Gibbons Creek Environmental
Redevelopment Group, LLC

HDR
Firm Registration No. F-754
17111 Preston Road, Suite 300
Dallas, Texas 75248-1229
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Construction Drawings For

Gibbons Creek Electric Station

Scrubber Sludge Pond
Ash Ponds

Project No.
10290148

Anderson, Texas
May 2021

VICINITY MAP
NOT TO SCALE

INDEX OF DRAWINGS

STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
6-7-21

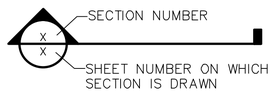
STANDARD ABBREVIATIONS

&	AND
APPROX	APPROXIMATELY
@	AT
AVG	AVERAGE
APS	ASH PONDS
BOE	BOTTOM OF EXCAVATION
BOL	BOTTOM OF LINER
X	BY
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
CY	CUBIC YARD
DIA	DIAMETER
DET	DETAIL
DWG	DRAWING
E	EAST
ELEV	ELEVATION
EW	EACH WAY
EXIST	EXISTING
EXC	EXCAVATION
FGD	FLUE GAS DESULFICATION
FML	FLEXIBLE MEMBRANE LINER
FT	FEET
GAL	GALLON
GCSES	GIBBONS CREEK STEAM ELECTRIC STATION
GCERG	GIBBONS CREEK ENVIRONMENTAL REDEVELOPMENT GROUP
GND	GROUND
GDL	GRAVEL DRAINAGE LAYER
GNDL	GEONET DRAINAGE LAYER
HDPE	HIGH DENSITY POLYETHYLENE
HORIZ	HORIZONTAL
ID	INSIDE DIAMETER
IN	INCHES
IE	INVERT ELEVATION
LCRS	LEACHATE COLLECTION AND REMOVAL SYSTEM
LCS	LEACHATE COLLECTION SYSTEM
LCP	LEACHATE COLLECTION PIPE
LCPR	LEACHATE COLLECTION PIPE RISER
LF	LINEAR FEET
LB	POUND
MH	MANHOLE
MAX	MAXIMUM
MIL	.001 INCHES
MIN	MINIMUM
MW	MONITOR WELL
MSL	MEAN SEA LEVEL
N	NORTH
NIC	NOT IN CONTRACT
NO	NUMBER
NTS	NOT TO SCALE
NTYS	NORTH THICKENER YARD SUMP
OC	ON CENTER
OZ	OUNCE
%	PERCENT
PLCP	PERFORATED LEACHATE COLLECTION PIPE
PERF	PERFORATED
PGL	PROFILE GRADE LINE
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PVI	POINT OF VERTICAL INTERSECTION
PT	POINT OF TANGENT
PZ	PIEZOMETER
Q	FLOW
QTY	QUANTITY
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
REF	REFERENCE
REQ	REQUIRED
RD	ROAD
SCH	SCHEDULE
SDL	SAND DRAINAGE LAYER
SEC	SECTION
SFL	SITE F LANDFILL
SHT	SHEET
S	SOUTH
SDR	STANDARD DIMENSION RATIO
SLQCP	SOIL LINER QUALITY CONTROL PLAN
SP	STEEL PIPE
SSP	SCRUBBER SLUDGE POND
SQ	SQUARE
SS	SIDE SLOPE
STA	STATION
STYS	SOUTH THICKENER YARD SUMP
T.A.S.	TERMINAL ANCHOR SECTION
TL	TANGENT LENGTH
TOC	TOP OF COVER
TOFC	TOP OF FINAL COVER
TOL	TOP OF LINER
TOS	TOE OF SLOPE
TS	TOP SLOPE
TEMP	TEMPORARY
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
W	WEST
W/	WITH
WW	WETWELL
YD	YARD

SYMBOLS

SECTION DETAIL INDICATORS

DRAWING ON WHICH SECTION IS CUT:



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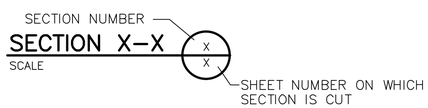

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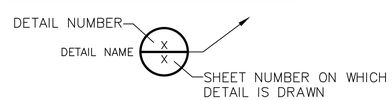

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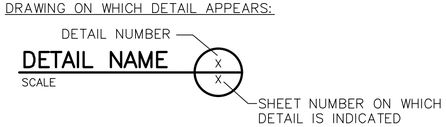
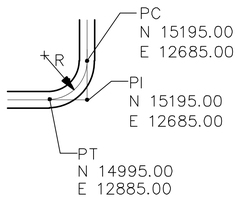
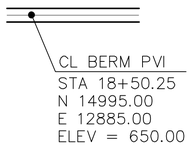
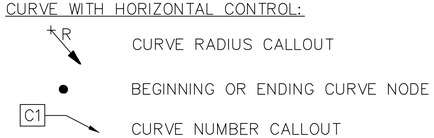


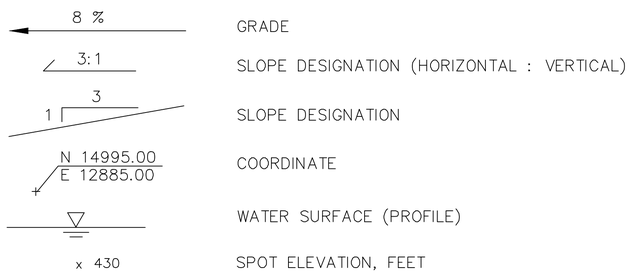




CURVE WITH HORIZONTAL CONTROL:



