHOLES TO BE STANDARD DRAWINGS OPSD 700 -SERIES.
 - 6.2.2 ALL SANITARY MANHOLES TO BE PRE-BENCHED MONOLITHIC BASE, WITH SEALED CONNECTIONS FOR ALL PIPES.
 - 6.2.3 BEDDING - SEWER BEDDING TO BE TO STANDARD DRAWING OPSD 802.03, CLASS "B" (UNLESS OTHERWISE NOTED AND APPROVED).

P01 ISSUED FOR SPA				R.A / R.C	R.L	2024-01-23
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Designer	R. AZZAM / R. CHERKEWSKI	Design Check	A. WRIGGLESWORTH	Project Director	M. DI NIRO	

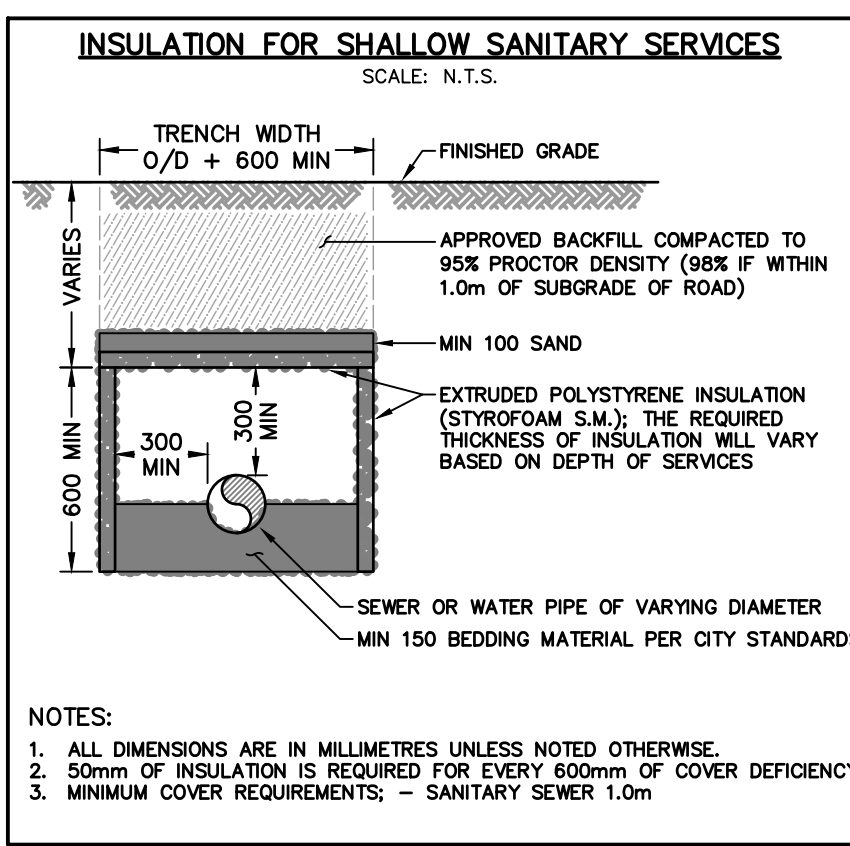
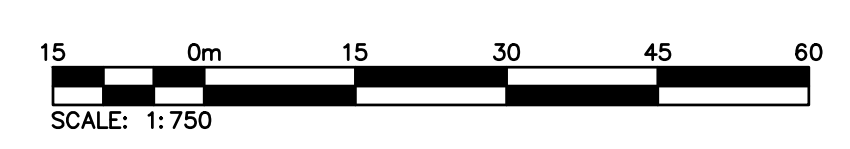
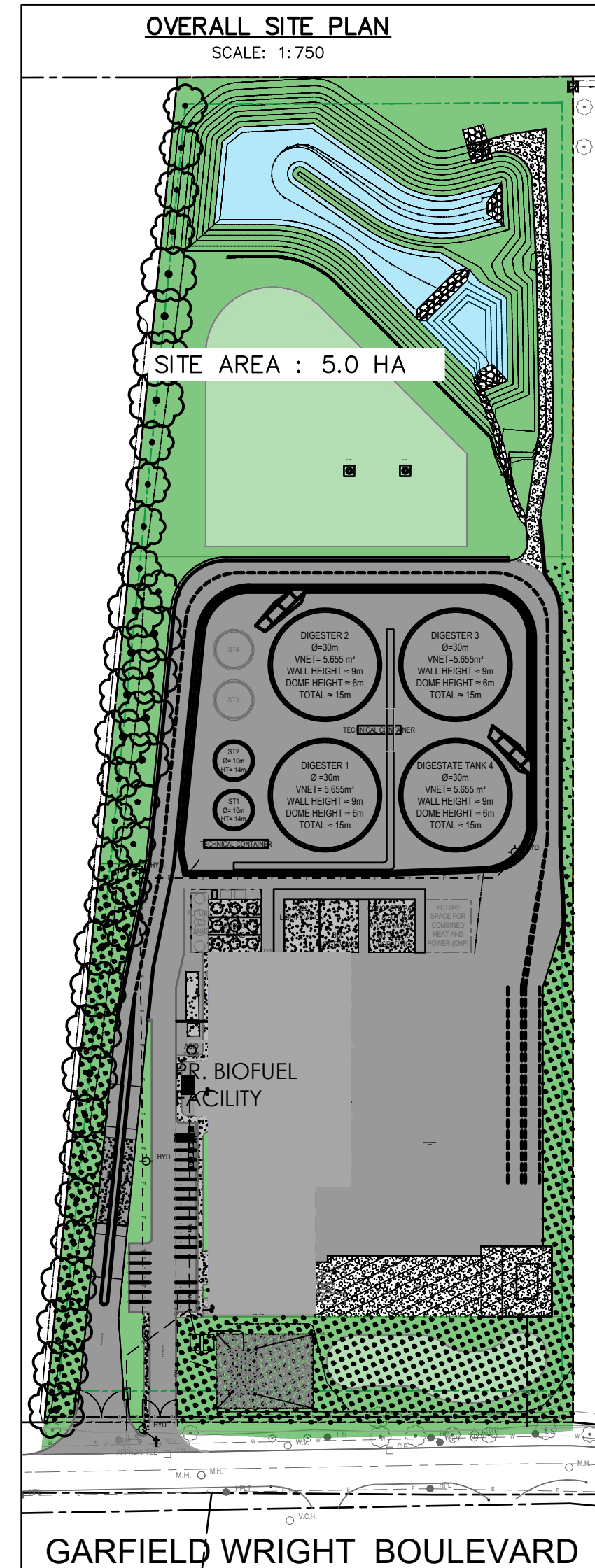
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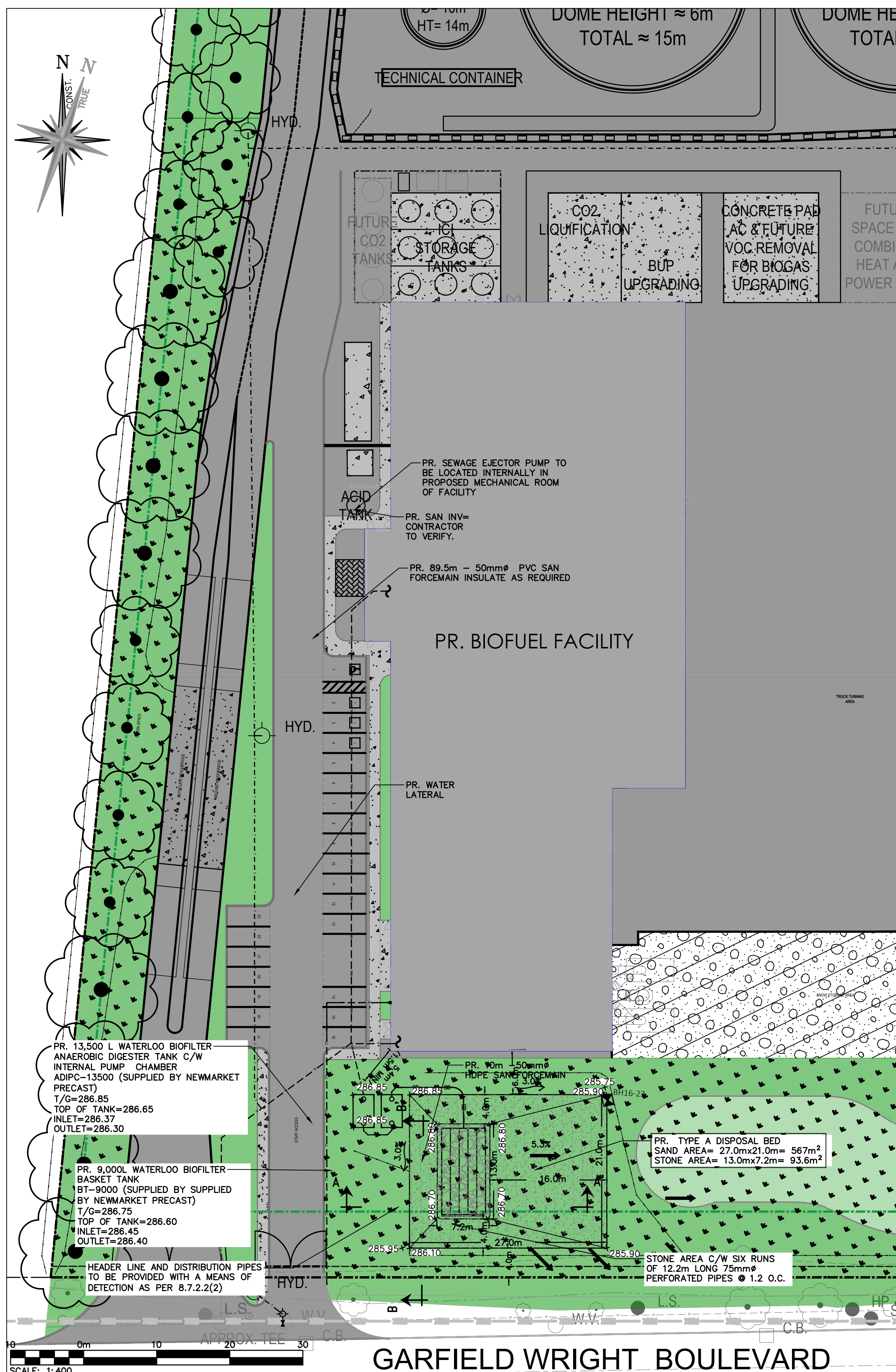
Client	CONVERTUS YORK BIOFUEL LTD.
Project	CONVERTUS BIOFUEL FACILITY
Project No.	12605345
Date	2024-01-23

Title	SITE SERVICING NOTES
Sheet No.	12605345-GHD-10-30-DRG-CI-D502



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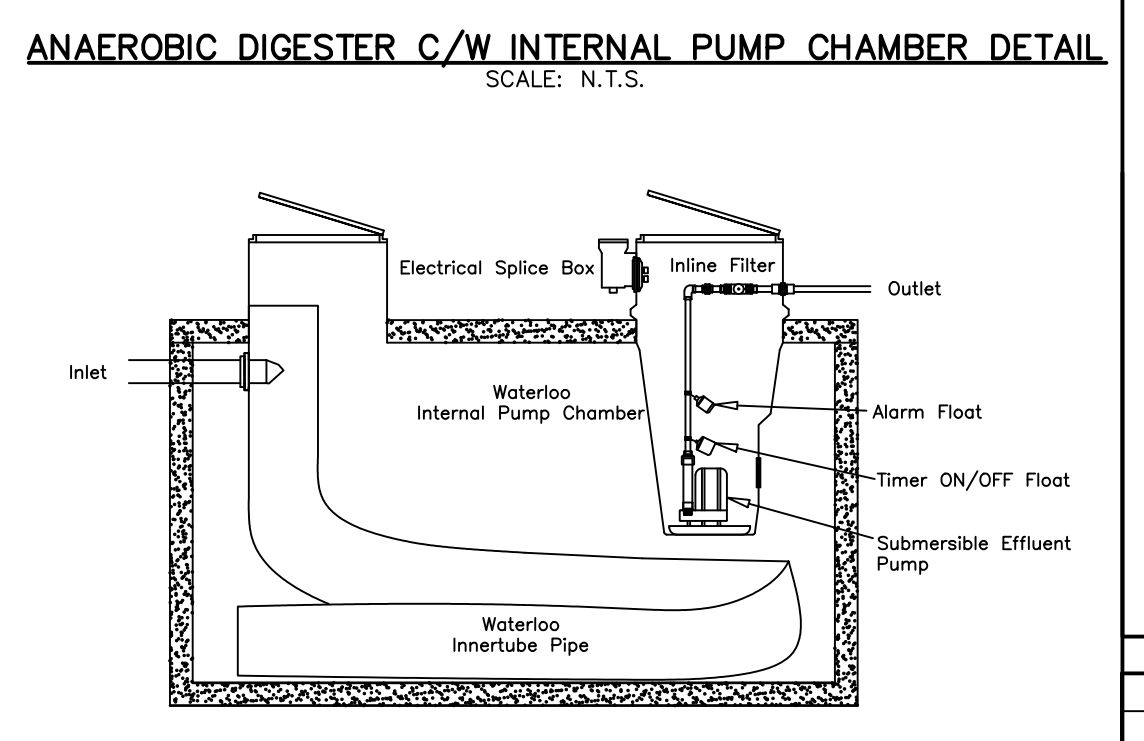
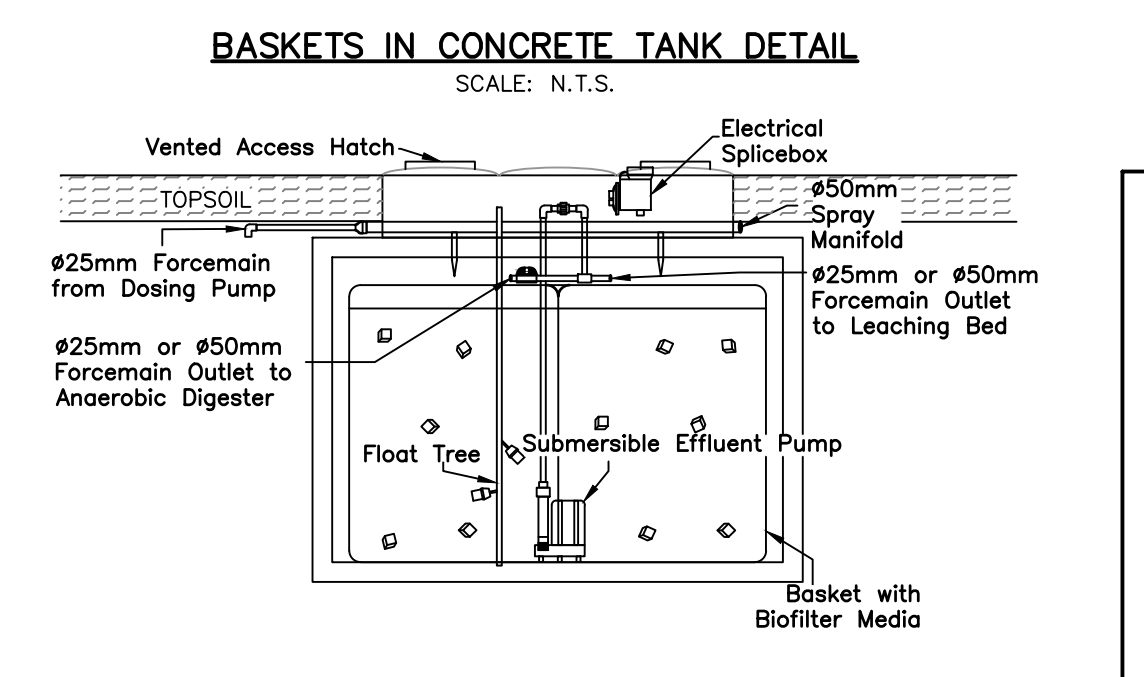
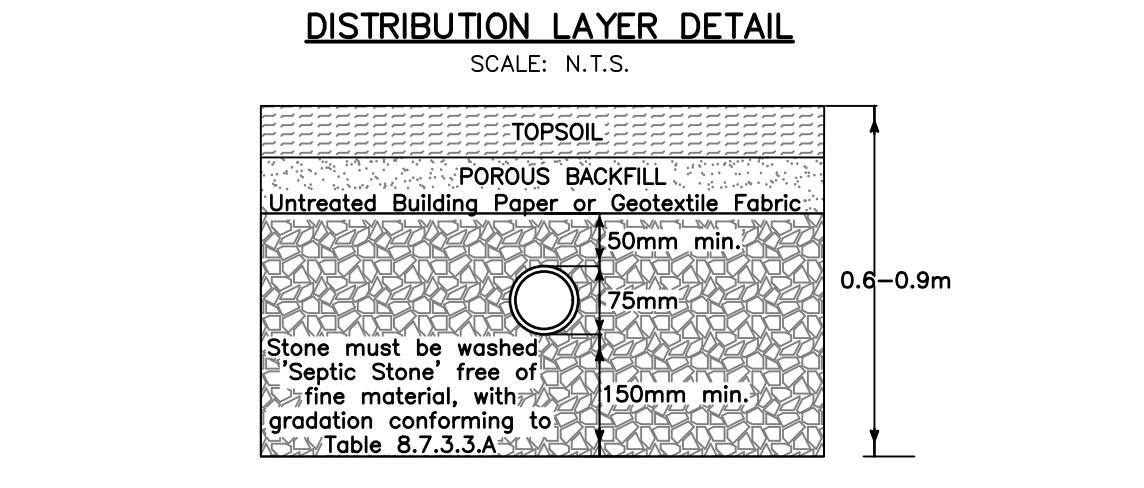
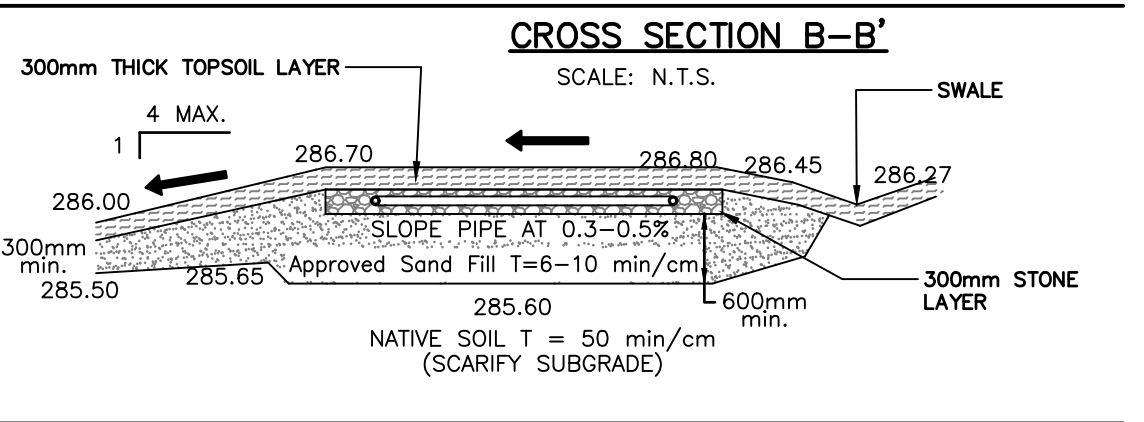
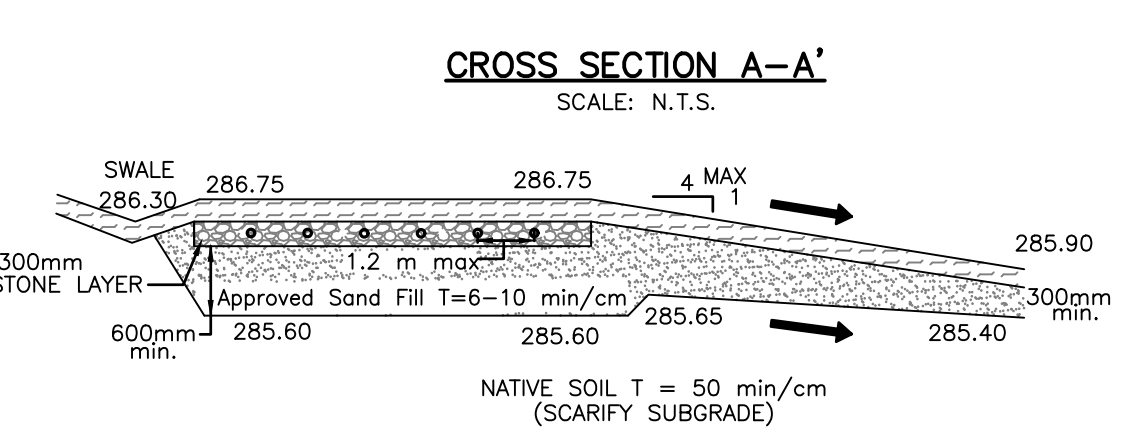
No.	Issue	Author	Designing	Checked	Approved	Date
P01	ISSUED FOR SPA	S. ARMSTRONG	L. CAMPANINI	A. MARSHALL	R. LOVEDAY	2024-01-23
No.	Issue	Author	Designing	Checked	Approved	Date
		S. ARMSTRONG	L. CAMPANINI	A. MARSHALL	R. LOVEDAY	
		S. ARMSTRONG	L. CAMPANINI	A. MARSHALL	R. LOVEDAY	
		S. ARMSTRONG	L. CAMPANINI	A. MARSHALL	R. LOVEDAY	



