Run-on and Run-off Control System Plan

SWEPCO – John W. Turk, Jr. Power Plant
Fulton, Arkansas
Permit No. 0311-S3N
AFIN: 29-00506

September 2021
Terracon Project No. 35217181

Prepared for:
SWEPCO
3711 Highway 3555
Fulton, AR 71838

Prepared by:
Terracon Consultants, Inc.
25809 Interstate 30 South
Bryant, Arkansas 72022
(501) 847-9292

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1.0 - Introduction

Federal Regulation Title 40, Part 257.81 requires the owner or operator of an existing or new CCR landfill or any lateral expansion of a CCR landfill must comply with the following:

1. Design, construct, operate, and maintain:
    a. A run-on control system to prevent flow onto the active portion of the CCR unit during the peak discharge from a 24-hour, 25-year storm.
    b. A run-off control system from the active portion of the CCR unit to collect and control at least the water volume resulting from a 24-hour, 25-year storm.
2. Run-off from the active portion of the CCR unit must be handled in accordance with the surface water requirements under §257.3-3
3. Prepare initial and periodic run-on and run-off control system plans for the CCR unit according to the following timeframes:
    a. For existing CCR landfills, the owner or operator of the CCR unit must prepare the initial run-on and run-off control system plan no later than October 17, 2016.
    b. The owner or operator of the CCR unit must prepare periodic run-on and run-off control system plans every five (5) years.
4. Obtain a certification from a qualified professional engineer stating that the initial and periodic run-on and run-off control system plans meet the requirements of this section.
5. Comply with the recordkeeping requirements specified in §257.105(g), the notification requirements specified in §257.106(g), and the internet requirements specified in §257.107(g).

This Run-on and Run-off Control System Plan presents the regulatory-required materials as noted above. It is prepared for the existing Southwestern Electric Power Company John W. Turk, Jr. Power Plant Class 3N Landfill, Fulton Arkansas. The design of run-on and run-off control measures were completed as part of a previous landfill permit modification:

- The ADEQ minor modification submitted in December 2015 and approved in April 2016 modified the final cover and perimeter drainage systems.

The landfill operations have installed and are currently maintaining many of the planned storm water control measures discussed in this plan. Attached **FIGURE 1** – *Ponds and Landfill Area*

Overall Plan in **Appendix 1** illustrates the general layout of the Class 3N Landfill and the Storm water Run-Off Pond.

2.0 - Run-on Controls

The run-on control system to prevent flow onto the active portion of the landfill during the peak discharge from a 24-hour, 25-year storm must consider site conditions around the landfill outside of the landfill footprint as well as site conditions within the landfill footprint.

2.1 Run-On Control Outside the Landfill Footprint

Perimeter drainage channels around the landfill provide controls to handle run-on from outside the landfill footprint. Because the area around the landfill is flat and below the landfill's perimeter berm, there is limited potential storm water drainage directed toward the landfill. The series of perimeter drainage channels were designed to handle the run-off from closed landfill areas as their primary purpose. These perimeter channels are constructed along with perimeter containment berms that define the limits of the landfill ash disposal area/footprint. The perimeter channels (see **FIGURE 2)**, direct flow to the east of the landfill to the storm water pond that discharges to the north into an unnamed tributary of Bridge Creek. The storm water then flows to Bridge Creek and into the Red River.

Surface water drainage calculations were performed to size the side-slope benches and down-slope channels incorporated in the final grade and the perimeter channel around the landfill footprint. Storm water drainage calculations used a 25-year, 24-hour storm event to generate storm water run-off from a vegetated final grade surface. The flow capacity of the different storm water systems is on **FIGURE 3**. The details of the different storm water systems can be found on **FIGURE 4**.

A perimeter drainage channel system handles storm water run-off flow from the down-slope channels and the final cover cap. The perimeter channels have a trapezoidal shape that was modeled to handle the 25-year, 24-hour storm event. The channels are sloped to drain into the storm water pond on the east side of the landfill.

2.2 Run-On Control Inside the Landfill Footprint

Within the landfill footprint, limited run-on controls are planned through a site-filling phasing plan that consists of five development and filling phases. This phasing plan results in constructing specific areas to accept ash waste while other areas are either un-constructed, being prepared for waste acceptance, have ash waste disposal and are in temporary closed condition, or are filled and in final closed condition. All phases incorporate perimeter containment berms that are either permanent berms or temporary internal berms to control run-on. Run-on controls are planned specific to each phase condition as detailed below and as presented on attached Figures 5 through 9 in **Appendix 1** - *Phases 1, 2, 3, 4 & 5 Active Ash Filling Sequence*.

2.2.1 Cell 1 Inactive

Cell 1 is currently inactive. Although final grades have not been reached in Cell 1, filling has been discontinued due to a small working area on the top of Cell 1. Filling has been moved to Cell 2. Run-on controls within the landfill are provided by the cell's perimeter berms. The exterior storm water is directed into the perimeter graded drainage channels on the north and south side of Cell 1 and is then directed to the east of Cell 1 into the storm water pond (see **FIGURE 5**).

2.2.2 Phase 2 Active Filling

Cell 2 was constructed to the west of Cell 1. Cell 2 was approved for waste acceptance in January 2019 and ties into Cell 1's west side divider berm. Cell 2 active filling began on the eastern portion of Cell 2 and is progressing to the west towards future Cell 3. Run-on controls within the landfill are provided by the cells' perimeter berms. The exterior storm water is directed into the perimeter graded drainage channels on the north and south side of Cells 1 and 2 and directed to the east of Cell 1 into the storm water pond. After construction of Cell 2, a partial final cover over Cell 1 was constructed. The final cover includes the previously mentioned storm water system that conveys the storm water from the cover to the east and into the storm water pond (see **FIGURE 6**). A ClosureTurf final cover test pad area was constructed on the south side of Cell 1 and an intermediate clay cover was constructed on the east side of Cell 1 (see **FIGURE 6A**).

2.2.3 Phase 3 Active Filling

Future Cell 3 will be constructed to the west of Cell 2. Cell 3 will tie into Cell 2's west side divider berm. Cell 3 active filling will begin in the eastern portion of Cell 3 and will progress to the west towards future Cell 4. Run-on controls within the landfills will be provided by the cell's perimeter berms. The exterior storm water is directed into the perimeter graded drainage channels on the north and south side of Cells 1, 2, and 3 and will then be directed to the east of Cell 1 into the storm water pond. After construction of Cell 3, final cover Cell 1 and a portion of Cell 2 will be constructed. This cover will consist of the previously mentioned storm water system that will convey the storm water from the cover to the east and into the storm water pond (see **FIGURE 7**).

2.2.4 Phase 4 Active Filling

Future Cell 4 will be constructed to the west of Cell 3. Cell 4 will tie into Cell 3's west side divider berm. Cell 4 active filling will begin in the eastern portion of Cell 4 and will progress to the west towards future Cell 5. Run-on controls within the landfills will be provided by the cell's perimeter berms. The exterior storm water is directed into the perimeter graded drainage channels on the north and south side of Cells 1, 2, 3, and 4 and will then be directed to the east of Cell 1 into the storm water pond. After construction of Cell 4, final cover over Cell 2 and a portion of Cell 3 will be constructed. This cover will consist of the previously mentioned storm water system that will convey the storm water from the cover to the east and into the storm water pond (see **FIGURE 8**).

2.2.5 Phase 5 Active Filling

Future Cell 5 will be constructed to the west of Cell 4. Cell 5 will tie into Cell 4's west side divider berm. Cell 5 active filling will begin in the eastern portion of Cell 5 and will progress to the west side of Cell 5. Run-on controls within the landfills will be provided by the cell's perimeter berms. The exterior storm water is directed into the perimeter graded drainage channels on the north and south side of Cells 1, 2, 3, 4, and 5 and will then be directed to the east of Cell 1 into the storm water pond. The storm water on the west side of Cell 5 will drain to the south and then to the east towards the storm water pond on the east side of Cell 1. After construction of Cell 5, final cover over Cell 3 and a portion of Cell 4 will be constructed. This cover will consist of the previously mentioned storm water system that will convey the storm water from the cover to the east and into the storm water pond (see **FIGURE 9**).

3.0 - Run-off Controls

The run-off control system to prevent flow (contact water) from leaving the active portion of the landfill during the peak discharge from a 24-hour, 25-year storm considers site conditions within active filling areas. Run-off control consists of the following aspects:

- Perimeter containment berms
- Leachate collection system
- Leachate treatment system
- Ash filling operation

Perimeter containment berms that are either permanent or temporary are provided around the active filling area to control run-on as discussed above, but also serve to control run-off. The landfill includes a collection system for contact water (referred to as leachate collection system) that encompasses a drainage layer and perforated collection pipe which are part of the landfill base liner system. Collected contact water is managed by a collection system, the leachate collection pipes, conveyance pipes, leachate treatment ponds, and final regulated discharge outlet. Ash filling operation is managed such that contact water is directed to the collection system features. The run-off control features are presented on the attached, **FIGURE 4**. The following further describes the run-off control components.

3.1 Perimeter Containment Berms

The perimeter containment berms are constructed around the active-phase filling areas and are either permanent or temporary features. These berms serve to contain the limits of active ash filling and provide a barrier and collection point for run-off control. The leachate collection system and ash filling operation use the berms as part of their control systems as described below.

3.2 Leachate Collection System

The leachate collection system consists of 2-ft. thick drainage layer over the landfill floor and 1-ft. thick layer over the slopes. The leachate collection system is connected to 12-inch-diameter perforated collection pipes. The composite liner system and leachate collection pipe network slope to low points located at the containment berms where the collected run-off flows into conveyance pipes for the leachate treatment system. The leachate collection pipe network spacing is a function of the base grade liner slope, drainage layer permeability, and flow distance to collection pipes. The Hydraulic Evaluation of Landfill Performance (HELP) model was used in evaluating the pipe spacing with respect to contact water percolation to the leachate collection drainage layer, the minimum liner slope and a selected pipe spacing or flow distance to a collection pipe.

Design of the chimney drains considered a 25-year, 24-hour storm event and a drainage area of approximately 4 acres. This resulted in a controlled discharge of storm water into the chimney drains and down to the leachate collection pipes. Where possible, the chimney drains are positioned above the perforated leachate collection pipe.

3.3 Conveyance Piping to Treatment Ponds

The leachate collection systems drain toward the western and northern perimeter of the landfill area where the pipes penetrate the landfill liner and continue to drain toward leachate treatment ponds. The pipes outside the limits of the landfill liner are contained within an outer containment pipe. The leachate pipes exiting the landfill are 12-inch-diameter HDPE SDR 17 pipe with an outer containment pipe being 18-inch-diameter HDPE SDR 17 pipe. The conveyance pipe slopes at minimum 0.25% slope or greater toward the leachate treatment ponds. Manholes are provided at pipe connections and bends.

3.4 Leachate Treatment Pond

The leachate treatment pond is on the north side of the landfill. The pond was conservatively sized to handle the run-off from the landfill base on a 100-year, 24-hour storm for when two cells are open. Hydrologic run-off analysis using Hydrocad V8.50 software program estimated a run-off rate and volume for this condition. The pond is approximately 17 feet deep to provide storage of the total storm event run-off with more than a 2-ft free board. The leachate is then pumped to the Process Water Pond for treatment and use by the facility.

3.5 Ash Filling Operation

The ash filling operation must be performed in a manner to provide run-off control within the disposal cell such that the contact surface water reaches the leachate collection system. This involves grading the placed ash in a controlled manner to direct contact surface water flow toward the leachate collection structures in the interior portions of the disposal area. Ash grading must be directed away from the outboard slopes unless a drainage channel at the toe of the ash slopes is utilized such that leachate is directed away from the perimeter berms and into the leachate collection structures. On the outboard slopes the contact surface water must be provided a collection point at the bottom of the slope where the drainage layer is placed up the inboard side of the containment berm; in these situations the ash placement must be kept back away from the drainage layer such that the leachate will drain toward the collection structures. In situations where the outboard slope is ready for closure, a drainage channel must be provided at the top level of the placed closure cap to collect contact surface water and direct that flow to a location where it can enter the leachate collection system.

4.0 - Plan Review and Changes in Facility Configuration

The landfill Owner and/or Operator will review and evaluate this Plan every five (5) years from initial plan preparation and when there are changes in the facility design, construction, operation, or maintenance that materially affect the facility's potential for run-on and run-off control: Amendments to the Plan made to address changes of this nature are referred to as technical or major amendments, and must be certified by a P.E. Non-technical amendments can be performed by the facility owner and/or operator.