VERTICAL CONTROL DESIGNATION



GENERAL NOTES

1. ALL WORK UNDER THIS CONTRACT SHALL BE PERFORMED IN ACCORDANCE WITH THE PLANS AND PROJECT SPECIFICATIONS. IN THE EVENT OF A DISCREPANCY BETWEEN THE PLANS AND THE PROJECT SPECIFICATIONS, THE SPECIFICATIONS SHALL GOVERN.
2. COORDINATE SYSTEM IS BASED ON LOCAL SURVEY. THE BENCHMARKS TO BE USED FOR CONSTRUCTION ARE LOCATED AS SHOWN ON DRAWING NO. 00C–01. EXISTING CONTOURS ARE BASED ON TOPOGRAPHICAL SURVEY PERFORMED FEBRUARY 12–20, 2019 BY LACY SURVEYING. CURRENT GROUND ELEVATIONS MAY VARY FROM THOSE SHOWN DUE TO SITE WORK THAT HAS BEEN PERFORMED SINCE THE SURVEY WAS PERFORMED.
3. THE CONTRACTOR SHALL VERIFY EXISTING CONTOURS PRIOR TO THE START OF WORK.
4. THERE SHALL NOT BE ANY ADDITIONAL PAYMENT OR EXTENSION OF CONTRACT TIME FOR WORKING WITH SATURATED SOILS OR HANDLING WATER SEEPAGE DUE TO RAINFALL, RUNOFF AND INFILTRATION.
5. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING ROADS, BENCHMARKS AND EXISTING GROUNDWATER MONITOR WELLS DURING THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL BE SOLEY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE INCURRED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PROTECT THE GROUNDWATER MONITOR WELLS, BENCHMARKS AND EXISTING ROADS.
6. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES HAVE NOT BEEN ESTABLISHED BY THE OWNER OR ENGINEER. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PROPER SAFE WORKING DISTANCE FROM ALL UTILITY EASEMENTS OR LINES.
7. EXCAVATION BY "BLASTING" IS NOT PERMITTED ON THIS PROJECT.
8. FINISHED GROUND ELEVATIONS SHALL MATCH EXISTING GROUND ELEVATIONS EXCEPT AS SHOWN ON THE PLANS. ALL EXCESS SOIL FROM THE EXCAVATION AND GRADING SHALL BE PLACED IN DESIGNATED STOCKPILE LOCATIONS AS APPROVED BY THE OWNER. IF WASTE IS ENCOUNTERED DURING EXCAVATION, THE OWNER SHALL BE NOTIFIED AND THE WASTE REMOVED AND PLACED IN AREAS DESIGNATED AS APPROVED BY THE OWNER. TRANSPORT OF SOIL TO FILL AREAS SHALL BE CONDUCTED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
9. THE CONTRACTOR SHALL CONSTRUCT, AND UPON COMPLETION OF THE PROJECT, REMOVE TEMPORARY CONSTRUCTION ACCESS ROADS. SUCH ROADS SHALL BE LOCATED AS APPROVED BY THE OWNER. DRAINAGE PATTERNS AT THE SITE SHALL NOT BE ALTERED BY ROAD CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION AND MAINTENANCE OF TEMPORARY DRAINAGE STRUCTURES, INCLUDING CULVERTS, AT NO ADDITIONAL COST TO THE OWNER.
10. THE CONTRACTOR SHALL INSTALL, MAINTAIN, AND UPON COMPLETION OF THE PROJECT, REMOVE TEMPORARY EROSION AND SEDIMENT CONTROLS AS APPROVED BY GCERG AND IN ACCORDANCE WITH THE SITE SWPPP AND PURSUANT TO TPDES REQUIREMENTS. SUCH CONTROLS SHALL BE PLACED AT THE LIMITS OF DISTURBED AREAS AND AT INTERMEDIATE LOCATIONS WHERE CONCENTRATED FLOW IS LIKELY.
11. TEMPORARY CONSTRUCTION SLOPES SHALL NOT BE GREATER THAN 2H:1V. STEEPER SLOPES WILL ONLY BE ALLOWED IF THE CONTRACTOR PROVIDES A GEOTECHNICAL ENGINEERING REPORT SPECIFYING MAXIMUM SLOPES AND THE DURATION FOR WHICH SUCH SLOPES SHALL REMAIN IN PLACE.
12. THE CONTRACTOR SHALL REMOVE ALL VEGETATION WITHIN THE CONSTRUCTION LIMITS AS REQUIRED TO CONSTRUCT THE PROJECT. ALL VEGETATION SHALL BE REMOVED BY CONTRACTOR AT NO ADDITIONAL EXPENSE TO OWNER.
13. THE CONTRACTOR SHALL OBTAIN AND CONDUCT WORK CONSISTENT WITH A TPDES PERMIT FOR CONSTRUCTION, REFER TO TECHNICAL SPECIFICATIONS. PREPARATION OF A SWPPP AND OBTAINING THE TPDES PERMIT ARE THE CONTRACTORS RESPONSIBILITY.
14. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER ANY ERROR OR DISCREPANCY FOUND ONCE THE CONTRACT DOCUMENT IS CAREFULLY REVIEWED AND ALL ASPECTS OF FIELD WORK HAVE BEEN VERIFIED. IN THE EVENT THE CONTRACTOR CONTINUES TO WORK ON AN ITEM WHERE AN ERROR EXISTS, IT SHALL BE DEEMED THAT THE CONTRACTOR BID AND INTENDED TO EXECUTE THE MORE STRINGENT OR HIGHER QUALITY REQUIREMENT WITHOUT AN INCREASE IN CONTRACT SUM OR TIME. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE TO CORRECT ANY FAILURE OF COMPANY PARTS TO COORDINATE OR FIT PROPERLY INTO FINAL POSITION, AS A RESULT OF CONTRACTOR FAILURE TO RAISE OR RESOLVE A DISCREPANCY.
15. THE DRAWINGS AND SPECIFICATIONS SHOULD AGREE WITH EACH OTHER, AND WORK CALLED FOR BY DRAWINGS AND NOT MENTIONED IN SPECIFICATION, OR VICE VERSA, SHALL BE FURNISHED BY BOTH. WHEN DISCREPANCIES EXIST BETWEEN SCALE AND DIMENSIONS, THE DIMENSIONED FIGURE SHALL BE USED.
16. CONTRACTOR AND EACH SUBCONTRACTOR SHALL VERIFY ALL GRADES, LINES, LEVELS, AND DIMENSIONS AS INDICATED ON DRAWINGS, AND HE SHALL REPORT ERRORS TO THE ENGINEER BEFORE COMMENCING WORK. THE CONTRACTOR SHALL ESTABLISH BENCHMARKS IN AT LEAST TWO WIDELY SEPARATED PLACES, AND AS WORK PROGRESSES THE CONTRACTOR WILL MAINTAIN ADEQUATE HORIZONTAL AND VERTICAL CONTROL.
17. CONTRACTOR SHALL PROVIDE EROSION CONTROL BY SEEDING FOR ALL AREAS DISTURBED BY CONTRACTOR DURING THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL NOT DISTURB ANY AREA WITHOUT THE APPROVAL OF THE ENGINEER. EROSION CONTROL BY SEEDING SHALL CONFORM TO STANDARD SPECIFICATION 02930.
18. CONTRACTOR SHALL INSTALL EROSION AND SEDIMENT CONTROLS AS PER SPECIFICATIONS DURING CONSTRUCTION. SUCH CONTROLS SHALL BE PLACED AT LIMITS OF DISTURBED AREAS AND AT INTERMEDIATE LOCATIONS WHERE CONCENTRATED FLOW IS LIKELY.
19. STORMWATER THAT HAS COME INTO CONTACT WITH THE ASH WITHIN THE EXCAVATED POND IS TO BE CONSIDERED CONTACT STORMWATER. CONTRACTOR WILL CONTROL THE WATER ON SITE IN COMPLIANCE WITH THE TPDES PERMIT AND THE PROJECT WATER MANAGEMENT PLAN, THE LATEST EDITION.
20. THE CONTRACTOR IS REQUIRED TO ADHERE TO THE PROJECT SWPPP AND COORDINATE ANY CHANGES OR ADDITIONS WITH GCERG FOR APPROVAL.
21. CCR MATERIAL EXCAVATED FROM THE APS AND SSP SHALL BE HAULED TO THE SFL FOR DISPOSAL. CCR MATERIAL SHALL BE SUFFICIENTLY DRIED TO PASS A PAINT FILTER TEST PRIOR TO PLACEMENT AT THE SFL.
22. NO CCR MATERIAL WILL BE PERMITTED TO BE SPILLED FROM THE HAUL TRUCKS. ANY CCR MATERIAL SPILLED ON THE HAUL ROUTE MUST IMMEDIATELY BE CONTAINED AND REMOVED. THE CONTRACTOR SHALL FOLLOW CHARAH'S CCR SPILL RESPONSE PLAN AND COORDINATE ANY SPILL WITH CHARAH/GCERG AS REQUIRED.

