

FOR SURVEY CONTROL DATA,
SEE SURVEY DATA SHEETS

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED
STATE HIGHWAY

FEDERAL AID PROJECT NO. STP-226C(106)PM
GRADE, DRAIN, BRIDGE & SURFACE
3R REHABILITATION
SH 19

GRADY COUNTY

CONTROL SECTION NO. 19-26-18
STATE JOB NO. 30425(07)

SEE SHEET 0002 FOR INDEX OF SHEETS

BRIDGE "A" LOCATION NO. 2618-0705X NBIS NO. 09046; NEW NBI NO. 32291
BRIDGE "B" LOCATION NO. 2618-0721X NBIS NO. 08714; (TO BE REMOVED)
BRIDGE "C" LOCATION NO. 2618-0729X NBIS NO. 09048; NEW NBI NO. 32290
BRIDGE "D" LOCATION NO. 2618-0993X NBIS NO. 11070; NEW NBI NO. 32289
BRIDGE "E" LOCATION NO. 2618-1010X NBIS NO. 11089; NEW NBI NO. 32288

DESIGN DATA	
ADT 2023	= 5,000
ADT 2043	= 7,000
DHV (2-WAY)	= 700
K (DHV/ADT)	= 10%
D	= 56%
T (% DHV)	= 27%
T (% ADT)	= 32%
T3 (% ADT)	= 23%
V	= 65 MPH
20YR FLEX. ESALS	= 13.6 M

SCALES	
PLAN	1" = 50'
PROFILE HOR.	1" = 50'
VER.	1" = 10'
LAYOUT MAP	1" = 5,280'

CONVENTIONAL SYMBOLS	
	PROPOSED ROAD
	RAILROADS
	RANGE & TOWNSHIP SECTION LINES
	QUARTER SECTION LINES
	FENCES
	GROUND LINE
	EXISTING ROADS
	BASE LINE
	GRADE LINES
	TELEPHONE & TELEGRAPH
	POWER LINES
	BUILDINGS
	OIL WELLS
	DRAINAGE STRUCTURES - IN PLACE
	DRAINAGE STRUCTURES - NEW
	RIGHT-OF-WAY LINES - EXISTING
	RIGHT-OF-WAY LINES - NEW
	CONTROLLED ACCESS
	RIGHT-OF-WAY FENCE

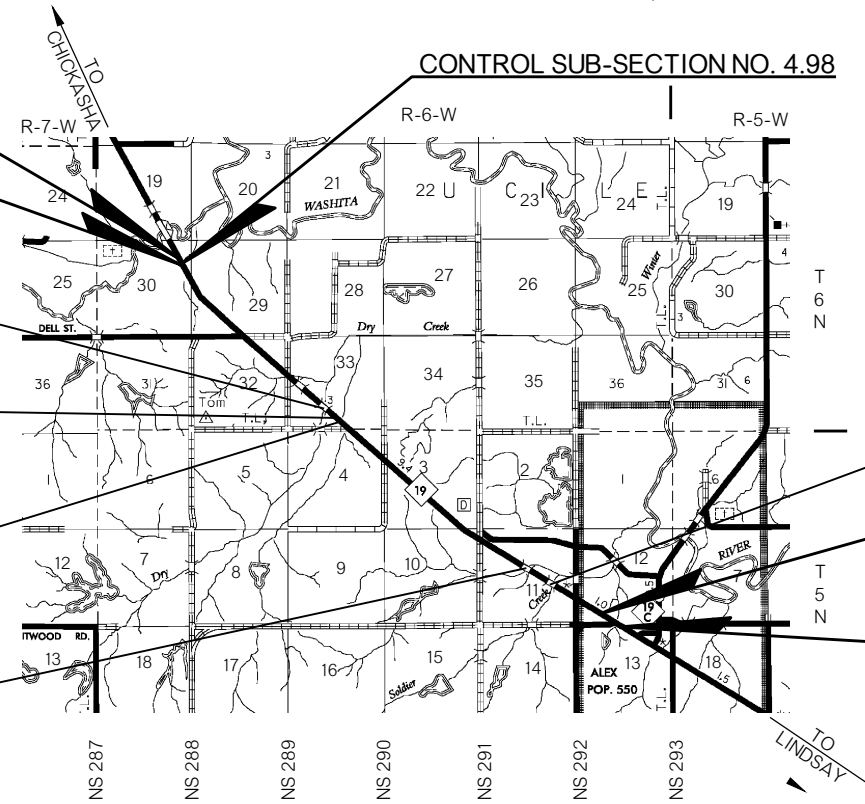
STA. 495+19.21 BEGIN
INCIDENTAL CONSTRUCTION
STA. 496+03.00 END INCIDENTAL
& BEGIN CONSTRUCTION

STA. 605+85.91 BEG. BRIDGE "A"
BRIDGE LENGTH = 46.18'
STA. 606+32.09 END BRIDGE "A"

BRIDGE "B" TO BE REMOVED
Q SURVEY STA. 613+95.00

STA. 618+30.91 BEG. BRIDGE "C"
BRIDGE LENGTH = 46.18'
STA. 618+77.09 END BRIDGE "C"

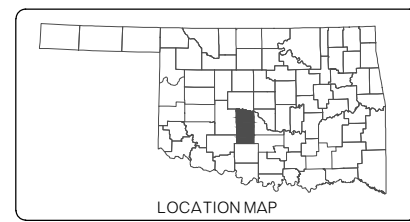
STA. 756+41.33 BEG. BRIDGE "D"
BRIDGE LENGTH = 93.33'
STA. 757+34.67 END BRIDGE "D"



STA. 766+01.00 BEG. BRIDGE "E"
BRIDGE LENGTH = 40.00'
STA. 766+41.00 END BRIDGE "E"

STA. 805+00.00 END CONSTRUCTION
& BEGIN INCIDENTAL

STA. 807+00.00 END
INCIDENTAL CONSTRUCTION



NOTE: PROJECT LENGTH BASED ON CRL STATIONING.

ROADWAY LENGTH	30,671.31 FT.	5.809 MI.
BRIDGE LENGTH	225.69 FT.	0.042 MI.
PROJECT LENGTH		5.851 MI.

EQUATIONS: NONE
EXCEPTION: NONE



Kristi Nicole Bradley
KRISTI NICOLE BRADLEY
LICENSED PROFESSIONAL ENGINEER NO. 30409

3020 N.W. 149TH STREET
OKLAHOMA CITY, OK 73134
PH. (405) 752-1122
FAX (405) 752-8855
CA# 1759, RENEWAL 06-30-2023

7/29/22
DATE

OKLAHOMA DEPARTMENT OF TRANSPORTATION	DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION
DATE APPROVED _____	DATE APPROVED _____
BY _____	BY _____
CHIEF ENGINEER	DIVISION ADMINISTRATOR
SWO 5208(1) F.A. PROJECT NO. STP-226C(106)PM	
COUNTY GRADY COUNTY HIGHWAY SH 19 SHEET NO. 0001	

P.E. NO. XXXX

2019 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION GOVERN, APPROVED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, DECEMBER 18, 2019.


**THE FOLLOWING ODOT STANDARD DRAWINGS
SHALL BE REQUIRED FOR THIS PROJECT:**

2019 ROADWAY		2009 BRIDGE		SIGNING & STRIPING	2009 TRAFFIC CONTROL	TRAFFIC SAFETY
BMPR-0	MJB-4-2	RCB-C1-3&4&5(2-20)-01E	RCB-E2-H3-30-2-01E	PM1-1-03	TCS1-1-01	RS1-2-00
TESCA-0	PRM-1-2	RCB-C1-8(2-14)-01E	RCB-E2-H3-30-3-01E	PM3-1-02	TCS2-1-00	
IPD-0	PMD-1-1	RCB-C1-14(2-10)-01E	RCB-E2-H6-30-1-01E	RSD1-1-00	TCS3-1-01	
RSF-0	SPI-5-2	RCB-C2-4&5(2-20)-01E	RCB-E2-H6-30-2-01E	RSD2-1-00	TCS4-1-01	
TSF-0	FPI-4-2	RCB-C2-8(12-20)-01E	RCB-E2-H6-30-3-01E	WSD2-1-00	TCS5-1-00	
TFL-0	PBB-1-2	RCB-C3-12(2-12)-02E	RCB-E3-H10-0-1-01E	WSD3-1-00	TCS6-1-02	
TRFD-0	FHTMPP-2-1	RCB-E1-H2-0-1-01E	RCB-E3-H10-0-2-01E	SZSD1-1-00	TCS7-1-02	
SCE-0	FHTCP-4-1	RCB-E1-H2-0-2-01E	RCB-E3-H7-30-1-01E	SBS1-1-00	TCS8-1-00	
SD-0	SBI-5-2	RCB-E1-H3-0-1-01E	RCB-E3-H7-30-2-01E	SBS2-1-00	TCS9-1-01	
CWA-0	PUD-4-1	RCB-E1-H3-0-2-01E	RCB-E3-H7-30-3-01E	SBS3-1-00	TCS10-1-00	
SSS-2-1	MI-4-2	RCB-E1-H7-0-1-01E	RCB-E3-H10-30-1-01E	GMS1-1-00	TCS11-1-01	
ASCD-6-1	RDI-4-1	RCB-E1-H7-0-2-01E	RCB-E3-H10-30-2-01E	SSP1-1-02	TCS12-1-00	
PED-4-1	DC-4-1	RCB-E1-H3-30-1-01E	RCB-E3-H10-30-3-01E	SSA1-1-00	TCS13-1-00	
PSE-2-1	PDT-2-1	RCB-E1-H3-30-2-01E	RCB-CW1-D4-0-01E		TCS14-1-00	
PSMD-2-2	RWF1-3-1	RCB-E1-H3-30-3-01E	RCB-CW1-D4-30-01E		TCS15-1-00	
SMD-4-2	RWF2-3-1	RCB-E1-H5-30-1-01E	RCB-CW2-D4-30-01E		TCS19-1-01	
CET4S-4-2	SUEL1-4-1	RCB-E1-H5-30-2-01E	RCB-CW3-D4-0-01E		TCS20-1-00	
CET6S-4-2	SUEL2-4-1	RCB-E1-H5-30-3-01E	RCB-CW3-D4-30-01E		TCS21-1-02	
CET6D-4-2	SUEL4-4-1	RCB-E2-H3-30-1-01E			TCS22-1-00	
MFC-5-1					TCS24-1-02	

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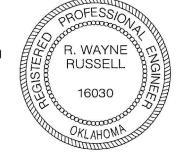
0001	TITLE SHEET
0002	INDEX OF SHEETS & STANDARDS
0003	INDEX OF SEALS
0004-0006	TYPICAL SECTIONS
AB01	PAY QUANTITIES AND GENERAL NOTES (BRIDGE)
AE01	ENVIRONMENTAL NOTES
AR01	PAY QUANTITIES (ROADWAY)
AR02	PAY NOTES (ROADWAY)
AR03	SUGGESTED SEQUENCE OF CONSTRUCTION
AR04-AR10	SUMMARY SHEETS
AR11-AR14	SUMMARY OF DRAINAGE STRUCTURES
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AT02	TRAFFIC CONTROL PAY QUANTITIES & NOTES
B001-B002	GENERAL PLAN AND ELEVATION BRIDGE "A"
B003-B006	BRIDGE "A" DETAILS
B007-B008	GENERAL PLAN AND ELEVATION BRIDGE "C"
B009-B010	GENERAL PLAN AND ELEVATION BRIDGE "D"
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R001	STORM WATER MANAGEMENT PLAN
R002-R003	DRAINAGE RECORD
R004-R010	DRAINAGE AREA MAPS
R011-R024	GEOMETRIC LAYOUT & SURFACE CONSTRUCTION
R025-R051	PLAN AND PROFILES
R052-R065	REMOVAL SHEETS
R066-R069	SUMMARY OF DISTURBED DRAINAGE AREAS
R070-R081	EROSION CONTROL SHEETS
R082-R083	MASS DIAGRAM SHEETS
S001-S047	SURVEY DATA SHEETS
T001	SIGN SUMMARY
T002-T022	SIGNING & STRIPING
T023	PHASE 1 TYP. TRAFFIC CONTROL DETAIL
T024	PHASES 2 & 3 TYP. TRAFFIC CONTROL DETAIL
T025	PHASE 4 TYP. TRAFFIC CONTROL DETAIL
T026	PHASE 5 TYP. TRAFFIC CONTROL DETAIL
X001-X207	CROSS SECTIONS

**INDEX OF SHEETS
AND STANDARDS**




R. WAYNE RUSSELL, P.E. # 16030
C.A. # 1160, RENEWAL 06-30-23

R. Wayne Russell
7-29-22
DATE




Traffic Engineering Consultants, Inc.
6000 S. Western Ave., Suite 300 - Oklahoma City, OK 73139, Ph: 405-720-7721, Web: www.tocusa.com

THIS SEAL COVERS SHEETS:
AT01, AT02, T001-T026




3020 N.W. 149TH STREET
OKLAHOMA CITY, OK 73134
PH. (405) 752-1122
FAX (405) 752-8855
CA# 1759, RENEWAL 06-30-2023




Shay V. Smith
7-29-2022
DATE

SHAY V. SMITH
LICENSED PROFESSIONAL ENGINEER NO. 27713

THIS SEAL COVERS SHEETS:
AB01, B001-B018



3020 N.W. 149TH STREET
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CA# 1759, RENEWAL 06-30-2023



Kristi Nicole Bradley
7/29/22
DATE

KRISTI NICOLE BRADLEY
LICENSED PROFESSIONAL ENGINEER NO. 30409

THIS SEAL COVERS CHANGES MADE TO SHEETS:
0001-0006, AR01-AR14, R001-R083, X001-X207
AFTER 09-15-2021



3020 N.W. 149TH STREET
OKLAHOMA CITY, OK 73134
PH. (405) 752-1122
FAX (405) 752-8855
CA# 1759, RENEWAL 06-30-2023



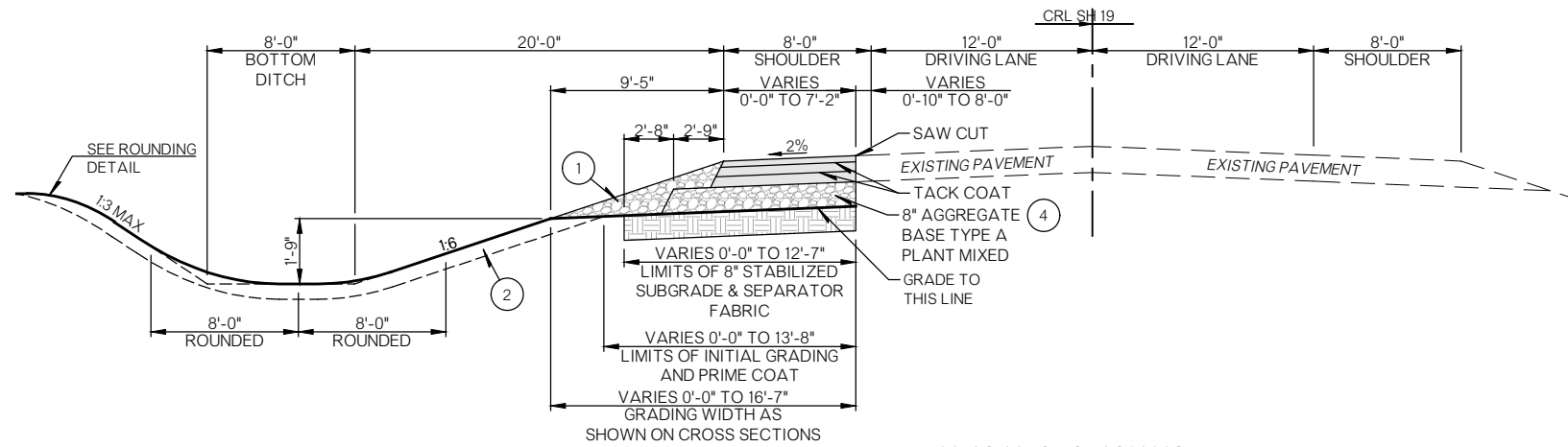
Cassandra Pinta
9-15-21
DATE

CASSANDRA PINTA
LICENSED PROFESSIONAL ENGINEER NO. 27216

THIS SEAL COVERS SHEETS:
0001-0005, AR01-AR14, R001-R083, X001-X207
THROUGH 09-15-2021

INDEX OF SEALS

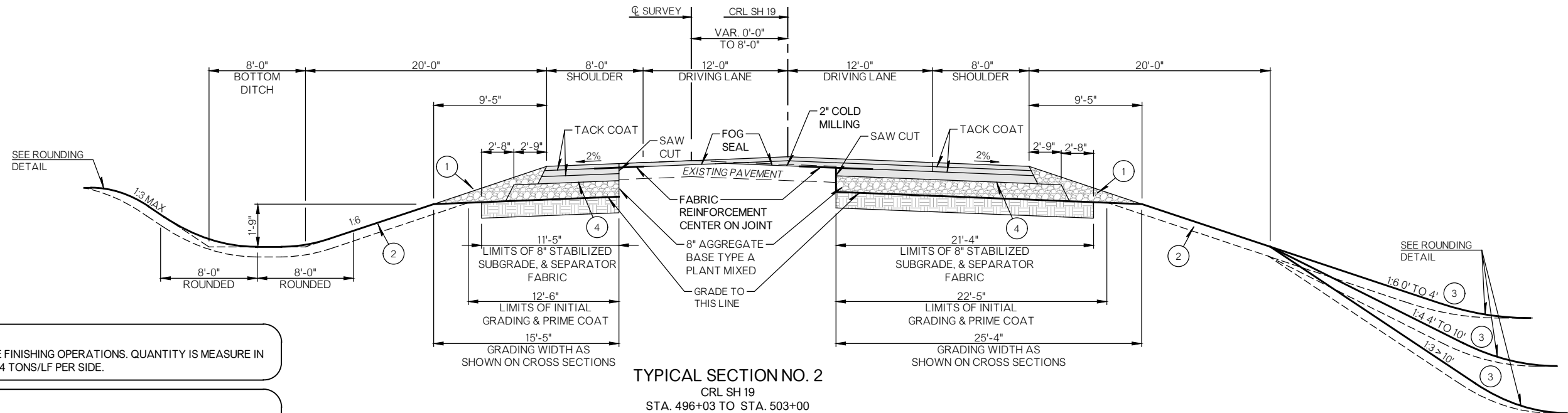
State Job No. 30425(07) Sheet No. 0003



TYPICAL SECTION NO. 1

CRL SH 19
STA. 495+19.21 TO STA. 496+03

PAVEMENT REQUIREMENT	
PAVEMENT STRUCTURE	0'-0" TO 7'-2" SHOULDER
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	3" SUPERPAVE TYPE S3 (PG 64-22 OK)
	3.5" SUPERPAVE TYPE S3 (PG 64-22 OK)



TYPICAL SECTION NO. 2

CRL SH 19
STA. 496+03 TO STA. 503+00

PAVEMENT REQUIREMENT			
PAVEMENT STRUCTURE	12'-0" DRIVING LANES OVERLAY / 8'-0" SHOULDER OVERLAY	12'-0" DRIVING LANES	8'-0" SHOULDERS
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 70-28 OK)	2" SUPERPAVE TYPE S4 (PG 70-28 OK)	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE		3" SUPERPAVE TYPE S3 (PG 64-22 OK)	3" SUPERPAVE TYPE S3 (PG 64-22 OK)
		3.5" SUPERPAVE TYPE S3 (PG 64-22 OK)	3.5" SUPERPAVE TYPE S3 (PG 64-22 OK)

1 BACKFILL NOTE:
TO BE BACKFILLED AS PART OF THE FINISHING OPERATIONS. QUANTITY IS MEASURED IN T.B.S.C. TYPE E. ESTIMATED AT 0.334 TONS/LF PER SIDE.

1A BACKFILL NOTE:
TO BE BACKFILLED AS PART OF THE FINISHING OPERATIONS. COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

2 TOPSOIL NOTE:
THE CONTRACTOR SHALL STRIP ALL OF THE AVAILABLE TOPSOIL, STOCKPILE IT, AND PLACE IT BACK ON THE SECTION IN ACCORDANCE WITH SECTION 205 OF THE STANDARD SPECIFICATIONS. RESERVED TOPSOIL SHALL BE SPREAD FIRST ON THE COMPLETED SLOPES OF THE CUT SECTIONS AND THE REMAINDER ON COMPLETED FILL SLOPES OR OTHER PRIORITY AREAS LOCATED BY THE ENGINEER. ALL ADDITIONAL COSTS ASSOCIATED WITH OPERATIONS SHALL BE INCLUDED IN THE PAY ITEM FOR SALVAGED TOPSOIL, LUMP SUM.

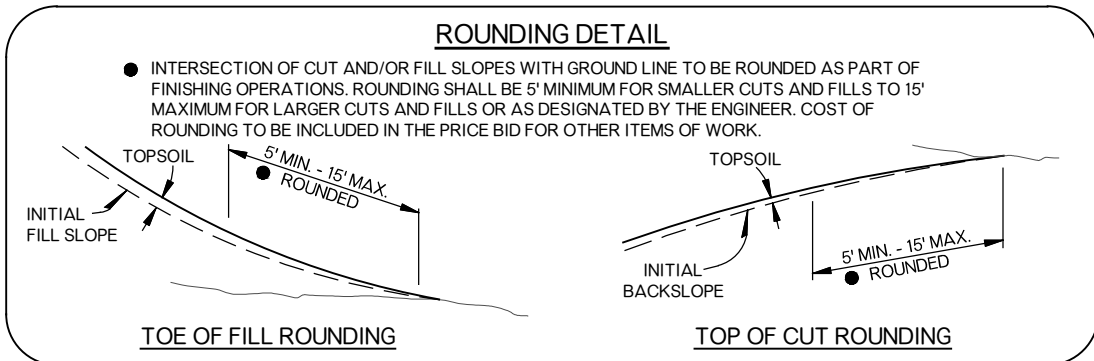
THE GRADING LINE AS SHOWN ON THE TYPICAL AND CROSS SECTIONS IS TO THE TOP OF THE TOPSOIL. EARTHWORK QUANTITIES WERE NOT ADJUSTED FOR SALVAGE AND THE TOPSOIL QUANTITY IS INCLUDED IN THE MASSLINE BALANCE.

3 DISTANCE MEASURED VERTICALLY FROM EDGE OF FINISHED GRADE SHOULDER.

4 PRIME COAT ON TOP OF AGGREGATE BASE.

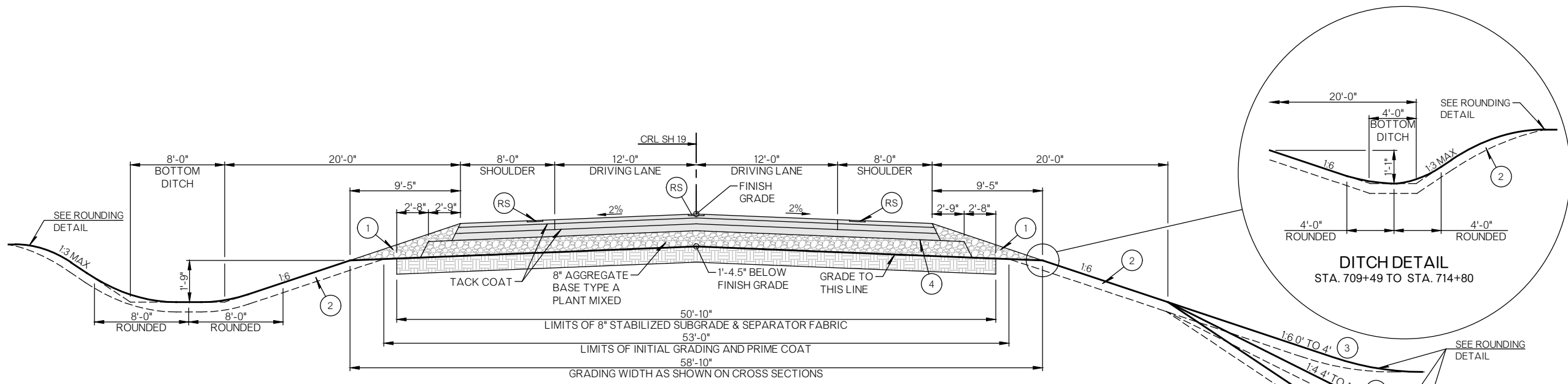
RS RUMBLE STRIP

SE SAFETY EDGE



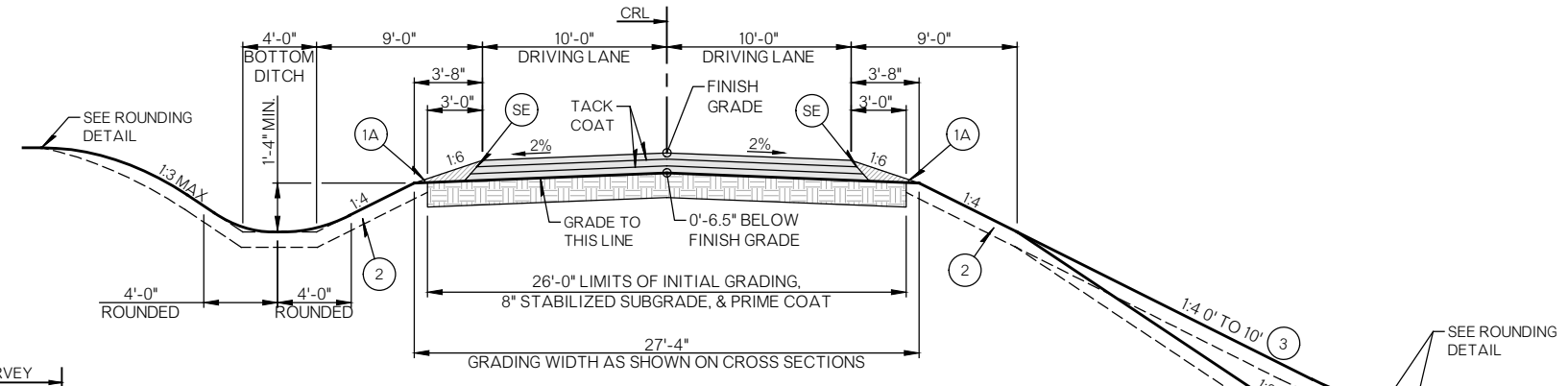
TYPICAL SECTIONS

State Job No. 30425(07) Sheet No. 0004



TYPICAL SECTION NO. 3
CRL SH 19
STA. 503+00 TO STA. 800+00

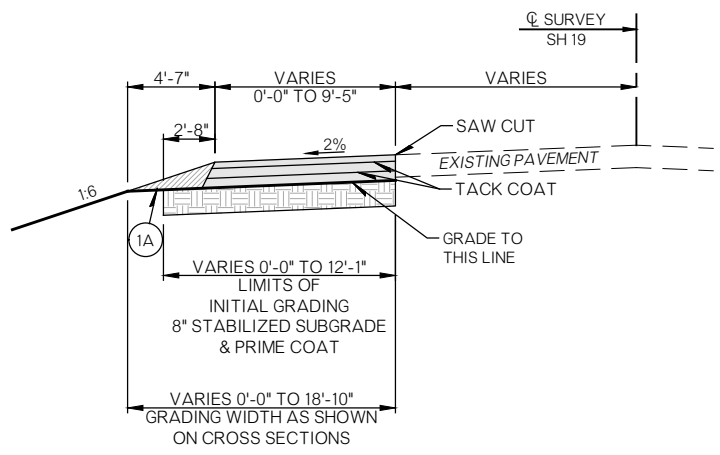
PAVEMENT REQUIREMENT		
PAVEMENT STRUCTURE	12'-0" DRIVING LANES	8'-0" SHOULDERS
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 70-28 OK)	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	3" SUPERPAVE TYPE S3 (PG 70-28 OK)	3" SUPERPAVE TYPE S3 (PG 64-22 OK)
	3.5" SUPERPAVE TYPE S3 (PG 64-22 OK)	3.5" SUPERPAVE TYPE S3 (PG 64-22 OK)



TYPICAL SECTION NO. 4

- CRL EW 142 E STA. 10+20 TO STA. 13+50
- CRL NS 289 STA. 14+00 TO STA. 19+80
- CRL EW 143 STA. 27+00 TO STA. 29+80
- CRL NS 290 STA. 34+50 TO STA. 39+80
- CRL NS 291 STA. 45+50 TO STA. 49+68
- CRL NS 292 STA. 60+20 TO STA. 64+00

PAVEMENT REQUIREMENT	
PAVEMENT STRUCTURE	10'-0" DRIVING LANES
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	2.25" SUPERPAVE TYPE S3 (PG 64-22 OK)
	2.25" SUPERPAVE TYPE S3 (PG 64-22 OK)



TYPICAL SECTION NO. 5
CRL SH 19 (TEMPORARY WIDENING)
STA. 508+61.89 TO STA. 513+79.51
STA. 787+14.70 TO STA. 801+26.00

PAVEMENT REQUIREMENT	
PAVEMENT STRUCTURE	0'-0" TO 9'-5" SHOULDER
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	3" SUPERPAVE TYPE S3 (PG 64-22 OK)
	3" SUPERPAVE TYPE S3 (PG 64-22 OK)

1 BACKFILL NOTE:
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2 TOPSOIL NOTE:
THE CONTRACTOR SHALL STRIP ALL OF THE AVAILABLE TOPSOIL, STOCKPILE IT, AND PLACE IT BACK ON THE SECTION IN ACCORDANCE WITH SECTION 205 OF THE STANDARD SPECIFICATIONS. RESERVED TOPSOIL SHALL BE SPREAD FIRST ON THE COMPLETED SLOPES OF THE CUT SECTIONS AND THE REMAINDER ON COMPLETED FILL SLOPES OR OTHER PRIORITY AREAS LOCATED BY THE ENGINEER. ALL ADDITIONAL COSTS ASSOCIATED WITH OPERATIONS SHALL BE INCLUDED IN THE PAY ITEM FOR SALVAGED TOPSOIL, LUMP SUM.

THE GRADING LINE AS SHOWN ON THE TYPICAL AND CROSS SECTIONS IS TO THE TOP OF THE TOPSOIL. EARTHWORK QUANTITIES WERE NOT ADJUSTED FOR SALVAGE AND THE TOPSOIL QUANTITY IS INCLUDED IN THE MASSLINE BALANCE.

3 DISTANCE MEASURED VERTICALLY FROM EDGE OF FINISHED GRADE SHOULDER.

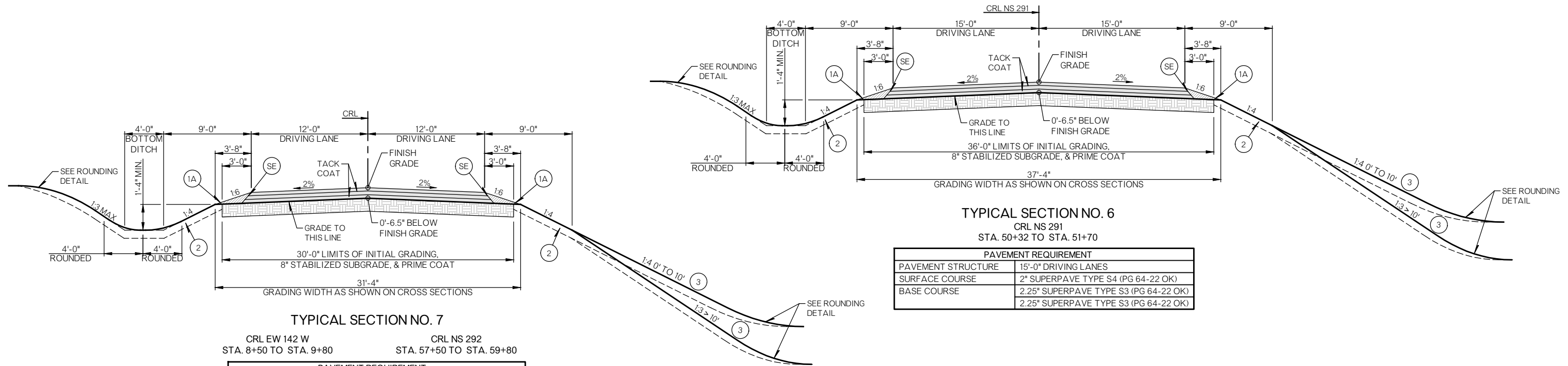
4 PRIME COAT ON TOP OF AGGREGATE BASE.

RS RUMBLE STRIP

SE SAFETY EDGE

TYPICAL SECTIONS

State Job No. 30425(07) Sheet No. 0005

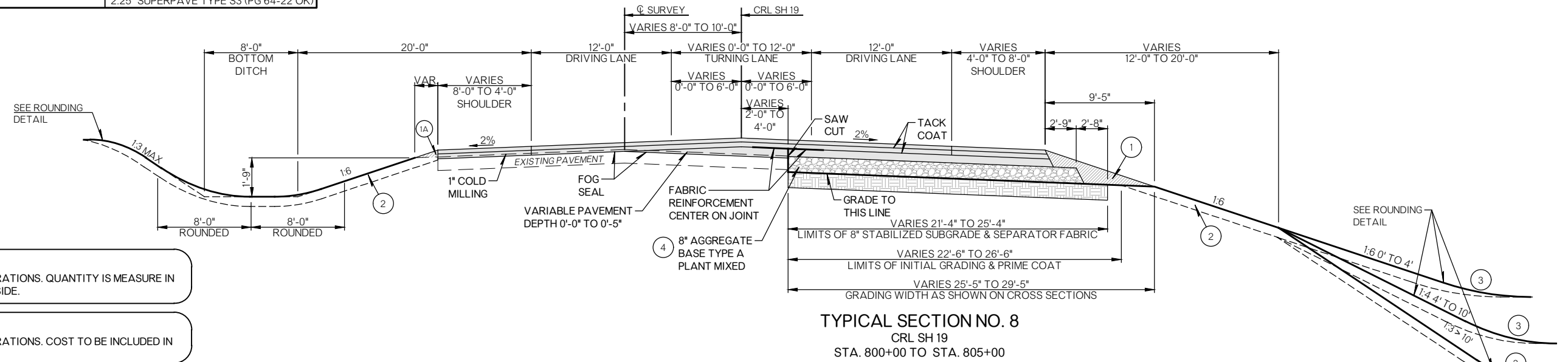


TYPICAL SECTION NO. 6
CRL NS 291
STA. 50+32 TO STA. 51+70

PAVEMENT REQUIREMENT	
PAVEMENT STRUCTURE	15'-0" DRIVING LANES
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	2.25" SUPERPAVE TYPE S3 (PG 64-22 OK) 2.25" SUPERPAVE TYPE S3 (PG 64-22 OK)

TYPICAL SECTION NO. 7
CRL EW 142 W STA. 8+50 TO STA. 9+80
CRL NS 292 STA. 57+50 TO STA. 59+80

PAVEMENT REQUIREMENT	
PAVEMENT STRUCTURE	12'-0" DRIVING LANES
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	2.25" SUPERPAVE TYPE S3 (PG 64-22 OK) 2.25" SUPERPAVE TYPE S3 (PG 64-22 OK)



TYPICAL SECTION NO. 8
CRL SH 19
STA. 800+00 TO STA. 805+00

PAVEMENT REQUIREMENT				
PAVEMENT STRUCTURE	4'-0" TO 8'-0" SHOULDER OVERLAY	0'-0" TO 12'-0" DRIVING / TURNING LANES OVERLAY	0'-0" TO 12'-0" DRIVING / TURNING LANES WIDENING	4'-0" TO 8'-0" SHOULDER WIDENING
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 64-22 OK)	2" SUPERPAVE TYPE S4 (PG 70-28 OK)	2" SUPERPAVE TYPE S4 (PG 70-28 OK)	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	2.5" SUPERPAVE TYPE S3 (PG 64-22 OK)	2.5" SUPERPAVE TYPE S3 (PG 70-28 OK)	2.5" SUPERPAVE TYPE S3 (PG 70-28 OK)	2.5" SUPERPAVE TYPE S3 (PG 64-22 OK)
			4" SUPERPAVE TYPE S3 (PG 64-22 OK)	4" SUPERPAVE TYPE S3 (PG 64-22 OK)

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THE GRADING LINE AS SHOWN ON THE TYPICAL AND CROSS SECTIONS IS TO THE TOP OF THE TOPSOIL. EARTHWORK QUANTITIES WERE NOT ADJUSTED FOR SALVAGE AND THE TOPSOIL QUANTITY IS INCLUDED IN THE MASSLINE BALANCE.

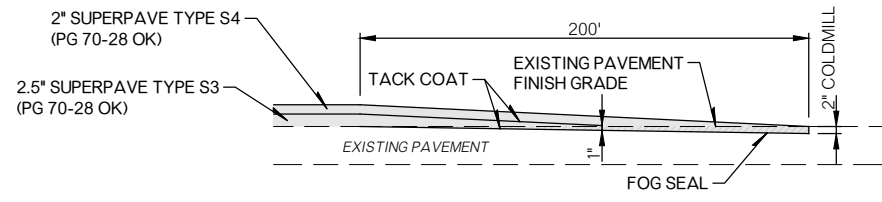
3 DISTANCE MEASURED VERTICALLY FROM EDGE OF FINISHED GRADE SHOULDER.

4 PRIME COAT ON TOP OF AGGREGATE BASE.

RS RUMBLE STRIP

SE SAFETY EDGE

COLD MILLING DETAIL
CRL SH 19
STA. 805+00 TO STA. 807+00



ENVIRONMENTAL MITIGATION NOTES

REVISIONS		
REV. NO.	DESCRIPTION	DATE

EARTHWORK NOTE:
 THE CONTRACTOR MUST ENSURE THAT ANY MATERIAL INCORPORATED INTO THE PROJECT IS FREE OF ANY HAZARDOUS, INDUSTRIAL OR CONTAMINATED WASTE, REFER TO SUB-SECTIONS 106.01 AND 202.02 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

IMPORTED MATERIAL (EG. BORROW) - IF MATERIAL IS IMPORTED TO THE PROJECT AND AT ANY POINT THE MATERIAL IS DETERMINED BY THE ENGINEER TO INCLUDE ANY TYPE OF UNACCEPTABLE CONTAMINATION, THE MATERIAL MAY REQUIRE REMOVAL, IN WHOLE, OR IN PART. IF REMOVAL IS REQUIRED, THEN THE INITIAL PLACEMENT, REMOVAL AND PROPER DISPOSAL OF THIS MATERIAL SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE DISPOSAL OF THE UNACCEPTABLE MATERIAL SHALL BE APPROVED BY THE ENGINEER, REFER TO SUB-SECTION 107.15 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

TO ASSIST THE CONTRACTOR, THE "OFF PROJECT FACILITY/BORROW SITE HAZARDOUS MATERIALS QUESTIONNAIRE" IS PROVIDED ON THE DEPARTMENT'S WEB SITE:

[HTTPS://OK.GOV/ODOT/PROGRAMS_AND_PROJECTS/ENVIRONMENTAL/INDEX.HTML](https://ok.gov/odot/programs_and_projects/environmental/index.html)

THIS QUESTIONNAIRE IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR SO THAT A CLEARER UNDERSTANDING OF THE CHARACTERISTICS OF THE PROPOSED SITE/ MATERIAL IS ACHIEVED. COMPLETION AND SUBMITTAL OF THIS FORM TO THE ENGINEER DOES NOT EXCUSE THE CONTRACTOR FROM PROVIDING MATERIALS THAT ARE FREE OF HAZARDOUS AND INDUSTRIAL COMPOSITION IN ACCORDANCE WITH SUB-SECTIONS 106.01 AND 202.02 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

NON-COMPLIANCE NOTE:
 FAILURE TO IMPLEMENT THE COMMITMENTS SPECIFIED IN THE PLAN NOTES CAN RESULT IN NON-COMPLIANCE ISSUES ON THE PROJECT. WORK ACTIVITIES MAY BE SUSPENDED ON THE PROJECT, FOR AN UNDETERMINED DURATION, WHILE WORKING WITH REGULATORS TO BRING THE PROJECT BACK INTO COMPLIANCE. THE CONTRACTOR WILL NOT BE COMPENSATED FOR TIME LOST.

WATER QUALITY CONSERVATION NOTE:
 APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE IMPACTS FROM STORM WATER DISCHARGES AND SEDIMENTATION IN STREAMS, AS ESTABLISHED BY THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY, SHALL BE CONSCIENTIOUSLY IMPLEMENTED THROUGHOUT THE PROPOSED CONSTRUCTION PERIODS, IN ORDER TO MINIMIZE ANY POTENTIAL IMPACTS TO ANY LISTED SPECIES. THE EFFECTIVENESS OF EROSION CONTROLS SHALL BE MAINTAINED FOR THE DURATION OF CONSTRUCTION ACTIVITIES. HAZARDOUS MATERIALS, CHEMICALS, FUELS, LUBRICATING OILS, AND OTHER SUCH SUBSTANCES SHALL BE STORED AT LEAST 100 FEET FROM THE ORDINARY HIGH WATER MARK (OHWM). REFUELING OF CONSTRUCTION EQUIPMENT SHALL ALSO BE CONDUCTED AT LEAST 100 FEET FROM THE OHWMS. SEDIMENT AND EROSION CONTROLS SHALL BE INSTALLED AROUND STAGING AREAS TO PROHIBIT DISCHARGE OF MATERIALS FROM THESE SITES. CONSTRUCTION WASTE MATERIALS AND DEBRIS SHALL BE STOCKPILED AT LEAST 25 FEET OUTSIDE OF THE OHWMS, AND THESE MATERIALS SHALL BE REMOVED AND DISPOSED OF PROPERLY FOLLOWING COMPLETION OF THE PROJECT. PREVENTATIVE MEASURES MUST BE TAKEN TO PROHIBIT THE DISCHARGE OF CONTAMINANTS INTO ANY SURFACE WATERS.

BALD EAGLE NOTE:
 SUITABLE NESTING, ROOSTING OR FORAGING HABITAT FOR THE BALD EAGLE OCCURS WITHIN THE PROJECT'S ACTION AREA. THE BALD EAGLE NESTING SEASON IN OKLAHOMA EXTENDS FROM SEPTEMBER 16, THROUGH MAY 31. THE RESIDENT ENGINEER SHALL CONTACT THE ODOT BIOLOGIST TO SCHEDULE A NEST SURVEY. NEST SEARCH SURVEYS CAN ONLY BE CONDUCTED WHEN LEAVES ARE NOT ON THE TREES TYPICALLY BETWEEN DECEMBER 1ST AND FEBRUARY 28TH. NO WORK MAY OCCUR WITHIN SUITABLE BALD EAGLE HABITAT, LOCATED THE FULL EXTENT OF THE STUDY AREA, DURING THE NESTING SEASON (SEPTEMBER 16, THROUGH MAY 31) UNTIL THE COMPLETION OF THE SURVEY BY THE ODOT BIOLOGIST. IF NESTS ARE OBSERVED, A NO-WORK BUFFER UP TO A DISTANCE OF 660 FEET SHALL BE PLACED AROUND THE NEST. THE EXACT DISTANCE OF THE BUFFER ZONE SHALL BE ESTABLISHED BY THE ODOT BIOLOGIST IN CONSULTATION WITH US FISH AND WILDLIFE SERVICES. IF THE BUFFER CANNOT BE MAINTAINED, ALL CLEARING, EXTERNAL CONSTRUCTION AND LANDSCAPING ACTIVITIES, WITHIN THE BUFFER, SHALL BE CONDUCTED BETWEEN JUNE 1 AND SEPTEMBER 15 (OUTSIDE THE NESTING SEASON).

MIGRATORY BIRD NOTE:
 MIGRATORY BIRDS ARE PROTECTED BY THE FEDERAL MIGRATORY BIRD TREATY ACT. MANY BIRDS COMMONLY USE BRIDGES AND CULVERTS FOR NESTING. THE NESTING SEASON FOR MOST MIGRATORY BIRD SPECIES EXTENDS FROM MARCH 1 TO AUGUST 31. MIGRATORY BIRD NESTING USE OF THE FOLLOWING BRIDGES AND CULVERTS WAS OBSERVED:

NBI:08712 (RCB BRIDGE)	RCB AT STA.593-37
NBI:09046 (DRY CREEK RCB)	RCB AT STA.655+57.7
NBI:09048 (RCB BRIDGE)	RCB AT STA.682+89.6
NBI:11070 (RCB BRIDGE)	RCB AT STA.692+09
NBI:11089 (SOLDIER CREEK SLAB SPAN)	RCB AT STA.792+77.9
NBI:11119 (CONCRETE SLAB)	RCB AT STA.876+81.5
RCB AT STA.495+25	RCB AT STA.884+18.6
RCB AT STA.581+13.9	RCB AT STA.908+97

PAINTING, REPAIR, RETROFIT, REHABILITATION OR DEMOLITION OF THE EXISTING BRIDGES AND CULVERTS SHALL BE CONDUCTED BETWEEN SEPTEMBER 1, AND FEBRUARY 28, WHEN MIGRATORY BIRD NESTS ARE NOT OCCUPIED. IF PAINTING, REPAIR, RETROFIT, REHABILITATION OR DEMOLITION CANNOT BE COMPLETED BETWEEN SEPTEMBER 1 AND FEBRUARY 28, THE BRIDGES AND CULVERTS SHALL BE PROTECTED FROM NEW NEST ESTABLISHMENT PRIOR TO MARCH 1, BY MEANS THAT DO NOT RESULT IN BIRD DEATH OR INJURY. OPTIONS INCLUDE THE EXCLUSION OF ADULT BIRDS FROM SUITABLE NEST SITES ON OR WITHIN A STRUCTURE BY THE PLACEMENT OF WEATHER-RESISTANT POLYPROPYLENE NETTING WITH 0.25-INCH OR SMALLER OPENINGS, PRIOR TO MARCH 1. METHODS OTHER THAN NETTING MUST BE PRE-APPROVED BY THE ODOT BIOLOGIST.

ALTHOUGH NO NESTS WERE OBSERVED ON ALL OTHER STRUCTURES, THE BIRDS MAY OCCUPY THE STRUCTURES IN THE FUTURE. THE RESIDENT ENGINEER SHALL CONTACT THE ODOT BIOLOGIST IF ANY BIRD USE OF THESE STRUCTURES IS OBSERVED. IF BIRDS ARE OBSERVED THEN PAINTING, REPAIR, RETROFIT, REHABILITATION OR DEMOLITION OF THE EXISTING BRIDGES AND CULVERTS SHALL BE CONDUCTED BETWEEN SEPTEMBER 1, AND FEBRUARY 28 (WHEN MIGRATORY BIRD NESTS ARE NOT OCCUPIED).

BALD EAGLE	SEPTEMBER 16 – MAY 31
MIGRATORY BIRDS: SWALLOWS AND PHOEBES (NESTS PRESENT)	MARCH 1 – AUGUST 31

ARCHEOLOGICAL SITE AVOIDANCE NOTE:
 TEMPORARY FENCING WILL BE USED TO DEMARCATATE THE PROJECT R/W FROM STATIONS: 503+50 LT THROUGH 508+50 LT. NO EQUIPMENT STAGING, BORROW, HAUL ROADS, SPOIL DUMPS, VEHICLE PARKING, OR ANY OTHER PROJECT RELATED OFF-SITE FACILITIES OR USE SHOULD OCCUR BEYOND THE FENCING IN THIS AREA DURING CONSTRUCTION ACTIVITIES.

ODOT-CULTURAL RESOURCES PROGRAM SHOULD BE INVITED TO ALL PRE-WORK CONFERENCES TO DISCUSS THESE MEASURES, PER POLICY DIRECTIVE C-201-2E(1). IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT THE CULTURAL RESOURCES PROGRAM AT 405-325-7201.

<p>ENVIRONMENTAL NOTES</p>		DETAIL		
		REVIEW		
		APPROVED		
		ENVIRONMENTAL DIVISION		
STATE OF OKLAHOMA	DEPARTMENT OF TRANSPORTATION	JOB/PIECE NO. 30425(04)07	SHEET NO. AE01	

SUMMARY OF PAY QUANTITIES - ROADWAY (CONTINUED)				
ROADWAY 100				
ITEM	PES. NO	DESCRIPTION	UNIT	QUANTITY
619(C)	6600	SAWING PAVEMENT	LF	1,835.00
624(A)	3200	FENCE-STYLE WWF (R-41)	LF	4,059.00
624(B)	3340	GATES-STYLE WWF (4.5'HIGH X 12'LONG)	EA	3.00
624(C)	3405	FENCE-STYLE SWF (5 BARBED WIRE) (5)(R-41)(R-42)	LF	24,330.00
624(C)	3410	FENCE-STYLE SWF (6 BARBED WIRE) (5)(R-41)(R-42)	LF	1,238.00
629(A)	7200	MAILBOX INSTALLATION-SINGLE	EA	6.00
629(B)	7300	MAILBOX INSTALLATION-MULTIPLE	EA	2.00
629(C)	7400	REMOVAL OF MAILBOX INSTALLATION	EA	13.00
629(E)	7600	MAILBOX	EA	11.00

SUMMARY OF PAY QUANTITIES (STAKING)				
STAKING 600				
ITEM	PES. NO	DESCRIPTION	UNIT	QUANTITY
642(B)	3300	CONSTRUCTION STAKING LEVEL II (6)	LSUM	1.00

SUMMARY OF PAY QUANTITIES (CONSTRUCTION)				
CONSTRUCTION 640				
ITEM	PES. NO	DESCRIPTION	UNIT	QUANTITY
220	1100	SWPPP DOCUMENTATION AND MANAGEMENT	LSUM	1.00
640(A)	1210	FIELD OFFICE (9)	EA	1.00
641	2110	MOBILIZATION	LSUM	1.00

SUMMARY OF PAY QUANTITIES - ROADWAY				
ROADWAY 100				
ITEM	PES. NO	DESCRIPTION	UNIT	QUANTITY
201(A)	1200	CLEARING AND GRUBBING	LSUM	1.00
202(A)	2200	UNCLASSIFIED EXCAVATION (1)(R-1)	CY	463,352.00
202(D)	2500	UNCLASSIFIED BORROW (R-3)	CY	80,517.00
205(A)	6200	TYPE A-SALVAGED TOPSOIL (R-4)(R-6)	LSUM	1.00
221(B)	2300	TEMPORARY SILT FENCE (R-8)	LF	21,789.00
221(E)	2600	TEMPORARY SILT DIKE (R-8)	LF	5,855.00
221(F)	2710	TEMPORARY ROCK FILTER DAM TYPE 2 (R-8)	CY	185.00
221(G)	2800	TEMPORARY FIBER LOG (7)	LF	4,154.00
221(H)	2900	(PL)TEMPORARY INLET SEDIMENT FILTER (R-8)	EA	5.00
230(A)	7200	SOLID SLAB SODDING (19)(R-6)(R-7)	SY	351,344.00
233(A)	0200	VEGETATIVE MULCHING (R-11)	AC	73.00
241	3100	MOWING (R-15)	AC	146.00
242	4101	STABILIZED CONSTRUCTION EXIT (18)	EA	2.00
303(A)	1210	AGGREGATE BASE TYPE A, PLANT MIXED	CY	36,044.00
307(K)	4200	STABILIZED SUBGRADE (12)	SY	196,620.00
325	0100	SEPARATOR FABRIC	SY	178,155.00
402(E)	2600	TRAFFIC BOUND SURFACE COURSE TYPE E (13)(R-18)	TON	25,228.00
407(B)	7300	TACK COAT (R-23)	GAL	24,838.00
408	8100	PRIME COAT (R-21)	GAL	110,533.00
409(A)	9200	FABRIC REINFORCEMENT (16)	SY	765.00
411(B)	1320	SUPERPAVE, TYPE S3 (PG 70-28 OK) (R-24)	TON	14,657.00
411(B)	1330	SUPERPAVE, TYPE S3 (PG 64-22 OK) (R-24)	TON	43,466.00
411(C)	1420	SUPERPAVE, TYPE S4 (PG 70-28 OK) (R-24)	TON	10,561.00
411(C)	1430	SUPERPAVE, TYPE S4 (PG 64-22 OK) (14)(R-24)	TON	8,856.00
412	3100	COLD MILLING PAVEMENT (10)(R-27)(R-28)	SY	2,903.00
501(A)	1200	STRUCTURAL EXCAVATION UNCLASSIFIED	CY	370.00
509(A)	0200	CLASS AA CONCRETE	CY	1,384.00
509(D)	0500	CLASS C CONCRETE (R-31)	CY	3,098.00
511(A)	2200	REINFORCING STEEL	LB	212,691.00
601(B)	1220	TYPE I-A PLAIN RIPRAP (8)	TON	1,502.00
601(C)	1300	TYPE I-A FILTER BLANKET	TON	391.00
611(A)	7210	MANHOLE (4' DIAMETER) (17)(R-33)	EA	5.00
611(G)	0354	INLET (SMD-TYPE 2) (11)(R-33)(R-35)	EA	3.00
611(G)	0358	INLET (SMD-TYPE 2A)	EA	1.00
611(L)	1600	JUNCTION BOXES	CF	88.00
613(A)	5208	18" R.C.PIPE CLASS III	LF	306.00
613(A)	5216	24" R.C.PIPE CLASS III	LF	660.00
613(A)	5220	30" R.C.PIPE CLASS III	LF	1,288.00
613(A)	5224	36" R.C.PIPE CLASS III	LF	276.00
613(B)	5508	18" CORR. GALV. STEEL PIPE (R-35)	LF	1,998.00
613(B)	5516	24" CORR. GALV. STEEL PIPE (R-35)	LF	554.00
613(B)	5524	30" CORR. GALV. STEEL PIPE (R-35)	LF	16.00
613(B)	5528	36" CORR. GALV. STEEL PIPE	LF	90.00
613(B)	5604	21" X 15" CORR. GALV. STEEL PIPE ARCH (R-35)	LF	366.00
613(B)	5612	28" X 20" CORR. GALV. STEEL PIPE ARCH	LF	52.00
613(H)	6200	6" PERFORATED PIPE UNDERDRAIN ROUND (2)	LF	2,195.00
613(I)	6305	6" NON-PERF. PIPE UNDERDRAIN RND. (2)	LF	732.00
613(M)	6960	TYPE A4 CULVERT END TREATMENT	EA	1.00
613(M)	6964	TYPE B4 CULVERT END TREATMENT	EA	9.00
613(M)	6968	TYPE C4 CULVERT END TREATMENT	EA	12.00
613(M)	6972	TYPE D4 CULVERT END TREATMENT	EA	4.00
613(M)	7004	TYPE A6 CULVERT END TREATMENT	EA	40.00
613(M)	7008	TYPE B6 CULVERT END TREATMENT	EA	15.00
613(M)	7012	TYPE C6 CULVERT END TREATMENT	EA	1.00
613(M)	7016	TYPE D6 CULVERT END TREATMENT	EA	1.00
613(M)	7028	TYPE BB6 CULVERT END TREATMENT	EA	2.00
613(Q)	7500	OUTLET LATERAL HEADWALL (3)	EA	6.00
613(S)	7700	STANDARD BEDDING MATERIAL, CLASS B	CY	224.00
613(T)	7800	STANDARD BEDDING MATERIAL, CLASS C (15)	CY	3,551.00
619(A)	6200	REMOVAL OF STRUCTURES & OBSTRUCTIONS (4)(R-37)(R-38)	LSUM	1.00
619(B)	6300	REMOVAL OF HEADWALL (R-38)	EA	1.00
619(B)	6360	REMOVAL OF CONCRETE PAVEMENT (R-38)(R-39)	SY	449.00
619(B)	6364	REMOVAL OF ASPHALT PAVEMENT (R-38)(R-39)	SY	100,851.00
619(B)	6380	REMOVAL OF CONCRETE DRIVEWAY (R-38)(R-39)	SY	359.00
619(B)	6384	REMOVAL OF ASPHALT DRIVEWAY (R-38)(R-39)	SY	1,865.00
619(B)	6396	REMOVAL OF GUARDRAIL (R-38)	LF	3,778.00
619(B)	6400	REMOVAL OF CURB (R-38)(R-39)	LF	60.00
619(B)	6404	REMOVAL OF SIDEWALK (R-38)(R-39)	SY	17.00

PAY QUANTITY NOTES

- (R-1) PAYMENT FOR THIS ITEM WILL BE BASED ON PLAN QUANTITY ONLY. SEE SECTION 109.01B OF THE STANDARD SPECIFICATIONS.
(R-3) INCLUDES 500 CU. YDS. FOR DRIVEWAYS, RETURNS, DIKES, AND MISCELLANEOUS EARTHWORK.
(R-4) AN ESTIMATED QUANTITY OF 66,505 C.Y. TOPSOIL TO BE RESERVED FOR REPLACEMENT OF APPROXIMATELY 5" ON COMPLETED FORESLOPES, DITCHES, AND BACKSLOPES. THIS QUANTITY IS INCLUDED IN THE EARTHWORK BALANCE. ANY ADDITIONAL EXCAVATION REQUIRED IN CUT SECTIONS TO ALLOW FOR PLACEMENT OF TOPSOIL TO FINAL GRADE, SHALL BE INCLUDED IN THE PRICE BID.
(R-6) FOR SOLID SLAB SODDING PRICE BID TO INCLUDE COST OF 10-20-10 FERTILIZER, ESTIMATED AT 200 POUNDS PER 1,000 S.Y.
FOR SALVAGE TOPSOIL PRICE BID TO INCLUDE COST OF 18-46-0 FERTILIZER, ESTIMATED AT 150 POUNDS PER ACRE.
(R-7) FOR SOLID SLAB SODDING PRICE BID TO INCLUDE COST OF WATERING, ESTIMATED AT 40 GALLONS PER S.Y.
(R-8) PRICE BID TO INCLUDE COST OF ALL NECESSARY MAINTENANCE, MAINTAINING DEVICE IN PROPER UPRIGHT POSITION, REMOVAL OF DEVICE, AND REMOVAL OF SEDIMENT WHEN IT REACHES HALF THE HEIGHT OF THE DEVICE.
(R-11) THE QUANTITIES ESTIMATED FOR TEMPORARY EROSION AND SEDIMENT CONTROL IS 74 ACRES.
(R-15) QUANTITY BASED ON TWO APPLICATIONS.
(R-18) ESTIMATED AT 160 LBS. PER CU. FT.
(R-21) PRIME COAT SHALL BE APPLIED AT AN ESTIMATED RATE OF 0.35 GAL. PER SQ. YD. WHEN APPLIED TO SUBGRADE, AND 0.25 GAL. PER SQ. YD. WHEN APPLIED TO AGGREGATE BASE. THE ACTUAL CUTBACK PRIME COAT REQUIRED FOR PLACEMENT OPERATIONS WILL BE DETERMINED BY THE CONTRACTOR, AND SHALL CONSIDER THE RESIDUE FROM DISTILLATION PERCENTAGE SHOWN IN SECTION 708.03 OF THE STANDARD SPECIFICATIONS.
(R-23) ESTIMATED AT 0.075 GALLONS PER SQUARE YARD OF ORIGINAL EMULSION OF TACK COAT (BEFORE DILUTION FOR APPLICATION) IN ACCORDANCE WITH SECTION 407 OF THE STANDARD SPECIFICATIONS.
(R-24) ESTIMATED AT 112 LBS. PER SQ. YD. PER 1" THICK.
(R-27) PRICE BID TO INCLUDE COST OF FOG SEAL, MEETING THE REQUIREMENTS OF SECTION 407 OF THE STANDARD SPECIFICATIONS.
(R-28) MILLINGS SHALL BECOME THE PROPERTY OF ODOT, TO BE HAULED AND STOCKPILED WITHIN TEN MILES OF THE PROJECT. MILLINGS SHALL BE FREE FROM SOIL OR FOREIGN MATERIAL AND SHALL CONTAIN NO PIECES GREATER THAN 4" DIAMETER. CARE SHOULD BE TAKEN WHEN STOCKPILING TO NOT INCORPORATE UNDERLYING MATERIAL INTO THE STOCKPILE.
(R-31) QUANTITY INCLUDES AN ESTIMATED 50 C.Y. TO BE USED AS DIRECTED BY THE ENGINEER.
(R-33) THE PRECAST CONCRETE OPTION MAY BE USED INSTEAD, PER DIRECTION OF THE ENGINEER.
(R-35) ANY DRAINAGE STRUCTURE DESCRIBED AS TEMPORARY, SHALL AFTER COMPLETION OF THE PROJECT, BE REMOVED BY AND BECOME THE PROPERTY OF THE CONTRACTOR.
(R-37) INCLUDES REMOVAL OF ALL EXISTING ROADWAY DRAINAGE STRUCTURES, HEADWALLS (UNLESS OTHERWISE SPECIFIED), INLETS, FENCES, AND OTHER STRUCTURES WITHIN THE RIGHT OF WAY.
(R-38) TO BECOME THE PROPERTY OF AND BE DISPOSED OF BY THE CONTRACTOR IN A MANNER APPROVED BY THE ENGINEER.
(R-39) MATERIALS REMOVED SHALL NOT BE MEASURED FOR PAYMENT UNDER SECTION 202.06 UNCLASSIFIED EXCAVATION.
(R-41) INCLUDES 2% FOR GROUND MEASUREMENT.
(R-42) ALL GATES AND GATE END POSTS FOR STRANDED WIRE FENCE (SWF) SHALL BE CONSTRUCTED AT THE SAME WIDTH AS THE EXISTING, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

PAY QUANTITY NOTES

- (1) 20,000 C. Y. OF EXCESS EXCAVATION FROM J/P 30425(07) IS TO BE STOCKPILED AT A LOCATION DETERMINED BY THE ENGINEER WITHIN THE J/P 30425(04) PROJECT EXTENTS, TO BE USED TO REDUCE UNCLASSIFIED BORROW FOR J/P 30425(04). BID PRICE FOR THE DELIVERY AND STOCKPILING OF THIS MATERIAL SHALL INCLUDE ALL NECESSARY INCIDENTALS REQUIRED FOR EROSION CONTROL INCLUDING BUT NOT LIMITED TO, VEGETATIVE MULCH AND/OR SEEDING AND SILT FENCE.
(2) BID PRICE TO INCLUDE COST OF PIPE UNDERDRAIN COVER MATERIAL AND TRENCH EXCAVATION.
(3) ESTIMATED QUANTITY ONLY. TO BE USED AS DIRECTED BY THE ENGINEER.
(4) SEE REMOVAL SHEETS AND SUMMARY OF REMOVAL QUANTITIES FOR EXTENTS OF FENCE REMOVAL.
(5) CORNER, STRETCHER, AND END POSTS SHALL BE CONSTRUCTED OF SCH. 40 STEEL USING DIMENSIONS SPECIFIED IN STANDARD RWF1-3- (LATEST REVISION). PIPE WILL BE WELDED AND TENSION WIRES OMITTED. THE CORNER AND STRETCHER POST WILL BE PAINTED WITH ZINC RICH PAINT AFTER WELDING. GALVANIZED POSTS ARE NOT REQUIRED.
(6) IN ADDITION TO SECTION 642.04(B), THE CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING: SURVEY CONTROL POINTS, REFERENCE POINTS AND BENCHMARKS NOTED ON THE PLANS. THE CONTRACTORS SHALL BE RESPONSIBLE FOR LOCATING AND REFRESHING THE CENTERLINE OF PERMANENT CONSTRUCTION, AND SETTING ALL OTHER CONTROL POINTS AND REFERENCE POINTS REQUIRED FOR CONSTRUCTION AND INSPECTION TO INCLUDE BRIDGE CURVES, CONSTRUCTION REFERENCE LINES (CRL), AND RIGHT-OF-WAY. THE SURVEYOR WILL PROVIDE THE RESIDENT ENGINEER WITH A COMPUTERIZED DISK OF SURVEY DATA. THE SURVEY WILL IDENTIFY AND VERIFY BENCHMARKS SET AND MAINTAIN ADDITIONAL BENCHMARKS WITHIN THE PROJECT UNITS AT A MINIMUM OF 500' AS REQUIRED TO INSURE CONSTRUCTION OF A SMOOTH PROFILE OF MAINLINE TO INSURE SMOOTH TRANSITIONS AT THE BOP, EOP AND BRIDGES AS REQUIRED IN SECTIONS 642.04(C). THE SURVEYOR WILL PROVIDE A COPY OF CHECKED BENCHMARKS TO THE RESIDENT ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO BEGINNING ANY EARTHWORK PAY ITEMS. THE CONTRACTOR SHALL PROVIDE FOR THE RESIDENT ENGINEERS USE A ROVING CABLE FREE INTEGRATED GPS & RTK SYSTEM WITH FIELD CONTROLLER. THE SYSTEM SHALL BE COMPATIBLE WITH THE SURVEY BASE STATION USED BY THE CONTRACTOR. THE CONTRACTOR SHALL MAINTAIN THE BASE STATION DURING WORK HOURS FROM THE BEGINNING OF EARTHWORK ACTIVITIES UNTIL SUBSTANTIAL COMPLETION IS ACHIEVED. THE CONTRACTOR SHALL PROVIDE A ONE WEEK TRAINING COURSE FOR THIS EQUIPMENT FOR UP TO FOUR ODOT INSPECTORS. THIS TRAINING WILL BE CONDUCTED PRIOR TO COMMENCING EARTHWORK ACTIVITIES. AT A MINIMUM TRAINING SHALL CONSIST OF UNIT OPERATION, SETUP, TAKEDOWN, STATION, OFFSET, ELEVATION, PROJECT LINE WORK, TOC/TOS, CALCULATE AREA, AND DISTANCE. CONTRACTOR SHALL ALSO SET UP TWO (2) POLES AT EACH BASE LOCATION TO ALLOW INSPECTION AND CONTRACTOR TO OPERATE UNITS SIMULTANEOUSLY.
(7) TEMPORARY FIBER LOG TO BE USED IN LOCATION AND MANNER APPROVED BY THE ENGINEER.
(8) RIPRAP IS ESTIMATED AT 170 LBS./C.FT.
(9) FIELD OFFICE TO BE EQUIPPED WITH ONE TELECOMMUNICATIONS PHONE LINE FOR AN OPERATIONAL TELEPHONE. IN ADDITION, THE FIELD OFFICE IS TO BE EQUIPPED WITH A HARDWIRED INTERNET LINE FOR USE IN THE FIELD OFFICE, 1 MOBILE WI-FI (MIFI) FOR USE OUTSIDE THE FIELD OFFICE (NEEDS TO WORK AT PROJECT LOCATION), AND SHALL PROVIDE POTABLE DRINKING WATER FOR INSPECTORS. ALL COST ASSOCIATED WITH THESE ITEMS, INCLUDING MONTHLY EXPENSES, SHALL BE INCLUDED IN THE BID PRICE FOR OFFICE.
(10) LOCATION AND EXTENT OF CRACK SEALING TO BE DETERMINED BY THE ENGINEER AFTER COLD MILLING OPERATIONS HAVE BEEN COMPLETED.
AFTER COLD MILLING AND PRIOR TO THE PLACEMENT OF TACK COAT, THE CONTRACTOR SHALL CLEAN AND FILL ANY CRACKS OR JOINTS IN THE ASPHALT PAVEMENT THAT ARE 1/2" OR WIDER. THE CONTRACTOR SHALL REMOVE LOOSE MATERIAL, CLEAN AND TACK THE CRACK, IF NECESSARY, FILL THE CRACK WITH SUPERPAVE TYPE S4 (PG 70-28 OK) AND COMPACT IT THOROUGHLY.
ALL COST ASSOCIATED WITH CRACK SEALING OPERATIONS TO BE INCLUDED IN BID PRICE FOR COLD MILLING PAVEMENT. ANY ASPHALT REQUIRED TO SEAL WIDER CRACKS SHALL BE PAID AT THE BID PRICE FOR "SUPERPAVE TYPE S4 (PG 70-28 OK)".
(11) BID PRICE TO INCLUDE COST FOR ADDITIONAL DEPTH IN SMD. SEE SUMMARY OF DRAINAGE STRUCTURES FOR INFORMATION
(12) CONTRACTOR IS TO SPECIFY TYPE OF STABILIZATION ADDITIVE APPLICATION RATE BASED UPON OHD L-50. COST OF ADDITIVE TO BE INCLUDED IN PRICE BID FOR STABILIZED SUBGRADE.
(13) INCLUDES 2,000 TONS TO BE USED AS DIRECTED BY THE ENGINEER.
(14) INCLUDES 460 TONS FOR MAINTENANCE OF EXISTING SHOULDERS AT THE DISCRETION OF THE ENGINEER.
(15) 18 CY TO BE USED TO TEMPORARY GRADE AND DRAIN STRUCTURES 31, 35, AND 46.
(16) BID PRICE TO INCLUDE COST OF BITUMINOUS BINDER ESTIMATED AT 169 GALS.
(17) BID PRICE TO INCLUDE COST FOR ADDITIONAL DEPTH IN MANHOLE. SEE SUMMARY OF DRAINAGE STRUCTURES FOR INFORMATION.
(18) LOCATION OF STABILIZED CONSTRUCTION EXIT SHALL BE DETERMINED BY THE ENGINEER.
(19) SOLID SLAB SODDING TO BE USED IN LIEU OF DITCH LINER PROTECTION.

GENERAL CONSTRUCTION NOTES

IN ACCORDANCE WITH THE OKLAHOMA UNDERGROUND FACILITIES DAMAGE PREVENTION ACT, THE CONTRACTOR SHALL NOTIFY THE OKLAHOMA ONE-CALL SYSTEM, INC. 48 HOURS PRIOR TO BEGINNING EXCAVATION. OKLAHOMA ONE-CALL SYSTEM, INC. "CALL OKIE" 1-800-522-6543 OR 811.
THIS PROJECT SHALL BE CONSTRUCTED WITHOUT CLOSING THE EXISTING ROAD TO LOCAL AND THROUGH TRAFFIC. SEE STANDARD SPECIFICATIONS FOR MAINTENANCE OF LOCAL AND THROUGH TRAFFIC.
MAINTENANCE OF THROUGH TRAFFIC INCLUDES THE MAINTENANCE OF THE EXISTING ROAD IN CLOSE PROXIMITY TO THE NEW CONSTRUCTION AS SHOWN ON THE PLANS.
THIS PROJECT SHALL BE CONSTRUCTED WITHOUT CLOSING THE EXISTING SECTION LINE ROADS TO LOCAL AND THROUGH TRAFFIC. SEE STANDARD SPECIFICATIONS FOR MAINTENANCE OF LOCAL AND THROUGH TRAFFIC.
FOR PROJECTS THAT INCLUDE WIDENING AND/OR RESURFACING, THE CONTRACTOR SHALL SCHEDULE OPERATIONS TO MINIMIZE POTENTIAL DROP-OFF HAZARDS AND SHALL SUBMIT A SEQUENCE OF CONSTRUCTION OPERATIONS TO THE RESIDENT ENGINEER FOR APPROVAL BEFORE OPERATIONS BEGIN. ANY PORTION OF THE CONSTRUCTION OPERATIONS, SUCH AS SUPERPAVE LAYING OPERATIONS, EXCAVATION FOR PAVEMENT WIDENING, OR EXTENSION OF ROADWAY STRUCTURES, SHALL BE LIMITED TO ONE SIDE AT A TIME, AND THE PROCEDURES OUTLINED IN THE PAVEMENT DROP-OFF TREATMENT STANDARD PDT-2 (LA TEST REVISION) SHALL BE IMPLEMENTED. ONLY THAT AMOUNT OF OPEN TRENCH WILL BE ALLOWED THAT CAN BE SURFACED IN 1 (ONE) DAY'S TIME WITHOUT APPROVAL BY THE ENGINEER. LIGHTS, SIGNS AND BARRICADES SHALL BE MOVED AS WORK PROGRESSES.
ALL TREES, BRUSH, AND OTHER DEBRIS THAT MIGHT INTERFERE WITH THE FLOW OF WATER SHALL BE CLEANED OUT TO THE RIGHT-OF-WAY LINE, AT EACH STRUCTURE AND BRIDGE, IN A MANNER APPROVED BY THE ENGINEER. ALL COST TO BE INCLUDED IN OTHER ITEMS OF WORK.
IN ORDER TO ALLEVIATE DUST CONDITIONS DURING GRADING OPERATIONS AND BEFORE PAVEMENT WORK IS COMPLETED, THE CONTRACTOR SHALL SPRINKLE GRADING AT INTERVALS APPROVED BY THE ENGINEER. ALL COST TO BE INCLUDED IN OTHER ITEMS OF WORK.
THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY RIGHT-OF-WAY FENCE AS REQUIRED. WHEN THE PORTION OF THE PROJECT THAT REQUIRED THIS FENCE IS COMPLETED, THE TEMPORARY FENCE SHALL BE REMOVED, AND PERMANENT RIGHT-OF-WAY FENCING SHALL BE RESTORED OR INSTALLED IN A MANNER APPROVED BY THE ENGINEER. ALL COST OF TEMPORARY FENCING SHALL BE INCLUDED IN OTHER ITEMS OF WORK.
ALL FLOWLINES THAT ARE TO BE FILLED SHALL BE THOROUGHLY TAMPED BEFORE CONSTRUCTION OR EXTENSION OF DRAINAGE STRUCTURES. ALL COST TO BE INCLUDED IN OTHER ITEMS OF WORK.
THE CONTRACTOR SHALL NOT WASTE ANY EXCESS EXCAVATION UNTIL ALL PLANNED EMBANKMENTS AND BACKFILLS ARE COMPLETED. EXCESS UNCLASSIFIED EXCAVATION MATERIAL DETERMINED BY THE ENGINEER TO BE SUITABLE FOR BACKFILL SHALL BE USED TO REDUCE ANY UNCLASSIFIED BORROW NEEDED. COST OF SECOND HANDLING SHALL BE INCLUDED IN OTHER ITEMS OF WORK. ANY REMAINING EXCESS EXCAVATION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND BE DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER.
PRIME COAT SHALL BE APPLIED TO THE SUBGRADE IMMEDIATELY AFTER FINAL COMPACTION AND SHAPING TO RETAIN MOISTURE FOR PROPER CHEMICAL REACTION OF THE SOIL ADDITIVE. THE CONTRACTOR SHALL KEEP THE OPEN TRENCH DRAINED. COST TO BE INCLUDED IN OTHER ITEMS OF WORK.
VEGETATIVE MULCHING: THE VEGETATIVE MULCH SHALL BE ANCHORED IN ACCORDANCE WITH THE "MULCHING TILLER METHOD", AS SPECIFIED IN 233.04B(2) OF THE STANDARD SPECIFICATIONS.
AREAS ON WHICH SALVAGED TOPSOIL IS TO BE REPLACED SHALL HAVE 18-46-0 FERTILIZER APPLIED, AT THE RATE OF 150 POUNDS PER ACRE, JUST PRIOR TO THE REPLACEMENT OF SALVAGED TOPSOIL.
AT THE BEGINNING OF TURFING OPERATIONS, ANY AREAS INCLUDED IN PLANNED QUANTITIES THAT HAVE GROWN A SATISFACTORY VOLUNTEER TURF OF PERENNIAL GRASS, AS DETERMINED BY THE ENGINEER, SHALL BE FERTILIZED AND WATERED AS CALLED FOR ON THE PLANS, BUT SHALL NOT BE SEEDED, SODDED, OR SPRIGGED.
PIPE UNDERDRAIN QUANTITIES ESTIMATED ONLY. LOCATION, IF AND WHERE REQUIRED, TO BE DETERMINED BY THE ENGINEER.
THE CONTRACTOR SHALL REMOVE AND RESET MAILBOXES AS NECESSARY. MAILBOXES ARE TO BE MAINTAINED IN AN UPRIGHT POSITION AND ACCESSIBLE TO MAIL CARRIER'S CAR DURING CONSTRUCTION. ANY DAMAGE TO BOXES OR SUPPORTS SHALL BE REPAIRED BY THE CONTRACTOR. ALL COST TO BE INCLUDED IN OTHER ITEMS OF WORK.
SURFACING OF RETURNS, UNLESS OTHERWISE SHOWN ON THE PLANS, SHALL BE OF THE SAME MATERIAL (BASE AND SURFACE) AS THAT OF THE ABUTTING SHOULDER OF THE MAINLINE. BASE AND SURFACE THICKNESS SHALL BE THE THICKNESS SHOWN ON PLANS.
T.B.S.C. SURFACES SHALL BE SPRINKLED WITH WATER AND ROLLED WITH A PNEUMATIC ROLLER IN A MANNER APPROVED BY THE ENGINEER.
THE USE OF A MATERIAL TRANSFER VEHICLE (MTV) WILL NOT BE REQUIRED FOR THIS PROJECT. EXCESS ASPHALT AT JOINTS AND CRACKS IN EXISTING PAVEMENT SHALL BE REMOVED FLUSH TO TOP OF PAVING IN A MANNER APPROVED BY THE ENGINEER.

SUGGESTED SEQUENCE OF CONSTRUCTION

GENERAL NOTES

THE CONTRACTOR SHALL SEQUENCE CONSTRUCTION TO ENSURE ACCESS TO EXISTING DRIVES IS MAINTAINED DURING ALL CONSTRUCTION OPERATIONS. IF AT ANY TIME ACCESS IS TO BE INTERRUPTED, THEN THE CONTRACTOR SHALL NOTIFY ODOT, THE PROPERTY OWNER, THE CITY OF ALEX, AND ALL EMERGENCY AGENCIES A MINIMUM OF FIVE WORKING DAYS BEFORE OPERATIONS BEGIN. DRIVES AND RETURNS SHALL BE CONSTRUCTED DURING OFF PEAK HOURS OR AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL PROVIDE TEMPORARY DRAINAGE STRUCTURES AS DEPICTED ON THE SUMMARY OF DRAINAGE OR AS REQUIRED THROUGHOUT CONSTRUCTION TO MAINTAIN PROPER DRAINAGE.

SAW CUTS RUNNING PARALLEL TO SH 19 SHALL BE COMPLETED JUST PRIOR TO SUBGRADE STABILIZATION.

THE EDGE DROPOFF MUST BE SHOULDERED UP DURING NON-WORKING HOURS.

THE CONTRACTOR SHALL NOT PLACE MORE REINFORCING FABRIC THAN CAN BE COVERED IN THE SAME DAY.

SOLID SLAB SOD SHALL BE PLACED ON PERMANENT SLOPES TO REDUCE THE AMOUNT OF DISTURBED AREAS ON THE PROJECT IN EACH PHASE OF CONSTRUCTION. VEGETATIVE MULCH SHOULD BE UTILIZED ON TEMPORARY SLOPES THAT WILL REMAIN FOR MORE THAN 14 DAYS.

INCLUDES 460 TONS OF S4 (PG 64-22 OK) FOR MAINTENANCE OF EXISTING SHOULDERS AT THE DISCRETION OF THE ENGINEER.

FOR ADDITIONAL INFORMATION, REFERENCE TRAFFIC CONTROL SHEETS.

PHASE 1: CONSTRUCT SH 19 LT INCIDENTAL, PROPOSED, AND TEMPORARY WIDENINGS TRAFFIC ON EXISTING SH 19

- A) SHIFT TRAFFIC TO THE RT EDGE OF EXISTING SH 19 AND NARROW LANES TO 11' WIDE.
- B) INSTALL TEMPORARY DRAINAGE STRUCTURE T1 AS NEEDED IN ORDER TO DRAIN SH 19 TEMPORARY WIDENING.
- C) CONSTRUCT DRAINAGE STRUCTURE 1.
- D) GRADE, DRAIN, AND PAVE SH 19 LT INCIDENTAL SHOULDER WIDENING FROM STA. 495+19 TO STA. 496+03.
- E) GRADE, DRAIN, AND PAVE THE BASE COURSE LIFTS FOR THE SH 19 LT SHOULDER FROM STA. 496+03 TO STA. 496+61.
- F) GRADE, DRAIN, AND PAVE THE BASE COURSE LIFTS FOR THE SH 19 LT WIDENING FROM STA. 496+61 TO STA. 500+93.
- G) GRADE, DRAIN, AND PAVE SH 19 LT TEMPORARY WIDENING FROM CL SURVEY STA. 500+38 TO STA. 508+20.
- H) GRADE, DRAIN, AND PAVE SH 19 LT TEMPORARY WIDENING FROM CL SURVEY STA. 508+61 TO STA. 513+73.
- I) GRADE, DRAIN, AND PAVE SH 19 LT TEMPORARY WIDENING FROM CL SURVEY STA. 786+86 TO STA. 800+97.
- J) SHIFT TRAFFIC TO THE LT EDGE OF EXISTING SH 19 AND NEWLY CONSTRUCTED TEMPORARY PAVEMENT.

PHASE 2: CONSTRUCT SH 19 REALIGNMENT TRANSITIONS

- A) CONSTRUCT DRAINAGE STRUCTURE 2 BY CONSTRUCTING THE RT HALF TO 1' RT OF CRL. ONCE IN PLACE, COMPLETE GRADING OPERATIONS IN ORDER TO DIVERT WATER FROM THE EXISTING DRAINAGE STRUCTURE AT CL SURVEY STA. 504+00 TO DRAINAGE STRUCTURE 2.
- B) REMOVE LT. TEMPORARY WIDENING FROM CL SURVEY STA. 500+38 TO STA. 508+20. SHIFT TRAFFIC ONTO EXISTING SH 19 THROUGH THESE EXTENTS.
- C) SAWCUT EXISTING DRAINAGE STRUCTURE AT CL SURVEY STA. 510+99 TO 25' LT OF CRL, INSTALL TEMPORARY DRAINAGE STRUCTURE T2 AND CONSTRUCT DRAINAGE STRUCTURE 4 (70' OF RT LIMITS).
- D) SAWCUT EXISTING DRAINAGE STRUCTURE AT CL SURVEY STA. 787+69.9 TO 25' LT OF CRL AND THEN INSTALL TEMPORARY DRAINAGE STRUCTURE T27 AND CONSTRUCT DRAINAGE STRUCTURE 53 (84' OF RT LIMITS).
- E) CONSTRUCT DRAINAGE STRUCTURE 54.
- F) SAWCUT EXISTING DRAINAGE STRUCTURE AT CL SURVEY STA. 792+77.9 TO 24' LT OF CRL LEAVING THE BOTTOM SLAB FROM 19' LT TO 24' LT OF CRL TO CREATE A SPLASH PAD. CONSTRUCT DRAINAGE STRUCTURE 55 (70' OF RT LIMITS).
- G) CONSTRUCT DRAINAGE STRUCTURE 57 BY CONSTRUCTING THE RT HALF TO THE CRL AND THEN BORING THE LT HALF UNDER THE EXISTING ROADWAY (EXCLUDING THE LT END SECTION). ONCE IN PLACE, INSTALL TEMPORARY DRAINAGE STRUCTURE T28 AND COMPLETE GRADING OPERATIONS IN ORDER TO DIVERT WATER FROM THE EXISTING DRAINAGE STRUCTURE AT CL SURVEY STA. 798+13.9 TO DRAINAGE STRUCTURE 57. REMOVE EXISTING DRAINAGE STRUCTURE.
- H) GRADE, DRAIN, AND PAVE THE BASE COURSE LIFTS FOR THE SH 19 RT SHOULDER FROM STA. 496+03 TO STA. 498+61.
- I) GRADE, DRAIN, AND PAVE THE BASE COURSE LIFTS FOR THE SH 19 RT SHOULDER AND PART OF THE RT LANE FROM STA. 498+61 TO STA. 502+47.

SUGGESTED SEQUENCE OF CONSTRUCTION

- J) GRADE, DRAIN, AND PAVE THE BASE COURSE LIFTS FOR THE SH 19 RT SHOULDER, RT LANE, AND PART OF THE LT LANE FROM STA. 502+47 TO STA. 504+76.
- K) GRADE, DRAIN, AND PAVE THE BASE COURSE LIFTS FOR THE SH 19 RT SHOULDER, RT LANE, AND LT LANE FROM STA. 504+76 TO STA. 506+07.
- L) GRADE, DRAIN, AND PAVE SH 19 RT TEMPORARY WIDENING FROM CL SURVEY STA. 498+80 TO STA. 511+18.
- M) CONSTRUCT STRUCTURE 16, 17, 18 (117' OF RT LIMITS) & 19.
- N) GRADE FROM CRL STA. 585+00 TO 600+00 AND STA. 564+00 TO 574+00. UTILIZE EXCESS UNCLASSIFIED EXCAVATION TO GRADE HIGH FILL AREAS FROM CRL STA. 576+68 TO STA. 583+69 AND SECTION LINE ROAD NS 289 TO ALLOW TIME FOR CONSOLIDATION.
- O) CONSTRUCT FIRST PHASE OF BRIDGE "A" AND UTILIZED EXCESS UNCLASSIFIED EXCAVATION TO GRADE HIGH FILL AREA FROM CRL 603+68 TO 606+19 TO ALLOW TIME FOR CONSOLIDATION.
- P) CUT APPROXIMATELY 52' OF THE DOWNSTREAM END OF EXISTING 30" PIPE AT CRL STA. 706+01. CONSTRUCT STRUCTURE T17 FOR TEMPORARY DRAINAGE. BORE STRUCTURE 37 UNDER THE EXISTING ROADWAY AND CONSTRUCT STRUCTURE 38. GRADE THE EXISTING OFFSITE CHANNEL TO MEET THE PROPOSED ROADWAY DITCH AND OPEN THE PROPOSED STRUCTURE TO DRAINAGE. UTILIZE EXCESS UNCLASSIFIED EXCAVATION TO GRADE HIGH FILL AREA FROM CRL 705+22 TO 708+25 TO ALLOW TIME FOR CONSOLIDATION. REMOVE EXISTING INLET, CAP AND PLUG T17 AND EXISTING PIPE WHEN REMOVING EXISTING PAVEMENT.
- Q) GRADE, DRAIN, AND PAVE SH 19 RT SHOULDER, RT LANE, AND LT LANE FROM STA. 506+07 TO STA. 513+00.
- R) GRADE, DRAIN, AND PAVE SH 19 RT SHOULDER, RT LANE, AND LT LANE FROM STA. 789+00 TO STA. 800+10.
- T) GRADE, DRAIN, AND PAVE THE BASE COURSE LIFTS FOR THE SH 19 RT SHOULDER AND PART OF THE RT LANE FROM STA. 800+10 TO STA. 805+00 UTILIZING ONE WAY TRAFFIC DURING DAYTIME OPERATIONS
- U) CONSTRUCT RT DRIVES AT STA. 500+63, 789+16, AND 791+68.
- V) CENTER TRAFFIC ON EXISTING SH 19 LANES AND WIDEN LANES TO 12'.

PHASE 3: CONSTRUCT SH 19 RT SHOULDER, RT LANE, AND LT LANE TRAFFIC ON EXISTING SH 19 & TEMPORARY WIDENINGS

- A) CONSTRUCT FIRST PHASE OF BRIDGES "C", "D", AND "E"
- B) INSTALL TEMPORARY DRAINAGE STRUCTURES T3, T5-T16, T19, T20, AND T22-T26 AS NEEDED IN ORDER TO DRAIN SH 19 RT SHOULDER, RT LANE, AND LT LANE.
- C) CONSTRUCT DRAINAGE STRUCTURES 5, 7, 10, 13, 15, 17, 18 (117' OF RT LIMITS), 19, 20 (90' OF RT LIMITS), 21 (90' OF RT LIMITS), 23, 39 (92' OF RT LIMITS), 47-49, 60, & 62.
- D) CONSTRUCT DRAINAGE STRUCTURE 8 (90' OF RT LIMITS) AND GRADE TO DRAIN TO EXISTING DRAINAGE STRUCTURE AT CL SURVEY 538+13.4.
- E) REMOVE EXISTING DRAINAGE STRUCTURE AT CL SURVEY STA. 554+63.2. SAWCUT EXISTING DRAINAGE STRUCTURE AT CL SURVEY STA. 554+64.7 TO 44' LT OF CRL, AND CONSTRUCT DRAINAGE STRUCTURE 12.
- F) SAWCUT EXISTING DRAINAGE STRUCTURE AT CL SURVEY STA. 631+83.0 TO 31' LT OF CRL AND CONSTRUCT DRAINAGE STRUCTURE 27 (75' OF RT LIMITS). GRADE TO DRAIN FROM EXISTING DRAINAGE STRUCTURE.
- G) SAWCUT EXISTING DRAINAGE STRUCTURE AT CL SURVEY STA. 649+41.1 TO 38' LT OF CRL AND CONSTRUCT DRAINAGE STRUCTURE 28 (92' OF RT LIMITS). GRADE TO DRAIN FROM EXISTING DRAINAGE STRUCTURE.
- H) SAWCUT EXISTING DRAINAGE STRUCTURE AT CL SURVEY STA. 654+16 TO 45' LT OF CRL AND CONSTRUCT DRAINAGE STRUCTURES 29 (84' OF RT LIMITS) AND 30. UTILIZE TEMPORARY SHORING TO CONNECT EXISTING DRAINAGE STRUCTURE TO DRAINAGE STRUCTURE 30.
- I) CONSTRUCT DRAINAGE STRUCTURE 31 (68' OF RT LIMITS) AND FILL WITH CLASS BEDDING C TO ENSURE DRAINAGE.
- J) SAWCUT EXISTING DRAINAGE STRUCTURE AT CL SURVEY STA. 682+89.6 TO 46.5' LT OF CRL AND CONSTRUCT DRAINAGE STRUCTURES 33 (118' OF RT LIMITS) AND 34. GRADE TO DRAIN FROM EXISTING DRAINAGE STRUCTURE.
- K) REMOVE EXISTING DOWNSTREAM HEADWALL FROM STRUCTURE AT CL SURVEY STA. 692+09.2 AND CONSTRUCT DRAINAGE STRUCTURE AND DOWNSTREAM END SECTION OF STRUCTURE 35 (100' OF RT LIMITS). GRADE TO DRAIN FROM EXISTING DRAINAGE STRUCTURE.

SUGGESTED SEQUENCE OF CONSTRUCTION

- L) UTILIZE A 2:1 SLOPE FROM THE EXISTING EDGE OF PAVEMENT RT TO INSTALL TEMPORARY DRAINAGE STRUCTURE T18 AND ALL PIPE FROM STR. 37 FROM STR. T18 TO STR. 38. CONSTRUCT DRAINAGE STRUCTURE 38 TO DOWNSTREAM. INSTALL T17 PIPE TO THE END OF THE EXISTING STRUCTURE AT 706+02.
- M) BORE UNDER THE EXISTING ROADWAY AND PLACE DRAINAGE STRUCTURE 40 (EXCLUDING LT END SECTION). INSTALL TEMPORARY DRAINAGE STRUCTURE T21 AND CONSTRUCT DRAINAGE STRUCTURE 41. GRADE TO DRAIN CHANNEL INTO DRAINAGE STRUCTURE T21. REMOVE EXISTING DRAINAGE STRUCTURE INLET AT STA. 728+23.0.
- N) SAWCUT EXISTING DRAINAGE STRUCTURE AT CL SURVEY STA. 736+05.7 TO 29' LT OF CRL AND CONSTRUCT DRAINAGE STRUCTURE 42 (92' OF RT LIMITS). GRADE TO DRAIN FROM EXISTING DRAINAGE STRUCTURE.
- O) SAWCUT EXISTING DRAINAGE STRUCTURE AT CL SURVEY STA. 753+24.5 TO 25' LT OF CRL AND CONSTRUCT DRAINAGE STRUCTURE 44 (78' OF RT LIMITS). GRADE TO DRAIN FROM EXISTING DRAINAGE STRUCTURE.
- P) SAWCUT EXISTING DRAINAGE STRUCTURE AT STA. 759+75.8 TO 29' LT OF CRL AND CONSTRUCT DRAINAGE STRUCTURE 45 (68' OF RT LIMITS). GRADE TO DRAIN TO EXISTING DRAINAGE STRUCTURE.
- Q) SAWCUT EXISTING DRAINAGE STRUCTURE AT CL SURVEY STA. 779+61.6 TO 24' LT OF CRL AND CONSTRUCT DRAINAGE STRUCTURE 46 (76' OF RT LIMITS). GRADE TO DRAIN TO EXISTING DRAINAGE STRUCTURE. FILL PROPOSED DRAINAGE STRUCTURE WITH CLASS BEDDING C TO ENSURE DRAINAGE.
- R) SAWCUT EXISTING DRAINAGE STRUCTURE AT CL SURVEY STA. 787+69.9 TO 27' LT OF CRL. CONSTRUCT DRAINAGE STRUCTURE 52 (88' OF RT LIMITS). GRADE TO DRAIN TO EXISTING DRAINAGE STRUCTURE.
- S) GRADE, DRAIN AND PAVE SH 19 RT SHOULDER, RT LANE, AND LT LANE FROM STA. 513+00 TO STA. 789+00.
- T) CONSTRUCT RT SECTION LINE ROADS AND DRIVES.
- U) SHIFT TRAFFIC TO THE RT EDGE OF PROPOSED SH 19.

PHASE 4: CONSTRUCT SH 19 LT SHOULDER TRAFFIC ON PROPOSED SH 19

- A) REMOVE SPAN BRIDGE AND BRIDGE "B".
- B) COMPLETE BRIDGES "A", "C", "D", AND "E".
- C) REMOVE ALL TEMPORARY DRAINAGE STRUCTURES ONCE THEY ARE NO LONGER NEEDED FOR DRAINAGE.
- D) CONSTRUCT DRAINAGE STRUCTURES 2 (REMAINING HALF), 3, 4 (REMAINING HALF), 8 (REMAINING HALF), 9, 14, 16, 18 (REMAINING HALF), 20-21 (REMAINING HALF), 22, 24-26, 27-28 (REMAINING HALF), 32, 33 (REMAINING HALF), 35 (REMAINING HALF), 37 (REMAINING HALF), 39-40 (REMAINING HALF), 42 (REMAINING HALF), 43, 45 (REMAINING HALF), 50-51, 52-53 (REMAINING HALF), 55 (REMAINING HALF), 56, 57 (REMAINING HALF), 58-59, AND 61.
- E) REMOVE SH 19 RT TEMPORARY WIDENING FROM CL SURVEY STA. 498+80 TO STA. 511+18.
- F) REMOVE EXISTING DRAINAGE STRUCTURE AT CL SURVEY STA. 554+64.7. PLUG THE HOLE IN DRAINAGE STRUCTURE 12. CONSTRUCT DRAINAGE STRUCTURE 11.
- G) COMPLETE DRAINAGE STRUCTURE 29 UTILIZING TEMPORARY SHORING.
- H) COMPLETE DRAINAGE STRUCTURE 31 AND 46. REMOVE ANY REMAINING CLASS BEDDING C FROM STRUCTURES.
- I) REMOVE EXISTING SH 19 PAVEMENT AND GRADE, DRAIN, AND PAVE THE BASE COURSE LIFTS FOR THE REMAINING SH 19 LT LANE AND LT SHOULDER FROM STA. 501+00 TO STA. 792+99.
- J) GRADE, DRAIN, AND PAVE LT SECTION LINES AND DRIVES.
- K) AS NEEDED TO COMPLETE PHASE 5, SHIFT TRAFFIC AWAY FROM CONSTRUCTION AND UTILIZE FLAGMEN TO REDUCE TRAFFIC TO ONE LANE.

PHASE 5: CONSTRUCT REMAINING ITEMS FOR SH 19 REALIGNMENT TRANSITIONS TRAFFIC ON PROPOSED SH 19

- A) COLD MILL SH 19 EXISTING PAVEMENT FROM STA. 496+03 TO STA. 501+00.
- B) PAVE SURFACE COURSE LIFT FOR SH 19 FROM STA. 496+03 TO STA. 506+07.
- C) GRADE, DRAIN, AND PAVE THE BASE COURSE LIFTS FOR PART OF THE SH 19 LT SHOULDER FROM STA. 792+99 TO STA. 805+00.
- D) COLD MILL SH 19 EXISTING PAVEMENT FROM STA. 800+10 TO STA. 805+00.
- E) PAVE SURFACE COURSE LIFT FOR SH 19 FROM STA. 800+10 TO STA. 805+00.
- F) COMPLETE FINISHING OPERATIONS.
- G) OPEN COMPLETED FACILITY TO TRAFFIC.

SUGGESTED SEQUENCE OF CONSTRUCTION

SUMMARY OF SURFACING

STATION EXTENTS	AGGREGATE BASE TYPE A PLANT MIXED 303(A)	STABILIZED SUBGRADE 307(K)	SEPARATOR FABRIC 325	TBSC TYPE E 402(E)	TACK COAT 407(B)	PRIME COAT 408	FABRIC REINFORCEMENT 409(A)	SUPERPAVE. TYPE S3 (PG 70-28 OK) 411(B)	SUPERPAVE. TYPE S3 (PG 64-22 OK) 411(B)	SUPERPAVE. TYPE S4 (PG 70-28 OK) 411(C)	SUPERPAVE. TYPE S4 (PG 64-22 OK) 411(C)	COLD MILLING PAVEMENT 412
	CY	SY	SY	TON	GAL	GAL	SY	TON	TON	TON	TON	SY
SH 19												
STA. 495+19 TO STA. 507+00	821.57	4,951.57	4,301.69	756.10	740.21	2,494.28	530.91	226.92	962.67	325.74	224.68	2,007.46
STA. 507+00 TO STA. 522+00	1,708.46	8,467.80	8,467.80	995.83	504.25	4,984.86		672.03	1,809.08	448.11	301.92	
STA. 522+00 TO STA. 537+00	1,708.46	8,467.80	8,467.80	995.83	1,014.89	4,984.85		672.03	1,809.08	448.11	301.92	
STA. 537+00 TO STA. 552+00	1,708.46	8,467.80	8,467.80	995.83	1,014.89	4,984.85		672.03	1,809.08	448.11	301.92	
STA. 552+00 TO STA. 567+00	1,708.46	8,467.80	8,467.80	995.83	1,014.89	4,984.86		672.03	1,809.08	448.11	301.92	
STA. 567+00 TO STA. 582+00	1,708.46	8,467.80	8,467.80	995.83	1,014.89	4,984.86		672.03	1,809.08	448.11	301.92	
STA. 582+00 TO STA. 597+00	1,708.46	8,467.80	8,467.80	995.83	1,014.89	4,984.86		672.03	1,809.08	448.11	301.92	
STA. 597+00 TO STA. 612+00	1,708.46	8,467.80	8,467.80	995.83	1,014.89	4,984.86		672.03	1,809.08	448.11	301.92	
STA. 612+00 TO STA. 627+00	1,708.46	8,467.80	8,467.80	995.83	1,014.89	4,984.86		672.03	1,809.08	448.11	301.92	
STA. 627+00 TO STA. 642+00	1,708.46	8,467.80	8,467.80	995.83	1,014.89	4,984.86		672.03	1,809.08	448.11	301.92	
STA. 642+00 TO STA. 657+00	1,708.46	8,467.80	8,467.80	995.83	1,014.89	4,984.86		672.03	1,809.08	448.11	301.92	
STA. 657+00 TO STA. 672+00	1,763.66	8,716.20	8,716.20	995.85	1,052.14	5,133.90		713.75	1,857.78	475.93	301.92	
STA. 672+00 TO STA. 687+00	2,439.31	11,756.51	11,756.51	995.94	1,508.16	6,958.07		1,224.48	2,453.79	816.48	301.95	
STA. 687+00 TO STA. 702+00	1,784.09	8,808.25	8,808.25	996.03	1,065.90	5,189.11		729.09	1,875.85	486.16	301.98	
STA. 702+00 TO STA. 717+00	2,009.08	9,820.75	9,820.75	996.15	1,217.75	5,776.27		899.10	2,074.35	599.52	302.01	
STA. 717+00 TO STA. 732+00	2,126.28	10,348.02	10,348.02	996.01	1,296.87	6,112.97		987.79	2,177.69	658.66	301.97	
STA. 732+00 TO STA. 747+00	1,708.46	8,467.80	8,467.80	995.83	1,014.89	4,984.86		672.03	1,809.08	448.11	301.92	
STA. 747+00 TO STA. 762+00	1,708.46	8,467.80	8,467.80	995.83	1,014.89	4,984.86		672.03	1,809.08	448.11	301.92	
STA. 762+00 TO STA. 777+00	1,708.46	8,467.80	8,467.80	995.83	1,014.89	4,984.86		672.03	1,809.08	448.11	301.92	
STA. 777+00 TO STA. 792+00	1,708.46	8,467.80	8,467.80	995.83	504.25	4,984.86		672.03	1,809.08	448.11	301.92	
STA. 792+00 TO STA. 805+00	1,181.44	5,844.87	5,853.93	698.28	445.86	3,374.76	233.45	466.85	1,267.27	924.04	207.46	895.54
EW 142 W												
STA. 8+50 TO STA. 9+80		845.65			112.57	295.98			190.76		73.51	
EW 142 E												
STA. 10+20 TO STA. 13+50		1,426.12			183.92	499.14			312.41		134.67	
NS 289												
STA. 14+00 TO STA. 19+80		2,183.55			1,534.70	764.24			470.12		201.82	
STA. 20+20 TO STA. 23+50		1,376.12			176.19	481.64			299.45		128.88	
EW 143												
STA. 27+00 TO STA. 29+80		1,280.92			166.18	448.32			282.15		121.78	
NS 290												
STA. 34+50 TO STA. 39+80		1,861.61			232.16	651.56			395.37		169.17	
STA. 40+20 TO STA. 46+00		1,972.05			244.64	690.22			416.81		178.13	
NS 291												
STA. 45+50 TO STA. 49+68		1,723.48			220.99	603.22			375.53		161.68	
STA. 50+32 TO STA. 51+70		908.14			122.06	317.85			206.69		89.88	
NS 292												
STA. 57+50 TO STA. 59+80		1,118.84			145.90	391.59			247.61		106.95	
STA. 60+20 TO STA. 64+00		1,604.34			206.35	561.52			350.57		151.03	
TEMPORARY WIDENING												
STA. 60+20 TO STA. 64+00		448.69			53.79				122.92		38.82	
STA. 787+15 TO STA. 792+00		316.70			34.67				79.97		24.61	
STA. 792+00 TO STA. 801+26		758.42			89.20				204.24		63.92	
TOTALS	36,043.87	196,620.00	178,154.55	20,375.98	24,037.39	110,532.66	764.36	14,656.40	41,951.12	10,560.07	7,813.70	2,903.00

SUMMARY SHEET

SUMMARY OF REMOVAL QUANTITIES

STATION EXTENTS	REMOVAL OF FENCE	REMOVAL OF CURB 619(B)	REMOVAL OF CONCRETE PAVEMENT 619(B)	REMOVAL OF ASPHALT PAVEMENT 619(B)	REMOVAL OF CONCRETE DRIVEWAY 619(B)	REMOVAL OF ASPHALT DRIVEWAY 619(B)	REMOVAL OF GUARDRAIL 619(B)	REMOVAL OF SIDEWALK 619(B)	SAWING PAVEMENT 619(C)
	LF	LF	SY	SY	SY	SY	LF	LF	LF
SH 19									
STA. 494+00 TO STA. 522+00	4,076			6,545.94		210.46		16.93	1,032
STA. 522+00 TO STA. 552+00	2,621			9,327.51	358.45				
STA. 552+00 TO STA. 582+00	4,026			8,852.19		423.78			15
STA. 582+00 TO STA. 612+00	3,817			8,684.87			621		
STA. 612+00 TO STA. 642+00	3,007			9,117.97			1,354		
STA. 642+00 TO STA. 672+00	3,284			9,673.36					
STA. 672+00 TO STA. 702+00	3,509			9,395.29		568.20			11
STA. 702+00 TO STA. 732+00	2,945			9,291.83			406		
STA. 732+00 TO STA. 762+00	2,704			9,344.17			779		
STA. 762+00 TO STA. 792+00	3,592	60	128.51	8,988.24	386.93		618		
STA. 792+00 TO STA. 806+00	1,828		310.71	3,308.75		213.09			583
CRL EW 142									
STA. 7+00 TO STA. 14+00	1,232			1,695.36					39
CRL NS 289									
STA. 13+00 TO STA. 24+00	1,474		9.21	1,869.95					34
CRL EW 143									
STA. 26+00 TO STA. 30+00	812			1,183.96					35
CRL NS 290									
STA. 33+00 TO STA. 47+00	1,779			823.69		61.67			14
CRL 291									
STA. 44+00 TO STA. 53+00	1,170			1,058.25					19
CRL 292									
STA. 57+00 TO STA. 65+00	1,082			1,689.41					53
TOTALS	42,958	60	448.43	100,850.74	358.45	1,864.13	3,778	16.93	1,835

◆ FOR INFORMATION PURPOSES ONLY. COST TO BE INCLUDED IN PRICE BID FOR REMOVAL OF STRUCTURES AND OBSTRUCTIONS.
NOTE: ITEMS TO BE REMOVED MAY OR MAY NOT BE PRESENT IN ANY SPECIFIED LOCATION.

SUMMARY OF MAILBOX

STATION AND LOCATION	TYPE	MAILBOX INSTALLATION - SINGLE 629(A)	MAILBOX INSTALLATION - MULTIPLE 629(B)	REMOVAL OF MAILBOX INSTALLATION 629(C)	MAILBOX 629(E)
		EA	EA	EA	EA
SH 19					
STA. 514+96 - RT.	1	1		1	1
STA. 516+84 - LT.				1	
STA. 529+61 - RT.	1	1		1	1
STA. 565+33 - RT.	1		1	3	3
STA. 581+97 - RT.	1	1		1	1
STA. 627+00 - LT.	1		1	2	2
STA. 672+87 - LT.				1	
STA. 791+93 - RT.	1	1		1	1
STA. 792+63 - LT.	1	1		1	1
CRL NS 292					
STA. 58+70 - RT.	1	1		1	1
TOTALS		6	2	13	11

SUMMARY OF FENCE

STATION EXTENTS AND LOCATION	FENCE - STYLE WWF 624(A)	GATES- STYLE WWF (4.5' H X 12' LG) 624(B)	FENCE - STYLE SWF (5BW) 624(C)	FENCE - STYLE SWF (6BW) 624(C)
	LF	EA	LF	LF
SH 19				
STA. 494+00 TO STA. 494+26 - LT.			26	
STA. 494+79 TO STA. 495+06 - LT.			38	
STA. 495+44 TO STA. 504+96 - LT.			984	
STA. 496+02 TO STA. 521+63 - RT.			2,593	
STA. 531+60 TO STA. 544+19 - RT.			1,358	
STA. 576+78 TO STA. 581+30 - LT.			578	
STA. 581+28 TO STA. 606+20 - RT.			2,536	
STA. 581+54 TO STA. 584+08 - RT.			406	
STA. 581+90 TO STA. 582+39 - LT.			51	
STA. 582+40 TO STA. 583+44 - RT.			125	
STA. 603+03 TO STA. 604+91 - LT.			197	
STA. 605+15 TO STA. 608+36 - LT.			385	
STA. 607+26 TO STA. 614+55 - RT.			785	
STA. 613+22 TO STA. 614+13 - LT.			62	
STA. 615+06 TO STA. 618+56 - RT.			398	
STA. 617+36 TO STA. 618+55 - LT.			93	
STA. 619+46 TO STA. 624+26 - RT.			648	
STA. 623+44 TO STA. 625+41 - RT.			239	
STA. 625+50 TO STA. 631+40 - RT.			674	
STA. 631+70 TO STA. 653+85 - RT.			2,421	
STA. 631+92 TO STA. 632+01 - LT.			56	
STA. 632+31 TO STA. 632+95 - LT.			84	
STA. 645+76 TO STA. 647+37 - LT.			250	
STA. 646+15 TO STA. 651+43 - LT.			624	
STA. 651+41 TO STA. 686+42 - RT.	3,743			
STA. 663+00 - RT.		2		
STA. 670+65 - RT.		1		
STA. 686+42 TO STA. 720+55 - RT.			3,538	
STA. 716+87 TO STA. 718+54 - LT.			262	
STA. 719+87 TO STA. 750+06 - RT.			3,364	
STA. 778+55 TO STA. 782+90 - LT.				519
STA. 781+76 TO STA. 783+50 - RT.				362
STA. 785+54 TO STA. 788+84 - RT.				332
STA. 793+19 TO STA. 800+20 - RT.			701	
STA. 797+35 TO STA. 801+10 - LT.			376	
STA. 800+20 TO STA. 802+57 - RT.	236			
TOTALS	3,979	3	23,852	1,213

SUMMARY SHEET

SUMMARY OF EROSION CONTROL				
STATION EXTENTS	LOCATION AND DESCRIPTION	SOLID SLAB SODDING 230(A)	TYPE I-A PLAIN RIPRAP 601(B)	TYPE I-A FILTER BLANKET 601(C)
		SY	TON	TON
SH 19				
STA. 494+00 TO STA. 507+00	EDGE OF ROADWAY TO TOES LT. & RT.	9,463.80		
STA. 504+25	STR. 2 AROUND OUTLET RT.		26.75	5.50
STA. 507+00 TO STA. 522+00	EDGE OF ROADWAY TO TOES LT. & RT.	14,546.62		
STA. 511+03	STR. 4 AROUND OUTLET RT.		26.75	5.50
STA. 522+00 TO STA. 537+00	EDGE OF ROADWAY TO TOES LT. & RT.	18,711.77		
STA. 537+00 TO STA. 552+00	EDGE OF ROADWAY TO TOES LT. & RT.	17,268.31		
STA. 538+32	STR. 9 AROUND OUTLET LT.		14.31	2.95
STA. 544+30	STR. 10 AROUND OUTLET RT.		1.80	0.56
STA. 552+00 TO STA. 567+00	EDGE OF ROADWAY TO TOES LT. & RT.	16,983.77		
STA. 555+73	STR. 12 AROUND OUTLET RT.		4.71	1.45
STA. 567+00 TO STA. 582+00	EDGE OF ROADWAY TO TOES LT. & RT.	16,087.23		
STA. 567+87	STR. 14 AROUND OUTLET LT.		2.07	0.64
STA. 581+60	STR. 18 AROUND OUTLET LT.		272.65	56.11
STA. 581+48	STR. 19 AROUND OUTLET RT.		2.68	0.83
STA. 582+00 TO STA. 597+00	EDGE OF ROADWAY TO TOES LT. & RT.	20,767.72		
STA. 593+56	STR. 20 AROUND OUTLET LT.		4.35	1.34
STA. 597+00 TO STA. 612+00	EDGE OF ROADWAY TO TOES LT. & RT.	16,781.17		
STA. 606+40	BRIDGE "A" ACROSS OUTLET LT.		179.97	55.56
STA. 612+00 TO STA. 627+00	EDGE OF ROADWAY TO TOES LT. & RT.	14,326.62		
STA. 613+84	STR. 21 AROUND OUTLET LT.		59.28	18.30
STA. 618+06	BRIDGE "C" ACROSS OUTLET LT.		152.57	47.10
STA. 627+00 TO STA. 642+00	EDGE OF ROADWAY TO TOES LT. & RT.	18,155.66		
STA. 631+55	STR. 27 AROUND OUTLET RT.		81.46	16.76
STA. 642+00 TO STA. 657+00	EDGE OF ROADWAY TO TOES LT. & RT.	16,361.09		
STA. 649+92	STR. 28 AROUND OUTLET RT.		1.76	0.54
STA. 653+61	STR. 30 AROUND OUTLET RT.		3.46	1.07
STA. 657+00 TO STA. 672+00	EDGE OF ROADWAY TO TOES LT. & RT.	15,924.10		
STA. 672+00 TO STA. 687+00	EDGE OF ROADWAY TO TOES LT. & RT.	18,725.81		
STA. 682+25	STR. 32 AROUND OUTLET LT.		2.00	0.62
STA. 684+91	STR. 34 AROUND OUTLET RT.		3.88	1.20
STA. 687+00 TO STA. 702+00	EDGE OF ROADWAY TO TOES LT. & RT.	17,297.92		
STA. 702+00 TO STA. 717+00	EDGE OF ROADWAY TO TOES LT. & RT.	15,011.95		
STA. 706+80	STR. 38 AROUND OUTLET RT.		10.38	2.14
STA. 716+87	STR. 39 AROUND OUTLET RT.		3.46	1.07
STA. 717+00 TO STA. 732+00	EDGE OF ROADWAY TO TOES LT. & RT.	13,626.97		
STA. 729+46	STR. 41 AROUND OUTLET RT.		3.46	1.07
STA. 732+00 TO STA. 747+00	EDGE OF ROADWAY TO TOES LT. & RT.	13,840.63		
STA. 736+34	STR. 42 AROUND OUTLET RT.		3.07	0.95
STA. 747+00 TO STA. 762+00	EDGE OF ROADWAY TO TOES LT. & RT.	15,452.17		
STA. 757+94	BRIDGE "D" ACROSS OUTLET LT.		214.35	66.17
STA. 760+04	STR. 45 AROUND OUTLET LT.		50.64	10.42
STA. 762+00 TO STA. 777+00	EDGE OF ROADWAY TO TOES LT. & RT.	16,455.95		
STA. 766+21	BRIDGE "E" ACROSS OUTLET LT.		138.41	42.73
STA. 777+00 TO STA. 792+00	EDGE OF ROADWAY TO TOES LT. & RT.	14,318.69		
STA. 788+12	STR. 52 AROUND OUTLET LT.		3.28	1.01
STA. 792+00 TO STA. 805+00	EDGE OF ROADWAY TO TOES LT. & RT.	11,797.70		

SUMMARY OF EROSION CONTROL				
STATION EXTENTS	LOCATION AND DESCRIPTION	SOLID SLAB SODDING 230(A)	TYPE I-A PLAIN RIPRAP 601(B)	TYPE I-A FILTER BLANKET 601(C)
		SY	TON	TON
CRL EW 142 W				
STA. 7+50 TO STA. 9+80	EDGE OF ROADWAY TO TOES LT. & RT.	818.23		
CRL EW 142 E				
STA. 10+20 TO STA. 14+00	EDGE OF ROADWAY TO TOES LT. & RT.	2,561.09		
CRL NS 289				
STA. 13+50 TO STA. 19+80	EDGE OF ROADWAY TO TOES LT. & RT.	3,399.65		
STA. 17+88	STR. 17 AROUND OUTLET RT.		229.08	47.14
STA. 20+20 TO STA. 23+75	EDGE OF ROADWAY TO TOES LT. & RT.	1,125.68		
STA. 21+37	STR. 16 AROUND OUTLET RT.		4.79	1.48
CRL EW 143				
STA. 26+50 TO STA. 29+80	EDGE OF ROADWAY TO TOES LT. & RT.	574.87		
CRL NS 290				
STA. 34+50 TO STA. 39+80	EDGE OF ROADWAY TO TOES LT. & RT.	2,250.63		
STA. 40+20 TO STA. 46+00	EDGE OF ROADWAY TO TOES LT. & RT.	2,990.25		
CRL NS 291				
STA. 45+50 TO STA. 49+68	EDGE OF ROADWAY TO TOES LT. & RT.	1,879.39		
STA. 50+32 TO STA. 51+70	EDGE OF ROADWAY TO TOES LT. & RT.	1,020.44		
CRL NS 292				
STA. 57+50 TO STA. 59+80	EDGE OF ROADWAY TO TOES LT. & RT.	1,109.11		
STA. 60+20 TO STA. 64+00	EDGE OF ROADWAY TO TOES LT. & RT.	1,708.54		
TOTALS		351,343.53	1,501.36	390.20

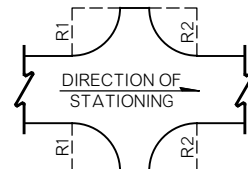
SUMMARY OF DITCH TREATMENT				
STATION EXTENTS AND LOCATION	DESIGN NO.	BOTTOM WIDTH	CURTAIN WALL	CLASS C CONCRETE 509(D)
		FT	EA	CY
SH 19				
STA. 494+85 TO STA. 496+75 - LT.	2A	8	3	34.28
STA. 510+00 TO STA. 521+00 - LT.	2A	8	12	197.22
STA. 513+42 TO STA. 514+26 - RT.	2A	4	2	11.06
STA. 515+06 TO STA. 521+34 - RT.	2A	4	8	81.44
STA. 542+00 TO STA. 544+00 - LT.	2A	8	3	36.04
STA. 546+34 TO STA. 546+78 - LT.	2A	8	2	8.24
STA. 547+70 TO STA. 548+19 - LT.	2A	8	2	9.12
STA. 565+96 TO STA. 573+33 - RT.	2A	8	9	132.36
STA. 567+87 TO STA. 578+16 - LT.	2A	8	12	184.67
STA. 579+52 TO STA. 580+14 - RT.	2A	8	2	11.42
STA. 580+72 TO STA. 581+48 - RT.	2A	8	2	13.89
STA. 582+52 TO STA. 587+00 - RT.	2A	8	6	80.58
STA. 584+80 TO STA. 587+00 - LT.	2A	8	4	39.81
STA. 596+00 TO STA. 603+41 - LT.	2A	8	9	133.06
STA. 596+00 TO STA. 601+50 - RT.	2A	8	7	98.84
STA. 618+50 TO STA. 622+47 - LT.	2A	8	5	71.33
STA. 623+24 TO STA. 626+06 - LT.	2A	8	4	50.77
STA. 631+70 TO STA. 645+50 - RT.	2A	8	15	247.41
STA. 632+31 TO STA. 645+50 - LT.	2A	8	15	236.62
STA. 654+25 TO STA. 658+50 - LT.	2A	8	6	76.51
STA. 678+50 TO STA. 687+50 - RT.	2A	8	10	161.40
STA. 678+50 TO STA. 681+20 - LT.	2A	8	4	48.65
STA. 682+25 TO STA. 683+50 - LT.	2A	8	3	22.78
STA. 688+75 TO STA. 695+50 - LT.	2A	8	8	121.17
STA. 702+00 TO STA. 708+50 - LT.	2A	8	8	116.75
STA. 724+00 TO STA. 729+00 - LT.	2A	8	6	89.77
STA. 732+50 TO STA. 737+75 - RT.	2A	8	7	94.42
STA. 733+50 TO STA. 737+75 - LT.	2A	8	6	76.51
STA. 739+63 TO STA. 750+50 - LT.	2A	8	12	194.92
STA. 763+00 TO STA. 765+81 - LT.	2A	8	4	50.59
STA. 763+00 TO STA. 765+81 - RT.	2A	8	4	50.59
SEC. LINE EW 142 W				
STA. 8+50 TO STA. 9+34 - LT.	2A	4	2	11.06
STA. 8+50 TO STA. 9+46 - RT.	2A	4	2	12.59
SEC. LINE EW 142 E				
STA. 10+55 TO STA. 13+50 - LT.	2A	4	4	38.30
STA. 11+66 TO STA. 13+50 - RT.	2A	4	3	23.98
SEC. LINE NS 290				
STA. 35+87 TO STA. 37+25 - LT.	2A	4	3	18.12
STA. 35+87 TO STA. 36+78 - RT.	2A	4	2	11.95
STA. 40+50 TO STA. 41+60 - RT.	2A	4	3	14.55
STA. 40+83 TO STA. 42+00 - LT.	2A	4	3	15.44
STA. 43+75 TO STA. 46+00 - RT.	2A	4	4	29.38
STA. 44+23 TO STA. 46+00 - LT.	2A	4	3	23.09
SEC. LINE NS 291				
STA. 50+56 TO STA. 51+70 - RT.	2A	4	3	15.06
STA. 50+74 TO STA. 51+70 - LT.	2A	4	2	12.59
SEC. LINE NS 292				
STA. 57+50 TO STA. 59+50 - RT.	2A	4	3	26.02
STA. 58+00 TO STA. 58+68 - LT.	2A	4	2	9.02
STA. 59+25 TO STA. 59+52 - LT.	2A	4	2	3.80
TOTALS		241		3,047.17

SUMMARY SHEET

SUMMARY OF DRIVES							
STATION AND LOCATION	WIDTH x LENGTH	RADII (R1)	RADII (R2)	3" TBSC TYPEE 402(E)	TACK COAT 407(B)	(2-2.5") 5" SUPERPAVE, TYPE S3 (PG 64-22 OK) 411(B)	2" SUPERPAVE, TYPE S4 (PG 64-22 OK) 411(C)
				TON	GAL	TON	TON
SH 19							
STA. 500+63 - RT.	14' x 53'	15'	15'	43.92	5.33	10.10	3.86
STA. 505+99 - LT.	16' x 63'	15'	15'	55.67	5.84	11.06	4.24
STA. 514+75 - RT.	12' x 115'	15'	15'	79.47	25.87	49.09	18.67
STA. 522+08 - RT.	16' x 77'	15'	15'	95.83	28.15	53.11	20.57
STA. 528+06 - LT.	12' x 95'	15'	15'	45.60	21.63	41.06	15.61
STA. 529+40 - RT.	12' x 120'	15'	15'	115.63	4.84	9.19	3.49
STA. 565+56 - RT.	16' x 69'	15'	15'	91.79	20.77	39.28	15.10
STA. 567+04 - LT.	12' x 95'	15'	15'	64.80	4.84	9.19	3.49
STA. 567+50 - LT.	12' x 95'	15'	15'	64.80	4.84	9.19	3.49
STA. 573+60 - RT.	12' x 62'	15'	15'	75.84	4.84	9.19	3.49
STA. 582+18 - RT.	12' x 154'	15'	15'	108.48	34.02	64.57	24.55
STA. 603+86 - LT.	12' x 185'	15'	15'	129.60	4.84	9.19	3.49
STA. 617+16 - LT.	12' x 95'	15'	15'	65.09	4.84	9.19	3.49
STA. 622+90 - LT.	12' x 95'	15'	15'	64.69	4.84	9.19	3.49
STA. 626+40 - LT.	12' x 95'	15'	15'	45.60	21.63	41.06	15.61
STA. 627+21 - LT.	12' x 99'	15'	15'	47.19	22.33	42.38	16.11
STA. 629+24 - LT.	16' x 95'	15'	15'	60.74	27.97	52.88	20.34
STA. 663+00 - RT.	24' x 75'	15'	15'	140.43	32.39	61.03	23.79
STA. 670+65 - RT.	12' x 75'	15'	15'	83.77	4.84	9.19	3.49
STA. 681+65 - LT.	30' x 81'	60'	60'	97.20	67.39	126.55	49.72
STA. 688+75 - LT.	16' x 96'	15'	15'	46.30	28.43	53.82	20.70
STA. 690+18 - RT.	12' x 210'	25'	25'	134.65	48.69	92.36	35.18
STA. 701+00 - RT.	16' x 65'	15'	15'	86.97	19.66	37.18	14.32
STA. 709+34 - RT.	30' x 79'	25'	25'	168.02	44.85	84.34	33.05
STA. 739+30 - LT.	12' x 94'	15'	15'	45.30	21.35	40.51	15.40
STA. 783+46 - LT.	12' x 85'	15'	15'	40.80	19.54	37.08	14.10
STA. 783+73 - RT.	12' x 55'	15'	15'	60.61	4.84	9.19	3.49
STA. 784+56 - RT.	12' x 55'	15'	15'	51.07	13.24	25.12	9.55
STA. 785+18 - LT.	16' x 85'	15'	15'	54.39	25.20	47.64	18.33
STA. 787+50 - LT.	16' x 92'	15'	15'	58.88	27.14	51.31	19.74
STA. 789+16 - RT.	12' x 89'	15'	15'	67.22	20.38	38.67	14.70
STA. 791+68 - RT.	20' x 93'	15'	15'	109.03	34.00	64.15	24.85
STA. 792+42 - LT.	12' x 118'	15'	15'	56.36	26.34	50.01	19.01
STA. 795+64 - LT.	12' x 75'	25'	25'	48.00	9.86	18.65	7.16
STA. 801+26 - LT.	12' x 67'	15'	15'	44.82	4.84	9.19	3.49
STA. 801+90 - LT.	12' x 67'	15'	15'	31.92	15.66	29.78	11.32
STA. 804+20 - LT.	12' x 92'	15'	15'	43.92	20.90	39.66	15.08
EW 143							
STA. 28+90 - RT.	16' x 101'	15'	15'	56.32	27.78	52.53	20.20
NS 290							
STA. 35+00 - RT.	14' x 45'	15'	15'	25.34	12.70	24.05	9.20
STA. 44+00 - LT.	14' x 35'	15'	15'	19.71	10.22	19.35	7.40
NS 292							
STA. 58+95 - LT.	14' x 45'	15'	15'	25.48	12.76	24.17	9.25
TOTALS				2,851.25	800.42	1,514.45	581.61

● TBSC QUANTITIES ARE FOR TEMPORARY DRIVES (2 APPLICATIONS) UNLESS OTHERWISE NOTED ON PLANS

REFER TO 2019 ODOT ROADWAY STANDARD: RDI-4-0



SUMMARY OF EARTHWORK QUANTITIES						
LOCATION	STATION EXTENTS	PHASE	UNCLASSIFIED EXCAVATION 202(A)	FILL +15%	EXCESS EXCAVATION	UNCLASSIFIED BORROW 202(D)
			CY	CY	CY	CY
TEMP WIDENING LT.	STA. 500+38.00 TO STA. 508+20.00	1	22	865	0	843
TEMP WIDENING LT.	STA. 508+61.00 TO STA. 513+73.00	1	3	646	0	643
TEMP WIDENING LT.	STA. 786+86.00 TO STA. 800+97.00	1	41	1,800	0	1,759
SH 19	STA. 495+19.00 TO STA. 800+97.00	1	11,614	396	11,218	
SUB TOTAL BALANCE			11,680	3,707	7,973	0
TEMP WIDENING RT.	STA. 852+45.46 TO STA. 864+16.23	2	417	1,284	0	867
SH 19	STA. 805+00.00 TO STA. 938+92.00	2	11,411	22,262	0	10,851
TEMP WIDENING REMOVAL RT.		2	1,116		1,116	
SUB TOTAL BALANCE			24,624	27,253	0	2,629
SH 19	STA. 513+00.00 TO STA. 789+00.00	3	187,776	253,245	0	65,469
EW 142	STA. 7+50.00 TO STA. 9+80.00	3	941	43	898	
NS 289	STA. 13+50.00 TO STA. 19+80.00	3	1,592	7,447	0	5,855
EW 143	STA. 26+50.00 TO STA. 29+80.00	3	34	117	0	83
NS 290	STA. 33+80.00 TO STA. 39+80.00	3	426	4,662	0	4,236
NS 291	STA. 45+25.00 TO STA. 49+68.00	3	360	3,889	0	3,529
NS 292	STA. 57+25.00 TO STA. 59+80.00	3	930	43	887	
SUB TOTAL BALANCE			216,683	296,699	0	80,016
SH 19	STA. 501+00.00 TO STA. 792+99.00	4	214,040	62,030	152,010	
EW 142	STA. 10+20.00 TO STA. 14+00.00	4	4,646	32	4,614	
NS 289	STA. 20+20.00 TO STA. 23+75.00	4	165	4,292	0	4,127
NS 290	STA. 40+20.00 TO STA. 46+50.00	4	3,552	263	3,289	
NS 291	STA. 50+32.00 TO STA. 52+50.00	4	1,147	9	1,138	
NS 292	STA. 60+20.00 TO STA. 64+50.00	4	1,238	173	1,065	
TEMP WIDENING REMOVAL LT.		4	2,880	0	2,880	
SUB TOTAL BALANCE			444,351	363,498	160,869	80,016
SH 19	STA. 496+03.00 TO STA. 805+00.00	5	1,539	697	842	
TOTAL			445,890	364,195	141,711	80,016

■ EXCESS EXCAVATION REDUCED BY 3,245 CY TO OFFSET UNCL BORROW REQUIREMENTS ON PHASE 1 CONSTRUCTION.

