



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street, S.E.
Charleston, WV 25304
(304) 926-0450
fax: (304) 926-0452

Harold D. Ward, Cabinet Secretary
www.dep.wv.gov

Friday, January 17, 2025
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

DIVERSIFIED PRODUCTION LLC
101 MCQUISTON DRIVE

JACKSON CENTER, PA 16133

Re: Permit Modification Approval for Abbey South 4MH
47-033-06046-00-00

Extending Well Pad

DIVERSIFIED PRODUCTION LLC

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before permitted well work is commenced.

If there are any questions, please feel free to contact me at (304) 926- 0450.

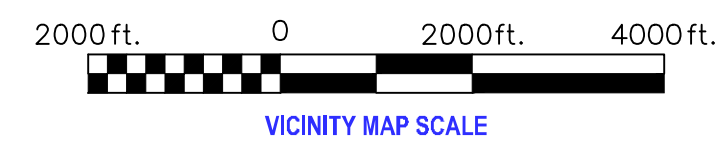
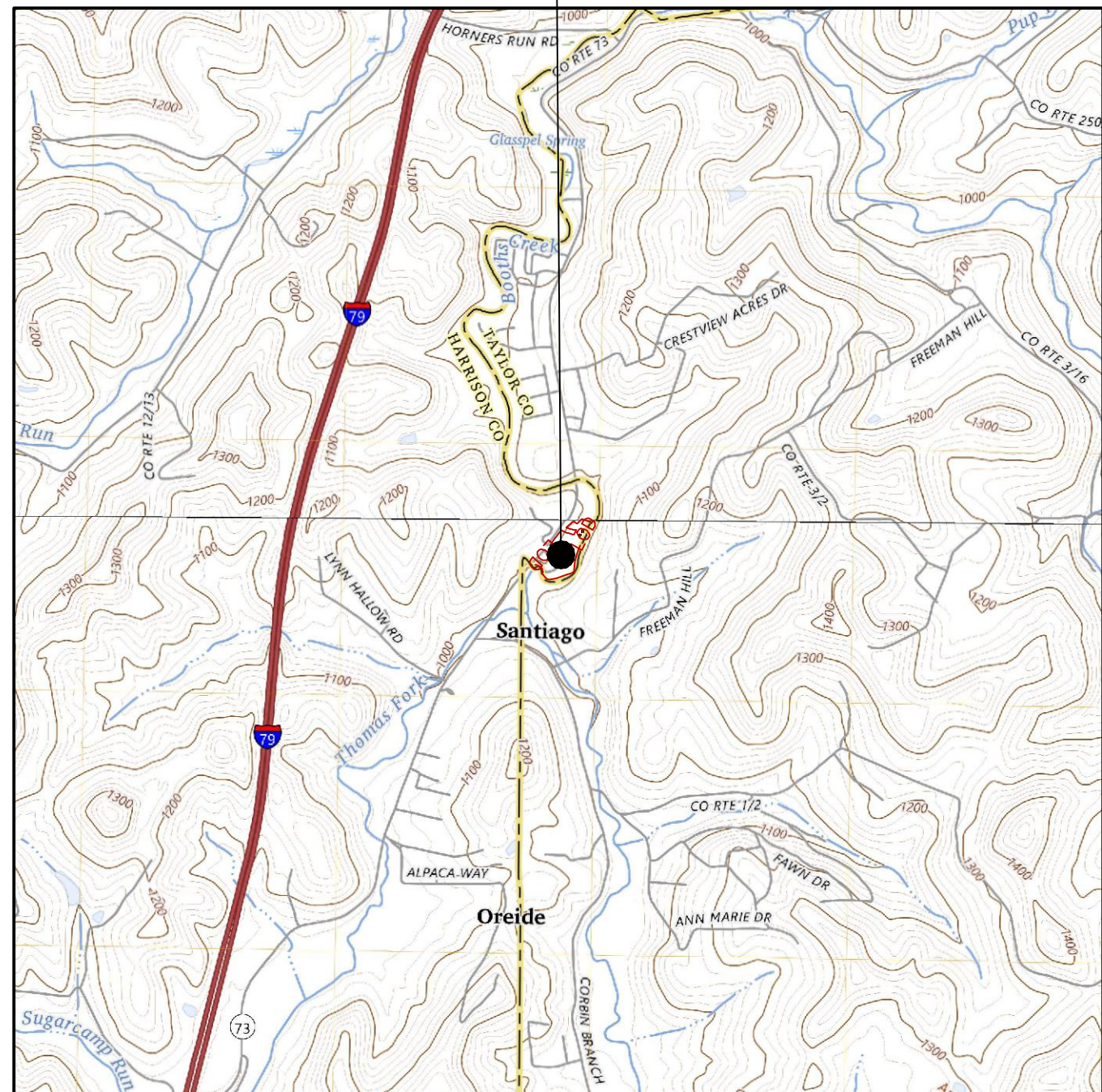
James A. Martin
Chief

Operator's Well Number: Abbey South 4MH
Farm Name: Long Ridge West Virginia LLC
U.S. WELL NUMBER: 47-033-06046-00-00
Horizontal 6A New Drill
Date Modification Issued: 1/17/2025

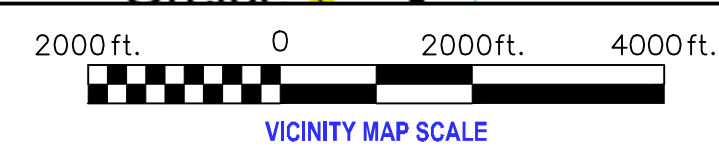
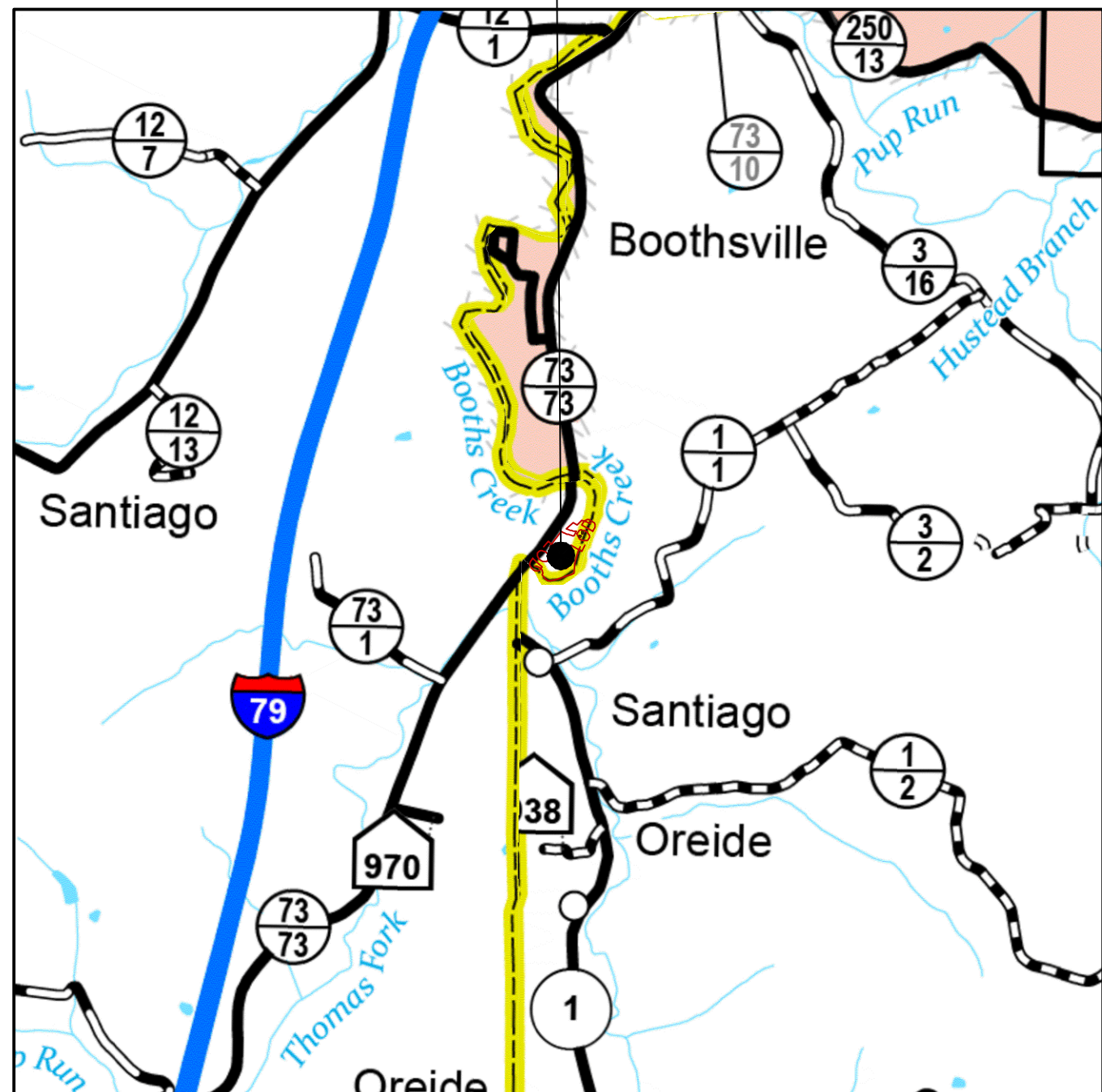
Promoting a healthy environment.

01/17/2025

APPROXIMATE SITE LOCATION



APPROXIMATE SITE LOCATION



ABBEY WELL PAD

ISSUED FOR CONSTRUCTION PLANS

T70-11275

HARRISON COUNTY, WEST VIRGINIA

DECEMBER 2024

Disturbance Summary

Property Owner (District - Tax Map - Parcel)	Access Road Disturbance (Ac.)	Well Pad Disturbance (Ac.)	Laydown Area Disturbance (Ac.)	Stockpile Disturbance (Ac.)	Total Disturbance (Ac.)
WILLOW CREEK MHV LLC (17-5-210-44.2)	0.35	2.52	1.80	0.78	5.45
WILLOW CREEK MHV LLC (17-5-210-44.1)	0.00	0.00	0.00	0.53	0.53
Total Disturbance	0.35	2.52	1.80	1.31	5.98

911 ADDRESS
39 CATHERINE DRIVE
SHINNSTON, WV 26431

SHEET	DESCRIPTION
1	COVER
2	GENERAL NOTES
3	QUANTITIES
4	SITE SAFETY MAP
5	EXISTING CONDITIONS
6	OVERALL SITE PLAN
7	OVERALL SITE PLAN WITH ORTHO
8	ACCESS ROAD STA. 100+00 - 102+25
9	BUILDING ACCESS ROAD PLAN & PROFILE
10	ACCESS ROAD SECTIONS
11	DETAILED WELL PAD PLAN
12	WELL PAD BASELINE
13	WELL PAD SECTIONS
14	STOCKPILE BASELINES
15	STOCKPILE SECTIONS
16	CULVERT PROFILE
17	OVERALL GEOMETRIC LAYOUT
18	GEOMETRIC LAYOUT TABLES
19	RECLAMATION PLAN
20	TYPICAL SECTIONS
21-28	DETAILS