ISSUE	DATE	DESCRIPTION

PROJECT MANAGER D. VOGT, P.E.

PROJECT NUMBER 10290148

STATE OF TEXAS · DAVID C. VOGT · 93905 · LICENSED · PROFESSIONAL ENGINEER · 6-7-21

Gibbons Creek Environmental Redevelopment Group, LLC

GIBBONS CREEK ELECTRIC STATION
Anderson, Texas

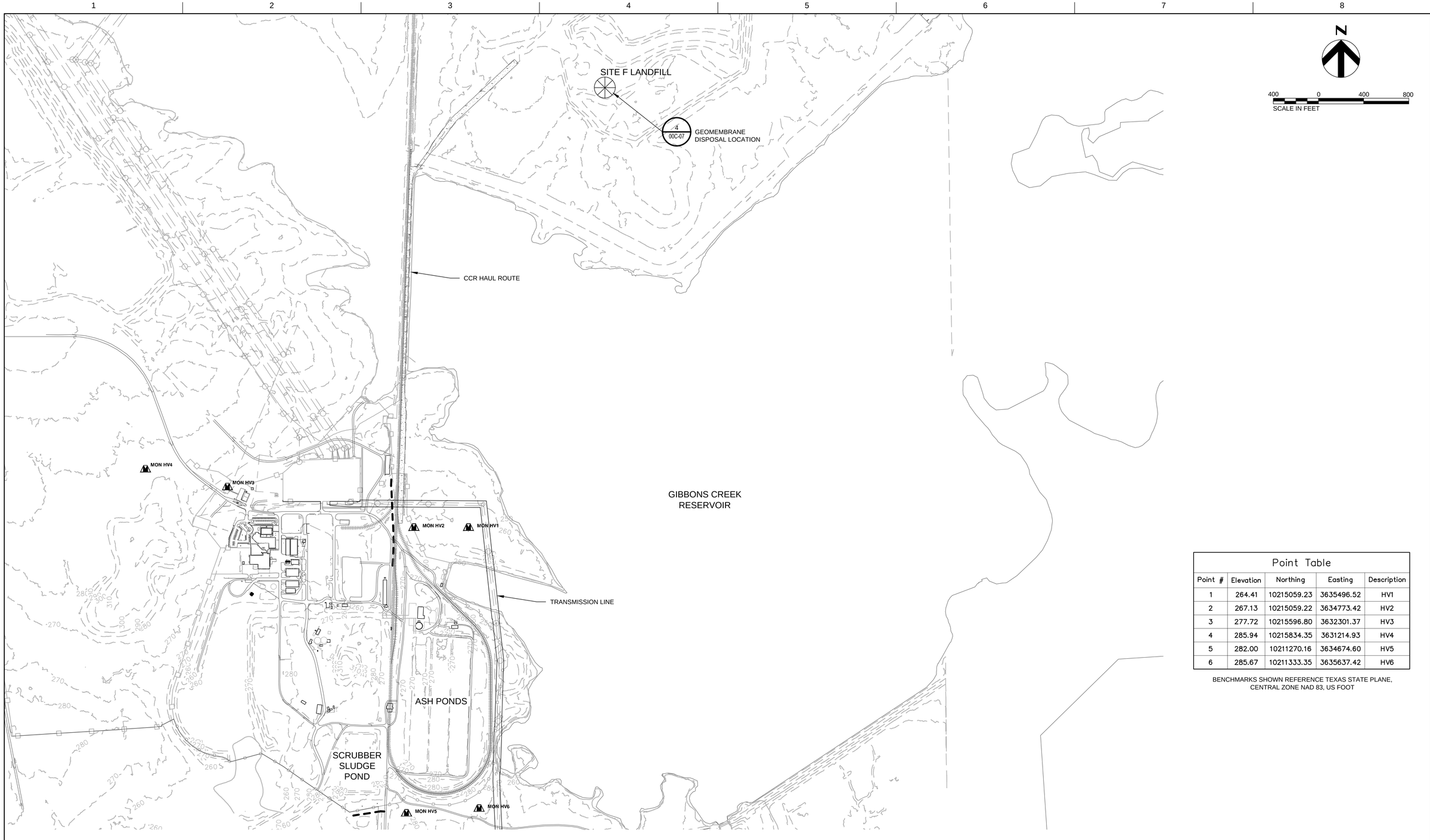
ABBREVIATIONS AND GENERAL NOTES

0 1" 2"

FILENAME 00G-02.dwg

SCALE

SHEET 00G-02



Point Table				
Point #	Elevation	Northing	Easting	Description
1	264.41	10215059.23	3635496.52	HV1
2	267.13	10215059.22	3634773.42	HV2
3	277.72	10215596.80	3632301.37	HV3
4	285.94	10215834.35	3631214.93	HV4
5	282.00	10211270.16	3634674.60	HV5
6	285.67	10211333.35	3635637.42	HV6

BENCHMARKS SHOWN REFERENCE TEXAS STATE PLANE, CENTRAL ZONE NAD 83, US FOOT

PROJECT MANAGER D. VOGT, P.E.

