



US Army Corps
of Engineers®
Little Rock District

JOINT PUBLIC NOTICE

CORPS OF ENGINEERS – STATE OF MISSOURI

Application Number: SWL-2024-00083

Date: May 22, 2024

Comments Due: June 17, 2024

TO WHOM IT MAY CONCERN: **Comments are invited on the work described below. Please see the Public Involvement section for details on submitting comments.**

Point of Contact. If additional information is desired, please contact the regulator, Michael Gala, telephone number: (870) 571-3817, mailing address: Little Rock District Corps of Engineers, Regulatory Division, PO Box 867, Little Rock, Arkansas 72203-0867, email address:

Michael.R.Gala@usace.army.mil

Project Information. Pursuant to Section 404 of the Clean Water Act (33 U.S. Code 1344), notice is hereby given that

**City of Ellington
100 Tubbs Avenue
Ellington, Missouri 63638**

has requested authorization for work, including the placement of dredged and fill material, in waters of the United States associated with the construction of a new levee along the descending right bank. The proposed project is located in Logan Creek, on the right descending bank, in the NW 1/4 of section 31, T. 30N, R. 1E, and the SW 1/4 of Section 32. T/ 30N, R. 1E, Ellington, Reynolds County, Missouri.

The project purpose is constructing a levee for flood protection for the City of Ellington.

The project involves the construction of a 1.64-mile levee and associated infrastructure. It includes excavating 19,545 cubic yards (CY) of material along the right descending bank and below Logan Creek's Ordinary High Water Mark (OHWM) that will be discharged into uplands, the discharge of 45,550 CY of material above the OHWM for the levee, and 3,850 CY of clean fill material below the OHWM for bank stabilization. All areas disturbed and not being armored will be replanted with native vegetation.

The project area is along the right descending bank of perennial Logan Creek. The primary project area is within the riparian corridor of Logan Creek, dominated by large trees with a sand and gravel substrate. Below the OHWM along the right descending bank is primarily gravel bars, and the primary soil type is sandy loam. The furthest downstream area is primarily commercial, small businesses, city buildings, and recreational areas. The middle section of the project is primarily residential and has areas where Logan Creek is within 10-15 feet of public instruction. This section also identified two areas on the National Wetland Inventory as Palustrine Forested wetlands; however, a field investigation only identified uplands within that area with well-drained sandy soils, no hydrology, or hydric vegetation. In the furthest upstream areas, several bends within Logan Creek are between 15 and 30 feet from public infrastructure, which would likely undercut the

adjacent roads. This area contains primarily small farms on the creek side of County Road 106. All the areas on the inspected outer bends had undercut banks with sluffing of bank material into the creek.

The applicant has avoided and minimized impacts by keeping the project's footprint below the OHWM as small as possible. The applicant has proposed to buy credits for unavoidable impacts from the Land Learning Foundation.

The location and general plan for the proposed work are shown on the enclosed sheets.

Water Quality Certification. The Clean Water Act (CWA) Section 401 Certification Rule (Certification Rule, 40 Code of Federal Regulations (CFR) Part 121), effective November 27, 2023, requires certification for any license or permit that authorizes an activity that may result in a discharge. The scope of a CWA Section 401 certification is limited to assuring that a discharge from a Federally licensed or permitted activity will comply with water quality requirements. This public notice is issued jointly with the Missouri Department of Natural Resources, Water Protection Program. The Department of Natural Resources will use the comments to this notice in deciding whether to grant Section 401 water quality certification. Commenters are requested to furnish a copy of their comments to the Missouri Department of Natural Resources by email at wpsc401cert@dnr.mo.gov or by mail at P.O. Box 176, Jefferson City, Missouri 65102. In accordance with Certification Rule Part 121.6, the Corps and Missouri Department of Natural Resources, Water Protection Program have determined the reasonable period of time for the certifying agency to act upon the certification request is 60 days. In accordance with Certification Rule Part 121.12, the Corps will notify the U.S. Environmental Protection Agency Administrator when it has received the subject certification. The Administrator is responsible for determining if the discharge may affect water quality in a neighboring jurisdiction. The DA permit may not be issued pending the conclusion of the Administrator's determination of effects on neighboring jurisdictions.

Cultural Resources. A Corps staff archeologist will evaluate the proposal for compliance with Section 106 of the National Historic Preservation Act, including identification and evaluation of cultural resources potentially impacted by the proposal's implementation in waters of the United States. The District Engineer invites responses to this public notice from Native American Nations or tribal governments; Federal, State, and local agencies; historical and archeological societies; and other parties likely to have knowledge of or concerns with historic properties in the area.

Endangered Species. Our preliminary determination is that the proposed activity will not affect listed Endangered Species or their critical habitat. A copy of this notice is being furnished to the U.S. Fish and Wildlife Service and appropriate state agencies and constitutes a request to those agencies for information on whether any listed or proposed-to-be-listed endangered or threatened species may be present in the area which would be affected by the proposed activity.

Floodplain. We are providing copies of this notice to appropriate floodplain officials in accordance with 44 Code of Federal Regulations (CFR) Part 60 (Floodplain Management Regulations Criteria for Land Management and Use) and Executive Order 11988 on Floodplain Management.

Section 404(b)(1) Guidelines. The evaluation of activities to be authorized under this permit, which involves the discharge of dredged or fill material will include application of guidelines promulgated

by the Administrator, Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act. These guidelines are contained in 40 Code of Federal CFR 230.

Public Involvement. Any interested party is invited to submit to the above-listed POC written comments or objections relative to the proposed work on or before **June 17, 2024**. Substantive comments, both favorable and unfavorable, will be accepted and made a part of the record and will receive full consideration in determining whether this work would be in the public interest. The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Any person may request in writing within the comment period specified in this notice that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. The District Engineer will determine if the issues raised are substantial and whether a hearing is needed for making a decision.

NOTE: The mailing list for this Public Notice is arranged by state and county(s) where the project is located and includes any addressees who have asked to receive copies of all public notices. Please discard notices that are not of interest to you. If you have no need for any of these notices, please advise us so that your name can be removed from the mailing list.

Enclosures

Approximate Coordinates of Project Center

Latitude: **37.243**

Longitude: **-90.978**

UTM Zone: **15N**

North: **4123745.365265** East: **679345.520456**

ELLINGTON LOGAN CREEK FLOOD PROTECTION



SHEET	DESCRIPTION	REVISIONS						
		0	1	2	3	4	5	6
1	COVER SHEET	●						
2	LEGEND / NOTES	●						
3	AREA LAYOUT (3 SHEETS)	●						
4	PLAN AREA A (3 SHEETS)	●						
5	PLAN AREA B (3 SHEETS)	●						
6	PLAN AREA C (3 SHEETS)	●						
7	PLAN AREA D (3 SHEETS)	●						
8	PLAN AREA E (3 SHEETS)	●						
9	PLAN AREA F (3 SHEETS)	●						
10	PLAN AREA G (3 SHEETS)	●						
11	CONSTRUCTION DETAILS (5 SHEETS)	●						
13	CROSS SECTIONS	●						
14	CROSS SECTIONS (2)	●						
15	CROSS SECTIONS (3)	●						
16	CROSS SECTIONS (4)	●						
17	CROSS SECTIONS (5)	●						
18	CROSS SECTIONS (6)	●						
19	CROSS SECTIONS (7)	●						
20	CROSS SECTIONS (8)	●						
21	CROSS SECTIONS (9)	●						
22	CROSS SECTIONS (10)	●						
23	CROSS SECTIONS (11)	●						

Action Number: SWL-2024-00083

ELLINGTON LEVEE DESIGN
CITY OF ELLINGTON/Levee Construction
ELLINGTON, MISSOURI
Reynolds County

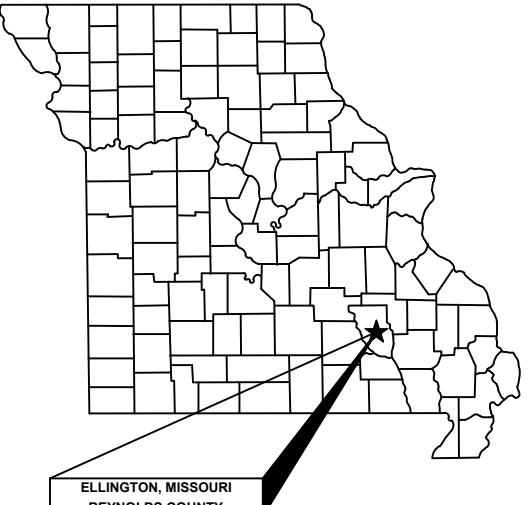
NW 1/4 of section 31, T. 30N, R. 1E, and the
SW 1/4 of Section 32, T. 30N, R. 1E
COVER
May 2024

Page 1 of 43

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JOB: P200235



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SMITH & CO.
ENGINEERS

901 VINE STREET; P.O. BOX 72
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(573) 785-8621 FAX: (573) 785-2651 WWW.SHSMITHCO.COM
CIVIL ENGINEERING • SURVEYING •
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GENERAL NOTES:

- 1.) ALL GRADED AREAS SHALL BE PROTECTED FROM EROSION BY EROSION CONTROL DEVICES AND/OR SEEDING AND MULCHING. EROSION CONTROL SHALL NOT BE LIMITED TO WHAT IS SHOWN ON THE PLAN, WHATEVER MEANS NECESSARY SHALL BE TAKEN TO PREVENT SILTATION AND EROSION FROM ENTERING NATURAL STREAMS AND ADJACENT ROADWAYS, PROPERTIES, AND DITCHES.
- 2.) PROPOSED CONTOURS SHOWN ARE FINISHED ELEVATIONS ON PAVED AREAS. CONTRACTOR TO GRADE ALL AREAS TO REQUIRED SUBGRADE.
- 3.) ALL FILL PLACED FOR PROPOSED STORM AND SANITARY SEWER LINES AND/OR PAVED AREAS, AND FOR DRAINAGE BERMS SHALL BE COMPACTION TO 90% OF MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED AASHTO T-180 COMPACTION TEST OR 95% OF MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST AASHTO T-99. A TEST SHALL BE VERIFIED BY A SOILS ENGINEER CONCURRENT WITH GRADING AND BACKFILLING OPERATIONS.
- 4.) THE GENERAL CONTRACTOR SHALL FLAG ALL SANITARY AND STORM SEWER STRUCTURES WITH A 2X4 PAINTED ORANGE AND MARKED TO READ "STORM SEWER STRUCTURE OR SANITARY SEWER STRUCTURE DO NOT BURY".
- 5.) SAFETY NOTICE TO CONTRACTOR: IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT LIMITED TO NORMAL WORKING HOURS.
- 6.) CONTRACTOR IS TO REMOVE AND DISPOSE OF, OFF SITE, ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM DEMOLITION OPERATIONS.
- 7.) THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE AND SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID DAMAGE TO ADJACENT PROPERTIES DURING ALL PHASES OF THIS DEMOLITION PLAN.
- 8.) THE CONTRACTOR SHALL RESTORE OFFSITE CONSTRUCTION AREAS TO AN EQUAL OR BETTER CONDITION THAN EXISTED PRIOR TO THE COMMENCEMENT OF WORK.
- 9.) ALL EXCAVATIONS, GRADING, OR FILLING SHALL HAVE A FINISHED GRADE NOT TO EXCEED A 3:1 SLOPE (33 PERCENT). STEEPER GRADES MAY BE APPROVED BY THE DESIGNATED OFFICIAL IF THE EXCAVATION IS THROUGH ROCK OR THE EXCAVATION OR THE FILL IS ADEQUATELY PROTECTED (A DESIGNED HEAD WALL OR TOE WALL MAY BE REQUIRED). RETAINING WALLS THAT EXCEED A HEIGHT OF FOUR (4) FEET SHALL REQUIRE THE CONSTRUCTION OF SAFETY GUARDS AS IDENTIFIED IN THE APPROPRIATE SECTION(S) OF THE ADOPTED IBC CODES AND MUST BE APPROVED BY THE CITY BUILDING DEPARTMENT. PERMANENT SAFETY GUARDS WILL BE CONSTRUCTED IN ACCORDANCE WITH THE APPROPRIATE SECTION(S) OF THE ADOPTED IBC CODES.
- 10.) PROVISIONS SHALL BE MADE TO ACCOMMODATE THE INCREASED RUNOFF CAUSED BY CHANGED SOIL AND SURFACE CONDITIONS DURING THE AFTER GRADING. UN-VEGETATED OPEN CHANNELS SHALL BE DESIGNED SO THAT GRADIENTS RESULT IN VELOCITIES OF 2 FPS (FEET PER SECOND) OR LESS. OPEN CHANNELS WITH VELOCITIES MORE THAN 2 FPS AND LESS THAN 5 FPS SHALL BE ESTABLISHED IN PERMANENT VEGETATION BY USE OF COMMERCIAL EROSION CONTROL BLANKETS OR LINED WITH ROCK, RIP RAP OR CONCRETE OR OTHER SUITABLE MATERIALS AS APPROVED BY THE DESIGNATED OFFICIAL. DETENTION BASINS, DIVERSIONS, OR OTHER APPROPRIATE STRUCTURES SHALL BE CONSTRUCTED TO PREVENT VELOCITIES ABOVE 5 FPS.
- 11.) ALL FILLED PLACES IN PROPOSED ROADS SHALL BE COMPACTION FROM THE BOTTOM OF THE FILL UP TO 90% MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED AASHTO T-180 COMPACTION TEST OR 95% OF MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST AASHTO T-99. A SOIL'S ENGINEER SHALL VERIFY ALL TESTS CONCURRENT WITH GRADING AND BACKFILLING OPERATIONS. A SEALED COPY OF THE RESULT REPORTS SHALL BE GIVE TO THE ENGINEER FOR REVIEW AND APPROVAL.
- 12.) WHERE NATURAL VEGETATION IS REMOVED DURING GRADING, VEGETATION SHALL BE REESTABLISHED IN SUCH A DENSITY AS TO PREVENT EROSION. PERMANENT SOD SHALL BE ESTABLISHED AS SOON AS POSSIBLE.
- 13.) ALL CONSTRUCTION METHODS AND PRACTICES TO CONFORM WITH OSHA STANDARDS.

EXISTING UTILITIES NOTE:

1. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ARE BASED ON VISIBLE ABOVE-GROUND OBJECTS AND MARKINGS, PREVIOUS RECORD DRAWINGS AND SURVEYS PROVIDED TO SMITH&CO. BY OTHERS, AND PAINT OR OTHER MARKINGS MADE BY UTILITY COMPANIES AND/OR UTILITY LOCATOR SERVICES PRIOR TO THE FIELD SURVEY. NO EXCAVATIONS WERE MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATE BURIED OBJECTS. LOCATIONS OF UNDERGROUND UTILITIES/STRUCTURES/CONDUITS MAY VARY FROM THE LOCATIONS SHOWN HEREUPON. ADDITIONAL BURIED UTILITIES THAT DO NOT HAVE SURFACE MARKERS MAY BE ENCOUNTERED DURING EXCAVATION.
2. SMITH&CO. IS NOT A UTILITY LOCATOR SERVICE. SMITH&CO. IS NOT RESPONSIBLE OR LIABLE FOR DAMAGES RESULTING FROM UNMARKED OR INACCURATELY MARKED UNDERGROUND UTILITIES OR STRUCTURES. CALL 1-800-DIG-RITE.



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ELLINGTON LEVEE DESIGN
CITY OF ELLINGTON/Levee Construction
ELLINGTON, MISSOURI
Reynolds County

NW 1/4 of section 31, T. 30N, R. 1E, and the
SW 1/4 of Section 32, T. 30N, R. 1E

LEGEND NOTES

May 2024

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LEGEND:

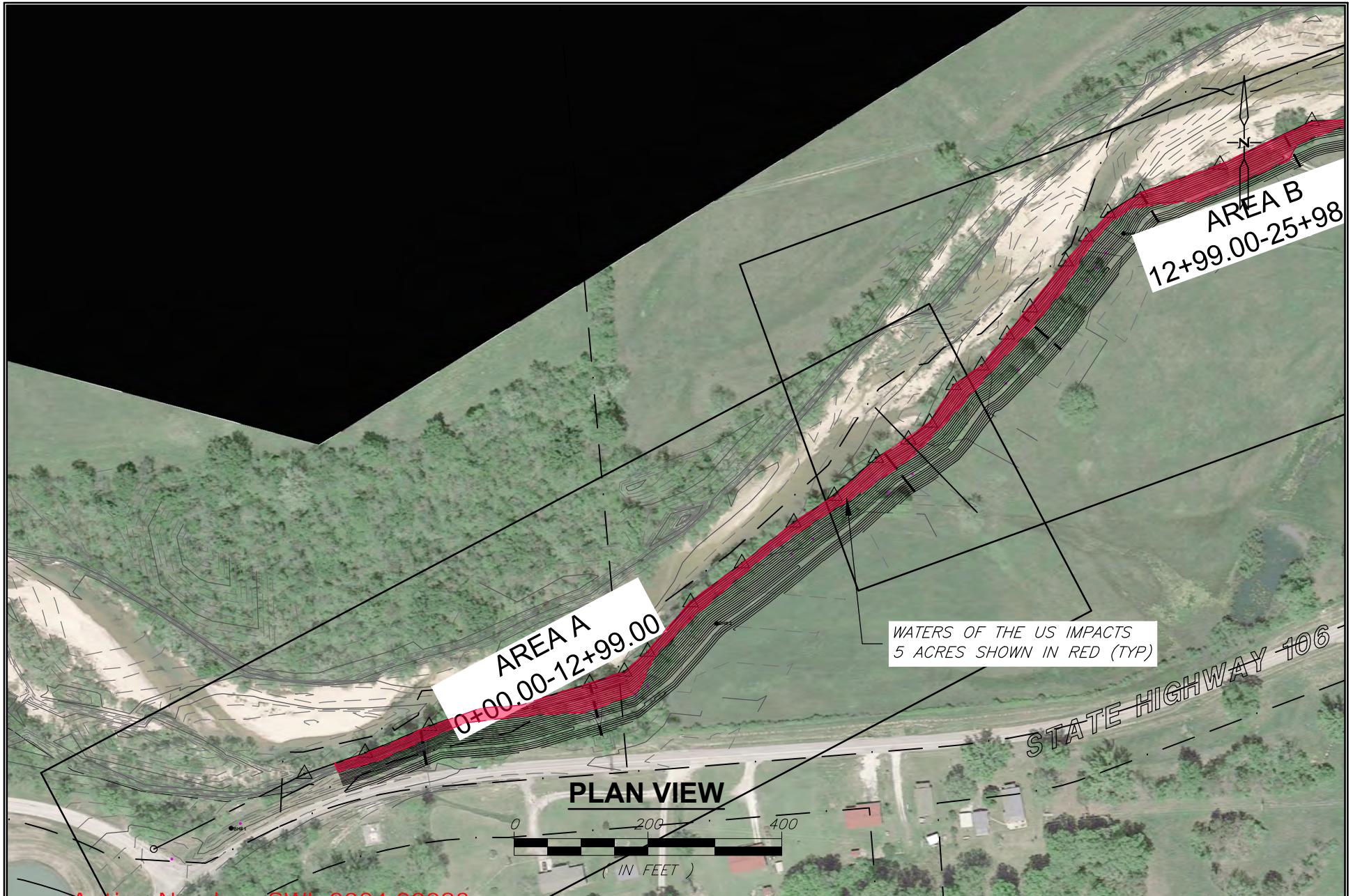
EXISTING	PROPOSED
UNDERGROUND UTILITY LINES:	
WATER.....	2" WATER LINE.....
SANITARY SEWER.....	4" WATER LINE.....
FORCE MAIN.....	6" WATER LINE.....
STORM SEWER.....	8" WATER LINE.....
TELEPHONE.....	10" WATER LINE.....
GAS.....	12" WATER LINE.....
ELECTRIC.....	FIRE HYDRANT.....
CABLE.....	FLUSH HYDRANT.....
FUEL LINE.....	WATER SERVICE.....
FIBER OPTIC.....	
OVERHEAD UTILITY LINES:	
POWER POLE.....	O PP
POWER POLE W/TRANSFORMERS NO.....	O PP-1
CABLE POLE.....	O CP
TELEPHONE POLE.....	O TP
LIGHT POLE.....	XO LP
GUY WIRE ANCHOR.....	PP
ELECTRICAL RISER.....	ELEC. RISER
TELEPHONE PEDESTAL.....	B PHPD
MANHOLE.....	O EXIST. MH
CLEAN OUT.....	O CO
FIRE HYDRANT.....	X
FLUSH HYDRANT.....	X (FLUSH)
VALVE WATER/GAS.....	WV GV
METER WATER/GAS/ELECTRIC ETC.....	O WATER/GAS/ELECTRIC METER
DROP INLET FOR STORM WATER.....	■ DROP INLET
DOWN SPOUT.....	O DS
SIGN.....	- SIGN
RIGHT-OF-WAY MARKER.....	O R/W
TREE.....	O
TREE LINE.....	Wavy Line
CONTROL POINT.....	ACP#1
CONTOURS	
INTERMEDIATE.....	— 100 —
INDEX.....	— 100 —
CHAIN LINK.....	O O
WOOD.....	O O
BARBED WIRE.....	X
RIGHT-OF-WAY LINE.....	— X —
PROPERTY LINE.....	— • —
GUARD RAIL.....	— □ —
PIPE/CULVERT.....	— — —
DITCH FLOW LINE DIRECTION.....	>
BUILDING.....	■ ■ ■

NOTE:
ALL ITEMS IN THE GENERAL LEGEND
MAY OR MAY NOT BE USED IN THIS PLAN SET.

