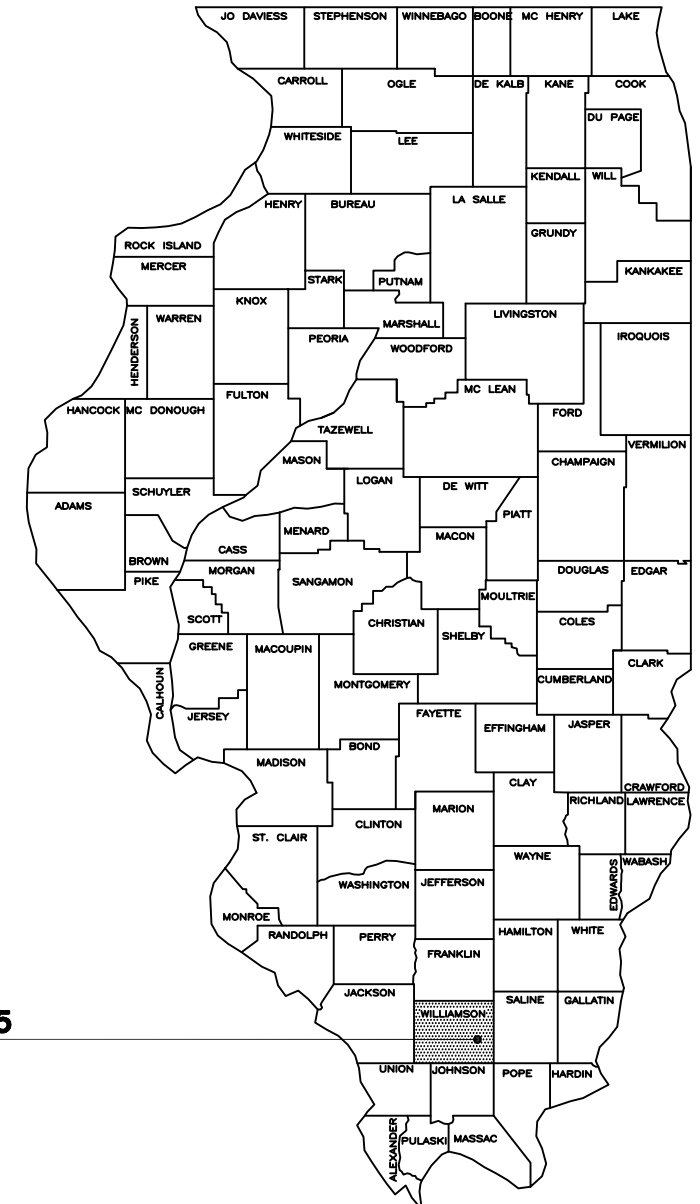


State of Illinois
Department of Natural Resources
Office of Mines and Minerals
Division of Abandoned Mined Lands Reclamation

Funded by the
United States Department of Interior
Federal Office of Surface Mining

Crab Orchard SM-15
Reclamation Project
AML-GWmE-1803
Williamson County
2LR



Certified Copy

Crab Orchard SM-15
Williamson County

PRE-BID MEETING

A PRE-BID MEETING IS SCHEDULED FOR THIS PROJECT ON TUESDAY, JULY 24, 2018 AT 1:00 P.M. AT THE INTERSECTION OF SARAVILLE ROAD AND SHED CHURCH ROAD (SEE SHEET 2). ALL PRIME AND SUBCONTRACTORS ARE ENCOURAGED TO ATTEND.

SCHEDULE OF DRAWINGS:

1. Cover Sheet
2. Summary of Quantities / General Notes / Location Map
3. Site Information
- 4.-6. Existing Conditions
- 7.-9. Proposed Conditions
- 10.-18. Cross Sections
19. Details

IDOT Standard 701006-05

CONTRACT NO. M1803

Prepared By IDNR Staff

Approved for Bidding:

Thomas A. Benner

Thomas A. Benner, Director
 Office of Mines and Minerals

Approved By:

J. Greg Pinto

J. Greg Pinto, Acting Manager
 AMLR Division

Approved By:

Janet L. Uglum

Janet L. Uglum, P.E.
 IL Licensed Professional Engineer
 No. 062-054108



Summary of Quantities

Item No.	#	Bid Item Description	Section	Quantity	Unit	Rates/Remarks
NRM20110	1	Special Clearing	201	1	L SUM	
NRM20210	2	Earth Excavation	202	149,938	CU YD	COMPACTION PER SECTION 205
NRM25040	3	Nitrogen Fertilizer Nutrient	250	3,940	POUND	100 LB / ACRE TWICE
NRM25050	4	Phosphorous Fertilizer Nutrient	250	1,970	POUND	100 LB / ACRE
NRM25060	5	Potassium Fertilizer Nutrient	250	1,970	POUND	100 LB / ACRE
NRM25070	6	Agricultural Ground Limestone	250	98.5	TON	5 TON / ACRE
NRM25090	7	Seeding	250	17.1	ACRE	
25000314	8	Seeding Class 4B	IDOT 250	2.6	ACRE	
25100115	9	Mulch, Method 2, Procedure 1	IDOT 251	17.1	ACRE	2 TON / ACRE
NRM25810	10	Mowing	258	19.7	ACRE	
NRM28040	11	Perimeter Erosion Barrier	280	375	FOOT	IDOT Standard 280001-07
NRM28050	12	Inlet and Pipe Protection	280	1	EACH	IDOT Standard 280001-07
NRM28610	13	Special Excelsior Blanket	286	6,419	SQ YD	
40200800	14	Aggregate Surface Course, Type B	IDOT 402	928.0	TON	CA-6, 4" LIFTS, 8" TOTAL
542C0211	15	Pipe Culverts, Class C, Type 1 6"	IDOT 542	100	FOOT	PVC SCHEDULE 40
542C0217	16	Pipe Culverts, Class C, Type 1 12"	IDOT 542	30	FOOT	CORRUGATED ALUMINUM ALLOY
54210180	17	Pipe Elbow 6"	IDOT 542	2	EACH	PVC, 90° AND 45°
56300300	18	Adjusting Water Service Lines	IDOT 563	960	FOOT	3/4 INCH
NRM61410	19	Dewatering Impoundments	614	1	L SUM	WATER TREATMENT NOT REQUIRED
NRM67110	20	Mobilization	671	1	L SUM	MAX. 6% OF BID

GENERAL NOTES

Unless otherwise noted on the plans, all disturbed areas within the construction limits will be amended with agricultural ground limestone, fertilizer nutrients, seeded and mulched at the required rates specified in the plans.

The contractor is responsible for visiting the site and familiarizing himself with the existing conditions and the proposed reclamation work prior to submitting a bid.

The contractor shall provide and pay for all field engineering services to execute the project as specified in the Field Engineering section of the Special Provisions.

The contractor is responsible for locating and protecting all existing utility lines.

Unless noted on the plans, all onsite access roads may be used for construction and must be maintained during construction and restored to original or better condition at the completion of work by the contractor. Access roads to the site as designated in the plans are to be maintained to the satisfaction of the engineer.

The construction limits will be staked by the contractor prior to construction. The contractor is responsible for the repair and or restitution at his own expense for all damages done to any area outside the construction limits.

Application rates specified in the plans are shown in the Summary of Quantities-Rates/Remarks column.

CONSTRUCTION NOTES

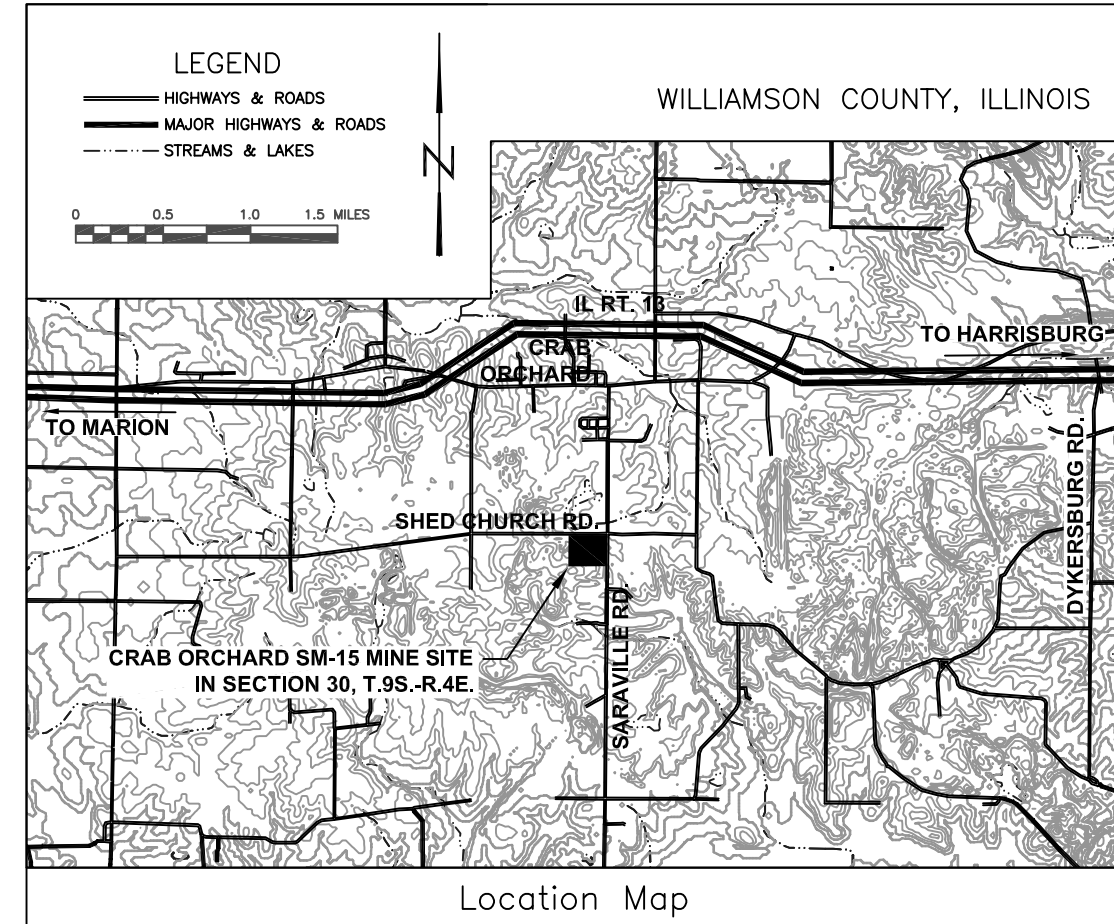
BURIAL/REMOVAL OF MATERIAL-Concrete and masonry debris designated for burial by the engineer shall be buried at least three feet below proposed final grade. Onsite organic debris and trash shall be disposed of in an engineer approved offsite landfill in accordance with Sections 201 and 501 of the Special Provisions.

TREE REMOVAL-Trees cleared from the site shall be disposed of onsite per Section 201 of the Special Provisions. Clearing of trees may only occur from October 16th to March 14th. No clearing of trees outside these dates or outside the construction limits may occur. Special Clearing shall only be performed to the extent needed to perform the contract work.

EROSION CONTROL-The contractor shall schedule his operations and take such precautions that may be necessary to prevent or minimize erosion. Failure to comply with this requirement shall cause the contractor to be fully responsible for repairing any eroded areas and cleaning up areas or drainage structures that have become silted in or damaged.

AGRICULTURAL GROUND LIMESTONE-Immediately prior to seed bed preparation, fertilizer nutrients and agricultural ground limestone shall be uniformly spread at the rates specified in the plans.