ISSUE	DATE	DESCRIPTION

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STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
7-21

Gibbons Creek Environmental Redevelopment Group, LLC

GIBBONS CREEK ELECTRIC STATION
Anderson, Texas

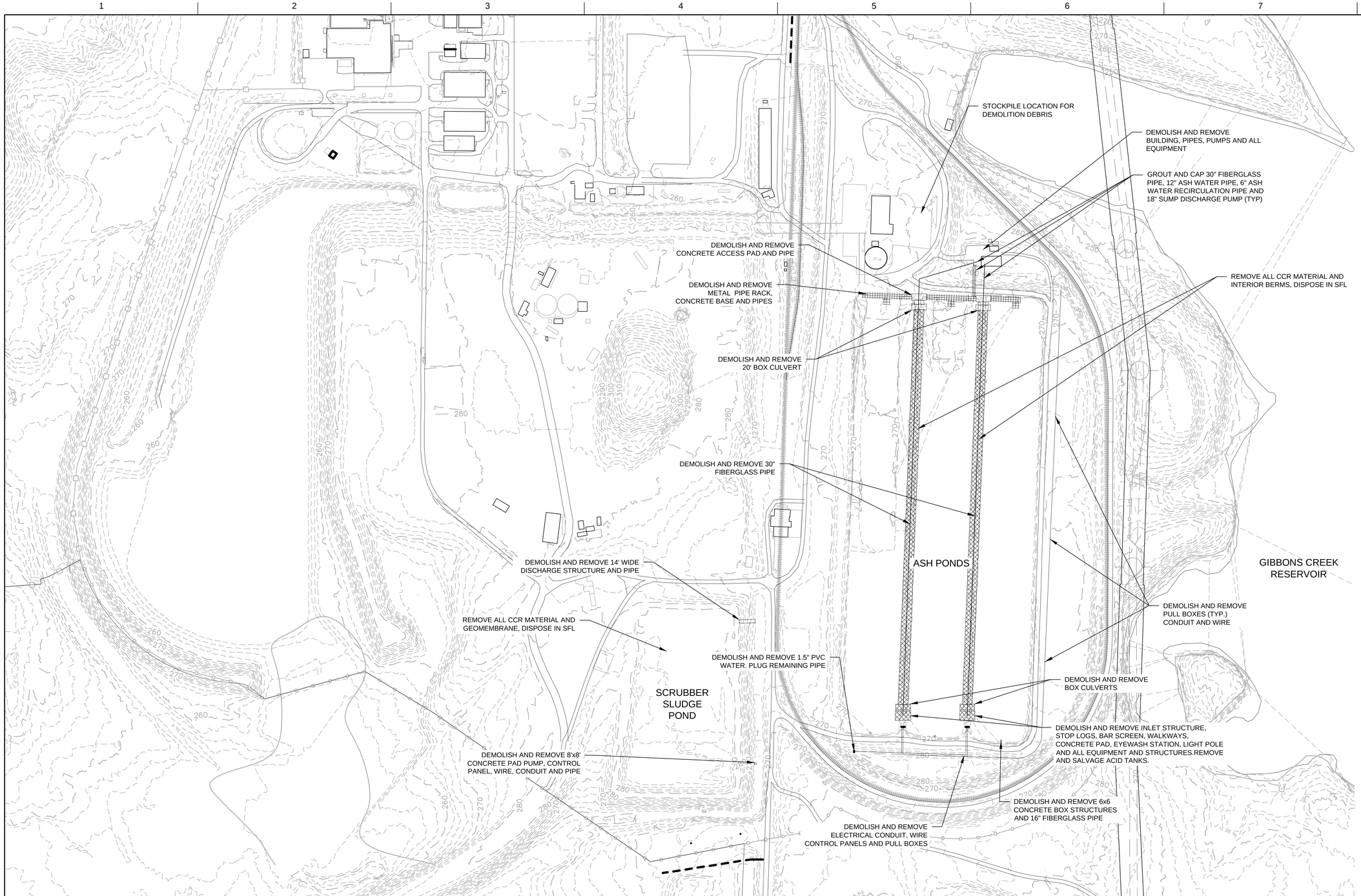
SITE LAYOUT

0 1" 2"

FILENAME 00C-01.dwg

SCALE

SHEET 00C-01



NOTES:

1. REMOVE ALL PIPEWORK IN SSP AND ASP A MINIMUM OF 50' BEYOND LIMITS OF POND. GROUT AND CAP REMAINING PIPE.
2. LOCATIONS OF PIPE, CONDUIT AND STRUCTURES ARE APPROXIMATE AND BASED ON LIMITED AS-BUILT INFORMATION, FIELD OBSERVATIONS AND INTERVIEWS WITH STAFF. ACTUAL FIELD CONDITIONS MAY VARY.
3. DRAINAGE PIPE UNDER BERM SEPARATING ASH POND "A" FROM ASH POND "B" MUST REMAIN UNTIL POND "A" IS DEWATERED AND EMPTY. DRAINAGE PIPE UNDER BERM SEPARATING ASH POND "B" FROM ASH POND "C" SHALL BE REMOVED AFTER DEWATERING OF ASH PONDS "B" AND "C" IS COMPLETE.

ISSUE	DATE	DESCRIPTION

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STATE OF TEXAS
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93905
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PROFESSIONAL ENGINEER
7-21