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No.	Issue	Author	Designing	Checked	Approved	Date
P01	ISSUED FOR SPA	S. ARMSTRONG	L. CAMPANINI	A. MARSHALL	R. LOVEDAY	2024-01-23
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		S. ARMSTRONG	L. CAMPANINI	A. MARSHALL	R. LOVEDAY	
		S. ARMSTRONG	L. CAMPANINI	A. MARSHALL	R. LOVEDAY	

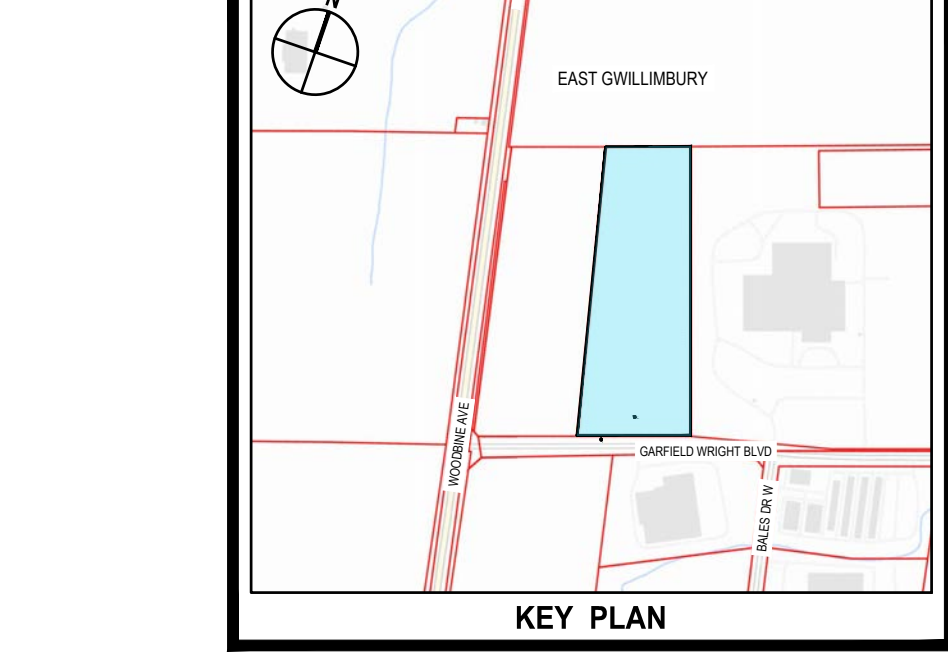
- ### SEWAGE SYSTEM NOTES
- PROPOSED SEWAGE SYSTEM CONSTRUCTION TO BE UNDERTAKEN IN ACCORDANCE WITH THE ONTARIO BUILDING CODE, ONTARIO MINISTRY OF ENVIRONMENT, AND THE MANUFACTURER'S RECOMMENDATIONS.
 - INSTALLATION OF ALL COMPONENTS OF THE SEWAGE SYSTEM TO BE COMPLETED BY A LICENSED AND REGISTERED ON-SITE SEWAGE SYSTEM INSTALLER IN THE PROVINCE OF ONTARIO.
 - THE CONTRACTOR SHALL COORDINATE AND PAY FOR ALL NECESSARY INSPECTIONS WITH THE TOWN AND OTHER AUTHORITIES PERTAINING TO THE INSTALLATION OF THEIR WORK.
 - CONTRACTOR TO LOCATE ALL UNDERGROUND UTILITIES AND EXISTING SEWAGE WORKS PRIOR TO CONSTRUCTION.
 - ALL COMPONENT LOCATIONS SHALL BE FIELD VERIFIED WITH THE ENGINEER PRIOR TO INSTALLATION.
 - ALL EARTHWORKS, INCLUDING PLACEMENT OF FILL ARE TO BE UNDERTAKEN WITH TRACK MOUNTED EQUIPMENT TO KEEP COMPACTON TO A MINIMUM. KEEP ALL TRAFFIC IN THE AREA OF THE PROPOSED LEACHING BED TO A MINIMUM.
 - ALL TOPSOIL AND ORGANICS TO BE REMOVED FROM LEACHING BED AREA.
 - IF HIGH GROUNDWATER CONDITIONS ARE EVIDENT AT THE TIME OF CONSTRUCTION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY. ALL VERTICAL CLEARANCE DISTANCES AS REQUIRED BY THE ONTARIO BUILDING CODE MUST BE MAINTAINED.
 - GRAVITY SEWERS TO HAVE MINIMUM 0.6 M COVER AND SHALL BE INSULATED WHERE LESS THAN 1.0M COVER IS PROVIDED. FOREMAIN SHALL BE INSULATED WHERE LESS THAN 1.5 M COVER IS PROVIDED. BEDDING, COVER AND BACKFILL TO BE IN ACCORDANCE WITH OPSS.
 - UNLESS OTHERWISE NOTED PE FOREMAIN TO BE HDPE SERIES 100 OR DR 13.5 PE AND PVC FOREMAIN TO BE SCHEDULE 40. GRAVITY SEWERS TO BE SDR-35. FORCE MAIN TO BE PROVIDED WITH TRACER WIRE, SECURED TO THE TOP OF THE PIPE WITH WATER PROOF TAPE OR ZIP TIES.
 - ALL PIPES SUBJECT TO VEHICULAR TRAFFIC SHALL BE ADEQUATELY PROTECTED.
 - ALL METAL IN TANKS OR PUMP CHAMBERS TO BE GALVANIZED OR STAINLESS STEEL.
 - ALL JOINTS BELOW THE HIGH WATER LEVEL IN PRECAST TANKS TO BE SEALED WITH MASTIC SEALANT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS FOR WATER TIGHT SEAL. ALL TANK INLETS AND OUTLETS TO BE EQUIPPED WITH CAST IN RUBBER BOOT FOR WATER TIGHT SEAL. UNLESS OTHERWISE NOTED ALL TANK INLETS AND OUTLETS TO BE EQUIPPED WITH TEES.
 - ALL TANKS TO BE PROVIDED WITH PRECAST CONCRETE OR PVC ACCESS RISERS TO GRADE. HATCHES TO BE BOLTED AND GASKETED AND ACCESSIBLE AT GRADE. ALL CIRCULAR HATCHES TO BE 600 MM DIAMETER POLYLOK RISER WITH CAST IN ADAPTOR. ALL SQUARE ACCESS OPENINGS TO BE PROVIDED ON TANKS CONTAINING PUMPS.
 - EXISTING SOILS SHALL BE SCARIFIED AT A RIGHT ANGLE TO THE DIRECTION OF LATERAL SEWAGE FLOW IN THE LEACHING BED PRIOR TO IMPORTING FILL OR INSTALLING DISTRIBUTION PIPE STONE LAYER.
 - WHEN THE IMPORTATION OF FILL IS REQUIRED, FILL SHOULD BE END-DUMPED AND GRADED PROGRESSIVELY OVER THE PREPARED SITE AREA WITH TRACK MOUNTED EQUIPMENT.
 - ALL ELEVATIONS TO BE VERIFIED PRIOR TO BACKFILL
 - ALL FILL MATERIAL PLACED BENEATH TANKS TO BE COMPACTED TO 95%.
 - ALL DISTURBED AREAS TO BE TOPSOILED (100MM MINIMUM) AND SEEDED COMPLETE WITH FERTILIZER AND MULCH IN ACCORDANCE WITH OPSS.
 - THE INSTALLING CONTRACTOR SHALL INSTALL THE SEWAGE SYSTEM USING A TRANSIT/LEVEL AND SHALL PROVIDE SAME FOR INSPECTION OF ANY COMPONENT.
 - MAXIMUM BURIAL DEPTH OF TANKS NOT TO EXCEED TO MANUFACTURER'S RECOMMENDATIONS.
 - CLEARANCE DISTANCES FROM PROPERTY LINES, STRUCTURES, WELLS, AND SURFACE WATER WILL ADHERE TO THE REQUIREMENTS OF OBC 8.2.1.6.A.
 - A LEACHING BED SHALL NOT BE LOCATED ON AN AREA WITH A SLOPE OF GREATER THAN 4 UNITS HORIZONTALLY TO 1 UNIT VERTICALLY.
 - THE HEADER LINE, DISTRIBUTION PIPES AND LEACHING BED SHALL BE EQUIPPED WITH MEANS OF DETECTION AS REQUIRED BY OBC 8.7.2.2. (2). LIGHT COLOURED PLASTIC COATED 14 GAUGE TRACER WIRE OR EPOXY COATED, 10mm REBAR LAID HORIZONTALLY AT EACH CORNER OF THE BED IS ACCEPTABLE.
 - STONE TRENCH OR LAYER TO BE COVERED WITH PERMEABLE GEOTEXTILE PRIOR TO BACKFILL.
 - STONE TO CONFORM WITH OBC 8.7.3.3.
 - ALL IMPORTED SAND FILL TO HAVE A T-TIME OF 6 TO 10 MIN/CM AND A SILT/CLAY CONTENT OF NO MORE THAN 5% AND SHALL BE VERIFIED IN WRITING BY A SOIL TESTING FIRM AND APPROVED BY THE ENGINEER PRIOR TO PLACEMENT.
 - ANAEROBIC DIGESTER AND BIOFILTER BASKET PUMPS AS DESIGNED AND SUPPLIED BY WATERLOO BIOFILTER. INTERNAL PUMP CHAMBER TO BE VENTED AND EQUIPPED WITH AUDIBLE AND VISUAL HIGH LEVEL ALARM.
 - ALL VALVES TO PROVIDE NO OBSTRUCTION TO FLOW WHEN FULLY OPENED. ALL VALVES AND COUPLINGS TO BE ACCESSIBLE AT GRADE.
 - ALL PUMP FLOATS TO BE SECURED TO A REMOVABLE PVC FLOAT TREE.
 - ALL PUMP CONTROL PANELS TO BE EQUIPPED WITH SEPARATE CIRCUIT BREAKERS FOR PUMP CIRCUIT
 - NO JUNCTION BOXES IN RISERS
 - ALL BURIED ELECTRICAL WIRING TO BE IN PVC CONDUIT
 - PRIOR TO ACCEPTANCE CONTRACTOR TO PROVIDE DOCUMENTATION THAT ALL ELECTRICAL WORK HAS BEEN INSPECTED AND APPROVED BY THE ELECTRICAL AUTHORITY HAVING JURISDICTION.
 - SEWAGE EJECTOR PUMP TO BE LOCATED IN PROPOSED MECHANICAL ROOM OF FACILITY.



ON-SITE SEWAGE SYSTEM DESIGN NOTES

(REFER TO ON-SITE SEWAGE SYSTEM DESIGN MEMO BY GHD FOR MATERIAL, CONSTRUCTION, INSPECTION AND OTHER DETAILS.)

