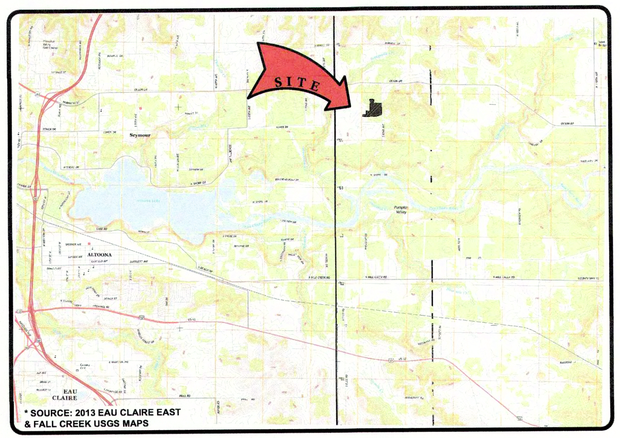
FEASIBILITY REPORT
SECTOR 2-NORTHEAST EXPANSION

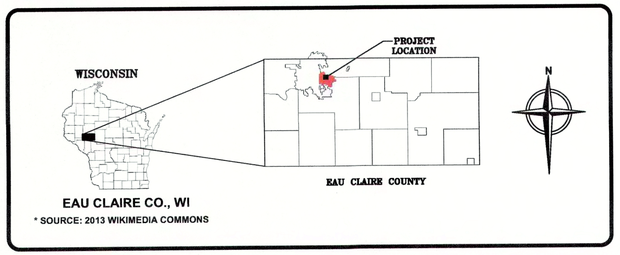
PREPARED FOR:

ADVANCED DISPOSAL SERVICES
SEVEN MILE CREEK LANDFILL, LLC.

EAU CLAIRE, WISCONSIN

JULY 2019





LOCATION MAP

Advanced Disposal

PREPARED BY:

cornerstone
A TETRA TECH COMPANY

8413 EXCELSIOR DRIVE
SUITE 160
MADISON, WISCONSIN, 53717
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WISCONSIN JOHN C. OSWALD G-1126 MIDDLETON WI PROFESSIONAL GEOLOGIST 1-27-19

WISCONSIN DAN ROCHE E-45252 MADISON WI PROFESSIONAL ENGINEER 1-27-19

INDEX OF DRAWINGS

01	TITLE SHEET
02	LEGEND AND NOTES
03	EXISTING CONDITIONS
04	GEOLOGICAL CROSS SECTION LOCATION MAP
05	GEOLOGIC & POTENTIOMETRIC CROSS SECTION A-A'
06	GEOLOGIC CROSS SECTION B-B'
07	GEOLOGIC CROSS SECTION C-C'
08	GEOLOGIC CROSS SECTION D-D'
09	GEOLOGIC CROSS SECTION E-E'
10	GEOLOGIC CROSS SECTION F-F'
11	GEOLOGIC CROSS SECTION G-G'
12	GEOLOGIC CROSS SECTION H-H'
13	GEOLOGIC CROSS SECTION I-I'
14	GEOLOGIC CROSS SECTION J-J'
15	GEOLOGIC CROSS SECTION K-K'
16	GEOLOGIC CROSS SECTION L-L'
17	GEOLOGIC CROSS SECTION M-M'
18	GEOLOGIC CROSS SECTION N-N'
19	GEOLOGIC CROSS SECTION O-O'
20	GEOLOGIC CROSS SECTION P-P'
21	COMPETENT BEDROCK SURFACE MAP
22	WEATHERED BEDROCK SURFACE MAP
23	WEATHERED AND COMPETENT BEDROCK PIEZOMETRIC MAP
24	GROUNDWATER MAP WITH FLOWNET (HIGHEST - JUNE 2019)
25	GROUNDWATER MAP (LOWEST - APRIL 2010)
26	PROPOSED SUBBASE GRADES
27	APPROVED AND PROPOSED BASE GRADES WITH LEACHATE COLLECTION AND LINER DETAIL
28	APPROVED FINAL COVER (OCTOBER 2015)
29	PROPOSED FINAL COVER WITH CLOSURE SEQUENCE
30	ENVIRONMENTAL MONITORING PLAN

THESE PLANS ARE ACCOMPANIED BY A REPORT OF THE SAME TITLE. THESE DOCUMENTS ARE INTERRELATED AND ARE INTENDED TO BE USED TOGETHER. THESE PLANS ARE NOT FOR CONSTRUCTION.

1" 1/2" 0" 1"

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ABBREVIATIONS

ABC	AGGREGATE BASE COURSE
AC	ASPHALT CONCRETE
AD	ALGEBRAIC DIFFERENCE
BVCE	BEGIN VERTICAL CURVE ELEVATION
BVCS	BEGIN VERTICAL CURVE STATION
CHDPE	CORRUGATED HIGH DENSITY POLYETHYLENE
CMP	CORRUGATED METAL PIPE
△	DELTA
ø, DIA	DIAMETER
DWG	DRAWING
EL, ELEV	ELEVATION
E	EASTING
EOP, EP	EDGE OF PAVEMENT
EVCE	END VERTICAL CURVE ELEVATION
EVCS	END VERTICAL CURVE STATION
EG	EXISTING GRADE
FT	FEET
FFE	FINISHED FLOOR ELEVATION
FG	FINAL GRADE
FL	FLOWLINE ELEVATION
FML	FLEXIBLE MEMBRANE LINER
GCCS	GAS COLLECTION CONTROL SYSTEM
GCL	GEOSYNTHETIC CLAY LINER
HDPE	HIGH DENSITY POLYETHYLENE
HP	HIGH POINT
IE, INV	INVERT ELEVATION
K	RATE OF VERTICAL CURVATURE
LFG	LANDFILL GAS
LCRS	LEACHATE COLLECTION AND REMOVAL SYSTEM
LT	LEFT
L	LENGTH
MAX	MAXIMUM
MIN	MINIMUM
MSL	MEAN SEA LEVEL
N	NORTHING
(NIC)	NOT IN CONTRACT
NTS	NOT TO SCALE
%	PERCENT
PERF	PERFORATED
PC	POINT OF CURVE
PT	POINT OF TANGENT
PVI	POINT OF VERTICAL INTERSECTION
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCB	REINFORCED CONCRETE BOX
RCP	REINFORCED CONCRETE PIPE
RT	RIGHT
R/W, ROW	RIGHT OF WAY
SHT	SHEET
S	SLOPE
SDR	STANDARD DIMENSION RATIO
SG	SUBGRADE
SS	STAINLESS STEEL
STA	STATION
TAN	TANGENT
TOC	TOP OF CURB
TC	TOP OF CONCRETE
TW	TOP OF WALL
(TYP)	TYPICAL
VC	VERTICAL CURVE

GENERAL NOTES

1. EXISTING CONTOURS ARE FROM COM AERIAL SURVEY ON APRIL 9, 2019 AND SUPPLEMENTED BY TOPOGRAPHIC SURVEY PERFORMED BY SRMC ON APRIL 6, 2017.
2. THE LANDFILL PROJECT IS LOCATED AT 44°50'04.67"N, 91°22'12.10"W (SOURCE: GOOGLE EARTH).
3. PROPERTY BOUNDARIES AND ROAD RIGHT-OF-WAYS ARE FROM DRAWINGS CREATED BY AYRES ASSOCIATES WITH SUPPLEMENTAL DATA FROM EAU CLAIRE COUNTY'S GIS DEPARTMENT. CTH Q/OLSON ROAD OVER SEVEN MILE CREEK WAS REDESIGNED AND REBUILT IN LATE 2018. THE ROAD WAS STRAIGHTENED AND RAISED. UPDATES TO THE ROAD CONFIGURATION ON DRAWINGS WILL BE PROVIDED ONCE ADDITIONAL SURVEY INFORMATION AND/OR AERIAL PHOTOGRAPHY IS PROVIDED.
4. SITE GRID IS BASED ON WISCONSIN STATE PLANE COORDINATE SYSTEM, NAD 1983(2011), CENTRAL ZONE, FROM FEASIBILITY REPORT FOR SECTOR 2 HORIZONTAL & VERTICAL EXPANSION (NOVEMBER 2003), SHEET NO. 2.

   STONE MONUMENT (SECTION CORNER 8/9/17/16)
   SITE: 14+26.25N, 21+67.65E
   STATE: 366426.25N, 1645167.65E
5. VERTICAL DATUM IS BASED ON USGS NGVD 1929 AND REFERENCED TO USGS MEAN SEA LEVEL (MSL). THE TOPOGRAPHIC CONTOUR INTERVAL IS TWO FEET.