Gibbons Creek Environmental Redevelopment Group, LLC

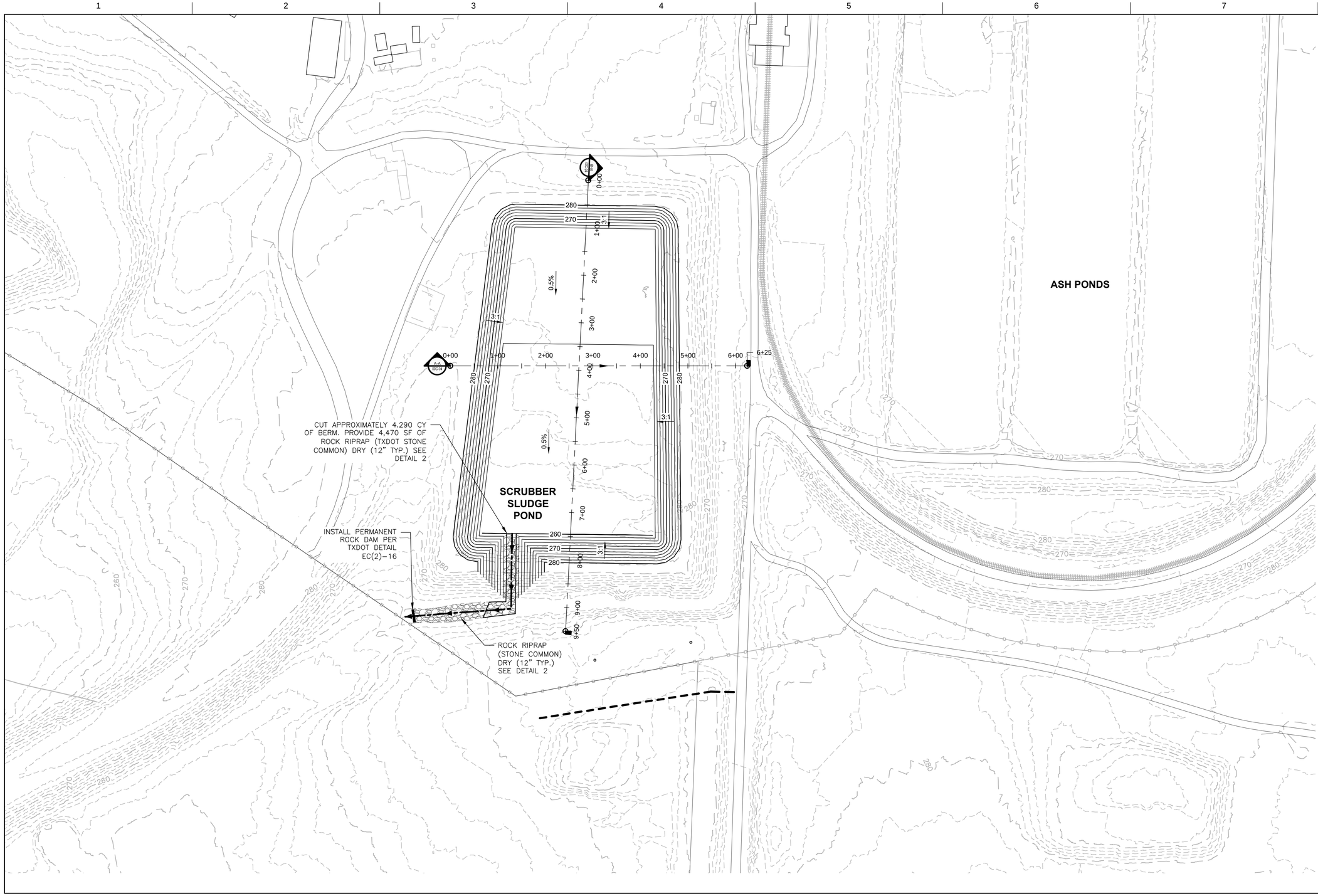
GIBBONS CREEK ELECTRIC STATION
Anderson, Texas

DEMOLITION PLAN

0 1" 2"

FILENAME 00C-02.dwg
SCALE 1"=200'

SHEET 00C-02



LEGEND

- EXISTING MINOR CONTOUR
- 320 EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- 320 PROPOSED MAJOR CONTOUR

NOTES:

1. CONTRACTOR SHALL DEWATER THE SSP IN ACCORDANCE WITH THE PROJECT WATER MANAGEMENT PLAN, LATEST REVISION AND AS DIRECTED BY CHARAH/GCERG.
2. CONTRACTOR TO REMOVE ALL CCR MATERIAL FROM THE POND AND HAUL IT TO THE SFL FOR DISPOSAL.
3. CCR MATERIAL SHALL BE REMOVED TO A VISUAL STANDARD AS DETERMINED BY THE PROJECT ENGINEER.
4. CONTRACTOR TO DETERMINE AND INSTALL APPROPRIATE STORMWATER POLLUTION PREVENTION BMPS IN ACCORDANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN.
5. ANY STORMWATER THAT CONTACTS CCR MATERIAL IN THE SSP MUST BE TREATED AS CONTACT WATER AND CONVEYED PER THE PROJECT WATER MANAGEMENT PLAN AND DISCHARGED IN COMPLIANCE WITH THE TPDES PERMIT.
6. GEOMEMBRANE MATERIAL SHALL BE SEGREGATED FROM THE CCR MATERIAL. GEOMEMBRANE MATERIAL TO BE STACKED AT SFL AT THE LOCATION INDICATED ON THE SITE LAYOUT FOR DISPOSAL.
7. CONTRACTOR TO NOTIFY ENGINEER AND OWNER A MINIMUM OF 48 HOURS IN ADVANCE FOR CCR REMOVAL CERTIFICATION INSPECTION AND/OR CONSTRUCTION PROGRESS SURVEYS.
8. PIPE, CONCRETE, AND OTHER CONSTRUCTION DEBRIS MUST BE HAULED OFFSITE AND DISPOSED IN AN AUTHORIZED MANNER.
9. CONTRACTOR TO INSTALL VEGETATION UPON COMPLETION OF THE CERTIFICATION IAW TXDOT SPECIFICATION 164. CONTRACTOR SHALL CONTINUE TO WATER AND MAINTAIN AREA UNTIL VEGETATION ESTABLISHED.

PROJECT MANAGER D. VOGT, P.E.

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Gibbons Creek Environmental Redevelopment Group, LLC

GIBBONS CREEK ELECTRIC STATION
Anderson, Texas

SCRUBBER SLUDGE POND PROPOSED FINAL CONTOURS

0 1" 2"

FILENAME 00C-03.dwg
SCALE 1"=100'

SHEET 00C-03

100 0 100 200
HORIZONTAL SCALE: 1" = 100'

20 0 20 40
VERTICAL SCALE: 1" = 20'

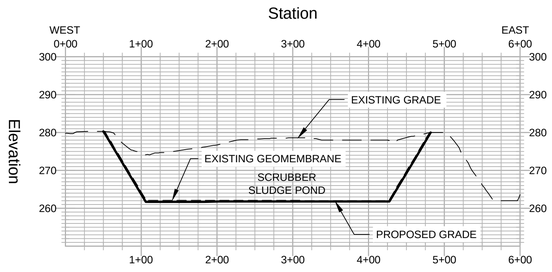
LEGEND

EXISTING GROUND SURFACE

PROPOSED GRADE

NOTES:

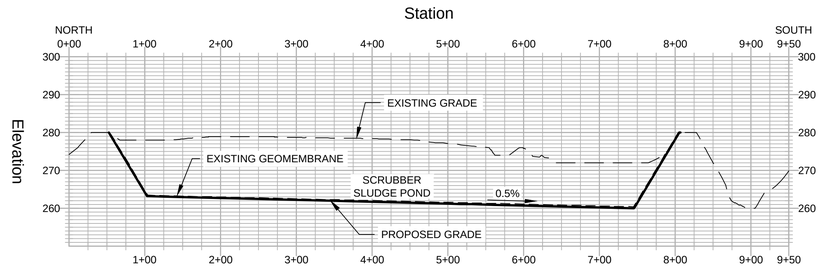
1. CCR ELEVATION FROM LIDAR SURVEY TAKEN JAN. 01 2021 BY LACY SURVEYING OF ARP, TEXAS.
2. CONTRACTOR WILL REMOVE ALL CCR MATERIAL TO A VISUAL STANDARD AS DETERMINED BY PROJECT ENGINEER.
3. PROPOSED POND FLOOR ELEVATIONS ARE APPROXIMATE BASED ON THE NARRATIVE DESCRIPTION OF THE POND IN THE 2016 HISTORY OF CONSTRUCTION REPORT BY ERM.