PEAK DAILY SEWAGE FLOW RATE	Q = 4,500 L/DAY
SOIL PERCOLATION RATE	T = 50 min/cm (ESTIMATED BY GHD)
PROPOSED TREATMENT UNIT	WATERLOO BIOFILTER MODEL AD-BA45 RATED FOR 4,500 L/DAY MIN FOAM VOLUME 6.3 m ³ MIN ANEROBIC DIGESTER SIZE = 8,496 L MIN INNER TUBE VOLUME SIZE = 900 L MIN PUMP CHAMBER WORKING CAPACITY = 3,150 L
TYPE A DISPERSAL BED STONE AREA	MINIMUM SIZE = 4,500/50 = 4,500/50 = 90m ² PROVIDED = 13.0M X 7.2 = 93.6m ²
TYPE A DISPERSAL BED SAND AREA	MINIMUM SIZE = QT/400 = 4,500*50/400 = 563m ² PROVIDED = 567m ²



CALL BEFORE YOU DIG

THE LOCATION OF SERVICES ON THIS DRAWING ARE ONLY APPROXIMATE AND BASED ON SURFACE FEATURES LOCATED AT THE TIME OF THE TOPOGRAPHIC SURVEY. PRIOR TO ANY CONSTRUCTION IT IS THE RESPONSIBILITY OF THE CONTRACTOR/BUILDER TO ENSURE THE EXACT LOCATION OF ALL UTILITIES.

LEGEND

---	PROPERTY LINE
-x-x-	EXISTING FENCE
---	PROPOSED GRADE
---	PROPOSED GRADE (TO MATCH EXISTING)
---	PROPOSED MINOR FLOW DIRECTION
---	PROPOSED GRASSED SWALE
---	PROPOSED SLOPE (3:1 MAX.)
---	BUILDING ENTRANCE (PERSONNEL DOOR)
---	EXISTING WATERMAIN
---	PROPOSED SANITARY FOREMAIN
---	PROPOSED WATER SERVICE LATERAL (XXmm)
---	EXISTING FIRE HYDRANT & GATE VALVE
---	LEACHING BED PERFORATED PIPE
BH9	BOREHOLE LOCATION (GHD)
---	PR. TREE PLANTING
---	FILTER STONE AREA
---	IMPORTED SAND FILL AREA

C	ISSUED FOR REVIEW	2024/JAN/16
B	ISSUED FOR REVIEW	2024/JAN/09
A	ISSUED FOR COORDINATION	2023/OCT/24
No.	ISSUE / REVISION	YYYY/MM/DD

SURVEY NOTES:

EXISTING TOPOGRAPHY AND SITE FEATURES SURVEYED MARCH 15, 2023 BY SCHAEFFER OZALDOV PURCELL LTD. COORDINATE ZONE UTM ZONE 17, NAD 83 (CSRS 2010) DRAWING FILE: TOPOGRAPHICAL SURVEY 23-010 MAR 15-23 DWS

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LICENSED PROFESSIONAL ENGINEER
A. SUMARY
100505002
Jan 16 24
PROVINCE OF ONTARIO

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Client **CONVERTUS YORK BIOFUEL LTD.**

Project **CONVERTUS BIOFUEL FACILITY**

Project No. **12605345**

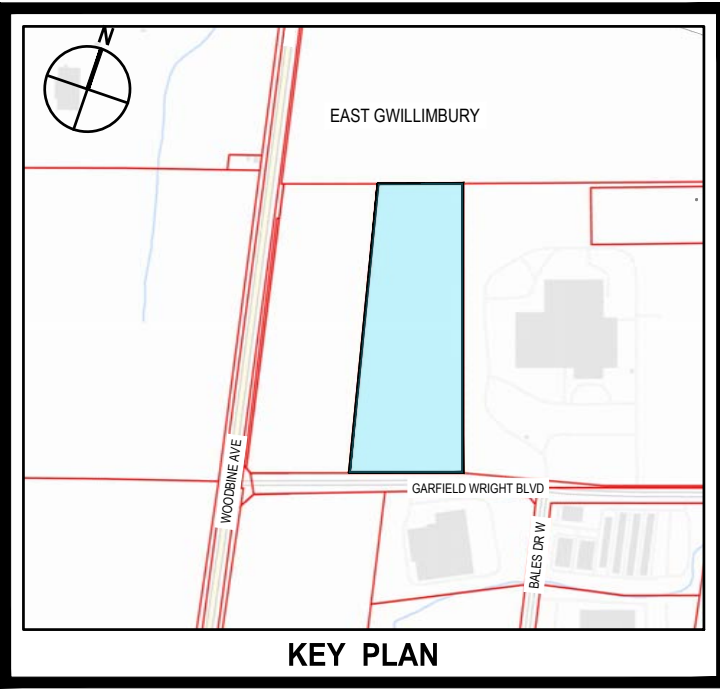
Date **2024-01-23**

Scale **1:400**

Title **ONSITE SEPTIC SYSTEM DESIGN**

Size **ANSI D**

Sheet No. **12605345-GHD-10-32-DRG-CI-D101**



- LEGEND:**
- PROJECT LOT LIMIT
 - LEGAL LOT LIMIT
 - MAJOR CONTOUR (1.0m INTERVAL)
 - MINOR CONTOUR (0.2m INTERVAL)
 - FENCE LINE
 - ROAD
 - ROAD (APPROXIMATE)
 - OVERHEAD ELECTRIC
 - WATERMAIN
 - TREE LINE
 - TREE
 - MAINTENANCE HOLE
 - CATCHBASIN
 - FIRE HYDRANT
 - WATER VALVE
 - VALVE CHAMBER
 - LIGHT STANDARD
 - HYDRO POLE
 - HYDRO POLE & LIGHT
 - HYDRO POLE & TRANSFORMER
 - CATCHMENT BOUNDARY
 - CATCHMENT ID
 - CATCHMENT AREA IN HECTARES
 - FLOW ROUTE

SOURCE & BENCHMARKS

LEGAL SURVEY "PART 1, BLOCK 1, PLAN 65M-3843, TOWN OF EAST GWILLIMBURY, REGIONAL MUNICIPALITY OF YORK, PROVINCE OF ONTARIO", AND EXISTING TOPOGRAPHY AND SITE FEATURES, COMPILED BY SCHAEFFER DZALDOV PURCELL LTD (OLS), CONCORD, ONTARIO, SDP JOB 23-009 & 23-010, FILE "G2-M3843-BLOCK-1", 2023-MARCH, UTM ZONE 17, NAD-83 (CSRS-2010); CGVD-1928:1978, STATION 00820118077, BENCHMARK, ELEVATION 290.976 METRES GEODETIC, LOCATED AT THE INTERCHANGE OF PROVINCIAL HWY-404 AND YORK REGION ROAD-31 (DAVIS DRIVE), APPROXIMATELY 1400-METRES SOUTH-WEST OF SUBJECT SITE.

ADDITIONAL TOPOGRAPHY AND SITE FEATURES SURVEY, NORTH-EAST / EAST OF SITE LIMITS, COMPILED BY GHD LTD, WATERLOO, ONTARIO, GHD JOB 12605345, FILE "12605345(SOURCE)V001 FILE 2 EXISTING CONDITIONS", 2023-NOVEMBER, UTM ZONE 17, NAD-83 (CSRS-2010), CGVD-1928:1978, YORK REGION VERTICAL CONTROL BENCHMARK 56-131, TABLET, ELEVATION 284.55, LOCATED 21.8 METRES SOUTH AND 82.4 METRES WEST OF THE CENTRELINE OF THE INTERSECTION OF YORK REGION ROAD-31 (DAVIS DRIVE), AND YORK REGION ROAD-8 (WOODBINE AVENUE), APPROXIMATELY 500-METRES SOUTH-WEST OF SUBJECT SITE.

PREPARED BY: GHD

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No.	Issue	Checked	Approved	Date
P03	ISSUED FOR SPA	D.S.	R.L.	2024-01-23
P02	FOR PERMIT SUBMISSION	D.S.	R.L.	2023-07-31
P01	FOR CLIENT REVIEW	D.S.	R.L.	2023-07-28

Author	S. HOLLAND	Drafting Check	A. WRIGGLESWORTH	Project Manager	R. LOVEDAY
Designer	L. SPITERI	Design Check	D. SINGARAJA	Project Director	M. DI NIRO

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Client	CONVERTUS YORK BIOFUEL LTD.		
Project	CONVERTUS BIOFUEL FACILITY		
Project No.	Date	Scale	Sheet No.
12605345	2024-01-24	1:1000	12605345-GHD-10-34-DRG-CI-D101

EXISTING CONDITIONS PLAN AND CATCHMENTS

Size ANSI D

SOURCE & BENCHMARKS

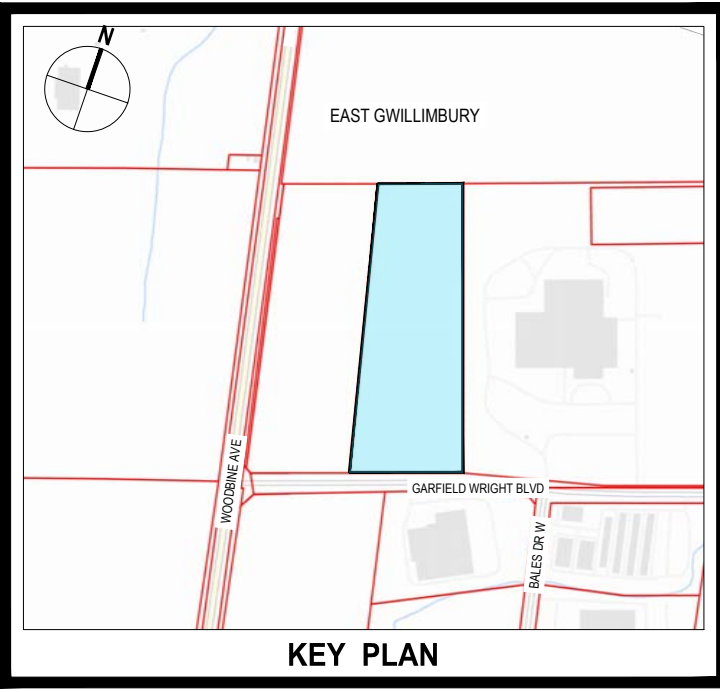
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- LEGEND:**
- PROJECT LOT LIMIT
 - SETBACK LIMIT
 - ADJACENT LOT LEGAL LIMIT
 - 282.0 MAJOR CONTOUR (1.0m INTERVAL)
 - MINOR CONTOUR (0.20m INTERVAL)
 - FENCE LINE
 - ROAD
 - ROAD (APPROXIMATE)
 - E OVERHEAD ELECTRIC
 - W WATERMAIN
 - TREE
 - M.H. MAINTENANCE HOLE
 - C.B. CATCHBASIN
 - HYD. FIRE HYDRANT
 - W.V. WATER VALVE
 - V.C.H. VALVE CHAMBER
 - L.S. LIGHT STANDARD
 - HP. HYDRO POLE
 - HPL. HYDRO POLE & LIGHT
 - HPT. HYDRO POLE & TRANSFORMER
 - C.B. PROPOSED CATCHBASIN
 - C.B. PROPOSED DOUBLE CATCHBASIN
 - C.B. M.H. PROPOSED DOUBLE CATCHBASIN MAINTENANCE HOLE
 - C.B.M.H. PROPOSED CATCHBASIN MAINTENANCE HOLE
 - M.H. PROPOSED MAINTENANCE HOLE
 - M.H. PROPOSED MAINTENANCE HOLE WITH 2 ACCESS COVERS
 - PROPOSED TREE
 - PROPOSED EDGE OF ASPHALT
 - PROPOSED ROAD MARKINGS
 - PROPOSED CURB
 - PROPOSED SWALE
 - PROPOSED FENCE LINE
 - PROPOSED ACCESS GATE
 - STM PROPOSED STORM SEWER
 - PROPOSED PERFORATED GROUNDWATER LATERAL COLLECTOR
 - PROPOSED PERFORATED GROUNDWATER MAINLINE COLLECTOR
 - CATCHMENT BOUNDARY
 - PROPOSED BUILDING
 - PROPOSED HARD SURFACE
 - PROPOSED GRAVEL AREA
 - PROPOSED CONCRETE
 - PROPOSED GRANULAR (SNOW STORAGE AREA)
 - PROPOSED RIP-RAP
 - P101 CATCHMENT ID
 - CATCHMENT AREA IN HECTARES
 - MAJOR STORM ROUTE
 - MINOR FLOW ROUTE



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P03	ISSUED FOR SPA	D.S	R.L	2024-01-23
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Author	S. HOLLAND	Drafting Check	A. WRIGGLESWORTH	Project Manager
Designer	L. SPITERI	Design Check	D. SINGARAJA	Project Director
				R. LOVEDAY
				M. DI NIRO

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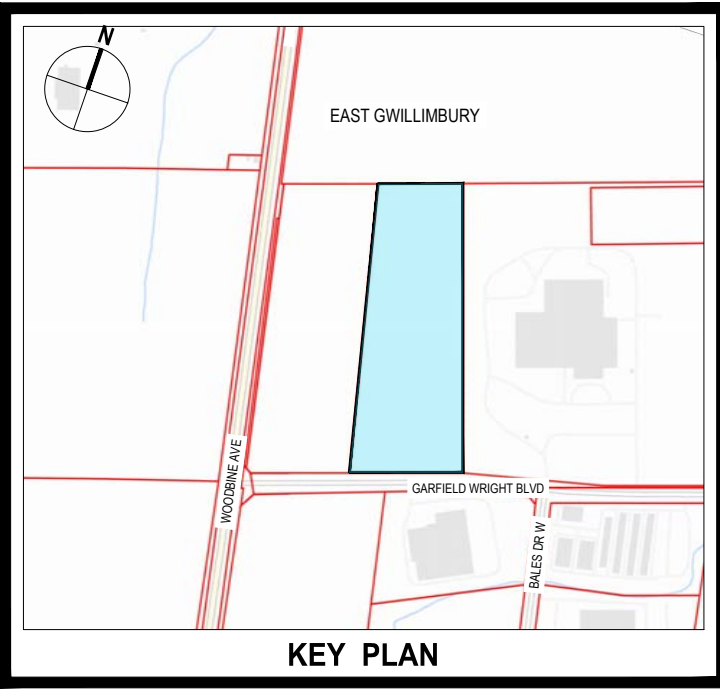


Client	CONVERTUS YORK BIOFUEL LTD.	
Project	CONVERTUS BIOFUEL FACILITY	
Project No.	Date	Scale
12605345	2024-01-23	1:1000

Title	PROPOSED CONDITIONS PLAN AND CATCHMENTS
Sheet No.	12605345-GHD-10-34-DRG-CI-D102



- LEGEND:**
- PROJECT LOT LIMIT
 - SETBACK LIMIT
 - ADJACENT LOT LEGAL LIMIT
 - MAJOR CONTOUR (1.0m INTERVAL)
 - MINOR CONTOUR (0.20m INTERVAL)
 - FENCE LINE
 - ROAD
 - ROAD (APPROXIMATE)
 - OVERHEAD ELECTRIC
 - WATERMAIN
 - TREE
 - M.H. MAINTENANCE HOLE
 - C.B. CATCHBASIN
 - H.Y.D. FIRE HYDRANT
 - W.V. WATER VALVE
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 - PROPOSED HARD SURFACE
 - PROPOSED GRAVEL AREA
 - PROPOSED LANDSCAPE SURFACE
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 - PROPOSED GRANULAR (SNOW STORAGE AREA)
 - PROPOSED RIP-RAP



SOURCE & BENCHMARKS

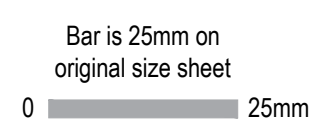
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Author **S. HOLLAND** Drafting Check **A. WRIGGLESWORTH** Project Manager **R. LOVEDAY**
 Designer **L. SPITERI** Design Check **D. SINGARAJA** Project Director **M. DI NIRO**