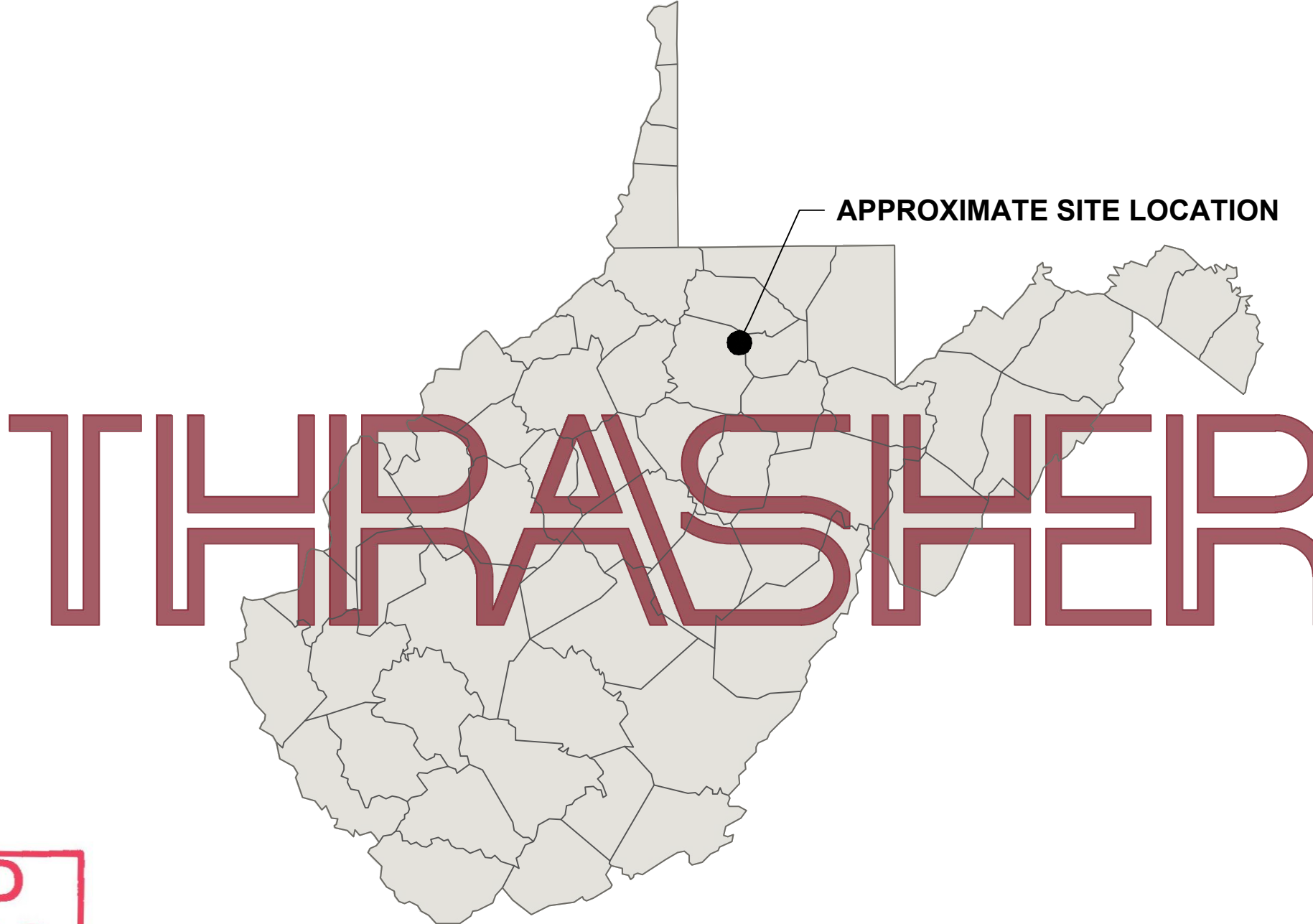
Abbey Well Pad Well Head Coordinates

Coordinate Label	2MH	4MH	6MH	8MH
Latitude	N 39.373639°	N 39.373667°	N 39.373696°	N 39.373724°
Longitude	W 80.201062°	W 80.201024°	W 80.200986°	W 80.200947°
WV83-N Northing	318,976.473 ft	318,986.775 ft	318,996.963 ft	319,007.378 ft
WV83-N Easting	1,770,317.364 ft	1,770,328.270 ft	1,770,339.053 ft	1,770,350.077 ft
UTM 83-17 Northing	4,358,545.395 m	4,358,548.589 m	4,358,551.747 m	4,358,554.976 m
UTM 83-17 Easting	568,816.540 m	568,819.810 m	568,823.044 m	568,826.350 m

Abbey Well Pad Site Coordinates

Coordinate Label	Access Road Beginning	Well Pad Center	Well Pad N Corner	Well Pad NE Corner	Well Pad SE Corner	Well Pad SW Corner	Well Pad NW Corner
Latitude	N 39.373609°	N 39.373601°	N 39.373988°	N 39.373788°	N 39.373422°	N 39.373222°	N 39.373547°
Longitude	W 80.201663°	W 80.200808°	W 80.200725°	W 80.200150°	W 80.200340°	W 80.201280°	W 80.201436°
WV83-N Northing	318,966.860 ft	318,962.143 ft	319,103.067 ft	319,028.748 ft	318,895.827 ft	318,825.258 ft	318,943.849 ft
WV83-N Easting	1,770,147.360 ft	1,770,389.115 ft	1,770,413.762 ft	1,770,575.610 ft	1,770,520.953 ft	1,770,254.547 ft	1,770,211.489 ft
UTM 83-17 Northing	4,358,541.603 m	4,358,541.393 m	4,358,584.453 m	4,358,562.631 m	4,358,521.857 m	4,358,499.005 m	4,358,534.918 m
UTM 83-17 Easting	568,764.794 m	568,838.473 m	568,845.267 m	568,894.954 m	568,878.976 m	568,798.169 m	568,784.449 m

Kenny Willott 1/1/25



APPROVED
WVDEP OOG
MODIFICATION
[Signature]
1/17/2025



Diversified Production LLC
01/17/2025

DIVERSIFIED PRODUCTION, LLC
PHONE: (304) 543-1779
101 McQUISTON DRIVE
JACKSON CENTER, PA 16133

CONTACTS

CLIENT'S CONTACT
DIVERSIFIED PRODUCTION, LLC
ATTN: JIM BOWER
(412) 551-3585

BRIDGEPORT, WV OFFICE
600 WHITE OAKS BLVD.
BRIDGEPORT, WV 26330
(304) 624-4108
PO BOX 940

ENGINEER
THE THRASHER GROUP
ATTN: COLE ANDERSON, P.E.
(304) 624-4108

PLAN REPRODUCTION WARNING

THESE PLANS ARE INTENDED TO BE PLOTTED ON ANSI D (22" X 34") SHEETS. FOR REDUCTIONS, REFER TO GRAPHIC SCALE. THESE PLANS HAVE BEEN CREATED FOR FULL COLOR PLOTTING. ANY SET OF THESE PLANS THAT IS NOT PLOTTED IN FULL COLOR SHALL NOT BE CONSIDERED ADEQUATE FOR CONSTRUCTION PURPOSES. **WARNING**: INFORMATION MAY BE LOST IN COPYING AND/OR GRAY SCALE PLOTTING.

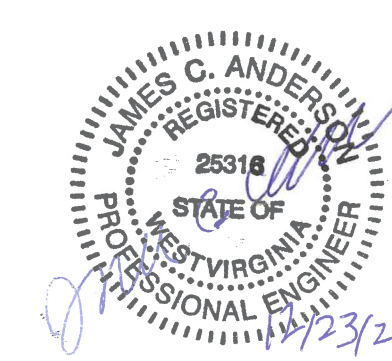
THE INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF THE THRASHER GROUP INC. REPRODUCTION OF THESE DOCUMENTS IN WHOLE OR IN PART, FOR ANY REASON WITHOUT PRIOR WRITTEN PERMISSION, IS STRICTLY PROHIBITED.

WELL RESTRICTIONS CHECKLIST (HORIZONTAL 6A WELLS)	
AT LEAST 100 FEET FROM PAD AND LOD (INCLUDING ANY E&S CONTROL FEATURE) TO ANY PERENNIAL STREAM, LAKE, POND, RESERVOIR OR WETLAND:	NO
AT LEAST 300 FEET FROM PAD AND LOD (INCLUDING ANY E&S CONTROL FEATURE) TO ANY NATURALLY PRODUCING TROUT STREAM:	YES
AT LEAST 1000 FEET FROM PAD AND LOD (INCLUDING ANY E&S CONTROL FEATURE) TO ANY GROUND WATER INTAKE OR PUBLIC WATER SUPPLY:	YES
AT LEAST 250 FEET FROM ANY EXISTING WATER WELL OR DEVELOPED SPRING TO WELL BEING DRILLED:	YES
AT LEAST 625 FEET FROM AN OCCUPIED DWELLING STRUCTURE TO CENTER OF PAD:	YES
AT LEAST 625 FEET FROM AGRICULTURAL BUILDINGS LARGER THAN 2500 SQUARE FEET TO THE CENTER OF PAD:	YES



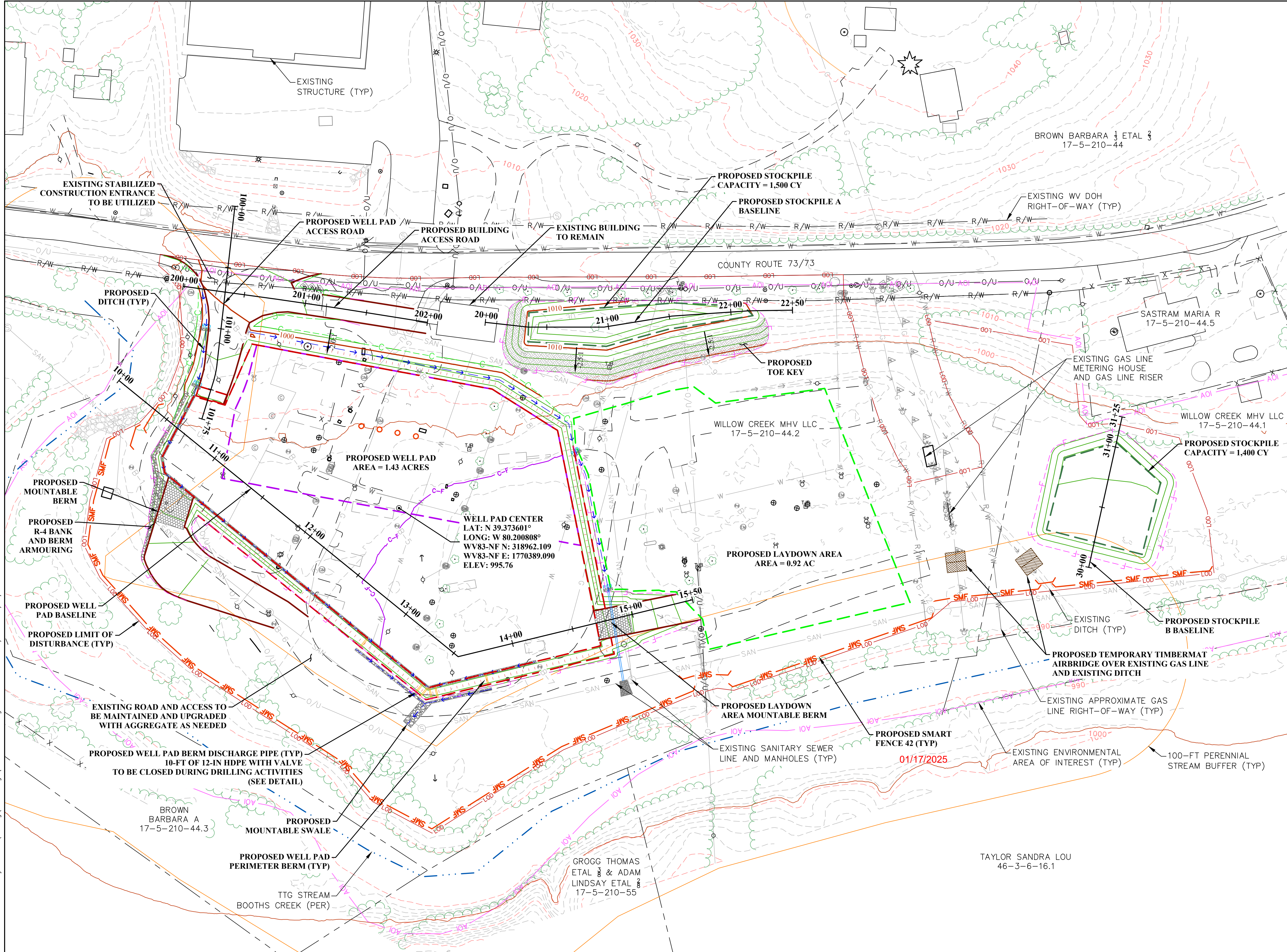
CONTRACTOR SHALL NOTIFY THE ONE-CALL SYSTEM OF THE INTENDED EXCAVATION OR DEMOLITION NOT LESS THAN FORTY-EIGHT (48) HOURS, EXCLUDING SATURDAYS, SUNDAYS AND LEGAL FEDERAL OR STATE HOLIDAYS, NOR MORE THAN TEN (10) WORK DAYS PRIOR TO THE BEGINNING OF SUCH WORK.
CALL 811.COM/811-IN-YOUR-STATE