■ EXCESS EXCAVATION REDUCED BY 9,089 CY. TO OFFSET ALL BUT 2,629 CY UNCL. BORROW REQUIRED ON PHASE 2 CONSTRUCTION.

■ EXCESS EXCAVATION REDUCED BY 1,785 CY. TO OFFSET ALL BUT 77,387 CY UNCL. BORROW REQUIRED ON PHASE 3 CONSTRUCTION.

■ EXCESS EXCAVATION REDUCED BY 4,127 CY FOR UNCL. BORROW REQUIREMENTS ON PHASE 4 CONSTRUCTION.

● EXCESS EXCAVATION REDUCED BY 20,000 CY WHICH SHALL BE STOCKPILED AT A LOCATION DETERMINED BY THE ENGINEER WITHIN THE J/P 30425(04) PROJECT LIMITS TO BE USED TO REDUCE UNCLASSIFIED BORROW FOR J/P 30425(04). THE REMAINDER OF EXCESS EXCAVATION, AFTER ALL NECESSARY FILL REQUIREMENTS HAVE BEEN MET, SHALL BE CONSIDERED WASTE BECOMING PROPERTY OF THE CONTRACTOR TO BE DISPOSED OF IN A MANNER AND LOCATION APPROVED BY THE ENGINEER.

SUMMARY SHEET

SUMMARY OF TEMPORARY SEDIMENT CONTROL

STATION EXTENTS	LOCATION AND DESCRIPTION	TYPE	TEMPORARY SILT FENCE 221(E)	TEMPORARY INLET SEDIMENT FILTER 221(H)	TEMPORARY SILT DIKE 221(E)	TEMPORARY ROCK FILTER DAM TYPE 2 221(F)	TEMPORARY FIBER LOG 221(K)
			LF	EA	LF	C.Y.	LF
SH 19							
STA. 497+00	ACROSS DITCH LT. & RT.				42		
STA. 498+50	ACROSS DITCH LT. & RT.				42		
STA. 497+50 TO STA. 498+50	ALONG CUT SLOPE LT.						100
STA. 500+00	ACROSS DITCH LT. & RT.				42		
STA. 500+70 TO STA. 504+16	ALONG TOE RT.		362				
STA. 502+00	ACROSS DITCH LT.				21		
STA. 503+00	ACROSS DITCH LT.				21		
STA. 504+34 TO STA. 507+00	ALONG TOE RT.		269				
STA. 504+50	ACROSS DITCH LT.				21		
STA. 506+50	ACROSS DITCH LT.				21		
STA. 507+00 TO STA. 510+95	ALONG TOE RT.		401				
STA. 508+00	ACROSS DITCH LT.				21		
STA. 509+50	ACROSS DITCH LT.				21		
STA. 510+50	ACROSS DITCH LT.				21		
STA. 511+03	AROUND INLET LT.			1			
STA. 511+12 TO STA. 513+50	ALONG TOE RT.		244				
STA. 511+50	ACROSS DITCH LT.				21		
STA. 512+75	ALONG DITCH LT.					7	
STA. 514+00	ACROSS DITCH RT.				14		
STA. 515+50	ACROSS DITCH RT.				14		
STA. 517+00	ACROSS DITCH LT.				21		
STA. 518+50	ACROSS DITCH LT.				21		
STA. 518+50	ALONG DITCH RT.					6	
STA. 520+00	ACROSS DITCH LT. & RT.				35		
STA. 521+50	ACROSS DITCH LT.				21		
STA. 523+00	ACROSS DITCH LT. & RT.				35		
STA. 524+50	ACROSS DITCH LT. & RT.				35		
STA. 526+00	ACROSS DITCH LT. & RT.				35		
STA. 527+50	ACROSS DITCH LT. & RT.				35		
STA. 529+00	ACROSS DITCH LT. & RT.				35		
STA. 530+00 TO STA. 533+00	ALONG CUT SLOPE RT.						300
STA. 530+50	ACROSS DITCH LT. & RT.				42		
STA. 532+00	ACROSS DITCH RT.				21		
STA. 532+40	ALONG DITCH LT.					4	
STA. 533+50 TO STA. 537+00	ALONG TOE LT.		358				
STA. 533+50	ACROSS DITCH RT.				21		
STA. 535+00 TO STA. 537+00	ALONG TOE RT.		201				
STA. 537+00 TO STA. 538+29	ALONG TOE RT.		130				
STA. 537+00 TO STA. 538+28	ALONG TOE LT.		125				
STA. 538+35 TO STA. 543+50	ALONG TOE RT.		518				
STA. 538+36 TO STA. 541+99	ALONG TOE LT.		365				
STA. 542+15	ALONG DITCH LT.					4	
STA. 544+00	ACROSS DITCH LT. & RT.				42		
STA. 545+50	ACROSS DITCH LT.				21		
STA. 547+00	ACROSS DITCH RT.				21		
STA. 547+50 TO STA. 549+50	ALONG CUT SLOPE RT.						200
STA. 548+50	ACROSS DITCH LT. & RT.				42		
STA. 550+00	ACROSS DITCH LT. & RT.				42		
STA. 551+50	ACROSS DITCH LT. & RT.				42		
STA. 552+00 TO STA. 554+50	ALONG TOE LT.		256				
STA. 552+00 TO STA. 555+70	ALONG TOE RT.		380				
STA. 554+00 TO STA. 558+00	ALONG FILL SLOPE RT.						402
STA. 555+30	ALONG DITCH LT.					4	
STA. 555+77 TO STA. 560+50	ALONG TOE RT.		483				
STA. 557+50	ACROSS DITCH LT.				21		
STA. 559+00	ACROSS DITCH LT.				21		
STA. 561+00	ACROSS DITCH LT. & RT.				42		

SUMMARY OF TEMPORARY SEDIMENT CONTROL

STATION EXTENTS	LOCATION AND DESCRIPTION	TYPE	TEMPORARY SILT FENCE 221(E)	TEMPORARY INLET SEDIMENT FILTER 221(H)	TEMPORARY SILT DIKE 221(E)	TEMPORARY ROCK FILTER DAM TYPE 2 221(F)	TEMPORARY FIBER LOG 221(K)
			LF	EA	LF	C.Y.	LF
STA. 562+50	ACROSS DITCH LT. & RT.				42		
STA. 564+00	ACROSS DITCH LT. & RT.				42		
STA. 565+50	ACROSS DITCH LT.				21		
STA. 566+50	ACROSS DITCH LT. & RT.				42		
STA. 567+50	ACROSS DITCH RT.				21		
STA. 569+00	ACROSS DITCH RT.				21		
STA. 570+50	ALONG DITCH LT.					7	
STA. 570+50	ACROSS DITCH RT.				21		
STA. 572+00	ACROSS DITCH LT.				21		
STA. 573+00	ALONG DITCH RT.					6	
STA. 573+50	ACROSS DITCH LT.				21		
STA. 573+88 TO STA. 578+00	ALONG TOE RT.		413				
STA. 575+00	ACROSS DITCH LT.				21		
STA. 577+50	ALONG DITCH LT.					7	
STA. 579+17 TO STA. 581+31	ALONG TOE LT.		228				
STA. 580+00 TO STA. 581+50	ALONG CUT SLOPE RT.						150
STA. 581+90 TO STA. 585+00	ALONG TOE LT.		323				
STA. 583+00	ACROSS DITCH RT.				21		
STA. 584+50	ACROSS DITCH RT.				21		
STA. 585+10	ALONG DITCH RT.					5	
STA. 585+25	ALONG DITCH LT.					5	
STA. 587+50	ACROSS DITCH LT. & RT.				42		
STA. 585+50 TO STA. 590+50	ALONG CUT SLOPE RT.						503
STA. 589+00	ACROSS DITCH LT. & RT.				42		
STA. 590+50	ACROSS DITCH LT. & RT.				42		
STA. 592+00	ACROSS DITCH LT. & RT.				42		
STA. 593+25	ACROSS DITCH LT. & RT.				42		
STA. 594+50 TO STA. 598+50	ALONG CUT SLOPE RT.						402
STA. 595+00	ACROSS DITCH LT. & RT.				42		
STA. 596+50	ACROSS DITCH LT. & RT.				42		
STA. 598+00	ACROSS DITCH LT. & RT.				42		
STA. 599+50	ACROSS DITCH LT. & RT.				42		
STA. 601+00	ACROSS DITCH LT. & RT.				42		
STA. 601+50 TO STA. 606+20	ALONG TOE RT.		482				
STA. 602+50	ACROSS DITCH LT.				21		
STA. 603+39 TO STA. 603+80	ALONG TOE LT.		135				
STA. 603+92 TO STA. 604+74	ALONG TOE LT.		174				
STA. 605+97 TO STA. 612+00	ALONG TOE LT.		603				
STA. 607+26 TO STA. 612+00	ALONG TOE RT.		494				
STA. 612+00 TO STA. 613+53	ALONG TOE LT.		153				
STA. 612+00 TO STA. 614+55	ALONG TOE RT.		256				
STA. 614+17 TO STA. 617+10	ALONG TOE LT.		303				
STA. 615+06 TO STA. 618+56	ALONG TOE RT.		354				
STA. 617+22 TO STA. 617+62	ALONG TOE LT.		65				
STA. 619+00	ALONG DITCH LT.					7	
STA. 619+46 TO STA. 624+37	ALONG TOE RT.		500				
STA. 622+00	ACROSS DITCH LT.				21		
STA. 623+50	ACROSS DITCH LT. & RT.				38		
STA. 625+00	ACROSS DITCH LT. & RT.				39		
STA. 625+51 TO STA. 627+00	ACROSS DITCH LT.				39		
STA. 627+00 TO STA. 629+00	ACROSS DITCH LT. & RT.				39		
STA. 628+00	ACROSS DITCH RT.				39		
STA. 630+00	ACROSS DITCH RT.				39		
STA. 632+25	ALONG DITCH LT.				40	6	
STA. 632+50	ACROSS DITCH RT.				40	6	
STA. 633+00	ACROSS DITCH LT.				40	6	

SUMMARY SHEET

SUMMARY OF TEMPORARY SEDIMENT CONTROL

STATION EXTENTS	LOCATION AND DESCRIPTION	TYPE	TEMPORARY SILT FENCE 221(B)	TEMPORARY INLET SEDIMENT FILTER 221(H)	TEMPORARY SILT DIKE 221(E)	TEMPORARY ROCK FILTER DAM TYPE 2 221(F)	TEMPORARY FIBER LOG 221(K)
			LF	EA	LF	C.Y.	LF
STA. 635+50	ACROSS DITCH LT. & RT.				42		
STA. 637+00	ACROSS DITCH LT. & RT.				42		
STA. 638+50	ACROSS DITCH LT. & RT.				42		
STA. 640+00	ACROSS DITCH LT. & RT.				42		
STA. 641+50	ACROSS DITCH RT.				21		
STA. 641+50	ALONG DITCH LT.					5	
STA. 643+00	ACROSS DITCH RT.				21		
STA. 644+50	ACROSS DITCH LT. & RT.				42		
STA. 645+50 TO STA. 649+89	ALONG TOE RT.		443				
STA. 646+00	ACROSS DITCH LT.				21		
STA. 647+50	ACROSS DITCH LT.				21		
STA. 649+00	ACROSS DITCH LT.				21		
STA. 651+02 TO STA. 653+59	ALONG TOE RT.		269				
STA. 651+50	ACROSS DITCH LT.				21		
STA. 652+00 TO STA. 655+50	ALONG CUT SLOPE LT.						366
STA. 652+50 TO STA. 655+00	ALONG FILL SLOPE RT.						254
STA. 653+00	ACROSS DITCH LT.				21		
STA. 653+63 TO STA. 657+00	ALONG TOE RT.		352				
STA. 654+00	ACROSS DITCH LT.				21		
STA. 655+50	ACROSS DITCH LT.				21		
STA. 656+00	ALONG DITCH LT.					5	
STA. 657+00 TO STA. 657+50	ALONG TOE RT.		50				
STA. 658+50	ACROSS DITCH LT. & RT.				42		
STA. 660+00	ACROSS DITCH LT. & RT.				42		
STA. 661+50	ACROSS DITCH LT. & RT.				42		
STA. 663+00	ACROSS DITCH LT.				21		
STA. 664+25	ALONG DITCH LT.					5	
STA. 664+50	ACROSS DITCH RT.				21		
STA. 666+00	ACROSS DITCH LT. & RT.				42		
STA. 667+50	ACROSS DITCH LT. & RT.				42		
STA. 668+50 TO STA. 670+59	ALONG TOE RT.		245				
STA. 669+00	ACROSS DITCH LT.				21		
STA. 670+50	ACROSS DITCH LT.				21		
STA. 672+00	ACROSS DITCH LT. & RT.				42		
STA. 673+50	ACROSS DITCH LT. & RT.				42		
STA. 675+00	ACROSS DITCH LT. & RT.				42		
STA. 676+50	ACROSS DITCH LT. & RT.				42		
STA. 678+00	ACROSS DITCH LT. & RT.				42		
STA. 679+50	ACROSS DITCH RT.				21		
STA. 680+75	ALONG DITCH LT.					6	
STA. 681+00	ACROSS DITCH RT.				21		
STA. 681+50 TO STA. 686+50	ALONG CUT SLOPE RT.						502
STA. 682+50	ACROSS DITCH LT.				21		
STA. 684+00	ALONG DITCH RT.					6	
STA. 684+00	ACROSS DITCH LT.				21		
STA. 685+50	ACROSS DITCH LT. & RT.				42		
STA. 687+00	ACROSS DITCH LT. & RT.				42		
STA. 687+50 TO STA. 690+12	ALONG TOE RT.		406				
STA. 690+00	ACROSS DITCH LT.				21		
STA. 690+24 TO STA. 692+79	ALONG TOE RT.		407				
STA. 691+50	ACROSS DITCH LT.				21		
STA. 692+00 TO STA. 694+00	ALONG FILL SLOPE RT.						204
STA. 692+85 TO STA. 697+50	ALONG TOE RT.		471				
STA. 693+00	ACROSS DITCH LT.				21		
STA. 694+50	ACROSS DITCH LT.				21		
STA. 696+00	ACROSS DITCH LT.				21		
STA. 698+00	ACROSS DITCH LT. & RT.				42		
STA. 699+50	ACROSS DITCH LT. & RT.				42		
STA. 701+00	ACROSS DITCH LT.				21		

SUMMARY OF TEMPORARY SEDIMENT CONTROL

STATION EXTENTS	LOCATION AND DESCRIPTION	TYPE	TEMPORARY SILT FENCE 221(B)	TEMPORARY INLET SEDIMENT FILTER 221(H)	TEMPORARY SILT DIKE 221(E)	TEMPORARY ROCK FILTER DAM TYPE 2 221(F)	TEMPORARY FIBER LOG 221(K)
			LF	EA	LF	C.Y.	LF
STA. 702+00 TO STA. 706+77	ALONG TOE RT.		496				
STA. 702+50	ACROSS DITCH LT.				21		
STA. 705+50 TO STA. 707+50	ALONG FILL SLOPE RT.						207
STA. 705+75	ALONG DITCH LT.					6	
STA. 706+36	AROUND INLET LT.			1			
STA. 706+83 TO STA. 709+19	ALONG TOE RT.		278				
STA. 707+00	ACROSS DITCH LT.				21		
STA. 710+00	ACROSS DITCH LT.				21		
STA. 711+50	ACROSS DITCH LT. & RT.				35		
STA. 713+00	ACROSS DITCH LT. & RT.				35		
STA. 714+50	ACROSS DITCH LT. & RT.				35		
STA. 714+80 TO STA. 716+84	ALONG TOE RT.		206				
STA. 716+00	ACROSS DITCH LT.				21		
STA. 716+86	AROUND INLET LT.			1			
STA. 716+90 TO STA. 717+44	ALONG TOE RT.		55				
STA. 718+50 TO STA. 719+92	ALONG TOE RT.		150				
STA. 719+00	ACROSS DITCH LT.				21		
STA. 720+50	ACROSS DITCH LT. & RT.				42		
STA. 722+00	ACROSS DITCH LT. & RT.				42		
STA. 723+50	ACROSS DITCH LT. & RT.				42		
STA. 725+00	ACROSS DITCH LT. & RT.				42		
STA. 726+00 TO STA. 729+43	ALONG TOE RT.		368				
STA. 726+50	ACROSS DITCH LT.				21		
STA. 727+00 TO STA. 730+50	ALONG FILL SLOPE RT.						257
STA. 728+00	ACROSS DITCH LT.				21		
STA. 729+49 TO STA. 732+00	ALONG TOE RT.		267				
STA. 729+50	ACROSS DITCH LT.				21		
STA. 731+50	ACROSS DITCH LT.				21		
STA. 732+00 TO STA. 732+50	ALONG TOE RT.		51				
STA. 733+00	ACROSS DITCH LT. & RT.				42		
STA. 734+50	ACROSS DITCH LT. & RT.				42		
STA. 736+00	ACROSS DITCH LT. & RT.				42		
STA. 737+50	ACROSS DITCH LT. & RT.				42		
STA. 740+00	ACROSS DITCH LT. & RT.				42		
STA. 741+50	ACROSS DITCH LT. & RT.				42		
STA. 743+00	ACROSS DITCH LT. & RT.				42		
STA. 744+50	ACROSS DITCH LT.				21		
STA. 744+80	ALONG DITCH RT.					5	
STA. 745+00 TO STA. 747+00	ALONG TOE RT.		202				
STA. 746+00	ACROSS DITCH LT.				21		
STA. 747+00 TO STA. 752+85	ALONG TOE RT.		587				
STA. 747+50	ACROSS DITCH LT.				21		
STA. 748+00 TO STA. 756+50	ALONG TOE LT.		860				
STA. 749+00	ACROSS DITCH LT.				21		
STA. 752+00	ALONG DITCH LT.					6	
STA. 753+00	ACROSS DITCH LT. & RT.				42		
STA. 754+50	ACROSS DITCH LT. & RT.				42		
STA. 756+00	ACROSS DITCH LT.				21		
STA. 757+50	ALONG TOE RT.		459				
STA. 758+75	ACROSS DITCH LT.		466			34	
STA. 759+00 TO STA. 759+93	ALONG FILL SLOPE RT.		472			34	307
STA. 760+15 TO STA. 762+00	ALONG DITCH LT.		479			34	6
STA. 761+00	AROUND INLET LT.		485	1		34	5
STA. 762+00 TO STA. 763+00	ALONG TOE RT.		492			34	5
STA. 764+00	ACROSS DITCH LT.		499			34	5
STA. 765+50	ACROSS DITCH LT.		505			35	5

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SUMMARY OF TEMPORARY SEDIMENT CONTROL

STATION EXTENTS	LOCATION AND DESCRIPTION	TYPE	TEMPORARY SILT FENCE 221(B)	TEMPORARY INLET SEDIMENT FILTER 221(H)	TEMPORARY SILT DIKE 221(E)	TEMPORARY ROCK FILTER DAM TYPE 2 221(F)	TEMPORARY FIBER LOG 221(K)
			LF	EA	LF	C.Y.	LF
STA. 765+50	ACROSS DITCH LT.		505		35	5	
STA. 767+00	ALONG DITCH RT.					6	
STA. 767+00	ALONG DITCH LT.					6	
STA. 770+00	ACROSS DITCH LT. & RT.				42		
STA. 771+50	ACROSS DITCH LT. & RT.				42		
STA. 773+00	ACROSS DITCH LT. & RT.				42		
STA. 774+50	ACROSS DITCH LT. & RT.				42		
STA. 776+00	ACROSS DITCH LT. & RT.				42		
STA. 777+50	ACROSS DITCH LT. & RT.				42		
STA. 779+00	ACROSS DITCH RT.				21		
STA. 782+00	ACROSS DITCH LT. & RT.				42		
STA. 783+00	ACROSS DITCH RT.				21		
STA. 784+50	ACROSS DITCH LT.				21		
STA. 786+00	ACROSS DITCH LT. & RT.				42		
STA. 787+50	ACROSS DITCH RT.				21		
STA. 788+50	ACROSS DITCH LT. & RT.				42		
STA. 789+22 TO STA. 789+50	ALONG TOE RT.		54				
STA. 789+53	AROUND INLET LT.			1			
STA. 789+56 TO STA. 791+58	ALONG TOE RT.		232				
STA. 790+00	ACROSS DITCH LT.				21		
STA. 791+50	ACROSS DITCH LT.				21		
STA. 791+78 TO STA. 792+00	ALONG TOE RT.		61				
STA. 792+00 TO STA. 792+34	ALONG TOE RT.		34				
STA. 792+71 TO STA. 795+46	ALONG TOE RT.		278				
STA. 794+00	ACROSS DITCH LT.				21		
STA. 795+00	ACROSS DITCH LT.				21		
STA. 796+50	ACROSS DITCH RT.				21		
STA. 798+00	ACROSS DITCH LT. & RT.				42		
STA. 799+00	ACROSS DITCH LT. & RT.				42		
STA. 800+50	ACROSS DITCH LT. & RT.				42		
STA. 802+00	ACROSS DITCH RT.				21		
STA. 803+50	ACROSS DITCH LT. & RT.				42		
STA. 804+75	ACROSS DITCH LT.				21		
CRL EW 142							
STA. 8+50	ACROSS DITCH LT. & RT.				28		
STA. 11+50	ACROSS DITCH LT. & RT.				28		
STA. 13+00	ACROSS DITCH LT. & RT.				28		
CRL NS 289							
STA. 14+00	ACROSS DITCH LT. & RT.				28		
STA. 15+00	ACROSS DITCH LT. & RT.				28		
STA. 16+25	ACROSS DITCH LT. & RT.				28		
STA. 16+50 TO STA. 17+75	ALONG TOE LT.		131				
STA. 16+75 TO STA. 17+75	ALONG TOE RT.		105				
STA. 18+01 TO STA. 19+43	ALONG TOE LT.		207				
STA. 20+92 TO STA. 21+33	ALONG TOE RT.		56				
STA. 21+41 TO STA. 22+50	ALONG TOE RT.		113				
STA. 21+50	ACROSS DITCH LT.				14		
STA. 23+00	ACROSS DITCH LT. & RT.				28		
CRL EW 143							
STA. 27+00 TO STA. 28+62	ALONG TOE RT.		163				
STA. 27+50 TO STA. 29+25	ALONG TOE LT.		162				
CRL NS 290							
STA. 34+50 TO STA. 35+50	ALONG TOE LT.		102				
STA. 34+50	ACROSS DITCH RT.				14		
STA. 36+00	ACROSS DITCH LT. & RT.				28		
STA. 36+75 TO STA. 39+20	ALONG TOE RT.		235				
STA. 37+00	ACROSS DITCH LT.				14		
STA. 37+25 TO STA. 39+45	ALONG TOE LT.		255				
STA. 41+00	ACROSS DITCH LT.				19	6	
STA. 42+50	ALONG DITCH RT.				19	7	
STA. 44+00	ALONG DITCH LT.				19	7	

SUMMARY OF TEMPORARY SEDIMENT CONTROL

STATION EXTENTS	LOCATION AND DESCRIPTION	TYPE	TEMPORARY SILT FENCE 221(B)	TEMPORARY INLET SEDIMENT FILTER 221(H)	TEMPORARY SILT DIKE 221(E)	TEMPORARY ROCK FILTER DAM TYPE 2 221(F)	TEMPORARY FIBER LOG 221(K)
			LF	EA	LF	C.Y.	LF
STA. 45+50	ACROSS DITCH LT. & RT.		118		18		
CRL NS 291							
STA. 46+00	ACROSS DITCH LT. & RT.				28		
STA. 46+65 TO STA. 49+07	ALONG TOE RT.		225				
STA. 46+75 TO STA. 49+34	ALONG TOE LT.		298				
STA. 51+50	ACROSS DITCH LT. & RT.				28		
CRL NS 292							
STA. 58+00	ACROSS DITCH LT. & RT.				28		
STA. 61+00	ACROSS DITCH LT. & RT.				28		
STA. 62+50	ACROSS DITCH LT. & RT.				28		
STA. 63+50	ACROSS DITCH LT. & RT.				28		
TOTALS			21,789	5	5,855	184	4,154

SUMMARY SHEET

REVISIONS		
NO.	DESCRIPTION	DATE

GENERAL CONSTRUCTION NOTES

REMOVED MATERIAL TO BECOME PROPERTY OF CONTRACTOR AND IT SHALL BE DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER.

THIS PROJECT SHALL BE CONSTRUCTED WITHOUT CLOSING THE EXISTING ROAD TO LOCAL AND THROUGH TRAFFIC. SEE O.D.O.T. STANDARDS AND DETAIL DRAWINGS FOR MAINTENANCE OF LOCAL AND THROUGH TRAFFIC.

ANY DAMAGE CAUSED BY THE CONTRACTOR TO ANY STRUCTURES, ROADWAY SURFACES, STRIPING, RAISED PAVEMENT MARKERS, GUARDRAIL, SLOPES, AND SIGNS SHALL BE REPAIRED AT CONTRACTORS EXPENSE TO THE SATISFACTION OF THE ENGINEER.

THIS PROJECT SHALL BE CONSTRUCTED WITHOUT CLOSING TRAFFIC ON CROSS STREETS. A MINIMUM OF ONE LANE IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES. SEE O.D.O.T. STANDARDS AND DETAIL DRAWINGS FOR MAINTENANCE OF LOCAL AND THROUGH TRAFFIC.

ALL REGULATORY SIGNS SHALL BE HIGH INTENSITY SHEETING. THE HIGH INTENSITY SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956 (LATEST EDITION) FOR TYPE III SHEETING.

ALL WARNING SIGNS SHALL HAVE FLUORESCENT YELLOW SHEETING. THE FLUORESCENT YELLOW SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956 (LATEST EDITION) REQUIREMENTS FOR TYPE VIII SHEETING.

ALL GREEN AND BLUE SIGNS ON CONVENTIONAL HIGHWAYS SHALL HAVE HIGH INTENSITY SHEETING. THE HIGH INTENSITY SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956 (LATEST EDITION) FOR TYPE III SHEETING.

ALL PANEL AND OVERHEAD SIGNS SHALL HAVE TYPE III HIGH INTENSITY BACKGROUND WITH TYPE VIII LEGENDS AND BORDERS. THE TYPE III BACKGROUND AND THE TYPE VIII LEGENDS AND BORDERS SHALL MEET THE REQUIREMENTS OF ASTM D4956 (LATEST EDITION).

THE MANUFACTURER SHALL FURNISH A TYPE "A" CERTIFICATION IN ACCORDANCE WITH ODOT STANDARD SPECIFICATIONS, LATEST EDITION, SUBSECTION 106.04. THE CERTIFICATION SHALL INCLUDE TEST RESULTS ON THE MATERIAL SUBMITTED FOR APPROVAL.

ALL BROKEN CONCRETE INCLUDING OLD SIGN FOOTINGS WITH STUBS, WASTE MATERIAL AND DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE LIMITS OF THE PROJECT AND DISPOSED OF IN AN AREA APPROVED BY THE ENGINEER. NO PAYMENT SHALL BE MADE FOR THE DISPOSAL OF THIS MATERIAL. ANY PIPE POST OR WIDE FLANGE POST ABOVE THE OLD SIGN FOOTINGS SHALL BE CUT AND HANDLED AS PROPERTY OF THE STATE AND SHALL BE NEATLY STACKED ON THE JOB SITE, AS DESIGNATED BY THE ENGINEER UNTIL SUCH TIME AS DIVISION PERSONNEL CAN REMOVE THE MATERIAL FROM THE JOB SITE.

THE STATIONS AND LOCATIONS OF THE SIGN PLACEMENT, AS SHOWN ON THE PLAN SHEETS, ARE APPROXIMATE. EXACT STATIONS AND LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR SO THAT THE SIGN IS INSTALLED IN ACCORDANCE WITH DEPARTMENT STANDARDS AND THE MUTCD IN ORDER TO PROVIDE OPTIMUM VISIBILITY TO THE ONCOMING/APPROACHING MOTORIST. IF A PROPOSED LOCATION CONFLICTS WITH OTHER SIGNS, UTILITIES OR OTHER ROADWAY FEATURES, THE ENGINEER SHALL BE NOTIFIED.

POST LENGTHS SHOWN ON SIGN SUMMARY ARE APPROXIMATE, EXACT LENGTH SHALL BE DETERMINED BY FIELD SURVEY BY THE CONTRACTOR.

ALL REMOVED SIGNS, SIGN POSTS, BOLTS, MISCELLANEOUS HARDWARE, AND DELINEATORS SHALL REMAIN THE PROPERTY OF THE STATE. THE CONTRACTOR SHALL NEATLY STACK SUCH REMOVED MATERIAL AT A LOCATION ON THE JOB SITE AS DESIGNATED BY THE ENGINEER UNTIL SUCH TIME AS DIVISION PERSONNEL CAN REMOVE THE MATERIAL FROM THE JOB SITE.

ALL SIGNS SHALL BE REMOVED FROM THE POSTS IN A SALVAGEABLE MANNER FOR REUSE. CARE SHALL BE TAKEN DURING REMOVAL AND TRANSPORTING TO ALLEVIATE DAMAGE OF MATERIALS. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED DURING REMOVAL OF SIGNS, AND SIGN POSTS.


AFTER REMOVAL OF ANY SIGN FOOTINGS, THE HOLES SHALL BE FILLED WITH SOIL AND TAMPED AND SHAPED IN A MANNER APPROVED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE HE MAY INFLICT TO THE EXISTING UNDERGROUND UTILITIES WITHIN THE PROJECT AREA AS A RESULT OF HIS DIGGING, TRENCHING, BORING, ETC.... PRIOR TO DIGGING NEAR THE UTILITIES, THE CONTRACTOR SHALL CALL FOR A LIST OF ALL UNDERGROUND FACILITIES REGISTERED IN THE AREA OF CONSTRUCTION LISTED WITH THE FOLLOWING AGENCIES:
THE "OKIE" NOTIFICATION CENTER 811 OR (405)522-6543 OR WWW.CALLOKIE.COM OR THE LOCAL COUNTY CLERK'S OFFICE.

PAY QUANTITY NOTES

- (1) PAY ITEM IS FOR THE RELOCATION OF ONE (1) ADOPT A HIGHWAY SIGN, ONE (1) CHAMPIONSHIP FOOTBALL SIGN AND ONE (1) CHITWOOD SIGN, AS SHOWN IN THE PLANS. THE COST OF RELOCATION SHALL INCLUDE THE REMOVAL OF SIGNS, POST AND FOOTINGS AND ALL EQUIPMENT, LABOR AND INCIDENTALS NECESSARY TO INSTALL THE SIGNS AS SHOWN IN THE PLANS AND TO THE SATISFACTION OF THE ENGINEER. COST MAY ALSO INCLUDE FILLING HOLES AFTER FOOTING REMOVAL AS DIRECTED BY THE ENGINEER.
- (TS-25) QUANTITY SHOWN INCLUDES 63,425 L.F. TRAFFIC STRIPE (MULTI-POLYMER) (WHITE) AND 47,230 L.F. TRAFFIC STRIPE (MULTI-POLYMER) (YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF SIX INCH (6") WIDE TRAFFIC STRIPE.
- (TS-27) QUANTITY SHOWN INCLUDES 0 L.F. TRAFFIC STRIPE (MULTI-POLYMER) (WHITE) AND 1,300 L.F. TRAFFIC STRIPE (MULTI-POLYMER) (YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF TWELVE INCH (12") WIDE TRAFFIC STRIPE.
- (TS-28) QUANTITY SHOWN INCLUDES 525 L.F. TRAFFIC STRIPE (MULTI-POLYMER) (WHITE) AND WILL BE MEASURED BY THE LINEAR FOOT OF TWENTY-FOUR INCH (24") WIDE TRAFFIC STRIPE.
- (TS-33) INCLUDED IN THIS PAY ITEM IS ALL HARDWARE ASSOCIATED WITH PROPERLY ANCHORING AND MOUNTING THE HIGHWAY SIGN IN ACCORDANCE WITH O.D.O.T. PLANS AND STANDARD DRAWINGS SSA1-1 AND SSP1-1. (LATEST REVISION).

PAY QUANTITIES			
JP#30425(07)			
0300 TRAFFIC SIGNING & STRIPING			
ITEM	DESCRIPTION	UNIT	TOTAL
413(A) 4210	RUMBLE STRIP-CENTER LINE HMA-CON	LF	29688.00
413(B) 4310	RUMBLE STRIP-METHOD HMA-CYC	LF	25518.00
805(D) 3528	(PL)REMOVE & RESET EXISTING SIGNS	(1) EA	3.00
850(A) 1200	SHEET ALUMINUM SIGNS	SF	229.16
851(C) 2415	2" SQUARE TUBE POST	(TS-33) LF	574.50
856(A) 8204	TRAFFIC STRIPE (MULTI-POLY)(6" WIDE)	(TS-25) LF	110655.00
856(A) 8212	TRAFFIC STRIPE (MULTI-POLY)(12" WIDE)	(TS-27) LF	1300.00
856(A) 8216	TRAFFIC STRIPE (MULTI-POLY)(24" WIDE)	(TS-28) LF	525.00
856(B) 8304	TRAFFIC STRIPE (MULTI-POLY)(ARROWS)	EA	30.00

Design	RWR	06-30-22
Drawn	SB	06-30-22
		

**SIGNING & STRIPING
PAY QUANTITIES & NOTES**

State Job No. 30425(07) Sheet No. AT01

G:\0\Projects\1-2799 - TC, EC-1709 JP_30425(07) - S.H.19 - Grady Co\CAD\AT01\30425(07)-QUANT_SS.dgn 06-30-22

REVISIONS		
NO.	DESCRIPTION	DATE

GENERAL CONSTRUCTION NOTES

THE CONTRACTOR SHALL PROVIDE A PERSON TO BE ON 24 HOUR CALL AS NEEDED AND DETERMINED BY THE ENGINEER. THIS PERSON SHALL HOLD A CURRENT CERTIFICATION FROM THE AMERICAN TRAFFIC SAFETY SERVICE ASSOCIATION (ATSSA) OR THE OKLAHOMA TRAFFIC ENGINEERING ASSOCIATION (OTEA) AS A TRAFFIC CONTROL TECHNICIAN OR TRAFFIC CONTROL SUPERVISOR.

ANY SIGNS AND/OR DELINEATORS WHICH ARE TO BE REMOVED DURING THIS PROJECT WILL BE STORED IN A PROTECTED AREA DESIGNATED BY THE RESIDENT ENGINEER UNTIL SUCH A TIME THAT THEY ARE TO BE RESET BY THE CONTRACTOR. COST OF THIS WORK TO BE INCLUDED IN OTHER ITEMS OF WORK.

EXISTING ROADWAY SHALL REMAIN OPEN DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER BARRICADES, LIGHTS, AND SIGNING WITHIN THE LIMITS OF CONSTRUCTION. ALL CONSTRUCTION SIGNING WILL BE IMPLEMENTED ACCORDING TO CONSTRUCTION PLANS. CONSTRUCTION TRAFFIC CONTROL WILL BE INSTALLED IN A MANNER APPROVED BY THE ENGINEER, IN ACCORDANCE WITH CHAPTER VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (CURRENT EDITION), AND COMPLIANT WITH APPLICABLE O.D.O.T. STANDARD DRAWINGS.

THIS PROJECT SHALL BE CONSTRUCTED WITHOUT CLOSING TRAFFIC ON CROSS STREETS. A MINIMUM OF ONE LANE IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES.

FIVE (5) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION ON THIS PROJECT, THE RESIDENT ENGINEER SHALL CONTACT THE OKLAHOMA HIGHWAY PATROL, SIZE AND WEIGHTS SECTION (405) 425 2210 AND ADVISE THE OFFICE WHEN SAID DETOURING WILL BEGIN AND THAT WIDE LOADS OVER 10 FT. SHOULD BE ADVISED AND RESTRICTED. UPON COMPLETION OF THE PROJECT, THE RESIDENT ENGINEER SHALL CONTACT THE OKLAHOMA HIGHWAY PATROL AND ADVISE THE OFFICE THAT THE PROJECT IS COMPLETE.

FIVE (5) WORKING DAYS PRIOR TO DETOURING WIDE LOAD VEHICLES, FOR THE CONSTRUCTION OF THE PROJECT, THE RESIDENT ENGINEER SHALL CONTACT THE OKLAHOMA HIGHWAY PATROL, SIZE AND WEIGHTS SECTION (405) 425 2210 AND ADVISE THE OFFICE WHEN SAID DETOURING WILL BEGIN AND THAT WIDE LOADS OVER 10 FT. SHOULD BE ADVISED AND RESTRICTED (SEE PLANS FOR PROPOSED WIDE LOAD DETOUR ROUTE). UPON COMPLETION OF THE PROJECT THE RESIDENT ENGINEER SHALL CONTACT THE OKLAHOMA HIGHWAY PATROL AND ADVISE THE OFFICE THAT THE WIDE LOAD DETOUR IS NO LONGER IN EFFECT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE HE MAY INFLICT TO THE EXISTING UNDERGROUND UTILITIES WITHIN THE PROJECT AREA AS A RESULT OF HIS DIGGING, TRENCHING, BORING, ETC.... PRIOR TO DIGGING NEAR THE UTILITIES, THE CONTRACTOR SHALL CALL FOR A LIST OF ALL UNDERGROUND FACILITIES REGISTERED IN THE AREA OF CONSTRUCTION LISTED WITH THE FOLLOWING AGENCIES:
THE "OKIE" NOTIFICATION CENTER 811 OR (405)522-6543 OR WWW.CALLOKIE.COM OR THE LOCAL COUNTY CLERK'S OFFICE.

PAY QUANTITY NOTES

(TC-1) THE CONTRACTOR SHALL FURNISH AND INSTALL SUCH LIGHTS, SIGNS, BARRICADES, AND PROVIDE FLAGGERS NECESSARY FOR THE CONTROL, SAFETY, AND MAINTENANCE OF TRAFFIC WHEN INSTALLING, RELOCATING OR DELIVERING PORTABLE LONGITUDINAL BARRIER.

(TC-2) QUANTITY INCLUDES SUFFICIENT LENGTH OF PORTABLE LONGITUDINAL BARRIER TO PROVIDE FOR THE LONGEST SECTION SHOWN ON THE PLANS. THIS SAME BARRIER WILL BE USED ON OTHER DETOUR PHASES.

(TC-19) THIS ITEM INCLUDES AN ESTIMATED 162,066 L.F. (4" WIDE) WHITE AND 167,860 L.F. (4" WIDE) YELLOW STRIPE. THE CONTRACTOR SHALL PROVIDE AND INSTALL AN O.D.O.T. APPROVED REMOVABLE PAVEMENT MARKING TAPE. COST FOR REMOVAL OF THIS TAPE SHALL BE INCLUDED IN THE PRICE BID FOR THIS ITEM. NON-REMOVABLE MARKING TAPE (FOIL BACK) SHALL NOT BE CONSIDERED AN APPROVED EQUAL FOR THIS ITEM.

(TC-20) ALL STRIPING TO BE PLACED ON TEMPORARY SURFACES OR ON SURFACES SCHEDULED TO BE REMOVED SHALL BE DONE WITH PAINT UNLESS OTHERWISE NOTED ON THE PLANS OR STANDARD DRAWINGS. TEMPORARY PAVEMENT MARKINGS PLACED ON FINISHED PAVEMENT OR EXISTING PAVEMENT TO REMAIN IN PLACE SHALL USE ONE OF THE FOLLOWING METHODS:
- REMOVABLE PAVEMENT MARKING TAPE
- CLASS A PAVEMENT MARKERS

(TC-22) AMOUNT SHOWN IS AN APPROXIMATION AND THE ACTUAL AMOUNT OF REMOVAL, IF NECESSARY, SHALL BE DETERMINED BY THE ENGINEER. PRICE BID FOR PAVEMENT MARKING REMOVAL SHALL INCLUDE THE COST OF REMOVING STRIPE, ARROWS, WORDS AND SYMBOLS, AS SHOWN IN THE PLANS. THESE ITEMS MAY CONSIST OF PLASTIC, PAINT OR NON-REMOVABLE MARKING TAPE.

(TC-26) ALL CONSTRUCTION TRAFFIC CONTROL WILL BE IMPLEMENTED ACCORDING TO CONSTRUCTION PLANS, AND INSTALLED IN A MANNER APPROVED BY THE ENGINEER, IN ACCORDANCE WITH CHAPTER VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (CURRENT EDITION), AND COMPLIANT WITH APPLICABLE O.D.O.T. STANDARD DRAWINGS. PRICE BID FOR THIS ITEM SHALL BE PAYMENT IN FULL FOR THE INSTALLATION, MAINTENANCE AND SUBSEQUENT REMOVAL OF ALL NECESSARY CONSTRUCTION TRAFFIC CONTROL DEVICES REQUIRED FOR COMPLETION OF THE PROJECT.

ALL SIGNS AND BARRICADES WHICH ARE SHOWN WITH TYPE 'A' LIGHTS IN THE STANDARD DRAWINGS SHALL HAVE THE CORRESPONDING LIGHT ATTACHED DURING NON-DAYLIGHT HOURS.

(TC-28) INCLUDED IN THIS ITEM ARE ALL S.C.S. (SPECIAL CONSTRUCTION SIGNING) SIGNS WHICH ARE BETWEEN 0.00 S.F. AND 6.25 S.F. ALSO INCLUDED IN THIS ITEM SHALL BE THE COST OF INSTALLATION, MAINTENANCE, AND REMOVAL OF THESE SIGNS.

(TC-29) INCLUDED IN THIS ITEM ARE ALL S.C.S. (SPECIAL CONSTRUCTION SIGNING) SIGNS WHICH ARE BETWEEN 6.26 S.F. AND 15.99 S.F. ALSO INCLUDED IN THIS ITEM SHALL BE THE COST OF INSTALLATION, MAINTENANCE, AND REMOVAL OF THESE SIGNS.

(TC-30) INCLUDED IN THIS ITEM ARE ALL S.C.S. (SPECIAL CONSTRUCTION SIGNING) SIGNS WHICH ARE BETWEEN 16.00 S.F. AND 32.99 S.F. ALSO INCLUDED IN THIS ITEM SHALL BE THE COST OF INSTALLATION, MAINTENANCE, AND REMOVAL OF THESE SIGNS.

(TC-33) ALL CONSTRUCTION WORK ZONE SIGNS SHALL HAVE FLUORESCENT SHEETING. THE FLUORESCENT SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956 (LATEST REVISION).

THE MANUFACTURER SHALL FURNISH A TYPE 'D' CERTIFICATION IN ACCORDANCE WITH O.D.O.T. STANDARD SPECIFICATIONS (CURRENT EDITION) SUBSECTION 106.04. THE CERTIFICATION SHALL INCLUDE TEST RESULTS ON MATERIAL SUBMITTED FOR APPROVAL.

(TC-52) ANY USED CHANGEABLE MESSAGE SIGNS AND CONSTRUCTION ZONE IMPACT ATTENUATORS TO BE PLACED ON THIS PROJECT SHALL BE SUBJECT TO INSPECTION AND APPROVAL, BY THE OKLAHOMA DEPARTMENT OF TRANSPORTATION, TO ASSURE THAT THEY ARE IN GOOD WORKING CONDITION, PRIOR TO PLACEMENT ON THE PROJECT.

(TC-70) THIS ITEM IS AN ESTIMATED QUANTITY TO BE USED AS DEEMED NECESSARY BY THE ENGINEER.

(TC-75) TEMPORARY PAVEMENT MARKINGS SHALL BE IN PLACE THE SAME DAY THAT EXISTING PAVEMENT MARKINGS ARE REMOVED FROM ANY ROADWAY OPEN TO TRAFFIC. ALSO, ALL TEMPORARY PAVEMENT MARKINGS SHALL BE REMOVED PRIOR TO THE INSTALLATION OF FINAL STRIPING.

(TC-84) 775 CONSTRUCTION CALENDAR DAYS WERE USED TO COMPUTE THE SIGN DAY PAY ITEMS. THE AMOUNT OF CALENDAR DAYS USED TO COMPUTE THE SIGN DAY PAY ITEMS IS AN ESTIMATED QUANTITY ONLY, BASED ON THE CURRENT O.D.O.T. STANDARDS AND SUGGESTED CONSTRUCTION SEQUENCE FOR THIS PROJECT. THESE ESTIMATED SIGN DAY QUANTITIES MAY CHANGE AS THE PROJECT'S CONSTRUCTION TRAFFIC CONTROL IS MODIFIED DURING CONSTRUCTION.

(TC-85) THESE SIGNS MUST BE ON THE OKLAHOMA DEPARTMENT OF TRANSPORTATION LIST OF APPROVED CHANGEABLE MESSAGE SIGNS. FOR A LIST OF THE APPROVED SIGNS GO TO THE OKLAHOMA DEPARTMENT OF TRANSPORTATION WEBSITE AT:
<http://www.okladot.state.ok.us/traffic/qpl/index.php>.

(1) PAY QUANTITY REFLECTS THE AMOUNT OF 4" TAPE OR THE EQUIVALENT AMOUNT OF 4" TAPE FOR STRIPING THAT IS WIDER THAN 4 INCHES.

(2) WARNING LIGHTS TYPE "C" ARE NOT REQUIRED ON THIS PROJECT.

(3) THIS QUANTITY PROVIDES FOR TWO (2) MESSAGE BOARDS FOR THE DURATION OF THE PROJECT TO BE USED AT THE DISCRETION OF THE ENGINEER.

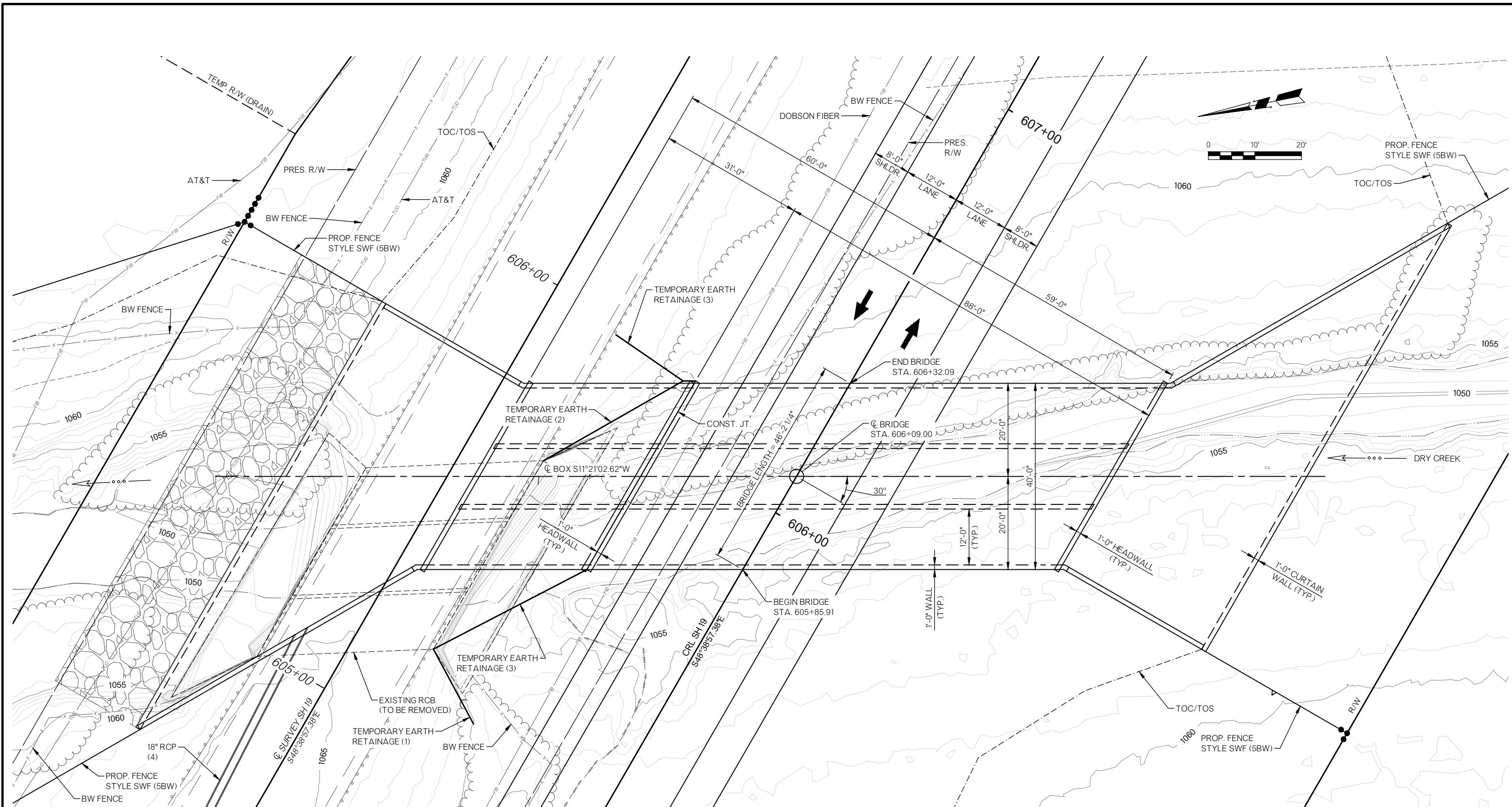
PAY QUANTITIES			
JP#30425(07)			
0301 TRAFFIC CONTROL			
ITEM	DESCRIPTION	UNIT	TOTAL
857(C) 9400	REMOVABLE PAVEMENT MARKING TAPE (4" WIDE) (TC-19,20,70,75)(1)	LF	329,926.00
857(F) 9700	PAVEMENT MRKNG.REMOVAL(TRAF.STRP) (TC-22,70)	LF	50,000.00
871(B) 2300	CONST.ZONE IMPACT ATTEN. (TC-52,84)	SD	319.00
877(B) 4300	DELIVER PORTABLE LONGITUDINAL BARRIER (TC-1,2)	LF	3,387.50
877(C) 4400	RELOCATION OF PORT. LONGITUDINAL BARRIER (TC-1)	LF	6,775.00
880(B) 6300	CONSTRUCTION SIGNS 0 TO 6.25 SF (TC-26,28,33,84)	SD	6,864.00
880(B) 6310	CONSTRUCTION SIGNS 6.26 SF TO 15.99 SF (TC-26,29,33,84)	SD	1,496.00
880(B) 6320	CONSTRUCTION SIGNS 16.0 SF TO 32.99 SF (TC-26,30,33,84)	SD	3,509.00
880(C) 6410	CONSTRUCTION BARRICADES (TYPE III) (TC-26,84)	SD	929.50
880(E) 6600	WARNING LIGHTS (TYPE A) (TC-26,84)	SD	5,368.00
880(F) 6700	DRUMS (TC-26,84)(2)	SD	4,609.00
880(G) 6805	CHANNELIZER CONES (TC-26,84)	SD	4,609.00
880(I) 7000	FLAGGER (TC-84)	SD	55.00
882(A) 8210	PORT. CHANGEABLE MESSAGE SIGN (TC-52,84,85)(3)	SD	605.00

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Design	RWR	06-22-22
Drawn	SB	06-22-22
TEC A CLEAR DIRECTION		

**TRAFFIC CONTROL
PAY QUANTITIES & NOTES**

State Job No. 30425(07) Sheet No. AT02



BM#114 - 36"x5/8" REBAR 2 FT. SOUTH OF BWF
 Q SURVEY STA. 599+57, 48.00' LT.
 ELEV. = 1089.8896

NOTES
 ALL STATIONING FOLLOWS CRL SH 19, UNLESS NOTED OTHERWISE.

FOR ELEVATION VIEW, SEE SHEET NO. B002.

SEE SHEET NO. B002 FOR DESIGN DATA, FINISH GRADE DATA, HYDRAULIC DATA SUMMARY, INDEX OF SHEETS AND EXISTING BRIDGE NOTE.

FOR CHANNEL WORK DETAILS, SEE THE CHANNEL PLAN AND PROFILE SHEETS AND CROSS-SECTIONS. (ROADWAY ITEMS).

PLAN
 SCALE 1" = 10'

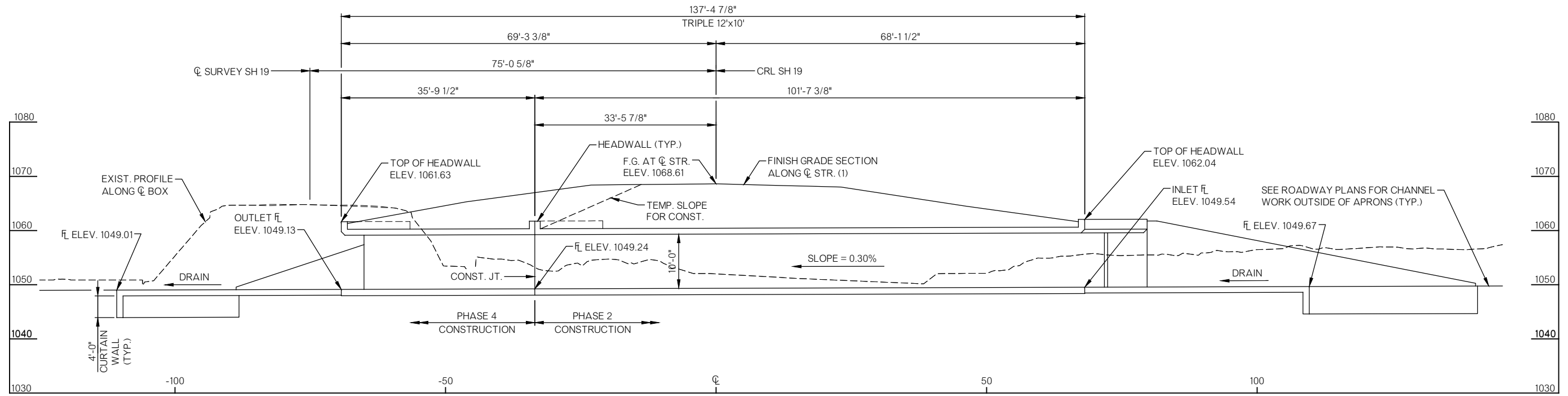
- NOTES**
- (1) TEMPORARY EARTH RETAINAGE FOR EXISTING RCB END SECTION REMOVAL. (PHASE 2).
 - (2) TEMPORARY EARTH RETAINAGE FOR EXISTING RCB END SECTION REMOVAL AND NEW RCB CONSTRUCTION. (PHASE 2 AND PHASE 4).
 - (3) TEMPORARY EARTH RETAINAGE FOR NEW RCB CONSTRUCTION. (PHASE 2 AND PHASE 4).
 - (4) SEE SHEET B002 FOR PIPE STUB DETAIL. SEE ROADWAY PLAN AND PROFILE SHEETS AND CROSS SECTION SHEETS FOR ADDITIONAL INFORMATION.

BM#115 - 36"x5/8" REBAR 1 FT. N. OF BRACE POST
 Q SURVEY STA. 607+19, 37.00' RT.
 ELEV. = 1060.4918

CONST. 3-12"x10" BRIDGE BOX WITH STD. HEADWALLS, WINGS, APRONS AND 4' CURTAIN WALLS, SKEWED 30° R.F.

BRIDGE "A"
 SH 19 OVER DRY CREEK
GENERAL PLAN AND ELEVATION
 (SHEET 1 OF 2)
 CONST. TRIPLE 12"x10"x137.41' LG. BOX, SKEWED 30° R.F., AT CRL STA. 606+09
 State Job No. 30425(07) Sheet No. B001

SH 19 GRADY COUNTY



ELEVATION
SCALE 1" = 10'

BM#114 - 36"x5/8" REBAR 2 FT. SOUTH OF B/W
 Q SURVEY STA. 599+57, 48.00' LT.
 ELEV. = 1089.8896

BM#115 - 36"x5/8" REBAR 1 FT. N. OF BRACE POST
 Q SURVEY STA. 607+19, 37.00' RT.
 ELEV. = 1060.4918

SUMMARY OF QUANTITIES - BRIDGE "A"				
DESCRIPTION	UNIT	PHASE 2	PHASE 4	TOTAL
UNCLASSIFIED EXCAVATION	CY	2,720.00	2,440.00	5,160.00
STRUCTURAL EXCAVATION UNCLASSIFIED	CY	250.00	135.00	385.00
(2) TEMPORARY EARTH RETAINAGE	LSUM	1.00	0.00	1.00
CLASS AA CONCRETE	CY	644.00	327.40	971.40
REINFORCING STEEL	LB	115,810.00	60,450.00	176,260.00
REMOVAL OF EXISTING BRIDGE STRUCTURE	LSUM	0.00	1.00	1.00

(2) USE OF TEMPORARY EARTH RETAINAGE STRUCTURE(S) WILL BE REQUIRED IN MULTIPLE PHASES OF CONSTRUCTION.

DESIGN DATA
 (LOAD AND RESISTANCE FACTOR DESIGN)

CLASS "AA" CONCRETE F'C = 4,000 PSI
 REINFORCING STEEL FY = 60,000 PSI
 LOADING: HL-93 AND ODOT OVERLOAD TRUCK
 SPECIAL BARREL DESIGN: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION.
 STANDARD BARREL DESIGN: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 2007 EDITION, WITH 2008 INTERIMS.
 END SECTION DESIGN: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 2007 EDITION, WITH 2008 INTERIMS.

THE FOLLOWING STANDARDS SHALL BE REQUIRED:

- SBI-5-1
- RCB-C3-12(2-12)-02E
- RCB-E3-H10-30-1-01E
- RCB-E3-H10-30-2-01E
- RCB-E3-H10-30-3-01E
- RCB-CW3-D4-30-01E

NOTES
 ALL STATIONING FOLLOWS CRL SH 19, UNLESS NOTED OTHERWISE.

THE CONTRACTOR SHALL MAINTAIN DRAINAGE AT ALL TIMES DURING CONSTRUCTION.

FOR CHANNEL WORK DETAILS, SEE THE CHANNEL PLAN AND PROFILE SHEETS AND CROSS-SECTIONS. (ROADWAY ITEMS).

(1) SEE ROADWAY PLAN AND PROFILES AND CROSS SECTIONS.

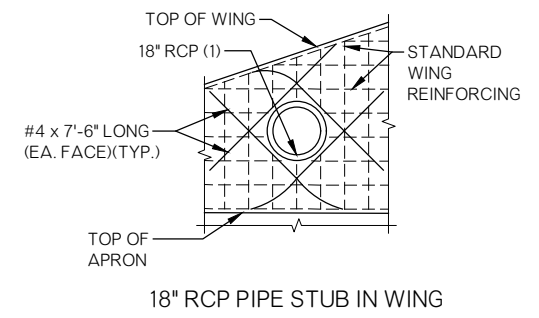
INDEX OF SHEETS (BRIDGE "A")

NO.	DESCRIPTION
AB01	PAY QUANTITIES AND GENERAL NOTES (BRIDGE)
B001	GENERAL PLAN AND ELEVATION (SHEET 1 OF 2)
B002	GENERAL PLAN AND ELEVATION (SHEET 2 OF 2)
B003-B006	BRIDGE "A" DETAILS

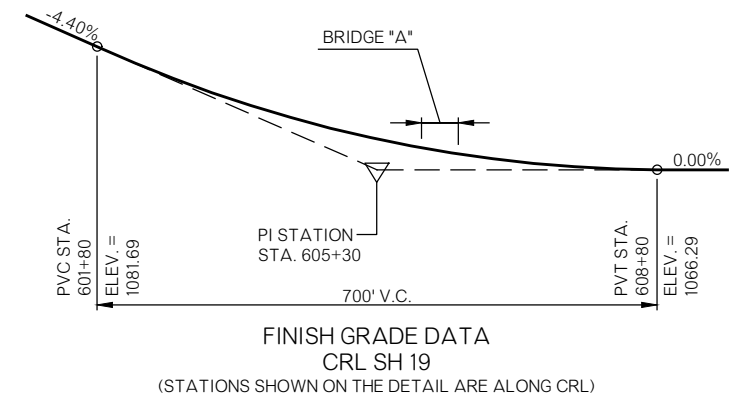
HYDRAULIC DATA ~ BRIDGE "A"
 DRY CREEK

TOTAL D.A. = 7.86 SQ. MI.
 CONTROLLED D.A. = 4.53 SQ. MI.
 EFFECTIVE D.A. = 3.33 SQ. MI.

FREQ.	Q (cfs)	CHW (ft)	V (fps)
2	369	1058.53	2.35
5	785	1060.49	3.41
10	1200	1061.74	4.19
25	1900	1062.88	5.32
50	2430	1062.94	6.75
100	3080	1063.84	8.47
500	4920	1065.81	11.70
RDWY OT > Q500	0	0	0
DETOUR OT	0	0	0



PIPE STUB NOTES:
 REINFORCING STEEL IN RCB WINGS SHALL BE FIELD CUT TO MAINTAIN A 2" CLEARANCE AROUND PIPE STUB.
 AN ESTIMATED 50.00 LBS OF ADDITIONAL REINFORCING IS REQUIRED FOR THE 18" RCP STUB.
 ALL COST FOR MATERIALS, LABOR AND INCIDENTALS TO CONSTRUCT PIPE STUB SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

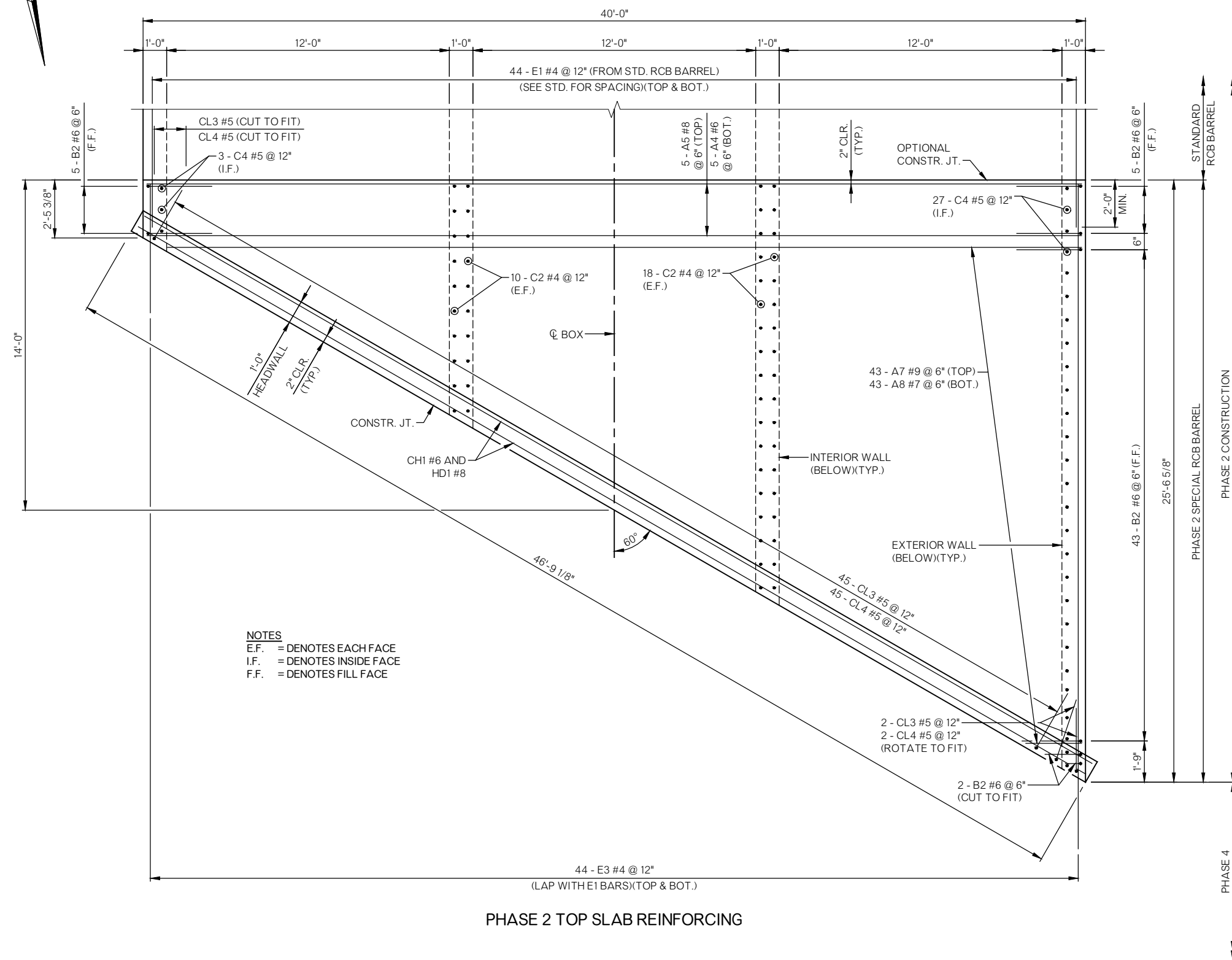


EXISTING BRIDGE NOTE:
 THE EXISTING BRIDGE SHALL BE REMOVED IN ACCORDANCE WITH THE NOTES ON SHEET AB01.

CONST. 3-12"x10' BRIDGE BOX WITH STD. HEADWALLS, WINGS, APRONS AND 4' CURTAIN WALLS, SKEWED 30° R.F.

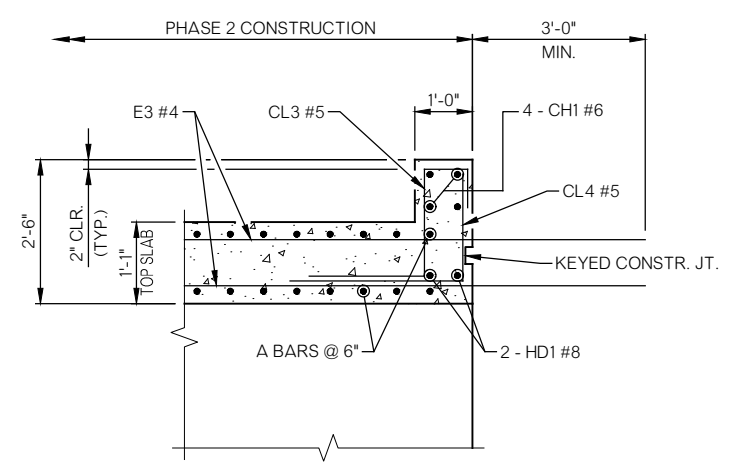
BRIDGE "A"
 SH 19 OVER DRY CREEK
GENERAL PLAN AND ELEVATION
 (SHEET 2 OF 2)
 CONST. TRIPLE 12"x10"x137.41' LG. BOX, SKEWED 30° R.F., AT CRL STA. 606+09
 State Job No. 30425(07) Sheet No. B002

SH 19
GRADY COUNTY

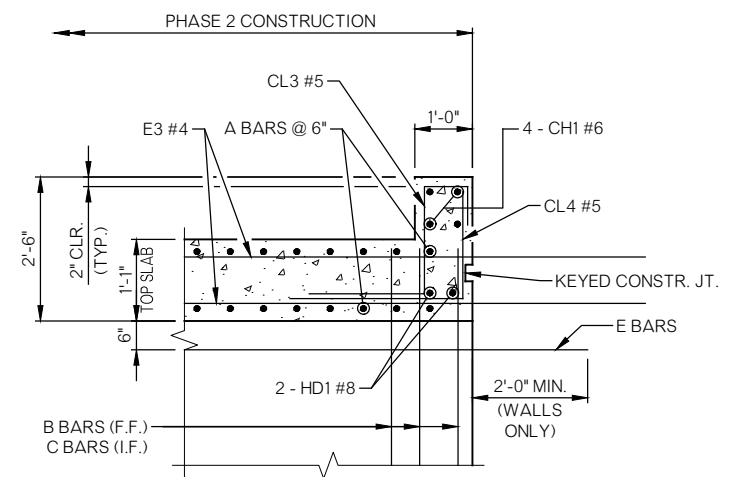


PHASE 2 TOP SLAB REINFORCING

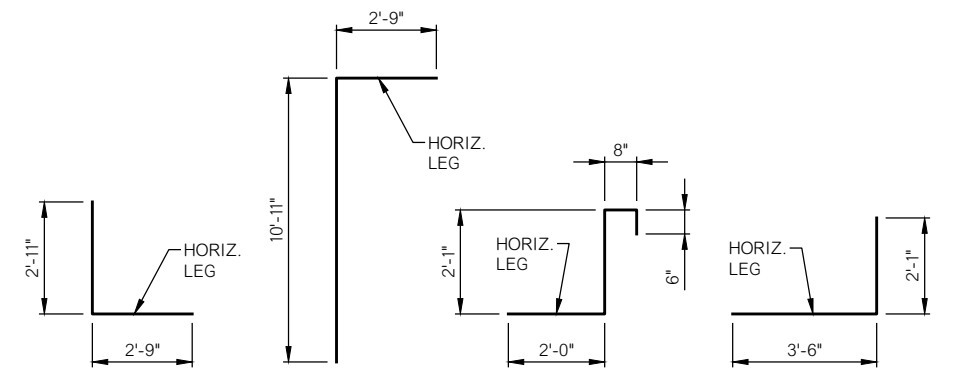
NOTES
 E.F. = DENOTES EACH FACE
 I.F. = DENOTES INSIDE FACE
 F.F. = DENOTES FILL FACE



HEADWALL DETAIL AT MIDSPAN



HEADWALL DETAIL AT EXTERIOR WALL

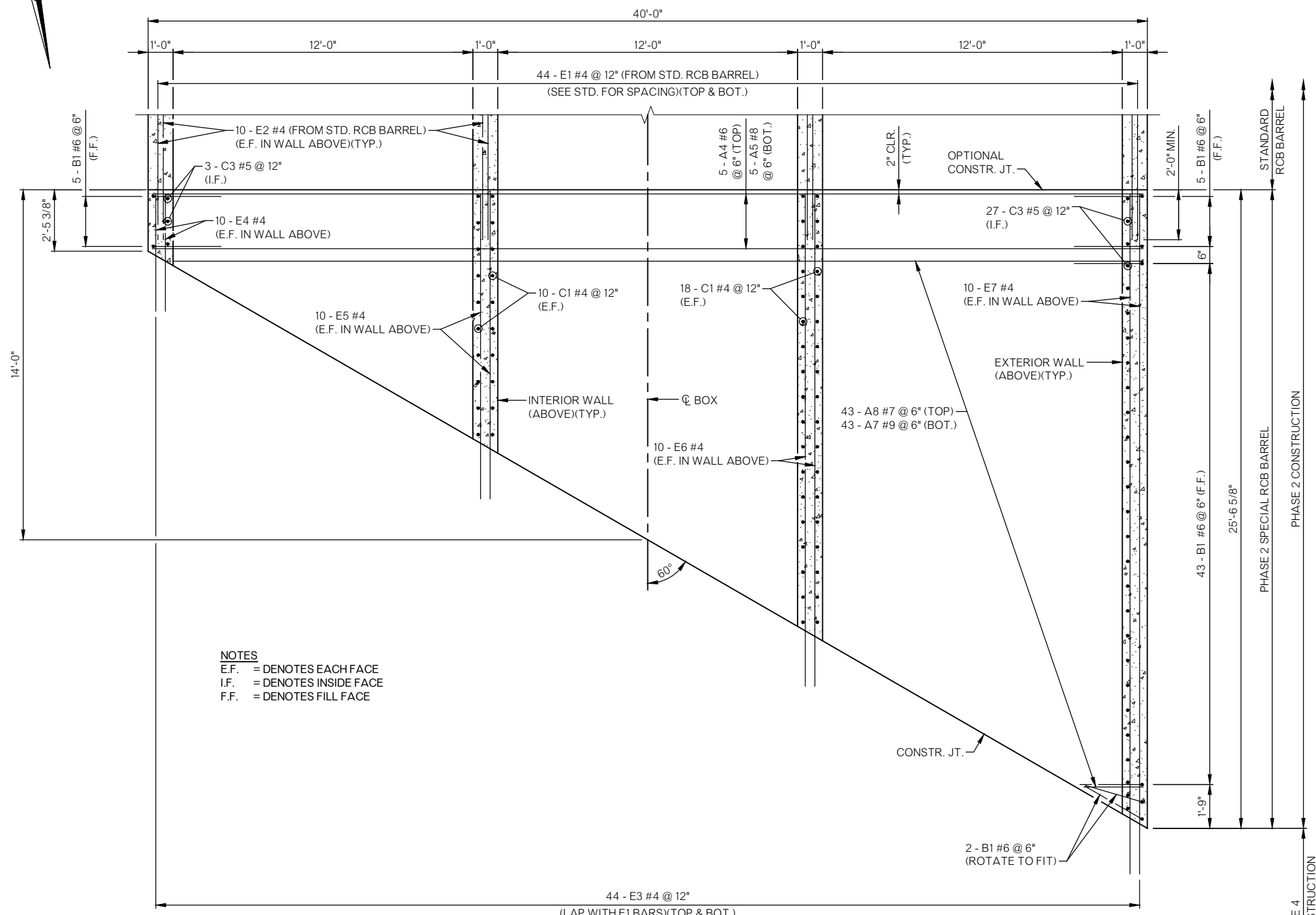


BAR BEND DETAILS

BRIDGE "A"
 SH 19 OVER DRY CREEK

BRIDGE "A" DETAILS
 (SHEET 1 OF 4)

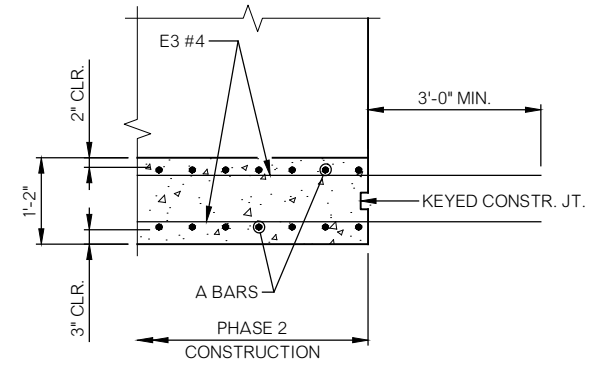
State Job No. 30425(07) Sheet No. B003



NOTES
 E.F. = DENOTES EACH FACE
 I.F. = DENOTES INSIDE FACE
 F.F. = DENOTES FILL FACE

PHASE 2 BOTTOM SLAB REINFORCING

BRIDGE "A"					
PHASE 2 SPECIAL RCB BARREL REINFORCING LIST					
MARK	NO.	SIZE	FORM	LENGTH	REMARKS
PLAIN REINFORCING BARS					
A4	10	#6	STR.	39'-8"	
A5	10	#8	STR.	39'-8"	
A7	86	#9	STR.	20'-8" AVG.	2'-6" TO 38'-10"
A8	86	#7	STR.	20'-8" AVG.	2'-6" TO 38'-10"
B1	55	#6	BNT.	5'-8"	
B2	55	#6	BNT.	13'-8"	
C1	56	#4	STR.	2'-3"	
C2	56	#4	STR.	10'-11"	
C3	30	#5	STR.	2'-7"	
C4	30	#5	STR.	10'-11"	
E3	176	#4	STR.	16'-11" AVG.	5'-6" TO 28'-4"
E4	20	#4	STR.	4'-9"	
E5	20	#4	STR.	12'-3"	
E6	20	#4	STR.	19'-9"	
E7	20	#4	STR.	27'-3"	
CH1	4	#6	STR.	46'-5"	
CL3	47	#5	BNT.	5'-3"	
CL4	47	#5	BNT.	5'-7"	
HD1	2	#8	STR.	46'-5"	

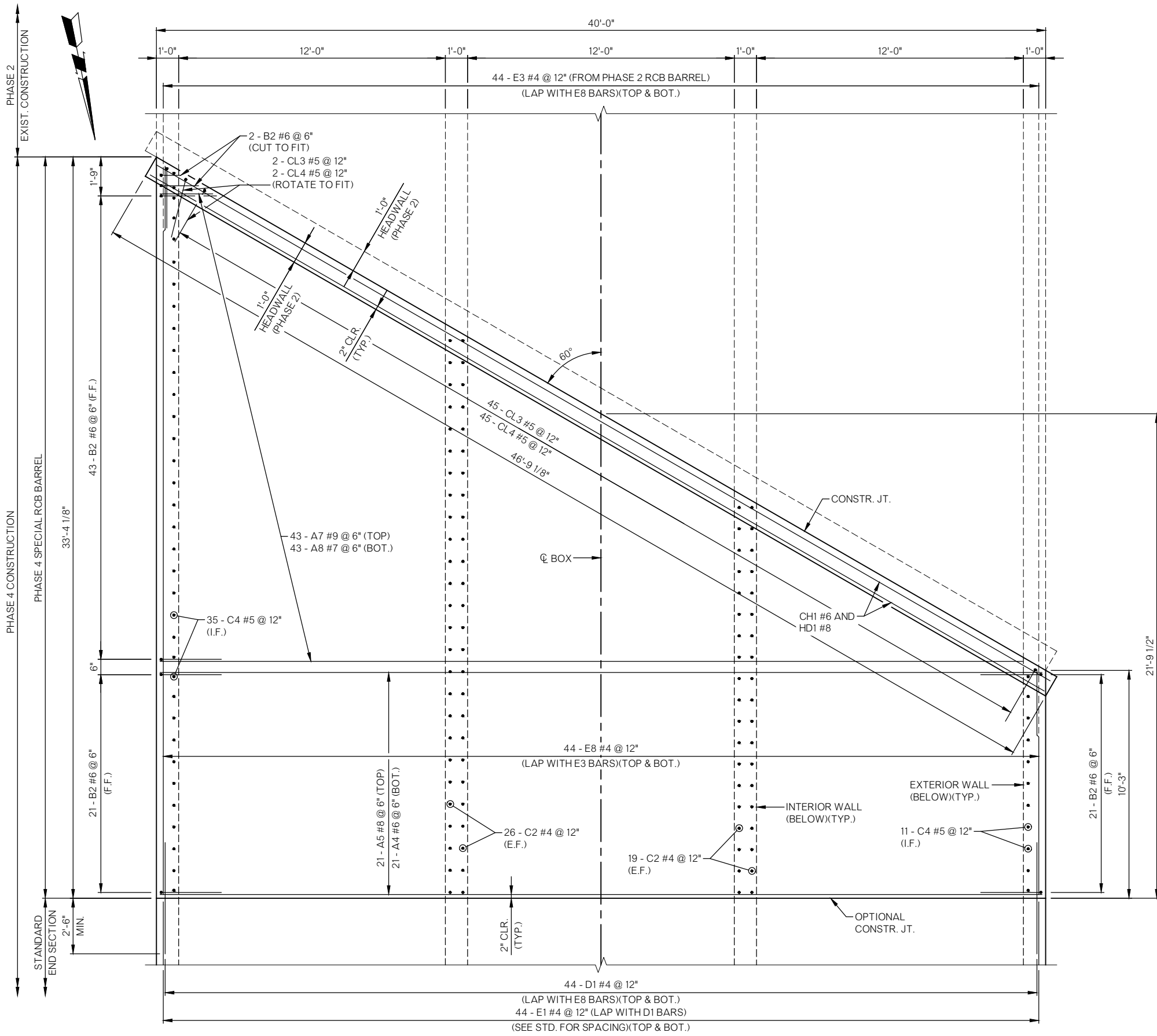


BOTTOM SLAB CONSTRUCTION JOINT DETAIL

BRIDGE "A"
 SH 19 OVER DRY CREEK

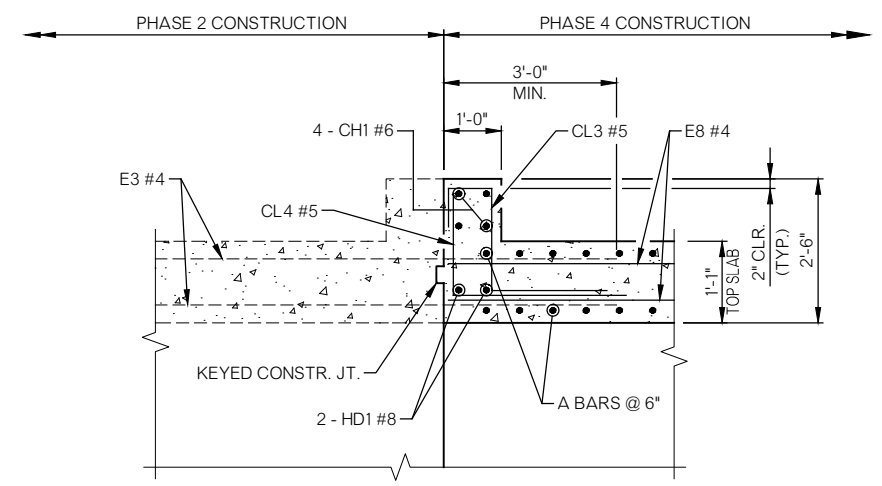
BRIDGE "A" DETAILS
 (SHEET 2 OF 4)

State Job No. 30425(07) Sheet No. B004

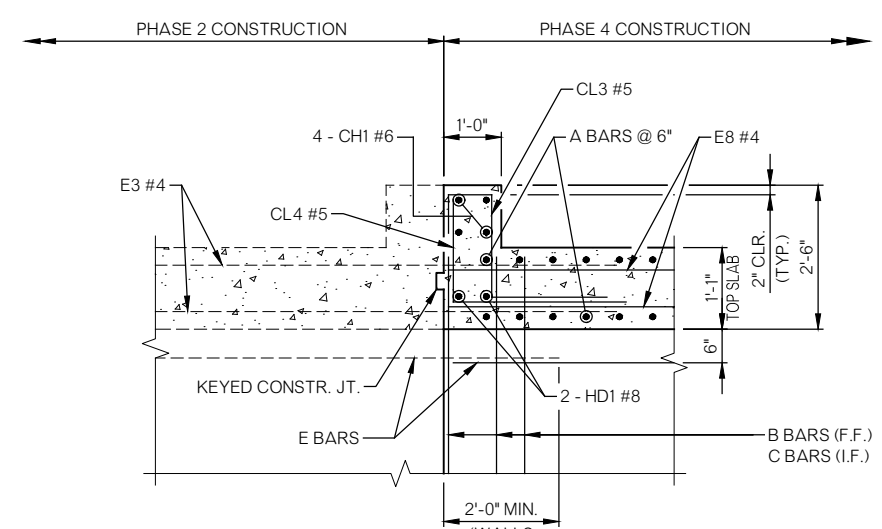


PHASE 4 TOP SLAB REINFORCING

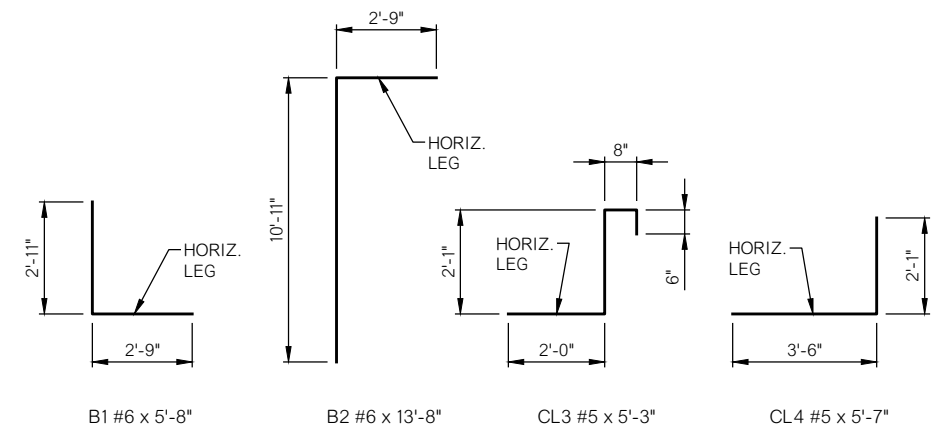
NOTES
 E.F. = DENOTES EACH FACE
 I.F. = DENOTES INSIDE FACE
 F.F. = DENOTES FILL FACE



HEADWALL DETAIL AT MIDSPAN



HEADWALL DETAIL AT EXTERIOR WALL

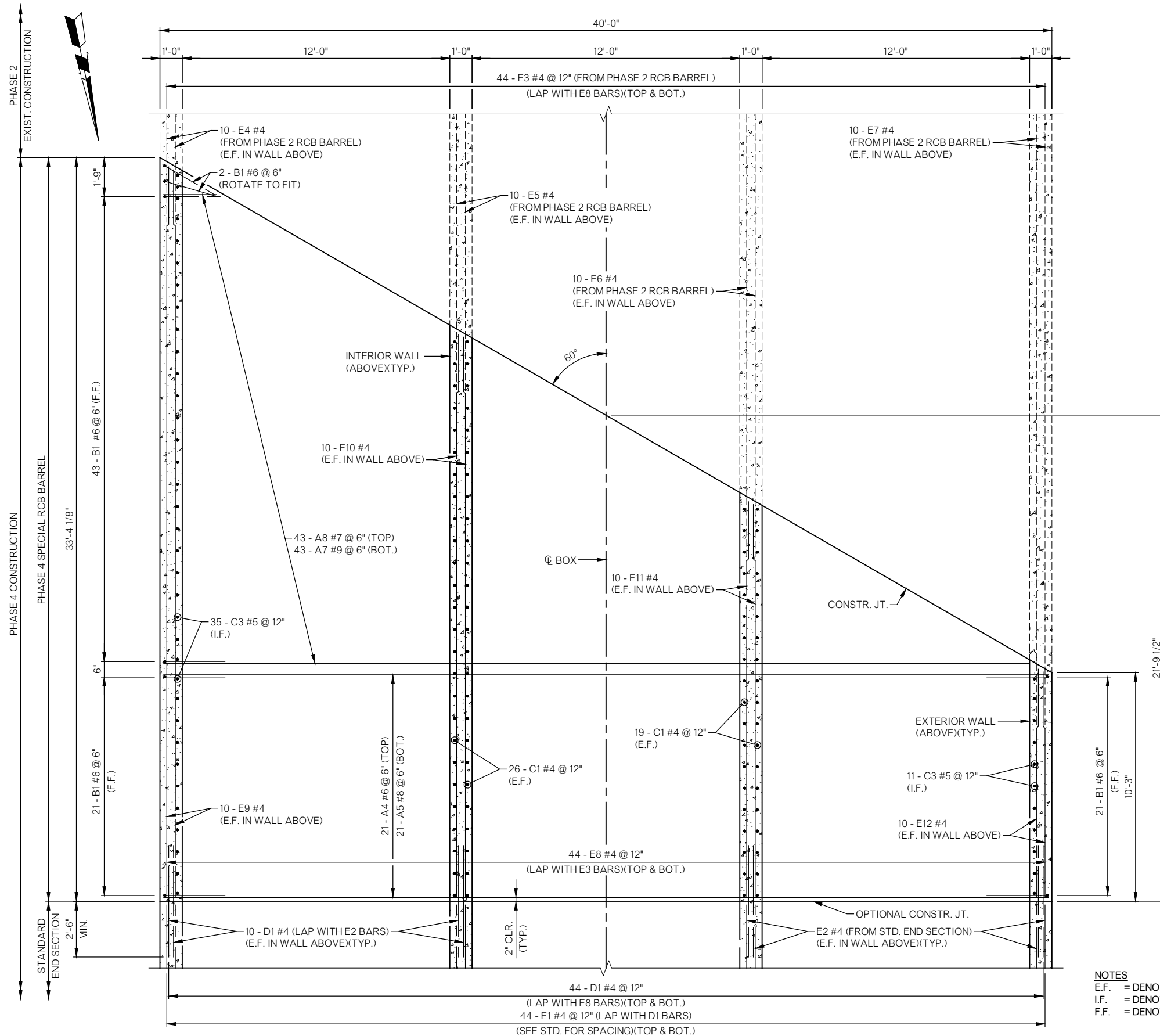


BAR BEND DETAILS

BRIDGE "A"
 SH 19 OVER DRY CREEK

BRIDGE "A" DETAILS
 (SHEET 3 OF 4)

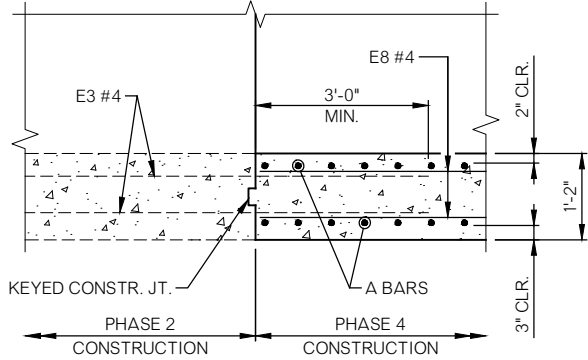
State Job No. 30425(07) Sheet No. B005



PHASE 4 BOTTOM SLAB REINFORCING

NOTES
 E.F. = DENOTES EACH FACE
 I.F. = DENOTES INSIDE FACE
 F.F. = DENOTES FILL FACE

BRIDGE "A"					
PHASE 4 SPECIAL RCB BARREL REINFORCING LIST					
MARK	NO.	SIZE	FORM	LENGTH	REMARKS
PLAIN REINFORCING BARS					
A4	42	#6	STR.	39'-8"	
A5	42	#8	STR.	39'-8"	
A7	86	#9	STR.	20'-8" AVG.	2'-6" TO 38'-10"
A8	86	#7	STR.	20'-8" AVG.	2'-6" TO 38'-10"
B1	87	#6	BNT.	5'-8"	
B2	87	#6	BNT.	13'-8"	
C1	90	#4	STR.	2'-3"	
C2	90	#4	STR.	10'-11"	
C3	46	#5	STR.	2'-7"	
C4	46	#5	STR.	10'-11"	
D1	256	#4	STR.	5'-0"	
E8	176	#4	STR.	21'-5" AVG.	10'-0" TO 32'-10"
E9	20	#4	STR.	32'-7"	
E10	20	#4	STR.	25'-0"	
E11	20	#4	STR.	17'-6"	
E12	20	#4	STR.	10'-0"	
CH1	4	#6	STR.	46'-5"	
CL3	47	#5	BNT.	5'-3"	
CL4	47	#5	BNT.	5'-7"	
HD1	2	#8	STR.	46'-5"	

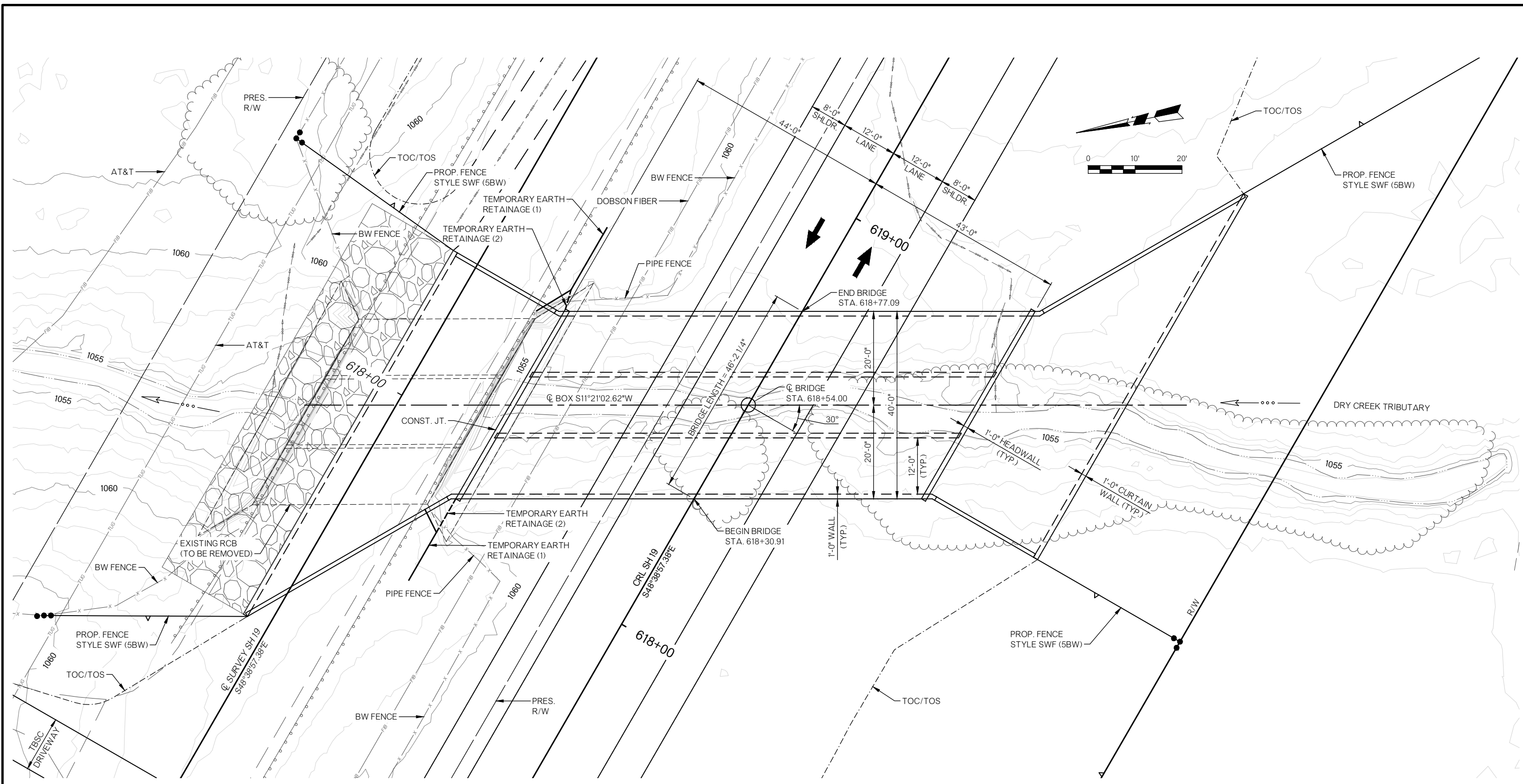


BOTTOM SLAB CONSTRUCTION JOINT DETAIL

BRIDGE "A"
 SH 19 OVER DRY CREEK

BRIDGE "A" DETAILS
 (SHEET 4 OF 4)

State Job No. 30425(07) Sheet No. B006



BM#116 - CHISELED BOX SE WING WALL ON BRIDGE
 Q SURVEY STA. 614+27, 19.00' RT.
 ELEV. = 1062.1743

NOTES
 ALL STATIONING FOLLOWS CRL SH 19, UNLESS NOTED OTHERWISE.

FOR ELEVATION VIEW, SEE SHEET NO. B008.

SEE SHEET NO. B008 FOR DESIGN DATA, FINISH GRADE DATA, HYDRAULIC DATA SUMMARY, INDEX OF SHEETS AND EXISTING BRIDGE NOTE.

FOR CHANNEL WORK DETAILS, SEE THE CHANNEL PLAN AND PROFILE SHEETS AND CROSS-SECTIONS. (ROADWAY ITEMS).

- (1) TEMPORARY EARTH RETAINAGE FOR EXISTING RCB END SECTION REMOVAL AND NEW RCB CONSTRUCTION. (PHASE 3 AND PHASE 4).
- (2) TEMPORARY EARTH RETAINAGE FOR NEW RCB CONSTRUCTION. (PHASE 4)

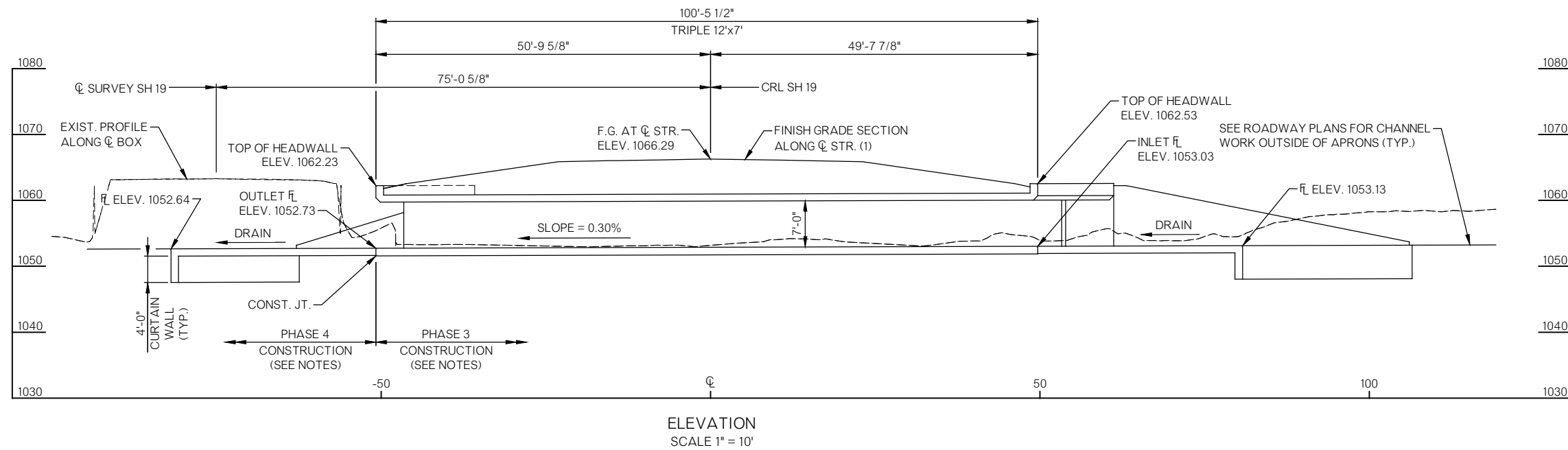
PLAN
 SCALE 1" = 10'

BM#117 - 36"x5/8" REBAR 1 FT. S. OF E. BRACE POST
 Q SURVEY STA. 622+96, 44.00' LT.
 ELEV. = 1065.1233

CONST. 3-12x7' BRIDGE BOX WITH STD. HEADWALLS, WINGS, APRONS AND 4' CURTAIN WALLS, SKEWED 30° R.F.

BRIDGE "C"
 SH 19 OVER DRY CREEK TRIBUTARY
GENERAL PLAN AND ELEVATION
 (SHEET 1 OF 2)
 CONST. TRIPLE 12"x7"x100.46' LG. BOX, SKEWED 30° R.F., AT CRL STA. 618+54
 State Job No. 30425(07) Sheet No. B007

SH 19 GRADY COUNTY



BM#116 - CHISELED BOX SE WING WALL ON BRIDGE
 CL SURVEY STA. 614+27, 19.00' RT.
 ELEV. = 1062.1743

BM#117 - 36"x5/8" REBAR 1 FT. S. OF E. BRACE POST
 CL SURVEY STA. 622+96, 44.00' LT.
 ELEV. = 1065.1233

ELEVATION
 SCALE 1" = 10'

INDEX OF SHEETS (BRIDGE "C")

NO.	DESCRIPTION
AB01	PAY QUANTITIES AND GENERAL NOTES (BRIDGE)
B007	GENERAL PLAN AND ELEVATION (SHEET 1 OF 2)
B008	GENERAL PLAN AND ELEVATION (SHEET 2 OF 2)

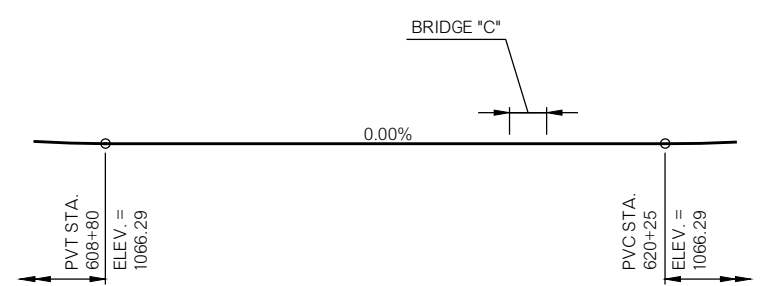
HYDRAULIC DATA ~ BRIDGE "C"
 DRY CREEK TRIBUTARY

TOTAL D.A. = 2.99 SQ. MI.
 CONTROLLED D.A. = 1.56 SQ. MI.
 EFFECTIVE D.A. = 1.43 SQ. MI.

FREQ.	Q (cfs)	CHW (ft)	V (fps)
2	214	1058.64	2.56
5	422	1059.65	2.99
10	603	1060.06	3.17
25	876	1060.64	2.77
50	1087	1061.14	2.68
100	1409	1061.85	2.77
500	2819	1065.47	2.94
RDWY OT > Q500	0	0	0
DETOUR OT	0	0	0

DESCRIPTION	UNIT	PHASE 3	PHASE 4	TOTAL
UNCLASSIFIED EXCAVATION	CY	1,600.00	710.00	2,310.00
STRUCTURAL EXCAVATION UNCLASSIFIED	CY	230.00	55.00	285.00
TEMPORARY EARTH RETAINAGE	LSUM	1.00	0.00	1.00
CLASS AA CONCRETE	CY	530.20	87.80	618.00
REINFORCING STEEL	LB	98,060.00	11,080.00	109,140.00
REMOVAL OF EXISTING BRIDGE STRUCTURE	LSUM	0.00	1.00	1.00

(2) USE OF TEMPORARY EARTH RETAINAGE STRUCTURE(S) WILL BE REQUIRED IN MULTIPLE PHASES OF CONSTRUCTION.



FINISH GRADE DATA
 CRL SH 19
 (STATIONS SHOWN ON THE DETAIL ARE ALONG CRL)

EXISTING BRIDGE NOTE:
 THE EXISTING BRIDGE SHALL BE REMOVED IN ACCORDANCE WITH THE NOTES ON SHEET AB01.

DESIGN DATA
 (LOAD AND RESISTANCE FACTOR DESIGN)

CLASS "AA" CONCRETE F'C = 4,000 PSI
 REINFORCING STEEL FY = 60,000 PSI

LOADING: HL-93 AND ODOT OVERLOAD TRUCK

DESIGN: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 2007 EDITION, WITH 2008 INTERIMS.

THE FOLLOWING STANDARDS SHALL BE REQUIRED:

- SBI-5-1
- RCB-C3-12(2-12)-02E
- RCB-E3-H7-30-1-01E
- RCB-E3-H7-30-2-01E
- RCB-E3-H7-30-3-01E
- RCB-CW3-D4-30-01E

NOTES
 ALL STATIONING FOLLOWS CRL SH 19, UNLESS NOTED OTHERWISE.

THE CONTRACTOR SHALL MAINTAIN DRAINAGE AT ALL TIMES DURING CONSTRUCTION.

FOR CHANNEL WORK DETAILS, SEE THE CHANNEL PLAN AND PROFILE SHEETS AND CROSS-SECTIONS. (ROADWAY ITEMS).

PHASE 3 CONSTRUCTION CONSISTS OF THE INLET END SECTION AND HEADWALL, STANDARD RCB BARREL, AND OUTLET END SECTION BARREL AND HEADWALL.

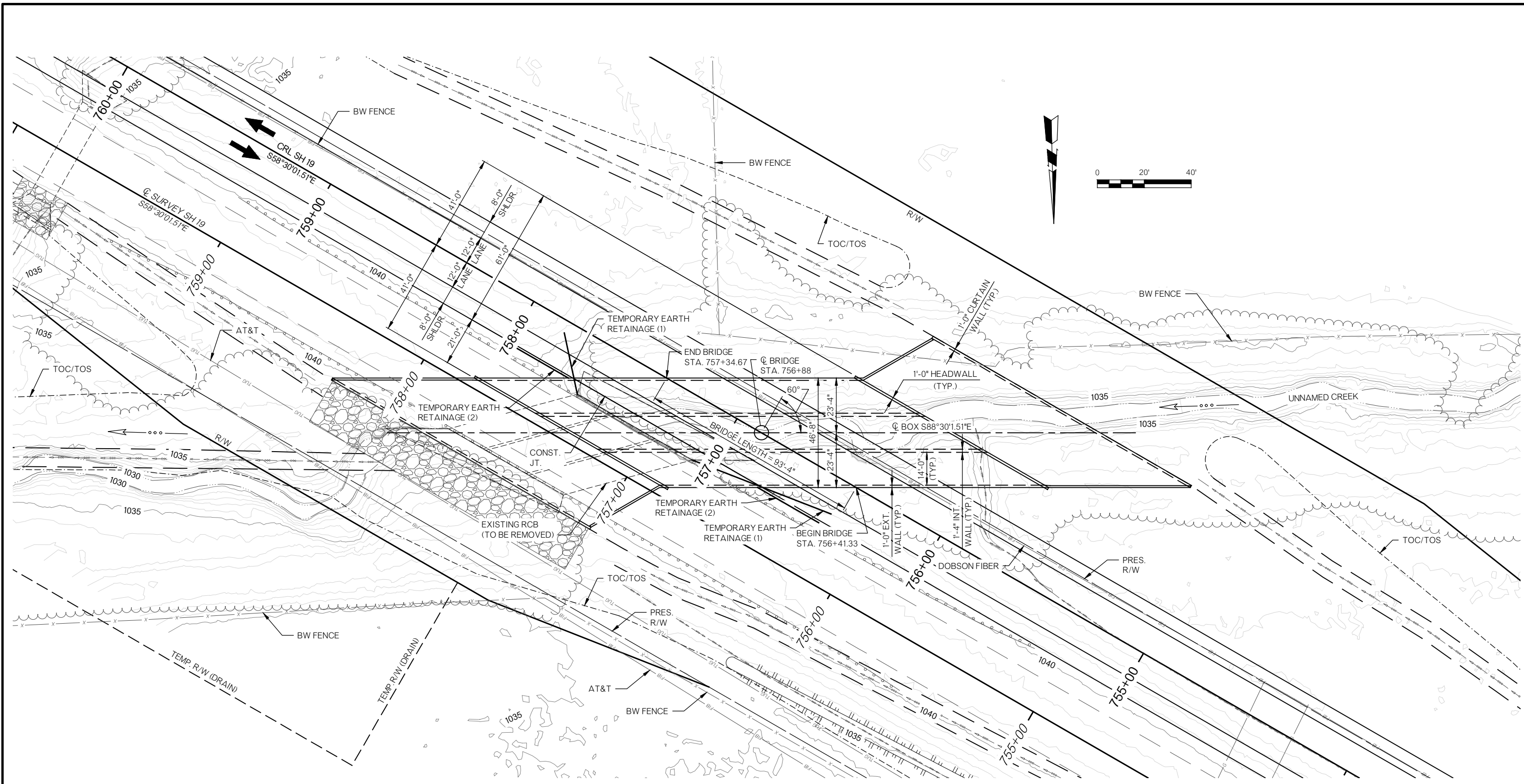
PHASE 4 CONSTRUCTION CONSISTS OF THE OUTLET END SECTION WINGS, APRON AND CURTAIN WALL.

(1) SEE ROADWAY PLAN AND PROFILES AND CROSS SECTIONS.

CONST. 3-12'x7' BRIDGE BOX WITH STD. HEADWALLS, WINGS, APRONS AND 4' CURTAIN WALLS, SKEWED 30° R.F.

BRIDGE "C"
 SH 19 OVER DRY CREEK TRIBUTARY
GENERAL PLAN AND ELEVATION
 (SHEET 2 OF 2)
 CONST. TRIPLE 12'x7'x100.46' L.G. BOX, SKEWED 30° R.F., AT CRL STA. 618+54
 State Job No. 30425(07) Sheet No. B008

SH 19
GRADY COUNTY



PLAN
SCALE 1" = 20'

BM#132 - CHISELED BOX ON CENTER OF HEADWALL
 Q SURVEY STA. 753+25, 26.00' RT.
 ELEV. = 1038.7846

BM#133 - CHISELED BOX ON CENTER OF HEADWALL
 Q SURVEY STA. 761+24, 35.00' RT.
 ELEV. = 1038.0733

- NOTES**
 ALL STATIONING FOLLOWS CRL SH 19, UNLESS NOTED OTHERWISE.
- FOR ELEVATION VIEW, SEE SHEET NO. B010.
- SEE SHEET NO. B010 FOR DESIGN DATA, FINISH GRADE DATA, HYDRAULIC DATA SUMMARY, INDEX OF SHEETS AND EXISTING BRIDGE NOTE.
- FOR CHANNEL WORK DETAILS, SEE THE CHANNEL PLAN AND PROFILE SHEETS AND CROSS-SECTIONS. (ROADWAY ITEMS).

- (1) TEMPORARY EARTH RETAINAGE FOR EXISTING RCB END SECTION REMOVAL AND NEW RCB CONSTRUCTION. (PHASE 3 AND PHASE 4).
- (2) TEMPORARY EARTH RETAINAGE FOR NEW RCB CONSTRUCTION. (PHASE 4).

CONST. 3-14'x8' BRIDGE BOX WITH SP.
 HEADWALLS, WINGS, APRONS AND 4'
 CURTAIN WALLS, SKEWED 60° L.F.

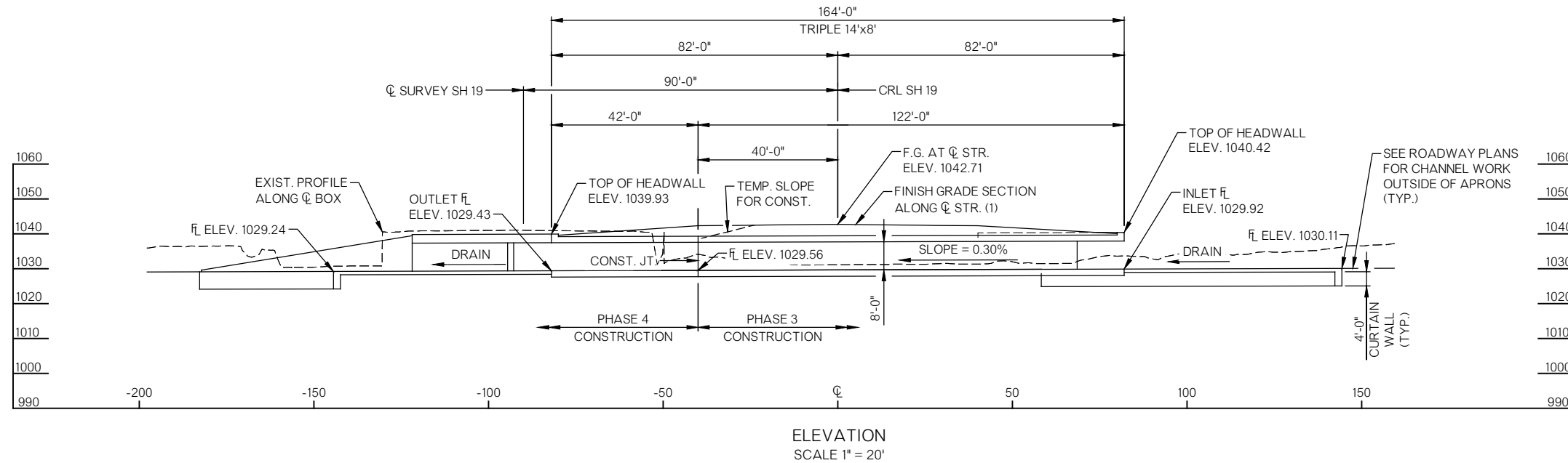
BRIDGE "D"
 SH 19 OVER UNNAMED CREEK

**GENERAL PLAN AND ELEVATION
 (SHEET 1 OF 2)**

CONST. TRIPLE 14'x8'x164' LG. BOX, SKEWED 60° L.F., AT CRL STA. 756+88

State Job No. 30425(07) Sheet No. B009

SH 19
GRADY COUNTY



BM#132 - CHISELED BOX ON CENTER OF HEADWALL
 C SURVEY STA. 753+25, 26.00' RT.
 ELEV. = 1038.7846

BM#133 - CHISELED BOX ON CENTER OF HEADWALL
 C SURVEY STA. 761+24, 35.00' RT.
 ELEV. = 1038.0733

INDEX OF SHEETS (BRIDGE "D")

NO.	DESCRIPTION
AB01	PAY QUANTITIES AND GENERAL NOTES (BRIDGE)
B009	GENERAL PLAN AND ELEVATION (SHEET 1 OF 2)
B010	GENERAL PLAN AND ELEVATION (SHEET 2 OF 2)
B011-B016	BRIDGE "D" DETAILS

HYDRAULIC DATA ~ BRIDGE "D"
UNNAMED CREEK

TOTAL D.A. = 2.68 SQ. MI.
 CONTROLLED D.A. = 1.42 SQ. MI.
 EFFECTIVE D.A. = 1.26 SQ. MI.

FREQ.	Q (cfs)	CHW (ft)	V (fps)
2	218	1038.10	1.10
5	471	1039.82	1.61
10	727	1041.09	2.16
25	1160	1041.48	3.45
50	1470	1041.93	4.37
100	1880	1042.37	5.32
500	2990	1043.05	7.05
RDWY OT = Q458	2400	1042.72	6.21
DETOUR OT	0	0	0

SUMMARY OF QUANTITIES - BRIDGE "D"

DESCRIPTION	UNIT	PHASE 3	PHASE 4	TOTAL
UNCLASSIFIED EXCAVATION	CY	3,880.00	3,010.00	6,890.00
STRUCTURAL EXCAVATION UNCLASSIFIED	CY	590.00	335.00	925.00
(2) TEMPORARY EARTH RETAINAGE	LSUM	1.00	0.00	1.00
CLASS AA CONCRETE	CY	1,090.10	483.70	1,573.80
REINFORCING STEEL	LB	285,530.00	109,740.00	395,270.00
REMOVAL OF EXISTING BRIDGE STRUCTURE	LSUM	0.00	1.00	1.00

(2) USE OF TEMPORARY EARTH RETAINAGE STRUCTURE(S) WILL BE REQUIRED IN MULTIPLE PHASES OF CONSTRUCTION.

DESIGN DATA
(LOAD AND RESISTANCE FACTOR DESIGN)

CLASS "AA" CONCRETE F'C = 4,000 PSI
 REINFORCING STEEL FY = 60,000 PSI
 LOADING: HL-93 AND ODOT OVERLOAD TRUCK
 DESIGN: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION.

THE FOLLOWING STANDARDS SHALL BE REQUIRED:

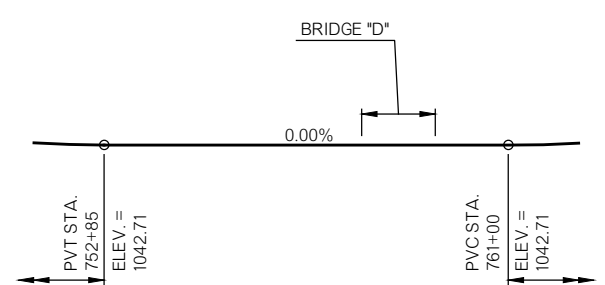
SBI-5-1

NOTES
 ALL STATIONING FOLLOWS CRL SH 19, UNLESS NOTED OTHERWISE.

THE CONTRACTOR SHALL MAINTAIN DRAINAGE AT ALL TIMES DURING CONSTRUCTION.

FOR CHANNEL WORK DETAILS, SEE THE CHANNEL PLAN AND PROFILE SHEETS AND CROSS-SECTIONS. (ROADWAY ITEMS).

(1) SEE ROADWAY PLAN AND PROFILES AND CROSS SECTIONS.

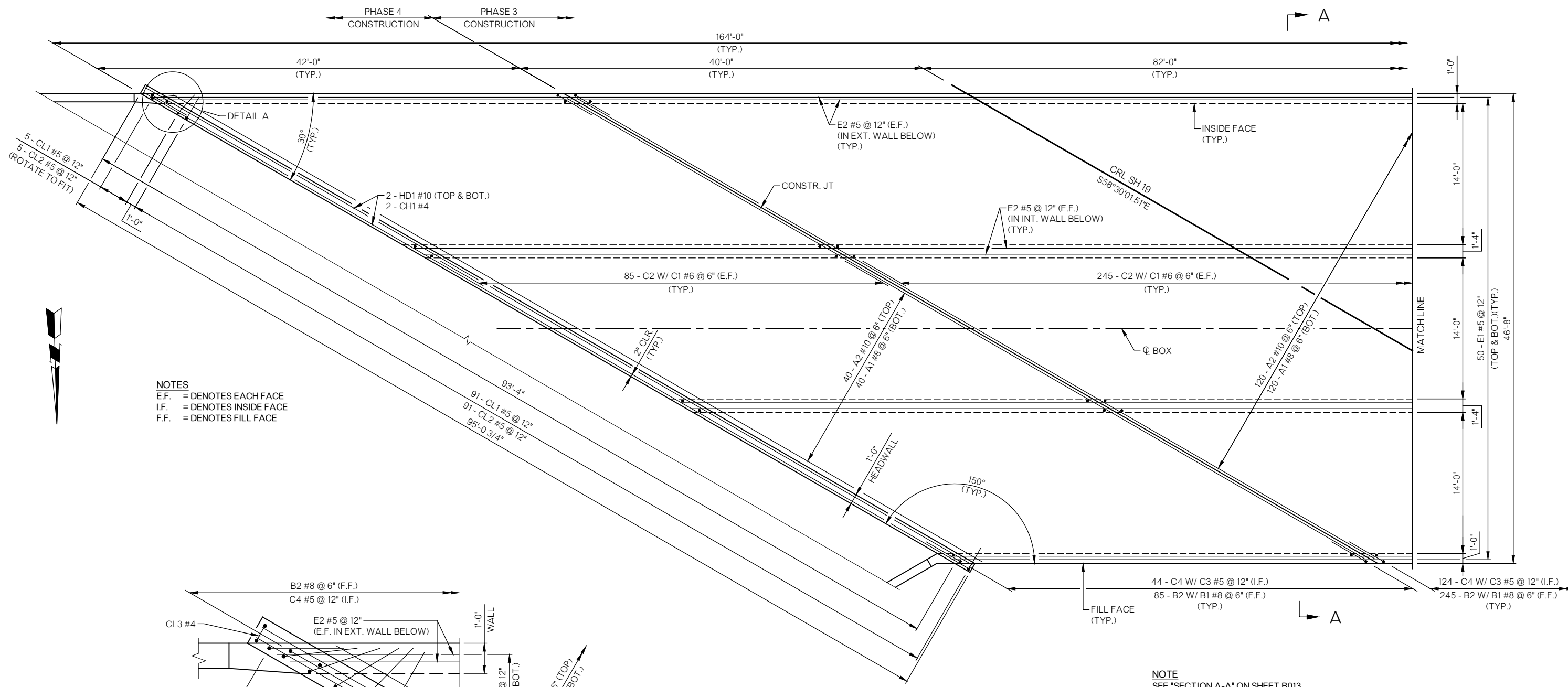


FINISH GRADE DATA
 CRL SH 19
 (STATIONS SHOWN ON THE DETAIL ARE ALONG CRL)

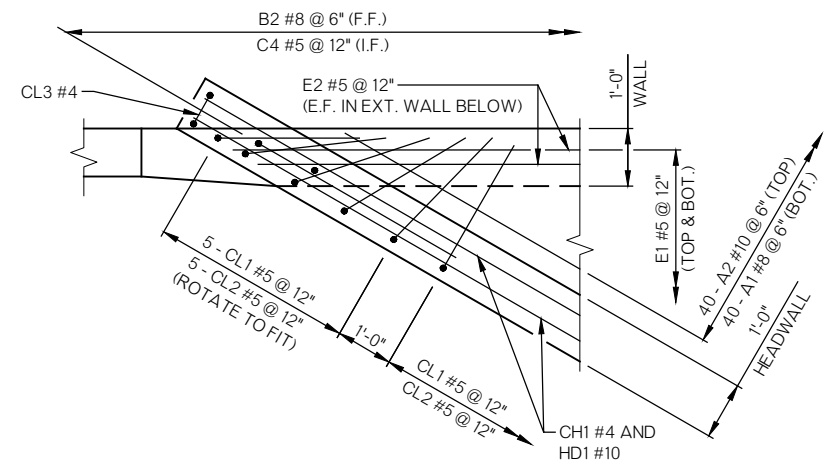
EXISTING BRIDGE NOTE:
 THE EXISTING BRIDGE SHALL BE REMOVED IN ACCORDANCE WITH THE NOTES ON SHEET AB01.

BRIDGE "D"
 SH 19 OVER UNNAMED CREEK
GENERAL PLAN AND ELEVATION
 (SHEET 2 OF 2)
 CONST. TRIPLE 14'x8'x164' LG. BOX, SKEWED 60° L.F., AT CRL STA. 756+88
 State Job No. 30425(07) Sheet No. B010

CONST. 3-14'x8' BRIDGE BOX WITH SP. HEADWALLS, WINGS, APRONS AND 4' CURTAIN WALLS, SKEWED 60° L.F.



NOTES
 E.F. = DENOTES EACH FACE
 I.F. = DENOTES INSIDE FACE
 F.F. = DENOTES FILL FACE



DETAIL A
 (SHOWING ACUTE CORNER AT EAST HEADWALL,
 ACUTE CORNER AT WEST HEADWALL SIMILAR)

BARREL REINFORCING AND LAYOUT PLAN
 (1 OF 2)
 (TOP SLAB SHOWN, BOT. SLAB SIMILAR)
 (REINFORCING LAPS NOT SHOWN FOR CLARITY)

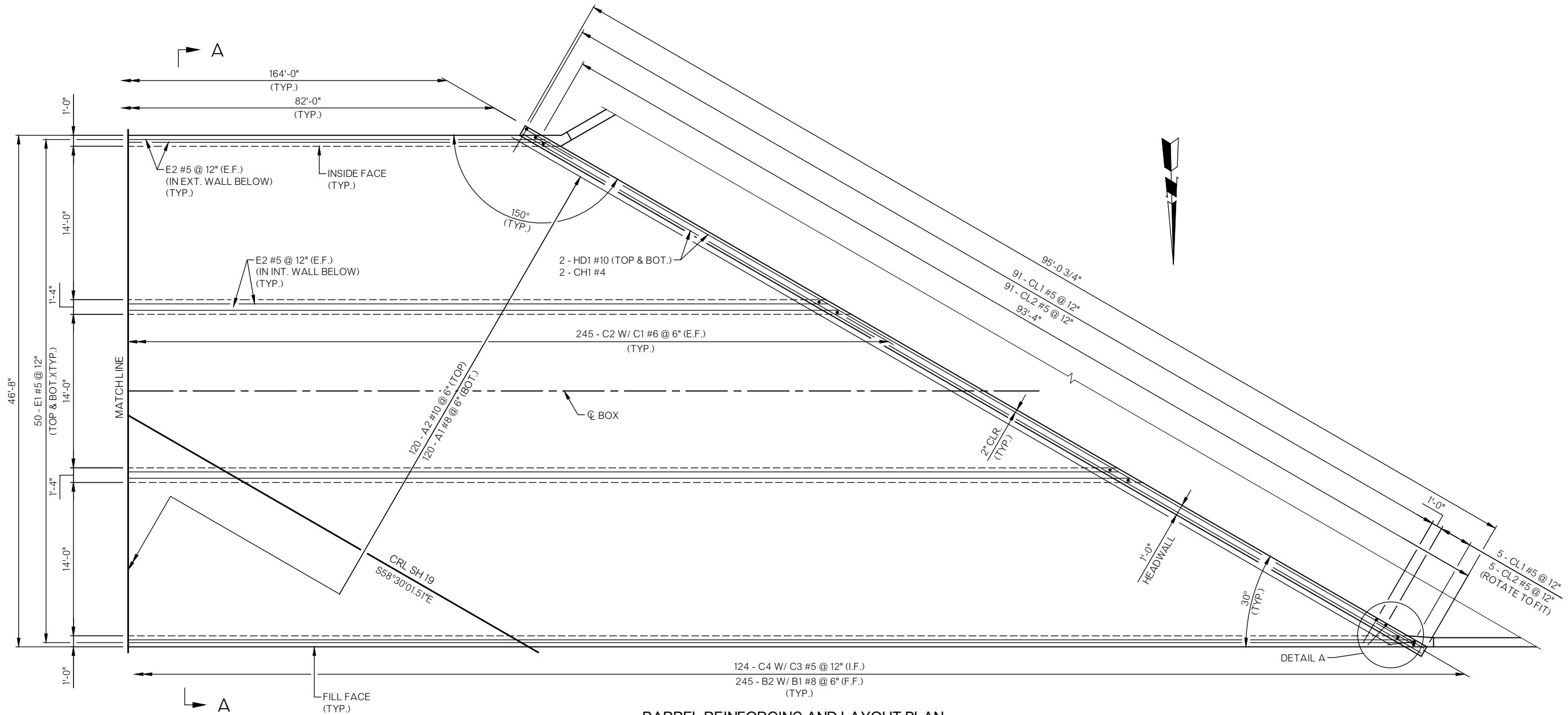
NOTE
 SEE "SECTION A-A" ON SHEET B013.

BRIDGE "D"
 SH 19 OVER UNNAMED CREEK

BRIDGE "D" DETAILS
 (SHEET 1 OF 6)

State Job No. 30425(07) Sheet No. B011

GRADY COUNTY SH 19



**BARREL REINFORCING AND LAYOUT PLAN
(2 OF 2)**

(TOP SLAB SHOWN, BOT. SLAB SIMILAR)
(REINFORCING LAPS NOT SHOWN FOR CLARITY)

NOTE
SEE "SECTION A-A" ON SHEET B013.
SEE "DETAIL A" ON SHEET B011.