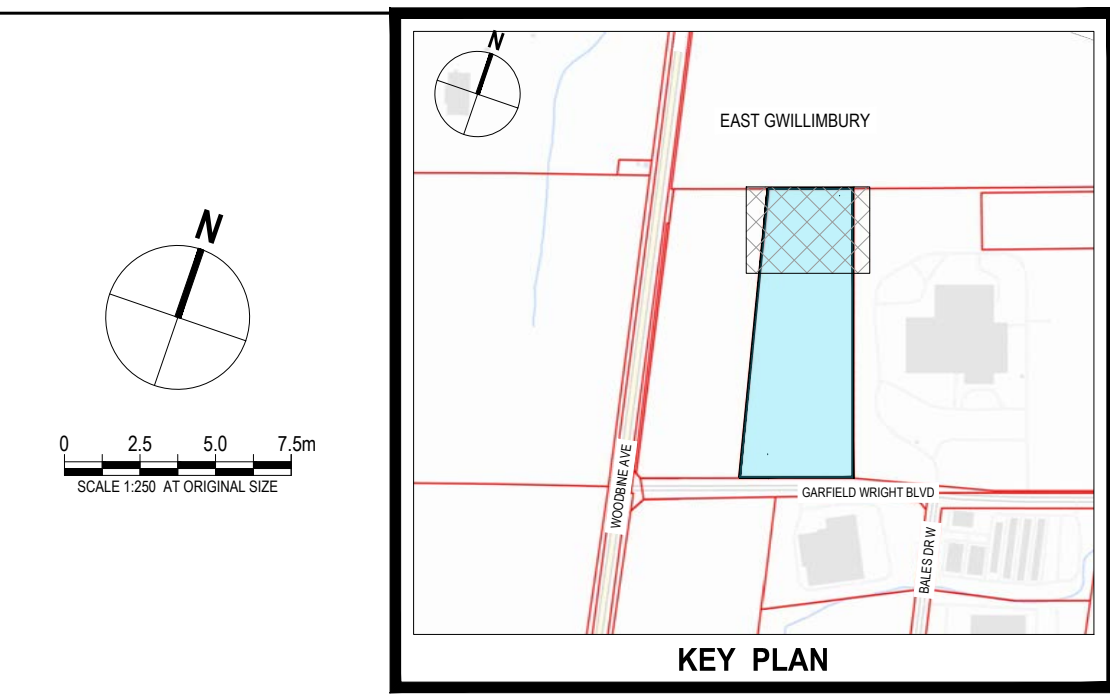
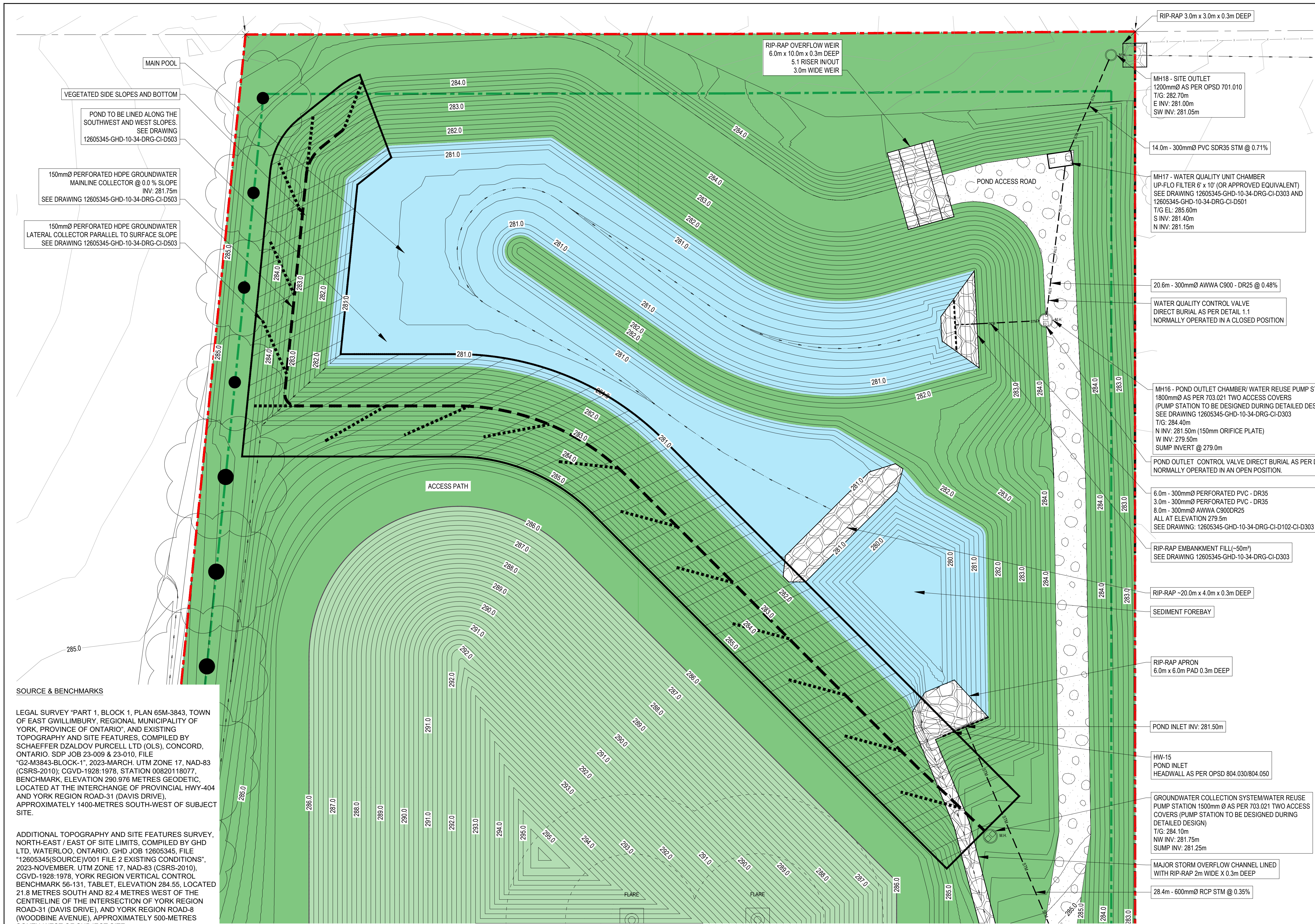
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Client	CONVERTUS YORK BIOFUEL LTD.
Project	CONVERTUS BIOFUEL FACILITY
Project No.	12605345
Date	2024-01-21
Scale	1:1000

Title	PROPOSED CONDITIONS PLAN
Sheet No.	12605345-GHD-10-34-DRG-CI-D103

NOT FOR CONSTRUCTION



- LEGEND:**
- PROJECT LOT LIMIT
 - SETBACK LIMIT
 - ADJACENT LOT LEGAL LIMIT
 - MAJOR CONTOUR (1.0m INTERVAL)
 - MINOR CONTOUR (0.20m INTERVAL)
 - FENCE LINE
 - ROAD
 - ROAD (APPROXIMATE)
 - E --- OVERHEAD ELECTRIC
 - W --- WATERMAIN
 - TREE
 - MH MAINTENANCE HOLE
 - C.B. CATCHBASIN
 - HYD. FIRE HYDRANT
 - WV. WATER VALVE
 - V.C.H. VALVE CHAMBER
 - L.S. LIGHT STANDARD
 - HP. HYDRO POLE
 - HPL. HYDRO POLE & LIGHT
 - HPT. HYDRO POLE & TRANSFORMER
 - C.B. PROPOSED CATCHBASIN
 - C.B. PROPOSED DOUBLE CATCHBASIN
 - C.B. M.H. PROPOSED DOUBLE CATCHBASIN MAINTENANCE HOLE
 - C.B. M.H. PROPOSED CATCHBASIN MAINTENANCE HOLE
 - M.H. PROPOSED MAINTENANCE HOLE
 - M.H. PROPOSED MAINTENANCE HOLE WITH 2 ACCESS COVERS
 - PROPOSED TREE
 - PROPOSED EDGE OF ASPHALT
 - PROPOSED ROAD MARKINGS
 - PROPOSED CURB
 - PROPOSED SWALE
 - PROPOSED FENCE LINE
 - PROPOSED ACCESS GATE
 - STM PROPOSED STORM SEWER
 - PROPOSED PERFORATED GROUNDWATER LATERAL COLLECTOR
 - PROPOSED PERFORATED GROUNDWATER MAINLINE COLLECTOR
 - CATCHMENT BOUNDARY
 - PROPOSED BUILDING
 - PROPOSED HARD SURFACE
 - PROPOSED GRAVEL AREA
 - PROPOSED LANDSCAPE SURFACE
 - PROPOSED CONCRETE
 - PROPOSED GRANULAR (SNOW STORAGE AREA)
 - PROPOSED RIP-RAP

SOURCE & BENCHMARKS

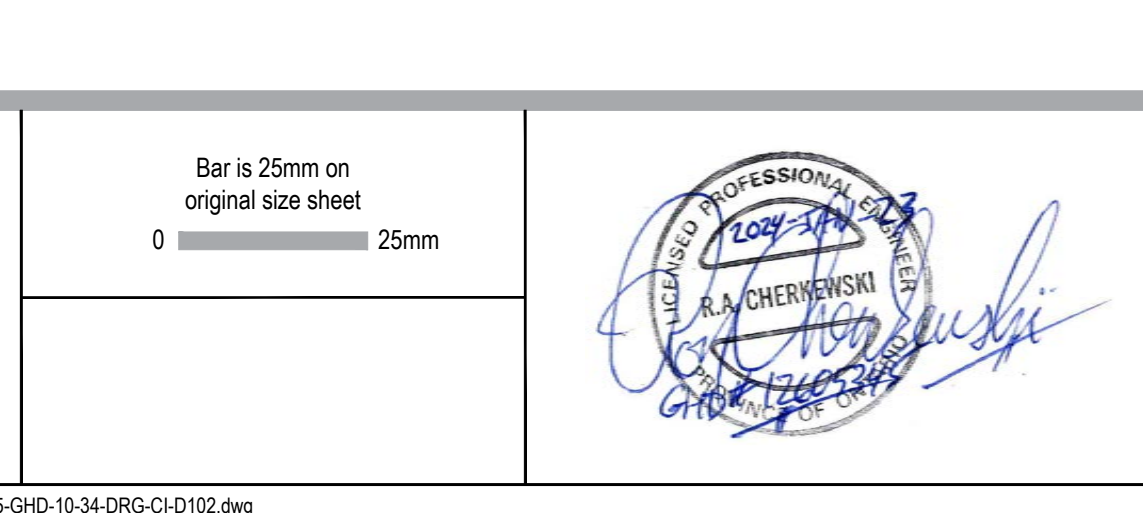
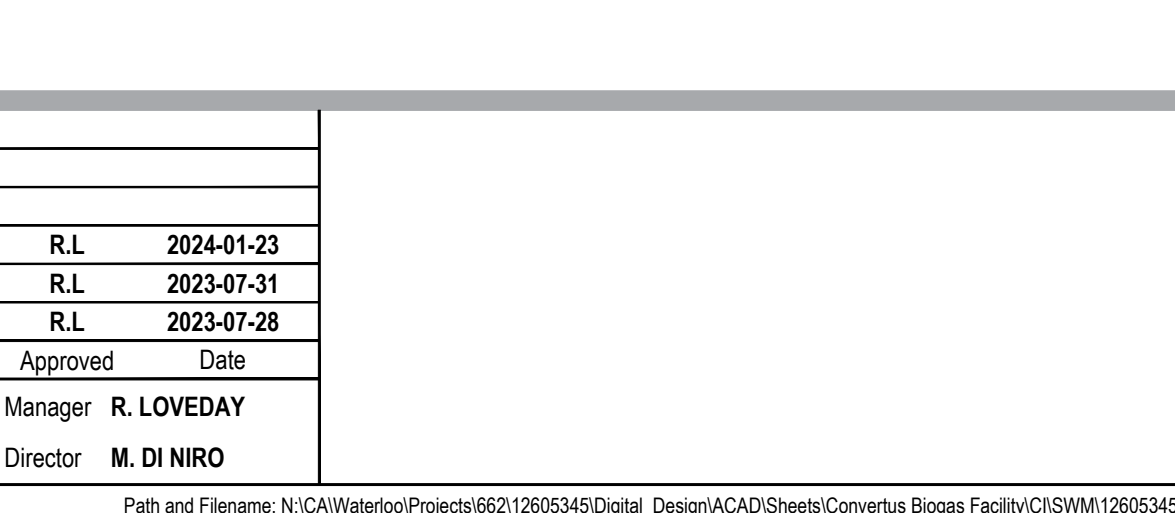
LEGAL SURVEY "PART 1, BLOCK 1, PLAN 65M-3843, TOWN OF EAST GWILLIMBURY, REGIONAL MUNICIPALITY OF YORK, PROVINCE OF ONTARIO", AND EXISTING TOPOGRAPHY AND SITE FEATURES, COMPILED BY SCHAEFFER DZALDOV PURCELL LTD (OLS), CONCORD, ONTARIO. SDP JOB 23-009 & 23-010, FILE "G2-M3843-BLOCK-1", 2023-MARCH. UTM ZONE 17, NAD-83 (CSRS-2010); CGVD-1928:1978, STATION 00820118077, BENCHMARK, ELEVATION 290.976 METRES GEODETIC, LOCATED AT THE INTERCHANGE OF PROVINCIAL HWY-404 AND YORK REGION ROAD-31 (DAVIS DRIVE), APPROXIMATELY 1400-METRES SOUTH-WEST OF SUBJECT SITE.

ADDITIONAL TOPOGRAPHY AND SITE FEATURES SURVEY, NORTH-EAST / EAST OF SITE LIMITS, COMPILED BY GHD LTD, WATERLOO, ONTARIO. GHD JOB 12605345, FILE "12605345(SOURCE)V001 FILE 2 EXISTING CONDITIONS", 2023-NOVEMBER. UTM ZONE 17, NAD-83 (CSRS-2010), CGVD-1928:1978, YORK REGION VERTICAL CONTROL BENCHMARK 56-131, TABLET, ELEVATION 284.55, LOCATED 21.8 METRES SOUTH AND 82.4 METRES WEST OF THE CENTRELINE OF THE INTERSECTION OF YORK REGION ROAD-31 (DAVIS DRIVE), AND YORK REGION ROAD-8 (WOODBINE AVENUE), APPROXIMATELY 500-METRES SOUTH-WEST OF SUBJECT SITE.