SECTION A-A

HORIZONTAL SCALE: 1" = 100' ; VERTICAL SCALE: 1" = 20'

A-A
00C-03



SECTION B-B

HORIZONTAL SCALE: 1" = 100' ; VERTICAL SCALE: 1" = 20'

B-B
00C-03

ISSUE	DATE	DESCRIPTION

PROJECT MANAGER D. VOGT, P.E.

PROJECT NUMBER 10290148

STATE OF TEXAS
DAVID C. VOGT
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PROFESSIONAL ENGINEER
6-7-21

Gibbons Creek Environmental Redevelopment Group, LLC

GIBBONS CREEK ELECTRIC STATION
Anderson, Texas

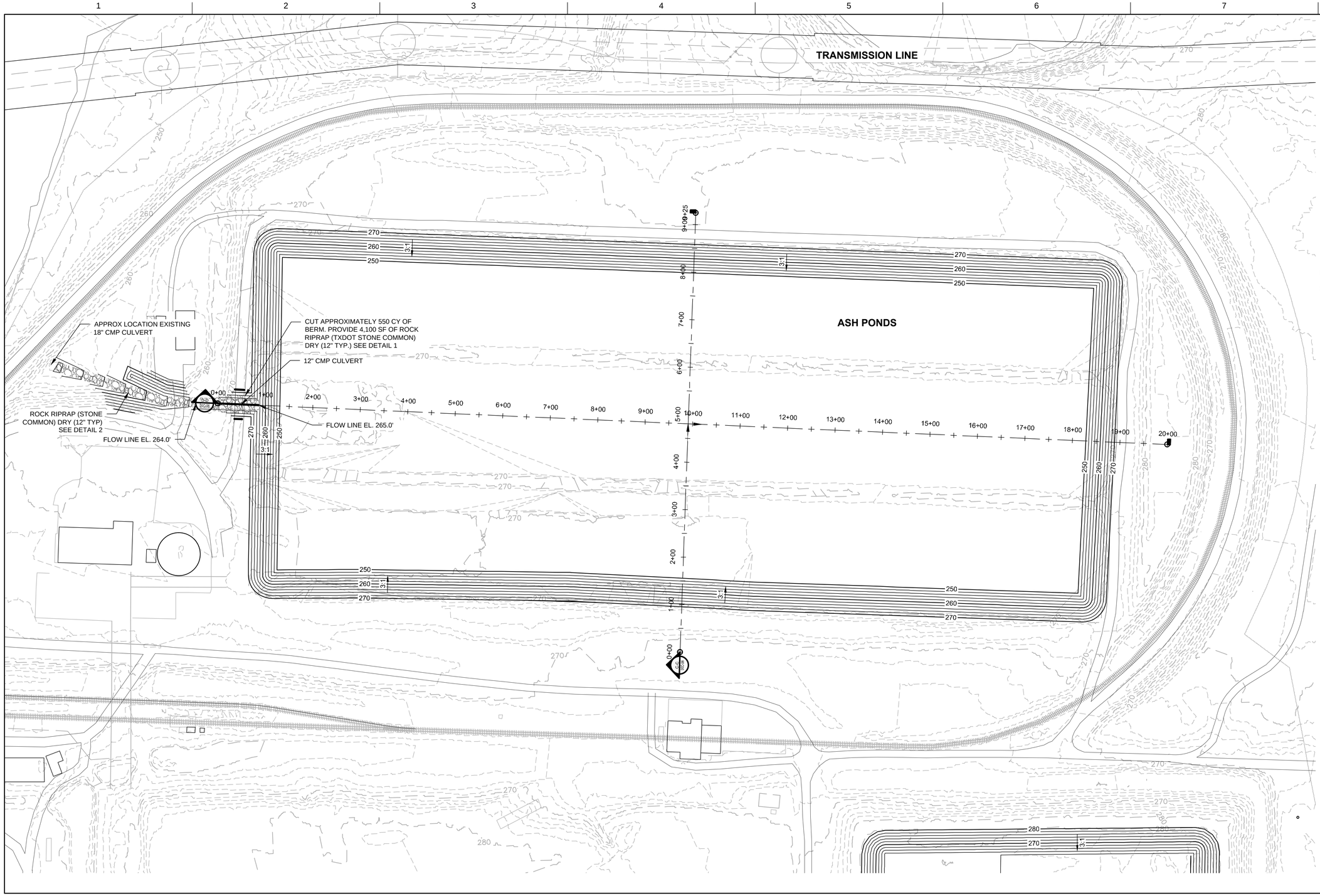
SCRUBBER SLUDGE POND CROSS SECTIONS

0 1" 2"

FILENAME 00C-04.dwg

SCALE AS SHOWN

SHEET 00C-04



LEGEND

- EXISTING MINOR CONTOUR
- 320 EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- 320 PROPOSED MAJOR CONTOUR

NOTES:

1. CONTRACTOR SHALL DEWATER THE APS IN ACCORDANCE WITH THE PROJECT WATER MANAGEMENT PLAN, LATEST REVISION AND AS DIRECTED BY CHARAH/GCERG.
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3. CCR MATERIAL SHALL BE REMOVED TO A VISUAL STANDARD AS DETERMINED BY THE PROJECT ENGINEER.
4. CONTRACTOR TO DETERMINE AND INSTALL APPROPRIATE STORMWATER POLLUTION PREVENTION BMPS IN ACCORDANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN. ANY STORMWATER THAT CONTACTS CCR MATERIAL MUST BE TREATED AS CONTACT WATER AND CONVEYED PER THE PROJECT WATER MANAGEMENT PLAN AND DISCHARGED IN COMPLIANCE WITH THE TPDES PERMIT.
5. CONTRACTOR TO NOTIFY ENGINEER AND OWNER A MINIMUM OF 48 HOURS IN ADVANCE FOR CCR REMOVAL CERTIFICATION INSPECTION AND/OR CONSTRUCTION PROGRESS SURVEYS.
6. PIPE, CONCRETE, AND OTHER DEMOLITION DEBRIS MUST BE HAULED OFFSITE AND DISPOSED IN AN AUTHORIZED MANNER.
7. CONTRACTOR TO INSTALL VEGETATION UPON COMPLETION OF THE CERTIFICATION IAW TXDOT SPECIFICATION 164. CONTRACTOR SHALL CONTINUE TO WATER AND MAINTAIN AREA UNTIL VEGETATION ESTABLISHED.