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ELLINGTON LEVEE DESIGN
CITY OF ELLINGTON/Levee Construction
REYNOLDS COUNTY, MISSOURI

NW 1/4 of section 31, T. 30N, R. 1E, and the
SW 1/4 of Section 31, T. 30N, R. 1E

May 2024

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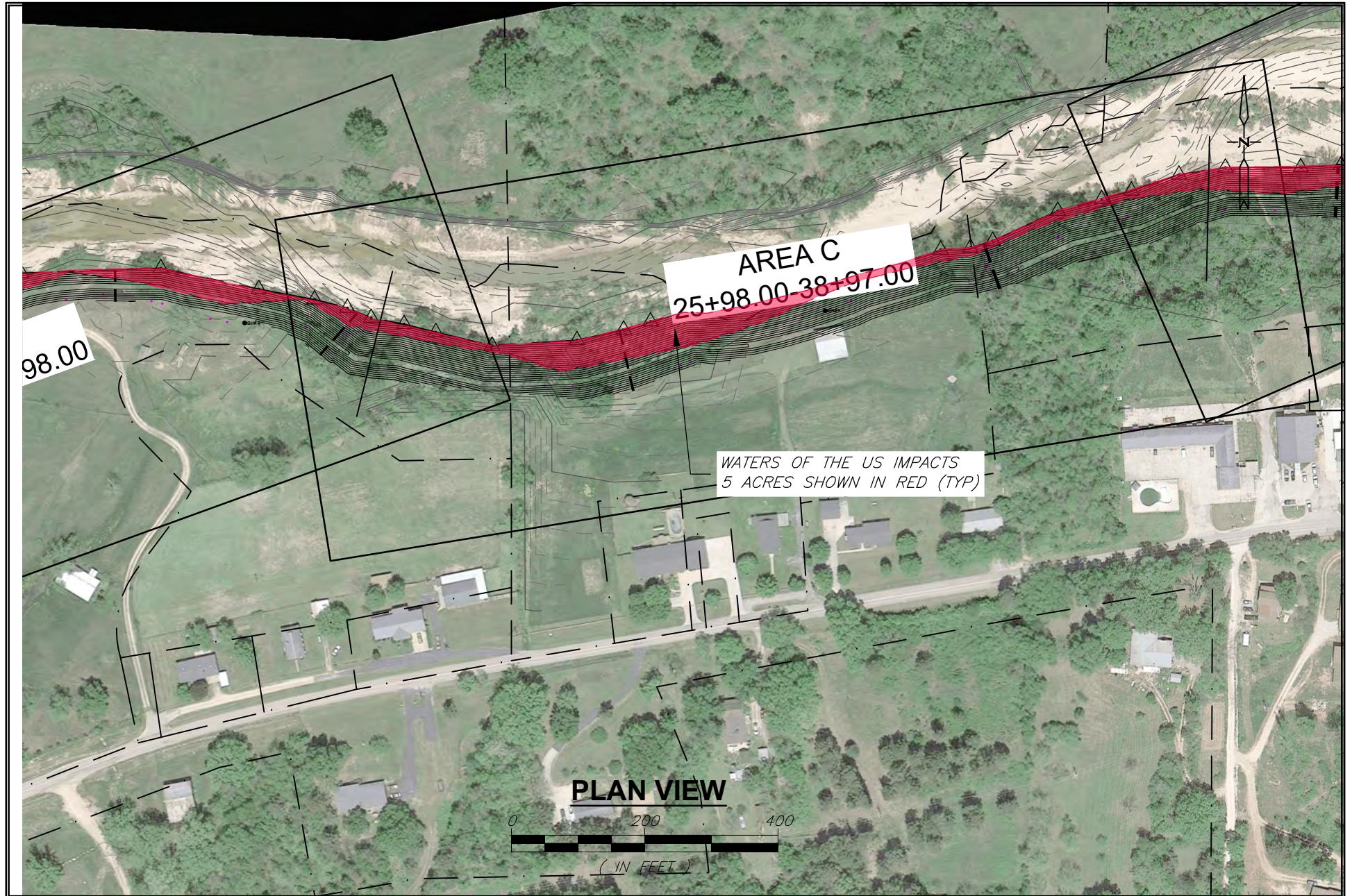
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 CITY of Ellington/Levee Construction
 ELLINGTON, MISSOURI
 Reynolds County

NW 1/4 of section 31, T. 30N, R. 1E, and the
 SW 1/4 of Section 32, T. 30N, R. 1E
 AREA LAYOUT R.C.
 May 2024

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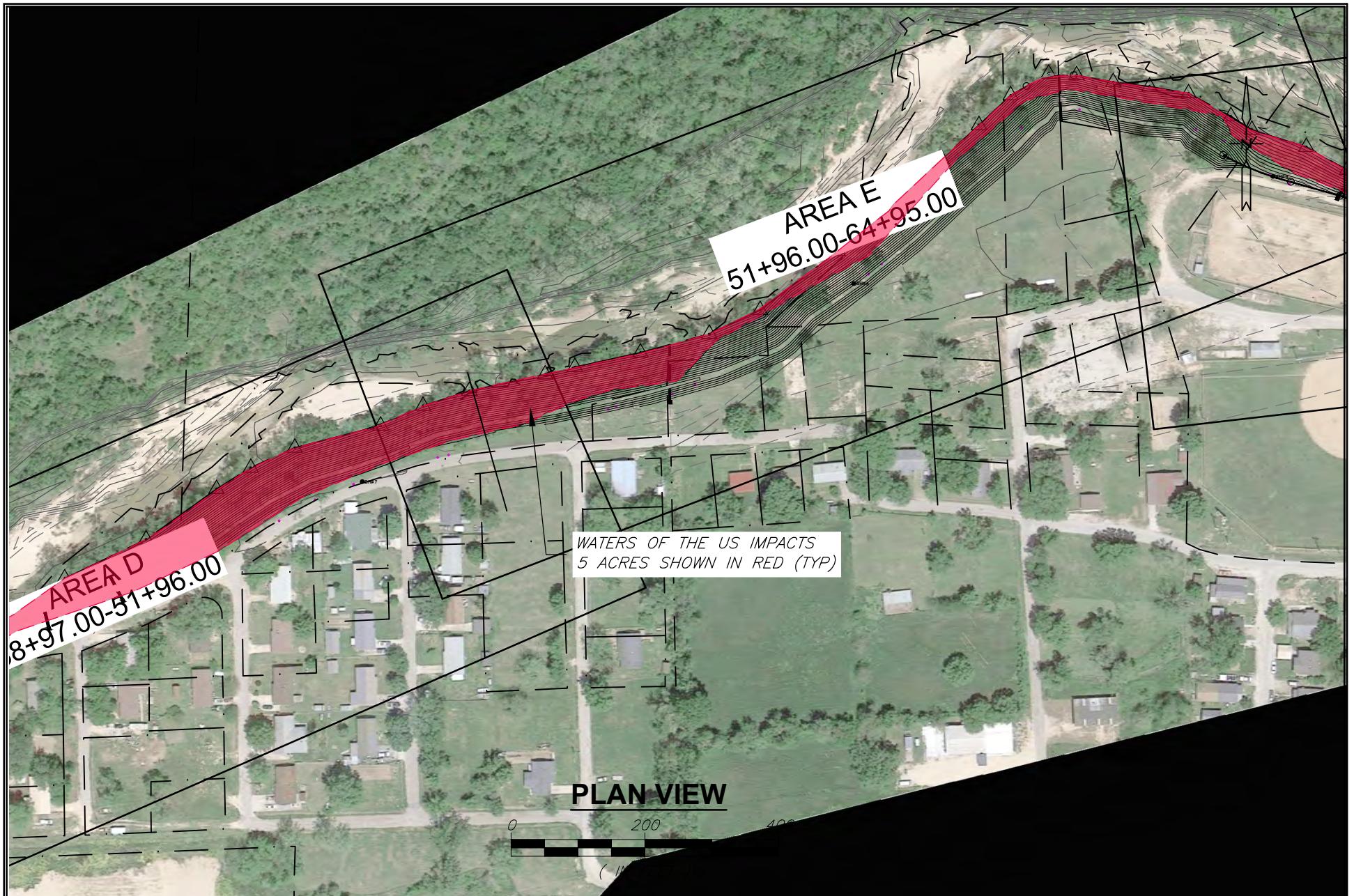
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 AREA LAYOUT D/E
 May 2024

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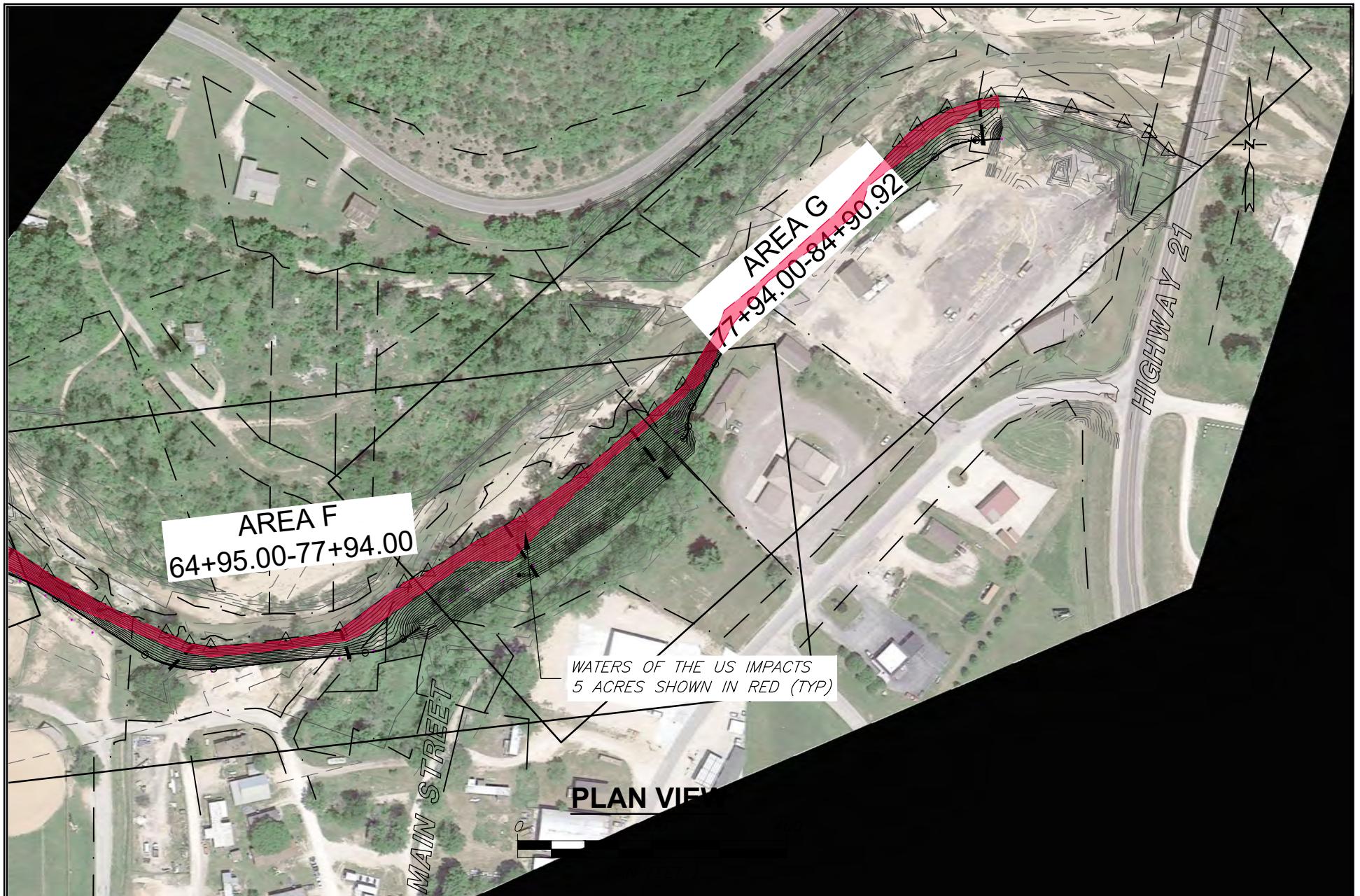
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AREA LAYOUT FG
May 2024

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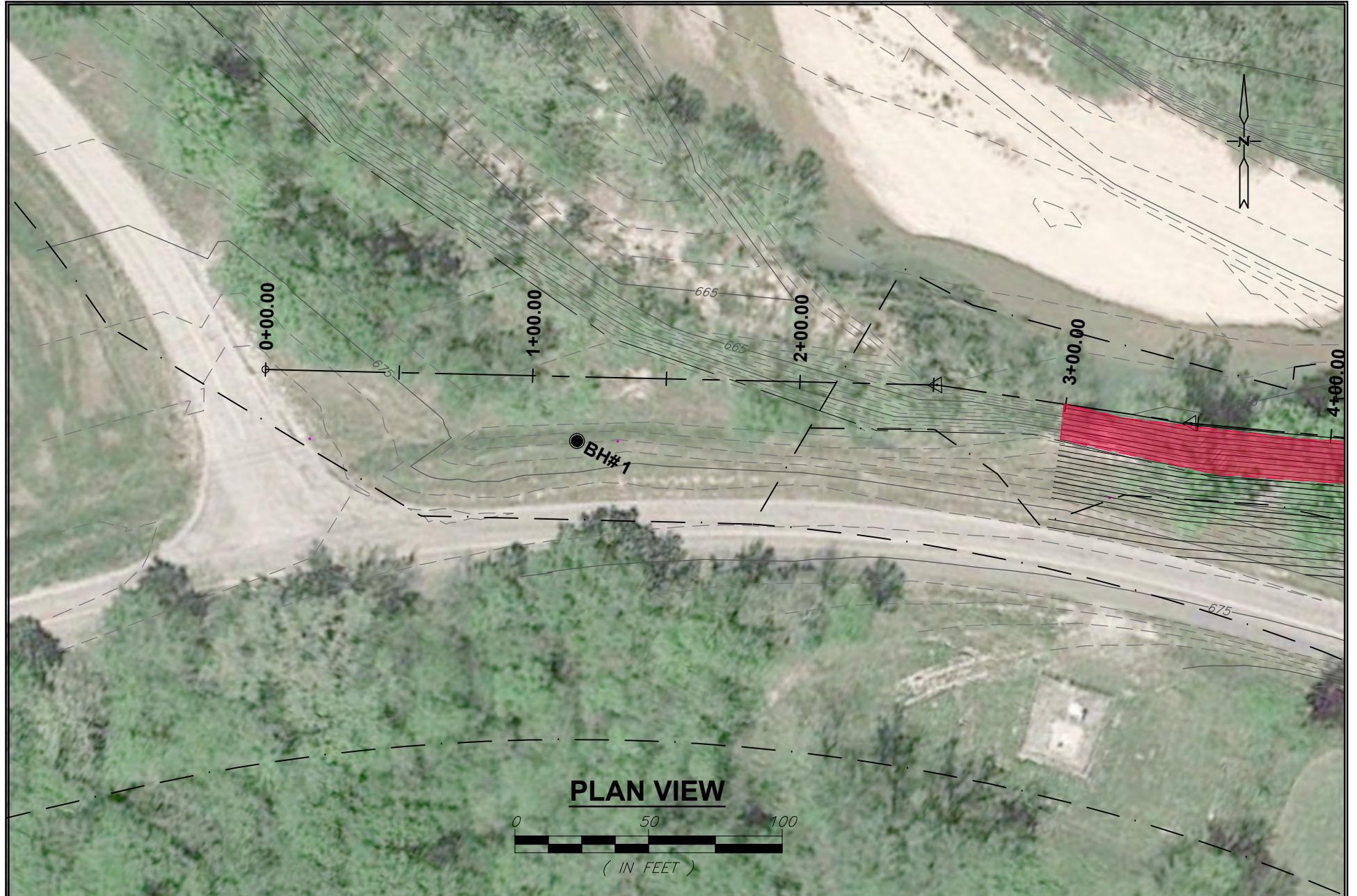
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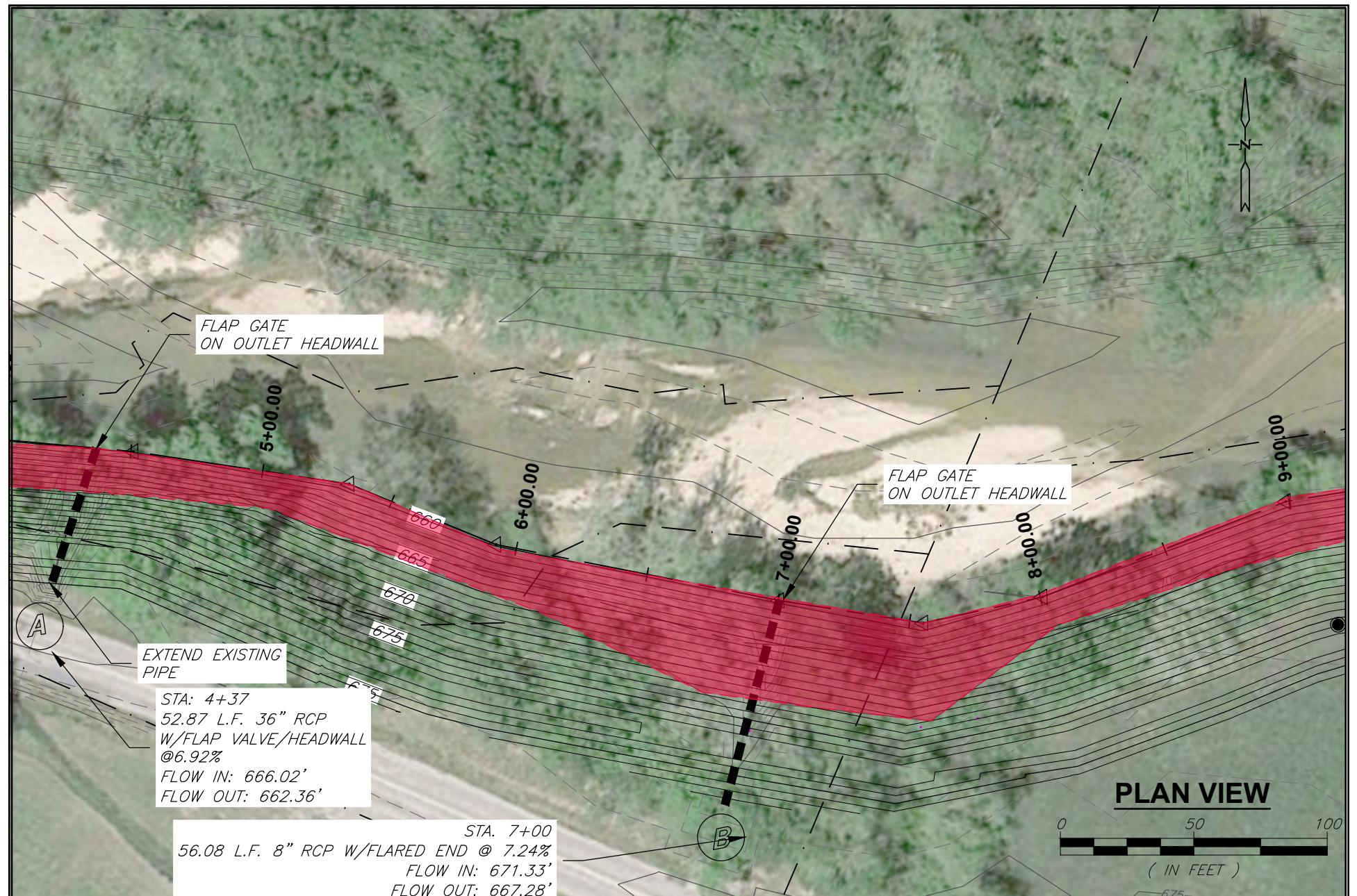
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City of Ellington/Levee Construction
REYNOLDS COUNTY, MISSOURI
NW 1/4 of section 31, T. 30N, R. 1E, and the
SW 1/4 of Section 32. T/ 30N, R. 1E
PLAN AREA A1
May 2024

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Reynolds County

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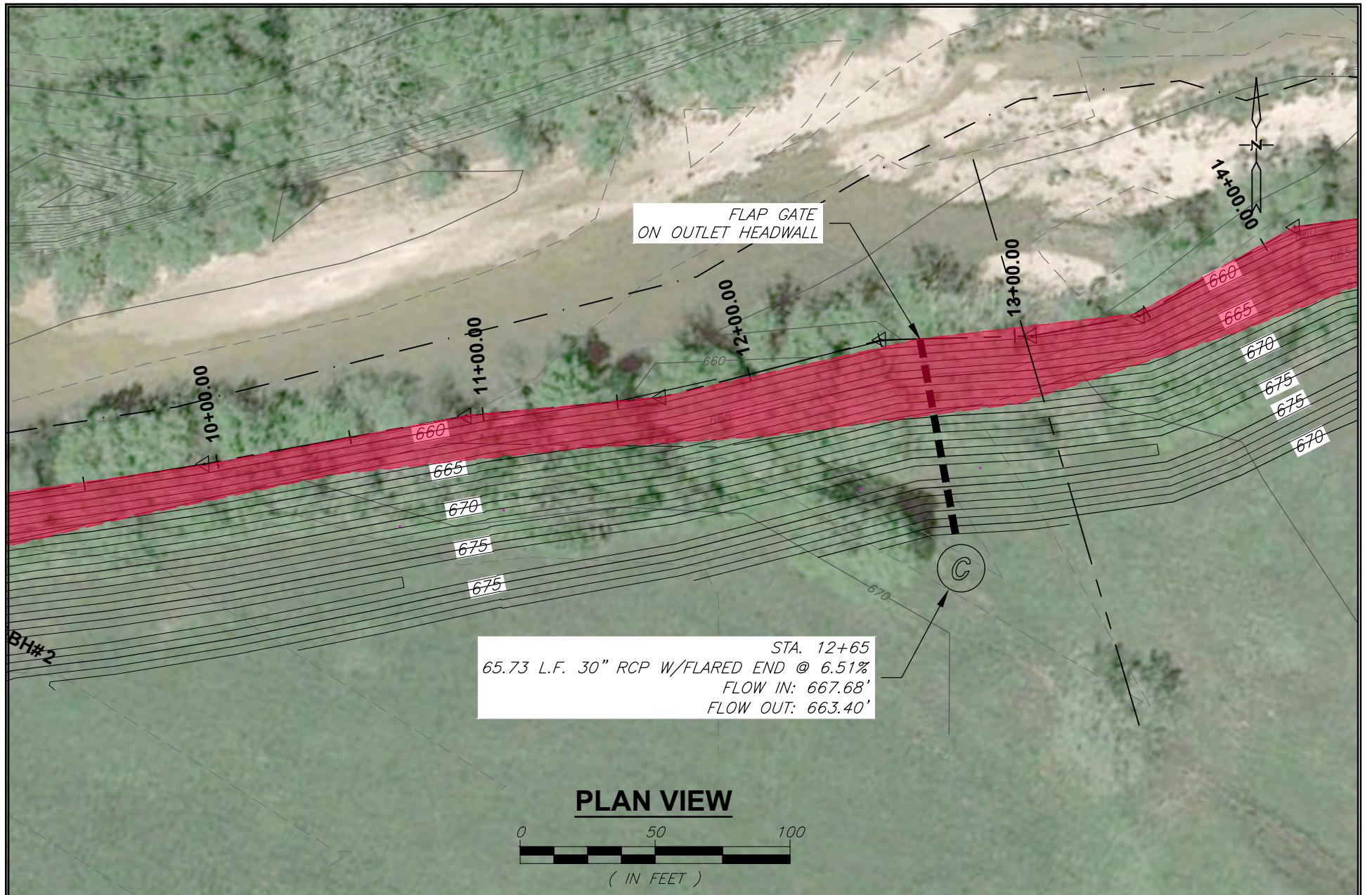
May 2024