SURVEY CONTROL				
Point #	Northing	Easting	Elevation	Raw Description
CP-9	1452.32	2828.34	914.06	STAINLESS STEEL BOLT
CP-3	2881.16	584.48	905.92	STAINLESS STEEL BOLT
CP-5	1522.09	246.77	920.71	STAINLESS STEEL BOLT
CP-8	1514.72	886.19	920.61	STAINLESS STEEL BOLT
CP-10	2712.93	2809.46	933.56	STAINLESS STEEL BOLT

NOTE: CONTROL POINTS ARE SHOWN ON EXISTING CONDITIONS (SHEET NO. 03).

LEGEND (EXISTING FEATURES)

- MUNICIPAL BOUNDARY
- PROPERTY BOUNDARY
- 100-YEAR FLOODPLAIN DELINEATION
- PERMITTED SOLID WASTE BOUNDARY
- PHASE BOUNDARY
- 1400 EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- EXISTING FENCE
- EXISTING UNDERGROUND COMMUNICATION
- EXISTING UNDERGROUND ELECTRIC
- EXISTING OVERHEAD ELECTRIC
- MH EXISTING MANHOLE
- LHW-1A EXISTING LEACHATE HEADWELL
- GP-4R EXISTING GAS PROBE
- GEW-18/SEC2GW21 EXISTING GAS EXTRACTION WELL
- DH-4R EXISTING WATER TABLE WELL
- DH-33-33A EXISTING WATER TABLE (DH-33) & PIEZOMETER (DH-33A)
- TB-16 EXISTING SOIL BORING LOCATION
- PW-1 EXISTING PRIVATE WELL (WITH NUMBER)
- EXISTING PRIVATE WELL (UN-NUMBERED)
- L-2 EXISTING LYSIMETER
- STREAM NO. 1 EXISTING STAFF GAUGE
- EXISTING SEPTIC SYSTEM
- SEC2GW60 EXISTING LFG EXTRACTION WELL
- SEC2GW45 EXISTING CAISSON LFG EXTRACTION WELL
- S2P080C3 EXISTING SUPPLEMENTAL EXTRACTION WELL
- GP-11 PROPOSED GAS PROBE
- DH-4R ABANDONED MONITORING WELL
- PW-6 ABANDONED PRIVATE WELL
- GP-2 ABANDONED GAS PROBE
- LHW-2B ABANDONED LEACHATE HEADWELL
- EXISTING STRUCTURE

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

DATE OF ISSUE 7/8/2019
DRAWN BY SSW/SRC DESIGNED BY SSW
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ADVANCED DISPOSAL
SEVEN MILE CREEK LANDFILL
EAU CLAIRE, WISCONSIN
FEASIBILITY REPORT
SECTOR 2-NORTHEAST EXPANSION
LEGEND AND NOTES

SHEET NO. **02**
PROJECT NO. 180720

1" 1/2" 0" 1"

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SCALE IN FEET

LEGEND

- MUNICIPAL BOUNDARY (CITY OF EAU CLAIRE)
- PROPERTY BOUNDARY
- ROAD RIGHT–OF–WAY
- PERMITTED SOLID WASTE BOUNDARY
- PHASE BOUNDARY
- FINAL COVER AREA
- APPROXIMATE 100–YEAR FLOODPLAIN DELINEATION
- PROPOSED NORTHEAST EXPANSION VERTICAL FOOTPRINT
- PROPOSED NORTHEAST EXPANSION HORIZONTAL FOOTPRINT
- EXISTING FENCE
- EXISTING EDGE OF WOODS/SHRUBS
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- DH–33 EXISTING GROUNDWATER MONITORING WELL
- PW–8 EXISTING PRIVATE WELL
- GP–13 EXISTING GAS PROBE
- TB–68 EXISTING SOIL BORING LOCATION
- MH EXISTING MANHOLE
- LHW–1A EXISTING LEACHATE HEADWELL
- L–2 EXISTING LYSIMETER
- EXISTING STAFF GAUGE
- TP–4 EXISTING TEST PIT
- DH–44 ABANDONED MONITORING WELL
- PW–5 ABANDONED PRIVATE WELL
- GP–3 ABANDONED GAS PROBE
- LHW–2B ABANDONED LEACHATE HEADWELL
- SEC2GW60 EXISTING LFG EXTRACTION WELL
- SEC2GW45 EXISTING CAISSON LFG EXTRACTION WELL
- S2P080C3 EXISTING SUPPLEMENTAL EXTRACTION WELL
- CP–1 EXISTING SURVEY CONTROL POINT
- EXISTING SEPTIC SYSTEM
- PROPOSED SOLID WASTE BOUNDARY SETBACK
- UG UG UG UG UNDERGROUND COMMUNICATION
- UE UE UE UE UNDERGROUND ELECTRIC
- OHE OHE OHE OHE OVERHEAD ELECTRIC

NOTES

1. DRONE SURVEY PERFORMED BY CQM ON APRIL 9, 2019 WITHIN AREA SHOWN ON MAP AND SUPPLEMENTED BY TOPOGRAPHIC SURVEY PERFORMED BY SRMC ON APRIL 6, 2017.
2. PROPERTY BOUNDARIES AND ROAD RIGHT–OF–WAYS ARE FROM DRAWINGS CREATED BY AYRES ASSOCIATES WITH SUPPLEMENTAL DATA FROM EAU CLAIRE COUNTY'S GIS DEPARTMENT. CTH Q/OLSON ROAD OVER SEVEN MILE CREEK WAS REDESIGNED AND REBUILT IN LATE 2018. THE ROAD WAS STRAIGHTENED AND RAISED. UPDATES TO THE ROAD CONFIGURATION ON DRAWINGS WILL BE PROVIDED ONCE ADDITIONAL SURVEY INFORMATION AND/OR AERIAL PHOTOGRAPHY IS PROVIDED.
3. LOCATION OF EXISTING SECTOR 2 GAS WELLS, CLEANOUTS AND LEACHATE HEADWELLS ARE FROM CQM SURVEY (AUGUST 5, 2014) AND SUBSEQUENT CONSTRUCTION DOCUMENTATION REPORTS.
4. LOCATION OF EXISTING SECTOR 1 GAS WELLS ARE FROM AYRES AND ASSOCIATES HORIZONTAL AND VERTICAL EXPANSION FEASIBILITY REPORT (NOVEMBER 2003).
5. LOCATION OF EXISTING GAS PROBES ARE FROM AYRES 2006 AND 2013 SURVEYS, AND CQM SURVEY (AUGUST 2014).
6. MONITORING WELL AND BORING LOCATIONS, EXCEPT FOR DH–40, DH–51, DH–22R, DH–52, DH–53, DH–60, DH–60A, DH–61, DH–62, DH–62A, DH–63, TB–81, TB–82, TB–83 AND TB–83B ARE FROM AYRES ASSOCIATES HORIZONTAL AND VERTICAL EXPANSION FEASIBILITY REPORT (NOVEMBER 2003).
7. MONITORING WELL (DH–40 AND DH–51) LOCATIONS ARE FROM AYRES ASSOCIATES SECTOR 2–PLAN OF OPERATION–PLAN MODIFICATION (AUGUST 2011).
8. MONITORING WELL (DH–52 AND DH–53) LOCATIONS ARE BASED ON AYRES ASSOCIATES WELL INFORMATION FORM DATED SEPTEMBER 2006.
9. MONITORING WELL DH–22R LOCATION BASED ON AYRES ASSOCIATES WELL INFORMATION FORM DATED OCTOBER 2011.
10. TEST PIT LOCATIONS ARE FROM AYRES AND ASSOCIATES HORIZONTAL AND VERTICAL EXPANSION FEASIBILITY REPORT (NOVEMBER 2003).
11. BORINGS TB–81 THROUGH TB–83B AND WELLS DH–60 THROUGH DH–63 INSTALLED IN DECEMBER 2018 FOR THE NORTHEAST EXPANSION AND SURVEYED BY CQM, INC. ON JANUARY 8, 2019.
12. MONITORING WELLS THAT HAVE BEEN REPLACED ARE DESIGNATED WITH THE LETTER "R" IN WELL NAME (DH–4R). PIEZOMETER LOCATIONS ARE DESIGNATED WITH THE LETTERS "A, B OR C" (DH–22A/DH–22B).
13. APPROXIMATE FLOODPLAIN BOUNDARY BASED ON FEMA FLOOD INSURANCE RATE MAP (FIRM) NUMBER 55035C0100E AND 55035C0059E (FEBRUARY 18, 2009).
14. ORDINARY HIGH WATER MARK (OHWM) BOUNDARY ON EAST SIDE OF SEVEN MILE CREEK BASED ON DELINEATION SURVEY PERFORMED BY AYRES ASSOCIATES ON NOVEMBER 18, 2002.
15. SEPTIC SYSTEM LOCATIONS ARE APPROXIMATE.
16. LAND USE FOR PROPERTIES WITHIN THE STUDY AREA ARE IDENTIFIED ON FIGURE 4–3 INCLUDED IN THE ACCOMPANYING FEASIBILITY REPORT