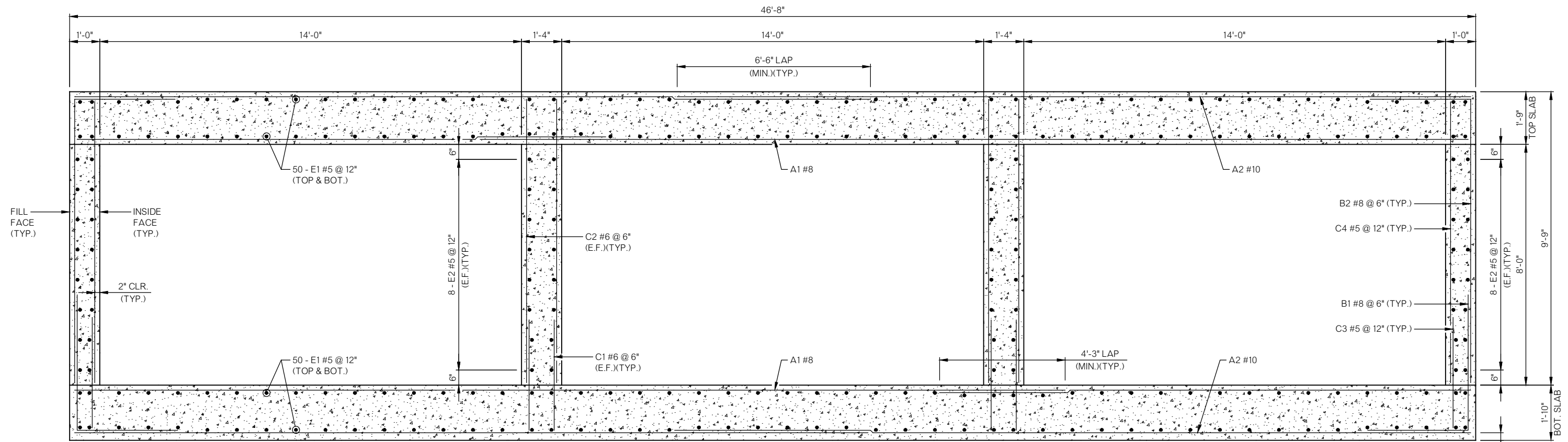
NOTES
E.F. = DENOTES EACH FACE
I.F. = DENOTES INSIDE FACE
F.F. = DENOTES FILL FACE

BRIDGE "D"
SH 19 OVER UNNAMED CREEK

**BRIDGE "D" DETAILS
(SHEET 2 OF 6)**

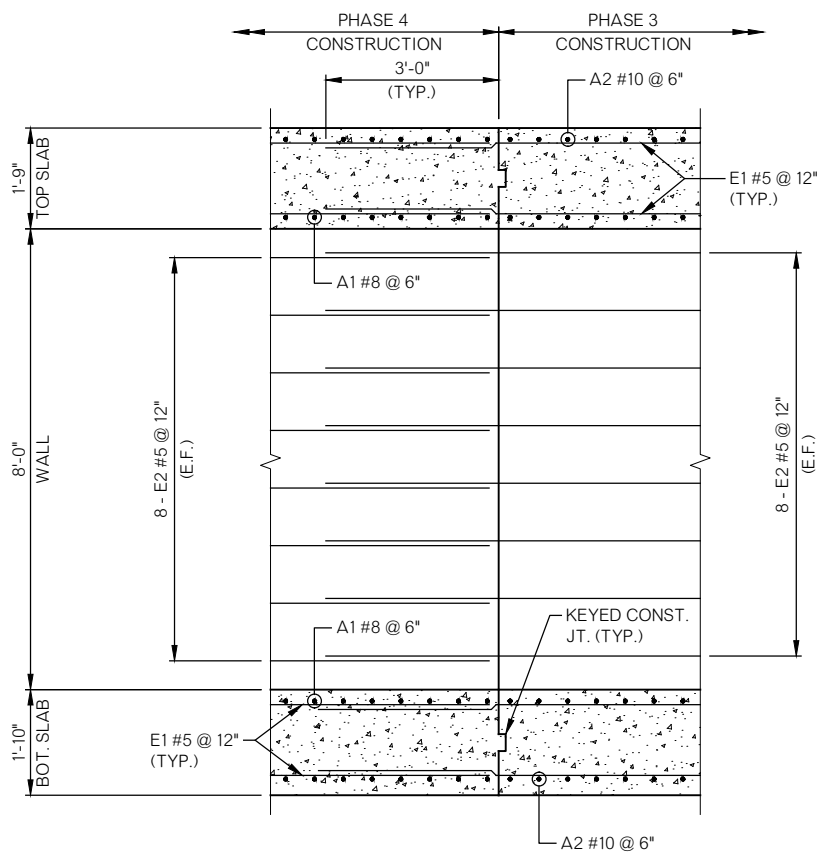
State Job No. 30425(07) Sheet No. B012

GRADY COUNTY SH 19

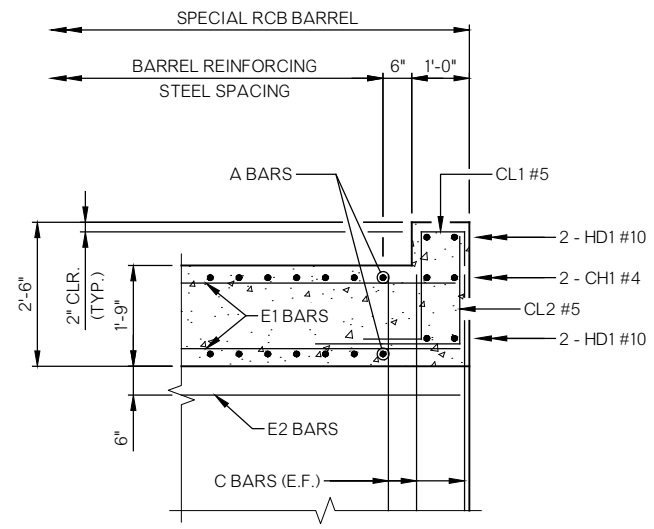


SECTION A-A
(SEE SHEETS B011 AND B012 FOR PLACEMENT OF A BARS)

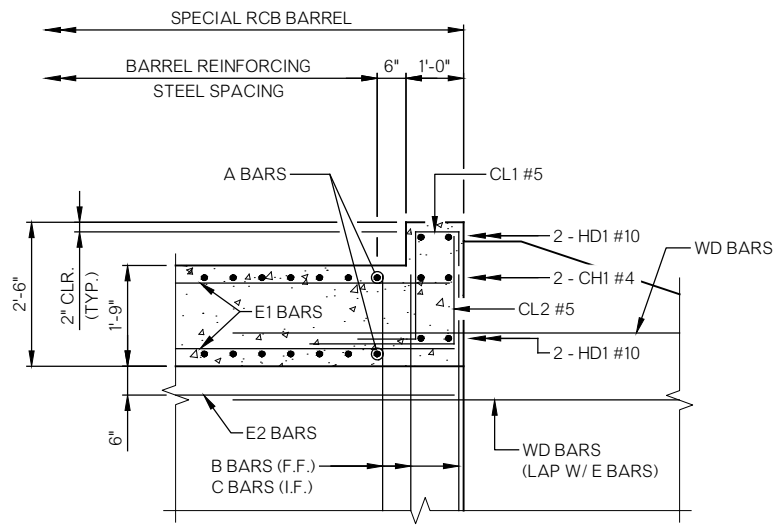
NOTES
E.F. = DENOTES EACH FACE



SECTION THRU CONSTRUCTION JOINT



HEADWALL DETAIL AT INTERIOR WALL
(DIMENSION SHOWN NORMAL TO HEADWALL)

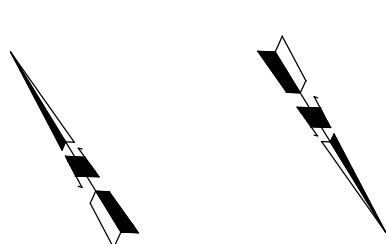


HEADWALL DETAIL AT EXTERIOR WALL
(DIMENSION SHOWN NORMAL TO HEADWALL)

BRIDGE "D"
SH 19 OVER UNNAMED CREEK

BRIDGE "D" DETAILS
(SHEET 3 OF 6)

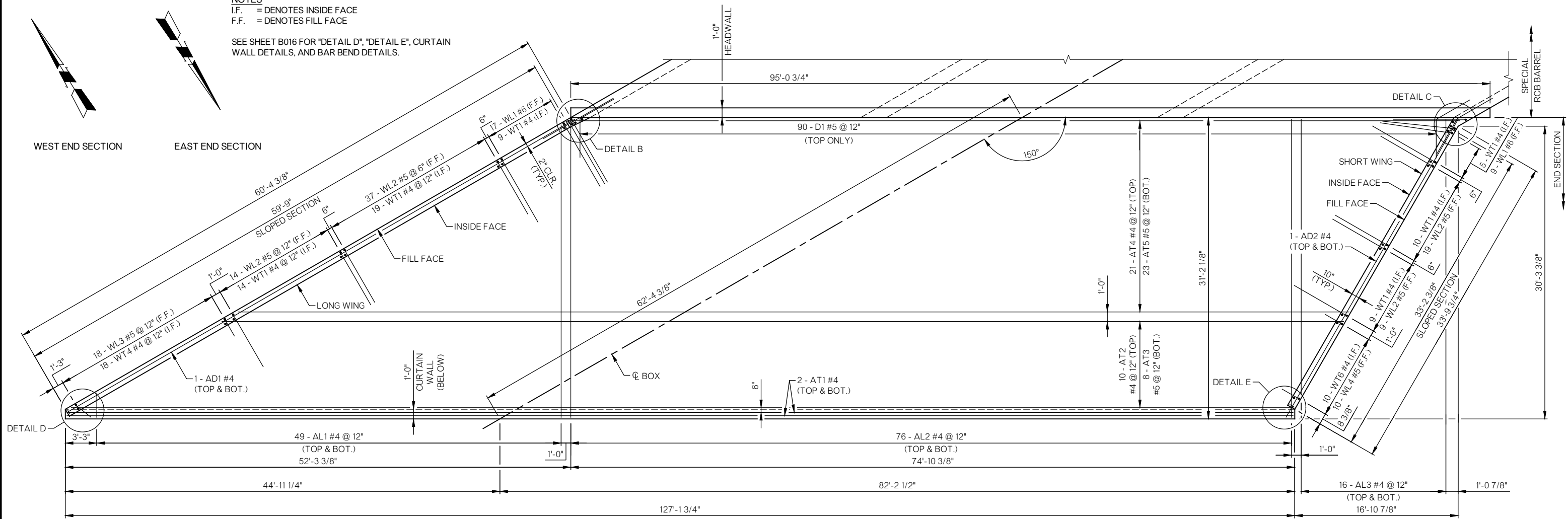
State Job No. 30425(07) Sheet No. B013



NOTES

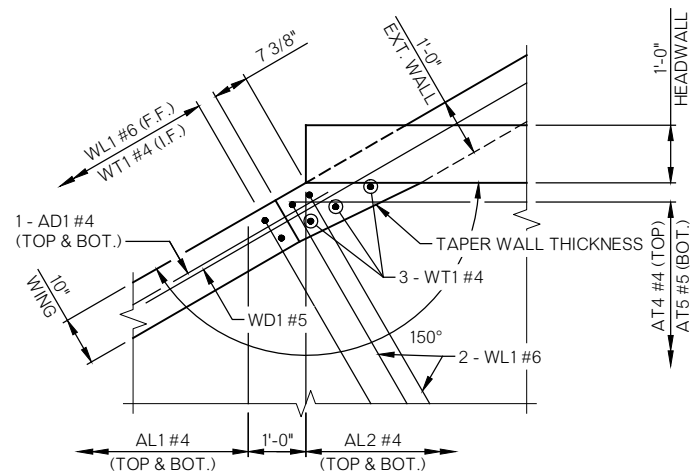
I.F. = DENOTES INSIDE FACE
F.F. = DENOTES FILL FACE

SEE SHEET B016 FOR "DETAIL D", "DETAIL E", CURTAIN WALL DETAILS, AND BAR BEND DETAILS.

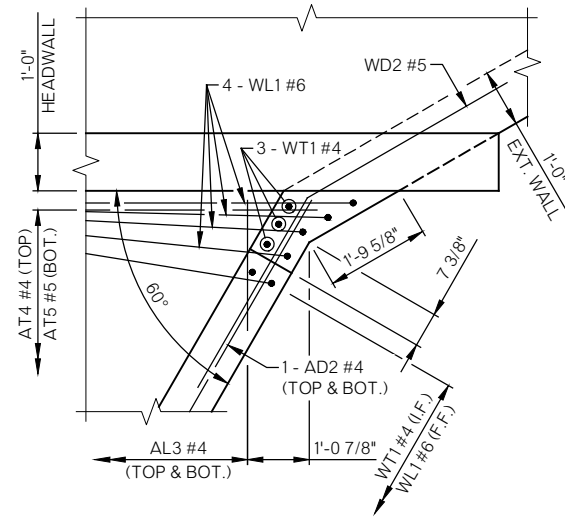


END SECTION APRON REINFORCING AND LAYOUT PLAN

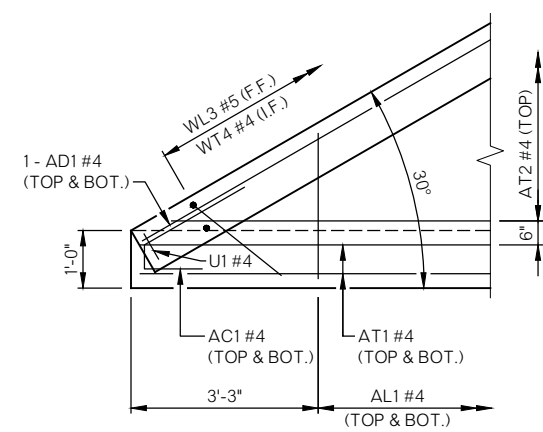
(BARREL REINFORCING NOT SHOWN FOR CLARITY)



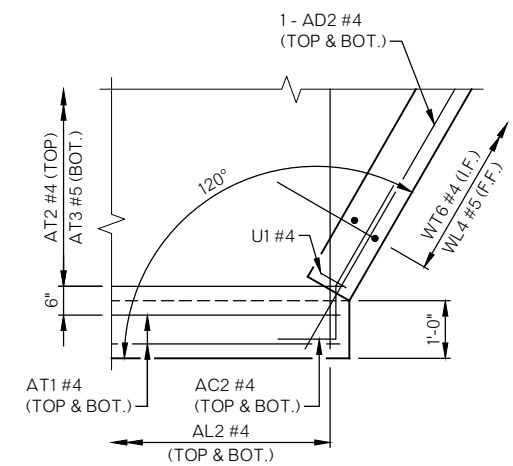
DETAIL B



DETAIL C



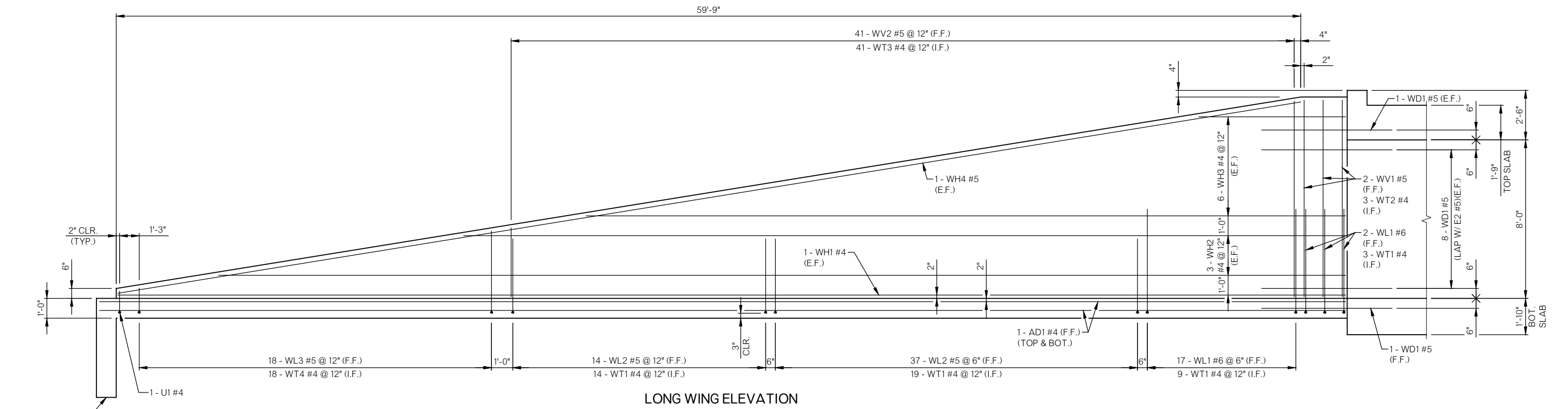
DETAIL D



DETAIL E

BRIDGE "D"
SH 19 OVER UNNAMED CREEK

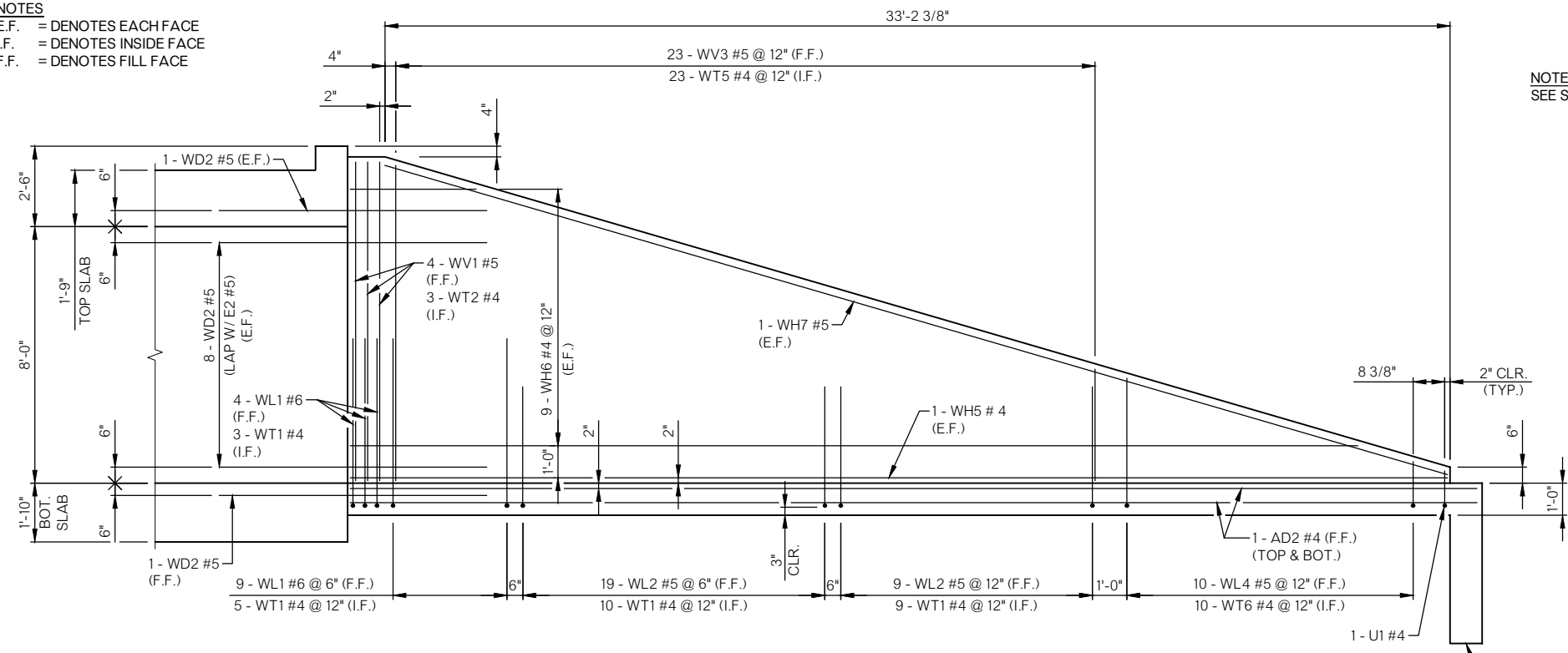
BRIDGE "D" DETAILS
(SHEET 4 OF 6)



LONG WING ELEVATION

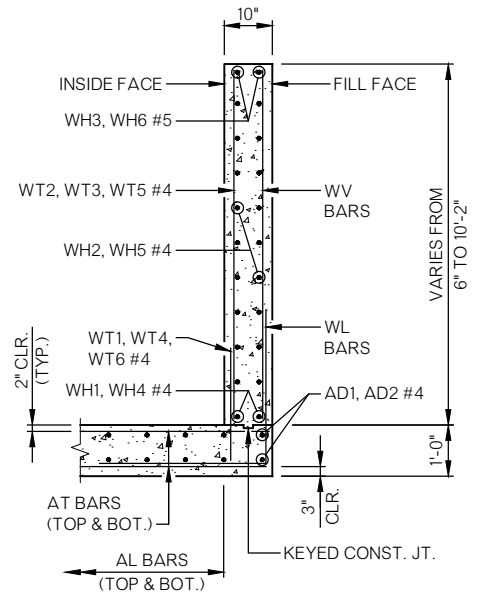
SEE CURTAIN WALL DETAIL ON SHEET B016

NOTES
 E.F. = DENOTES EACH FACE
 I.F. = DENOTES INSIDE FACE
 F.F. = DENOTES FILL FACE



SHORT WING ELEVATION

NOTES
 SEE SHEET B013 FOR HEADWALL DETAILS.



TYPICAL SECTION THRU WING

BRIDGE "D"
 SH 19 OVER UNNAMED CREEK

BRIDGE "D" DETAILS
 (SHEET 5 OF 6)

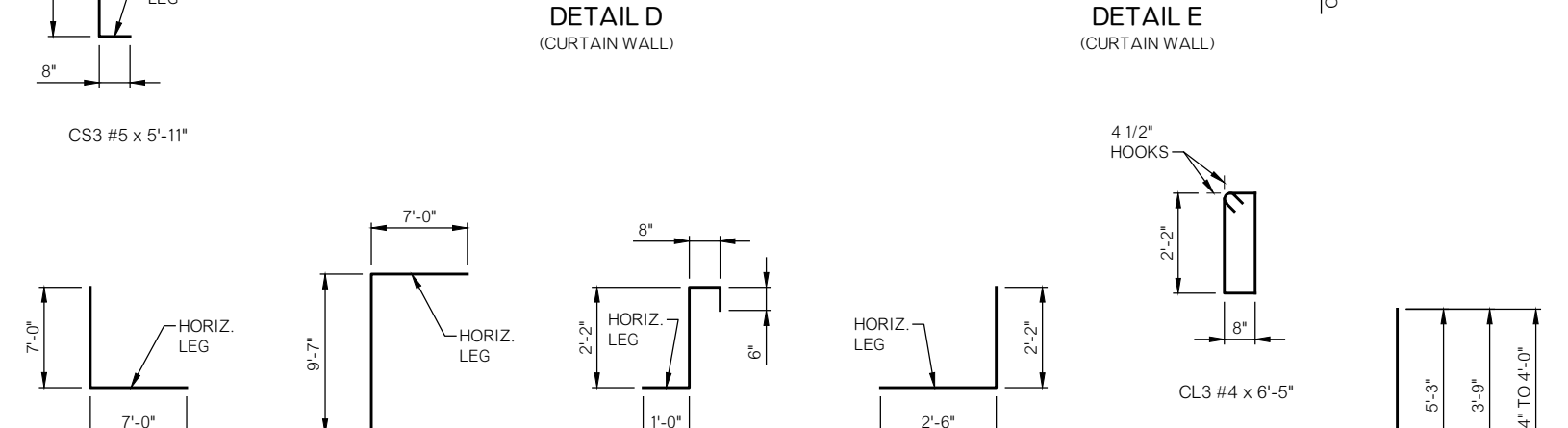
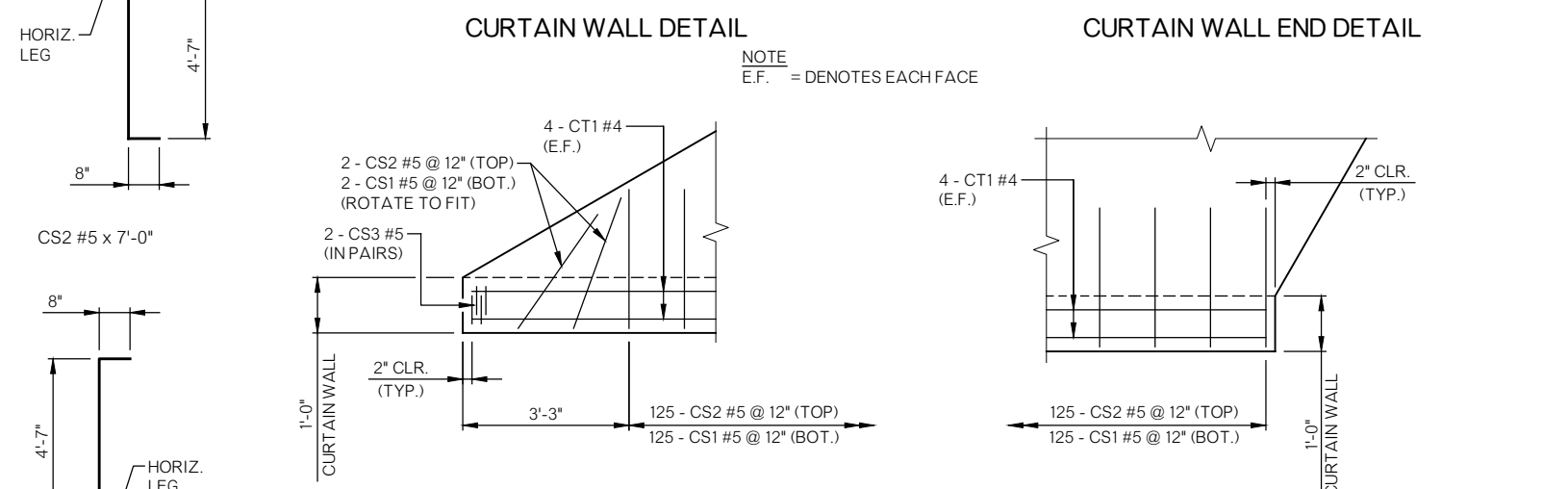
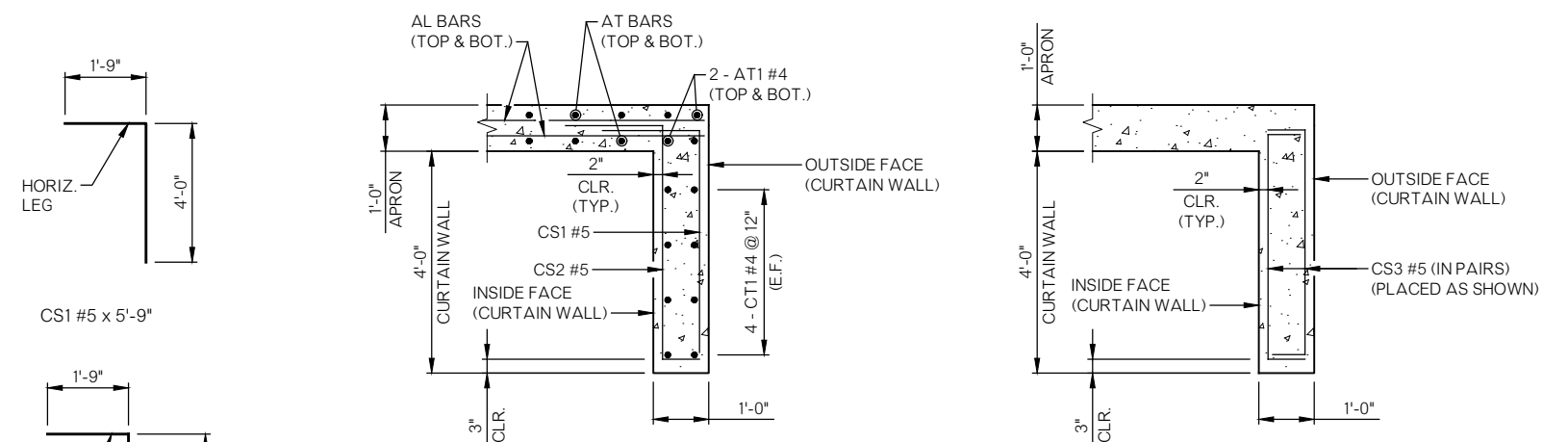
State Job No. 30425(07) Sheet No. B015

BRIDGE "D" APRON REINFORCING LIST (INCLUDES CURTAIN WALL) (ONE SHOWN, TWO REQUIRED)						
MARK	NO.	SIZE	FORM	LENGTH	REMARKS	
PLAIN REINFORCING BARS						
	AC1	2	#4	BNT.	3'-8"	
	AC2	2	#4	BNT.	3'-11"	
(1)	AD1	2	#4	STR.	62'-8"	
	AD2	2	#4	STR.	35'-7"	
(2)	AL1	98	#4	STR.	16'-4" AVG.	2'-5" TO 30'-3"
	AL2	152	#4	STR.	30'-10"	
(3)	AL3	32	#4	STR.	15'-2" AVG.	2'-3" TO 28'-1"
(4)	AT1	4	#4	STR.	134'-3"	
(4)	AT2	10	#4	STR.	128'-4" AVG.	123'-2" TO 133'-6"
(5)	AT3	8	#5	STR.	127'-0" AVG.	123'-0" TO 131'-0"
(5)	AT4	21	#4	STR.	108'-3" AVG.	96'-10" TO 119'-8"
(1)	AT5	23	#5	STR.	107'-2" AVG.	94'-5" TO 119'-5"
	CS1	127	#5	BNT.	5'-9"	
	CS2	127	#5	BNT.	7'-0"	
	CS3	4	#5	BNT.	5'-11"	
(4)	CT1	8	#4	STR.	134'-3"	

BRIDGE "D" PHASE 3 BARREL REINFORCING LIST (INCLUDES HEADWALL)					
MARK	NO.	SIZE	FORM	LENGTH	REMARKS
PLAIN REINFORCING BARS					
(9)	A1	240	#8	STR.	96'-11"
(10)	A2	240	#10	STR.	99'-2"
	B1	490	#8	BNT.	14'-0"
	B2	490	#8	BNT.	16'-7"
	C1	980	#6	STR.	4'-11"
	C2	980	#6	STR.	9'-7"
	C3	248	#5	STR.	4'-7"
	C4	248	#5	STR.	9'-7"
(6)	CH1	2	#4	STR.	98'-11"
	CL1	96	#5	BNT.	4'-4"
	CL2	96	#5	BNT.	4'-8"
	CL3	1	#4	BNT.	6'-5"
	D1	90	#5	BNT.	8'-0"
(11)	E1	200	#5	STR.	127'-8"
(11)	E2	64	#5	STR.	127'-8"
(7)	HD1	4	#10	STR.	101'-2"
	WD1	19	#5	STR.	8'-0"
	WD2	19	#5	BNT.	8'-0"

BRIDGE "D" WING REINFORCING LIST (ONE SHOWN, TWO REQUIRED)						
MARK	NO.	SIZE	FORM	LENGTH	REMARKS	
PLAIN REINFORCING BARS						
(1)	WH1	2	#4	STR.	62'-6"	
(1)(13)	WH2	6	#4	STR.	51'-4" AVG.	45'-2" TO 57'-6"
(1)(14)	WH3	12	#4	STR.	20'-11" AVG.	5'-5" TO 36'-5"
(12)	WH4	2	#5	STR.	63'-4"	
	WH5	2	#4	STR.	34'-0"	
(8)	WH6	18	#4	STR.	17'-6" AVG.	3'-9" TO 31'-3"
	WH7	2	#5	STR.	34'-5"	
	WL1	32	#6	BNT.	12'-9"	
	WL2	79	#5	BNT.	10'-0"	
	WL3	18	#5	BNT.	4'-8" AVG.	3'-4" TO 6'-0"
	WL4	10	#5	BNT.	4'-8" AVG.	3'-4" TO 6'-0"
	WT1	72	#4	STR.	2'-10"	
	WT2	6	#4	STR.	10'-0"	
	WT3	41	#4	STR.	6'-8" AVG.	3'-5" TO 9'-11"
	WT4	18	#4	STR.	2'-8" AVG.	1'-4" TO 4'-0"
	WT5	23	#4	STR.	6'-8" AVG.	3'-5" TO 9'-11"
	WT6	10	#4	STR.	2'-8" AVG.	1'-4" TO 4'-0"
	WV1	6	#5	STR.	10'-0"	
	WV2	41	#5	STR.	6'-8" AVG.	3'-5" TO 9'-11"
	WV3	23	#5	STR.	6'-8" AVG.	3'-5" TO 9'-11"
	U1	2	#4	BNT.	2'-8"	

BRIDGE "D" PHASE 4 BARREL REINFORCING LIST (INCLUDES HEADWALL)					
MARK	NO.	SIZE	FORM	LENGTH	REMARKS
PLAIN REINFORCING BARS					
(9)	A1	80	#8	STR.	96'-11"
(10)	A2	80	#10	STR.	99'-2"
	B1	170	#8	BNT.	14'-0"
	B2	170	#8	BNT.	16'-7"
	C1	340	#6	STR.	4'-11"
	C2	340	#6	STR.	9'-7"
	C3	88	#5	STR.	4'-7"
	C4	88	#5	STR.	9'-7"
(6)	CH1	2	#4	STR.	98'-11"
	CL1	96	#5	BNT.	4'-4"
	CL2	1	#4	BNT.	6'-5"
	D1	90	#5	BNT.	8'-0"
	E1	200	#5	STR.	41'-8"
	E2	64	#5	STR.	41'-8"
(7)	HD1	4	#10	STR.	101'-2"
	WD1	19	#5	STR.	8'-0"
	WD2	19	#5	BNT.	8'-0"

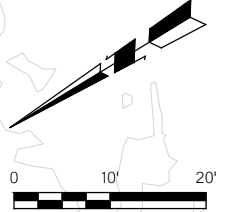
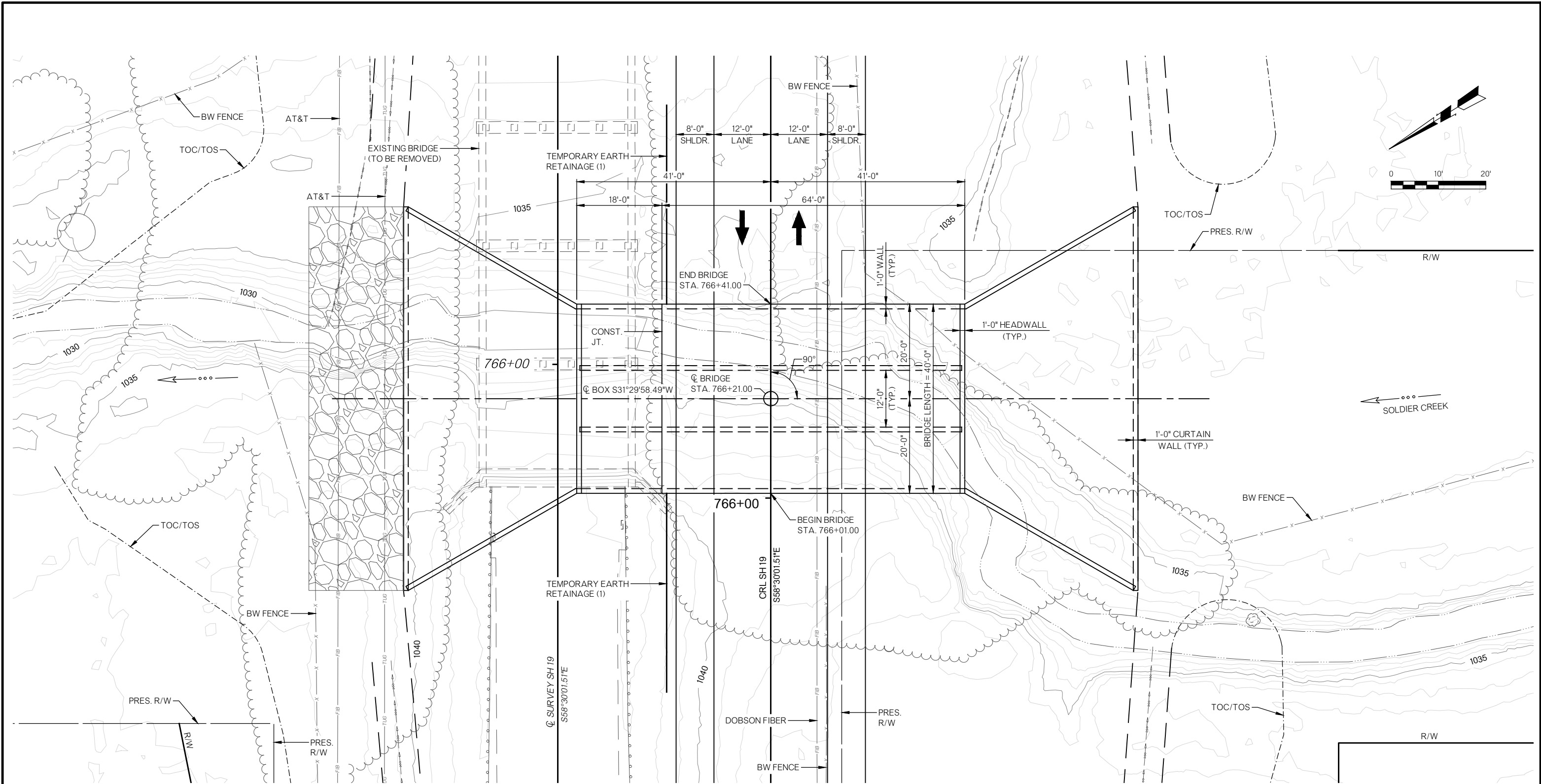


- (1) INCLUDES ONE (1) 2'-6" LAP.
- (2) INCLUDES TWO (2) SETS OF FORTY-NINE (49) BARS EACH.
- (3) INCLUDES TWO (2) SETS OF SIXTEEN (16) BARS EACH.
- (4) INCLUDES THREE (3) 2'-6" LAPS.
- (5) INCLUDES TWO (2) 2'-6" LAPS.
- (6) INCLUDES ONE (1) 4'-3" LAP.
- (7) INCLUDES ONE (1) 6'-6" LAP.
TOP BARS SHALL LAP IN CENTER OF MIDDLE SPAN.
BOTTOM BARS SHALL LAP IN CENTER OF ALTERNATING INTERIOR WALLS.
- (8) INCLUDES TWO (2) SETS OF NINE (9) BARS EACH.
- (9) INCLUDES ONE (1) 4'-3" LAP. LAP IN CENTER OF ALTERNATING INTERIOR WALLS.
- (10) INCLUDES ONE (1) 6'-6" LAP. LAP IN CENTER OF MIDDLE SPAN.
- (11) INCLUDES TWO (2) 3'-0" LAPS.
- (12) INCLUDES ONE (1) 3'-0" LAP.
- (13) INCLUDES TWO (2) SETS OF THREE (3) BARS EACH.
- (14) INCLUDES TWO (2) SETS OF SIX (6) BARS EACH.

BRIDGE "D"
SH 19 OVER UNNAMED CREEK

BRIDGE "D" DETAILS
(SHEET 6 OF 6)

State Job No. 30425(07) Sheet No. B016



PLAN
SCALE 1" = 10'

BM#133 - CHISELED BOX ON CENTER OF HEADWALL
 ☉ SURVEY STA. 761+24, 35.00' RT.
 ELEV. = 1038.0733

BM#134 - CHISELED BOX ON CENTER OF HEADWALL
 ☉ SURVEY STA. 722+47, 29.00' RT.
 ELEV. = 1040.2782

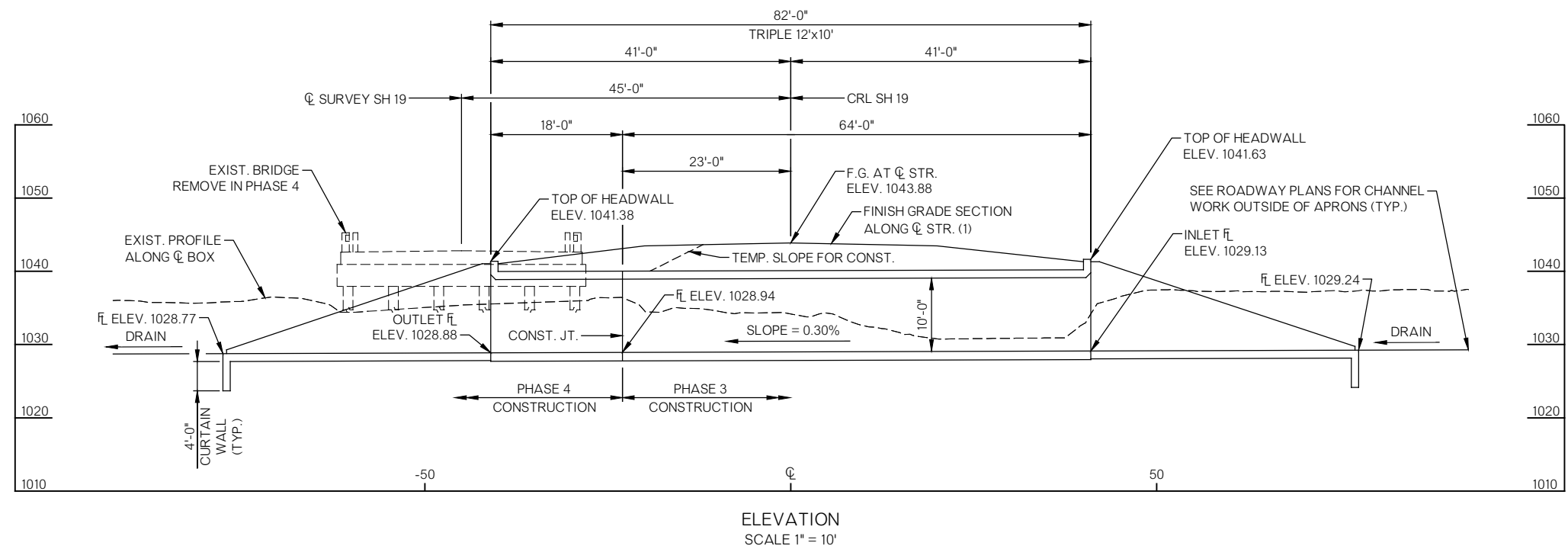
- NOTES**
 ALL STATIONING FOLLOWS CRL SH 19, UNLESS NOTED OTHERWISE.
 FOR ELEVATION VIEW, SEE SHEET NO. B018.
 SEE SHEET NO. B018 FOR DESIGN DATA, FINISH GRADE DATA, HYDRAULIC DATA SUMMARY, INDEX OF SHEETS AND EXISTING BRIDGE NOTE.
 FOR CHANNEL WORK DETAILS, SEE THE CHANNEL PLAN AND PROFILE SHEETS AND CROSS-SECTIONS. (ROADWAY ITEMS).

- (1) TEMPORARY EARTH RETAINAGE FOR NEW RCB CONSTRUCTION.
 (PHASE 3 AND PHASE 4).

CONST. 3-12'x10' BRIDGE BOX WITH STD.
 HEADWALLS, WINGS, APRONS AND 4'
 CURTAIN WALLS, SKEWED 0°

BRIDGE "E"
 SH 19 OVER SOLDIER CREEK
GENERAL PLAN AND ELEVATION
(SHEET 1 OF 2)
 CONST. TRIPLE 12'x10'x82' LG. BOX, SKEWED 0°, AT CRL STA. 766+21
 State Job No. 30425(07) Sheet No. B017

SH 19
GRADY COUNTY



ELEVATION
SCALE 1" = 10'

BM#133 - CHISELED BOX ON CENTER OF HEADWALL
 Q SURVEY STA. 761+24, 35.00' RT.
 ELEV. = 1038.0733

BM#134 - CHISELED BOX ON CENTER OF HEADWALL
 Q SURVEY STA. 722+47, 29.00' RT.
 ELEV. = 1040.2782

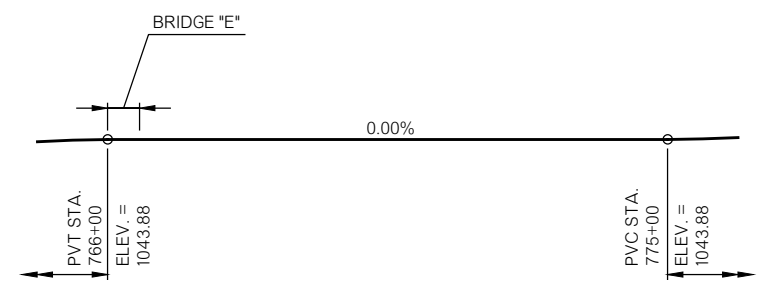
INDEX OF SHEETS (BRIDGE "E")

NO.	DESCRIPTION
AB01	PAY QUANTITIES AND GENERAL NOTES (BRIDGE)
B017	GENERAL PLAN AND ELEVATION (SHEET 1 OF 2)
B018	GENERAL PLAN AND ELEVATION (SHEET 2 OF 2)

HYDRAULIC DATA ~ BRIDGE "E"
 SOLDIER CREEK

TOTAL D.A. = 3.79 SQ. MI.
 CONTROLLED D.A. = 2.76 SQ. MI.
 EFFECTIVE D.A. = 1.03 SQ. MI.

FREQ.	Q (cfs)	CHW (ft)	V (fps)
2	184	1035.81	1.40
5	394	1037.03	1.99
10	605	1037.79	2.48
25	961	1039.14	2.95
50	1220	1039.84	3.64
100	1560	1041.07	4.69
500	2500	1043.55	8.67
RDWY OT = Q458	2400	1042.72	7.54
DETOUR OT	0	0	0



FINISH GRADE DATA
 CRL SH 19
 (STATIONS SHOWN ON THE DETAIL ARE ALONG CRL)

SUMMARY OF QUANTITIES - BRIDGE "E"

DESCRIPTION	UNIT	PHASE 3	PHASE 4	TOTAL
UNCLASSIFIED EXCAVATION	CY	1,790.00	1,190.00	2,980.00
STRUCTURAL EXCAVATION UNCLASSIFIED	CY	175.00	95.00	270.00
(2) TEMPORARY EARTH RETAINAGE	LSUM	1.00	0.00	1.00
CLASS AA CONCRETE	CY	430.80	209.50	640.30
REINFORCING STEEL	LB	70,260.00	30,390.00	100,650.00
REMOVAL OF EXISTING BRIDGE STRUCTURE	LSUM	0.00	1.00	1.00

(2) USE OF TEMPORARY EARTH RETAINAGE STRUCTURE(S) WILL BE REQUIRED IN MULTIPLE PHASES OF CONSTRUCTION.

DESIGN DATA
 (LOAD AND RESISTANCE FACTOR DESIGN)

CLASS "AA" CONCRETE F'C = 4,000 PSI
 REINFORCING STEEL FY = 60,000 PSI

LOADING: HL-93 AND ODOT OVERLOAD TRUCK

DESIGN: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS,
 2007 EDITION, WITH 2008 INTERIMS.

THE FOLLOWING STANDARDS SHALL BE REQUIRED:

- SBI-5-1
- RCB-C3-12(2-12)-02E
- RCB-E3-H10-0-1-01E
- RCB-E3-H10-0-2-01E
- RCB-CW3-D4-0-01E

NOTES

ALL STATIONING FOLLOWS CRL SH 19, UNLESS NOTED OTHERWISE.

THE CONTRACTOR SHALL MAINTAIN DRAINAGE AT ALL TIMES DURING CONSTRUCTION.

FOR CHANNEL WORK DETAILS, SEE THE CHANNEL PLAN AND PROFILE SHEETS AND CROSS-SECTIONS. (ROADWAY ITEMS).

(1) SEE ROADWAY PLAN AND PROFILES AND CROSS SECTIONS.

CONST. 3-12'x10' BRIDGE BOX WITH STD.
 HEADWALLS, WINGS, APRONS AND 4'
 CURTAIN WALLS, SKEWED 0°

EXISTING BRIDGE NOTE:
 THE EXISTING BRIDGE SHALL BE
 REMOVED IN ACCORDANCE WITH
 THE NOTES ON SHEET AB01.

BRIDGE "E"
 SH 19 OVER SOLDIER CREEK
GENERAL PLAN AND ELEVATION
 (SHEET 2 OF 2)
 CONST. TRIPLE 12'x10'x82' LG. BOX, SKEWED 0°, AT CRL STA. 766+21
 State Job No. 30425(07) Sheet No. B018

U.S. ARMY CORPS OF ENGINEERS SECTION 404 PERMIT CONDITIONS

404 PERMIT INFORMATION

NATIONWIDE PERMIT NO. _____

TO BE PROVIDED AT A LATER DATE

SECTION 404 OF THE CLEAN WATER ACT REQUIRES PRIOR AUTHORIZATION FROM SECRETARY OF THE ARMY (CORPS) FOR THE DISCHARGE OF DREDGED OR FILL MATERIAL INTO WATERS OF THE UNITED STATES.

NO PRE-CONSTRUCTION NOTIFICATION REQUIRED: PROJECT DOES NOT REQUIRE NOTIFICATION TO THE US ARMY CORPS OF ENGINEERS (USACE) IN ORDER TO COMMENCE.

PRE-CONSTRUCTION NOTIFICATION REQUIRED: RESIDENT ENGINEER MUST NOTIFY THE USACE WITHIN 30 DAYS OF THE START OF CONSTRUCTION AND 30 DAYS PRIOR TO COMPLETION OF CONSTRUCTION, FORMS LOCATED IN THE CONTRACT.

INDIVIDUAL PERMIT: WILL BE MONITORED CLOSELY BY THE USACE.

GENERAL PERMIT: PROJECT WITHIN A DESIGNATED CRITICAL RESOURCE WATER AND WILL REQUIRE PRE-CONSTRUCTION NOTIFICATION SEE ABOVE FOR EXPLANATION OF PRE-CONSTRUCTION NOTIFICATION.

NO PERMIT REQUIRED

SWT TRACKING NO. _____

SPECIAL CONDITIONS

NAVIGABLE WATER OF THE U.S.

ON-SITE MITIGATION

ENDANGERED SPECIES PRESENT

HISTORIC PROPERTIES PRESENT

DESIGNATED CRITICAL RESOURCE WATERS

PERMIT GENERAL CONDITIONS

THE CONTRACTOR SHALL BE RESPONSIBLE BUT NOT LIMITED TO THE FOLLOWING HIGHLIGHTS OF THE 404 PERMIT (SEE CONTRACT FOR COMPLETE LIST):

TEMPORARY FILLS:

APPROPRIATE MEASURES MUST BE TAKEN TO MAINTAIN NORMAL DOWNSTREAM FLOWS AND MINIMIZE FLOODING TO THE MAXIMUM EXTENT PRACTICABLE, WHEN TEMPORARY STRUCTURES (WORK ROADS, WORKPADS, ETC..) WORK, AND DISCHARGES, INCLUDING COFFERDAMS, ARE NECESSARY FOR CONSTRUCTION ACTIVITIES, ACCESS FILLS, OR DEWATERING OF CONSTRUCTION SITES. TEMPORARY FILLS MUST CONSIST OF MATERIALS, AND BE PLACED IN A MANNER, THAT WILL NOT BE ERODED BY EXPECTED HIGH FLOWS. TEMPORARY FILLS MUST BE REMOVED IN THEIR ENTIRETY AND THE AFFECTED AREAS RETURNED TO PRE-CONSTRUCTION ELEVATIONS. THE AREAS AFFECTED BY TEMPORARY FILLS MUST BE RE VEGETATED, AS APPROPRIATE.

NAVIGATION:

NO ACTIVITY MAY CAUSE MORE THAN A MINIMAL ADVERSE EFFECT ON NAVIGATION WITHIN A NAVIGABLE WATER OF THE U.S. IF THIS PROJECT IS LOCATED WITHIN A NAVIGABLE WATER OF THE U.S., IT WILL BE IDENTIFIED IN THE SPECIAL CONDITIONS.

AQUATIC LIFE MOVEMENTS & ADVERSE EFFECTS FROM IMPOUNDMENTS:

NO ACTIVITY MAY LARGELY DISRUPT THE NECESSARY LIFE CYCLE MOVEMENTS OF THOSE SPECIES INDIGENOUS TO THE BODY OF WATER, INCLUDING THOSE SPECIES THAT NORMALLY MIGRATE THROUGH THE AREA. CULVERTS WILL BE DESIGNED TO PROVIDE SUFFICIENT PASSAGE FOR AQUATIC LIFE AND INSTALLED TO MAINTAIN LOW FLOW. RATE OF FLOW CANNOT BE MADE HIGHER THAN WHAT WAS PRIOR TO THE START OF CONSTRUCTION. EROSION CONTROL MEASURES SHOULD BE UTILIZED AROUND THE PERIMETER OF NEW STRUCTURES TO AVOID SILT BUILD UP. CAUTION SHOULD BE TAKEN TO MINIMIZE HARM IF CONSTRUCTION ACTIVITIES TAKE PLACE WITHIN A STREAM OR RIVER CHANNEL AND CREATE A CONFINED BODY OF WATER, CAUSE ADVERSE EFFECTS TO THE AQUATIC SYSTEM IN ANY WAY, AND/OR RESTRICTING ITS FLOW.

MANAGEMENT OF WATER FLOWS:

CONSTRUCTION ACTIVITIES MAY NOT IMPEDE THE PASSAGE OF NORMAL OR HIGH FLOWS. TO THE GREATEST EXTENT POSSIBLE, THE PRE- CONSTRUCTION COURSE, CONDITIONS, CAPACITY AND LOCATION OF OPEN WATERS MUST BE MAINTAINED. THIS INCLUDES STREAM CHANNELIZATION AND STORM WATER MANAGEMENT.

SUITABLE MATERIAL:

NO ACTIVITY MAY USE UNSUITABLE MATERIAL (E.G., TRASH, DEBRIS, CAR BODIES, ASPHALT, ETC.). MATERIALS USED FOR CONSTRUCTION OR DISCHARGED MUST BE FREE FROM TOXIC POLLUTANTS IN TOXIC AMOUNTS (SEE SECTION 307 OF CLEAN WATER ACT).

PROPER MAINTENANCE

ANY AUTHORIZED STRUCTURE OR FILL SHALL BE PROPERLY MAINTAINED, INCLUDING MAINTENANCE TO ENSURE PUBLIC SAFETY AND COMPLIANCE WITH APPLICABLE NATION WIDE PERMIT GENERAL CONDITIONS, AS WELL AS ANY ACTIVITY- SPECIFIC CONDITIONS ADDED BY THE DISTRICT ENGINEER TO AN NATIONWIDE PERMIT AUTHORIZATION

HAZARDOUS MATERIALS:

HAZARDOUS MATERIALS, CHEMICALS, FUELS, LUBRICATING OILS AND OTHER SUCH SUBSTANCES SHOULD BE STORED AWAY FROM ANY STREAM OR RIVER CHANNEL (SEE SECTION 307 OF CLEAN WATER ACT)

EQUIPMENT:

HEAVY EQUIPMENT WORKING IN WETLANDS OR MUDFLATS MUST BE PLACED ON MATS, OR OTHER MEASURES MUST BE TAKEN TO MINIMIZE SOIL DISTURBANCE; FOR EXAMPLE IF WETLANDS ARE PRESENT WITHIN THE CONSTRUCTION, THE FOOTPRINT WILL BE SHOWN ON THE PLANS. MEASURES SHOULD BE TAKEN TO PREVENT DISCHARGE INTO ANY WATERS OF THE STATE (e.g. CONCRETE WASHOUT).

SOIL EROSION AND SEDIMENT CONTROLS:

APPROPRIATE SOIL EROSION AND SEDIMENT CONTROLS MUST BE USED AND MAINTAINED IN EFFECTIVE OPERATING CONDITION DURING CONSTRUCTION, AND ALL EXPOSED SOILS AND OTHER FILLS, AS WELL AS ANY WORK WITHIN STREAM OR RIVER CHANNELS OR BANKS, MUST BE PERMANENTLY STABILIZED AS SOON AS POSSIBLE.

404 COMPLIANCE:

IN ORDER TO REMAIN COMPLIANT WITH THE 404 PERMIT, THE PROJECT MUST COMPLY WITH ALL FEDERAL ENVIRONMENTAL PROTECTION LAWS ASSOCIATED AND, THE ENVIRONMENTAL COMMITMENTS AS SHOWN ON THE PLANS. THIS INCLUDES BUT IS NOT LIMITED TO COMPLIANCE WITH ALL ENVIRONMENTAL NOTES IN THE PLANS, INCLUDING CULTURAL RESOURCES, HAZARDOUS WASTE, BIOLOGICAL FOR PROTECTED SPECIES, AND DEQ STORM WATER REGULATIONS AS THEY PERTAIN TO THE SWMP SHEET WITHIN THE PLANS. ALL OF THE 404 PERMIT GENERAL AND SPECIFIC CONDITIONS MUST BE ADHERED TO. A COPY OF THESE CONDITIONS CAN BE FOUND IN THE CONTRACT WITH THE 404 PERMIT.

SHEET NUMBERS: _____

PERMIT GENERAL CONDITIONS

FUELING:

ALL FUELING AND SERVICING OF VEHICLES AND EQUIPMENT SHALL BE DONE ABOVE THE ORDINARY HIGH WATER MARK (OHWM).

MATERIAL STORAGE:

STORE MATERIAL AND FUEL OUTSIDE OF THE ORDINARY HIGH WATER MARK OR ANY AREA LIKELY TO FLOOD.

DEBRIS STORAGE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ANY MATERIALS, DEBRIS, OR REFUSE WHICH HAS FALLEN INTO ANY STREAM OR RIVER CHANNELS RESULTING FROM THE EXECUTION OF THE PROJECT AS SOON AS POSSIBLE

SEE NATIONWIDE PERMIT 14 IN THE CONTRACT

401 CERTIFICATION CONDITIONS

THE CONTRACTOR SHALL BE RESPONSIBLE BUT NOT LIMITED TO THE FOLLOWING HIGHLIGHTS OF THE 401 CERTIFICATION (SEE CONTRACT FOR COMPLETE LIST):

ALL SPILLS OF FUEL OR POLLUTANTS IN EXCESS OF FIVE GALLONS SHALL BE REPORTED TO ODEQ WITHIN 24 HRS AND REPORTED TO POLLUTION PREVENTION HOTLINE (1-800-522-0206)

ALL FUELING AND SERVICING OF VEHICLES AND EQUIPMENT SHALL BE DONE OUTSIDE THE ORDINARY HIGH WATER MARK

THE PERMITTEE SHALL PROVIDE ACCESS TO THE PROPERTY TO ODEQ FOR INSPECTIONS.

ANY STOCKPILE SHALL BE ABOVE ORDINARY HIGH WATER MARK AND REMOVED FROM LIKELY FLOOD ZONE

BEST MANAGEMENT PRACTICES SHOULD BE USED TO CONTROL SOIL EROSION AND MAINTAIN COMPLIANCE WITH WATER QUALITY STANDARDS.

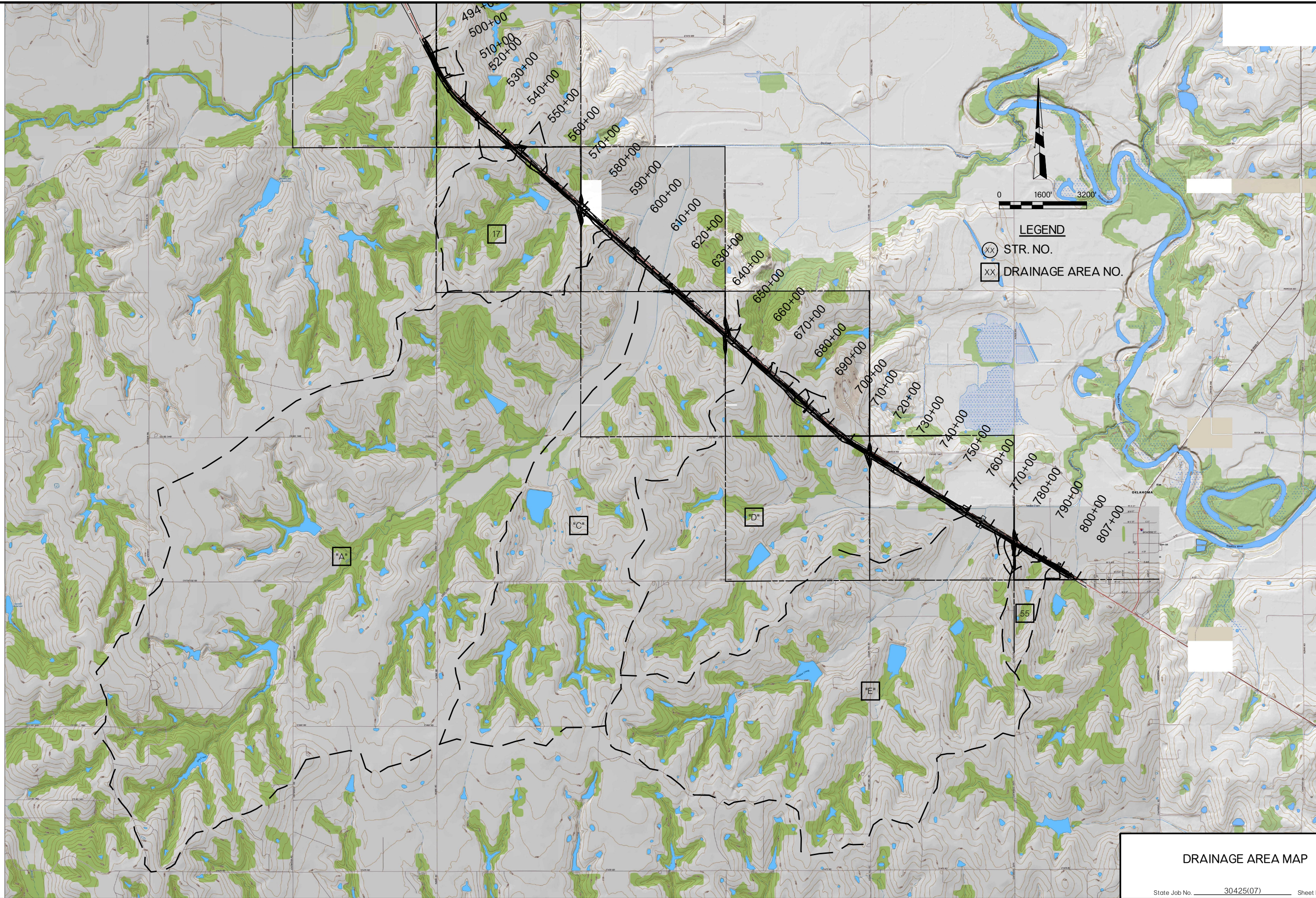
FOR ANY PROJECT THAT INVOLVES BANK STABILIZATION, THE PERMITTEE SHALL CONSIDER INSTALLING BIOENGINEERING PRACTICES IN PLACE OF STRUCTURAL PRACTICES (RIPRAP) TO MINIMIZE IMPACTS TO AQUATIC RESOURCES

**SECTION 404
PERMIT COMPLIANCE**

DRAINAGE RECORD

P.C. NO.	ALIGNMENT	LOCATION (STATION)	LOCATION (OFFSET)	LT/RT	D.A. NO.	AREA (AC)	C	CC ₁ A ₀	CC ₁ A ₂₅	T _c (MIN)	I ₀ (IN/HR)	I ₂₅ (IN/HR)	Q ₀ (CFS)	Q ₂₅ (CFS)	INLET TYPE	DESIGN Q (CFS)	STR. NO.	LOCATION (STATION)	LOCATION (OFFSET)	LT/RT	ADJ. CA	ADD'N CA	FROM STR. NO.	CUMULATIVE T _c (MIN)	Σ I (IN/HR)	Σ CA	TOTAL Q IN CONDUIT (CFS)	PIPE DIA. (IN)	SLOPE (FT/FT)	VELOCITY (FT/S)	SLOPE LENGTH (FT)	LENGTH (FT)	TIME IN PIPE (MIN)	TOTAL TC (MIN)	TO STR. NO.	FLOWLINE (FT)	D.S. FLOWLINE (FT)	TOP OF RIM/GRATE (FT)							
T10	SH 19	573+66.00	34'	LT.	T7, T8, T9	0.91	0.50	0.46	0.50	10.00	6.44	7.31	2.93	3.66	CGSP	Q10	T10	573+66.00	34.00	LT.	0.4550	0.49		D.A. T7, T8, T9	10.41	6.34	0.95	5.99	18"	0.0436	6.75	56.05	56	0.14	10.55	DITCH	1097.08	1094.64	0.00						
T11	SH 19	582+13.00	35'	LT.	T10	1.47	0.50	0.74	0.81	10.00	6.44	7.31	4.73	5.91	CGSP	Q10	T11	582+13.00	35.00	LT.	0.7350	0.00		D.A. T10	10.00	6.44	0.74	4.73	18"	0.0322	5.49	68.04	68	0.21	10.21	DITCH	1078.56	1076.37	0.00						
T12	SH 19	602+00.00	45'	LT.	T11	1.21	0.50	0.61	0.67	10.00	6.44	7.31	3.90	4.86	CGSP	Q10	T12	602+00.00	45.00	LT.	0.6050	0.00		D.A. T11	10.00	6.44	0.61	3.90	21"x15"	0.0586	6.26	44.08	44	0.12	10.12	DITCH	1076.26	1073.68	0.00						
T13	SH 19	622+90.00	40'	LT.	T12, T13, T14, T15	0.52	0.50	0.26	0.29	10.00	6.44	7.31	1.67	2.09	CGSP	Q10	T13	622+90.00	40.00	LT.	0.2600	0.38		D.A. T12, T13, T14, T15	10.58	6.31	0.64	4.04	18"	0.0064	4.60	50.00	50	0.18	10.76	DITCH	1063.17	1062.85	0.00						
T14	SH 19	626+40.00	34'	LT.	T13, T14, T15	0.12	0.50	0.06	0.07	10.00	6.44	7.31	0.39	0.48	CGSP	Q10	T14	626+40.00	34.00	LT.	0.0600	0.32		D.A. T13, T14, T15	10.41	6.34	0.38	2.41	18"	0.0210	4.03	40.01	40	0.17	10.58	DITCH	1073.61	1072.77	0.00						
T15	SH 19	627+21.00	31'	LT.	T14, T15	0.30	0.50	0.15	0.17	10.00	6.44	7.31	0.97	1.21	CGSP	Q10	T15	627+21.00	31.00	LT.	0.1500	0.17		D.A. T14, T15	10.24	6.38	0.32	2.04	21"x15"	0.0115	3.36	34.00	34	0.17	10.41	DITCH	1075.56	1075.17	0.00						
T16	SH 19	629+24.00	35'	LT.	T15	0.34	0.50	0.17	0.19	10.00	6.44	7.31	1.09	1.37	CGSP	Q10	T16	629+24.00	35.00	LT.	0.1700	0.00		D.A. T15	10.00	6.44	0.17	1.09	18"	0.0073	3.03	44.00	44	0.24	10.24	DITCH	1077.43	1077.11	0.00						
T17	SH 19	706+01.00	28'	LT.	T16	1.76	0.50	0.88	0.97	10.00	6.44	7.31	5.67	7.08	SMD TYPE 2A	Q10	T17	706+01.00	28.00	LT.	0.8800	8.42		D.A. T16, EXIST. STR	10.00	6.44	9.30	59.88	30"	0.0118	7.47	165.01	166	0.37	10.37	DITCH	1098.12	1096.18	1124.50						
T18	DELETED															0.00	T18						0.00																						
T19	SH 19	709+35.00	20'	LT.	T17	0.37	0.50	0.19	0.20	10.00	6.44	7.31	1.19	1.49	CGSP	Q10	T19	709+35.00	20.00	LT.	0.1850	0.00		D.A. T17	10.00	6.44	0.19	1.19	21"x15"	0.0074	2.88	50.00	50	0.29	10.29	DITCH	1120.39	1120.02	0.00						
T20	SH 19	716+86.00	21'	LT.	T17, T18	1.01	0.50	0.51	0.56	10.00	6.44	7.31	3.25	4.06	SMD TYPE 2	Q10	T20	716+86.00	21.00	LT.	0.5050	0.19		D.A. T17, T18	10.29	6.37	0.69	4.40	0			0.00	0												
T21	SH 19	728+51.00	8'	RT.	40	16.52	0.33	5.45	6.00	26.85	4.11	4.87	22.41	29.20	CGSP	Q10	T21	728+51.00	8.00	RT.	5.4514	0.00		D.A. 40	26.85	4.11	5.45	22.41	30"	0.0050	6.72	16.00	16	0.04	26.89	STR. 40	1083.00	1082.92	0.00						
T22	SH 19	739+30.00	27'	LT.	T19	0.24	0.50	0.12	0.13	10.00	6.44	7.31	0.77	0.96	CGSP	Q10	T22	739+30.00	27.00	LT.	0.1200	0.00		D.A. T19	10.00	6.44	0.12	0.77	18"	0.0030	2.78	40.00	40	0.24	10.24	DITCH	1078.18	1078.06	0.00						
T23	SH 19	783+46.00	22'	LT.	T20	0.15	0.50	0.08	0.08	10.00	6.44	7.31	0.48	0.60	CGSP	Q10	T23	783+46.00	22.00	LT.	0.0750	0.00		D.A. T20	10.00	6.44	0.08	0.48	18"	0.0052	2.44	42.00	42	0.29	10.29	DITCH	1044.59	1044.37	0.00						
T24	SH 19	784+56.00	21'	LT.	T20, T21	0.11	0.50	0.06	0.06	10.00	6.44	7.31	0.35	0.44	CGSP	Q10	T24	784+56.00	21.00	LT.	0.0550	0.08		D.A. T20, T21	10.29	6.37	0.13	0.83	18"	0.0025	2.83	40.00	40	0.24	10.52	DITCH	1044.26	1044.16	0.00						
T25	SH 19	785+18.00	22'	LT.	T20, T21, T22	0.06	0.50	0.03	0.03	10.00	6.44	7.31	0.19	0.24	CGSP	Q10	T25	785+18.00	22.00	LT.	0.0300	0.13		D.A. T20, T21, T22	10.52	6.32	0.16	1.01	18"	0.0039	2.97	38.00	38	0.21	10.74	DITCH	1044.15	1044.00	0.00						
T26	SH 19	787+24.00	25'	LT.	T20, T21, T22, T23	0.21	0.50	0.11	0.12	10.00	6.44	7.31	0.68	0.84	CGSP	Q10	T26	787+24.00	25.00	LT.	0.1050	0.16		D.A. T20, T21, T22, T23	10.74	6.27	0.27	1.66	18"	0.0052	3.41	38.00	38	0.19	10.92	DITCH	1043.18	1042.98	0.00						
T27	SH 19	789+53.00	24'	LT.	T24	0.31	0.50	0.16	0.17	10.00	6.44	7.31	1.00	1.25	SMD TYPE 2	Q10	T27	789+53.00	24.00	LT.	0.1550	0.00		D.A. T24	10.00	6.44	0.16	1.00	0			0.00	0												
T28	SH 19	798+55.00	50'	LT.											CGSP	Q10	T28	798+55.00	50.00	LT.	0.0000	1.51		STR. 57	22.61	4.50	1.51	6.79	24"	0.0050	2.89	16.00	16	0.09	22.70	DITCH	1036.60	1036.52	0.00						

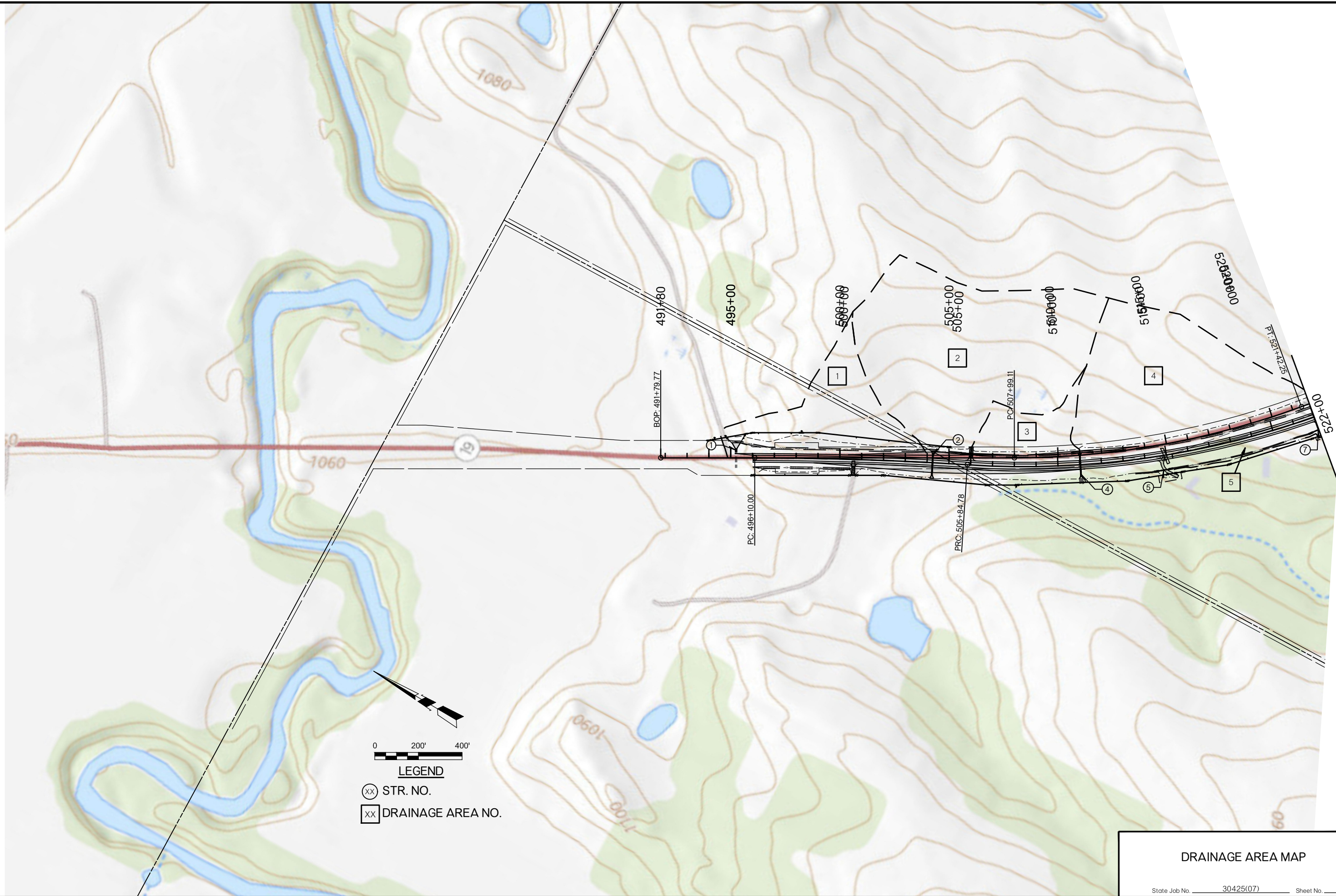
DRAINAGE RECORD



LEGEND
⊗ STR. NO.
⊠ DRAINAGE AREA NO.

DRAINAGE AREA MAP
State Job No. 30425(07) Sheet No. R004

SH 19
GRADY COUNTY



0 200' 400'

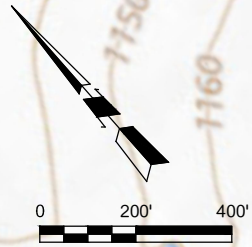
LEGEND

⊗ STR. NO.

⊠ DRAINAGE AREA NO.

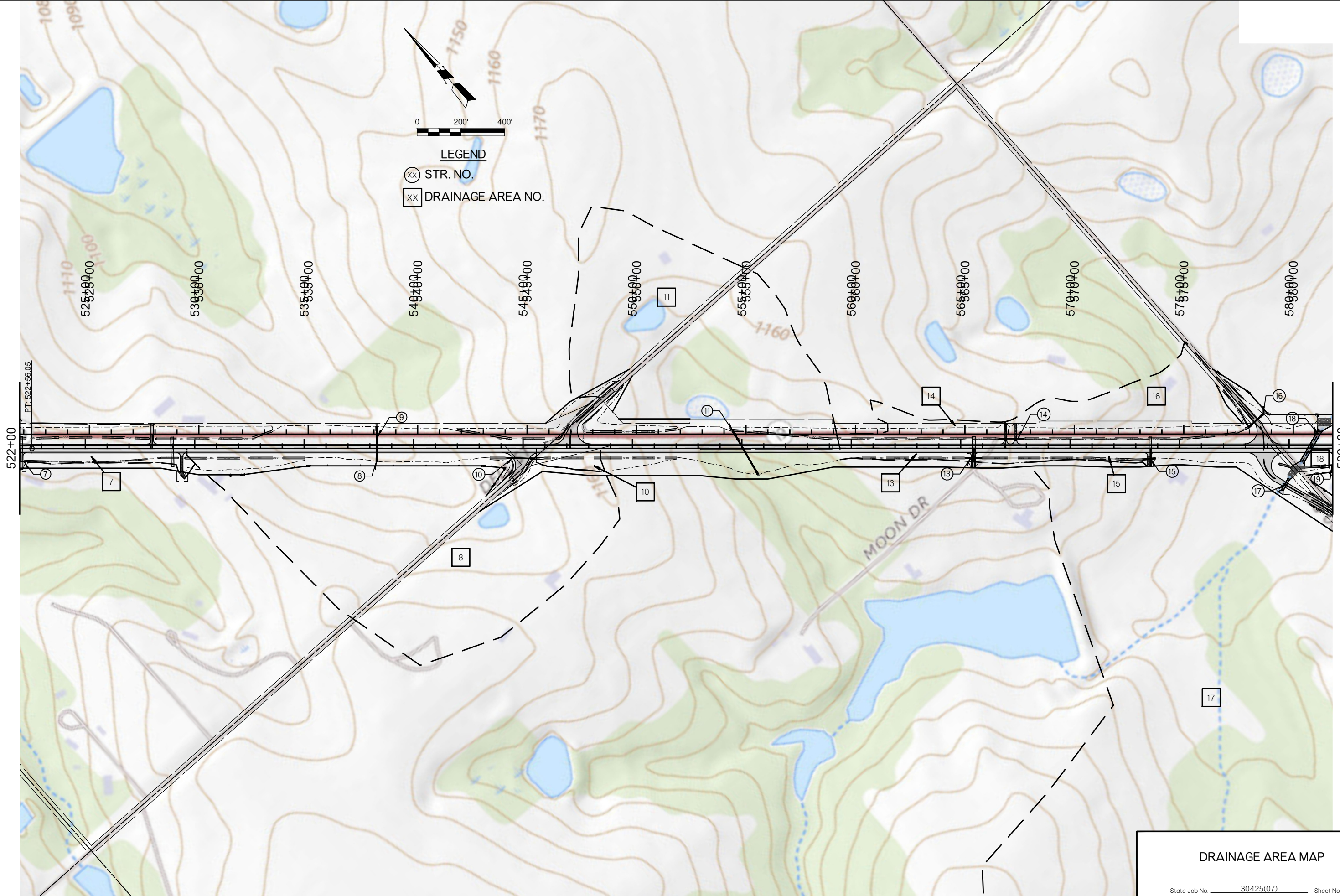
DRAINAGE AREA MAP

State Job No. 30425(07) Sheet No. R005



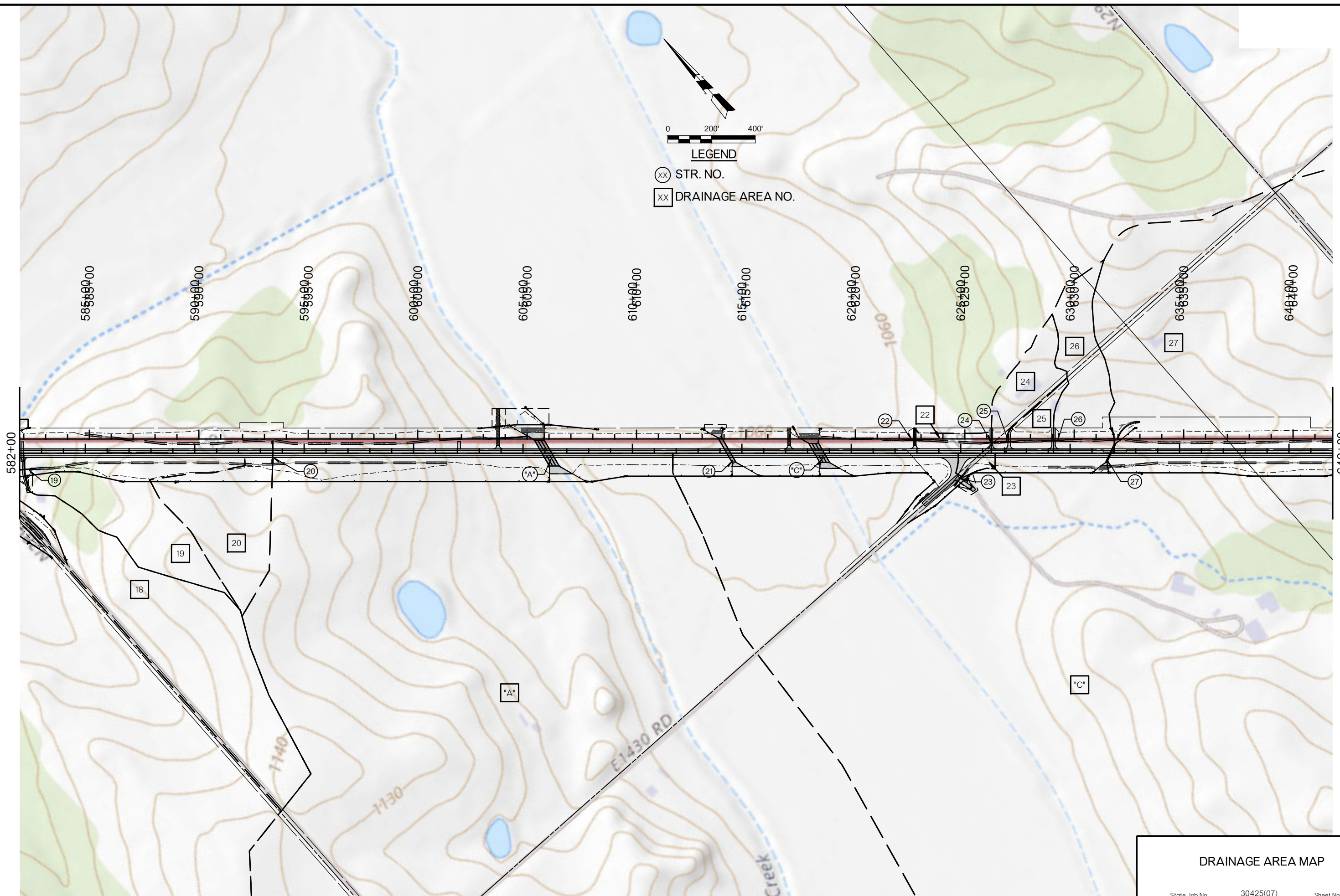
LEGEND

- ⊗ STR. NO.
- ⊠ DRAINAGE AREA NO.



DRAINAGE AREA MAP

State Job No. 30425(07) Sheet No. R006



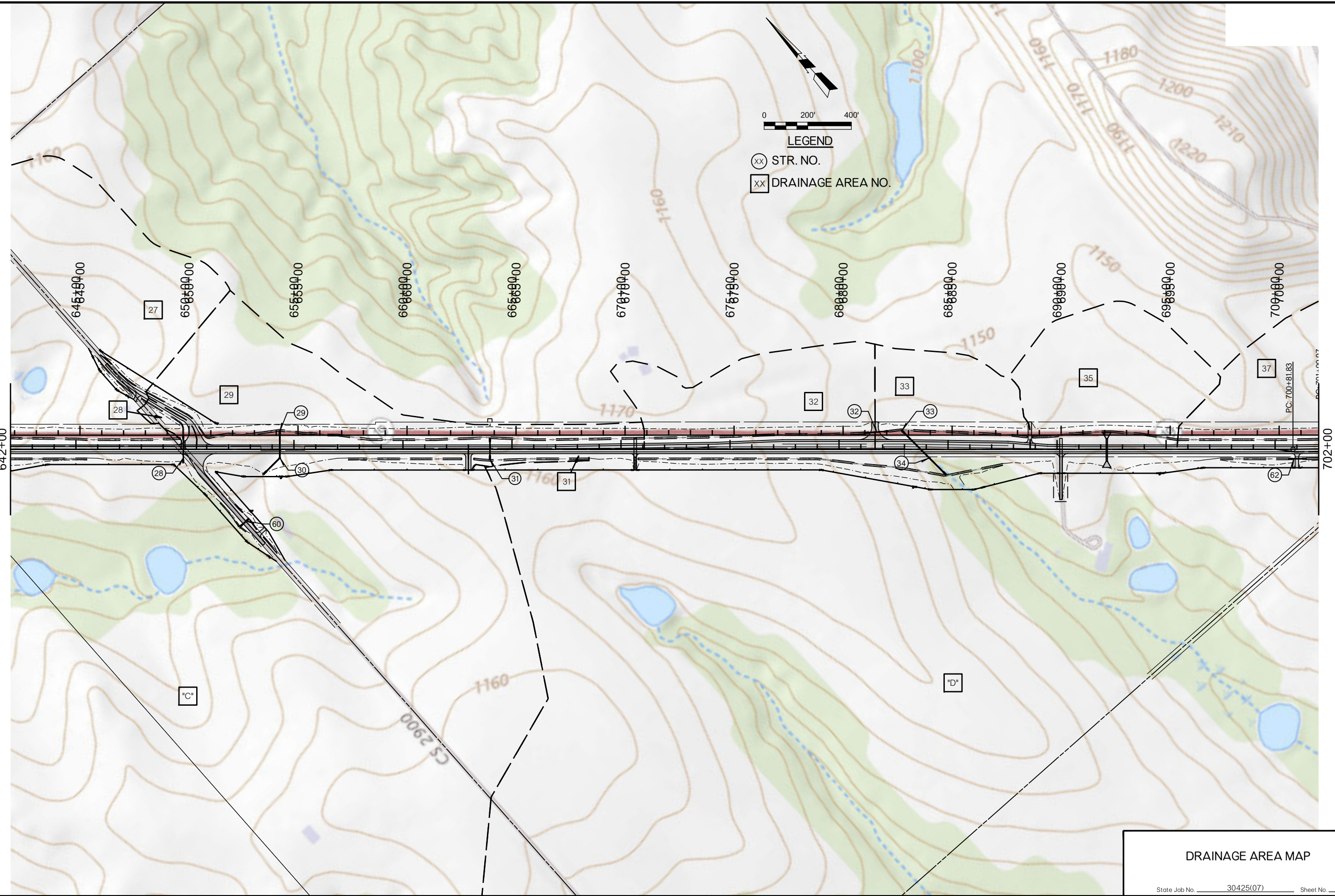
0 200' 400'

LEGEND

- ⊗ STR. NO.
- ⊠ DRAINAGE AREA NO.

DRAINAGE AREA MAP

State Job No. 30425(07) Sheet No. R007



642+00

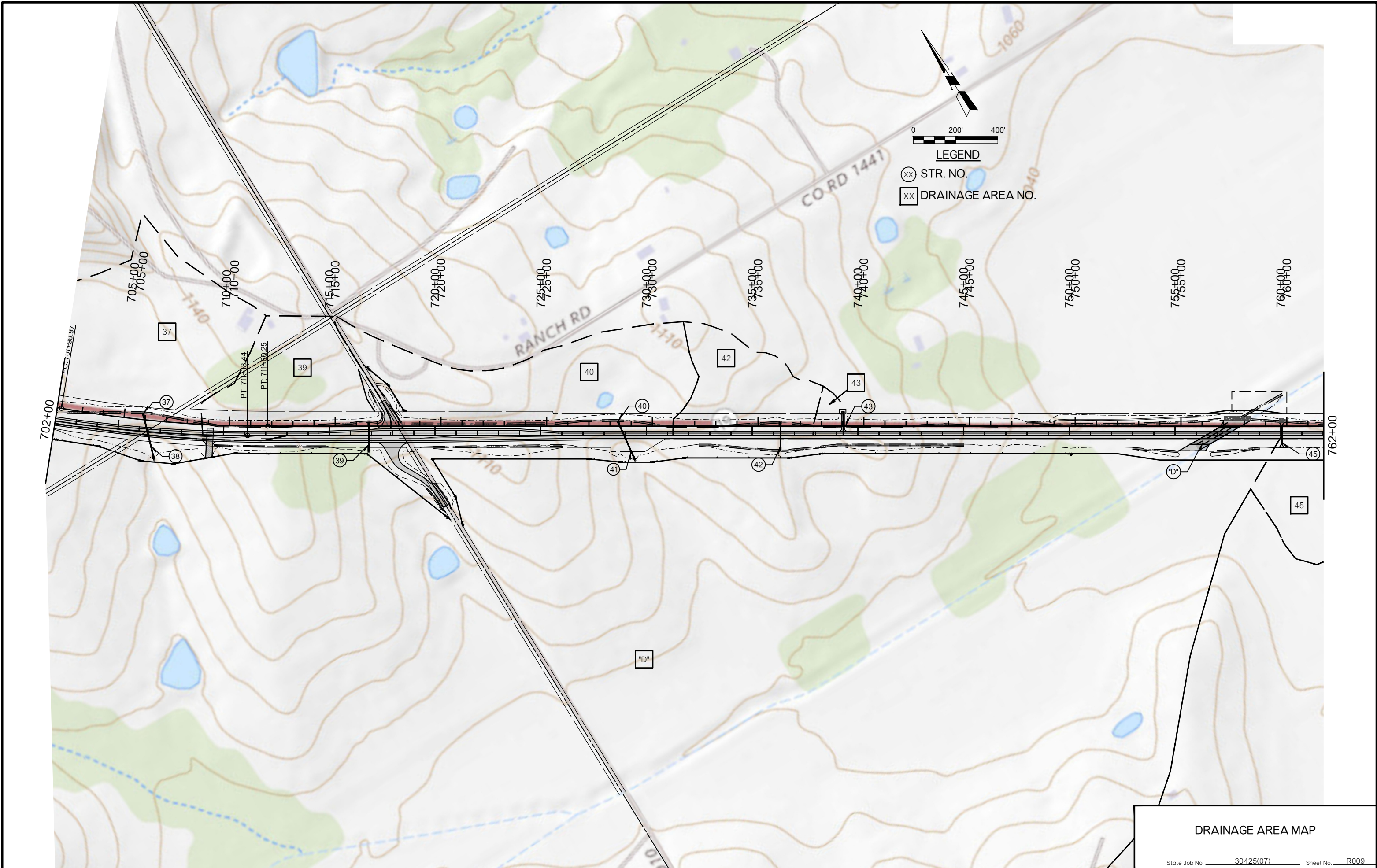
702+00

LEGEND

- (XX) STR. NO.
- [XX] DRAINAGE AREA NO.

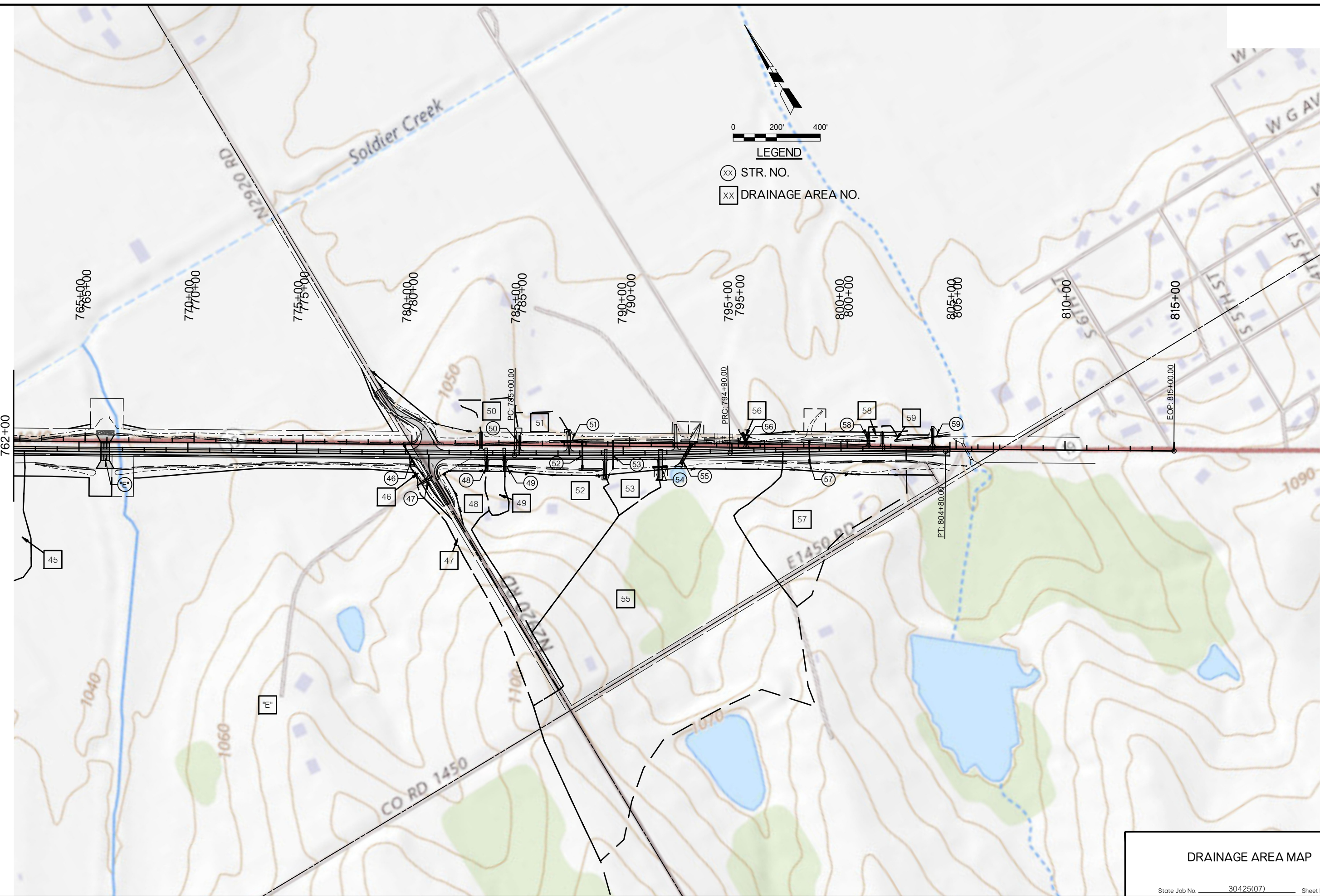
DRAINAGE AREA MAP

State Job No. 30425(07) Sheet No. R008



DRAINAGE AREA MAP

State Job No. 30425(07) Sheet No. R009



DRAINAGE AREA MAP

State Job No. 30425(07) Sheet No. R010

SEC. 30 T6N R6W

SEC. 29 T6N R6W

STA. 505+99 LT.
CONST. 16" TBSC DR.
W/ 24" CGSP SD

495+00

500+00

505+00
506+00

TYPICAL NO. 1

TYPICAL NO. 2

CRL SH 19
495+19.21, 20.00' LT.
BEGIN SHOULDER WIDENING

CRL SH 19
496+03, 12.85' LT.
END SHOULDER WIDENING

BOP STA: 496+03.00 CRL SH 19
= POT STA: 496+03.00 C SURVEY
N=594628.5102
E=2008715.9045

PC: 496+10.00
N=594622.3546
E=2008719.2375

15' R
500+40.96
35.00' RT.

15' R
500+85.04
35.00' RT.

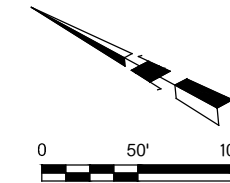
15' R
505+75.90
35.00' LT.

15' R
506+22.20
35.00' LT.

PRC: 505+84.78
N=593750.6914
E=2009155.1971

CURVE DATA
CRL SH 19
CURVE NO. C1
P.I. STA. 500+97.56
 $\Delta = 003^{\circ}43'24.16''$
R = 15000.0000'
D = 000^{\circ}22'55.10''
T = 487.5605'
L = 974.7778'
Ch = 974.6063'
E = 7.9218'
e = 0.081''
S = NC
V = 65 mi/h

STA. 500+63 RT.
CONST. 14" TBSC DR.
AS DIKE



SEC. 30 T6N R6W

SEC. 29 T6N R6W

TYPICAL NO. 2

510+00
510+00

515+00
515+00

520+00
520+00

TYPICAL NO. 4

CRL SH 19
508+61.89, 53.12' LT.
BEGIN TEMP. WIDENING

CRL SH 19
513+79.51, 58.35' LT.
END TEMP. WIDENING

507+00

522+00

15' R
521+85.20
35.00' RT.

CURVE DATA
CRL SH 19
CURVE NO. C2
P.I. STA. 514+32.79
 $\Delta = 023^{\circ}56'21.04''$
R = 4000.0000'
D = 001^{\circ}25'56.62''
T = 848.0075'
L = 1671.2699'
Ch = 1659.1399'
E = 88.9016'
e = 0.081''
S = 0.0441''
V = 65 mi/h

15' R
514+54.18
35.00' RT.

15' R
514+95.82
35.00' RT.

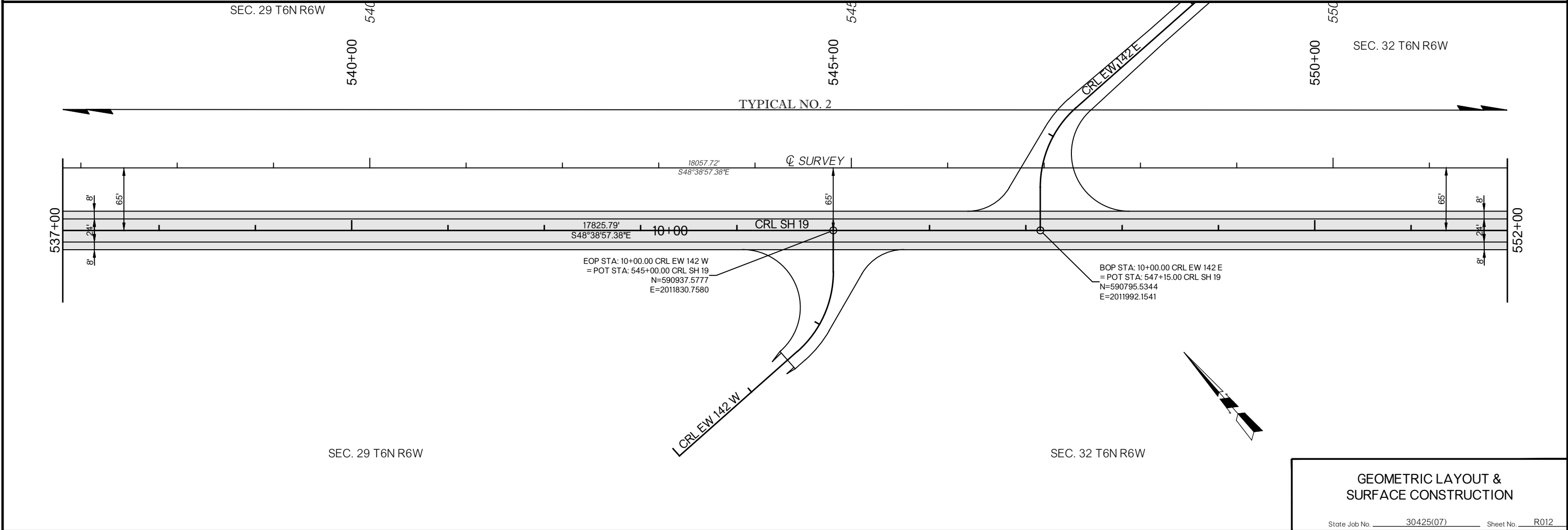
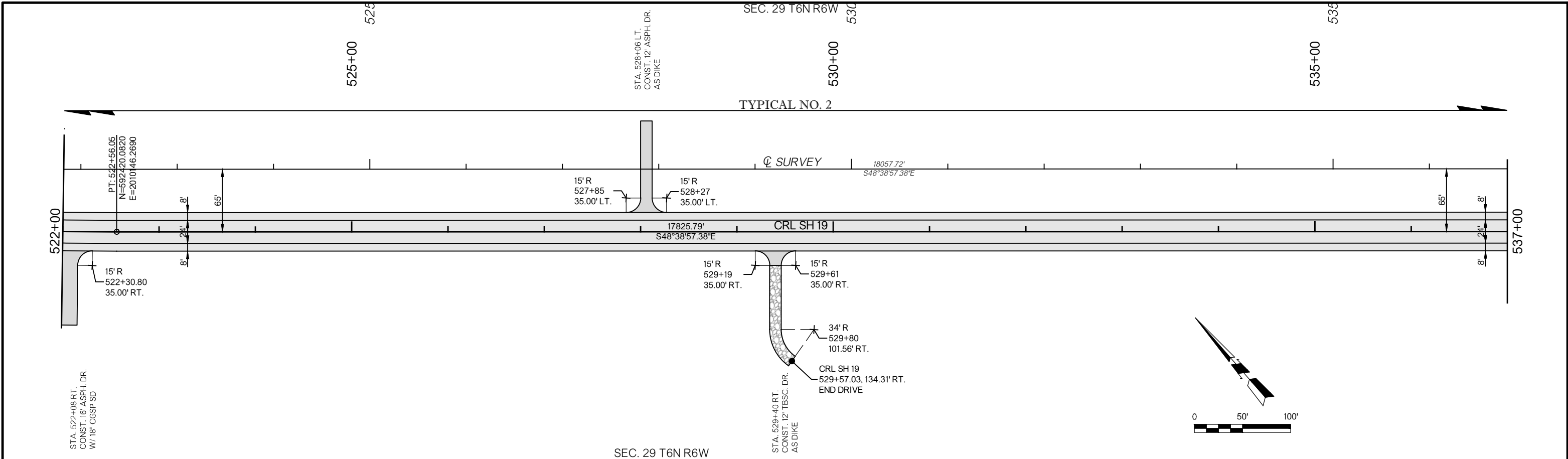
44' R
515+24.53
37.73' RT.

STA. 514+75 RT.
CONST. 12" ASPH. DR.
W/ 18" CGSP SD

CRL SH 19
515+35.49, 107.34' RT.
END DRIVE

SEC. 29 T6N R6W

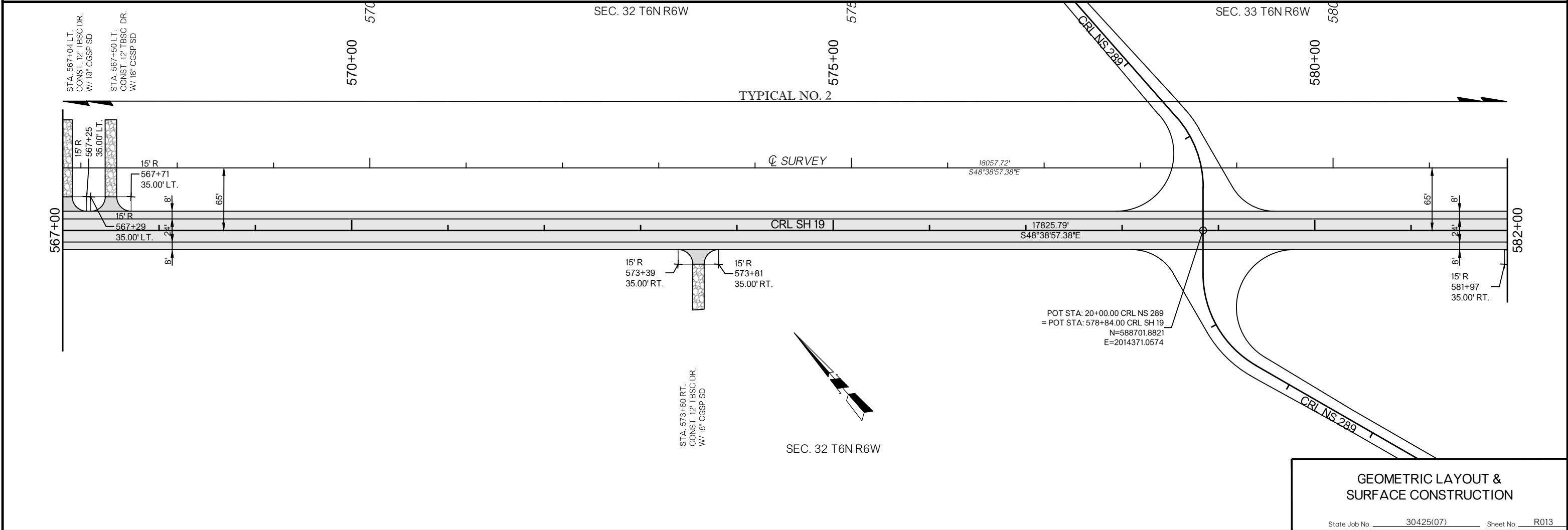
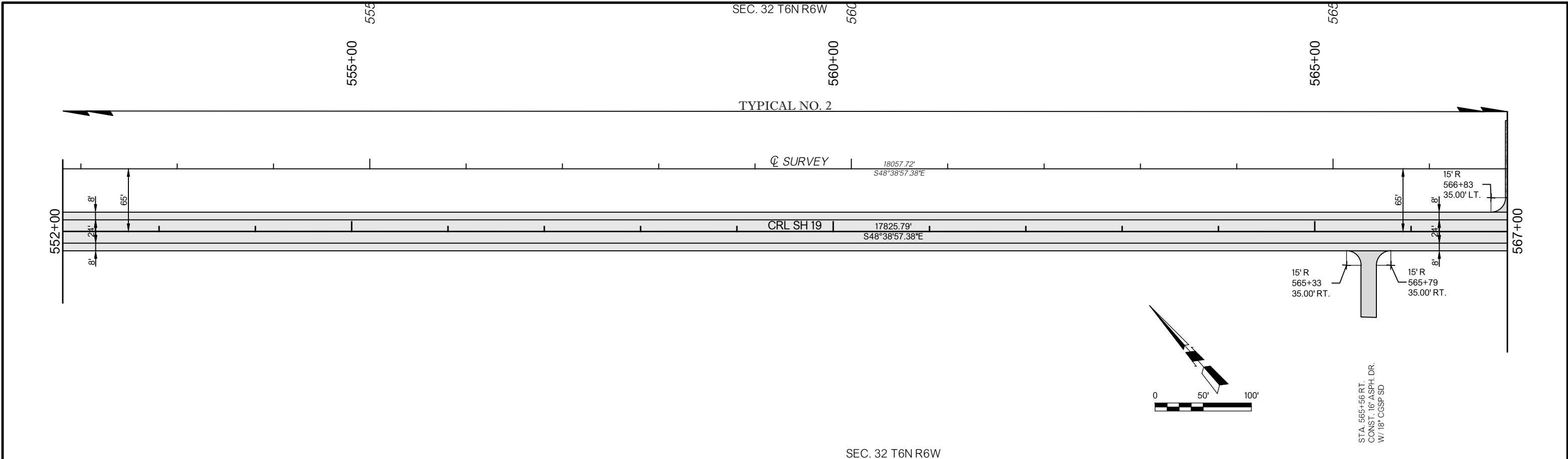
GEOMETRIC LAYOUT &
SURFACE CONSTRUCTION



**GEOMETRIC LAYOUT &
SURFACE CONSTRUCTION**

State Job No. 30425(07) Sheet No. R012

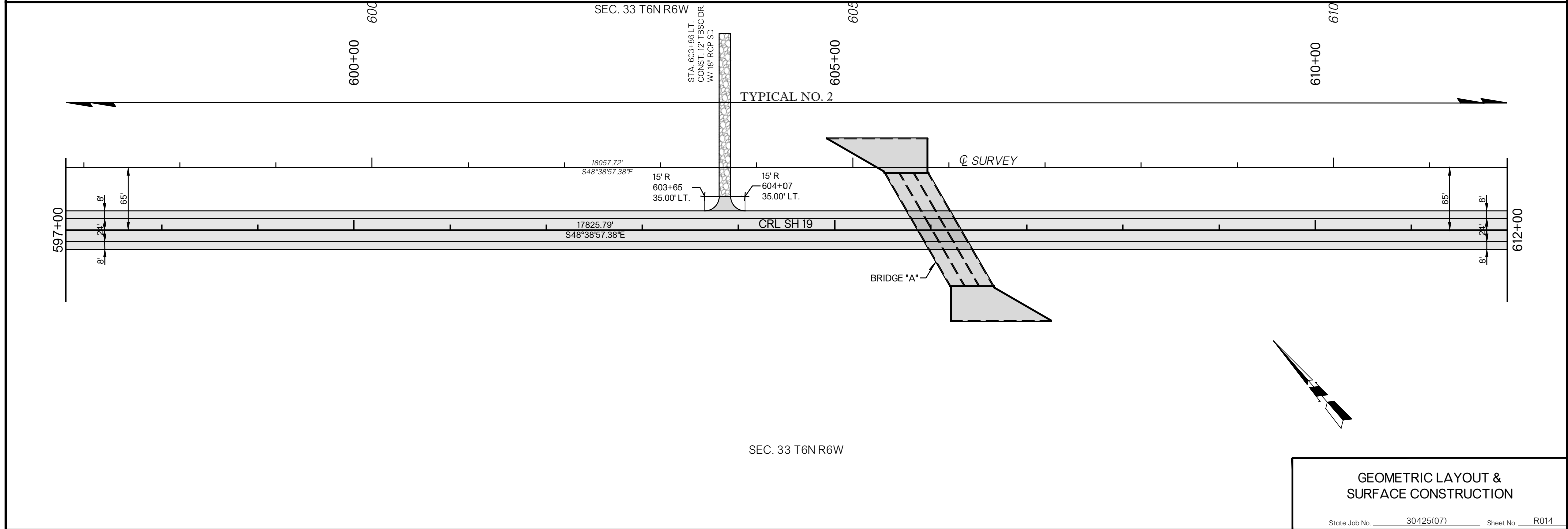
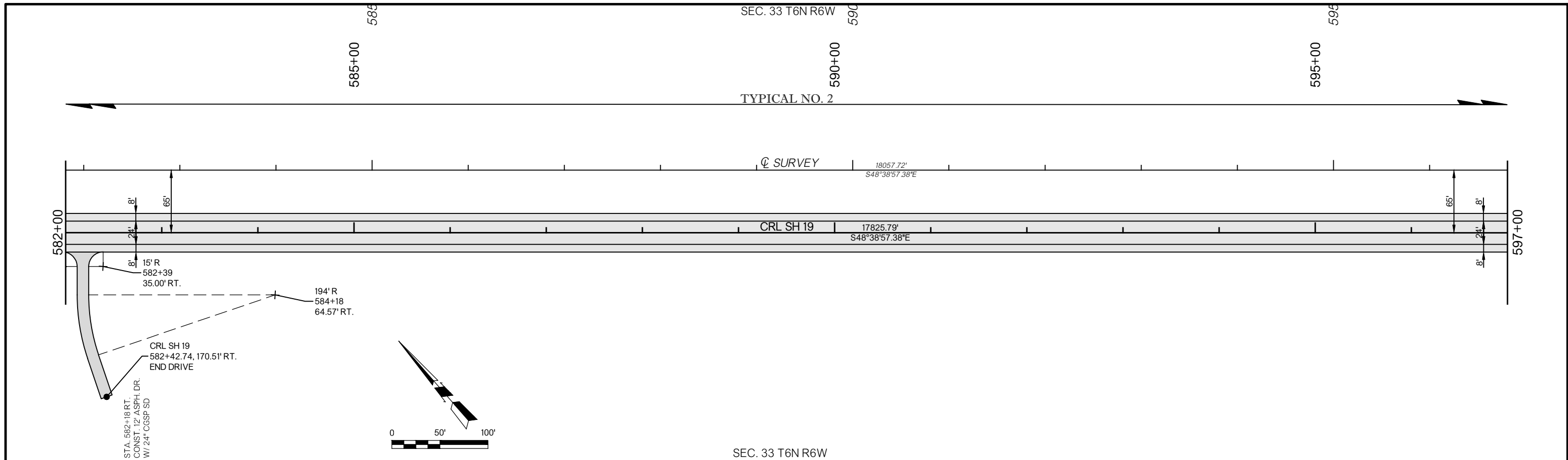
GRADY COUNTY SH 19



**GEOMETRIC LAYOUT &
SURFACE CONSTRUCTION**

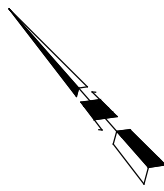
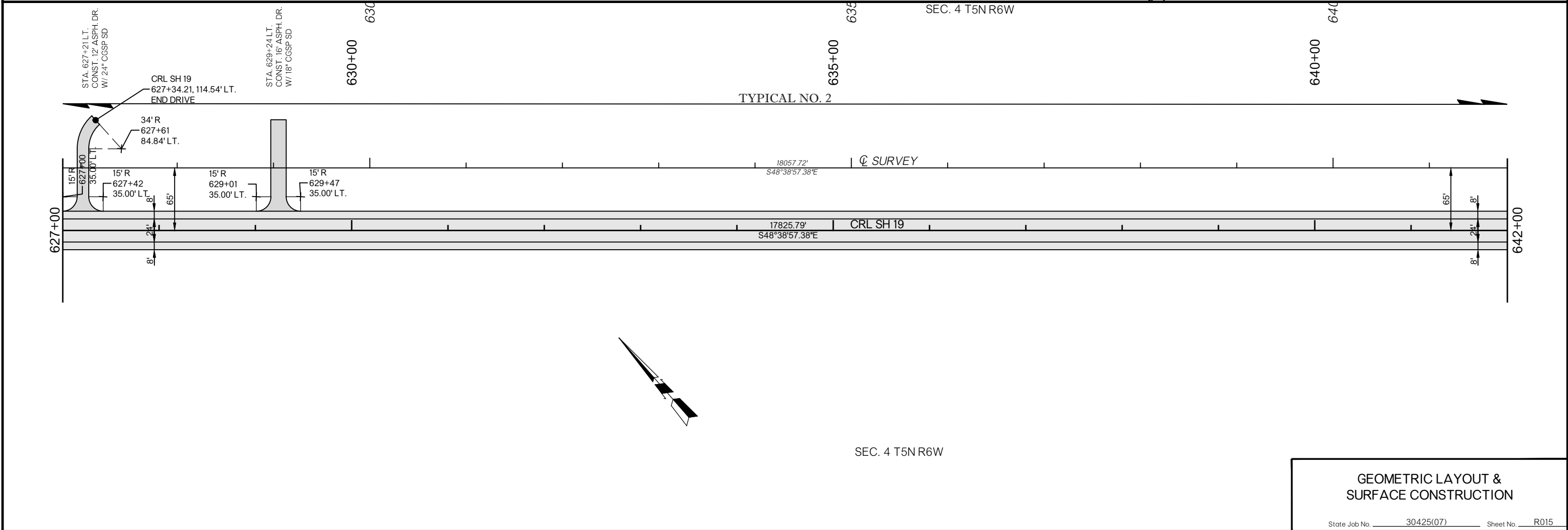
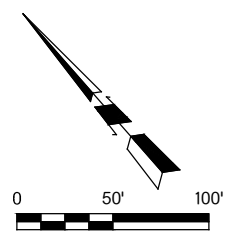
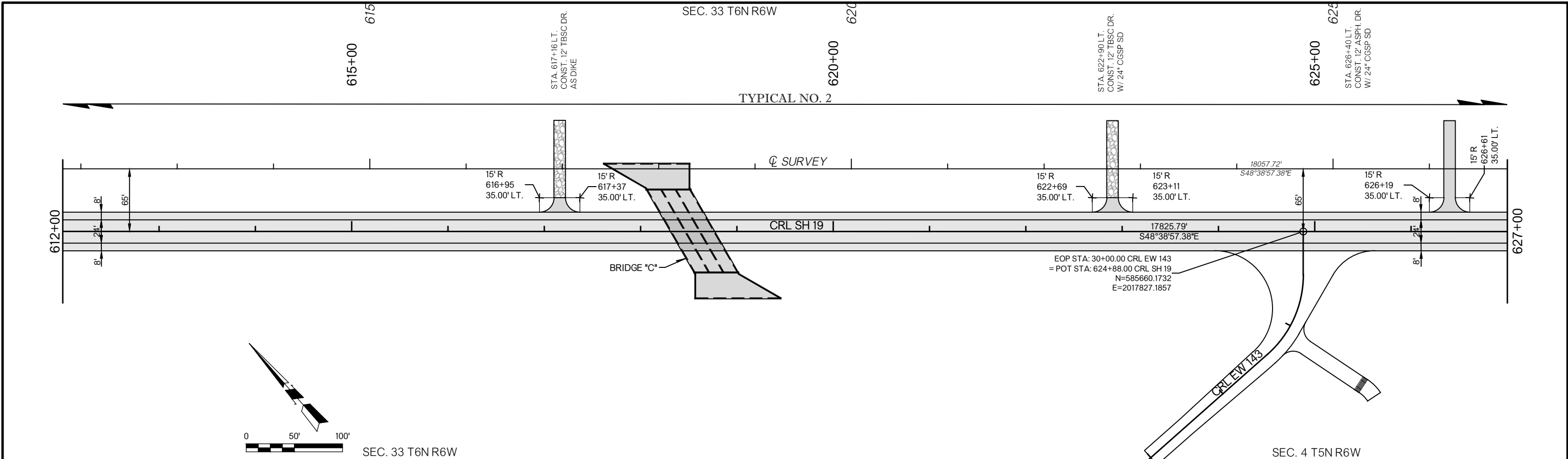
State Job No. 30425(07) Sheet No. R013

GRADY COUNTY SH 19



**GEOMETRIC LAYOUT &
SURFACE CONSTRUCTION**

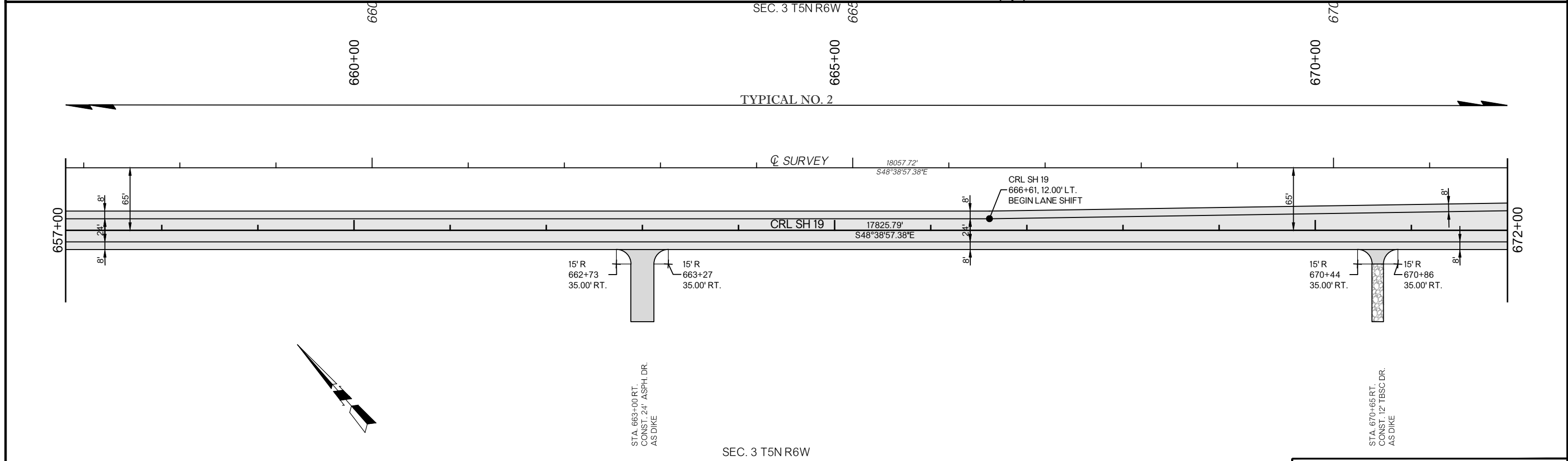
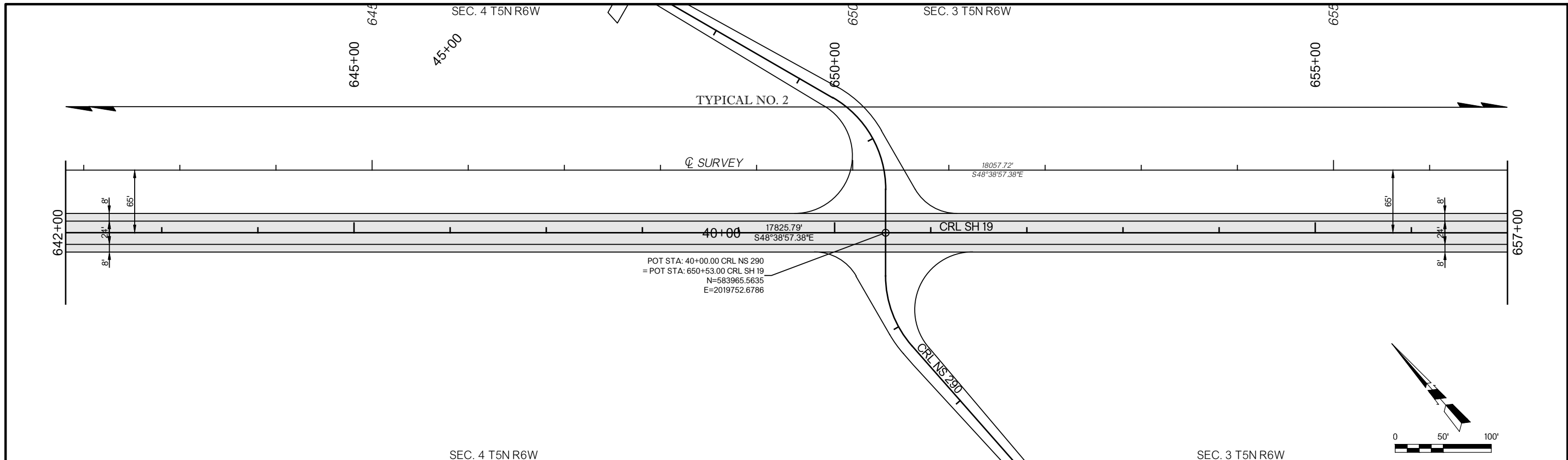
State Job No. 30425(07) Sheet No. R014



**GEOMETRIC LAYOUT &
SURFACE CONSTRUCTION**

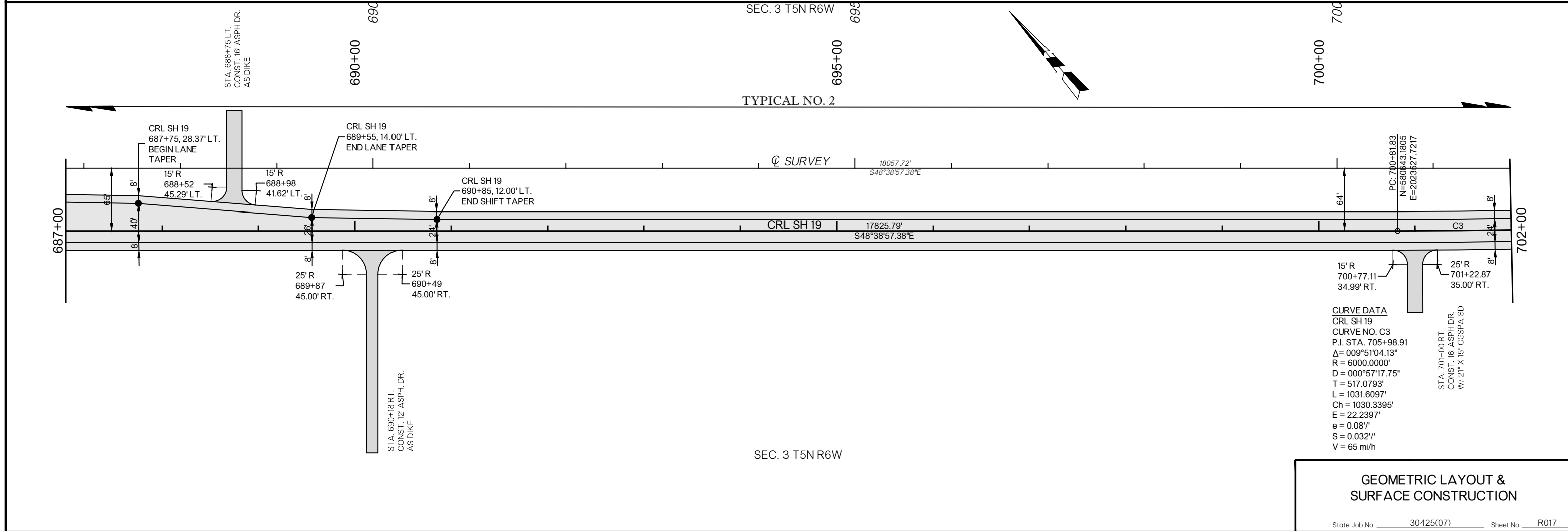
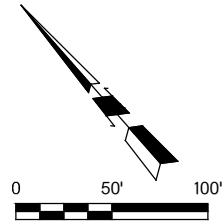
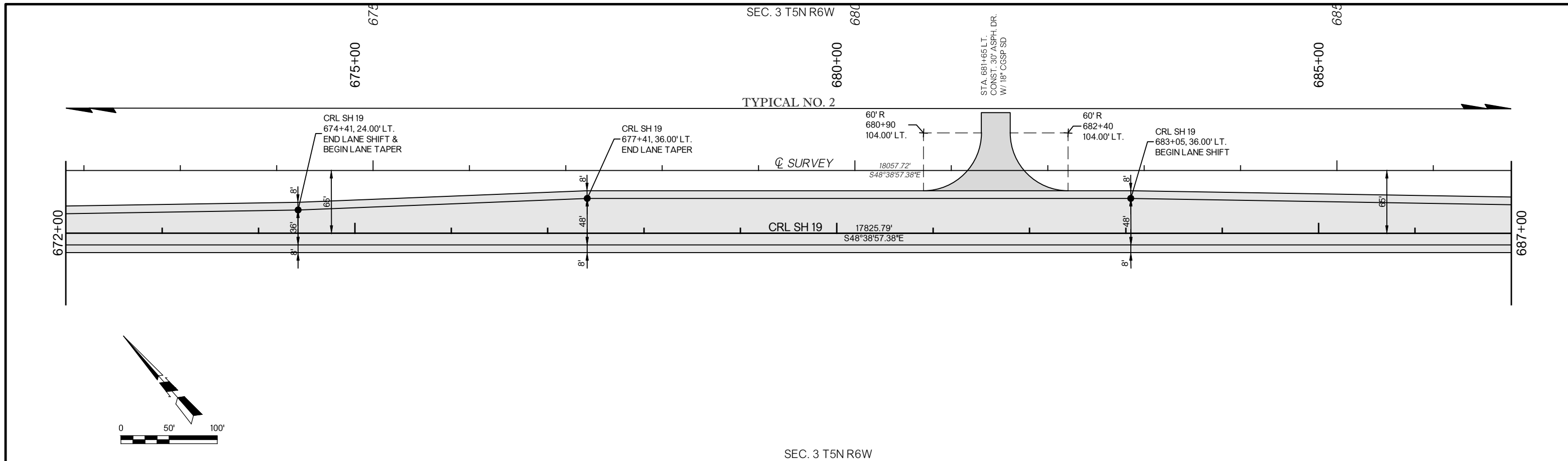
State Job No. 30425(07) Sheet No. R015