Technical and administrative amendments to the Plan will be documented on the Plan Review Log. Owner/Operator will make the necessary revisions to the Plan as soon as possible, but no later than six months after the change occurs. The Plan must be implemented as soon as possible following a technical amendment, but no later than six months from the date of the amendment. The Designated Person is responsible for initiating and coordinating revisions to the SPCC Plan.

Scheduled reviews and Plan amendments will be recorded in the Plan Review Log provided in **Appendix 2**. The log will be completed even if no amendment is made to the Plan as a result of the review.

5.0 - Professional Engineer Certification

The original plan and all reviews and amended plans must obtain certification from a qualified professional engineer stating that the initial and periodic run-on and run-off control system plans meet the requirements 40 CFR 257. This certification in no way relieves the owner or operator of the facility of his/her duty to fully implement this Plan. The Profession Engineer Certification page is provided in **Appendix 3**.

APPENDIX 1: FIGURES

NOTE:
ALL CONTOURS SHOWN ARE TO FINISH GRADE OF ROADS, DITCHES, BERMS, PROTECTIVE SOIL COVER AND CAP

NOTE:
ALL ELEVATIONS SHOWN ARE IN NAVD 1988 DATUM
NAVD 1988 DATUM ELEV. 301.00 = PLANT DATUM ELEV. 101.00
ALL COORDINATES, ELEVATIONS AND DIMENSIONS ARE EXPRESSED IN FEET OR DECIMAL OF A FOOT UNLESS OTHERWISE NOTED

THIS DRAWING ISSUED FOR THE LANDFILL RUN-ON AND RUN-OFF CONTROL SYSTEM PLAN.

DATE	NO.	DESCRIPTION	APPD.

REVISIONS

RUN-ON RUN-OFF CONTROL SYSTEM PLAN

SWEPCO
JOHN W. TURK JR.
POWER PLANT UNIT 1
FULTON ARKANSAS

PONDS AND LANDFILL AREA OVERALL PLAN

DWG. NO. FIGURE 1 REV: 0

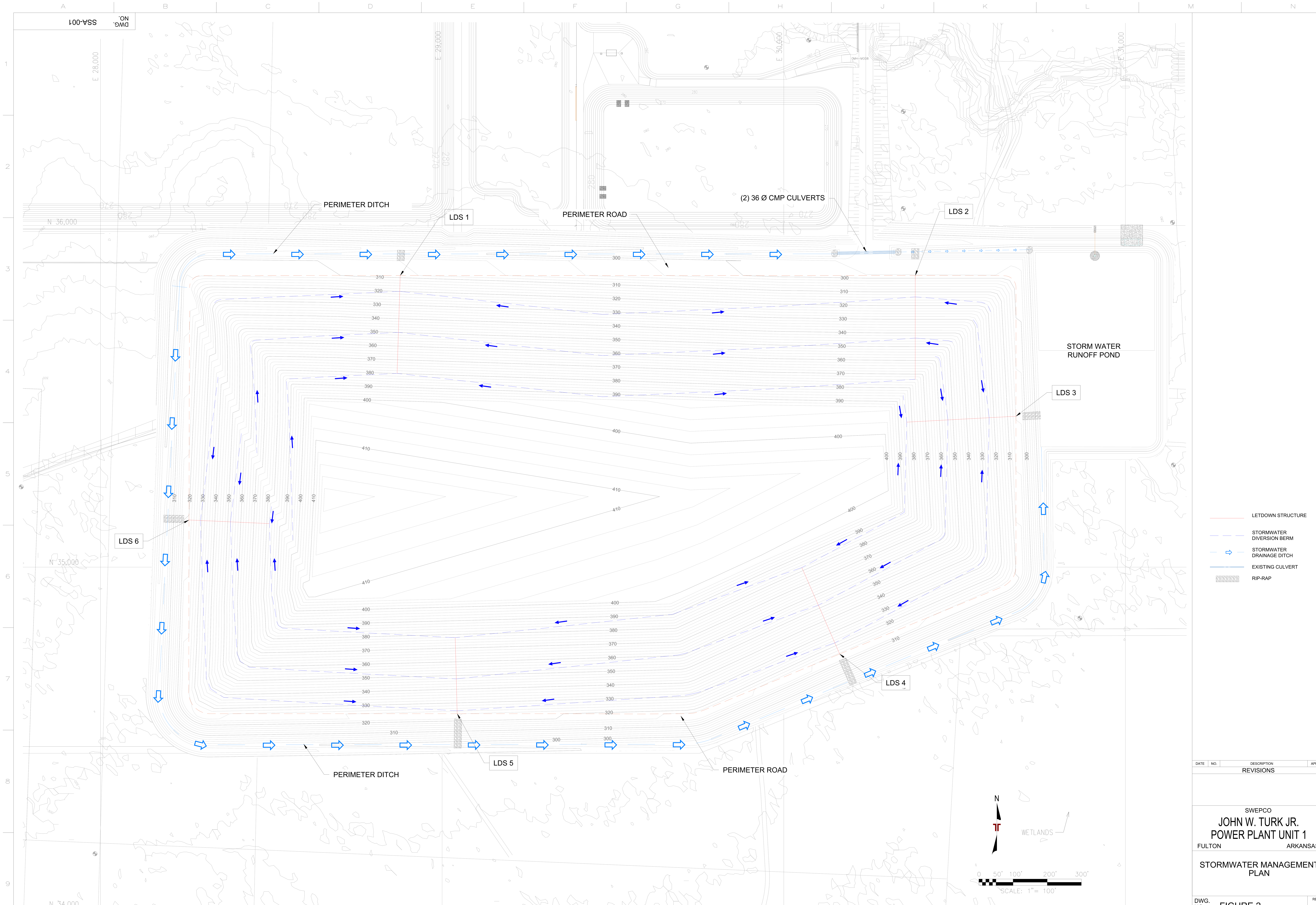
PROJECT NUMBER: 216/002/35217181

Terracon
Consulting Engineers and Scientists
25809 I-30 SOUTH BRYANT, AR 72022
PH. (501) 847-9292 FAX. (501) 847-9210

SCALE: SEE BARSCALE — CIVIL
DR: TLB/DAP
CH: TLB
ENGR: DCM
PROJ ENGR: DCM
DATE: 9/13/2021
APPROVED BY

AEP SERVICE CORP.
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215

SYSTEM DATE- DD-MMM-YYYY
SYSTEM TIME- HOUR:MINUTE



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ALL CONTOURS SHOWN ARE TO FINISH GRADE OF ROADS, DITCHES, BERMS, PROTECTIVE SOIL COVER AND CAP

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DATE	NO.	DESCRIPTION	APPD.

REVISIONS

SWEPCO
JOHN W. TURK JR.
POWER PLANT UNIT 1
FULTON ARKANSAS

STORMWATER MANAGEMENT PLAN

DWG. NO. FIGURE 2
REV:

PROJECT NUMBER: 216/002/35217181

Terracon
Consulting Engineers and Scientists
25809 I-30 SOUTH BRYANT, AR 72022
PH. (501) 847-9292 FAX. (501) 847-9210

SCALE: SEE BARSCALE
CIVIL
DR: TLB/DAP
CH: TLB
ENGR: DCM
PROJ ENGR: DCM
DATE: 9/13/2021
APPROVED BY

AEP AMERICAN ELECTRIC POWER
AEP SERVICE CORP.
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215

SYSTEM DATE– DD–MMM–YYYY
SYSTEM TIME– HOUR:MINUTE

DWG. NO. SSA-001

SUBBASIN DATA SUPPORT TABLE					
Element ID	Area	Average	Design	Total	Peak
		Slope	Storm	Runoff	Runoff
			Event		
	(acres)	(%)		(inches)	(cfs)
LD1-SUB01	1.32	6.0	24HR/25YR	3.14	12.85
LD1-SUB02	3.79	6.0	24HR/25YR	3.09	31.68
LD1-SUB03	0.82	25.0	24HR/25YR	3.14	8.30
LD1-SUB04	0.53	25.0	24HR/25YR	3.14	5.32
LD1-SUB05	0.68	25.0	24HR/25YR	3.14	6.86
LD1-SUB06	0.63	25.0	24HR/25YR	3.14	6.33
LD1-SUB07	1.04	25.0	24HR/25YR	3.14	10.48
LD1-SUB08	1.66	25.0	24HR/25YR	3.14	16.53
LD1-SUB09	1.37	25.0	24HR/25YR	3.14	13.74
LD1-SUB10	1.65	25.0	24HR/25YR	3.14	16.43
LD2-SUB01	3.72	5.8	24HR/25YR	3.09	31.13
LD2-SUB02	0.83	5.8	24HR/25YR	3.14	8.22
LD2-SUB03	0.45	25.0	24HR/25YR	3.14	4.50
LD2-SUB04	0.30	25.0	24HR/25YR	3.13	3.04
LD2-SUB05	1.68	25.0	24HR/25YR	3.14	16.75
LD2-SUB06	0.90	25.0	24HR/25YR	3.14	9.12
LD2-SUB07	1.69	25.0	24HR/25YR	3.14	16.80
LD2-SUB08	1.19	25.0	24HR/25YR	3.14	11.93
LD3-SUB01	0.34	25.0	24HR/25YR	3.13	3.40
LD3-SUB02	0.07	25.0	24HR/25YR	3.13	0.67
LD3-SUB03	0.85	25.0	24HR/25YR	3.14	8.56
LD3-SUB04	0.37	25.0	24HR/25YR	3.14	3.74
LD3-SUB05	1.08	25.0	24HR/25YR	3.14	10.87
LD3-SUB06	0.67	25.0	24HR/25YR	3.14	6.78
LD4-SUB01	2.22	3.7	24HR/25YR	3.11	19.71
LD4-SUB02	1.37	3.7	24HR/25YR	3.13	13.01
LD4-SUB03	0.48	25.0	24HR/25YR	3.14	4.86
LD4-SUB04	0.40	25.0	24HR/25YR	3.14	4.06
LD4-SUB05	1.14	25.0	24HR/25YR	3.14	11.47
LD4-SUB06	1.04	25.0	24HR/25YR	3.14	10.48
LD4-SUB07	1.20	25.0	24HR/25YR	3.14	12.10
LD4-SUB08	1.25	25.0	24HR/25YR	3.14	12.54
LD5-SUB01	2.42	3.4	24HR/25YR	3.10	21.00
LD5-SUB02	4.33	3.4	24HR/25YR	3.06	32.10
LD5-SUB03	1.13	25.0	24HR/25YR	3.17	11.36
LD5-SUB04	1.09	25.0	24HR/25YR	3.14	11.02
LD5-SUB05	1.61	25.0	24HR/25YR	3.14	16.10
LD5-SUB06	1.80	25.0	24HR/25YR	3.14	17.90
LD5-SUB07	1.48	25.0	24HR/25YR	3.14	14.76
LD5-SUB08	1.65	25.0	24HR/25YR	3.14	16.47
LD6-SUB01	0.02	25.0	24HR/25YR	3.13	0.16
LD6-SUB02	0.44	25.0	24HR/25YR	3.14	4.42
LD6-SUB03	0.41	25.0	24HR/25YR	3.14	4.11
LD6-SUB04	0.96	25.0	24HR/25YR	3.14	9.65
LD6-SUB05	0.69	25.0	24HR/25YR	3.14	6.97
LD6-SUB06	0.94	25.0	24HR/25YR	3.14	9.49
Sub-47	0.78	25.0	24HR/25YR	3.14	7.90
Sub-48	2.46	25.0	24HR/25YR	3.14	24.06
Sub-49	1.34	25.0	24HR/25YR	3.14	13.42
Sub-50	0.63	1.0	24HR/25YR	4.47	6.21
Sub-51	1.06	1.0	24HR/25YR	4.46	9.81
Sub-52	0.64	1.0	24HR/25YR	4.47	6.34
Sub-53	1.50	25.0	24HR/25YR	3.14	15.03
Sub-54	0.76	25.0	24HR/25YR	3.14	7.70
Sub-55	0.05	1.0	24HR/25YR	4.46	0.51
Sub-56	0.24	1.0	24HR/25YR	4.47	2.51
Sub-57	0.52	25.0	24HR/25YR	3.14	5.26
Sub-58	0.23	1.0	24HR/25YR	4.47	2.41
Sub-59	0.53	25.0	24HR/25YR	3.14	5.35
Sub-60	0.32	1.0	24HR/25YR	4.47	3.34
Sub-61	0.99	25.0	24HR/25YR	3.14	10.00
Sub-62	0.42	1.0	24HR/25YR	4.47	4.27
Sub-63	0.67	25.0	24HR/25YR	3.14	6.81
Sub-64	0.25	1.0	24HR/25YR	4.47	2.58
Sub-65	0.90	25.0	24HR/25YR	3.14	9.04
Sub-66	0.19	1.0	24HR/25YR	4.47	2.00
Sub-67	0.82	25.0	24HR/25YR	3.14	8.28
Sub-68	0.20	1.0	24HR/25YR	4.47	2.05
TOTALS	71.20	-	-	-	682.65