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ADVANCED DISPOSAL
SEVEN MILE CREEK LANDFILL
EAU CLAIRE, WISCONSIN

FEASIBILITY REPORT
SECTOR 2-NORTHEAST EXPANSION
EXISTING CONDITIONS

SHEET NO. **03**

PROJECT NO. 180720

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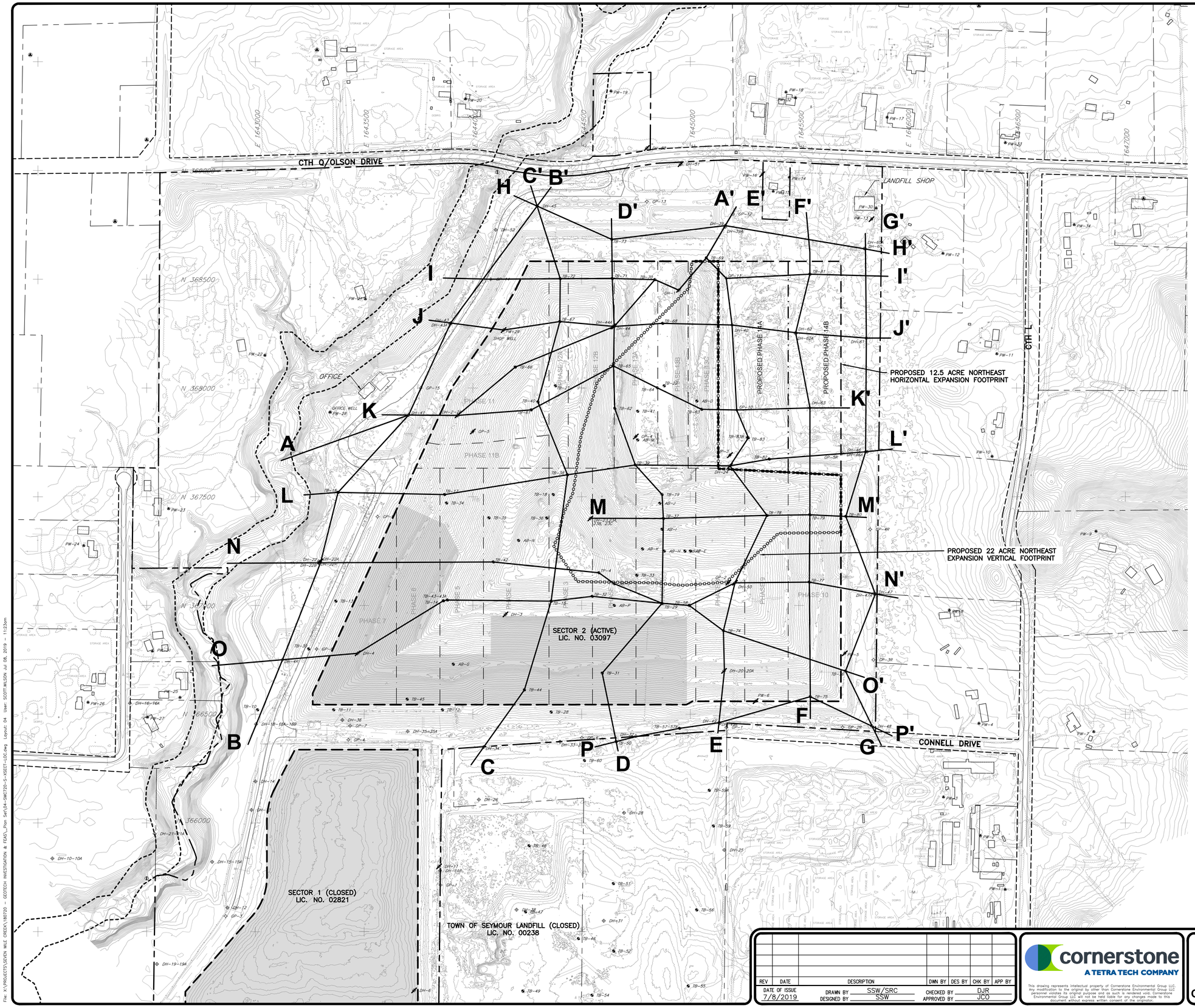

LEGEND

- MUNICIPAL BOUNDARY (CITY OF EAU CLAIRE)
- PROPERTY BOUNDARY
- ROAD RIGHT–OF–WAY
- PERMITTED SOLID WASTE BOUNDARY
- PHASE BOUNDARY
- FINAL COVER AREA
- APPROXIMATE 100–YEAR FLOODPLAIN DELINEATION
- EXISTING FENCE
- EXISTING EDGE OF WOODS/SHRUBS
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- DH–33 EXISTING GROUNDWATER MONITORING WELL
- PW–8 EXISTING PRIVATE WELL
- GP–13 EXISTING GAS PROBE
- B–68 SOIL BORING LOCATION
- DH–44 ABANDONED MONITORING WELL
- PW–5 ABANDONED PRIVATE WELL
- GP–3 ABANDONED GAS PROBE
- PROPOSED NORTHEAST EXPANSION HORIZONTAL FOOTPRINT
- PROPOSED NORTHEAST EXPANSION VERTICAL FOOTPRINT

NOTES:

1. DRONE SURVEY PERFORMED BY CQM ON APRIL 9, 2019 WITHIN AREA SHOWN ON MAP AND SUPPLEMENTED BY TOPOGRAPHIC SURVEY PERFORMED BY SRMC ON APRIL 6, 2017.
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4. LOCATION OF EXISTING SECTOR 1 GAS WELLS ARE FROM AYRES AND ASSOCIATES HORIZONTAL AND VERTICAL EXPANSION FEASIBILITY REPORT (NOVEMBER 2003).
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9. EXISTING TEST PIT LOCATIONS ARE FROM AYRES AND ASSOCIATES HORIZONTAL AND VERTICAL EXPANSION FEASIBILITY REPORT (NOVEMBER 2003).
10. MONITORING WELLS THAT HAVE BEEN REPLACED ARE DESIGNATED WITH THE LETTER "R" IN WELL NAME (DH–4R). PIEZOMETER LOCATIONS ARE DESIGNATED WITH THE LETTERS "A, B OR C" (DH–22A/DH–22B).
11. MONITORING WELLS DH–60 THROUGH DH–63, AND BORINGS TB–81 THROUGH TB–83B WERE INSTALLED FOR THE NORTHEAST EXPANSION AND SURVEYED BY CQM, INC. ON JANUARY 8, 2019.

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SCALE IN FEET

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ADVANCED DISPOSAL
SEVEN MILE CREEK LANDFILL
EAU CLAIRE, WISCONSIN

FEASIBILITY REPORT
SECTOR 2-NORTHEAST EXPANSION
GEOLOGICAL CROSS SECTION LOCATION MAP

SHEET NO. **04**
PROJECT NO. 180720

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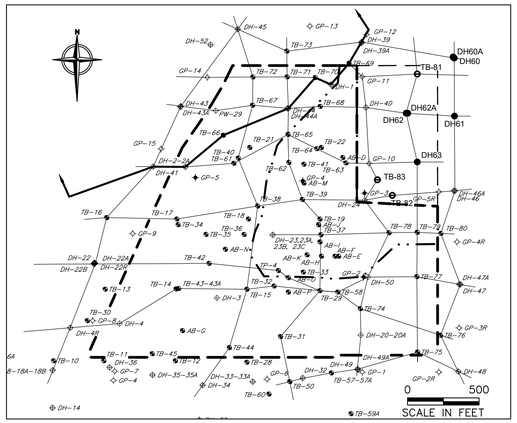


CROSS SECTION LOCATOR MAP

SOIL CLASSIFICATIONS:

	SYMBOL	HATCHING	* DESCRIPTION	NAME	COLOR	MUNSELL COLOR RANGE
ALLUVIUM	SP		FINE TO MEDIUM SAND	POORLY GRADED SANDS OR GRAVELLY SANDS LITTLE OR NO FINES (<5% FINES)	DARK BROWN TO WHITE	10YR4/3–10YR8/1
	SP–SM		FINE TO MEDIUM SILTY SAND	POORLY GRADED SILTY SANDS FEW FINES (5%–12% FINES)	DARK BROWN TO LIGHT BROWN GRAY	7.5YR4/4–2.5Y6/2
	SM		SILTY SAND TO SILTY SAND	SILTY SANDS FINE TO MEDIUM (>12% FINES)	VERY DARK GRAY BROWN TO VERY PALE BROWN	10YR3/2–10YR7/3
	ML		SILT	INORGANIC SILTS AND VERY FINE SANDS WITH SLIGHT PLASTICITY	BROWN TO YELLOW BROWN	10YR5/3–10YR5/4
	CL–ML		SILT W/ CLAY	SILTY INORGANIC CLAYS LOW PLASTICITY	DARK YELLOW BROWN TO YELLOW BROWN	10YR4/4–10YR6/4
	CL		CLAY W/ SILT	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS	DARK BROWN TO OLIVE GRAY	7.5YR3/4–5Y4/3
	CH		CLAY	INORGANIC CLAYS OF HIGH PLASTICITY FAT CLAYS	DARK RED BROWN	5YR3/4
RESIDUAL	CLAYEY SHALE				RED–GRAY TO OLIVE	5YR5/2–5Y4/4
	WEATHERED SANDSTONE(>50 BLOWCOUNTS AND/OR FIELD CLASSIFICATION OF SS FRAGMENTS)				RED–YELLOW TO WHITE	7.5YR6/6–5Y8/1
	COMPETENT SANDSTONE(AUGER REFUSAL/TOP CORE RUN)				LIGHT GRAY TO YELLOW BROWN	10YR7/2–10YR5/4