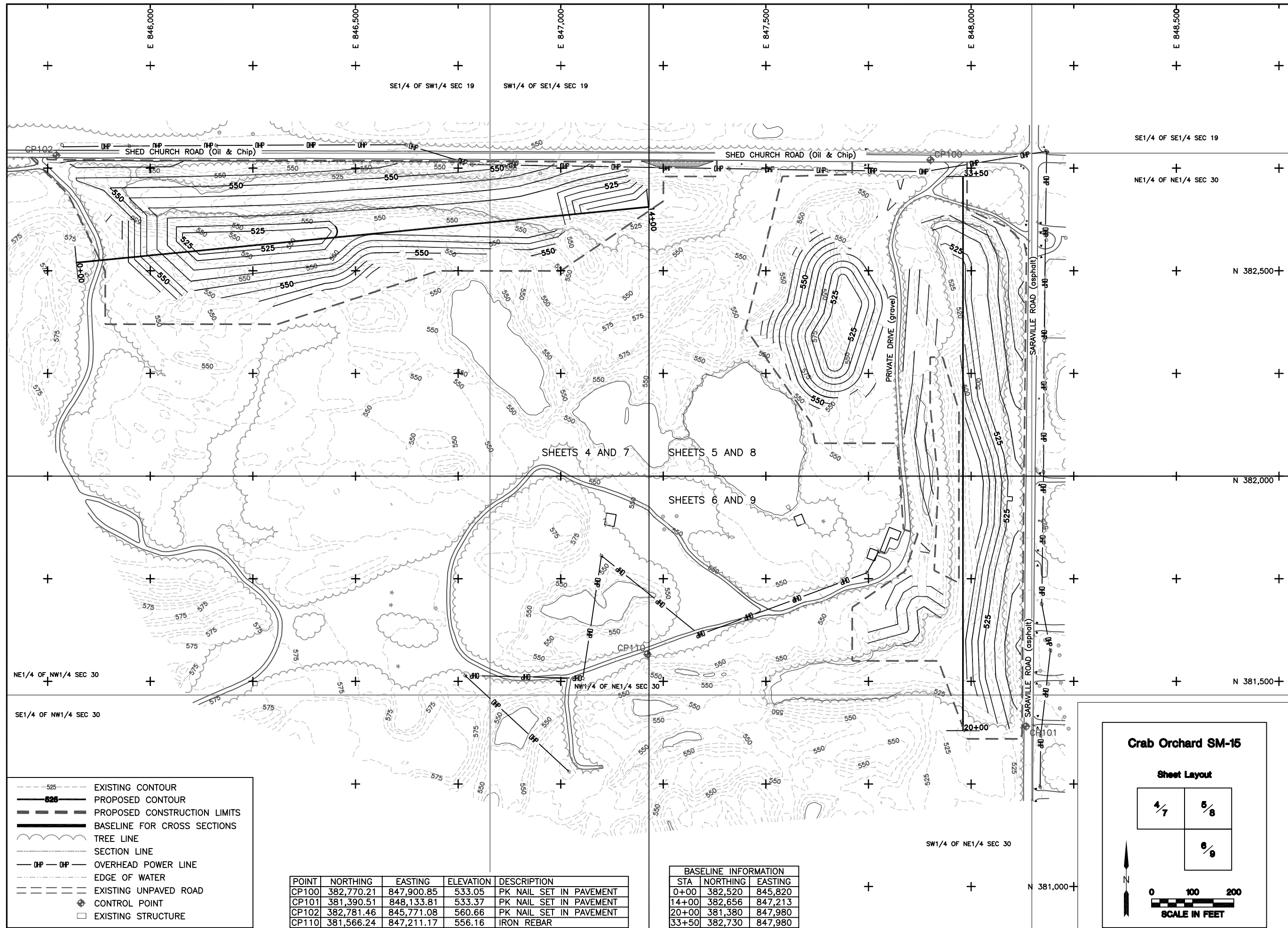
MULCHING-Within 24 hours from the time seeding has been performed, the seeded area shall be given a covering of mulch at the rates specified in the plans. The mulch is to be anchored into the soil in accordance with the requirements for method 2, procedure 1 of Article 251.03 of the Standard Specifications. If Excelsior or Special Excelsior Blanket is to be used, the blanket shall be placed the same day that the areas are seeded.



Location Map

Schedule of Seeding, Fertilizer Nutrients, Mulch and Mowing

ITEM (unit)	INITIAL APPLICATION FALL 2019 AUG. 20-SEPT. 30	SECOND APPLICATION SPRING 2020 JAN. 1-MARCH 15	MOWING TO BE COMPLETED BY JUNE 30, 2020 OR AS DIRECTED BY ENGINEER	TOTAL QUANTITY
SEEDING (acres)	17.1			17.1 ACRE
SEEDING CLASS 4B (acres)	2.6			2.6 ACRE
AGRICULTURAL GROUND LIMESTONE (tons)	99			99 TON
NITROGEN FERTILIZER NUTRIENT (pounds)	1,970	1,970		3,940 POUND
PHOSPHOROUS FERTILIZER NUTRIENT (pounds)	1,970			1,970 POUND
POTASSIUM FERTILIZER NUTRIENT (pounds)	1,970			1,970 POUND
MULCH, METHOD 2 PROCEDURE 1 (acres)	17.1			17.1 ACRE
MOWING (acres)			19.7	19.7 ACRE



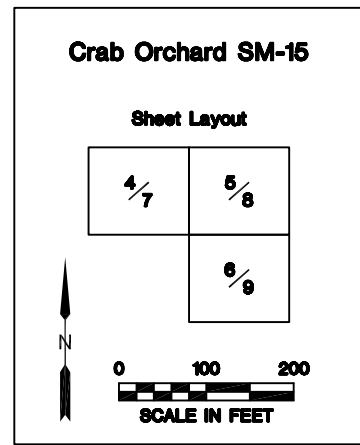
Legend

- - - 525 - - - EXISTING CONTOUR
- - - 525 - - - PROPOSED CONTOUR
- - - - - PROPOSED CONSTRUCTION LIMITS
- - - - - BASELINE FOR CROSS SECTIONS
- ~ ~ ~ TREE LINE
- - - SECTION LINE
- - - - - OVERHEAD POWER LINE
- - - - - EDGE OF WATER
- - - - - EXISTING UNPAVED ROAD
- ⊕ CONTROL POINT
- EXISTING STRUCTURE

POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP100	382,770.21	847,900.85	533.05	PK NAIL SET IN PAVEMENT
CP101	381,390.51	848,133.81	533.37	PK NAIL SET IN PAVEMENT
CP102	382,781.46	845,771.08	560.66	PK NAIL SET IN PAVEMENT
CP110	381,566.24	847,211.17	556.16	IRON REBAR

BASELINE INFORMATION

STA	NORTHING	EASTING
0+00	382,520	845,820
14+00	382,656	847,213
20+00	381,380	847,980
33+50	382,730	847,980

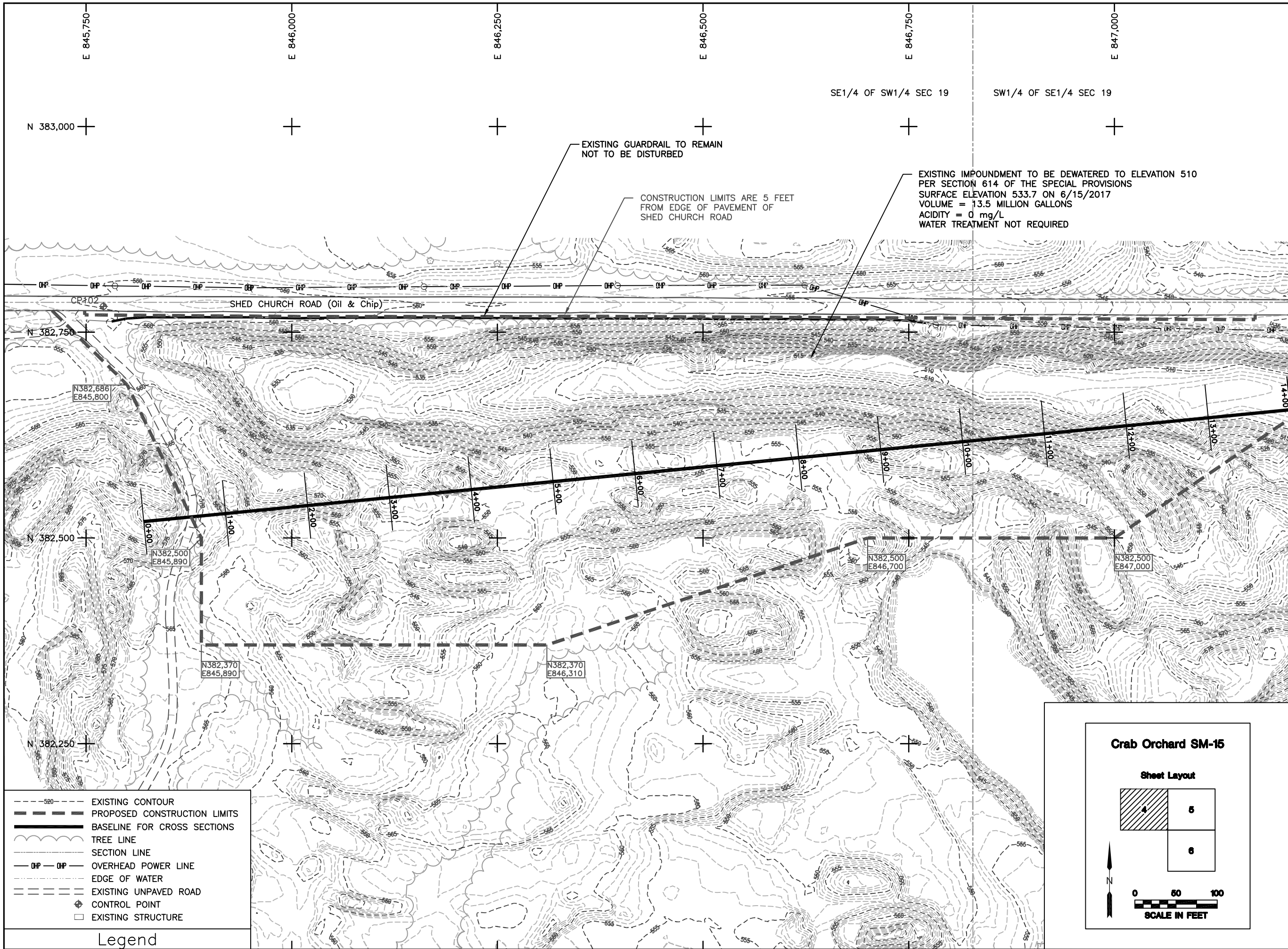


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Williamson County

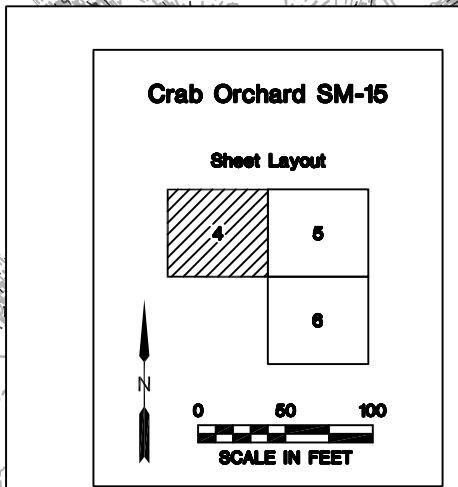
Drawn By : AW Date : 03/2018
Checked By :