PLAN AREA A-2

Page 8 of 43

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Reynolds County

NW 1/4 of section 31, T. 30N, R. 1E, and the

PLAN AREA A3

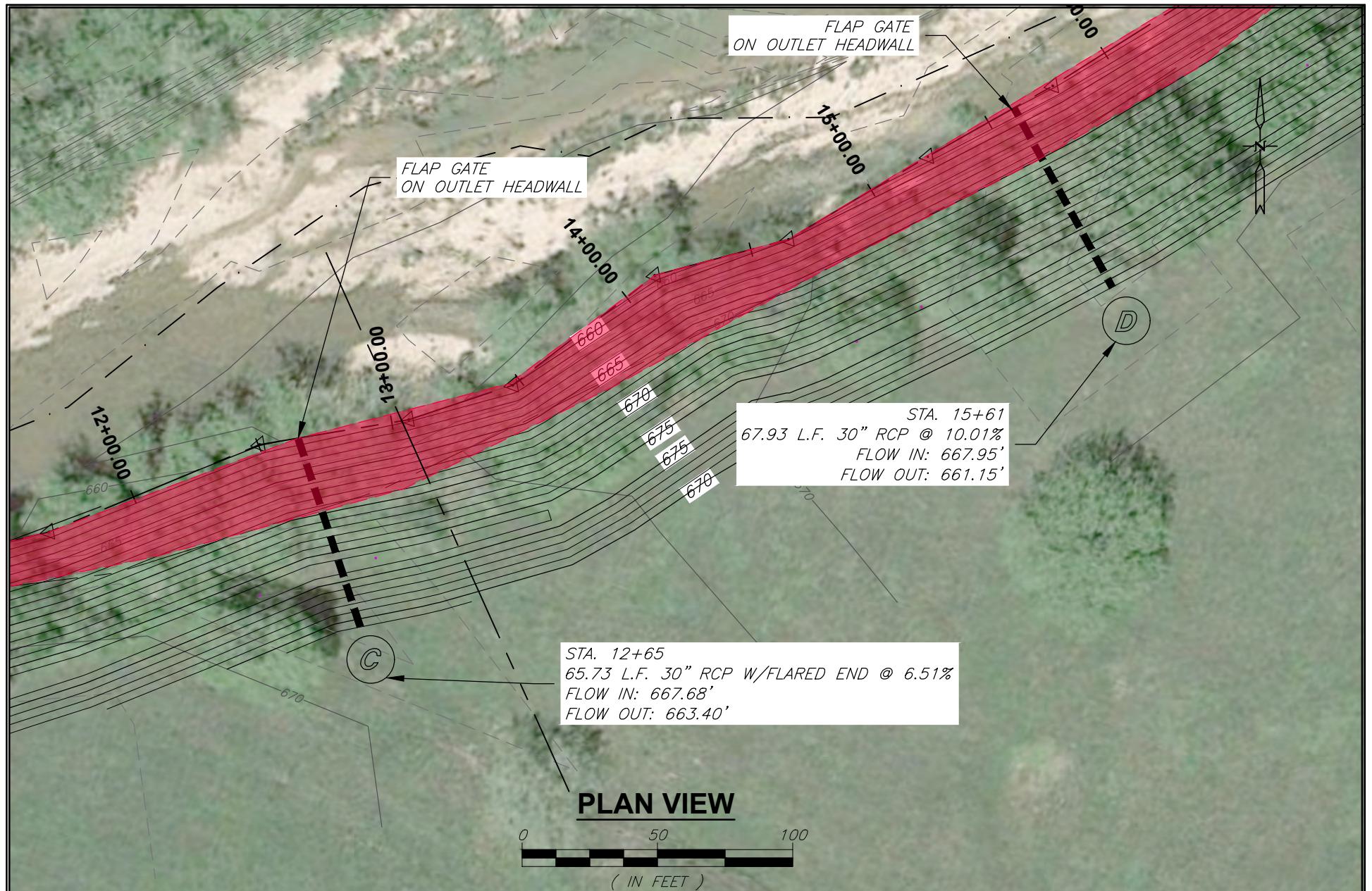
SW 1/4 of Section 32, T. 30N, R. 1E

May 2024

Page 9 of 43

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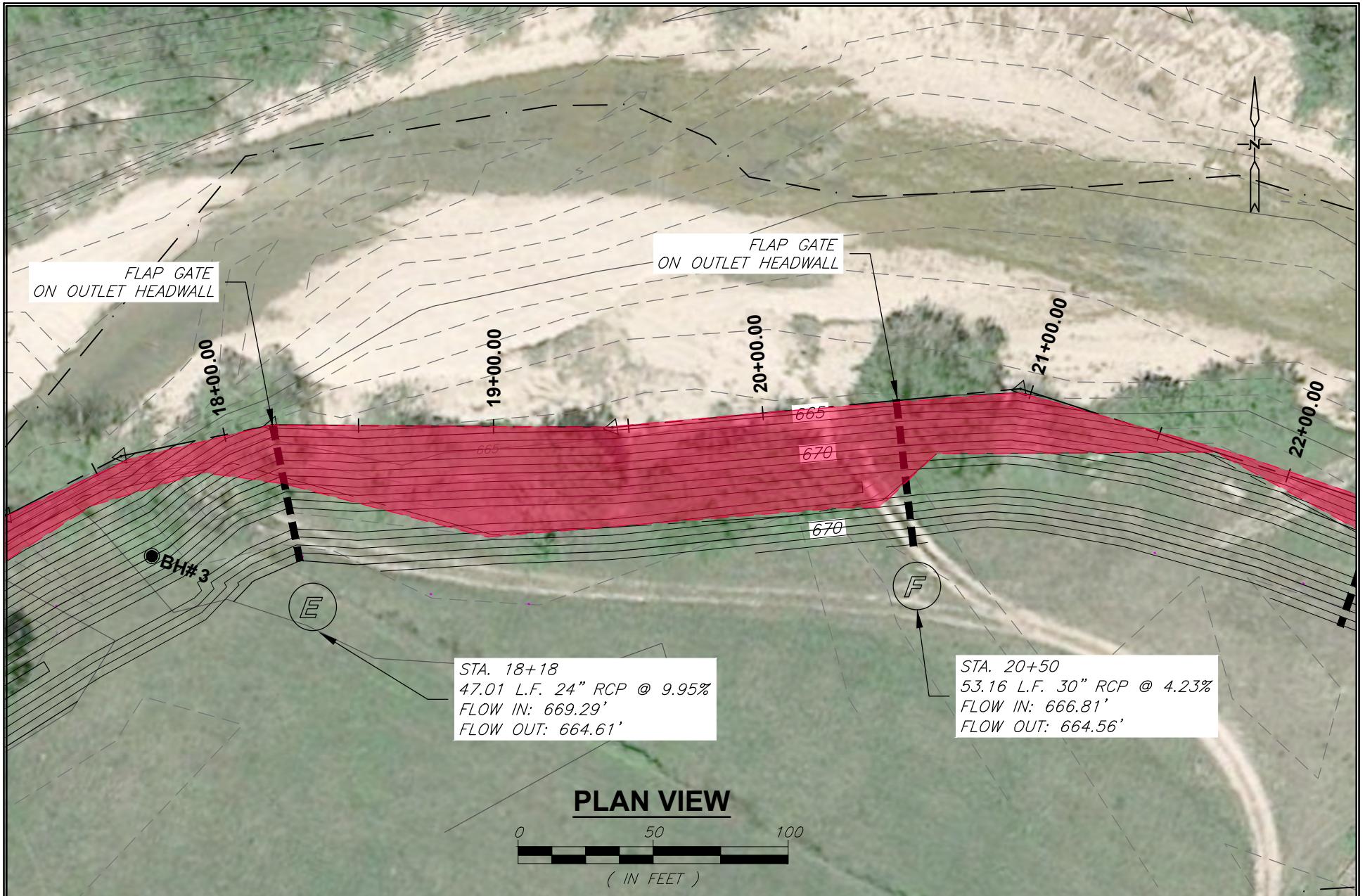
ELLINGTON LEVEE DESIGN
CITY OF ELLINGTON/Levee Construction
ELLINGTON, MISSOURI
Reynolds County

NW 1/4 of section 31, T. 30N, R. 1E, and the
SW 1/4 of Section 32, T. 30N, R. 1E
PLAN AREA B1
May 2024

Page 10 of 43

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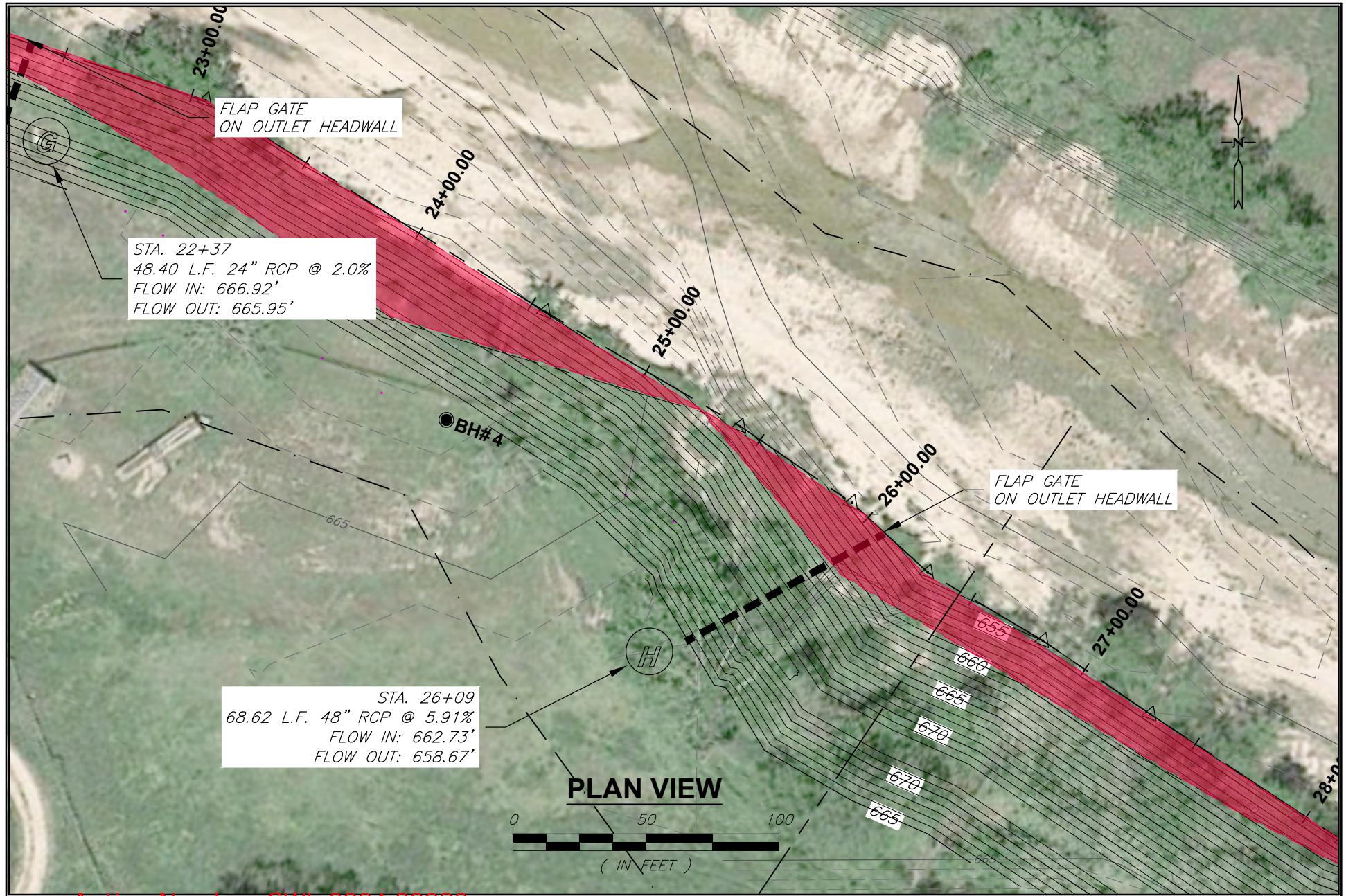
ELLINGTON LEVEE DESIGN
CITY OF ELLINGTON/Levee Construction
ELLINGTON, MISSOURI
Reynolds County

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SW 1/4 of Section 32, T. 30N, R. 1E
PLAN AREA B2
May 2024

Page 11 of 43

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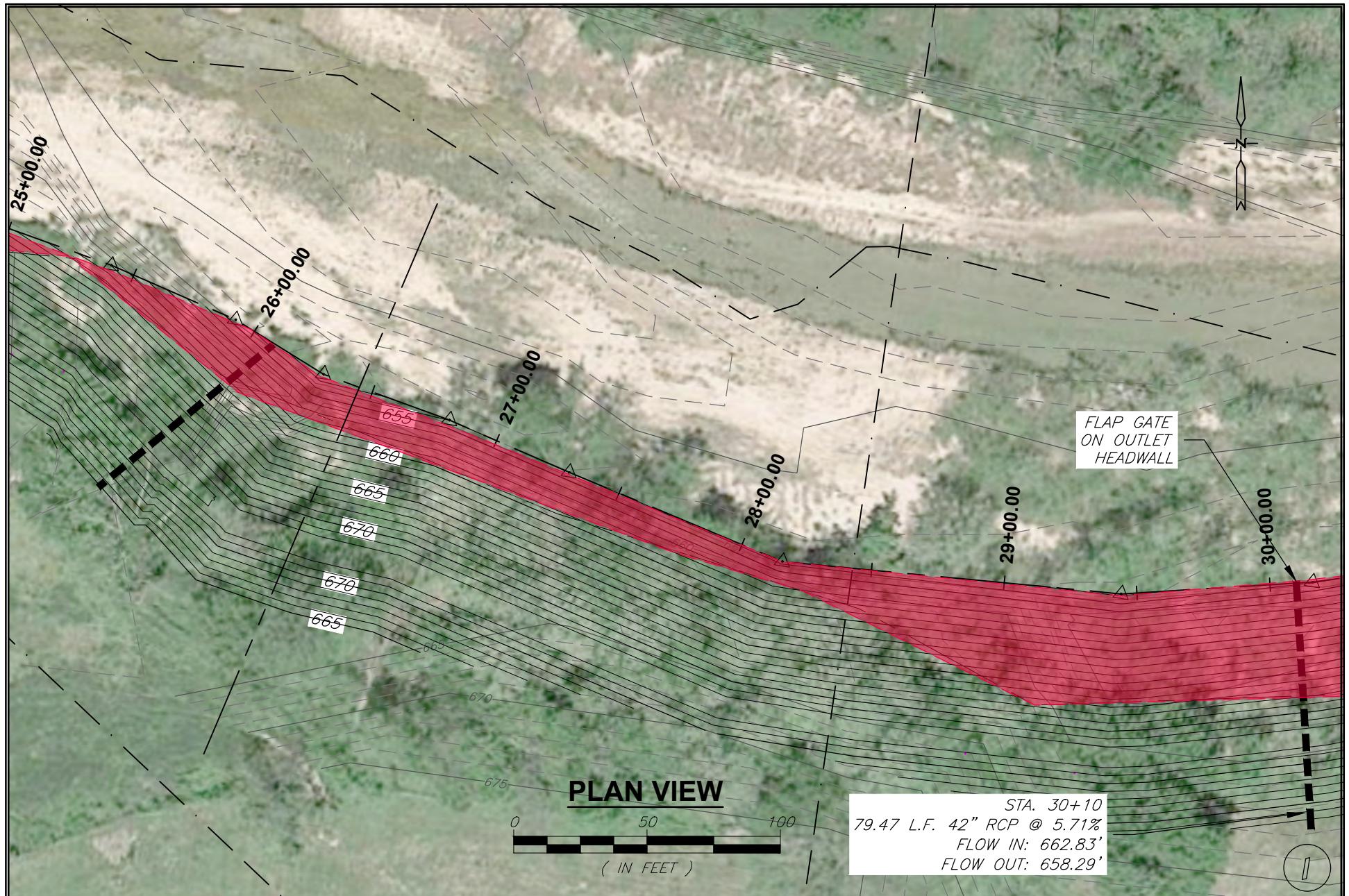
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CITY OF ELLINGTON/Levee Construction
ELLINGTON, MISSOURI
Reynolds County

NW 1/4 of section 31, T. 30N, R. 1E, and the
PLAN AREA B3
SW 1/4 of Section 32, T. 30N, R. 1E
May 2024

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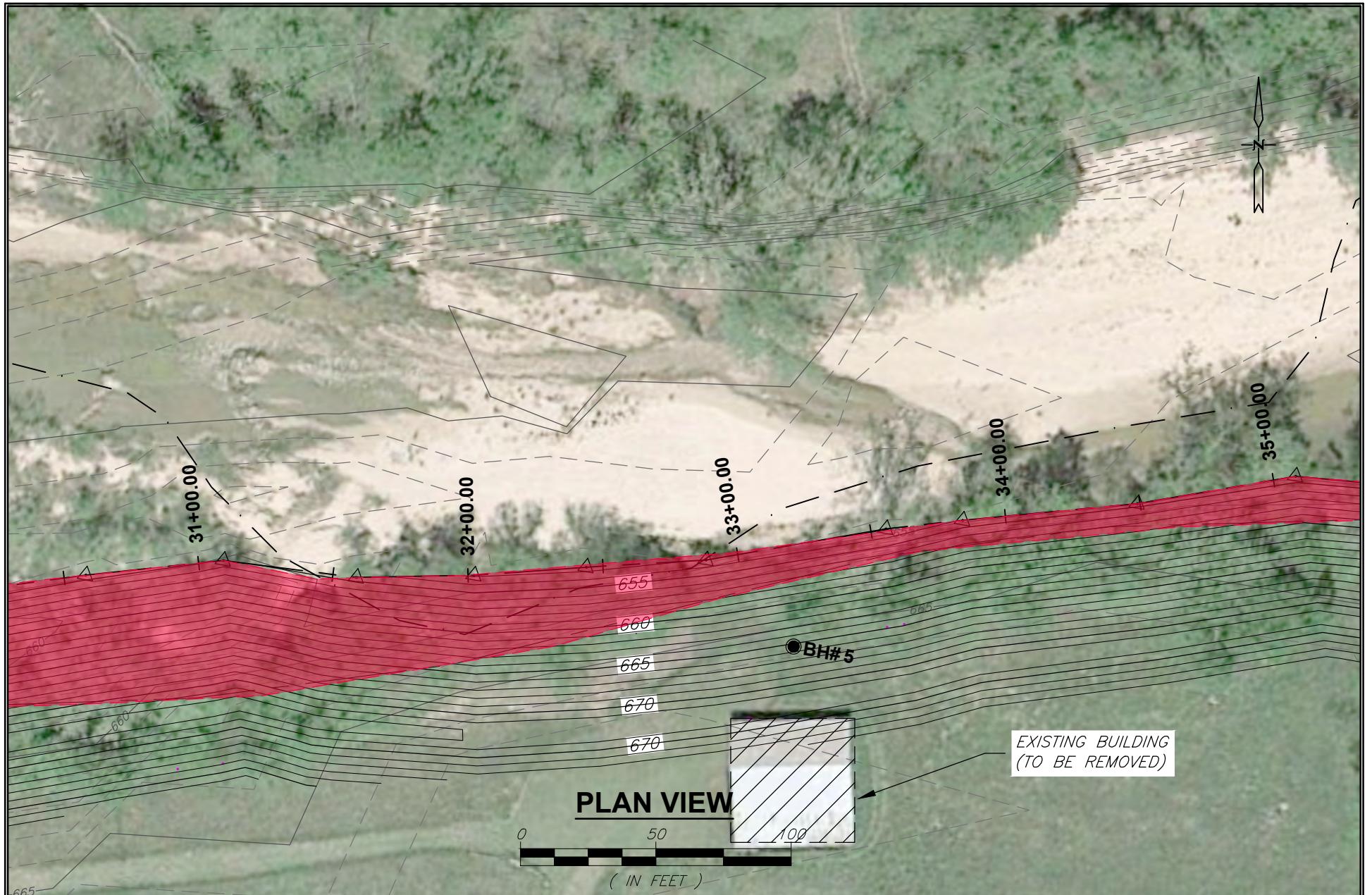
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ELLINGTON LEVEE DESIGN
 CITY OF Ellington/Levee Construction
 ELLINGTON, MISSOURI
 Reynolds County

NW 1/4 of section 31, T. 30N, R. 1E, and the
 SW 1/4 of Section 32: T. 30N, R. 1E
 PLAN AREA 6.1
 May 2024

Page 13 of 43

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 CITY OF ELLINGTON/Levee Construction
 ELLINGTON, MISSOURI
 Reynolds County

NW 1/4 of section 31, T. 30N, R. 1E, and the
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 PLAN AREA C-2
 May 2024

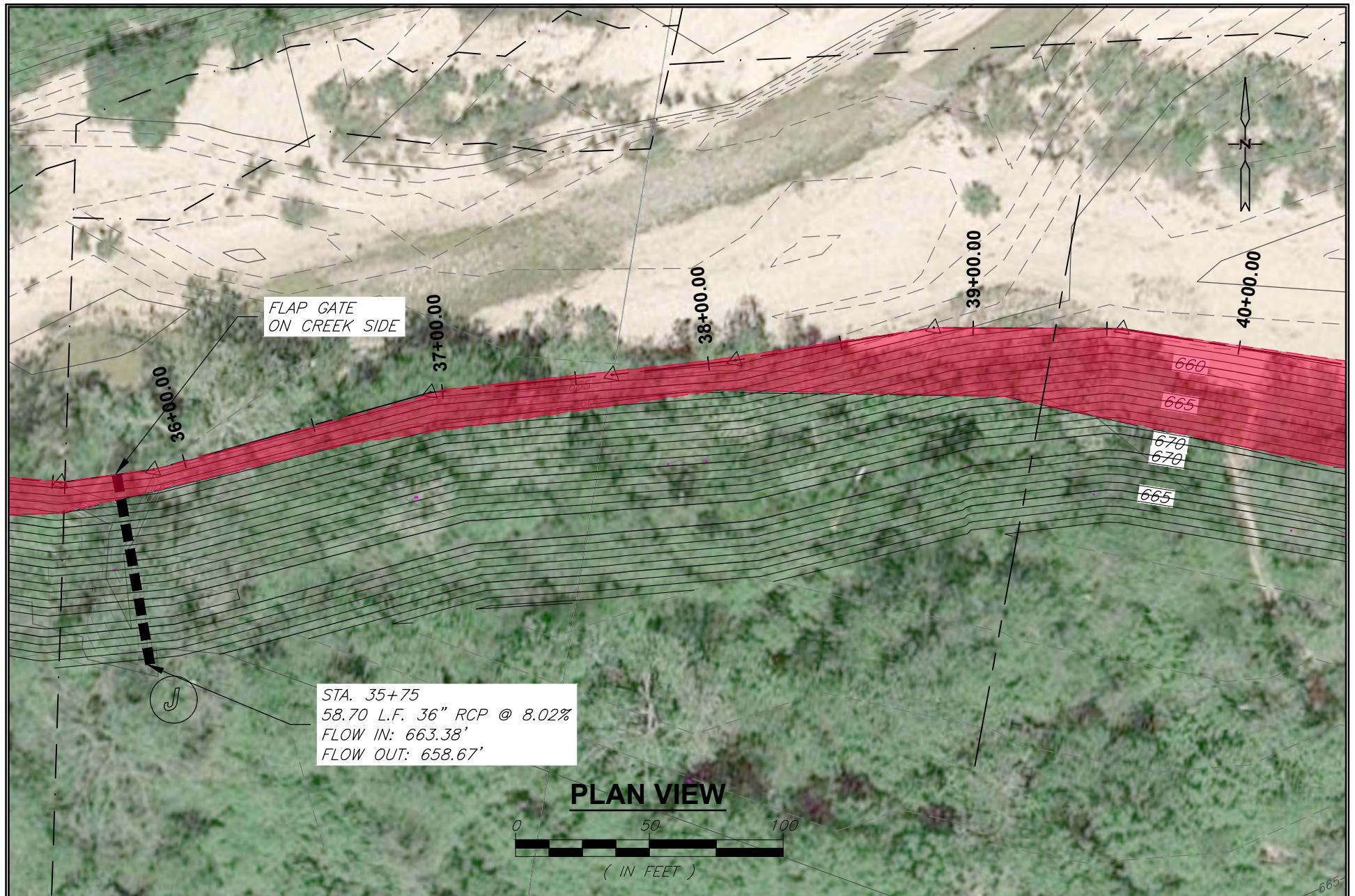
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Action Number: SWL-2024-00083

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CITY OF ELLINGTON/Levee Construction
ELLINGTON, MISSOURI
Reynolds County

NW 1/4 of section 31, T. 30N, R. 1E, and the
SW 1/4 of Section 32, T. 30N, R. 1E
PLAN AREA C-3
May 2024

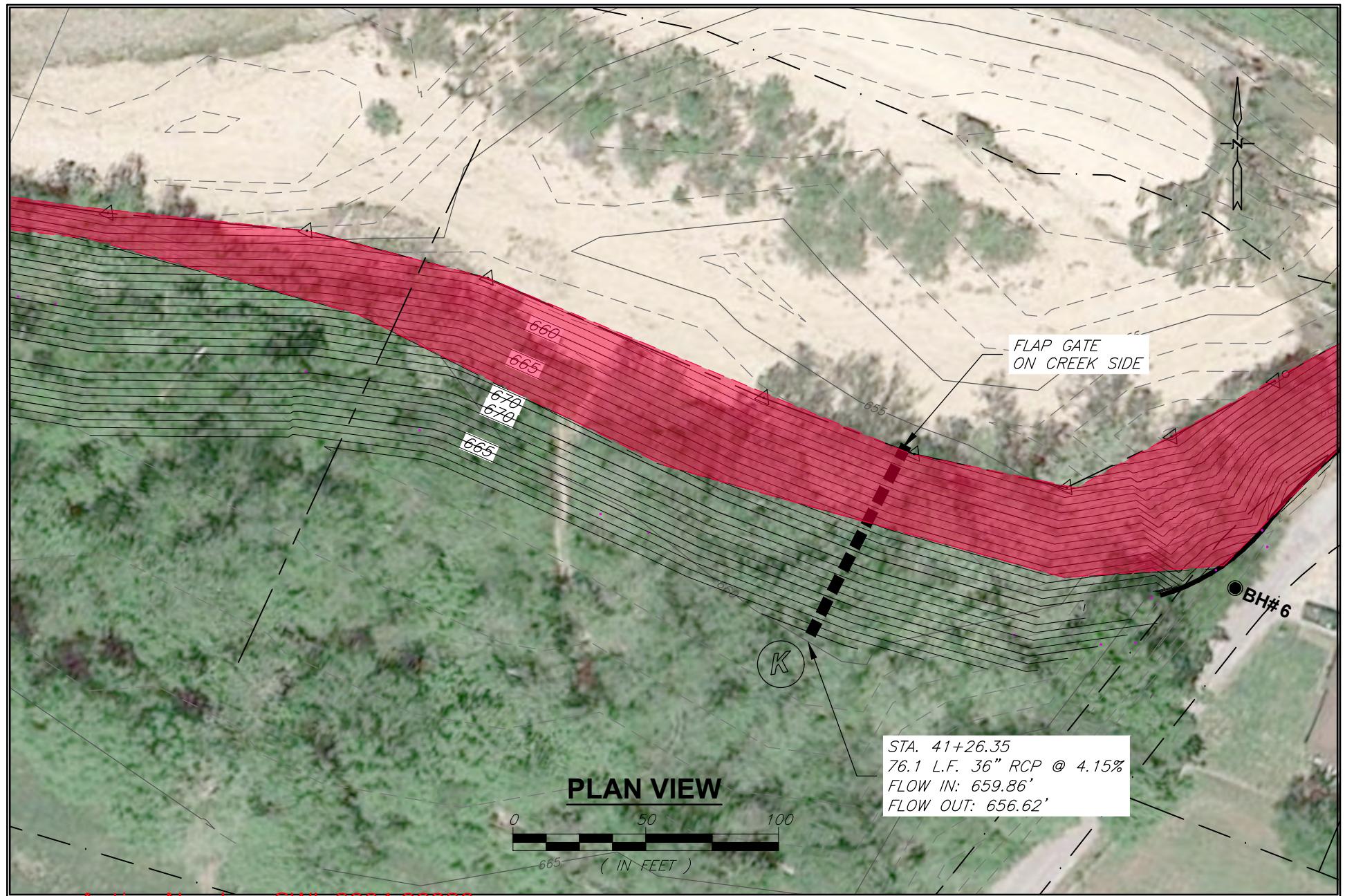
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Action Number: SWL-2024-00083