GRAIN SIZE DATA:

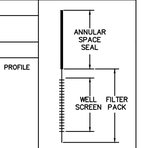
LL/PL/PI % G/S/F	LIQUID LIMIT/PLASTIC LIMIT/PLASTIC INDEX PERCENT GRAVEL/SAND/FINES

ABBREVIATIONS:

APPROX	APPROXIMATE
B/	BOTTOM
DH–39	MONITORING WELL
DH–39A	PIEZOMETER
EOB	END OF BORING
FF	FRACTURE FREQUENCY
GS	GROUND SURFACE
K–1.45e-2cm/sec	AQUIFER HYDRAULIC CONDUCTIVITY
N/E	NOT ENCOUNTERED
RQD	ROCK QUALITY DESIGNATION
TB–79	SOIL BORING
T/	TOP
WL	WATER LEVEL–6/18/19
WL–898.0*	WATER LEVELS BASED ON ESTIMATES FROM 6/18/19 GROUND WATER CONTOURS

LEGEND:

- WATER TABLE SURFACE/GROUNDWATER PROFILE
- WEATHERED BEDROCK SURFACE
- COMPETENT BEDROCK SURFACE
- EXISTING GROUND PROFILE



WELL DETAIL

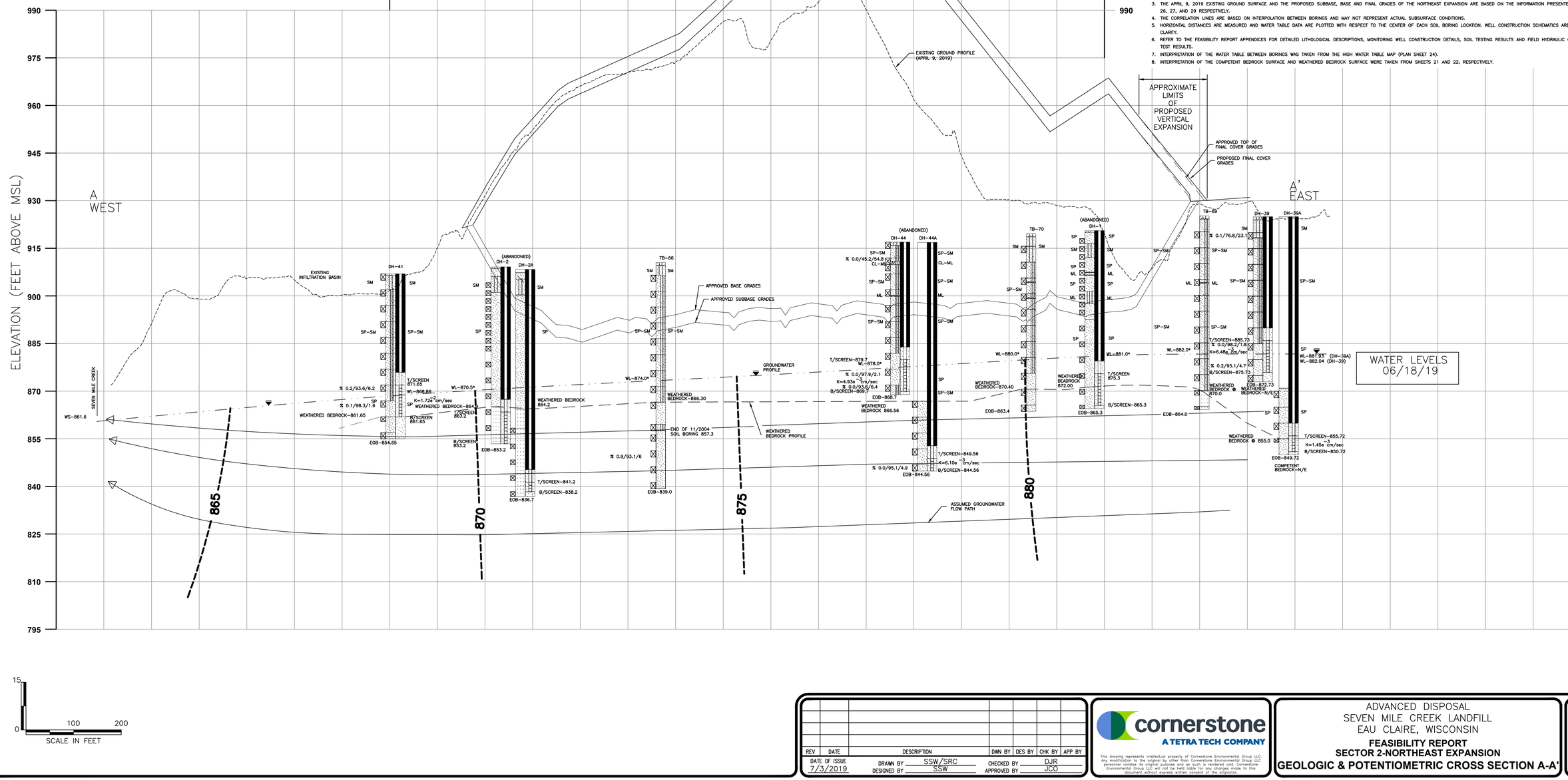
WELL CONSTRUCTION SHOWN FOR ACTIVE WELLS ONLY, AS OF JUNE 2019

* SEE BORING LOGS FOR DETAILED SOIL DESCRIPTIONS

ASSUMED GROUNDWATER FLOW PATH

NOTES:

1. GEOLOGIC, HYDROGEOLOGIC, AND SUBSURFACE INFORMATION PROVIDED ON THIS DRAWING OBTAINED FROM AYRES NOVEMBER 2003 FEASIBILITY REPORT, FEBRUARY 2011 FEASIBILITY MODIFICATION, CORNERSTONE 2014 FEASIBILITY REPORT AND 2019 FEASIBILITY REPORT.
2. SUBBASE GRADES AND BASE GRADES ARE BASED ON INFORMATION PRESENTED IN THE CORNERSTONE 2015 PLAN OF OPERATION.
3. THE APRIL 9, 2019 EXISTING GROUND SURFACE AND THE PROPOSED SUBBASE, BASE AND FINAL GRADES OF THE NORTHEAST EXPANSION ARE BASED ON THE INFORMATION PRESENTED ON SHEETS 3, 26, 27, AND 29 RESPECTIVELY.
4. THE CORRELATION LINES ARE BASED ON INTERPOLATION BETWEEN BORINGS AND MAY NOT REPRESENT ACTUAL SUBSURFACE CONDITIONS.
5. HORIZONTAL DISTANCES ARE MEASURED AND WATER TABLE DATA ARE PLOTTED WITH RESPECT TO THE CENTER OF EACH SOIL BORING LOCATION. WELL CONSTRUCTION SCHEMATICS ARE OFFSET FOR CLARITY.
6. REFER TO THE FEASIBILITY REPORT APPENDICES FOR DETAILED LITHOLOGICAL DESCRIPTIONS, MONITORING WELL CONSTRUCTION DETAILS, SOIL TESTING RESULTS AND FIELD HYDRAULIC CONDUCTIVITY TEST RESULTS.
7. INTERPRETATION OF THE WATER TABLE BETWEEN BORINGS WAS TAKEN FROM THE HIGH WATER TABLE MAP (PLAN SHEET 24).
8. INTERPRETATION OF THE COMPETENT BEDROCK SURFACE AND WEATHERED BEDROCK SURFACE WERE TAKEN FROM SHEETS 21 AND 22, RESPECTIVELY.