REVISION NUMBER	REVISED SHEETS	BY	DATE	DESCRIPTION
IFC1	6,7,11-15,17,18	DMP	12.20.2024	EXPANDED WELL PAD



JAMES C. ANDERSON, WV P.E. #25316

ISSUED FOR PERMITS	DATE: 09.24.2024	BY: JCA
ISSUED FOR BID	DATE: 11.08.2024	BY: JCA
ISSUED FOR CONSTRUCTION	DATE: 11.19.2024	BY: JCA

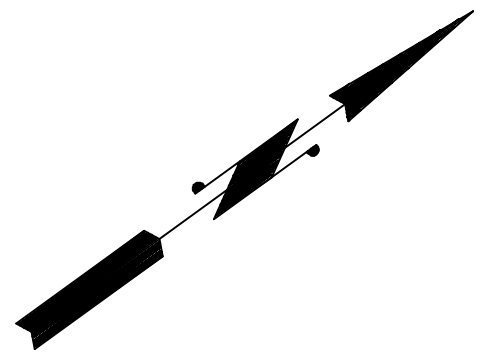


PLAN LEGEND

	EXISTING CONTOURS
	PROPERTY LINES
	WV DOH RIGHT-OF-WAY
	ENVIRONMENTAL AREA OF INTEREST
	EXISTING FEMA 100-YR FLOODPLAIN
	DELINEATED PERENNIAL STREAM (PER)
	100-FT PERENNIAL STREAM BUFFER
	EXISTING UNPAVED ROAD EDGE
	EXISTING TREE LINE
	EXISTING DITCH
	EXISTING CULVERT
	EXISTING OVERHEAD UTILITY
	EXISTING UNDERGROUND ELECTRIC
	EXISTING WATER LINE
	EXISTING GAS LINE
	EXISTING GAS LINE RIGHT-OF-WAY
	EXISTING SANITARY SEWER LINE
	EXISTING FENCE
	EXISTING STRUCTURE
	EXISTING POST
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED CONTOURS
	PROPOSED CUT LIMIT
	PROPOSED FILL LIMIT
	PROPOSED ROAD EDGE
	PROPOSED PAD OUTLINE
	PROPOSED WELL PAD PERIMETER BERM
	PROPOSED TANK PAD OUTLINE
	PROPOSED VEGETATED DITCH
	PROPOSED ROCK LINED DITCH
	PROPOSED SMART FENCE 42
	PROPOSED CULVERT
	PROPOSED DISCHARGE PIPE
	PROPOSED ROCK CHECK DAM
	PROPOSED OUTLET PROTECTION

- ### GENERAL NOTES
- EXISTING CONTOURS AND BASE MAPPING ARE BASED UPON A COMBINATION OF TTG SURVEY IN JANUARY 2023 & AERIAL IMAGERY FLOWN BY TTG IN FEBRUARY 2024.
 - PROPERTY LINES SHOWN ARE BASED UPON A COMBINATION OF TTG SURVEY AND GIS TAX MAPS.
 - ENVIRONMENTAL DELINEATIONS WERE PERFORMED BY TTG IN FEBRUARY 2024.
 - ASSUMED 4-IN TOPSOIL DEPTH.
 - PROPOSED CONTOURS SHOWN INSIDE THE WELL PAD BERM AND WITHIN THE PROPOSED ROAD BED REPRESENT SUBGRADE ELEVATIONS. CONTOURS SHOWN OUTSIDE OF THE PROPOSED WELL PAD BERM AND PROPOSED ROAD BED REPRESENT FINAL GRADE.
 - ENVIRONMENTAL BUFFER SHOWN REPRESENTS A 100-FT OFFSET FROM THE TOP OF BANK OF PERENNIAL STREAMS.

APPROVED
WV DEP OOG
MODIFICATION
[Signature]
1/17/2025



CAD FILE: R:\070\770-11275 - DBOC - Abbey Well Pad\Drawing\Final Design\11275-SitePlan.dwg PLOT DATE/TIME: 12/20/2024 8:15 AM

THE INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF THE THRASHER GROUP, INC. REPRODUCTION OF THESE DOCUMENTS IN WHOLE OR IN PART, FOR ANY REASON WITHOUT PRIOR WRITTEN PERMISSION, IS STRICTLY PROHIBITED. COPYRIGHT © 2024 THE THRASHER GROUP, INC.

NO.	BY	DATE	ISSUED FOR
IFC1	JCA	12.20.2024	EXPANDED WELL PAD FOOTPRINT
IFC	JCA	11.19.2024	ISSUED FOR CONSTRUCTION
IFB	JCA	11.08.2024	ISSUED FOR BID
IFP	JCA	09.24.2024	ISSUED FOR PERMITTING

Diversified Production LLC

SCALE:

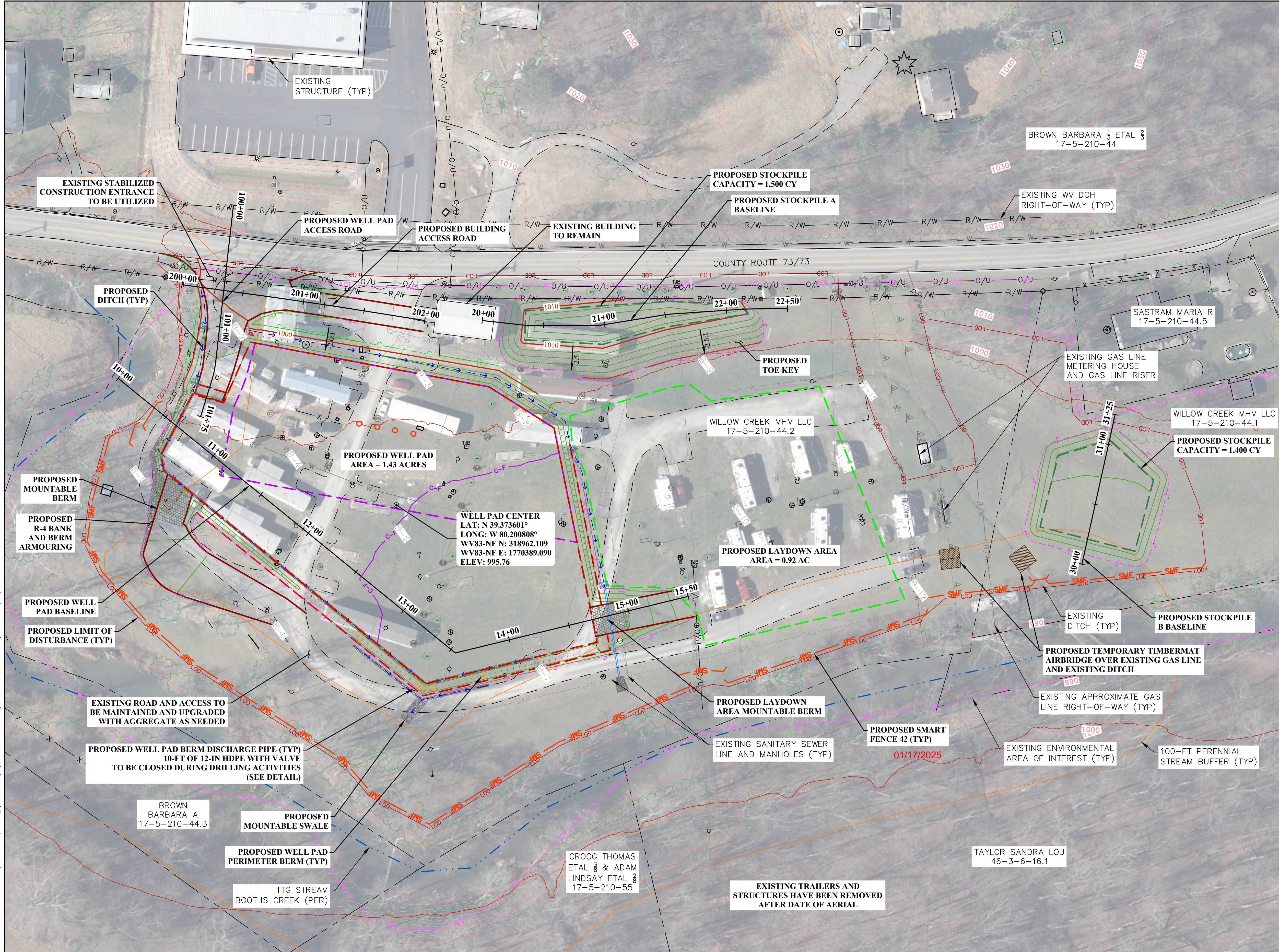
DRAWN:	DMP	DATE:	11.08.2024
CHECKED:	JCA	DATE:	11.08.2024
APPROVED:		DATE:	
SURVEY DATE:			
SURVEY BY:			
FIELD BOOK No.:			

THRASHER
THE THRASHER GROUP INC.
CIVIL • ENVIRONMENTAL • CONSULTING • FIELD SERVICES
600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330
PHONE (304) 624-4108 • FAX (304) 624-7631