ELLINGTON LEVEE DESIGN
CITY OF ELLINGTON/Levee Construction
ELLINGTON, MISSOURI
Reynolds County

NW 1/4 of section 31, T. 30N, R. 1E, and the

SW 1/4 of Section 32, T. 30N, R. 1E

May 2024

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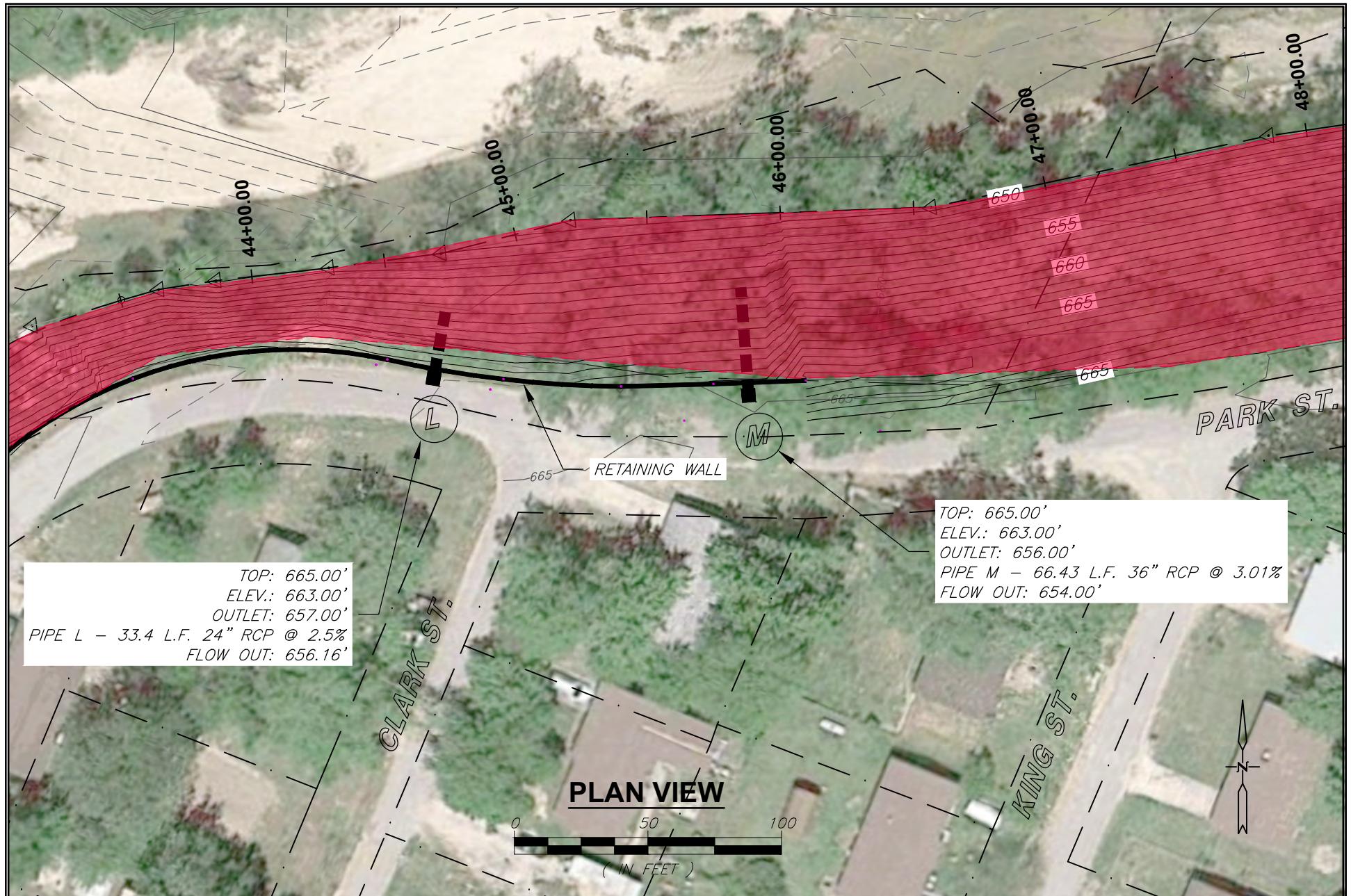
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Action Number: SWL-2024-00083
ELLINGTON LEVEE DESIGN
 City of Ellington/Levee Construction
 ELLINGTON, MISSOURI

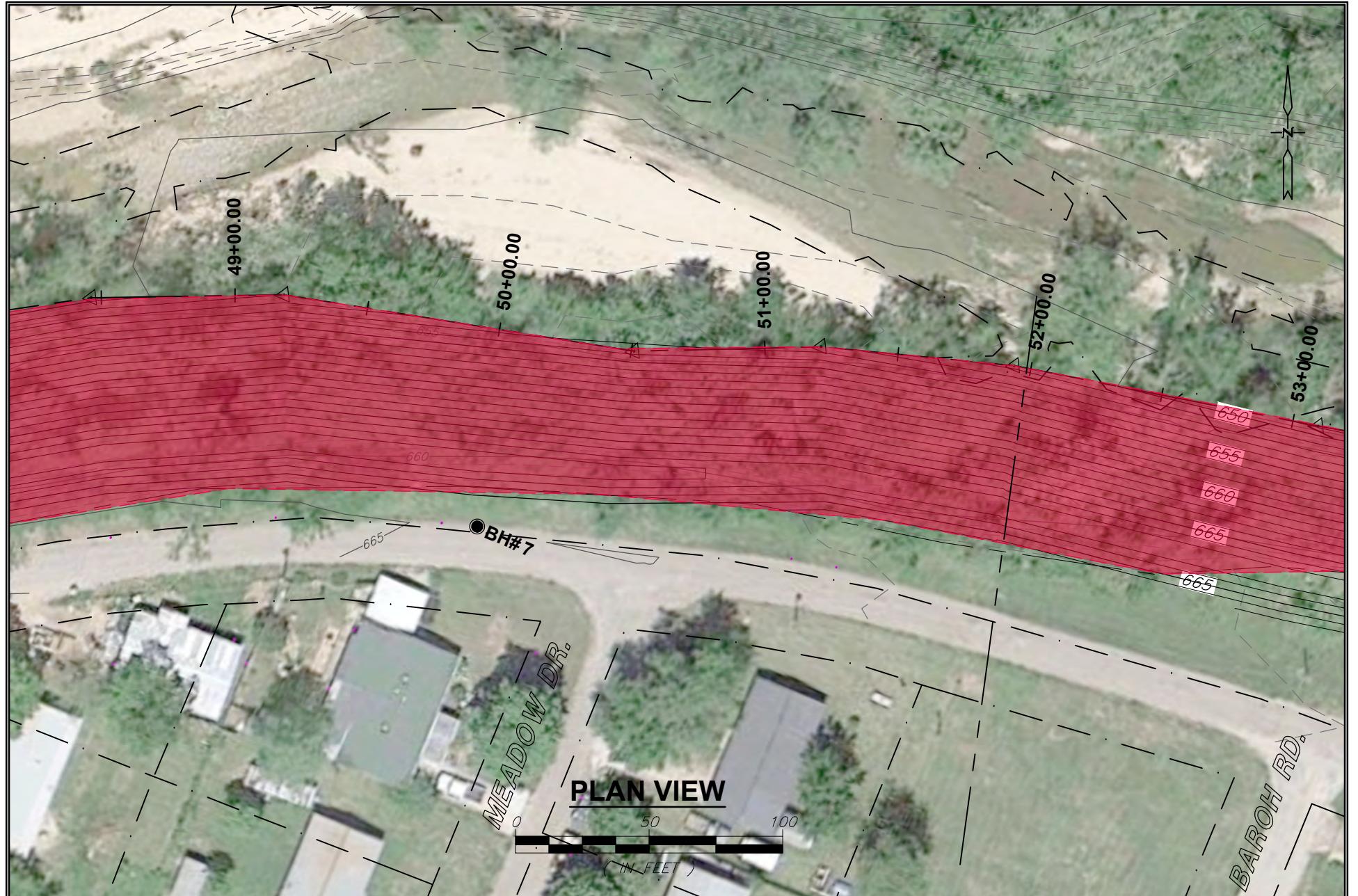
Reynolds County

NW 1/4 of section 31, T. 30N, R. 1E, and the
 SW 1/4 of Section 32. T. 30N, R. 1E
 PLAN AREA D-2
 May 2024

Page 17 of 43

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Action Number: SWL-2024-00083

~~ELLINGTON LEVEE DESIGN
City of Ellington/Levee Construction
ELLINGTON, MISSOURI
Reynolds County~~

NW 1/4 of section 31, T. 30N, R. 1E, and the

SW 1/4 of Section 32, T. 30N, R. 1E

May 2024

Page 18 of 43

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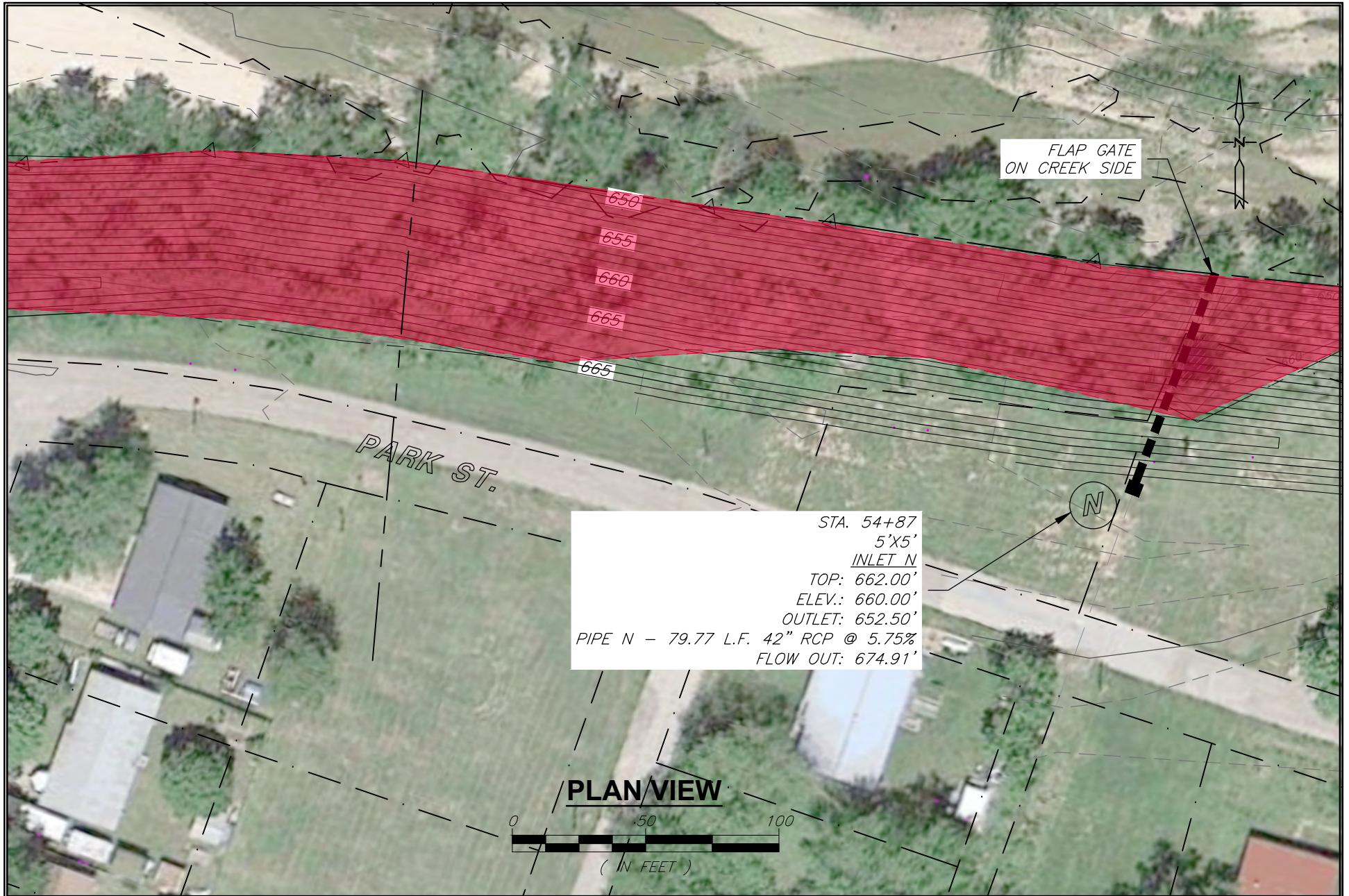
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Action Number: SWL-2024-00083

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CITY OF Ellington/Levee Construction
ELLINGTON, MISSOURI
Reynolds County~~

NW 1/4 of section 31, T. 30N, R. 1E, and the
SW 1/4 of Section 32: T. 30N, R. 1E
PLAN AREA E-1
May 2024

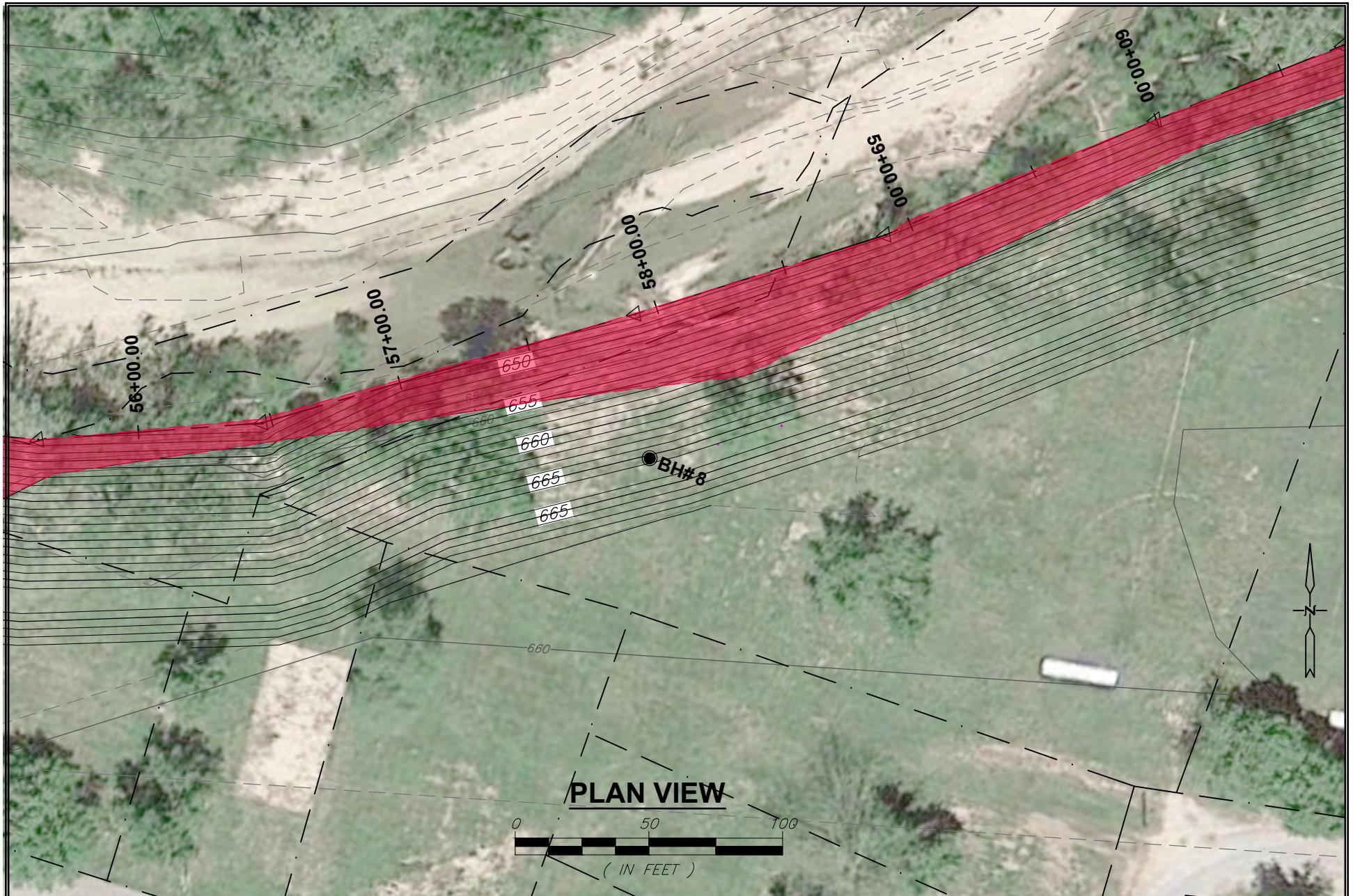
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Action Number: SWL-2024-00083

ELLINGTON LEVEE DESIGN

ELLINGTON, MISSOURI

Reynolds County

NW 1/4 of section 31, T. 30N, R. 1E, and the

SW 1/4 of Section 32, T. 30N, R. 1E

May 2024

PLAN AREA E1

Page 20 of 43

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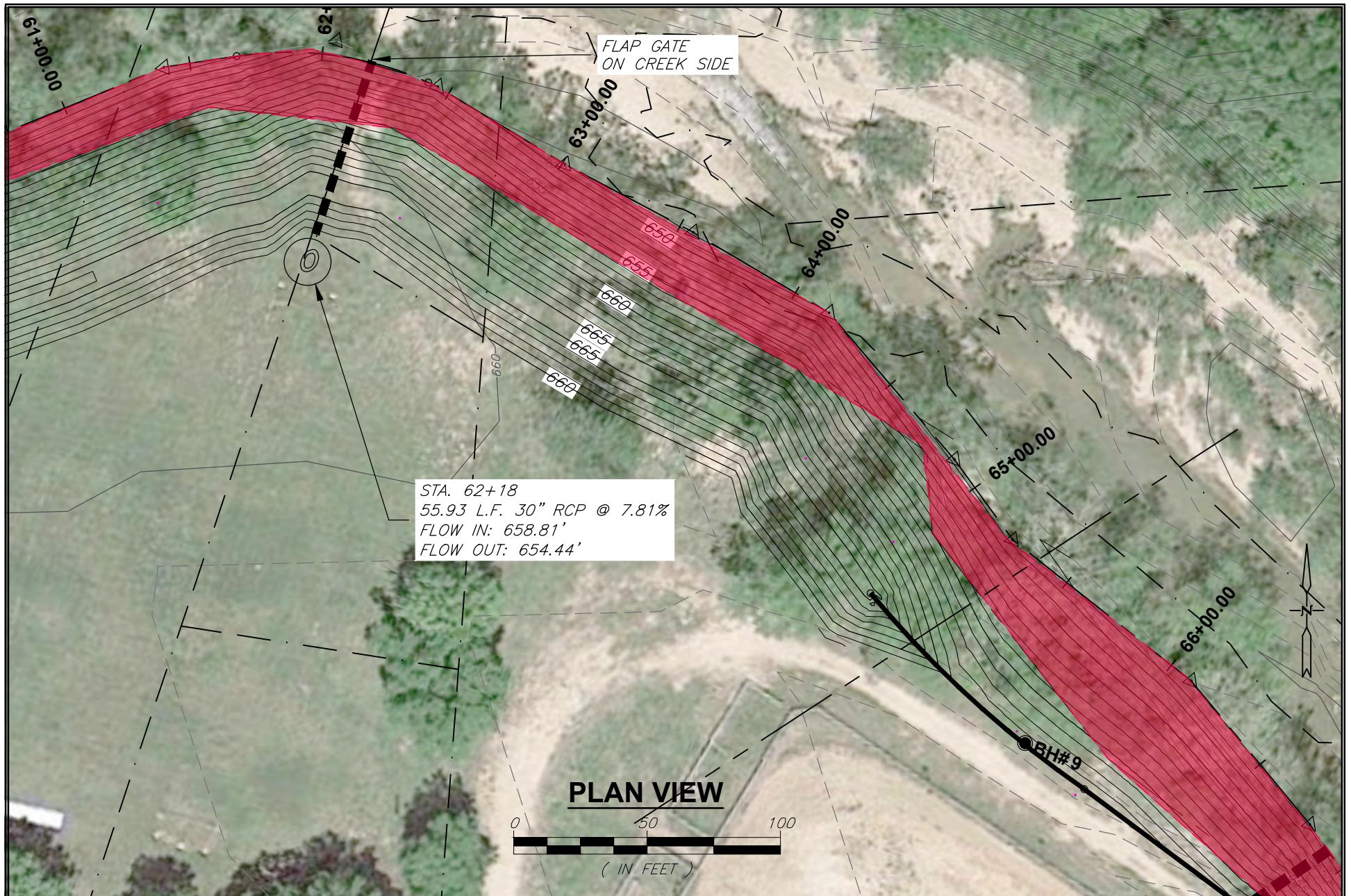
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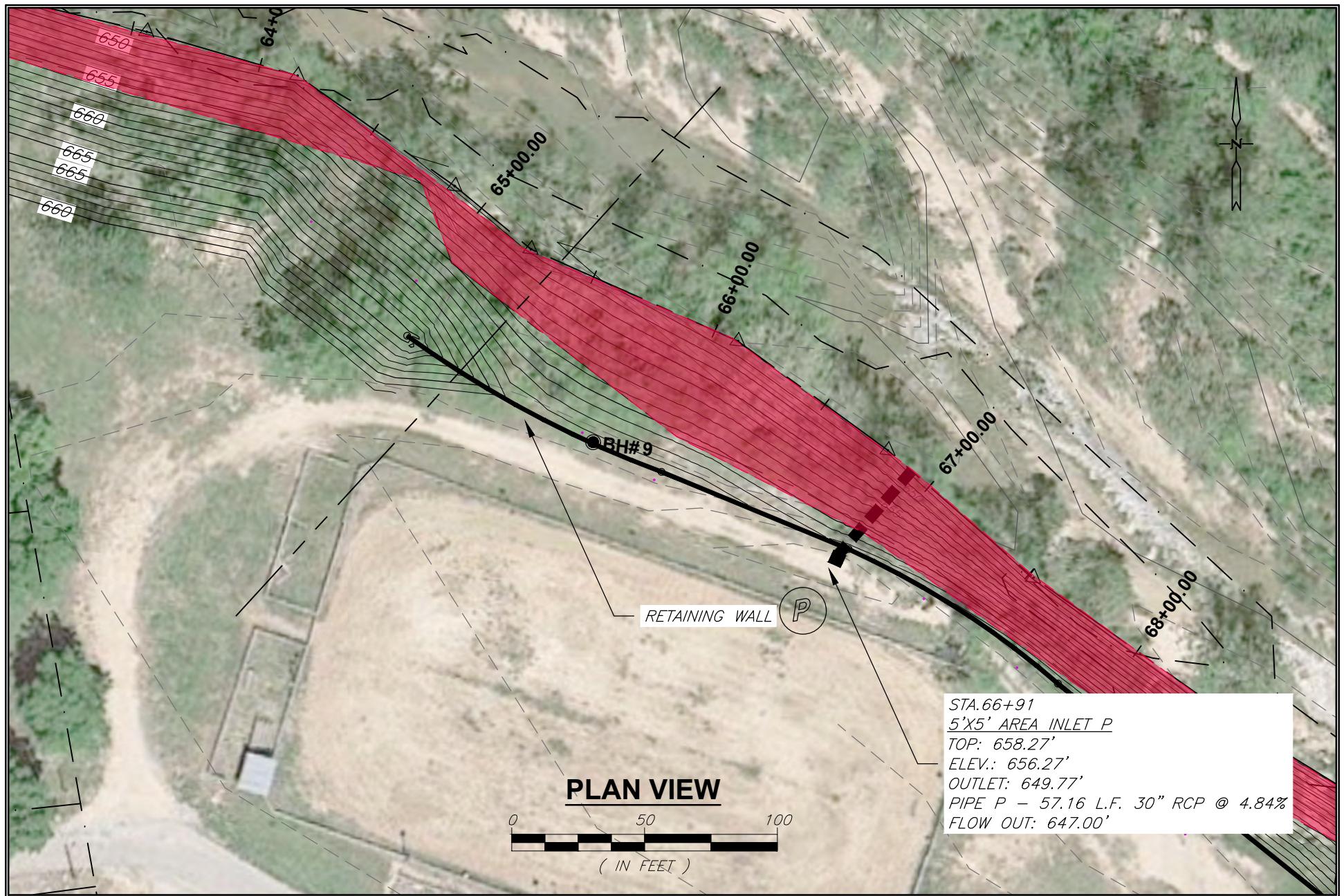
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Action Number: SWL-2024-00083
ELLINGTON LEVEE DESIGN
CITY OF ELLINGTON/Levee Construction
ELLINGTON, MISSOURI
Reynolds County
NW 1/4 of section 31, T. 30N, R. 1E, and the
SW 1/4 of Section 32: T. 30N, R. 1E
PLAN AREA E.3
May 2024 Page 21 of 43