PREPARED BY: GHD

No.	Issue	Checked	Approved	Date
P03	ISSUED FOR SPA	D.S	R.L	2024-01-23
P02	FOR PERMIT SUBMISSION	D.S	R.L	2023-07-31
P01	FOR CLIENT REVIEW	D.S	R.L	2023-07-28

Author **S. HOLLAND** Drafting Check **A. WRIGGLESWORTH** Project Manager **R. LOVEDAY**
 Designer **R. CHERKEWSKI** Design Check **D. SINGARAJA** Project Director **M. DI NIRO**



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Client **CONVERTUS YORK BIOFUEL LTD.**

Project **CONVERTUS BIOFUEL FACILITY**

Project No. **12605345** Date **2024-01-21** Scale **1:250**

Title **PROPOSED CONDITIONS STORMWATER MANAGEMENT POND**

Sheet No. **12605345-GHD-10-34-DRG-CI-D104**

Size **ANSI D**

NOT FOR CONSTRUCTION

EROSION AND SEDIMENT CONTROL MEASURES:

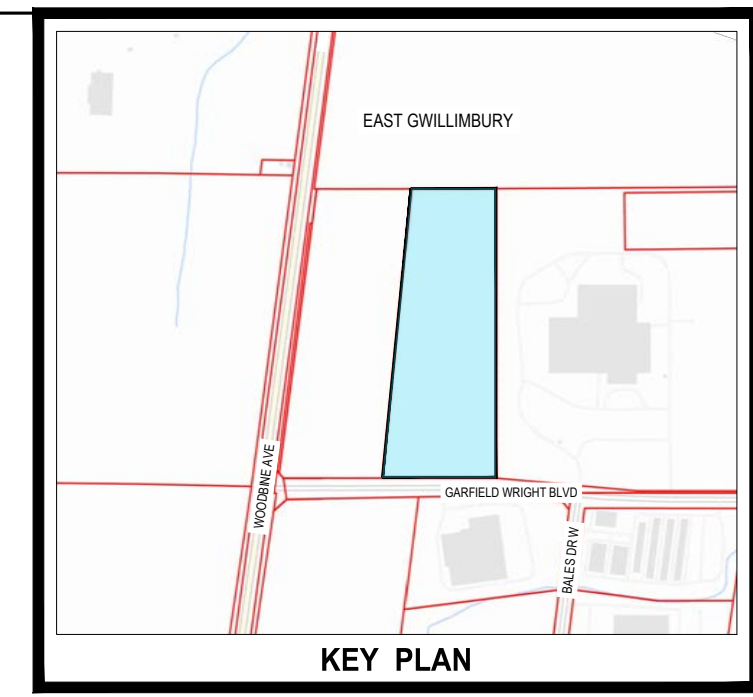
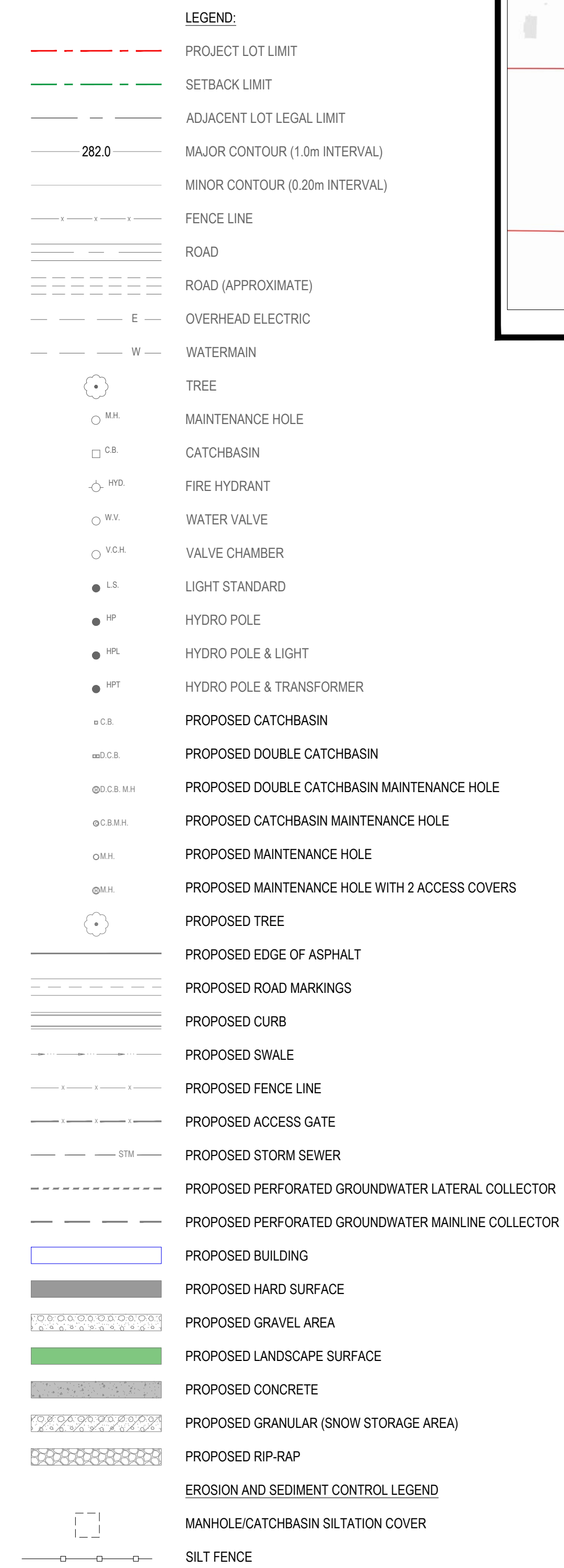
1. THE CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION AND MAINTENANCE OF ALL SOIL EROSION AND SEDIMENT CONTROL FACILITIES DURING CONSTRUCTION.
2. MINIMIZE AREA DISTURBANCE DURING CONSTRUCTION.
3. CONTRACTOR IS REQUIRED TO GET APPROVALS FROM THE OWNER OF STOCKPILE LOCATIONS (IF ANY) AND PROVIDE SEDIMENT AND EROSION CONTROL STRATEGY PRIOR TO COMMENCEMENT OF EARTHWORKS.
4. ROADWAYS ARE TO BE MAINTAINED FREE OF MUD, DEBRIS, ETC.
5. ALL SEDIMENT MEASURES TO BE INSTALLED PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.
6. ALL SILT FENCES MUST BE CLEARED OF SEDIMENT WHEN DEPTH REACHES 150mm AT THE BASE OF THE FENCE OR BREACHES.
7. THE CONTRACTOR SHALL SUPPLY A MINIMUM OF AN EXTRA 20 STRAW BALES TO BE PLACED ALONG THE TEMPORARY DRAINAGE AND OTHER AREAS AS SPECIFIED BY THE ENGINEER.
8. ALL SEDIMENT CONTROL MEASURES TO REMAIN IN PLACE FOR THE DURATION OF CONSTRUCTION AND REMOVED BY THE CONTRACTOR AFTER COMPLETION OF ALL OTHER CONSTRUCTION ACTIVITIES.
9. ALL OF THE ABOVE NOTES AND ANY SEDIMENT CONTROL MEASURES IDENTIFIED ARE THE MINIMUM REQUIRED. ADDITIONAL CONTROLS MAY BE REQUIRED BASED ON CHANGES IN SITE CONDITIONS.
10. CONSTRUCTION TO BE SEQUENCED SO THAT THE FOREBAY AND STORMWATER MANAGEMENT POND IS CONSTRUCTED FIRST AND CAN BE USED AS A SEDIMENT POND.

SOURCE & BENCHMARKS

LEGAL SURVEY "PART 1, BLOCK 1, PLAN 65M-3843, TOWN OF EAST GWILLIMBURY, REGIONAL MUNICIPALITY OF YORK, PROVINCE OF ONTARIO", AND EXISTING TOPOGRAPHY AND SITE FEATURES, COMPILED BY SCHAEFFER DZALDOV PURCELL LTD (OLS), CONCORD, ONTARIO. SDP JOB 23-009 & 23-010, FILE "G2-M3843-BLOCK-1", 2023-MARCH. UTM ZONE 17, NAD-83 (CSRS-2010); CGVD-1928:1978, STATION 00820118077, BENCHMARK, ELEVATION 290.976 METRES GEODETIC, LOCATED AT THE INTERCHANGE OF PROVINCIAL HWY-404 AND YORK REGION ROAD-31 (DAVIS DRIVE), APPROXIMATELY 1400-METRES SOUTH-WEST OF SUBJECT SITE.

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PREPARED BY: GHD



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P02	FOR PERMIT SUBMISSION	D.S	R.L	2023-07-31
P01	FOR CLIENT REVIEW	D.S	R.L	2023-07-28

Author	S. HOLLAND	Drafting Check	A. WRIGGLESWORTH	Project Manager	R. LOVEDAY
Designer	L. SPITERI	Design Check	D. SINGARAJA	Project Director	M. DI NIRO

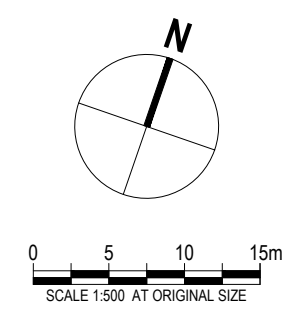


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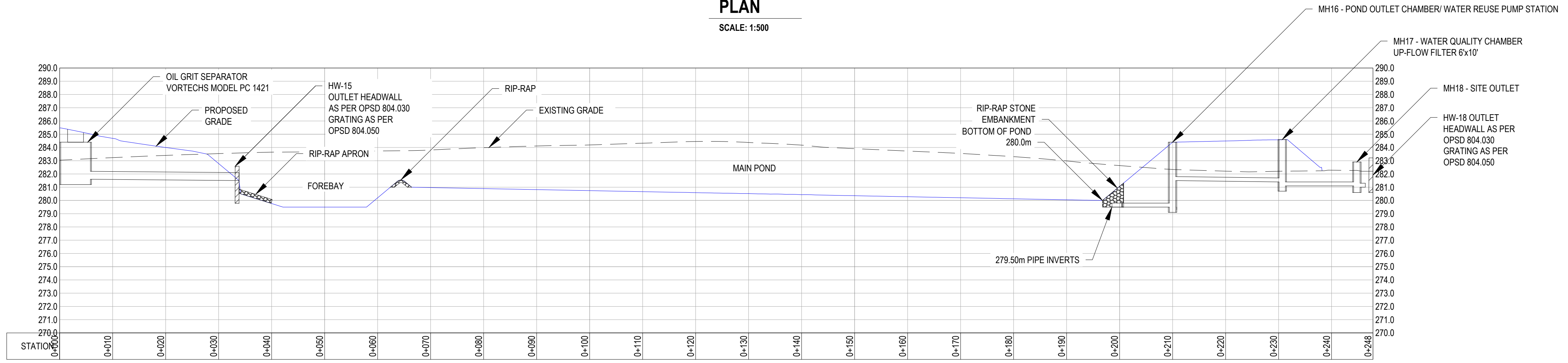


Client	CONVERTUS YORK BIOFUEL LTD.
Project	CONVERTUS BIOFUEL FACILITY
Project No.	12605345
Date	2024-01-23
Scale	1:1000

Title	PROPOSED CONDITIONS EROSION AND SEDIMENT CONTROL
Sheet No.	12605345-GHD-10-34-DRG-CI-D105



PLAN
SCALE: 1:500

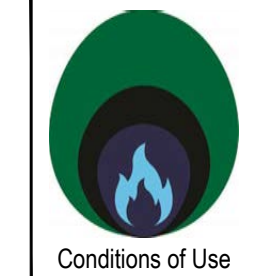
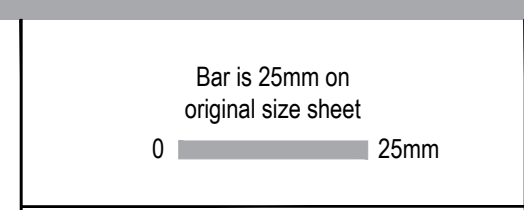


SECTION
SCALE: 1:500 (HORIZ)
1:200 (VERT)

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P03 ISSUED FOR SPA				D.S	R.L	2024-01-23
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Author	S. HOLLAND	Drafting Check	A. WRIGGLESWORTH	Project Manager	R. LOVEDAY	
Designer	R. CHERKEWSKI	Design Check	D. SINGARAJA	Project Director	M. DI NIRO	

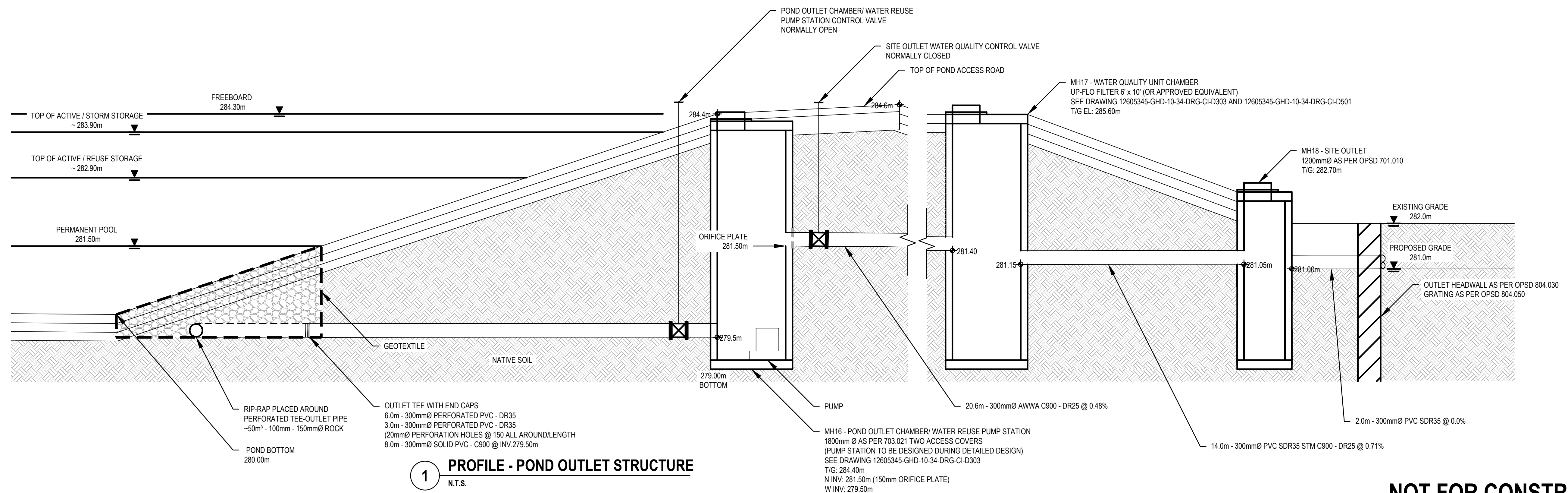
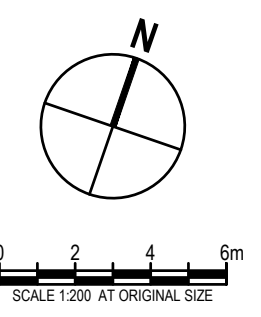
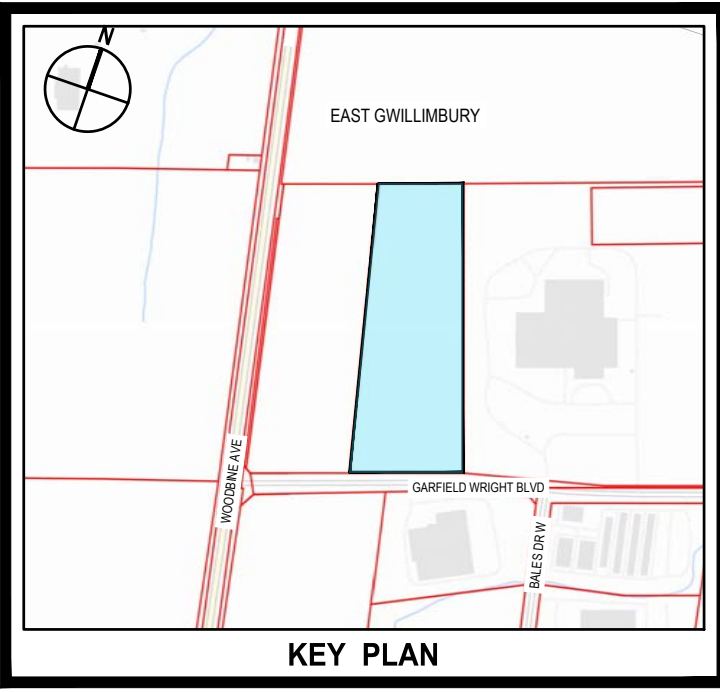
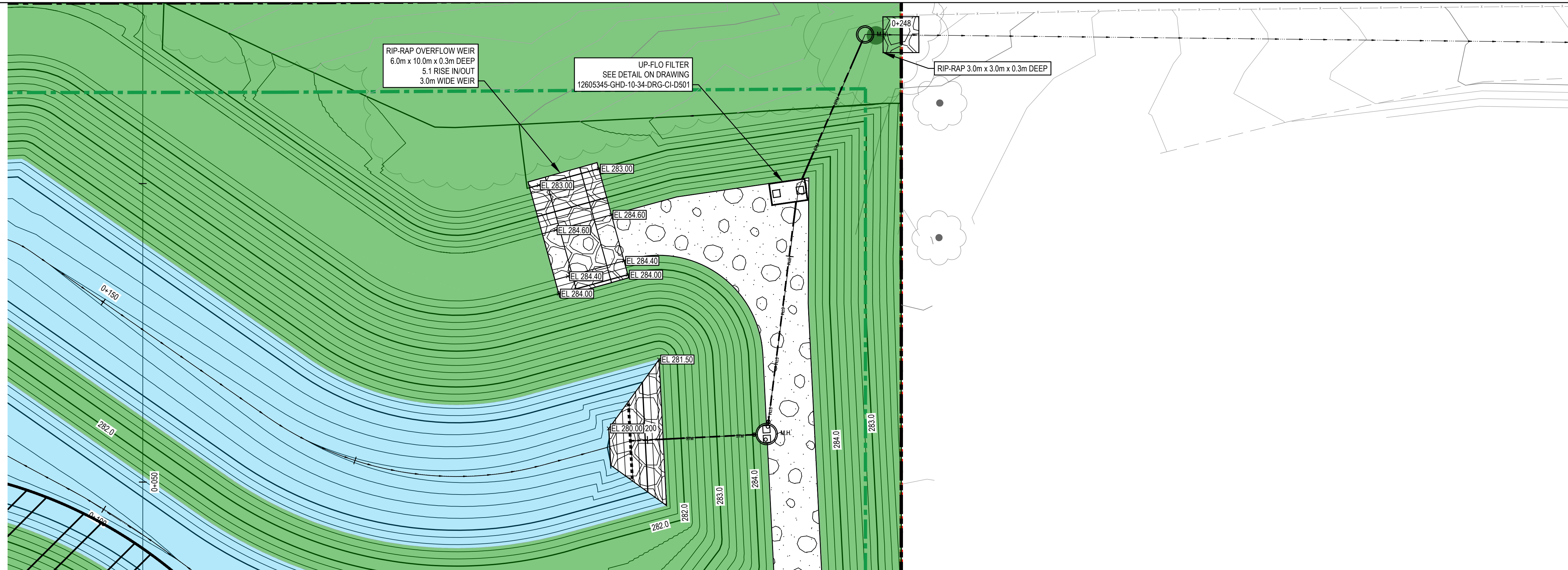