CHANNEL DATA SUPPORT TABLE											
Element	Length	Inlet	Outlet	Total	Average	Channel	Channel	Channel	Peak	Max	Design
ID		Invert	Invert	Drop	Slope	Type	Height	Width	Flow	Flow	Flow
		Elevation	Elevation							Velocity	Capacity
	(ft)	(ft)	(ft)	(ft)	(%)		(ft)	(ft)	(cfs)	(ft/sec)	(cfs)
DB1-1a	353.58	395.86	388.78	7.08	2.0000	Trapezoidal	2.000	12.10	8.19	3.61	75.22
DB1-1b	112.43	388.78	386.54	2.24	1.9900	Trapezoidal	2.000	12.10	8.17	3.55	75.03
DB1-1c	2.48	386.54	386.49	0.05	2.0200	Trapezoidal	2.000	12.10	8.17	3.55	75.48
DB1-1d	2.49	386.49	386.44	0.05	2.0100	Trapezoidal	2.000	12.10	8.17	3.54	75.32
DB1-1e	2.04	386.44	386.40	0.04	1.9600	Trapezoidal	2.000	12.10	8.16	3.51	74.43
DB1-1f	2.93	386.40	386.34	0.06	2.0500	Trapezoidal	2.000	12.10	8.16	3.57	76.07
DB1-1g	150.83	386.34	383.35	2.99	1.9800	Trapezoidal	2.000	12.10	8.12	3.54	74.84
DB1-1h	166.97	383.35	379.98	3.37	2.0200	Trapezoidal	2.000	12.10	25.37	4.72	75.52
DB1-2b	269.71	385.01	379.98	5.03	1.8600	Trapezoidal	2.000	12.10	38.14	5.09	72.59
DB1-3a	225.71	365.16	360.62	4.54	2.0100	Trapezoidal	2.000	12.10	6.31	3.37	75.36
DB1-3b	87.64	360.62	358.88	1.74	1.9900	Trapezoidal	2.000	12.10	6.28	3.32	74.96
DB1-3c	6.88	358.88	358.75	0.13	1.8900	Trapezoidal	2.000	12.10	6.28	3.24	73.07
DB1-3d	6.72	358.75	358.62	0.13	1.9300	Trapezoidal	2.000	12.10	6.28	3.27	73.93
DB1-3e	5.23	358.62	358.51	0.11	2.1000	Trapezoidal	2.000	12.10	6.28	3.38	77.09
DB1-3f	7.88	358.51	358.36	0.15	1.9000	Trapezoidal	2.000	12.10	6.28	3.25	73.34
DB1-3g	246.59	358.36	353.45	4.91	1.9900	Trapezoidal	2.000	12.10	6.21	3.34	75.01
DB1-3h	171.15	353.45	350.00	3.45	2.0200	Trapezoidal	2.000	12.10	16.00	4.21	75.47
DB1-4b	258.34	355.01	350.00	5.01	1.9400	Trapezoidal	2.000	12.10	16.44	4.21	74.02
DB1-5a	10.45	329.47	329.16	0.31	2.9700	Trapezoidal	2.000	12.10	13.72	4.67	91.55
DB1-5b	12.63	329.16	328.94	0.22	1.7400	Trapezoidal	2.000	12.10	13.71	3.83	70.16
DB1-5c	309.29	328.94	324.13	4.81	1.5600	Trapezoidal	2.000	12.10	13.56	3.72	66.29
DB1-5d	213.77	324.13	320.00	4.13	1.9300	Trapezoidal	2.000	12.10	13.50	3.99	73.88
DB1-6b	251.53	324.94	320.00	4.94	1.9600	Trapezoidal	2.000	12.10	16.34	4.22	74.49
DB2-1b	300.80	385.54	379.93	5.61	1.8700	Trapezoidal	2.000	12.10	35.14	4.99	72.59
DB2-3b	299.21	355.43	349.83	5.60	1.8700	Trapezoidal	2.000	12.10	16.62	4.18	72.72
DB2-4b	165.73	357.16	353.75	3.41	2.0600	Trapezoidal	2.000	12.10	9.07	3.71	76.25
DB2-4c	201.37	353.75	349.83	3.92	1.9500	Trapezoidal	2.000	12.10	9.04	3.63	74.16
DB2-5b	306.26	325.43	319.72	5.71	1.8600	Trapezoidal	2.000	12.10	16.67	4.17	72.58
DB2-6b	224.40	328.95	324.46	4.49	2.0000	Trapezoidal	2.000	12.10	11.88	3.93	75.19
DB2-6c	237.50	324.46	319.72	4.74	2.0000	Trapezoidal	2.000	12.10	11.79	3.91	75.09
DB3-1b	36.17	384.54	383.82	0.72	1.9900	Trapezoidal	2.000	12.10	0.67	1.90	75.00
DB3-2b	130.37	386.43	383.82	2.61	2.0000	Trapezoidal	2.000	12.10	3.39	2.87	75.21
DB3-3b	89.41	357.14	355.36	1.78	1.9900	Trapezoidal	2.000	12.10	3.74	2.93	75.00
DB3-3c	85.96	355.36	353.63	1.73	2.0100	Trapezoidal	2.000	12.10	3.73	2.93	75.41
DB3-4c	135.93	356.35	353.63	2.72	2.0000	Trapezoidal	2.000	12.10	8.53	3.61	75.19
DB3-5b	180.59	328.88	325.28	3.60	1.9900	Trapezoidal	2.000	12.10	6.76	3.41	75.05
DB3-5c	93.25	325.28	323.41	1.87	2.0100	Trapezoidal	2.000	12.10	6.75	3.39	75.27
DB3-6b	13.83	331.54	331.26	0.28	2.0200	Trapezoidal	2.000	12.10	10.86	3.82	75.63
DB3-6c	239.01	331.26	326.47	4.79	2.0000	Trapezoidal	2.000	12.10	10.81	3.85	75.25
DB3-6d	153.64	326.47	323.41	3.06	1.9900	Trapezoidal	2.000	12.10	10.77	3.81	75.02
DB4-1b	168.82	385.74	382.36	3.38	2.0000	Trapezoidal	2.000	12.10	16.96	4.28	75.21
DB4-2a	168.32	390.35	386.98	3.37	2.0000	Trapezoidal	2.000	12.10	19.58	4.42	75.21
DB4-2b	230.66	386.98	382.36	4.62	2.0000	Trapezoidal	2.000	12.10	24.17	4.67	75.23
DB4-3b	236.89	380.37	355.63	24.74	10.4400	Trapezoidal	2.000	12.10	10.45	7.05	171.78
DB4-3c	166.08	355.63	352.30	3.33	2.0100	Trapezoidal	2.000	12.10	10.41	3.80	75.27
DB4-4b	170.50	360.55	357.14	3.41	2.0000	Trapezoidal	2.000	12.10	11.42	3.89	75.17
DB4-4c	241.95	357.14	352.30	4.84	2.0000	Trapezoidal	2.000	12.10	11.37	3.89	75.18
DB4-5b	307.73	331.61	325.46	6.15	2.0000	Trapezoidal	2.000	12.10	12.44	3.99	75.15
DB4-5c	163.06	325.46	322.20	3.26	2.0000	Trapezoidal	2.000	12.10	12.38	3.95	75.16
DB4-6b	189.46	330.71	326.92	3.79	2.0000	Trapezoidal	2.000	12.10	12.05	3.94	75.18
DB4-6c	235.87	326.92	322.20	4.72	2.0000	Trapezoidal	2.000	12.10	11.98	3.94	75.19
DB5-1a	363.76	390.36	383.08	7.28	2.0000	Trapezoidal	2.000	12.10	31.77	5.04	75.20
DB5-1b	273.25	383.08	377.81	5.27	1.9300	Trapezoidal	2.000	12.10	41.84	5.27	73.82
DB5-2b	156.44	387.74	384.60	3.14	2.0100	Trapezoidal	2.000	12.10	20.88	4.50	75.31
DB5-2c	349.98	384.60	377.81	6.79	1.9400	Trapezoidal	2.000	12.10	31.69	4.95	74.04
DB5-3b	361.52	360.57	353.34	7.23	2.0000	Trapezoidal	2.000	12.10	17.69	4.36	75.17
DB5-3c	291.80	353.34	347.50	5.84	2.0000	Trapezoidal	2.000	12.10	17.52	4.33	75.20
DB5-4b	252.83	359.64	354.57	5.07	2.0100	Trapezoidal	2.000	12.10	16.01	4.24	75.27
DB5-4c	353.44	354.57	347.50	7.07	2.0000	Trapezoidal	2.000	12.10	15.78	4.23	75.18
DB5-6b	337.17	337.94	331.20	6.74	2.0000	Trapezoidal	2.000	12.10	14.62	4.15	75.15
DB5-6c	347.05	331.20	324.26	6.94	2.0000	Trapezoidal	2.000	12.10	14.41	4.14	75.17
DB6-1b	80.87	387.81	386.19	1.62	2.0000	Trapezoidal	2.000	12.10	4.42	3.05	75.23
DB6-1c	208.01	386.19	382.01	4.18	2.0100	Trapezoidal	2.000	12.10	4.38	3.08	75.35
DB6-2a	27.53	383.02	382.47	0.55	2.0000	Trapezoidal	2.000	12.10	0.16	1.33	75.13
DB6-2b	23.21	382.47	382.01	0.46	1.9800	Trapezoidal	2.000	12.10	0.16	1.33	74.83
DB6-3b	143.55	359.80	356.89	2.91	2.0300	Trapezoidal	2.000	12.10	9.62	3.74	75.68
DB6-3c	243.23	356.89	352.06	4.83	1.9900	Trapezoidal	2.000	12.10	9.57	3.72	74.91
DB6-4a	189.61	357.27	353.49	3.78	1.9900	Trapezoidal	2.000	12.10	4.10	3.01	75.05
DB6-4b	71.27	353.49	352.06	1.43	2.0100	Trapezoidal	2.000	12.10	4.08	2.99	75.29
DB6-5b	178.88	338.17	334.59	3.58	2.0000	Trapezoidal	2.000	12.10	9.45	3.71	75.20
DB6-5c	283.57	334.59	328.92	5.67	2.0000	Trapezoidal	2.000	12.10	9.37	3.71	75.16
DB6-6a	331.79	337.38	330.75	6.63	2.0000	Trapezoidal	2.000	12.10	6.89	3.46	75.14
DB6-6b	91.59	330.75	328.92	1.83	2.0000	Trapezoidal	2.000	12.10	6.88	3.40	75.14
LD1-01	120.18	379.98	350.00	29.98	24.9500	Trapezoidal	2.000	16.00	63.44	13.60	465.95
LD1-02	120.12	350.00	320.00	30.00	24.9800	Trapezoidal	2.000	16.00	95.77	15.27	466.22
LD1-03	46.50	320.00	308.42	11.58	24.9000	Trapezoidal	2.000	16.00	125.31	16.43	465.55
LD2-01	120.42	379.93	349.83	30.10	25.0000	Trapezoidal	2.000	16.00	45.96	12.39	466.42
LD2-02	120.46	349.83	319.72	30.11	25.0000	Trapezoidal	2.000	16.00	71.49	14.08	466.42
LD2-03	83.92	313.60	298.00	15.60	18.5900	Trapezoidal	2.000	16.00	99.86	13.88	402.22
LD3-01	120.87	383.82	353.63	30.19	24.9800	Trapezoidal	2.000	16.00	4.05	5.65	466.24
LD3-02	120.88	353.63	323.41	30.22	25.0000	Trapezoidal	2.000	16.00	16.31	9.03	466.45
LD3-03	78.47	323.41	303.85	19.56	24.9300	Trapezoidal	2.000	16.00	33.72	11.28	465.77
LD4-01	120.09	382.36	352.30	30.06	25.0300	Trapezoidal	2.000	16.00	40.88	11.98	466.75
LD4-02	120.59	352.30	322.20	30.10	24.9600	Trapezoidal	2.000	16.00	62.62	13.54	466.09
LD4-03	35.65	322.20	313.32	8.88	24.9100	Trapezoidal	2.000	16.00	86.97	14.85	465.60
LD5-01	120.66	377.81	347.50	30.31	25.1200	Trapezoidal	2.000	16.00	73.38	14.20	467.57
LD5-02	93.00	347.50	324.26	23.24	24.9900	Trapezoidal	2.000	16.00	106.69	15.73	466.35
LD5-03	9.08	324.26	322.10	2.16	23.7900	Trapezoidal	2.000	16.00	136.84	16.55	455.01
LD6-01	114.03	382.01	352.06	29.95	26.2700	Trapezoidal	2.000	16.00	4.54	5.98	478.11
LD6-02	88.53	352.06	328.92	23.14	26.1400	Trapezoidal	2.000	16.00	18.18	9.48	476.95
LD6-03	33.56	328.92	320.16	8.76	26.1000	Trapezoidal	2.000	16.00	34.41	11.54	476.63
Link-151	57.15	290.49	290.10	0.39	0.6800	Trapezoidal	4.000	28.00	148.68	4.98	413.33
Link-153	372.01	330.94	327.21	3.73	1.0000	Trapezoidal	2.000	12.10	16.14	3.31	53.23
Link-154	294.65	327.21	324.26	2.95	1.0000	Trapezoidal	2.000	12.10	15.91	3.27	53.19
Link-178	339.89	290.10	288.00	2.10	0.6200	Trapezoidal	4.000	28.00	225.38	5.37	393.29
Link-184	142.58	308.30	305.20	3.10	2.1700	Trapezoidal	4.000	28.00	15.44	1.99	262.32
Link-185	556.36	305.20	302.00	3.20	0.5800	Trapezoidal	4.000	28.00	20.48	1.80	134.92
Link-186	1279.29	302.00	291.97	10.03	0.7800	Trapezoidal	4.000	28.00	131.25	3.09	157.52
Link-187	236.43	302.40	301.60	0.80	0.3400	Trapezoidal	4.000	28.00	48.35	2.47	232.84
Link-188	476.64	294.17	291.70	2.47	0.5200	Trapezoidal	4.000	28.00	181.84	4.07	288.15
Link-189	712.49	297.90	294.17	3.73	0.5200	Trapezoidal	4.000	28.00	172.51	4.16	289.62
Link-190	724.38	301.60	297.90	3.70	0.5100	Trapezoidal	4.000	28.00	46.25	3.04	286.08
Link-191	603.53	291.70	288.39	3.31	0.5500	Trapezoidal	6.000	40.00	247.01	4.51	779.85
Link-192	436.06	288.39	286.00	2.39	0.5500	Trapezoidal	8.000	52.00	251.46	4.49	1578.90