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ADVANCED DISPOSAL
SEVEN MILE CREEK LANDFILL
EAU CLAIRE, WISCONSIN
FEASIBILITY REPORT
SECTOR 2-NORTHEAST EXPANSION
GEOLOGIC & POTENTIOMETRIC CROSS SECTION A-A'

SHEET NO. **05**
PROJECT NO. 180720

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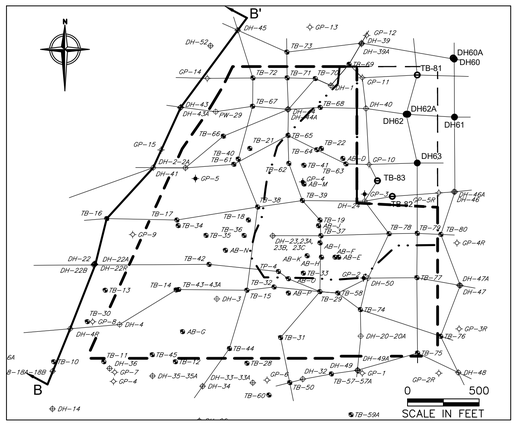

CROSS SECTION LOCATOR MAP

SOIL CLASSIFICATIONS:

	SYMBOL	HATCHING	* DESCRIPTION	NAME	COLOR	MUNSELL COLOR RANGE
ALLUVIUM	SP		FINE TO MEDIUM SAND	POORLY GRADED SANDS OR GRAVELLY SANDS LITTLE OR NO FINES (<5% FINES)	DARK BROWN TO WHITE	10YR4/3–10YR8/1
	SP–SM		FINE TO MEDIUM SILTY SAND	POORLY GRADED SILTY SANDS FEW FINES (5%–12% FINES)	DARK BROWN TO LIGHT BROWN GRAY	7.5YR4/4–2.5Y6/2
	SM		SILTY SAND TO SILTY SAND	SILTY SANDS FINE TO MEDIUM (>12% FINES)	VERY DARK GRAY BROWN TO VERY PALE BROWN	10YR3/2–10YR7/3
	ML		SILT	INORGANIC SILTS AND VERY FINE SANDS WITH SLIGHT PLASTICITY	BROWN TO YELLOW BROWN	10YR5/3–10YR5/4
	CL–ML		SILT W/ CLAY	SILTY INORGANIC CLAYS LOW PLASTICITY	DARK YELLOW BROWN TO YELLOW BROWN	10YR4/4–10YR6/4
	CL		CLAY W/ SILT	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS	DARK BROWN TO OLIVE GRAY	7.5YR3/4–5Y4/3
	CH		CLAY	INORGANIC CLAYS OF HIGH PLASTICITY FAT CLAYS	DARK RED BROWN	5YR3/4
RESIDUAL	CLAYEY SHALE				RED–GRAY TO OLIVE	5YR5/2–5Y4/4
	WEATHERED SANDSTONE(>50 BLOWCOUNTS AND/OR FIELD CLASSIFICATION OF SS FRAGMENTS)				RED–YELLOW TO WHITE	7.5YR6/6–5Y8/1
	COMPETENT SANDSTONE(AUGER REFUSAL/TOP CORE RUN)				LIGHT GRAY TO YELLOW BROWN	10YR7/2–10YR5/4

GRAIN SIZE DATA:

LL/PL/PI	LIQUID LIMIT/PLASTIC LIMIT/PLASTIC INDEX
% G/S/F	PERCENT GRAVEL/SAND/FINES

ABBREVIATIONS:

APPROX	APPROXIMATE
B/	BOTTOM
DH–39	MONITORING WELL
DH–39A	PIEZOMETER
EOB	END OF BORING
FF	FRACTURE FREQUENCY
GS	GROUND SURFACE
K–1.45e^{-2}cm/sec	AQUIFER HYDRAULIC CONDUCTIVITY
N/E	NOT ENCOUNTERED
RQD	ROCK QUALITY DESIGNATION
TB–79	SOIL BORING
T/	TOP
WL	WATER LEVEL–6/18/19
WL–898.0*	WATER LEVELS BASED ON ESTIMATES FROM 6/18/19 GROUND WATER CONTOURS

LEGEND:

	WATER TABLE SURFACE/GROUNDWATER PROFILE
	WEATHERED BEDROCK SURFACE
	COMPETENT BEDROCK SURFACE
	EXISTING GROUND PROFILE

ANNULAR SPACE SEAL
WELL FILTER SCREEN PACK
WELL DETAIL

WELL CONSTRUCTION SHOWN FOR ACTIVE WELLS ONLY, AS OF JUNE 2019

* SEE BORING LOGS FOR DETAILED SOIL DESCRIPTIONS

NOTES:

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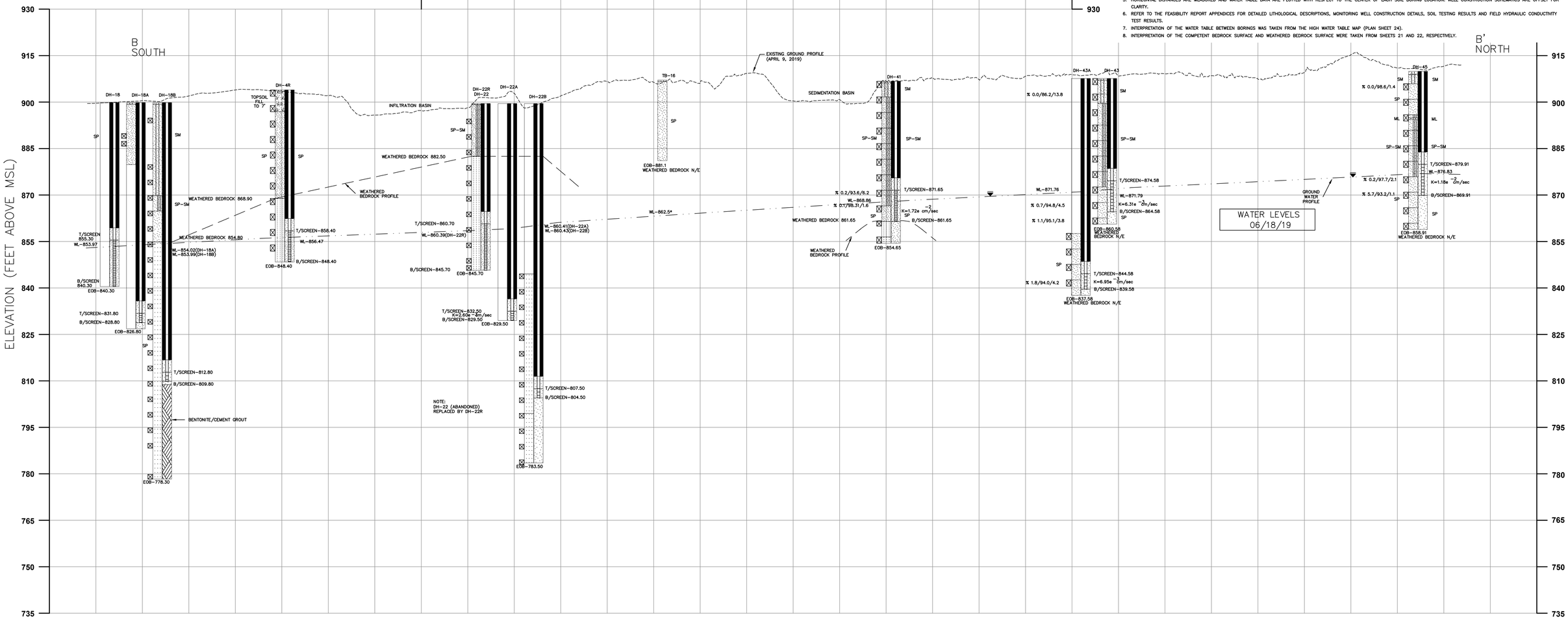

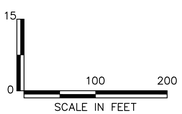

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ADVANCED DISPOSAL
SEVEN MILE CREEK LANDFILL
EAU CLAIRE, WISCONSIN
FEASIBILITY REPORT
SECTOR 2-NORTHEAST EXPANSION
GEOLOGIC CROSS SECTION B-B'

SHEET NO. **06**
PROJECT NO. 180720

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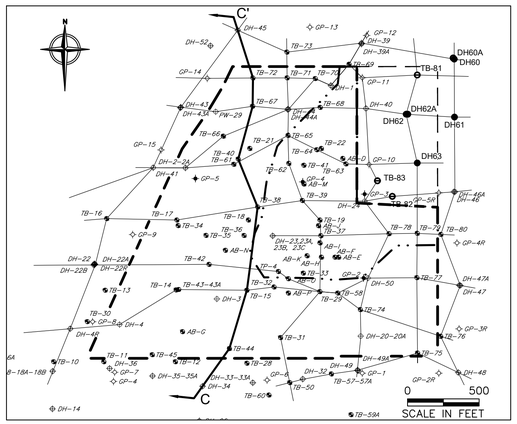

CROSS SECTION LOCATOR MAP

SOIL CLASSIFICATIONS:

	SYMBOL	HATCHING	* DESCRIPTION	NAME	COLOR	MUNSELL COLOR RANGE
ALLUVIUM	SP		FINE TO MEDIUM SAND	POORLY GRADED SANDS OR GRAVELLY SANDS LITTLE OR NO FINES (<5% FINES)	DARK BROWN TO WHITE	10YR4/3–10YR8/1
	SP–SM		FINE TO MEDIUM SILTY SAND	POORLY GRADED SILTY SANDS FEW FINES (5%–12% FINES)	DARK BROWN TO LIGHT BROWN GRAY	7.5YR4/4–2.5Y6/2
	SM			SILTY SANDS FINE TO MEDIUM (>12% FINES)	VERY DARK GRAY BROWN TO VERY PALE BROWN	10YR3/2–10YR7/3
	ML		SILT	INORGANIC SILTS AND VERY FINE SANDS WITH SLIGHT PLASTICITY	BROWN TO YELLOW BROWN	10YR5/3–10YR5/4
	CL–ML		SILT W/ CLAY	SILTY INORGANIC CLAYS LOW PLASTICITY	DARK YELLOW BROWN TO YELLOW BROWN	10YR4/4–10YR6/4
	CL		CLAY W/ SILT	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS	DARK BROWN TO OLIVE GRAY	7.5YR3/4–5Y4/3
	CH		CLAY	INORGANIC CLAYS OF HIGH PLASTICITY FAT CLAYS	DARK RED BROWN	5YR3/4
RESIDUAL	CLAYEY SHALE				RED–GRAY TO OLIVE	5YR5/2–5Y4/4
	WEATHERED SANDSTONE(>50 BLOWCOUNTS AND/OR FIELD CLASSIFICATION OF SS FRAGMENTS)				RED–YELLOW TO WHITE	7.5YR6/6–5Y8/1
	COMPETENT SANDSTONE(AUGER REFUSAL/TOP CORE RUN)				LIGHT GRAY TO YELLOW BROWN	10YR7/2–10YR5/4

GRAIN SIZE DATA:

LL/PL/PI	LIQUID LIMIT/PLASTIC LIMIT/PLASTIC INDEX
% G/S/F	PERCENT GRAVEL/SAND/FINES

ABBREVIATIONS:

APPROX	APPROXIMATE
B/	BOTTOM
DH–39	MONITORING WELL
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EOB	END OF BORING
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K–1.45e^{-2}cm/sec	AQUIFER HYDRAULIC CONDUCTIVITY
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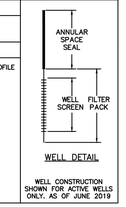
RQD	ROCK QUALITY DESIGNATION
TB–79	SOIL BORING
T/	TOP
WL	WATER LEVEL–6/18/19
WL–898.0*	WATER LEVELS BASED ON ESTIMATES FROM 6/18/19 GROUND WATER CONTOURS

LEGEND:

▽	WATER TABLE SURFACE/GROUNDWATER PROFILE
	WEATHERED BEDROCK SURFACE
	COMPETENT BEDROCK SURFACE
	EXISTING GROUND PROFILE



WELL DETAIL

WELL CONSTRUCTION SHOWN FOR ACTIVE WELLS ONLY, AS OF JUNE 2019

* SEE BORING LOGS FOR DETAILED SOIL DESCRIPTIONS

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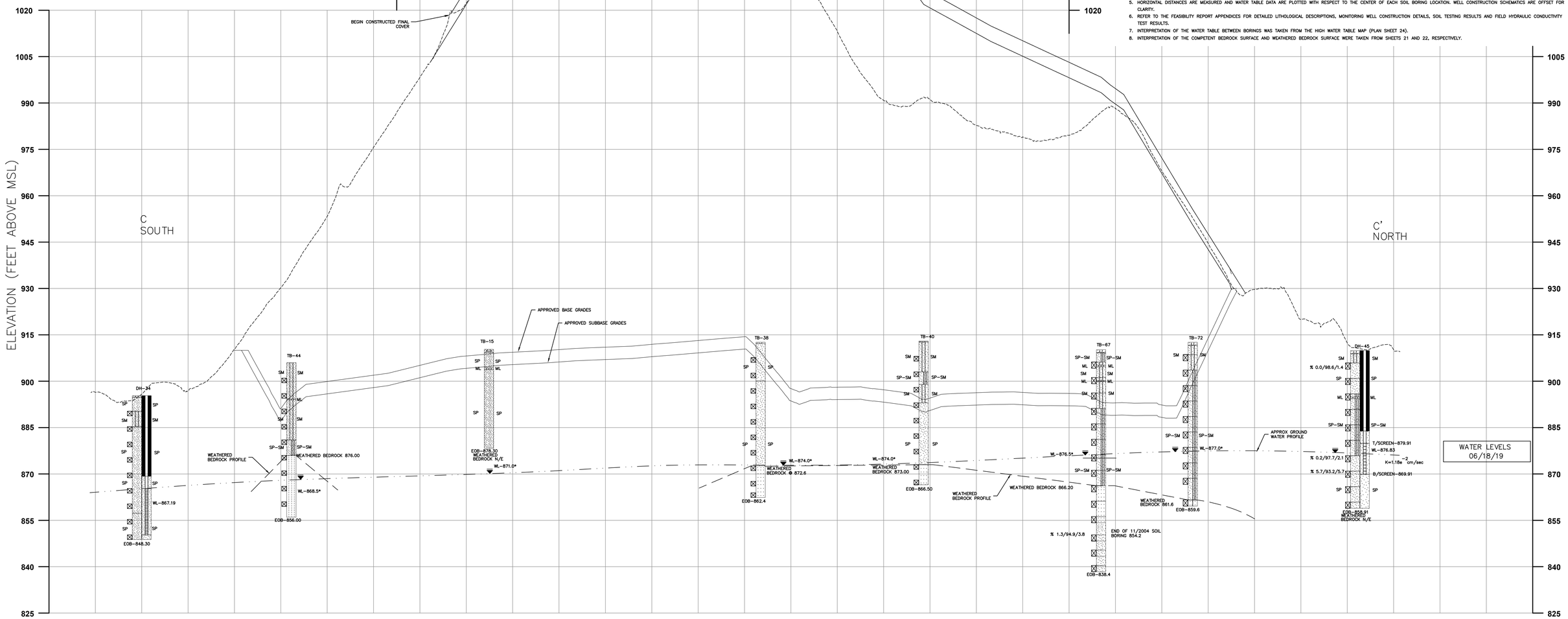

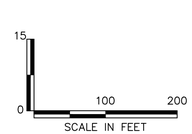

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ADVANCED DISPOSAL
SEVEN MILE CREEK LANDFILL
EAU CLAIRE, WISCONSIN
FEASIBILITY REPORT
SECTOR 2-NORTHEAST EXPANSION
GEOLOGIC CROSS SECTION C-C'

SHEET NO. **07**
PROJECT NO. 180720

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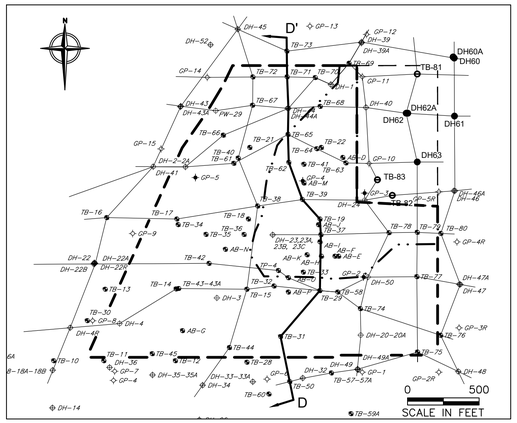


CROSS SECTION LOCATOR MAP

APPROXIMATE LIMITS OF PROPOSED VERTICAL EXPANSION

PEAK ELEVATION=1165.54 FEET M.S.L.

PROPOSED TOP OF FINAL COVER GRADES

APPROVED TOP OF FINAL COVER GRADES

APPROVED TOP OF FINAL COVER GRADES

BEGIN CONSTRUCTED FINAL COVER

EXISTING GROUND PROFILE (APRIL 9, 2019)

APPROVED BASE GRADES

APPROVED SUBBASE GRADES

GROUND WATER PROFILE

WEATHERED BEDROCK PROFILE

COMPETENT BEDROCK PROFILE

BOTTOM OF BORING @ 844.5 FEET M.S.L.