GRADY COUNTY SH 19



**GEOMETRIC LAYOUT &
SURFACE CONSTRUCTION**

State Job No. 30425(07) Sheet No. R016



CURVE DATA
 CRL SH 19
 CURVE NO. C3
 P.I. STA. 705+98.91
 $\Delta = 009^{\circ}51'04.13''$
 $R = 6000.0000'$
 $D = 000^{\circ}57'17.75''$
 $T = 517.0793'$
 $L = 1031.6097'$
 $Ch = 1030.3395'$
 $E = 22.2397'$
 $e = 0.08''$
 $S = 0.032''$
 $V = 65 \text{ mi/h}$

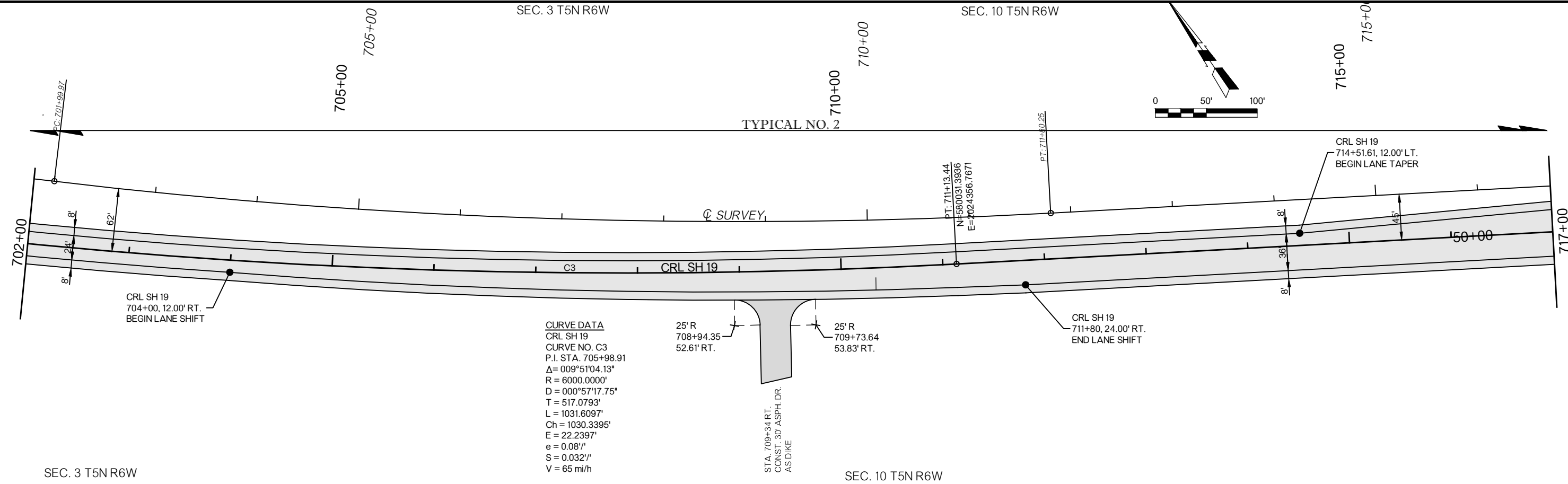
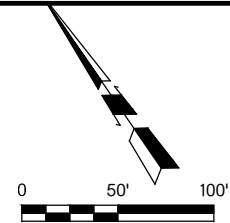
**GEOMETRIC LAYOUT &
SURFACE CONSTRUCTION**

State Job No. 30425(07) Sheet No. R017

GRADY COUNTY SH 19

SEC. 3 T5N R6W

SEC. 10 T5N R6W



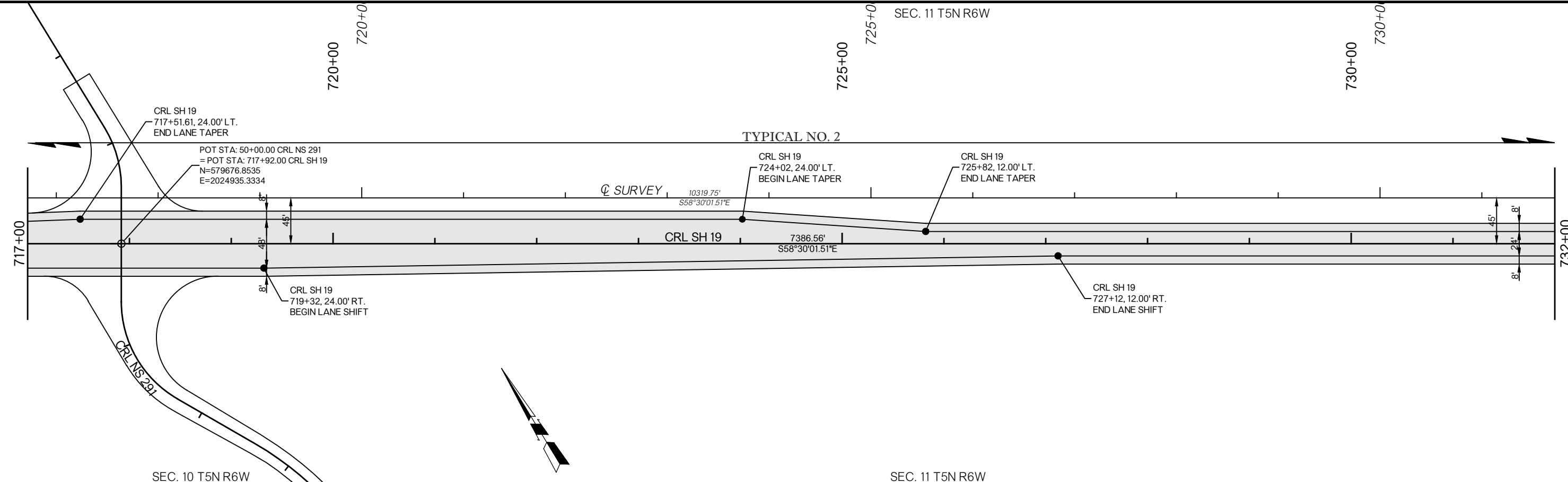
CURVE DATA
 CRL SH 19
 CURVE NO. C3
 P.I. STA. 705+98.91
 $\Delta = 009^\circ 51' 04.13''$
 $R = 6000.0000'$
 $D = 000^\circ 57' 17.75''$
 $T = 517.0793'$
 $L = 1031.6097'$
 $Ch = 1030.3395'$
 $E = 22.2397'$
 $e = 0.081'$
 $S = 0.0321''$
 $V = 65 \text{ mi/h}$

STA. 709+34 RT.
 CONST. 30' ASPH. DR.
 AS DIKE

SEC. 3 T5N R6W

SEC. 10 T5N R6W

SEC. 11 T5N R6W



POT STA: 50+00.00 CRL NS 291
 = POT STA: 717+92.00 CRL SH 19
 $N = 579676.8535$
 $E = 2024935.3334$

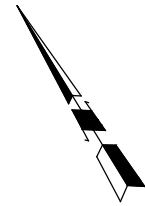
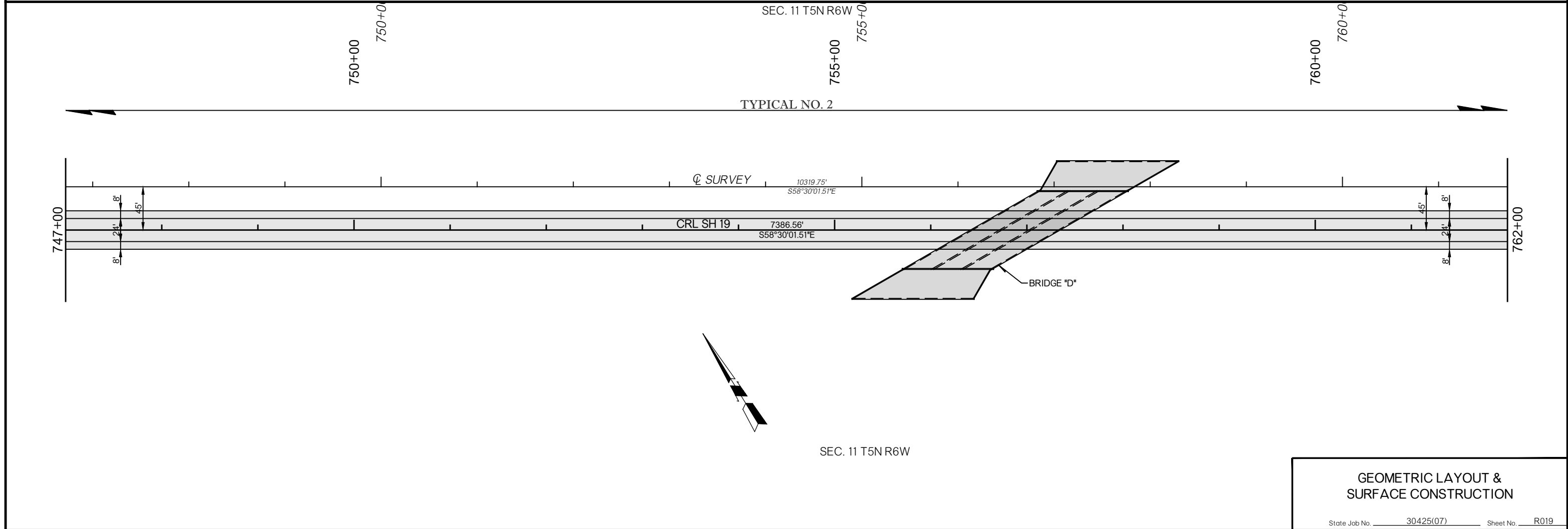
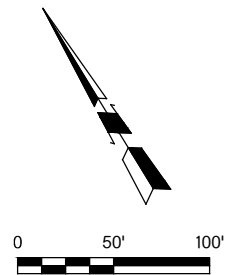
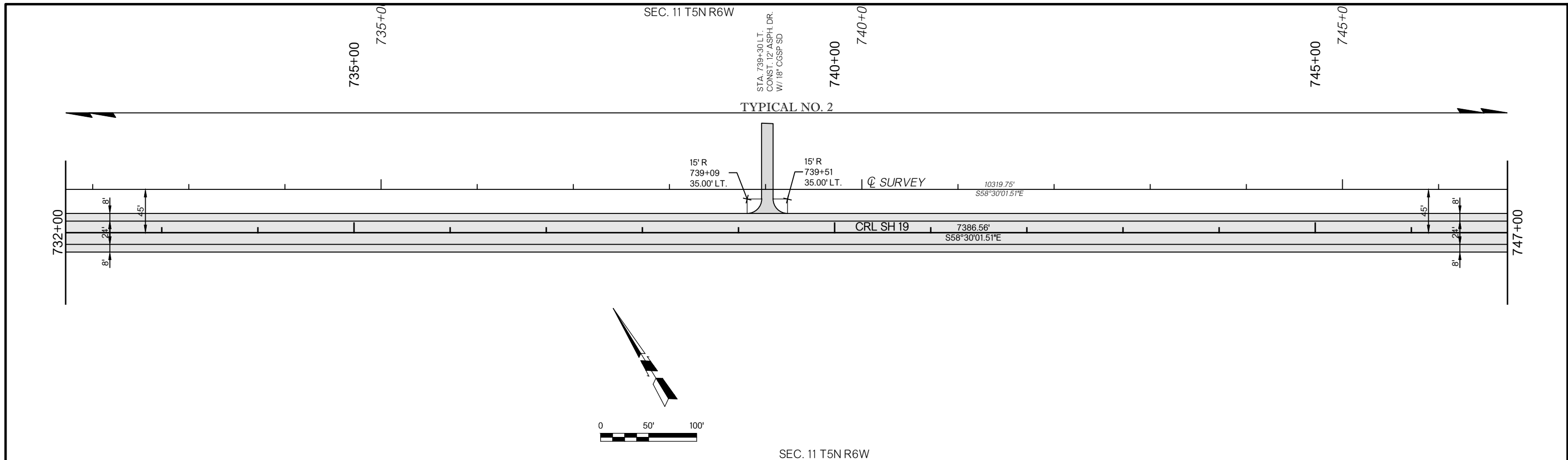
SEC. 10 T5N R6W

SEC. 11 T5N R6W

**GEOMETRIC LAYOUT &
SURFACE CONSTRUCTION**

State Job No. 30425(07) Sheet No. R018

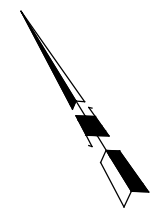
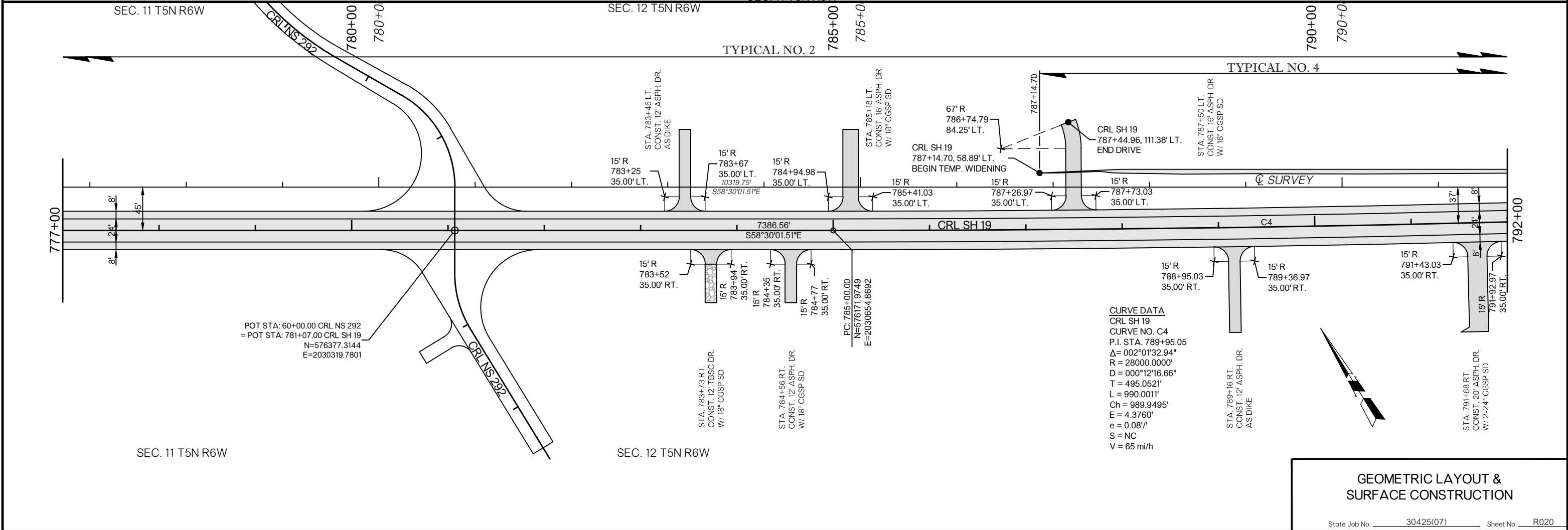
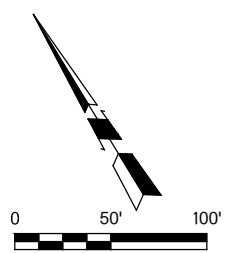
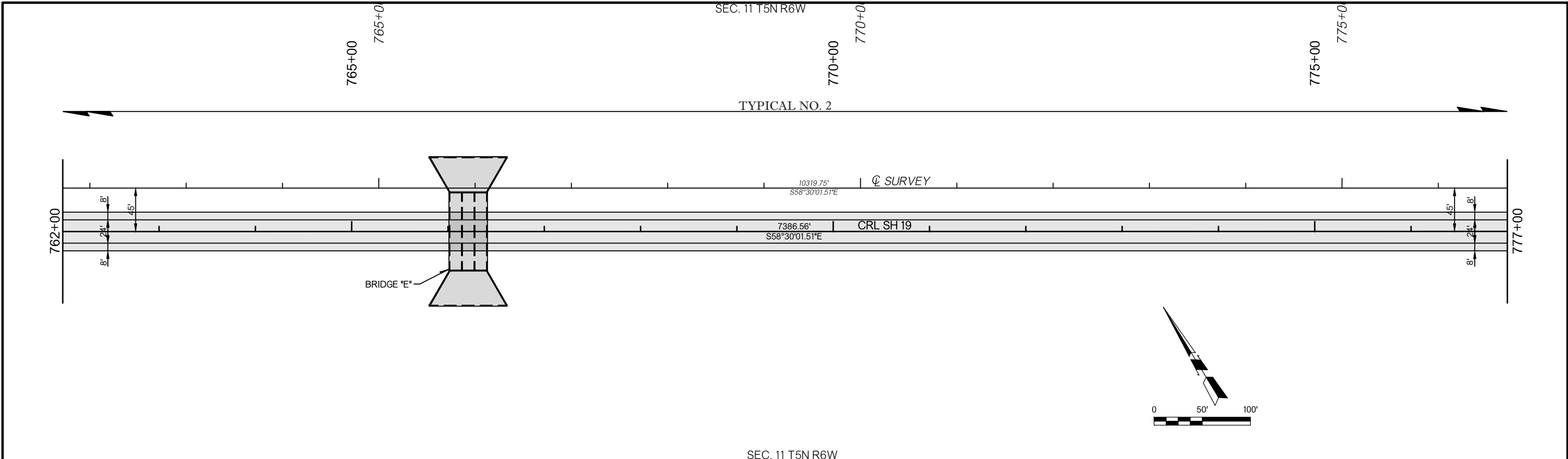
GRADY COUNTY SH 19



SEC. 11 T5N R6W

GEOMETRIC LAYOUT &
SURFACE CONSTRUCTION

State Job No. 30425(07) Sheet No. R019



CURVE DATA
 CRL SH 19
 CURVE NO. C4
 P.I. STA. 789+95.05
 $\Delta = 002^{\circ}01'32.94''$
 $R = 28000.0000'$
 $D = 000^{\circ}12'16.66''$
 $T = 495.0521'$
 $L = 990.0011'$
 $Ch = 989.9495'$
 $E = 4.3760'$
 $e = 0.08''$
 $S = NC$
 $V = 65 \text{ mi/h}$

**GEOMETRIC LAYOUT &
 SURFACE CONSTRUCTION**

State Job No. 30425(07) Sheet No. R020

GRADY COUNTY SH 19

795+00

795+00

800+00

800+00

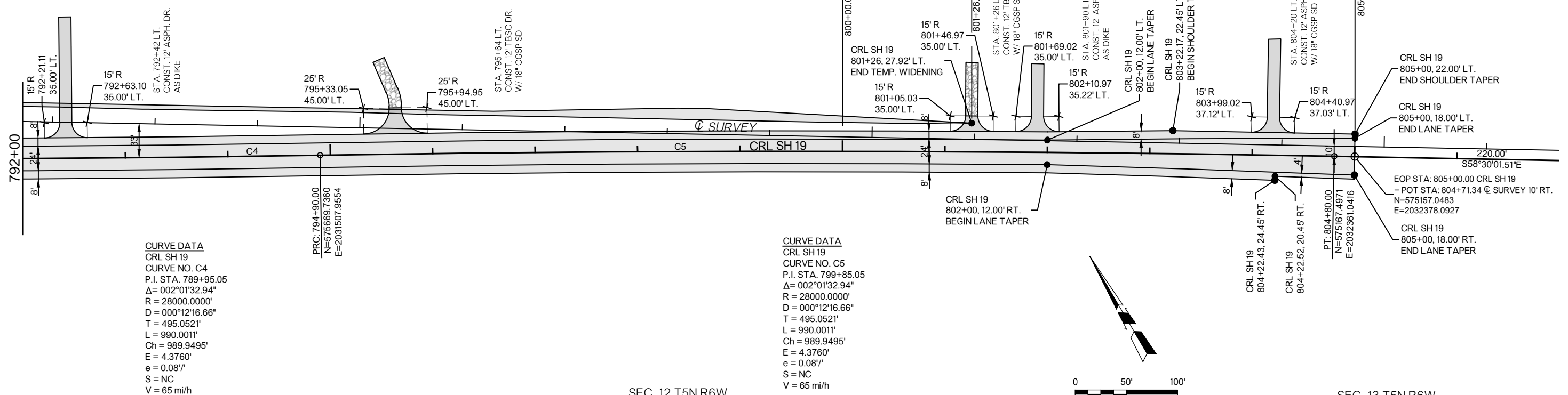
805+00

805+00

TYPICAL NO. 2

TYPICAL NO. 4

TYPICAL NO. 8



CURVE DATA
 CRL SH 19
 CURVE NO. C4
 P.I. STA. 789+95.05
 $\Delta = 002^{\circ}01'32.94''$
 $R = 28000.0000'$
 $D = 000^{\circ}12'16.66''$
 $T = 495.0521'$
 $L = 990.0011'$
 $Ch = 989.9495'$
 $E = 4.3760'$
 $e = 0.08''$
 $S = NC$
 $V = 65 \text{ mi/h}$

PRC: 794+90.00
 $N = 575669.7360$
 $E = 2031607.9554$

CURVE DATA
 CRL SH 19
 CURVE NO. C5
 P.I. STA. 799+85.05
 $\Delta = 002^{\circ}01'32.94''$
 $R = 28000.0000'$
 $D = 000^{\circ}12'16.66''$
 $T = 495.0521'$
 $L = 990.0011'$
 $Ch = 989.9495'$
 $E = 4.3760'$
 $e = 0.08''$
 $S = NC$
 $V = 65 \text{ mi/h}$

EOP STA: 805+00.00 CRL SH 19
 = POT STA: 804+71.34 Q SURVEY 10' RT.
 $N = 575157.0483$
 $E = 2032378.0927$
 CRL SH 19
 805+00, 18.00' RT.
 END LANE TAPER

GEOMETRIC LAYOUT & SURFACE CONSTRUCTION

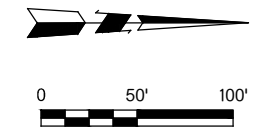
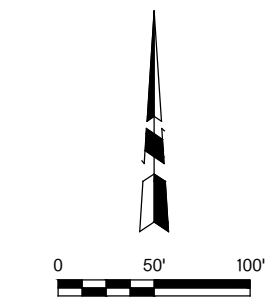
CURVE DATA
 CRL EW 142 W
 CURVE NO. 142-1
 P.I. STA. 9+13.28
 $\Delta = 048^\circ 29' 15.21''$
 $R = 110.0000'$
 $D = 052^\circ 05' 13.46''$
 $T = 49.5370'$
 $L = 93.0894'$
 $Ch = 90.3364'$
 $E = 10.6396'$
 $e = \text{LOW SPEED}$
 $S = \text{NC}$
 $V = 20 \text{ mi/h}$

CURVE DATA
 CRL EW 142 E
 CURVE NO. 142-2
 P.I. STA. 10+94.47
 $\Delta = 048^\circ 26' 53.38''$
 $R = 110.0000'$
 $D = 052^\circ 05' 13.46''$
 $T = 49.4915'$
 $L = 93.0138'$
 $Ch = 90.2674'$
 $E = 10.6209'$
 $e = \text{LOW SPEED}$
 $S = \text{NC}$
 $V = 20 \text{ mi/h}$

CURVE DATA
 CRL NS 289
 CURVE NO. 289-1
 P.I. STA. 15+06.62
 $\Delta = 018^\circ 40' 05.25''$
 $R = 500.0000'$
 $D = 011^\circ 27' 32.96''$
 $T = 82.1834'$
 $L = 162.9101'$
 $Ch = 162.1905'$
 $E = 6.7091'$
 $e = \text{LOW SPEED}$
 $S = \text{RC}$
 $V = 35 \text{ mi/h}$

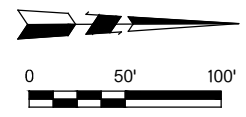
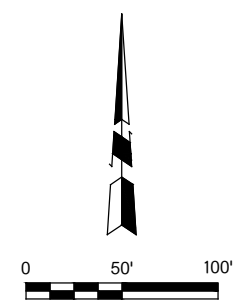
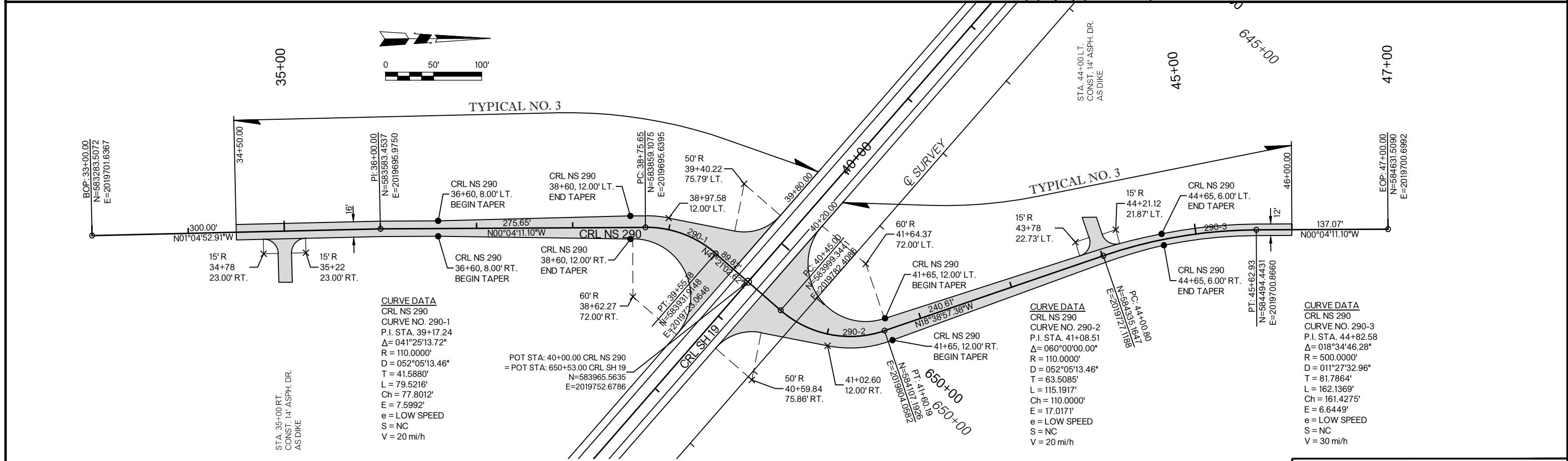
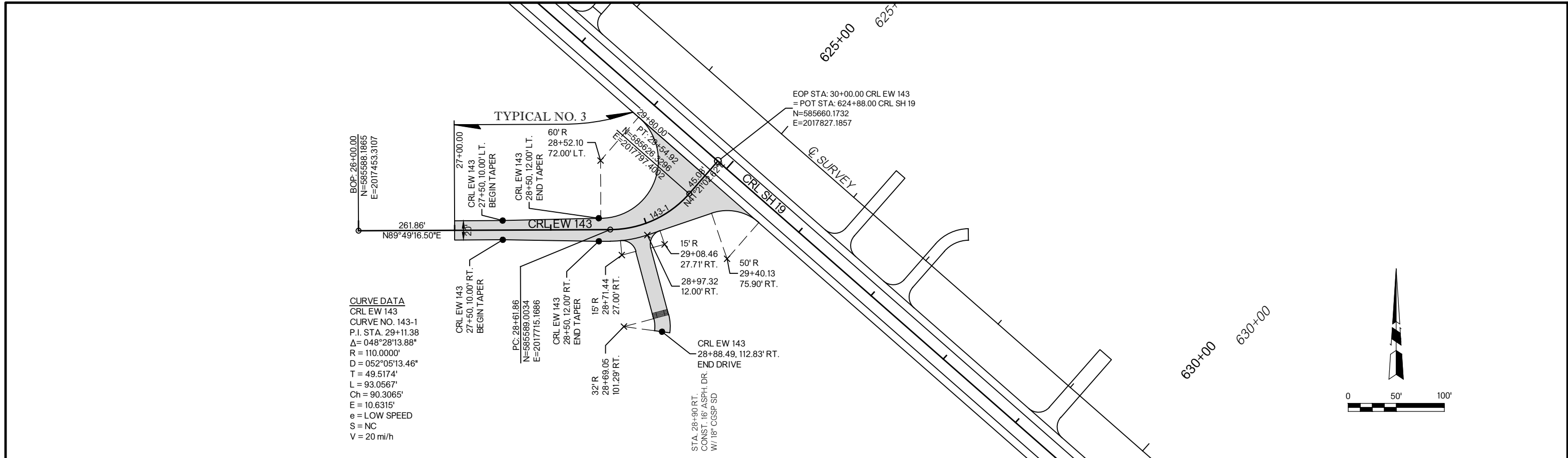
CURVE DATA
 CRL NS 289
 CURVE NO. 289-2
 P.I. STA. 19+03.32
 $\Delta = 060^\circ 00' 00.00''$
 $R = 110.0000'$
 $D = 052^\circ 05' 13.46''$
 $T = 63.5085'$
 $L = 115.1917'$
 $Ch = 110.0000'$
 $E = 17.0171'$
 $e = \text{LOW SPEED}$
 $S = \text{NC}$
 $V = 20 \text{ mi/h}$

CURVE DATA
 CRL NS 289
 CURVE NO. 289-3
 P.I. STA. 20+86.15
 $\Delta = 041^\circ 20' 27.22''$
 $R = 110.0000'$
 $D = 052^\circ 05' 13.46''$
 $T = 41.5007'$
 $L = 79.3688'$
 $Ch = 77.6583'$
 $E = 7.5683'$
 $e = \text{LOW SPEED}$
 $S = \text{NC}$
 $V = 20 \text{ mi/h}$



**GEOMETRIC LAYOUT &
 SURFACE CONSTRUCTION**

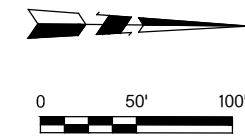
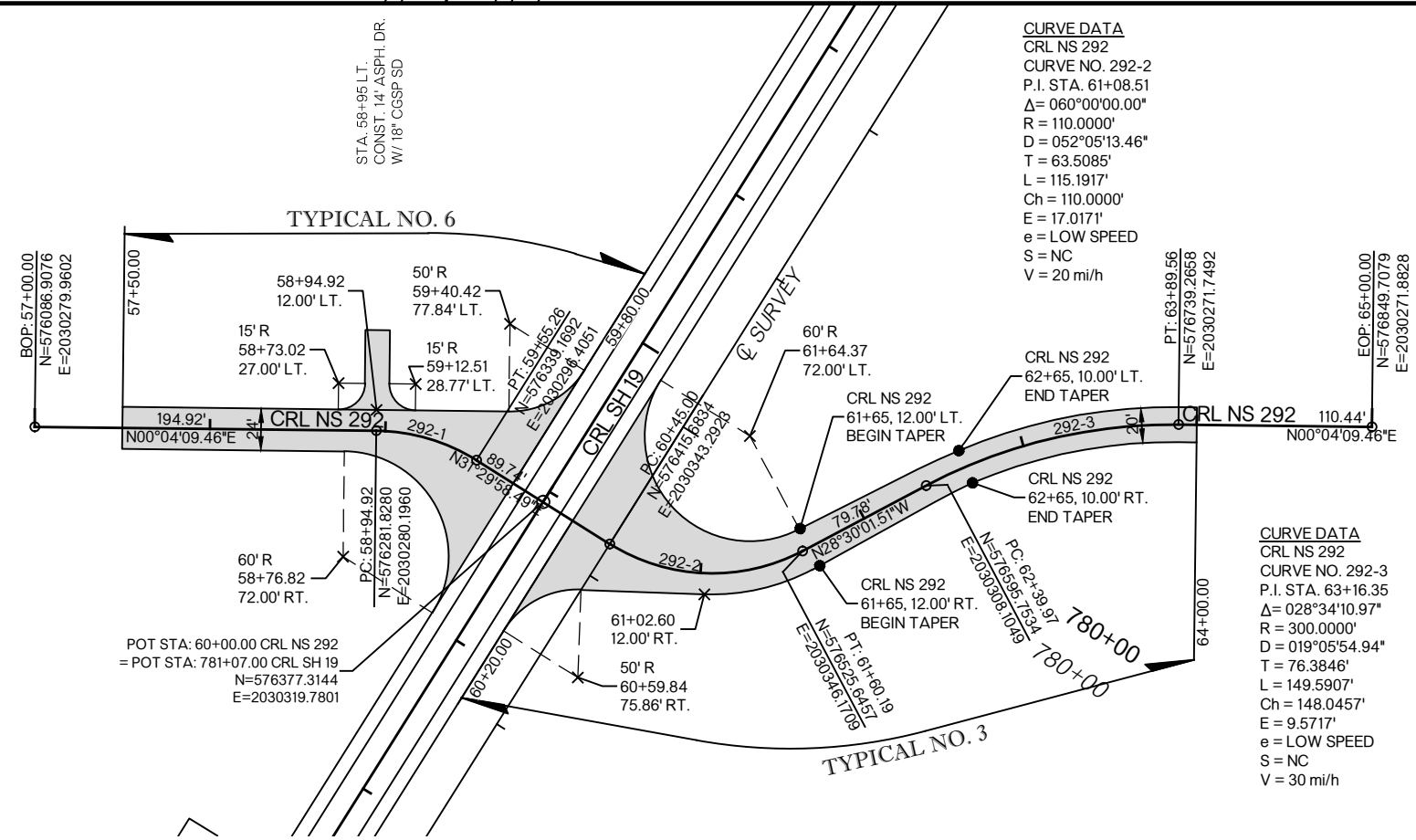
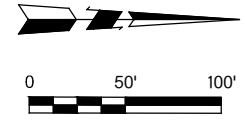
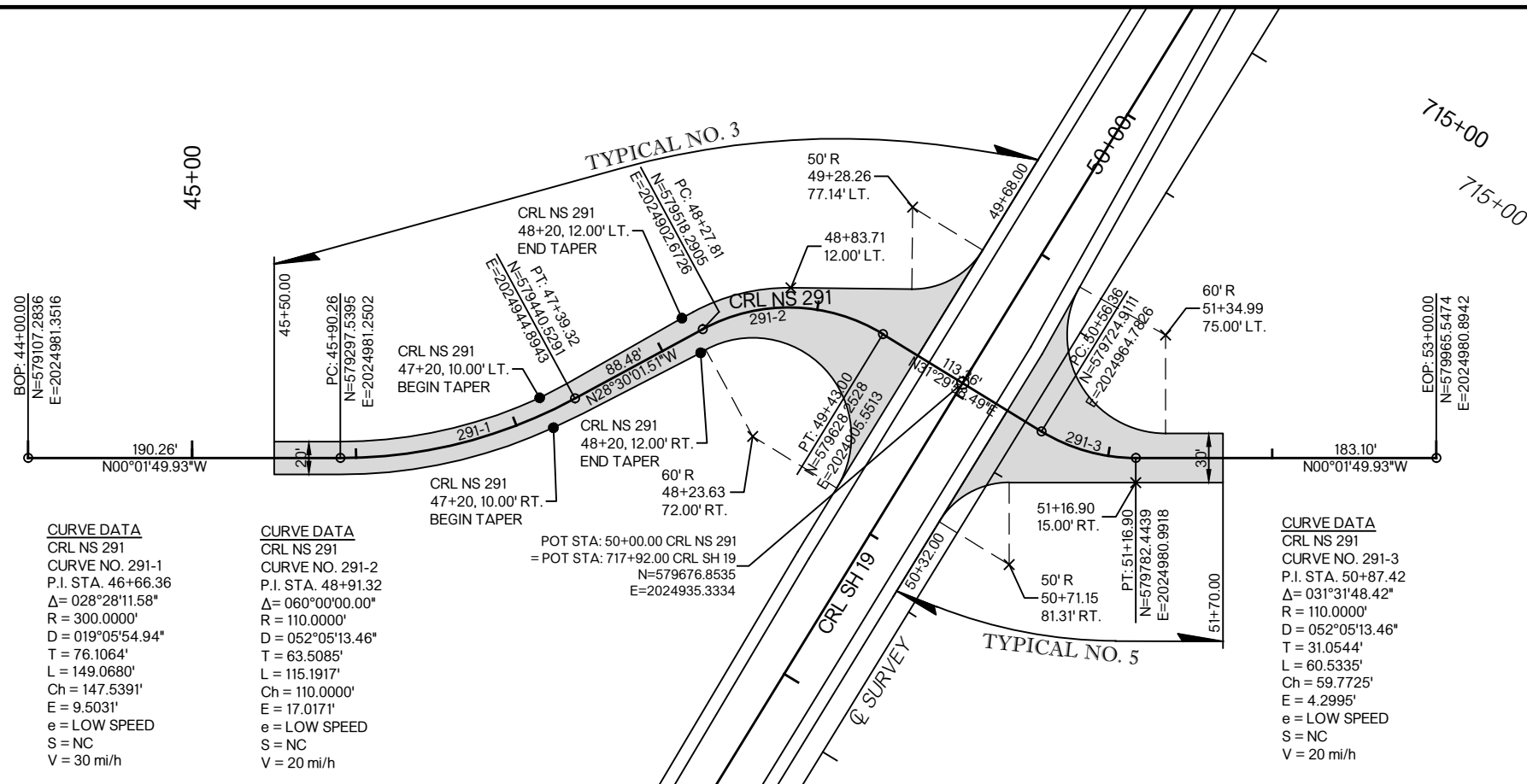
GRADY COUNTY SH 19



**GEOMETRIC LAYOUT &
SURFACE CONSTRUCTION**

State Job No. 30425(07) Sheet No. R023

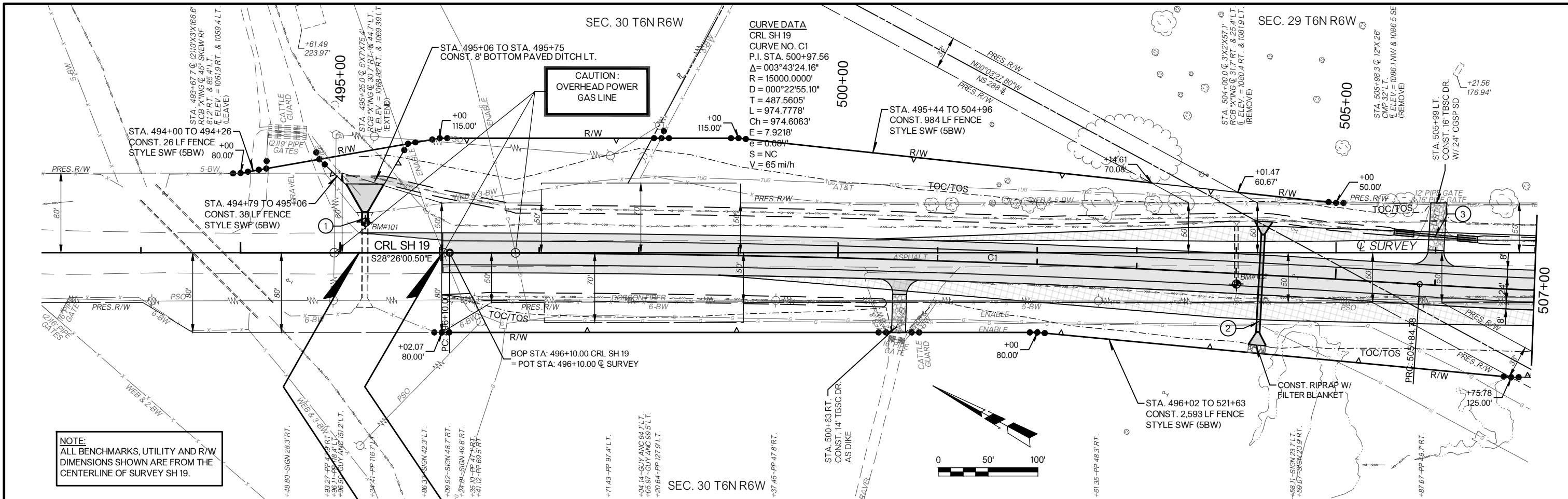
GRADY COUNTY SH 19



**GEOMETRIC LAYOUT &
 SURFACE CONSTRUCTION**

State Job No. 30425(07) Sheet No. R024

GRADY COUNTY SH 19



NOTE:
ALL BENCHMARKS, UTILITY AND R/W DIMENSIONS SHOWN ARE FROM THE CENTERLINE OF SURVEY SH 19.

CURVE DATA
CRL SH 19
CURVE NO. C1
P.I. STA. 500+97.56
 $\Delta = 003^{\circ}43'24.16''$
 $R = 15000.0000'$
 $D = 000^{\circ}22'55.10''$
 $T = 487.5605'$
 $L = 974.7778'$
 $E = 7.9218'$
 $e = 0.087'$
 $S = NC$
 $V = 65 \text{ mi/h}$

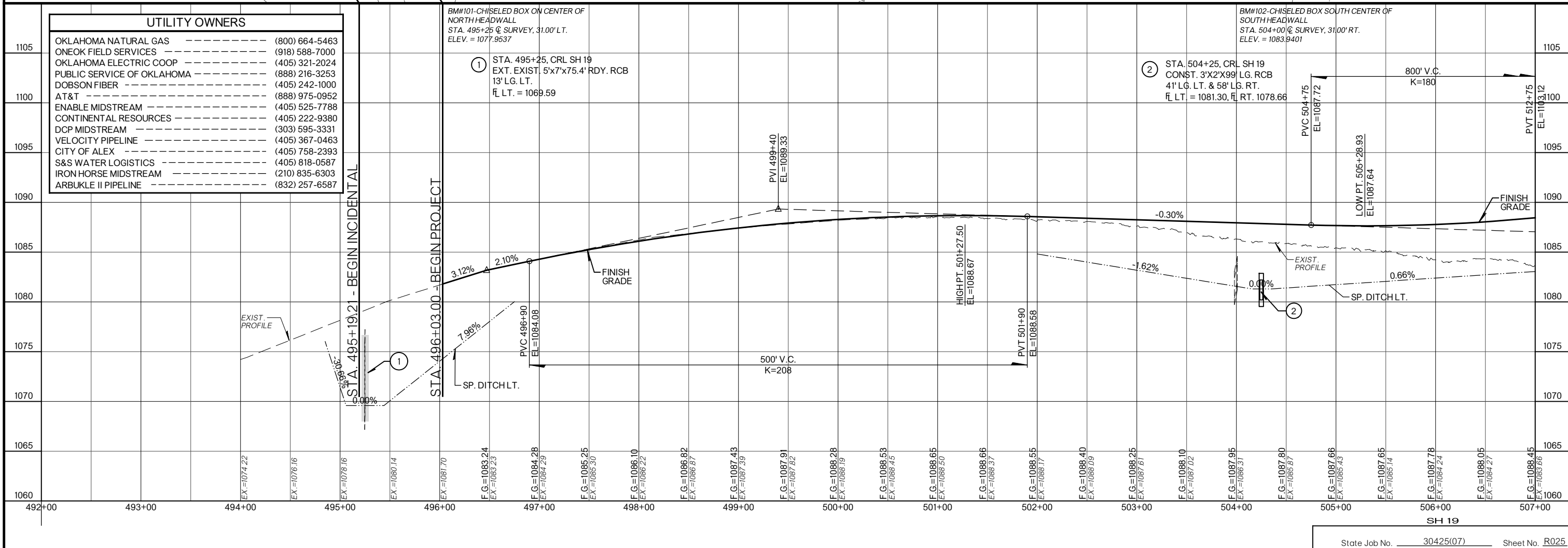
UTILITY OWNERS		
OKLAHOMA NATURAL GAS	-----	(800) 664-5463
ONEOK FIELD SERVICES	-----	(918) 588-7000
OKLAHOMA ELECTRIC COOP	-----	(405) 321-2024
PUBLIC SERVICE OF OKLAHOMA	-----	(888) 216-3253
DOBSON FIBER	-----	(405) 242-1000
AT&T	-----	(888) 975-0952
ENABLE MIDSTREAM	-----	(405) 525-7788
CONTINENTAL RESOURCES	-----	(405) 222-9380
DCP MIDSTREAM	-----	(303) 595-3331
VELOCITY PIPELINE	-----	(405) 367-0463
CITY OF ALEX	-----	(405) 758-2393
S&S WATER LOGISTICS	-----	(405) 818-0587
IRON HORSE MIDSTREAM	-----	(210) 835-6303
ARBUKLE II PIPELINE	-----	(832) 257-6587

BM#101-CHISELED BOX ON CENTER OF NORTH HEADWALL
STA. 495+25 Q SURVEY, 31.00' LT.
ELEV. = 1077.9537

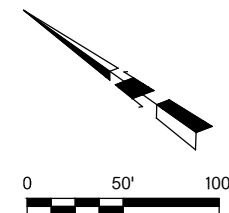
① STA. 495+25, CRL SH 19
EXT. EXIST. 5'x7'x75.4' RDY. RCB
13' LG. LT.
FL LT. = 1069.59

BM#102-CHISELED BOX SOUTH CENTER OF SOUTH HEADWALL
STA. 504+00 Q SURVEY, 31.00' RT.
ELEV. = 1083.9401

② STA. 504+25, CRL SH 19
CONST. 3'X2'X99' LG. RCB
4' LG. LT. & 58' LG. RT.
FL LT. = 1081.30, FL RT. 1078.66

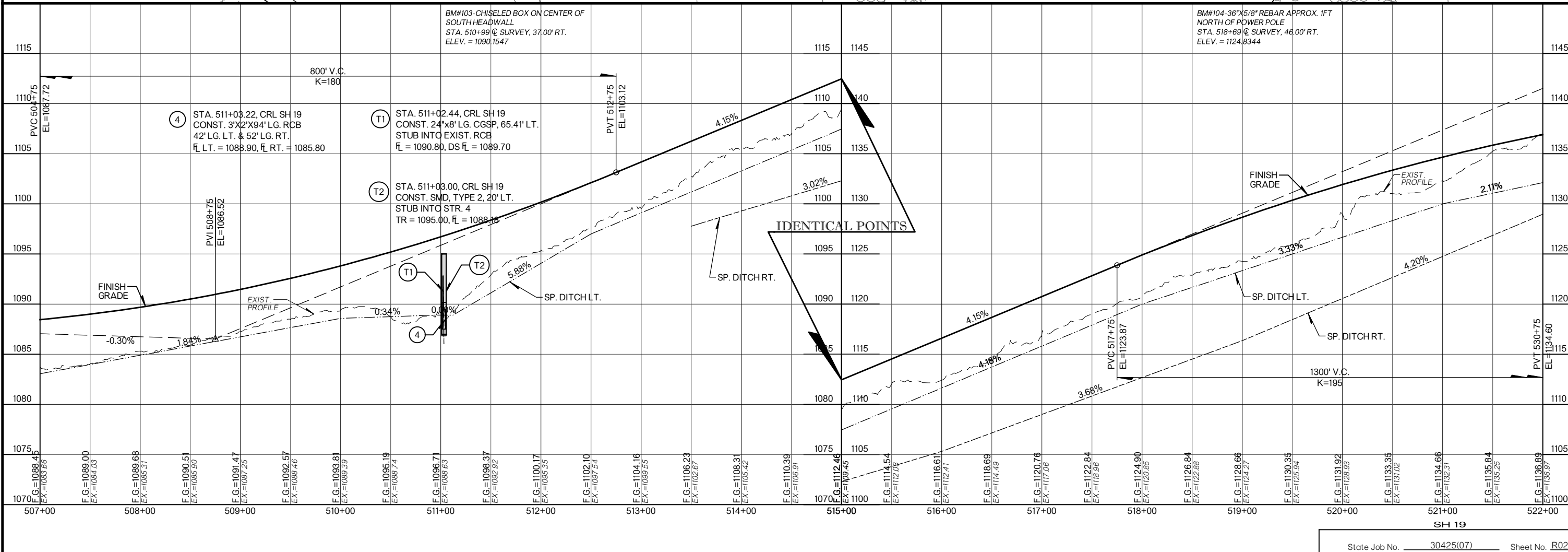
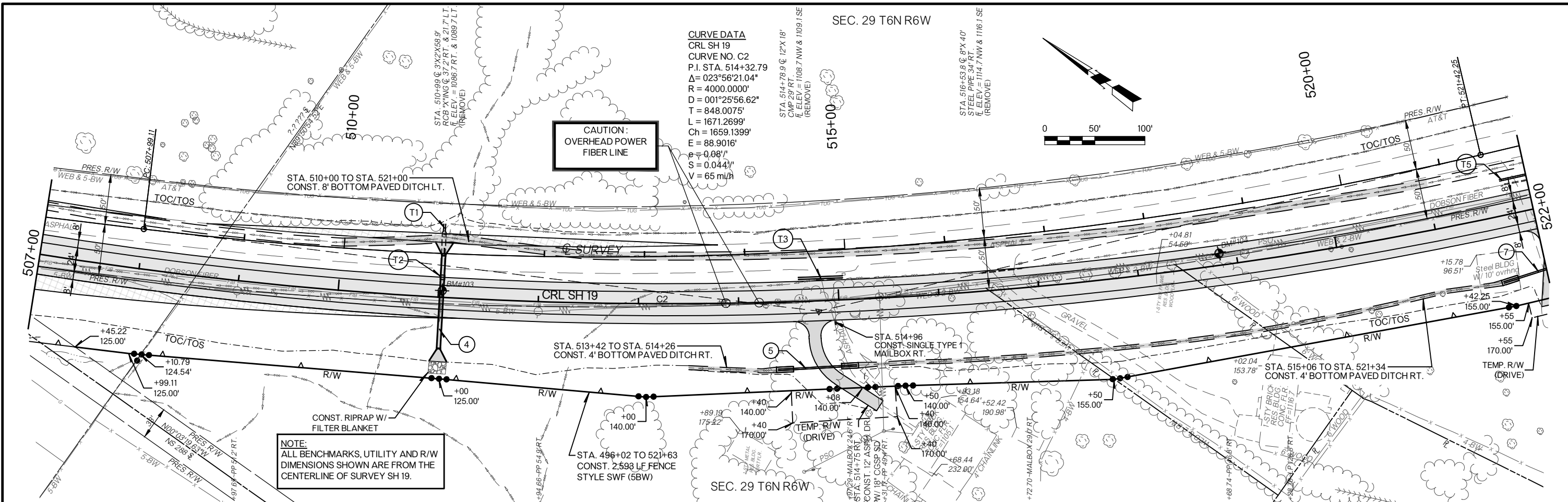


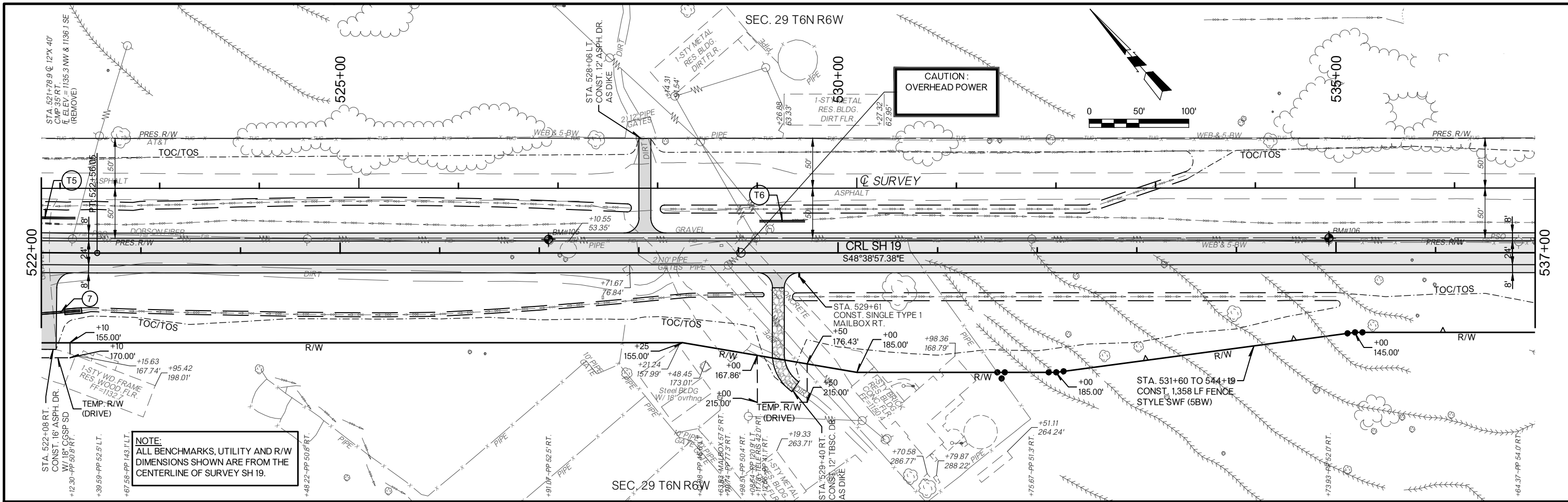
CURVE DATA
 CRL SH 19
 CURVE NO. C2
 P.I. STA. 514+32.79
 $\Delta = 023^{\circ}56'21.04''$
 $R = 4000.0000'$
 $D = 001^{\circ}25'56.62''$
 $T = 848.0075'$
 $L = 1671.2699'$
 $Ch = 1659.1399'$
 $E = 88.9016'$
 $e = 0.0841'$
 $S = 0.0441'$
 $V = 65 \text{ mi/h}$



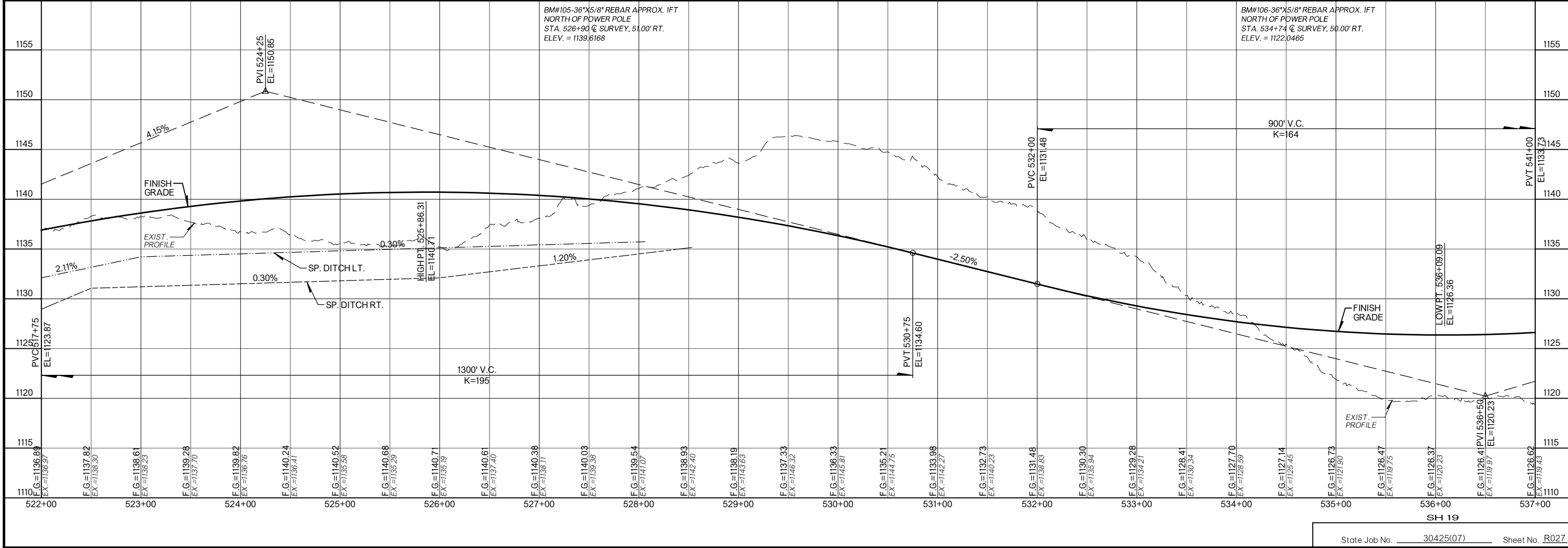
CAUTION:
 OVERHEAD POWER
 FIBER LINE

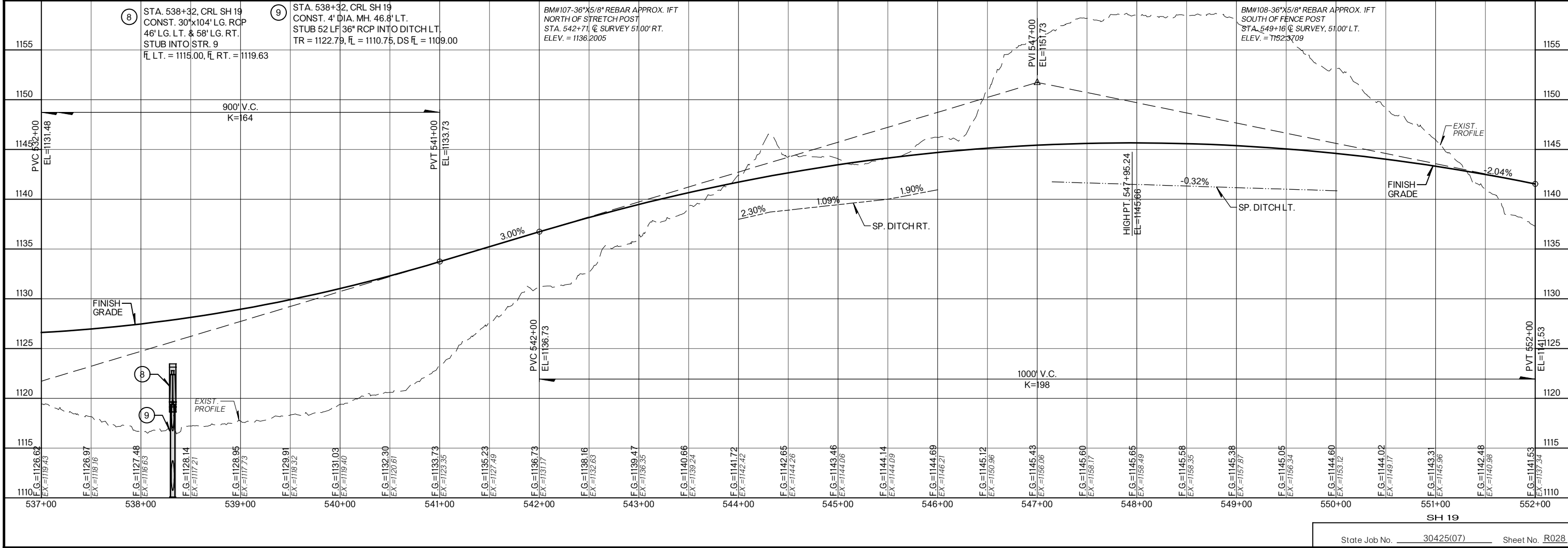
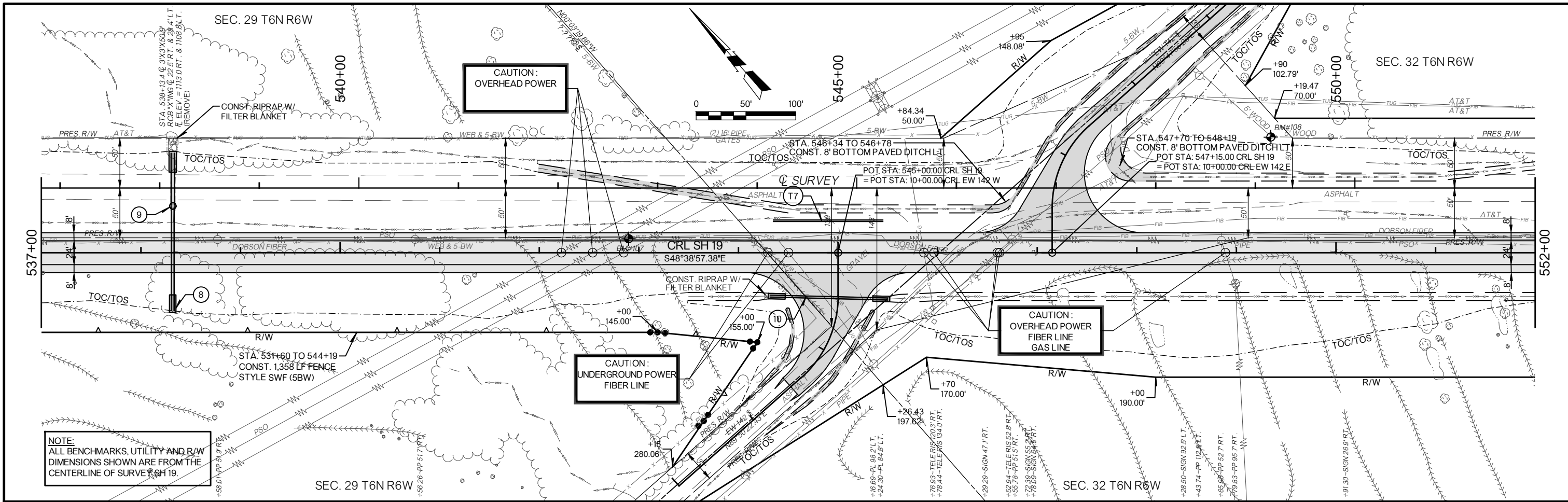
NOTE:
 ALL BENCHMARKS, UTILITY AND R/W
 DIMENSIONS SHOWN ARE FROM THE
 CENTERLINE OF SURVEY SH 19.

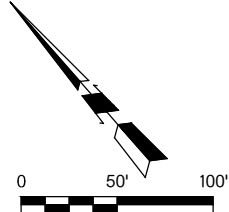




NOTE:
ALL BENCHMARKS, UTILITY AND R/W
DIMENSIONS SHOWN ARE FROM THE
CENTERLINE OF SURVEY SH 19.





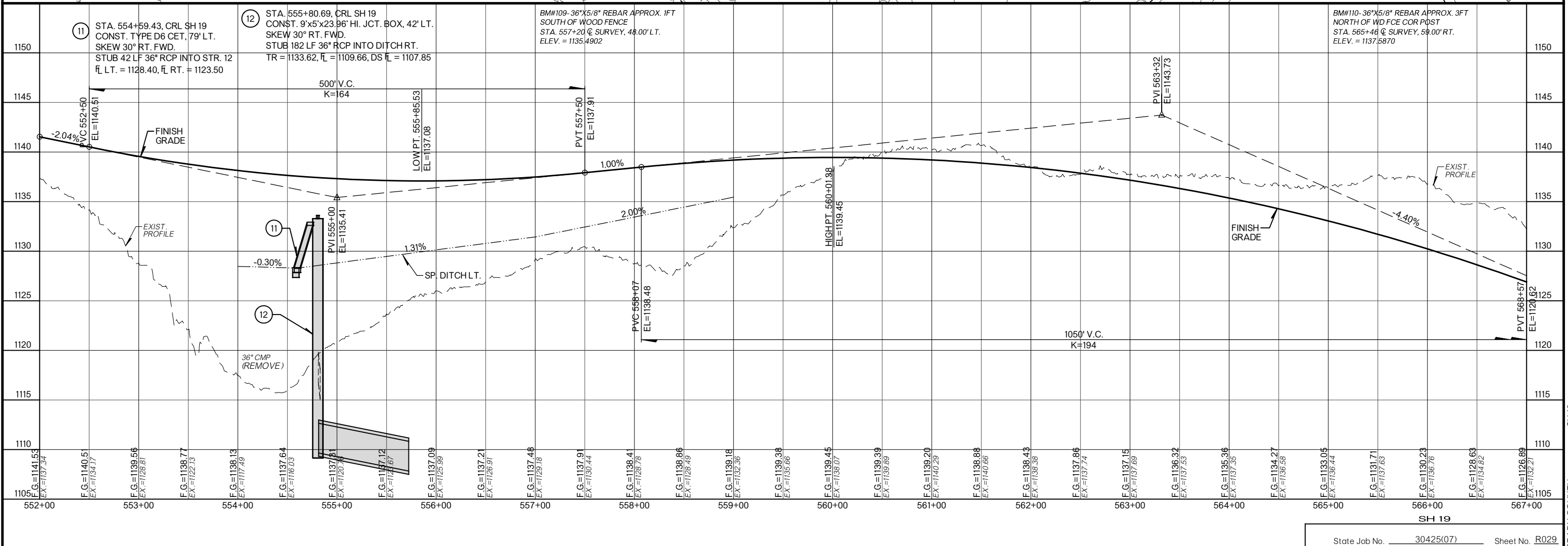
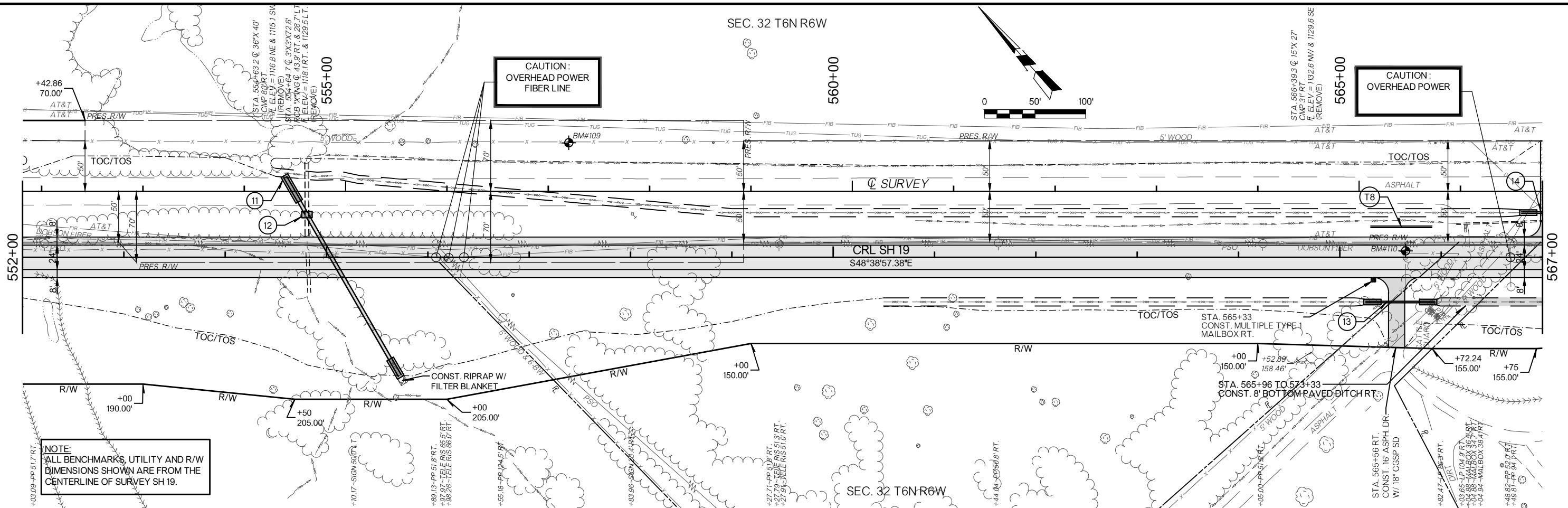


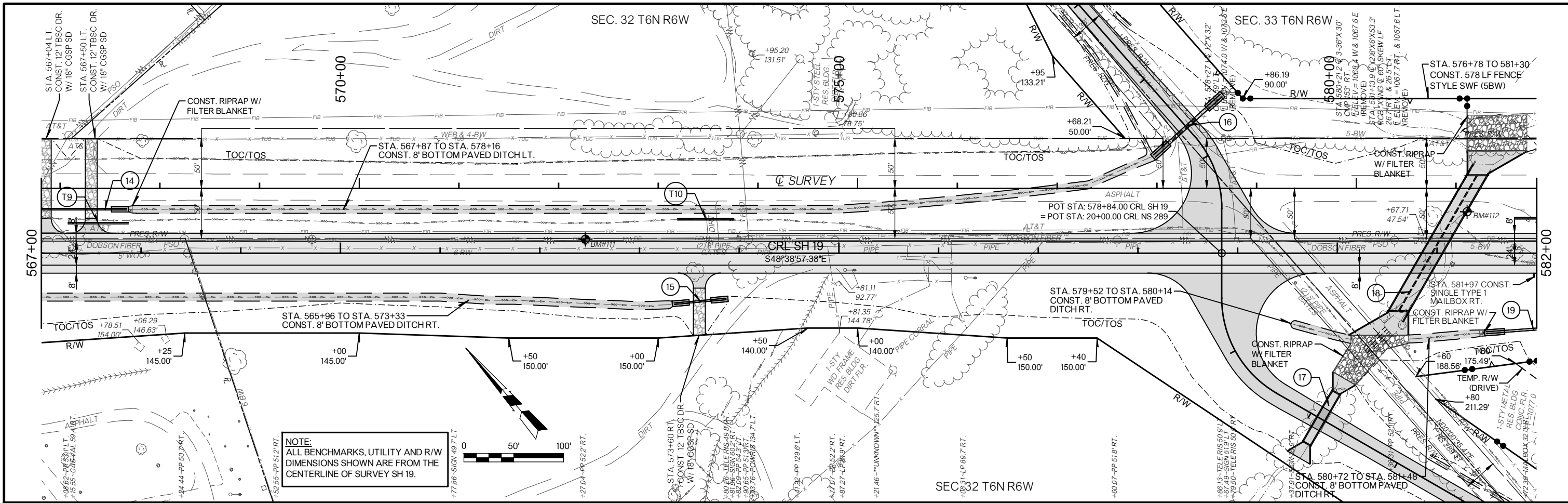
560+00

565+00

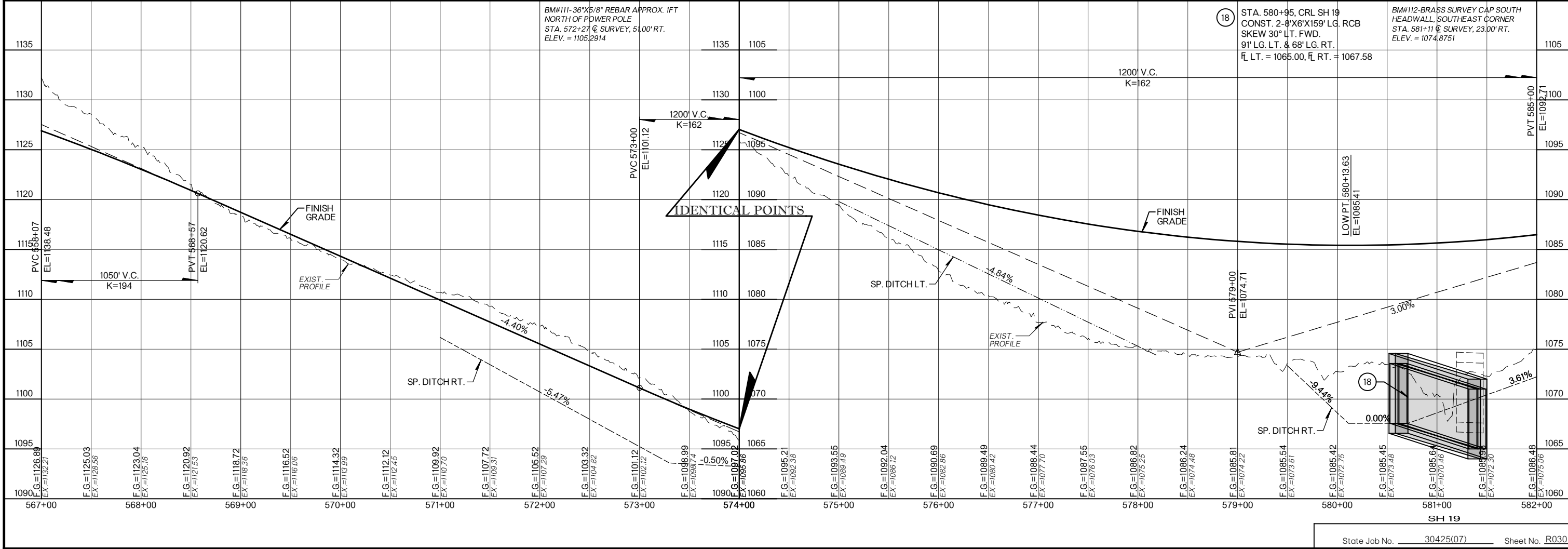
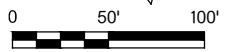
CAUTION: OVERHEAD POWER FIBER LINE

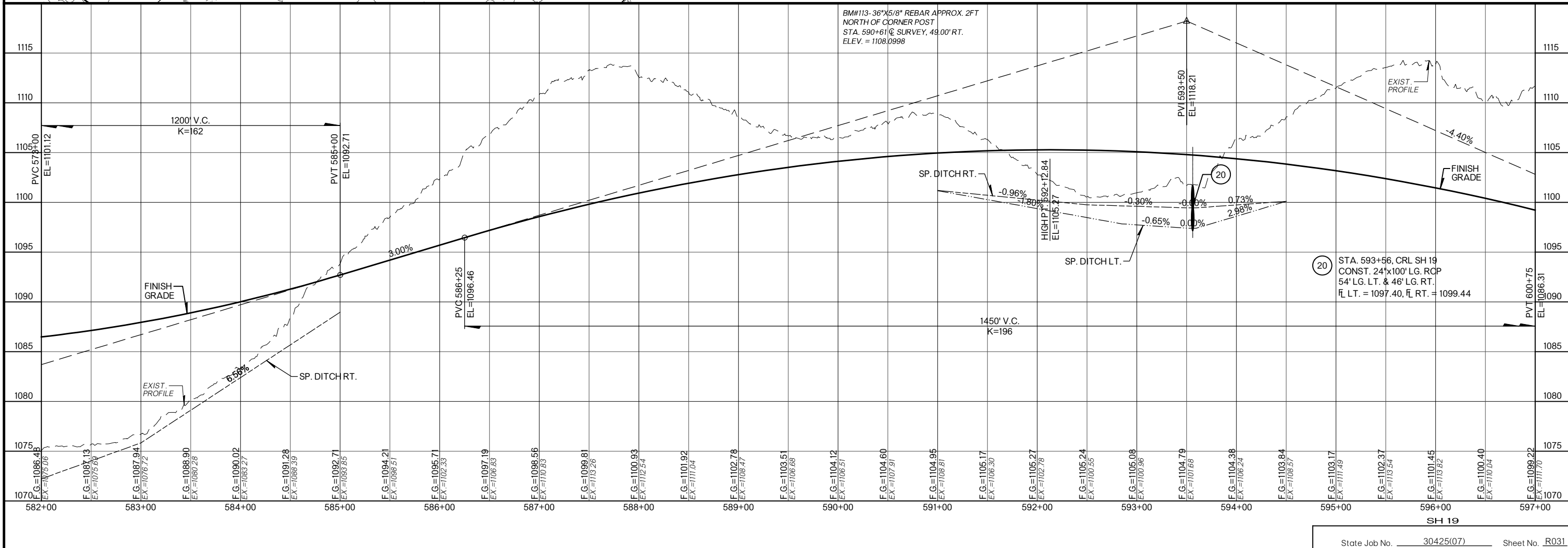
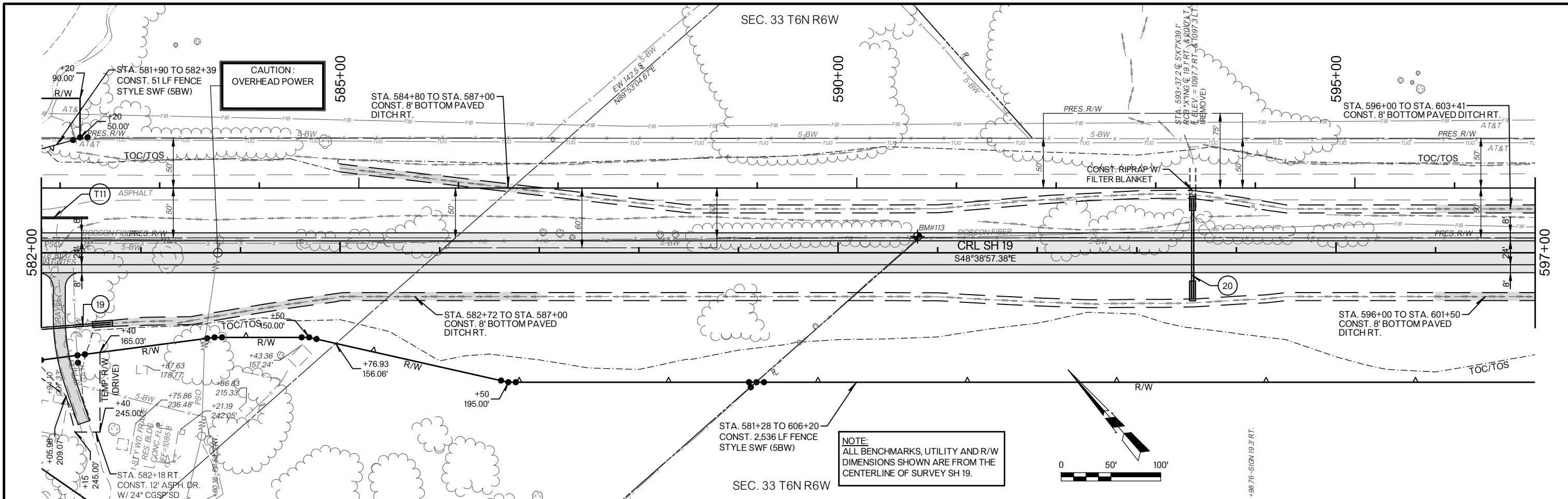
CAUTION: OVERHEAD POWER



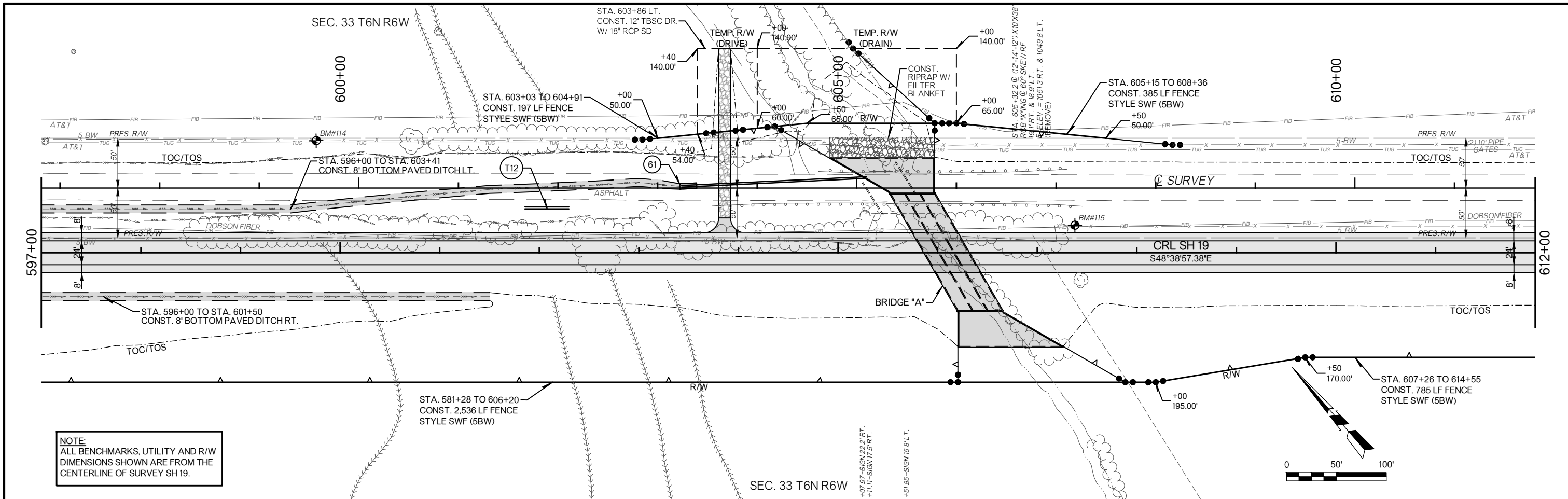


NOTE:
ALL BENCHMARKS, UTILITY AND R/W
DIMENSIONS SHOWN ARE FROM THE
CENTERLINE OF SURVEY SH 19.

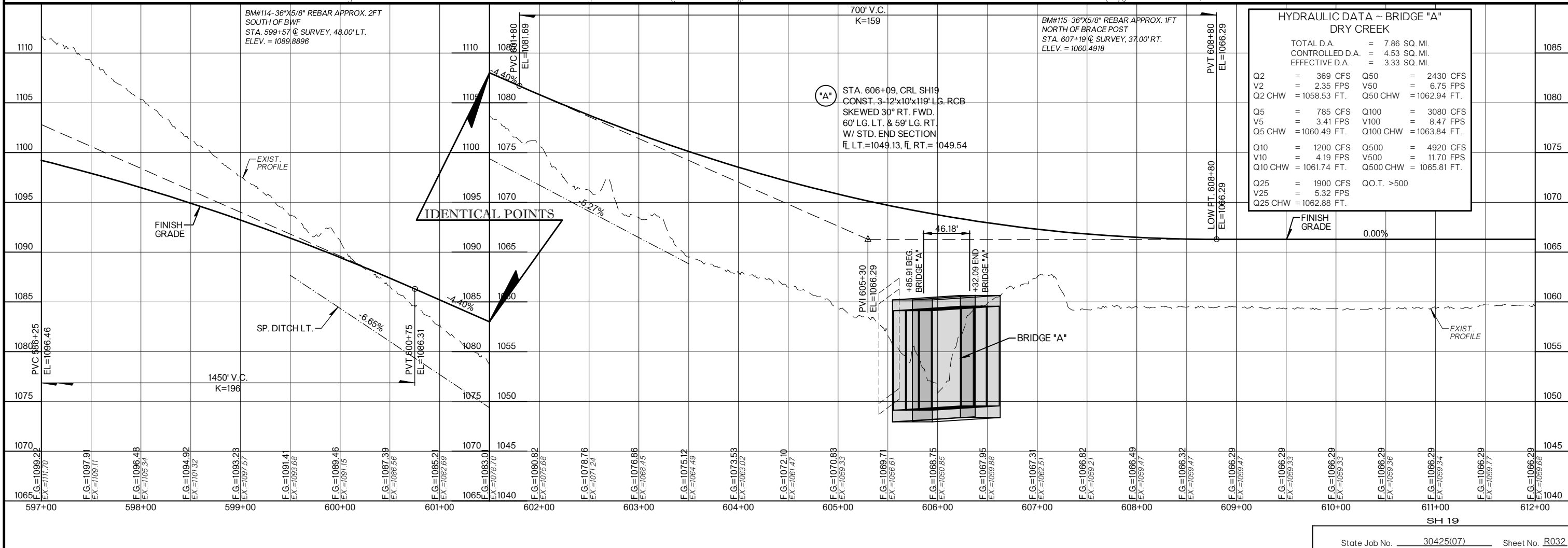
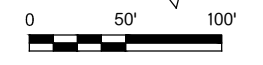




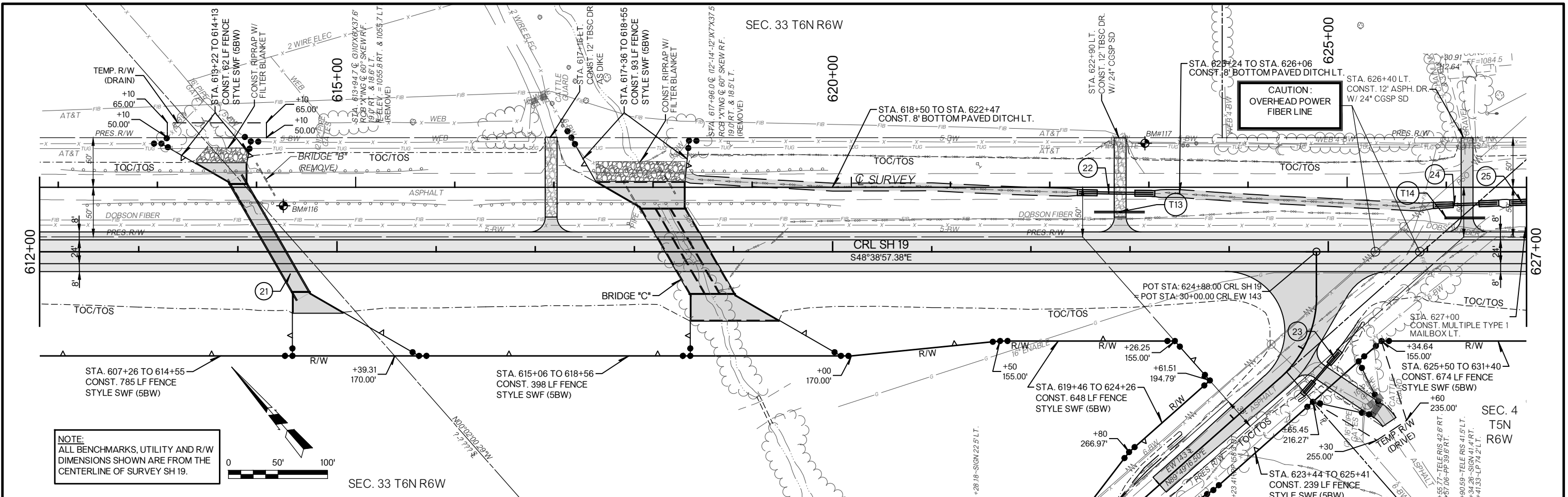
GRADY COUNTY



NOTE:
ALL BENCHMARKS, UTILITY AND R/W DIMENSIONS SHOWN ARE FROM THE CENTERLINE OF SURVEY SH 19.



HYDRAULIC DATA ~ BRIDGE "A" DRY CREEK			
TOTAL D.A.	=	7.86 SQ. MI.	
CONTROLLED D.A.	=	4.53 SQ. MI.	
EFFECTIVE D.A.	=	3.33 SQ. MI.	
Q2	=	369 CFS	Q50 = 2430 CFS
V2	=	2.35 FPS	V50 = 6.75 FPS
Q2 CHW	=	1058.53 FT.	Q50 CHW = 1062.94 FT.
Q5	=	785 CFS	Q100 = 3080 CFS
V5	=	3.41 FPS	V100 = 8.47 FPS
Q5 CHW	=	1060.49 FT.	Q100 CHW = 1063.84 FT.
Q10	=	1200 CFS	Q500 = 4920 CFS
V10	=	4.19 FPS	V500 = 11.70 FPS
Q10 CHW	=	1061.74 FT.	Q500 CHW = 1065.81 FT.
Q25	=	1900 CFS	Q.O.T. >500
V25	=	5.32 FPS	
Q25 CHW	=	1062.88 FT.	



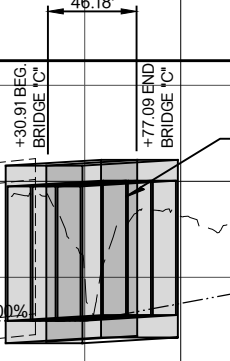
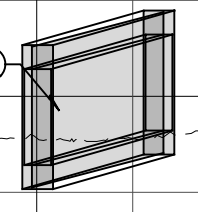
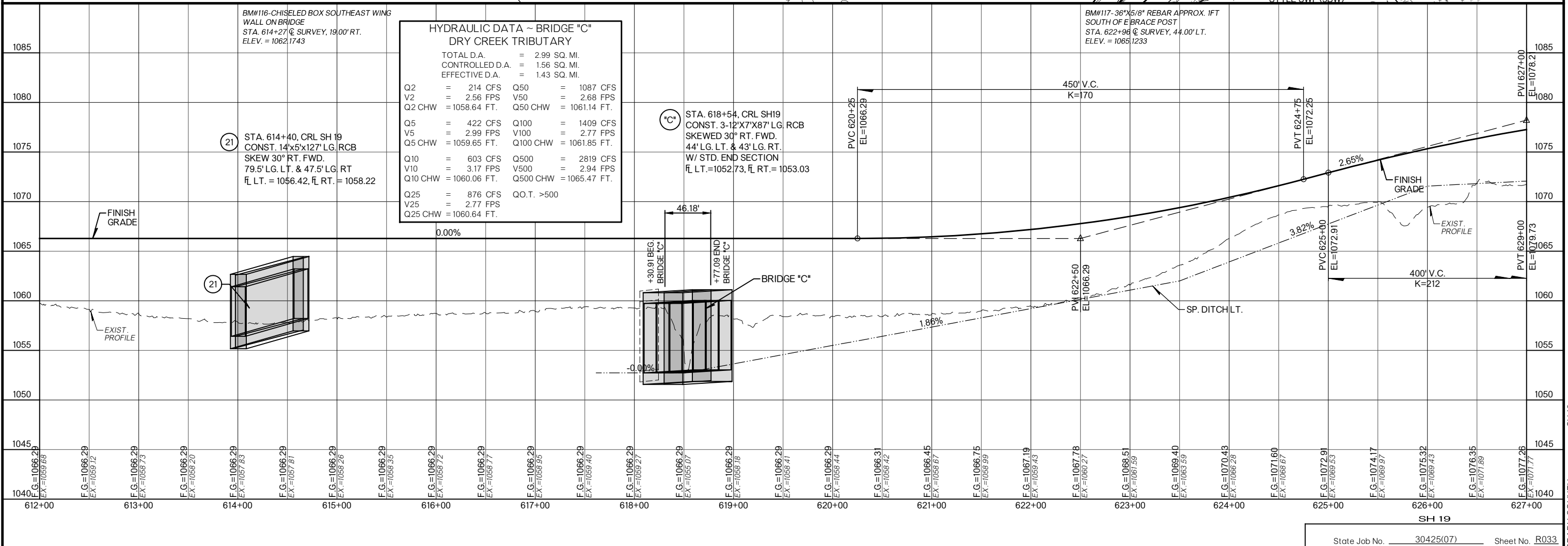
NOTE:
ALL BENCHMARKS, UTILITY AND R/W DIMENSIONS SHOWN ARE FROM THE CENTERLINE OF SURVEY SH 19.

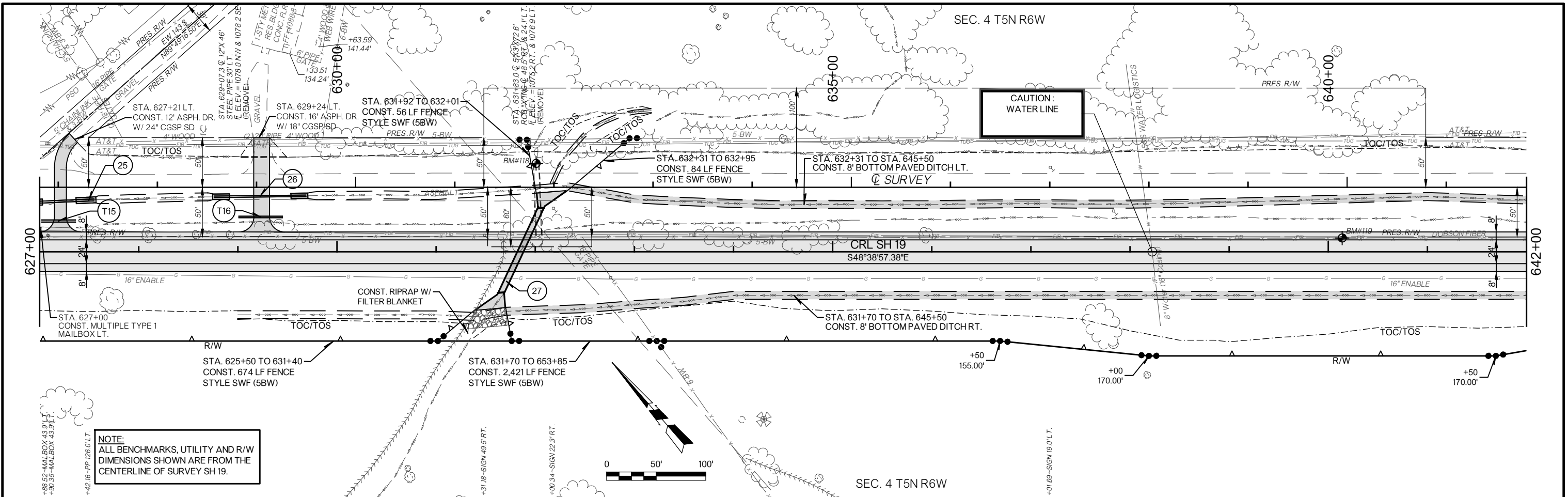


HYDRAULIC DATA ~ BRIDGE "C"
DRY CREEK TRIBUTARY

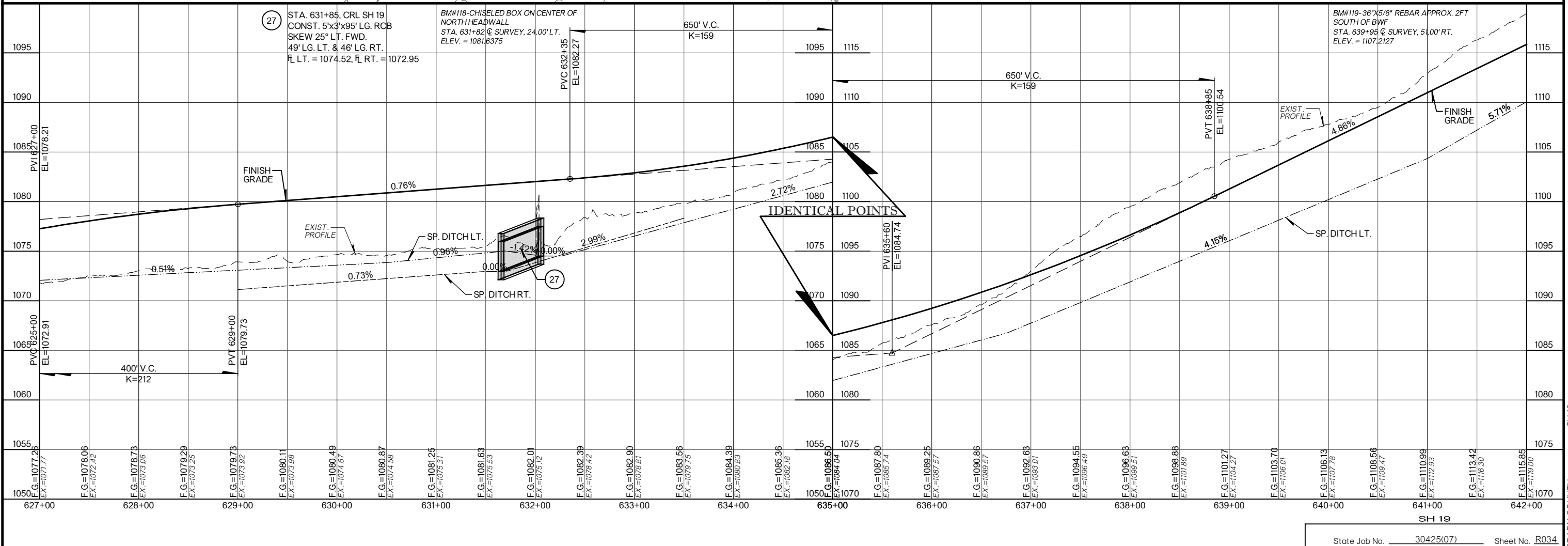
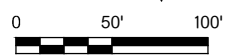
TOTAL D.A. = 2.99 SQ. MI.
CONTROLLED D.A. = 1.56 SQ. MI.
EFFECTIVE D.A. = 1.43 SQ. MI.

Q2 = 214 CFS	Q50 = 1087 CFS
V2 = 2.56 FPS	V50 = 2.68 FPS
Q2 CHW = 1058.64 FT.	Q50 CHW = 1061.14 FT.
Q5 = 422 CFS	Q100 = 1409 CFS
V5 = 2.99 FPS	V100 = 2.77 FPS
Q5 CHW = 1059.65 FT.	Q100 CHW = 1061.85 FT.
Q10 = 603 CFS	Q500 = 2819 CFS
V10 = 3.17 FPS	V500 = 2.94 FPS
Q10 CHW = 1060.06 FT.	Q500 CHW = 1065.47 FT.
Q25 = 876 CFS	QO.T. >500
V25 = 2.77 FPS	
Q25 CHW = 1060.64 FT.	

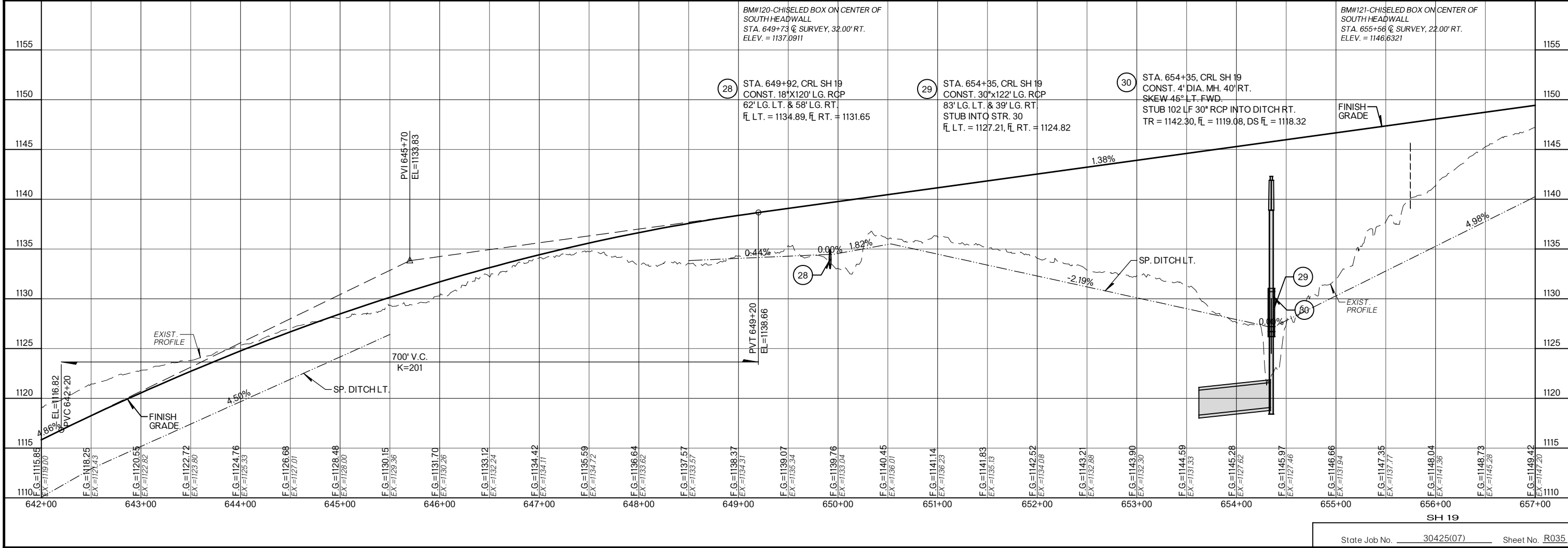
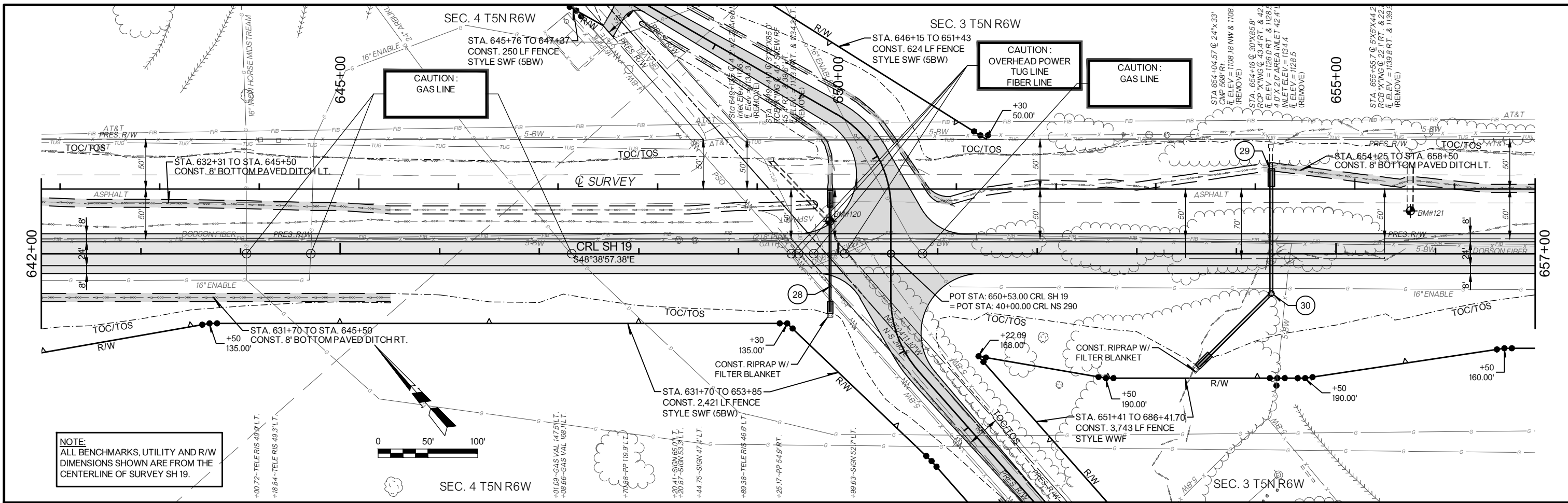




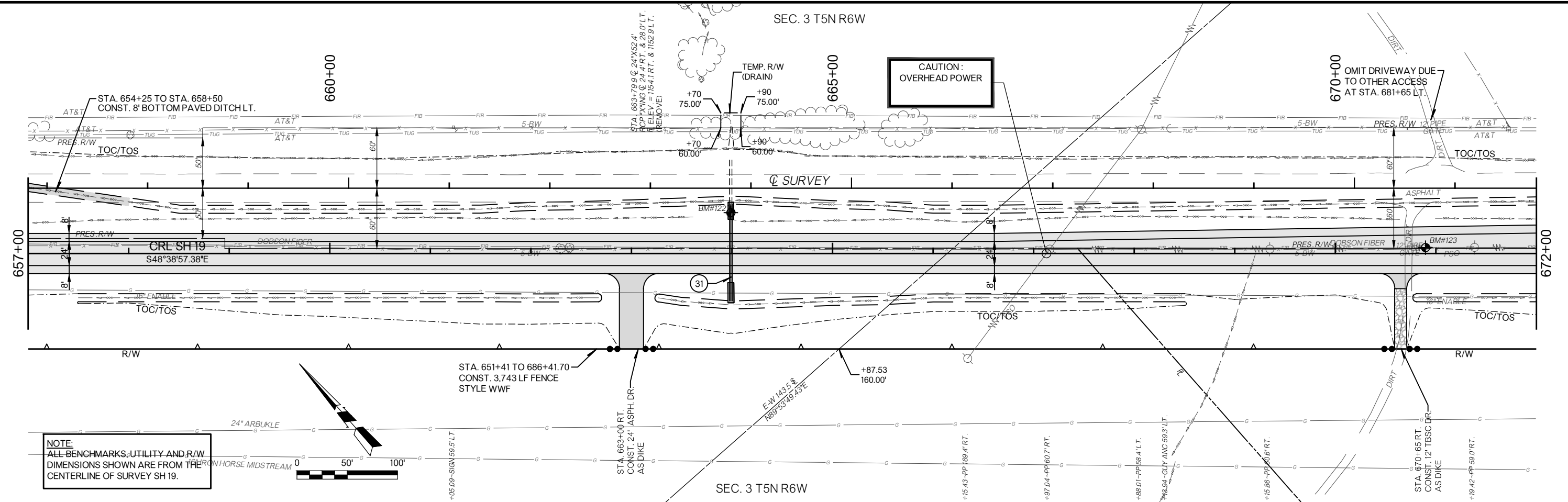
NOTE:
ALL BENCHMARKS, UTILITY AND R/W DIMENSIONS SHOWN ARE FROM THE CENTERLINE OF SURVEY SH 19.



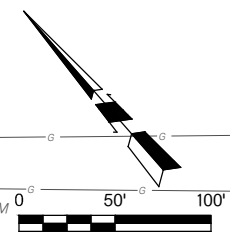
GRADY COUNTY



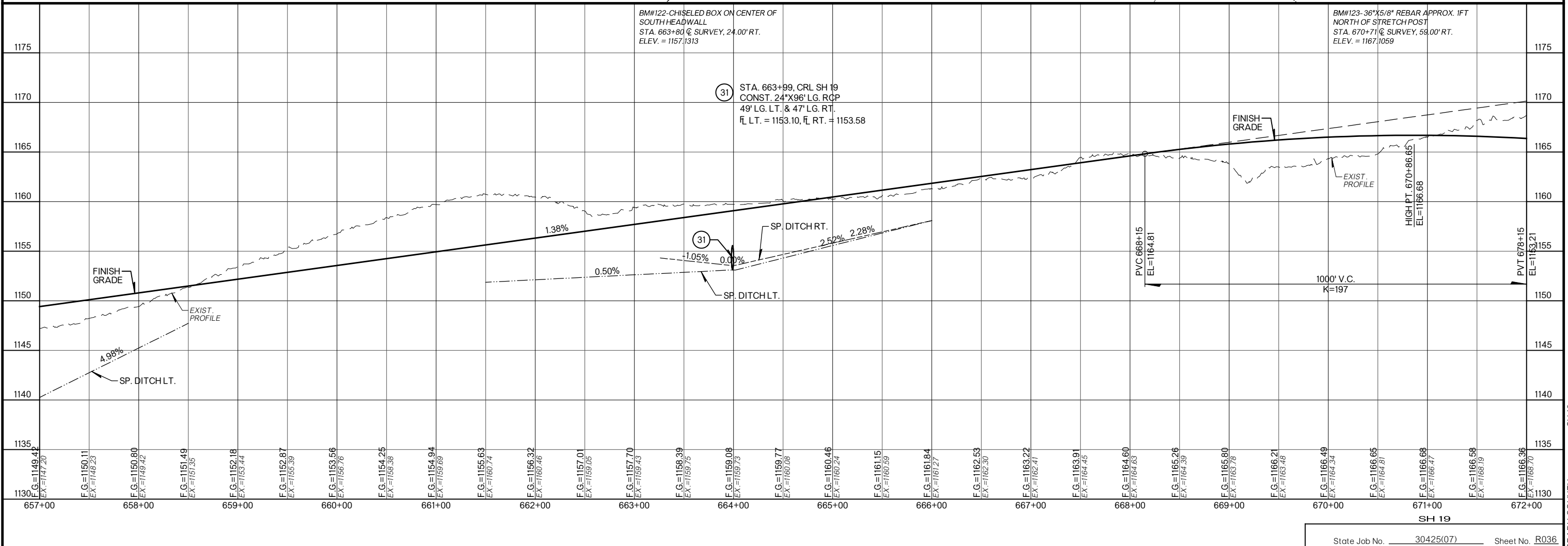
SEC. 3 T5N R6W

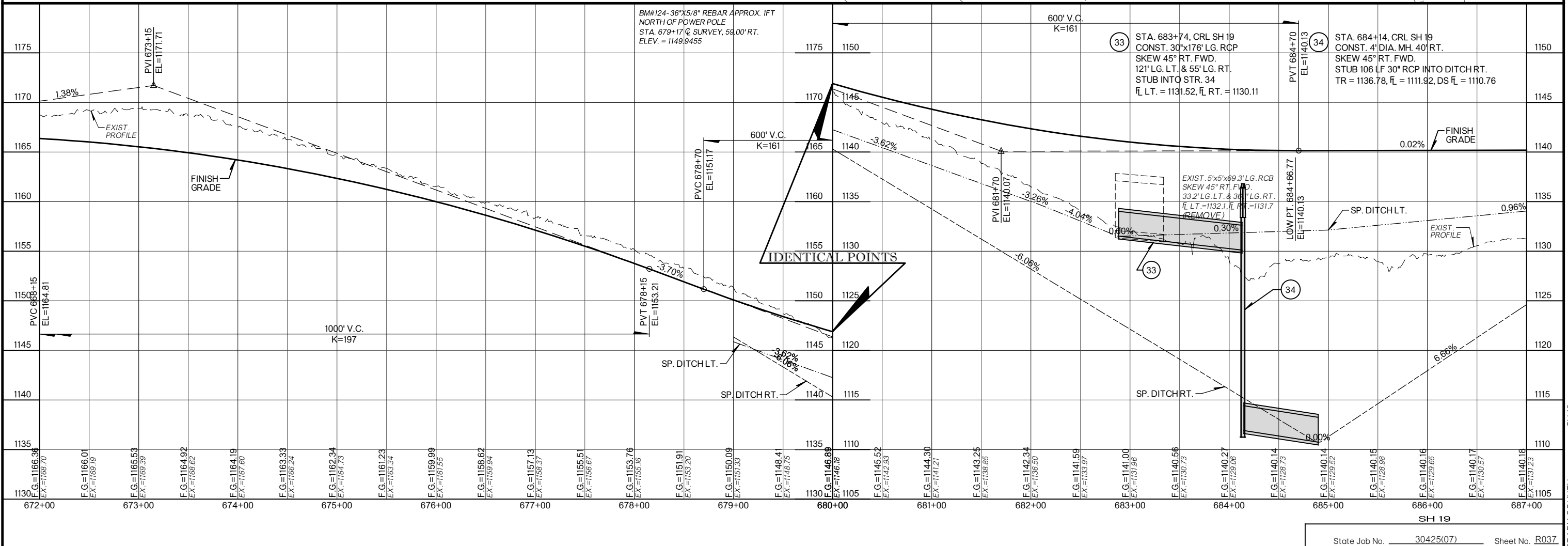
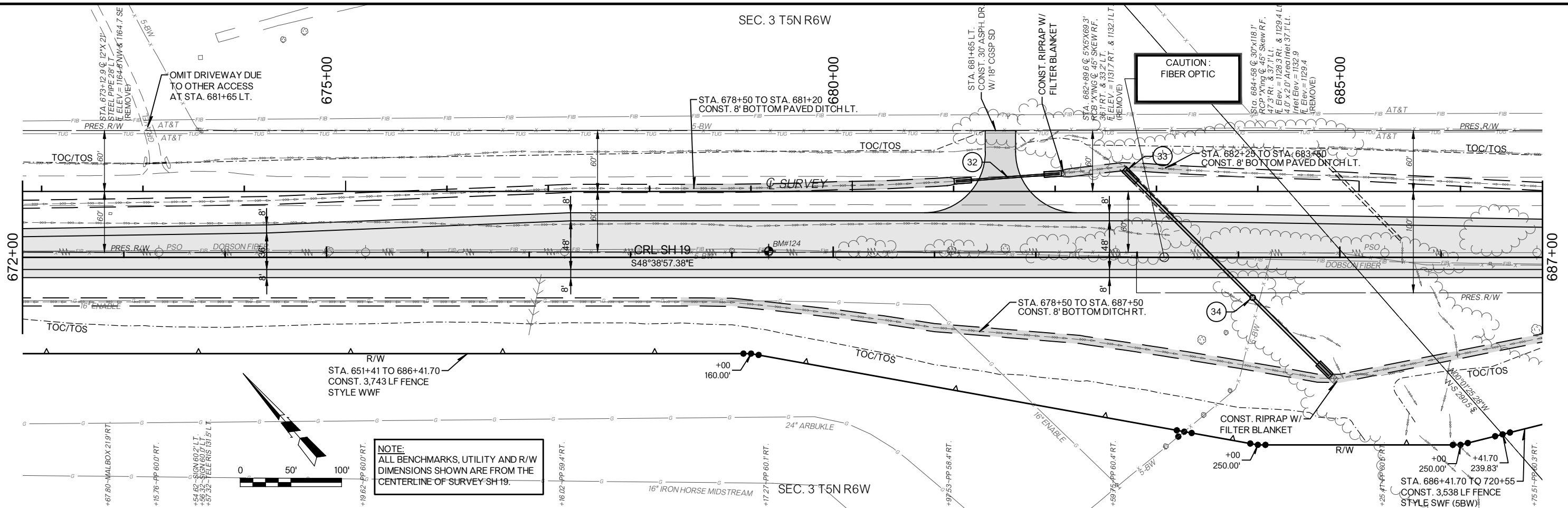


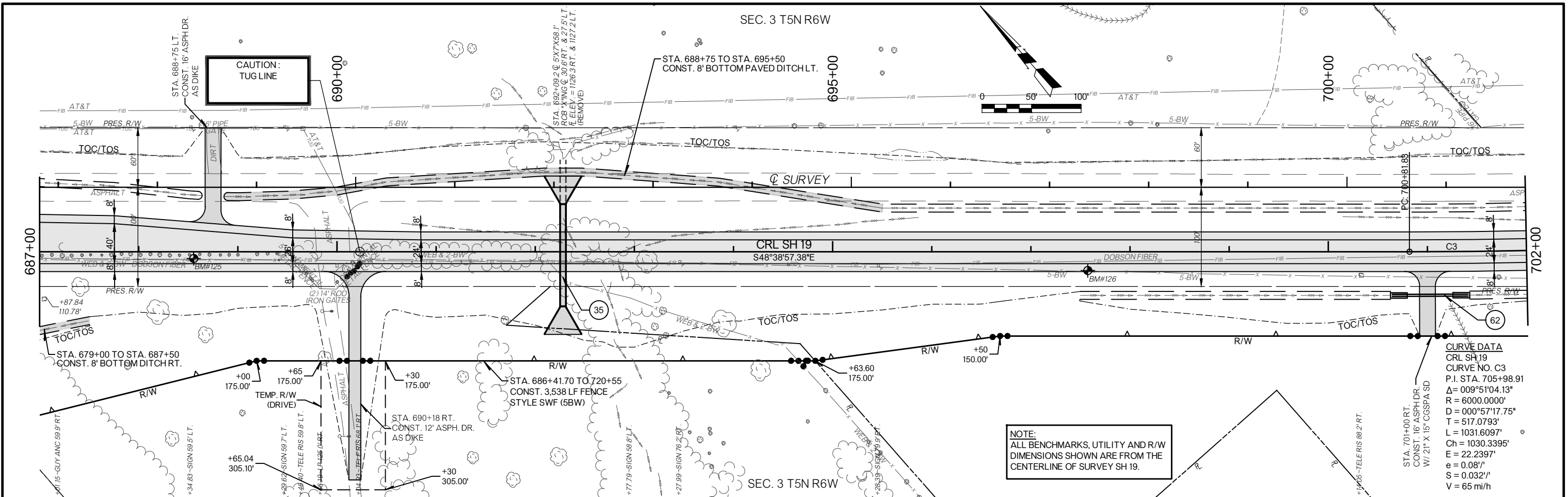
NOTE:
ALL BENCHMARKS, UTILITY AND R/W
DIMENSIONS SHOWN ARE FROM THE
CENTERLINE OF SURVEY SH 19.



SEC. 3 T5N R6W

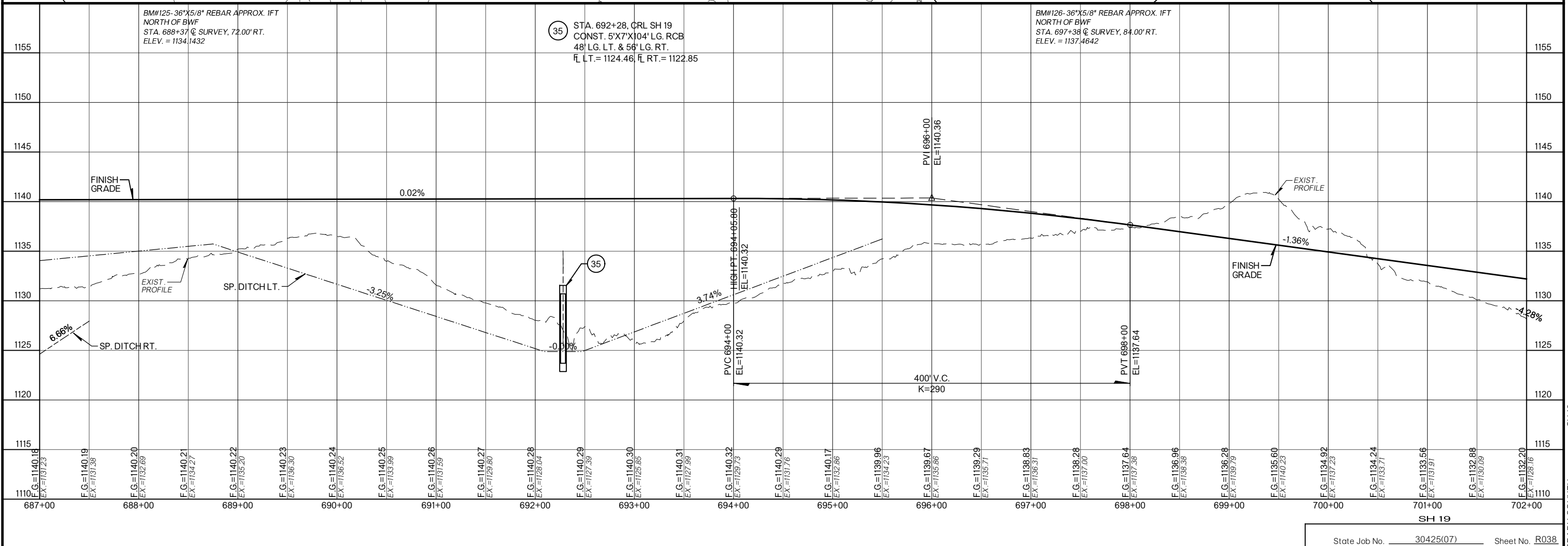


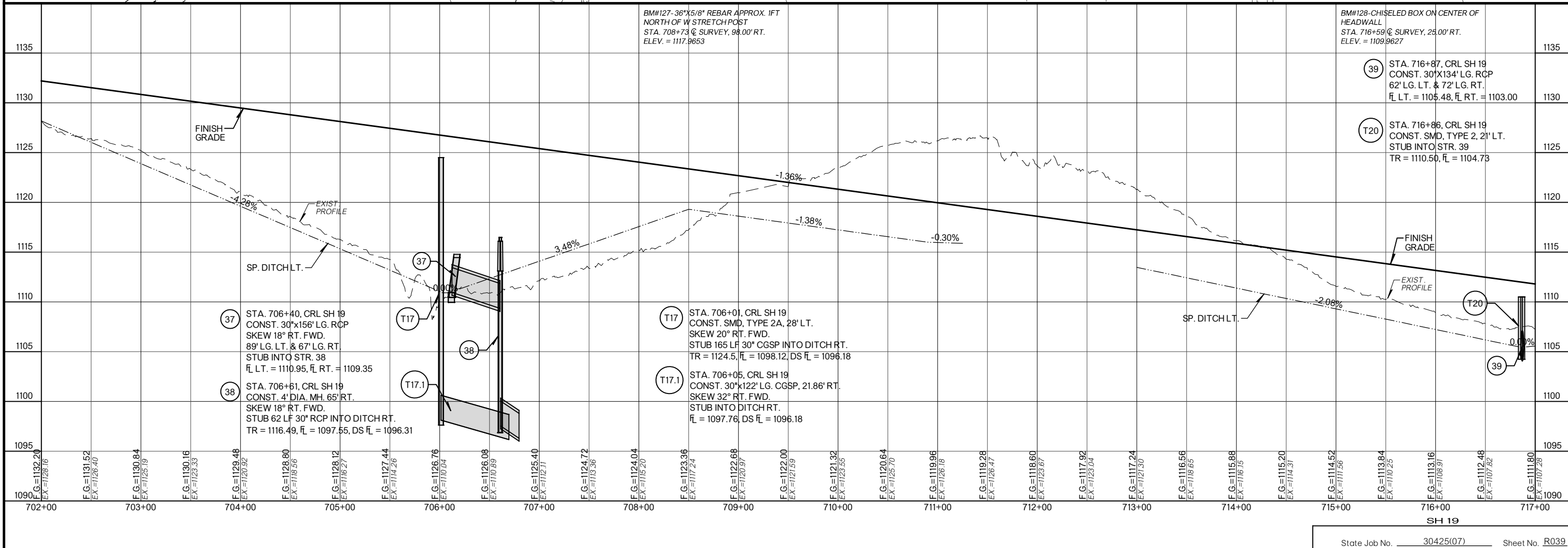
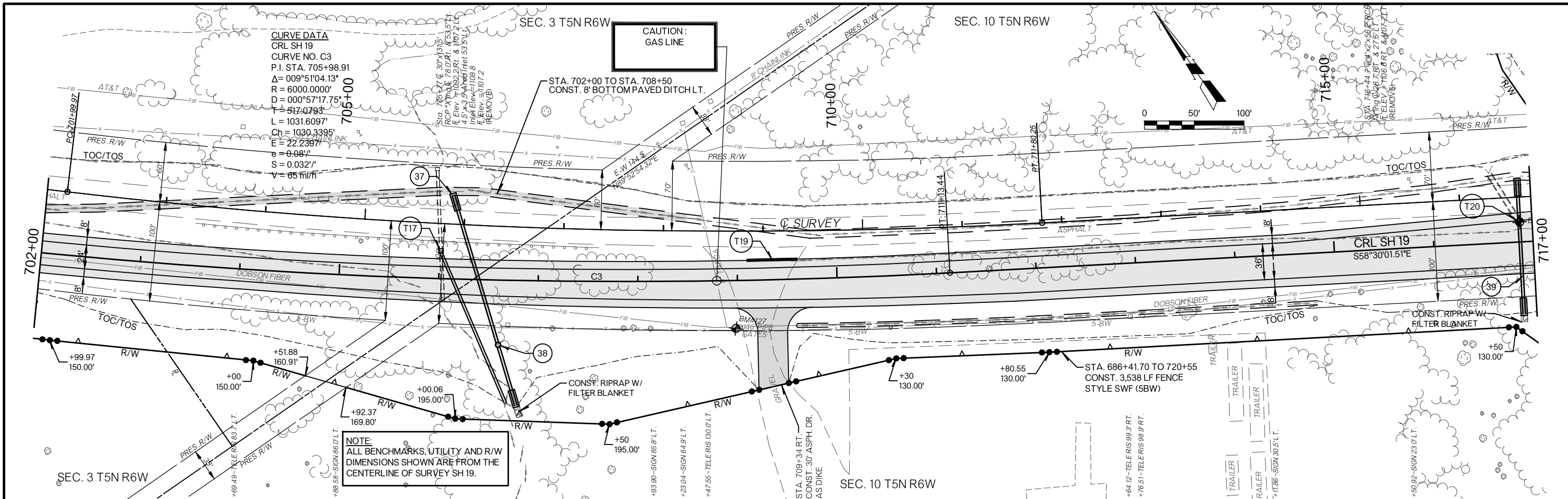


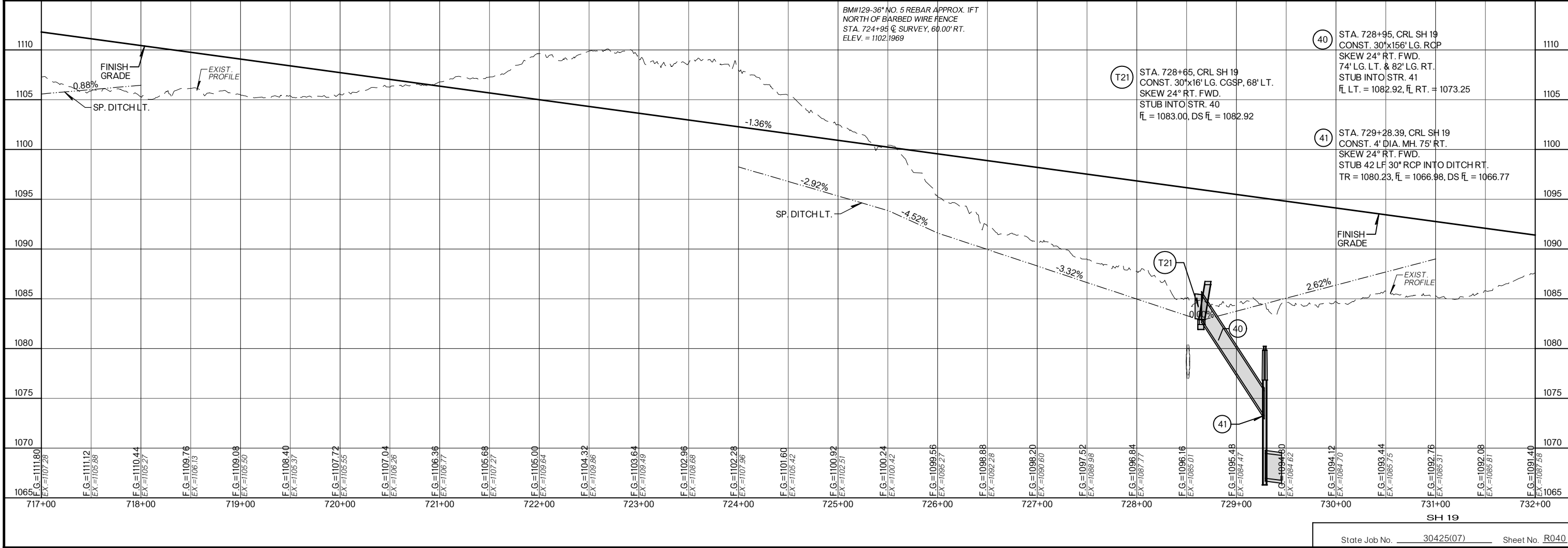
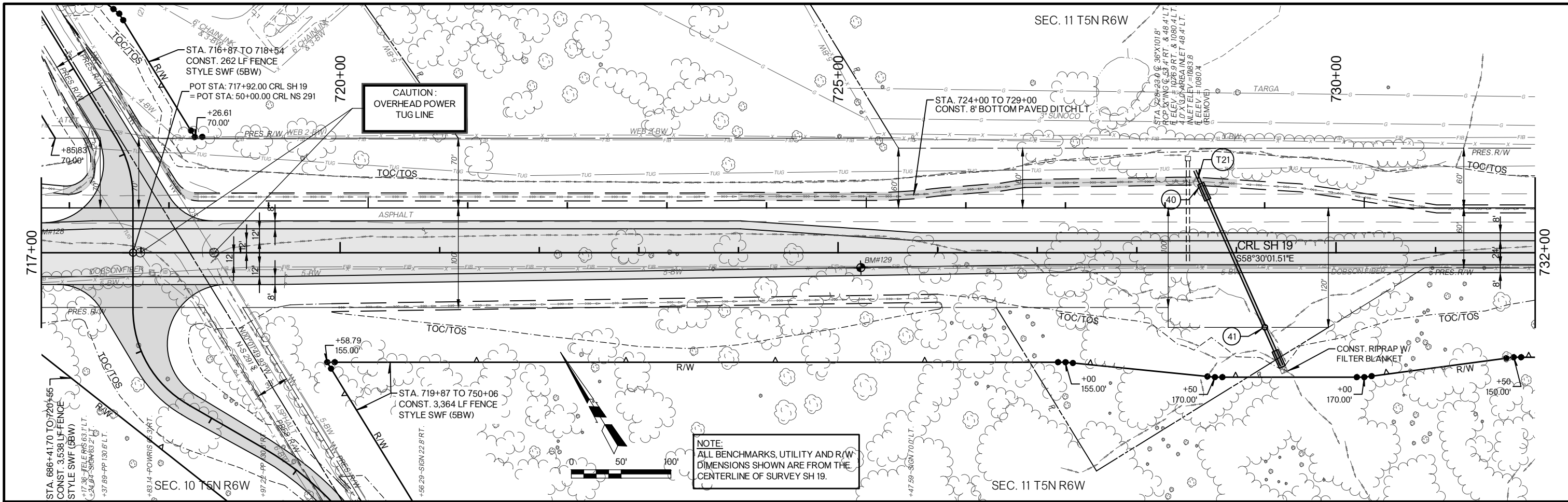


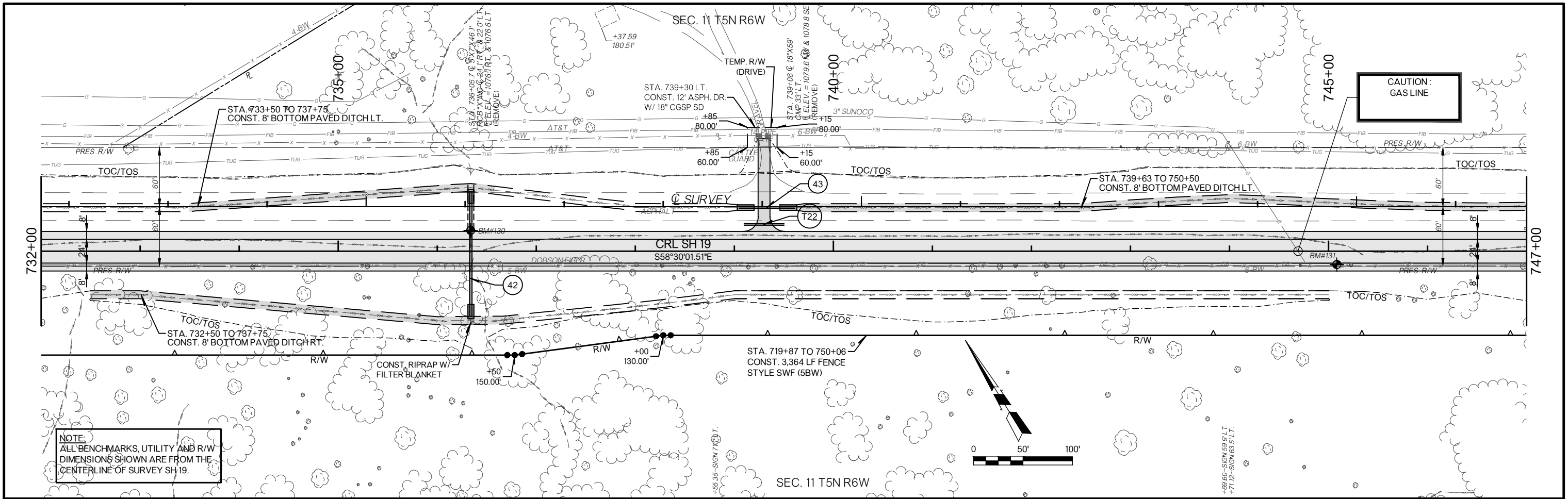
NOTE:
ALL BENCHMARKS, UTILITY AND R/W
DIMENSIONS SHOWN ARE FROM THE
CENTERLINE OF SURVEY SH 19.