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Client	CONVERTUS YORK BIOFUEL LTD.	
Project	CONVERTUS BIOFUEL FACILITY	
Project No.	Date	Scale
12605345	2024-01-23	AS SHOWN

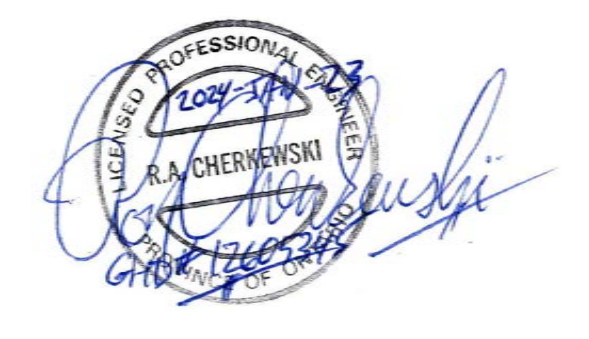
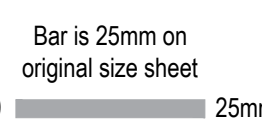
Title	STORMWATER MANAGEMENT POND PLAN AND PROFILE	Size	ANSI D
Sheet No.	12605345-GHD-10-34-DRG-CI-D301		



PREPARED BY: GHD

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P03	ISSUED FOR SPA	D.S	R.L	2024-01-23
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Author	S. HOLLAND	Drafting Check	A. WRIGGLESWORTH	Project Manager
Designer	R. CHERKEWSKI	Design Check	D. SINGARAJA	Project Director
			R. LOVEDAY	
			M. DI NIRO	



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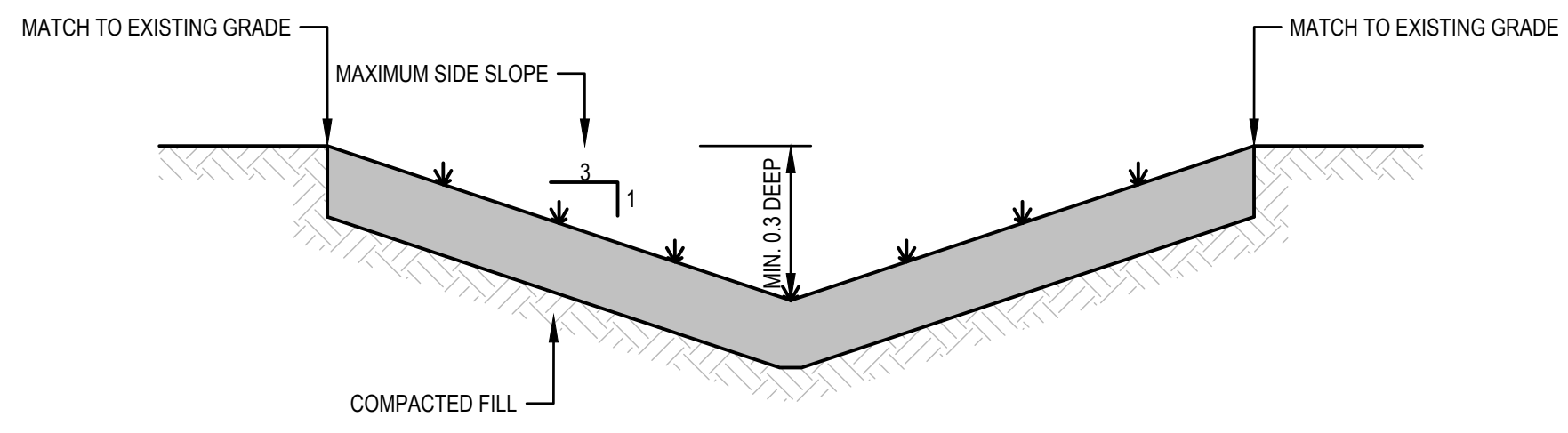


Client **CONVERTUS YORK BIOFUEL LTD.**
Project **CONVERTUS BIOFUEL FACILITY**

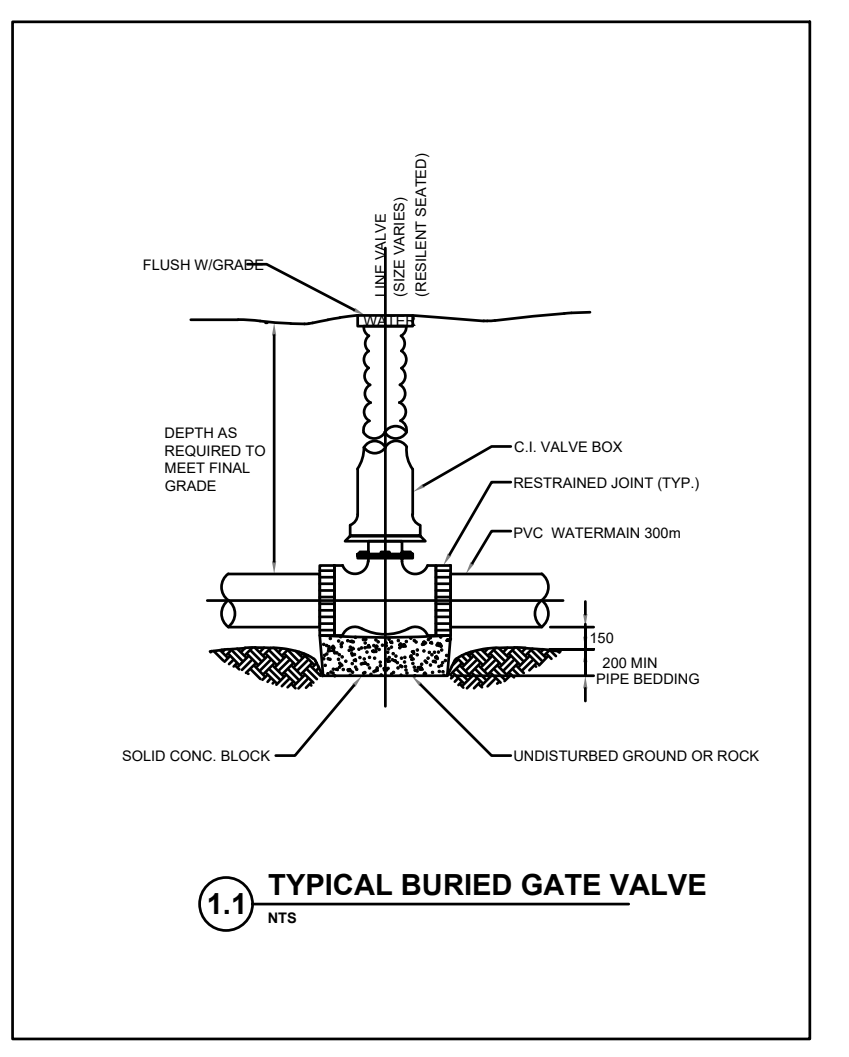
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Size **ANSI D**

Project No. **12605345** Date **2024-01-23** Scale **AS SHOWN**

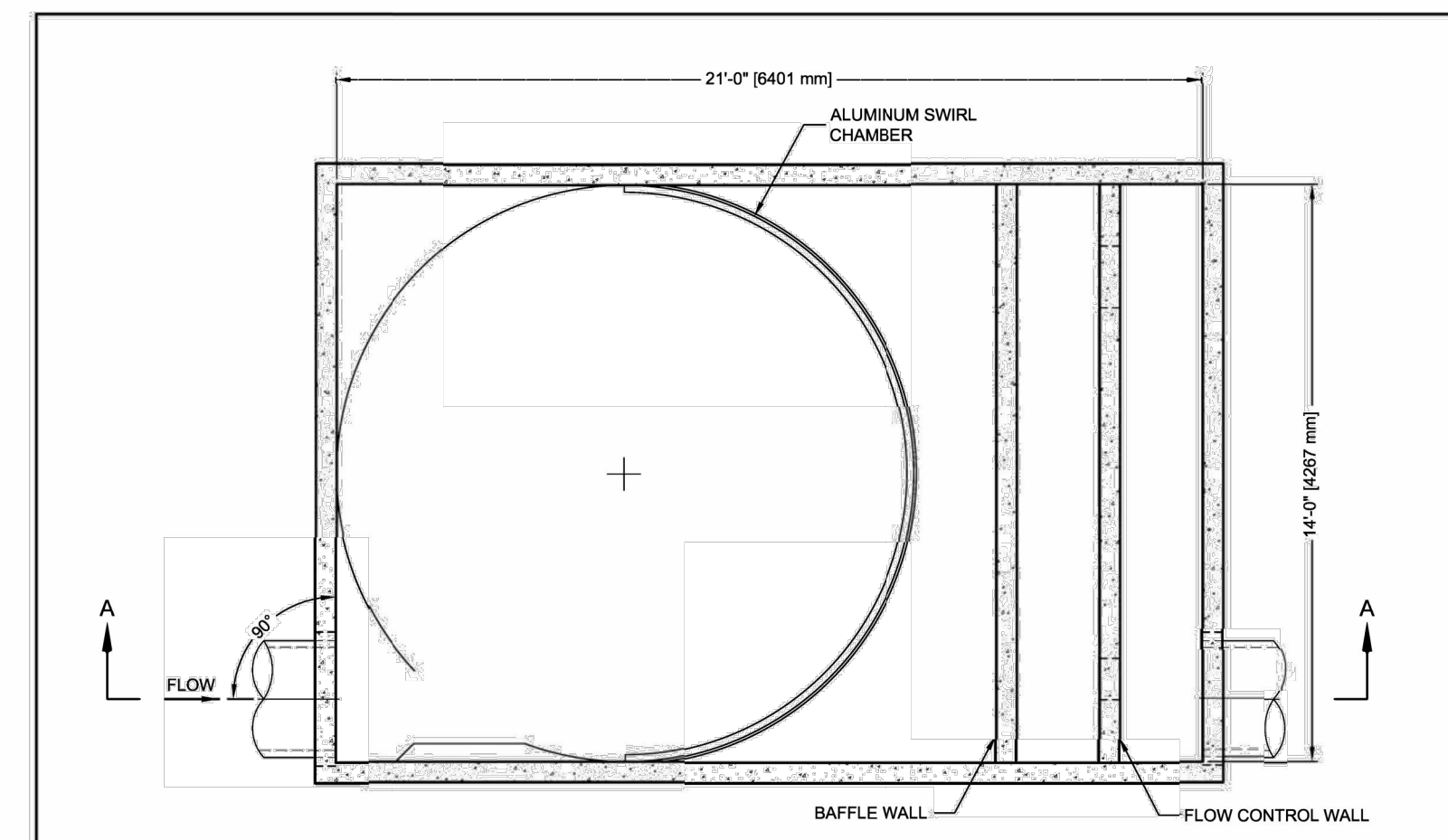
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VEGETATED SWALE
N.T.S.

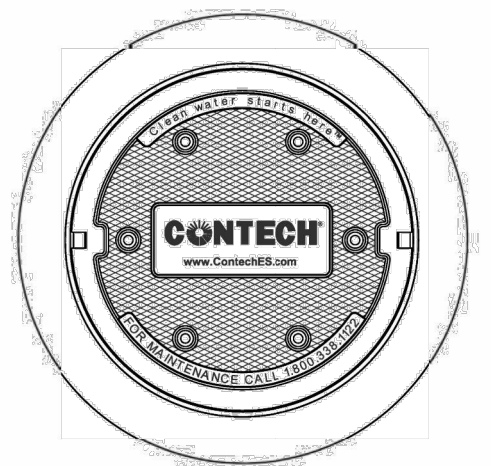


1.1 TYPICAL BURIED GATE VALVE
N.T.S.



SECTION B-B

VORTECHS PC1421 DESIGN NOTES
VORTECHS PC1421 RATED TREATMENT CAPACITY IS 34 CFS, OR PER LOCAL REGULATIONS. IF THE SITE CONDITIONS EXCEED RATED TREATMENT CAPACITY, AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.
THE STANDARD INLET/OUTLET CONFIGURATION IS SHOWN. FOR OTHER CONFIGURATION OPTIONS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS, LLC REPRESENTATIVE. www.ContechES.com



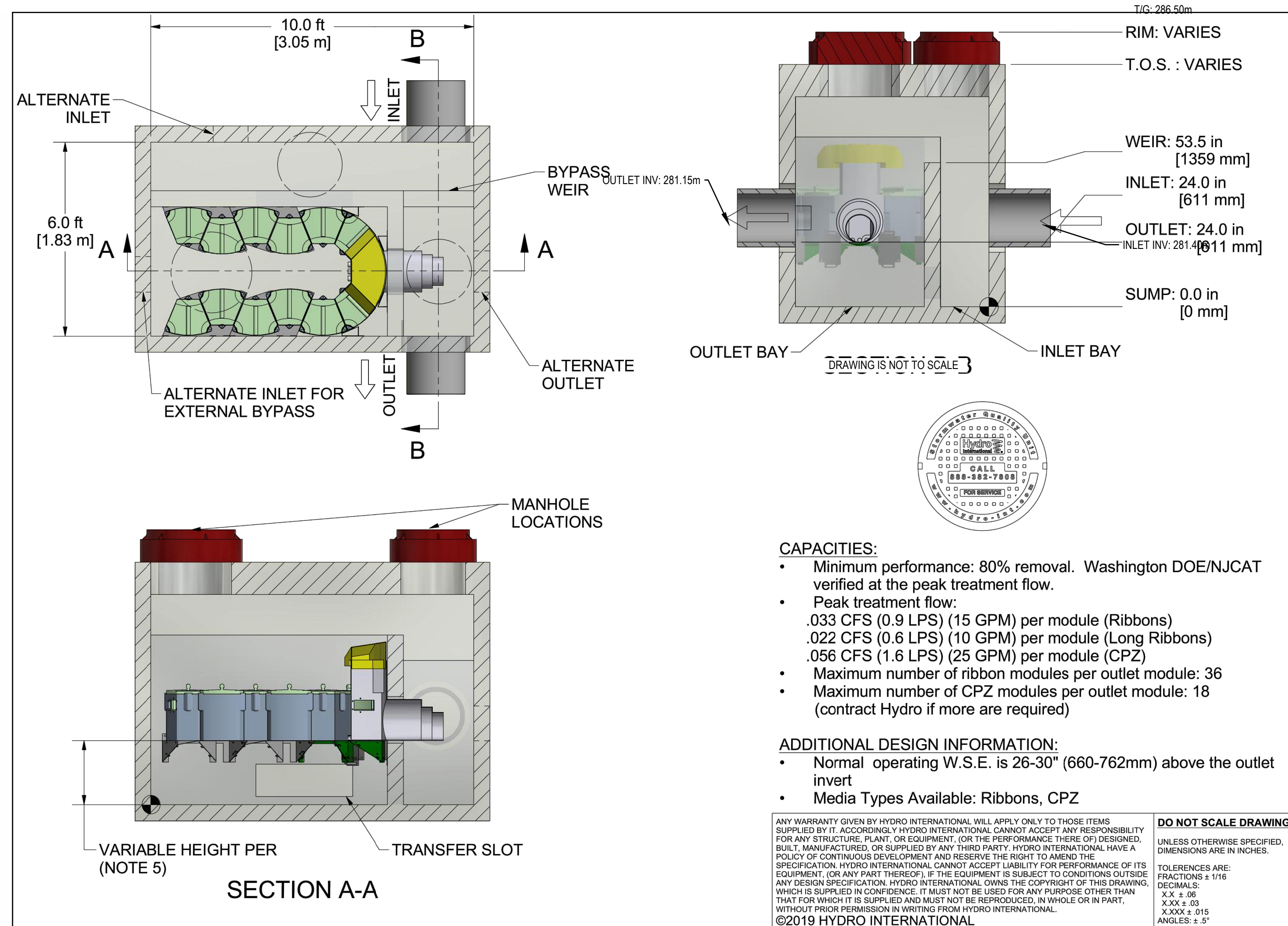
FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS			
STRUCTURE ID	OGS 15		
WATER QUALITY FLOW RATE (CFS)	33.5		
PEAK FLOW RATE (CFS)	34		
DESIGN STORM	25mm		
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	281.6m	RCP	600mm
INLET PIPE 2	-	-	-
OUTLET PIPE	281.6m	RCP	600mm
RIM ELEVATION	285.20m		
ANTI-FLOTATION BALLAST	WIDTH	HEIGHT	
NOTES/SPECIAL REQUIREMENTS:	-		
	- N/A		