Site Information
Sheet 3 of 19



- 520 --- EXISTING CONTOUR
- PROPOSED CONSTRUCTION LIMITS
- BASELINE FOR CROSS SECTIONS
- TREE LINE
- SECTION LINE
- OHP --- OVERHEAD POWER LINE
- EDGE OF WATER
- EXISTING UNPAVED ROAD
- ⊕ CONTROL POINT
- EXISTING STRUCTURE

Legend



SE1/4 OF SW1/4 SEC 19 SW1/4 OF SE1/4 SEC 19

EXISTING GUARDRAIL TO REMAIN
NOT TO BE DISTURBED

CONSTRUCTION LIMITS ARE 5 FEET
FROM EDGE OF PAVEMENT OF
SHED CHURCH ROAD

EXISTING IMPOUNDMENT TO BE DEWATERED TO ELEVATION 510
PER SECTION 614 OF THE SPECIAL PROVISIONS
SURFACE ELEVATION 533.7 ON 6/15/2017
VOLUME = 13.5 MILLION GALLONS
ACIDITY = 0 mg/L
WATER TREATMENT NOT REQUIRED

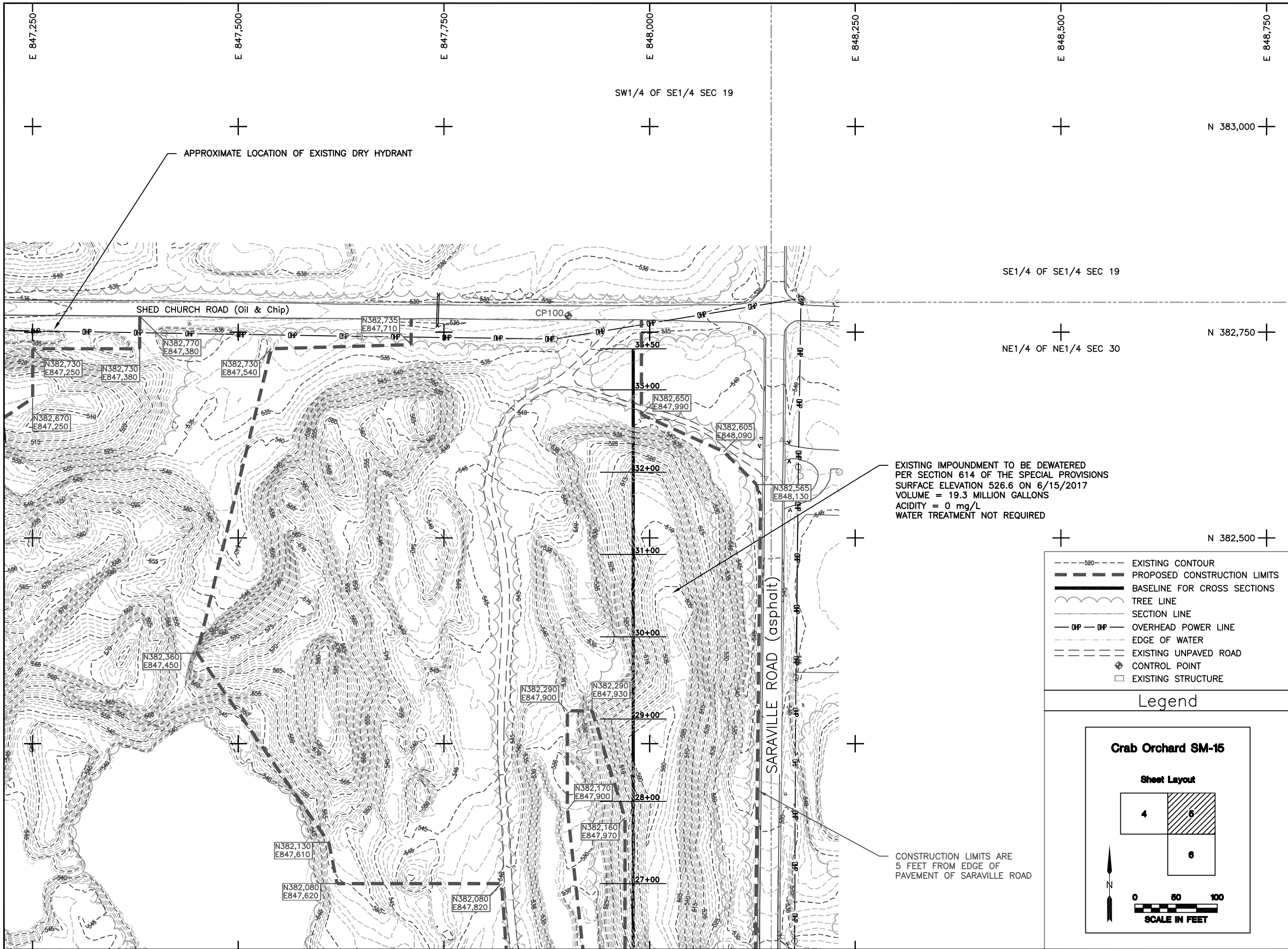
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Department of Natural Resources

Crab Orchard SM-15
Mine Reclamation Project
AML-GWmE-1803
Williamson County

Drawn By : AW Date : 03/2018
Checked By :

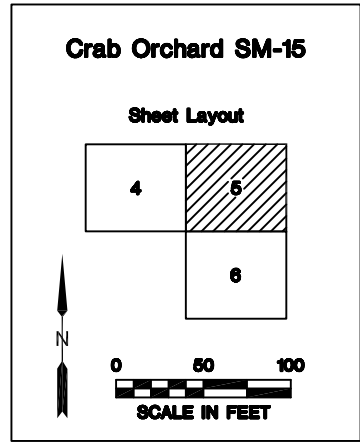
Existing Conditions

Sheet 4 of 19



- 520--- EXISTING CONTOUR
- PROPOSED CONSTRUCTION LIMITS
- BASELINE FOR CROSS SECTIONS
- ~ TREE LINE
- SECTION LINE
- OHP — OHP OVERHEAD POWER LINE
- - - EDGE OF WATER
- - - EXISTING UNPAVED ROAD
- ⊕ CONTROL POINT
- EXISTING STRUCTURE

Legend



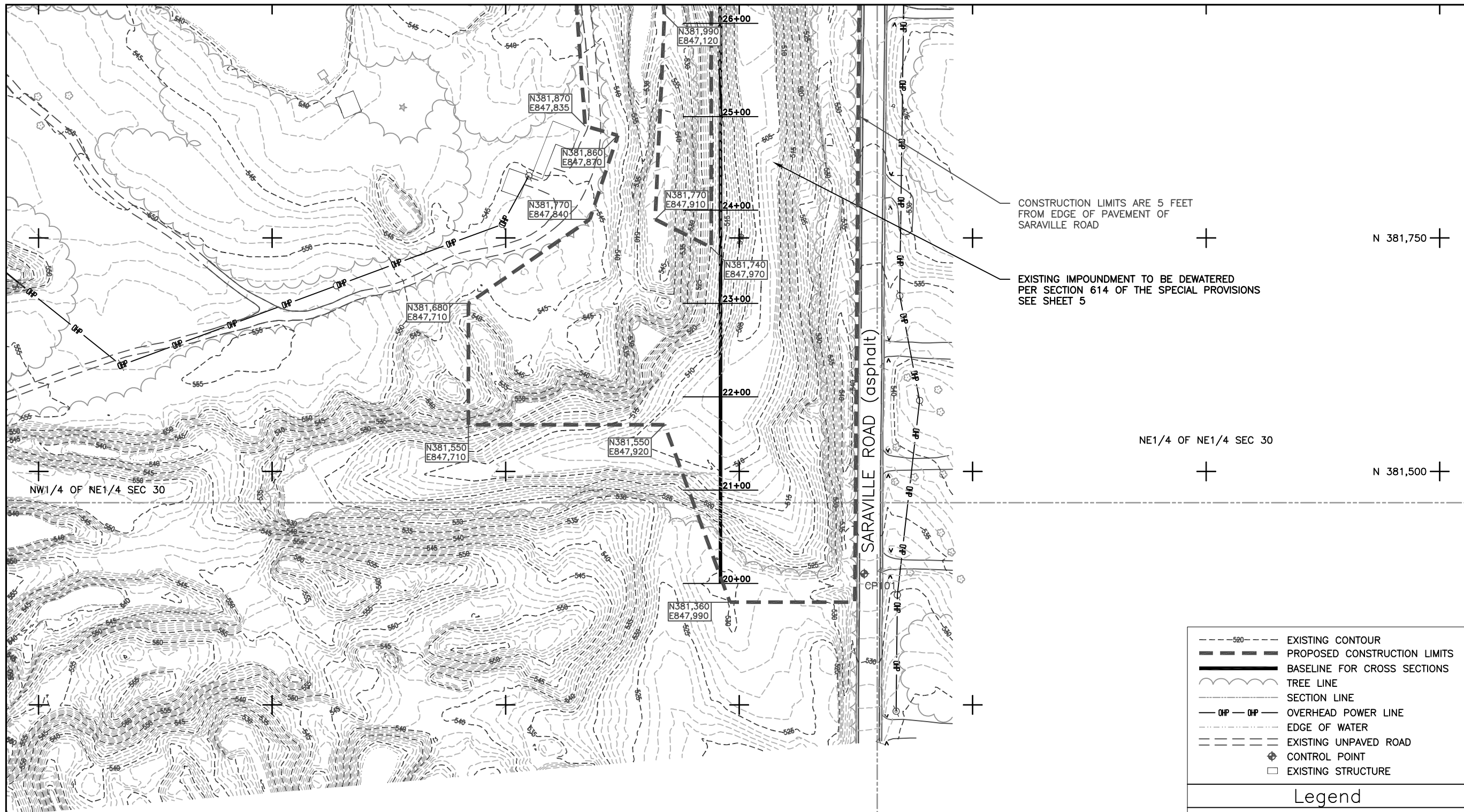
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Department of Natural Resources

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AML-GWmE-1803
Williamson County

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Checked By :

Existing Conditions

Sheet 5 of 19



CONSTRUCTION LIMITS ARE 5 FEET FROM EDGE OF PAVEMENT OF SARAVILLE ROAD

EXISTING IMPOUNDMENT TO BE DEWATERED PER SECTION 614 OF THE SPECIAL PROVISIONS SEE SHEET 5

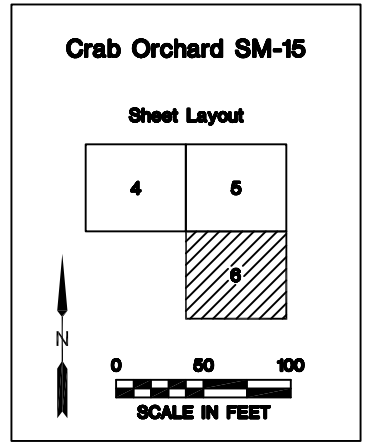
NE1/4 OF NE1/4 SEC 30

SW1/4 OF NE1/4 SEC 30

SE1/4 OF NE1/4 SEC 30

- 520--- EXISTING CONTOUR
- PROPOSED CONSTRUCTION LIMITS
- BASELINE FOR CROSS SECTIONS
- ~ TREE LINE
- SECTION LINE
- OHP — OHP OVERHEAD POWER LINE
- - - EDGE OF WATER
- - - EXISTING UNPAVED ROAD
- ⊕ CONTROL POINT
- EXISTING STRUCTURE

Legend



State of Illinois
Department of Natural Resources

Crab Orchard SM-15
Mine Reclamation Project
AML-GWmE-1803
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Checked By :

Existing Conditions
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E 845,750