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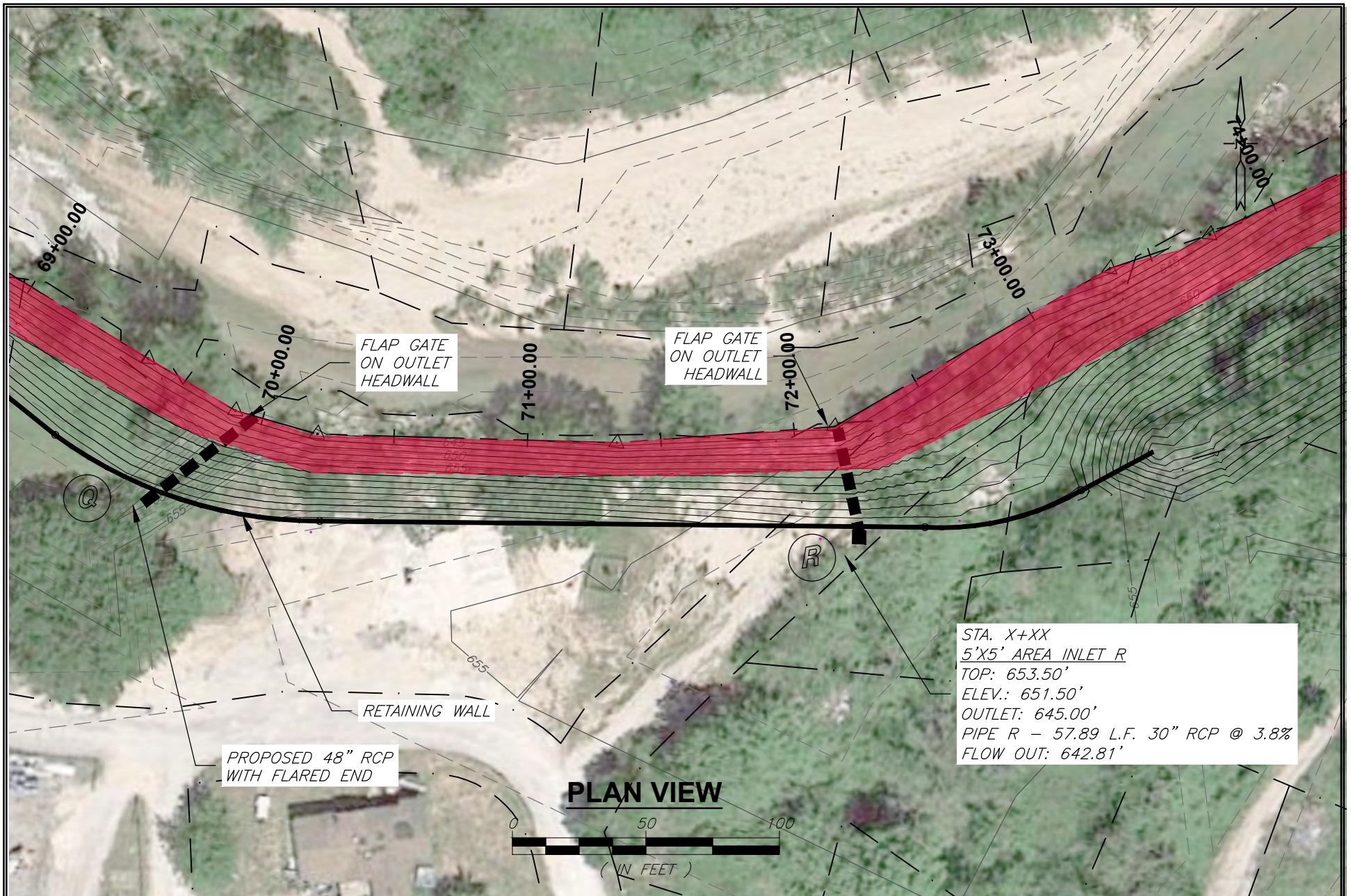
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ELLINGTON LEVEE DESIGN
 City of Ellington/Levee Construction
 ELLINGTON, MISSOURI
 Reynolds County

NW 1/4 of section 31, T. 30N, R. 1E, and the
 SW 1/4 of Section 32. T. 30N, R. 1E
 PLAN AREA F.1
 May 2024

Page 22 of 43

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Action Number: SWL-2024-00083
ELLINGTON LEVEE DESIGN
 City of Ellington/Levee Construction
 ELLINGTON, MISSOURI

Reynolds County

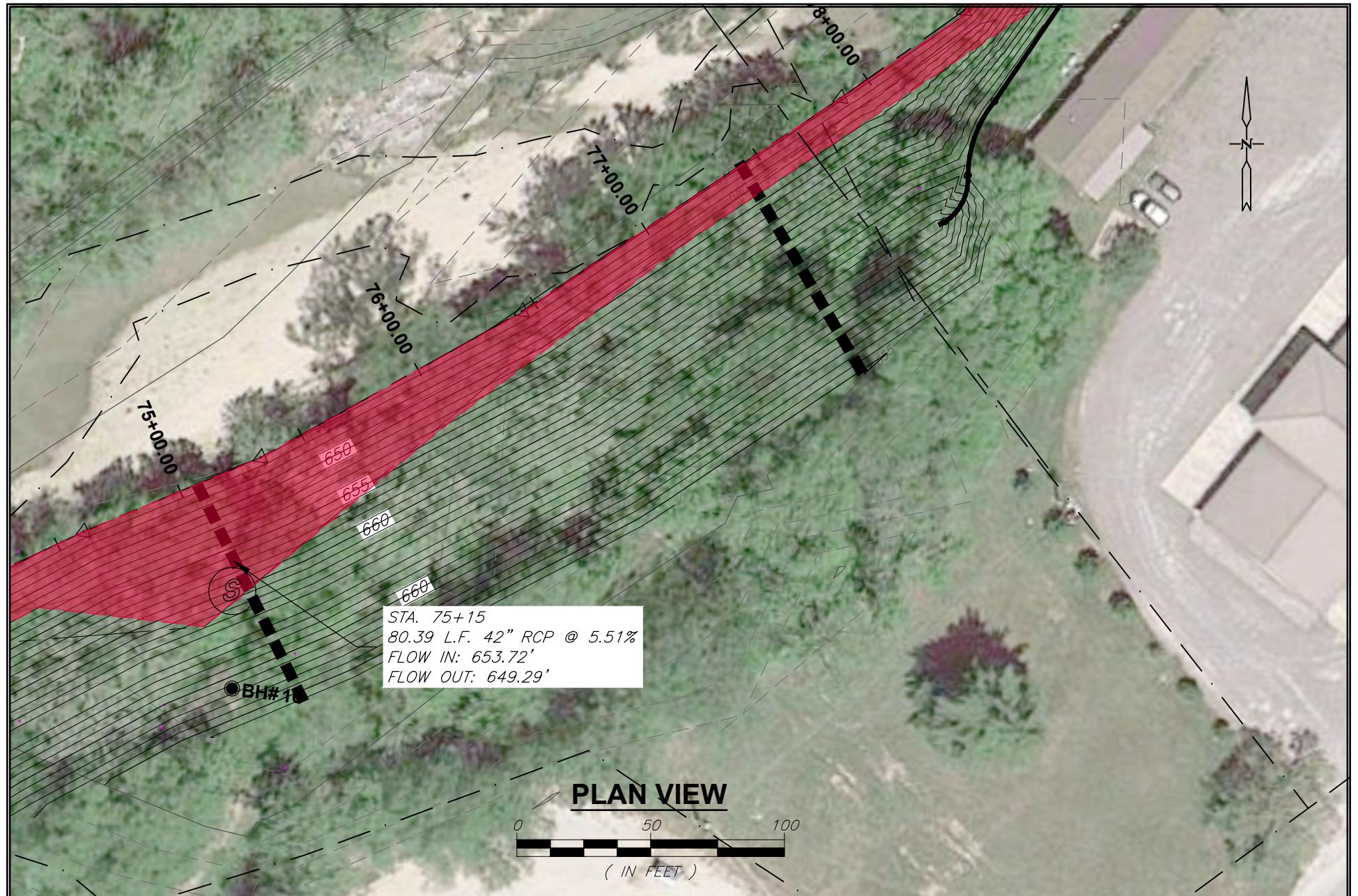
NW 1/4 of section 31, T. 30N, R. 1E, and the
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 PLAN AREA F-2
 May 2024

Page 23 of 43

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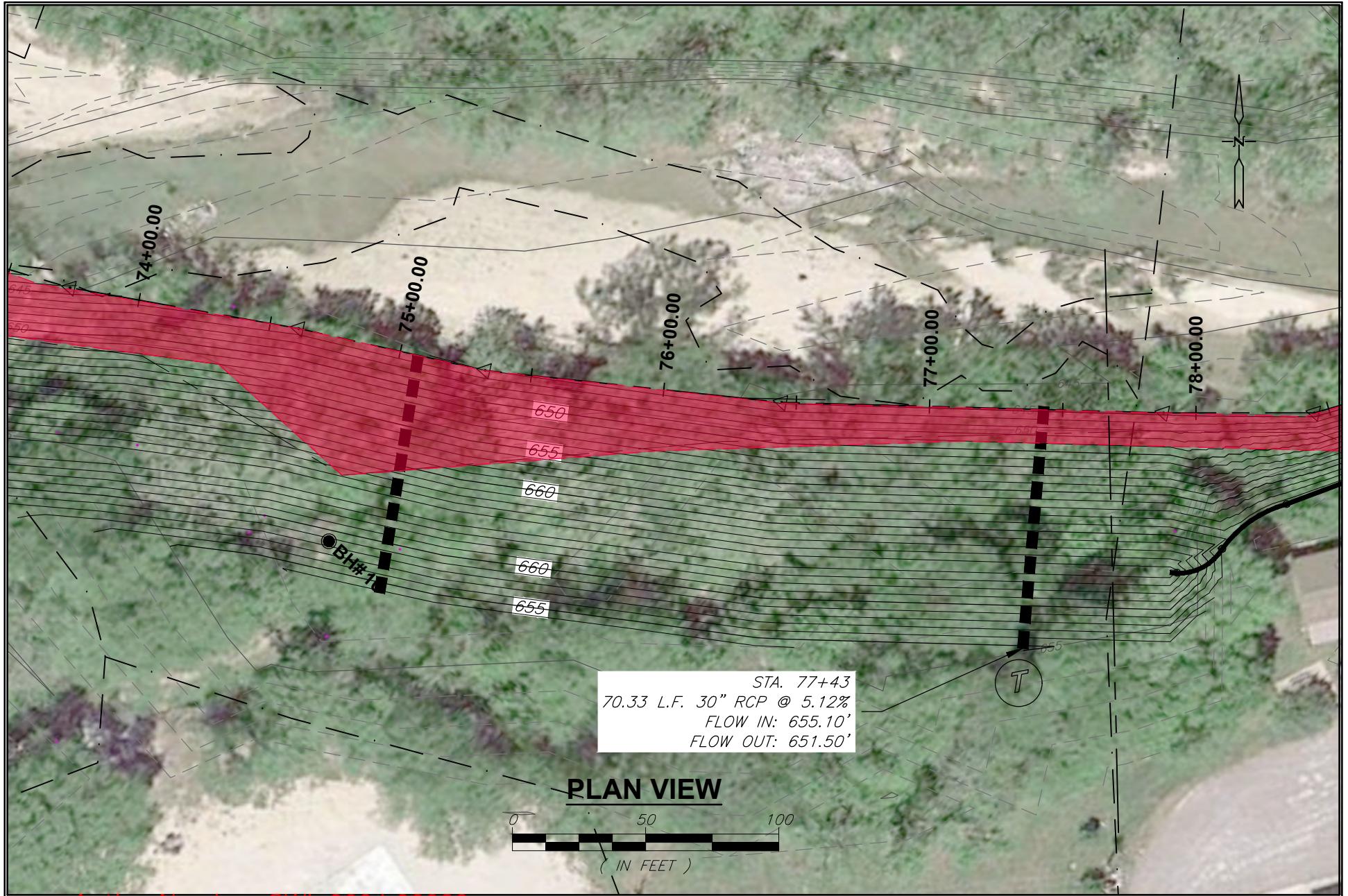
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ELLINGTON LEVEE DESIGN
 CITY OF ELLINGTON/Levee Construction
 REYNOLDS COUNTY, MISSOURI

NW 1/4 of section 31, T. 30N, R. 1E, and the
 SW 1/4 of Section 32, T. 30N, R. 1E
 PLAN AREA F-3
 May 2024

Page 24 of 43

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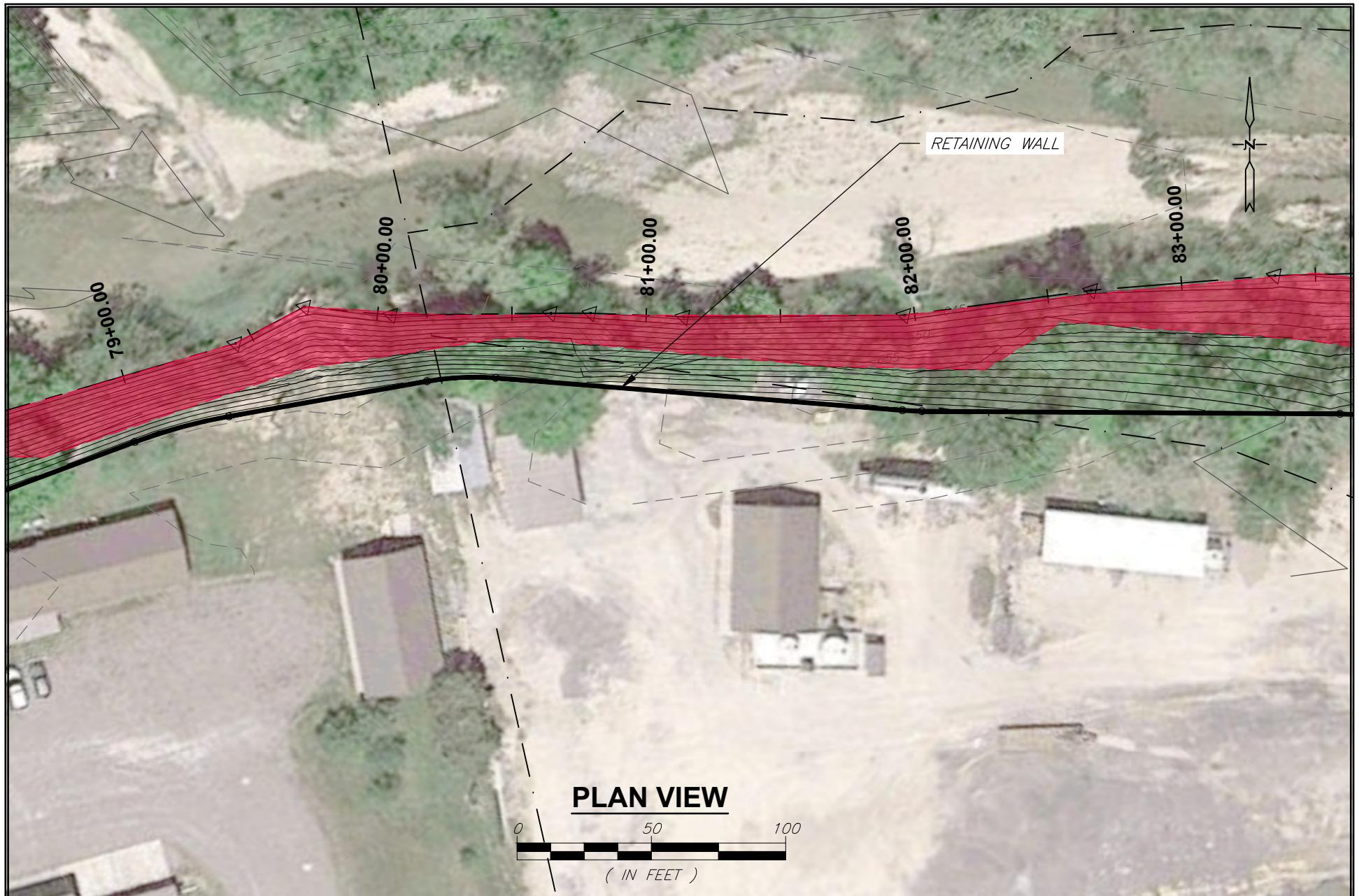


Action Number: SWL-2024-00083
ELLINGTON LEVEE DESIGN
CITY OF Ellington/Levee Construction
ELLINGTON, MISSOURI
Reynolds County
NW 1/4 of section 31, T. 30N, R. 1E, and the
SW 1/4 of Section 32: T. 30N, R. 1E
PLAN AREA G-1
May 2024

Page 25 of 43

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Action Number: SWL-2024-00083
ELLINGTON LEVEE DESIGN
CITY OF ELLINGTON/Levee Construction
ELLINGTON, MISSOURI
Reynolds County
NW 1/4 of section 31, T. 30N, R. 1E, and the
SW 1/4 of Section 32. T. 30N, R. 1E
PLAN AREA G-2
May 2024

Page 26 of 43

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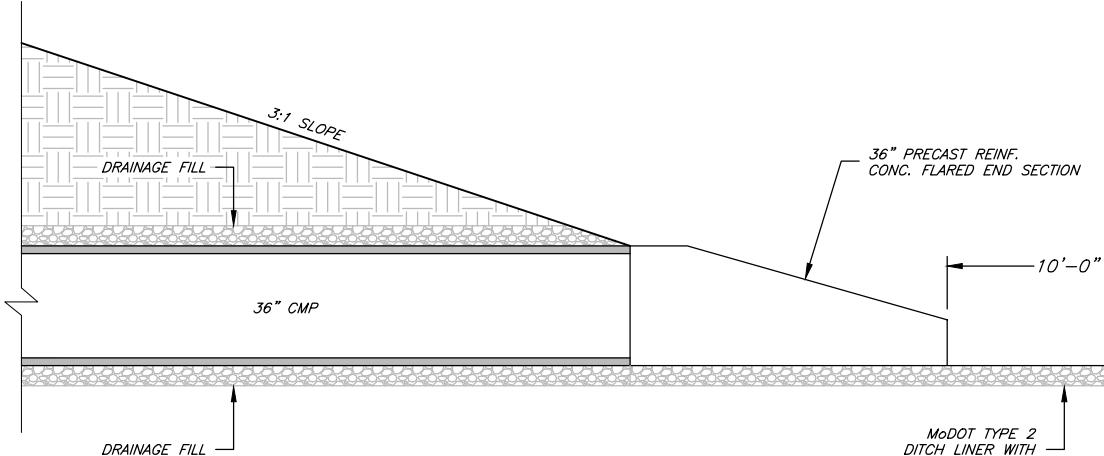
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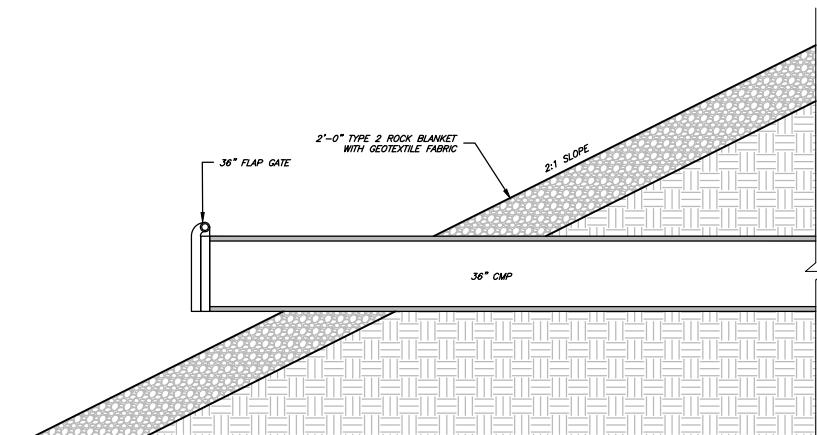
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ELLINGTON LEVEE DESIGN
CITY OF Ellington/Levee Construction
ELLINGTON, MISSOURI
Reynolds County
NW 1/4 of section 31, T. 30N, R. 1E, and the
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PLAN AREA C3
May 2024

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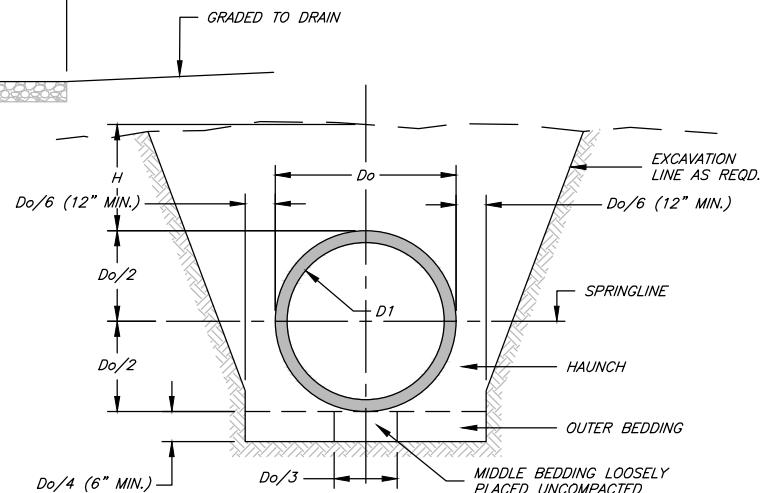
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CULVERT INLET DETAIL



CULVERT OUTLET DETAIL



D₁ = NORMAL INSIDE DIAMETER OF PIPE.

D_o = OUTSIDE DIAMETER OF PIPE.

H = FILL COVER HEIGHT OVER PIPE (FEET)

MIN. = MINIMUM

= UNDISTURBED SOIL

TYPICAL TRENCH DETAIL

Action Number: SWL-2024-00083

ELLINGTON LEVEE DESIGN
CITY OF HUNTINGTON/Levee Construction
ELINGTON, MISSOURI
Reynolds County

NW 1/4 of section 31, T. 30N, R. 1E, and the
SW 1/4 of Section 32, T. 30N, R. 1E
CONSTRUCTION DETAILS 1
May 2024

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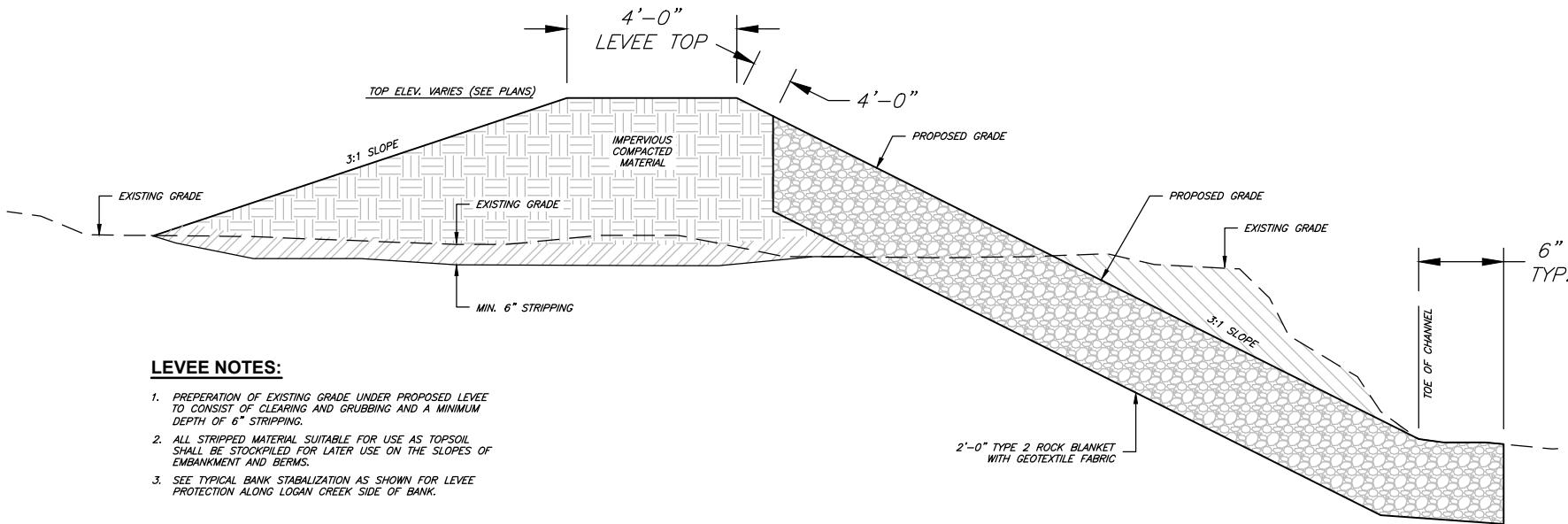
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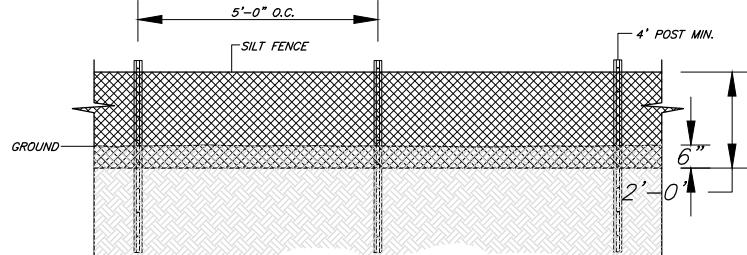
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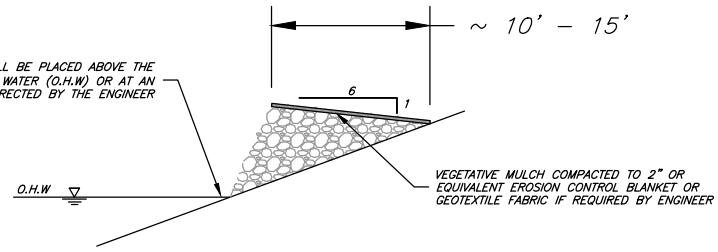
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TYPICAL BANK STABILIZATION IN FILL
N.T.S.