ISSUE	DATE	DESCRIPTION

PROJECT MANAGER D. VOGT, P.E.

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STATE OF TEXAS · DAVID C. VOGT · 93905 · LICENSED PROFESSIONAL ENGINEER · 5-5-21

Gibbons Creek Environmental Redevelopment Group, LLC

GIBBONS CREEK ELECTRIC STATION
Anderson, Texas

ASH PONDS
PROPOSED FINAL CONTOURS

0 1" 2"

FILENAME 00C-05.dwg

SCALE 1"=100'

SHEET 00C-05

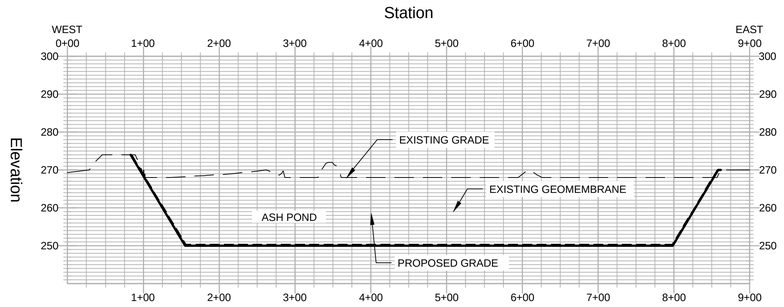
100 0 100 200
HORIZONTAL SCALE: 1" = 100'

20 0 20 40
VERTICAL SCALE: 1" = 20'

LEGEND

EXISTING GROUND SURFACE

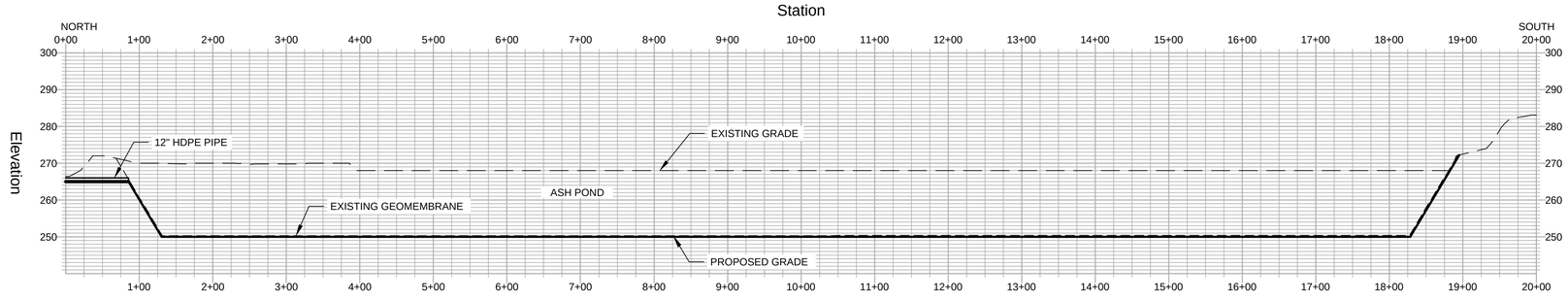
PROPOSED GRADE



SECTION C-C

HORIZONTAL SCALE: 1" = 100' ; VERTICAL SCALE: 1" = 20'

C-C
00C-05



SECTION D-D

HORIZONTAL SCALE: 1" = 100' ; VERTICAL SCALE: 1" = 20'

D-D
00C-05

NOTES:

1. CCR ELEVATION FROM LIDAR SURVEY TAKEN JAN. 01 2021 BY LACY SURVEYING OF ARP, TEXAS.
2. CONTRACTOR WILL REMOVE ALL CCR MATERIAL TO A VISUAL STANDARD AS DETERMINED BY PROJECT ENGINEER.
3. PROPOSED POND FLOOR ELEVATIONS ARE APPROXIMATE BASED ON THE 1979 "ENLARGED SITE PLAN SECTION NO. 10" DRAWING 11-C-204.

ISSUE	DATE	DESCRIPTION

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STATE OF TEXAS
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6-7-21

Gibbons Creek Environmental Redevelopment Group, LLC

GIBBONS CREEK ELECTRIC STATION
Anderson, Texas

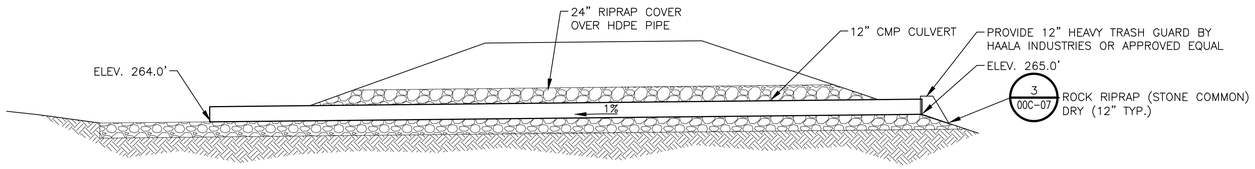
ASH PONDS CROSS SECTIONS

0 1" 2"