CULVERT DATA SUPPORT TABLE										
Element	Length	Inlet	Outlet	Average	Pipe	Pipe	Pipe	Peak	Max	Design
ID		Invert	Invert	Slope	Shape	Diameter	Width	Flow	Flow	Flow
		Elevation	Elevation			or Height			Velocity	Capacity
	(ft)	(ft)	(ft)	(%)		(inches)	(inches)	(cfs)	(ft/sec)	(cfs)
CULVERT-001	169.29	291.97	290.49	0.8700	CIRCULAR	36.000	36.00	146.27	12.99	162.15

DATE	NO.	DESCRIPTION	APPD.

REVISIONS

SWEPCO

JOHN W. TURK JR.
POWER PLANT UNIT 1

FULTON ARKANSAS

STORMWATER DATA SUPPORT SHEET

DWG. NO. FIGURE 3 REV:

SCALE: SEE BARSCALE CIVIL

DR: TLB/DAP
CH: TLB
ENGR: DCM
PROJ ENGR: DCM
DATE: 9/13/2021

APPROVED BY

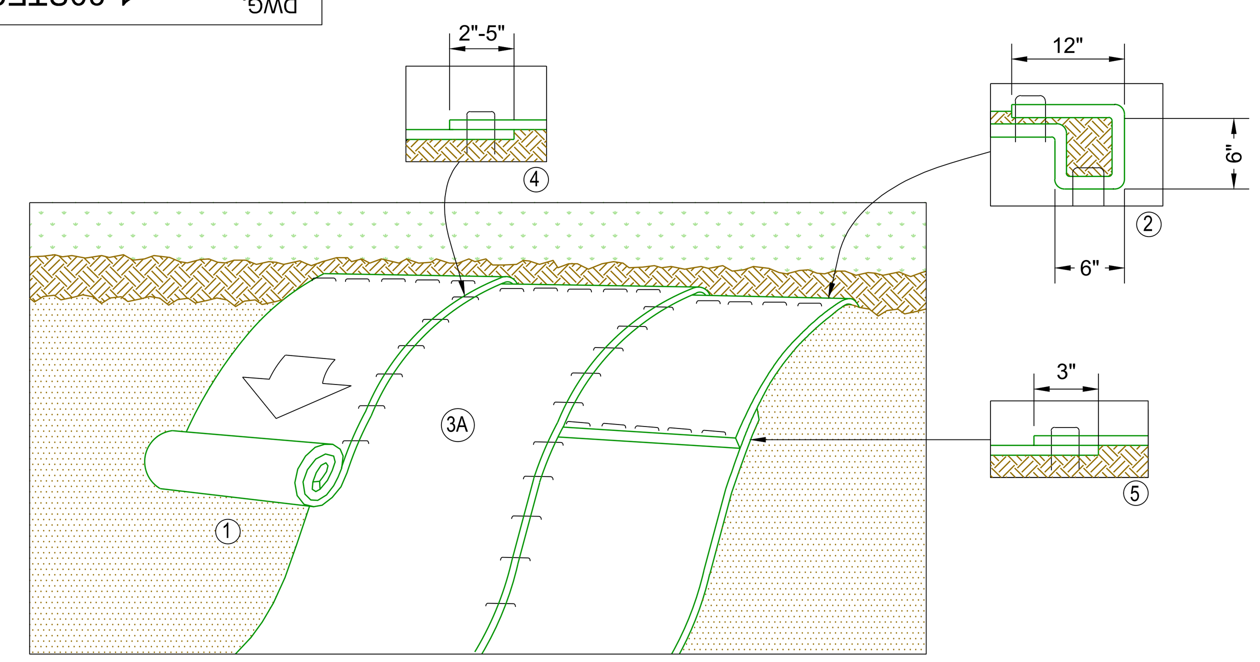
PROJECT NUMBER: 216/002/35217181

Terracon
Consulting Engineers and Scientists
25809 I-30 SOUTH BRYANT, AR 72022
PH. (501) 847-9292 FAX. (501) 847-9210

AEP AMERICAN ELECTRIC POWER
AEP SERVICE CORP.
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215

IGS0207

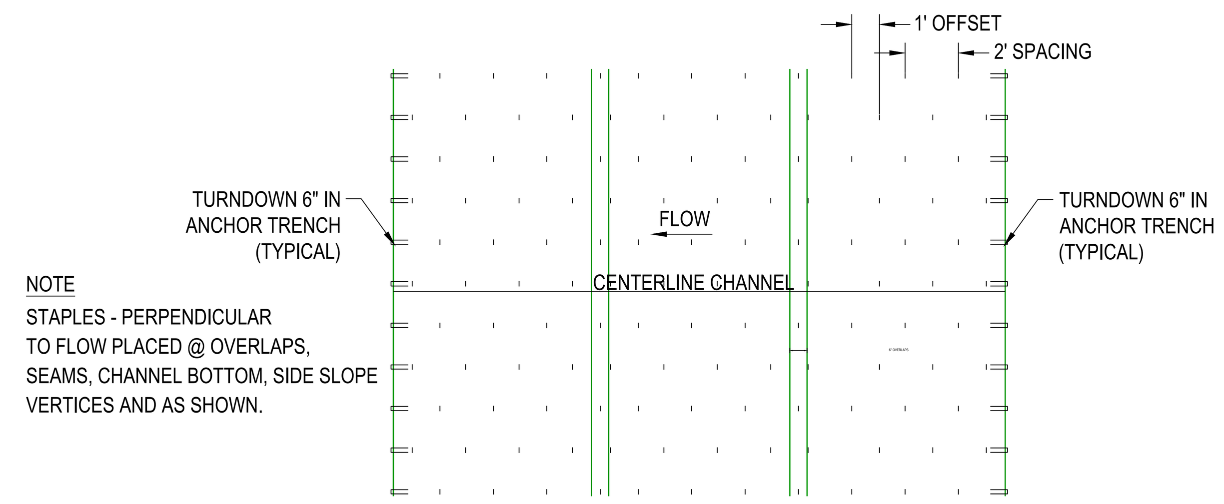
SYSTEM DATE– DD–MMM–YYYY
SYSTEM TIME– HOUR:MINUTE



SLOPE INSTALLATION OF ROLLED EROSION CONTROL PRODUCT (R.E.C.P.)

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS DOWN THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/ STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 6" OVERLAP. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 6" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. IN LOOSE SOIL CONDITIONS THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.



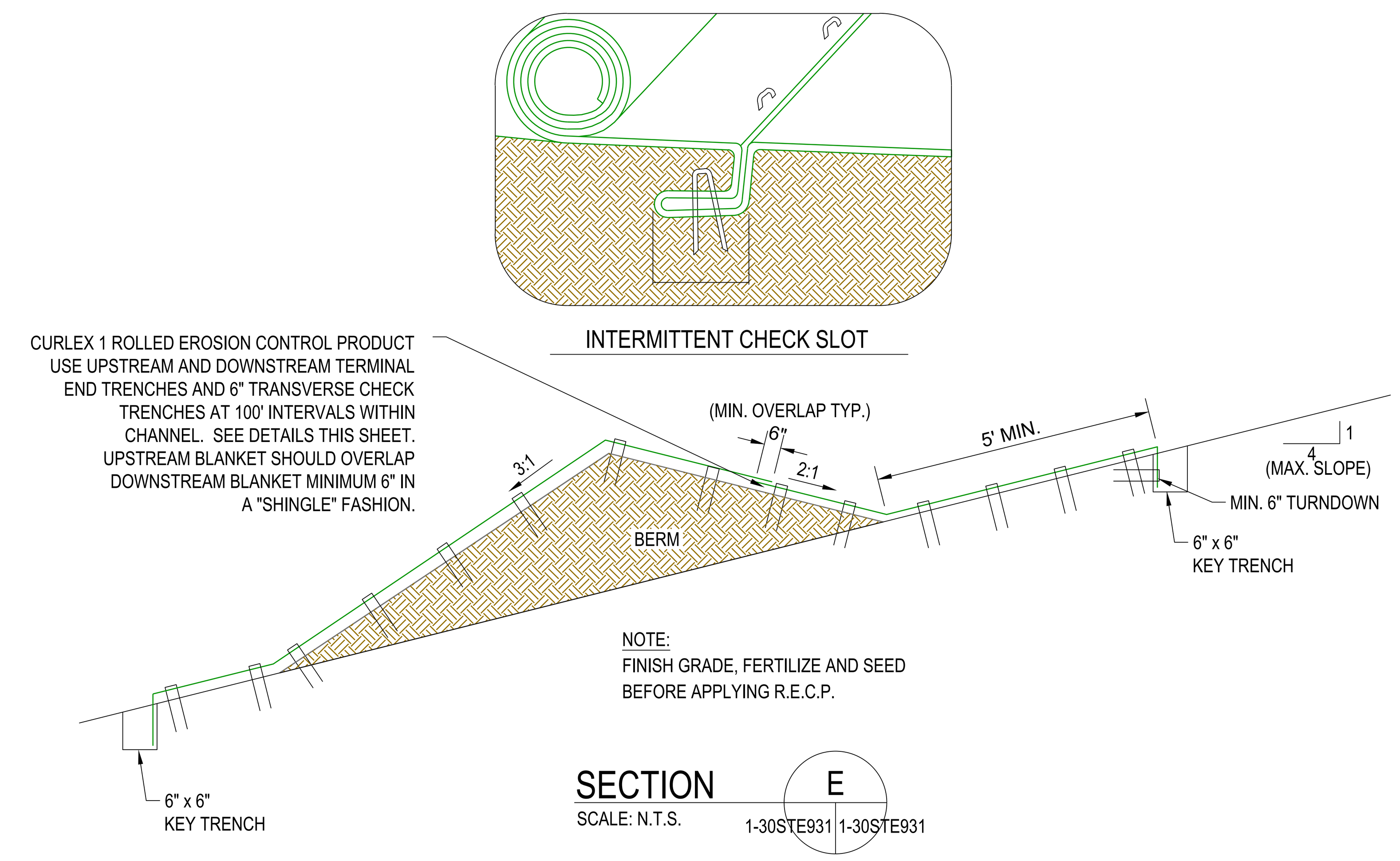
NOTE
STAPLES - PERPENDICULAR TO FLOW PLACED @ OVERLAPS, SEAMS, CHANNEL BOTTOM, SIDE SLOPE VERTICES AND AS SHOWN.

STAPLE PATTERN PLACEMENT - R.E.C.P.