SILT FENCE DETAIL
N.T.S.



TYPE C BERM SECTION
N.T.S.

Action Number: SWL-2024-00083
ELLINGTON LEVEE DESIGN
 CITY of Burlington/Levee Construction
 ELLINGTON, MISSOURI
 Reynolds County

NW 1/4 of section 31, T. 30N, R. 1E, and the
 SW 1/4 of Section 32, T. 30N, R. 1E
 CONSTRUCTION DETAILS 2
 May 2024

Page 29 of 43

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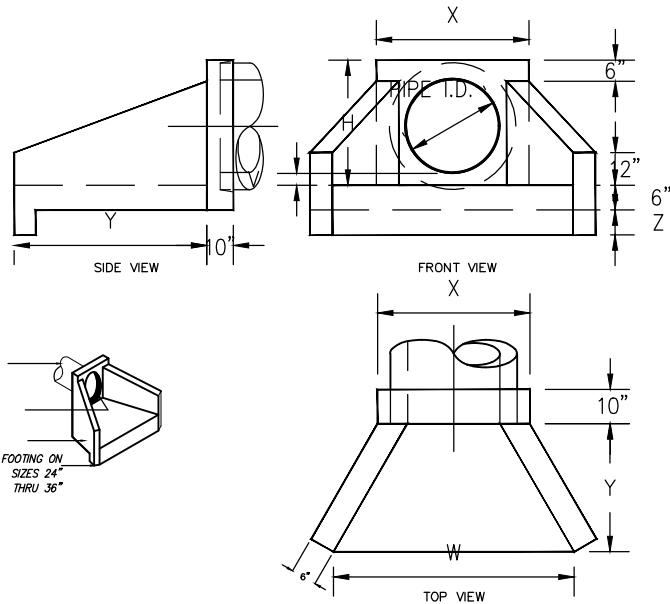
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Pipe Diameter	Dimensions					
	H	W	V	X	Y	Z
24"	4'-3"	8'-8"	6"	5'-3"	4'-0"	9"
30"	4'-3"	8'-8"	6"	5'-3"	4'-0"	9"
36"	4'-10"	10'-5"	6"	5'-10"	5'-0"	9"
42"	5'-6"	13'-1"	6"	6'-5"	6'-0"	12"
48"	6'-2"	13'-8"	6"	7'-0"	6'-0"	12"



TRENCH CONSTRUCTION SEQUENCE:

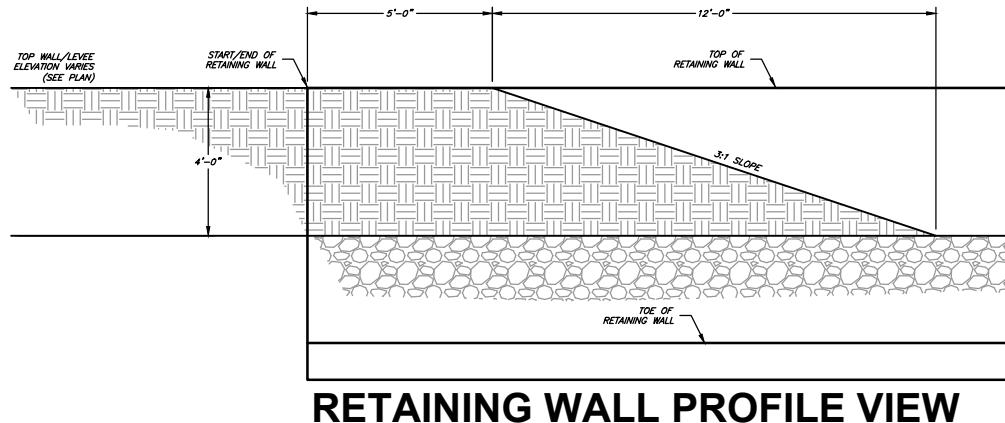
1. PLACE BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE
3. COMPACT BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. PLACE AND COMPACT THE HAUNCH AREA UP TO THE SPRINGLINE.
5. COMPLETE BACKFILL ACCORDING TO SPECIFICATIONS.

Action Number: SWL-2024-00083
ELLINGTON LEVEE DESIGN
CITY of Ellington/Levee Construction
ELLINGTON, MISSOURI
Reynolds County
NW 1/4 of section 31, T. 30N, R. 1E, and the
SW 1/4 of Section 32, T. 30N, R. 1E
CONSTRUCTION DETAILS 3
May 2024 Page 30 of 43

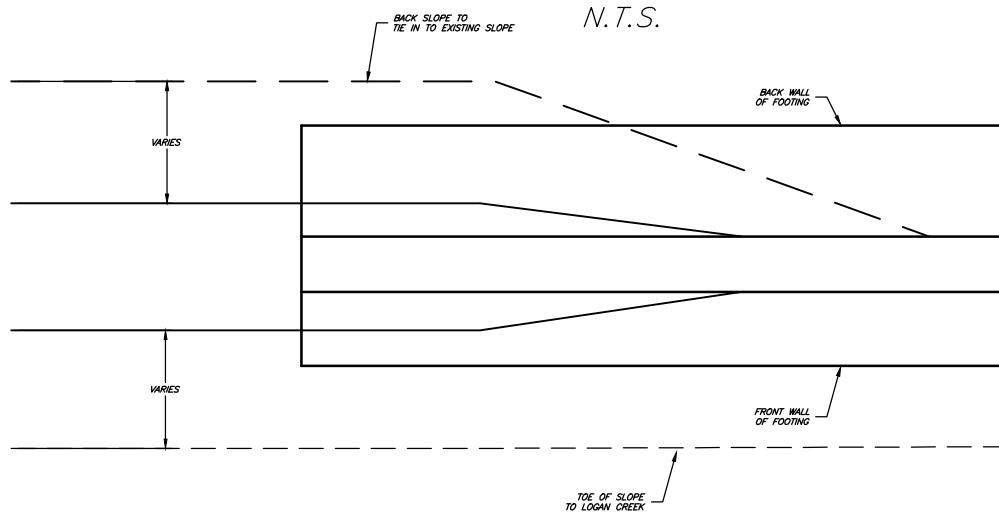
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RETAINING WALL PROFILE VIEW



RETAINING WALL PLAN VIEW

N.T.S.

Action Number: SWL-2024-00083
ELLINGTON LEVEE DESIGN
 CITY OF Ellington/Levee Construction
 ELLINGTON, MISSOURI
 Reynolds County

NW 1/4 of section 31, T. 30N, R. 1E, and the
 SW 1/4 of Section 32, T. 30N, R. 1E
 CONSTRUCTION DETAILS 4
 May 2024

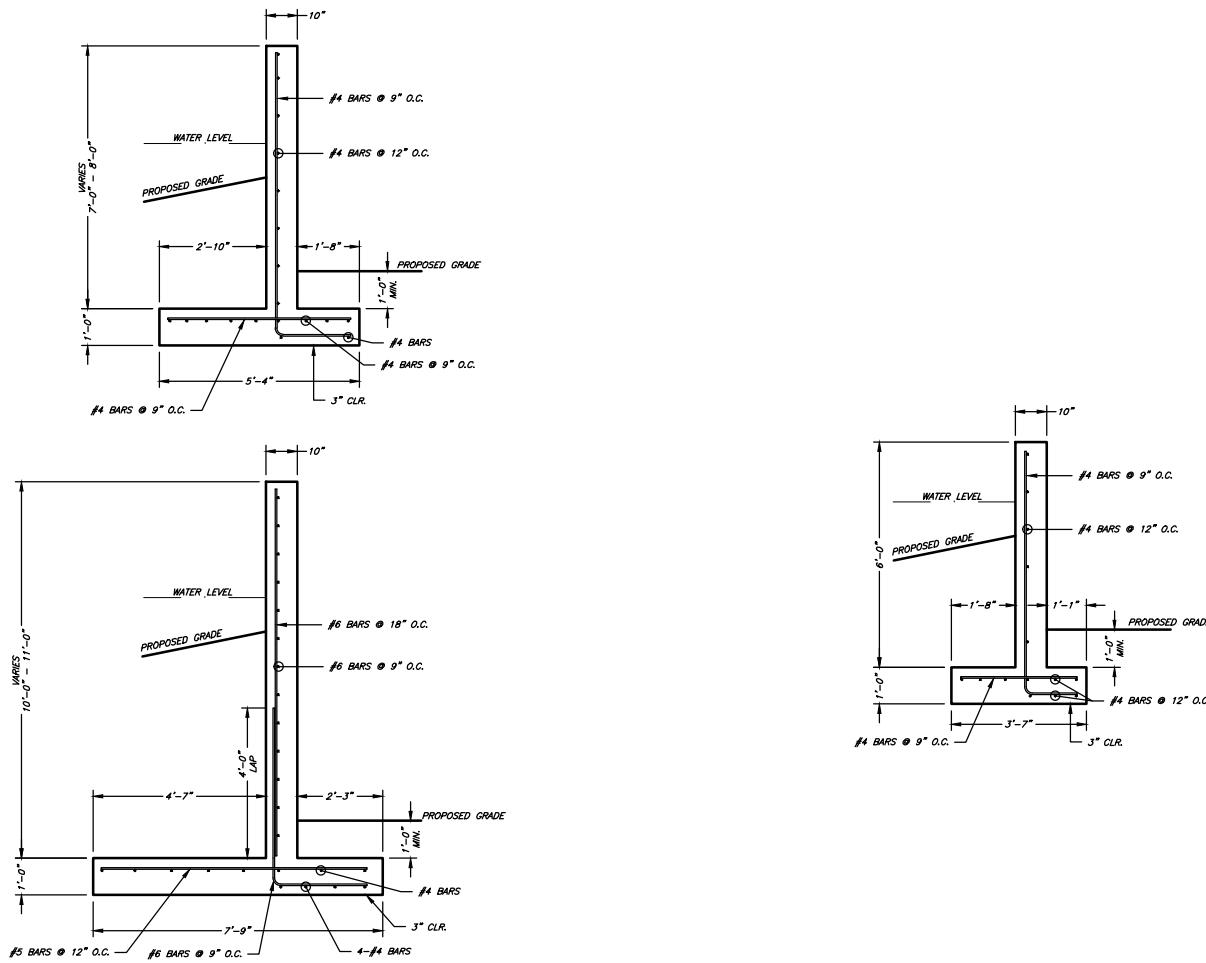
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RETAINING WALL DETAILS

N.T.S.

Action Number: SWL-2024-00083

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Reynolds County~~

~~NW 1/4 of section 31, T. 30N, R. 1E, and the
SW 1/4 of Section 32, T. 30N, R. 1E
CONSTRUCTION DETAILS 5
May 2024~~

~~Page 32 of 43~~

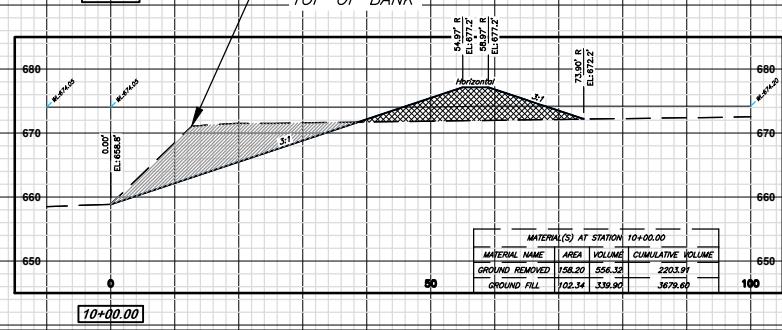
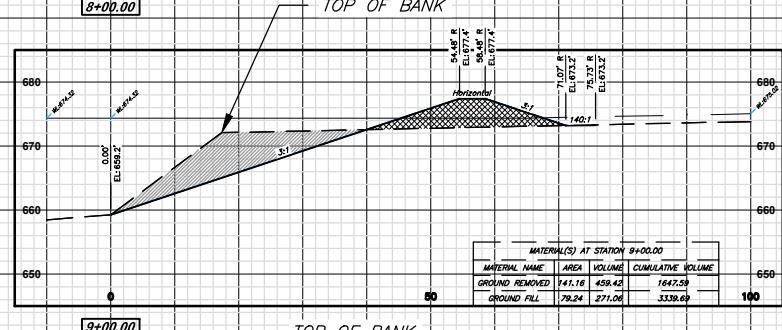
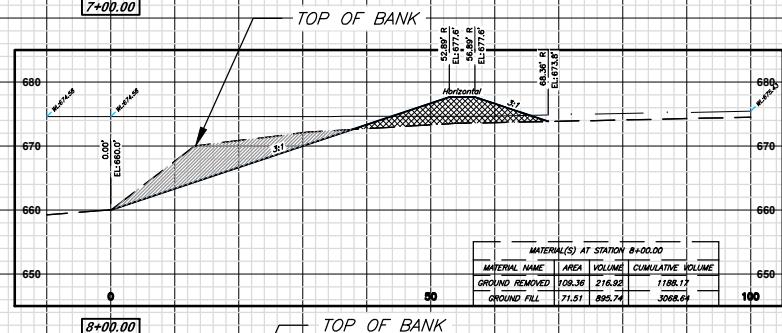
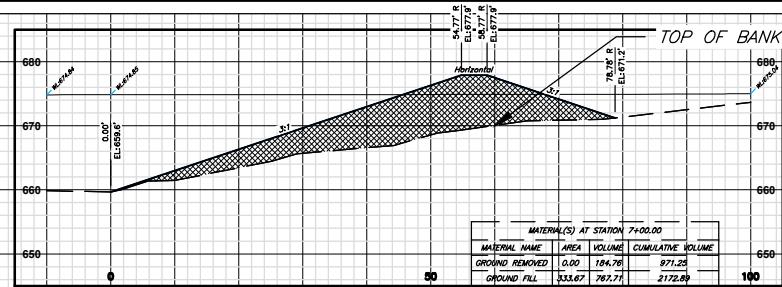
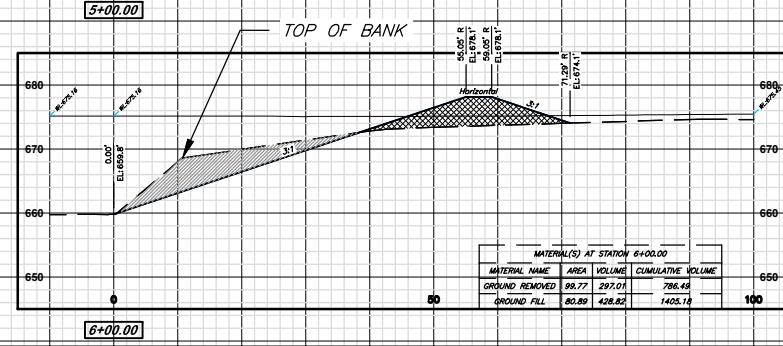
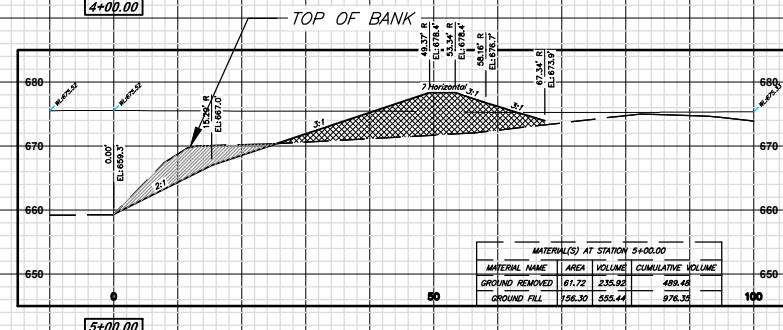
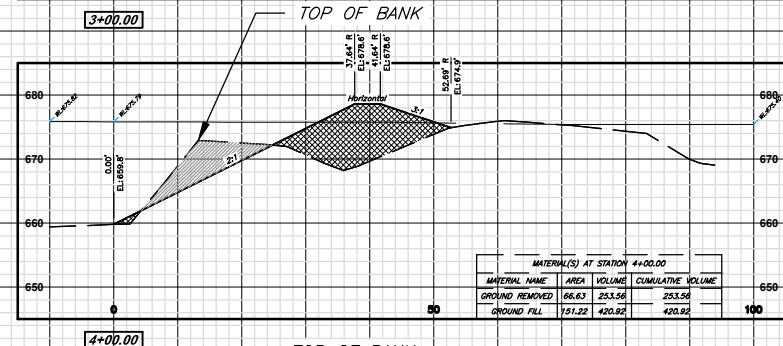
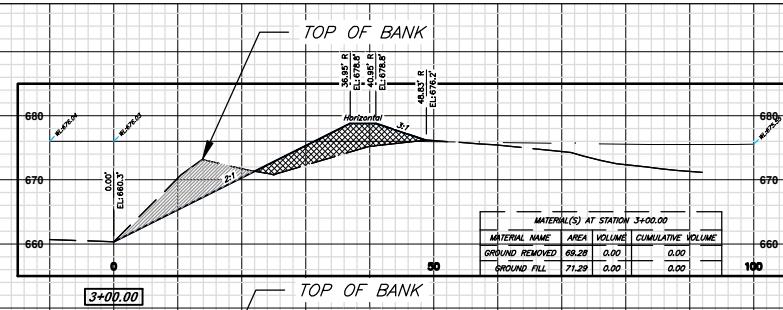
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Action Number: SWL-2024-00083

ELLINGTON LEVEE DESIGN
CITY of Ellington/Levee Construction
ELLINGTON, MISSOURI
Reynolds County

NW 1/4 of section 31, T. 30N, R. 1E, and the
SW 1/4 of Section 32, T. 30N, R. 1E
CROSS SECTIONS 1
May 2024

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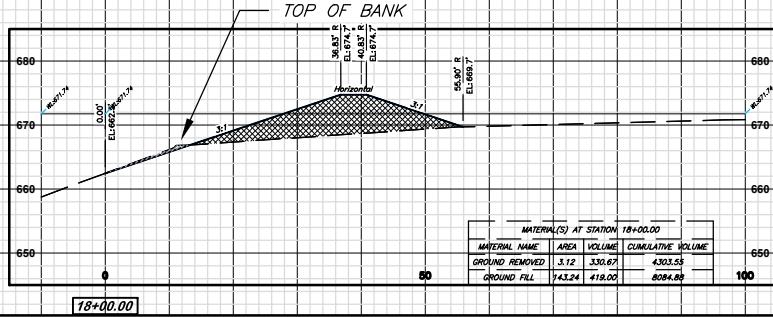
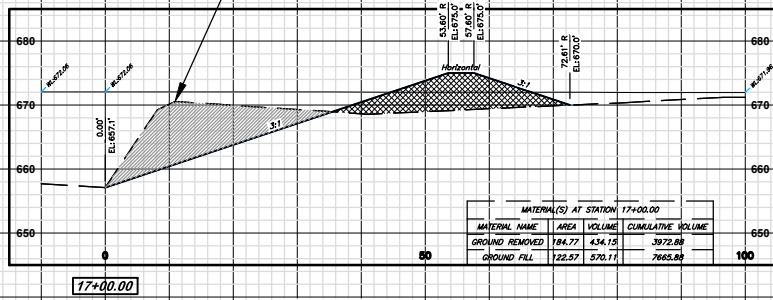
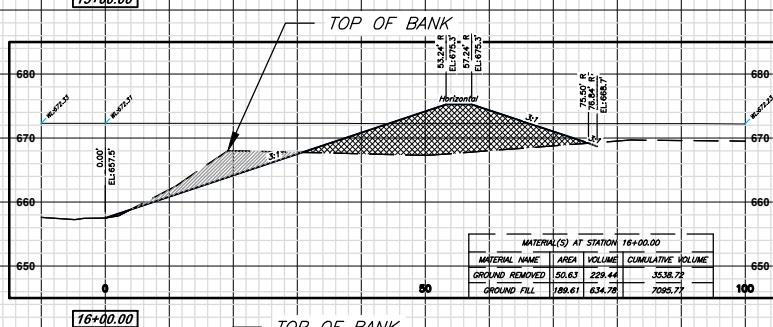
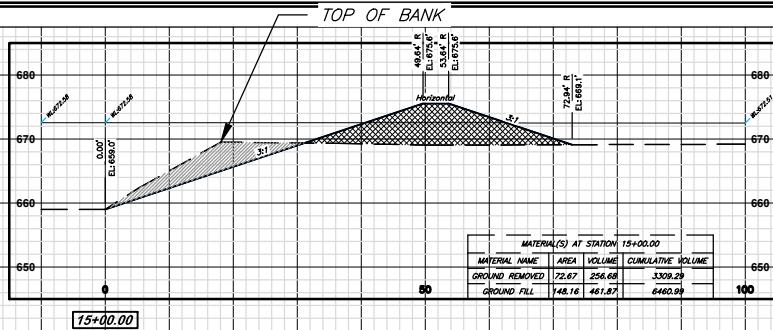
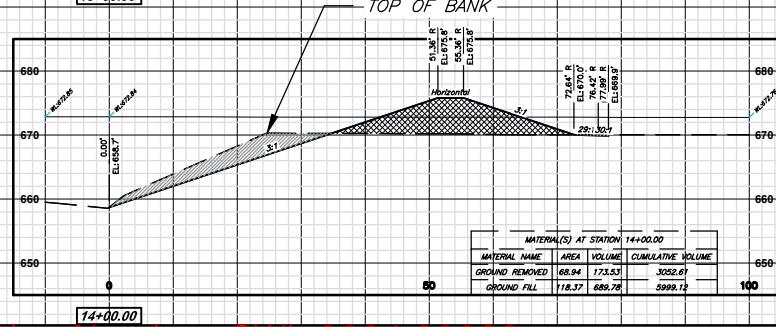
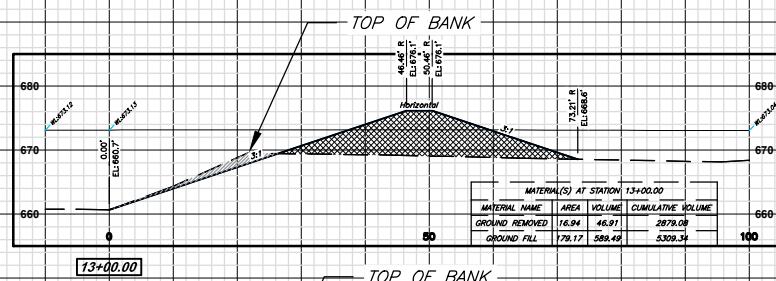
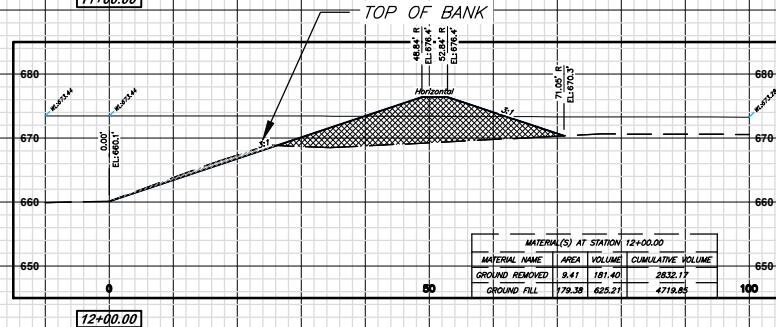
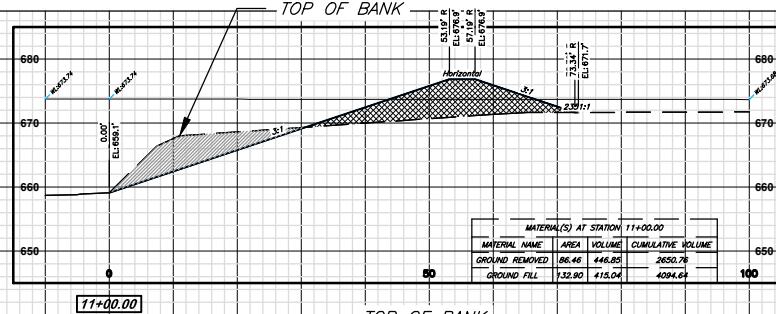
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Action Number: SWL-2024-00083