WATER LEVELS 06/18/19

ELEVATION (FEET ABOVE MSL)

D SOUTH

D' NORTH

SCALE IN FEET

SOIL CLASSIFICATIONS:

	SYMBOL	HATCHING	* DESCRIPTION	NAME	COLOR	MUNSELL COLOR RANGE
ALLUVIUM	SP		FINE TO MEDIUM SAND	POORLY GRADED SANDS OR GRAVELLY SANDS LITTLE OR NO FINES (<5% FINES)	DARK BROWN TO WHITE	10YR4/3-10YR8/1
	SP-SM		FINE TO MEDIUM SILTY SAND	POORLY GRADED SILTY SANDS FEW FINES (5%-12% FINES)	DARK BROWN TO LIGHT BROWN GRAY	7.5YR4/4-2.5Y8/2
	SM		SANDY SILT TO SILTY SAND	SILTY SANDS FINE TO MEDIUM (>12% FINES)	VERY DARK GRAY BROWN TO VERY PALE BROWN	10YR3/2-10YR7/3
	ML		SILT	INORGANIC SILTS AND VERY FINE SANDS WITH SLIGHT PLASTICITY	BROWN TO YELLOW BROWN	10YR5/3-10YR5/4
	CL-ML		SILT W/ CLAY	SILTY INORGANIC CLAYS LOW PLASTICITY	DARK YELLOW BROWN TO YELLOW BROWN	10YR4/4-10YR6/4
	CL		CLAY W/ SILT	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS	DARK BROWN TO OLIVE GRAY	7.5YR3/4-5Y4/3
	CH		CLAY	INORGANIC CLAYS OF HIGH PLASTICITY FAT CLAYS	DARK RED BROWN	5YR3/4
RESIDUAL	CLAYEY SHALE				RED-GRAY TO OLIVE	5YR5/2-5Y4/4
	WEATHERED SANDSTONE(>50 BLOWCOUNTS AND/OR FIELD CLASSIFICATION OF SS FRAGMENTS)				RED-YELLOW TO WHITE	7.5YR6/6-5Y8/1
	COMPETENT SANDSTONE(AUGER REFUSAL/TOP CORE RUN)				LIGHT GRAY TO YELLOW BROWN	10YR7/2-10YR5/4

GRAIN SIZE DATA:

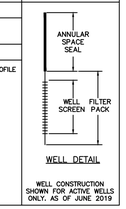
LL/PL/PI % G/S/F	LIQUID LIMIT/PLASTIC LIMIT/PLASTIC INDEX PERCENT GRAVEL/SAND/FINES

ABBREVIATIONS:

APPROX	APPROXIMATE
B/	BOTTOM
DH-39	MONITORING WELL
DH-39A	PIEZOMETER
EOB	END OF BORING
FF	FRACTURE FREQUENCY
GS	GROUND SURFACE
K-1.45e⁻²cm/sec	AQUIFER HYDRAULIC CONDUCTIVITY
N/E	NOT ENCOUNTERED
RQD	ROCK QUALITY DESIGNATION
TB-79	SOIL BORING
T/	TOP
WL	WATER LEVEL-6/18/19
WL-898.0*	WATER LEVELS BASED ON ESTIMATES FROM 6/18/19 GROUND WATER CONTOURS

LEGEND:

	WATER TABLE SURFACE/GROUNDWATER PROFILE
	WEATHERED BEDROCK SURFACE
	COMPETENT BEDROCK SURFACE
	EXISTING GROUND PROFILE



WELL DETAIL

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ADVANCED DISPOSAL
SEVEN MILE CREEK LANDFILL
EAU CLAIRE, WISCONSIN
FEASIBILITY REPORT
SECTOR 2-NORTHEAST EXPANSION
GEOLOGIC CROSS SECTION D-D'

SHEET NO. **08**
PROJECT NO. 180720

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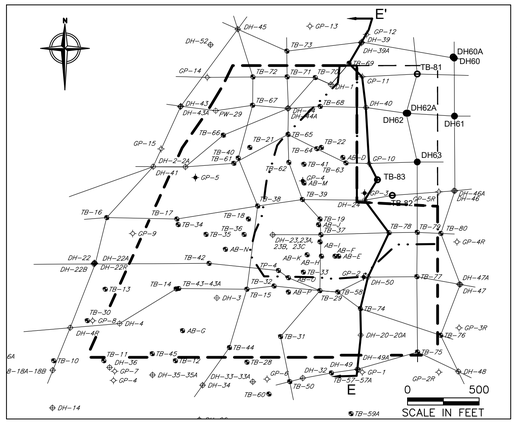

CROSS SECTION LOCATOR MAP

SOIL CLASSIFICATIONS:

	SYMBOL	HATCHING	* DESCRIPTION	NAME	COLOR	MUNSELL COLOR RANGE
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	SM		SILTY SAND TO SILTY SAND	SILTY SANDS FINE TO MEDIUM (>12% FINES)	VERY DARK GRAY BROWN TO VERY PALE BROWN	10YR3/2–10YR7/3
	ML		SILT	INORGANIC SILTS AND VERY FINE SANDS WITH SLIGHT PLASTICITY	BROWN TO YELLOW BROWN	10YR5/3–10YR5/4
	CL–ML		SILT W/ CLAY	SILTY INORGANIC CLAYS LOW PLASTICITY	DARK YELLOW BROWN TO YELLOW BROWN	10YR4/4–10YR6/4
	CL		CLAY W/ SILT	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS	DARK BROWN TO OLIVE GRAY	7.5YR3/4–5Y4/3
	CH		CLAY	INORGANIC CLAYS OF HIGH PLASTICITY FAT CLAYS	DARK RED BROWN	5YR3/4
RESIDUAL	CLAYEY SHALE				RED–GRAY TO OLIVE	5YR5/2–5Y4/4
	WEATHERED SANDSTONE(>50 BLOWCOUNTS AND/OR FIELD CLASSIFICATION OF SS FRAGMENTS)				RED–YELLOW TO WHITE	7.5YR6/6–5YB/1
	COMPETENT SANDSTONE(AUGER REFUSAL/TOP CORE RUN)				LIGHT GRAY TO YELLOW BROWN	10YR7/2–10YR5/4

GRAIN SIZE DATA:

LL/PL/PI	LIQUID LIMIT/PLASTIC LIMIT/PLASTIC INDEX
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LEGEND:

- WATER TABLE SURFACE/GROUNDWATER PROFILE
- WEATHERED BEDROCK SURFACE
- COMPETENT BEDROCK SURFACE
- EXISTING GROUND PROFILE

ANNULAR SPACE SEAL

WELL FILTER SCREEN PACK

WELL DETAIL

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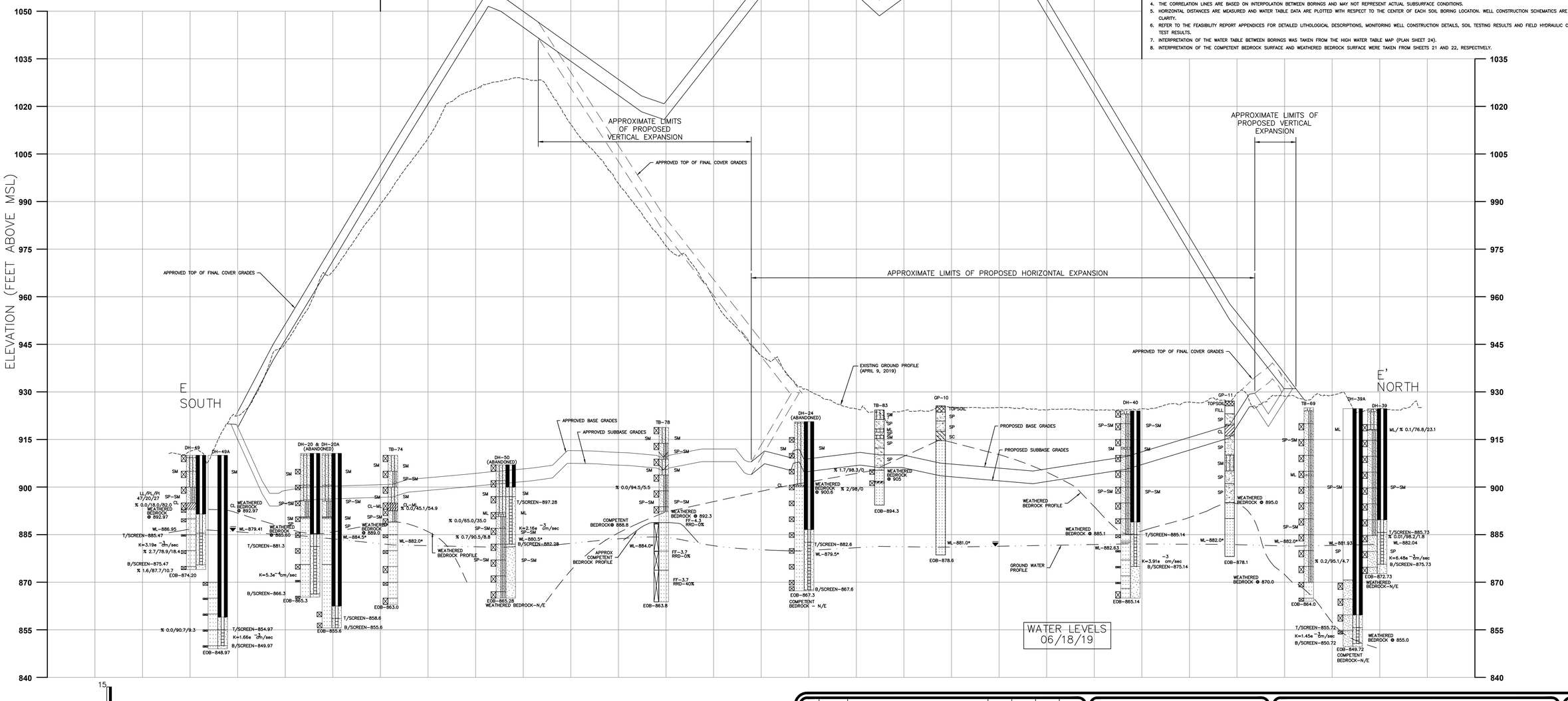