SECTION D
SCALE: N.T.S.
1-30STE931 | 1-30STE931

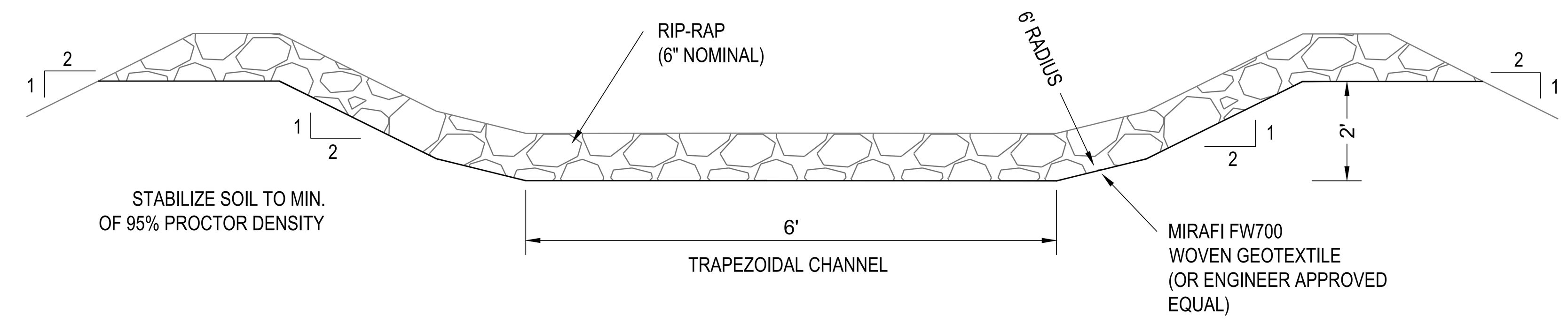
ROLLED EROSION CONTROL PRODUCT (R.E.C.P.)

DETAIL 7
SCALE: N.T.S.
1-30STE930 | 1-30STE931



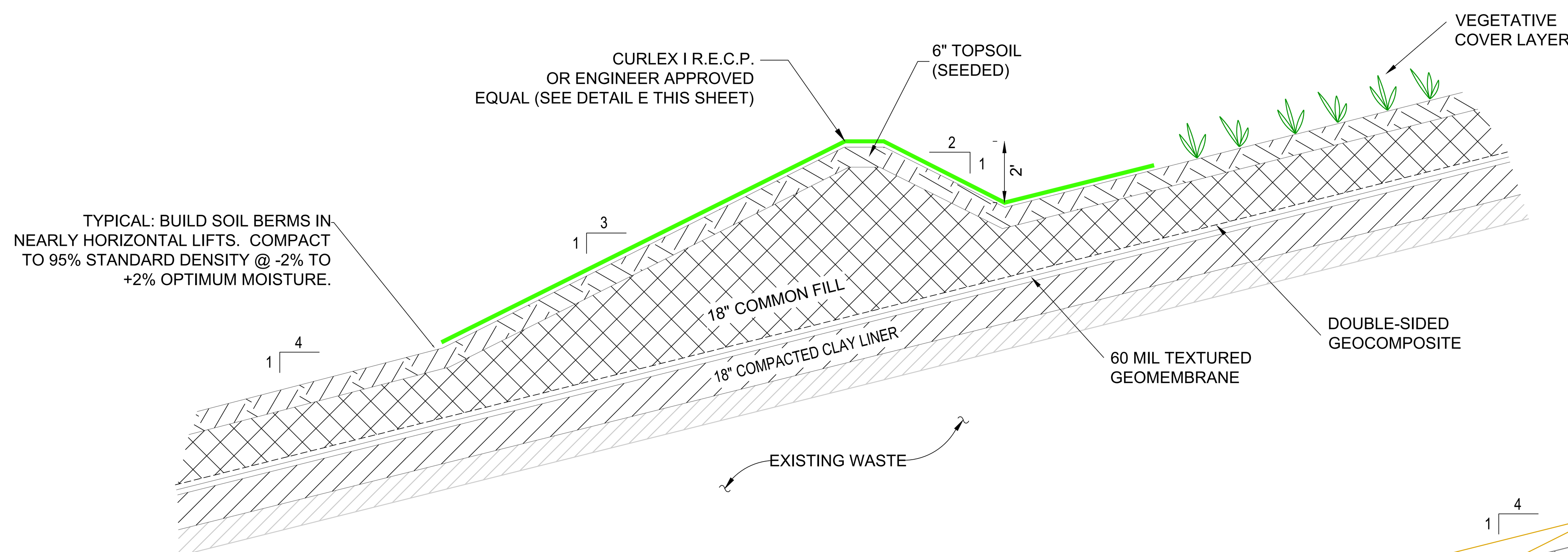
NOTE:
FINISH GRADE, FERTILIZE AND SEED BEFORE APPLYING R.E.C.P.

SECTION E
SCALE: N.T.S.
1-30STE931 | 1-30STE931



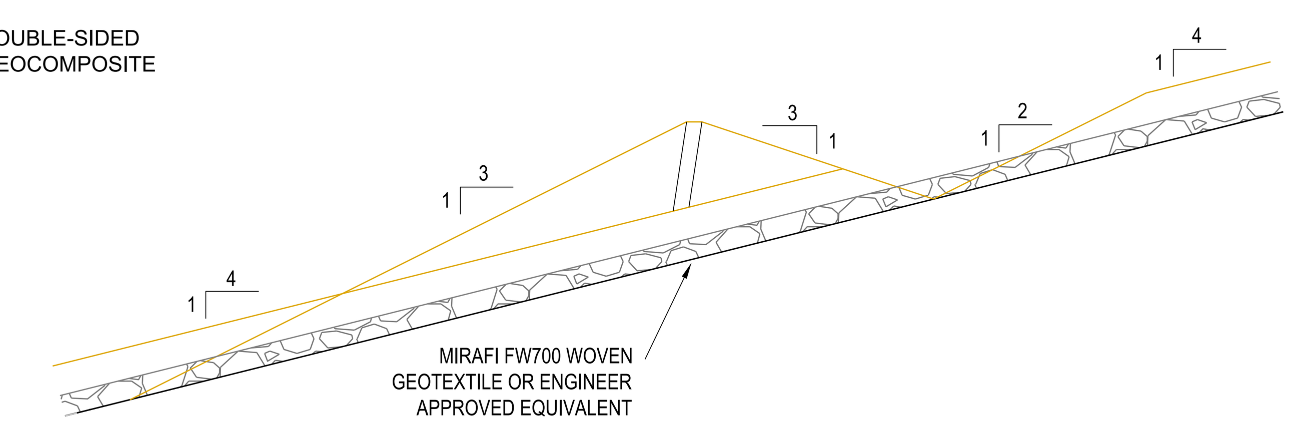
GROUTED RIP RAP LETDOWN STRUCTURE DETAIL

DETAIL 9
SCALE: N.T.S.
1-30STE930 | 1-30STE931



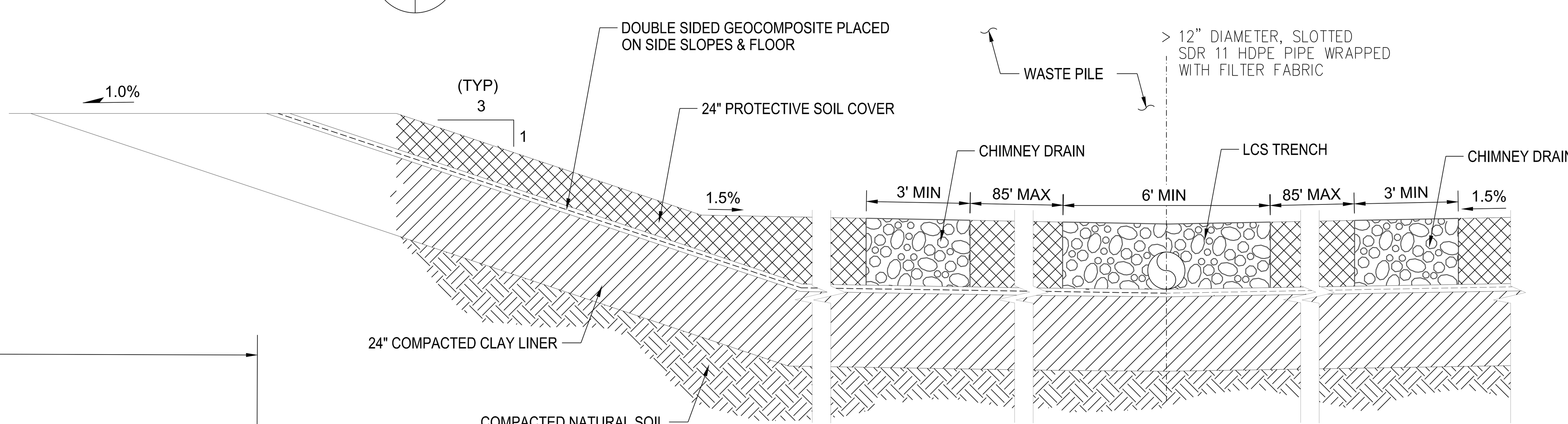
MID-SLOPE BERM DETAIL

DETAIL 8
SCALE: N.T.S.
1-30STE930 | 1-30STE931



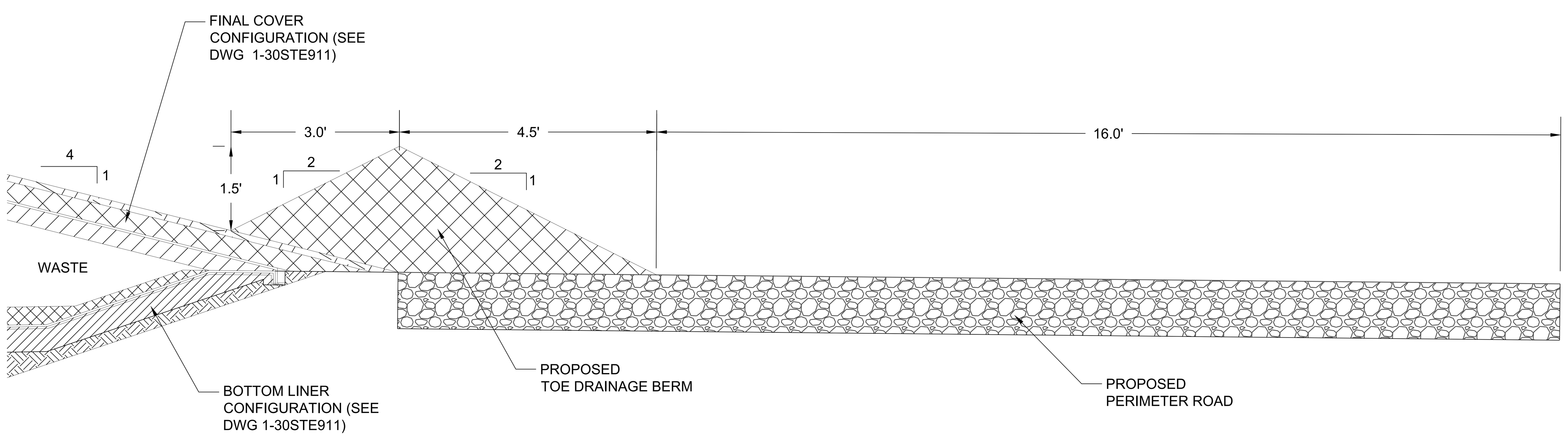
LETDOWN STRUCTURE INTERSECTION

DETAIL 10
SCALE: N.T.S.
1-30STE930 | 1-30STE931



LCS TRENCH & CHIMNEY DRAINS

SECTION F
SCALE: N.T.S.
1-30STE931



BERM @ TOE OF LANDFILL

DETAIL 11
SCALE: N.T.S.
1-30STE930 | 1-30STE931

NOTES:
1. CHIMNEY DRAINS WILL BE UTILIZED IF ON-SITE MATERIAL OR BOTTOM ASH FROM THE FACILITY ARE USED FOR PROTECTIVE COVER.
2. MAXIMUM CHIMNEY DRAIN SPACING WILL BE 85 FT SEPARATION.