CURVE DATA
CRL SH 19
CURVE NO. C3
P.I. STA. 705+98.91
 $\Delta = 009^{\circ}51'04.13''$
R = 6000.0000'
D = 000^{\circ}57'17.75''
T = 517.0793'
L = 1031.6097'
Ch = 1030.3395'
E = 22.2397'
e = 0.081'
S = 0.0321'
V = 65 mi/h

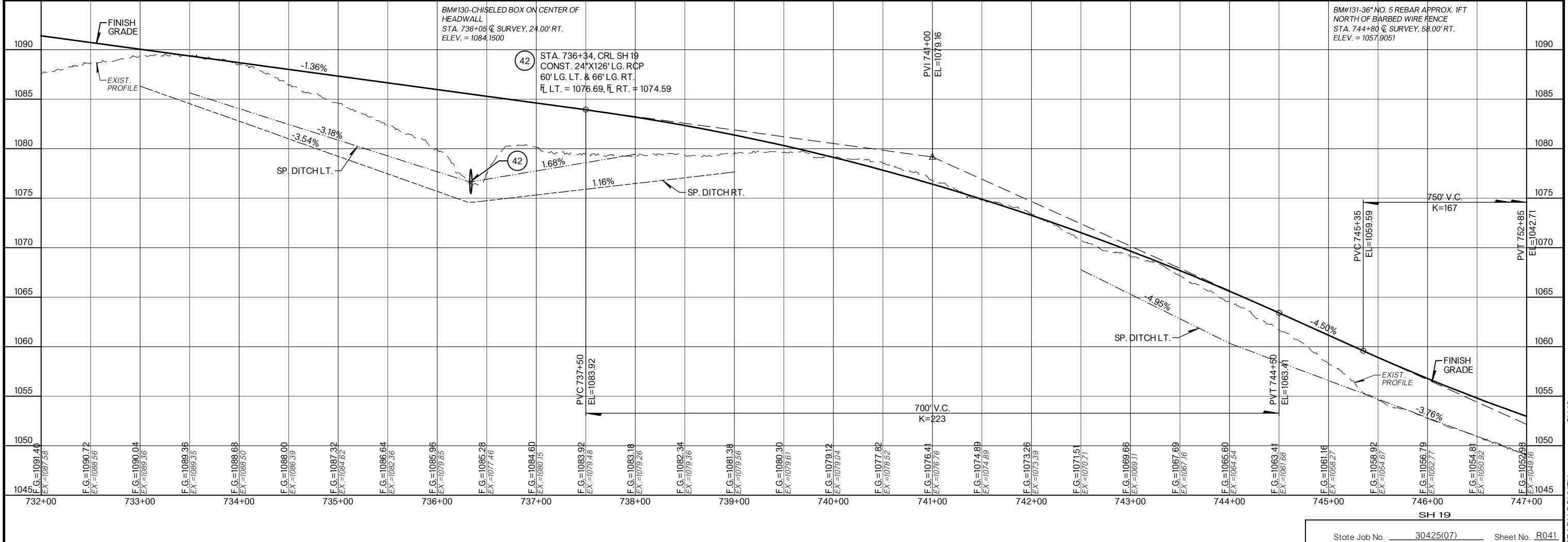
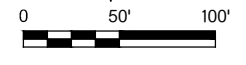


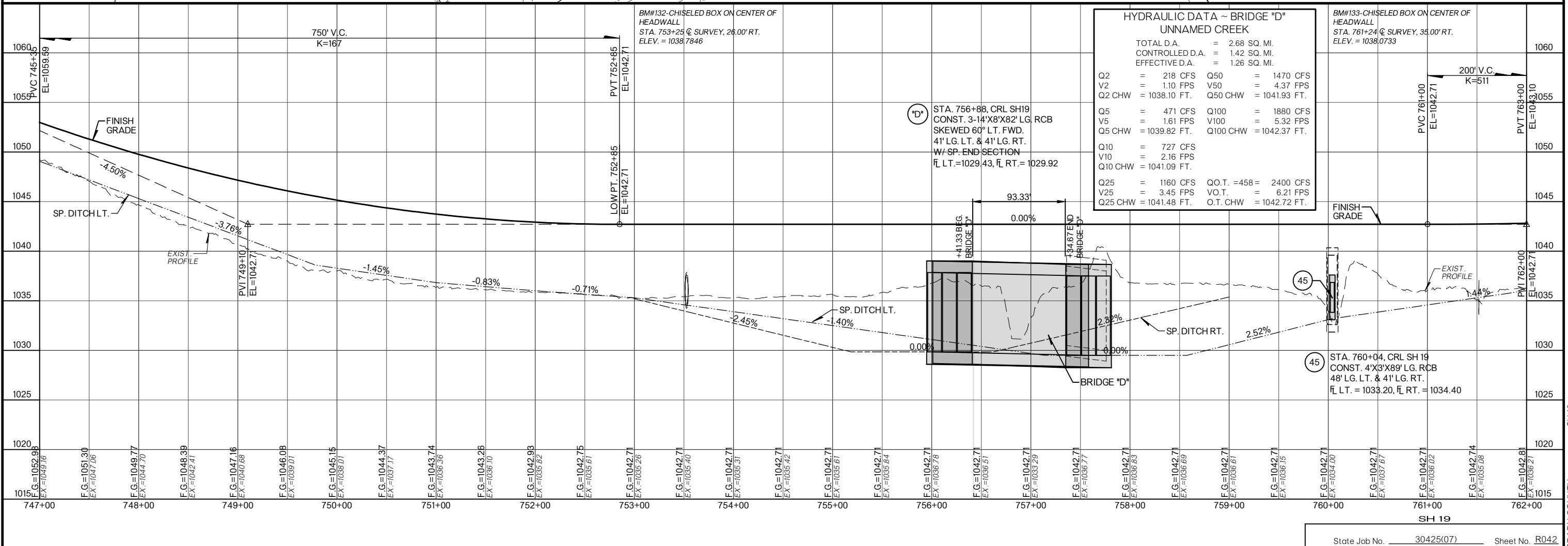
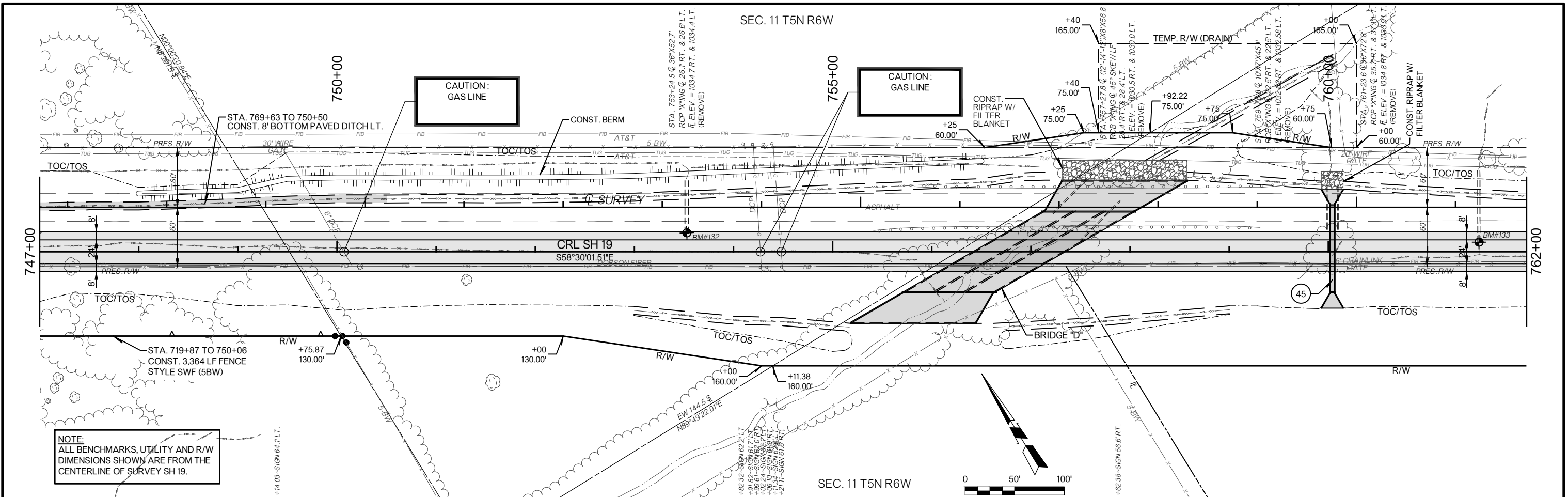






NOTE:
ALL BENCHMARKS, UTILITY AND R/W DIMENSIONS SHOWN ARE FROM THE CENTERLINE OF SURVEY SH 19.





HYDRAULIC DATA ~ BRIDGE "D"
UNNAMED CREEK

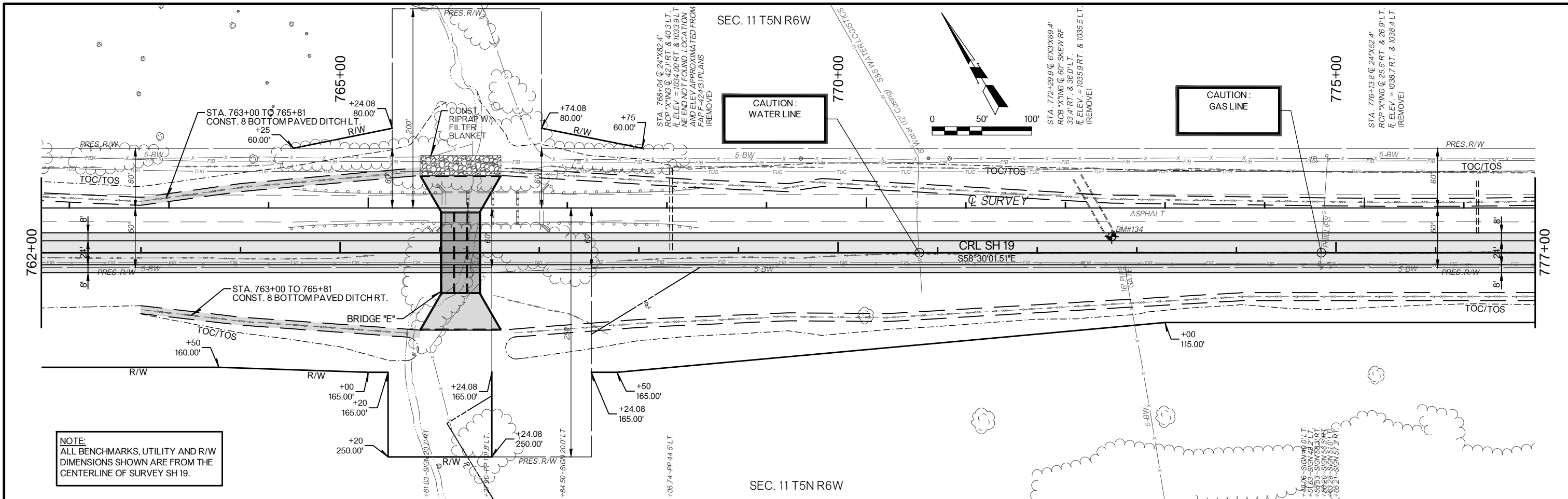
TOTAL D.A.	= 2.68 SQ. MI.		
CONTROLLED D.A.	= 1.42 SQ. MI.		
EFFECTIVE D.A.	= 1.26 SQ. MI.		
Q2	= 218 CFS	Q50	= 1470 CFS
V2	= 1.10 FPS	V50	= 4.37 FPS
Q2 CHW	= 1038.10 FT.	Q50 CHW	= 1041.93 FT.
Q5	= 471 CFS	Q100	= 1880 CFS
V5	= 1.61 FPS	V100	= 5.32 FPS
Q5 CHW	= 1039.82 FT.	Q100 CHW	= 1042.37 FT.
Q10	= 727 CFS		
V10	= 2.16 FPS		
Q10 CHW	= 1041.09 FT.		
Q25	= 1160 CFS	QO.T. = 458	= 2400 CFS
V25	= 3.45 FPS	VO.T.	= 6.21 FPS
Q25 CHW	= 1041.48 FT.	O.T. CHW	= 1042.72 FT.

BM#132-CHISELED BOX ON CENTER OF HEADWALL
STA. 753+25 @ SURVEY, 26.00' RT.
ELEV. = 1038.7846

BM#133-CHISELED BOX ON CENTER OF HEADWALL
STA. 761+24 @ SURVEY, 33.00' RT.
ELEV. = 1038.0733

STA. 756+88, CRL SH 19
CONST. 3-14'X8'X82' LG. RCB
SKEWED 60° LT. FWD.
41' LG. LT. & 41' LG. RT.
W/ SP. END SECTION
FL LT. = 1029.43, FL RT. = 1029.92

STA. 760+04, CRL SH 19
CONST. 4'X3'X89' LG. RCB
48' LG. LT. & 41' LG. RT.
FL LT. = 1033.20, FL RT. = 1034.40

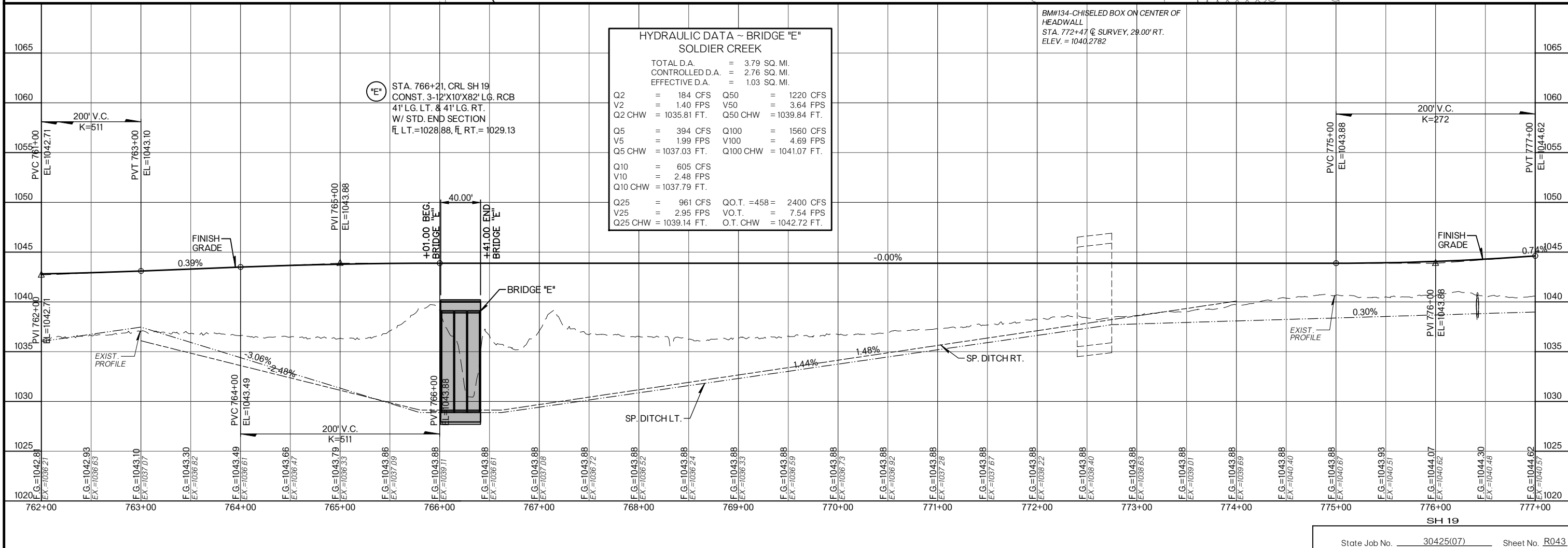


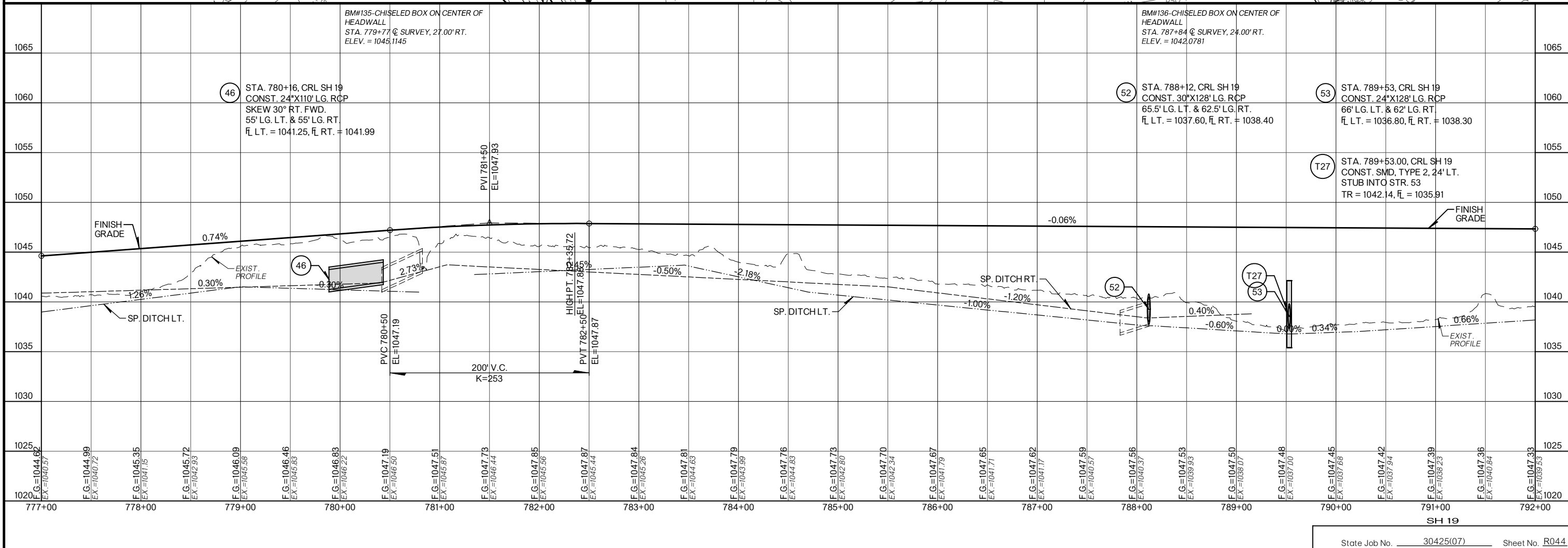
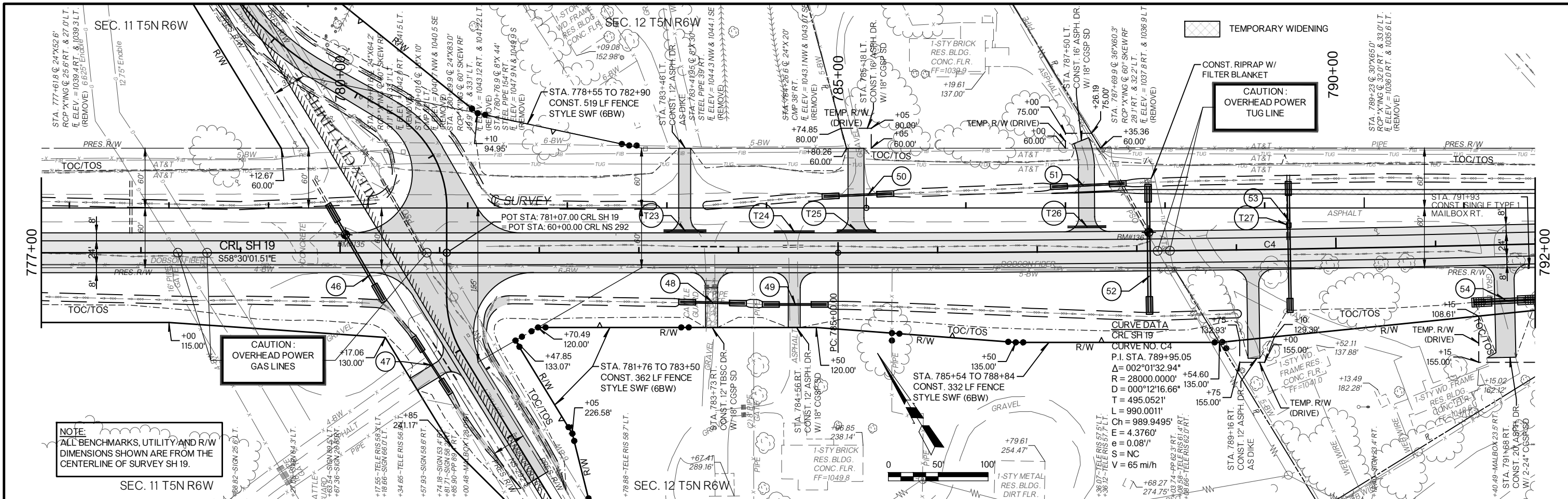
NOTE:
ALL BENCHMARKS, UTILITY AND R/W DIMENSIONS SHOWN ARE FROM THE CENTERLINE OF SURVEY SH 19.

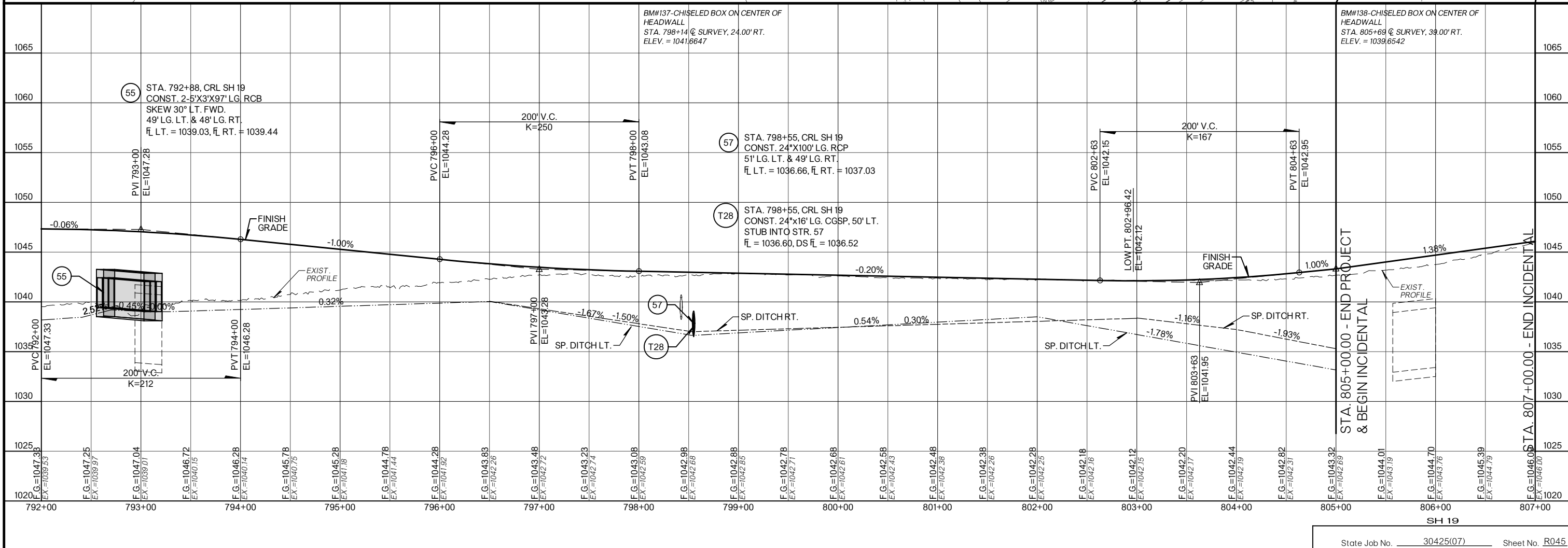
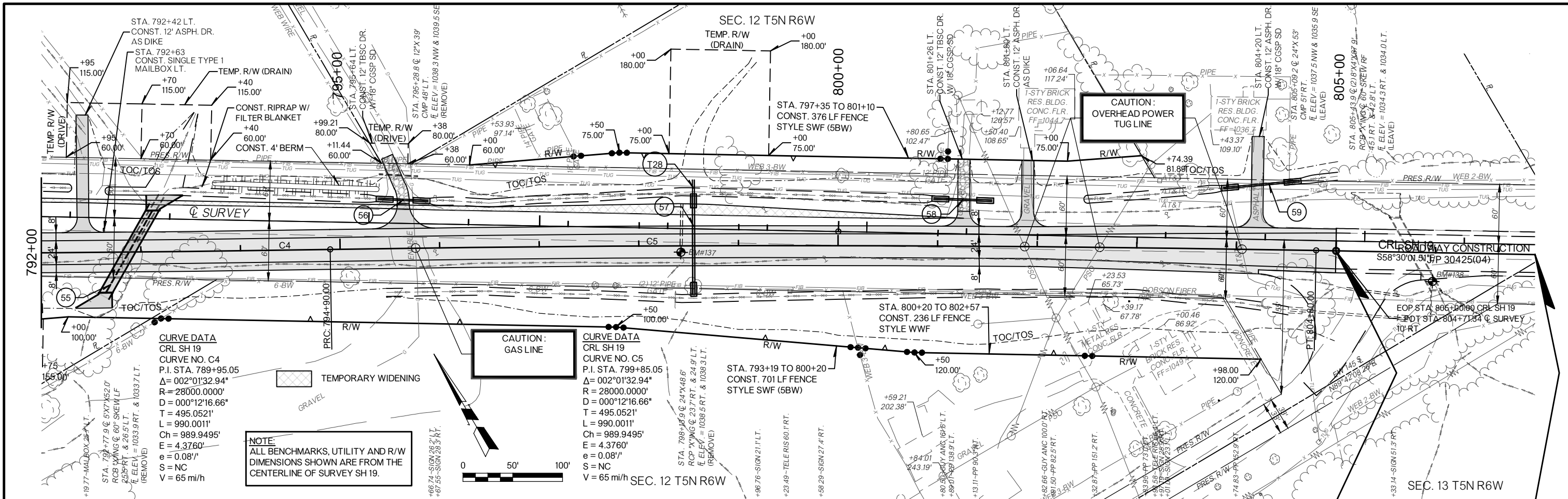
HYDRAULIC DATA ~ BRIDGE "E"
SOLDIER CREEK

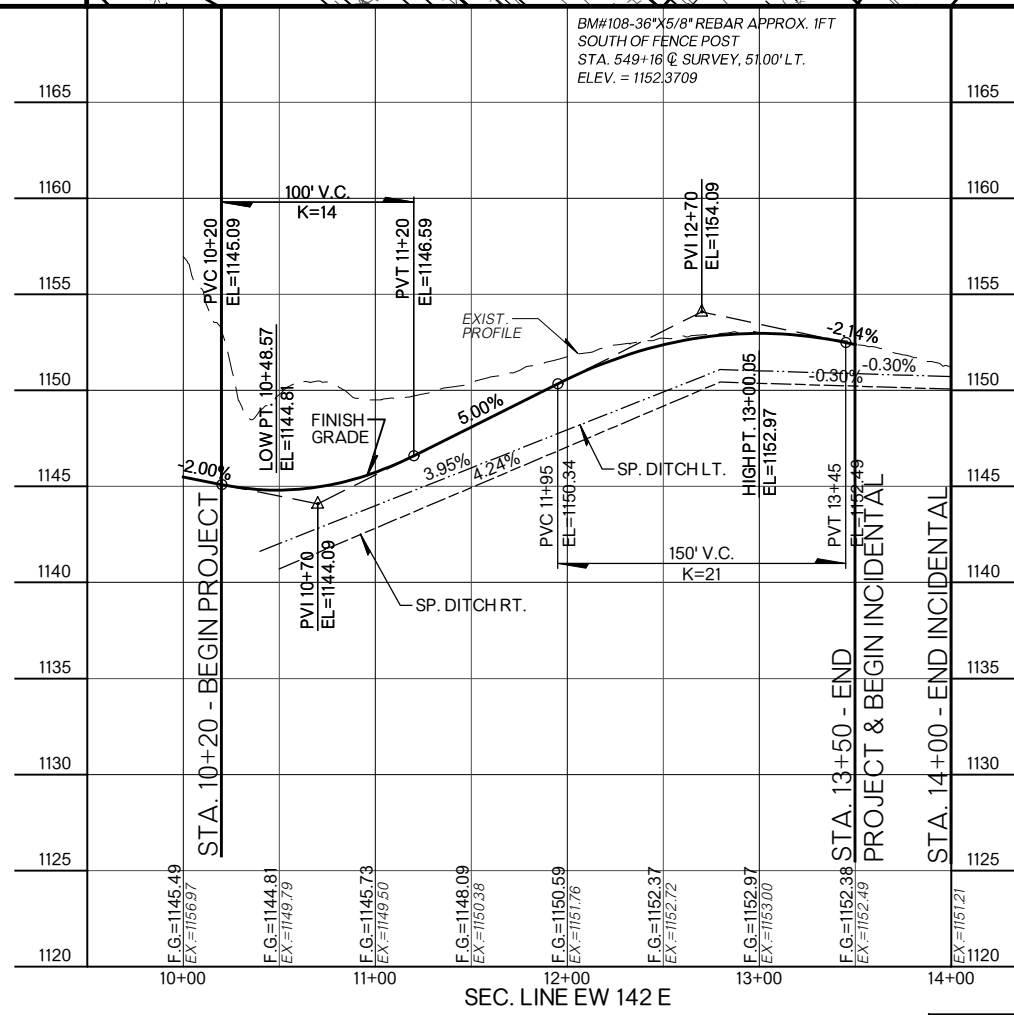
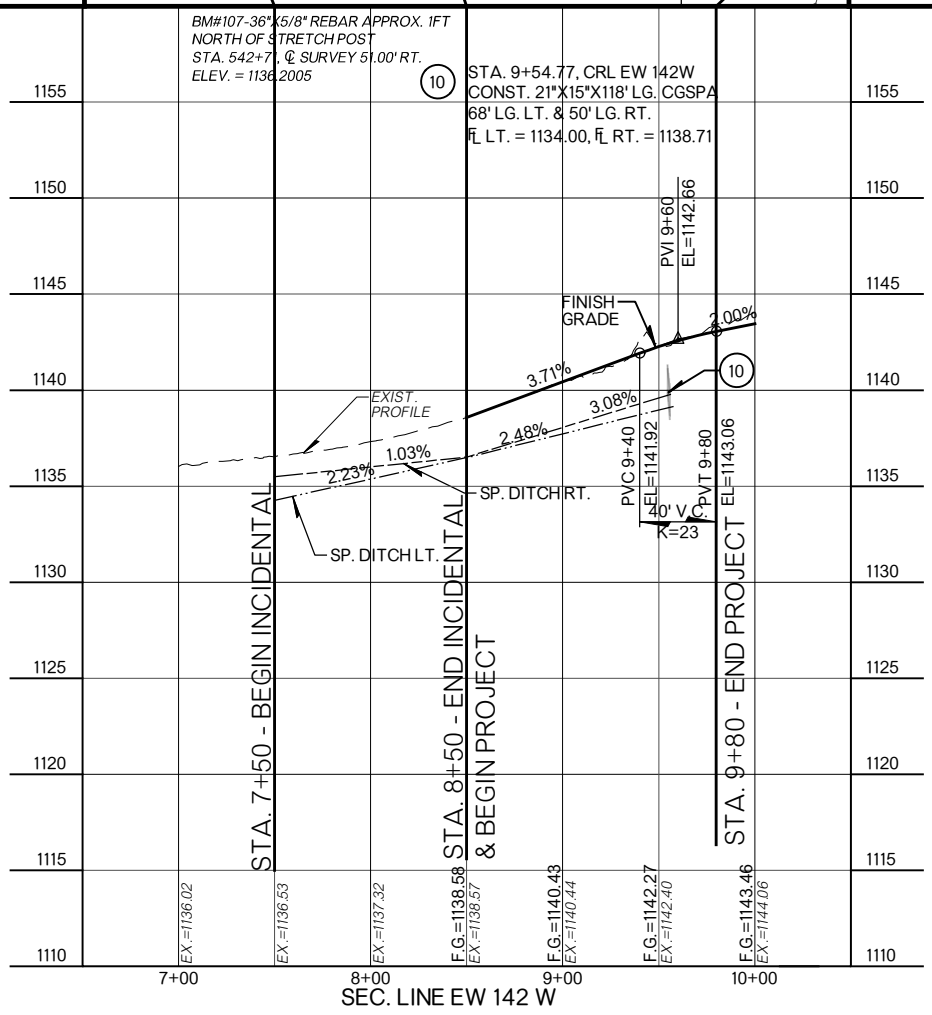
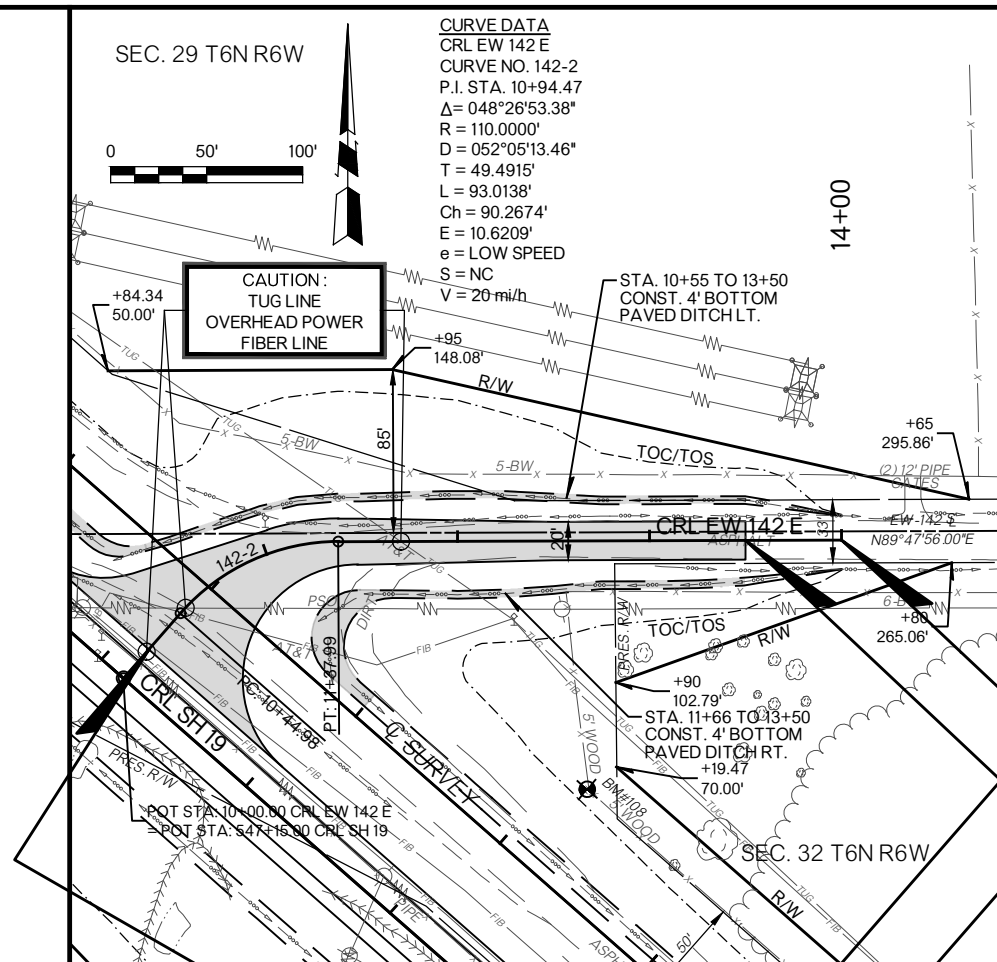
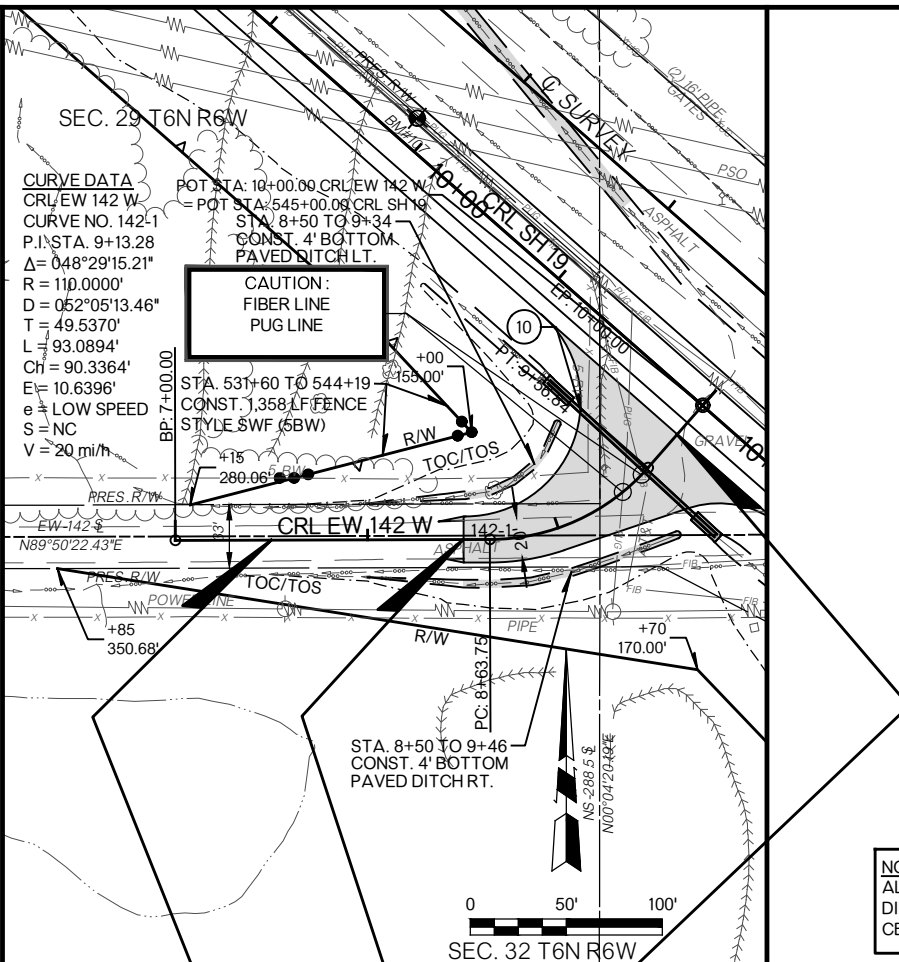
TOTAL D.A.	=	3.79 SQ. MI.
CONTROLLED D.A.	=	2.76 SQ. MI.
EFFECTIVE D.A.	=	1.03 SQ. MI.
Q2	=	184 CFS
V2	=	1.40 FPS
Q2 CHW	=	1035.81 FT.
Q5	=	394 CFS
V5	=	1.99 FPS
Q5 CHW	=	1037.03 FT.
Q10	=	605 CFS
V10	=	2.48 FPS
Q10 CHW	=	1037.79 FT.
Q25	=	961 CFS
V25	=	2.95 FPS
Q25 CHW	=	1039.14 FT.
Q50	=	1220 CFS
V50	=	3.64 FPS
Q50 CHW	=	1039.84 FT.
Q100	=	1560 CFS
V100	=	4.69 FPS
Q100 CHW	=	1041.07 FT.
Q.O.T.	=	458
Q.O.T. CHW	=	1042.72 FT.

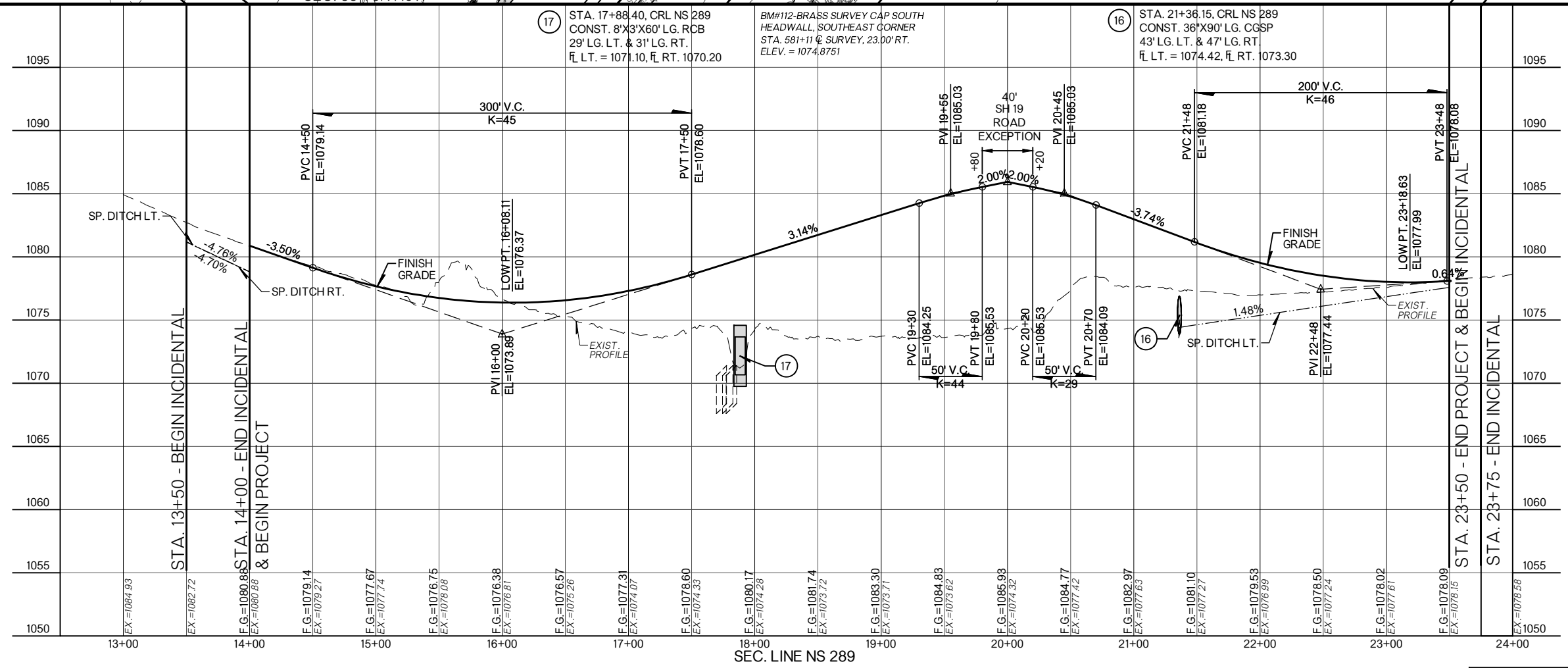
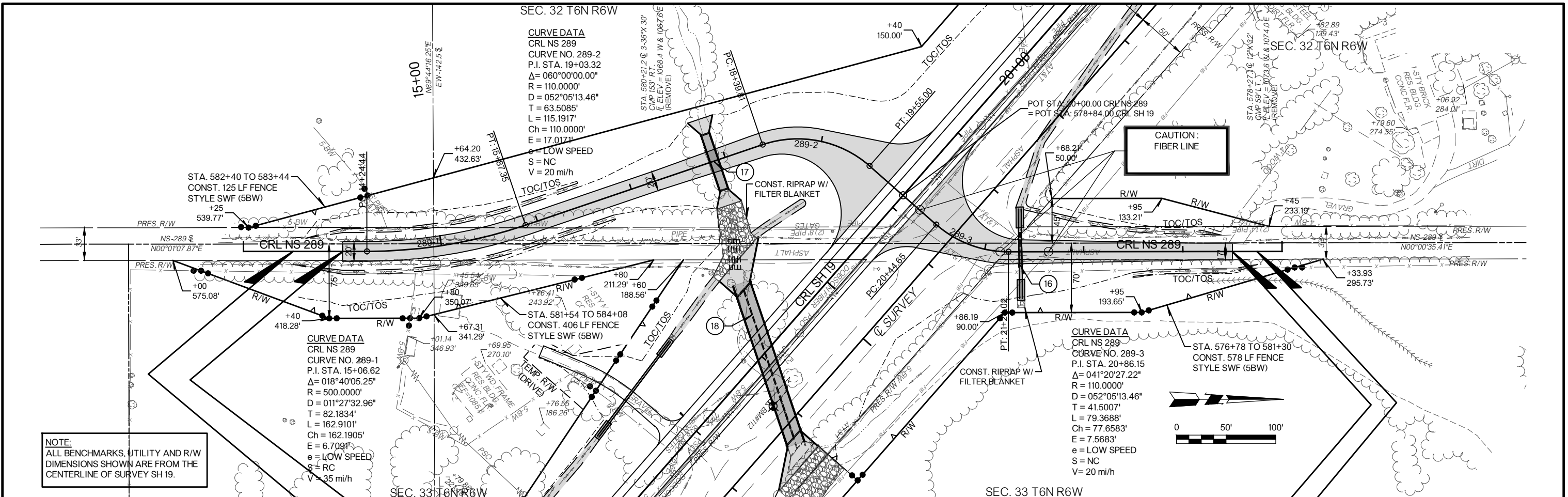
BM#134-CHISELED BOX ON CENTER OF HEADWALL
STA. 772+47 @ SURVEY, 29.00' RT.
ELEV. = 1040.2782

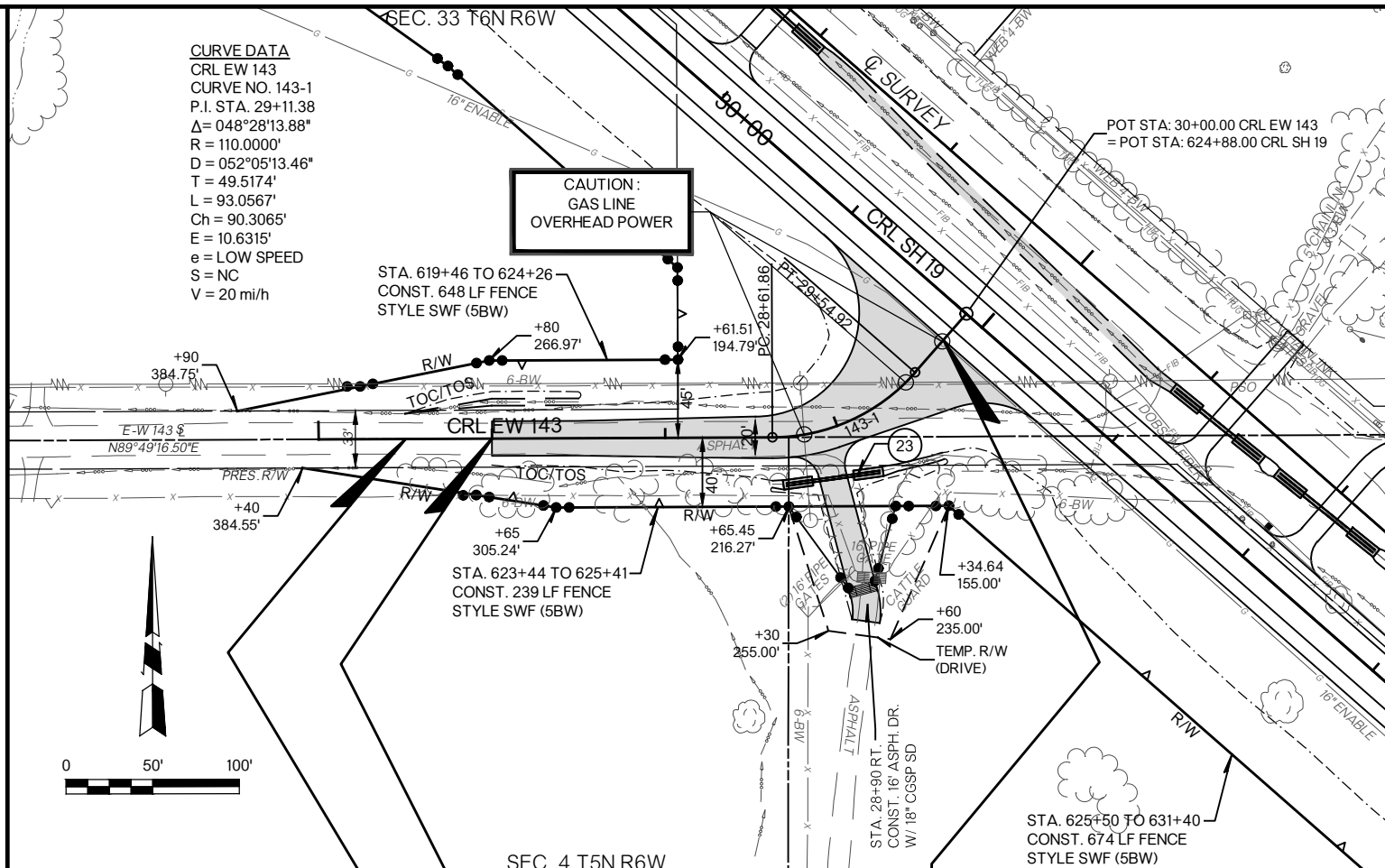




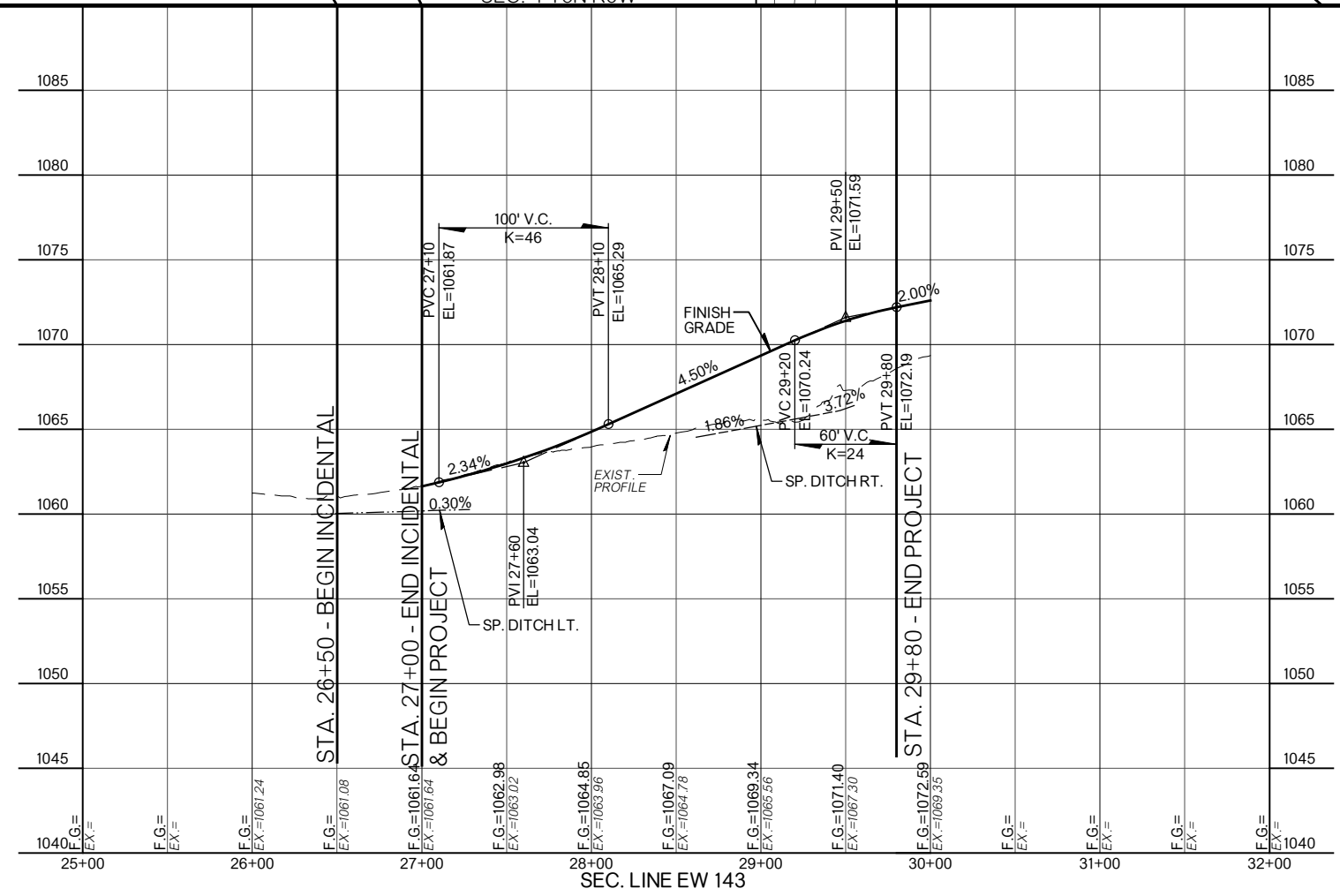








NOTE:
 ALL BENCHMARKS, UTILITY AND R/W
 DIMENSIONS SHOWN ARE FROM THE
 CENTERLINE OF SURVEY SH 19.



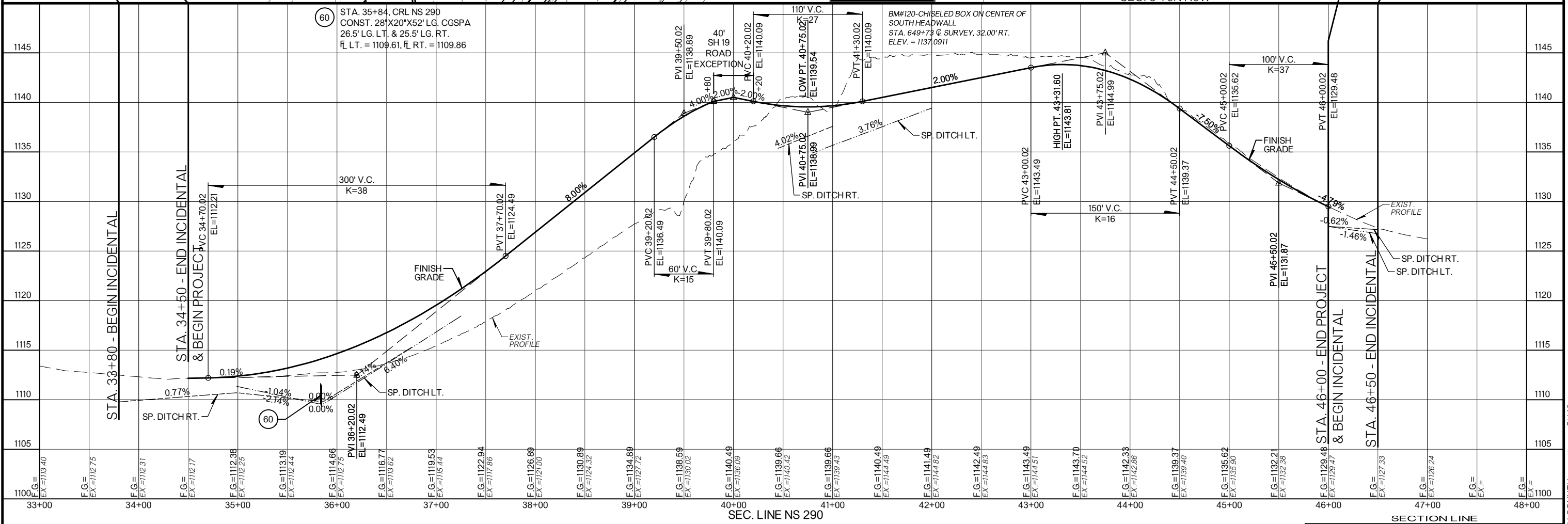
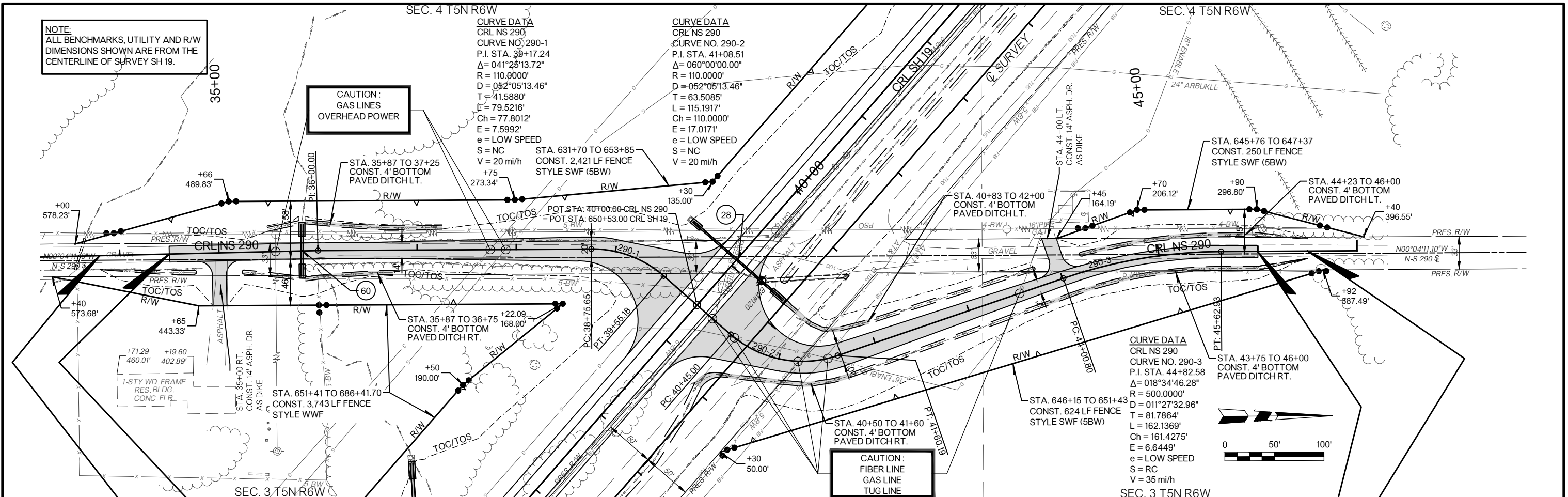
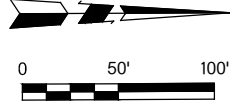
NOTE:
ALL BENCHMARKS, UTILITY AND R/W
DIMENSIONS SHOWN ARE FROM THE
CENTERLINE OF SURVEY SH 19.

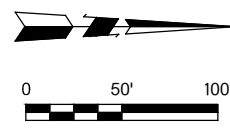
CAUTION:
GAS LINES
OVERHEAD POWER

CURVE DATA
CRL NS 290
CURVE NO. 290-1
P.I. STA. 39+17.24
 $\Delta = 041^{\circ}25'13.72''$
R = 110.0000'
D = 052^{\circ}05'13.46''
T = 41.5880'
L = 79.5216'
Ch = 77.8012'
E = 7.5992'
e = LOW SPEED
S = NC
V = 20 mi/h

CURVE DATA
CRL NS 290
CURVE NO. 290-2
P.I. STA. 41+08.51
 $\Delta = 060^{\circ}00'00.00''$
R = 110.0000'
D = 052^{\circ}05'13.46''
T = 63.5085'
L = 115.1917'
Ch = 110.0000'
E = 17.0171'
e = LOW SPEED
S = NC
V = 20 mi/h

CURVE DATA
CRL NS 290
CURVE NO. 290-3
P.I. STA. 44+82.58
 $\Delta = 018^{\circ}34'46.28''$
R = 500.0000'
D = 011^{\circ}27'32.96''
T = 81.7864'
L = 162.1369'
Ch = 161.4275'
E = 6.6449'
e = LOW SPEED
S = RC
V = 35 mi/h



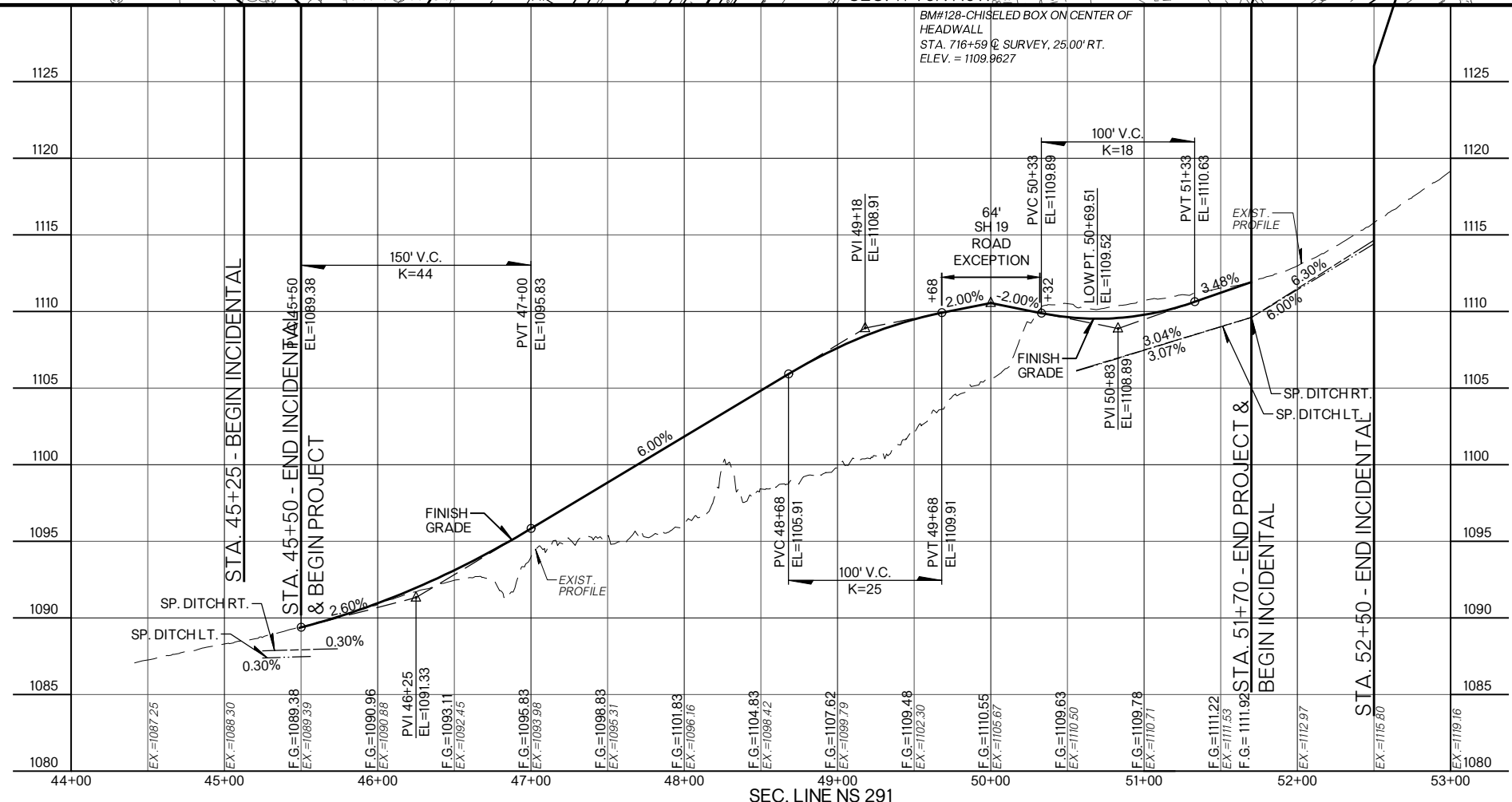
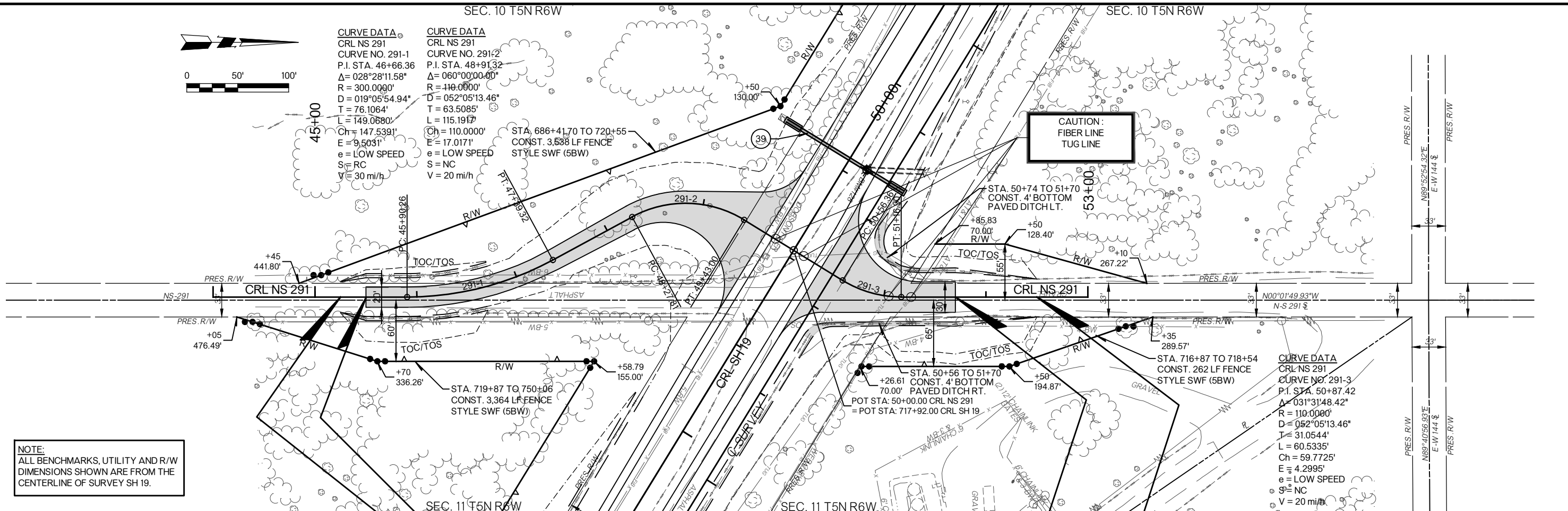


CURVE DATA
 CRL NS 291
 CURVE NO. 291-1
 P.I. STA. 46+66.36
 $\Delta = 028^{\circ}28'11.58''$
 $R = 300.0000'$
 $D = 019^{\circ}05'54.94''$
 $T = 76.1064'$
 $L = 149.0680'$
 $Ch = 147.5391'$
 $E = 9.5031'$
 $e = \text{LOW SPEED}$
 $S = \text{RC}$
 $V = 30 \text{ mi/h}$

CURVE DATA
 CRL NS 291
 CURVE NO. 291-2
 P.I. STA. 48+91.32
 $\Delta = 060^{\circ}00'00.00''$
 $R = 110.0000'$
 $D = 052^{\circ}05'13.46''$
 $T = 63.5085'$
 $L = 115.1917'$
 $Ch = 110.0000'$
 $E = 17.0171'$
 $e = \text{LOW SPEED}$
 $S = \text{NC}$
 $V = 20 \text{ mi/h}$

CURVE DATA
 CRL NS 291
 CURVE NO. 291-3
 P.I. STA. 50+87.42
 $\Delta = 031^{\circ}31'48.42''$
 $R = 110.0000'$
 $D = 052^{\circ}05'13.46''$
 $T = 31.0544'$
 $L = 60.5335'$
 $Ch = 59.7725'$
 $E = 4.2995'$
 $e = \text{LOW SPEED}$
 $S = \text{NC}$
 $V = 20 \text{ mi/h}$

NOTE:
 ALL BENCHMARKS, UTILITY AND R/W
 DIMENSIONS SHOWN ARE FROM THE
 CENTERLINE OF SURVEY SH 19.



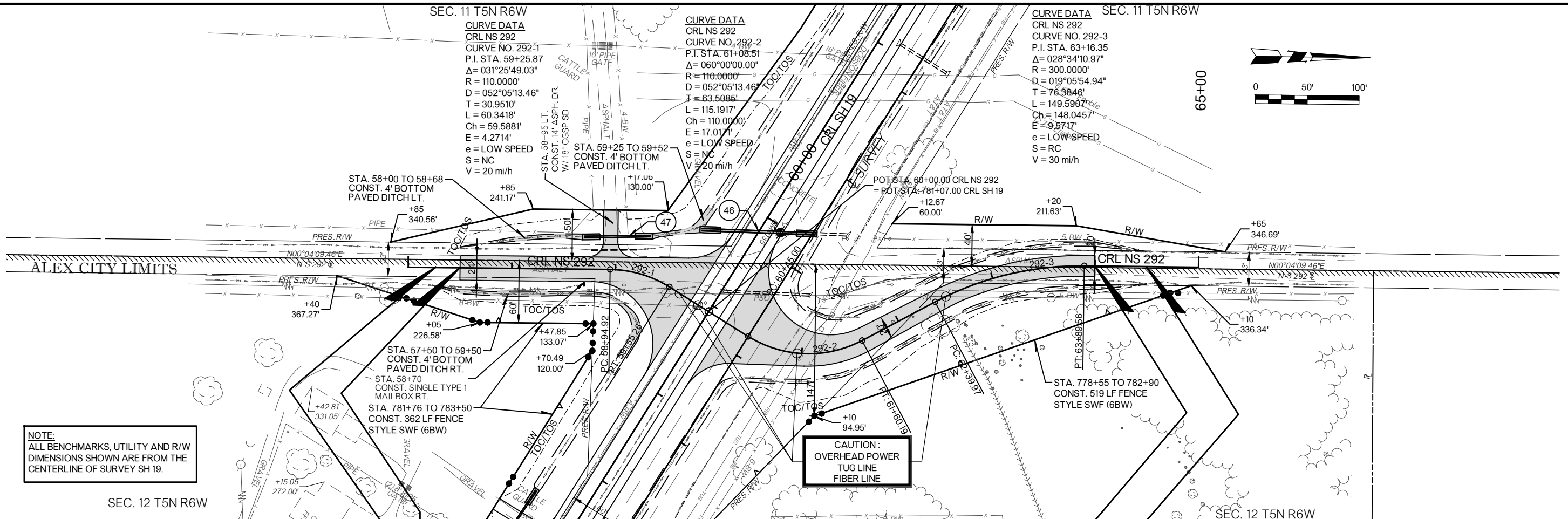
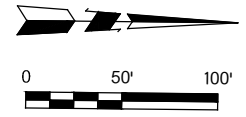
SEC. 11 T5N R6W

SEC. 11 T5N R6W

CURVE DATA
 CRL NS 292
 CURVE NO. 292-1
 P.I. STA. 59+25.87
 $\Delta = 031^{\circ}25'49.03"$
 $R = 110.0000'$
 $D = 052^{\circ}05'13.46"$
 $T = 30.9510'$
 $L = 60.3418'$
 $Ch = 59.5881'$
 $E = 4.2714'$
 $e = \text{LOW SPEED}$
 $S = \text{NC}$
 $V = 20 \text{ mi/h}$

CURVE DATA
 CRL NS 292
 CURVE NO. 292-2
 P.I. STA. 61+08.51
 $\Delta = 060^{\circ}00'00.00"$
 $R = 110.0000'$
 $D = 052^{\circ}05'13.46"$
 $T = 63.5085'$
 $L = 115.1917'$
 $Ch = 110.0000'$
 $E = 17.0171'$
 $e = \text{LOW SPEED}$
 $S = \text{NC}$
 $V = 20 \text{ mi/h}$

CURVE DATA
 CRL NS 292
 CURVE NO. 292-3
 P.I. STA. 63+16.35
 $\Delta = 028^{\circ}34'10.97"$
 $R = 300.0000'$
 $D = 019^{\circ}05'54.94"$
 $T = 76.3846'$
 $L = 149.5907'$
 $Ch = 148.0457'$
 $E = 9.5717'$
 $e = \text{LOW SPEED}$
 $S = \text{RC}$
 $V = 30 \text{ mi/h}$

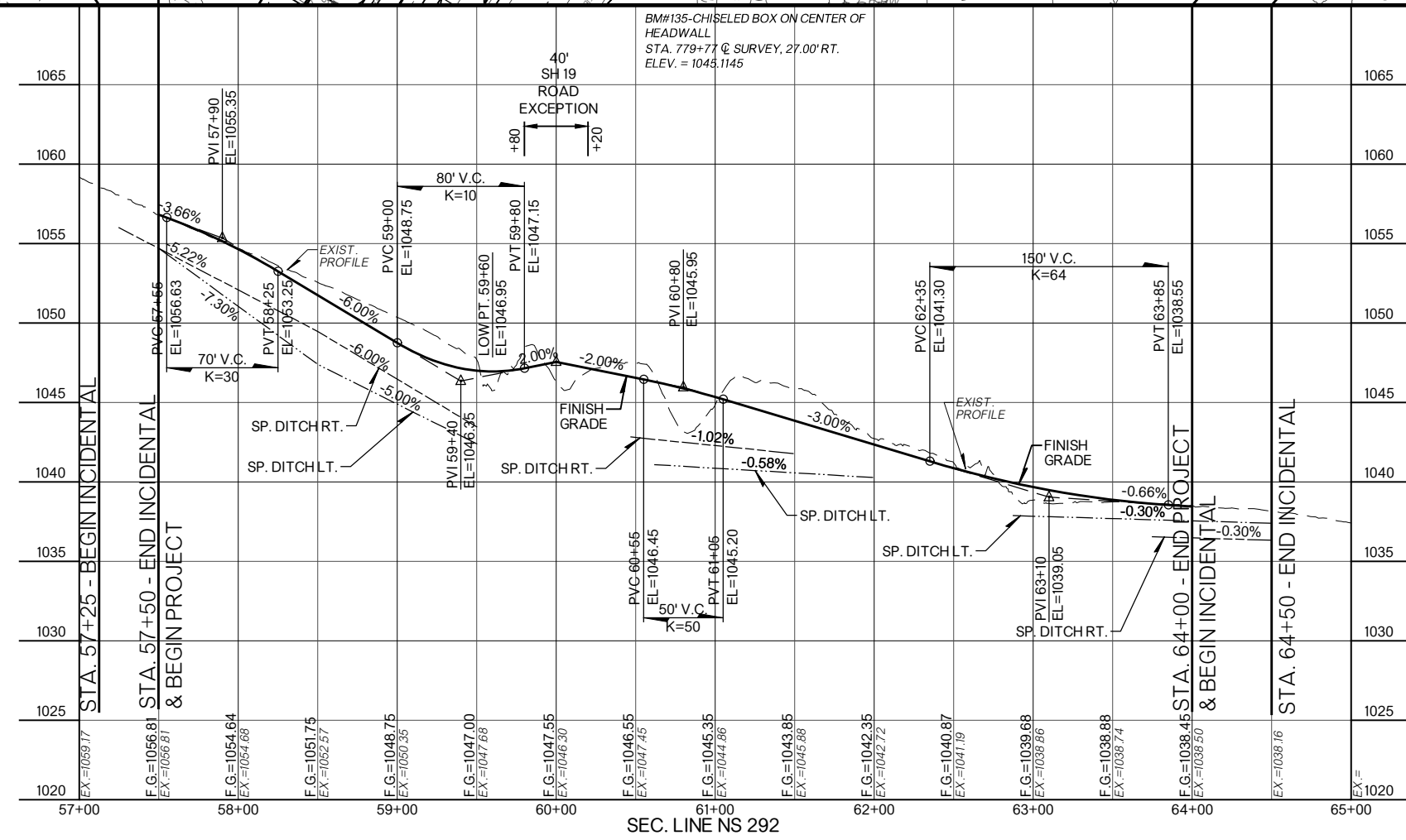


NOTE:
 ALL BENCHMARKS, UTILITY AND R/W
 DIMENSIONS SHOWN ARE FROM THE
 CENTERLINE OF SURVEY SH 19.

CAUTION:
 OVERHEAD POWER
 TUG LINE
 FIBER LINE

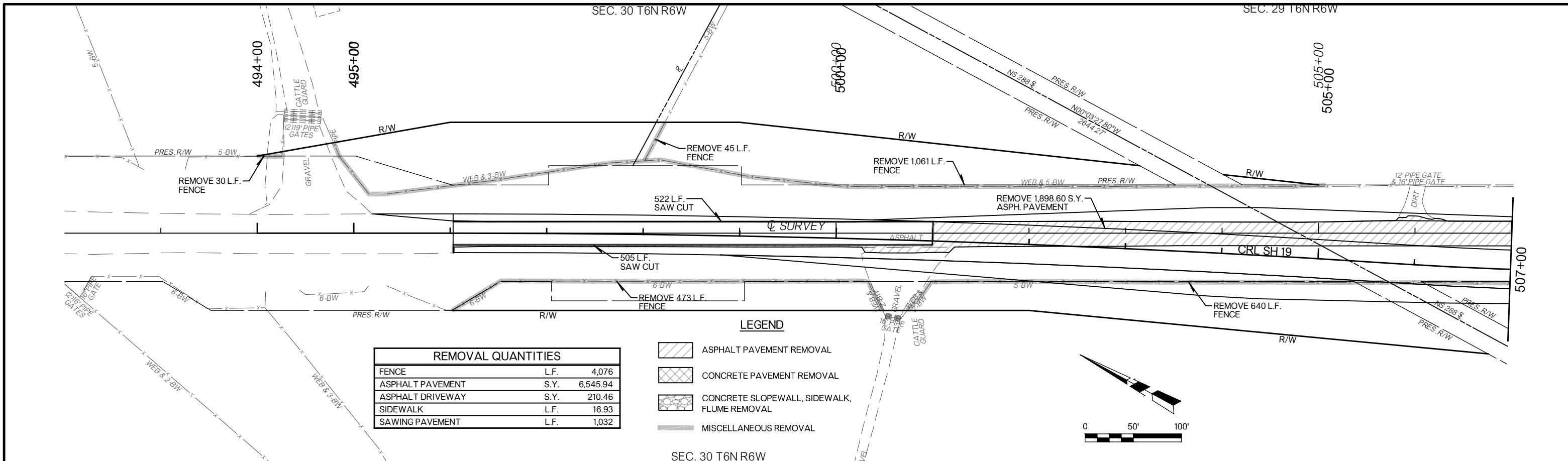
SEC. 12 T5N R6W

SEC. 12 T5N R6W



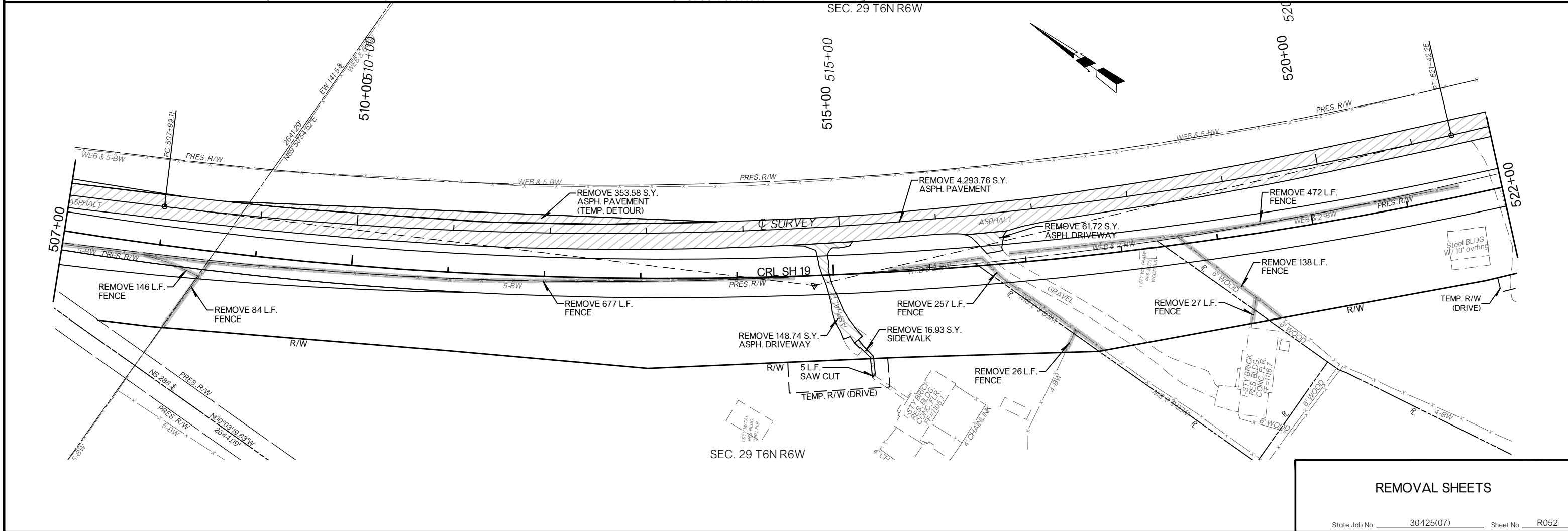
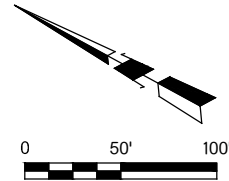
SEC. LINE NS 292

SECTION LINE



REMOVAL QUANTITIES		
FENCE	L.F.	4,076
ASPHALT PAVEMENT	S.Y.	6,545.94
ASPHALT DRIVEWAY	S.Y.	210.46
SIDEWALK	L.F.	16.93
SAWING PAVEMENT	L.F.	1,032

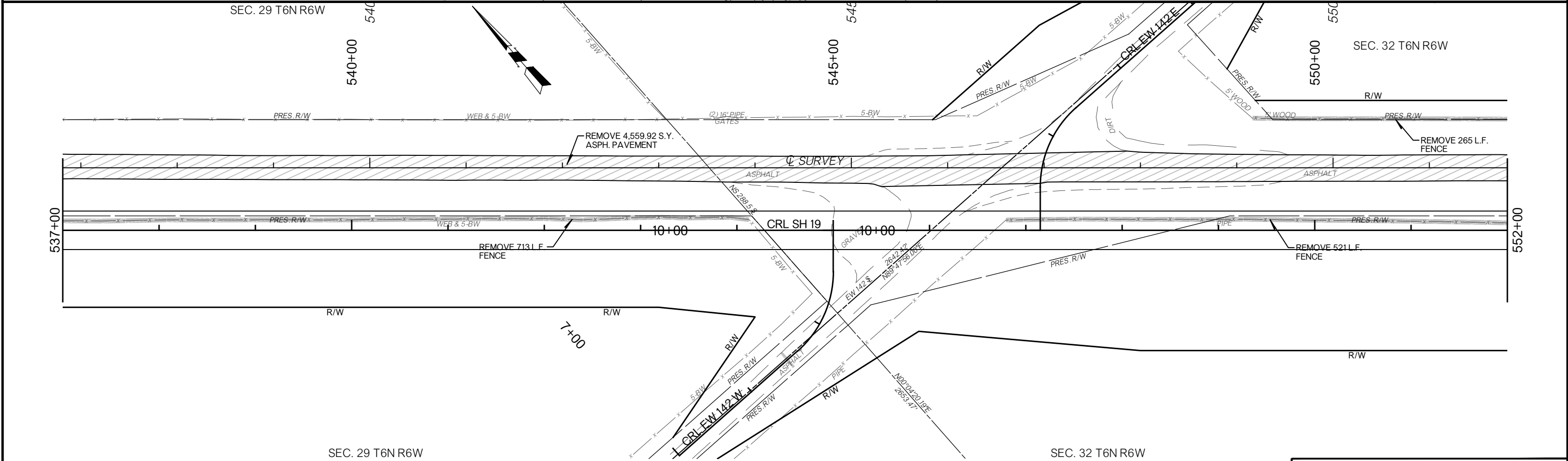
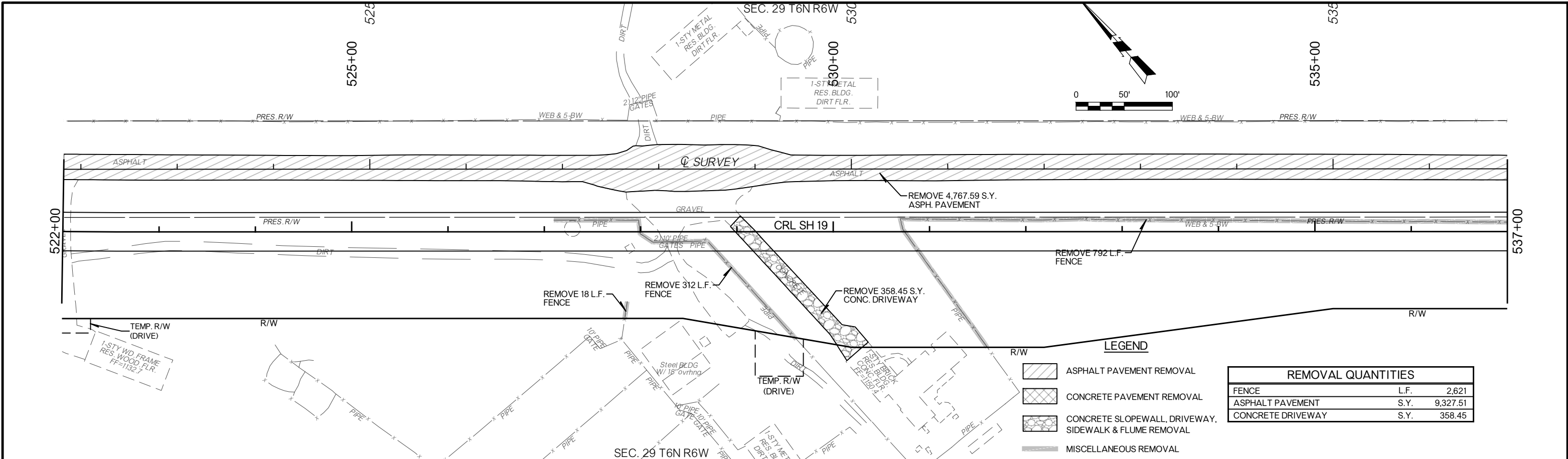
- LEGEND**
- ASPHALT PAVEMENT REMOVAL
 - CONCRETE PAVEMENT REMOVAL
 - CONCRETE SLOPEWALL, SIDEWALK, FLUME REMOVAL
 - MISCELLANEOUS REMOVAL

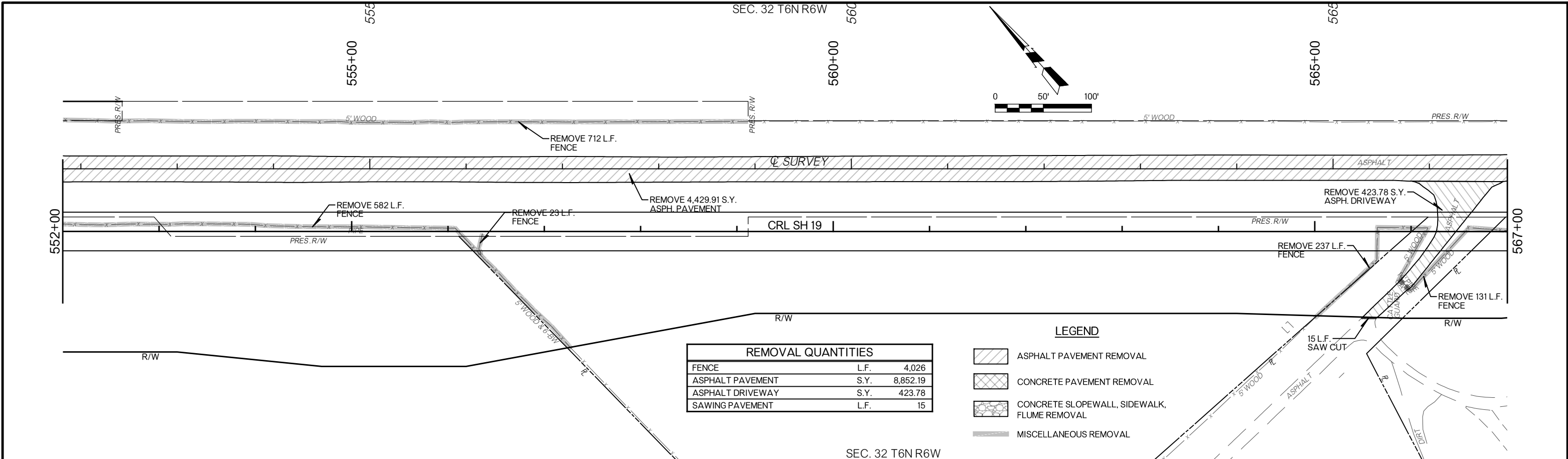


REMOVAL SHEETS

State Job No. 30425(07) Sheet No. R052

GRADY COUNTY SH 19

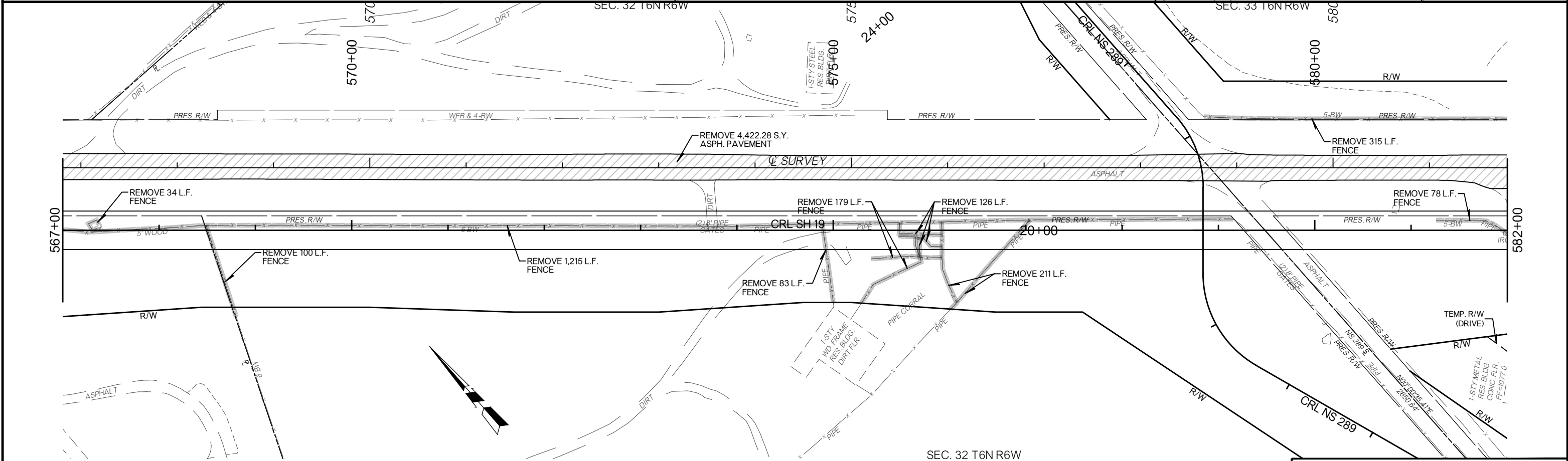




REMOVAL QUANTITIES		
FENCE	L.F.	4,026
ASPHALT PAVEMENT	S.Y.	8,852.19
ASPHALT DRIVEWAY	S.Y.	423.78
SAWING PAVEMENT	L.F.	15

LEGEND

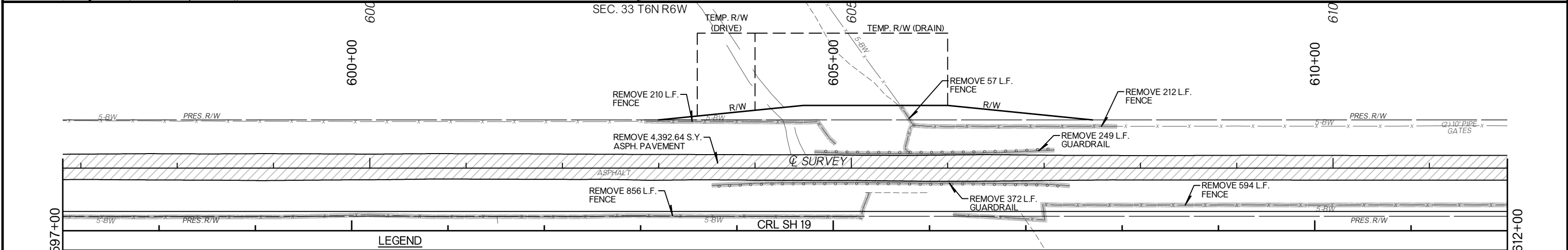
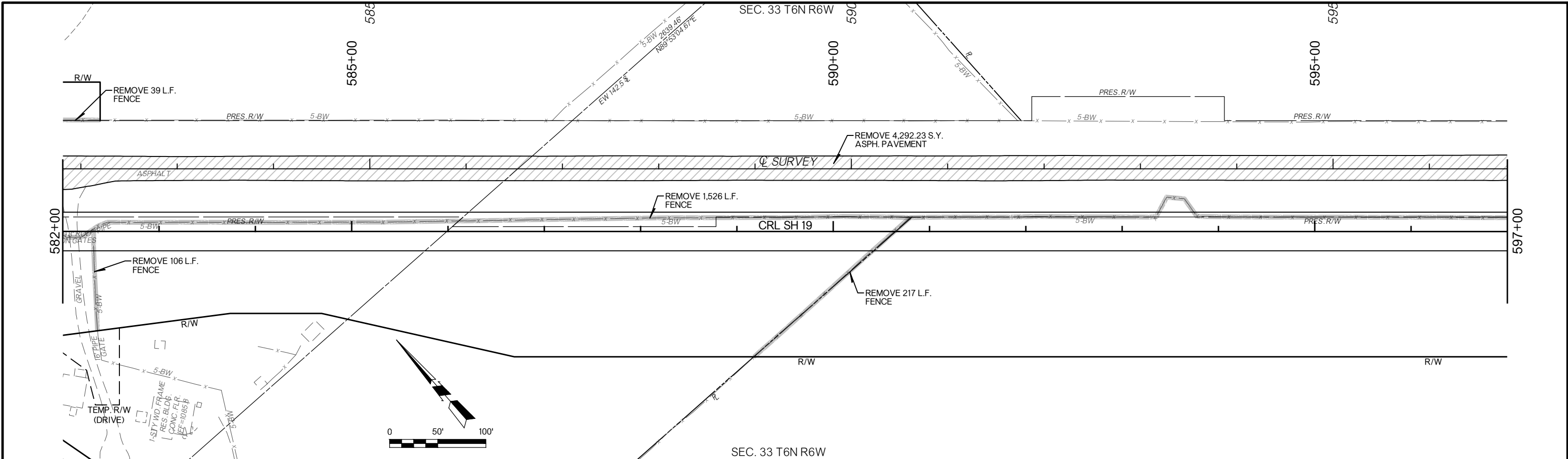
- ASPHALT PAVEMENT REMOVAL
- CONCRETE PAVEMENT REMOVAL
- CONCRETE SLOPEWALL, SIDEWALK, FLUME REMOVAL
- MISCELLANEOUS REMOVAL







REMOVAL SHEETS

State Job No. 30425(07) Sheet No. R054

GRADY COUNTY SH 19



LEGEND

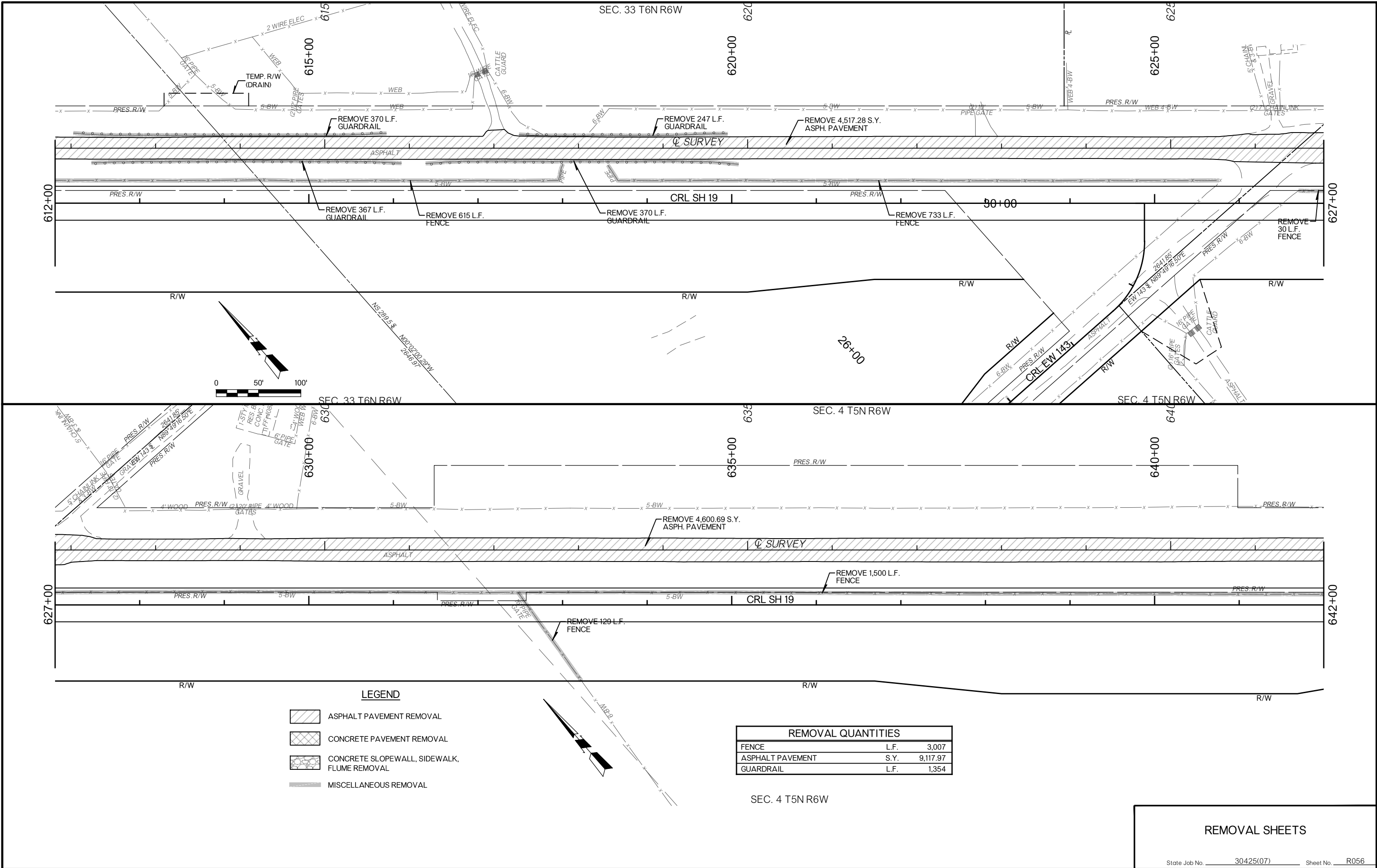
-  ASPHALT PAVEMENT REMOVAL
-  CONCRETE PAVEMENT REMOVAL
-  CONCRETE SLOPEWALL, SIDEWALK, FLUME REMOVAL
-  MISCELLANEOUS REMOVAL

REMOVAL QUANTITIES		
FENCE	L.F.	3,817
ASPHALT PAVEMENT	S.Y.	8,684.87
GUARDRAIL	L.F.	621





REMOVAL SHEETS

State Job No. 30425(07) Sheet No. R055

GRADY COUNTY SH 19



LEGEND

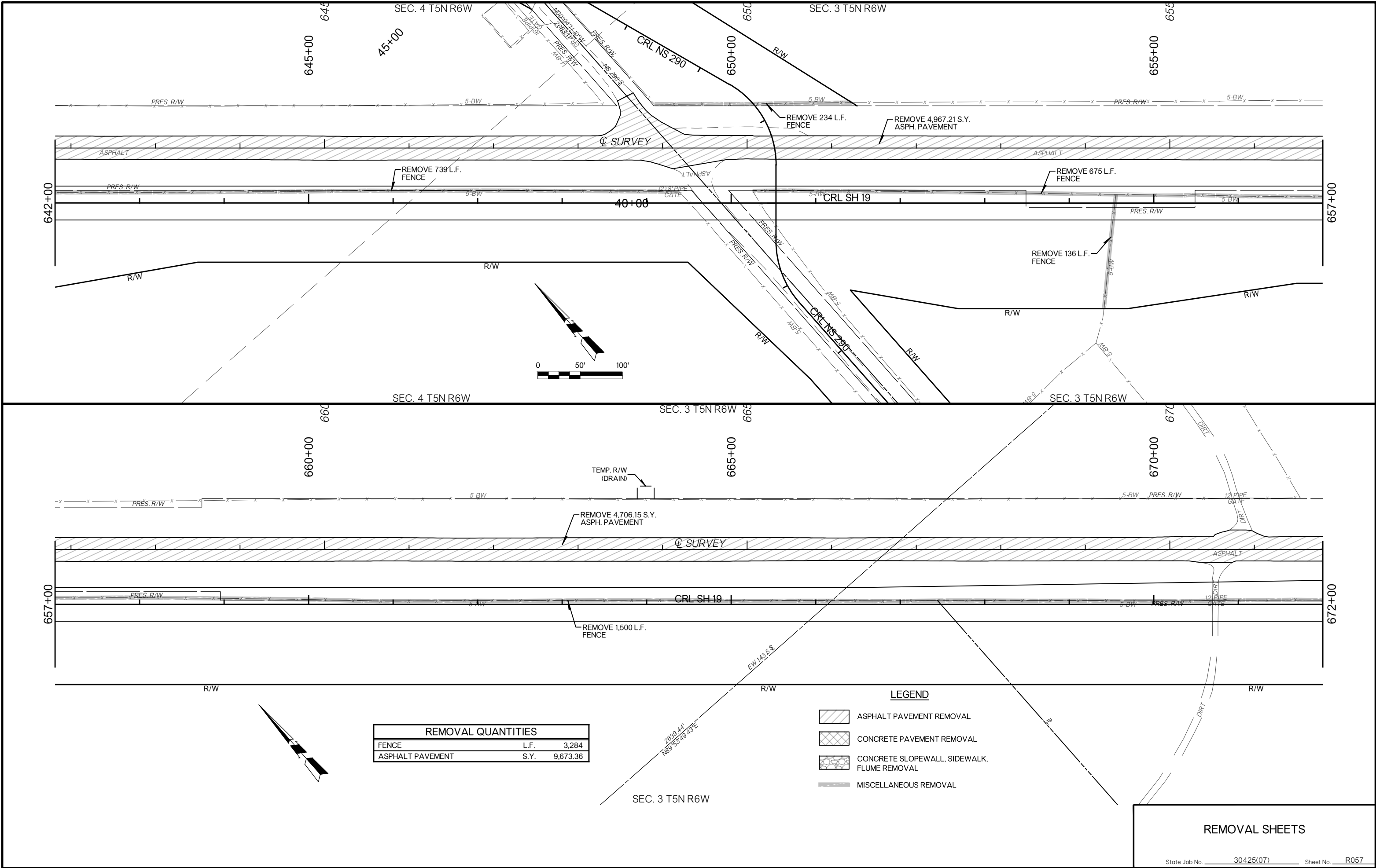
-  ASPHALT PAVEMENT REMOVAL
-  CONCRETE PAVEMENT REMOVAL
-  CONCRETE SLOPEWALK, SIDEWALK, FLUME REMOVAL
-  MISCELLANEOUS REMOVAL

REMOVAL QUANTITIES		
FENCE	L.F.	3,007
ASPHALT PAVEMENT	S.Y.	9,117.97
GUARDRAIL	L.F.	1,354

REMOVAL SHEETS

State Job No. 30425(07) Sheet No. R056

GRADY COUNTY SH 19

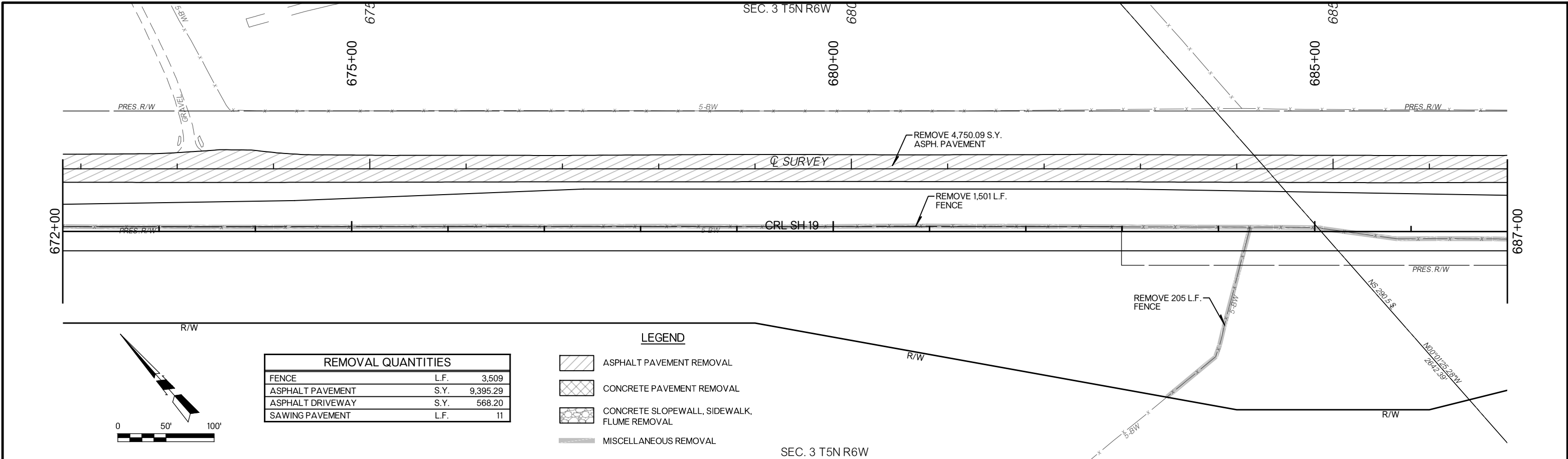


REMOVAL QUANTITIES		
FENCE	L.F.	3,284
ASPHALT PAVEMENT	S.Y.	9,673.36

- LEGEND**
- ASPHALT PAVEMENT REMOVAL
 - CONCRETE PAVEMENT REMOVAL
 - CONCRETE SLOPEWALL, SIDEWALK, FLUME REMOVAL
 - MISCELLANEOUS REMOVAL

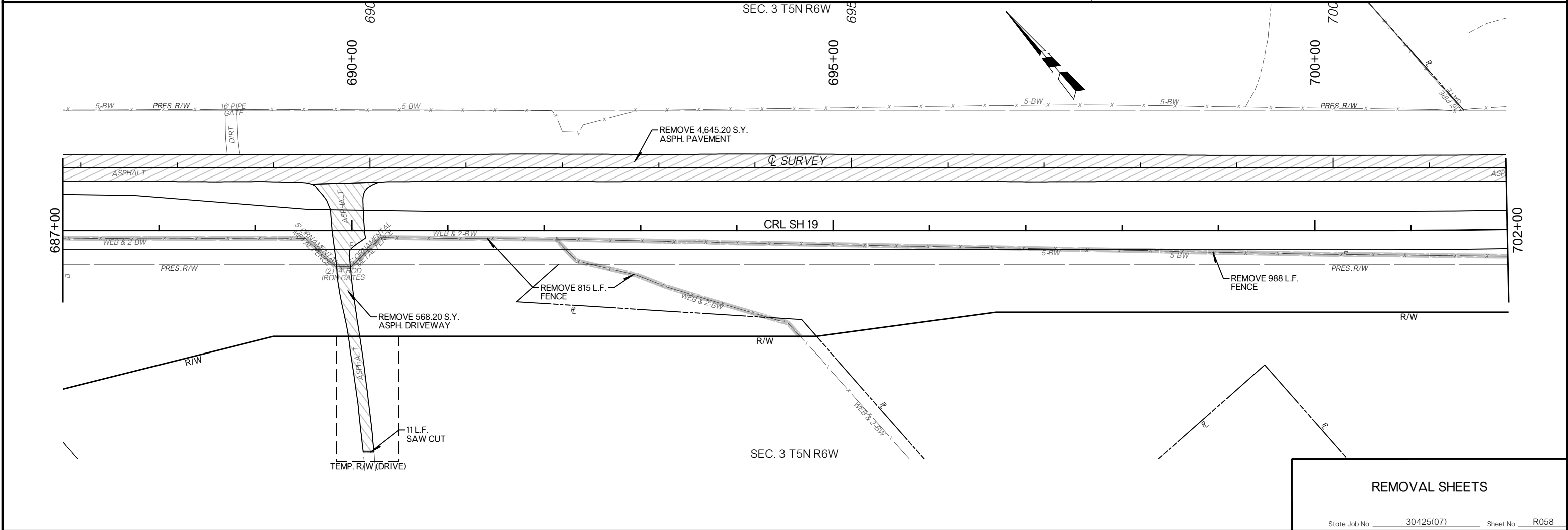
REMOVAL SHEETS

State Job No. 30425(07) Sheet No. R057



REMOVAL QUANTITIES		
FENCE	L.F.	3,509
ASPHALT PAVEMENT	S.Y.	9,395.29
ASPHALT DRIVEWAY	S.Y.	568.20
SAWING PAVEMENT	L.F.	11

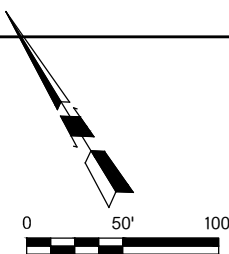
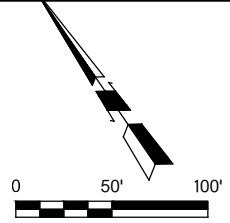
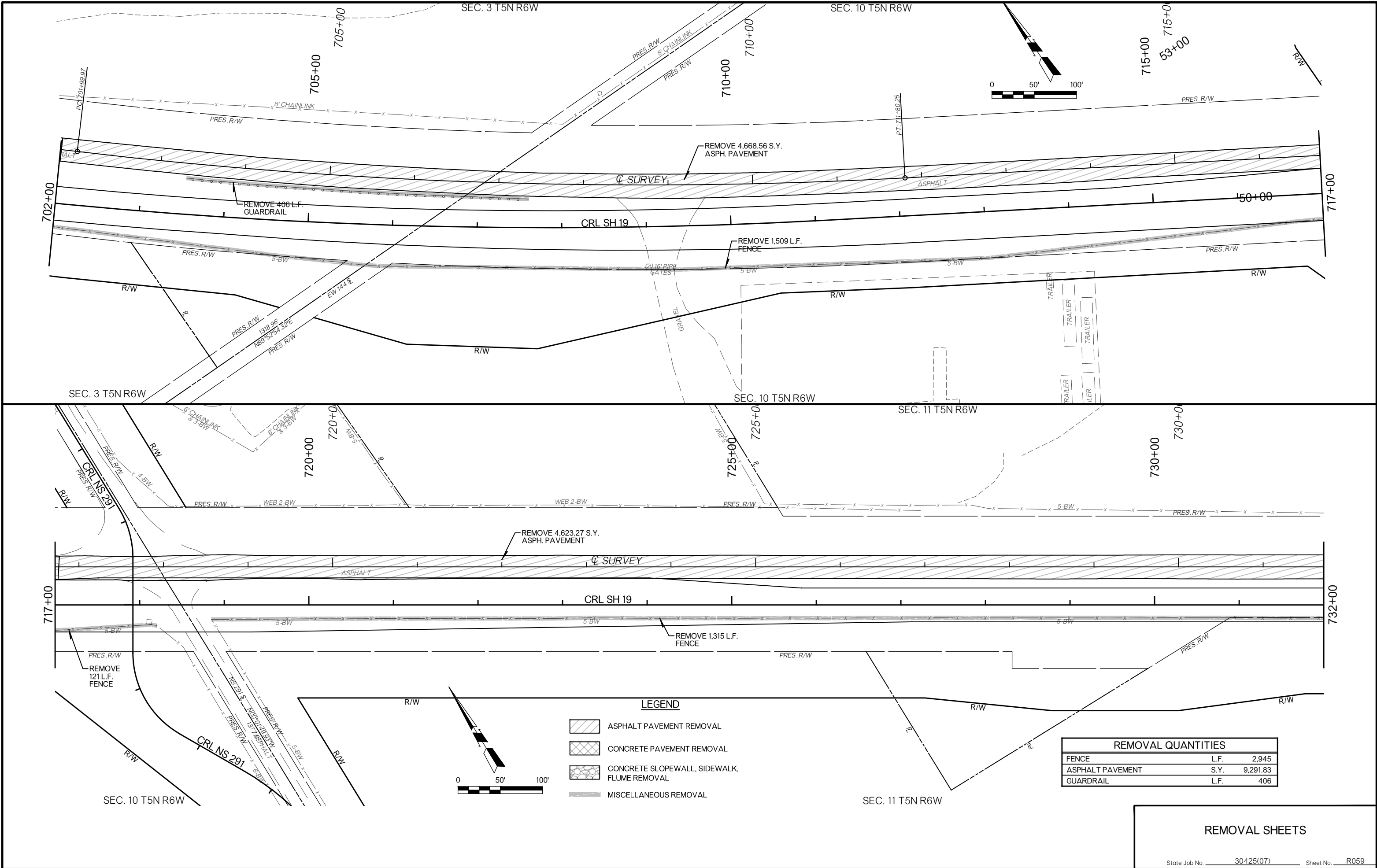
- LEGEND**
- ASPHALT PAVEMENT REMOVAL
 - CONCRETE PAVEMENT REMOVAL
 - CONCRETE SLOPEWALL, SIDEWALK, FLUME REMOVAL
 - MISCELLANEOUS REMOVAL







REMOVAL SHEETS

State Job No. 30425(07) Sheet No. R058

SH 19 GRADY COUNTY



LEGEND

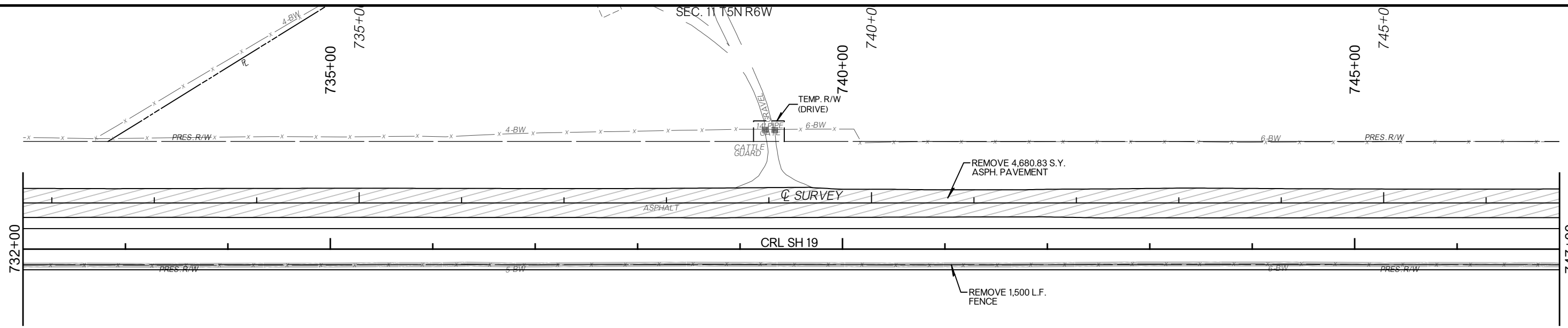
-  ASPHALT PAVEMENT REMOVAL
-  CONCRETE PAVEMENT REMOVAL
-  CONCRETE SLOPEWALL, SIDEWALK, FLUME REMOVAL
-  MISCELLANEOUS REMOVAL

REMOVAL QUANTITIES		
FENCE	L.F.	2,945
ASPHALT PAVEMENT	S.Y.	9,291.83
GUARDRAIL	L.F.	406

REMOVAL SHEETS

State Job No. 30425(07) Sheet No. R059

GRADY COUNTY SH 19



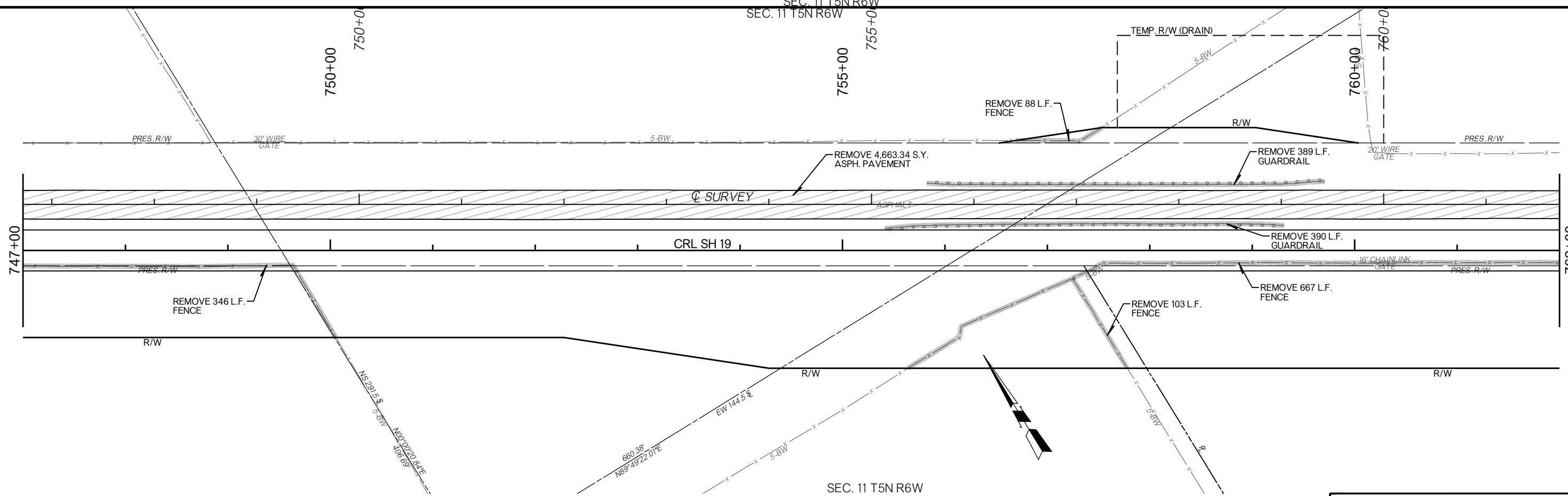
0 50' 100'

REMOVAL QUANTITIES

FENCE	L.F.	2,704
ASPHALT PAVEMENT	S.Y.	9,344.17
GUARDRAIL	L.F.	779

LEGEND

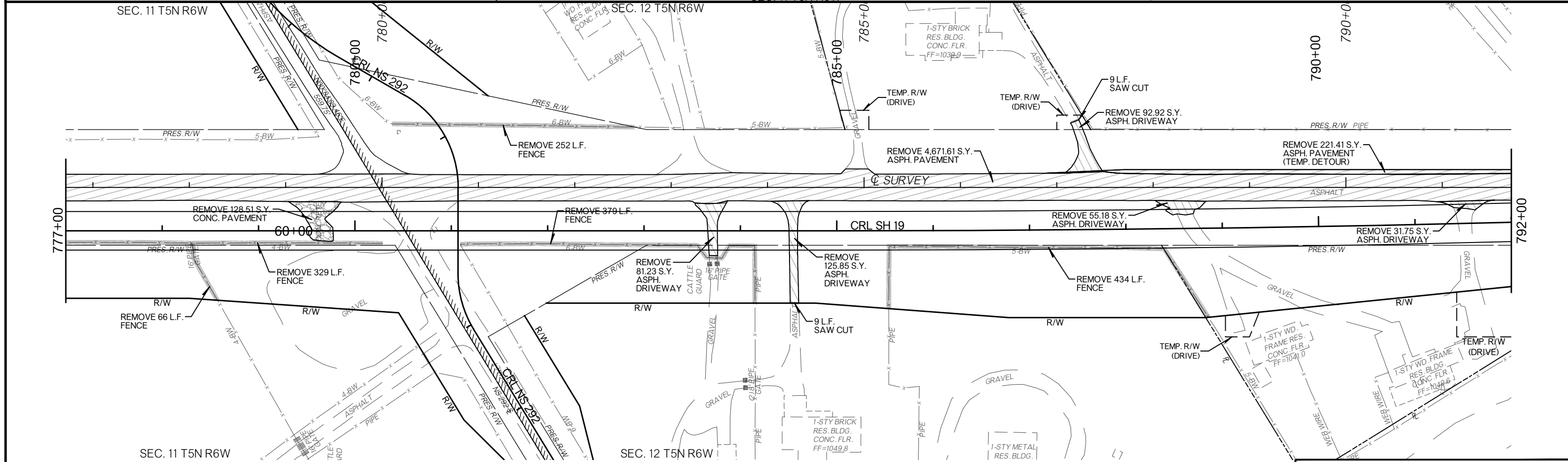
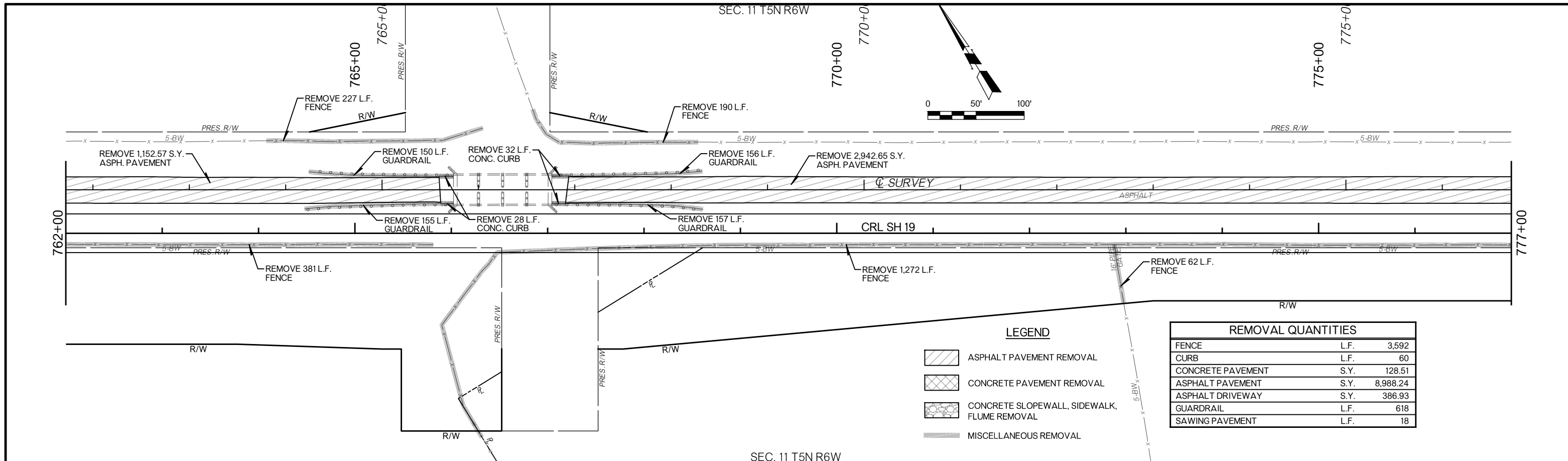
- ASPHALT PAVEMENT REMOVAL
- CONCRETE PAVEMENT REMOVAL
- CONCRETE SLOPEWALL, SIDEWALK, FLUME REMOVAL
- MISCELLANEOUS REMOVAL