E 846,000

E 846,250

E 846,500

E 846,750

E 847,000

N 383,000

N 382,750

N 382,500

N 382,250

SE1/4 OF SW1/4 SEC 19

SW1/4 OF SE1/4 SEC 19

PROPOSED AGGREGATE SURFACE COURSE, TYPE B
112.0 TONS (150' LENGTH x 16' AVERAGE WIDTH x 8" DEPTH)
TO BE PLACED AFTER GRADING IS COMPLETED

EXISTING GUARDRAIL TO REMAIN
NOT TO BE DISTURBED

PROPOSED SPECIAL EXCELSIOR BLANKET
640 SQ. YD. (720' LENGTH x 8' WIDTH)

PROPOSED SPECIAL EXCELSIOR BLANKET
880 SQ. YD. (990' LENGTH x 8' WIDTH)

PROPOSED SPECIAL EXCELSIOR BLANKET
916 SQ. YD. (1,030' LENGTH x 8' WIDTH)

PROPOSED SPECIAL EXCELSIOR BLANKET
222 SQ. YD.
(250' LENGTH x 8' WIDTH)

PROPOSED SPECIAL EXCELSIOR BLANKET
978 SQ. YD. (1,100' LENGTH x 8' WIDTH)

PROPOSED SPECIAL EXCELSIOR BLANKET
293 SQ. YD. (330' LENGTH x 8' WIDTH)

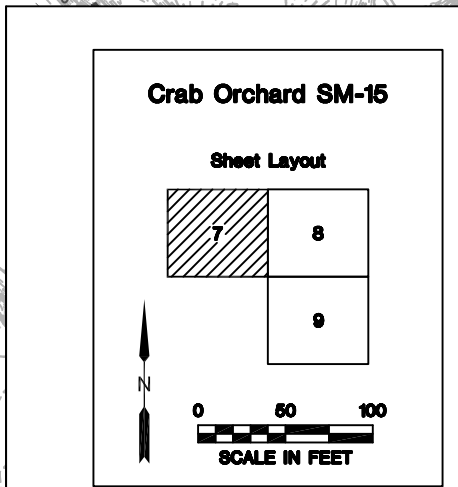
PROPOSED SPECIAL EXCELSIOR BLANKET
240 SQ. YD. (270' LENGTH x 8' WIDTH)

PROPOSED SPECIAL EXCELSIOR BLANKET
204 SQ. YD. (230' LENGTH x 8' WIDTH)

SHED CHURCH ROAD (Oil & Chip)

- Legend**
- - - 520 - - - EXISTING CONTOUR
 - 520** - - - PROPOSED CONTOUR
 - - - - - PROPOSED CONSTRUCTION LIMITS
 - - - - - BASELINE FOR CROSS SECTIONS
 - ~ ~ ~ TREE LINE
 - - - - - SECTION LINE
 - - - OHP - OHP - OVERHEAD POWER LINE
 - - - - - EDGE OF WATER
 - - - - - EXISTING UNPAVED ROAD
 - - - - - PROPOSED SPECIAL EXCELSIOR BLANKET (8 FT WIDTH)
 - ⊕ CONTROL POINT
 - EXISTING STRUCTURE

- Notes**
1. TRAFFIC CONTROL AND PROTECTION SHALL BE IN ACCORDANCE WITH IDOT STANDARD 701006 AND SHALL BE INCIDENTAL TO SPECIAL CLEARING.
 2. AT THIS LOCATION, SEEDING, SOIL AMENDMENTS AND MULCH SHALL BE APPLIED TO ALL DISTURBED AREAS ABOVE ELEVATION 535.0 (7.3 ACRE). SEEDING CLASS 4B AND SOIL AMENDMENTS SHALL BE APPLIED BETWEEN ELEVATIONS 530.0 AND 535.0 (1.6 ACRE). NO SEEDING, SOIL AMENDMENTS OR MULCH IS REQUIRED BELOW ELEVATION 530.0

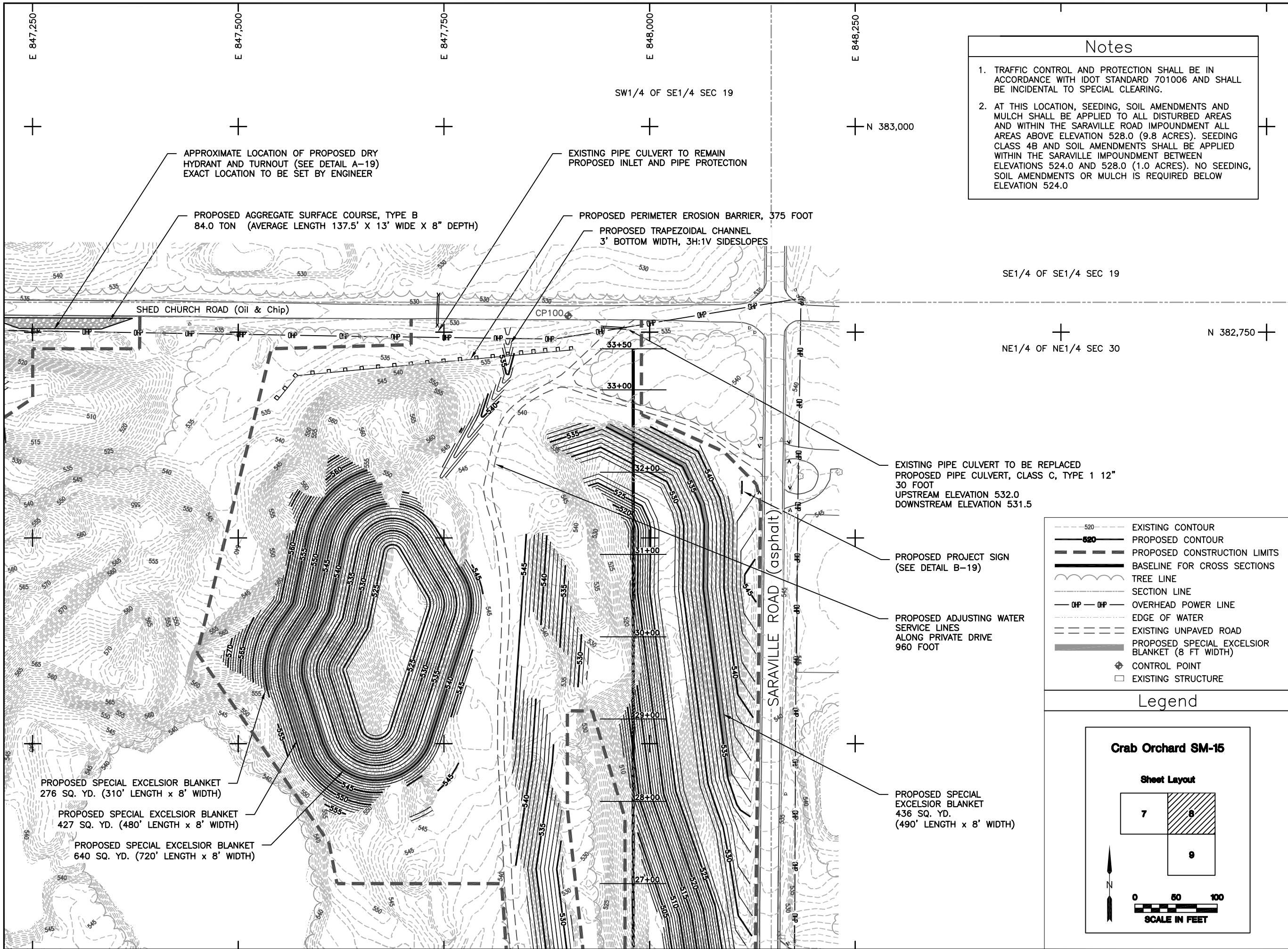


State of Illinois
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Williamson County

Drawn By : AW
Checked By :
Date : 03/2018

Proposed Conditions
Sheet 7 of 19



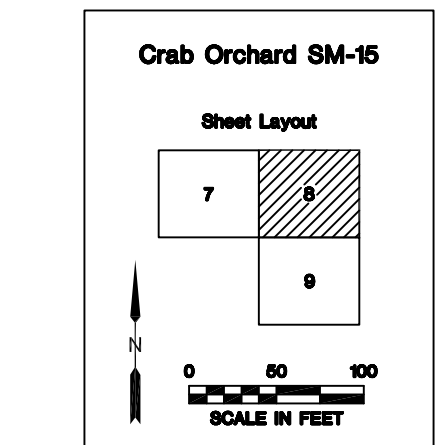
Notes

1. TRAFFIC CONTROL AND PROTECTION SHALL BE IN ACCORDANCE WITH IDOT STANDARD 701006 AND SHALL BE INCIDENTAL TO SPECIAL CLEARING.
2. AT THIS LOCATION, SEEDING, SOIL AMENDMENTS AND MULCH SHALL BE APPLIED TO ALL DISTURBED AREAS AND WITHIN THE SARAVILLE ROAD IMPOUNDMENT ALL AREAS ABOVE ELEVATION 528.0 (9.8 ACRES). SEEDING CLASS 4B AND SOIL AMENDMENTS SHALL BE APPLIED WITHIN THE SARAVILLE IMPOUNDMENT BETWEEN ELEVATIONS 524.0 AND 528.0 (1.0 ACRES). NO SEEDING, SOIL AMENDMENTS OR MULCH IS REQUIRED BELOW ELEVATION 524.0

SE1/4 OF SE1/4 SEC 19

NE1/4 OF NE1/4 SEC 30

- Legend**
- - - 520 - - - EXISTING CONTOUR
 - 520** - - - PROPOSED CONTOUR
 - - - - - PROPOSED CONSTRUCTION LIMITS
 - - - - - BASELINE FOR CROSS SECTIONS
 - - - - - TREE LINE
 - - - - - SECTION LINE
 - - - - - OVERHEAD POWER LINE
 - - - - - EDGE OF WATER
 - - - - - EXISTING UNPAVED ROAD
 - - - - - PROPOSED SPECIAL EXCELSIOR BLANKET (8 FT WIDTH)
 - ⊕ CONTROL POINT
 - EXISTING STRUCTURE