PHASE No.	
CONTRACT No.	
PROJECT No.	170-11275

DIVERSIFIED PRODUCTION, LLC
ISSUED FOR CONSTRUCTION PLANS FOR THE
ABBAY WELL PAD
HARRISON COUNTY, WV
OVERALL SITE PLAN

SHEET No.
6

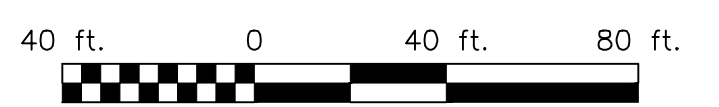
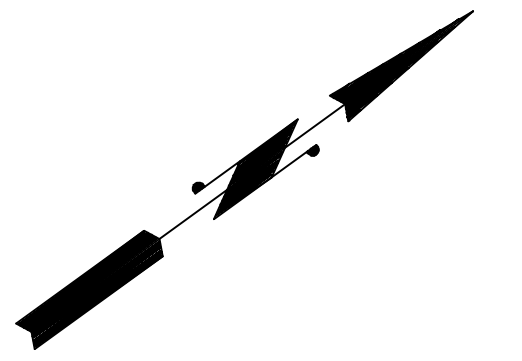


PLAN LEGEND

	EXISTING CONTOURS
	PROPERTY LINES
	WV DOH RIGHT-OF-WAY
	ENVIRONMENTAL AREA OF INTEREST
	EXISTING FEMA 100-YR FLOODPLAIN
	DELINEATED PERENNIAL STREAM (PER)
	100-FT PERENNIAL STREAM BUFFER
	EXISTING UNPAVED ROAD EDGE
	EXISTING TREE LINE
	EXISTING DITCH
	EXISTING CULVERT
	EXISTING OVERHEAD UTILITY
	EXISTING UNDERGROUND ELECTRIC
	EXISTING WATER LINE
	EXISTING GAS LINE
	EXISTING GAS LINE RIGHT-OF-WAY
	EXISTING SANITARY SEWER LINE
	EXISTING FENCE
	EXISTING STRUCTURE
	EXISTING POST
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED CONTOURS
	PROPOSED CUT LIMIT
	PROPOSED FILL LIMIT
	PROPOSED ROAD EDGE
	PROPOSED PAD OUTLINE
	PROPOSED WELL PAD PERIMETER BERM
	PROPOSED TANK PAD OUTLINE
	PROPOSED VEGETATED DITCH
	PROPOSED ROCK LINED DITCH
	PROPOSED SMART FENCE 42
	PROPOSED CULVERT
	PROPOSED DISCHARGE PIPE
	PROPOSED ROCK CHECK DAM
	PROPOSED OUTLET PROTECTION

- ### GENERAL NOTES
- EXISTING CONTOURS AND BASE MAPPING ARE BASED UPON A COMBINATION OF TTG SURVEY IN JANUARY 2023 & AERIAL IMAGERY FLOWN BY TTG IN FEBRUARY 2024.
 - PROPERTY LINES SHOWN ARE BASED UPON A COMBINATION OF TTG SURVEY AND GIS TAX MAPS.
 - ENVIRONMENTAL DELINEATIONS WERE PERFORMED BY TTG IN FEBRUARY 2024.
 - ASSUMED 4-IN TOPSOIL DEPTH.
 - PROPOSED CONTOURS SHOWN INSIDE THE WELL PAD BERM AND WITHIN THE PROPOSED ROAD BED REPRESENT SUBGRADE ELEVATIONS. CONTOURS SHOWN OUTSIDE OF THE PROPOSED WELL PAD BERM AND PROPOSED ROAD BED REPRESENT FINAL GRADE.
 - ENVIRONMENTAL BUFFER SHOWN REPRESENTS A 100-FT OFFSET FROM THE TOP OF BANK OF PERENNIAL STREAMS.

APPROVED
WVDEP OOG
MODIFICATION
[Signature]
1/17/2025



PLOT DATE/TIME: 12/20/2024 8:15 AM
CAD FILE: R:\070\170-11275 - DGCOC - Abbey Well Pad\Drawing\Final\11275-AbbeyWellPad.dwg

THE INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF THE THRASHER GROUP, INC. REPRODUCTION OF THESE DOCUMENTS IN WHOLE OR IN PART, FOR ANY REASON WITHOUT PRIOR WRITTEN PERMISSION, IS STRICTLY PROHIBITED. COPYRIGHT © 2024 THE THRASHER GROUP, INC.

NO.	BY	DATE	ISSUED FOR
IFC1	JCA	12.20.2024	EXPANDED WELL PAD FOOTPRINT
IFC	JCA	11.19.2024	ISSUED FOR CONSTRUCTION
IFB	JCA	11.08.2024	ISSUED FOR BID
IFP	JCA	09.24.2024	ISSUED FOR PERMITTING

Diversified Production LLC

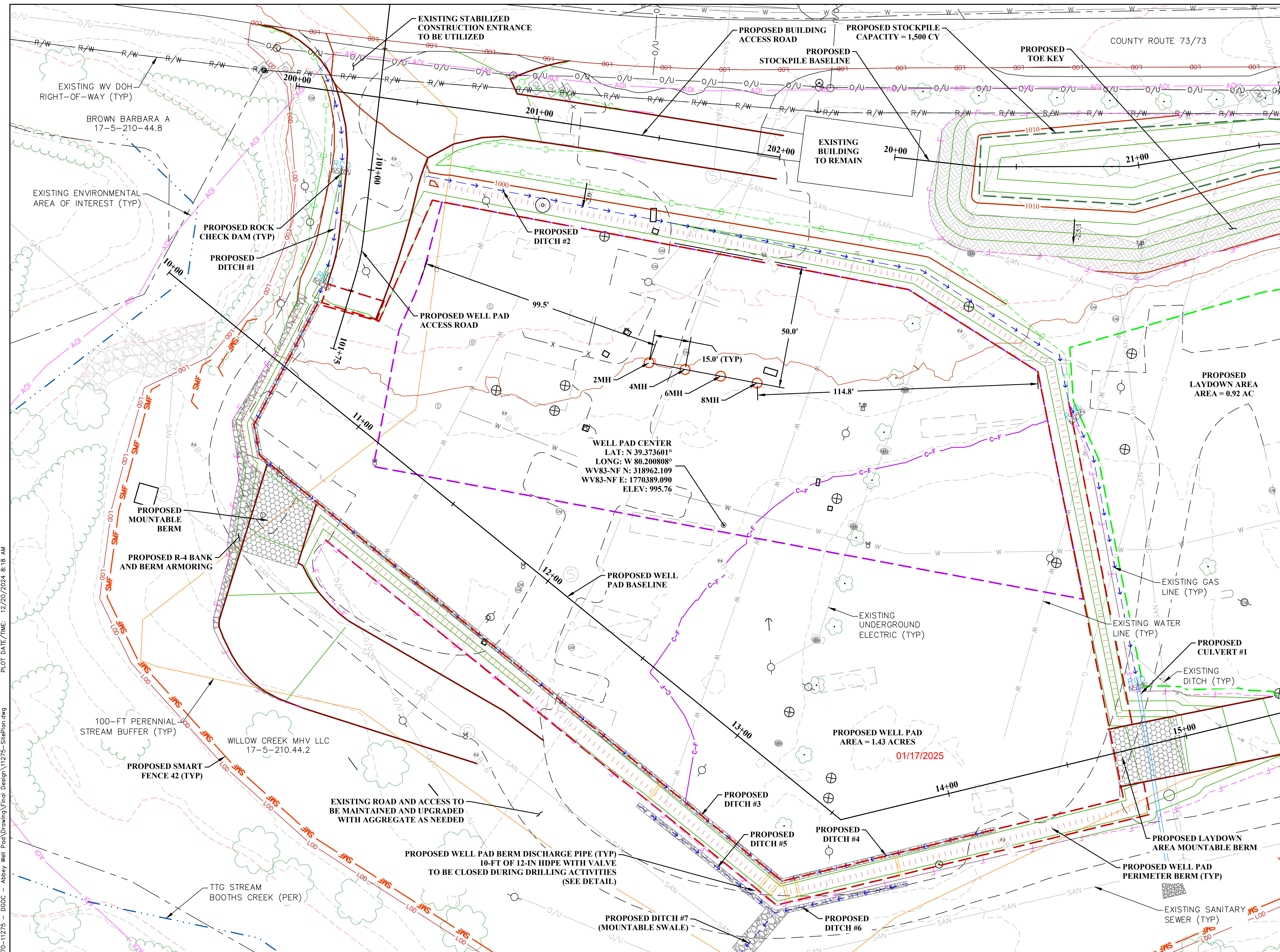
SCALE:

DRAWN:	DMP	DATE:	11.08.2024
CHECKED:	JCA	DATE:	11.08.2024
APPROVED:		DATE:	
SURVEY DATE:			
SURVEY BY:			
FIELD BOOK No.:			

THRASHER
THE THRASHER GROUP INC.
CIVIL • ENVIRONMENTAL • CONSULTING • FIELD SERVICES
600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330
PHONE (304) 624-4108 • FAX (304) 624-7631

PHASE No.	
CONTRACT No.	
PROJECT No.	170-11275

DIVERSIFIED PRODUCTION, LLC
ISSUED FOR CONSTRUCTION PLANS FOR THE
ABBAY WELL PAD
HARRISON COUNTY, WV
OVERALL SITE PLAN WITH ORTHO



PLAN LEGEND

	EXISTING CONTOURS
	PROPERTY LINES
	WV DOH RIGHT-OF-WAY
	ENVIRONMENTAL AREA OF INTEREST
	EXISTING FEMA 100-YR FLOODPLAIN
	DELINEATED PERENNIAL STREAM (PER)
	100-FT PERENNIAL STREAM BUFFER
	EXISTING UNPAVED ROAD EDGE
	EXISTING TREE LINE
	EXISTING DITCH
	EXISTING CULVERT
	EXISTING OVERHEAD UTILITY
	EXISTING UNDERGROUND ELECTRIC
	EXISTING GAS LINE
	EXISTING GAS LINE RIGHT-OF-WAY
	EXISTING SANITARY SEWER LINE
	EXISTING FENCE
	EXISTING STRUCTURE
	EXISTING POST
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED CONTOURS
	PROPOSED CUT LIMIT
	PROPOSED FILL LIMIT
	PROPOSED ROAD EDGE
	PROPOSED PAD OUTLINE
	PROPOSED WELL PAD PERIMETER BERM
	PROPOSED TANK PAD OUTLINE
	PROPOSED VEGETATED DITCH
	PROPOSED ROCK LINED DITCH
	PROPOSED SMART FENCE 42
	PROPOSED CULVERT
	PROPOSED DISCHARGE PIPE
	PROPOSED ROCK CHECK DAM
	PROPOSED OUTLET PROTECTION

- GENERAL NOTES**
- EXISTING CONTOURS AND BASE MAPPING ARE BASED UPON A COMBINATION OF TTG SURVEY IN JANUARY 2023 & AERIAL IMAGERY FLOWN BY TTG IN FEBRUARY 2024.
 - PROPERTY LINES SHOWN ARE BASED UPON A COMBINATION OF TTG SURVEY AND GIS TAX MAPS.
 - ENVIRONMENTAL DELINEATIONS WERE PERFORMED BY TTG IN FEBRUARY 2024.
 - ASSUMED 4-IN TOPSOIL DEPTH.
 - PROPOSED CONTOURS SHOWN INSIDE THE WELL PAD BERM AND WITHIN THE PROPOSED ROAD BED REPRESENT SUBGRADE ELEVATIONS. CONTOURS SHOWN OUTSIDE OF THE PROPOSED WELL PAD BERM AND PROPOSED ROAD BED REPRESENT FINAL GRADE.
 - ENVIRONMENTAL BUFFER SHOWN REPRESENTS A 100-FT OFFSET FROM THE TOP OF BANK OF PERENNIAL STREAMS.