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CITY of Burlington/Levee Construction
ELLINGTON, MISSOURI
Reynolds County

NW 1/4 of section 31, T. 30N, R. 1E, and the
SW 1/4 of Section 32, T. 30N, R. 1E
May 2024

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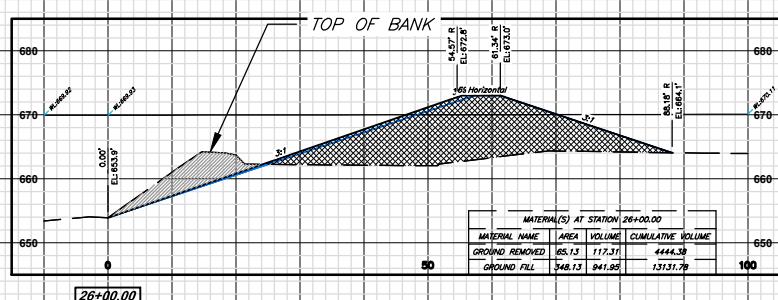
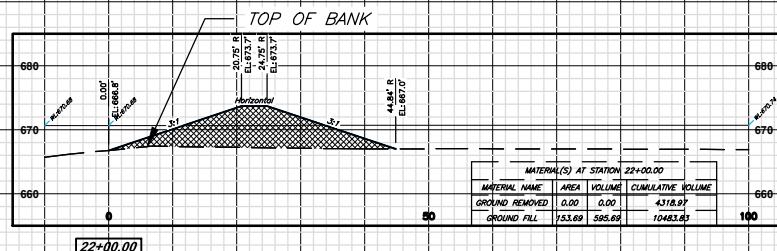
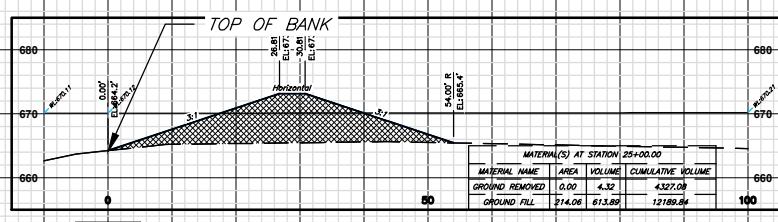
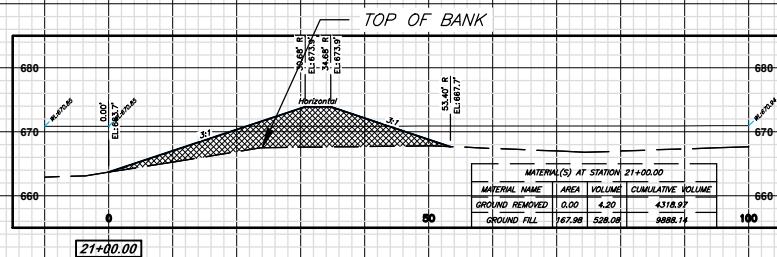
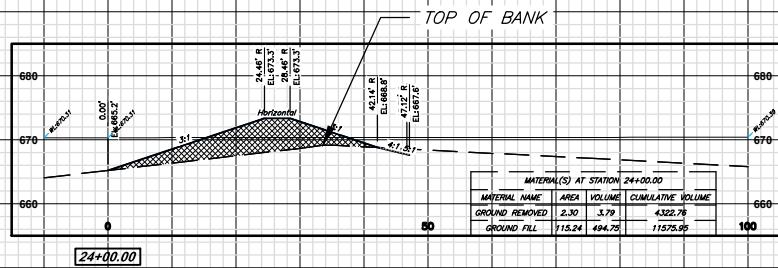
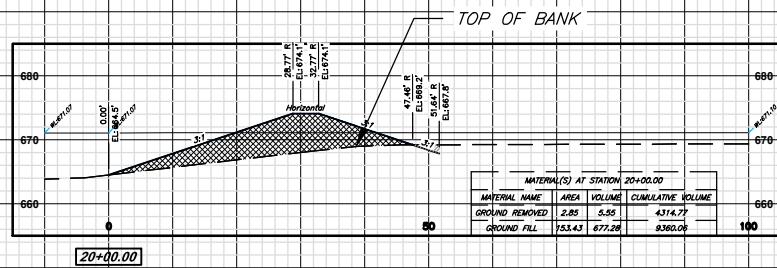
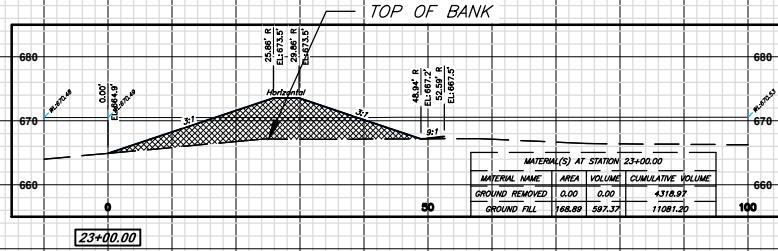
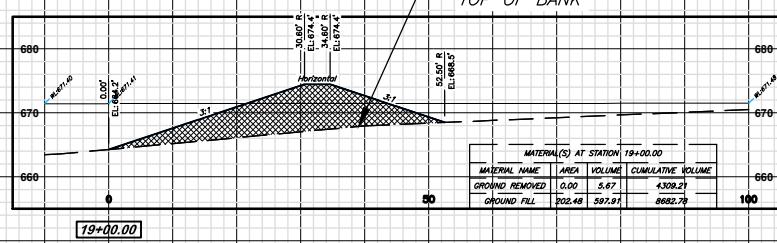
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Action Number: SWL-2024-00083

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CITY OF Ellington/Levee Construction
ELLINGTON, MISSOURI
Reynolds County

NW 1/4 of section 31, T. 30N, R. 1E, and the
SW 1/4 of Section 32, T. 30N, R. 1E
CROSS SECTIONS 3
May 2024

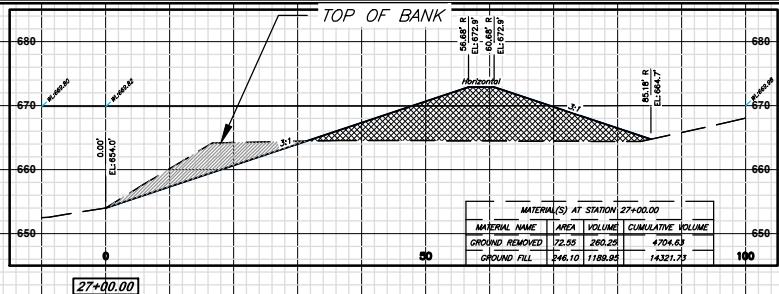
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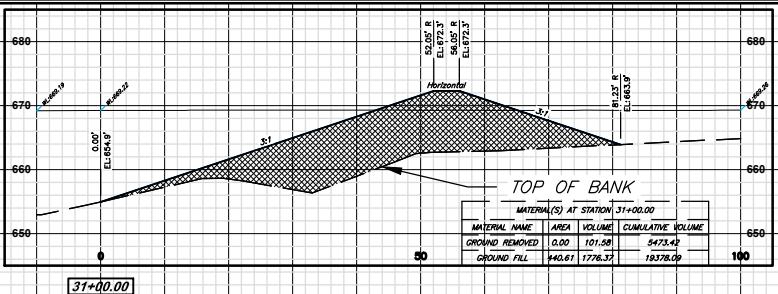
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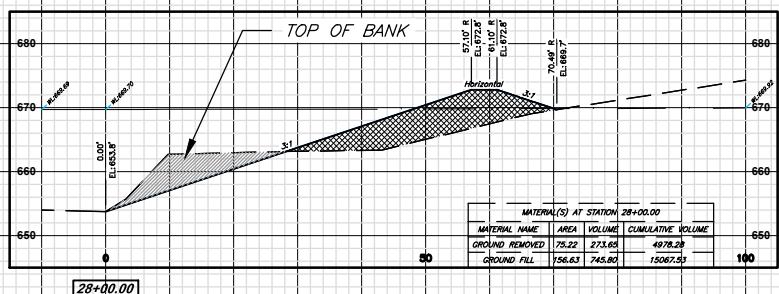
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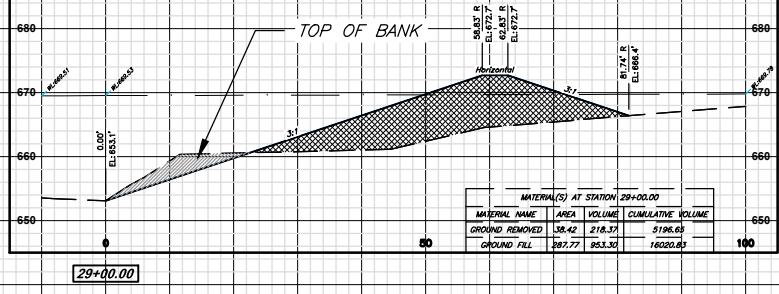
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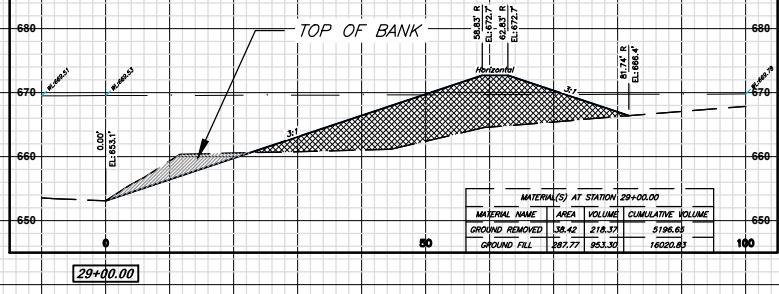
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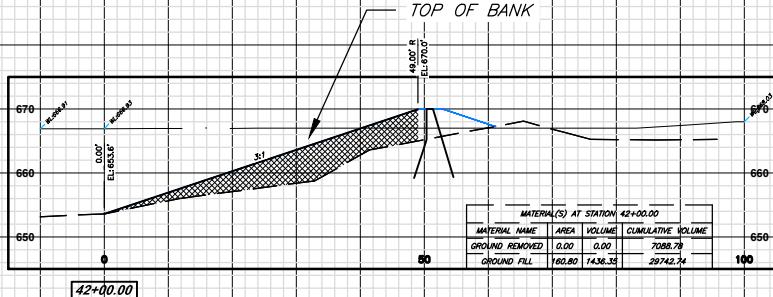
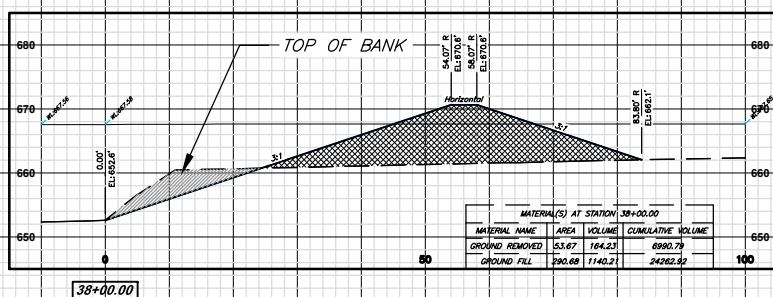
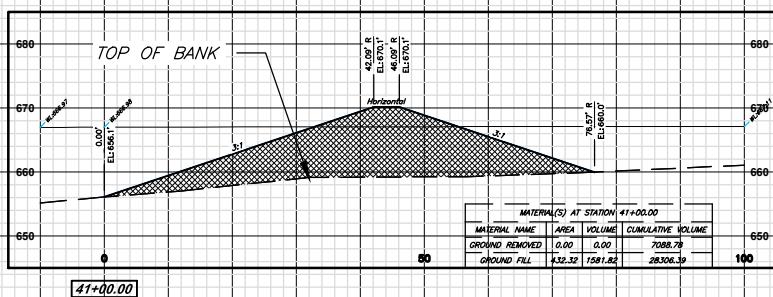
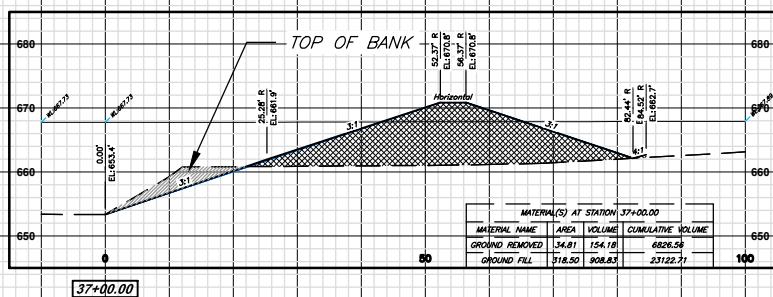
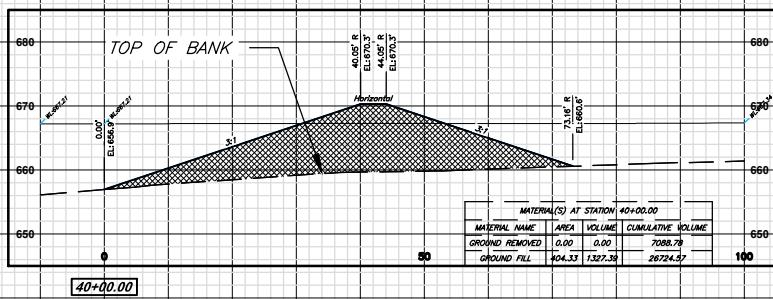
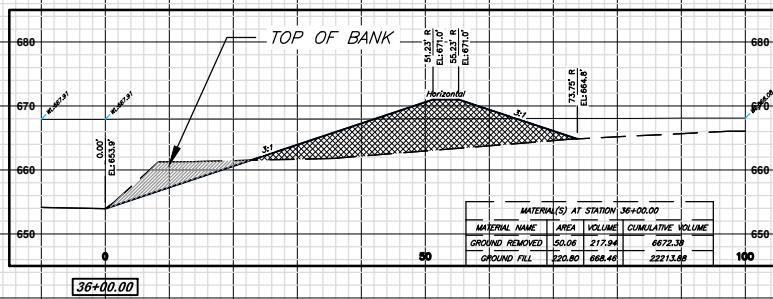
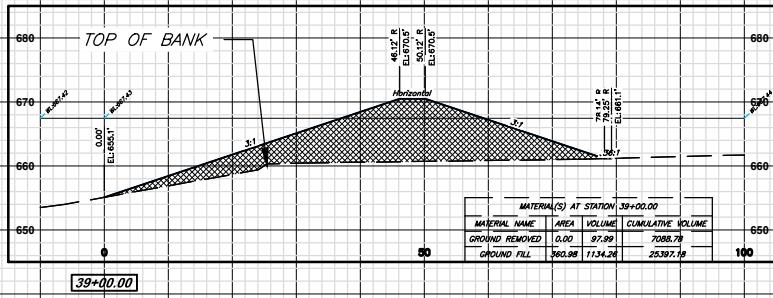
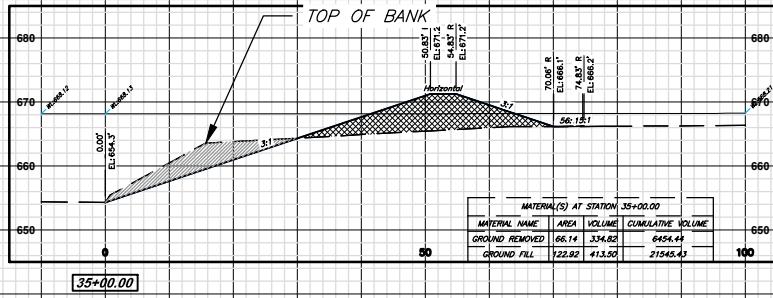


28+00.00



29+00.00





Action Number: SWL-2024-00083
ELLINGTON LEVEE DESIGN
City of Ellington/Levee Construction
ELINGTON, MISSOURI
Reynolds County

NW 1/4 of section 31, T. 30N, R. 1E, and the
SW 1/4 of Section 32, T. 30N, R. 1E
CROSS SECTIONS 5
May 2024 Page 37 of 43

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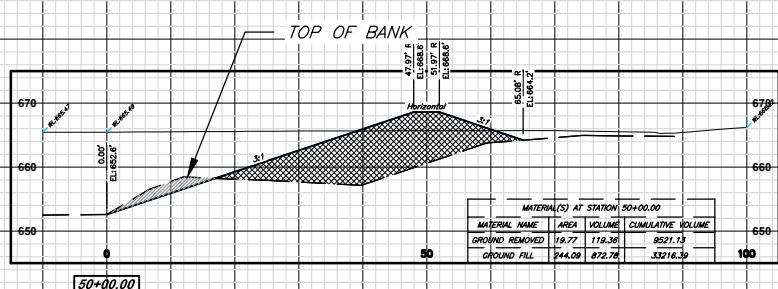
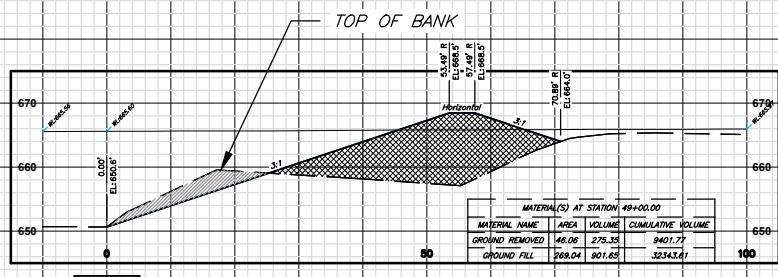
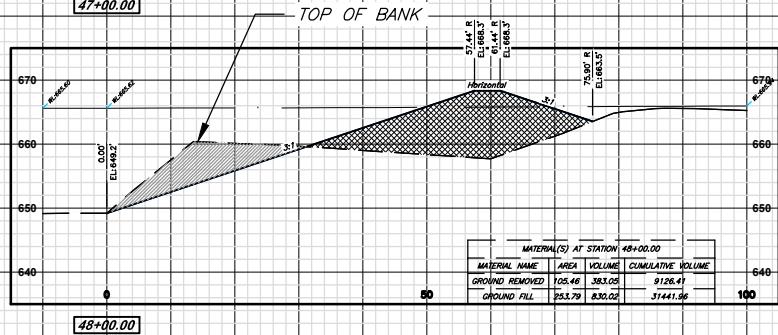
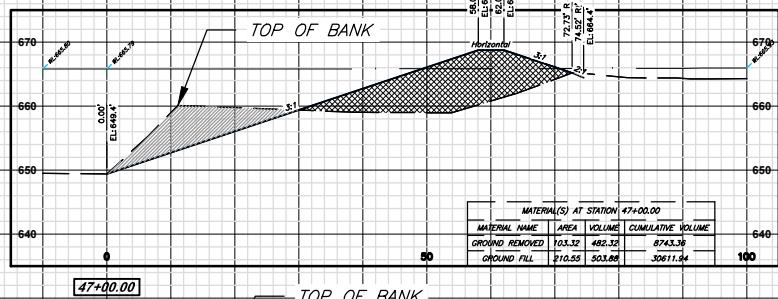
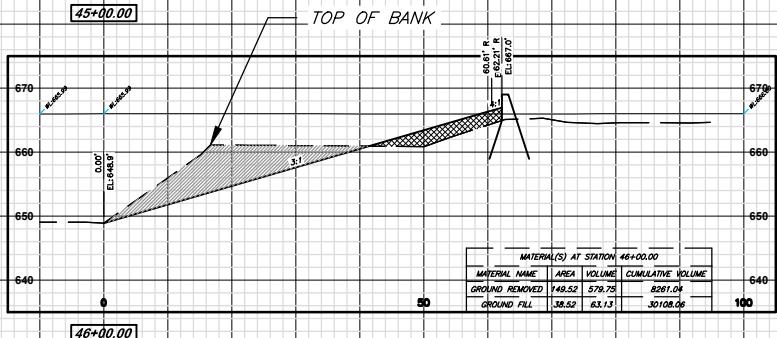
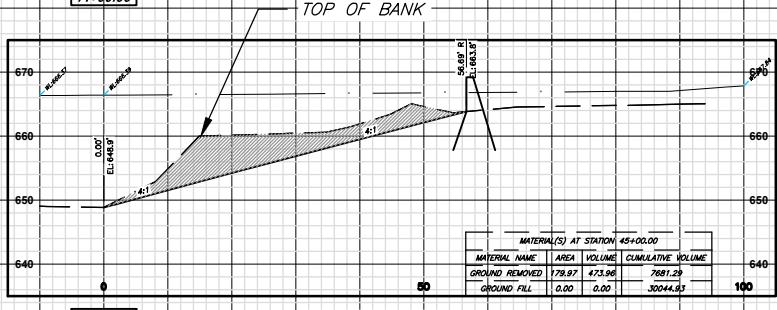
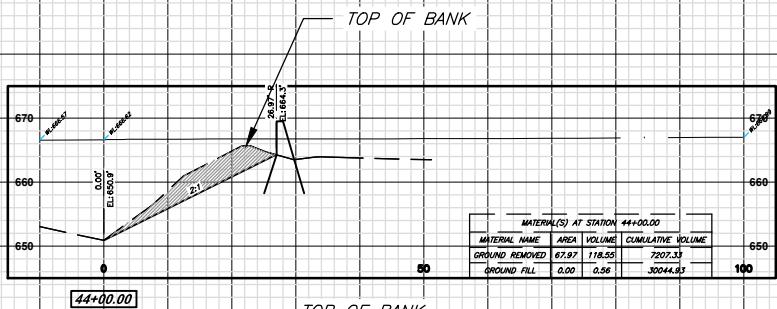
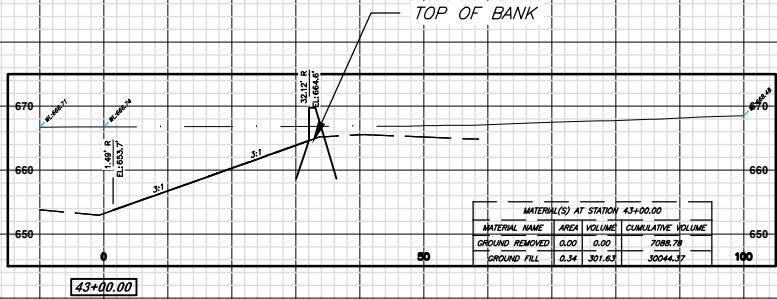
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Action Number: SWL-2024-00083

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CITY of Ellington/Levee Construction
ELLINGTON, MISSOURI
Reynolds County

NW 1/4 of section 31, T. 30N, R. 1E, and the
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CROSS SECTIONS 6
May 2024