- GENERAL NOTES:**
- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 - DIMENSIONS MARKED WITH () ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
 - FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS, LLC REPRESENTATIVE. www.ContechES.com
 - VORTECHS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
 - STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET AASHTO M306 LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
 - INLET PIPES MUST BE PERPENDICULAR TO THE VAULT AND AT THE CORNER TO INTRODUCE THE FLOW TANGENTIALLY TO THE SWIRL CHAMBER. DUAL INLETS NOT TO HAVE OPPOSING TANGENTIAL FLOW DIRECTIONS.
 - OUTLET PIPE(S) MUST BE DOWN STREAM OF THE FLOW CONTROL BAFFLE AND MAY BE LOCATED ON THE SIDE OR END OF THE VAULT. THE FLOW CONTROL WALL MAY BE TURNED TO ACCOMMODATE OUTLET PIPE KNOCKOUTS ON THE SIDE OF THE VAULT.
- INSTALLATION NOTES:**
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
 - CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE VORTECHS STRUCTURE (LIFTING CLUTCHES PROVIDED).
 - CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
 - CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
 - CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.



VORTECHS PC1421 STANDARD DETAIL



- CAPACITIES:**
- Minimum performance: 80% removal. Washington DOE/NJCAT verified at the peak treatment flow.
 - Peak treatment flow:
 - .033 CFS (0.9 LPS) (15 GPM) per module (Ribbons)
 - .022 CFS (0.6 LPS) (10 GPM) per module (Long Ribbons)
 - .056 CFS (1.6 LPS) (25 GPM) per module (CPZ)
 - Maximum number of ribbon modules per outlet module: 36
 - Maximum number of CPZ modules per outlet module: 18 (contract Hydro if more are required)
- ADDITIONAL DESIGN INFORMATION:**
- Normal operating W.S.E. is 26-30" (660-762mm) above the outlet invert
 - Media Types Available: Ribbons, CPZ

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UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.
TOLERANCES ARE:
FRACTIONS ± 1/16 DECIMALS
X.X ± .06
X.XX ± .03
X.XXX ± .015
ANGLES ± .5°

VERIFY ALL INVERT ELEVATIONS BEFORE FABRICATION VIA SHOP DRAWING APPROVALS

DRAWING IS NOT TO SCALE

UP-FLO FILTER 6' x 10'

N.T.S.
VERIFY ALL INVERT ELEVATIONS BEFORE FABRICATION VIA SHOP DRAWING APPROVALS
CONTRACTOR/FABRICATOR TO FLIP PLANVIEW ORIENTATION TO MATCH SITE LAYOUT REQUIREMENTS

NOT FOR CONSTRUCTION

PREPARED BY: GHD

No.	Issue	Checked	Approved	Date
P03	ISSUED FOR SPA	D.S	R.L	2024-01-22
P02	FOR PERMIT SUBMISSION	D.S	R.L	2023-07-31
P01	FOR CLIENT REVIEW	D.S	R.L	2023-07-28

Author: S. HOLLAND
Designer: L. SPITERI

Drafting Check: A. WRIGGLESWORTH
Design Check: D. SINGARAJA

Project Manager: R. LOVEDAY
Project Director: M. DI NIRO

Bar is 25mm on original size sheet

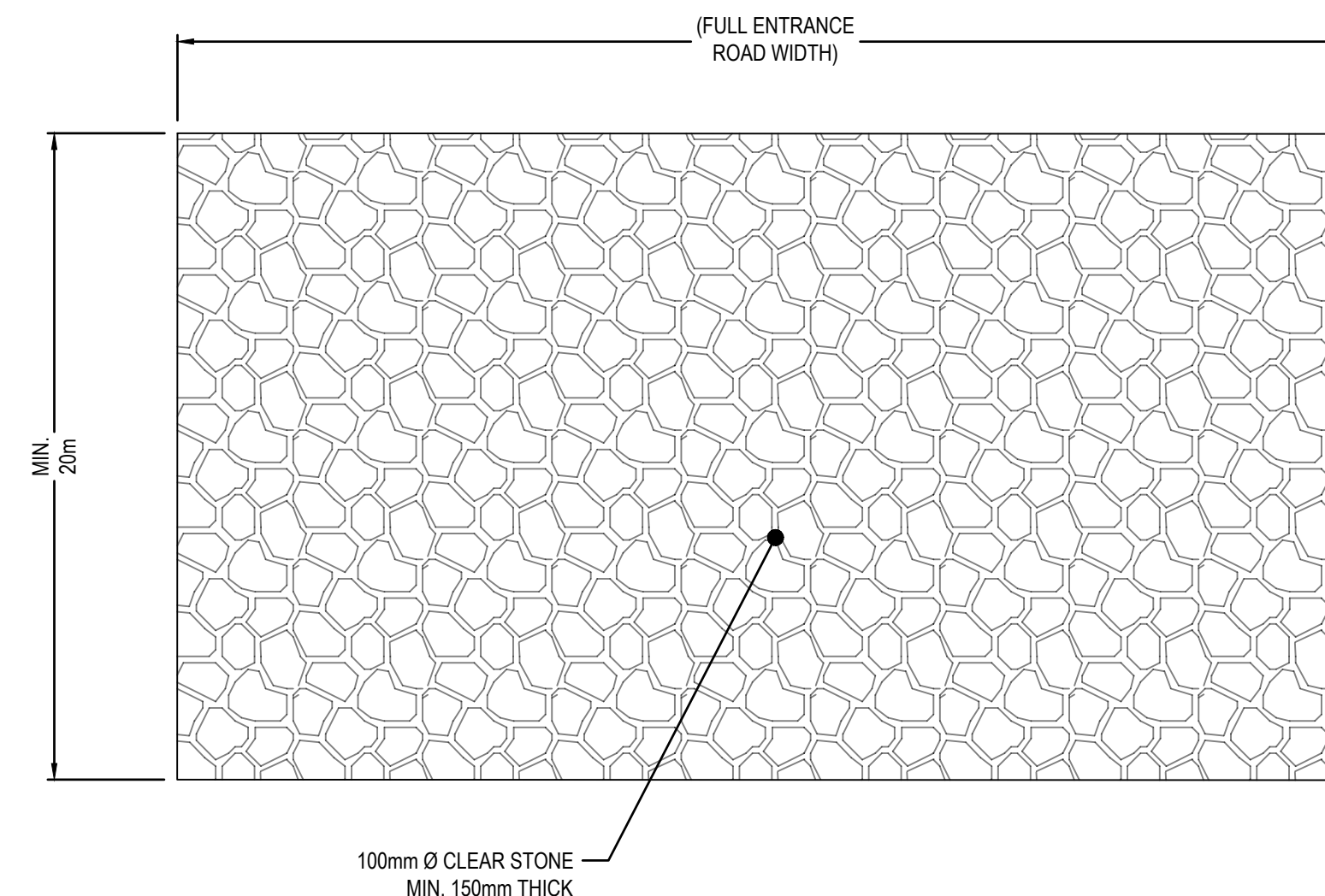
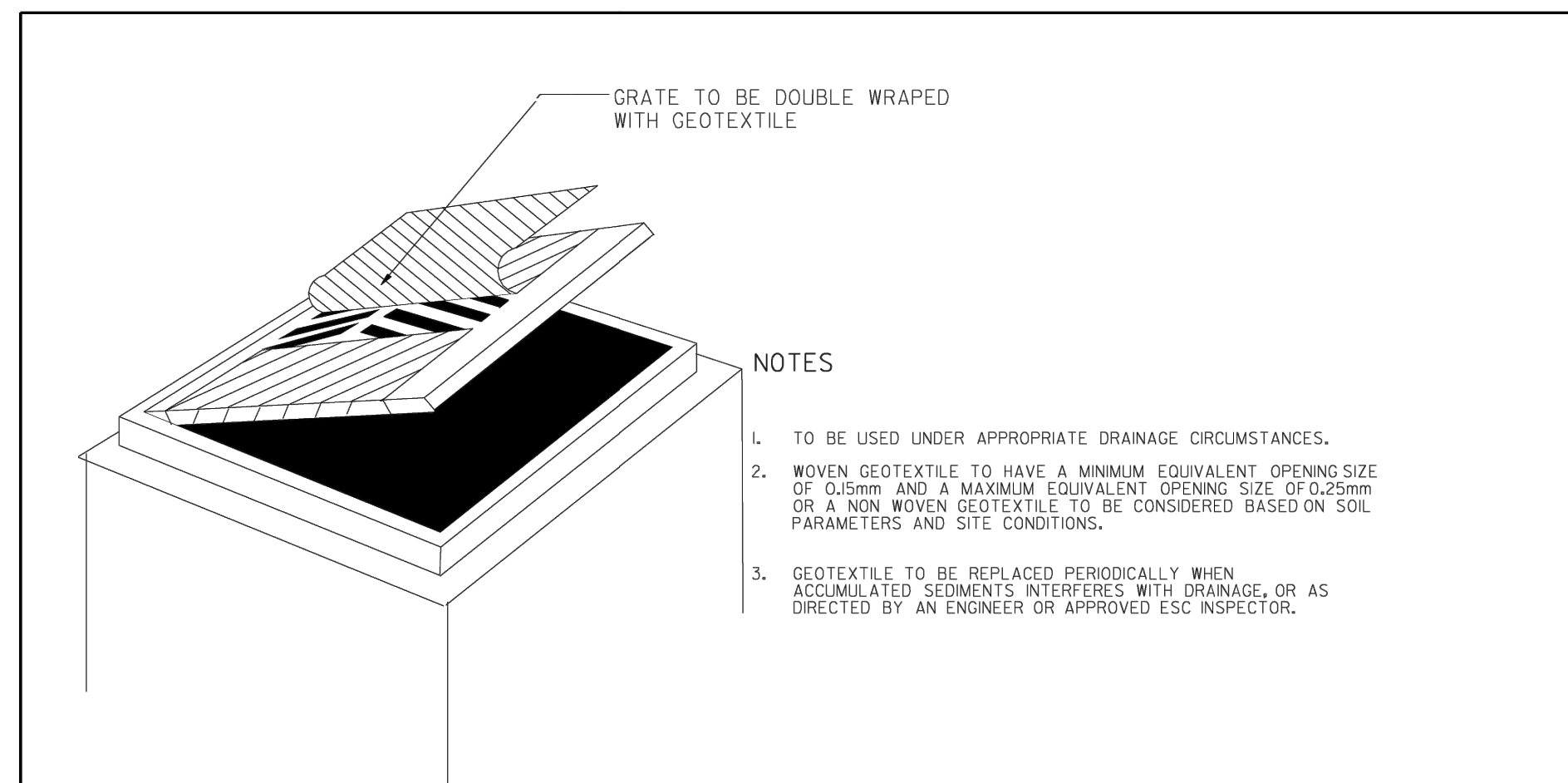
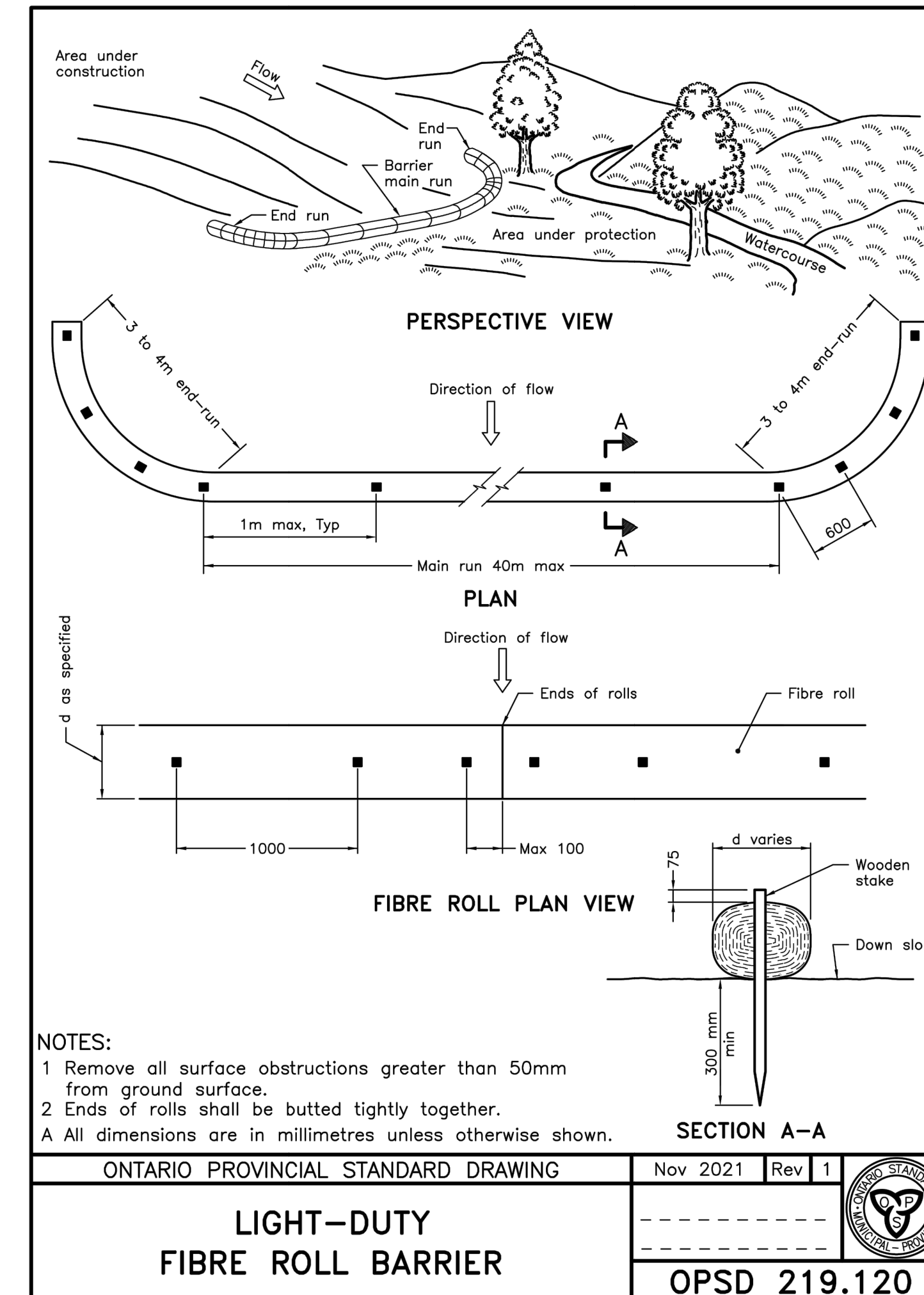
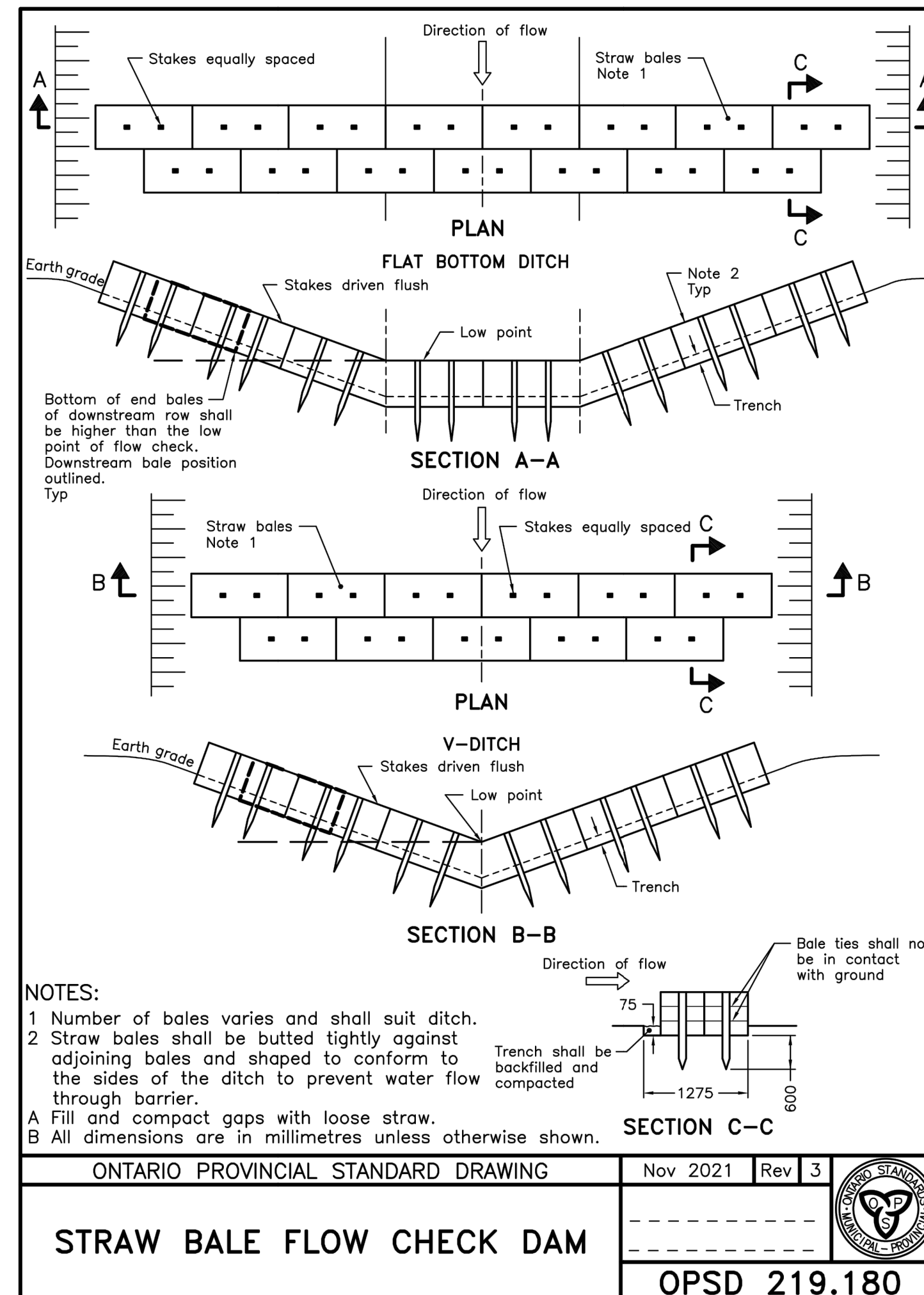
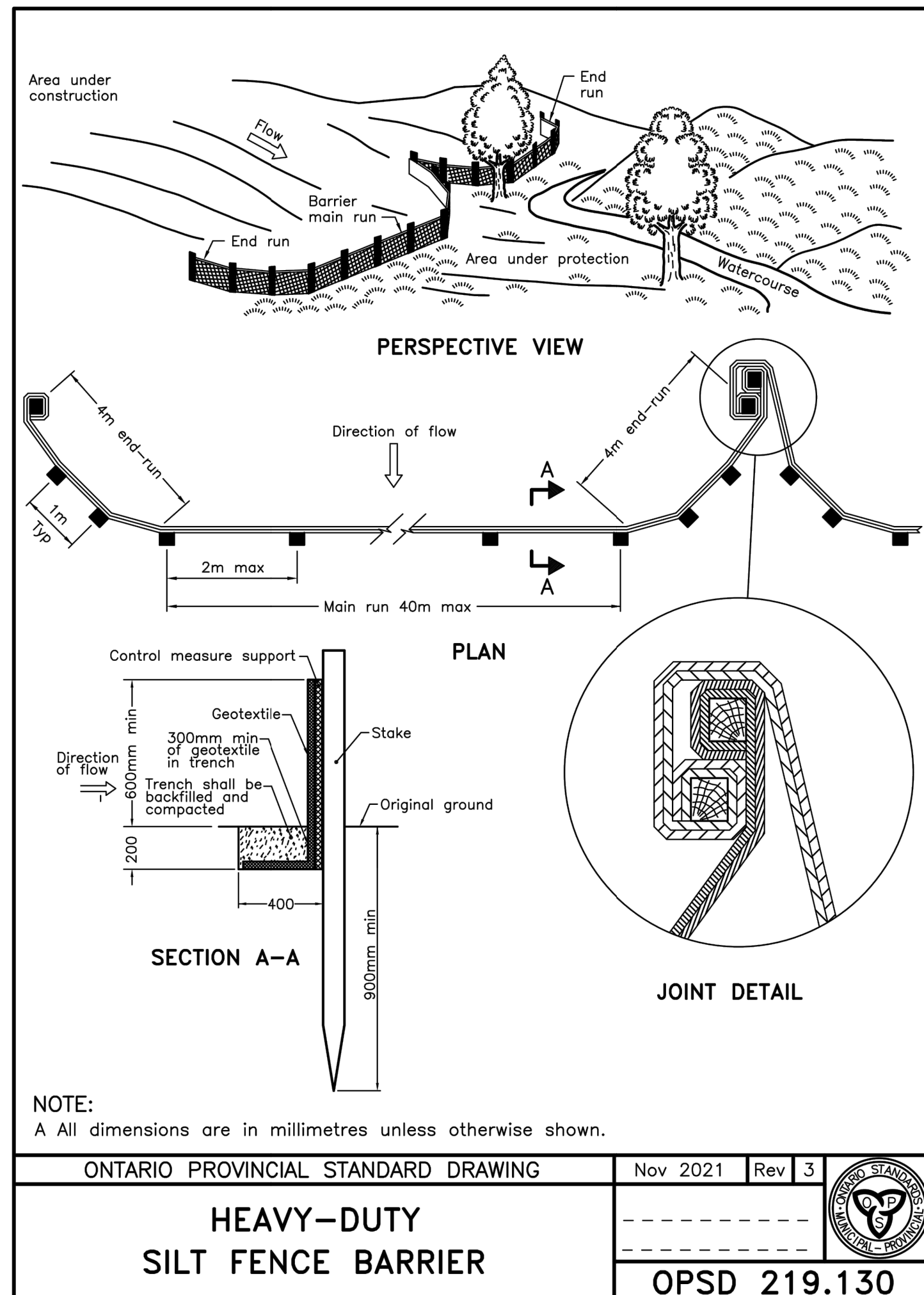