APPROVED
WVDEP OOG
 MODIFICATION
 1/17/2025

CAD FILE: R:\070\770-11275 - DBOC - Abbey Well Pad\Drawing\Final\11275-WellPlan.dwg
 PLOT DATE/TIME: 12/20/2024 8:18 AM

THE INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF THE THRASHER GROUP, INC. REPRODUCTION OF THESE DOCUMENTS IN WHOLE OR IN PART, FOR ANY REASON WITHOUT PRIOR WRITTEN PERMISSION, IS STRICTLY PROHIBITED. © 2024 THE THRASHER GROUP, INC.

NO.	BY	DATE	DESCRIPTION
IFC1	JCA	12.20.2024	EXPANDED WELL PAD FOOTPRINT
IFC	JCA	11.19.2024	ISSUED FOR CONSTRUCTION
IFB	JCA	11.08.2024	ISSUED FOR BID
IFP	JCA	09.24.2024	ISSUED FOR PERMITTING

Diversified Production LLC

SCALE:
 DRAWN: DMP DATE: 11.08.2024
 CHECKED: JCA DATE: 11.08.2024
 APPROVED: DATE:
 SURVEY DATE:
 SURVEY BY:
 FIELD BOOK No.:

THRASHER
 THE THRASHER GROUP INC.
 CIVIL • ENVIRONMENTAL • CONSULTING • FIELD SERVICES
 600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330
 PHONE (304) 624-4108 • FAX (304) 624-7631

PHASE No.
CONTRACT No.
PROJECT No.
770-11275

DIVERSIFIED PRODUCTION, LLC
 ISSUED FOR CONSTRUCTION PLANS FOR THE
ABBAY WELL PAD
 HARRISON COUNTY, WV
 DETAILED WELL PAD PLAN

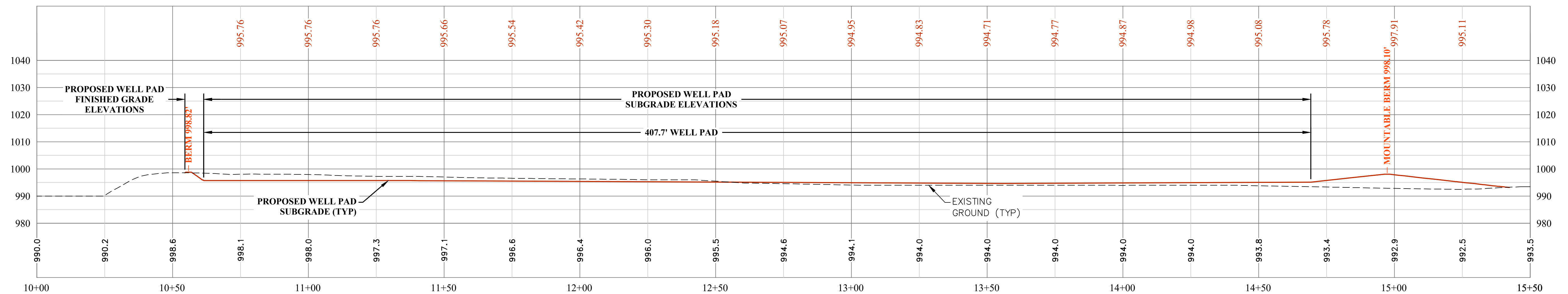
PROFILE LEGEND

- EXISTING GROUND
- PROPOSED GRADE
- PROPOSED CULVERT

GENERAL NOTES

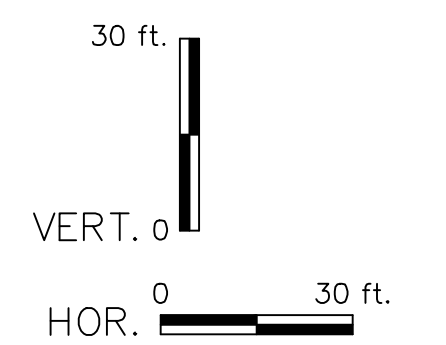
1. PROPOSED CONTOURS SHOWN INSIDE THE WELL PAD BERM AND WITHIN THE PROPOSED ROAD BED REPRESENT SUBGRADE ELEVATIONS. CONTOURS SHOWN OUTSIDE OF THE PROPOSED WELL PAD BERM AND PROPOSED ROAD BED REPRESENT FINAL GRADE.

PROPOSED WELL PAD BASELINE PROFILE



01/17/2025

APPROVED
WVDEP OOG
 MODIFICATION
 1/17/2025



PLOT DATE/TIME: 12/20/2024 8:15 AM

CAD FILE: R:\070\T70-11275 - D60C - Abbey Well Pad\Drawing\Final Design\11275-StePlan.dwg

THE INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF THE THRASHER GROUP, INC. REPRODUCTION OF THESE DOCUMENTS IN WHOLE OR IN PART, FOR ANY REASON WITHOUT PRIOR WRITTEN PERMISSION, IS STRICTLY PROHIBITED. COPYRIGHT © 2024 THE THRASHER GROUP, INC.

NO.	BY	DATE	ISSUED FOR PERMITTING
IFC1	JCA	12.20.2024	EXPANDED WELL PAD FOOTPRINT
IFC	JCA	11.19.2024	ISSUED FOR CONSTRUCTION
IFB	JCA	11.08.2024	ISSUED FOR BID
IFP	JCA	09.24.2024	ISSUED FOR PERMITTING



Diversified
Production LLC

SCALE:	
DRAWN:	DMP DATE: 11.08.2024
CHECKED:	JCA DATE: 11.08.2024
APPROVED:	DATE:
SURVEY DATE:	
SURVEY BY:	
FIELD BOOK No.:	

THRASHER
 THE THRASHER GROUP INC.
 CIVIL • ENVIRONMENTAL • CONSULTING • FIELD SERVICES
 600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330
 PHONE (304) 624-4108 • FAX (304) 624-7831

PHASE No.	
CONTRACT No.	
PROJECT No.	T70-11275

DIVERSIFIED PRODUCTION, LLC
 ISSUED FOR CONSTRUCTION PLANS FOR THE
 ABBEY WELL PAD
 HARRISON COUNTY, WV
 WELL PAD BASELINE

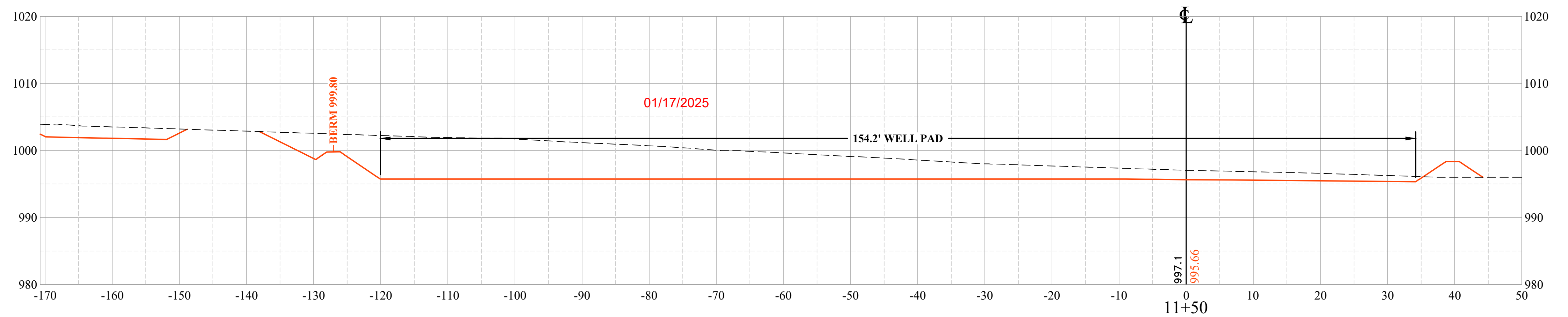
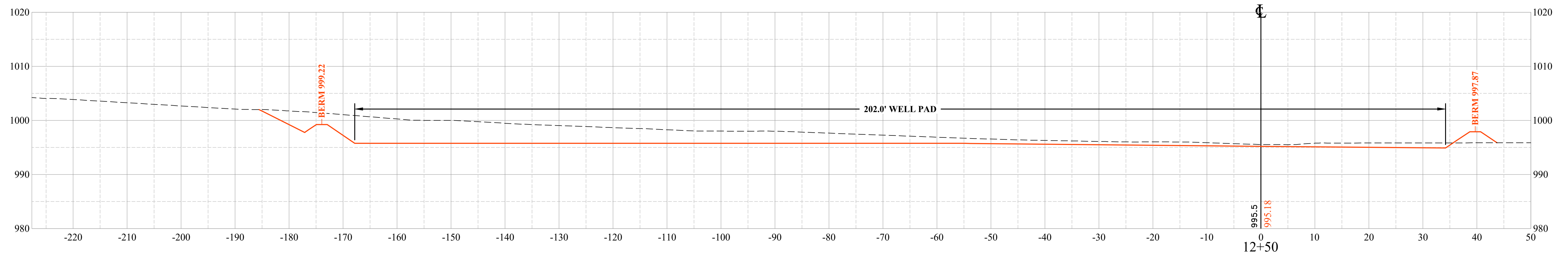
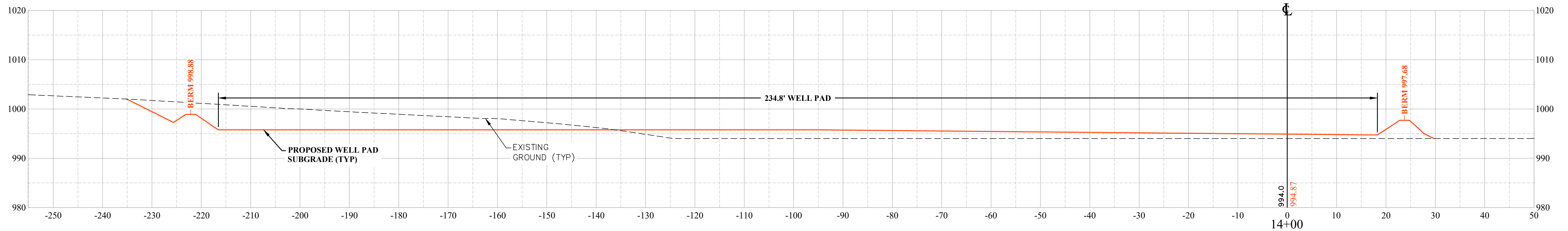
SHEET No.
12

SECTION LEGEND

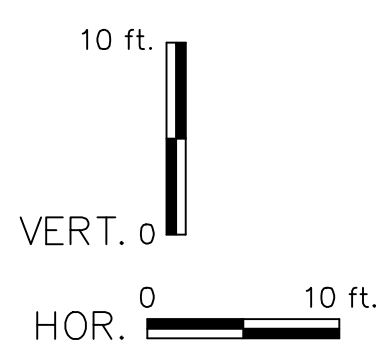
----- EXISTING GROUND
 _____ PROPOSED GRADE

GENERAL NOTES

1. PROPOSED CONTOURS SHOWN INSIDE THE WELL PAD BERM AND WITHIN THE PROPOSED ROAD BED REPRESENT SUBGRADE ELEVATIONS. CONTOURS SHOWN OUTSIDE OF THE PROPOSED WELL PAD BERM AND PROPOSED ROAD BED REPRESENT FINAL GRADE.