NOTE:
ALL ELEVATIONS SHOWN ARE IN NAVD 1988 DATUM
NAVD 1988 DATUM ELEV. 301.00 = PLANT DATUM ELEV. 101.00
ALL COORDINATES, ELEVATIONS AND DIMENSIONS ARE EXPRESSED IN FEET OR DECIMAL OF A FOOT UNLESS OTHERWISE NOTED

THIS DRAWING ISSUED FOR THE LANDFILL RUN-ON AND RUN-OFF CONTROL SYSTEMS PLAN

PROJECT NUMBER: 216/002/35217181

Terracon
Consulting Engineers and Scientists
25809 I-30 SOUTH, BRYANT, AR 72022
PH. (501) 847-9292 FAX (501) 847-9210

DATE	NO.	DESCRIPTION	APPD.
		REVISIONS	

RUN-ON AND RUN-OFF CONTROL SYSTEMS PLAN

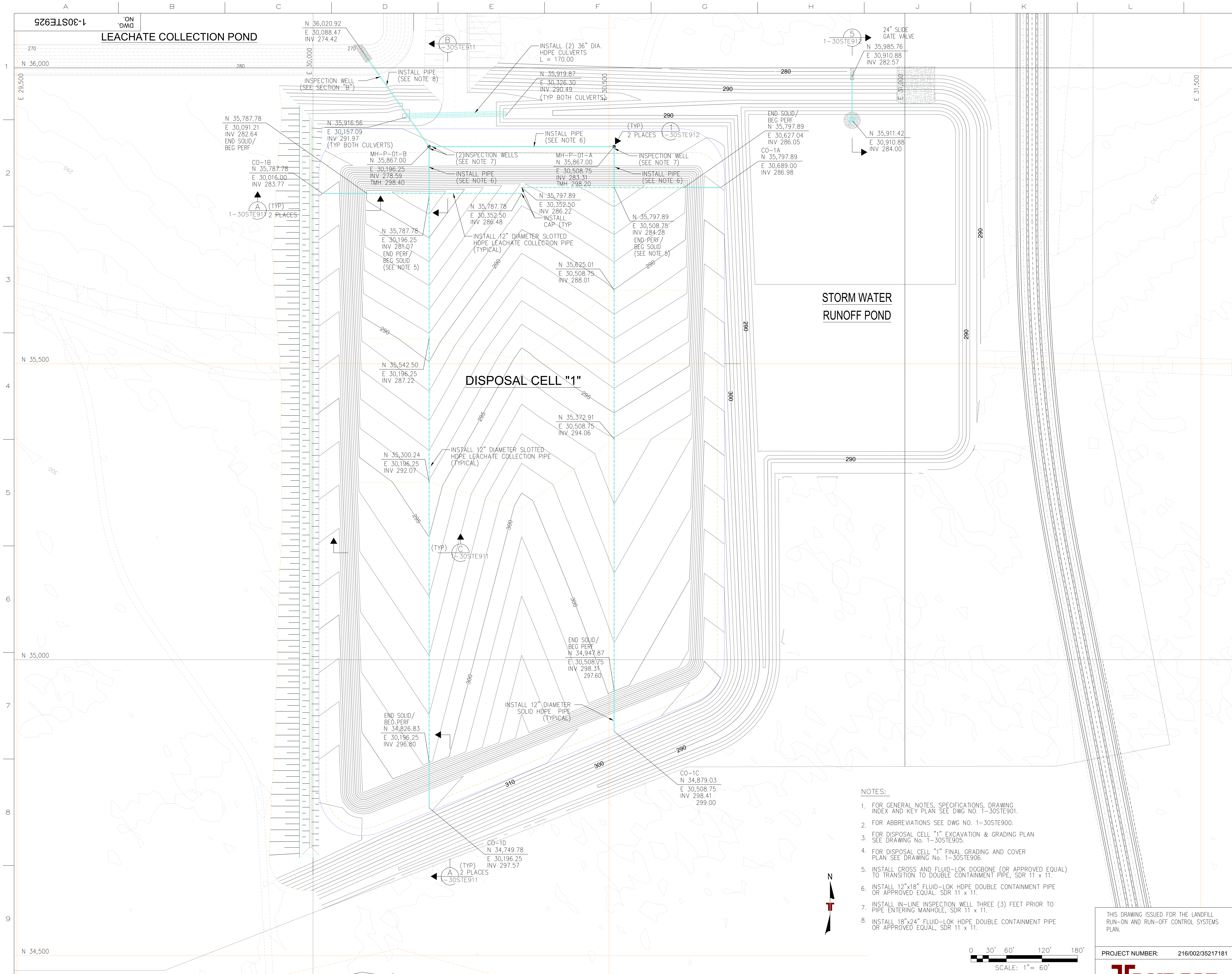
SWEPCO
JOHN W. TURK JR. POWER PLANT UNIT 1
FULTON ARKANSAS

SOLID WASTE LANDFILL MISCELLANDOUS DETAILS CIVIL SITE PLANS

DWG. NO. FIGURE 4 REV. 0

SCALE: N.T.S. CIVIL
DR: TLB/DAP
CH: TLB
ENGR: DCM
PROJ ENGR: DCM
DATE: 9/13/2021
APPROVED BY

AEP AMERICAN ELECTRIC POWER
AEP SERVICE CORP.
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215



NOTES:

1. FOR GENERAL NOTES, SPECIFICATIONS, DRAWING INDEX AND KEY PLAN SEE DWG NO. 1-30STE901.
2. FOR ABBREVIATIONS SEE DWG NO. 1-30STE900.
3. FOR DISPOSAL CELL "1" EXCAVATION & GRADING PLAN SEE DRAWING No. 1-30STE905.
4. FOR DISPOSAL CELL "1" FINAL GRADING AND COVER PLAN SEE DRAWING No. 1-30STE906.
5. INSTALL CROSS AND FLUID-LOK DOGBONE (OR APPROVED EQUAL) TO TRANSITION TO DOUBLE CONTAINMENT PIPE, SDR 11 x 11.
6. INSTALL 12"x18" FLUID-LOK HDPE DOUBLE CONTAINMENT PIPE OR APPROVED EQUAL, SDR 11 x 11.
7. INSTALL IN-LINE INSPECTION WELL THREE (3) FEET PRIOR TO PIPE ENTERING MANHOLE, SDR 11 x 11.
8. INSTALL 18"x24" FLUID-LOK HDPE DOUBLE CONTAINMENT PIPE OR APPROVED EQUAL, SDR 11 x 11.

NOTE:
ALL CONTOURS SHOWN ARE TO FINISH GRADE OF ROADS, DITCHES, BERMS, PROTECTIVE SOIL COVER AND CAP

NOTE:
ALL ELEVATIONS SHOWN ARE IN NAVD 1988 DATUM
NAVD 1988 DATUM INV 301.00 = PLANT DATUM INV 101.00
ALL COORDINATES, ELEVATIONS AND DIMENSIONS ARE EXPRESSED IN FEET OR DECIMAL OF A FOOT UNLESS OTHERWISE NOTED

THIS DRAWING ISSUED FOR THE LANDFILL RUN-ON AND RUN-OFF CONTROL SYSTEMS PLAN.

PROJECT NUMBER: 216/002/35217181

Terracon
Consulting Engineers and Scientists
25809 I-30 SOUTH, BRYANT, AR 72022
PH. (501) 847-9292 FAX (501) 847-9210

DATE	NO.	DESCRIPTION	APPD.

REVISIONS

RUN-ON AND RUN-OFF CONTROL SYSTEMS PLAN

SWEPCO
JOHN W. TURK JR. POWER PLANT UNIT 1
FULTON ARKANSAS

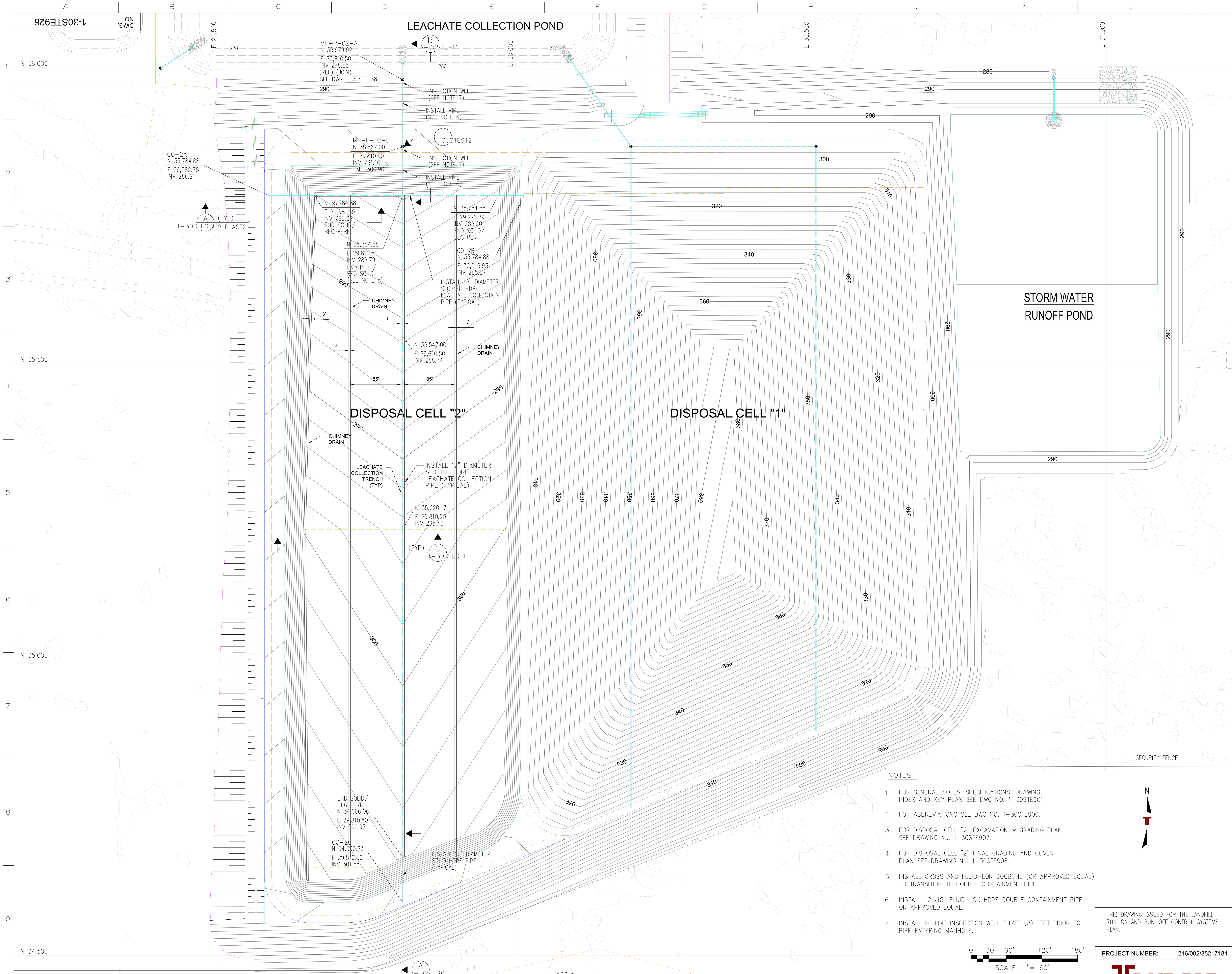
SOLID WASTE LANDFILL DISPOSAL CELL "1" PHASE 1 ACTIVE ASH FILLING SEQUENCE

DWG. NO. FIGURE 5 REV. 0

SCALE: SEE BARSCALE — CIVIL
DR: TLB/DAP
CH: TLB
ENGR: DCM
PROJ ENGR: DCM
DATE: 9/13/2021
APPROVED BY

AMERICAN ELECTRIC POWER
AEP SERVICE CORP.
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215

SYSTEM DATE= DD-MMM-YYYY
SYSTEM TIME= HOUR:MINUTE



NOTES:

1. FOR GENERAL NOTES, SPECIFICATIONS, DRAWING INDEX AND KEY PLAN SEE DWG NO. 1-30STE901.
2. FOR ABBREVIATIONS SEE DWG NO. 1-30STE900.
3. FOR DISPOSAL CELL "2" EXCAVATION & GRADING PLAN SEE DRAWING No. 1-30STE907.
4. FOR DISPOSAL CELL "2" FINAL GRADING AND COVER PLAN SEE DRAWING No. 1-30STE908.
5. INSTALL CROSS AND FLUID-LOK DOGBONE (OR APPROVED EQUAL) TO TRANSITION TO DOUBLE CONTAINMENT PIPE.
6. INSTALL 12"x18" FLUID-LOK HDPE DOUBLE CONTAINMENT PIPE OR APPROVED EQUAL.
7. INSTALL IN-LINE INSPECTION WELL THREE (3) FEET PRIOR TO PIPE ENTERING MANHOLE.

0 30' 60' 120' 180'
SCALE: 1"= 60'

NOTE:
ALL CONTOURS SHOWN ARE TO FINISH GRADE OF ROADS, DITCHES, BERMS, PROTECTIVE SOIL COVER AND CAP

NOTE:
ALL ELEVATIONS SHOWN ARE IN NAVD 1988 DATUM
NAVD 1988 DATUM INV 301.00 = PLANT DATUM INV 101.00
ALL COORDINATES, ELEVATIONS AND DIMENSIONS ARE EXPRESSED IN FEET OR DECIMAL OF A FOOT UNLESS OTHERWISE NOTED

THIS DRAWING ISSUED FOR THE LANDFILL RUN-ON AND RUN-OFF CONTROL SYSTEMS PLAN.