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	DATE OF ISSUE 7/3/2019	DRAWN BY SSW/SRC; DESIGNED BY SSW	CHECKED BY DJR; APPROVED BY JCO			

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ADVANCED DISPOSAL
SEVEN MILE CREEK LANDFILL
EAU CLAIRE, WISCONSIN
FEASIBILITY REPORT
SECTOR 2-NORTHEAST EXPANSION
GEOLOGIC CROSS SECTION E-E'

SHEET NO. **09**

PROJECT NO. 180720

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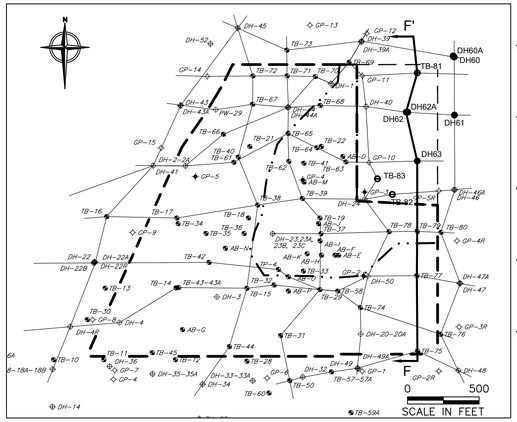


CROSS SECTION LOCATOR MAP

SOIL CLASSIFICATIONS:

	SYMBOL	HATCHING	* DESCRIPTION	NAME	COLOR	MUNSELL COLOR RANGE
ALLUVIUM	SP		FINE TO MEDIUM SAND	POORLY GRADED SANDS OR GRAVELLY SANDS LITTLE OR NO FINES (<5% FINES)	DARK BROWN TO WHITE	10YR4/3–10YR8/1
	SP–SM		FINE TO MEDIUM SILTY SAND	POORLY GRADED SILTY SANDS FEW FINES (5%–12% FINES)	DARK BROWN TO LIGHT BROWN GRAY	7.5YR4/4–2.5Y6/2
	SM		SILTY SAND TO SILTY SAND	SILTY SANDS FINE TO MEDIUM (>12% FINES)	VERY DARK GRAY BROWN TO VERY PALE BROWN	10YR3/2–10YR7/3
	ML		SILT	INORGANIC SILTS AND VERY FINE SANDS WITH SLIGHT PLASTICITY	BROWN TO YELLOW BROWN	10YR5/3–10YR5/4
	CL–ML		SILT W/ CLAY	SILTY INORGANIC CLAYS LOW PLASTICITY	DARK YELLOW BROWN TO YELLOW BROWN	10YR4/4–10YR6/4
	CL		CLAY W/ SILT	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS	DARK BROWN TO OLIVE GRAY	7.5YR3/4–5Y4/3
	CH		CLAY	INORGANIC CLAYS OF HIGH PLASTICITY FAT CLAYS	DARK RED BROWN	5YR3/4
RESIDUAL	CLAYEY SHALE				RED–GRAY TO OLIVE	5YR5/2–5Y4/4
	WEATHERED SANDSTONE(>50 BLOWCOUNTS AND/OR FIELD CLASSIFICATION OF SS FRAGMENTS)				RED–YELLOW TO WHITE	7.5YR6/6–5Y8/1
	COMPETENT SANDSTONE(AUGER REFUSAL/TOP CORE RUN)				LIGHT GRAY TO YELLOW BROWN	10YR7/2–10YR5/4

GRAIN SIZE DATA:

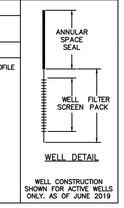
LL/PL/PI % G/S/F	LIQUID LIMIT/PLASTIC LIMIT/PLASTIC INDEX PERCENT GRAVEL/SAND/FINES

ABBREVIATIONS:

APPROX	APPROXIMATE
B/	BOTTOM
DH–39	MONITORING WELL
DH–39A	PIEZOMETER
EOB	END OF BORING
FF	FRACTURE FREQUENCY
GS	GROUND SURFACE
K–1.45e⁻² cm/sec	AQUIFER HYDRAULIC CONDUCTIVITY
N/E	NOT ENCOUNTERED
RQD	ROCK QUALITY DESIGNATION
TB–79	SOIL BORING
T/	TOP
WL	WATER LEVEL–6/18/19
WL–898.0*	WATER LEVELS BASED ON ESTIMATES FROM 6/18/19 GROUND WATER CONTOURS

LEGEND:

▽	WATER TABLE SURFACE/GROUNDWATER PROFILE
— — —	WEATHERED BEDROCK SURFACE
———	COMPETENT BEDROCK SURFACE
– – – –	EXISTING GROUND PROFILE



WELL DETAIL

WELL CONSTRUCTION SHOWN FOR ACTIVE WELLS ONLY, AS OF JUNE 2019

* SEE BORING LOGS FOR DETAILED SOIL DESCRIPTIONS

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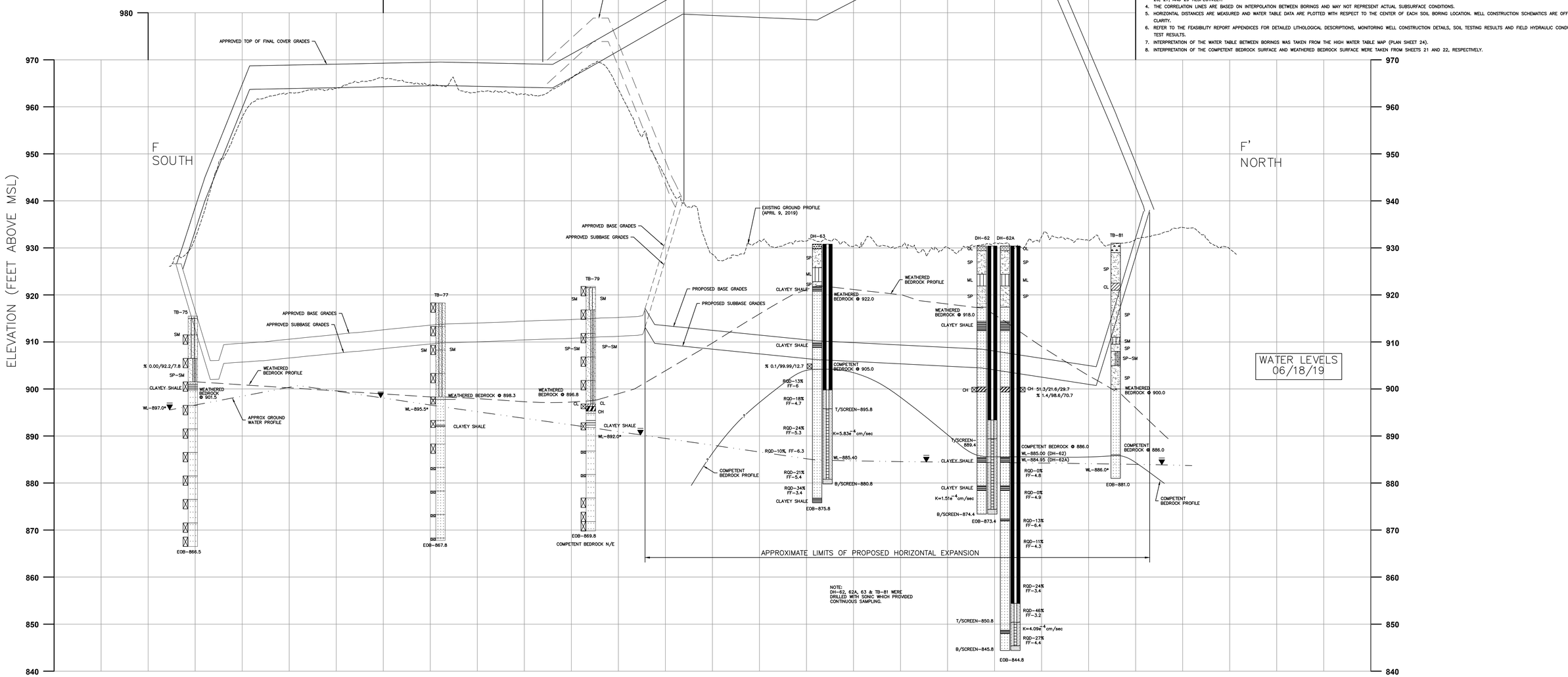

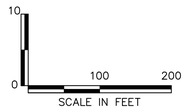

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GEOLOGIC CROSS SECTION F-F'

SHEET NO. **10**
PROJECT NO. 180720

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