REMOVAL SHEETS

State Job No. 30425(07) Sheet No. R060

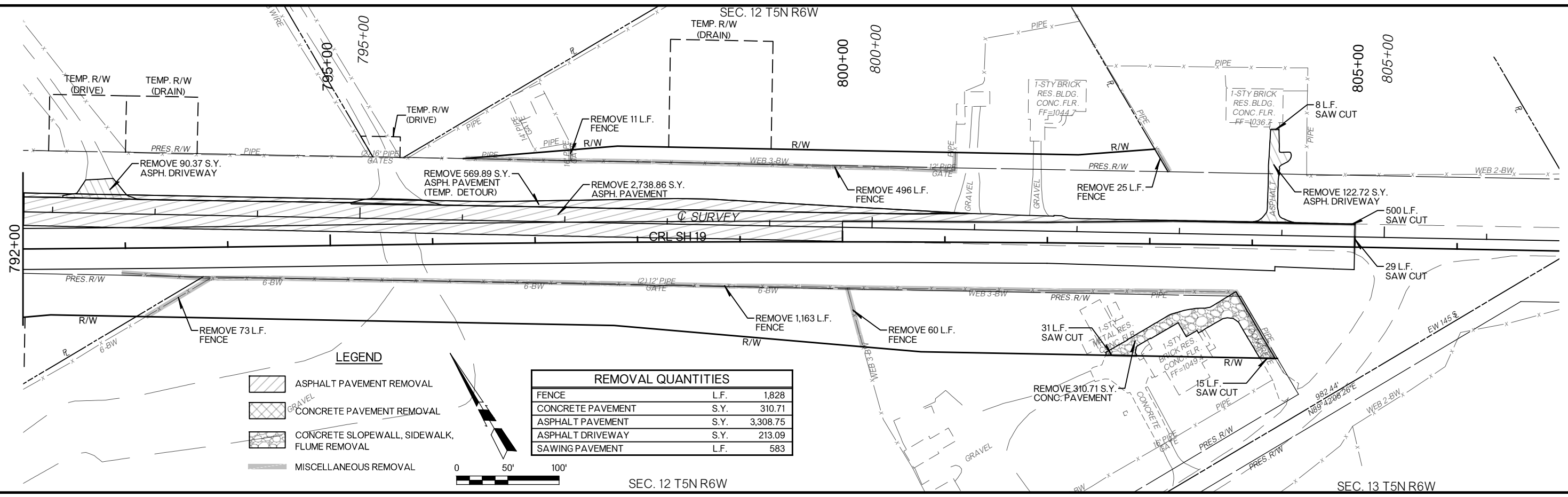
GRADY COUNTY SH 19



REMOVAL SHEETS

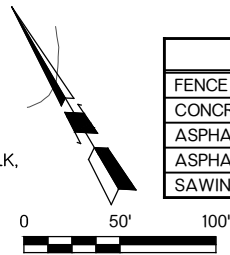
State Job No. 30425(07) Sheet No. R061

SH 19 GRADY COUNTY



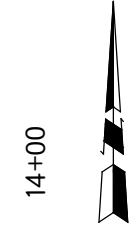
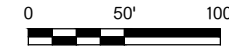
- LEGEND**
- ASPHALT PAVEMENT REMOVAL
 - CONCRETE PAVEMENT REMOVAL
 - CONCRETE SLOPEWALL, SIDEWALK, FLUME REMOVAL
 - MISCELLANEOUS REMOVAL

REMOVAL QUANTITIES		
FENCE	L.F.	1,828
CONCRETE PAVEMENT	S.Y.	310.71
ASPHALT PAVEMENT	S.Y.	3,308.75
ASPHALT DRIVEWAY	S.Y.	213.09
SAWING PAVEMENT	L.F.	583

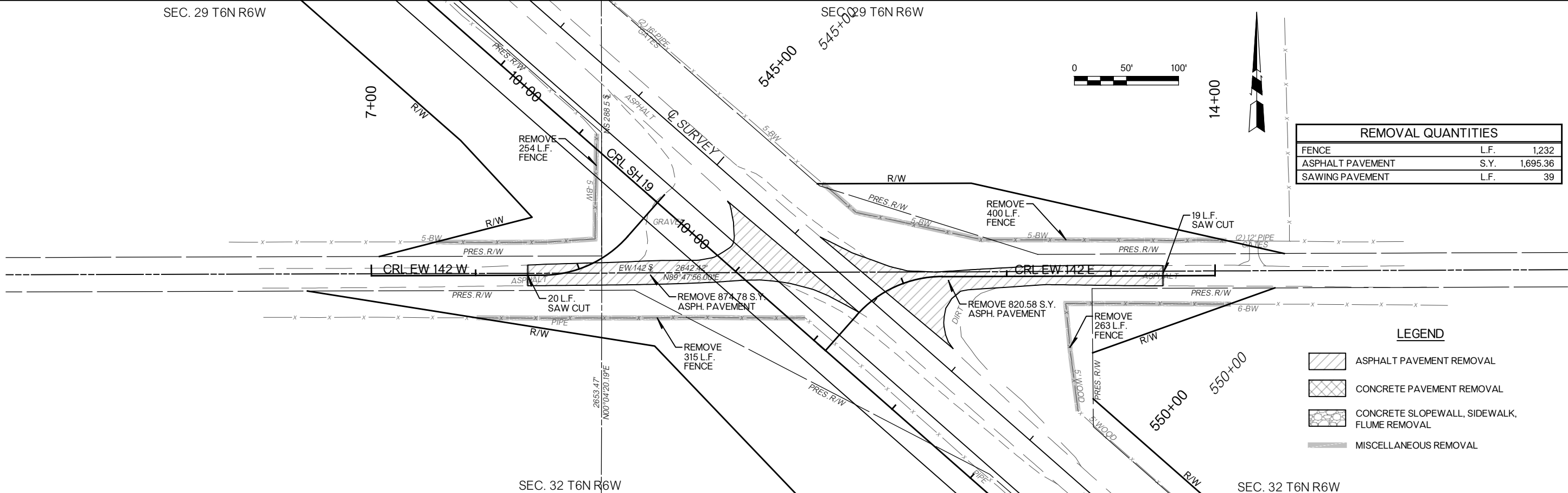


SEC. 29 T6N R6W

SEC. 29 T6N R6W



REMOVAL QUANTITIES		
FENCE	L.F.	1,232
ASPHALT PAVEMENT	S.Y.	1,695.36
SAWING PAVEMENT	L.F.	39

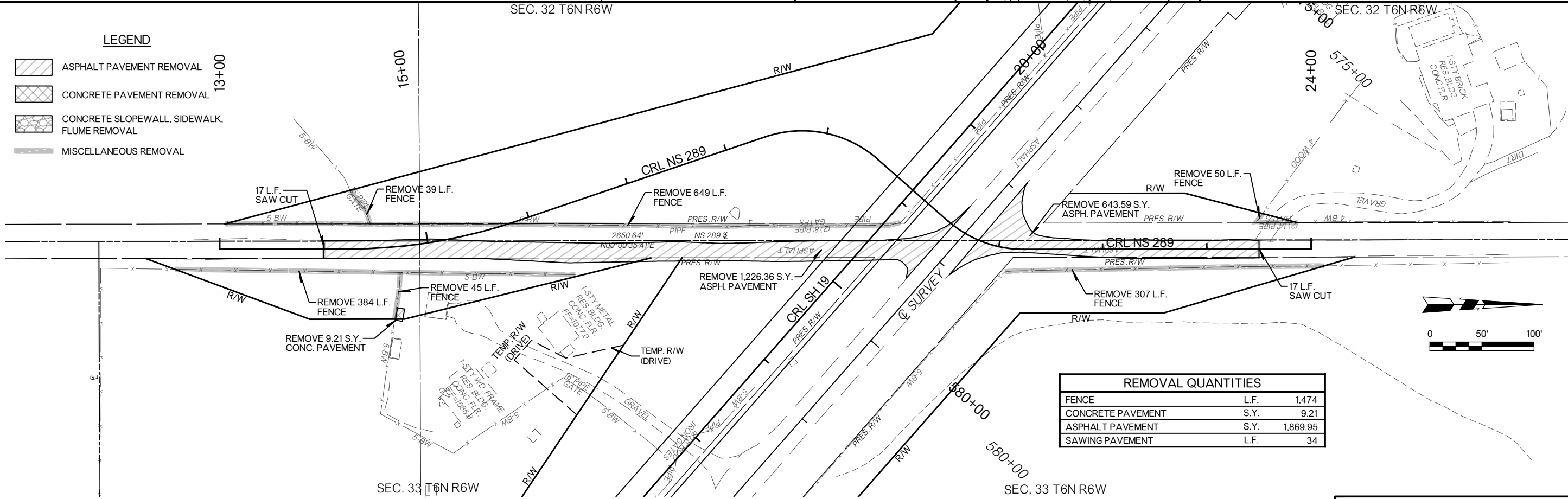


LEGEND

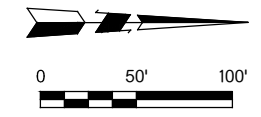
- ASPHALT PAVEMENT REMOVAL
- CONCRETE PAVEMENT REMOVAL
- CONCRETE SLOPEWALL, SIDEWALK, FLUME REMOVAL
- MISCELLANEOUS REMOVAL

LEGEND

- ASPHALT PAVEMENT REMOVAL
- CONCRETE PAVEMENT REMOVAL
- CONCRETE SLOPEWALL, SIDEWALK, FLUME REMOVAL
- MISCELLANEOUS REMOVAL



REMOVAL QUANTITIES		
FENCE	L.F.	1,474
CONCRETE PAVEMENT	S.Y.	9.21
ASPHALT PAVEMENT	S.Y.	1,869.95
SAWING PAVEMENT	L.F.	34



REMOVAL SHEETS

SH 19
GRADY COUNTY

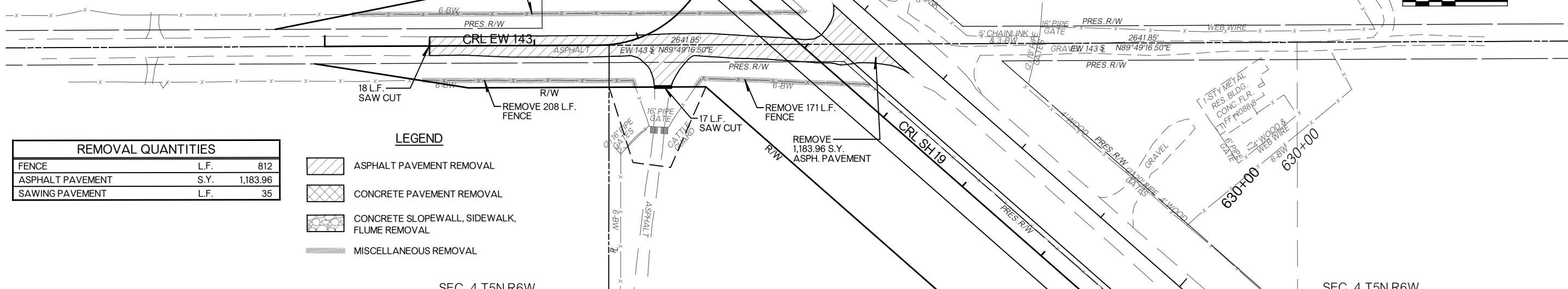
SEC. 33 T6N R6W

SEC. 33 T6N R6W

26+00

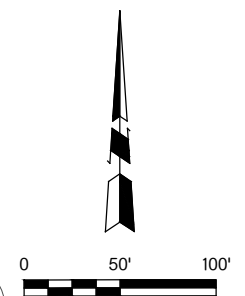
625+00 625+

REMOVE 433 L.F. FENCE R/W



REMOVAL QUANTITIES		
FENCE	L.F.	812
ASPHALT PAVEMENT	S.Y.	1,183.96
SAWING PAVEMENT	L.F.	35

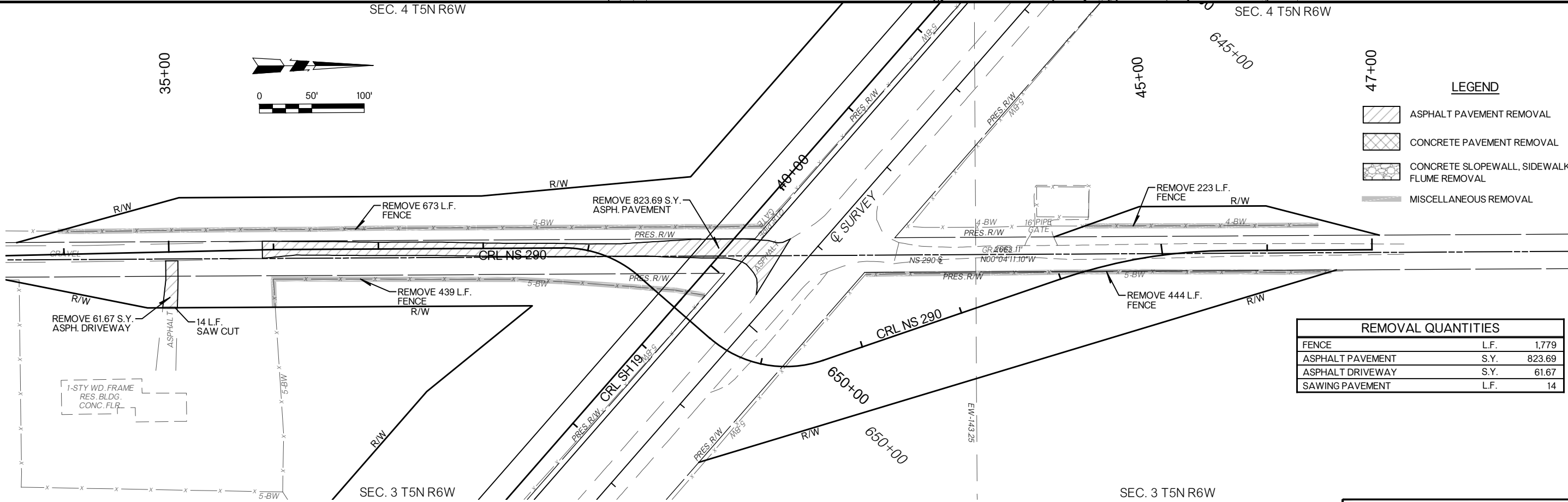
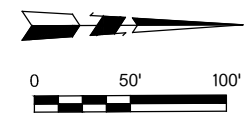
LEGEND	
	ASPHALT PAVEMENT REMOVAL
	CONCRETE PAVEMENT REMOVAL
	CONCRETE SLOPEWALL, SIDEWALK, FLUME REMOVAL
	MISCELLANEOUS REMOVAL



SEC. 4 T5N R6W

SEC. 4 T5N R6W

35+00



LEGEND	
	ASPHALT PAVEMENT REMOVAL
	CONCRETE PAVEMENT REMOVAL
	CONCRETE SLOPEWALL, SIDEWALK, FLUME REMOVAL
	MISCELLANEOUS REMOVAL

REMOVAL QUANTITIES		
FENCE	L.F.	1,779
ASPHALT PAVEMENT	S.Y.	823.69
ASPHALT DRIVEWAY	S.Y.	61.67
SAWING PAVEMENT	L.F.	14

SEC. 3 T5N R6W





SEC. 3 T5N R6W

REMOVAL SHEETS

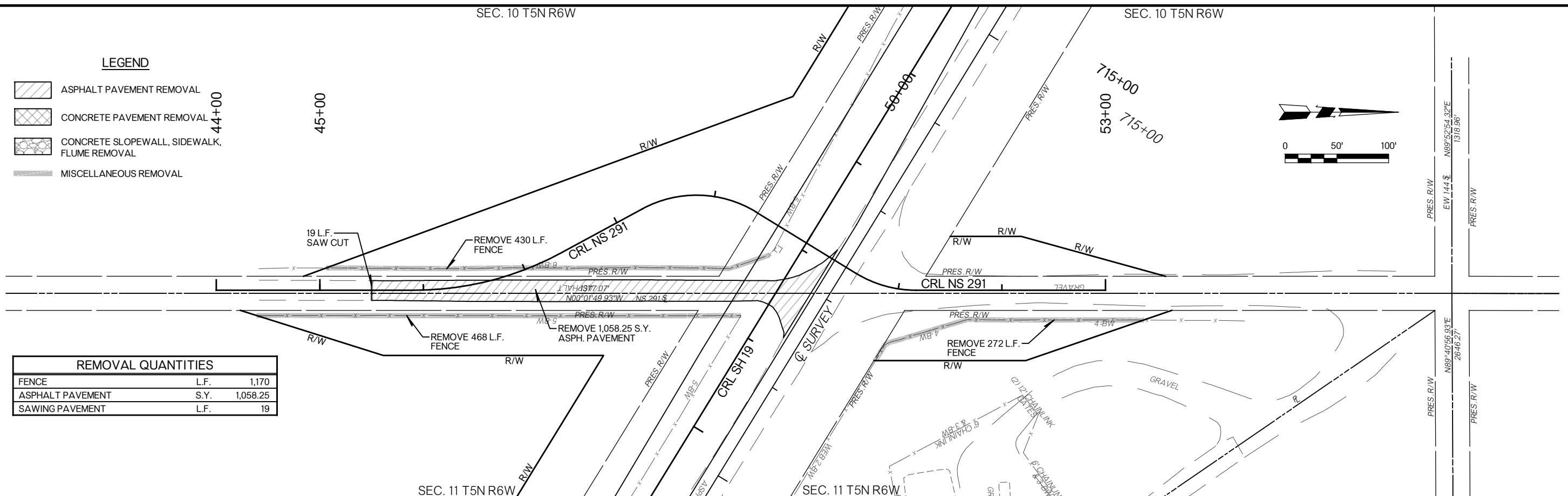
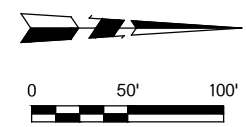
State Job No. 30425(07) Sheet No. R064

GRADY COUNTY SH 19

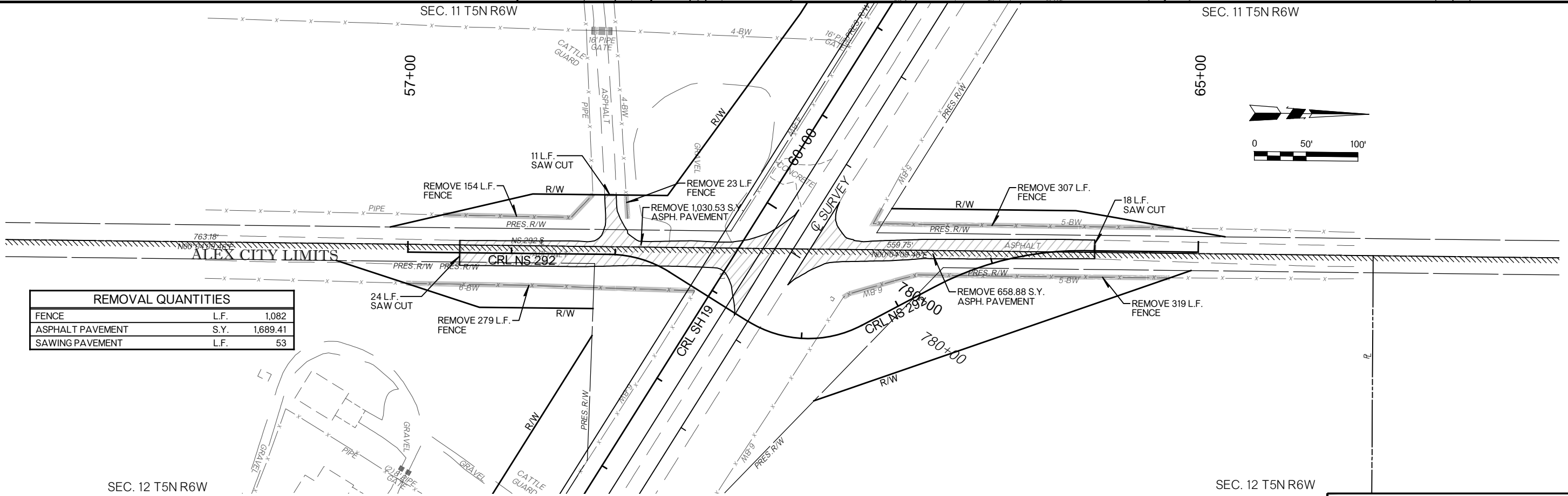
LEGEND

-  ASPHALT PAVEMENT REMOVAL
-  CONCRETE PAVEMENT REMOVAL
-  CONCRETE SLOPEWALL, SIDEWALK, FLUME REMOVAL
-  MISCELLANEOUS REMOVAL

REMOVAL QUANTITIES		
FENCE	L.F.	1,170
ASPHALT PAVEMENT	S.Y.	1,058.25
SAWING PAVEMENT	L.F.	19



REMOVAL QUANTITIES		
FENCE	L.F.	1,082
ASPHALT PAVEMENT	S.Y.	1,689.41
SAWING PAVEMENT	L.F.	53



REMOVAL SHEETS

SUMMARY OF DISTURBED DRAINAGE AREAS

ALIGNMENT	DISTURBED AREA NO.	OUTFLOW LOCATION (STATION)	DISTURBED AREA (STATION TO STATION)	DIRECTION TO OUTFALL	DESCRIPTION OF AREA	EROSION CONTROL MEASURES	DISTURBED AREA (AC)
CRL SH 19	1	STA. 495+25	STA. 495+06 TO STA. 501+28	E	CROWN OF ROAD TO TOE OF SLOPE LT.	SILT DIKE AND SOLID SLAB SOD	1.21
CRL SH 19	2	STA. 496+03	STA. 496+03 TO STA. 500+63	NW	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT DIKE AND SOLID SLAB SOD	0.61
CRL SH 19	3	TOE OF SLOPE	STA. 500+63 TO STA. 513+50	W	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT FENCE AND SOLID SLAB SOD	1.55
CRL SH 19	4	STA. 504+25	STA. 501+28 TO STA. 512+75	NW	CROWN OF ROAD TO TOE OF SLOPE LT.	SEDIMENT TRAP, SILT DIKE, AND SOLID SLAB SOD	2.02
CRL SH 19	5	STA. 512+75	STA. 512+75 TO STA. 528+06	NW	CROWN OF ROAD TO TOE OF SLOPE LT.	SEDIMENT TRAP, SILT DIKE, AND SOLID SLAB SOD	3.36
CRL SH 19	6	STA. 513+50	STA. 513+50 TO STA. 518+50	NW	RT SHOULDER TO TOE OF SLOPE RT.	SILT DIKE AND SOLID SLAB SOD	0.78
CRL SH 19	7	STA. 518+50	STA. 518+50 TO STA. 529+40	NW	CROWN OF ROAD TO TOE OF SLOPE RT.	SEDIMENT TRAP, SILT DIKE, AND SOLID SLAB SOD	1.66
CRL SH 19	8	STA. 533+50	STA. 528+06 TO STA. 533+50	SE	CROWN OF ROAD TO TOE OF SLOPE LT.	SEDIMENT TRAP, SILT DIKE, AND SOLID SLAB SOD	1.27
CRL SH 19	9	STA. 535+00	STA. 529+40 TO STA. 535+00	SE	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT DIKE AND SOLID SLAB SOD	1.15
CRL SH 19	10	TOE OF SLOPE	STA. 533+50 TO STA. 542+00	NE	CROWN OF ROAD TO TOE OF SLOPE LT.	SILT FENCE AND SOLID SLAB SOD	1.90
CRL SH 19	11	STA. 538+32	STA. 535+00 TO STA. 543+50	SE & NW	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT FENCE AND SOLID SLAB SOD	1.04
CRL SH 19	12	STA. 542+00	STA. 542+00 TO STA. 547+15	NW	CROWN OF ROAD TO TOE OF SLOPE LT.	SEDIMENT TRAP, SILT DIKE, AND SOLID SLAB SOD	1.52
CRL SH 19	13	STA. 543+50	STA. 543+50 TO STA. 548+00	NW	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT DIKE AND SOLID SLAB SOD	1.04
CRL SH 19	14	STA. 554+58	STA. 547+15 TO STA. 555+30	SE	CROWN OF ROAD TO TOE OF SLOPE LT.	SILT DIKE, SILT FENCE, AND SOLID SLAB SOD	2.18
CRL SH 19	15	STA. 555+73	STA. 548+00 TO STA. 560+00	SW	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT DIKE, SILT FENCE, AND SOLID SLAB SOD	2.20
CRL SH 19	16	STA. 555+30	STA. 555+30 TO STA. 560+00	NW	CROWN OF ROAD TO TOE OF SLOPE LT.	SEDIMENT TRAP, SILT DIKE, AND SOLID SLAB SOD	1.02
CRL SH 19	17	STA. 570+50	STA. 560+00 TO STA. 570+50	SE	CROWN OF ROAD TO TOE OF SLOPE LT.	SEDIMENT TRAP, SILT DIKE, AND SOLID SLAB SOD	2.28
CRL SH 19	18	STA. 573+00	STA. 560+00 TO STA. 573+00	SE	CROWN OF ROAD TO TOE OF SLOPE RT.	SEDIMENT TRAP, SILT FENCE, SILT DIKE, AND SOLID SLAB SOD	1.71
CRL SH 19	19	STA. 578+17	STA. 570+50 TO STA. 578+84	SE	CROWN OF ROAD TO TOE OF SLOPE LT.	SEDIMENT TRAP, SILT DIKE, AND SOLID SLAB SOD	2.03
CRL SH 19	20	STA. 579+61	STA. 573+00 TO STA. 578+84	SE & N	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT DIKE, SILT FENCE, AND SOLID SLAB SOD	1.30
CRL SH 19	21	TOE OF SLOPE	STA. 578+84 TO STA. 585+00	NE	CROWN OF ROAD TO TOE OF SLOPE LT.	SILT FENCE, SILT DIKE, AND SOLID SLAB SOD	1.64
CRL SH 19	22	STA. 580+60	STA. 578+84 TO STA. 585+00	N	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT DIKE, SILT FENCE, AND SOLID SLAB SOD	1.77
CRL SH 19	23	STA. 585+00	STA. 585+00 TO STA. 591+00	NW	CROWN OF ROAD TO TOE OF SLOPE RT.	SEDIMENT TRAP, SILT DIKE, AND SOLID SLAB SOD	1.35
CRL SH 19	24	STA. 585+00	STA. 585+00 TO STA. 591+00	NW	CROWN OF ROAD TO TOE OF SLOPE LT.	SEDIMENT TRAP, SILT DIKE, AND SOLID SLAB SOD	1.31
CRL SH 19	25	STA. 593+56	STA. 591+00 TO STA. 594+50	SE	CROWN OF ROAD TO TOE OF SLOPE LT.	SILT DIKE AND SOLID SLAB SOD	0.81
CRL SH 19	26	STA. 593+56	STA. 591+00 TO STA. 594+50	SE	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT DIKE AND SOLID SLAB SOD	0.59
CRL SH 19	27	STA. 603+43	STA. 594+50 TO STA. 603+86	SE	CROWN OF ROAD TO TOE OF SLOPE LT.	SILT DIKE, SILT FENCE AND SOLID SLAB SOD	2.06
CRL SH 19	28	STA. 606+43	STA. 594+50 TO STA. 610+00	SE	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT DIKE, SILT FENCE, AND SOLID SLAB SOD	2.66
CRL SH 19	29	TOE OF SLOPE	STA. 603+86 TO STA. 617+16	NE	CROWN OF ROAD TO TOE OF SLOPE LT.	SILT FENCE AND SOLID SLAB SOD	3.13
CRL SH 19	30	STA. 618+79	STA. 610+00 TO STA. 624+88	SE & NW	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT FENCE AND SOLID SLAB SOD	2.09
CRL SH 19	31	STA. 618+50	STA. 617+16 TO STA. 631+50	NW	CROWN OF ROAD TO TOE OF SLOPE LT.	SEDIMENT TRAP, SILT DIKE, SILT FENCE, AND SOLID SLAB SOD	3.12
CRL SH 19	32	TOE OF SLOPE	STA. 624+88 TO STA. 631+50	SW	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT DIKE, SILT FENCE, AND SOLID SLAB SOD	1.11
CRL SH 19	33	STA. 631+50	STA. 631+50 TO STA. 649+79	NW	CROWN OF ROAD TO TOE OF SLOPE RT.	SEDIMENT TRAP, SILT DIKE, SILT FENCE, AND SOLID SLAB SOD	2.63
CRL SH 19	34	STA. 632+05	STA. 631+50 TO STA. 641+50	NW	CROWN OF ROAD TO TOE OF SLOPE LT.	SEDIMENT TRAP, SILT DIKE, AND SOLID SLAB SOD	2.37
CRL SH 19	35	STA. 641+50	STA. 641+50 TO STA. 649+79	NW	CROWN OF ROAD TO TOE OF SLOPE LT.	SEDIMENT TRAP, SILT DIKE, AND SOLID SLAB SOD	1.85
CRL NS 290	36	STA. 46+50	STA. 44+00 TO STA. 46+50	N	CROWN OF ROAD TO TOE OF SLOPE LT.	SILT DIKE AND SOLID SLAB SOD	0.16
CRL NS 290	37	STA. 46+50	STA. 43+32 TO STA. 46+50	N	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT DIKE AND SOLID SLAB SOD	0.19
CRL NS 290	38	STA. 40+85	STA. 40+00 TO STA. 44+00	S	CROWN OF ROAD TO TOE OF SLOPE LT.	SILT DIKE AND SOLID SLAB SOD	0.37
CRL NS 290	39	STA. 35+85	STA. 34+50 TO STA. 40+00	S	CROWN OF ROAD TO TOE OF SLOPE LT.	SILT DIKE, SILT FENCE, AND SOLID SLAB SOD	0.44
CRL SH 19	40	STA. 654+35	STA. 650+53 TO STA. 656+00	SE	CROWN OF ROAD TO TOE OF SLOPE LT.	SILT DIKE AND SOLID SLAB SOD	1.60
CRL SH 19	41	STA. 652+94	STA. 650+53 TO STA. 663+00	W	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT DIKE, SILT FENCE, AND SOLID SLAB SOD	2.20
CRL NS 290	42	STA. 33+80	STA. 33+80 TO STA. 35+00	S	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT DIKE AND SOLID SLAB SOD	0.07
CRL SH 19	43	STA. 656+00	STA. 656+00 TO STA. 663+99	NW	CROWN OF ROAD TO TOE OF SLOPE LT.	SEDIMENT TRAP, SILT DIKE, AND SOLID SLAB SOD	1.81
CRL SH 19	44	STA. 663+99	STA. 663+00 TO STA. 670+65	NW	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT DIKE, SILT FENCE, AND SOLID SLAB SOD	1.04
CRL SH 19	45	STA. 663+99	STA. 663+99 TO STA. 670+87	NW	CROWN OF ROAD TO TOE OF SLOPE LT.	SEDIMENT TRAP, SILT DIKE, AND SOLID SLAB SOD	1.53
CRL SH 19	46	STA. 684+00	STA. 670+65 TO STA. 684+00	SE	CROWN OF ROAD TO TOE OF SLOPE RT.	SEDIMENT TRAP, SILT DIKE, AND SOLID SLAB SOD	2.49
CRL SH 19	47	STA. 680+75	STA. 670+87 TO STA. 680+75	SE	CROWN OF ROAD TO TOE OF SLOPE LT.	SEDIMENT TRAP, SILT DIKE, AND SOLID SLAB SOD	2.24
CRL SH 19	48	STA. 684+90	STA. 684+00 TO STA. 690+18	SW	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT DIKE, SILT FENCE, AND SOLID SLAB SOD	1.48

SUMMARY OF DISTURBED DRAINAGE AREAS

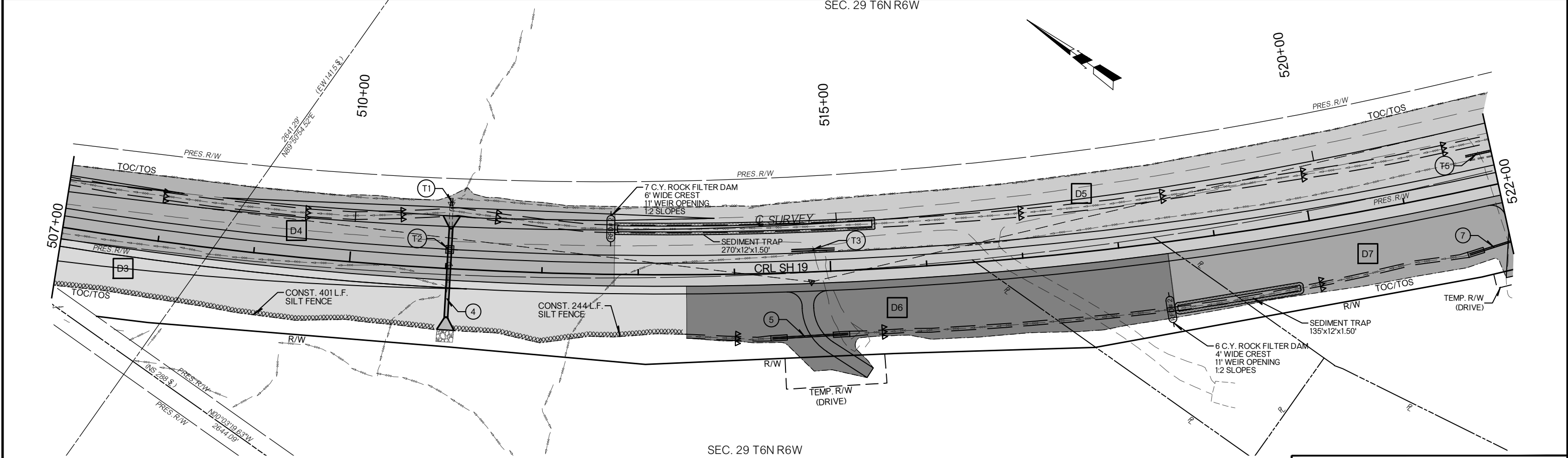
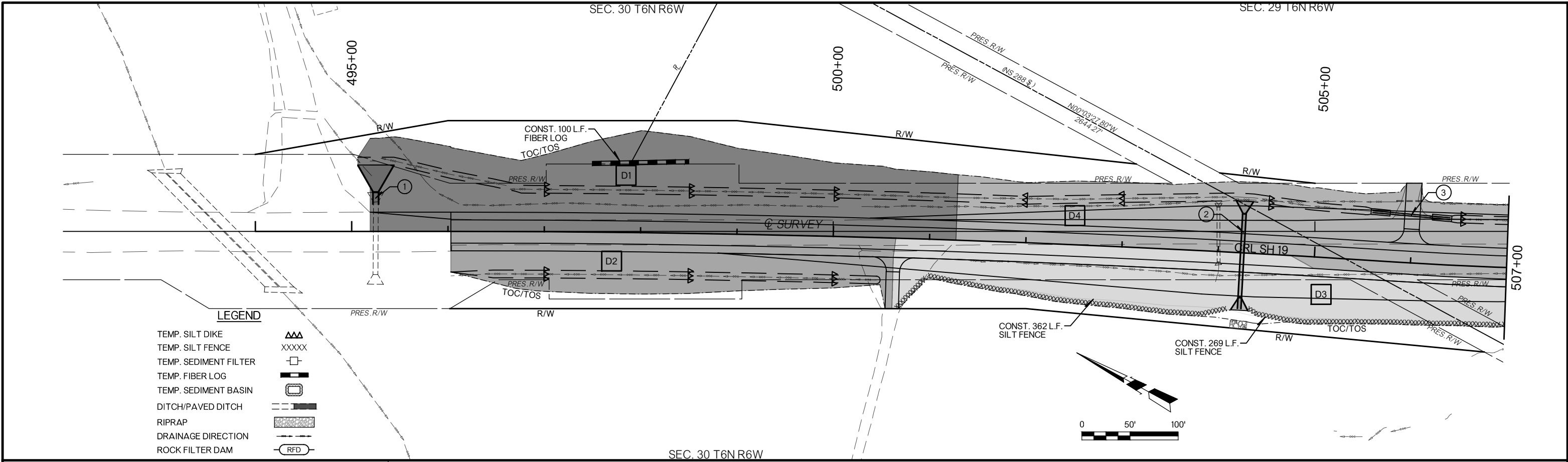
SUMMARY OF DISTURBED DRAINAGE AREAS

ALIGNMENT	DISTURBED AREA NO.	OUTFLOW LOCATION (STATION)	DISTURBED AREA (STATION TO STATION)	DIRECTION TO OUTFALL	DESCRIPTION OF AREA	EROSION CONTROL MEASURES	DISTURBED AREA (AC)
CRL SH 19	49	STA. 682+88	STA. 680+75 TO STA. 688+75	NW	CROWN OF ROAD TO TOE OF SLOPE LT.	SILT DIKE AND SOLID SLAB SOD	1.97
CRL SH 19	50	STA. 692+21	STA. 688+75 TO STA. 695+50	SE & NW	CROWN OF ROAD TO TOE OF SLOPE LT.	SILT DIKE AND SOLID SLAB SOD	1.61
CRL SH 19	51	TOE OF SLOPE	STA. 690+18 TO STA. 697+50	SW	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT FENCE AND SOLID SLAB SOD	1.18
CRL SH 19	52	TOE OF SLOPE	STA. 697+50 TO STA. 709+34	SW	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT DIKE, SILT FENCE, AND SOLID SLAB SOD	1.67
CRL SH 19	53	STA. 705+75	STA. 695+50 TO STA. 705+75	SE	CROWN OF ROAD TO TOE OF SLOPE LT.	SEDIMENT TRAP, SILT DIKE, AND SOLID SLAB SOD	2.42
CRL SH 19	54	STA. 706+12	STA. 705+75 TO STA. 708+50	NW	RT SHOULDER TO TOE OF SLOPE LT.	SEDIMENT FILTER, SILT DIKE, AND SOLID SLAB SOD	0.75
CRL SH 19	55	TOE OF SLOPE	STA. 709+34 TO STA. 717+92	SW	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT DIKE, SILT FENCE, AND SOLID SLAB SOD	1.52
CRL SH 19	56	STA. 716+87	STA. 708+50 TO STA. 717+92	SE	CROWN OF ROAD TO TOE OF SLOPE LT.	SEDIMENT FILTER, SILT DIKE, AND SOLID SLAB SOD	1.93
CRL SH 19	57	TOE OF SLOPE	STA. 717+92 TO STA. 732+50	S	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT DIKE, SILT FENCE, AND SOLID SLAB SOD	2.74
CRL SH 19	58	STA. 728+65	STA. 717+92 TO STA. 731+00	SE	CROWN OF ROAD TO TOE OF SLOPE LT.	SILT DIKE AND SOLID SLAB SOD	2.65
CRL SH 19	59	STA. 736+34	STA. 731+00 TO STA. 738+00	SE	CROWN OF ROAD TO TOE OF SLOPE LT.	SILT DIKE AND SOLID SLAB SOD	1.26
CRL SH 19	60	STA. 736+34	STA. 732+50 TO STA. 739+00	SE	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT DIKE AND SOLID SLAB SOD	1.07
CRL SH 19	61	STA. 745+00	STA. 739+00 TO STA. 745+00	SE	CROWN OF ROAD TO TOE OF SLOPE RT.	SEDIMENT TRAP, SILT DIKE, AND SOLID SLAB SOD	0.83
CRL SH 19	62	STA. 752+50	STA. 738+00 TO STA. 752+50	SE	CROWN OF ROAD TO TOE OF SLOPE LT.	SEDIMENT TRAP, SILT DIKE, SILT FENCE, AND SOLID SLAB SOD	2.78
CRL SH 19	64	TOE OF SLOPE	STA. 745+00 TO STA. 742+85	SW	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT FENCE AND SOLID SLAB SOD	0.90
CRL SH 19	65	STA. 756+20	STA. 752+85 TO STA. 763+00	NW & SE	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT DIKE, SILT FENCE, AND SOLID SLAB SOD	1.73
CRL SH 19	66	STA. 757+60	STA. 752+50 TO STA. 763+00	NW & SE	CROWN OF ROAD TO TOE OF SLOPE LT.	SILT DIKE, SILT FENCE, AND SOLID SLAB SOD	2.31
CRL SH 19	67	STA. 766+21	STA. 763+00 TO STA. 767+00	SE	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT DIKE AND SOLID SLAB SOD	0.85
CRL SH 19	68	STA. 766+21	STA. 763+00 TO STA. 767+00	SE	CROWN OF ROAD TO TOE OF SLOPE LT.	SILT DIKE AND SOLID SLAB SOD	0.93
CRL SH 19	69	STA. 767+00	STA. 767+00 TO STA. 780+44	NW	CROWN OF ROAD TO TOE OF SLOPE RT.	SEDIMENT TRAP, SILT DIKE, AND SOLID SLAB SOD	2.06
CRL SH 19	70	STA. 767+00	STA. 767+00 TO STA. 779+00	NW	CROWN OF ROAD TO TOE OF SLOPE LT.	SEDIMENT TRAP, SILT DIKE, AND SOLID SLAB SOD	2.37
CRL SH 19	71	STA. 778+33	STA. 779+00 TO STA. 781+07	N	CROWN OF ROAD TO TOE OF SLOPE LT.	SILT DIKE AND SOLID SLAB SOD	0.66
CRL SH 19	72	STA. 780+43	STA. 780+44 TO STA. 781+07	N	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT DIKE AND SOLID SLAB SOD	0.32
CRL SH 19	73	STA. 788+12	STA. 781+07 TO STA. 789+16	SE	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT DIKE AND SOLID SLAB SOD	1.48
CRL SH 19	74	STA. 778+60	STA. 781+07 TO STA. 783+46	N	CROWN OF ROAD TO TOE OF SLOPE LT.	SILT DIKE AND SOLID SLAB SOD	0.73
CRL SH 19	75	STA. 789+53	STA. 783+46 TO STA. 792+42	NE	CROWN OF ROAD TO TOE OF SLOPE LT.	SEDIMENT FILTER, SILT DIKE, AND SOLID SLAB SOD	1.81
CRL SH 19	76	STA. 792+63	STA. 789+16 TO STA. 795+46	SE & NW	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT FENCE AND SOLID SLAB SOD	0.86
CRL SH 19	77	STA. 793+24	STA. 792+42 TO STA. 796+50	NW	CROWN OF ROAD TO TOE OF SLOPE LT.	SILT DIKE AND SOLID SLAB SOD	0.74
CRL SH 19	78	STA. 798+55	STA. 796+50 TO STA. 801+90	SE & NW	CROWN OF ROAD TO TOE OF SLOPE LT.	SILT DIKE AND SOLID SLAB SOD	0.85
CRL SH 19	79	STA. 798+55	STA. 795+46 TO STA. 803+00	SE & NW	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT DIKE AND SOLID SLAB SOD	1.35
CRL SH 19	80	STA. 805+00	STA. 801+90 TO STA. 805+00	SE	CROWN OF ROAD TO TOE OF SLOPE LT.	SILT DIKE AND SOLID SLAB SOD	0.55
CRL SH 19	81	STA. 805+00	STA. 803+00 TO STA. 805+00	SE	CROWN OF ROAD TO TOE OF SLOPE RT.	SILT DIKE AND SOLID SLAB SOD	0.38

NOTES:

1) PLACE SOLID SLAB SOD IMMEDIATELY UPON COMPLETION OF CONSTRUCTION.

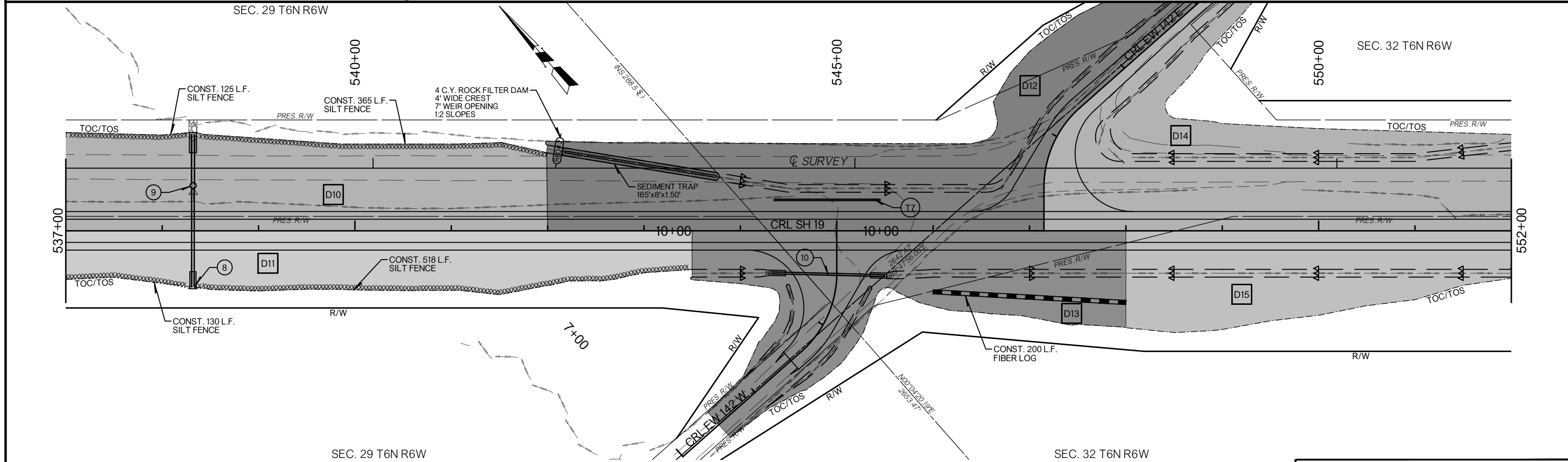
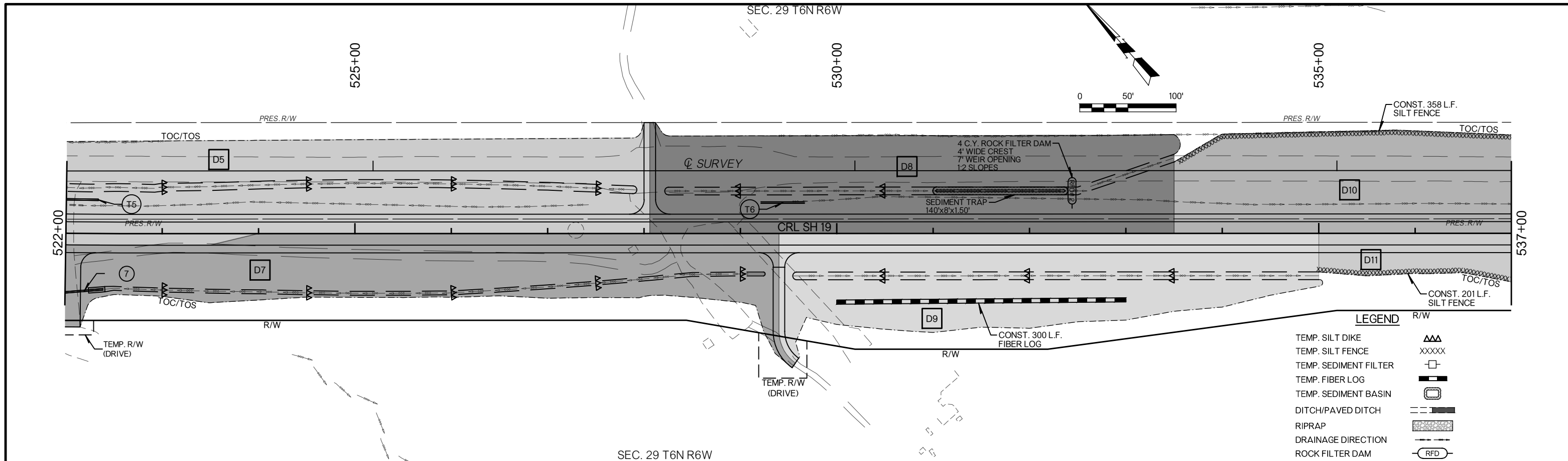
SUMMARY OF DISTURBED DRAINAGE AREAS



EROSION CONTROL

State Job No. 30425(07) Sheet No. R068

GRADY COUNTY SH 19

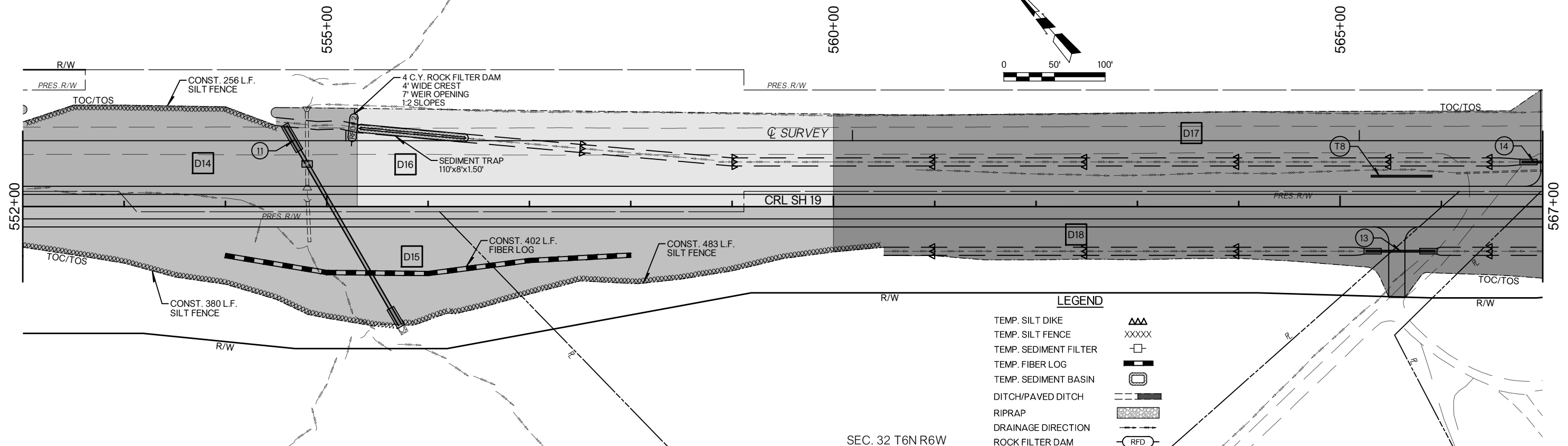
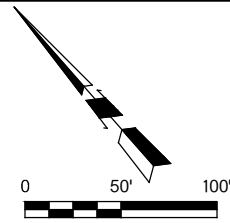


EROSION CONTROL

State Job No. 30425(07) Sheet No. R069

GRADY COUNTY SH 19

SEC. 32 T6N R6W



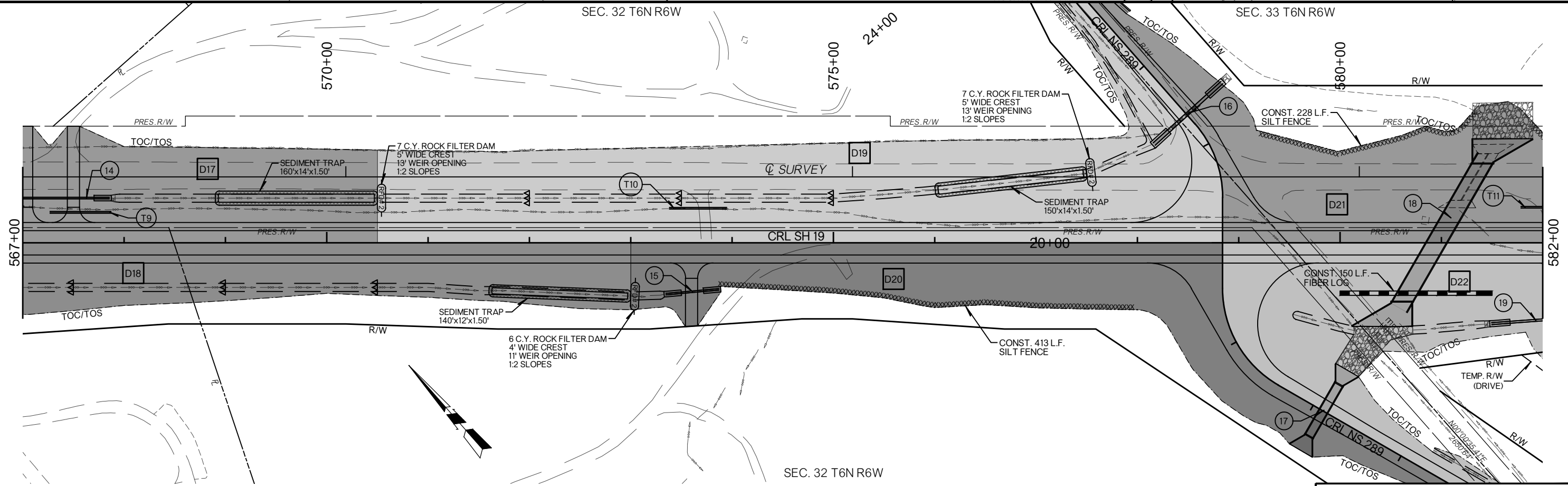
LEGEND

- TEMP. SILT DIKE
- TEMP. SILT FENCE
- TEMP. SEDIMENT FILTER
- TEMP. FIBER LOG
- TEMP. SEDIMENT BASIN
- DITCH/PAVED DITCH
- RIPRAP
- DRAINAGE DIRECTION
- ROCK FILTER DAM

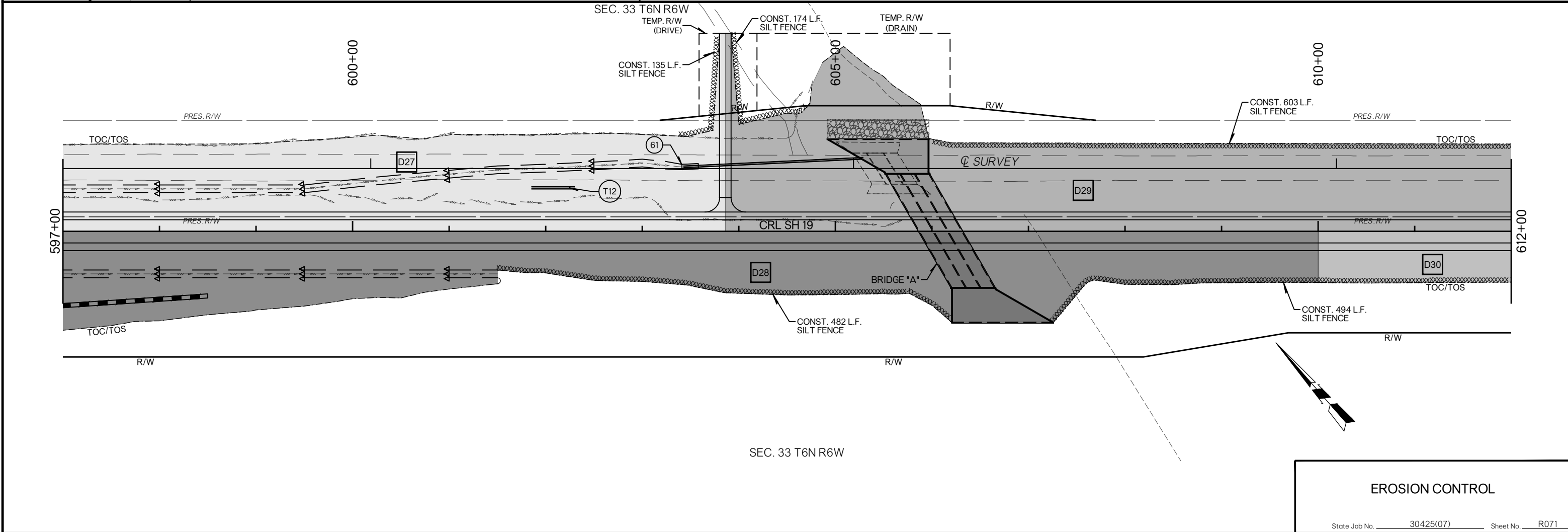
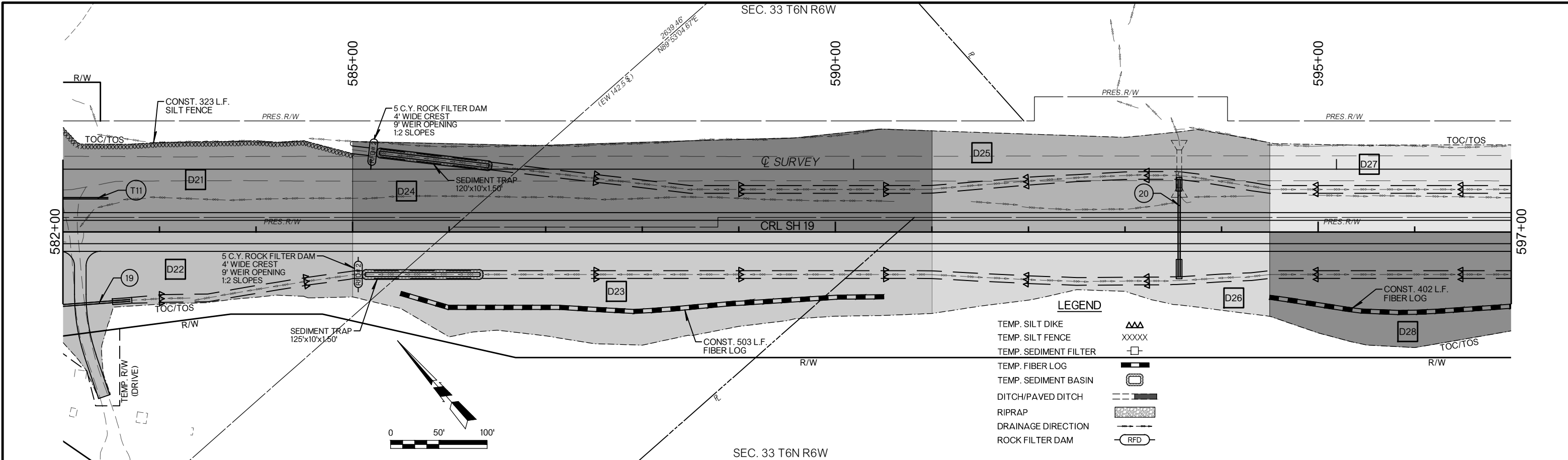
SEC. 32 T6N R6W

SEC. 32 T6N R6W

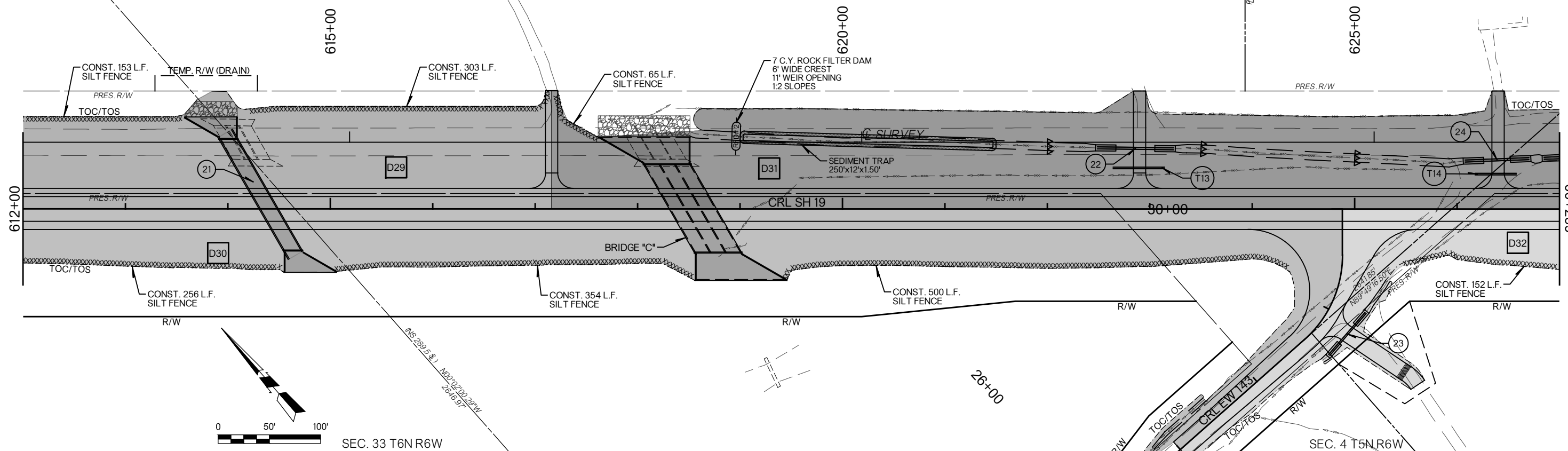
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EROSION CONTROL



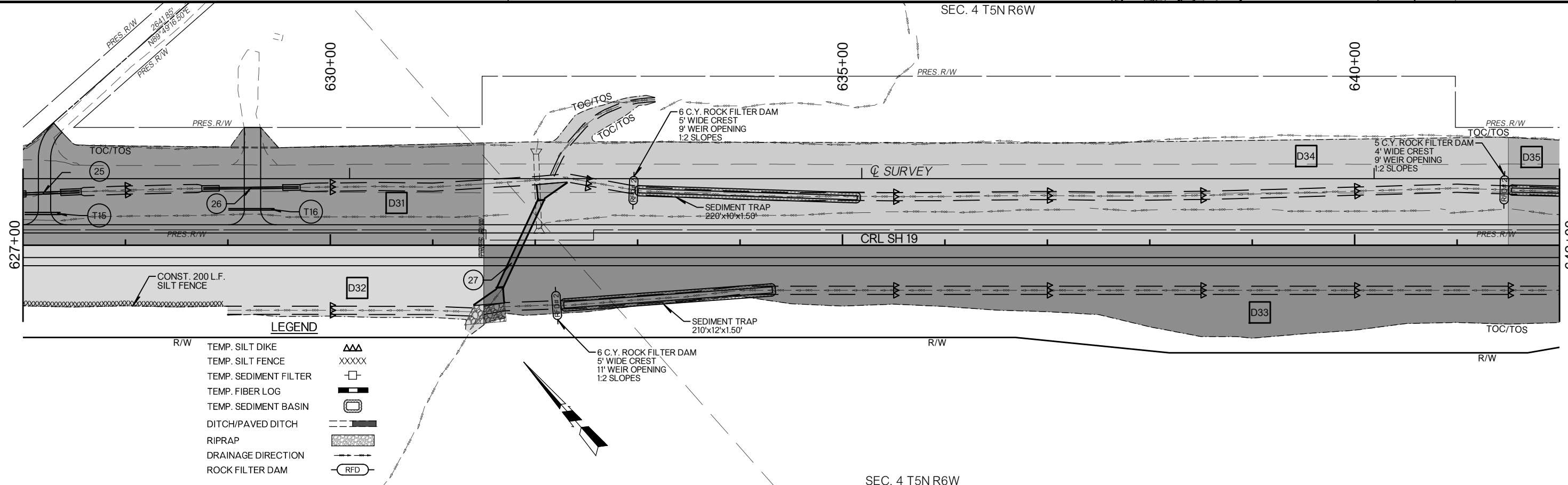
SEC. 33 T6N R6W



SEC. 33 T6N R6W

SEC. 4 T5N R6W

SEC. 4 T5N R6W



SEC. 4 T5N R6W

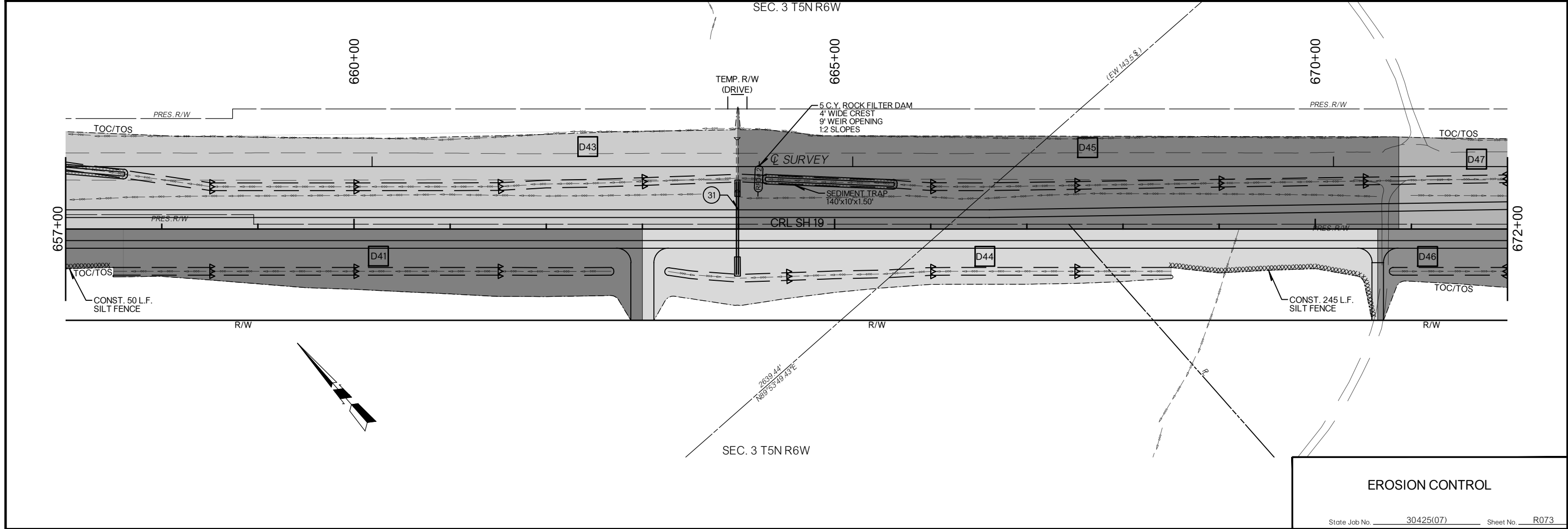
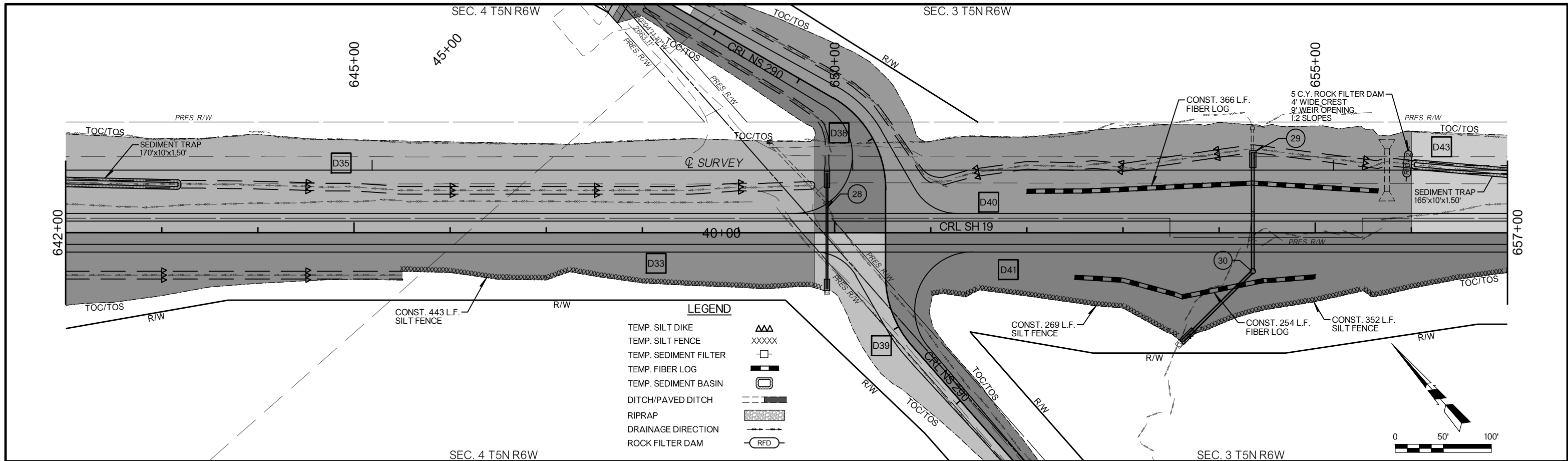
LEGEND

- TEMP. SILT DIKE
- TEMP. SILT FENCE
- TEMP. SEDIMENT FILTER
- TEMP. FIBER LOG
- TEMP. SEDIMENT BASIN
- DITCH/PAVED DITCH
- RIPRAP
- DRAINAGE DIRECTION
- ROCK FILTER DAM



EROSION CONTROL

State Job No. 30425(07) Sheet No. R072

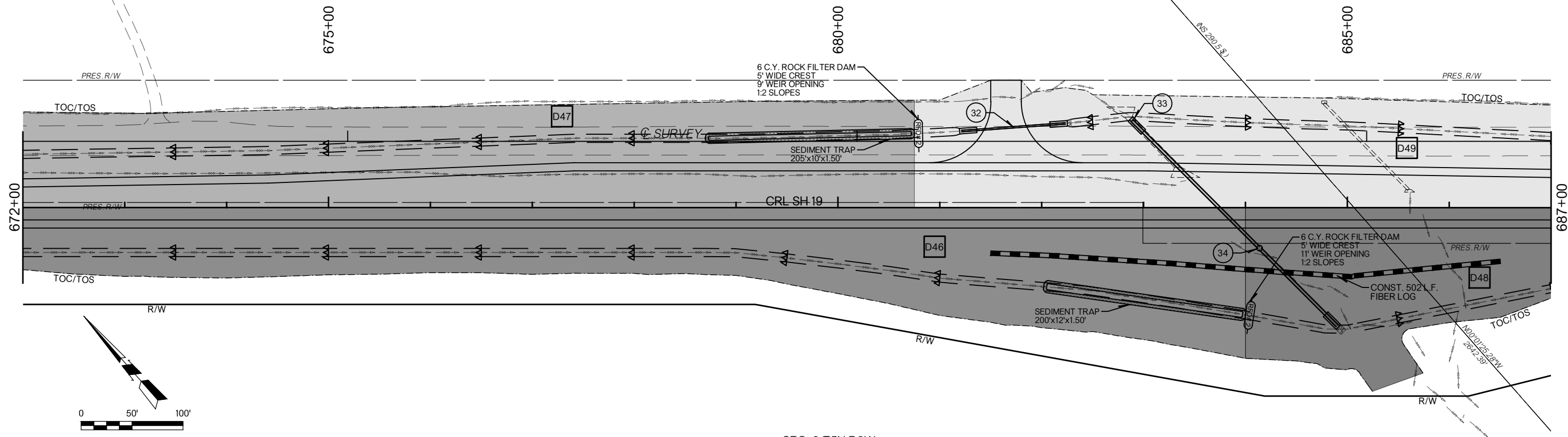


EROSION CONTROL

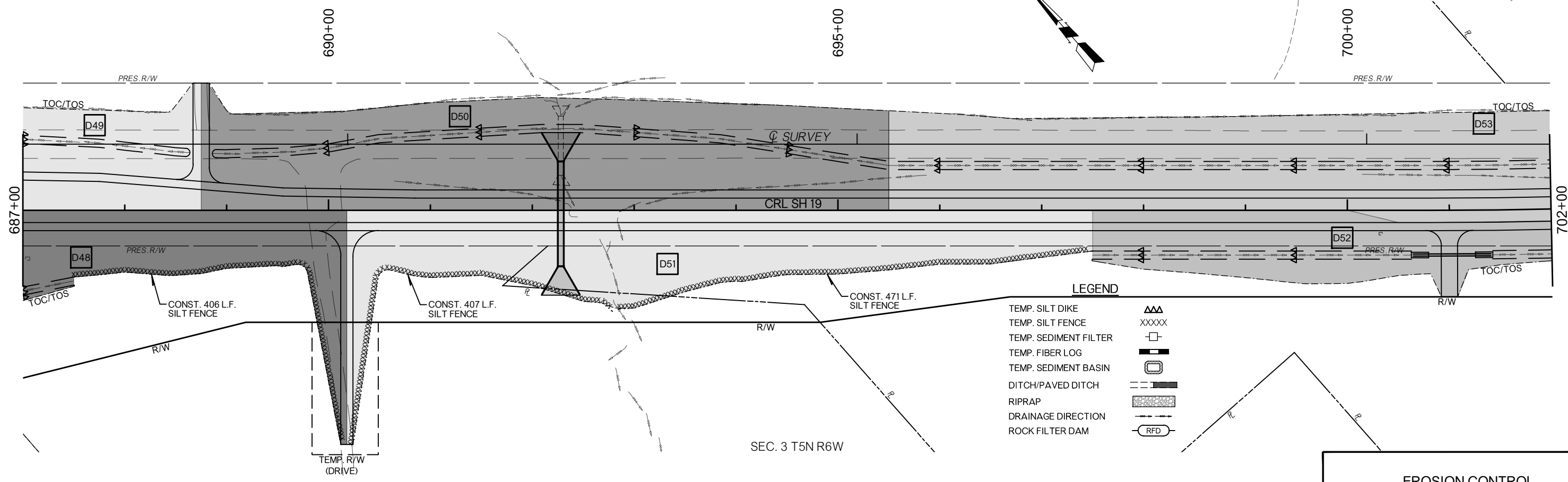
State Job No. 30425(07) Sheet No. R073

GRADY COUNTY SH 19

SEC. 3 T5N R6W



SEC. 3 T5N R6W



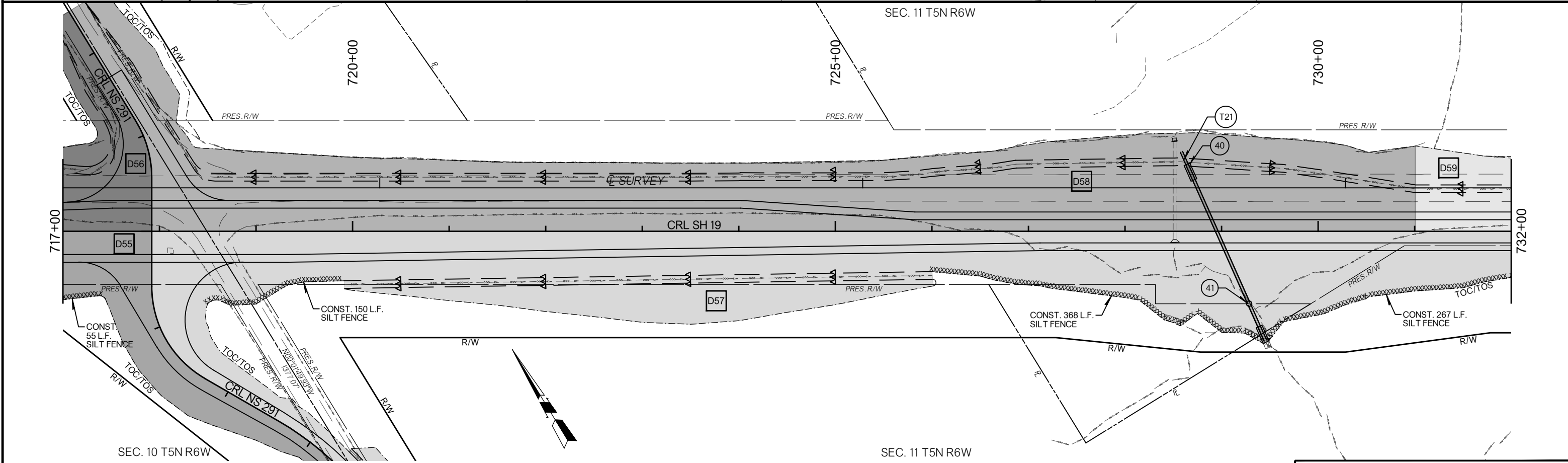
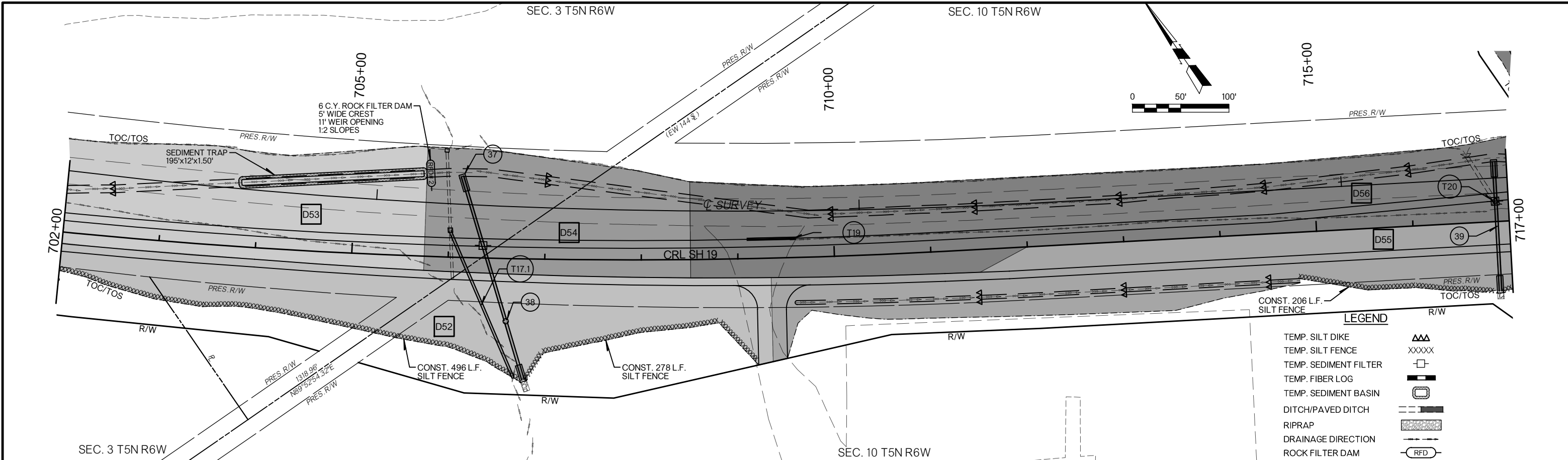
LEGEND

- TEMP. SILT DIKE
- TEMP. SILT FENCE
- TEMP. SEDIMENT FILTER
- TEMP. FIBER LOG
- TEMP. SEDIMENT BASIN
- DITCH/PAVED DITCH
- RIPRAP
- DRAINAGE DIRECTION
- ROCK FILTER DAM

EROSION CONTROL

State Job No. 30425(07) Sheet No. R074

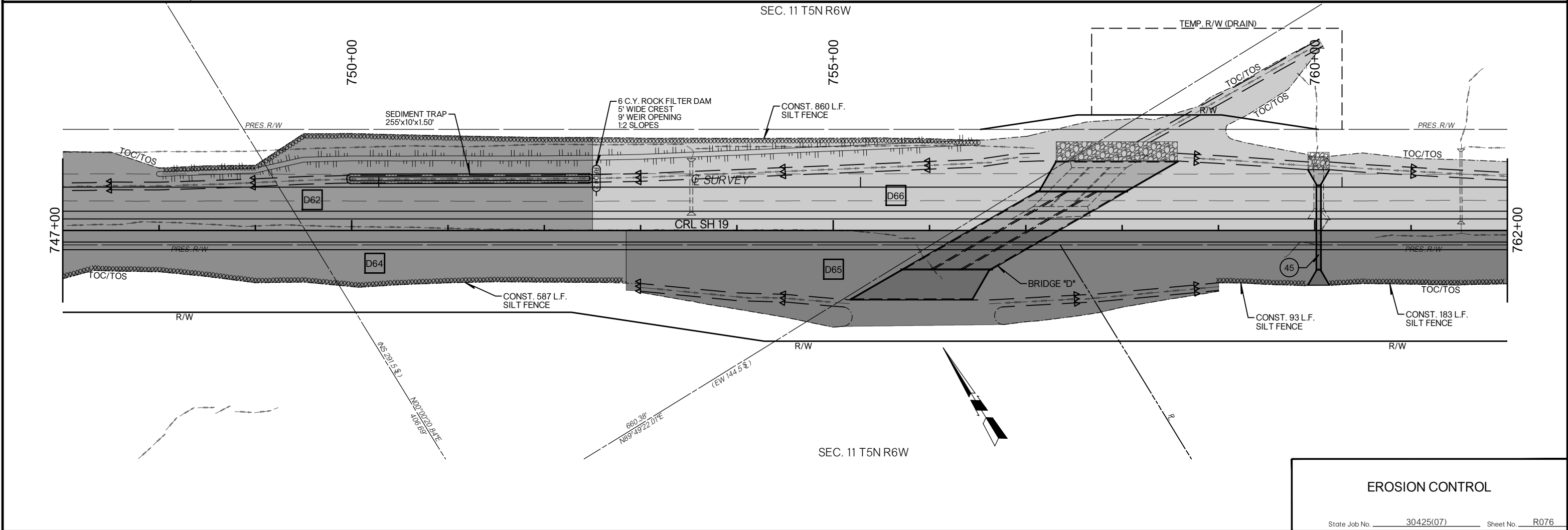
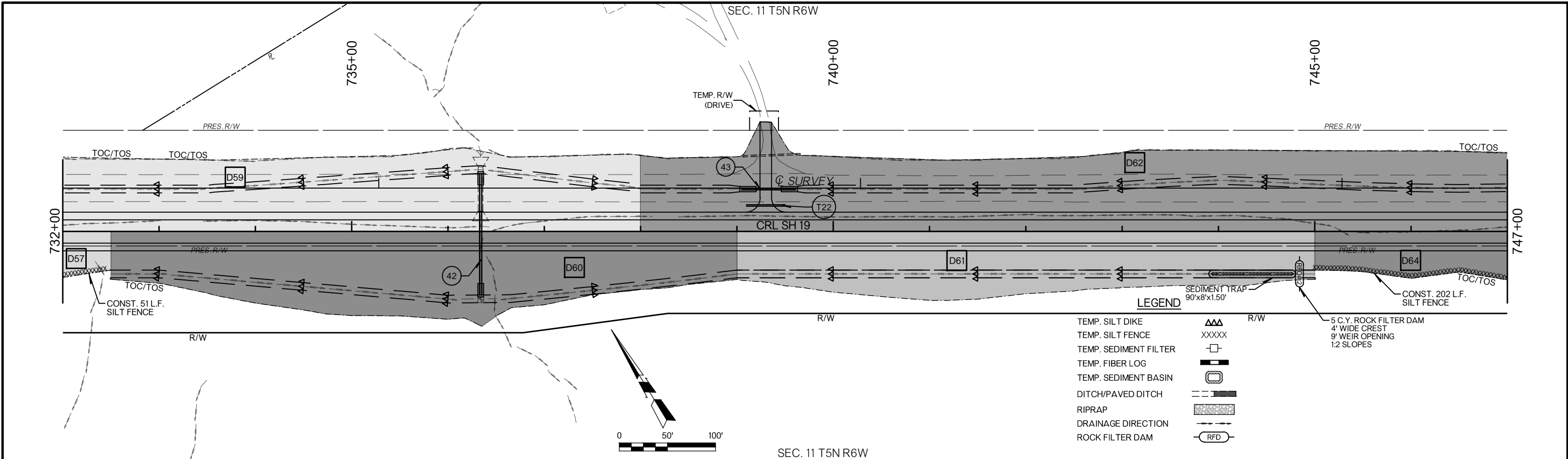
SH 19 GRADY COUNTY



EROSION CONTROL

State Job No. 30425(07) Sheet No. R075

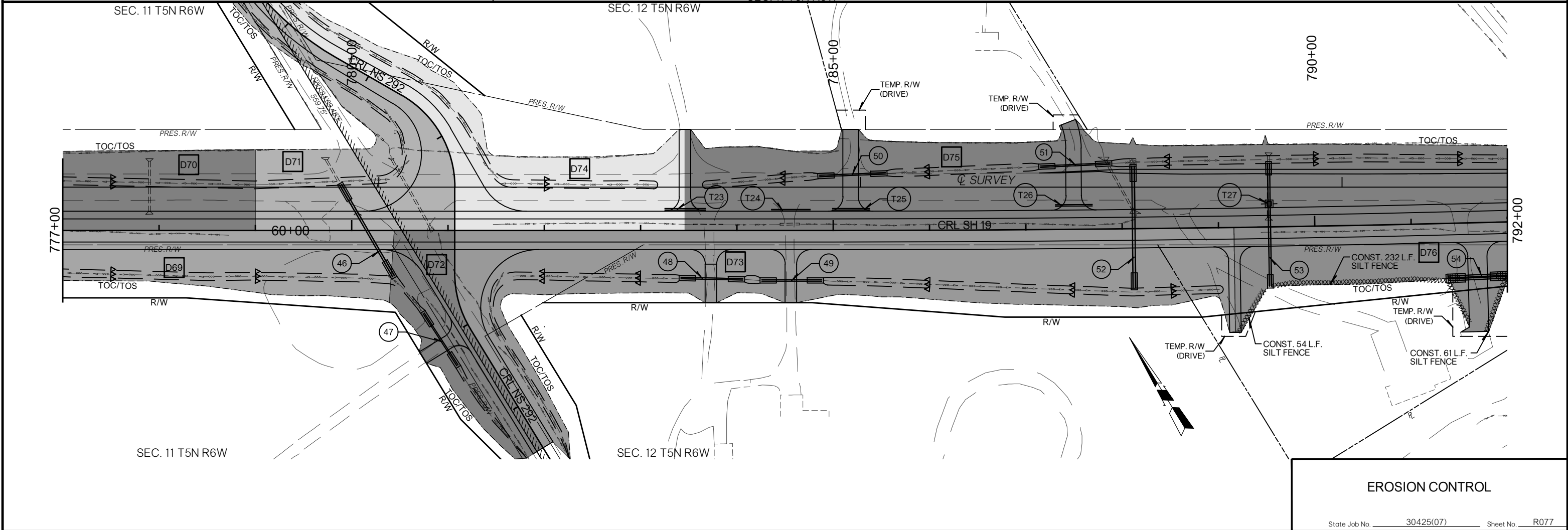
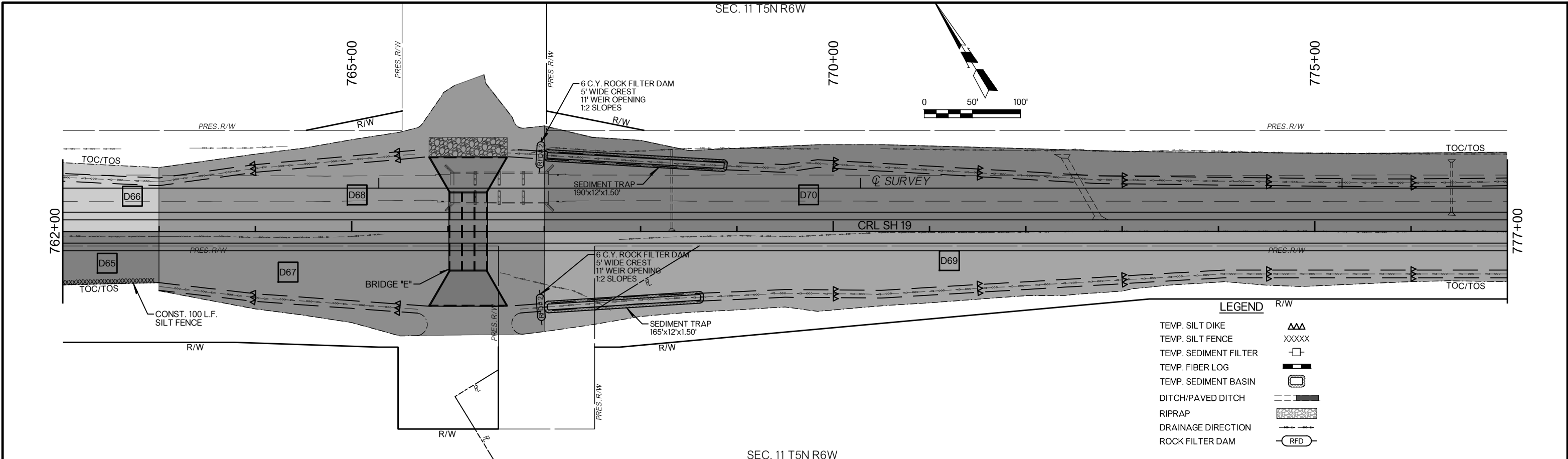
GRADY COUNTY SH 19

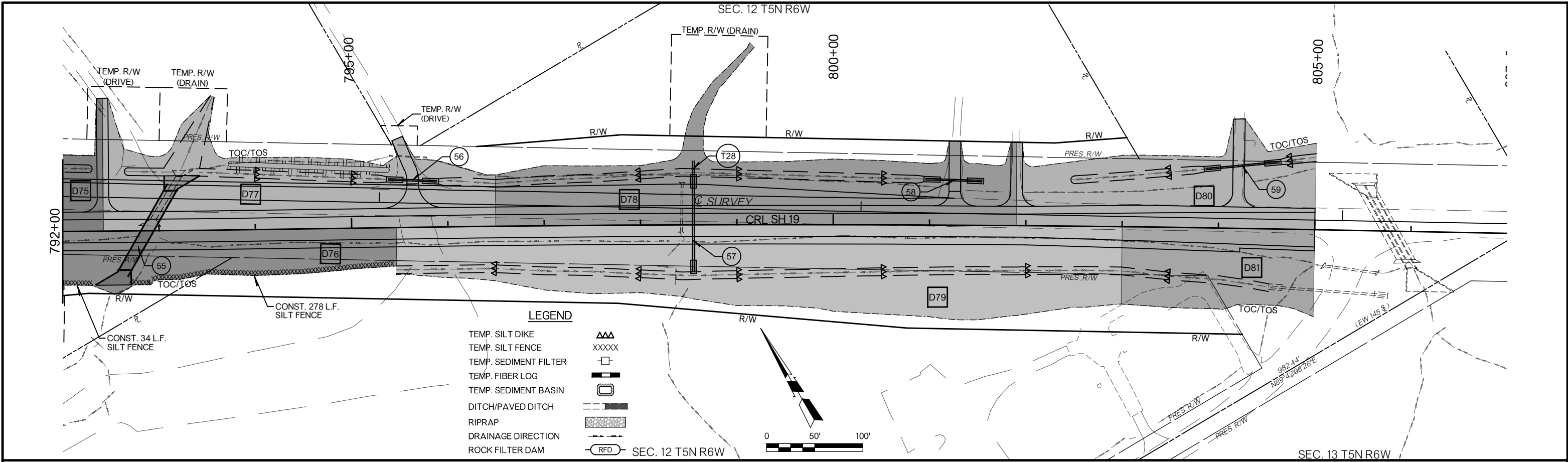


EROSION CONTROL

State Job No. 30425(07) Sheet No. R076

GRADY COUNTY SH 19





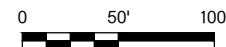
EROSION CONTROL

State Job No. 30425(07) Sheet No. R078

GRADY COUNTY SH 19

SEC. 29 T6N R6W

SEC. 29 T6N R6W



14+00



LEGEND

- TEMP. SILT DIKE
- TEMP. SILT FENCE
- TEMP. SEDIMENT FILTER
- TEMP. FIBER LOG
- TEMP. SEDIMENT BASIN
- DITCH/PAVED DITCH
- RIPRAP
- DRAINAGE DIRECTION
- ROCK FILTER DAM



SEC. 32 T6N R6W
SEC. 32 T6N R6W

SEC. 32 T6N R6W
SEC. 32 T6N R6W

13+00

15+00

24+00

CONST. 131 L.F.
SILT FENCE

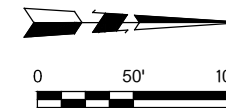
CONST. 207 L.F.
SILT FENCE

(NS 289)

CONST. 105 L.F.
SILT FENCE

CONST. 56 L.F.
SILT FENCE

CONST. 113 L.F.
SILT FENCE



SEC. 33 T6N R6W

SEC. 33 T6N R6W

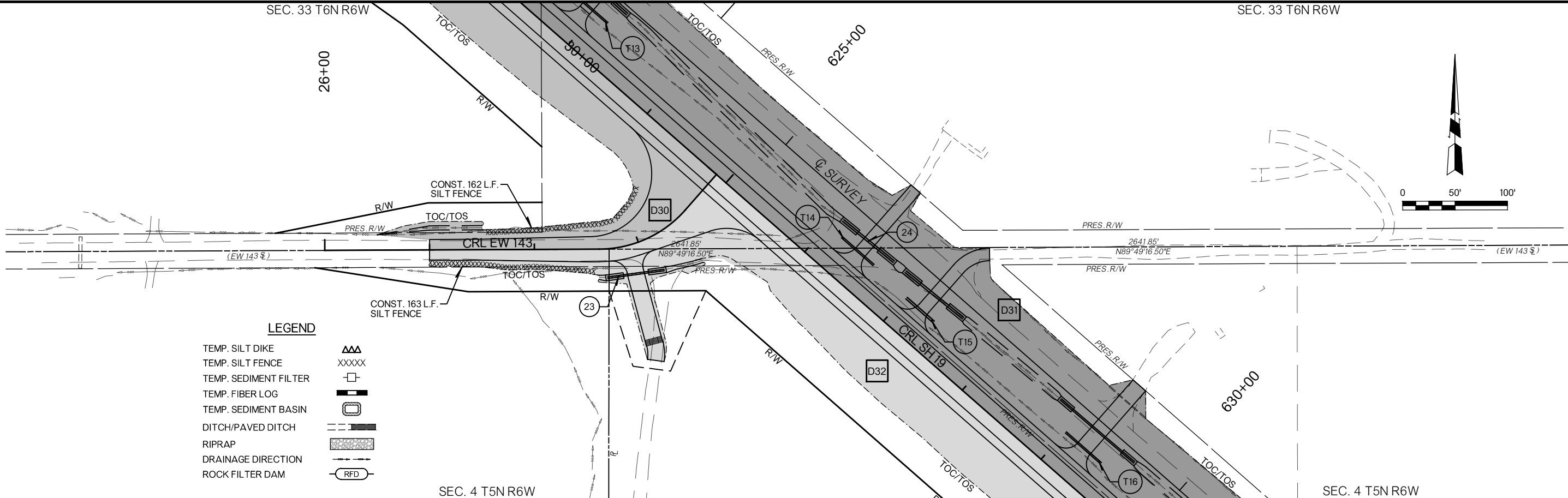
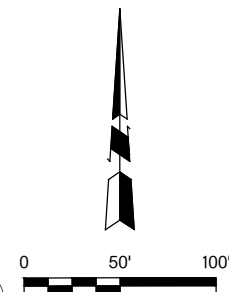
EROSION CONTROL

SEC. 33 T6N R6W

SEC. 33 T6N R6W

26+00

625+00



LEGEND

- TEMP. SILT DIKE
- TEMP. SILT FENCE
- TEMP. SEDIMENT FILTER
- TEMP. FIBER LOG
- TEMP. SEDIMENT BASIN
- DITCH/PAVED DITCH
- RIPRAP
- DRAINAGE DIRECTION
- ROCK FILTER DAM

SEC. 4 T5N R6W

SEC. 4 T5N R6W

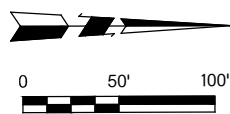
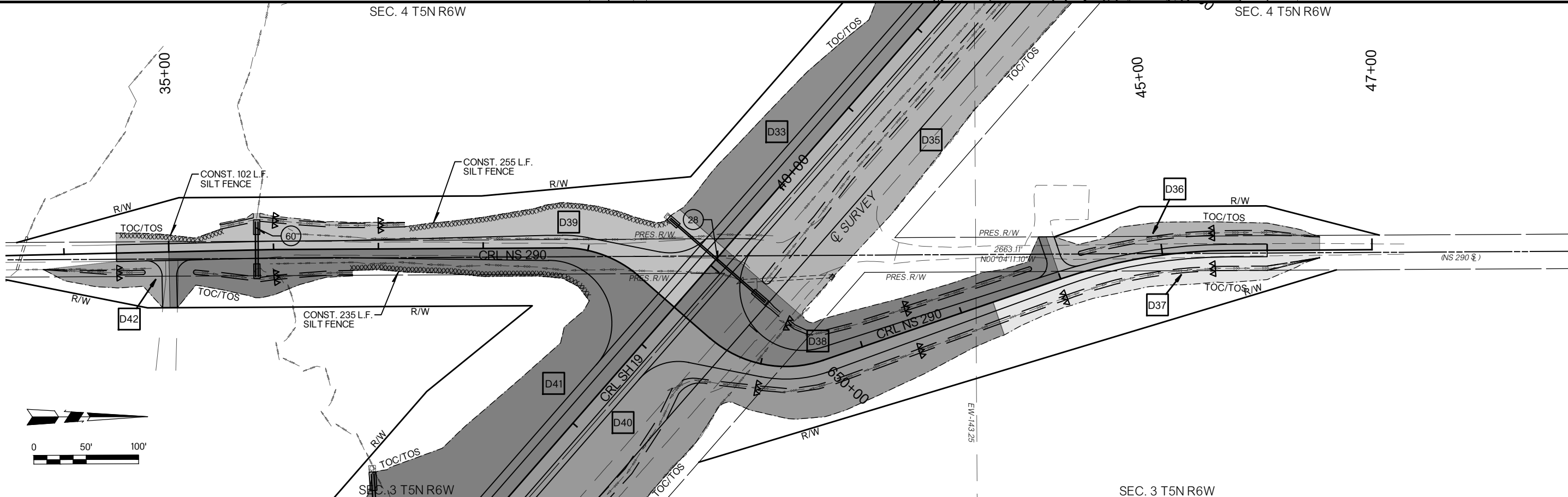
SEC. 4 T5N R6W

SEC. 4 T5N R6W

35+00

45+00

47+00



SEC. 3 T5N R6W

SEC. 3 T5N R6W

EROSION CONTROL

SEC. 10 T5N R6W

SEC. 10 T5N R6W

44+00

45+00

715+00



- LEGEND**
- TEMP. SILT DIKE
 - TEMP. SILT FENCE
 - TEMP. SEDIMENT FILTER
 - TEMP. FIBER LOG
 - TEMP. SEDIMENT BASIN
 - DITCH/PAVED DITCH
 - RIPRAP
 - DRAINAGE DIRECTION
 - ROCK FILTER DAM

CONST. 298 L.F. SILT FENCE

CONST. 225 L.F. SILT FENCE

CRL NS 291

CRL NS 291

CRL SH 191

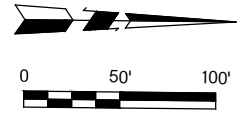
SEC. 11 T5N R6W

SEC. 11 T5N R6W

SEC. 11 T5N R6W

57+00

65+00

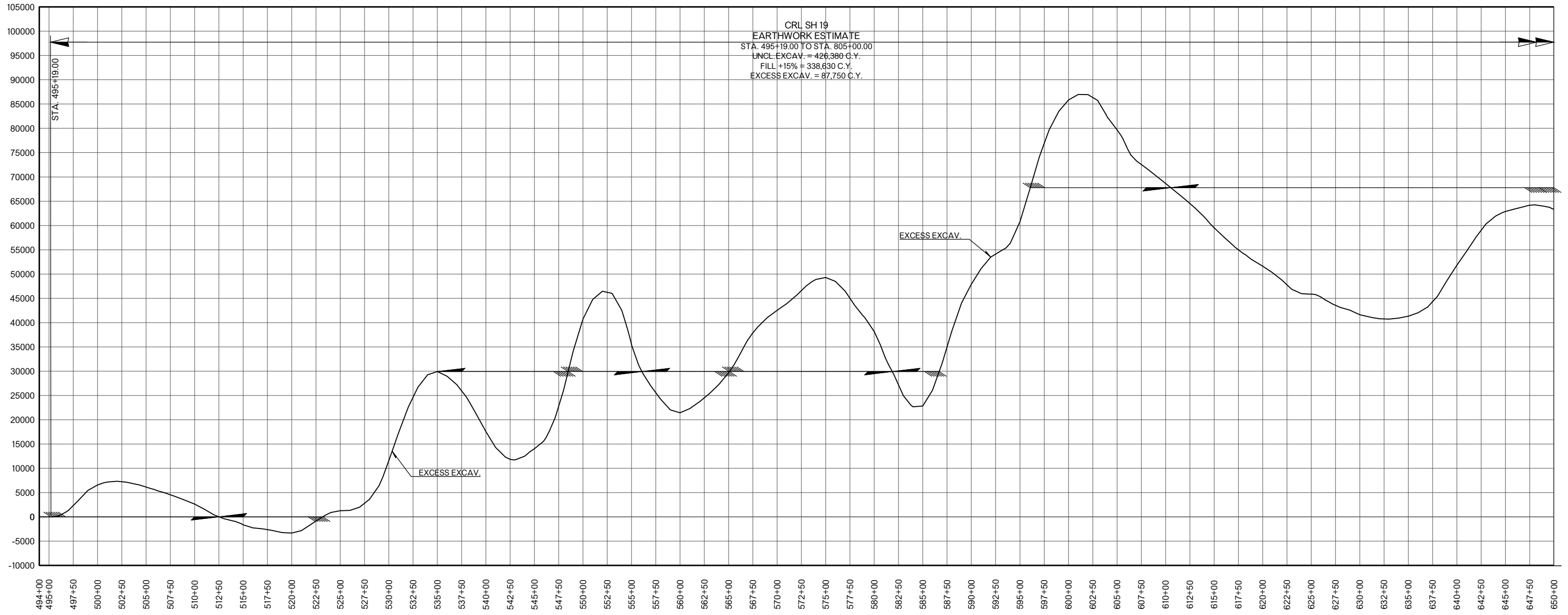


ALEX CITY LIMITS

SEC. 12 T5N R6W

SEC. 12 T5N R6W

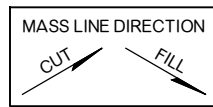
EROSION CONTROL



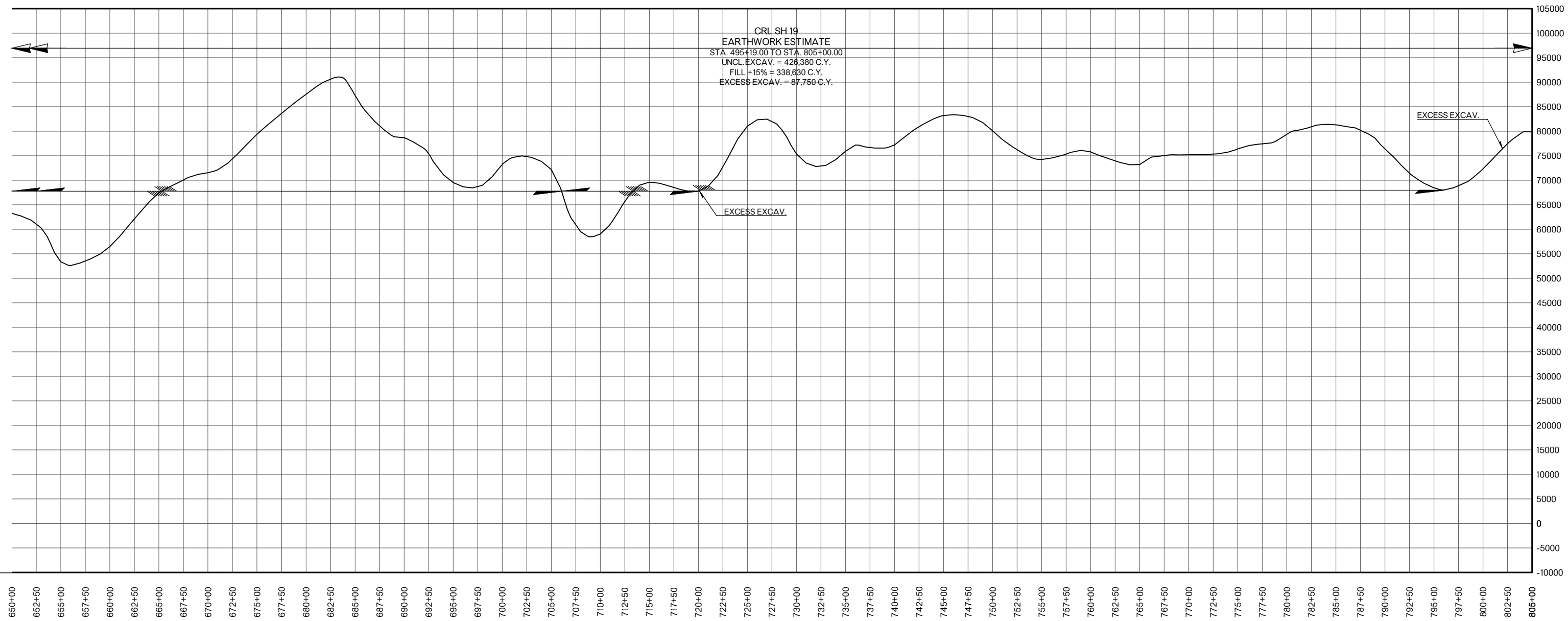
CRL SH 19
 EARTHWORK ESTIMATE
 STA. 495+19.00 TO STA. 805+00.00
 UNCL. EXCAV. = 426,380 C.Y.
 FILL +15% = 338,630 C.Y.
 EXCESS EXCAV. = 87,750 C.Y.

THIS MASS LINE, AS DEPICTED, REPRESENTS THE OVERALL SH 19 EARTHWORK PRIOR TO CONSTRUCTION PHASING. IT SHOULD BE USED IN THE DETERMINATION OF HAULS AND GENERAL AREAS OF EXCESS EXCAVATION OR UNCLASSIFIED BORROW. FOR ACTUAL PHASED EARTHWORK QUANTITIES, SEE SUMMARY OF EARTHWORK.

MASS DIAGRAM PROVIDED FOR BIDDING PURPOSES ONLY. ACTUAL BALANCE POINTS TO BE DETERMINED BY CONTRACTOR AND VOLUME OF MATERIAL ENCOUNTERED DURING GRADING OPERATIONS. WHENEVER POSSIBLE, THE CONTRACTOR SHALL SEQUENCE EARTHWORK OPERATIONS IN ORDER TO OBTAIN THE MATERIAL FROM THE CUT SECTIONS FOR USE AS FILL RATHER THAN OBTAINING UNCLASSIFIED BORROW. MATERIAL DEPICTED AS WASTE SHALL ONLY BE CONSIDERED WASTE ONCE ALL EARTHWORK OPERATIONS HAVE BEEN COMPLETED. THIS MATERIAL SHALL BE USED TO REDUCE THE NEED FOR UNCLASSIFIED BORROW AT ANY LOCATION AND TIME THROUGH THE DURATION OF THE PROJECT.

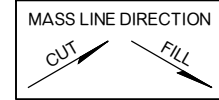


MASS DIAGRAMS



THIS MASS LINE, AS DEPICTED, REPRESENTS THE OVERALL SH 19 EARTHWORK PRIOR TO CONSTRUCTION PHASING. IT SHOULD BE USED IN THE DETERMINATION OF HAULS AND GENERAL AREAS OF EXCESS EXCAVATION OR UNCLASSIFIED BORROW. FOR ACTUAL PHASED EARTHWORK QUANTITIES, SEE SUMMARY OF EARTHWORK.

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MASS DIAGRAMS

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				
DESCRIPTION		REVISIONS		DATE	

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

SURVEY OF
S.H. 19
SWO 5208(1)
J P NO. 30425(07)
GRADY
FROM 5.03 MILES EAST OF US-81,
EAST 3.84 MILES

INDEX OF SHEETS

1	TITLE SHEET
2-3	HISTORICAL LETTER
4	HISTORICAL LETTER, ALIGNMENT DATA, COGO PTS
5	COGO PTS
6	CHECK LEVEL LIST
7	GPS NETWORK MAP
8-15	SURVEY DATA SHEET
16-21	GEOMETRIC DATA SHEET

SURVEY BEGAN: 3/1/2016
SURVEY COMPLETED: 8/18/2017

PERSONNEL:	TITLE:
EDWARD R. SEATON	LICENSED LAND SURVEYOR
TONY ROBISON	LICENSED LAND SURVEYOR
BRANDON KAUFMAN	LICENSED LAND SURVEYOR
RYAN THOMSON	PARTY CHIEF
DAKOTA ROBISON	DRAFTSMAN
JASON APPLETON	INSTRUMENTMAN
JIM PEACHES	INSTRUMENTMAN
RAY GIPSON	INSTRUMENTMAN
CLIFF MEDFORD	CERTIFIED PHOTOGRAMMETRIST

EQUIPMENT:

5	TRIMBLE R8-3 GPS RECEIVER
1	TRIMBLE R8-2 GPS RECEIVER
3	TRIMBLE TSC3 DATA COLLECTOR
1	TRIMBLE TSC2 DATA COLLECTOR
1	TOPCON GPT-2003 TOTAL STATION
1	TRIMBLE M3 TOTAL STATION
1	TRIMBLE DINI DIGITAL LEVEL

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SWO 5208(1) J/P 30425(07) S.H. 19 CO. GRADY

HORIZONTAL CONTROL:
 Oklahoma Coordinate System of 1927 Zone.
 Oklahoma Coordinate System of 1983 SOUTH Zone.
 Oklahoma Dept. of Transportation Plane Coordinate System of 1927
 Oklahoma Dept. of Transportation Plane Coordinate System of 1983
 Arbitrary Coordinate System

HORIZONTAL PLANE DATUM DEFINITION:
 Oklahoma Department of Transportation coordinates were derived by multiplying the Oklahoma Coordinate Systems of 1927 or 1983 by the combined adjustment factor of 1.00010. The ODOT Coordinate System is 2350 feet above sea level.

1. **GPS NETWORK** adjusted to NGS HARN
 Stations NGS HARN Monument UNION, X42 and PRCO B
 A) Closure before adjustment X : Y Angles
 Trav. Length : is p. Angles : 1:
 B) : is 1st Order before adjustment.
 C) Method of Distance Measurement:
 Electronic X GPS Triangulation
 D) Instrument used for angles : Order

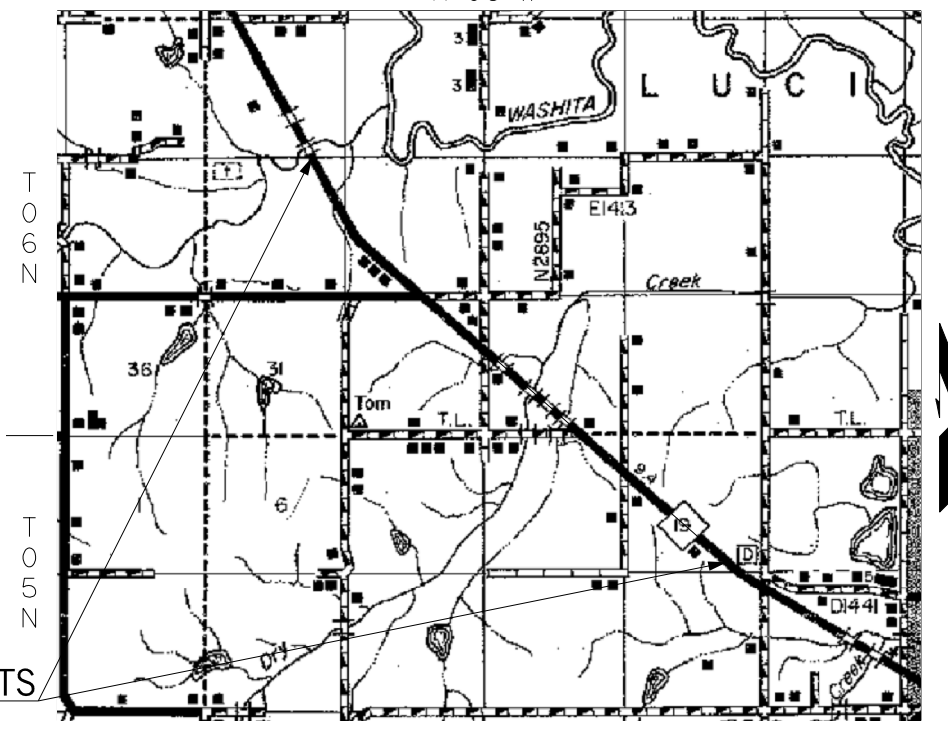
2. **GPS NETWORK** adjusted to : Order
 Stations : Y Angles
 A) Closure before adjustment X : Y Angles
 B) : is FIRST Order: Tied to
 C) d of Distance Measun :
 Electronic X GPS Triangulation
 D) Instrument used for angles : Order

VERTICAL CONTROL IS (2nd) order. Level Line taken from ODOT G-26-1029 and G-26-1030
 (2nd) order and tied to (2nd) order. NGVD 29 datum
 NAVD 88 datum

ACCURACY DEFINITION:
 (1) HORIZONTAL: (3rd Order = Class I = 1 : 10,000'
 (3rd Order = Class II = 1 : 5,000'
 (2) VERTICAL: (1st Order = 0.017 FL x sqrt. of MI.)
 (3rd Order = 0.050 FL x sqrt. of MI.)

Distribution:
 Copy w/survey reports _____ Edward R. Seaton
 Copy in each Alignment _____ Professional Land Surveyor
 and level book _____
 (FORM SD #20) _____ 18-Aug-17
 Rev. 11/03 _____ Date

PROJECT LOCATION
R-06-W



PROJECT EXTENTS

PROJECT LENGTH 20766 Ft. 3.93 MI.

BEGINNING STATION : 491+79.77
 ENDING STATION : 699+46.05

UTILITY CONTACT INFORMATION		
ELECTRIC	COMMUNICATIONS	WATER
HEATH OK ELEC COOP (405) 321-2024	DOBSON FIBER (405) 242-1000	CITY OF ALEX (405) 758-2393
PUBLIC SERVICES OKLAHOMA (888) 218-3263	AT & T (888) 975-0952	
	GAS	
ONG (800) 694-5463	ENABLE MIDSTREAM (405) 525-7788	DCP MIDSTREAM (303) 595-3331
ONEOK FIELD SERVICES (918) 588-7000	CONTINENTAL RESOURCES (405) 222-9380	VELOCITY PIPELINE (405) 367-0463

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

SWO 5208(1) Job/Piece 30425(07) Engr. Contract No. 1709

LAND SURVEYOR'S CERTIFICATION

I hereby certify that all land and property sub-division distances, angles, corners, and monumentation made or used in conjunction with this survey and depicted or recorded herein or hereon were recovered, established or re-established in substantial conformity with:

- Applicable instructions contained in the U.S. Government Bureau of Land Management publication "Manual of Survey Instruction";
- Its supplement, "Restoration of Lost or Obliterated Corners and Sub-division of Sections";
- "Oklahoma Minimum Standards for the Practice of Land Surveying" as adopted by the State Board of Licensure for Professional Engineers and Land Surveyors; and
- Sound land surveying practices;

including a thorough search, study, analysis and consideration of all existing records and field evidence.

I further certify that all survey monuments depicted exist and that all land survey work was done by me or under my direct supervision.

Dated this 18th day of August, 2017

Land Surveyor *Edward R. Seaton* (Seal)
 Edward R. Seaton
 Oklahoma Licensed Land Surveyor No. 1353

Printed Name: _____
 Oklahoma Licensed Land Surveyor No. 1353
 Certificate of Authorization No. 4849

THIS SURVEY MEETS THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYING AS ADOPTED BY THE OKLAHOMA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS, MAY 17, 2010.

SPECIFICATIONS FOR SURVEYS FOR PRIMARY AND SECONDARY HIGHWAYS DATED JANUARY 2011 GOVERN.
 SDS 1 OF 21

Electronic File Transfer Disclaimer:
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PLS	ERS	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	BDK	
CHECKED	ERS	
APPROVED	ERS	
CREW		
SURVEY DATA SHEET		
SWO 5208(1) STATE JOB NO. 30425(07) SHEET NO. S001		

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				
DESCRIPTION		REVISIONS		DATE	

SWO5208(1) - J/P No. 30425(07)
S.H. 19 Grady County
From 5.03 miles East of US 81,
East 3.84 Miles

Historical Letter & Written Report

1. GENERAL:

Survey Began: March 1, 2016
Survey Completed: August 18, 2017

Personnel on this survey:

Edward R. Seaton	Licensed Land Surveyor
Jerry Townsend	Licensed Land Surveyor
Tony Robinson	Licensed Land Surveyor
Brandon Kaufman	Licensed Land Surveyor
Ryan Thomson	Party Chief
Jason Appleton	Instrument Operator
Ray Gipson	Instrument Operator

2. ASSIGNMENT:

This Survey was assigned to me by Mr. Brian Schmidt, Triad Design Group, via email dated 03/01/2016. Heartland Surveying and Mapping, PLLC, under the direct supervision of Mr. Edward R. Seaton, began work on the project on March 1, 2017.

3. PURPOSE:

The purpose of this survey was to furnish sufficient data to develop Preliminary Engineering and Preparation of Construction plans. The survey included the Alignment, Topographic/Planimetric data, Surface Features/DTM data, Land Ties, Utilities, Drainage and all other pertinent information needed to aid in the design.

4. LIMITS:

The Survey began approximately 5.00 miles east of centerline of US 81 at a point approximately 500 feet west of the NS 288.0 Section Line and as shown at POT Sta. 271+00.00 in SWO 308 Relocation Book OSH 19, Grady Co. on Alternate "A". The Survey ended as shown at PC Sta. 450+14.7, SWO 822 Alignment Notes, Book 1. The survey width is 200 feet left and right or according to what is detailed in the SPECIFICATIONS FOR SURVEYS FOR PRIMARY AND SECONDARY HIGHWAYS (Revised January, 2016), whichever is greater. Flow line profiles were obtained 1000 feet downstream and 1000 feet upstream. This survey has geometric ties to the SWO 5207(1) Survey.

5. ALIGNMENT:

S.H. 19 MAIN SURVEY: The Centerline of Survey for this project is along and identical to a combination of alignments that follow the present pavement and were derived from:

SWO 308 Relocation Book OSH 19 Grady Co.
SWO 308 Transit Book No. 1 Grady Co.
SWO 308 Transit Book No. 2 Grady Co.
SWO 822 Alignment Notes Book 1
SWO 822 Alignment Notes Book 4
CIP - 126c(14) Plans
CIP - 126c(19) Plans

The Alignment was reconstructed using recovered field evidence and with the assistance of ODOT personnel. We met with Denny Dees, Jeff King and Kyle King on February 23rd 2017 to discuss our findings and how to proceed. Under their direction we used recovered centerline references, section corners and drainage structures to determine the original location of centerline. Summary of recovery as described below.

We created the Northwest tangent by holding the position of the mag nail we recovered at PI Sta. 262+80.4417 on CIP-126C(14) Plans and creating a straight line to the nail we recovered at PC Sta 278+97 from SAP-852-A plans. This line was then checked to a nail found at PT Sta 265+87.2029 on CIP-126C(14) and fit within 0.10 ft.

We created the Southeast tangent using structures and centerline points found on SAP-852-A and F-424(3) plans. We were able to recover all 3 references at POT Sta 397+00 and held that calculated position and then used the 2 recovered references at PI sta 457+62.9 to reestablish the original position of that point and held that to establish the tangent. We then compared that line to additional references recovered at stations 379+00, 400+04.6, and PC Sta 452+70.02 and accepted its position.

We then extended both tangents to intersection to recreate PI Sta 285+78.6 which created a Delta angle of 20°12'57" compared to the plan Delta of 20°14'. To create the curve we held the Calculated Delta and used the tangent length between the calculated PI and the recovered PC at Station 278+97 as directed in our meeting on Feb 23rd, 2017.

As discussed in the meeting, we found that there was an unknown error in the stationing on the SAP-852-A and F424(3) plans likely caused by the measuring techniques of the time. This made establishing beginning and ending points of this survey slightly more difficult to establish. We used the distances between the structures at Sta 266+25 and Sta 275+00 to reestablish the position of Sta 271+00 (BOP for this project). To reestablish the position of PC Station 450+14.7 in SWO 822 Alignment Notes Book 1 (BOP for this Project), we held the distance between the structure at Sta. 442+80 and the calculated position of POST Sta 457+28.1. We then assigned a station value of 500+00.00 to the BOP and continued that stationing through to the EOP (Sta 699+46.05) as directed in the Survey Special Provisions.

6. STATIONING:

The Stationing for this survey was given a value of 500+00.00 at POT Sta. 271+00.00 as shown in SWO 308 Relocation Book OSH 19 Grady Co., on Alternate "A" and stationing carried forward (East) to the End of the Survey. A station and bearing equation is shown at the beginning and end of this survey along with all equations that are shown in the existing books, surveys and plans discovered during this project to establish centerline

7. HORIZONTAL CONTROL:

Horizontal control for this survey is NGS Oklahoma State Plane Coordinate System, NAD83(2011), Lambert Projection, South Zone (3502), derived by Static GPS methods utilizing NGS HARN Monuments "UNION", "X 42" and "PRCO B".
Note: This Survey was done with SWO 5207(1) and the Primary Control was established for both projects. The Static Control Network was completed on April 22, 2016.

New Primary control points established:

7400 5/8"X3/6" rebar with 3" Aluminum Cap (ODOT No. G-26-1029)
7401 5/8"X3/6" rebar with 3" Aluminum Cap (ODOT No. G-26-1030)
7402 5/8"X3/6" rebar with 3" Aluminum Cap (ODOT No. G-26-1031)

a) RTK GPS methods were used to establish the following Secondary Control Points:

7001	Aerial Target	7015	Aerial Target
7002	Aerial Target	7016	Aerial Target
7003	Aerial Target		
7004	Aerial Target		
7005	Aerial Target		
7006	Aerial Target		
7007	Aerial Target		
7008	Aerial Target		
7009	Aerial Target		

7010	Aerial Target
7011	Aerial Target
7012	Aerial Target
7013	Aerial Target
7014	Aerial Target

8. VERTICAL CONTROL:

a) Vertical Control for this survey is NAVD83, derived from Primary monuments 7400 and 7401.

b) Vertical Control Points:
ODOT G-26-1029 and ODOT G-26-1030

c) Differential Leveling method was utilized throughout the project.

d) All leveling was conducted with a Trimble DNI digital level. Elevations were established by double loop leveling between benchmarks. The NAVD 88 elevation was derived by using the elevation of 1079.8094 on Control Pt. 7400 (G-26-1029) and ending on GPS Control Pt. 7401 (G-26-1030) with an elevation of 1128.7411.

A Benchmark list depicting all established benchmarks, as well as results of the control leveling has been placed in the archived Microstation Design File. (See SUBMITTED DATA below).

9. MEASUREMENT UNITS:

The distances, coordinates, and elevations shown on this survey are in US SURVEY FEET. All angles and bearings shown are in degrees, minutes, and seconds.

10. PHOTO CONTROLS:

Sixteen aerial targets were placed prior to acquisition of aerial photography and LiDAR. Coordinates and Elevations are:

Pt No.	Northing	Easting	Elevation
7001	594413.3080	2008215.8350	1069.1020
7003	595164.7820	2009152.5790	1073.6214
7004	592571.5270	2009312.9530	1099.8975
7005	592902.7400	2009699.6880	1113.2680
7006	593191.7270	2010124.0890	1140.7145
7007	592447.2680	2010271.4630	1139.1249
7008	590845.4260	2011453.7730	1134.8581
7009	590849.2850	2012478.2400	1146.8916
7010	589719.7640	2013249.7690	1138.0036
7011	588285.5680	2014353.3610	1076.5793
7012	589562.9050	2014444.3480	1084.8655
7013	587524.5630	2015763.2170	1098.9486
7014	585607.0890	2017036.9550	1059.3826
7015	583537.1680	2019718.2060	1113.0893
7016	585122.0160	2019690.2490	1140.6300
7017	582504.9970	2021564.0470	1164.6697
7018	579109.6520	2024943.9020	1085.9858
7400(G-26-1029)	594674.1110	2008729.5220	1079.8094
7401(G-26-1030)	579967.9750	2024369.2240	1128.7411

11. TOPOGRAPHY:

All topography information was obtained during the course of this survey by field conventional and RTK GPS methods along the present Right of Way of S.H. 19. LiDAR technology was utilized for

PLS	ERS	<p align="center">OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION</p> <p align="center">SURVEY DATA SHEET</p> <p align="center">SWO 5208(1) STATE JOB NO.30425(07) SHEET NO. S002</p>
DRAWN	BDK	
CHECKED	ERS	
APPROVED	ERS	
CREW		

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				
DESCRIPTION		REVISIONS		DATE	

the DTM along with Aerial Photogrammetry for acquisition of planimetric features.

Mapping limits are as follows:

300 feet right and left of Centerline of Survey from the Beginning of Survey to the End of Survey, widening to 500 feet right and left from 500 feet before all bridges and section line roads to 500 feet after all bridges and section line roads.

12. CROSS SECTION/DTM:

All surface feature information was obtained during the course of this survey by field conventional, LiDAR and RTK GPS methods. A DTM file was created and archived. (See SUBMITTED DATA below).

13. ENVIRONMENTAL CONCERNS:

No evidence was found of Hazardous waste sites during this survey.
No evidence was found of Cemeteries during this survey.

14. UTILITIES:

All utility companies servicing the project extents were contacted, after first contacting OKIE. Underground utilities were marked and tied to this survey. Depths of the utility lines were requested and approximate depths as provided are shown on topography. Not all companies furnished depths of utilities and some are approximate and some are unknown.

15. LAND TIES:

Complete Land Ties for this survey consisted of the following sections:

Sections 3 and 4, T-5-N, R-6-W, I.M., Grady County, State of Oklahoma.
Sections 29,30,32 and 33, T-6-N, R-6-W, I.M., Grady County, State of Oklahoma.

A search was made at all corner locations for any trace of the original monuments and/or Accessories. The Original Government Survey was performed in stages, as listed below:

Surveyor:	Description:	Date:	Organization:
Theodore H. Barrett	Original Survey	1871	U.S. General Land Office

Original Survey notes and Plats were obtained from the Bureau of Land Management website for the Sections being surveyed and adjoining sections. Records were obtained of current filed Section and Quarter Section corners from Hnb Tack. The following is our findings and actions at each Section and Quarter Section corner:

Northwest Corner of Section 30, Township 06 North, Range 06 West, IBM: (G-26-1077)
Found 3 references from OCCR by LS 696 dated 02/19/1999. Calculated position using said references and set a #5 rebar with a plastic cap stamped "Heartland CA4849"

West Quarter Corner of Section 30, Township 06 North, Range 06 West, IBM: (G-26-1082)
Calculated position using single proportion between found corners approx. 1/2 mile north and south. Set #5 rebar with cap stamped "Heartland CA4849" 100.0' north of calculated position as a witness corner due to true position falling in Washita River. Referenced and filed corner.