PROJECT NUMBER: 216/002/35217181

Terracon
Consulting Engineers and Scientists
25809 I-30 SOUTH, BRYANT, AR 72022
PH. (501) 847-9292 FAX. (501) 847-9210

DATE	NO.	DESCRIPTION	APPD.

REVISIONS

RUN-ON AND RUN-OFF CONTROL SYSTEMS PLAN

SWEPCO
JOHN W. TURK JR. POWER PLANT UNIT 1
FULTON ARKANSAS

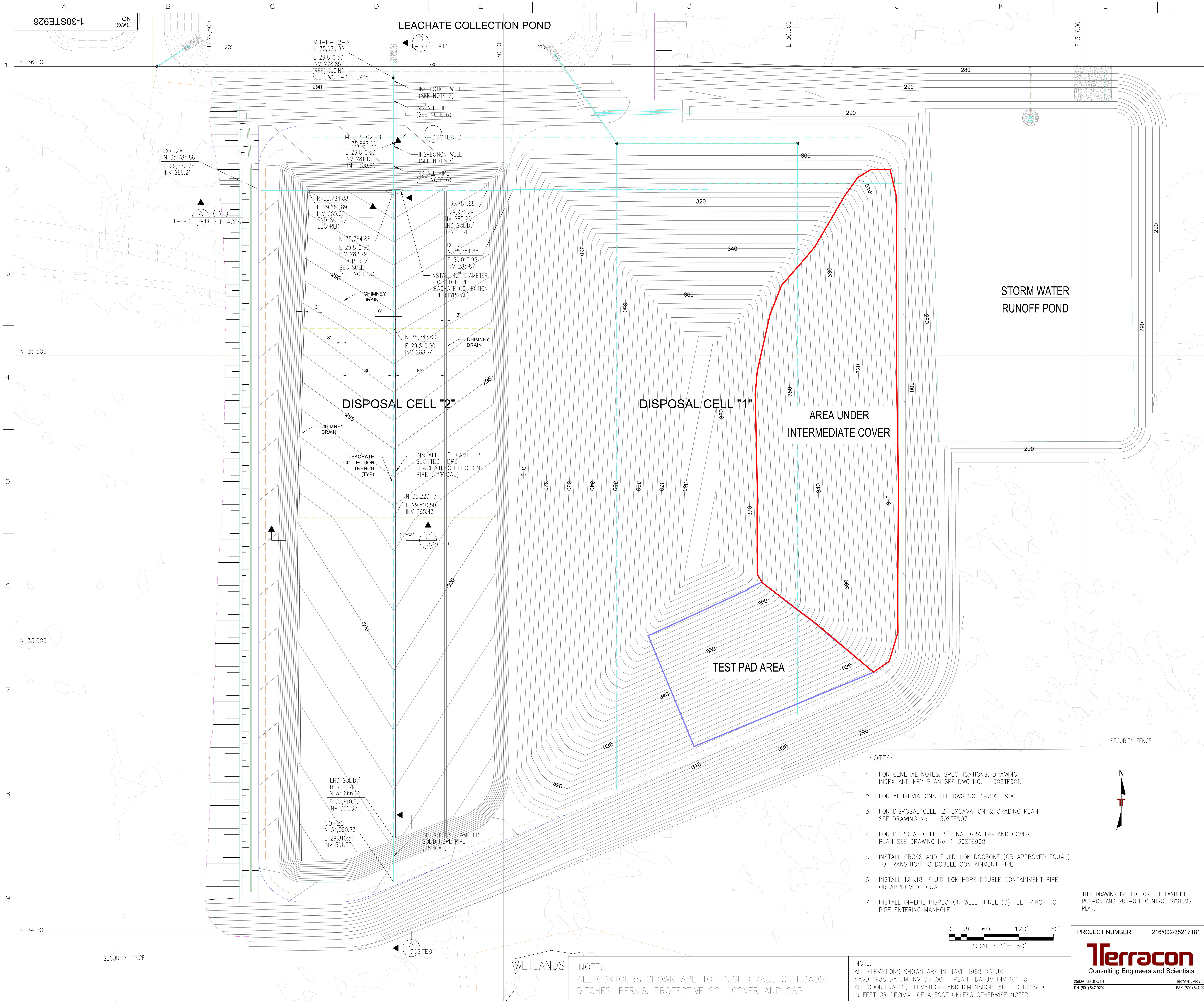
SOLID WASTE LANDFILL DISPOSAL CELL "2" PHASE 2 ACTIVE ASH FILLING SEQUENCE

DWG. NO. FIGURE 6 REV: 0

SCALE: SEE BARSCALE — CIVIL
DR: TLB/DAP
CH: TLB
ENGR: DCM
PROJ ENGR: DCM
DATE: 9/13/2021
APPROVED BY

AMERICAN ELECTRIC POWER
AEP SERVICE CORP.
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215

SYSTEM DATE- DD-MMM-YYYY
SYSTEM TIME- HOUR:MINUTE



NOTE:
ALL CONTOURS SHOWN ARE TO FINISH GRADE OF ROADS, DITCHES, BERMS, PROTECTIVE SOIL COVER AND CAP

NOTES:

1. FOR GENERAL NOTES, SPECIFICATIONS, DRAWING INDEX AND KEY PLAN SEE DWG NO. 1-30STE901.
2. FOR ABBREVIATIONS SEE DWG NO. 1-30STE900.
3. FOR DISPOSAL CELL "2" EXCAVATION & GRADING PLAN SEE DRAWING No. 1-30STE907.
4. FOR DISPOSAL CELL "2" FINAL GRADING AND COVER PLAN SEE DRAWING No. 1-30STE908.
5. INSTALL CROSS AND FLUID-LOK DOGBONE (OR APPROVED EQUAL) TO TRANSITION TO DOUBLE CONTAINMENT PIPE.
6. INSTALL 12"x18" FLUID-LOK HDPE DOUBLE CONTAINMENT PIPE OR APPROVED EQUAL.
7. INSTALL IN-LINE INSPECTION WELL THREE (3) FEET PRIOR TO PIPE ENTERING MANHOLE.

NOTE:
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SCALE: 1"= 60'

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REVISIONS

RUN-ON AND RUN-OFF CONTROL SYSTEMS PLAN

SWEPCO
JOHN W. TURK JR. POWER PLANT UNIT 1
FULTON, ARKANSAS

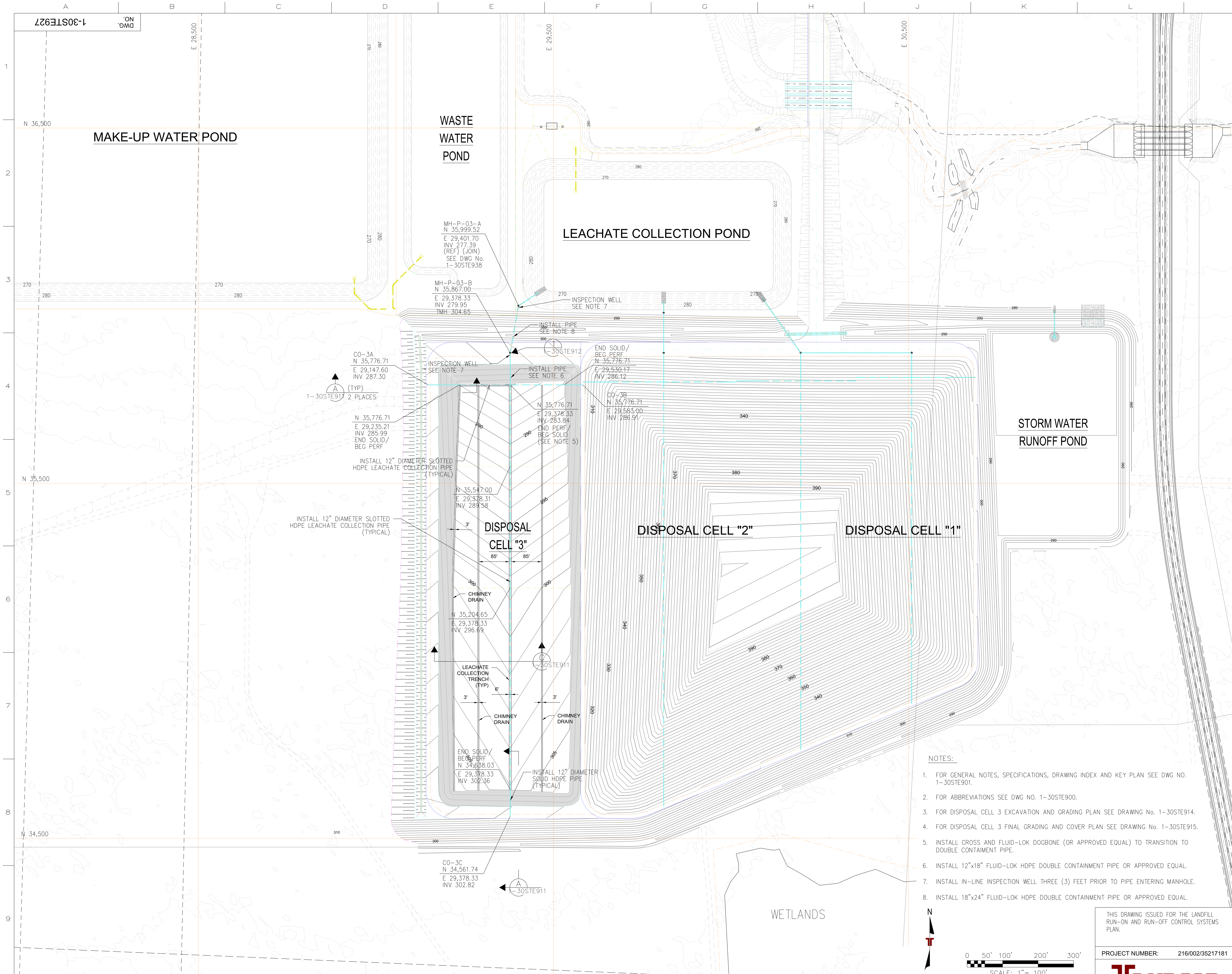
SOLID WASTE LANDFILL
DISPOSAL CELL "2"
PHASE 2 ACTIVE ASH FILLING SEQUENCE

DWG. NO. FIGURE 6A — REV. 0

CIVIL
DR: TLB/DAP
CH: TLB
ENGR: DCM
PROJ. ENGR: DCM
DATE: 9/13/2021

AMERICAN ELECTRIC POWER
AEP SERVICE CORP.
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215

DWG. NO. 1-30STE927



NOTES:

1. FOR GENERAL NOTES, SPECIFICATIONS, DRAWING INDEX AND KEY PLAN SEE DWG NO. 1-30STE901.
2. FOR ABBREVIATIONS SEE DWG NO. 1-30STE900.
3. FOR DISPOSAL CELL 3 EXCAVATION AND GRADING PLAN SEE DRAWING No. 1-30STE914.
4. FOR DISPOSAL CELL 3 FINAL GRADING AND COVER PLAN SEE DRAWING No. 1-30STE915.
5. INSTALL CROSS AND FLUID-LOK DOGBONE (OR APPROVED EQUAL) TO TRANSITION TO DOUBLE CONTAIMENT PIPE.
6. INSTALL 12"x18" FLUID-LOK HDPE DOUBLE CONTAINMENT PIPE OR APPROVED EQUAL.
7. INSTALL IN-LINE INSPECTION WELL THREE (3) FEET PRIOR TO PIPE ENTERING MANHOLE.
8. INSTALL 18"x24" FLUID-LOK HDPE DOUBLE CONTAINMENT PIPE OR APPROVED EQUAL.

NOTE:
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NOTE:
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25809 I-30 SOUTH BRYANT, AR 72022
PH. (501) 847-9292 FAX (501) 847-9210

DATE	NO.	DESCRIPTION	APPD.