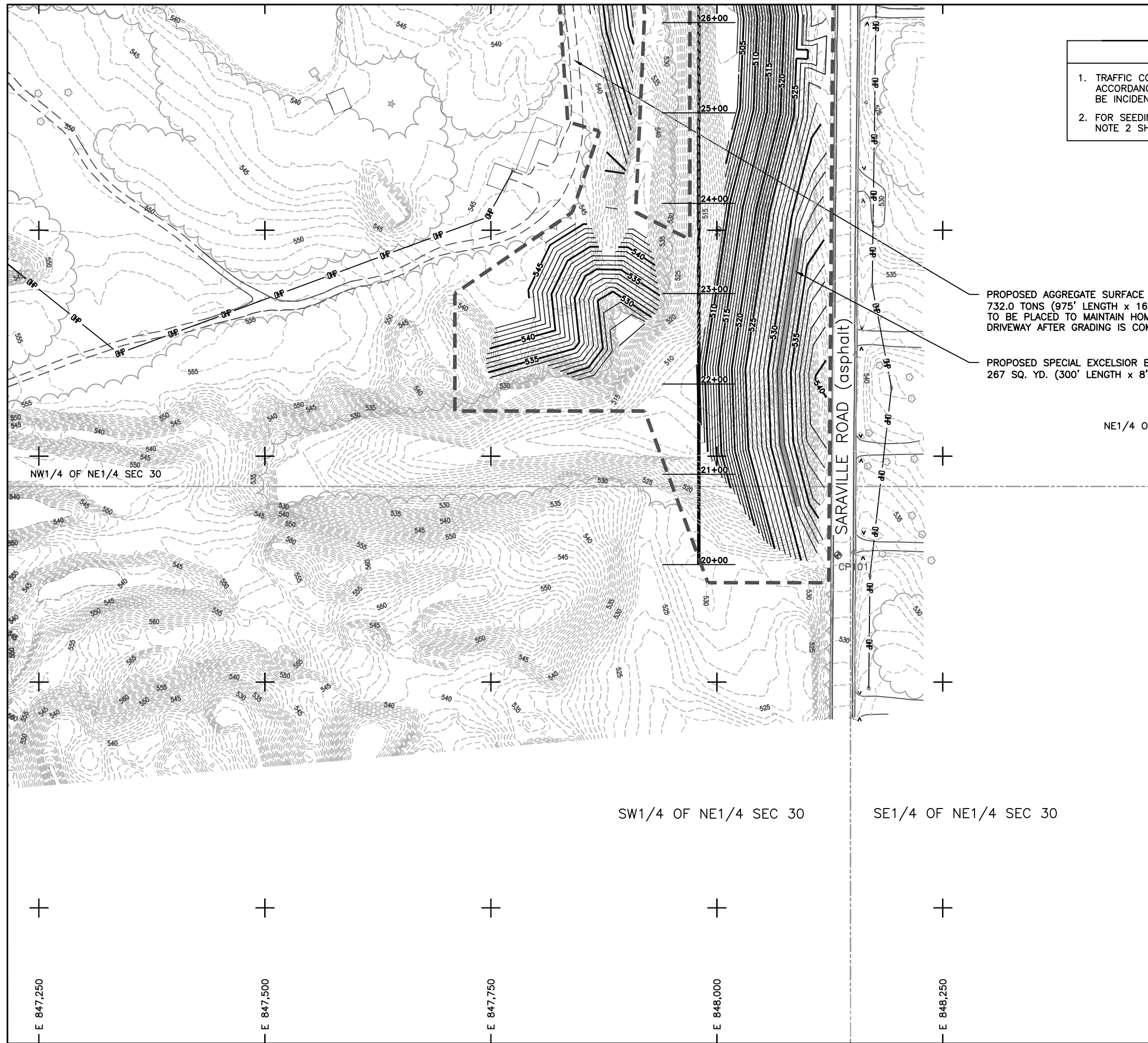


State of Illinois
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Crab Orchard SM-15
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AML-GWmE-1803
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Date : 03/2018

Proposed Conditions
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Notes

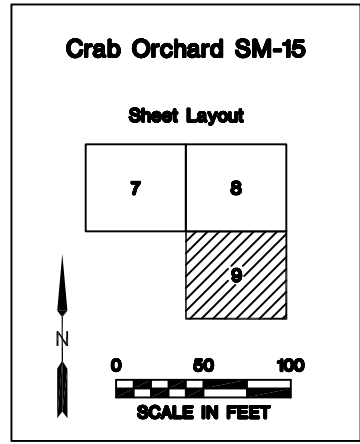
1. TRAFFIC CONTROL AND PROTECTION SHALL BE IN ACCORDANCE WITH IDOT STANDARD 701006 AND SHALL BE INCIDENTAL TO SPECIAL CLEARING.
2. FOR SEEDING REQUIREMENTS AT THIS LOCATION, SEE NOTE 2 SHEET 8.

PROPOSED AGGREGATE SURFACE COURSE, TYPE B
732.0 TONS (975' LENGTH x 16' AVERAGE WIDTH x 8" DEPTH)
TO BE PLACED TO MAINTAIN HOME ACCESS AND TO REPAIR
DRIVEWAY AFTER GRADING IS COMPLETED

PROPOSED SPECIAL EXCELSIOR BLANKET
267 SQ. YD. (300' LENGTH x 8' WIDTH)

NE1/4 OF NE1/4 SEC 30

- Legend**
- - - 520 - - - EXISTING CONTOUR
 - 520** - - - PROPOSED CONTOUR
 - - - - - PROPOSED CONSTRUCTION LIMITS
 - - - - - BASELINE FOR CROSS SECTIONS
 - ~ ~ ~ TREE LINE
 - - - - - SECTION LINE
 - - - OHP - OHP - OVERHEAD POWER LINE
 - - - - - EDGE OF WATER
 - - - - - EXISTING UNPAVED ROAD
 - - - - - PROPOSED SPECIAL EXCELSIOR BLANKET (8 FT WIDTH)
 - ⊕ CONTROL POINT
 - EXISTING STRUCTURE





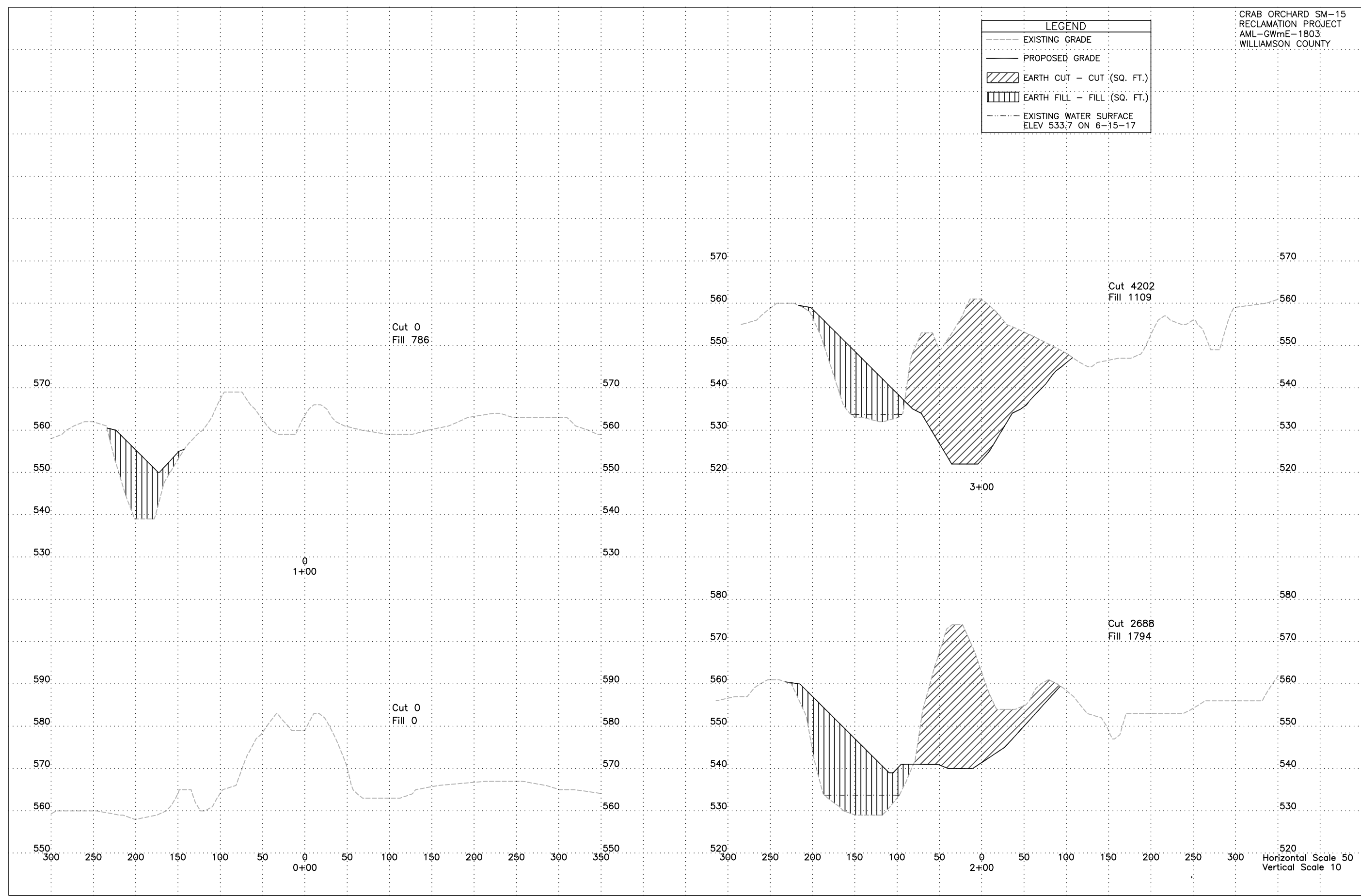
State of Illinois
Department of Natural Resources

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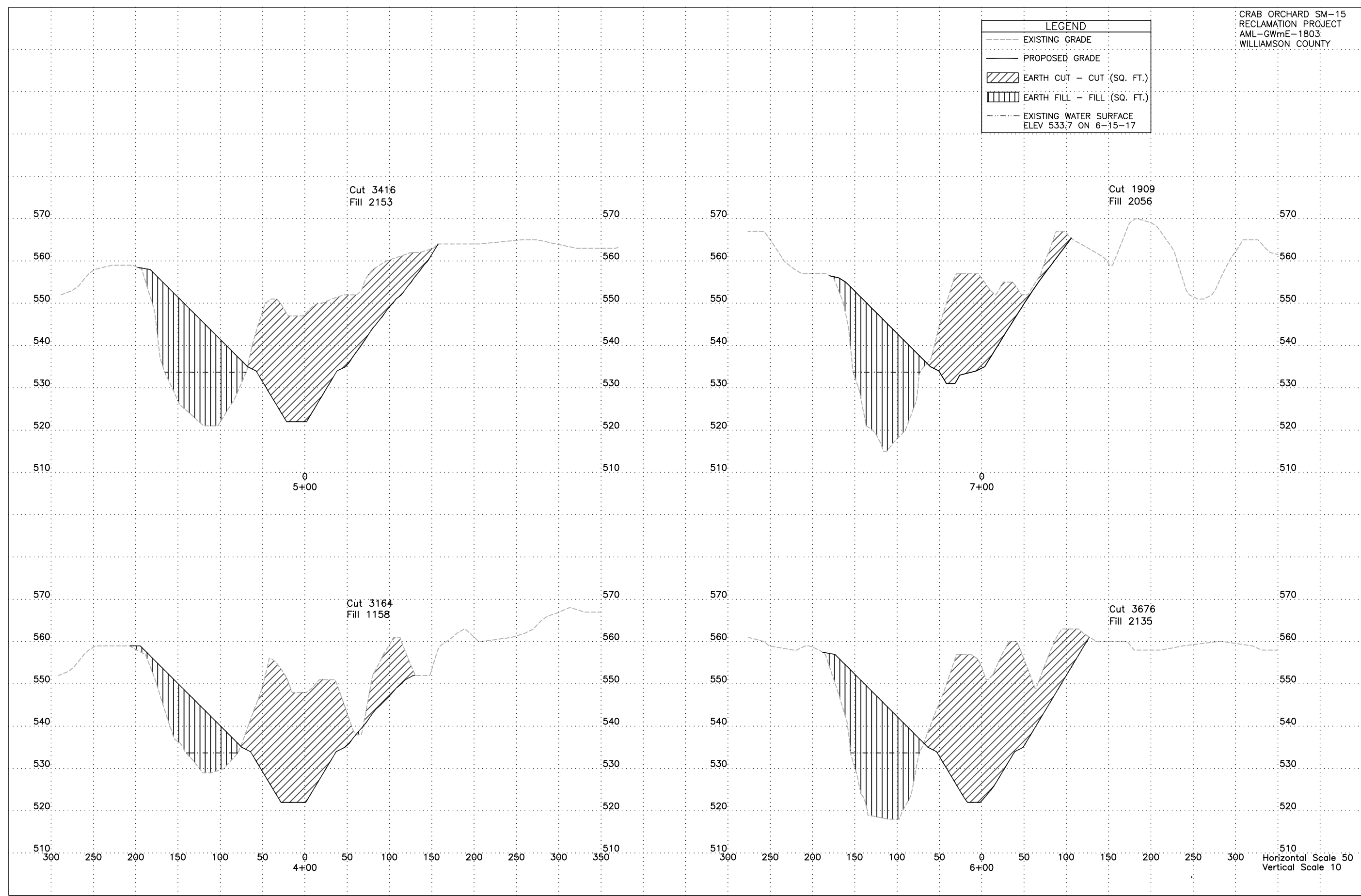
Proposed Conditions
Sheet 9 of 19