APPROVED
WVDEP OOG
 MODIFICATION
[Signature]
 1/17/2025



CAD FILE: R:\070\T70-11275 - D000 - Abbey Well Pad\Drawing\Final Design\11275-StePlan.dwg PLOT DATE/TIME: 12/20/2024 8:15 AM

THE INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF THE THRASHER GROUP, INC. REPRODUCTION OF THESE DOCUMENTS IN WHOLE OR IN PART, FOR ANY REASON WITHOUT PRIOR WRITTEN PERMISSION, IS STRICTLY PROHIBITED. COPYRIGHT © 2024 THE THRASHER GROUP, INC.

NO.	BY	DATE	ISSUED FOR PERMITTING
IFC1	JCA	12.20.2024	EXPANDED WELL PAD FOOTPRINT
IFC	JCA	11.19.2024	ISSUED FOR CONSTRUCTION
IFB	JCA	11.08.2024	ISSUED FOR BID
IFP	JCA	09.24.2024	ISSUED FOR PERMITTING

Diversified Production LLC

SCALE:	
DRAWN:	DMP DATE: 11.08.2024
CHECKED:	JCA DATE: 11.08.2024
APPROVED:	DATE:
SURVEY DATE:	
SURVEY BY:	
FIELD BOOK No.:	

THE THRASHER GROUP INC.
 CIVIL • ENVIRONMENTAL • CONSULTING • FIELD SERVICES
 600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330
 PHONE (304) 624-4108 • FAX (304) 624-7631

PHASE No.	
CONTRACT No.	
PROJECT No.	T70-11275

DIVERSIFIED PRODUCTION, LLC
 ISSUED FOR CONSTRUCTION PLANS FOR THE
 ABBEY WELL PAD
 HARRISON COUNTY, WV
 WELL PAD SECTIONS

SHEET No.
13

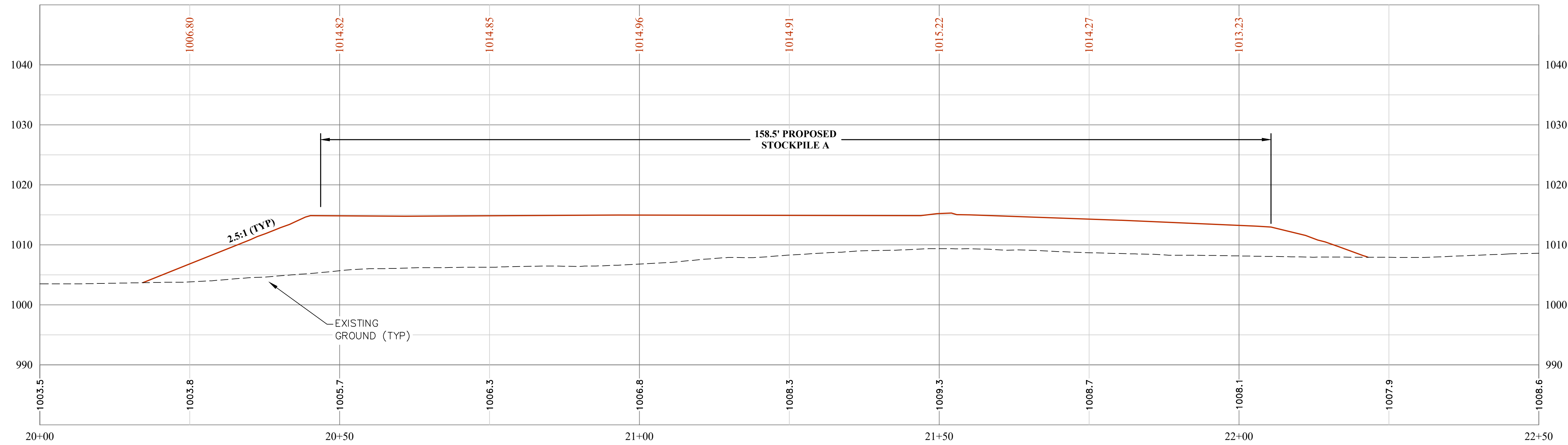
PROFILE LEGEND

- EXISTING GROUND
- PROPOSED GRADE
- PROPOSED CULVERT

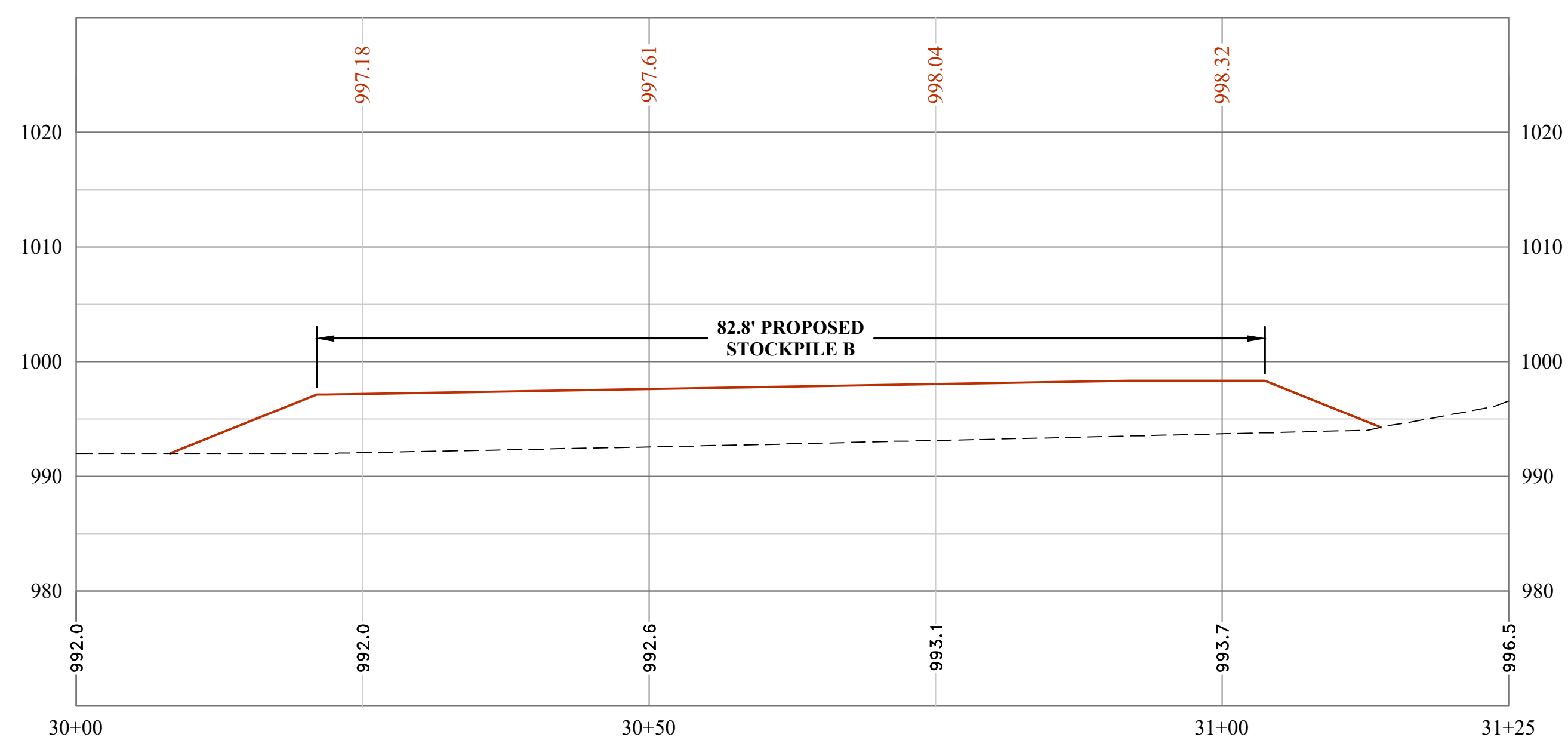
GENERAL NOTES

1. PROPOSED CONTOURS SHOWN INSIDE THE WELL PAD BERM AND WITHIN THE PROPOSED ROAD BED REPRESENT SUBGRADE ELEVATIONS. CONTOURS SHOWN OUTSIDE OF THE PROPOSED WELL PAD BERM AND PROPOSED ROAD BED REPRESENT FINAL GRADE.

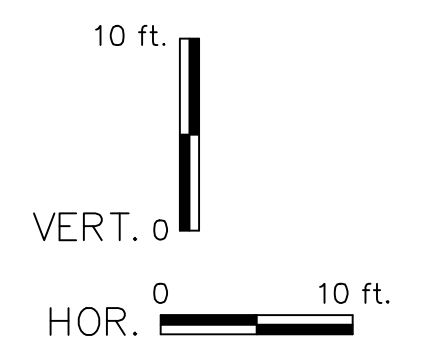
PROPOSED STOCKPILE A BASELINE PROFILE



PROPOSED STOCKPILE B BASELINE PROFILE



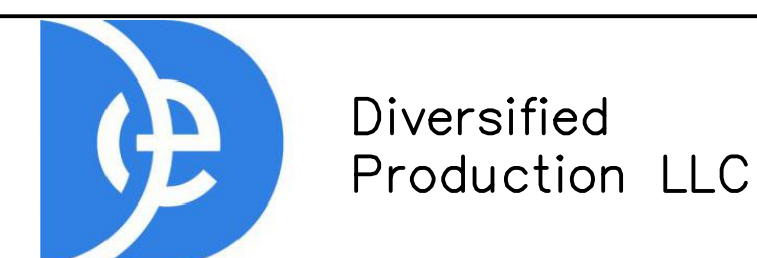
01/17/2025



CAD FILE: R:\070\T70-11275 - D60C - Abbey Well Pad\Drawings\Final Design\11275-StockPile.dwg PLOT DATE/TIME: 12/20/2024 8:15 AM

THE INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF THE THRASHER GROUP, INC. REPRODUCTION OF THESE DOCUMENTS IN WHOLE OR IN PART, FOR ANY REASON WITHOUT PRIOR WRITTEN PERMISSION, IS STRICTLY PROHIBITED. COPYRIGHT © 2024 THE THRASHER GROUP, INC.