REVISIONS

RUN-ON AND RUN-OFF CONTROL SYSTEMS PLAN

SWEPCO
JOHN W. TURK JR. POWER PLANT UNIT 1
FULTON ARKANSAS

SOLID WASTE LANDFILL DISPOSAL CELL "3" PHASE 3 ACTIVE ASH FILLING SEQUENCE

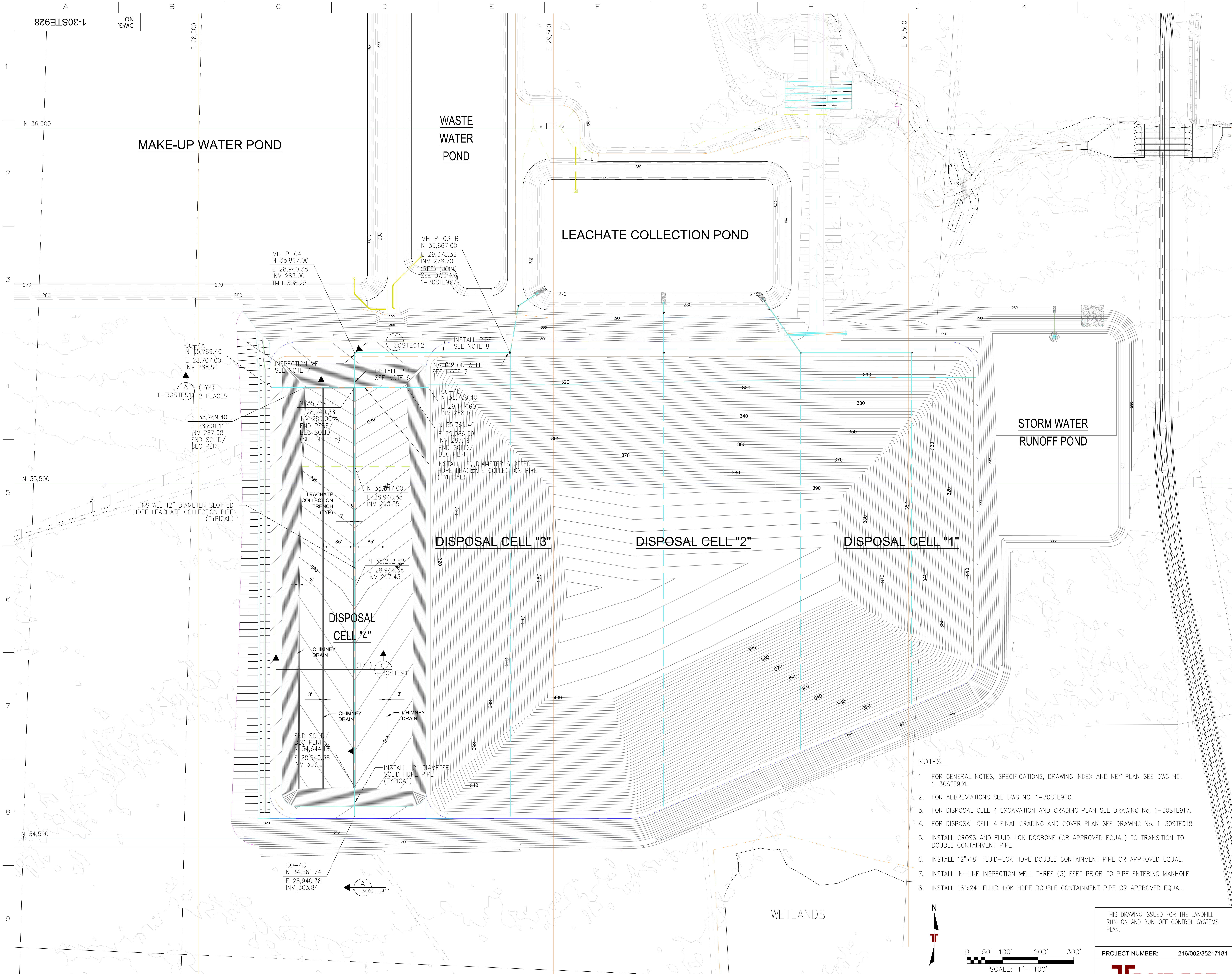
DWG. NO. FIGURE 7 REV. 0

SCALE: SEE BARSCALE — CIVIL
DR: TLB/DAP
CH: TLB
ENGR: DCM
PROJ ENGR: DCM
DATE: 9/13/2021
APPROVED BY

AEP AMERICAN ELECTRIC POWER
AEP SERVICE CORP.
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215

IGS0207

SYSTEM DATE- DD-MMM-YYYY
SYSTEM TIME- HOUR:MINUTE



NOTES:

1. FOR GENERAL NOTES, SPECIFICATIONS, DRAWING INDEX AND KEY PLAN SEE DWG NO. 1-30STE901.
2. FOR ABBREVIATIONS SEE DWG NO. 1-30STE900.
3. FOR DISPOSAL CELL 4 EXCAVATION AND GRADING PLAN SEE DRAWING No. 1-30STE917.
4. FOR DISPOSAL CELL 4 FINAL GRADING AND COVER PLAN SEE DRAWING No. 1-30STE918.
5. INSTALL CROSS AND FLUID-LOK DOGBONE (OR APPROVED EQUAL) TO TRANSITION TO DOUBLE CONTAINMENT PIPE.
6. INSTALL 12"x18" FLUID-LOK HDPE DOUBLE CONTAINMENT PIPE OR APPROVED EQUAL.
7. INSTALL IN-LINE INSPECTION WELL THREE (3) FEET PRIOR TO PIPE ENTERING MANHOLE
8. INSTALL 18"x24" FLUID-LOK HDPE DOUBLE CONTAINMENT PIPE OR APPROVED EQUAL.

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PROJECT NUMBER: 216/002/35217181

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Consulting Engineers and Scientists
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PH. (501) 847-9292 FAX (501) 847-9210

DATE	NO.	DESCRIPTION	APPD.

REVISIONS

RUN-ON AND RUN-OFF CONTROL SYSTEMS PLAN

SWEPCO
JOHN W. TURK JR. POWER PLANT UNIT 1
FULTON ARKANSAS

SOLID WASTE LANDFILL DISPOSAL CELL "4" PHASE 4 ACTIVE ASH FILLING SEQUENCE

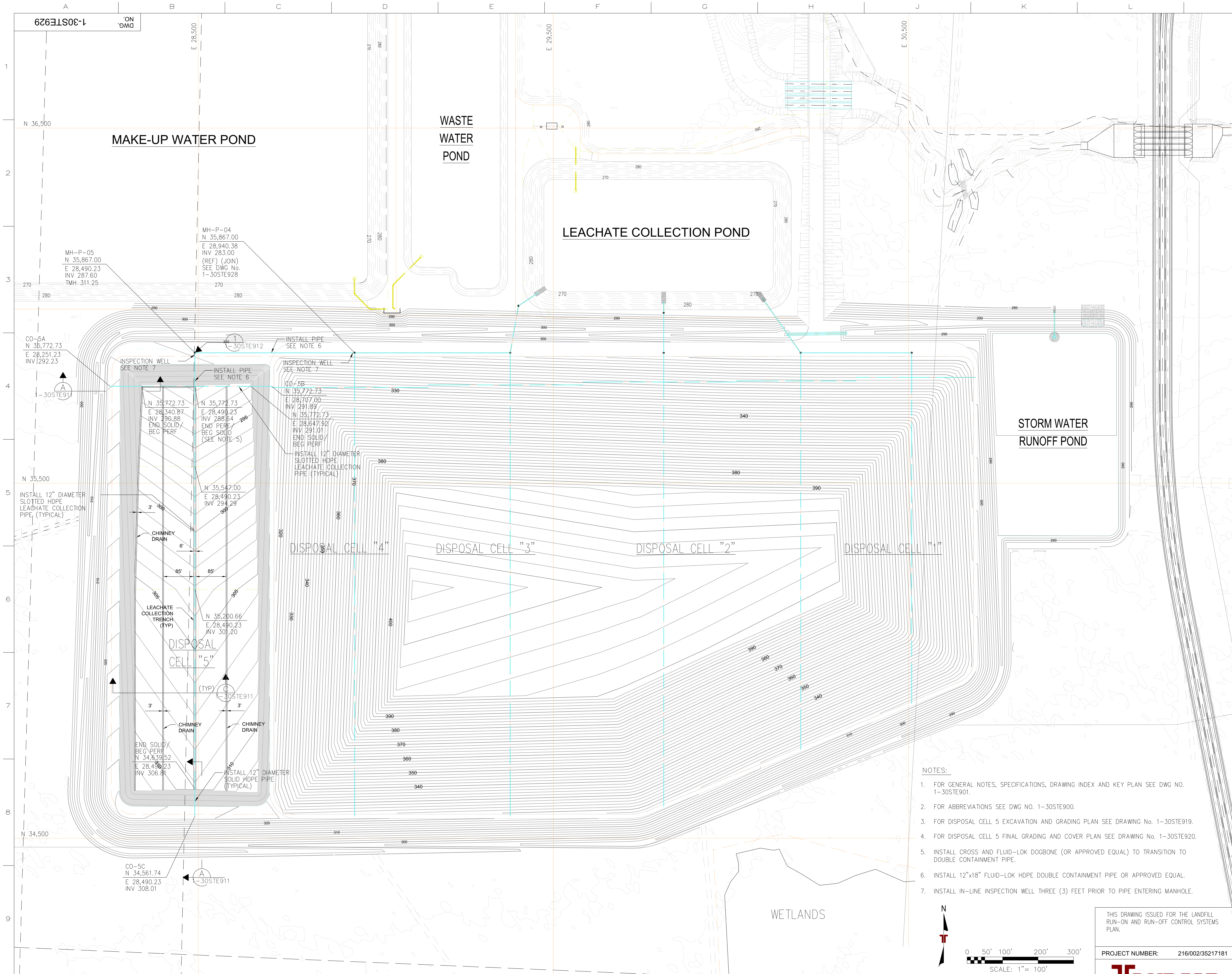
DWG. NO. FIGURE 8 REV. 0

SCALE: SEE BARSCALE CIVIL
DR: TLB/DAP
CH: TLB
ENGR: DCM
PROJ ENGR: DCM
DATE: 9/13/2021
APPROVED BY

AEP AMERICAN ELECTRIC POWER
AEP SERVICE CORP. 1 RIVERSIDE PLAZA COLUMBUS, OH 43215

DWG. NO. 1-30STE928

SYSTEM DATE- DD-MMM-YYYY
SYSTEM TIME- HOUR:MINUTE



NOTES:

1. FOR GENERAL NOTES, SPECIFICATIONS, DRAWING INDEX AND KEY PLAN SEE DWG NO. 1-30STE901.
2. FOR ABBREVIATIONS SEE DWG NO. 1-30STE900.
3. FOR DISPOSAL CELL 5 EXCAVATION AND GRADING PLAN SEE DRAWING No. 1-30STE919.
4. FOR DISPOSAL CELL 5 FINAL GRADING AND COVER PLAN SEE DRAWING No. 1-30STE920.
5. INSTALL CROSS AND FLUID-LOK DOGBONE (OR APPROVED EQUAL) TO TRANSITION TO DOUBLE CONTAINMENT PIPE.
6. INSTALL 12"x18" FLUID-LOK HDPE DOUBLE CONTAINMENT PIPE OR APPROVED EQUAL.
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REVISIONS

RUN-ON AND RUN-OFF CONTROL SYSTEMS PLAN

SWEPCO

JOHN W. TURK JR. POWER PLANT UNIT 1

FULTON ARKANSAS

SOLID WASTE LANDFILL DISPOSAL CELL "5" PHASE 5 ACTIVE ASH FILLING SEQUENCE

DWG. NO. FIGURE 9 REV: 0

PROJECT NUMBER: 216/002/35217181

SCALE: SEE BARSCALE — CIVIL
DR: TLB/DAP
CH: TLB
ENGR: DCM
PROJ ENGR: DCM
DATE: 9/13/2021
APPROVED BY

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Consulting Engineers and Scientists
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1 RIVERSIDE PLAZA
COLUMBUS, OH 43215

SYSTEM DATE- DD-MMM-YYYY
SYSTEM TIME- HOUR:MINUTE

APPENDIX 2: PLAN REVIEW LOG

Plan Review and Changes in Facility Configuration

Scheduled reviews and Plan amendments shall be recorded in the Plan Review Log below. This log must be completed even if no amendment is made to the Plan as a result of the review.

By	Date	Amendment Description	P.E. certification required?	P.E. Name	Licensing State: Registration No.
Terracon	10/07/16	Initial Plan	Yes	David McCormick	Arkansas: 9199
Terracon	9/13/21	Five-year review	Yes	David McCormick	Arkansas: 9199

APPENDIX 3: PROFESSIONAL ENGINEER CERTIFICATION PAGE

Professional Engineer Certification Page

The undersigned licensed Professional Engineer (P.E.) attests that this Run-on and Run-off Control Plan has been prepared, reviewed, and/or revised in accordance with good engineering practice, including consideration of applicable industry standards and the requirements of 40 CFR 257. This certification in no way relieves the owner or operator of the facility of his/her duty to fully implement this Plan.

Engineer:	David McCormick, P.E.
Registration Number:	9199
State:	Arkansas Terracon COA #223
Date:	9/28/21

P.E. certification is required for the original Plan and Plan reviews and amendments.