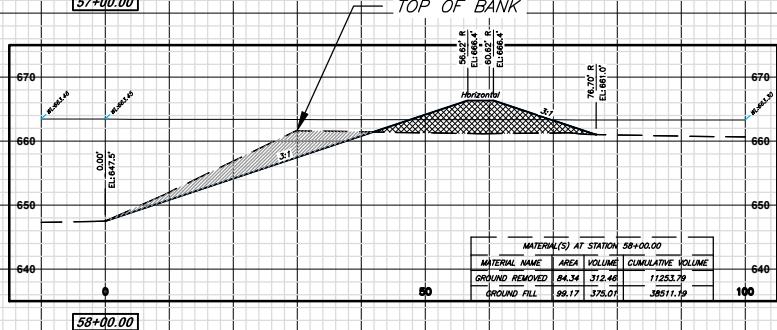
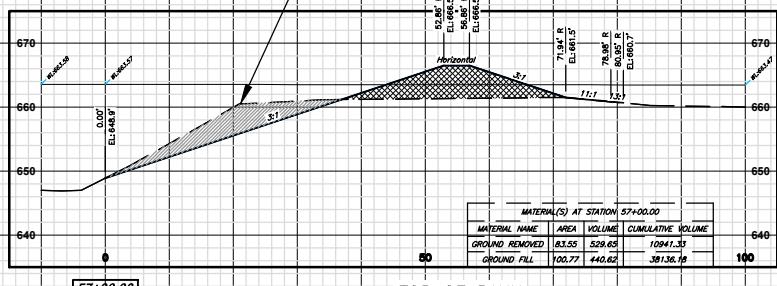
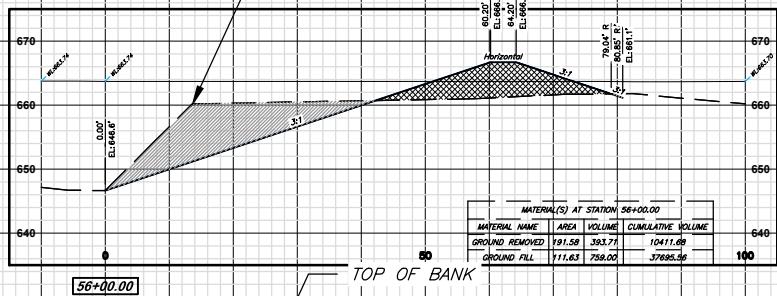
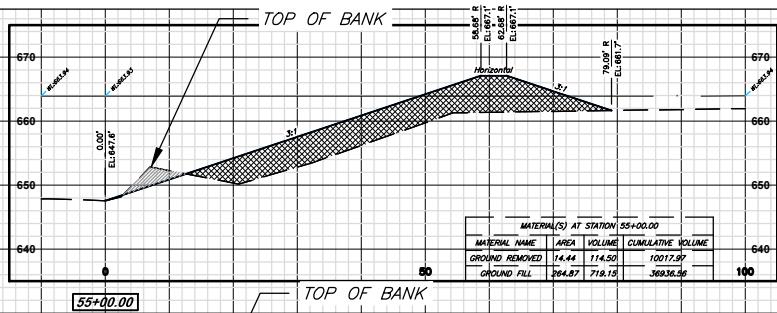
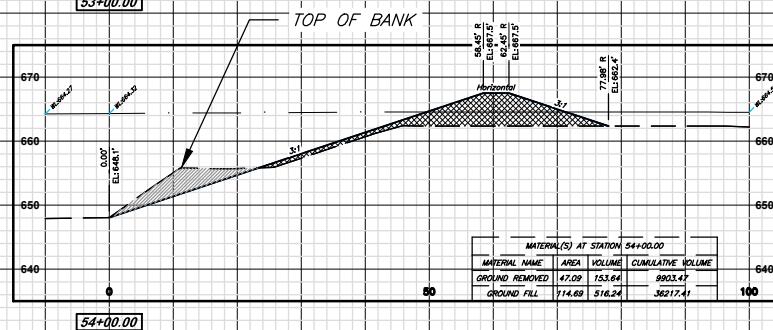
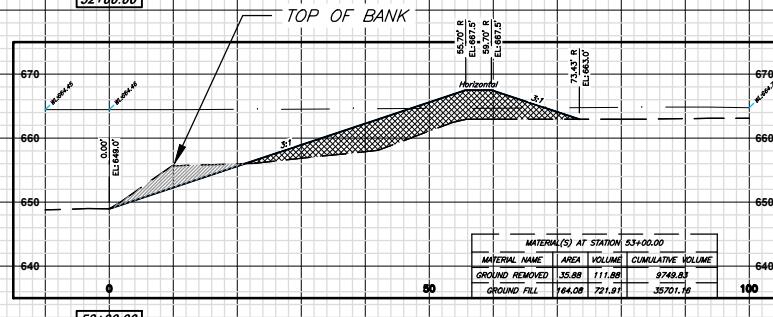
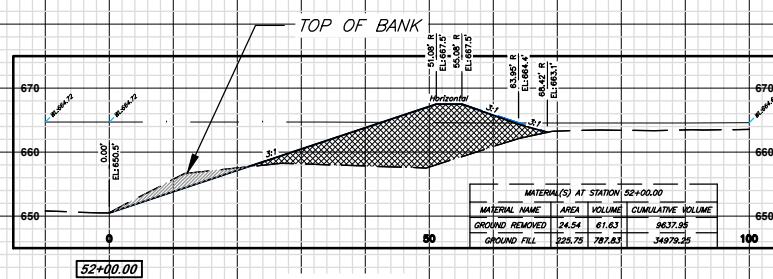
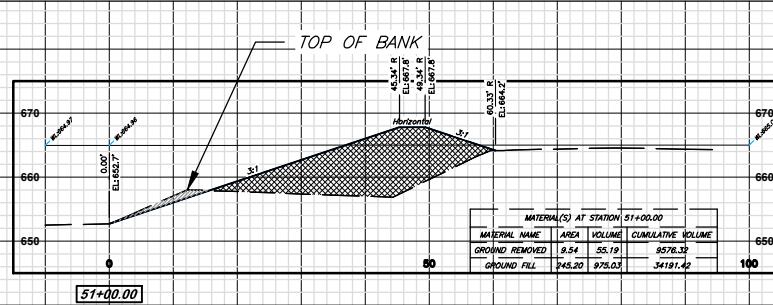
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Action Number: SWL-2024-00083

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City of Ellington/Levee Construction
ELLINGTON, MISSOURI
Reynolds County

NW 1/4 of section 31, T. 30N, R. 1E, and the
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CROSS SECTIONS 7
May 2024

Page 39 of 43

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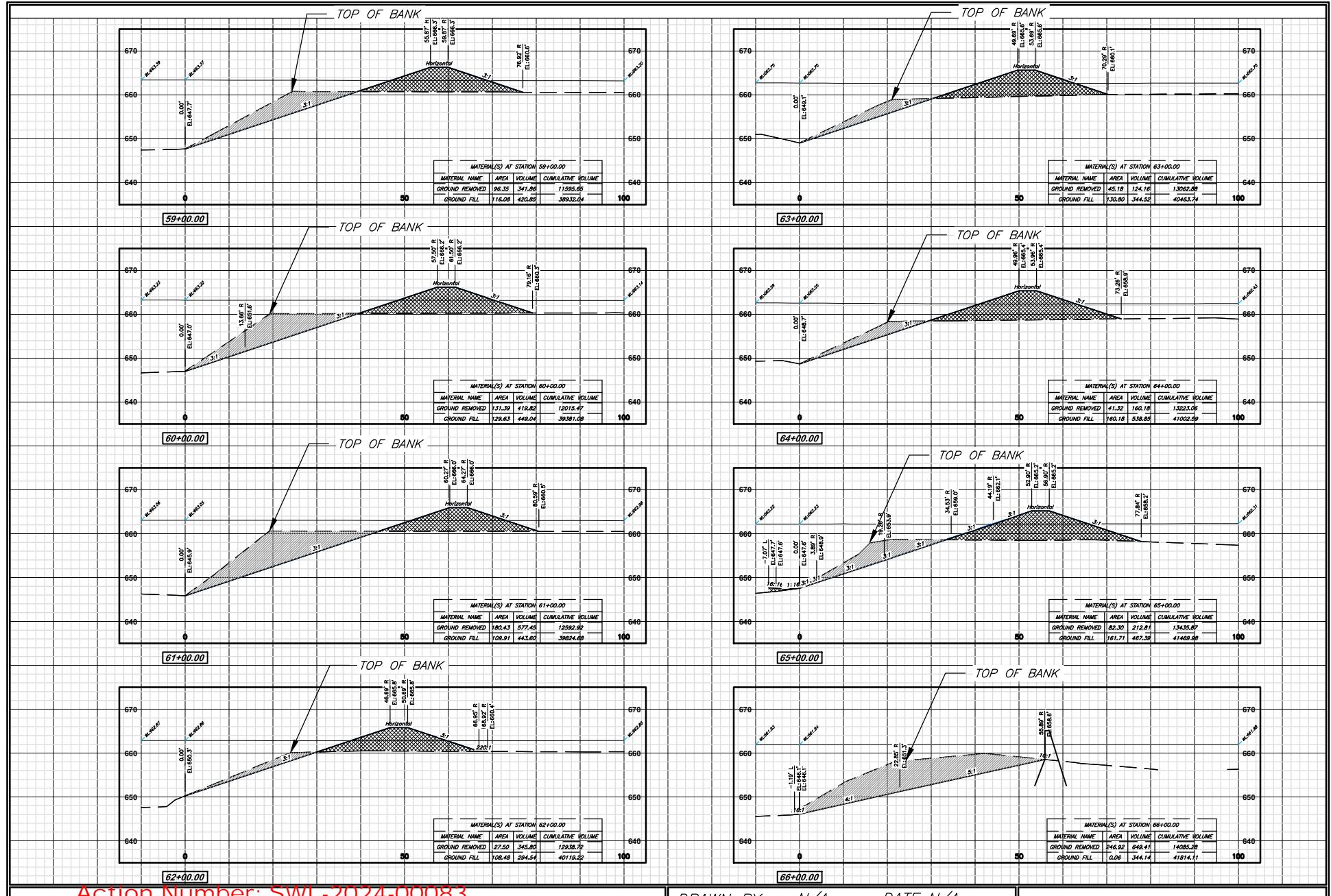


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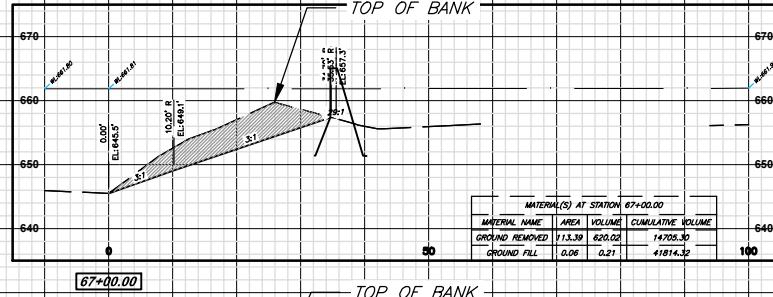
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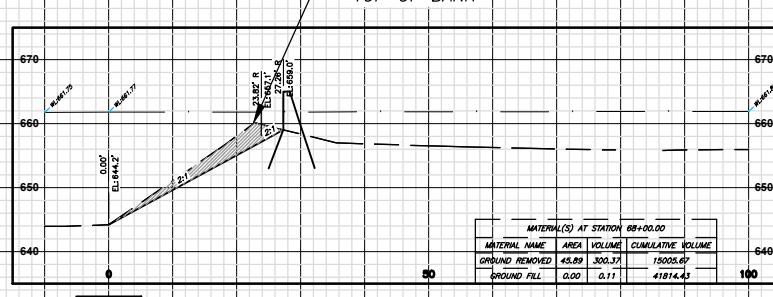
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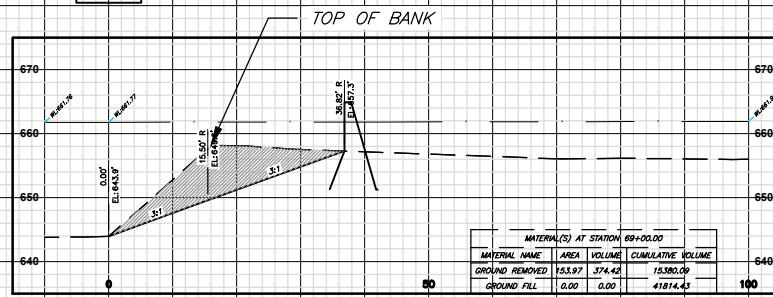
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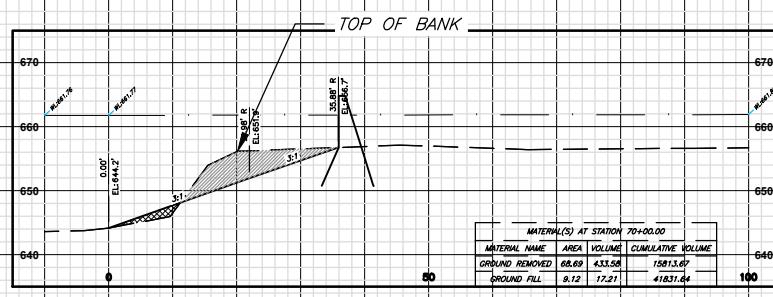
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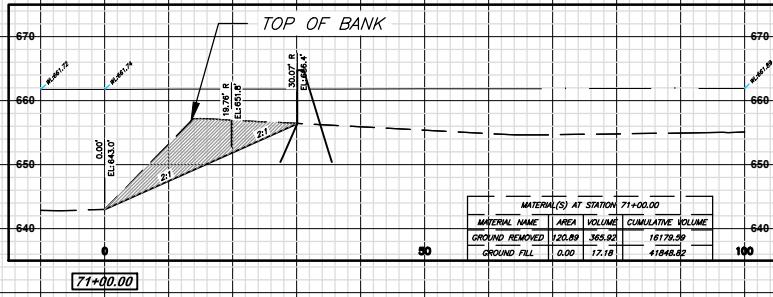
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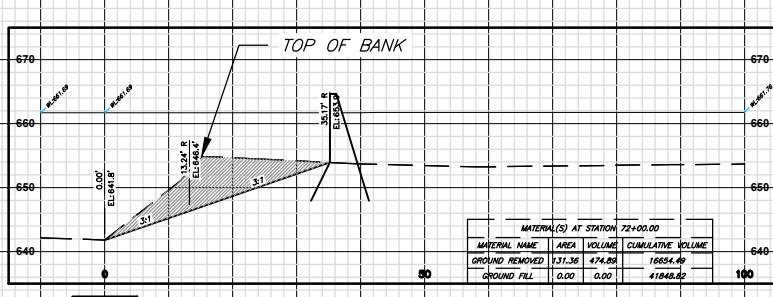
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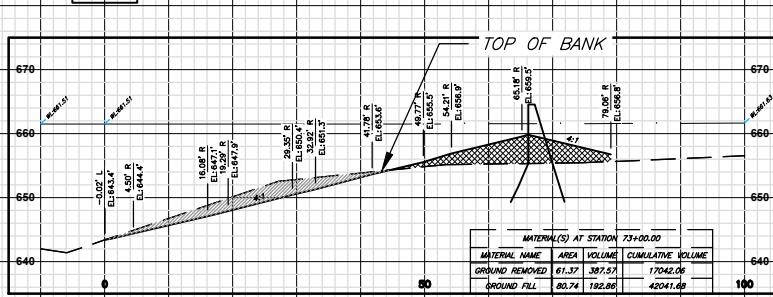
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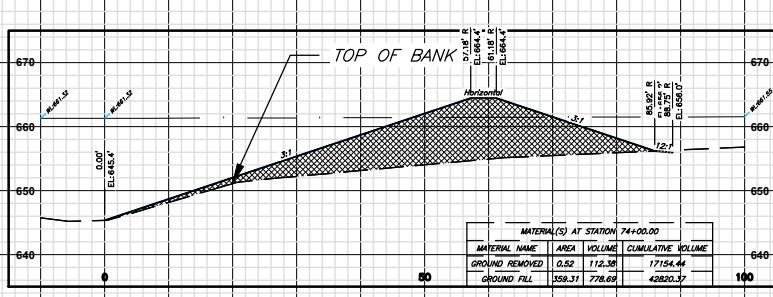
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Action Number: SWL-2024-00083
ELLINGTON LEVEE DESIGN
 City of Burlington/Levee Construction
 ELLINGTON, MISSOURI
 Reynolds County

NW 1/4 of section 31, T. 30N, R. 1E, and the
 SW 1/4 of Section 32, T. 30N, R. 1E
 CROSS SECTIONS 9
 May 2024

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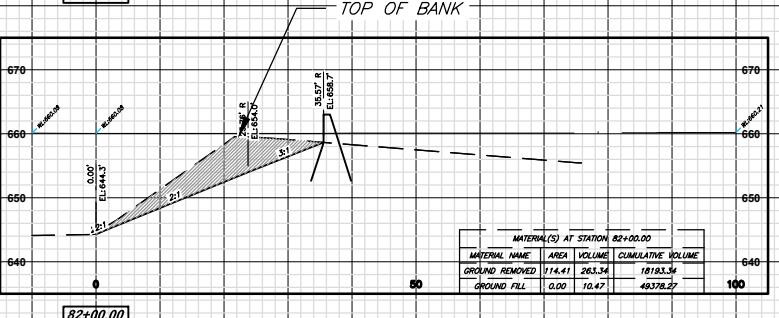
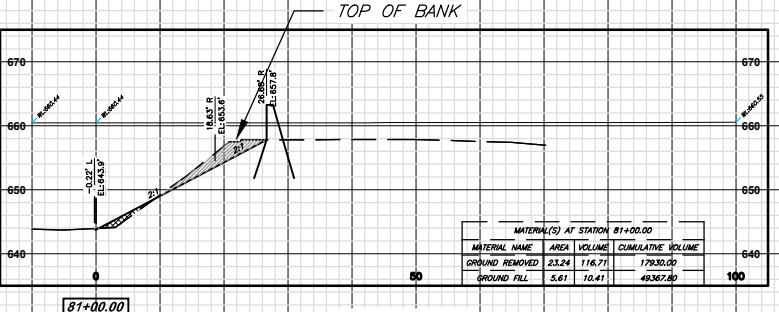
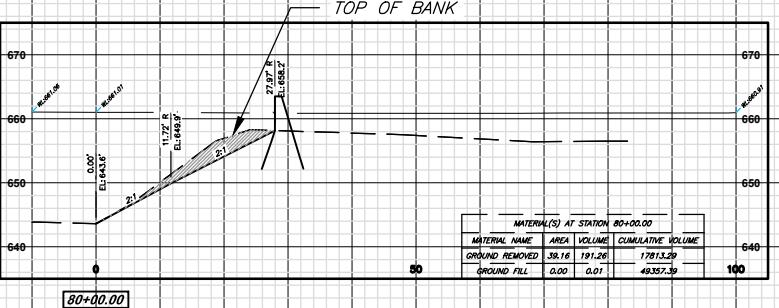
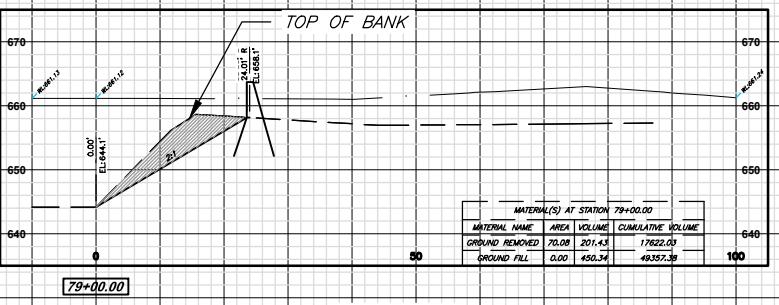
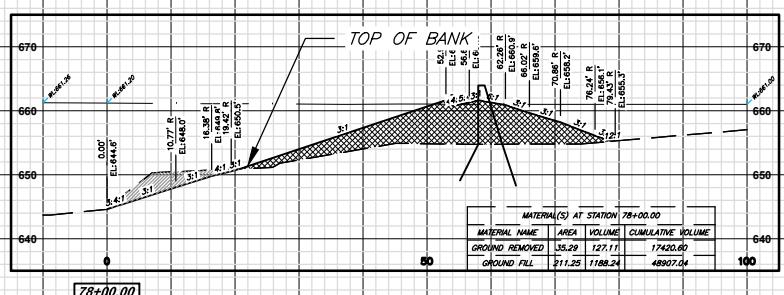
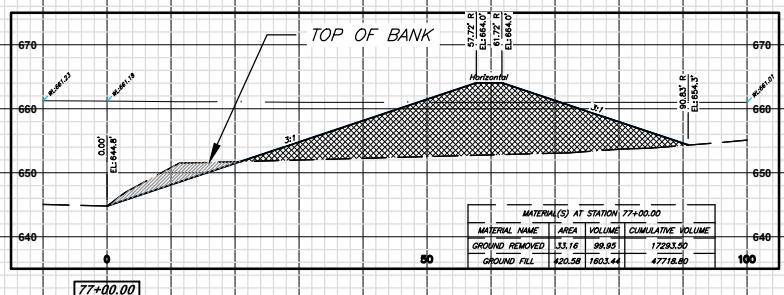
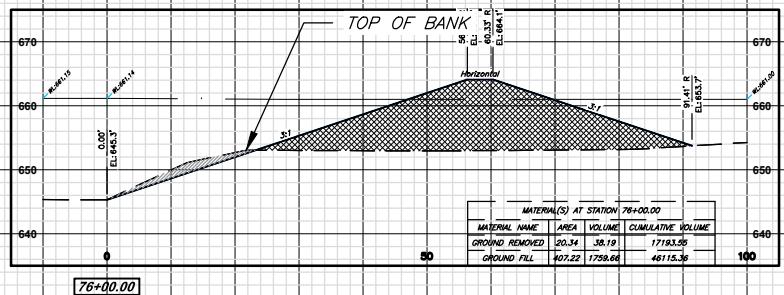
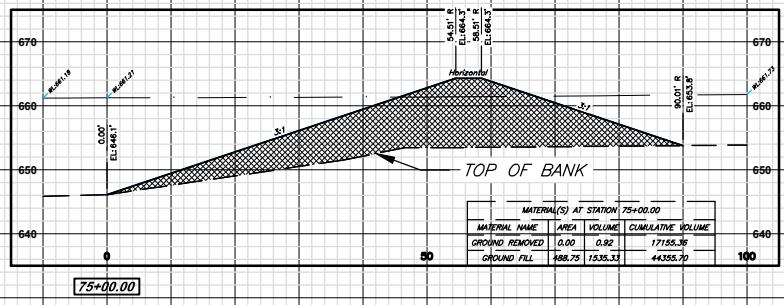
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ELLINGTON LEVEE DESIGN
 CITY OF Ellington/Levee Construction
 ELLINGTON, MISSOURI
 Reynolds County

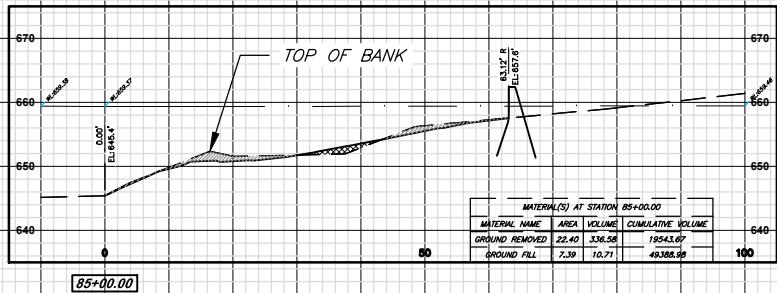
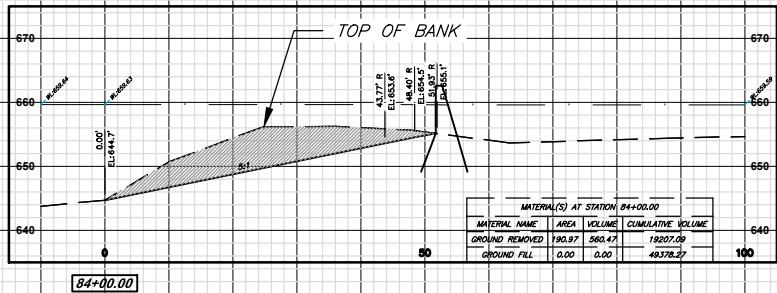
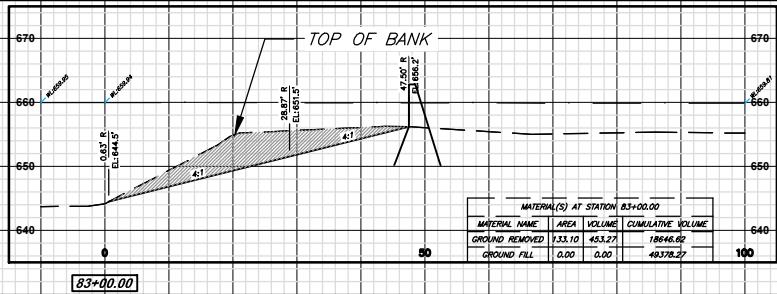
NW 1/4 of section 31, T. 30N, R. 1E, and the
 SW 1/4 of Section 32, T. 30N, R. 1E
 CROSS SECTIONS 10
 May 2024

Page 42 of 43

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Action Number: SWL-2024-00083
ELLINGTON LEVEE DESIGN
CITY of Burlington/Levee Construction
ELLINGTON, MISSOURI
Reynolds County

NW 1/4 of section 31, T. 30N, R. 1E, and the
CROSS SECTIONS 11
SW 1/4 of Section 32, T. 30N, R. 1E
May 2024

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