LEGEND	
---	EXISTING GRADE
—	PROPOSED GRADE
	EARTH CUT - CUT (SQ. FT.)
	EARTH FILL - FILL (SQ. FT.)
- - -	EXISTING WATER SURFACE ELEV 533.7 ON 6-15-17





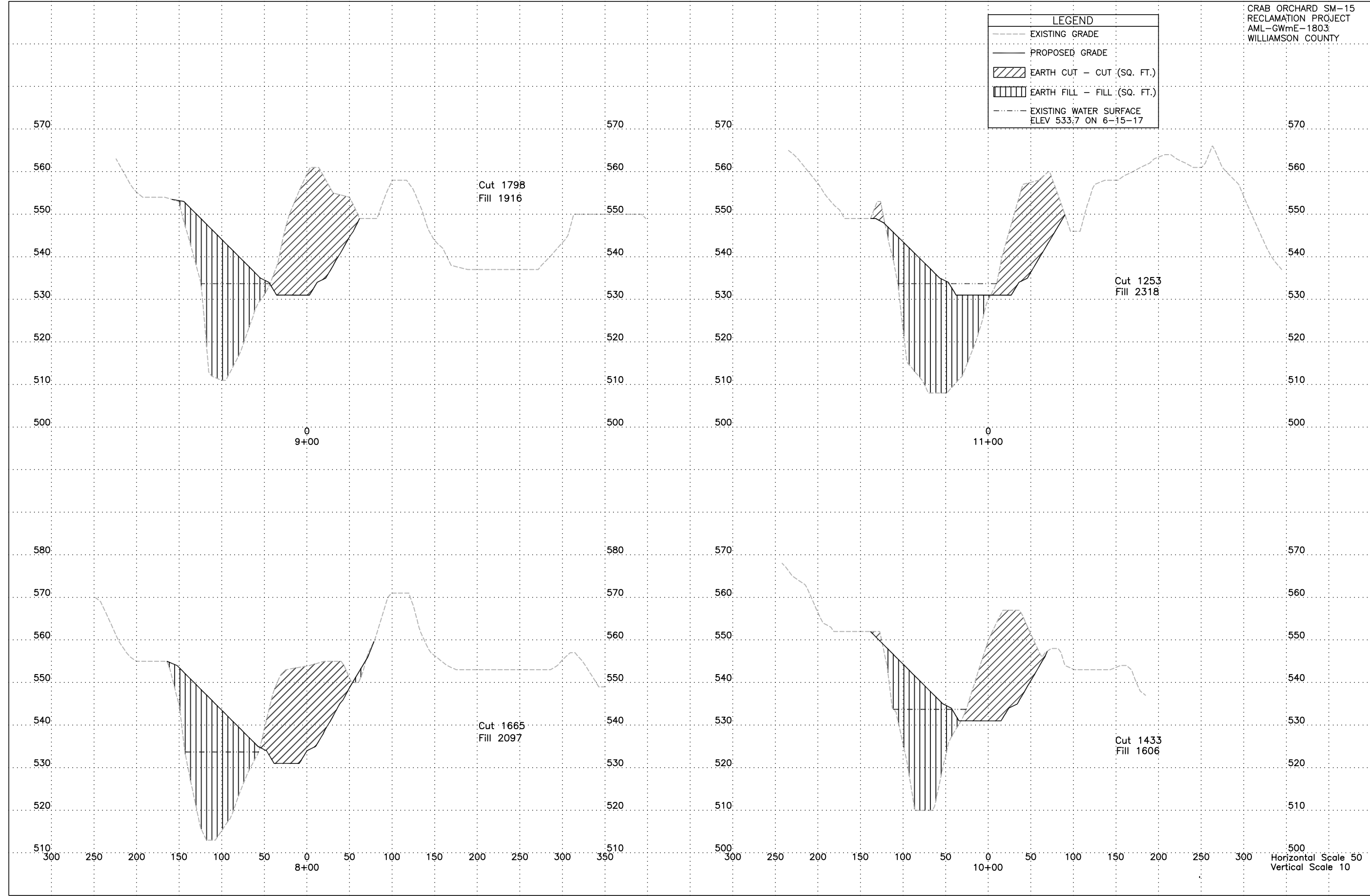
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 Vertical Scale 10

LEGEND	
---	EXISTING GRADE
—	PROPOSED GRADE
▨	EARTH CUT - CUT (SQ. FT.)
▩	EARTH FILL - FILL (SQ. FT.)
- - -	EXISTING WATER SURFACE ELEV 533.7 ON 6-15-17



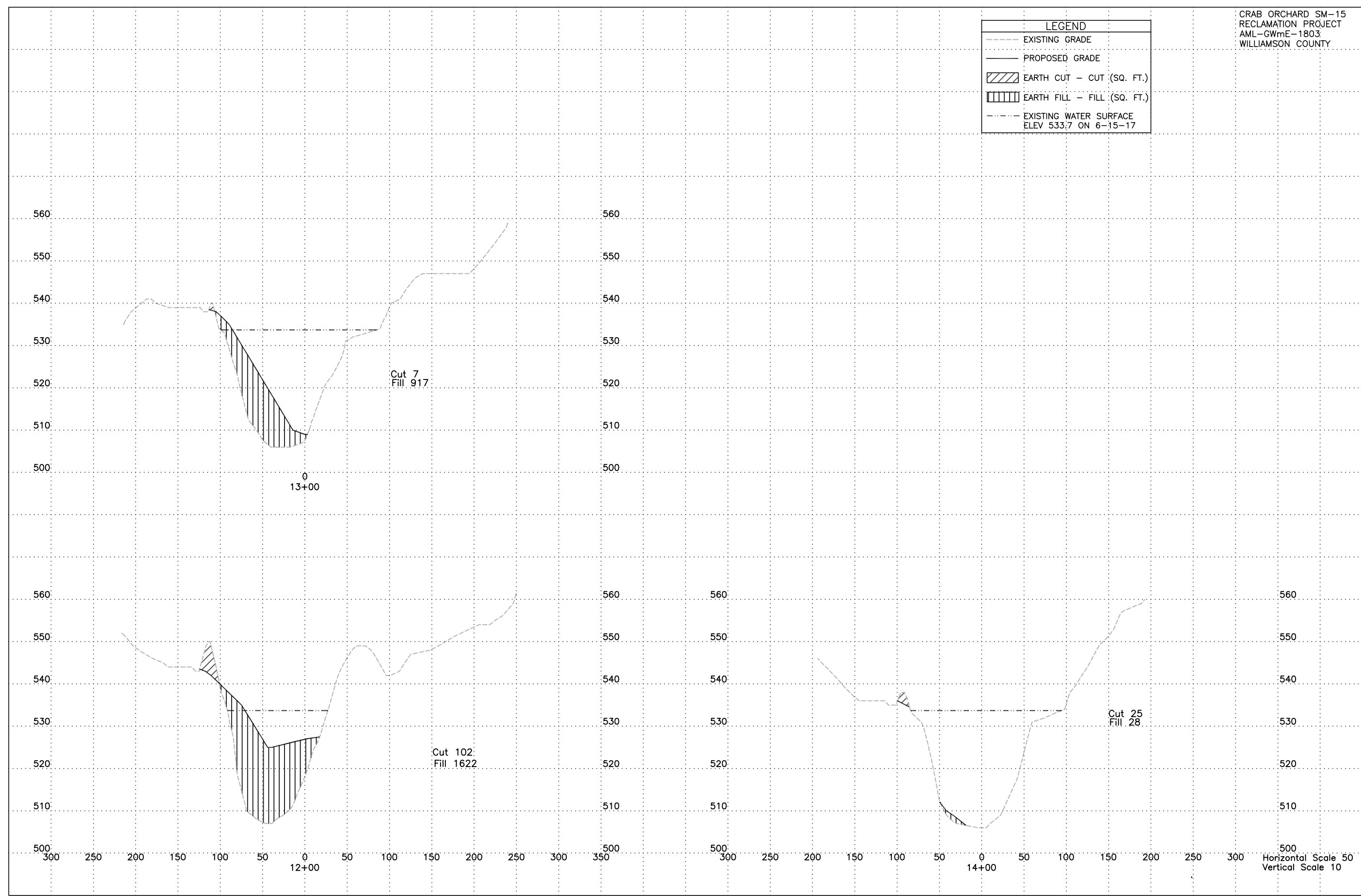
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 Vertical Scale 10

LEGEND	
---	EXISTING GRADE
—	PROPOSED GRADE
	EARTH CUT - CUT (SQ. FT.)
	EARTH FILL - FILL (SQ. FT.)
- - -	EXISTING WATER SURFACE ELEV 533.7 ON 6-15-17



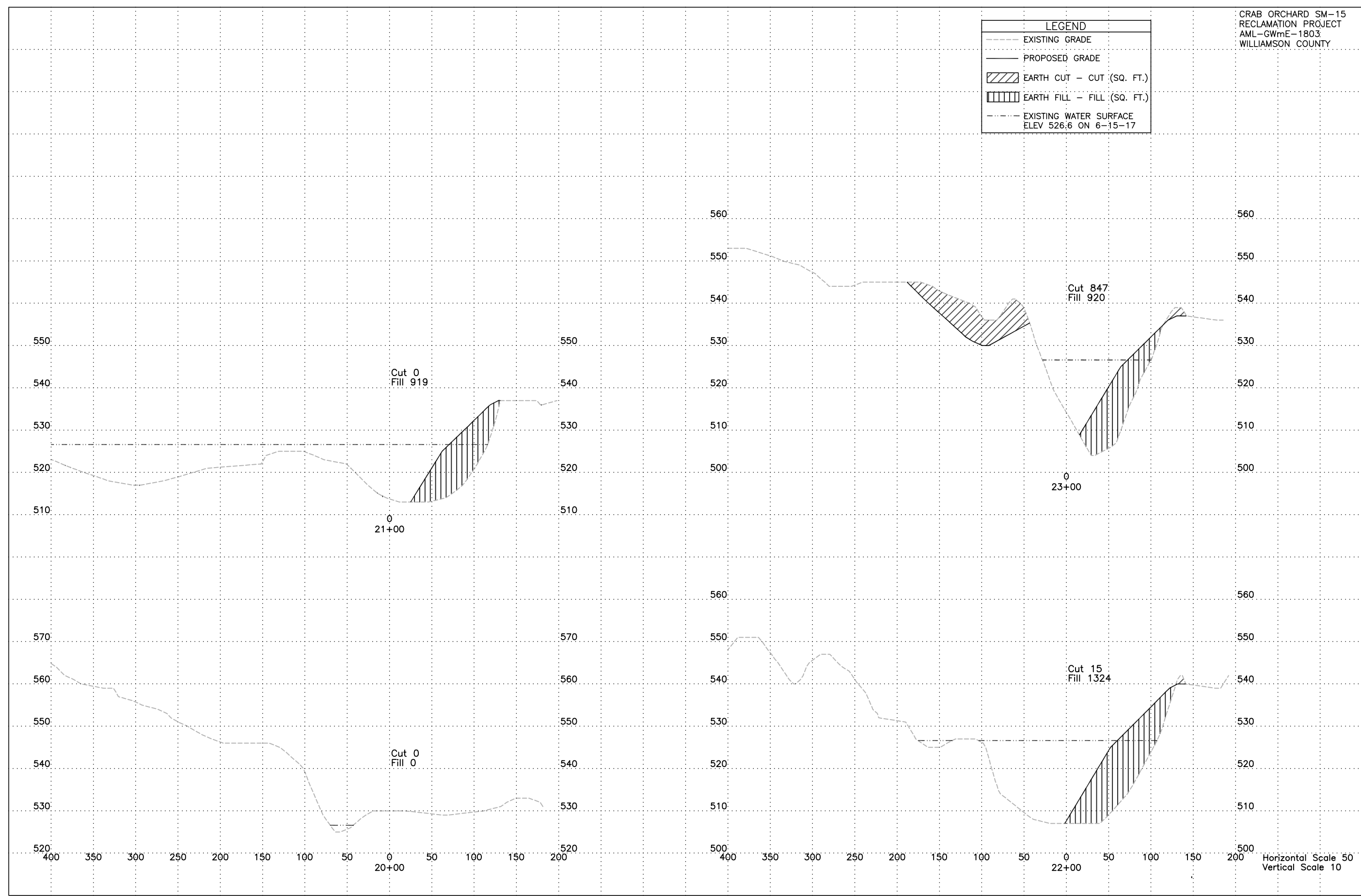
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 Vertical Scale 10