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Project	CONVERTUS BIOFUEL FACILITY	
Project No.	Date	Scale
12605345	2024-01-24	AS SHOWN

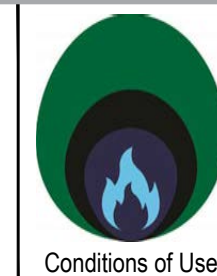
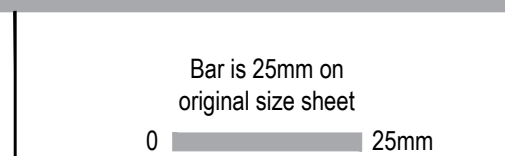
Title	STORMWATER DETAILS
Sheet No.	12605345-GHD-10-34-DRG-CI-D501



MUD MAT (TYPICAL)
 N.T.S.

NOT FOR CONSTRUCTION

PREPARED BY: GHD			
P03 ISSUED FOR SPA	D.S	R.L	2024-01-22
P02 FOR PERMIT SUBMISSION	D.S	R.L	2023-07-31
P01 FOR CLIENT REVIEW	D.S	R.L	2023-07-28
No.	Issue	Checked	Approved
Author	S. HOLLAND	Drafting Check	A. WRIGGLESWORTH
Designer	L. SPITERI	Design Check	D. SINGARAJA
		Project Director	M. DI NIRO

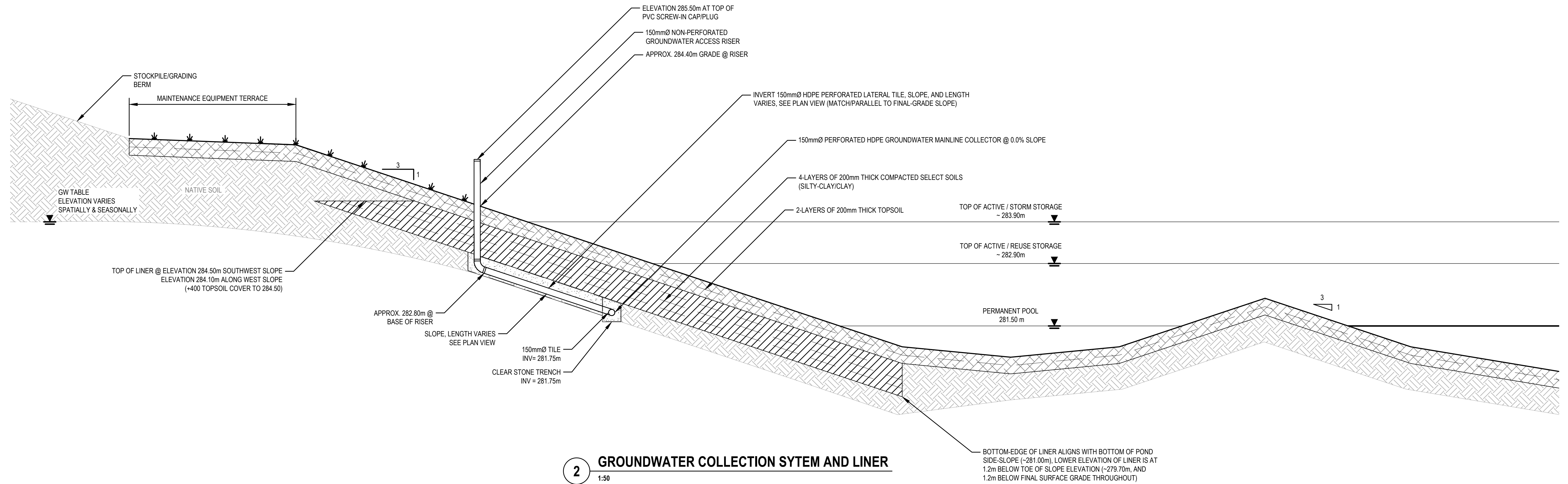


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Project	CONVERTUS BIOFUEL FACILITY
Project No.	12605345
Date	2024-01-23
Scale	AS SHOWN

Title	STORMWATER EROSION AND SEDIMENT CONTROL DETAILS
Sheet No.	12605345-GHD-10-34-DRG-CI-D502



2 GROUNDWATER COLLECTION SYSTEM AND LINER
1:50

NOTES - GROUNDWATER COLLECTION SYSTEM

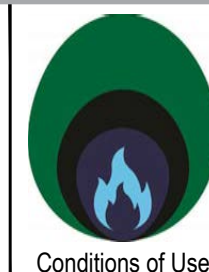
- EXCAVATE FOR LINER, SCARIFY SUBGRADE 200mm DEEP, REMOVE DELETERIOUS MATERIALS (ORGANIC, FLOWING NET, SOFT SUBGRADE), RE-COMPACT SUBGRADE.
- SUB-EXCAVATE/TRENCH FOR 450x450 "FRENCH DRAIN", INSTALLED WHOLLY BELOW UNDERSIDE OF LINER; LINE SUB-EXCAVATION TRENCH WITH MEDIUM-DUTY GEOTEXTILE CLOTH, HAVING "EOS" SUITABLE FOR NATIVE SOILS SEPARATION (FIELD SAMPLE CONFIRMATION REQUIRED OR SPECIFIC OPENING-SIZE SELECTION); INVERT CLEARSTONE TRENCH AT 281.60m (LEVEL); UTILIZE DRY-SCREENED CLEAR STONE (NOMINALLY 200).
- INVERT 150mmØ HDPE PERFORATED MAINLINE TILE AT 281.75m (LEVEL); CENTER HDPE TILE 150mm ABOVE BASE OF TRENCH, COVER TO MINIMUM 150MM OVER TOP OF TILE, WRAP/CLOSE TRENCH WITH LOWER-SIDE GEOTEXTILE FLAP FIRST, AND UPPER-SIDE FLAP OVER LOWER FLAP TO EXCLUDE ENTRY OF FINES.
- CONNECT ALL LATERALS UTILIZING SOCKET-"WYE" FITTINGS ARRANGED TO ALLOW FOR RODDING, FLUSHING, INSPECTION FROM UPSTREAM TO DOWNSTREAM DIRECTION; SEAL ALL CONNECTIONS WITH MINIMUM TWO LAYERS GEOTEXTILE WRAP, MINIMUM 1 M WIDTH.
- LATERAL LINES SIMILAR CONSTRUCTION AS MAINLINE, TRENCH DEPTH AND SLOPE ALIGNS PARALLEL TO FINISHED SURFACE; PIPING PERFORATED TO RISER-ELBOW, SOLID THROUGH ELBOW (45DEG FITTING) AND RISER; BACKFILL AROUND RISER WITH LINER MATERIAL TO TOPSOIL LAYER.
- PLACE SELECT-SITE-SOILS (CLAY, SILTY-CLAY, FINE-SILT) IN MAXIMUM 200MM THICK COMPACTED LAYERS, TO 98-PERCENT STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD), UTILIZING VIBRATORY SHEEPSFOOT/PAD COMPACTOR; KNEED SUBSEQUENT LAYERS INTO LOWER LAYERS, MINIMUM 4-LINER LAYERS PLACED ON RECOMPACTED SCARIFIED SUBGRADE.
- PLACE TOPSOIL IN MINIMUM TWO LAYERS TO A MAXIMUM OF 200MM COMPACTED THICKNESS EACH LAYER; LOWER TOPSOIL LAYER VIBRATORY COMPACTED TO 95-PERCENT SPMDD, UTILIZING SHEEPSFOOT/PAD COMPACTOR; KNEED INTO LOWER LAYERS; UPPER TOPSOIL LAYER TO BE COMPACTED UTILIZING DEAD-WEIGHT ONLY OF SHEEPSFOOT/PAD COMPACTOR (NO VIBRATION, MAKE MINIMUM 4-PASSES, PAD-DIMPLES USED TO HOLD SEED UNTIL GERMINATION); TOPSOIL FOR BALANCE OF POND AREA AND STOCKPILE PLACED SIMILARLY.

PREPARED BY: GHD

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Bar is 25mm on original size sheet
0 25mm



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