NO.	BY	DATE	ISSUED FOR
IFC1	JCA	12.20.2024	EXPANDED WELL PAD FOOTPRINT
IFC	JCA	11.19.2024	ISSUED FOR CONSTRUCTION
IFB	JCA	11.08.2024	ISSUED FOR BID
IFP	JCA	09.24.2024	ISSUED FOR PERMITTING



SCALE:
DRAWN: DMP DATE: 11.08.2024
CHECKED: JCA DATE: 11.08.2024
APPROVED: DATE:
SURVEY DATE:
SURVEY BY:
FIELD BOOK No.:



PHASE No.
CONTRACT No.
PROJECT No.
T70-11275

DIVERSIFIED PRODUCTION, LLC
ISSUED FOR CONSTRUCTION PLANS FOR THE
ABBAY WELL PAD
HARRISON COUNTY, WV
STOCKPILE BASELINES

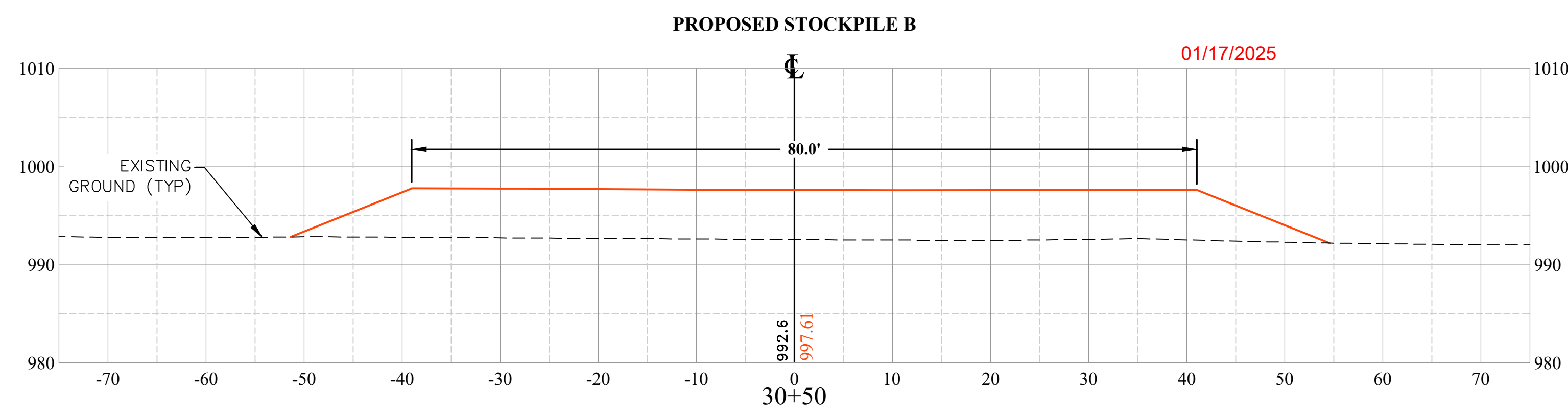
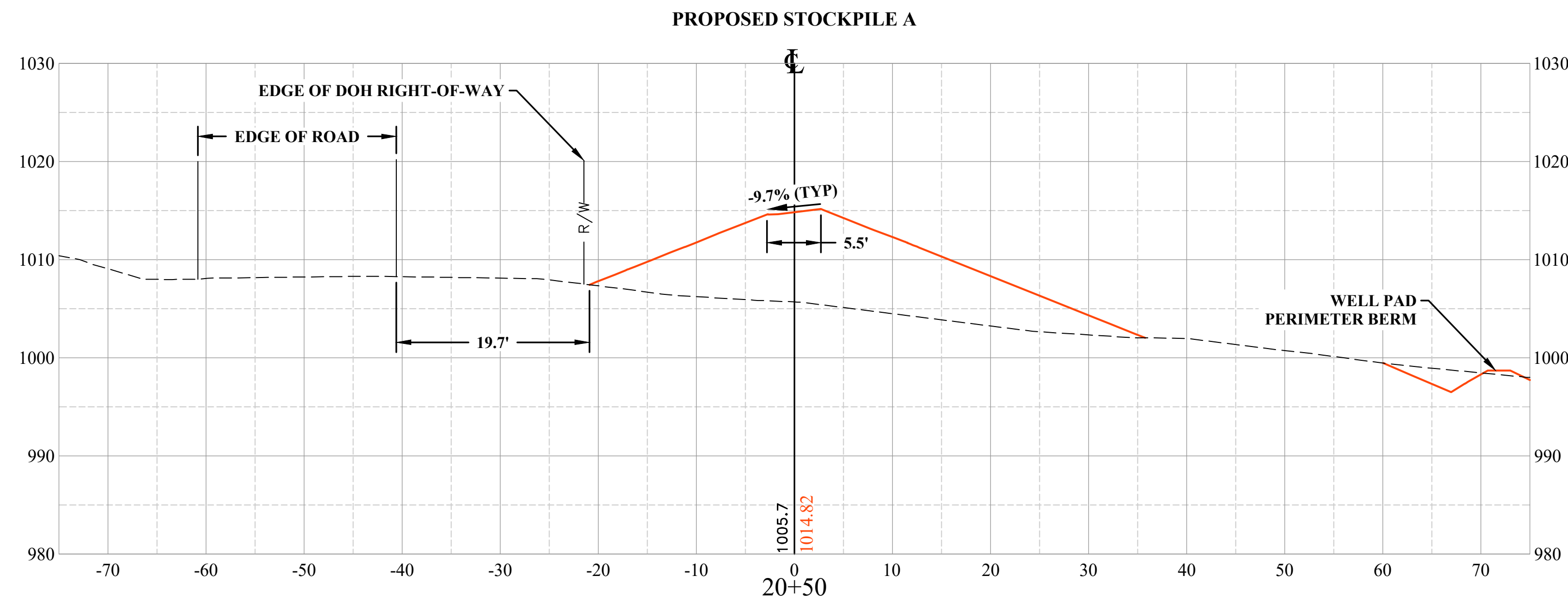
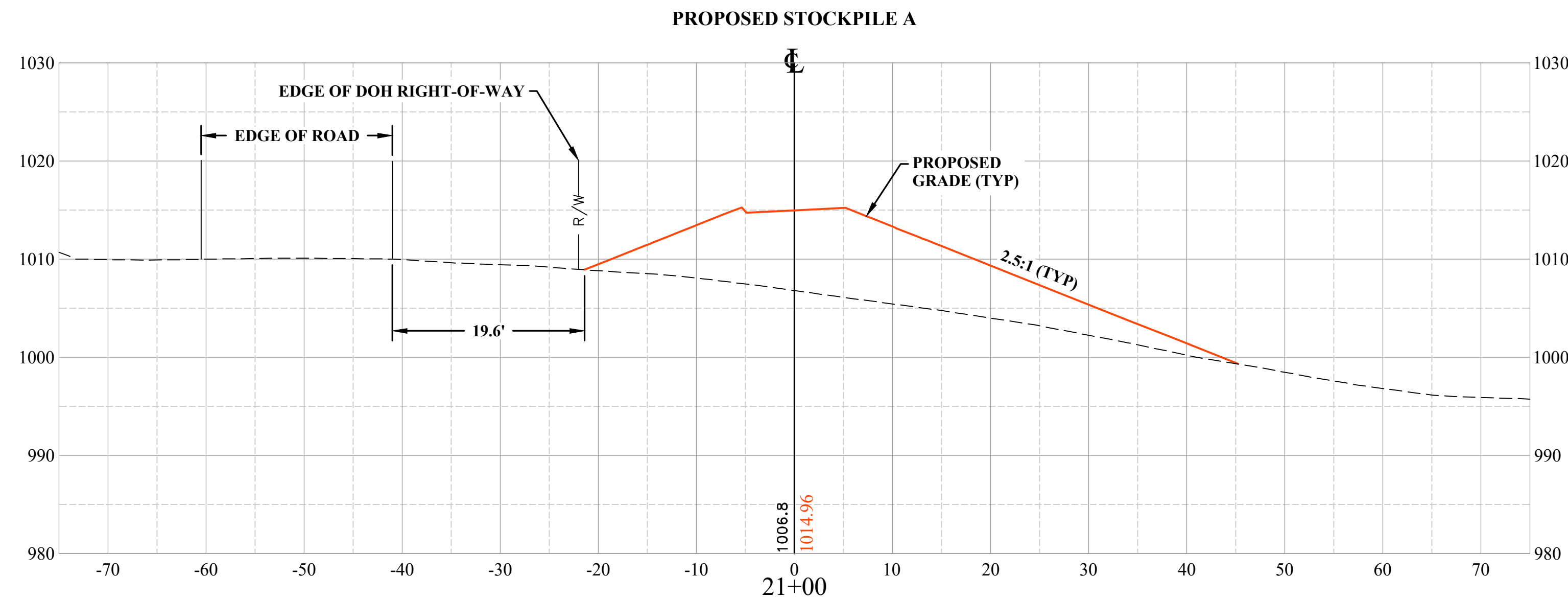
SHEET No.
14

SECTION LEGEND

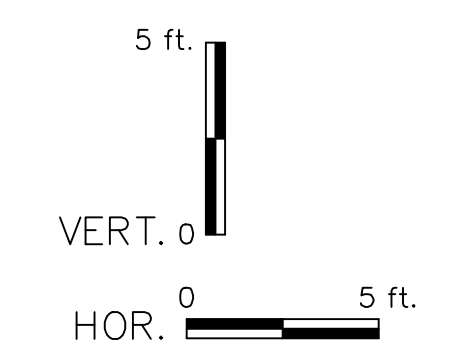
----- EXISTING GROUND
 ----- PROPOSED GRADE

GENERAL NOTES

1. PROPOSED CONTOURS SHOWN INSIDE THE WELL PAD BERM AND WITHIN THE PROPOSED ROAD BED REPRESENT SUBGRADE ELEVATIONS. CONTOURS SHOWN OUTSIDE OF THE PROPOSED WELL PAD BERM AND PROPOSED ROAD BED REPRESENT FINAL GRADE.



APPROVED
WVDEP OOG
 MODIFICATION
 1/17/2025



CAD FILE: R:\070\T70-11275 - D00C - Abbey Well Pad\Drawings\Final Design\11275-SitePlan.dwg
 PLOT DATE/TIME: 12/20/2024 8:15 AM

THE INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF THE THRASHER GROUP, INC. REPRODUCTION OF THESE DOCUMENTS IN WHOLE OR IN PART, FOR ANY REASON WITHOUT PRIOR WRITTEN PERMISSION, IS STRICTLY PROHIBITED. COPYRIGHT © 2024 THE THRASHER GROUP, INC.