Southwest Corner of Section 30, Township 06 North, Range 06 West, IBM: (G-26-1087)
Found and accepted PK Nail and 2 references as described in OCCR by LS 696 dated 02/19/1999. Referenced and filed corner.

South Quarter Corner of Section 30, Township 06 North, Range 06 West, IBM: (G-26-1088)

Found and accepted #4 rebar and 2 references as described in OCCR by LS 696 dated 02/19/1999. Referenced and filed the Corner.

Southeast Corner of Section 30, Township 06 North, Range 06 West, IBM: (G-26-1089)
Found RR Spike as described by LS 696 in OCCR dated 02/19/1999. Referenced and filed the Corner.

East Quarter Corner of Section 30, Township 06 North, Range 06 West, IBM: (G-26-1084)
Found 1/2" Iron Pin as described in OCCR by LS 189 dated 08/22/2003
Referenced and filed the corner.

Northeast Corner of Section 30, Township 06 North, Range 06 West, IBM: (G-26-1079)
Found #4 rebar and 3 references as described in OCCR by LS 396 dated 02/08/1999.

North Quarter Corner of Section 30, Township 06 North, Range 06 West, IBM: (G-26-1078)
Found #4 rebar and 3 references as described in OCCR by LS 396 dated 02/08/1999.

South Quarter Corner of Section 29, Township 06 North, Range 06 West, IBM: (G-26-1090)
Found and accepted 60D spike and 1 reference as described in OCCR by LS 696 dated 02/19/1999. Referenced and filed the Corner.

Southeast Corner of Section 29, Township 06 North, Range 06 West, IBM: (G-26-1091)
Found #3 rebar and 3 references as described in OCCR by LS 696 Dated 02/19/1999. Referenced and filed corner.

East Quarter Corner of Section 29, Township 06 North, Range 06 West, IBM: (G-26-1086)
Found 1/2" Iron Pin and 1 reference as described by LS 696 in OCCR dated 02/19/1999. Referenced and filed the corner.

Northeast Corner of Section 29, Township 06 North, Range 06 West, IBM: (G-26-1081) Found 3/8" Iron Pin for witness corner 200.0' East of true corner position as described in OCCR by LS 1200 dated 04/01/2014. True corner falls in river bank.

North Quarter Corner of Section 29, Township 06 North, Range 06 West, IBM: (G-26-1080)
Found 3/8" Iron Pin 335.0' West of true corner which falls in the Washita River and 3 references as described in OCCR by LS 1200 dated 04/01/2014.

West Quarter Corner of Section 32, Township 06 North, Range 06 West, IBM: (G-26-1094)
Used single proportion to calculate position of corner. Set #5 rebar with cap stamped Heartland CA4849. Referenced and filed corner.

Southwest Corner of Section 32, Township 06 North, Range 06 West, IBM: (G-26-1099)
Found and accepted 1/2" Iron Pin and 2 references as described in OCCR by LS 1434 dated 01/17/2013. Referenced and filed corner.

South Quarter Corner of Section 32, Township 06 North, Range 06 West, IBM: (G-26-1100)
Found and accepted 1/2" Iron Rod and 1 reference as described by LS 1200 dated 12/17/2012. Referenced and filed the Corner.

Southeast Corner of Section 32, Township 06 North, Range 06 West, IBM: (G-26-1101)
Found and accepted 1/2" Iron Pin as described by LS 449 dated 09/21/1984. Referenced and filed corner.

East Quarter Corner of Section 32, Township 06 North, Range 06 West, IBM: (G-26-1096)
Found 3/8" rebar and 1 reference as described in OCCR by LS 1071 dated 10/23/89. Referenced and filed the corner.

South Quarter Corner of Section 33, Township 06 North, Range 06 West, IBM: (G-26-1102)

Calculated position of corner by intersecting N-S and E-W 1/4 section lines. Set #5 rebar with plastic cap stamped "Heartland CA 4849". Referenced and filed corner.

Southeast Corner of Section 33, Township 2 South, Range 1 East, IBM: (G-26-1103)
Found 1/2" Iron Pin and 3 references as described in OCCR by LS 1326 dated 12/17/2001. Referenced and filed corner.

East Quarter Corner of Section 33, Township 2 South, Range 1 East, IBM: (G-26-1097)
Calculated position using single proportion between found section corners and set 5/8" rebar with cap stamped "Heartland CA4849". Referenced and filed the corner.

Northeast Corner of Section 33, Township 06 North, Range 06 West, IBM: (G-26-1093)
Found and accepted 1/2" Iron Pin and 3 references as described by LS 1326 in OCCR dated 11/10/2010. Referenced and filed corner.

North Quarter Corner of Section 33, Township 06 North, Range 06 West, IBM: (G-26-1092)
Calculated position using single proportion between recovered section corners 1/2 miles east and west. Set 5/8" rebar with cap stamped "Heartland CA4849". Referenced and filed corner.

West Quarter Corner of Section 4, Township 05 North, Range 06 West, IBM: (G-26-1104)
Found and accepted 1 1/2" Pipe bent NW and 3 references as described in OCCR by LS 1200 dated 12/20/2012. Referenced and filed the corner.

Southwest Corner of Section 4, Township 05 North, Range 06 West, IBM: (G-26-1111)
Found and accepted 3/8" Iron Rod with cap and 4 references as described by LS 1200 in OCCR dated 12/20/2012. Referenced and filed corner.

South Quarter Corner of Section 4, Township 05 North, Range 06 West, IBM: (G-26-1112)
Calculated position using single proportion between recovered corners. Set #5 rebar with cap stamped "Heartland CA4849". Referenced and filed the corner.

Southeast Corner of Section 4, Township 05 North, Range 06 West, IBM: (G-26-1113)
Found 60D nail and 3 references as described in OCCR by LS 1326 dated 08/04/2010. Filed and references corner.

East Quarter Corner of Section 4, Township 05 North, Range 06 West, IBM: (G-26-1108)
Found #4 rebar and 1 reference as described in OCCR by LS 1326 dated 08/04/2010. Referenced and filed corner.

South Quarter Corner of Section 3, Township 05 North, Range 06 West, IBM: (G-26-1114)
Found and accepted 3/8" Iron Pin. Referenced and filed the Corner.

Southeast Corner of Section 3, Township 05 North, Range 06 West, IBM: (G-26-1115)
Found and accepted 1/2" Iron Pin and 2 references as described by LS 1349 in OCCR dated 02/25/1997. Referenced and filed corner.

East Quarter Corner of Section 3, Township 05 North, Range 06 West, IBM: (G-26-1110)
Found 1/2" Iron Pin and 3 references as described in OCCR by LS 1200 dated 06/11/2015. Referenced and filed corner.

Northeast Corner of Section 3, Township 05 North, Range 06 West, IBM: (G-26-1105)
Found and accepted 1/2" Iron Pin and 3 references as described by LS 189 in OCCR dated 12/21/1993. Referenced and filed corner.

North Quarter Corner of Section 3, Township 05 North, Range 06 West, IBM: (G-26-1104)
Found 1/2" Iron Pin and 3 references as described by LS 1200 in OCCR dated 06/11/2015. Referenced and filed corner.

PLS	ERS		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION SURVEY DATA SHEET SW0 5208(1) STATE JOB NO.30425(07) SHEET NO.S003
DRAWN	BDK		
CHECKED	ERS		
APPROVED	ERS		
CREW			

SW05208_1_V1_COGO

POINT	EASTING	NORTHING	ELEVATION	POINT	EASTING	NORTHING	ELEVATION
101	2008705.886000	594711.404000	1077.953700	1003	2009373.354057	593624.301800	
102	2009067.741000	593912.684000	1083.940100	1004	2009461.291114	593671.915600	
103	2009407.627000	593298.319000	1090.154700	1005	2009549.228172	593719.529401	
104	2009886.717000	592687.717000	1124.834400	1006	2009533.469109	593045.990131	
105	2010495.491000	592130.933000	1139.616800	1007	2009458.401160	593112.056787	
106	2011084.348000	591614.113000	1122.046500	1008	2009383.333212	593178.123443	
107	2011682.140000	591087.106000	1136.200500	1009	2010051.901696	592456.509425	
108	2012233.611000	590737.659000	1152.370900	1010	2009985.835040	592381.441477	
109	2012835.430000	590203.746000	1135.490200	1011	2009919.768384	592306.373528	
110	2013384.913000	589578.271000	1137.587000	1012	2010902.996711	591973.893312	
111	2013901.206000	589134.101000	1105.291400	1013	2010969.063367	592048.961260	
112	2014583.181000	588570.496000	1074.875100	1014	2011035.130024	592124.029209	
113	2015279.510000	587924.088000	1108.099800	1015	2011843.109646	591146.508003	
114	2016015.813000	587404.261000	1089.889600	1016	2011909.176302	591221.575952	
115	2016531.596000	586837.264000	1060.491800	1017	2011975.242958	591296.643901	
116	2017075.528000	586383.406000	1062.174300	1018	2011938.979281	590795.708672	
117	2017769.485000	585856.490000	1065.123300	1019	2011872.912625	590720.640723	
118	2018421.084000	585256.031000	1081.637500	1020	2011806.845969	590645.572774	
119	2018981.832000	584662.466000	1107.212700	1021	2012779.695432	590322.226907	
120	2019728.209000	584030.573000	1137.091100	1022	2012845.762088	590397.294856	
121	2020172.590000	583653.257000	1146.632100	1023	2012911.828744	590472.362805	
122	2020789.769000	583106.941000	1157.131300	1024	2013530.374920	589661.560346	
123	2021285.419000	582624.483000	1167.105900	1025	2013596.441577	589736.628294	
124	2021921.206000	582065.247000	1149.945500	1026	2013662.508233	589811.696243	
125	2022602.605000	581448.230000	1134.143200	1027	2014353.206163	588670.968356	
126	2023271.623000	580843.349000	1137.464200	1028	2014287.139507	588595.900407	
127	2024148.195000	580107.339000	1117.965300	1029	2014221.072851	588520.832458	
300	2008514.388614	595000.686224		1030	2015071.916048	588304.863257	
301	2008904.930204	594279.402104		1031	2015137.982704	588379.931206	
302	2009608.537058	592979.923475		1032	2015204.049360	588454.999154	
303	2023482.914748	580769.202992		1033	2015650.280073	587529.424763	
311	2009285.417000	593576.687999		1034	2015584.213417	587454.356814	
312	2012632.960377	595389.226052		1035	2015918.146761	587379.288865	
313	2010117.968352	592531.577374		1036	2016533.092874	587018.894099	
315	2009133.039933	593858.110419		1037	2016599.159530	587093.962048	
316	2009323.059595	593507.166579		1038	2016665.226186	587169.029996	
317	2009324.002478	593507.169073		1039	2016993.633243	586347.151191	
318	2010836.930055	591898.825363		1040	2016927.566587	586272.083242	
320	2011777.042990	591071.440054		1041	2016861.499931	586197.015293	
321	2012005.045937	590870.776621		1042	2017939.342110	585514.840951	
322	2012713.628776	590247.158958		1043	2017873.275454	585439.773002	
323	2013464.308264	589586.492397		1044	2017807.208797	585364.705053	
325	2014419.272819	588746.036305		1045	2018315.221308	585184.032901	
326	2015005.849392	588229.795308		1046	2018249.154652	585108.964952	
327	2015716.346729	587604.492712		1047	2018183.087995	585033.897004	
328	2016467.026218	586943.826150		1048	2019160.471083	584706.561133	
329	2017059.699899	586422.219140		1049	2019226.537739	584781.629082	
330	2018005.408766	585589.908900		1050	2019292.604395	584856.697030	
331	2018381.287964	585259.100850		1051	2019458.222612	584178.087283	
332	2019094.404427	584631.493184		1052	2019392.155956	584103.019334	
333	2019524.289268	584253.155232		1053	2019326.089300	584027.951385	
334	2019703.852155	584095.123479		1054	2019769.918812	584170.191428	
335	2020445.627506	583442.293373		1055	2019835.985468	584245.259377	
336	2021022.653447	582934.457805		1056	2019902.052124	584302.327326	
337	2021721.782636	582319.160218		1057	2020379.560850	583367.225424	
338	2022345.182716	581770.511169		1058	2020313.494194	583292.157475	
339	2023073.005715	581129.960407		1059	2020247.427537	583217.089526	
1000	2008816.994232	594231.786300		1060	2021088.720103	583009.525754	
1001	2008729.057174	594184.172500		1061	2021154.786759	583084.593702	
1002	2008641.120117	594136.558700		1062	2021220.853416	583159.661651	

16. PROPERTY OWNERS:

All information on property owners shown on this survey was obtained from records on file at the Grady County Clerk's Office in Chickasha, Oklahoma and from Reconnaissance Data provided by ODOT. Right-of-way was re-established using FAP NO. F-424(3) Plans and S.A.P. 852-A Plans.

17. DRAINAGE:

Drainage/Hydraulic information for this survey was calculated from field data and USGS Quadrangle maps and has been placed in the submitted Microstation Design File. All drainage Divides shown in the Microstation Design File have been field checked for their accuracy. The Project is in Flood Zone A and Zone X according to FEMA Map Number 40051C0425E and 40051C0420E with an effective date of April 3, 2012.

18. DATA SUBMITTED:

REPORTS

1. ODOT form SD-1, Transmittal Letter.
2. ODOT form SD-20, Survey Control.
3. ODOT form SD-41, Surveyor's Certification.
4. Thirty Nine (39) Oklahoma Certified Corner Record Forms.
5. Two (2) ODOT form SD-11, for GPS Control Monuments.
6. ODOT form SD-7, Public & Privately owned Utilities List

Project Name: SW05208_1_V1
Description: SH19 Grady County from 5.03 miles East of US-81, East 3.84 miles
Horizontal Alignment Name: A001
Description: SH 19
Style: Centerline

	STATION	EASTING	NORTHING
Element: Linear			
POB (300)	491+79.77	2008514.3886	595000.6862
PI (301)	500+00.00	2008904.9302	594279.4021
Tangent Direction:	S 28°26'00.50" E		
Tangent Length:	820.23		
Element: Linear			
PI (301)	500+00.00	2008904.9302	594279.4021
PC (311)	507+99.11	2009285.4170	59576.6880
Tangent Direction:	S 28°26'00.50" E		
Tangent Length:	799.11		
Element: Circular			
PC (311)	507+99.11	2009285.4170	59576.6880
PI (302)	514+77.73	2009608.5371	592979.9235
CC (312)		2012632.9604	595389.2261
PT (313)	521+42.25	2010117.9684	592531.5774
Radius:	3806.75		
Delta:	20°12'56.88" Left		
Degree of Curvature (Arc):	1°30'18.40"		
Length:	1343.14		
Tangent:	678.63		
Chord:	1336.19		
Middle Ordinate:	59.08		
External:	60.02		
Tangent Direction:	S 28°26'00.50" E		
Radial Direction:	S 61°35'59.50" W		
Chord Direction:	S 38°32'28.94" E		
Radial Direction:	S 41°21'02.62" W		
Tangent Direction:	S 48°38'57.38" E		
Element: Linear			
PT (313)	521+42.25	2010117.9684	592531.5774
POE (303)	699+46.05	2023482.9147	580769.2030
Tangent Direction:	S 48°38'57.38" E		
Tangent Length:	17803.80		

SH 19 FROM 5.03 MILES EAST OF US-81
 EAST 3.84 MILES
 SWO 5208(1) JIP 30425(04)
 GRADY COUNTY
 DATUM: NAVD88

BENCH MARK AND CHECK LEVEL LIST

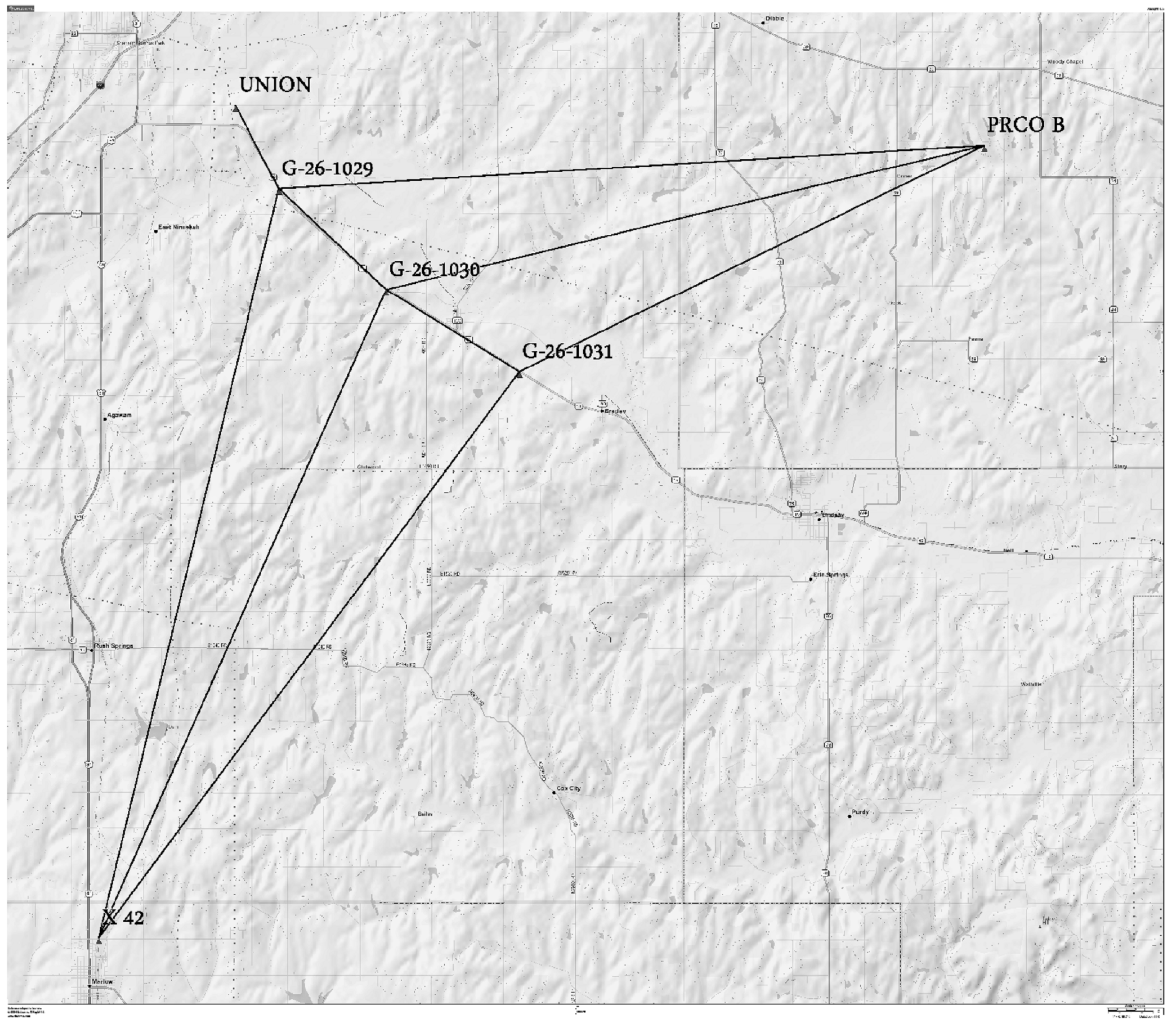
STATION	DIFF. EL. 1ST RUN	DIFF. EL. 2ND RUN	MEAN DIFF. ELEVATION	UNADJUSTED ELEVATION	ADJUSTED ELEVATION	STATION	OFFSET	DESCRIPTION
7400	-1.8553	1.8561	-1.8557	1077.9537	1079.8094	405+60	34 L	(G-26-1029) 3" ALUMINUM CAP
BM101	5.9843	-5.9884	5.9864	1083.9401	1083.9401	504+00	31 R	CHISLED BOX ON CENTER OF NORTH HEADWALL
BM102	6.2189	-6.2124	6.2147	1060.1547	1060.1547	510+99	37 R	CHISLED BOX ON CENTER OF SOUTH HEADWALL
7005	23.1137	-23.1129	23.1133	1113.2080	1113.2080	515+87	39 R	AERIAL TARGET
BM104	11.5651	-11.5677	11.5664	1124.8344	1124.8344	518+09	46 R	36"X 5/8" REBAR APPROX 1FT NORTH OF POWER POLE
7007	14.2909	-14.2901	14.2905	1139.1240	1139.1240	523+13	38 L	AERIAL TARGET
BM105	.4916	-.4922	.4910	1139.6188	1139.6188	526+90	51 R	36"X 5/8" REBAR APPROX 1FT NORTH OF POWER POLE
BM106	-17.5720	17.5687	-17.5704	1122.0465	1122.0465	534+74	50 R	36"X 5/8" REBAR APPROX 1FT NORTH OF POWER POLE
BM107	14.1542	-14.1539	14.1541	1136.2005	1136.2005	542+71	51 R	36"X 5/8" REBAR APPROX 1FT NORTH OF STRETCH POST
BM108	16.1710	-16.1698	16.1704	1152.3709	1152.3709	549+16	51 L	36"X 5/8" REBAR APPROX 1FT SOUTH OF FENCE POST
BM109	-16.8907	16.8907	-16.8907	1135.4902	1135.4902	557+20	48 L	36"X 5/8" REBAR APPROX 1FT SOUTH OF WOOD FENCE
7010	2.5143	-2.5125	2.5134	1138.0036	1138.0036	563+51	42 R	AERIAL TARGET
BM110	-.4165	.4167	-.4166	1137.5670	1137.5670	565+46	59 R	36"X 5/8" REBAR APPROX 3FT NORTH OF WD FCE COR POST
	-32.2956	32.2956	-32.2956					

7401	10.7758	-10.7757	10.7758	1128.7411	1128.7411	711+30	93 R	(G-26-1030) 3" ALUMINUM CAP
STATION	DIFF. EL. 1ST RUN	DIFF. EL. 2ND RUN	MEAN DIFF. ELEVATION	UNADJUSTED ELEVATION	ADJUSTED ELEVATION	STATION	OFFSET	DESCRIPTION
7400	-10.7064	10.7064	-10.7074	1069.1020	1069.1020	495+69	34 L	(G-26-1029) 3" ALUMINUM CAP
7001						495+54	542 R	AERIAL TARGET
STATION	DIFF. EL. 1ST RUN	DIFF. EL. 2ND RUN	MEAN DIFF. ELEVATION	UNADJUSTED ELEVATION	ADJUSTED ELEVATION	STATION	OFFSET	DESCRIPTION
BM101	-4.3313	4.3334	-4.3324	1073.6214	1073.6214	493+39	630 L	CHISLED BOX ON CENTER OF NORTH HEADWALL
7003								AERIAL TARGET
STATION	DIFF. EL. 1ST RUN	DIFF. EL. 2ND RUN	MEAN DIFF. ELEVATION	UNADJUSTED ELEVATION	ADJUSTED ELEVATION	STATION	OFFSET	DESCRIPTION
7005	27.4465	-27.4465	27.4465	1140.7145	1140.7145	516+48	472 L	AERIAL TARGET
7006								AERIAL TARGET
STATION	DIFF. EL. 1ST RUN	DIFF. EL. 2ND RUN	MEAN DIFF. ELEVATION	UNADJUSTED ELEVATION	ADJUSTED ELEVATION	STATION	OFFSET	DESCRIPTION
BM103	6.7432	-6.7423	6.7428	1099.8975	1099.8975	515+89	548 R	CHISLED BOX ON CENTER OF SOUTH HEADWALL
7004								AERIAL TARGET
STATION	DIFF. EL. 1ST RUN	DIFF. EL. 2ND RUN	MEAN DIFF. ELEVATION	UNADJUSTED ELEVATION	ADJUSTED ELEVATION	STATION	OFFSET	DESCRIPTION
BM108	-17.5114		-17.5114	1134.8565	1134.8561	542+59	383 R	36"X 5/8" REBAR APPROX 1FT SOUTH OF FENCE POST
7008								AERIAL TARGET
7009	12.0350		12.0350	1146.8945	1146.8916	550+25	296 L	AERIAL TARGET
BM108	5.4807		5.4807	1152.3752	1152.3709	549+16	51 L	36"X 5/8" REBAR APPROX 1FT SOUTH OF FENCE POST

BM111	-30.4179	30.4147	-30.4163	1105.2914	1105.2914	572+27	51 R	36"X 5/8" REBAR APPROX 1FT NORTH OF POWER POLE
BM112	33.2266	-33.2228	33.2247	1074.8751	1074.8751	581+11	23 R	BRASS SURVEY CAP SOUTH HEADWALL, SOUTHEAST CORNER
BM113	-9.1536	9.1525	-9.1531	1108.0968	1108.0968	590+61	49 R	36"X 5/8" REBAR APPROX 2FT NORTH OF CORNER POST
7013	-9.0565	9.0579	-9.0572	1098.9468	1098.9468	596+88	29 R	AERIAL TARGET
BM114	-20.3979	20.3977	-20.3978	1069.8966	1069.8966	599+57	46 L	36"X 5/8" REBAR APPROX 2FT SOUTH OF BWF
BM115	1.9828	-1.6821	1.6825	1060.4918	1060.4918	607+19	37 R	36"X 5/8" REBAR APPROX 1FT NORTH OF BRACE POST
BM116	2.9514	-2.9465	2.9490	1062.1743	1062.1743	614+27	19 R	CHISLED BOX SOUTH EAST WING WALL ON BRIDGE
BM117	16.5133	-16.5151	16.5142	1065.1233	1065.1233	622+96	44 L	36"X 5/8" REBAR APPROX 1FT SOUTH OF E BRACE POST
BM118	25.5706	-25.5738	25.5752	1081.6375	1081.6375	631+82	24 L	CHISLED BOX ON CENTER OF NORTH HEADWALL
BM119	29.8775	-29.8794	29.8785	1107.2127	1107.2127	639+95	51 R	36"X 5/8" REBAR APPROX 2FT SOUTH OF BWF
BM120	9.5397	-9.5422	9.5410	1137.0911	1137.0911	649+73	32 R	CHISLED BOX ON CENTER OF SOUTH HEADWALL
BM121	10.5017	-10.4968	10.4993	1146.6321	1146.6321	655+96	22 R	CHISLED BOX ON CENTER OF SOUTH HEADWALL
BM122	9.9749	-9.9742	9.9746	1157.1313	1157.1313	663+80	24 R	CHISLED BOX ON CENTER OF SOUTH HEADWALL
BM123	-2.4356	2.4367	-2.4382	1167.1059	1167.1059	670+71	59 R	36"X 5/8" REBAR APPROX 1FT NORTH OF STRETCH POST
7017	-14.7244	14.7241	-14.7243	1164.8967	1164.8967	673+59	35 L	AERIAL TARGET
BM124	-15.8012	15.8034	-15.8023	1149.9455	1149.9455	679+17	59 R	36"X 5/8" REBAR APPROX 1FT NORTH OF POWER POLE
BM125	3.3213	-3.3207	3.3210	1134.1432	1134.1432	688+37	72 R	36"X 5/8" REBAR APPROX 1FT NORTH OF BWF
BM126	-19.5000	19.4977	-19.4989	1137.4642	1137.4642	697+38	84 R	36"X 5/8" REBAR APPROX 1FT NORTH OF BWF
BM127				1117.9953	1117.9953	708+73	98 R	36"X 5/8" REBAR APPROX 1FT NORTH OF W STRETCH POST

STATION	DIFF. EL. 1ST RUN	DIFF. EL. 2ND RUN	MEAN DIFF. ELEVATION	UNADJUSTED ELEVATION	ADJUSTED ELEVATION	STATION	OFFSET	DESCRIPTION
BM112	1.7073		1.7073	1076.6824	1076.6793	581+11	23 R	BRASS SURVEY CAP SOUTH HEADWALL, SOUTHEAST CORNER
7011	8.2892		8.2892	1084.8716	1084.8655	573+51	630 L	AERIAL TARGET
7012	-9.9873		-9.9873	1074.6843	1074.6751	581+11	23 R	BRASS SURVEY CAP SOUTH HEADWALL, SOUTHEAST CORNER
STATION	DIFF. EL. 1ST RUN	DIFF. EL. 2ND RUN	MEAN DIFF. ELEVATION	UNADJUSTED ELEVATION	ADJUSTED ELEVATION	STATION	OFFSET	DESCRIPTION
BM118	-22.2567	22.2540	-22.2549	1059.3826	1059.3826	619+06	631 R	CHISLED BOX ON CENTER OF NORTH HEADWALL
7014								AERIAL TARGET
STATION	DIFF. EL. 1ST RUN	DIFF. EL. 2ND RUN	MEAN DIFF. ELEVATION	UNADJUSTED ELEVATION	ADJUSTED ELEVATION	STATION	OFFSET	DESCRIPTION
BM120	3.5390	-3.5387	3.5389	1137.0911	1137.0911	649+73	32 R	CHISLED BOX ON CENTER OF SOUTH HEADWALL
7016								AERIAL TARGET
STATION	DIFF. EL. 1ST RUN	DIFF. EL. 2ND RUN	MEAN DIFF. ELEVATION	UNADJUSTED ELEVATION	ADJUSTED ELEVATION	STATION	OFFSET	DESCRIPTION
BM120	-24.0035	24.0001	-24.0018	1113.0893	1113.0893	652+91	409 R	CHISLED BOX ON CENTER OF SOUTH HEADWALL
7015								AERIAL TARGET

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
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	OKLA.				
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G-26-1031 Network Adjustment Report

Project Name: G-26-1031
 Project Number: 5208(1)
 State: OKLA.
 Fiscal Year: 2017
 Sheet No.: S007

Network Adjustment Report

Adjustment Settings

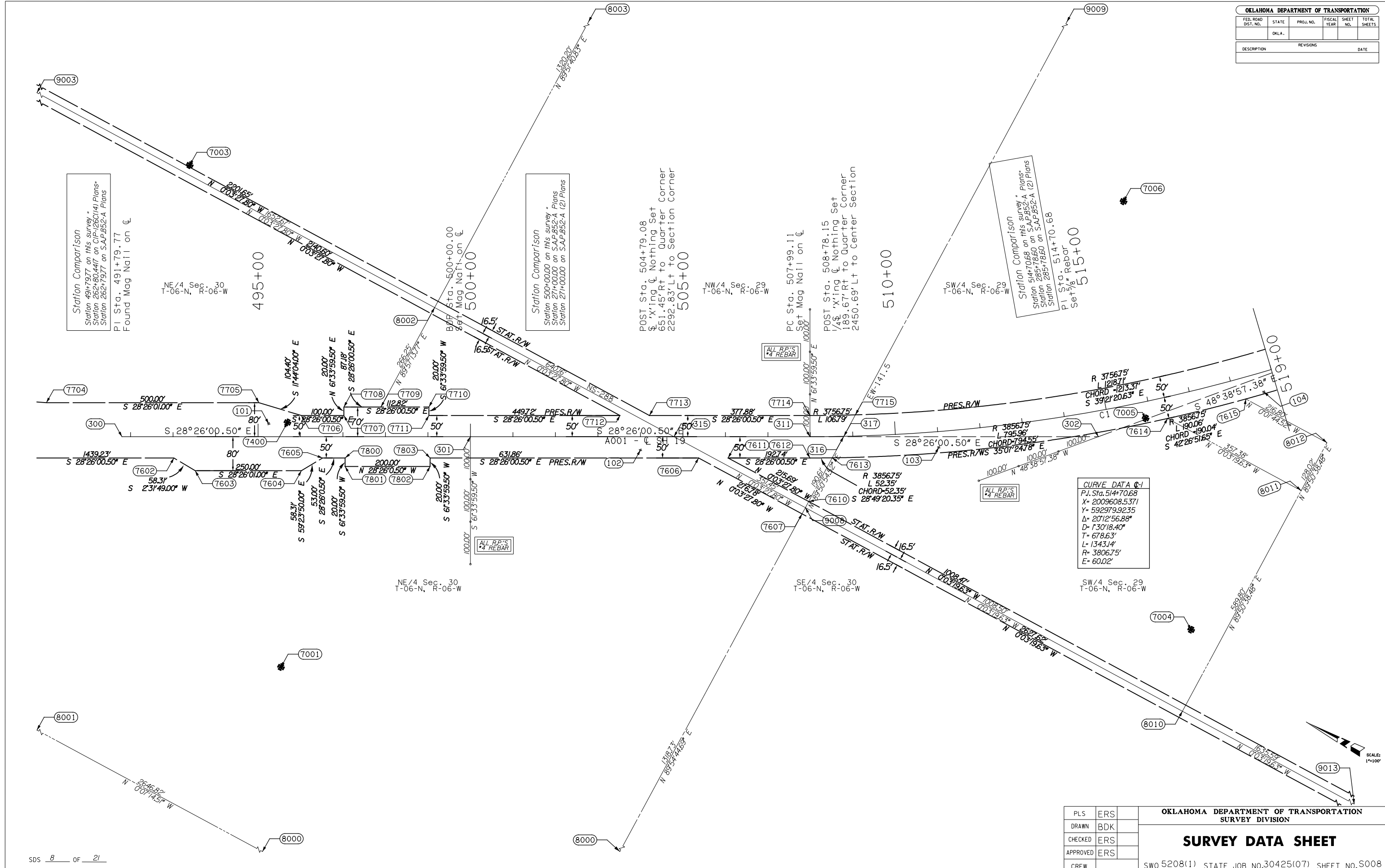
Set-Up Errors
 Units: Feet
 Height of Antenna: 6.50 ft
 Centering Error: 0.00 ft

Covariance Matrix

Horizontal: Propagated Error Floor (M): 0.05
 Constant Term (C): 0.00 ft
 Scale up (in feet) (S): 1.00
 Three-Dimensional: Propagated Linear Error (M): 0.05
 Constant term (C): 0.00 ft

PLS	ERS	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION SURVEY DATA SHEET SWO 5208(1) STATE JOB NO.30425(07) SHEET NO.S007
DRAWN	BDK	
CHECKED	ERS	
APPROVED	ERS	
CREW		

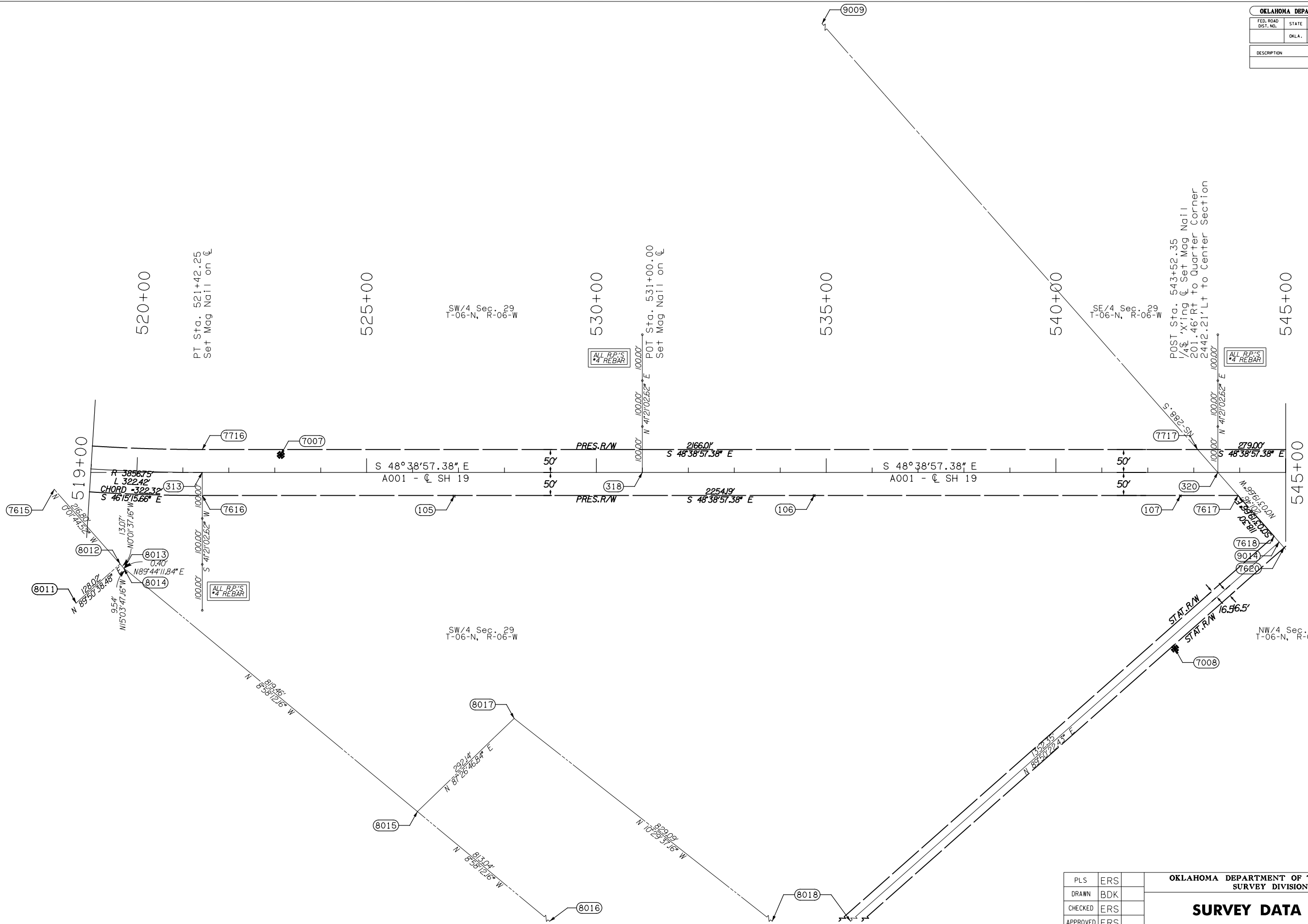
OKLAHOMA DEPARTMENT OF TRANSPORTATION				
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	TOTAL SHEETS
	OKLA.			
DESCRIPTION		REVISIONS	DATE	



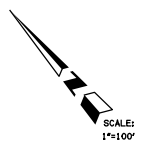
SDS 8 OF 21

PLS	ERS	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION SURVEY DATA SHEET SWO 5208(1) STATE JOB NO. 30425(07) SHEET NO. S008
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CHECKED	ERS	
APPROVED	ERS	
CREW		

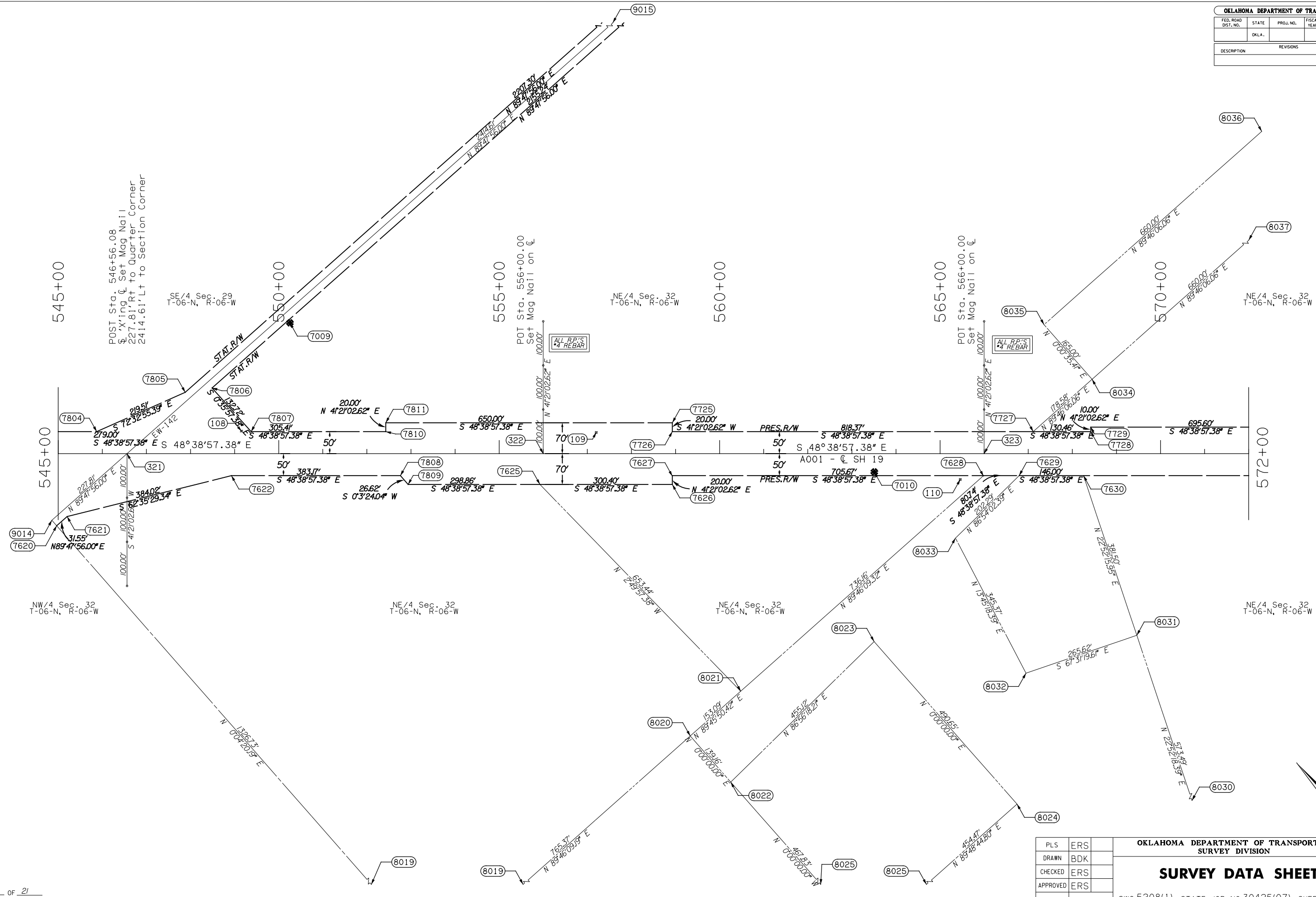
OKLAHOMA DEPARTMENT OF TRANSPORTATION				
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.
	OKLA.			
DESCRIPTION		REVISIONS	DATE	



PLS	ERS	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION SURVEY DATA SHEET SW0 5208(1) STATE JOB NO.30425(07) SHEET NO.S009
DRAWN	BDK	
CHECKED	ERS	
APPROVED	ERS	
CREW		

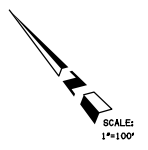


OKLAHOMA DEPARTMENT OF TRANSPORTATION				
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO. TOTAL SHEETS
	OKLA.			
DESCRIPTION		REVISIONS	DATE	

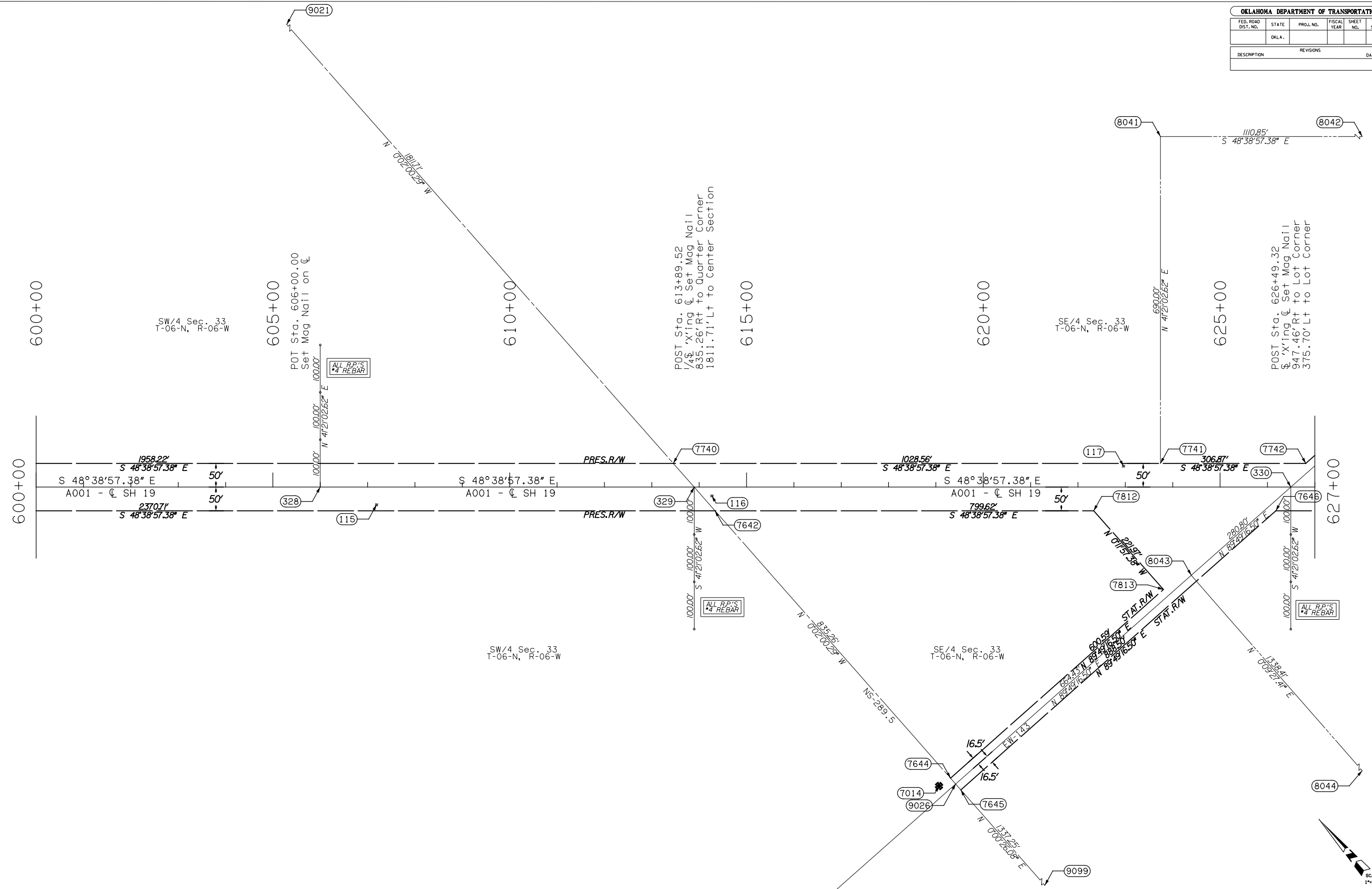


SDS 10 OF 21

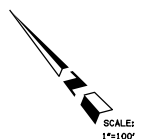
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CHECKED	ERS	
APPROVED	ERS	
CREW		



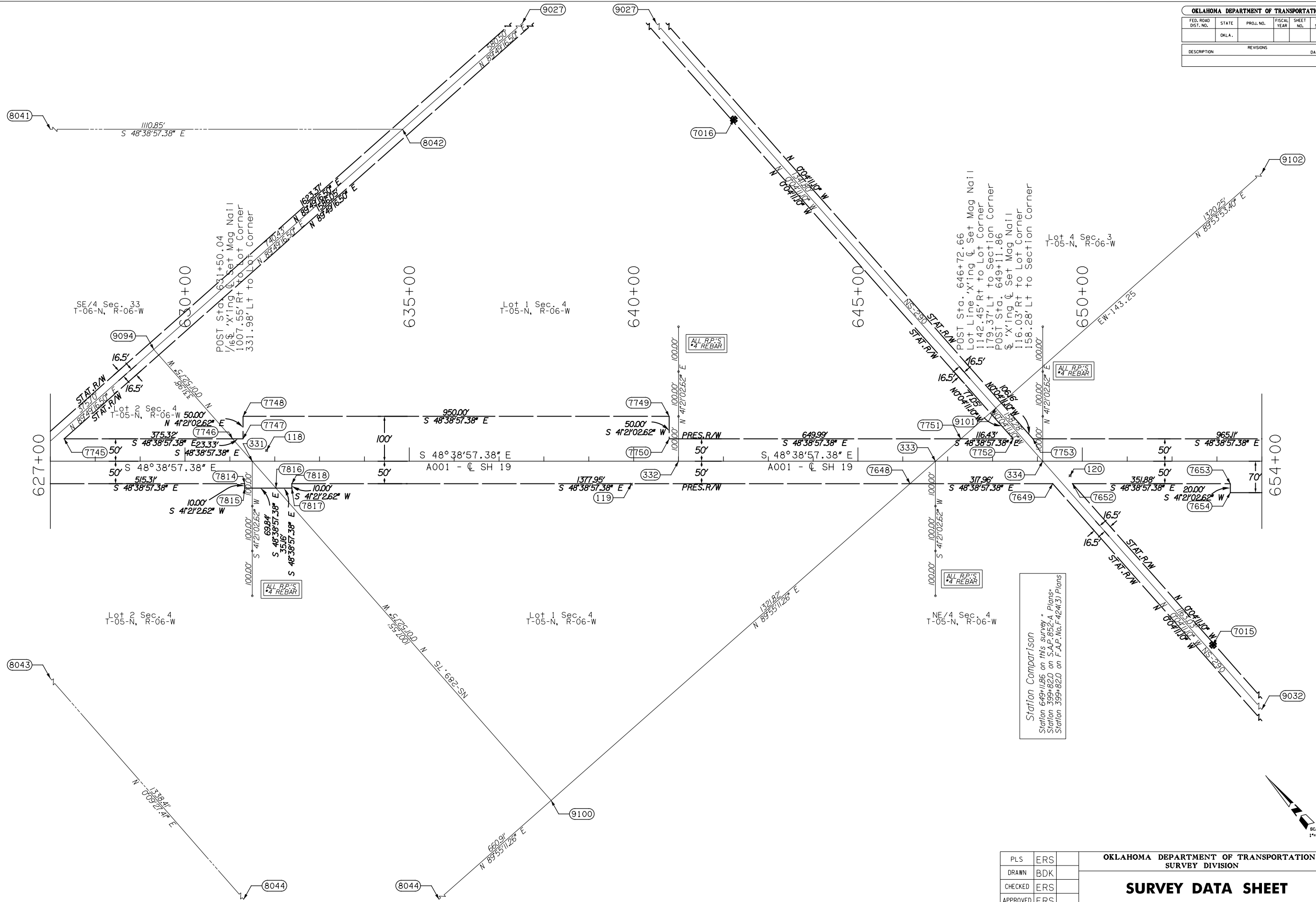
OKLAHOMA DEPARTMENT OF TRANSPORTATION				
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	TOTAL SHEETS
	OKLA.			
DESCRIPTION		REVISIONS	DATE	



PLS	ERS	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION SURVEY DATA SHEET SW0 5208(1) STATE JOB NO.30425(07) SHEET NO.S012
DRAWN	BDK	
CHECKED	ERS	
APPROVED	ERS	
CREW		

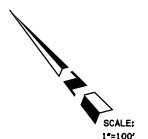


OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				
DESCRIPTION		REVISIONS		DATE	

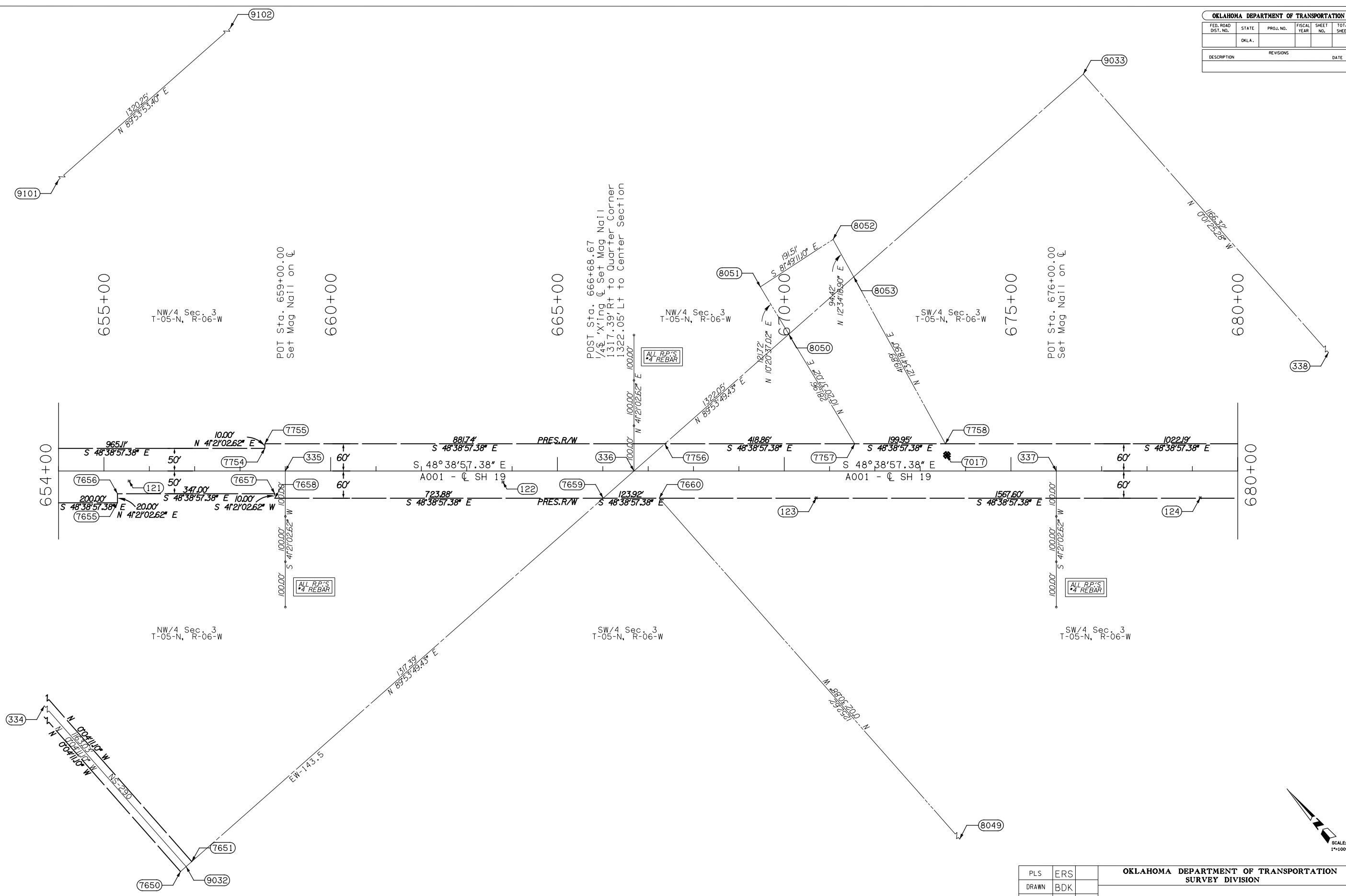


Station Comparison
 Station 649+186 on this survey -
 Station 399+820 on S.A.P. 852-A, Plans -
 Station 399+820 on F.A.P. No. F-424(31) Plans

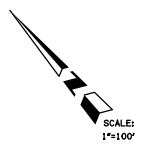
PLS	ERS	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	BDK	
CHECKED	ERS	
APPROVED	ERS	
CREW		
SURVEY DATA SHEET		
SW0 5208(1) STATE JOB NO. 30425(07) SHEET NO. S013		



OKLAHOMA DEPARTMENT OF TRANSPORTATION				
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PLS	ERS	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION SURVEY DATA SHEET SW0 5208(1) STATE JOB NO.30425(07) SHEET NO.S014
DRAWN	BDK	
CHECKED	ERS	
APPROVED	ERS	
CREW		



OKLAHOMA DEPARTMENT OF TRANSPORTATION				
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North Quarter Corner of Section 30,
Township 06 North, Range 06 West, IBM:
(G-26-1078)
Found #4 rebar and 3 references as
described in OCCR by LS 396 dated
02/09/1999.

Northwest Corner of Section 30,
Township 06 North, Range 06 West,
IBM: (G-26-1077)
Found 3 references from OCCR by LS
696 dated 02/19/1999. Calculated
position using said references and set
a #5 rebar with a plastic cap stamped
"Heartland CA4849"

Northeast Corner of Section 30,
Township 06 North, Range 06 West,
IBM: (G-26-1079)
Found #4 rebar and 3 references as
described in OCCR by LS 396 dated
02/09/1999.

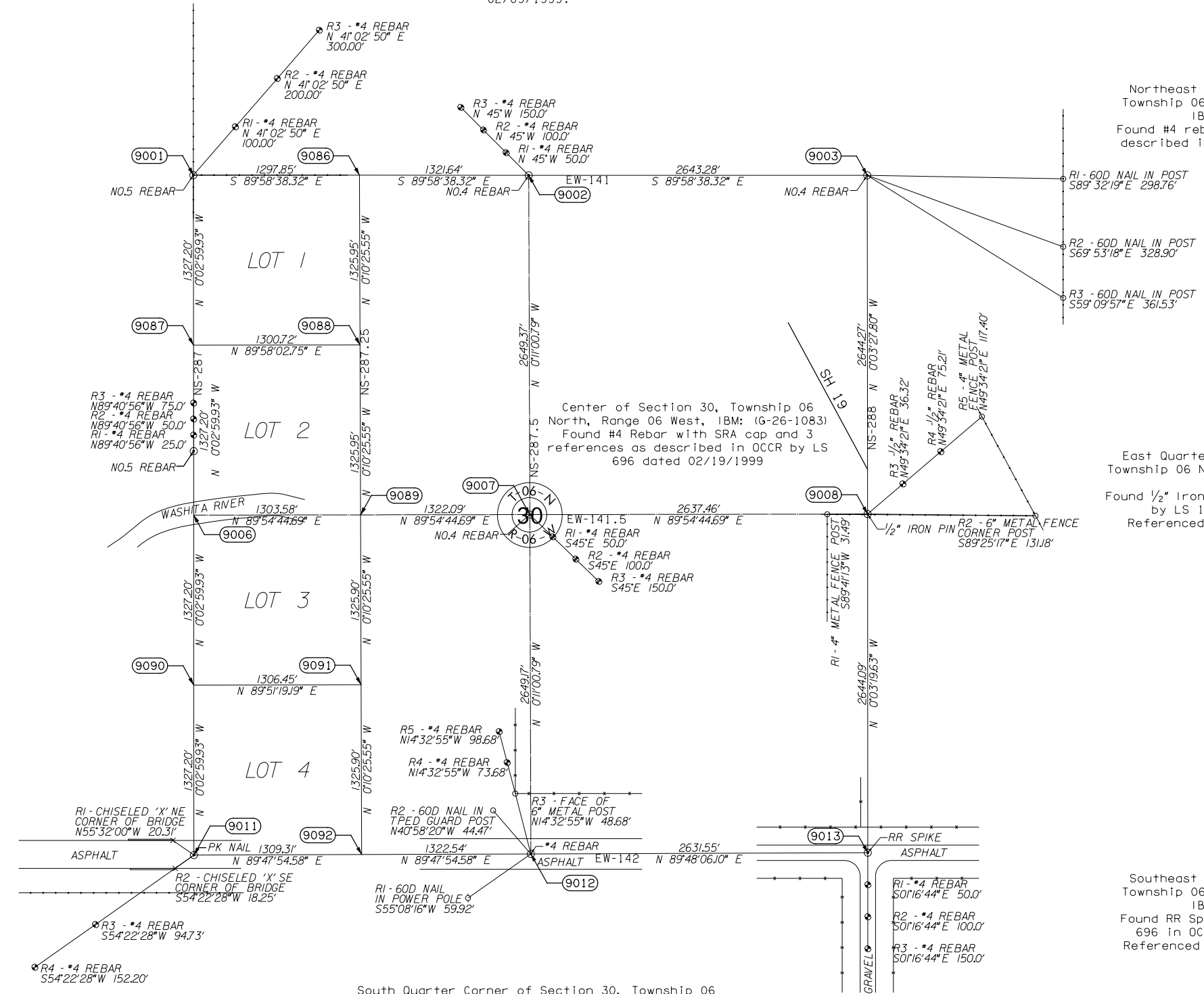
West Quarter Corner of Section 30,
Township 06 North, Range 06 West,
IBM: (G-26-1082)
Calculated position using single
proportion between found corners approx.
1/2 mile north and south. Set #5 rebar with
cap stamped "Heartland CA4849" 100.0' north
of calculated position as a witness corner
due to true position falling in Washita
River. Referenced and filed corner.

East Quarter Corner of Section 30,
Township 06 North, Range 06 West, IBM:
(G-26-1084)
Found 1/2" Iron Pin as described in OCCR
by LS 189 dated 08/22/2003
Referenced and filed the corner.

Southwest Corner of Section 30, Township
06 North, Range 06 West, IBM: (G-26-1087)
Found and accepted PK Nail and 2
references as described in OCCR by LS
696 dated 02/19/1999. Referenced and
filed corner.

South Quarter Corner of Section 30, Township 06
North, Range 06 West, IBM: (G-26-1088)
Found and accepted #4 rebar and 2 references as
described in OCCR by LS 696 dated 02/19/1999.
Referenced and filed the Corner.

Southeast Corner of Section 30,
Township 06 North, Range 06 West,
IBM: (G-26-1089)
Found RR Spike as described by LS
696 in OCCR dated 02/19/1999.
Referenced and filed the Corner.



SCALE:
1" = 500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
PLS	ERS
DRAWN	BDK
CHECKED	ERS
APPROVED	ERS
CREW	

SURVEY DATA SHEET

SW0 5208(1) STATE JOB NO.30425(07) SHEET NO.S016

OKLAHOMA DEPARTMENT OF TRANSPORTATION				
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DESCRIPTION		REVISIONS	DATE	

North Quarter Corner of Section 29,
Township 06 North, Range 06 West, 1BM:
(G-26-1080)
Found 3/8" Iron pin 335.0' west of true
corner which falls in the Washita
River and 3 references as described in
OCCR by LS 1200 dated 04/01/2014

Northwest Corner of Section 29,
Township 06 North, Range 06 West,
1BM: (G-26-1079)
Found #4 rebar and 3 references as
described in OCCR by LS 396 dated
02/09/1999.

Northeast Corner of Section 29,
Township 06 North, Range 06 West,
1BM: (G-26-1081) Found 3/8" Iron pin for
witness corner 200.0' East of true
corner position as described in OCCR
by LS 1200 dated 04/01/2014. True
corner falls in river bank.

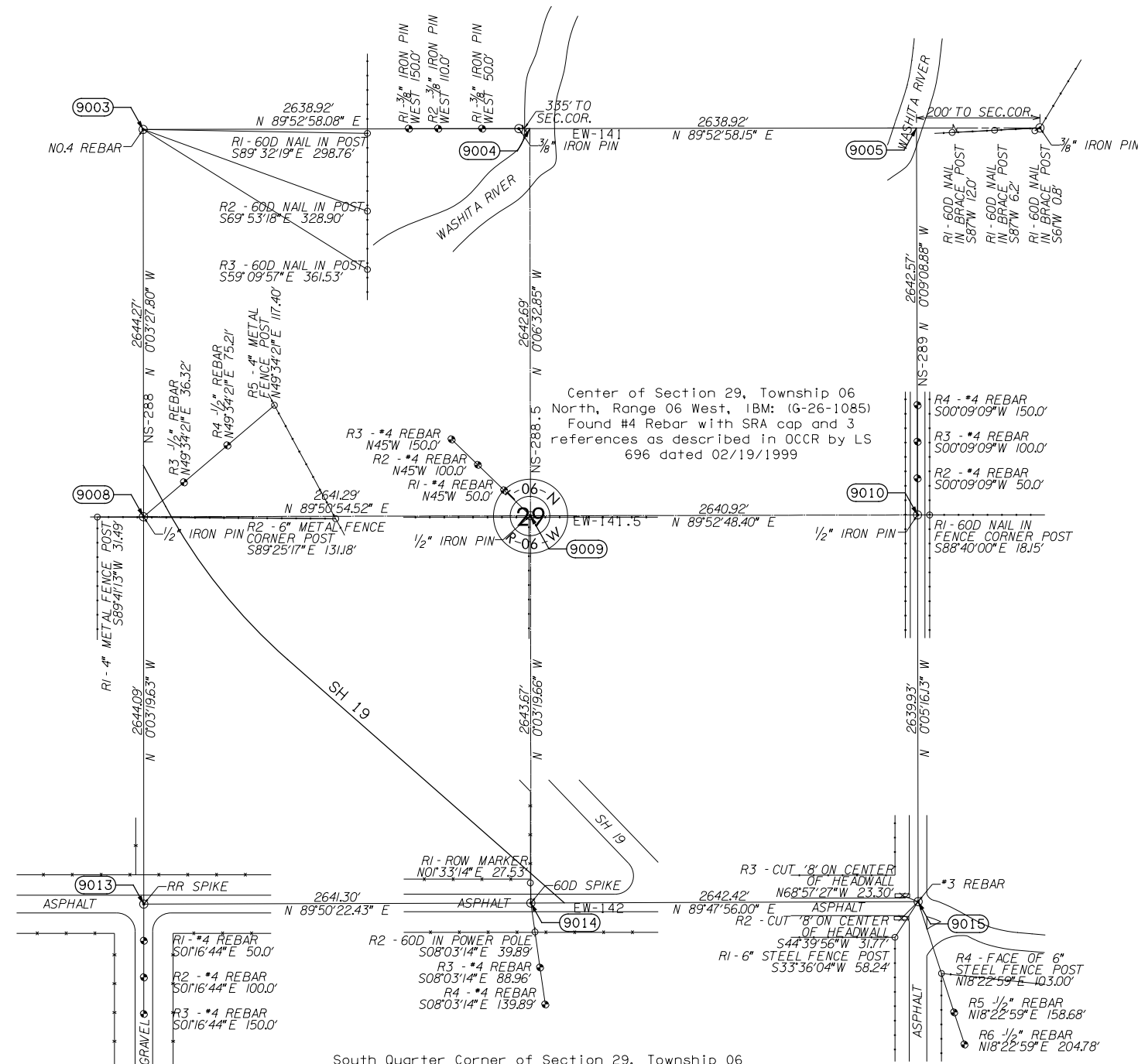
West Quarter Corner of Section 29,
Township 06 North, Range 06 West, 1BM:
(G-26-1084)
Found 1/2" Iron Pin as described in OCCR
by LS 189 dated 08/22/2003
Referenced and filed the corner.

East Quarter Corner of Section 29,
Township 06 North, Range 06 West, 1BM:
(G-26-1086)
Found 1/2" Iron Pin and 1 reference as
described by LS 696 in OCCR dated
02/19/1999. Referenced and filed the
corner.

Southwest Corner of Section 29,
Township 06 North, Range 06 West,
1BM: (G-26-1089)
Found RR Spike as described by LS
696 in OCCR dated 02/19/1999.
Referenced and filed the Corner.

Southeast Corner of Section 29,
Township 06 North, Range 06 West,
1BM: (G-26-1091)
Found #3 rebar and 3 references as
described in OCCR by LS 696 Dated
02/19/1999. Referenced and filed
corner.

South Quarter Corner of Section 29, Township 06
North, Range 06 West, 1BM: (G-26-1090)
Found and accepted 60D spike and 1 reference as
described in OCCR by LS 696 dated 02/19/1999.
Referenced and filed the Corner.



SCALE:
1" = 500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

PLS	ERS	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION SURVEY DATA SHEET SW0 5208(1) STATE JOB NO.30425(07) SHEET NO.S017
DRAWN	BDK	
CHECKED	ERS	
APPROVED	ERS	
CREW		

OKLAHOMA DEPARTMENT OF TRANSPORTATION				
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North Quarter Corner of Section 32, Township 06 North, Range 06 West, IBM: (G-26-1090)
 Found and accepted 60D spike and 1 reference as described in OCCR by LS 696 dated 02/19/1999. Referenced and filed the Corner.

Southwest Corner of Section 32, Township 06 North, Range 06 West, IBM: (G-26-1089)
 Found RR Spike as described by LS 696 in OCCR dated 02/19/1999. Referenced and filed the Corner.

Northeast Corner of Section 32, Township 06 North, Range 06 West, IBM: (G-26-1091)
 Found #3 rebar and 3 references as described in OCCR by LS 696 Dated 02/19/1999. Referenced and filed corner.

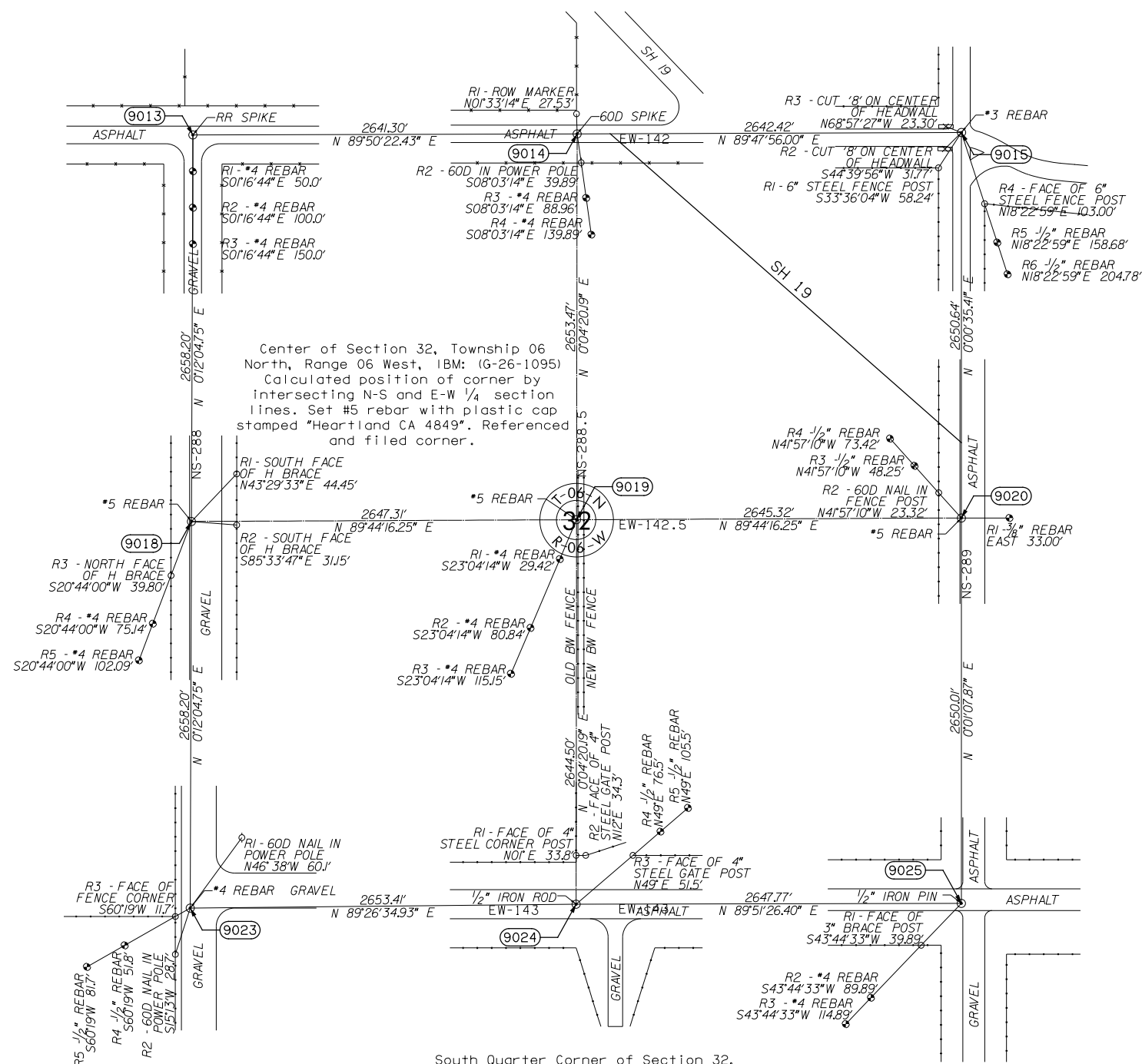
West Quarter Corner of Section 32, Township 06 North, Range 06 West, IBM: (G-26-1094)
 Used single proportion to calculate position of corner. Set #5 rebar with cap stamped Heartland CA4849. Referenced and filed corner.

East Quarter Corner of Section 32, Township 06 North, Range 06 West, IBM: (G-26-1096)
 Found 3/8" rebar and 1 reference as described in OCCR by LS 1071 dated 10/23/89. Referenced and filed the corner.

Northwest Corner of Section 32, Township 06 North, Range 06 West, IBM: (G-26-1099)
 Found and accepted 1/2" iron pin and 2 references as described in OCCR by LS 1434 dated 01/17/2013. Referenced and filed corner.

Southeast Corner of Section 32, Township 06 North, Range 06 West, IBM: (G-26-1101)
 Found and accepted 1/2" Iron pin as described by LS 449 dated 09/21/1984. Referenced and filed corner.

South Quarter Corner of Section 32, Township 06 North, Range 06 West, IBM: (G-26-1100)
 Found and accepted 1/2" Iron rod and 1 reference as described by LS 1200 dated 12/17/2012. Referenced and filed the Corner.



SCALE: 1" = 500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

PLS	ERS	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION SURVEY DATA SHEET SW0 5208(1) STATE JOB NO.30425(07) SHEET NO.S018
DRAWN	BDK	
CHECKED	ERS	
APPROVED	ERS	
CREW		

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
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North Quarter Corner of Section 33,
Township 06 North, Range 06 West, IBM:
(G-26-1092)
Calculated position using single
proportion between recovered section
corners 1/2 miles east and west. Set
5/8" rebar with cap stamped "Heartland
CA4849". Referenced and filed corner.

Northwest Corner of Section 33,
Township 06 North, Range 06 West,
IBM: (G-26-1091)
Found #3 rebar and 3 references as
described in OCCR by LS 696 Dated
02/19/1999. Referenced and filed
corner.

Northeast Corner of Section 33, Township
06 North, Range 06 West, IBM: (G-26-1093)
Found and accepted 1/2" Iron pin and 3
references as described by LS 1326 in
OCCR dated 11/10/2010. Referenced and
filed corner.

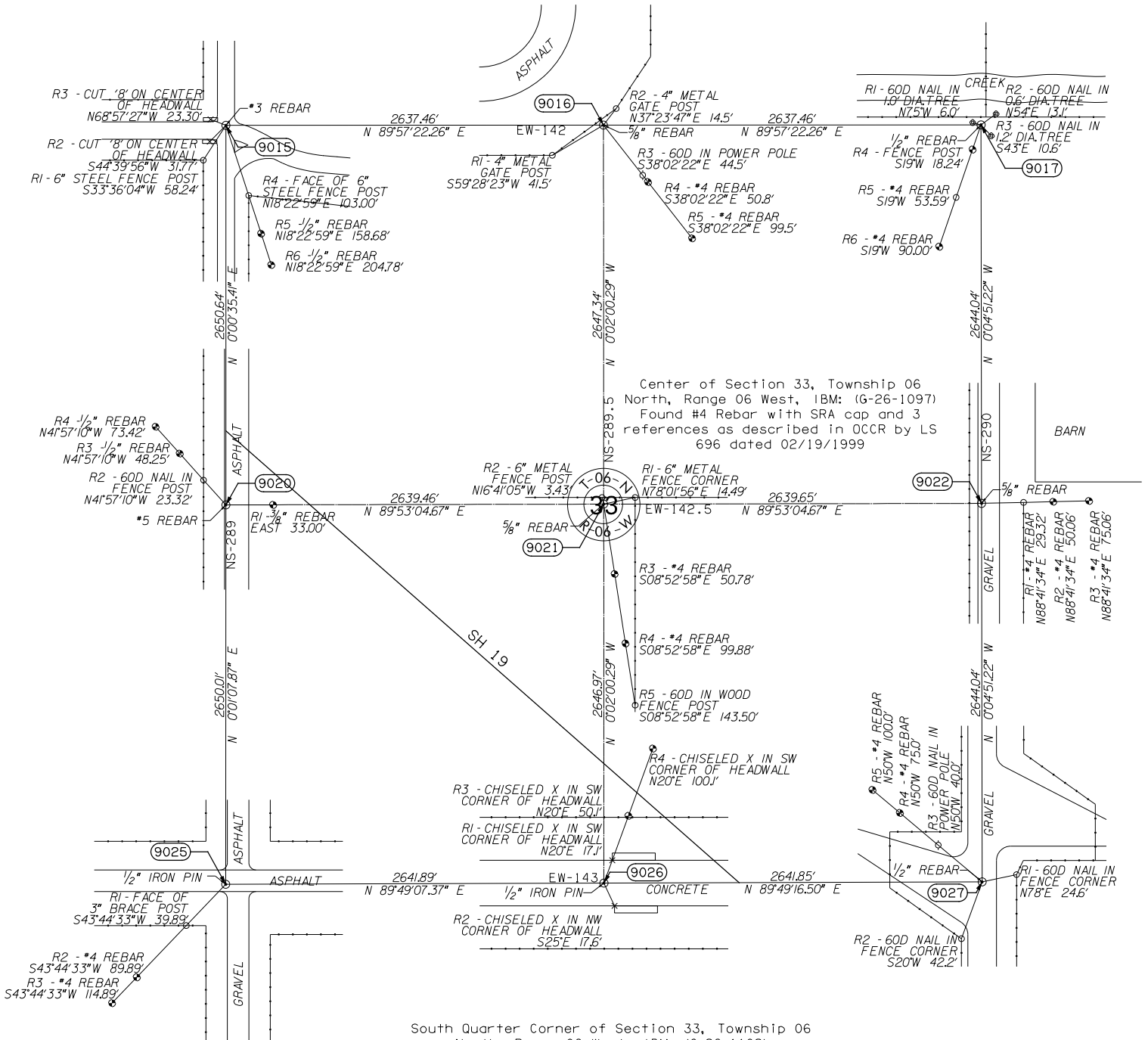
West Quarter Corner of Section 33,
Township 06 North, Range 06 West, IBM:
(G-26-1096)
Found 3#8" rebar and 1 reference as
described in OCCR by LS 1071 dated
10/23/89. Referenced and filed the
corner.

East Quarter Corner of Section 33,
Township 2 South, Range 1 East, IBM:
(G-26-1097)
Calculated position using single
proportion between found section
corners and set 5/8" rebar with cap
stamped "Heartland CA4849". Referenced
and filed the corner.

Southwest Corner of Section 33, Township
06 North, Range 06 West, IBM: (G-26-1101)
Found and accepted 1#2" Iron pin as
described by LS 449 dated
09/21/1984. Referenced and filed corner.

Southeast Corner of Section 33,
Township 2 South, Range 1 East, IBM:
(G-26-1103)
Found 1/2" Iron pin and 3 references
as described in OCCR by LS 1326
dated 12/17/2001. Referenced and
filed corner

South Quarter Corner of Section 33, Township 06
North, Range 06 West, IBM: (G-26-1102)
Calculated position of corner by intersecting N-S
and E-W 1#4 section lines. Set #5 rebar with
plastic cap stamped "Heartland CA 4849". Referenced
and filed corner.



SCALE:
1" = 500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

PLS	ERS	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION SURVEY DATA SHEET SW0 5208(1) STATE JOB NO.30425(07) SHEET NO.S019
DRAWN	BDK	
CHECKED	ERS	
APPROVED	ERS	
CREW		

OKLAHOMA DEPARTMENT OF TRANSPORTATION				
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North Quarter Corner of Section 4,
Township 05 North, Range 06 West, IBM:
(G-26-1102)
Calculated position of corner by
intersecting N-S and E-W 1#4 section
lines. Set #5 rebar with plastic cap
stamped "Heartland CA 4849". Referenced
and filed corner.

Northwest Corner of Section 4,
Township 05 North, Range 06 West,
IBM: (G-26-1101)
Found and accepted 1#2" Iron pin as
described by LS 449 dated
09/21/1984. Referenced and filed
corner.

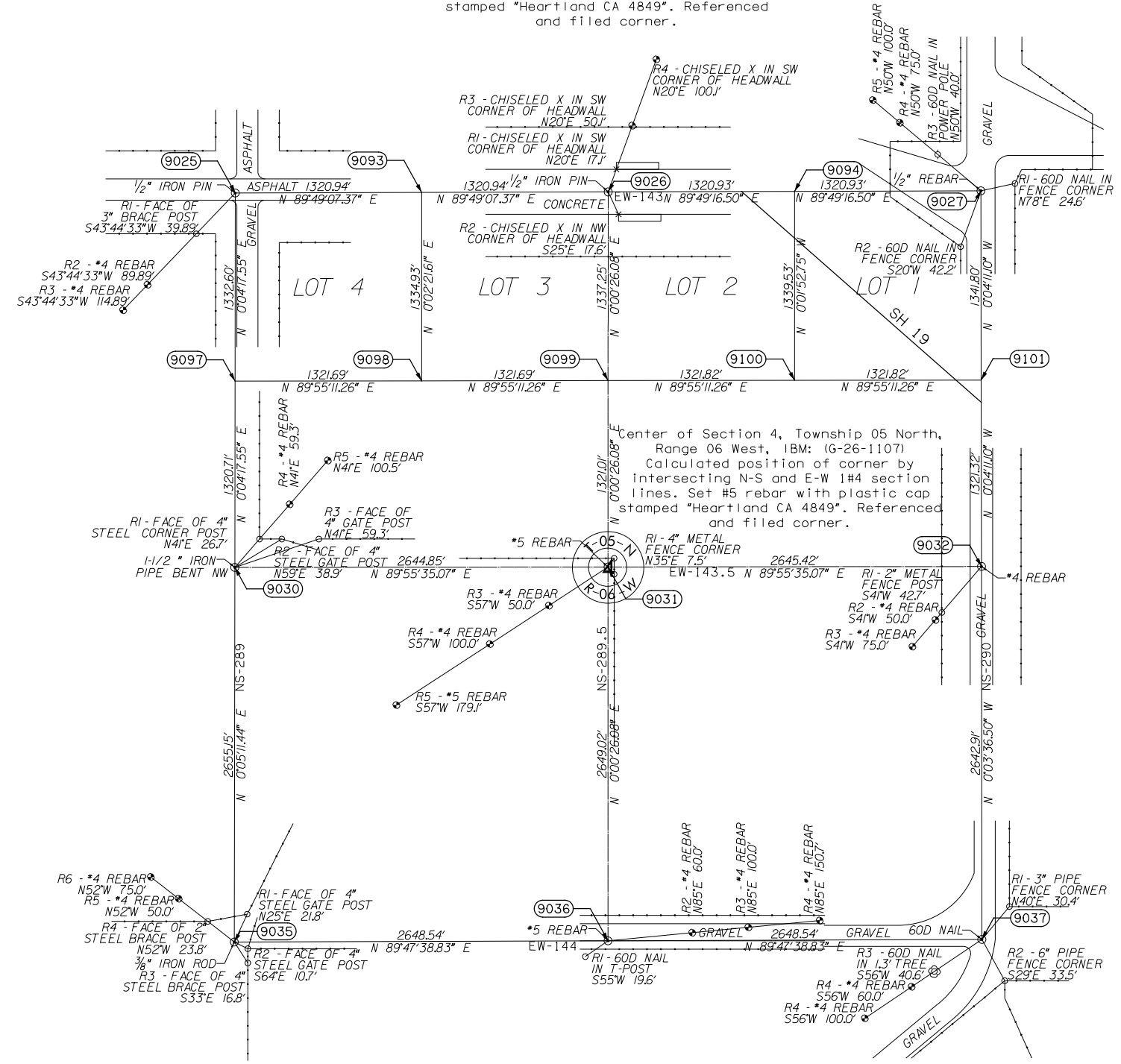
Northeast Corner of Section 4,
Township 05 North, Range 06 West,
IBM: (G-26-1103)
Found 1#2" Iron pin and 3 references
as described in OCCR by LS 1326 dated
12/17/2001. Referenced and filed
corner.

West Quarter Corner of Section 4,
Township 05 North, Range 06 West, IBM:
(G-26-1106)
Found and accepted 1 1/2" Pipe bent NW and
3 references as described in OCCR by LS
1200 dated 12/20/2012. Referenced and
filed the corner.

East Quarter Corner of Section 4,
Township 05 North, Range 06 West, IBM:
(G-26-1108)
Found #4 rebar and 1 reference as
described in OCCR by LS 1326 dated
08/04/2010. Referenced and filed
corner.

Southwest Corner of Section 4, Township
05 North, Range 06 West, IBM: (G-26-1111)
Found and accepted 3/8" iron rod with cap
and 4 references as described by LS 1200
in OCCR dated 12/20/2012. Referenced and
filed corner.

South Quarter Corner of Section 4,
Township 05 North, Range 06 West, IBM:
(G-26-1112)
Calculated position using single
proportion between recovered corners. Set
#5 rebar with cap stamped "Heartland
CA4849". Referenced and filed the corner.



Southeast Corner of Section 4,
Township 05 North, Range 06 West,
IBM: (G-26-1113)
Found 60D nail and 3 references as
described in OCCR by LS 1326 dated
08/04/2010. Filed and references
corner.



SCALE:
1" = 500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

PLS	ERS	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	BDK	
CHECKED	ERS	
APPROVED	ERS	
CREW		
		SURVEY DATA SHEET
		SWO 5208(1) STATE JOB NO. 30425(07) SHEET NO. S020

OKLAHOMA DEPARTMENT OF TRANSPORTATION				
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DESCRIPTION		REVISIONS	DATE	

North Quarter Corner of Section 3,
Township 05 North, Range 06 West, 1BM:
(G-26-1104)
Found 1/2" Iron pin and 3 references as
described by LS 1200 in OCCR dated
06/11/2015. Referenced and filed
corner.

Northwest Corner of Section 3,
Township 05 North, Range 06 West,
1BM: (G-26-1103)
Found 1#2" Iron pin and 3 references
as described in OCCR by LS 1326 dated
12/17/2001. Referenced and filed
corner.

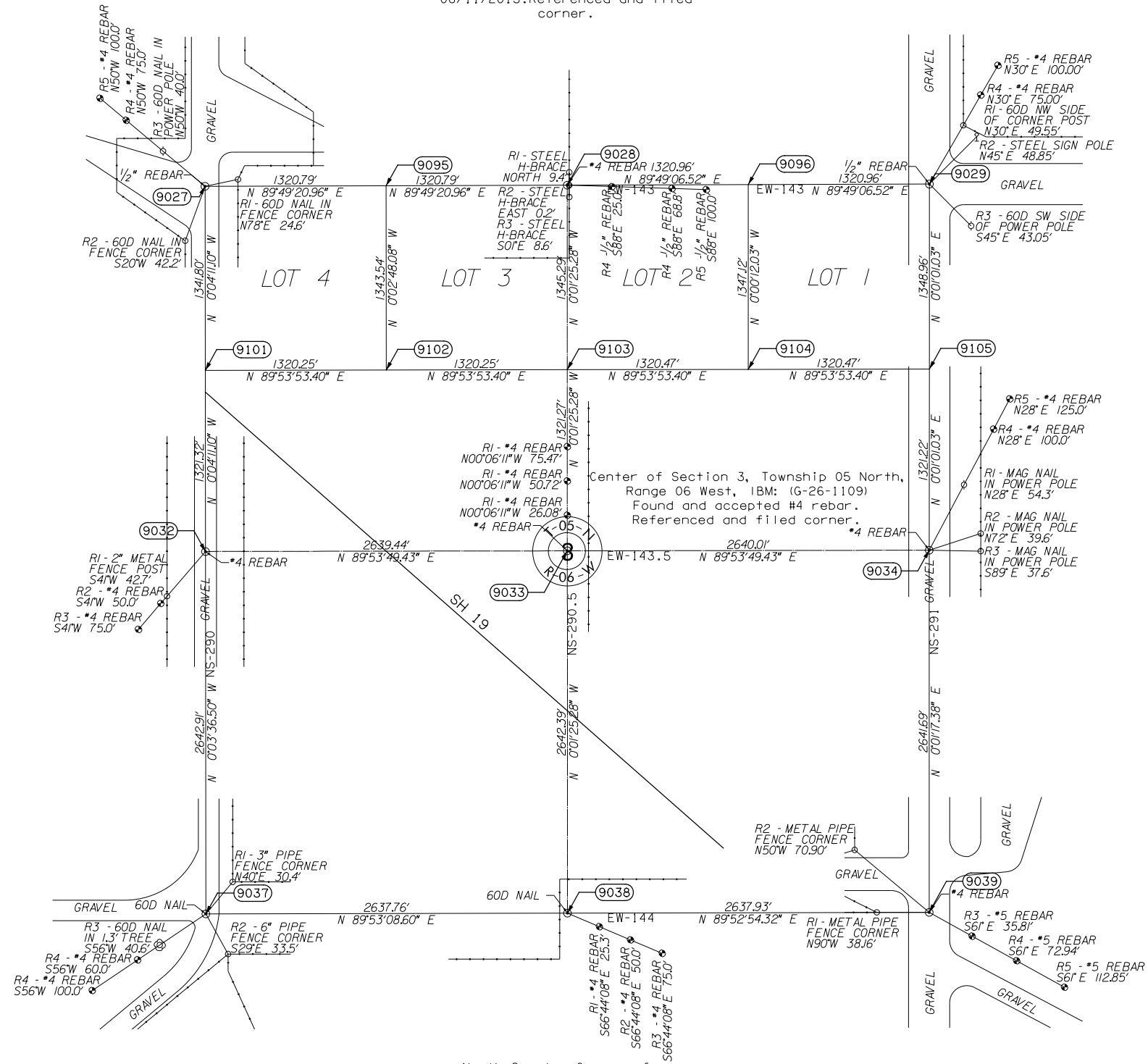
Northeast Corner of Section 3,
Township 05 North, Range 06 West,
1BM: (G-26-1105)
Found and accepted 1/2" Iron Pin and 3
references as described by LS 189 in
OCCR dated 12/21/1993. Referenced and
filed corner.

West Quarter Corner of Section 3,
Township 05 North, Range 06 West, 1BM:
(G-26-1108)
Found #4 rebar and 1 reference as
described in OCCR by LS 1326 dated
08/04/2010. Referenced and filed corner.

East Quarter Corner of Section 3,
Township 05 North, Range 06 West, 1BM:
(G-26-1110)
Found 1/2" Iron Pin and 3 references as
described in OCCR by LS 1200 dated
06/11/2015. Referenced and filed
corner.

Southwest Corner of Section 3, Township
05 North, Range 06 West, 1BM: (G-26-1113)
Found 60D nail and 3 references as
described in OCCR by LS 1326 dated
08/04/2010. Filed and references corner.

North Quarter Corner of
Section 3, Township 05 North,
Range 06 West, 1BM: (G-26-1114)
Found and accepted 3/8" Iron
pin. Referenced and filed the
Corner.



Northeast Corner of Section 3,
Township 05 North, Range 06 West,
1BM: (G-26-1115)
Found and accepted 1/2" Iron pin and 2
references as described by LS 1349
in OCCR dated 02/25/1997. Referenced
and filed corner.



SCALE:
1" = 500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

PLS	ERS	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION SURVEY DATA SHEET SW0 5208(1) STATE JOB NO. 30425(07) SHEET NO. S021
DRAWN	BDK	
CHECKED	ERS	
APPROVED	ERS	
CREW		

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				
DESCRIPTION			REVISIONS	DATE	

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

SURVEY OF
S.H. 19
SWO 5207(1)
J P NO. 30425(04)
GRADY

FROM 8.87 MILE EAST OF US-81,
EAST 4.51 MILES TO THE ROARING CREEK BRIDGE

INDEX OF SHEETS

1	TITLE SHEET
2-3	HISTORICAL LETTER
4	HISTORICAL LETTER & ALIGNMENT DATA
5-6	COGO POINT LIST
7	CHECK LEVEL LIST
8	GPS NETWORK MAP
9-17	SURVEY DATA SHEET
18-26	GEOMETRIC DATA SHEET

SURVEY BEGAN: 3/1/2016
SURVEY COMPLETED: 8/18/2017

PERSONNEL:	TITLE:
EDWARD R. SEATON	LICENSED LAND SURVEYOR
TONY ROBISON	LICENSED LAND SURVEYOR
BRANDON KAUFMAN	LICENSED LAND SURVEYOR
RYAN THOMSON	PARTY CHIEF
DAKOTA ROBISON	DRAFSTMAN
JASON APPLETON	INSTRUMENTMAN
JIM PEACHES	INSTRUMENTMAN
RAY GIPSON	INSTRUMENTMAN
CLIFF MEDFORD	CERTIFIED PHOTOGRAMMETRIST

EQUIPMENT:

5	TRIMBLE R6-3 GPS RECEIVER
1	TRIMBLE R6-2 GPS RECEIVER
3	TRIMBLE TSC3 DATA COLLECTOR
1	TRIMBLE TSC2 DATA COLLECTOR
1	TOPCON GPT-2003 TOTAL STATION
1	TRIMBLE M3 TOTAL STATION
1	TRIMBLE DINI DIGITAL LEVEL

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SWO 5207(1) J/P 30425(04) : S.H. 19 CO. GRADY

HORIZONTAL CONTROL:

Oklahoma Coordinate System of 1927 Zone. _____
 Oklahoma Coordinate System of 1983 Zone. SOUTH
 Oklahoma Dept. of Transportation Plane Coordinate System of 1927 _____
 Oklahoma Dept. of Transportation Plane Coordinate System of 1983 _____
 Arbitrary Coordinate System _____

HORIZONTAL PLANE DATUM DEFINITION:
 Oklahoma Department of Transportation coordinates were derived by multiplying the Oklahoma Coordinate Systems of 1927 or 1983 by the combined adjustment factor of 1.00010. The ODOT Coordinate System is 2350 feet above sea level.

1. **GPS NETWORK** adjusted to **NGS HARN**

Stations _____
 A) Closure before adjustment X : Y : Angles _____
 Trav. Length _____ : is _____ 1st Order before adjustment.
 B) _____
 C) Method of Distance Measurement: _____
 Electronic GPS Triangulation
 D) Instrument used for angles _____ () Order _____

2. _____ adjusted to _____ () Order _____

Stations _____
 A) Closure before adjustment X : Y : Angles _____
 B) _____ : is FIRST Order; _____ Tied to _____
 C) Method of Distance Measun _____
 Electronic GPS Triangulation
 D) Instrument used for angles _____ () Order _____

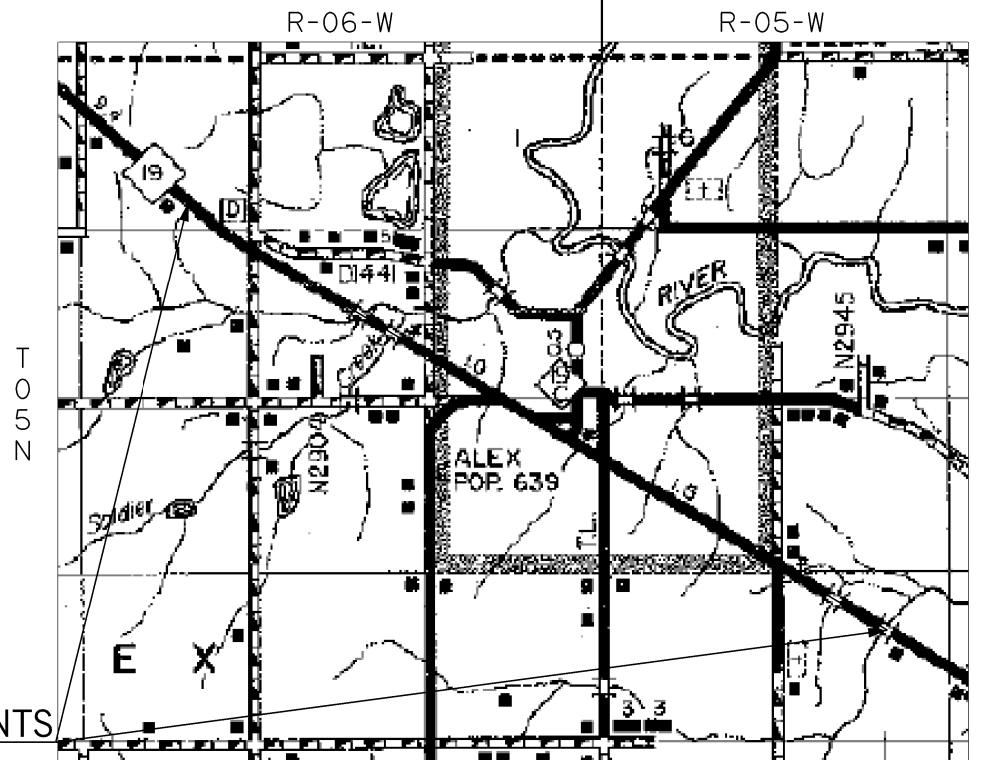
VERTICAL CONTROL IS (2nd) order. Level Line taken from ODOT G-26-1030 and G-26-1031 (2nd) order. () NGVD 29 datum
 (2nd) order and tied to _____ (2nd) order. NAVD 88 datum

ACCURACY DEFINITION:

(1) HORIZONTAL: (3rd Order = Class I = 1 : 10,000'
 (3rd Order = Class II = 1 : 5,000'
 (2) VERTICAL: (1st Order = 0.017 Ft. x sqrt. of MI.)
 (3rd Order = 0.050 Ft. x sqrt. of MI.)

Distribution:
 Copy w/survey reports _____ Edward R. Seaton
 Copy in each Alignment _____ Professional Land Surveyor
 and level book _____
 _____ 18-Aug-17
 _____ Date
 (FORM SD #20)
 Rev. 11/03

PROJECT LOCATION



PROJECT EXTENTS

PROJECT LENGTH 24173 Ft. 4.58 MI.

BEGINNING STATION : 699+46.05
 ENDING STATION : 941+18.75

UTILITY CONTACT INFORMATION		
ELECTRIC	COMMUNICATIONS	WATER
HEATH OK ELEC COOP (405) 321-2024	DOBSON FIBER (405) 242-1000	CITY OF ALEX (405) 758-2393
PUBLIC SERVICES OKLAHOMA (888) 216-3253	AT & T (888) 975-0952	
ONG (800) 664-5463	GAS ENABLE MIDSTREAM (405) 525-7788	DCP MIDSTREAM (303) 595-3331
ONEOK FIELD SERVICES (918) 588-7000	CONTINENTAL RESOURCES (405) 222-9380	VELOCITY PIPELINE (405) 367-0463

THIS SURVEY MEETS THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYING AS ADOPTED BY THE OKLAHOMA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS, MAY 17, 2010.

SPECIFICATIONS FOR SURVEYS FOR PRIMARY AND SECONDARY HIGHWAYS DATED JANUARY 2011 GOVERN.

SDS 1 OF 26

Electronic File Transfer Disclaimer:

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PLS	ERS
DRAWN	BDK
CHECKED	ERS
APPROVED	ERS
CREW	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

SWO 5207(1) STATE JOB NO. 30425(04) SHEET NO. S022

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

SWO 5207(1) Job/Piece 30425(04) Engr. Contract No. 1709

LAND SURVEYOR'S CERTIFICATION

I hereby certify that all land and property sub-division distances, angles, corners, and monumentation made or used in conjunction with this survey and depicted or recorded hereinafter were recovered, established or re-established in substantial conformity with:

- Applicable instructions contained in the U.S. Government Bureau of Land Management publication "Manual of Survey Instruction".
- Its supplement, "Restoration of Lost or Obliterated Corners and Sub-division of Sections".
- "Oklahoma Minimum Standards for the Practice of Land Surveying" as adopted by the State Board of Licensure for Professional Engineers and Land Surveyors; and
- Sound land surveying practices;

including a thorough search, study, analysis and consideration of all existing records and field evidence.

I further certify that all survey monuments depicted exist and that all land survey work was done by me or under my direct supervision.

Dated this 18th day of August, 2017

Land Surveyor Edward R. Seaton (seal) _____
 Signature

Edward R. Seaton

Printed Name

Oklahoma Licensed Land Surveyor No. 1353

Certificate of Authorization No. 4849



SW05207(1) - J/P No. 30425(04)
 S.H. 19 Grady County
 From 8.87 miles East of US 81,
 East 4.51 miles to the Roaring Creek Bridge

Historical Letter & Written Report

1. GENERAL:

Survey Began: March 1, 2016
 Survey Completed: August 18, 2017

Personnel on this survey:

Edward R. Seaton	Licensed Land Surveyor
Jerry Townsend	Licensed Land Surveyor
Tony Robison	Licensed Land Surveyor
Brandon Kaufman	Licensed Land Surveyor
Ryan Thomson	Party Chief
Jason Appleton	Instrument Operator
Ray Gipson	Instrument Operator

2. ASSIGNMENT:

This Survey was assigned to me by Mr. Brian Schmidt, Triad Design Group, via email dated 03/01/2016. Heartland Surveying and Mapping, PLLC, under the direct supervision of Mr. Edward R. Seaton, began work on the project on March 1, 2017.

3. PURPOSE:

The purpose of this survey was to furnish sufficient data to develop Preliminary Engineering and Preparation of Construction plans. The survey includes the Alignment, Topographic/Planimetric data, Surface Features/DTM data, Land Ties, Utilities, Drainage and all other pertinent information needed to aid in the design.

4. LIMITS:

The Survey began approximately 8.87 miles east of centerline of US 81 at a point approximately 737 feet northwest of the EW 144.0 Section Line and as shown at PC Sta. 450+14.70 in SWO 822 Alignment Notes, Book 1. The Survey ended as shown at POT Sta. 692+00.00, SWO 822 Alignment Notes, Book 1. The survey was will be 200 feet left and right or according to what is detailed in the SPECIFICATIONS FOR SURVEYS FOR PRIMARY AND SECONDARY HIGHWAYS (Revised January, 2016), whichever is greater. Flow line profiles were obtained 1000 feet downstream and 1000 feet upstream. This survey has geometric ties to SWO 5208(1) Survey.

5. ALIGNMENT:

S.H. 19 SURVEY: The Centerline of Survey for this project was along and identical to:

SWO 822 Alignment Notes Book 1
 SWO 822 Alignment Notes Book 4
 CIP - 126c(14) Plans
 CIP - 126c(19) Plans

The Alignment was reconstructed using recovered field evidence and with the assistance of ODOT personnel. We met with Denny Dees, Jeff King and Kyle King on February 23rd 2017 to discuss our findings and how to proceed. Under their direction we used recovered centerline references, section corners and drainage structures to determine the original location of centerline. The centerline was field staked and references for future recovery according to ODOT requirements. Summary of recovery as described below:

We created the Northwest tangent using structures and centerline points found on SAP-852-A and F-424(3) plans. We were able to recover all 3 references at POT Sta 397+00 and held that calculated position and then used the 2 recovered references at PI sta 457+62.9 to reestablish the original position of that point and held that to establish the tangent. We then compared that line to additional references recovered at stations 379+00, 400+04.6 and PC Sta 452+70.02 and accepted its position.

We created the Southeast tangent by holding the position of PI Sta 457+62.9 and extending it through the position of POT Sta 667+58 which was reestablished using both recovered references for that point. We then checked that position against references found at POT Sta 641+65.25 and POT Sta 654+00 and held that position. The measured Delta angle between the 2 tangents is 09°51'04" compared to the plan Delta of 09°50'. To create the curve we held the calculated Delta and used the tangent length between the calculated PI and the position calculated from recovered references of the PC at Station 452+70.02 as directed in our meeting on Feb 23rd 2017. As discussed in the meeting, we found that there was an unknown error in the stationing on the SAP-852-A and F424(3) plans likely caused by the measuring techniques of the time. This made establishing beginning and ending points of this survey slightly more difficult to establish. To reestablish the position of PC Station 450+14.7 in SWO 822 Alignment Notes Book 1 (BOP for this Project), we held the distance between the structure at Sta. 442+80 and the calculated position of POST Sta 457+28.1. Station 692+00 (BOP for this Project) was reestablished by extending the tangent 2442 ft (plan distance) beyond the recovered POT at Sta. 667+58. A new station of 699+46.05 was assigned to the BOP during the SWO 5208 Survey and is continued without equation through this survey which assigns a new station of 941+18.75 to the EOP.

6. STATIONING:

The Stationing for this survey is derived from the end stationing shown on SWO 5208(1) Survey at plans POT Sta. 450+14.7, and was carried forward Southeast to the End of the Survey. A station and bearing equation is shown at the beginning and end of this survey along with all equations that are shown in the existing books, surveys and plans discovered during this project to establish centerline

7. HORIZONTAL CONTROL:

Horizontal control for this survey is NGS Oklahoma State Plane Coordinate System, NAD83(2011), Lambert Projection, South Zone (3502), derived by Static GPS methods utilizing NGS HARN Monuments "UNION", "X 42" and "PRCO B". Note: This Survey was done with SWO 5208(1) and the Primary Control was established for both projects. The Static Control Network was completed on April 22, 2016.

New Primary control points established:

7400 5/8"X3/6" rebar with 3" Aluminum Cap (ODOT No. G-26-1029)
 7401 5/8"X3/6" rebar with 3" Aluminum Cap (ODOT No. G-26-1030)
 7402 5/8"X3/6" rebar with 3" Aluminum Cap (ODOT No. G-26-1031)

a.) RTK GPS methods were used to establish the following Secondary Control Points:

7015	Aerial Target	7029	Aerial Target
7016	Aerial Target	7030	Aerial Target
7017	Aerial Target	7031	Aerial Target
7018	Aerial Target	7032	Aerial Target
7019	Aerial Target	7033	Aerial Target
7020	Aerial Target		
7021	Aerial Target		
7022	Aerial Target		
7023	Aerial Target		
7024	Aerial Target		
7025	Aerial Target		
7026	Aerial Target		
7027	Aerial Target		

7028 Aerial Target

8. VERTICAL CONTROL:

- a.) Vertical Control for this survey is NAVD88, derived from Primary monuments 7401 and 7402.
- b.) Vertical Control Points:
 ODOT G-26-1030 and ODOT G-26-1031 and NGS monument P 41
- c.) Differential Leveling method was utilized throughout the project.

d.) All leveling was conducted with a Trimble DNI digital level. Elevations were established by double loop leveling between benchmarks. The NAVD 88 elevation was derived by using the elevation of 1128.7411 on Control Pt. 7401 (G-26-1030) and ending on GPS Control Pt. 7402 (G-26-1031) with an elevation of 1030.6354.

A Benchmark list depicting all established benchmarks, as well as results of the control leveling has been placed in the archived Microstation Design File. (See SUBMITTED DATA below).

9. MEASUREMENT UNITS:

The distances, coordinates, and elevations shown on this survey are in US SURVEY FEET. All angles and bearings shown are in degrees, minutes, and seconds.

10. PHOTO CONTROLS:

Nineteen aerial targets were placed prior to acquisition of aerial photography and LiDAR. Coordinates and Elevations are:

Pt. No.	Northing	Easting	Elevation	
7015	583537.1680	2019718.2060	1113.0893	AT7015
7016	585122.0160	2019690.2490	1140.6300	AT7016
7017	582504.9970	2021564.0470	1164.6697	AT7017
7018	579109.6520	2024943.9020	1085.9658	AT7018
7019	580245.3920	2025082.4500	1129.0596	AT7019
7020	577970.4800	2027710.0870	1036.7521	AT7020
7021	577054.7150	2030258.5070	1035.1395	AT7021
7022	575059.0020	2031426.6290	1068.0817	AT7022
7023	575088.2170	2033268.3490	1053.3365	AT7023
7024	574033.1520	2034189.8380	1071.3110	AT7024
7025	572432.2450	2035544.7440	1103.5013	AT7025
7026	573927.9630	2035576.7390	1043.3201	AT7026
7027	571647.4690	2038026.6300	1095.4119	AT7027
7028	569439.0090	2040862.9710	1063.9805	AT7028
7029	570467.2130	2040871.1370	1094.1598	AT7029
7030	569006.9140	2042232.0650	1035.9052	AT7030
7031	567741.8970	2043522.0560	1025.2988	AT7031
7032	568308.1980	2044251.2770	1025.1740	AT7032
7033	575870.6660	2030259.6240	1068.1606	AT7033

11. TOPOGRAPHY:

All topography information was obtained during the course of this survey by field conventional and RTK GPS methods along the present Right of Way of S.H. 19. LiDAR technology was utilized for the DTM along with Aerial Photogrammetry for acquisition of planimetric features.

Mapping limits are as follows:

300 feet right and left of Centerline of Survey from the Beginning of Survey to the End of Survey, widening to 500 feet right and left from 500 feet before all bridges and section line roads to 500 feet after all bridges and section line roads.

12. CROSS SECTION/DTM:

All surface feature information was obtained during the course of this survey by field conventional, LIDAR and RTK GPS methods. A DTM file was created and archived. (See SUBMITTED DATA below).

13. ENVIRONMENTAL CONCERNS:

No evidence was found of Hazardous waste sites during this survey.
No evidence was found of Cemeteries during this survey.

14. UTILITIES:

All utility companies servicing the project extents were contacted, after first contacting OKIE. Underground utilities were marked and tied to the survey. Depths of the utility lines were requested and approximate depths as provided are shown on topography. Not all companies furnished depths of utilities and some are approximate and some are unknown.

15. LAND TIES:

Complete Land Ties for this survey consisted of the following sections:

Sections 17, 18, 19 and 20, T-5-N, R-5-W, I.M., Grady County, State of Oklahoma.
Sections 10, 11, 12 and 13, T-5-N, R-6-W, I.M., Grady County, State of Oklahoma.

A search was made at all corner locations for any trace of the original monuments and/or Accessories. The Original Government Survey was performed in stages, as listed below:

Surveyor:	Description:	Date:	Organization:
Theodore H. Barrett	Original Survey	1871	U.S. General Land Office

Original Survey notes and Plats were obtained from the Bureau of Land Management website for the Sections being surveyed and adjoining sections. Records were obtained of current filed Section and Quarter Section corners from Hub Tack. The following is our findings and actions at each Section and Quarter Section corner:

Northwest Corner of Section 3, Township 05 North, Range 06 West, IBM: (G-26-1103)
Found 1/2" Iron Pin and 3 references as described in OCCR by LS 1326 dated 12/17/2001. Referenced and filed corner.

West Quarter Corner of Section 3, Township 05 North, Range 06 West, IBM: (G-26-1108)
Found #4 Rebar and 1 reference as described in OCCR by LS 1326 dated 08/04/2010. Referenced and filed corner.

Southwest Corner of Section 3, Township 05 North, Range 06 West, IBM: (G-26-1113)
Found 60D Nail and 3 references as described in OCCR by LS 1326 dated 08/04/2010. Filed and references corner.

South Quarter Corner of Section 3, Township 05 North, Range 06 West, IBM: (G-26-1114)
Found and accepted 3/8" Iron Pin. Referenced and filed the Corner.

Southeast Corner of Section 3, Township 05 North, Range 06 West, IBM: (G-26-1115)
Found and accepted 1/2" Iron Pin and 2 references as described by LS 1349 in OCCR dated 02/25/1997. Referenced and filed corner.

East Quarter Corner of Section 3, Township 05 North, Range 06 West, IBM: (G-26-1110)

Found 1/2" Iron Pin and 3 references as described in OCCR by LS 1200 dated 06/11/2015. Referenced and filed corner.

Northeast Corner of Section 3, Township 05 North, Range 06 West, IBM: (G-26-1105)
Found and accepted 1/2" Iron Pin and 3 references as described by LS 189 in OCCR dated 12/21/1993. Referenced and filed corner.

West Quarter Corner of Section 3, Township 05 North, Range 06 West, IBM: (G-26-1049)
Found and Accepted 3/8" Iron Rod as described in OCCR by LS 1200 dated 06/11/2015

Southwest Corner of Section 10, Township 10 North, Range 06 West, IBM: (G-26-1055)
Calculated position of corner using recovered references from OCCR by LS 1200 dated 02/26/2015. Set 5/8" Rebar with plastic cap stamped "Heartland CA4849". Referenced and filed corner.

South Quarter Corner of Section 10, Township 05 North, Range 06 West, IBM: (G-26-1056)
Found and accepted 3/8" Iron Pin as described by LS 1200 dated 05/05/2015. Referenced and filed the corner.

Southeast Corner of Section 10, Township 05 North, Range 06 West, IBM: (G-26-1057)
Found and accepted 1/2" Iron Rod as described by LS 1200 in OCCR dated 05/15/2015. Referenced and filed corner.

East Quarter Corner of Section 10, Township 05 North, Range 06 West, IBM: (G-26-1051)
Found PK Nail as described in OCCR by LS 1200 dated 12/04/2012. Referenced and filed corner.

South Quarter Corner of Section 3, Township 05 North, Range 06 West, IBM: (G-26-1058)
Found and accepted PK Nail as described by LS 1200 in OCCR dated 12/04/2012. Referenced and filed the Corner.

Southeast Corner of Section 11, Township 05 North, Range 06 West, IBM: (G-26-536)
Found and accepted BLM Brass Cap as described by LS 1326 in OCCR dated 12/15/2004. Referenced and filed corner.

East Quarter Corner of Section 11, Township 05 North, Range 06 West, IBM: (G-26-537)
Found and accepted Chiseled "X" as described in OCCR by LS 1326 dated 09/24/2003. Referenced and filed corner.

Northeast Corner of Section 11, Township 05 North, Range 06 West, IBM: (G-26-538)
Found and accepted 1/2" Iron Pin as described by LS 1271 in OCCR dated 04/01/1993. Referenced and filed corner.

North Quarter Corner of Section 11, Township 05 North, Range 06 West, IBM: (G-26-1047)
Found and accepted 3/8" Iron Rod as described by LS 1200 dated 12/04/2012. Referenced and filed corner

South Quarter Corner of Section 12, Township 05 North, Range 06 West, IBM: (G-26-541)
Found and accepted BLM Brass Cap as described by LS 1326 in OCCR dated 12/15/2001. Referenced and filed the Corner.

Southeast Corner of Section 12, Township 05 North, Range 06 West, IBM: (G-26-544)
Found and accepted BLM Brass Cap as described by LS 1200 in OCCR dated 05/14/2015. Referenced and filed corner.

East Quarter Corner of Section 12, Township 05 North, Range 06 West, IBM: (G-26-1054)
Found 3/8" Iron Rod as described in OCCR by LS 1200 dated 01/28/2015. Referenced and filed corner.

Northeast Corner of Section 12, Township 05 North, Range 06 West, IBM: (G-26-1048)
Found and accepted 3/8" Iron Rod as described by LS 1200 in OCCR dated 11/11/2014. Referenced and filed corner.

North Quarter Corner of Section 12, Township 05 North, Range 06 West, IBM: (G-26-542)
Found and accepted 1/2" Iron Pin as described by LS 1271 in OCCR dated 04/01/1993. Referenced and filed corner.

West Quarter Corner of Section 13, Township 05 North, Range 06 West, IBM: (G-26-1061)
Found 3" BLM Cap as described in OCCR by LS 1200 dated 12/01/2014. Referenced and filed corner.

Southwest Corner of Section 3, Township 05 North, Range 06 West, IBM: (G-26-1113)
Found BLM Brass Cap as described by LS 1326 in OCCR dated 12/15/2004. Filed and referenced corner.

South Quarter Corner of Section 13, Township 05 North, Range 06 West, IBM: (G-26-1069)
Found and accepted Brass Cap as described in OCCR by LS 1200 dated 01/28/2015. Referenced and filed the Corner.

Southeast Corner of Section 13, Township 05 North, Range 06 West, IBM: (G-26-1070)
Found and accepted Brass Cap as described by LS 1326 in OCCR dated 12/15/2004. Referenced and filed corner.

East Quarter Corner of Section 3, Township 05 North, Range 06 West, IBM: (G-26-1063)
Found and accepted BLM Brass Cap as described in OCCR by LS 1326 dated 12/15/2004. Referenced and filed corner.

South Quarter Corner of Section 18, Township 05 North, Range 05 West, IBM: (G-26-1071)
Found and accepted 1/2" Iron Pin as described by LS 1200 in OCCR dated 10/22/2014. Referenced and filed the Corner.

Southeast Corner of Section 18, Township 05 North, Range 05 West, IBM: (G-26-753)
Found and accepted 1/2" Iron Pin as described by LS 1262 in OCCR dated 05/28/2015. Referenced and filed corner.

East Quarter Corner of Section 18, Township 05 North, Range 05 West, IBM: (G-26-1065)
Found Cotton Spindle as described in OCCR by LS 1200 dated 01/07/2013. Referenced and filed corner.

Northeast Corner of Section 18, Township 05 North, Range 05 West, IBM: (G-26-551)
Found and accepted 1/2" Iron Pin as described by LS 1271 in OCCR dated 04/01/1993.

North Quarter Corner of Section 18, Township 05 North, Range 05 West, IBM: (G-26-548)
Found and accepted 1/2" Iron Pin. Referenced and filed corner.

South Quarter Corner of Section 17, Township 05 North, Range 05 West, IBM: (G-26-757)
Calculated position using recovered references from OCCR by LS 1102 dated 12/15/2005. Set 5/8" Rebar with plastic cap stamped "Heartland CA4849". Referenced and filed the Corner.

Southeast Corner of Section 17, Township 05 North, Range 05 West, IBM: (G-26-755)
Found and accepted Pipe Fence Post as described by LS 1102 in OCCR dated 12/15/2005. Referenced and filed corner.

East Quarter Corner of Section 17, Township 05 North, Range 05 West, IBM: (G-26-1067)
Found 3/8" Iron Rod as described in OCCR by LS 1200 dated 01/07/2013. Referenced and filed corner.

Northeast Corner of Section 17, Township 05 North, Range 05 West, IBM: (G-26-1060)
Found and accepted 3/8" Iron Rod as described by LS 1200 in OCCR dated 01/07/2013. Referenced and filed corner.

North Quarter Corner of Section 17, Township 05 North, Range 05 West, IBM: (G-26-1059)
Found Railroad Spike as described by LS 1200 in OCCR dated 01/07/2013. Referenced and filed corner.

West Quarter Corner of Section 19, Township 05 North, Range 05 West, IBM: (G-26-1072)
Found Mag Nail as described in OCCR by LS 1326 dated 05/13/2005. Referenced and filed corner.

Southwest Corner of Section 19, Township 05 North, Range 05 West, IBM: (G-26-1075)

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

DESCRIPTION	REVISIONS	DATE

Found and accepted 1/2" Iron Pin. Position fits well with adjacent land corners and local evidence. Filed and references corner.

South Quarter Corner of Section 19, Township 05 North, Range 05 West, IBM: (G-26-1076)
Found and accepted 1/2" Iron Pin with cap as described in OCCR by LS 1326 dated 05/17/2005. Referenced and filed the Corner.

Southeast Corner of Section 19, Township 05 North, Range 05 West, IBM: (G-26-758)
Found and accepted 3/8" Iron Pin as described by LS 1431 in OCCR dated 12/06/2011. Referenced and filed corner.

East Quarter Corner of Section 19, Township 05 North, Range 05 West, IBM: (G-26-756)
Found and accepted Mag Nail as described in OCCR by LS 1431 dated 12/06/2011. Referenced and filed corner.

South Quarter Corner of Section 20, Township 05 North, Range 05 West, IBM: (G-26-759)
Found and accepted 1/2" Iron Pin as described in OCCR by LS 1102 dated 12/15/2005. Referenced and filed the Corner.

Southeast Corner of Section 3, Township 05 North, Range 05 West, IBM: (G-26-760)
Found and accepted 1/2" Iron Pin as described by LS 1913 in OCCR dated 10/30/2015. Referenced and filed corner.

East Quarter Corner of Section 20, Township 05 North, Range 05 West, IBM: (G-26-757)
Found 1/2" Rebar as described in OCCR by LS 1913 dated 10/30/2015. Referenced and filed corner.

16. PROPERTY OWNERS:

All information on property owners shown on this survey was obtained from records on file at the Grady County Clerk's Office in Chickasha, Oklahoma and from Reconnaissance Data provided by ODOT. Right-of-way was re-established using FAP NO. F-424(3) Plans.

17. DRAINAGE:

Drainage/Hydraulic information for this survey was calculated from field data and USGS Quadrangle maps and has been placed in the submitted Microstation Design File. All drainage Divides shown in the Microstation Design File have been field checked for their accuracy. The Project is in Flood Zone A and Zone X according to FEMA Map Number 40051C0450E and 40051C0420E with an effective date of April 3, 2012.