LEGEND	
---	EXISTING GRADE
—	PROPOSED GRADE
▨	EARTH CUT - CUT (SQ. FT.)
▩	EARTH FILL - FILL (SQ. FT.)
- - -	EXISTING WATER SURFACE ELEV 533.7 ON 6-15-17



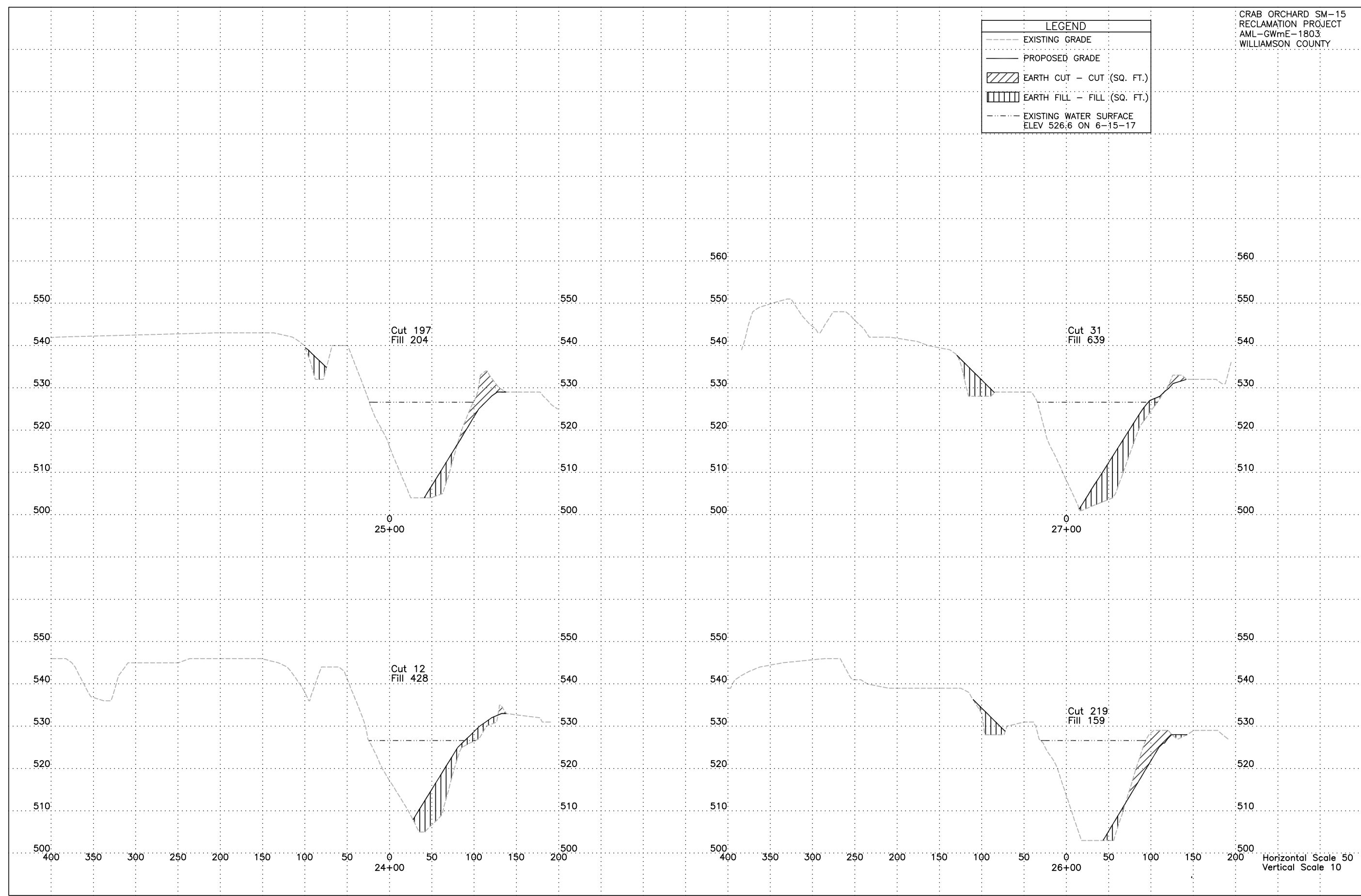
Horizontal Scale 50
 Vertical Scale 10

LEGEND	
---	EXISTING GRADE
—	PROPOSED GRADE
▨	EARTH CUT - CUT (SQ. FT.)
▩	EARTH FILL - FILL (SQ. FT.)
- - -	EXISTING WATER SURFACE ELEV 526.6 ON 6-15-17



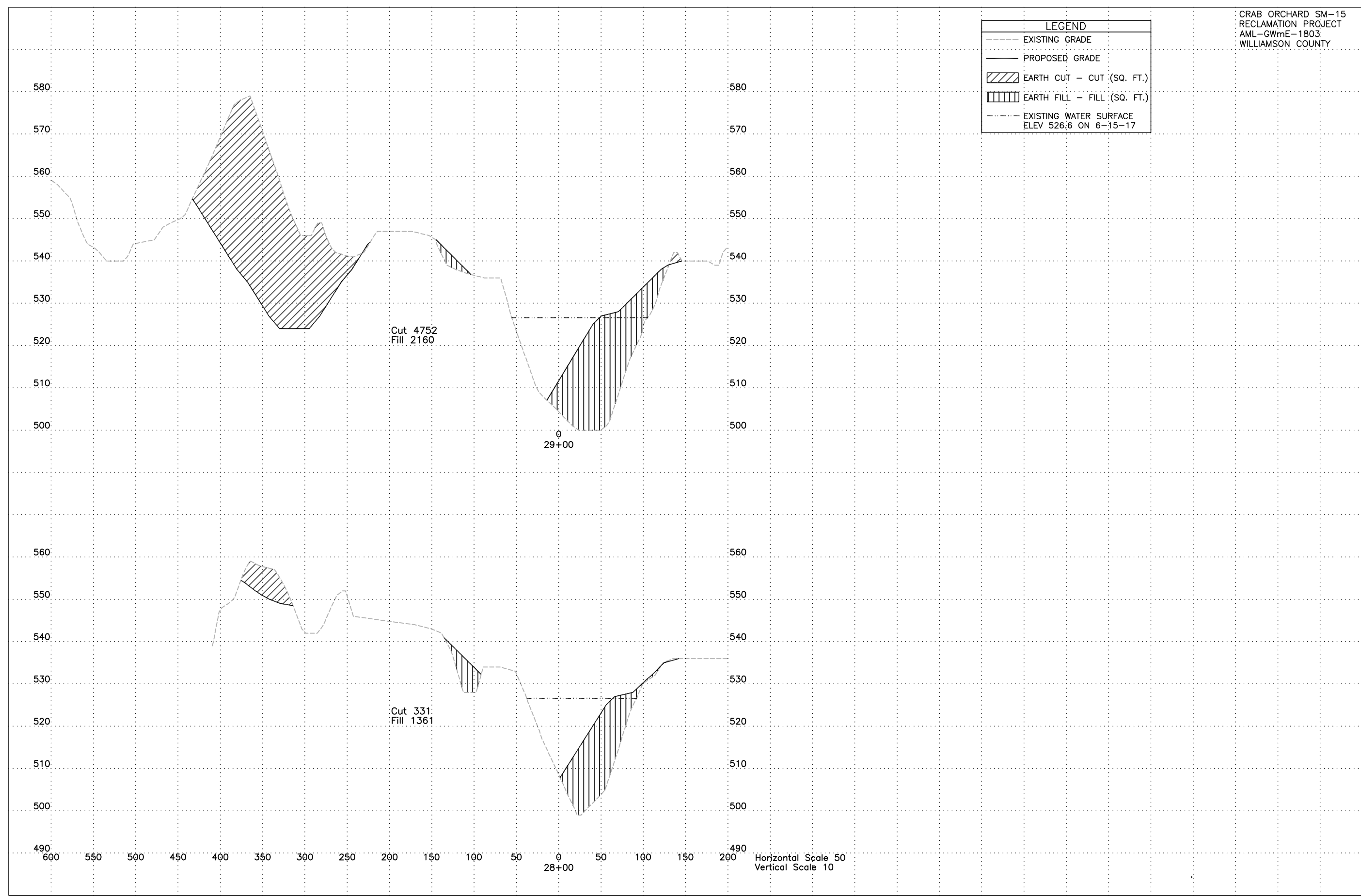
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

LEGEND	
---	EXISTING GRADE
—	PROPOSED GRADE
▨	EARTH CUT - CUT (SQ. FT.)
▩	EARTH FILL - FILL (SQ. FT.)
- - -	EXISTING WATER SURFACE ELEV 526.6 ON 6-15-17