NO.	BY	DATE	ISSUED FOR
IFC1	JCA	12.20.2024	EXPANDED WELL PAD FOOTPRINT
IFC	JCA	11.19.2024	ISSUED FOR CONSTRUCTION
IFB	JCA	11.08.2024	ISSUED FOR BID
IFP	JCA	09.24.2024	ISSUED FOR PERMITTING



SCALE:	
DRAWN:	DMP DATE: 11.08.2024
CHECKED:	JCA DATE: 11.08.2024
APPROVED:	DATE:
SURVEY DATE:	
SURVEY BY:	
FIELD BOOK No.:	



PHASE No.	
CONTRACT No.	
PROJECT No.	T70-11275

DIVERSIFIED PRODUCTION, LLC
 ISSUED FOR CONSTRUCTION PLANS FOR THE
 ABBEY WELL PAD
 HARRISON COUNTY, WV
 STOCKPILE SECTIONS

SHEET No.
15

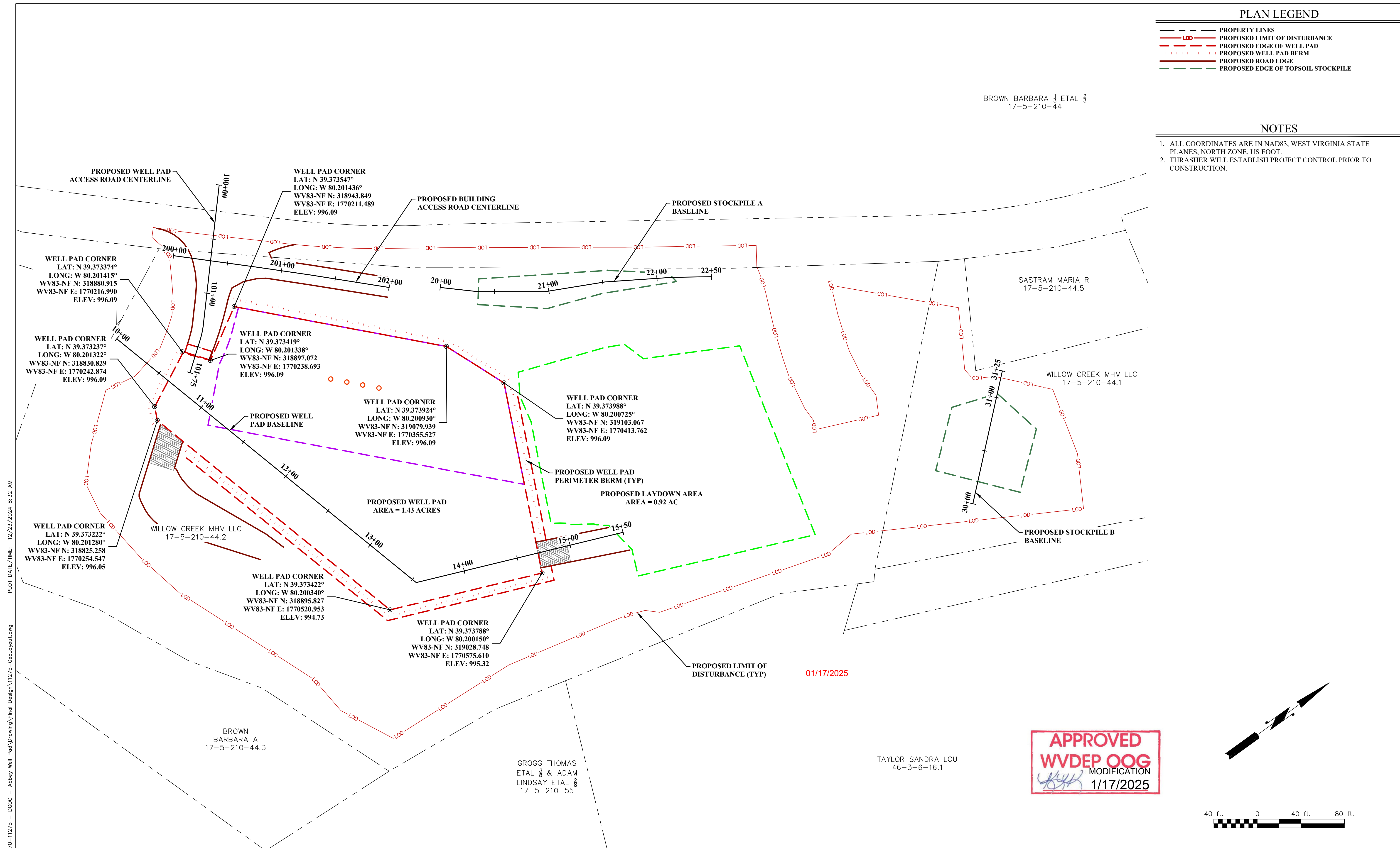
PLAN LEGEND

- PROPERTY LINES
- LOO- PROPOSED LIMIT OF DISTURBANCE
- - - PROPOSED EDGE OF WELL PAD
- - - PROPOSED WELL PAD BERM
- - - PROPOSED ROAD EDGE
- - - PROPOSED EDGE OF TOPSOIL STOCKPILE

BROWN BARBARA & ETAL
17-5-210-44

NOTES

1. ALL COORDINATES ARE IN NAD83, WEST VIRGINIA STATE PLANES, NORTH ZONE, US FOOT.
2. THRASHER WILL ESTABLISH PROJECT CONTROL PRIOR TO CONSTRUCTION.



APPROVED
WVDEP OOG
MODIFICATION
[Signature]
1/17/2025

CAD FILE: R:\070\770-11275 - DBOC - Abbey Well Pad\Drawing\Final Design\11275-GeoLayout.dwg
 PLOT DATE/TIME: 12/23/2024 8:32 AM

THE INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF THE THRASHER GROUP, INC. REPRODUCTION OF THESE DOCUMENTS IN WHOLE OR IN PART, FOR ANY REASON WITHOUT PRIOR WRITTEN PERMISSION, IS STRICTLY PROHIBITED. COPYRIGHT © 2024 THE THRASHER GROUP, INC.

NO.	BY	DATE	DESCRIPTION
IFC1	JCA	12.20.2024	EXPANDED WELL PAD FOOTPRINT
IFC	JCA	11.19.2024	ISSUED FOR CONSTRUCTION
IFB	JCA	11.08.2024	ISSUED FOR BID
IFP	JCA	09.24.2024	ISSUED FOR PERMITTING

Diversified Production LLC

SCALE:	
DRAWN:	DMP DATE: 11.08.2024
CHECKED:	JCA DATE: 11.08.2024
APPROVED:	DATE:
SURVEY DATE:	
SURVEY BY:	
FIELD BOOK No.:	

THE THRASHER GROUP INC.
CIVIL • ENVIRONMENTAL • CONSULTING • FIELD SERVICES
600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330
PHONE (304) 624-4108 • FAX (304) 624-7631

PHASE No.	
CONTRACT No.	
PROJECT No.	170-11275

DIVERSIFIED PRODUCTION, LLC
ISSUED FOR CONSTRUCTION PLANS FOR THE
ABBAY WELL PAD
HARRISON COUNTY, WV
OVERALL GEOMETRIC LAYOUT

SHEET No.
17

PLOT DATE/TIME: 12/23/2024 8:32 AM

CAD FILE: R:\070\T70-11275 - DGC - Abbey Well Pad\Drawing\Final Design\11275-GeoLayout.dwg

WELL PAD ACCESS ROAD																
No.	Type	Start Station	End Station	Length	Direction	Start Point (WV83-N E,N)	End Point (WV83-N E,N)	PI Station	PI Point	Degree of Curvature by ARC Dc	Delta Angle Δ	Radius R	External Tangent T	Chord Length LC	External Secant E	Mid-Ordinated M
1	Line	100+00.00'	101+28.88'	128.877'	S 47° 32' 07.85" E	1770112.9831',318998.3225'	1770208.0554',318911.3132'									
2	Curve	101+28.88'	101+43.31'	14.437'		1770208.0554',318911.3132'	1770217.7456',318900.6390'	101+36.12'	1770213.3958',318906.4257'	73°26'45"	10°36'13"	78.011'	7.239'	14.417'	0.335'	0.334
3	Line	101+43.31'	101+75.00'	31.686'	S 36° 55' 55.23" E	1770217.7456',318900.6390'	1770236.7844',318875.3112'									

BUILDING ACCESS ROAD																
No.	Type	Start Station	End Station	Length	Direction	Start Point (WV83-N E,N)	End Point (WV83-N E,N)	PI Station	PI Point	Degree of Curvature by ARC Dc	Delta Angle Δ	Radius R	External Tangent T	Chord Length LC	External Secant E	Mid-Ordinated M
1	Line	200+00.00'	200+77.16'	77.165'	N 43° 45' 10.43" E	1770140.9227',318926.2679'	1770194.2858',318982.0061'									
2	Curve	200+77.16'	201+26.95'	49.790'		1770194.2858',318982.0061'	1770229.1186',319017.5810'	201+02.06'	1770211.5025',318999.9891'	2°35'02"	1°17'11"	2217.426'	24.896'	49.788'	0.140'	0.14
3	Line	201+26.95'	202+00.00'	73.046'	N 45° 02' 21.85" E	1770229.1186',319017.5810'	1770280.8054',319069.1967'									

WELL PAD BASELINE							
No.	Type	Start Station	End Station	Length (L)	Direction	Start Point (WV83-N E,N)	End Point (WV83-N E,N)
1	Line	10+00.00'	13+54.57'	354.572'	N 75° 09' 48.49" E	1770171.9939',318839.2564'	1770514.7446',318930.0489'
2	Line	13+54.57'	15+50.00'	195.428'	N 22° 21' 09.19" E	1770514.7446',318930.0489'	1770589.0667',319110.7928'

STOCKPILE A BASELINE							
No.	Type	Start Station	End Station	Length (L)	Direction	Start Point (WV83-N E,N)	End Point (WV83-N E,N)
1	Line	20+00.00'	20+32.84'	32.836'	N 44° 26' 02.65" E	1770317.7688',319098.3734'	1770340.7567',319121.8200'
2	Line	20+32.84'	21+37.49'	104.656'	N 29° 10' 03.55" E	1770340.7567',319121.8200'	1770391.7626',319213.2055'
3	Line	21+37.49'	21+68.43'	30.937'	N 30° 23' 44.09" E	1770391.7626',319213.2055'	1770407.4156',319239.8900'
4	Line	21+68.43'	21+89.60'	21.175'	N 32° 26' 31.03" E	1770407.4156',319239.8900'	1770418.7751',319257.7608'
5	Line	21+89.60'	22+14.30'	24.695'	N 32° 27' 11.99" E	1770418.7751',319257.7608'	1770432.0267',319278.5991'
6	Line	22+14.30'	22+50.00'	35.700'	N 30° 12' 22.01" E	1770432.0267',319278.5991'	1770449.9878',319309.4518'

STOCKPILE B BASELINE							
No.	Type	Start Station	End Station	Length (L)	Direction	Start Point (WV83-N E,N)	End Point (WV83-N E,N)
1	Line	30+00.00'	31+25.00'	125.000'	N 41° 31' 50.25" W	1770756.6509',319388.0650'	1770673.7734',319479.6382'

APPROVED
WVDEP OOG
 MODIFICATION
[Signature]
1/17/2025

THE INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF THE THRASHER GROUP, INC. REPRODUCTION OF THESE DOCUMENTS IN WHOLE OR IN PART, FOR ANY REASON WITHOUT PRIOR WRITTEN PERMISSION, IS STRICTLY PROHIBITED. COPYRIGHT © 2024 THE THRASHER GROUP, INC.

NO.	BY	DATE	DESCRIPTION
IFC1	JCA	12.20.2024	EXPANDED WELL PAD FOOTPRINT
IFC	JCA	11.19.2024	ISSUED FOR CONSTRUCTION
IFB	JCA	11.08.2024	ISSUED FOR BID
IFP	JCA	09.24.2024	ISSUED FOR PERMITTING



Diversified
Production LLC

SCALE:	
DRAWN:	DMP DATE: 11.08.2024
CHECKED:	JCA DATE: 11.08.2024
APPROVED:	DATE:
SURVEY DATE:	
SURVEY BY:	
FIELD BOOK No.:	

THRASHER
THE THRASHER GROUP INC.
CIVIL • ENVIRONMENTAL • CONSULTING • FIELD SERVICES
600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330
PHONE (304) 624-4108 • FAX (304) 624-7631

PHASE No.	
CONTRACT No.	
PROJECT No.	T70-11275

DIVERSIFIED PRODUCTION, LLC
ISSUED FOR CONSTRUCTION PLANS FOR THE
ABBAY WELL PAD
HARRISON COUNTY, WV
GEOMETRIC LAYOUT TABLES

SHEET No.

18