FILENAME 00C-06.dwg

SCALE AS SHOWN

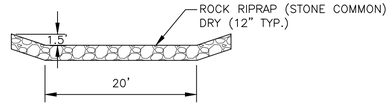
SHEET 00C-06



ASH POND FLOW LINE

NOT TO SCALE

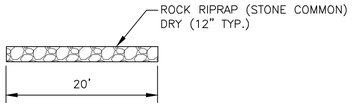
1
00C-05



RIPRAP CHANNEL

NOT TO SCALE

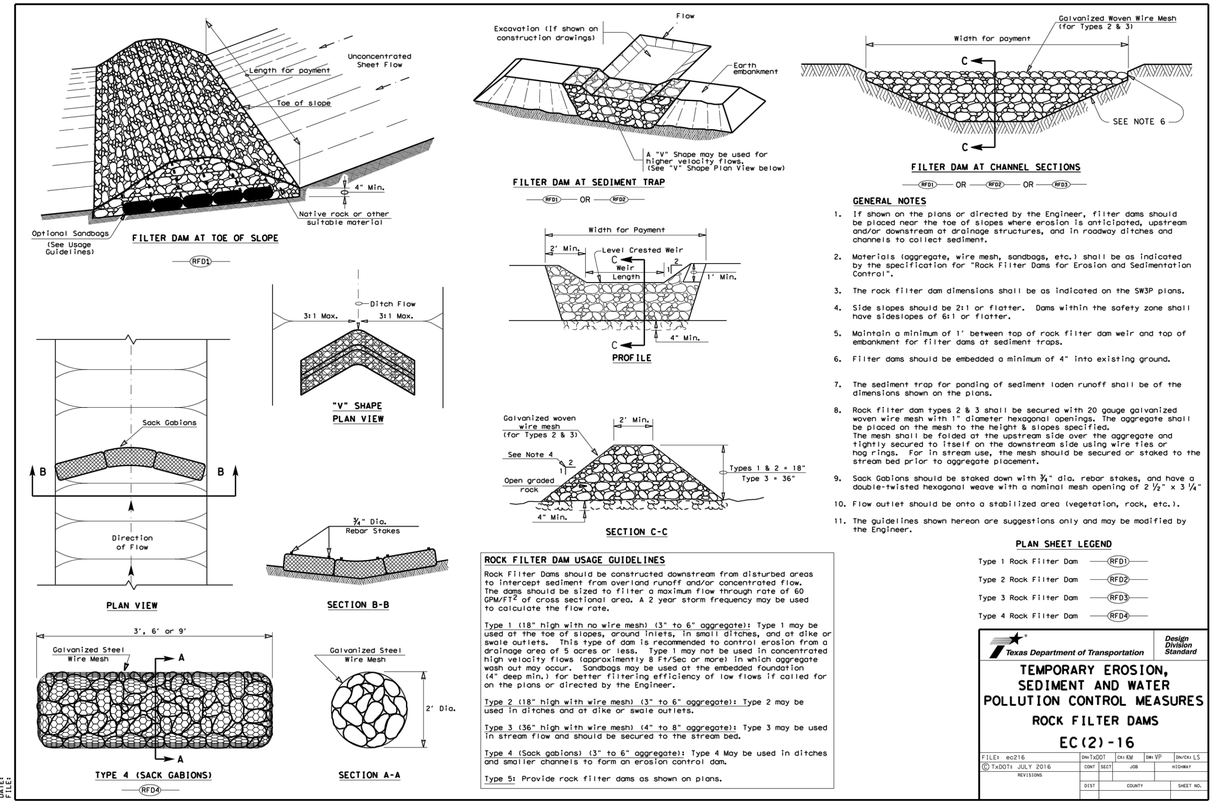
2
00C-03



RIPRAP CHANNEL

NOT TO SCALE

3
00C-03



GENERAL NOTES

1. If shown on the plans or directed by the Engineer, fliter dams should be placed near the toe of slopes where erosion is anticipated, upstream and/or downstream at drainage structures, and in roadway ditches and channels to collect sediment.
2. Materials (aggregate, wire mesh, sandbags, etc.) shall be as indicated by the specification for "Rock Filter Dams for Erosion and Sedimentation Control".
3. The rock filter dam dimensions shall be as indicated on the SW3P plans.
4. Side slopes should be 2:1 or flatter. Dams within the safety zone shall have sideslopes of 6:1 or flatter.
5. Maintain a minimum of 1' between top of rock filter dam weir and top of embankment for filter dams at sediment traps.
6. Filter dams should be embedded a minimum of 4" into existing ground.
7. The sediment trap for ponding of sediment laden runoff shall be of the dimensions shown on the plans.
8. Rock filter dam types 2 & 3 shall be secured with 20 gauge galvanized woven wire mesh with 1" diameter hexagonal openings. The aggregate shall be placed on the mesh to the height & slopes specified. The mesh shall be folded at the upstream side over the aggregate and tightly secured to itself on the downstream side using wire ties or hog rings. For in stream use, the mesh should be secured or staked to the stream bed prior to aggregate placement.
9. Sack Gabions should be staked down with ¾" dia. rebar stakes, and have a double-twisted hexagonal weave with a nominal mesh opening of 2 ½" x 3 ¼"
10. Flow outlet should be onto a stabilized area (vegetation, rock, etc.).
11. The guidelines shown hereon are suggestions only and may be modified by the Engineer.

ROCK FILTER DAM USAGE GUIDELINES

Rock Fliter Dams should be constructed downstream from disturbed areas to intercept sediment from overland runoff and/or concentrated flow. The dams should be sized to fliter a maximum flow through rate of 60 GPM/FT² of cross sectional area. A 2 year storm frequency may be used to calculate the flow rate.

Type 1 (18" high with no wire mesh) (3" to 6" aggregate): Type 1 may be used at the toe of slopes, around inlets, in small ditches, and at dike or swale outlets. This type of dam is recommended to control erosion from a drainage area of 5 acres or less. Type 1 may not be used in concentrated high velocity flows (approximently 8 Ft/Sec or more) in which aggregate wash out may occur. Sandbags may be used at the embedded foundation (4" deep min.) for better filtering efficiency of low flows if called for on the plans or directed by the Engineer.

Type 2 (18" high with wire mesh) (3" to 6" aggregate): Type 2 may be used in ditches and at dike or swale outlets.

Type 3 (36" high with wire mesh) (4" to 8" aggregate): Type 3 may be used in stream flow and should be secured to the stream bed.

Type 4 (Sack gabions) (3" to 6" aggregate): Type 4 May be used in ditches and smaller channels to form an erosion control dam.

Type 5: Provide rock filter dams as shown on plans.

PLAN SHEET LEGEND

Type 1 Rock Fliter Dam — RFD1
Type 2 Rock Fliter Dam — RFD2
Type 3 Rock Fliter Dam — RFD3
Type 4 Rock Fliter Dam — RFD4

Texas Department of Transportation — Design Division Standard

TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES

ROCK FILTER DAMS

EC(2)-16

FILE: ec216	DW: TxDOT	CK: KM	DW: VP	CK: LS
© TxDOT JULY 2016	CONT	SECT	JOB	HIGHWAY
REVISIONS	DIST	COUNTY		SHEET NO.

DATE:
FILE:

PROJECT MANAGER D. VOGT, P.E.

ISSUE	DATE	DESCRIPTION

PROJECT NUMBER 10290148

STATE OF TEXAS — DAVID C. VOGT — 93905 — LICENSED PROFESSIONAL ENGINEER — 8-27-21

Gibbons Creek Environmental Redevelopment Group, LLC

GIBBONS CREEK ELECTRIC STATION
Anderson, Texas

DETAILS

0 1" 2"

FILENAME 00C-07.dwg
SCALE AS SHOWN

SHEET
00C-07