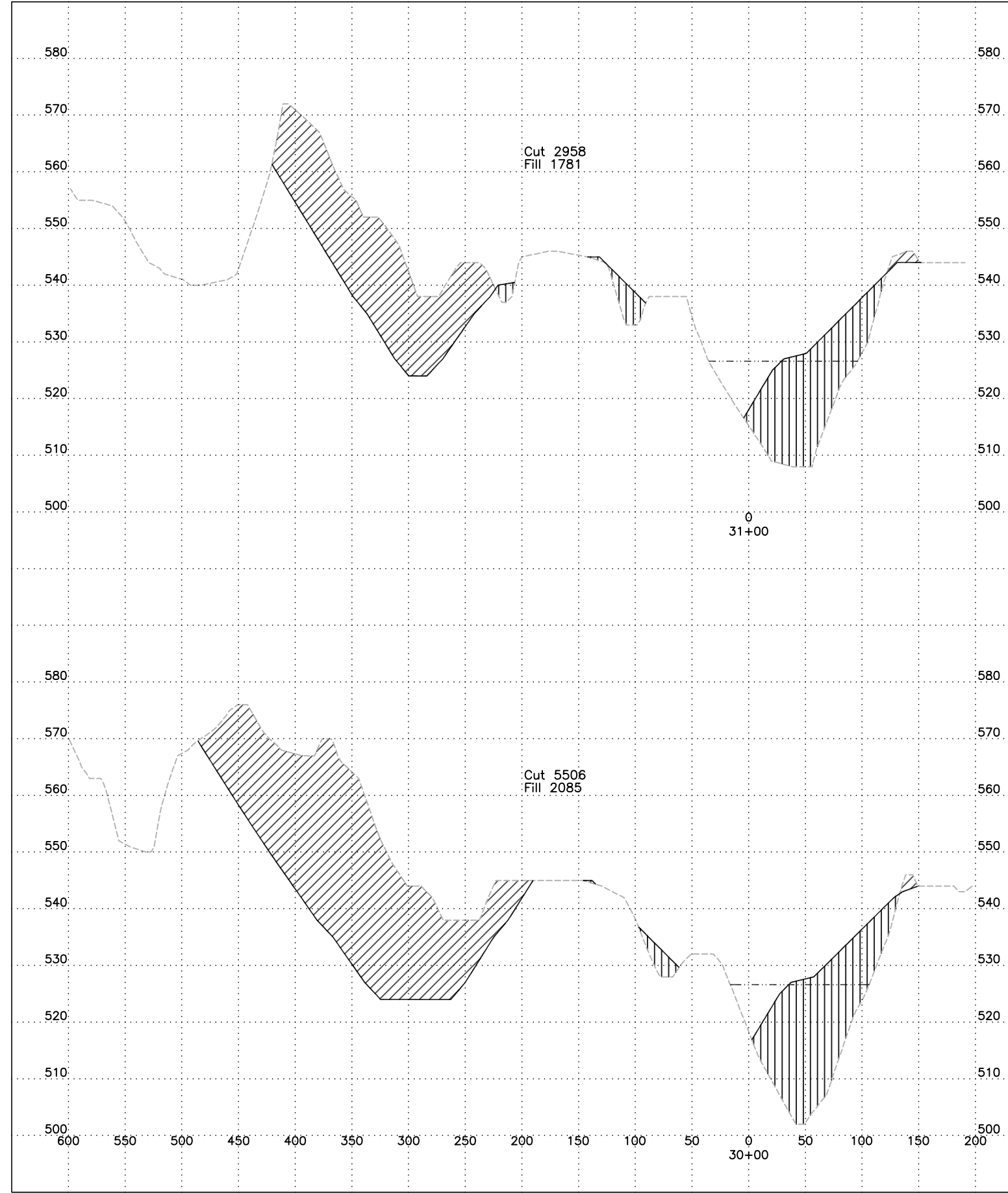


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

LEGEND	
---	EXISTING GRADE
—	PROPOSED GRADE
▨	EARTH CUT - CUT (SQ. FT.)
▩	EARTH FILL - FILL (SQ. FT.)
- - -	EXISTING WATER SURFACE ELEV 526.6 ON 6-15-17

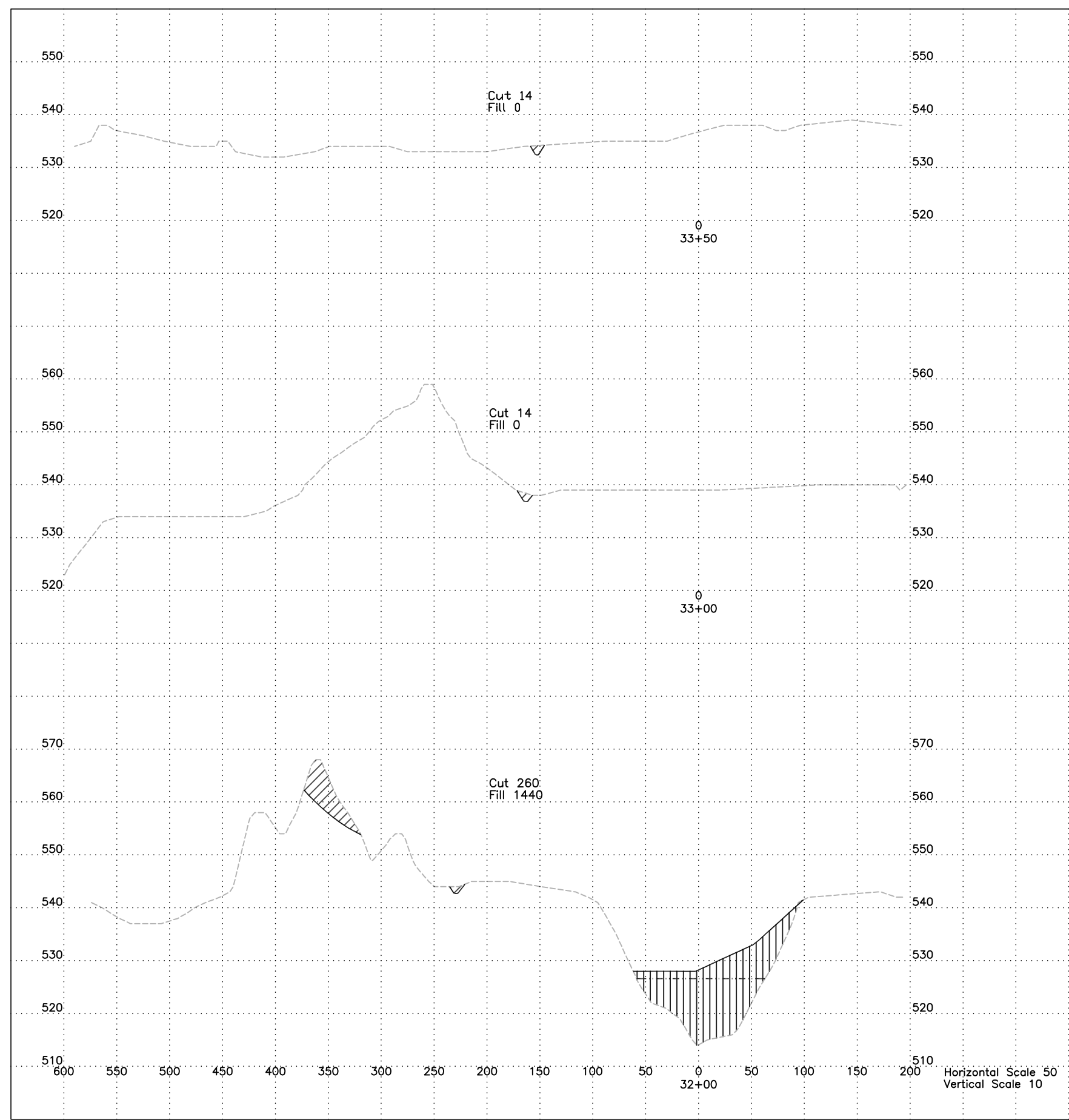


LEGEND	
---	EXISTING GRADE
—	PROPOSED GRADE
	EARTH CUT - CUT (SQ. FT.)
	EARTH FILL - FILL (SQ. FT.)
- - -	EXISTING WATER SURFACE ELEV 526.6 ON 6-15-17

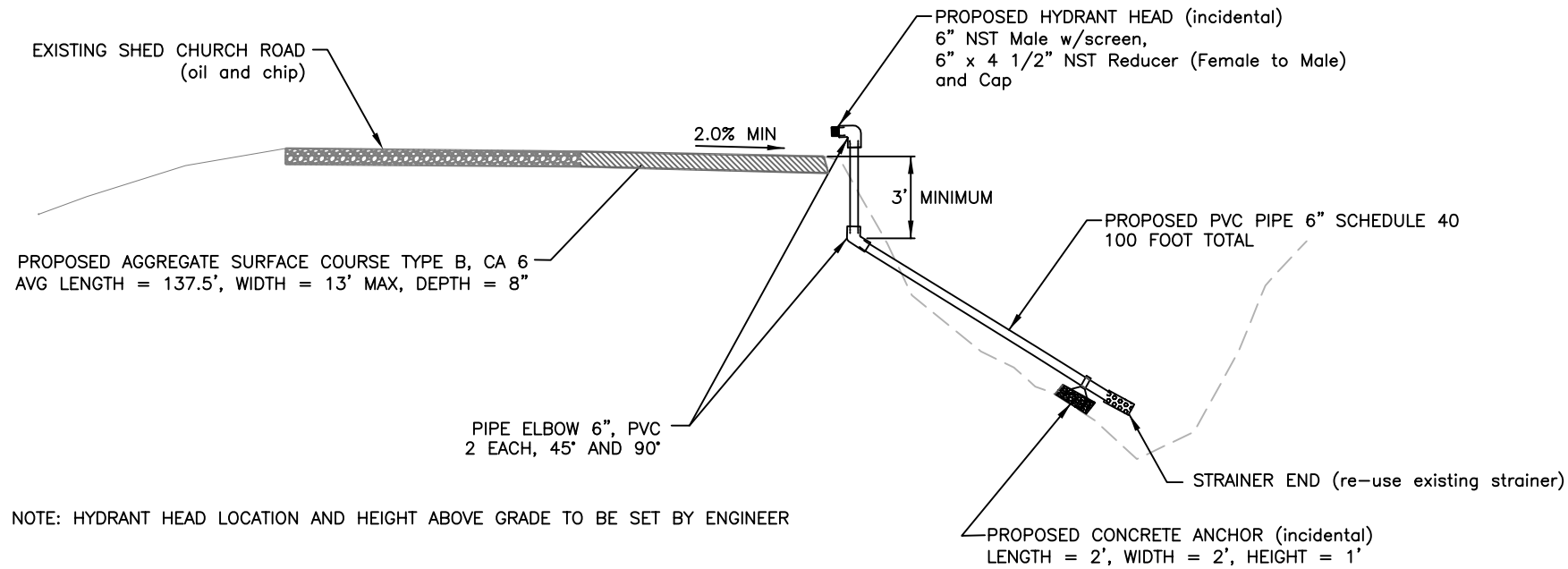


Horizontal Scale 50
 Vertical Scale 10

LEGEND	
---	EXISTING GRADE
—	PROPOSED GRADE
	EARTH CUT - CUT (SQ. FT.)
	EARTH FILL - FILL (SQ. FT.)
- - -	EXISTING WATER SURFACE ELEV 526.6 ON 6-15-17



Horizontal Scale 50
 Vertical Scale 10



NOTE: HYDRANT HEAD LOCATION AND HEIGHT ABOVE GRADE TO BE SET BY ENGINEER

A DRY HYDRANT AND TURNOUT
19 NOT TO SCALE

SPACING LETTERS

4.5"
3.5"
1.5"
3.5"
2.5"
3.5"
3.5"
2.5"
3.5"
2.5"
1.5"
2.5"
3.0"
2.0"
1.5"
2.0"
4.5"

**ABANDONED MINED LANDS
RECLAMATION PROJECT
STATE OF ILLINOIS**

BRUCE RAUNER, GOVERNOR
Department of Natural Resources
Wayne A. Rosenthal, Director

Funding provided by the US Department of the Interior
Office of Surface Mining, with fees paid by the Coal Industry

1. Furnishing, erecting and removing the sign shall be incidental to the contract.
2. The sign shall be painted on 1/2" or thicker exterior plywood (4' x 8'), color shall be black on white, and a 10" diameter Illinois state seal shall be provided by the D.N.R.
3. The posts shall be made of 4" x 4" wood or 2.5" metal pipe, and shall be 10' long. The sign shall be securely fastened to the posts with six 2.5" long, round head wood screws (for wood posts) or four 5" long, 3/8" diameter carriage bolts (for wood or metal posts).
4. The top of the sign shall be level with the top of the posts, and the posts shall be 1' from the edges of the sign. The posts shall be set in the ground 3', so that the bottom of the sign is 3' from the ground.

B CONSTRUCTION SIGN DETAIL
19 EXACT LOCATION TO BE SET BY ENGINEER

Drawn By : AW Date : 3/2/2018
Checked By : _____