18. DATA SUBMITTED:

REPORTS

1. ODOT form SD-1, Transmittal Letter.
2. ODOT form SD-20, Survey Control.
3. ODOT form SD-41, Surveyor's Certification.
4. Fifty-three (53) Oklahoma Certified Corner Record Forms.
5. Two (2) ODOT form SD-11, for GPS Control Monuments.
6. ODOT form SD-7, Public & Privately owned Utilities List

Project Name: SWO5207_1_V1
Description: SH19 Grady County from 8.87 miles East of US-81, East 4.51 miles to Roaring Creek Bridge
Horizontal Alignment Name: A001
Description: SH 19
Style: Centerline

	STATION	EASTING	NORTHING
Element: Linear			
POB (351)	699+46.05	2023482.914748	580769.202992
PC (361)	701+99.97	2023673.529215	580601.444840
Tangent Direction:		S 48°38'57.38" E	
Tangent Length:		253.92	
Element: Circular			
PC (361)	701+99.97	2023673.529215	580601.444840
PI (352)	706+91.32	2024042.373855	580276.827844
CC (362)		2027440.266737	584881.383859
PT (363)	711+80.25	2024461.318514	580020.102437
Radius:		5701.42	
Delta:		9°51'04.13" Left	
Degree of Curvature(Arc):		1°00'17.78"	
Length:		980.27	
Tangent:		491.35	
Chord:		979.07	
Middle Ordinate:		21.05	
External:		21.13	
Tangent Direction:		S 48°38'57.38" E	
Radial Direction:		S 41°21'02.62" W	
Chord Direction:		S 53°34'29.44" E	
Radial Direction:		S 31°29'58.49" W	
Tangent Direction:		S 58°30'01.51" E	
Element: Linear			
PT (363)	711+80.25	2024461.318514	580020.102437
POE (353)	941+18.75	2044019.697189	568034.909164
Tangent Direction:		S 58°30'01.51" E	
Tangent Length:		22938.51	

PLS	ERS	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION SURVEY DATA SHEET SWO 5207(1) STATE JOB NO. 30425(04) SHEET NO. 5025
DRAWN	BDK	
CHECKED	ERS	
APPROVED	ERS	
CREW		

POINT	EASTING	NORTHING	ELEVATION	POINT	EASTING	NORTHING	ELEVATION
126	2023271.62300	580843.34900	1137.464200	390	2041184.12011	569772.52453	
127	2024148.19500	580107.33900	1117.965300	391	2041937.54059	569310.83544	
128	2024856.50200	579748.60500	1109.962700	392	2042724.74292	568828.44514	
129	2025550.64100	579282.30600	1102.196900	393	2043499.75685	568353.52379	
130	2026516.65200	578732.46300	1084.150000	394	2032958.66013	574813.01021	
131	2027244.33400	578246.17100	1057.905100	395	2033224.52498	574650.09069	
132	2027981.34900	577832.56500	1038.784600	396	2033254.62289	574631.64698	
133	2028657.88800	577407.05200	1038.073300	397	2033284.72079	574613.20326	
134	2029618.74300	576825.92900	1040.278200	398	2033357.92692	574568.34322	
135	2030242.65900	576445.81200	1045.114500	399	2033406.46528	574538.59936	
136	2030931.57100	576026.48600	1042.078100	400	2033455.00364	574508.85550	
137	2031810.26900	575488.92700	1041.664700	401	2033649.15709	574389.88007	
138	2032446.01500	575081.50600	1039.654200	1100	2023739.59587	580676.51279	
139	2033047.17800	574800.21800	1067.079000	1101	2023805.66253	580751.58074	
140	2033700.19800	574282.72500	1084.523100	1102	2023871.72918	580826.64869	
141	2034560.77900	573897.92300	1057.410600	1103	2024071.06755	580082.84000	
142	2035355.95800	573420.90600	1069.438700	1104	2024085.41440	579985.84608	
143	2036161.23700	572918.77600	1082.677800	1105	2024409.06928	579934.83804	
144	2036750.41200	572421.72900	1066.474900	1106	2024356.82005	579849.57364	
145	2037431.26800	571992.91800	1086.774000	1107	2024304.57081	579764.30924	
146	2038027.91900	571637.45500	1095.889800	1108	2024931.70592	579614.57864	
147	2038794.78900	571307.92900	1084.682700	1109	2024879.37601	579529.36374	
148	2039452.98800	570909.33200	1086.484100	1110	2024827.04609	579444.14883	
149	2040125.34700	570489.54000	1092.270000	1111	2025894.64130	579259.05776	
150	2040823.43100	570108.93500	1084.341100	1112	2025946.89054	579344.32215	
151	2041728.40700	569409.46200	1057.884300	1113	2025999.13977	579429.58655	
152	2042429.10400	568986.62800	1032.307200	1114	2026747.28528	578736.56542	
153	2043095.56100	568570.96800	1027.664200	1115	2026799.53452	578821.82982	
154	2043795.48300	568144.43200	1031.396600	1116	2026851.78375	578907.09422	
351	2023482.91475	580769.20299		1117	2027682.51578	578163.46245	
352	2024042.37386	580276.82784		1118	2027735.30747	578248.39206	
353	2044019.69719	568034.90916		1119	2027788.09915	578333.32167	
361	2023673.52922	580601.44484		1120	2028342.39055	577759.09964	
362	2027440.26674	584881.38386		1121	2028394.72311	577844.31292	
363	2024461.31851	580020.10244		1122	2028447.05567	577929.52620	
364	2024018.43196	580297.89890		1123	2029030.18997	577103.05809	
365	2024049.33295	580297.96267		1124	2028977.94074	577017.79369	
366	2024984.03583	579699.79355		1125	2028925.69150	576932.52929	
367	2025842.39207	579173.79336		1126	2029987.33242	576751.09455	
368	2026695.03605	578651.30102		1127	2030039.58165	576836.35895	
369	2027629.72410	578078.53285		1128	2030091.83088	576921.62335	
370	2028290.05798	577673.88636		1129	2030219.72572	576374.12870	
371	2029082.43920	577188.32249		1130	2030166.54142	576289.44440	
372	2029935.08318	576665.83015		1131	2030113.35712	576204.76011	
373	2030272.91002	576458.81300		1132	2031095.76959	576071.85452	
374	2031043.52036	575986.59012		1133	2031148.01883	576157.11892	
375	2031896.16434	575464.09779		1134	2031200.26806	576242.38332	
376	2032578.19918	575046.15316		1135	2031843.91511	575378.83339	
378	2032920.71954	574836.25985		1136	2031791.66588	575293.56899	
379	2033771.98111	574314.61465		1137	2031739.41664	575208.30459	
380	2034624.62509	573792.12232		1138	2032578.19918	575146.15316	
381	2035572.49430	573211.27685		1139	2032578.19918	575246.15316	
382	2036329.91305	572747.13765		1140	2032578.19918	575346.15316	
383	2036871.67996	572415.14791		1141	2032944.06479	574739.02303	
384	2036877.23615	572411.74312		1142	2032967.41004	574641.78621	
385	2037267.82143	572172.39608		1143	2032990.75528	574544.54939	
386	2038201.02655	571600.53663		1144	2033869.21793	574337.95990	
387	2039058.37380	571075.16218		1145	2033966.45475	574361.30515	
388	2039911.01778	570552.66985		1146	2034063.69157	574384.65039	
389	2040849.74544	569977.42623		1147	2034676.87432	573877.38672	

POINT	EASTING	NORTHING	ELEVATION	POINT	EASTING	NORTHING	ELEVATION
1148	2034729.12355	573962.65111		7601	2022854.05501	581189.44439	
1149	2034781.37279	574047.91551		7602	2023667.46256	580526.37689	
1150	2035549.14905	573308.51367		7603	2023664.75105	580476.61884	
1151	2035525.80380	573405.75049		7604	2023863.08993	580314.07835	
1152	2035502.45856	573502.98731		7605	2022345.78618	580310.94702	
1153	2036277.66382	572661.87325		7606	2022345.82141	580277.94702	
1154	2036225.41459	572576.60885		7607	2023905.51531	580281.16583	
1155	2036173.16535	572491.34445		7608	2024409.06928	579934.83804	
1156	2037320.07067	572257.66048		7609	2024967.59297	579592.57990	
1157	2037372.31990	572342.92488		7610	2024968.62104	577663.58323	
1158	2037424.56913	572428.18928		7611	2025001.62098	577663.71504	
1159	2038148.77731	571515.27223		7612	2025000.60375	579572.35120	
1160	2038096.52808	571430.00784		7613	2025645.69601	579177.04464	
1161	2038044.27885	571344.74344		7614	2025792.95370	579086.80649	
1162	2039006.12456	570989.89778		7615	2025782.50385	579069.75361	
1163	2038953.87533	570904.63338		7616	2025919.48154	578985.81495	
1164	2038901.62610	570819.36899		7617	2026033.51228	578986.30731	
1165	2039858.76855	570467.40545		7618	2027629.71699	578008.16786	
1166	2039806.51931	570382.14105		7619	2028175.80048	577673.53295	
1167	2039754.27008	570296.87665		7620	2028290.05268	577603.52026	
1168	2040901.99467	570062.69063		7621	2029071.62302	577124.58120	
1169	2040954.24390	570147.95503		7622	2029004.46315	577014.98445	
1170	2041006.49314	570233.21943		7623	2028972.34948	576962.57884	
1171	2041131.87087	569687.26013		7624	2029057.61388	576910.32961	
1172	2041079.62164	569601.99574		7625	2029121.94820	577015.31540	
1173	2041027.37241	569516.73134		7626	2029156.88742	577072.33196	
1174	2041885.29135	569225.57104		7627	2029249.34589	577015.67427	
1175	2041833.04212	569140.30665		7628	2030256.33719	576398.59933	
1176	2041780.79289	569055.04225		7629	2030254.70684	575050.58059	
1177	2042776.99216	568913.70954		7630	2030287.66716	575017.75141	
1178	2042829.24139	568998.97394		7631	2030287.70707	575050.75206	
1179	2042881.49062	569084.23834		7632	2030289.17836	576267.26013	
1180	2043447.50762	568268.25939		7633	2030478.76604	576262.29699	
1181	2043395.25839	568182.99499		7634	2030934.35921	575983.11372	
1182	2043343.00915	568097.73059		7635	2031394.22266	575701.31366	
1183	2043967.44796	567949.64477		7636	2032258.11193	575171.93031	
1184	2043915.19872	567864.38037		7637	2032258.07064	575060.99001	
1185	2043862.94949	567779.11597		7638	2032491.03043	575029.20001	
7015	2019718.20600	583537.16800	1113.089300	7639	2032920.84019	574765.81657	
7016	2019690.24900	585122.01600	1140.630000	7640	2033535.30492	574389.27828	
7017	2021564.04700	582504.99700	1164.669700	7641	2033516.32956	574389.17798	
7018	2024943.90200	579109.65200	1085.985800	7649	2035559.84503	571089.64232	
7019	2025082.45000	580245.39200	1129.059600	7650	2035592.84497	571089.70168	
7020	2027710.08700	577970.48000	1036.752100	7651	2035589.43811	572970.27821	
7021	2030258.50700	577054.71500	1035.139500	7654	2036163.20538	572778.92522	
7022	2031426.62900	575059.00200	1068.081700	7655	2036224.43189	572741.40618	
7023	2033268.34900	575088.21700	1053.336500	7656	2036757.05430	572415.02010	
7024	2034189.83800	574033.15200	1071.311000	7657	2036737.95002	572414.99880	
7025	2035544.74400	572432.24500	1103.501300	7658	2036877.66834	572329.38071	
7026	2035576.73900	573927.96300	1043.320100	7659	2036925.43922	572300.10716	
7027	2038026.63000	571647.46900	1095.411900	7660	2036930.66414	572308.63360	
7028	2040862.97100	569439.00900	1063.980500				
7029	2040871.13700	570467.21300	1094.159800				
7030	2042232.06500	569086.91400	1035.905200				
7031	2043522.05600	567741.89700	1025.298800				

SH10 FROM 8.87 MILES EAST OF US 81,
EAST 4.51 MILES TO ROARING CREEK BRIDGE
SWO 5207(1) JP 30425(07).
GRADY COUNTY
DATUM: NAVD88

BENCH MARK AND CHECK LEVEL LIST

STATION	DIFF. EL. 1ST RUN	DIFF. EL. 2ND RUN	MEAN DIFF. ELEVATION	UNADJUSTED ELEVATION	ADJUSTED ELEVATION	STATION	OFFSET	DESCRIPTION
P41					1026.3800			NGS BENCHMARK P41
	7.0482	-7.0539	7.0511					
TBM1				1033.4311	1033.4311			TEMPORARY BENCHMARK
	23.9670	-23.9673	23.9672					
BM141				1057.3982	1057.3982	829+60	57 L	36" NO.5 REBAR APPROX 1 FT SOUTH OF STOP SIGN
	13.9127	-13.9128	13.9128					
7024				1071.3110	1071.3110	828+03	22 R	AERIAL TARGET

STATION	DIFF. EL. 1ST RUN	DIFF. EL. 2ND RUN	MEAN DIFF. ELEVATION	UNADJUSTED ELEVATION	ADJUSTED ELEVATION	STATION	OFFSET	DESCRIPTION
7401					1128.7411	711+30	93 R	(G-26-1030) 3" ALUMINUM CAP
	-18.7783	18.7785	-18.7784					
BM128				1109.9627	1109.9627	716+59	25 R	CHISELED BOX ON CENTER OF HEADWALL
	-7.7666	7.7650	-7.7658					
BM129				1102.1969	1102.1969	724+95	60 R	36" NO. 5 REBAR APPROX 1 FT NORTH OF BARBED WIRE FENCE
	-18.0463	18.0475	-18.0469					
BM130				1084.1500	1084.1500	736+05	24 R	CHISELED BOX ON CENTER OF HEADWALL
	-26.2445	26.2453	-26.2449					
BM131				1057.9051	1057.9051	744+80	58 R	36" NO. 5 REBAR APPROX 1 FT NORTH OF BARBED WIRE FENCE
	-21.1517	21.1543	-21.1530					
7020				1036.7521	1036.7521	750+21	50 R	AERIAL TARGET
	2.0341	-2.0309	2.0325					
BM132				1038.7846	1038.7846	753+25	28 R	CHISELED BOX ON CENTER OF HEADWALL
	-7.091	.7135	-7.113					
BM133				1038.0733	1038.0733	761+24	35 R	CHISELED BOX ON CENTER OF HEADWALL
	2.2068	-2.2030	2.2049					
BM134				1040.2782	1040.2782	772+47	29 R	CHISELED BOX ON CENTER OF HEADWALL
	4.8396	-4.8329	4.8363					

BM135				1045.1145	1045.1145	779+77	27 R	CHISELED BOX ON CENTER OF HEADWALL
	-3.0371	3.0357	-3.0364					
BM136				1042.0781	1042.0781	787+84	24 R	CHISELED BOX ON CENTER OF HEADWALL
	-.4141	.4126	-.4134					
BM137				1041.6647	1041.6647	798+14	24 R	CHISELED BOX ON CENTER OF HEADWALL
	-2.0097	2.0113	-2.0105					
BM138				1039.6542	1039.6542	805+09	39 R	CHISELED BOX ON CENTER OF HEADWALL
	27.4458	-27.4037	27.4248					
BM139				1067.0790	1067.0790	812+28	35 L	36" NO. 5 REBAR APPROX 3 FT SOUTH OF TOE OF SLOPE
	17.4458	-17.4425	17.4442					
BM140				1084.5231	1084.5231	820+55	65 R	36" NO. 5 REBAR APPROX 1 FT NORTH OF WOOD FENCE POST
	-13.2117	13.2125	-13.2121					
7024				1071.3110	1071.3110	828+03	22 R	AERIAL TARGET
	-13.9007	13.9000	-13.9004					
BM141				1057.4106	1057.4106	829+90	57 L	36" NO. 5 REBAR APPROX 1 FT SOUTH OF STOP SIGN
	12.0297	-12.0285	12.0281					
BM142				1069.4387	1069.4387	839+18	66 L	36" NO. 5 REBAR APPROX 50 FT FROM EDGE OF HWY
	13.2403	-13.2378	13.2391					
BM143				1082.6778	1082.6778	848+66	58 L	36" NO.5 REBAR APPROX 1 FT SOUTH OF POWERPOLE
	-16.1834	16.2223	-16.2029					
BM144				1066.4749	1066.4749	856+29	58 R	36" NO.5 REBAR APPROX 2 FT NORTH OF ROW MARKER
	20.2820	-20.3162	20.2991					
BM145				1086.7740	1086.7740	864+33	68 R	36" NO.5 REBAR APPROX 50 FT FROM EDGE OF HWY
	8.8394	-8.8364	8.8379					
7027				1095.4119	1095.4119	871+21	51 R	AERIAL TARGET
	.4776	-.4781	.4779					
BM146				1095.8898	1095.8898	871+28	59 R	36" NO.5 REBAR APPROX 1 FT NORTH OF BARBED WIRE FENCE
	-11.2083	11.2058	-11.2071					
BM147				1084.6827	1084.6827	879+54	61 L	36" NO.5 REBAR APPROX 1 FT SOUTH OF BARBED WIRE FENCE
	1.8007	-1.8021	1.8014					
BM148				1086.4841	1086.4841	887+23	65 L	36" NO.5 REBAR APPROX 1 FT SOUTH OF BARBED WIRE FENCE
	5.7847	-5.7870	5.7859					
BM149				1092.2700	1092.2700	895+16	58 L	36" NO.5 REBAR APPROX 3 FT SOUTH OF POWER POLE
	-7.9289	7.9288	-7.9289					
BM150				1084.3411	1084.3411	903+10	98 L	36" NO.5 REBAR APPROX 1 FT SOUTH OF POWER POLE
	-26.4605	26.4531	-26.4568					
BM151				1057.8843	1057.8843	914+47	25 R	CHISELED BOX ON HEADWALL

7030				1035.9052	1035.9052	920+45	37 R	AERIAL TARGET
	-21.9776	21.9806	-21.9791					
BM152				1032.3072	1032.3072	922+65	20 R	CHISELED BOX ON WINGWALL
	-3.5982	3.5979	-3.5981					
BM153				1027.6642	1027.6642	930+51	26 R	36" NO.5 REBAR APPROX 15 FT FROM EDGE OF ROAD
	-4.6410	4.6449	-4.6430					
7402				1030.6354	1030.6354	938+62	32 R	(G-26-1031) 3" ALUMINUM CAP
	2.9712	-2.9712	2.9712					
BM154				1031.3966	1031.3966	938+70	24 R	CHISELED BOX ON BACK OF CURB
	-.7612	-.7811	.7812					

STATION	DIFF. EL. 1ST RUN	DIFF. EL. 2ND RUN	MEAN DIFF. ELEVATION	UNADJUSTED ELEVATION	ADJUSTED ELEVATION	STATION	OFFSET	DESCRIPTION
BM128					1109.9627	716+59	25 R	CHISELED BOX ON CENTER OF HEADWALL
	-23.9761		-23.9761					
7018				1085.9866	1085.9866	720+67	524 R	AERIAL TARGET
	43.0746		43.0746					
7019				1129.0612	1129.0596	715+62	517 L	AERIAL TARGET
	-19.0961		-19.0961					
BM128				1109.9651	1109.9627	716+59	25 R	CHISELED BOX ON CENTER OF HEADWALL

STATION	DIFF. EL. 1ST RUN	DIFF. EL. 2ND RUN	MEAN DIFF. ELEVATION	UNADJUSTED ELEVATION	ADJUSTED ELEVATION	STATION	OFFSET	DESCRIPTION
BM135					1045.1145	779+77	27 R	CHISELED BOX ON CENTER OF HEADWALL
	23.0463	-23.0460	23.0462					
7033				1068.1606	1068.1606	782+92	508 R	AERIAL TARGET

STATION	DIFF. EL. 1ST RUN	DIFF. EL. 2ND RUN	MEAN DIFF. ELEVATION	UNADJUSTED ELEVATION	ADJUSTED ELEVATION	STATION	OFFSET	DESCRIPTION
BM135					1045.1145	779+77	27 R	CHISELED BOX ON CENTER OF HEADWALL
	-9.9749	9.9751	-9.9750					
7021				1035.1395	1035.1395	776+73	501 L	AERIAL TARGET

STATION	DIFF. EL. 1ST RUN	DIFF. EL. 2ND RUN	MEAN DIFF. ELEVATION	UNADJUSTED ELEVATION	ADJUSTED ELEVATION	STATION	OFFSET	DESCRIPTION
BM138					1039.6542	805+09	39 R	CHISELED BOX ON CENTER OF HEADWALL
	13.6834	-13.6812	13.6823					

7023				1053.3365	1053.3365	812+66	396 L	AERIAL TARGET
------	--	--	--	-----------	-----------	--------	-------	---------------

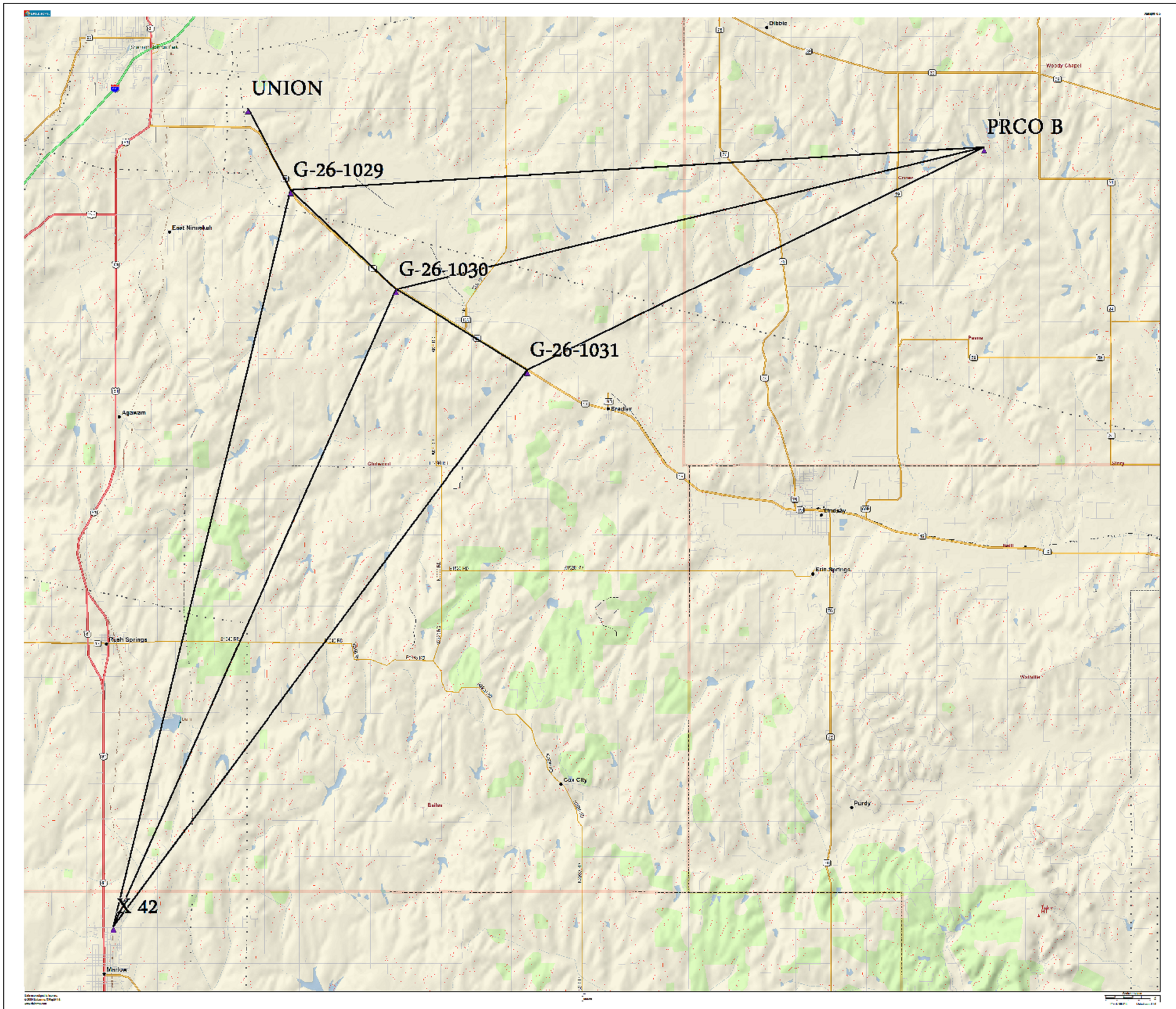
STATION	DIFF. EL. 1ST RUN	DIFF. EL. 2ND RUN	MEAN DIFF. ELEVATION	UNADJUSTED ELEVATION	ADJUSTED ELEVATION	STATION	OFFSET	DESCRIPTION
BM138					1039.6542	805+09	39 R	CHISELED BOX ON CENTER OF HEADWALL
	28.4286	-28.4263	28.4275					
7022				1068.0817	1068.0817	797+11	591 R	AERIAL TARGET

STATION	DIFF. EL. 1ST RUN	DIFF. EL. 2ND RUN	MEAN DIFF. ELEVATION	UNADJUSTED ELEVATION	ADJUSTED ELEVATION	STATION	OFFSET	DESCRIPTION
BM142					1069.4387	839+18	66 L	36" NO. 5 REBAR APPROX 50 FT FROM EDGE OF HWY
	-26.1162		-26.1162					
7026				1043.3225	1043.3201	838+41	613 L	AERIAL TARGET
	60.1837		60.1837					
7025				1103.5062	1103.5013	845+95	679 R	AERIAL TARGET
	-34.0602		-34.0602					
BM142				1069.4460	1069.4387	839+18	66 L	36" NO. 5 REBAR APPROX 50 FT FROM EDGE OF HWY

STATION	DIFF. EL. 1ST RUN	DIFF. EL. 2ND RUN	MEAN DIFF. ELEVATION	UNADJUSTED ELEVATION	ADJUSTED ELEVATION	STATION	OFFSET	DESCRIPTION
BM150					1084.3411	903+10	98 L	36" NO.5 REBAR APPROX 1 FT SOUTH OF POWER POLE
	9.8189	-9.8185	9.8187					
7029				1094.1598	1094.1598	901+63	429 L	AERIAL TARGET

STATION	DIFF. EL. 1ST RUN	DIFF. EL. 2ND RUN	MEAN DIFF. ELEVATION	UNADJUSTED ELEVATION	ADJUSTED ELEVATION	STATION	OFFSET	DESCRIPTION
BM150					1084.3411	903+10	98 L	36" NO.5 REBAR APPROX 1 FT SOUTH OF POWER POLE
	-20.3593	20.3619	-20.3806					
7028				1063.9805	1063.9805	906+94	452 R	AERIAL TARGET

STATION	DIFF. EL. 1ST RUN	DIFF. EL. 2ND RUN	MEAN DIFF. ELEVATION	UNADJUSTED ELEVATION	ADJUSTED ELEVATION	STATION	OFFSET	DESCRIPTION
BM154					1031.3966	938+70	24 R	CHISELED BOX ON BACK OF CURB
	-6.0982	6.0974	-6.0978					
7031				1025.2988	1025.2988	938+48	510 R	AERIAL TARGET



6/10/2017

Network Adjustment Results

Project File Name	C:\Users\BDBK\Documents\Projects\2017\5207(1)\SWO5207(1)\NET	Coordinate System	NAD 83 - StatePlane
Sheet	2141	Datum	NAD 83 - Geoid
Modified	6/25/2017 11:44:34 AM (UTC-5)	Zone	OKLA State South 1
Time zone	Central Standard Time	Grid	GEODEN2A Zone
Reference Number		Vertical Datum	
Projection			
Container ID			
Container ID			

Additional Coordinate System Details

Local Site Settings		
Project Units	Ground scale factor	
Project Datum	False northing offset	
Project Zone	False easting offset	

Network Adjustment Report

Adjustment Settings

Set-Up Errors

Control

Errors in Height (Antenna): 0.000 ft

Control Error: 0.000 ft

Covariance Display

Horizontal

Prepared Linear Error (SE): 2.5

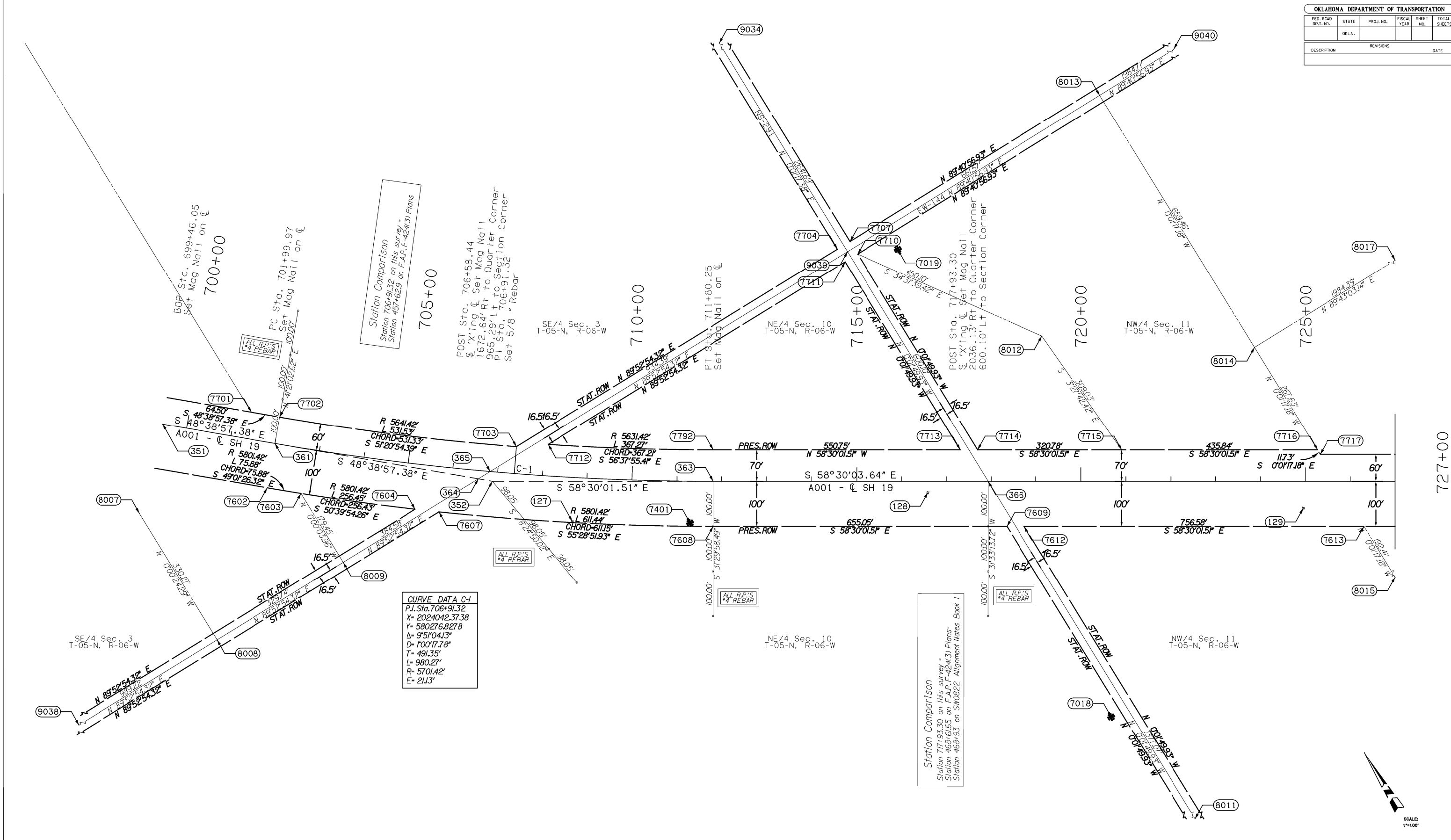
Constant Term (CI): 0.000 ft

Scale on Error Error (SE): 1.0

Three-Dimensional

Prepared Linear Error (SE): 2.5

Constant Term (CI): 0.000 ft



CURVE DATA C-1
 P.I. Sta. 706+91.32
 X= 2024042.3738
 Y= 580276.8278
 Δ= 9°51'04.13"
 D= 100'17.78"
 T= 491.35'
 L= 980.27'
 R= 5701.42'
 E= 2113'

Station Comparison
 Station 717+93.30 on this survey -
 Station 468+61.65 on F.A.P. F-424(3) Plans -
 Station 468+63 on SW0822 Alignment Notes Book 1

Station Comparison
 Station 706+91.32 on this survey -
 Station 457+62.9 on F.A.P. F-424(3) Plans

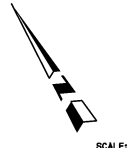
POST Sta. 706+58.44
 1672.64' Rt to Quarter Corner
 965.29' Lt to Section Corner
 P.I. Sta. 706+91.32
 Set 5/8" Rebar

POST Sta. 717+93.30
 2036.13' Rt to Quarter Corner
 600.10' Lt to Section Corner
 Set Mag Nail on C

SE/4 Sec. 3
 T-05-N, R-06-W

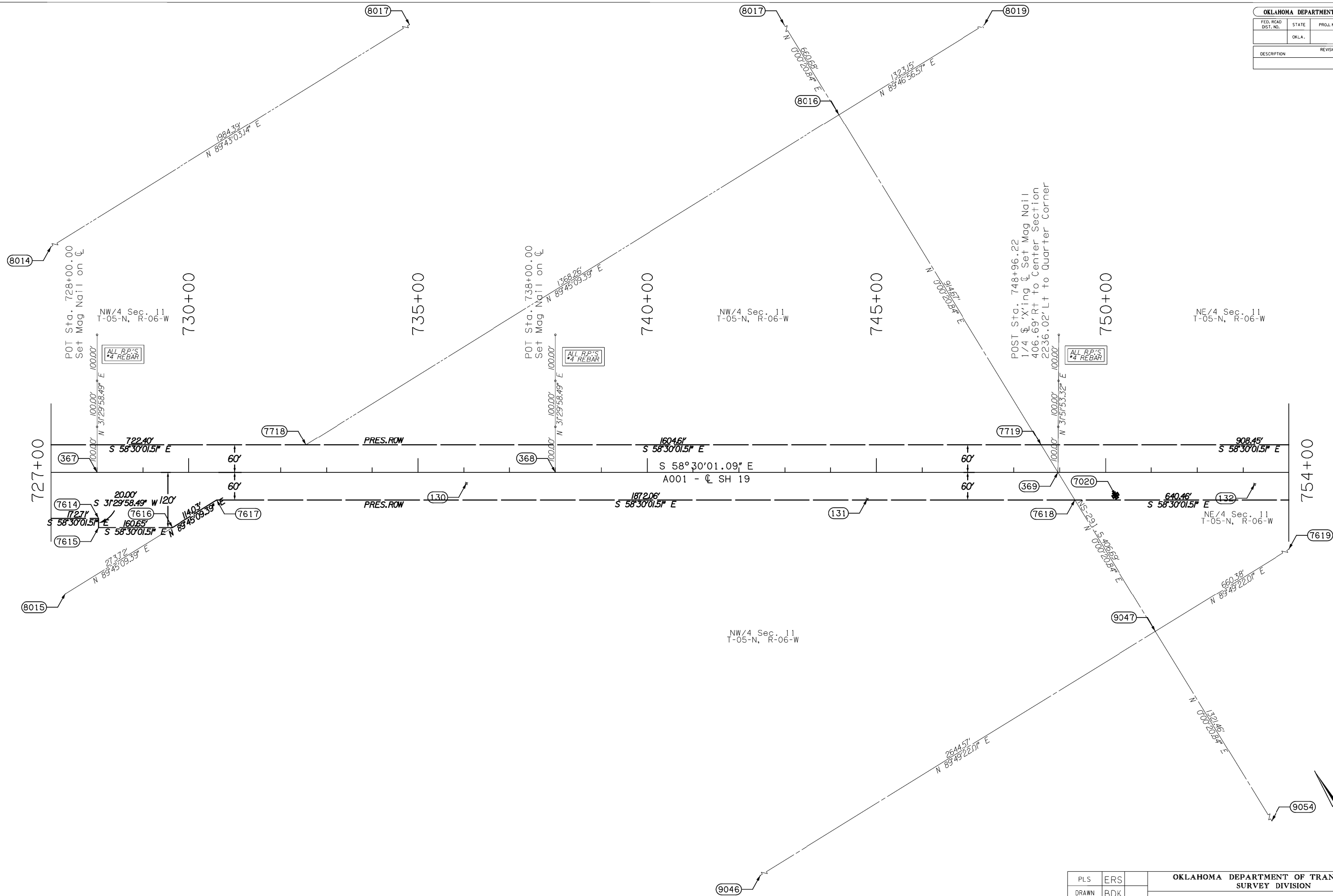
NE/4 Sec. 10
 T-05-N, R-06-W

NW/4 Sec. 11
 T-05-N, R-06-W



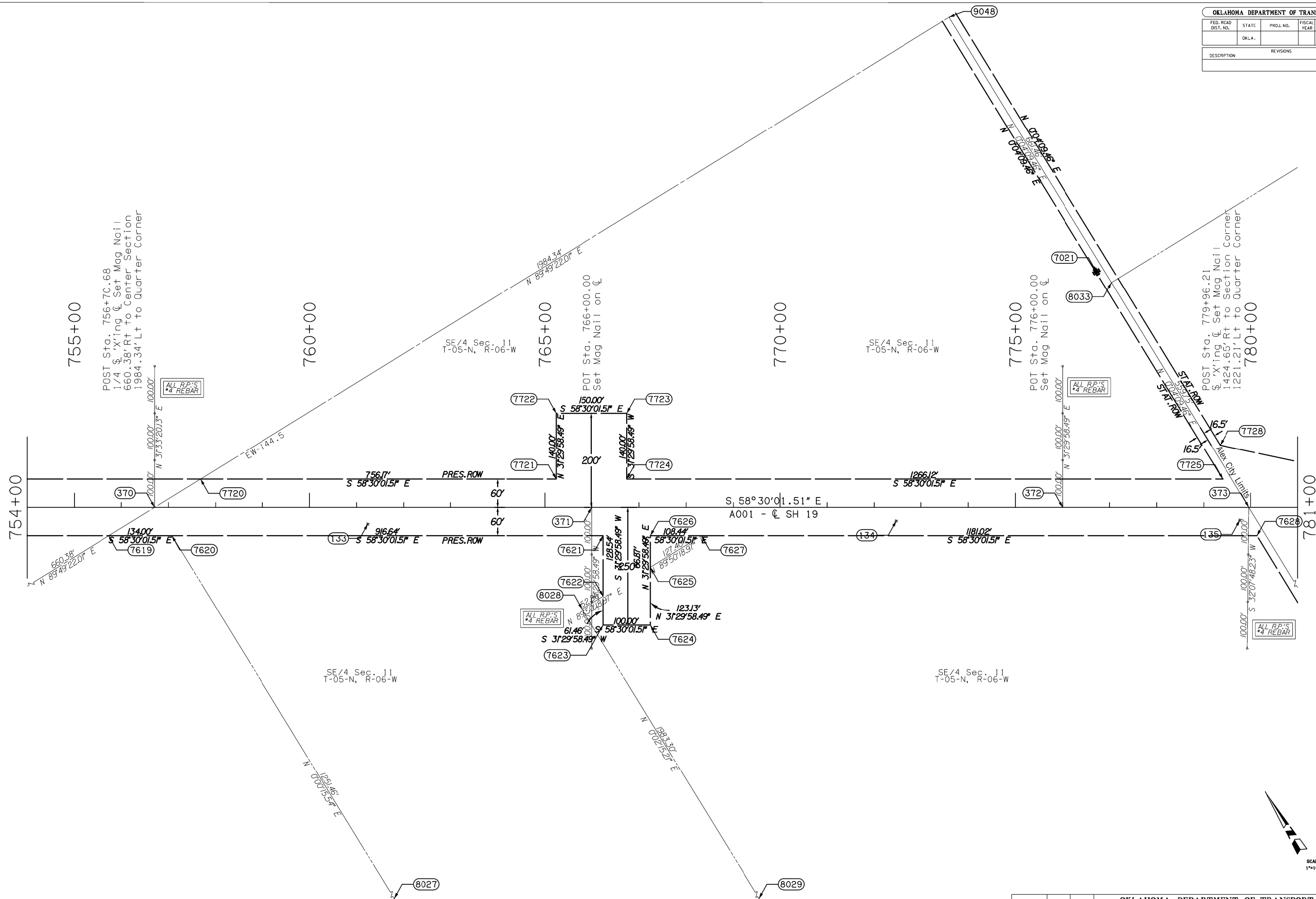
SCALE:
 1"=100'

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				
DESCRIPTION			REVISIONS	DATE	



PLS	ERS	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	BDK	
CHECKED	ERS	
APPROVED	ERS	
CREW		
SURVEY DATA SHEET		
SWO 5207(1) STATE JOB NO. 30425(04) SHEET NO. 5031		

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				
DESCRIPTION			REVISIONS	DATE	



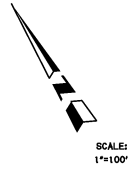
POST Sta. 756+70.68
1/4 S. X'ing C Set Mag Nail
660.38' Rt to Center Section
1984.34' Lt to Quarter Corner

POT Sta. 766+00.00
Set Mag Nail on C

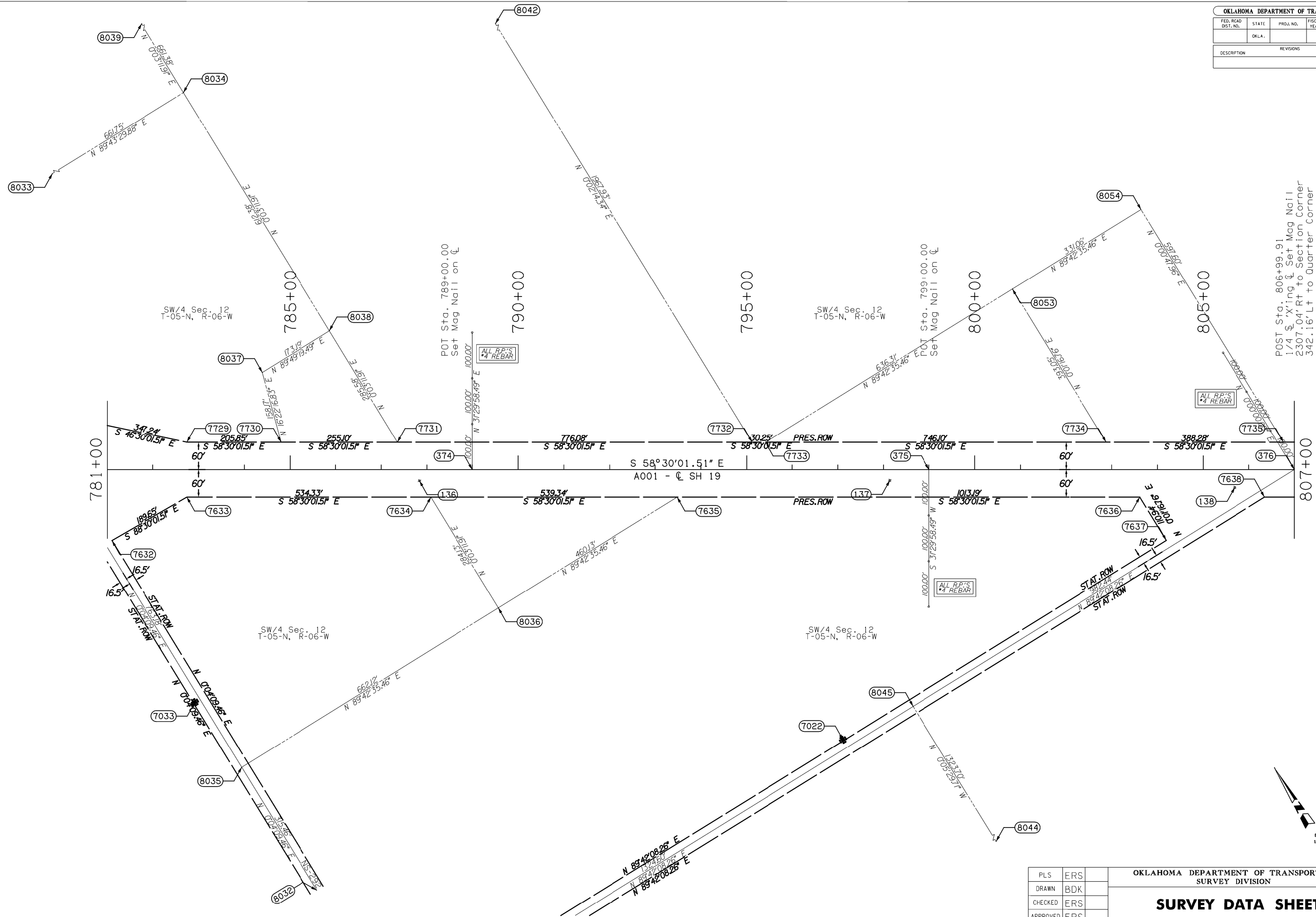
POT Sta. 776+00.00
Set Mag Nail on C

POST Sta. 779+96.21
S. X'ing C Set Mag Nail
1424.65' Rt to Section Corner
1221.21' Lt to Quarter Corner

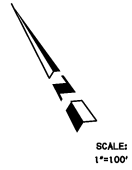
PLS	ERS	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION SURVEY DATA SHEET SWO 5207(1) STATE JOB NO. 30425(04) SHEET NO. S032
DRAWN	BDK	
CHECKED	ERS	
APPROVED	ERS	
CREW		



OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				
DESCRIPTION			REVISIONS	DATE	



POST Sta. 806+99.91
 1/4 S X'ing & Set Mag Nail
 2307.04' Rt to Section Corner
 342.16' Lt to Quarter Corner

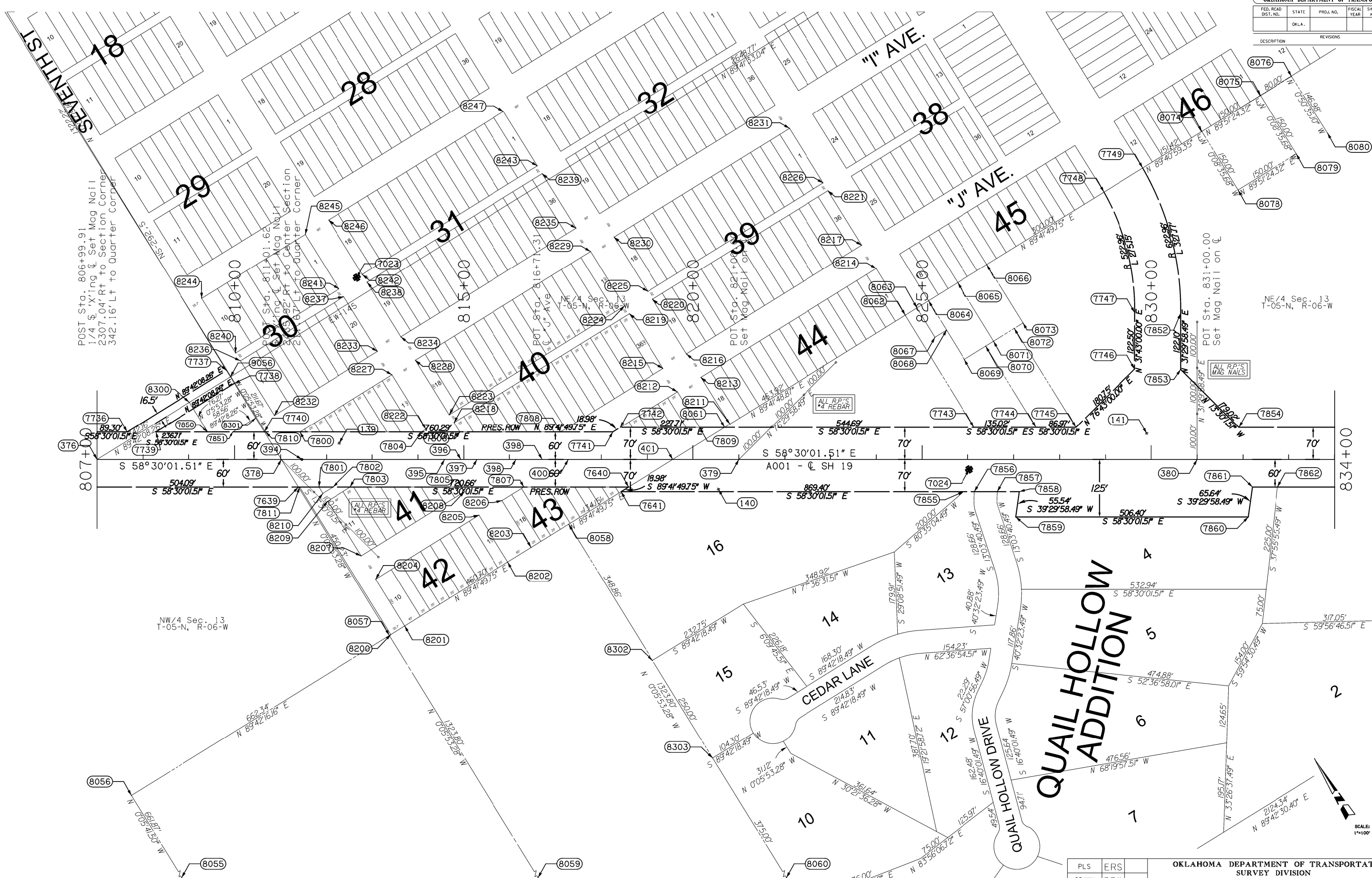


SCALE:
1"=100'

PLS	ERS
DRAWN	BDK
CHECKED	ERS
APPROVED	ERS
CREW	

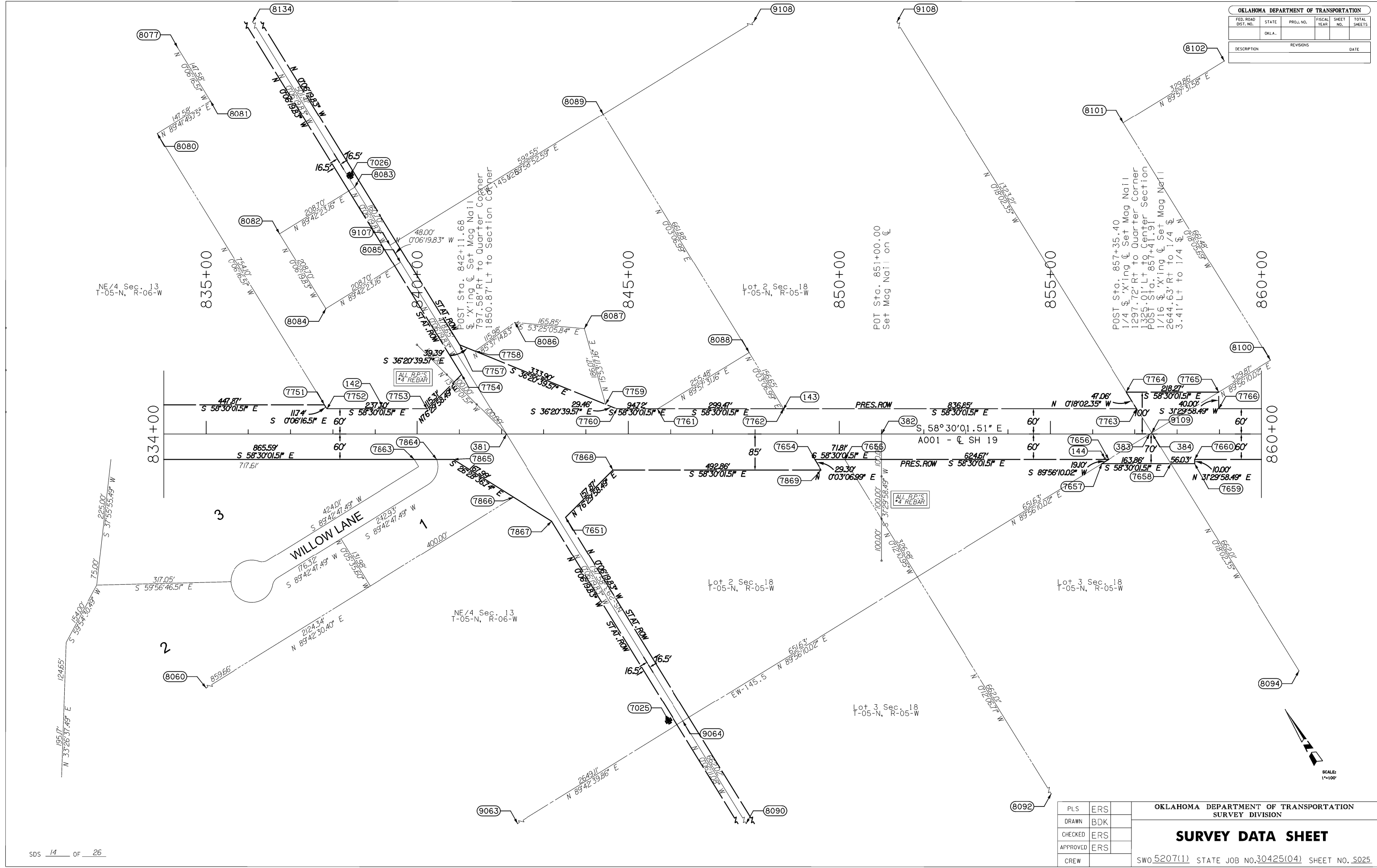
OKLAHOMA DEPARTMENT OF TRANSPORTATION
 SURVEY DIVISION
SURVEY DATA SHEET
 SWO 5207(1) STATE JOB NO. 30425(04) SHEET NO. S033

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				
DESCRIPTION		REVISIONS		DATE	



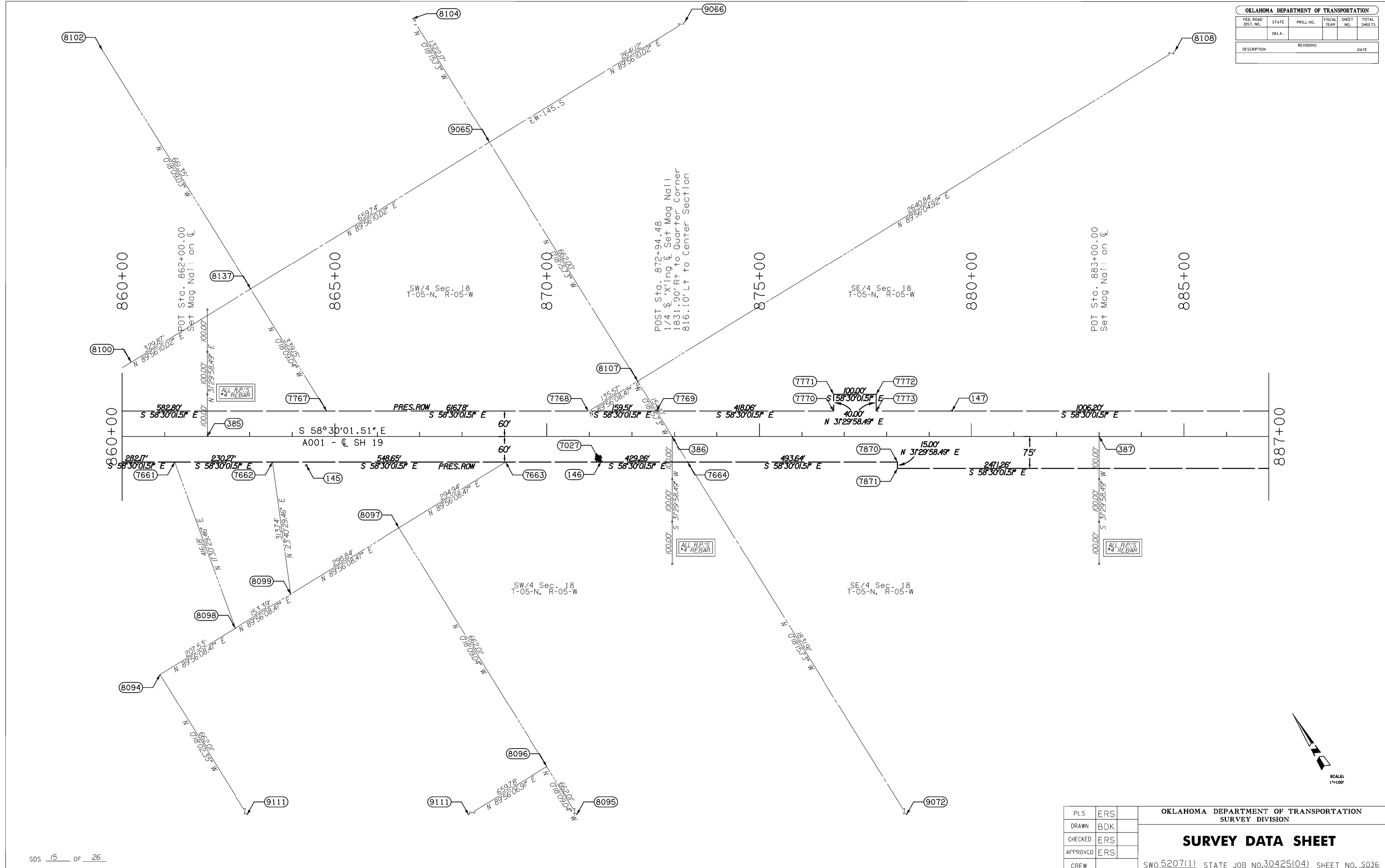
OKLAHOMA DEPARTMENT OF TRANSPORTATION		SURVEY DIVISION	
PLS	ERS	SURVEY DATA SHEET SWO 5207(1) STATE JOB NO. 30425(04) SHEET NO. S024	
DRAWN	BDK		
CHECKED	ERS		
APPROVED	ERS		
CREW			

OKLAHOMA DEPARTMENT OF TRANSPORTATION				
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO. TOTAL SHEETS
	OKLA.			
DESCRIPTION		REVISIONS	DATE	

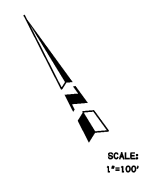


PLS	ERS	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION SURVEY DATA SHEET SWO 5207(1) STATE JOB NO. 30425(04) SHEET NO. 5025
DRAWN	BDK	
CHECKED	ERS	
APPROVED	ERS	
CREW		

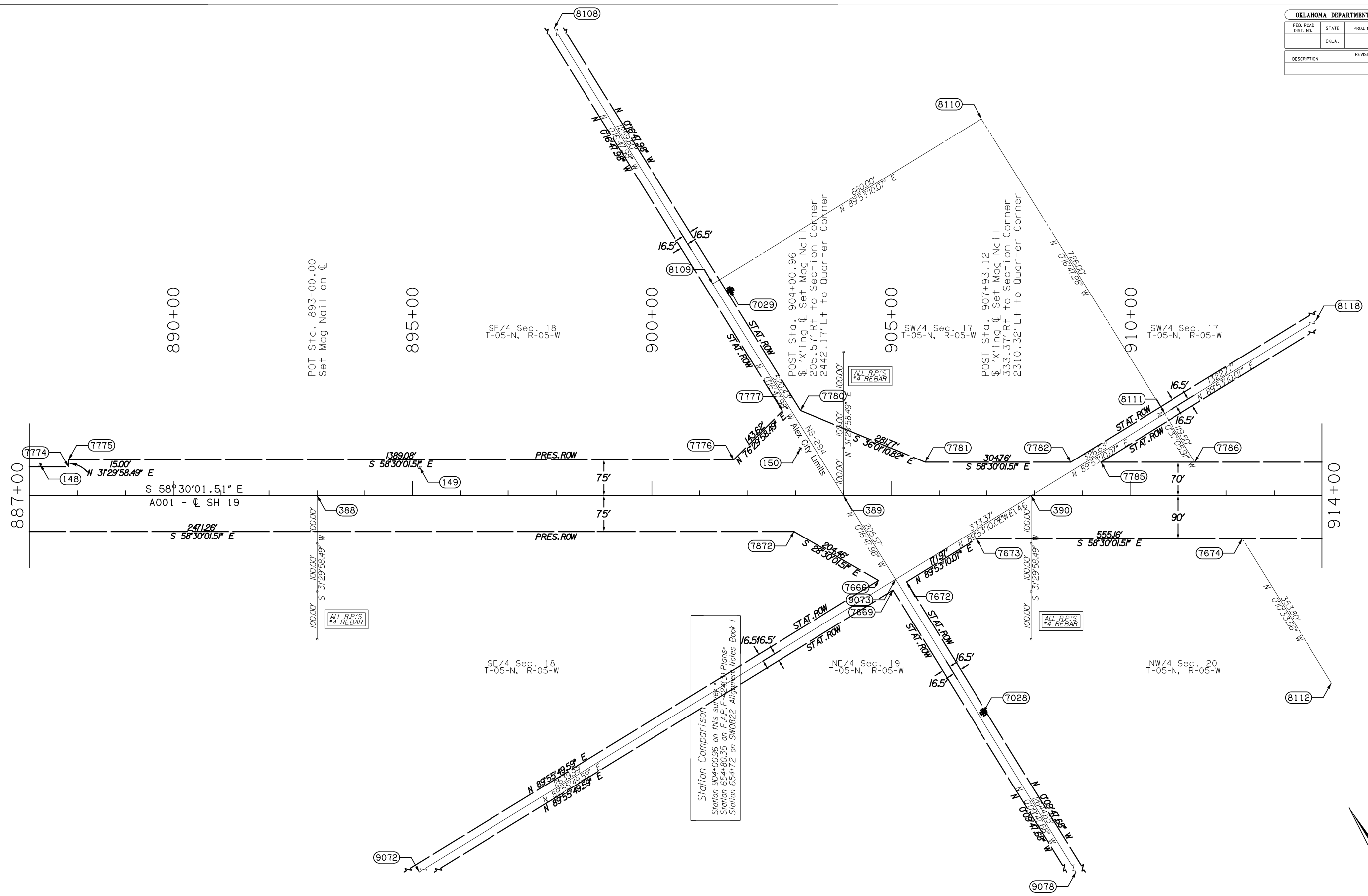
OKLAHOMA DEPARTMENT OF TRANSPORTATION				
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO. TOTAL SHEETS
	OKLA.			
DESCRIPTION		REVISIONS	DATE	



PLS	ERS	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION SURVEY DATA SHEET SWO 5207(1) STATE JOB NO. 30425(04) SHEET NO. 5036
DRAWN	BDK	
CHECKED	ERS	
APPROVED	ERS	
CREW		



OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				
DESCRIPTION			REVISIONS	DATE	



Station Comparison
 Station 904+00.96 on this survey - Plans
 Station 654+80.35 on F.A.P. - Plans
 Station 654+72 on SW0822 Alignment Notes Book 1

OKLAHOMA DEPARTMENT OF TRANSPORTATION		SURVEY DIVISION	
PLS	ERS	SURVEY DATA SHEET	
DRAWN	BDK		
CHECKED	ERS		
APPROVED	ERS		
CREW		SWO 5207(1) STATE JOB NO. 30425(04) SHEET NO. 5037	

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				
DESCRIPTION			REVISIONS	DATE	

North Quarter Corner of Section 3,
Township 05 North, Range 06 West, IBM:
(G-26-1104)
Found 1/2" Iron pin and 3 references as
described by LS 1200 in OCCR dated
06/11/2015. Referenced and filed
corner.

Northwest Corner of Section 3,
Township 05 North, Range 06 West,
IBM: (G-26-1103)
Found 1#2" Iron Pin and 3 references
as described in OCCR by LS 1326 dated
12/17/2001. Referenced and filed
corner.

Northeast Corner of Section 3,
Township 05 North, Range 06 West,
IBM: (G-26-1105)
Found and accepted 1/2" Iron Pin and
3 references as described by LS 189
in OCCR dated 12/21/1993. Referenced
and filed corner.

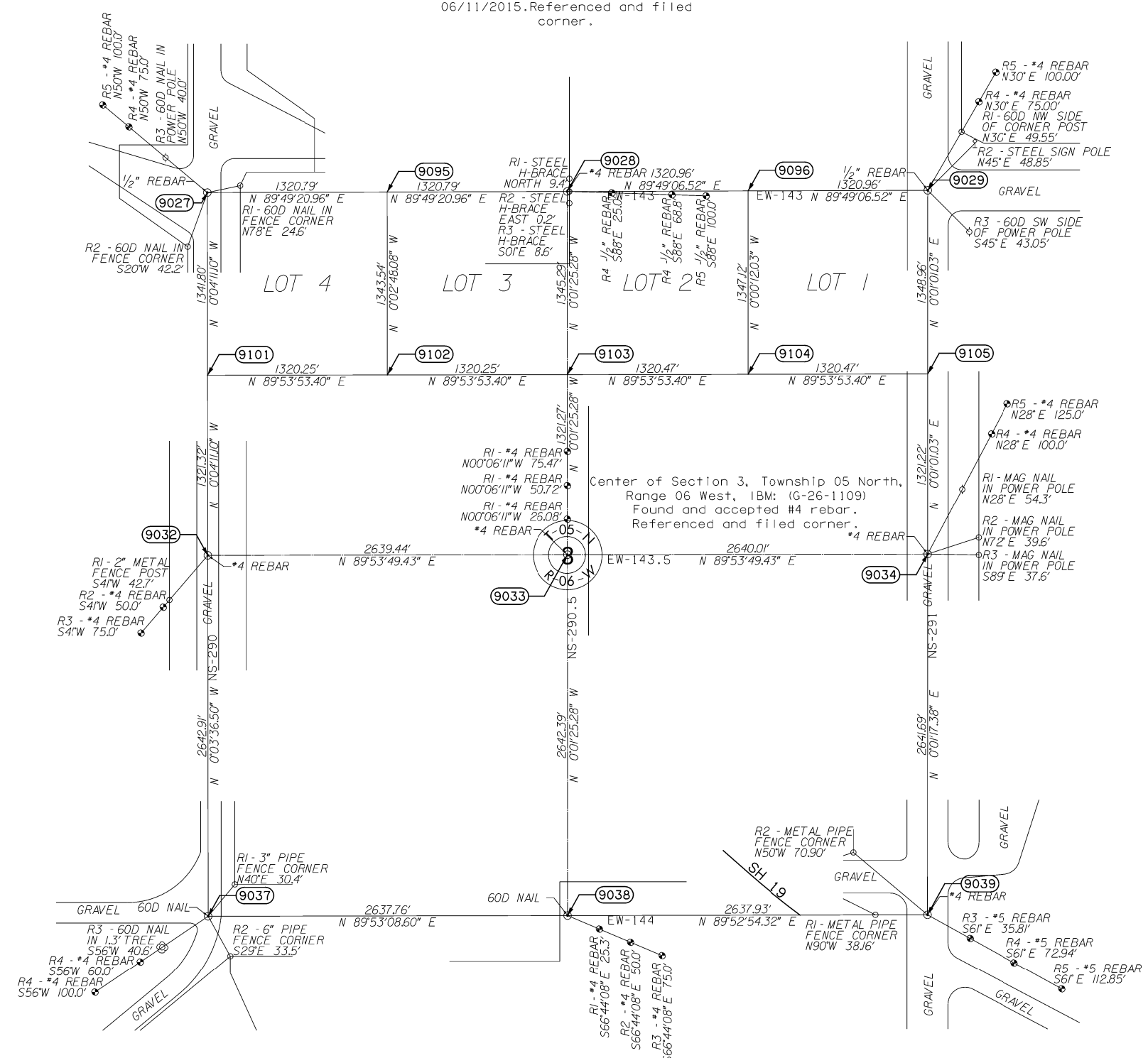
West Quarter Corner of Section 3,
Township 05 North, Range 06 West, IBM:
(G-26-1108)
Found #4 Rebar and 1 reference as
described in OCCR by LS 1326 dated
08/04/2010. Referenced and filed corner.

East Quarter Corner of Section 3,
Township 05 North, Range 06 West, IBM:
(G-26-1110)
Found 1/2" Iron Pin and 3 references as
described in OCCR by LS 1200 dated
06/11/2015. Referenced and filed
corner.

Southwest Corner of Section 3, Township
05 North, Range 06 West, IBM: (G-26-1113)
Found 60D Nail and 3 references as
described in OCCR by LS 1326 dated
08/04/2010. Filed and references corner.

Southeast Corner of Section 3,
Township 05 North, Range 06 West,
IBM: (G-26-1115)
Found and accepted 1/2" Iron Pin and 2
references as described by LS 1349
in OCCR dated 02/25/1997. Referenced
and filed corner.

South Quarter Corner of
Section 3, Township 05 North,
Range 06 West, IBM: (G-26-1114)
Found and accepted 3/8" Iron
pin. Referenced and filed the
corner.



SCALE:
1" = 500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
PLS	ERS
DRAWN	BDK
CHECKED	ERS
APPROVED	ERS
CREW	

SURVEY DATA SHEET

SWO 5207(1) STATE JOB NO. 30425(04) SHEET NO. S039

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				
DESCRIPTION			REVISIONS	DATE	

North Quarter Corner of Section 10,
Township 05 North, Range 06 West, IBM:
(G-26-1114)
Found and accepted 3#8" Iron pin.
Referenced and filed the Corner.

Northwest Corner of Section 10,
Township 05 North, Range 06 West,
IBM: (G-26-1113)
Found 60D nail and 3 references as
described in OCCR by LS 1326 dated
08/04/2010. Filed and references
corner.

Northeast Corner of Section 10,
Township 05 North, Range 06 West,
IBM: (G-26-1115)
Found and accepted 1#2" Iron pin and
2 references as described by LS 1349
in OCCR dated 02/25/1997. Referenced
and filed corner.

West Quarter Corner of Section 3,
Township 05 North, Range 06 West, IBM:
(G-26-1049)
Found and Accepted 3/8" Iron Rod as
described in OCCR by LS 1200 dated
06/11/2015

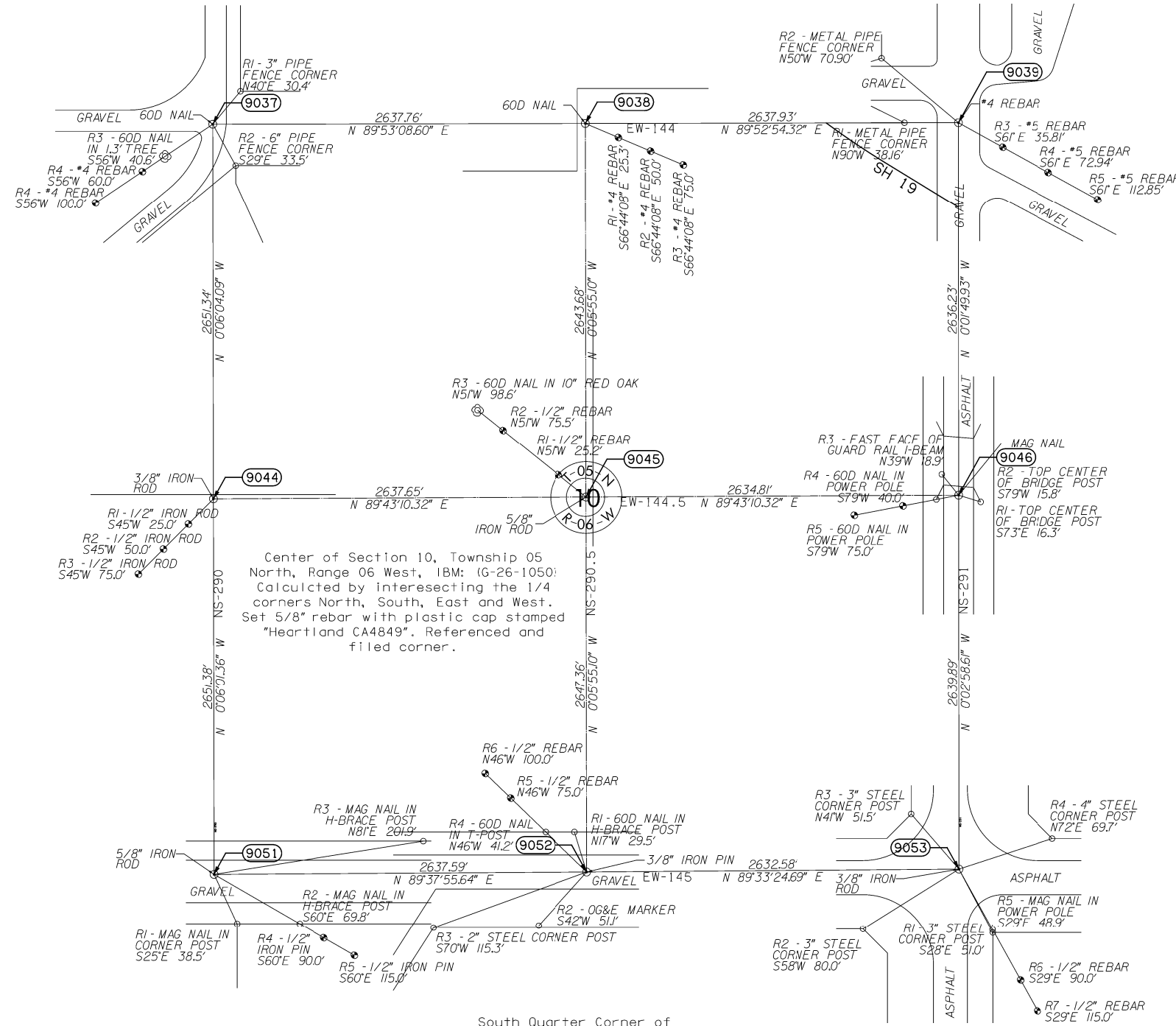
East Quarter Corner of Section 10,
Township 05 North, Range 06 West, IBM:
(G-26-1051)
Found PK Nail as described in OCCR by
LS 1200 dated 12/04/2012. Referenced
and filed corner.

Center of Section 10, Township 05
North, Range 06 West, IBM: (G-26-1050)
Calculated by intersecting the 1/4
corners North, South, East and West.
Set 5/8" rebar with plastic cap stamped
"Heartland CA4849". Referenced and
filed corner.

Southwest Corner of Section 10, Township
10 North, Range 06 West, IBM: (G-26-1055)
Calculated position of corner using
recovered references from OCCR by LS
1200 dated 02/26/2015. Set 5/8" Rebar
with plastic cap stamped "Heartland
CA4849". Referenced and filed corner.

South Quarter Corner of
Section 10, Township 05 North,
Range 06 West, IBM: (G-26-1056)
Found and accepted 3/8" Iron Pin
as described by LS 1200 dated
05/05/2015. Referenced and
filed the corner.

Southeast Corner of Section 10,
Township 05 North, Range 06 West,
IBM: (G-26-1057)
Found and accepted 1/2" Iron Rod as
described by LS 1200 in OCCR dated
05/15/2015. Referenced and filed
corner.



SCALE:
1" = 500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
PLS	ERS
DRAWN	BDK
CHECKED	ERS
APPROVED	ERS
CREW	

SURVEY DATA SHEET

SWO 5207(1) STATE JOB NO. 30425(04) SHEET NO. S040

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				
DESCRIPTION			REVISIONS	DATE	

North Quarter Corner of Section 11,
Township 05 North, Range 06 West, IBM:
(G-26-1047)
Found and accepted 3/8" Iron Rod as
described by LS 1200 dated 12/04/2012.
Referenced and filed corner

Northwest Corner of Section 11,
Township 05 North, Range 06 West,
IBM: (G-26-1115)
Found and accepted 1#2" Iron pin and
2 references as described by LS 1349
in OCCR dated 02/25/1997. Referenced
and filed corner.

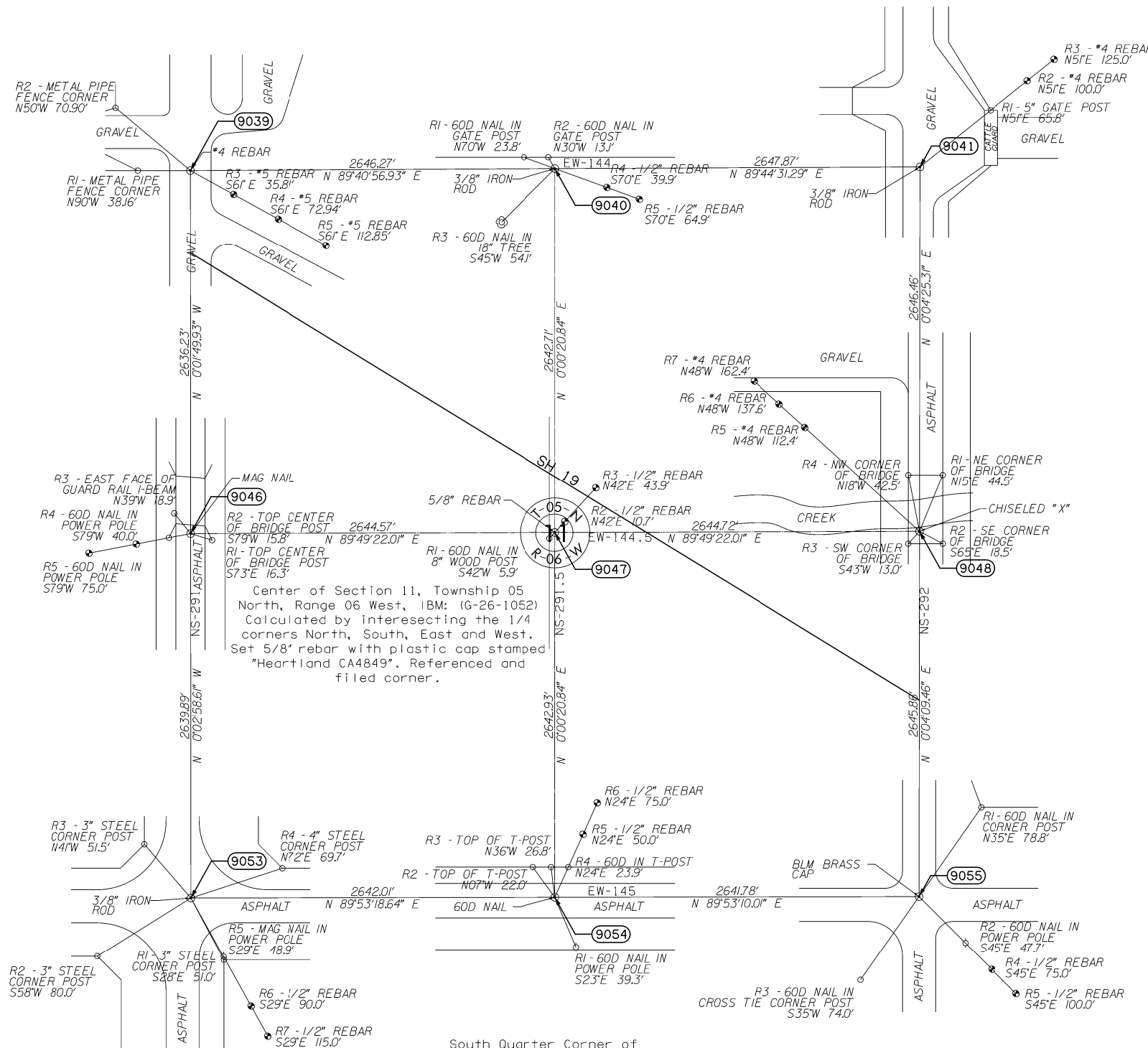
Northeast Corner of Section 11,
Township 05 North, Range 06 West,
IBM: (G-26-538)
Found and accepted 1/2" Iron Pin as
described by LS 1271 in OCCR dated
04/01/1993. Referenced and filed
corner.

West Quarter Corner of Section 11,
Township 05 North, Range 06 West, IBM:
(G-26-1051)
Found PK nail as described in OCCR by LS
1200 dated 12/04/2012. Referenced and
filed corner.

East Quarter Corner of Section 11,
Township 05 North, Range 06 West, IBM:
(G-26-537)
Found and accepted Chiseled 'X' as
described in OCCR by LS 1326 dated
09/24/2003. Referenced and filed
corner.

Southwest Corner of Section 11, Township
05 North, Range 06 West, IBM: (G-26-1057)
Found and accepted 1#2" Iron rod as
described by LS 1200 in OCCR dated
05/15/2015. Referenced and filed corner.

South Quarter Corner of
Section 3, Township 05 North,
Range 06 West, IBM: (G-26-1058)
Found and accepted PK Nail as
described by LS 1200 in OCCR
dated 12/04/2012. Referenced
and filed the Corner.



Southeast Corner of Section 11,
Township 05 North, Range 06 West,
IBM: (G-26-536)
Found and accepted BLM Brass Cap as
described by LS 1326 in OCCR dated
12/15/2004. Referenced and filed
corner.



SCALE:
1" = 500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
PLS	ERS
DRAWN	BDK
CHECKED	ERS
APPROVED	ERS
CREW	

SURVEY DATA SHEET

SWO 5207(1) STATE JOB NO. 30425(04) SHEET NO. 5041

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				
DESCRIPTION			REVISIONS	DATE	

North Quarter Corner of Section 12,
Township 05 North, Range 06 West, IBM: (G-26-542)
Found and accepted 1/2" Iron pin as described by LS 1271 in OCCR dated 04/01/1993. Referenced and filed corner.

Northwest Corner of Section 12,
Township 05 North, Range 06 West, IBM: (G-26-538)
Found and accepted 1/2" Iron Pin as described by LS 1271 in OCCR dated 04/01/1993. Referenced and filed corner.

Northeast Corner of Section 12,
Township 05 North, Range 06 West, IBM: (G-26-1048)
Found and accepted 3/8" Iron Rod as described by LS 1200 in OCCR dated 11/11/2014. Referenced and filed corner.

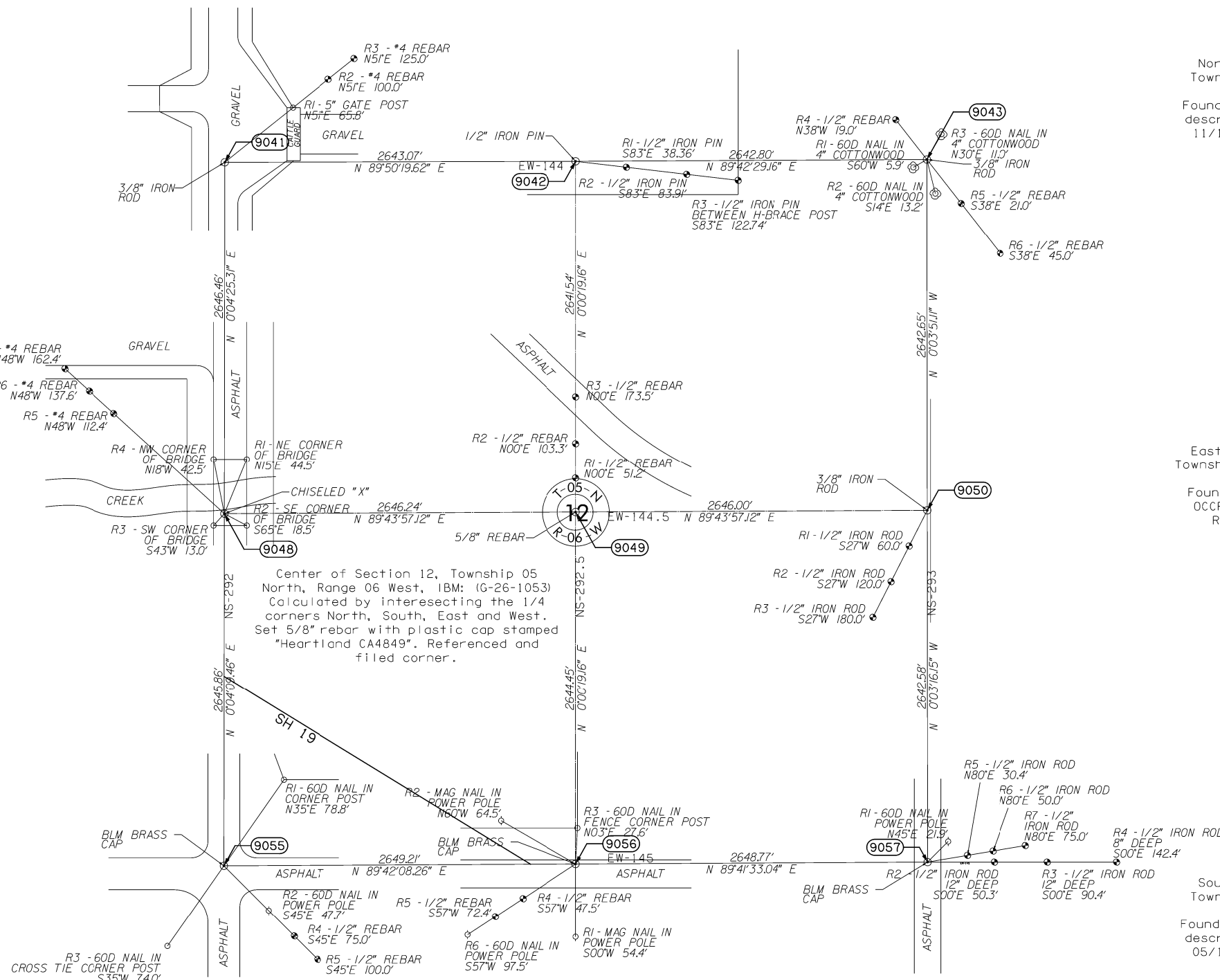
West Quarter Corner of Section 12,
Township 05 North, Range 06 West, IBM: (G-26-537)
Found and accepted chiseled 'X' as described in OCCR by LS 1326 dated 09/24/2003. Referenced and filed corner.

East Quarter Corner of Section 12,
Township 05 North, Range 06 West, IBM: (G-26-1054)
Found 3/8" Iron Rod as described in OCCR by LS 1200 dated 01/28/2015. Referenced and filed corner.

Center of Section 12, Township 05 North, Range 06 West, IBM: (G-26-1053)
Calculated by intersecting the 1/4 corners North, South, East and West. Set 5/8" rebar with plastic cap stamped "Heartland CA4849". Referenced and filed corner.

Southwest Corner of Section 12, Township 05 North, Range 06 West, IBM: (G-26-536)
Found and accepted BLM brass cap as described by LS 1326 in OCCR dated 12/15/2004. Referenced and filed corner.

South Quarter Corner of Section 12, Township 05 North, Range 06 West, IBM: (G-26-541)
Found and accepted BLM Brass Cap as described by LS 1326 in OCCR dated 12/15/2001. Referenced and filed the Corner.



SCALE:
1" = 500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
PLS	ERS
DRAWN	BDK
CHECKED	ERS
APPROVED	ERS
CREW	

SURVEY DATA SHEET

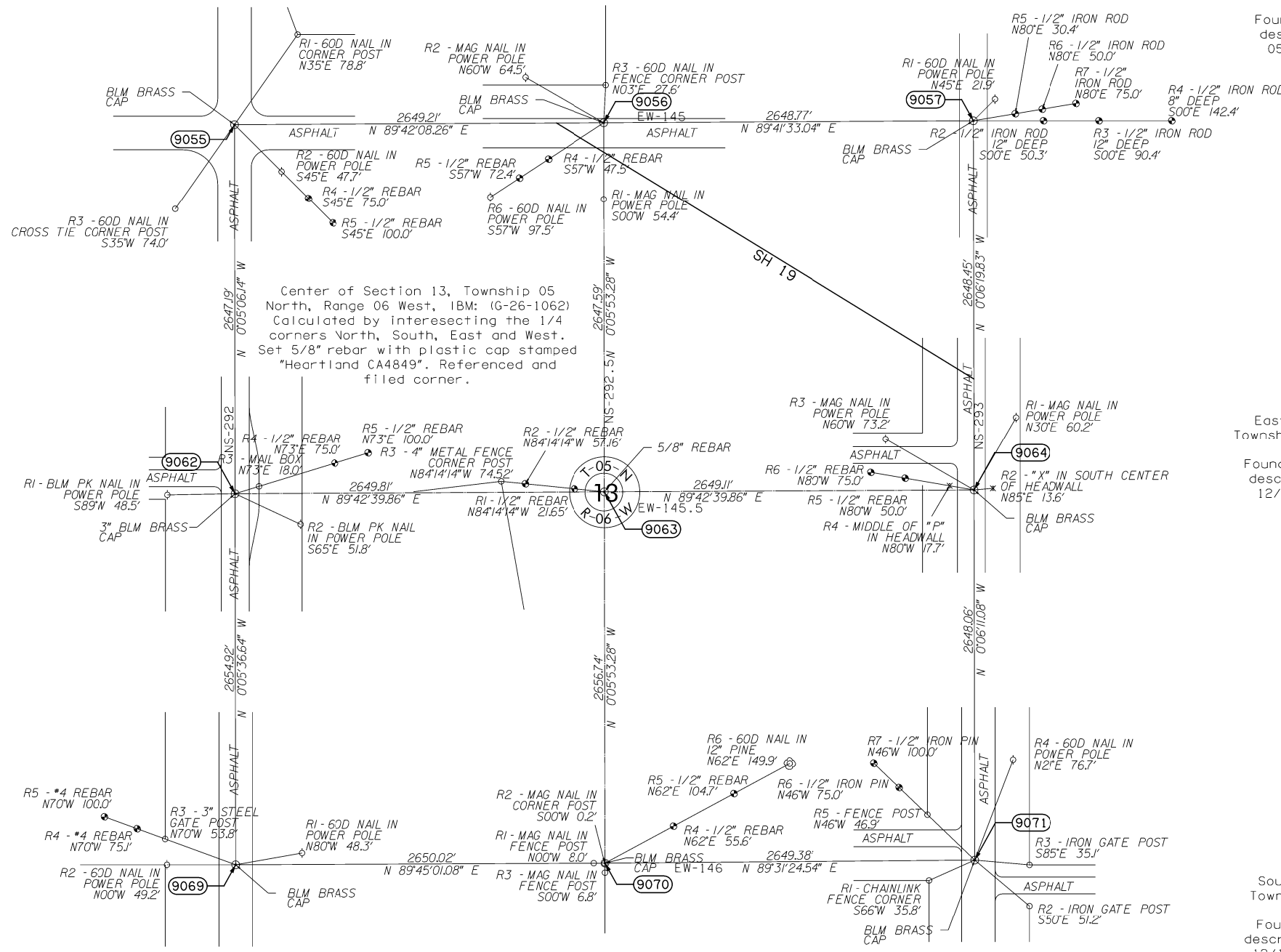
SWO 5207(1) STATE JOB NO. 30425(04) SHEET NO. 042

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				
DESCRIPTION			REVISIONS	DATE	

North Quarter Corner of Section 13,
Township 05 North, Range 06 West, IBM:
(G-26-541)
Found and accepted BLM Brass Cap as
described by LS 1326 in OCCR dated
12/15/2001. Referenced and filed the
Corner.

Northwest Corner of Section 13,
Township 05 North, Range 06 West,
IBM: (G-26-536)
Found and accepted BLM brass cap as
described by LS 1326 in OCCR dated
12/15/2004. Referenced and filed
corner.

Northeast Corner of Section 13,
Township 05 North, Range 06 West,
IBM: (G-26-544)
Found and accepted BLM Brass Cap as
described by LS 1200 in OCCR dated
05/14/2015. Referenced and filed
corner.



West Quarter Corner of Section 13,
Township 05 North, Range 06 West, IBM:
(G-26-1061)
Found 3" BLM Cap as described in OCCR by
LS 1200 dated 12/01/2014. Referenced and
filed corner.

East Quarter Corner of Section 3,
Township 05 North, Range 06 West, IBM:
(G-26-1063)
Found and accepted BLM Brass Cap as
described in OCCR by LS 1326 dated
12/15/2004. Referenced and filed
corner.

Southwest Corner of Section 3, Township
05 North, Range 06 West, IBM: (G-26-1113)
Found BLM Brass Cap as described by LS
1326 in OCCR dated 12/15/2004. Filed and
referenced corner.

South Quarter Corner of
Section 13, Township 05 North,
Range 06 West, IBM: (G-26-1069)
Found and accepted Brass Cap
as described in OCCR by LS
1200 dated 01/28/2015.
Referenced and filed the
Corner.

Southeast Corner of Section 13,
Township 05 North, Range 06 West,
IBM: (G-26-1070)
Found and accepted Brass Cap as
described by LS 1326 in OCCR dated
12/15/2004. Referenced and filed
corner.



SCALE:
1" = 500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
PLS	ERS
DRAWN	BDK
CHECKED	ERS
APPROVED	ERS
CREW	
SURVEY DATA SHEET	
SWO 5207(1) STATE JOB NO. 30425(04) SHEET NO. S043	

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				
DESCRIPTION			REVISIONS	DATE	

North Quarter Corner of Section 18,
Township 05 North, Range 05 West, IBM:
(G-26-548)
Found and accepted 1/2" Iron Pin.
Referenced and filed corner.

Northwest Corner of Section 18,
Township 05 North, Range 05 West,
IBM: (G-26-544)
Found and accepted BLM Brass Cap as
described by LS 1200 in OCCR dated
05/14/2015. Referenced and filed
corner.

Northeast Corner of Section 18,
Township 05 North, Range 05 West,
IBM: (G-26-551)
Found and accepted 1/2" Iron Pin as
described by LS 1271 in OCCR dated
04/01/1993.

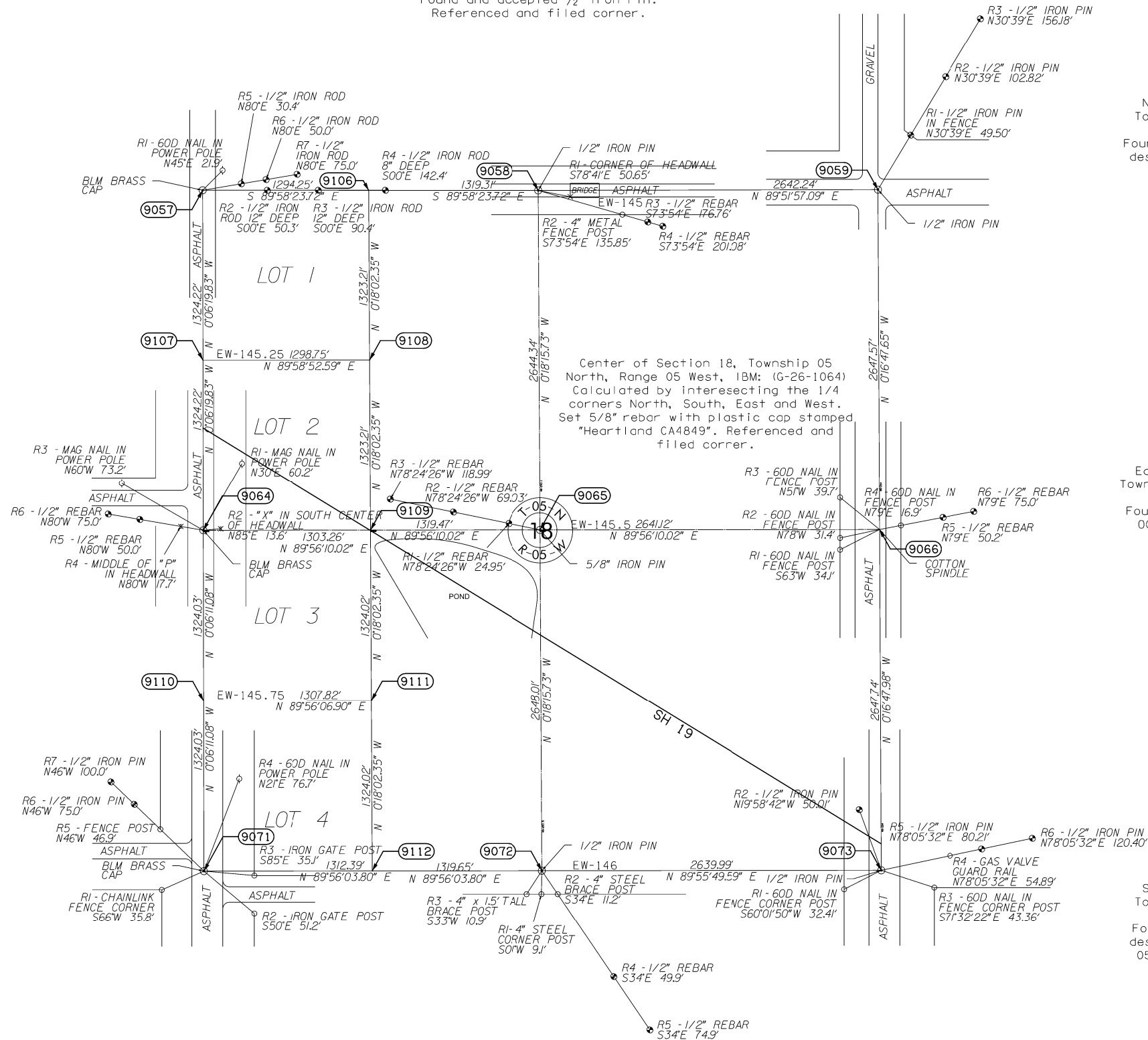
West Quarter Corner of Section 18,
Township 05 North, Range 05 West, IBM:
(G-26-1063)
Found and accepted BLM Brass Cap as
described in OCCR by LS 1326 dated
12/15/2004. Referenced and filed corner.

East Quarter Corner of Section 18,
Township 05 North, Range 05 West, IBM:
(G-26-1065)
Found Cotton Spindle as described in
OCCR by LS 1200 dated 01/07/2013.
Referenced and filed corner.

Southwest Corner of Section 18, Township
05 North, Range 05 West, IBM: (G-26-1070)
Found and accepted Brass Cap as
described by LS 1326 in OCCR dated
12/15/2004. Referenced and filed corner.

Southeast Corner of Section 18,
Township 05 North, Range 05 West,
IBM: (G-26-753)
Found and accepted 1/2" Iron Pin as
described by LS 1262 in OCCR dated
05/28/2015. Referenced and filed
corner.

South Quarter Corner of
Section 18, Township 05 North,
Range 05 West, IBM: (G-26-1071)
Found and accepted 1/2" Iron P
in as described by LS 1200 in
OCCR dated 10/22/2014.
Referenced and filed the
Corner.



SCALE:
1" = 500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

OKLAHOMA DEPARTMENT OF TRANSPORTATION		SURVEY DIVISION	
PLS	ERS	SURVEY DATA SHEET	
DRAWN	BDK		
CHECKED	ERS		
APPROVED	ERS		
CREW			
SWO 5207(1) STATE JOB NO. 30425(04) SHEET NO. 5044			

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				
DESCRIPTION			REVISIONS	DATE	

Northwest Corner of Section 17,
Township 05 North, Range 05 West,
IBM: (G-26-551)
Found and accepted 1/2" Iron Pin as
described by LS 1271 in OCCR dated
04/01/1993.

North Quarter Corner of Section 17,
Township 05 North, Range 05 West, IBM:
(G-26-1059)
Found railroad spike as described by
LS 1200 in OCCR dated 01/07/213.
Referenced and filed corner.

Northeast Corner of Section 17,
Township 05 North, Range 05 West,
IBM: (G-26-1060)
Found and accepted 3/8" Iron Rod as
described by LS 1200 in OCCR dated
01/07/2013. Referenced and filed
corner.

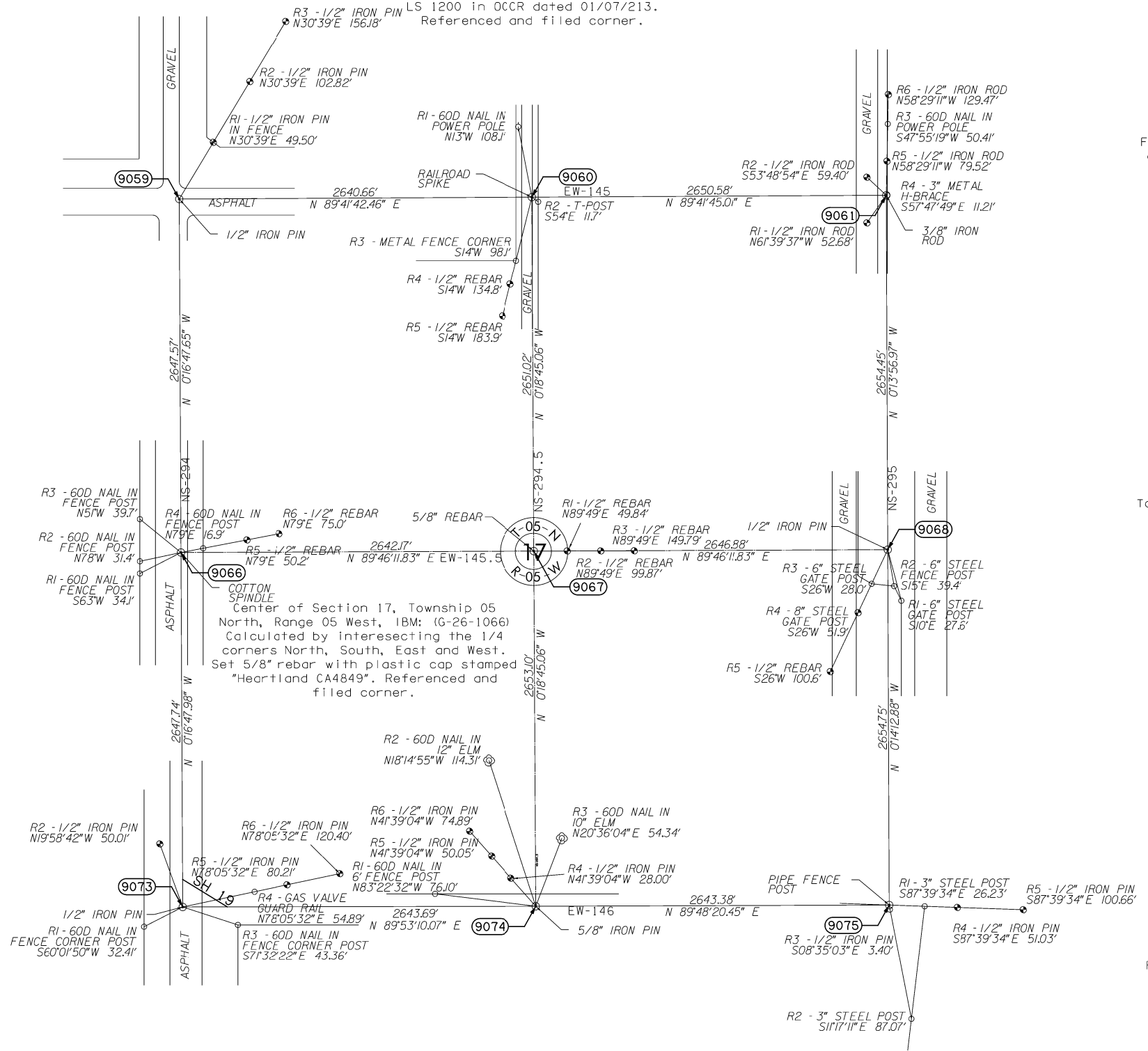
West Quarter Corner of Section 17,
Township 05 North, Range 05 West, IBM:
(G-26-1065)
Found Cotton Spindle as described in OCCR
by LS 1200 dated 01/07/2013. Referenced
and filed corner.

East Quarter Corner of Section 17,
Township 05 North, Range 05 West, IBM:
(G-26-1067)
Found 3/8" Iron Rod as described in
OCCR by LS 1200 dated 01/07/2013.
Referenced and filed corner.

Southwest Corner of Section 17, Township
05 North, Range 05 West, IBM: (G-26-753)
Found and accepted 1#2" iron pin as
described by LS 1262 in OCCR dated
05/28/2015. Referenced and filed corner.

South Quarter Corner of
Section 17, Township 05 North,
Range 05 West, IBM: (G-26-757)
Calculated position using
recovered references from
OCCR by LS 1102 dated
12/15/2005. Set 5/8" rebar
with plastic cap stamped
"Heartland CA4849". Referenced
and filed the Corner.

Southeast Corner of Section 17,
Township 05 North, Range 05 West,
IBM: (G-26-755)
Found and accepted Pipe Fence Post
as described by LS 1102 in OCCR
dated 12/15/2005. Referenced and
filed corner.



SCALE:
1" = 500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
PLS	ERS
DRAWN	BDK
CHECKED	ERS
APPROVED	ERS
CREW	

SURVEY DATA SHEET

SWO 5207(1) STATE JOB NO. 30425(04) SHEET NO. S045

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				
DESCRIPTION			REVISIONS	DATE	

North Quarter Corner of Section 19,
Township 05 North, Range 05 West, IBM:
(G-26-1071)
Found and accepted 1/2" Iron pin as
described by LS 1200 in OCCR dated
10/22/2014. Referenced and filed the
Corner.

Northwest Corner of Section 19,
Township 05 North, Range 05 West,
IBM: (G-26-1070)
Found and accepted Brass Cap as
described by LS 1326 in OCCR dated
12/15/2004. Referenced and filed
corner.

Northeast Corner of Section 19,
Township 05 North, Range 05 West,
IBM: (G-26-753)
Found and accepted 1/2" Iron pin as
described by LS 1262 in OCCR dated
05/28/2015. Referenced and filed
corner.

West Quarter Corner of Section 19,
Township 05 North, Range 05 West, IBM:
(G-26-1072)
Found Mag Nail as described in OCCR by LS
1326 dated 05/13/2005. Referenced and
filed corner.

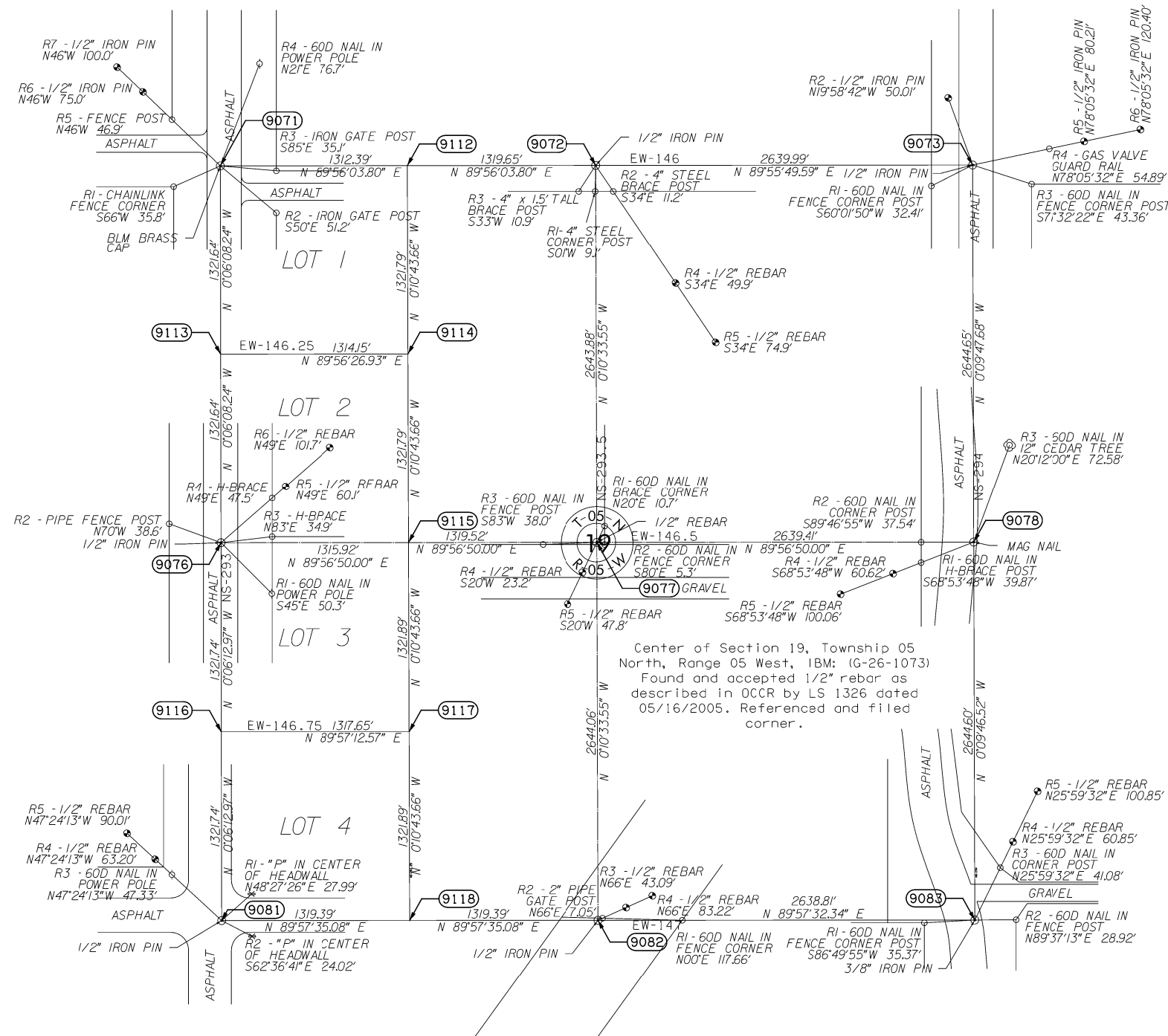
East Quarter Corner of Section 19,
Township 05 North, Range 05 West, IBM:
(G-26-756)
Found and accepted Mag Nail as
described in OCCR by LS 1431 dated
12/06/2011. Referenced and filed
corner.

Center of Section 19, Township 05
North, Range 05 West, IBM: (G-26-1073)
Found and accepted 1/2" rebar as
described in OCCR by LS 1326 dated
05/16/2005. Referenced and filed
corner.

Southwest Corner of Section 19, Township
05 North, Range 05 West, IBM: (G-26-1075)
Found and accepted 1/2" iron pin.
Position fits well with adjacent land
corners and local evidence. Filed and
references corner.

Southeast Corner of Section 19,
Township 05 North, Range 05 West,
IBM: (G-26-758)
Found and accepted 3/8" iron pin as
described by LS 1431 in OCCR dated
12/06/2011. Referenced and filed
corner.

South Quarter Corner of
Section 19, Township 05 North,
Range 05 West, IBM: (G-26-1076)
Found and accepted 1/2" Iron pin
with cap as described in
OCCR by LS 1326 dated
05/17/2005. Referenced and
filed the Corner.



SCALE:
1" = 500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
PLS	ERS
DRAWN	BDK
CHECKED	ERS
APPROVED	ERS
CREW	

SURVEY DATA SHEET

SWO 5207(1) STATE JOB NO. 30425(04) SHEET NO. 5046

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				
DESCRIPTION			REVISIONS	DATE	

Northwest Corner of Section 20, Township 05 North, Range 05 West, IBM: (G-26-753)
 Found and accepted 1#2" iron pin as described by LS 1262 in OCCR dated 05/28/2015. Referenced and filed corner.

Northeast Corner of Section 20, Township 05 North, Range 05 West, IBM: (G-26-755)
 Found and accepted pipe fence post as described by LS 1102 in OCCR dated 12/15/2005. Referenced and filed corner.

West Quarter Corner of Section 20, Township 05 North, Range 05 West, IBM: (G-26-756)
 Found and accepted mag nail as described in OCCR by LS 1431 dated 12/06/2011. Referenced and filed corner.

East Quarter Corner of Section 20, Township 05 North, Range 05 West, IBM: (G-26-757)
 Found 1/2" rebar as described in OCCR by LS 1913 dated 10/30/2015. Referenced and filed corner.

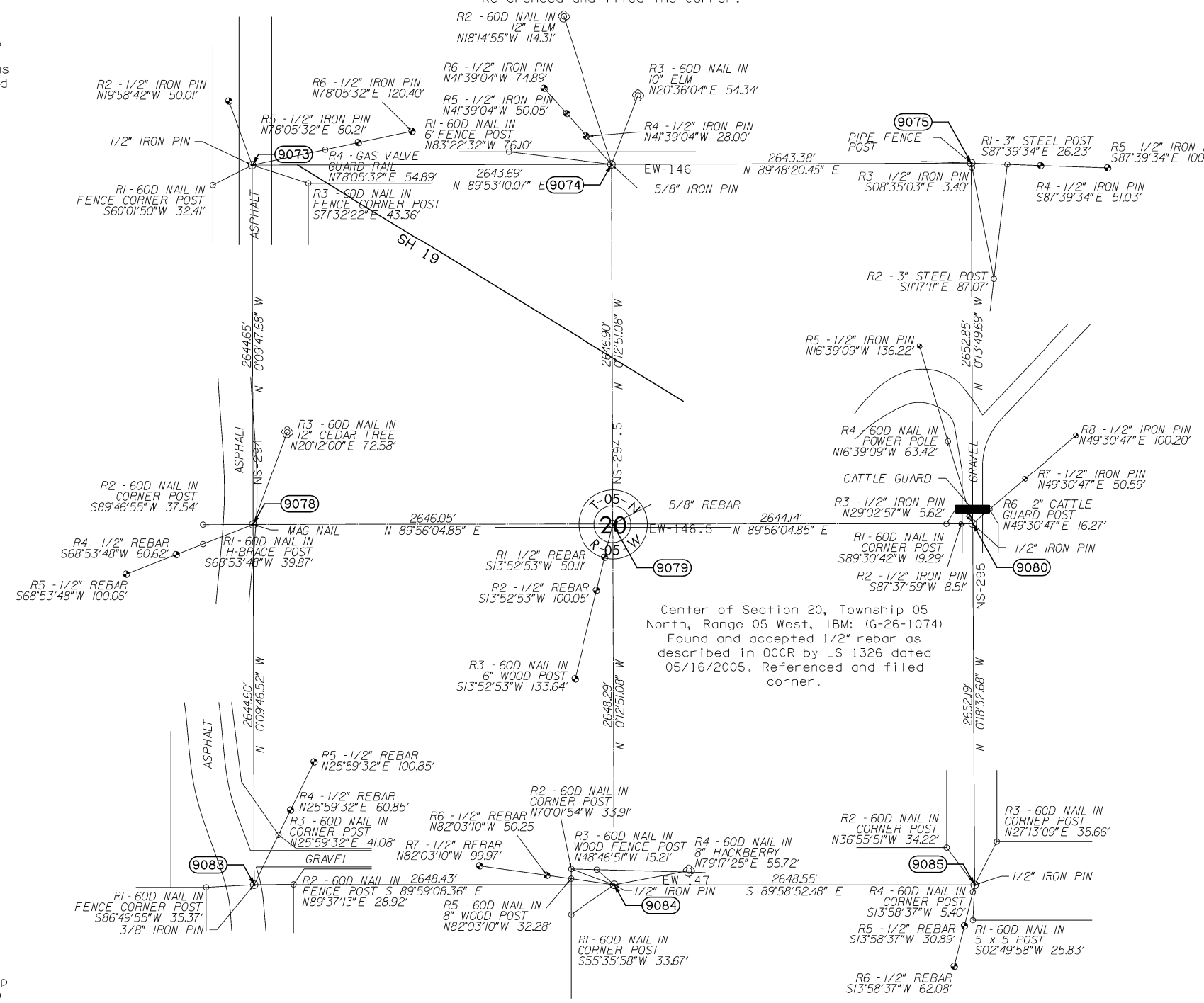
Southwest Corner of Section 20, Township 05 North, Range 05 West, IBM: (G-26-758)
 Found and accepted 3/8" iron pin as described by LS 1431 in OCCR dated 12/06/2011. Referenced and filed corner.

Southeast Corner of Section 3, Township 05 North, Range 05 West, IBM: (G-26-760)
 Found and accepted 1/2" iron pin as described by LS 1913 in OCCR dated 10/30/2015. Referenced and filed corner.

North Quarter Corner of Section 20, Township 05 North, Range 05 West, IBM: (G-26-757)
 Calculated position using recovered references from OCCR by LS 1102 dated 12/15/2005. Set 5/8" rebar with plastic cap stamped "Heartland CA4849". Referenced and filed the Corner.

Center of Section 20, Township 05 North, Range 05 West, IBM: (G-26-1074)
 Found and accepted 1/2" rebar as described in OCCR by LS 1326 dated 05/16/2005. Referenced and filed corner.

South Quarter Corner of Section 20, Township 05 North, Range 05 West, IBM: (G-26-759)
 Found and accepted 1/2" iron pin as described in OCCR by LS 1102 dated 12/15/2005. Referenced and filed the Corner.



SCALE: 1" = 500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
PLS	ERS
DRAWN	BDK
CHECKED	ERS
APPROVED	ERS
CREW	

SURVEY DATA SHEET

SWO 5207(1) STATE JOB NO. 30425(04) SHEET NO. 047

REVISIONS		
NO.	DESCRIPTION	DATE

SIGN SUMMARY													
SHEET NO.	ITEM NO.	APPROXIMATE STATION LOCATION		SIGN TYPE	POSTS				SIGN AREA			REMARKS	
					TYPE	A L.F.	B L.F.	SPACING	SHEET S.F.	PANEL S.F.	PANEL OVERHEAD S.F.		
T002	1	504+50	SH 19 EB	W11-10, W16-2P(1000)	2" SQ. TUBE POST	14.5				9.25			
T002	2	504+50	SH 19 WB	W11-10, W16-2P(1000)	2" SQ. TUBE POST	14.5				9.25			
T002	3	507+50	SH 19 EB	R2-1(65)	2" SQ. TUBE POST	13.5				5.00			
T004	4	540+00	SH 19 WB	R2-1(65)	2" SQ. TUBE POST	13.5				5.00			
T004	5	545+42	DELL ST.	R1-1	2" SQ. TUBE POST	14.0				5.18			
T004	6	546+70	DELL ST.	R1-1	2" SQ. TUBE POST	14.0				5.18			
T005	7	552+00	SH 19 EB	R2-1(65)	2" SQ. TUBE POST	13.5				5.00			
T006	8	558+00	SH 19 EB	S3-1	2" SQ. TUBE POST	13.0				6.25			
T007	9	574+00	SH 19 WB	R2-1(65)	2" SQ. TUBE POST	13.5				5.00			
T007	10	578+38	CS 2890 RD.	R1-1	2" SQ. TUBE POST	14.0				5.18			
T007	11	579+42	CS 2890 RD.	R1-1	2" SQ. TUBE POST	14.0				5.18			
T008	12	584+00	SH 19 EB	R2-1(65)	2" SQ. TUBE POST	13.5				5.00			
T009	13	605+75	SH 19 EB	I-3 (DRY CREEK)	2" SQ. TUBE POST	12.5				3.75			
T009	14	606+45	SH 19 WB	I-3 (DRY CREEK)	2" SQ. TUBE POST	12.5				3.75			
T010	15	620+00	SH 19 WB	R2-1(65)	2" SQ. TUBE POST	13.5				5.00			
T010	16	625+23	CR 1430 RD.	R1-1	2" SQ. TUBE POST	14.0				5.18			
T011	17	630+00	SH 19 EB	R2-1(65)	2" SQ. TUBE POST	13.5				5.00			
T011	18	637+75	SH 19 EB	W11-10, W16-2P(1000)	2" SQ. TUBE POST	14.5				9.25			
T012	19	645+50	SH 19 WB	R2-1(65)	2" SQ. TUBE POST	13.5				5.00			
T012	20	649+97	CS 2900 RD.	R1-1	2" SQ. TUBE POST	14.0				5.18			
T012	21	651+06	CS 2900 RD.	R1-1	2" SQ. TUBE POST	14.0				5.18			
T013	22	671+65	SH 19 EB	W11-10, W16-2P(1000)	2" SQ. TUBE POST	14.5				9.25			
T014	23	677+00	SH 19 WB	R2-1(65)	2" SQ. TUBE POST	13.5				5.00			
T014	24	680+50	SH 19 WB	W4-2(R)	2" SQ. TUBE POST	15.0				9.00			
T014	25	681+27	SIDE STREET	R1-1	2" SQ. TUBE POST	14.0				5.18			
T014	26	687+00	SH 19 EB	R2-1(65)	2" SQ. TUBE POST	13.5				5.00			
T015	27	691+65	SH 19 WB	W11-10, W16-2P(1000)	2" SQ. TUBE POST	14.5				9.25			
T016	28	713+00	SH 19 WB	R2-1(65)	2" SQ. TUBE POST	13.5				5.00			
T017	29	717+40	CEDAR HILL RD.	R1-1	2" SQ. TUBE POST	14.0				5.18			
T017	30	718+49	CEDAR HILL RD.	R1-1	2" SQ. TUBE POST	14.0				5.18			
T017	31	724+00	SH 19 EB	R2-1(65)	2" SQ. TUBE POST	13.5				5.00			
T020	32	765+50	SH 19 WB	R2-1(65)	2" SQ. TUBE POST	13.5				5.00			
T020	33	765+86	SH 19 EB	I-3 (SOLDIER CREEK)	2" SQ. TUBE POST	12.5	12.5	2'-0"		4.50			
T020	34	766+56	SH 19 WB	I-3 (SOLDIER CREEK)	2" SQ. TUBE POST	12.5	12.5	2'-0"		4.50			
T021	35	780+45	LAKE RD.	R1-1	2" SQ. TUBE POST	14.0				5.18			
T021	36	781+61	LAKE RD.	R1-1	2" SQ. TUBE POST	14.0				5.18			
T022	37	796+00	SH 19 WB	R2-1(65)	2" SQ. TUBE POST	13.5				5.00			
T022	38	796+00	SH 19 EB	W3-5(50)	2" SQ. TUBE POST	15.0				9.00			
T022	39	803+25	SH 19 WB	R2-1(55)	2" SQ. TUBE POST	13.5				5.00			
T022	40	803+25	SH 19 EB	R2-1(50)	2" SQ. TUBE POST	13.5				5.00			
TOTALS					2" SQ. TUBE POST	574.5				229.16			

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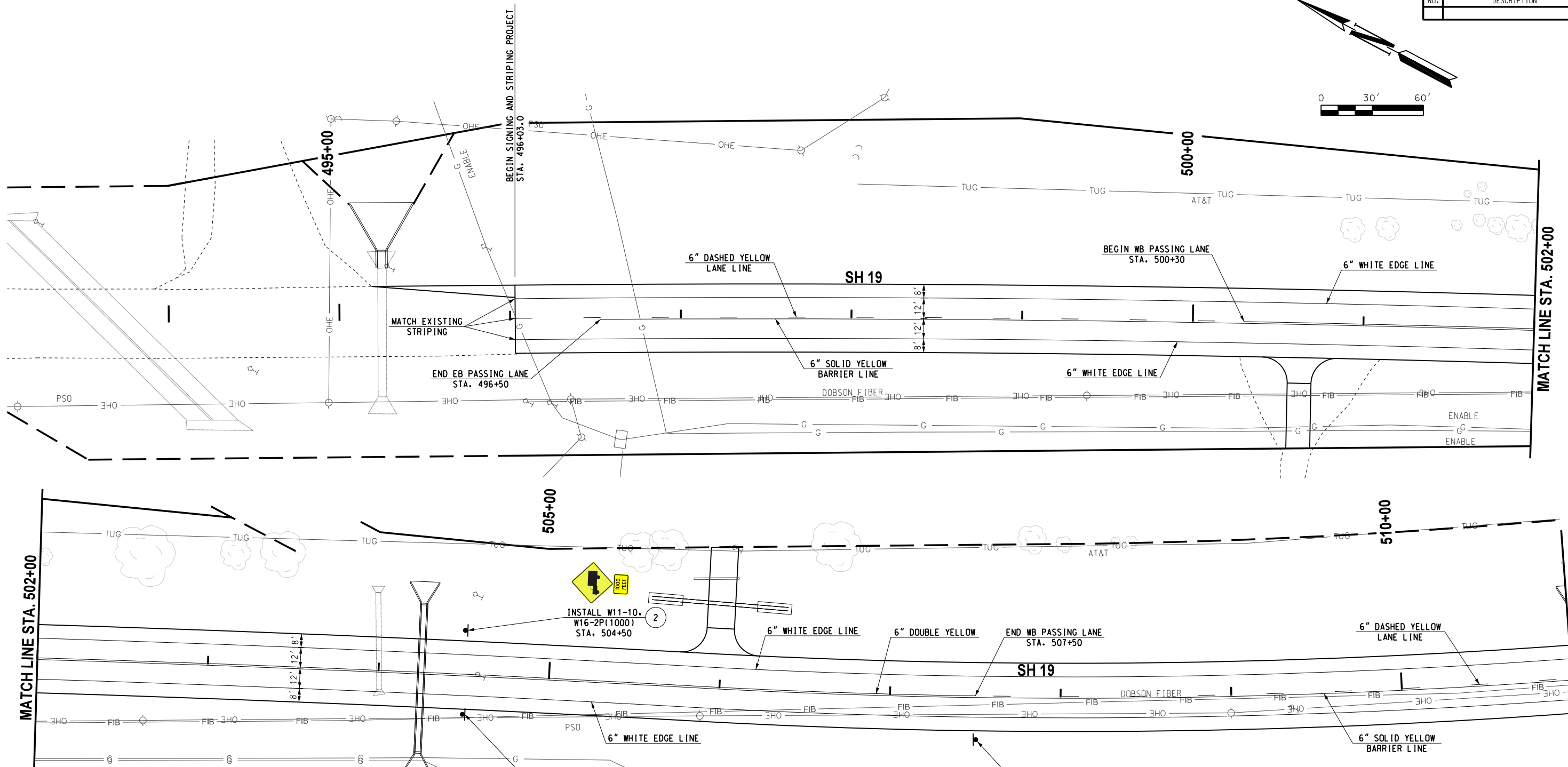
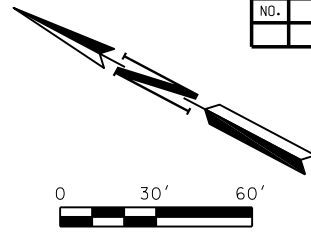
Design	RWR	06-22-22
Drawn	SB	06-22-22



SIGN SUMMARY

State Job No. 30425(07) Sheet No. T001

REVISIONS		
NO.	DESCRIPTION	DATE



06-22-22 G:\V\Projects\1-2789 - TC, EC-1709 JP_30425(07) - S.H.19 - Grady Co\CAD\1002-3042507-STRPE.dgn

INSTALL W11-10, W16-2P(1000) STA. 504+50

INSTALL W11-10, W16-2P(1000) STA. 504+50

INSTALL R2-1(65) STA. 507+50

MULTI-POLY STRIPING SUM. TABLE

DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (MULTI-POLY) 4" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 6" WHITE	L.F.	2995
TRAFFIC STRIPE (MULTI-POLY) 6" YELLOW	L.F.	2365
TRAFFIC STRIPE (MULTI-POLY) 6" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 24" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) ARROWS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) WORDS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) SYMBOLS	EA.	0

FOR DIMENSIONS NOT SHOWN ON THE PLANS FOR PAVEMENT MARKING, REFERENCE SHALL BE MADE TO THE STANDARD O.D.O.T. DRAWINGS (LATEST REV.).

Design	RWR	06-22-22
Drawn	TCC	06-22-22

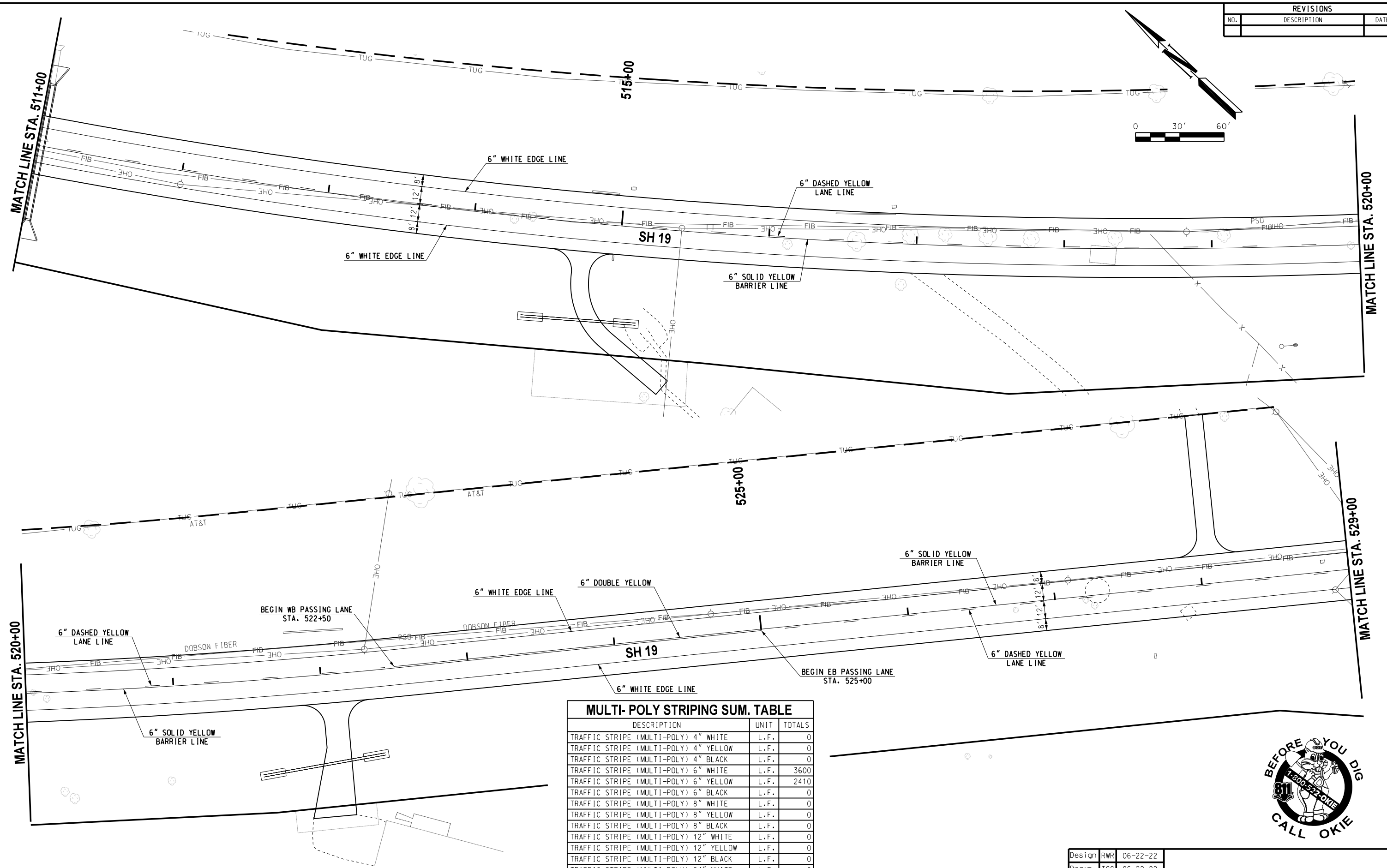
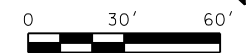


SIGNING & STRIPING

State Job No. 30425(07) Sheet No. 1002



REVISIONS		
NO.	DESCRIPTION	DATE



MULTI-POLY STRIPING SUM. TABLE

DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (MULTI-POLY) 4" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 6" WHITE	L.F.	3600
TRAFFIC STRIPE (MULTI-POLY) 6" YELLOW	L.F.	2410
TRAFFIC STRIPE (MULTI-POLY) 6" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 24" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) ARROWS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) WORDS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) SYMBOLS	EA.	0

FOR DIMENSIONS NOT SHOWN ON THE PLANS FOR PAVEMENT MARKING, REFERENCE SHALL BE MADE TO THE STANDARD O.D.O.T. DRAWINGS (LATEST REV.).

Design	RWR	06-22-22
Drawn	TCC	06-22-22



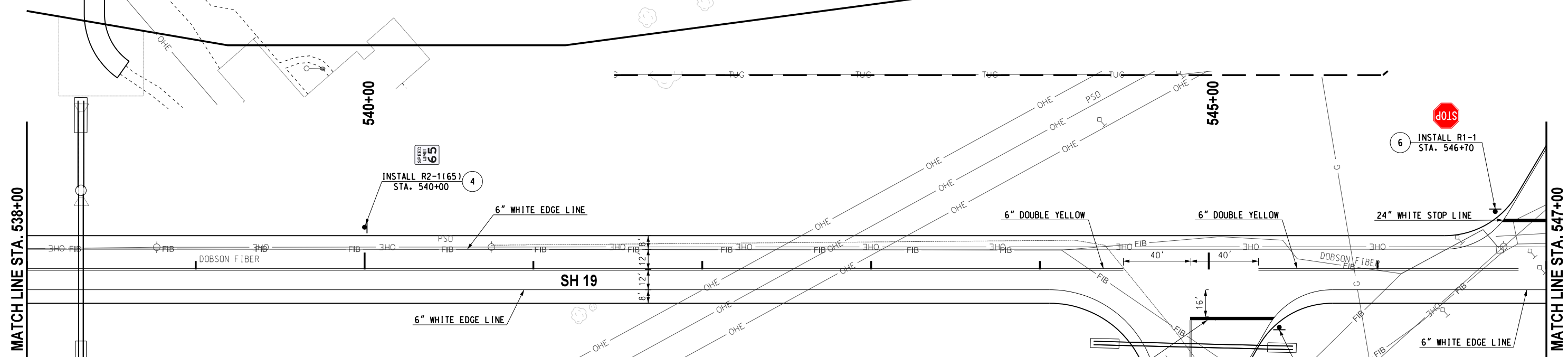
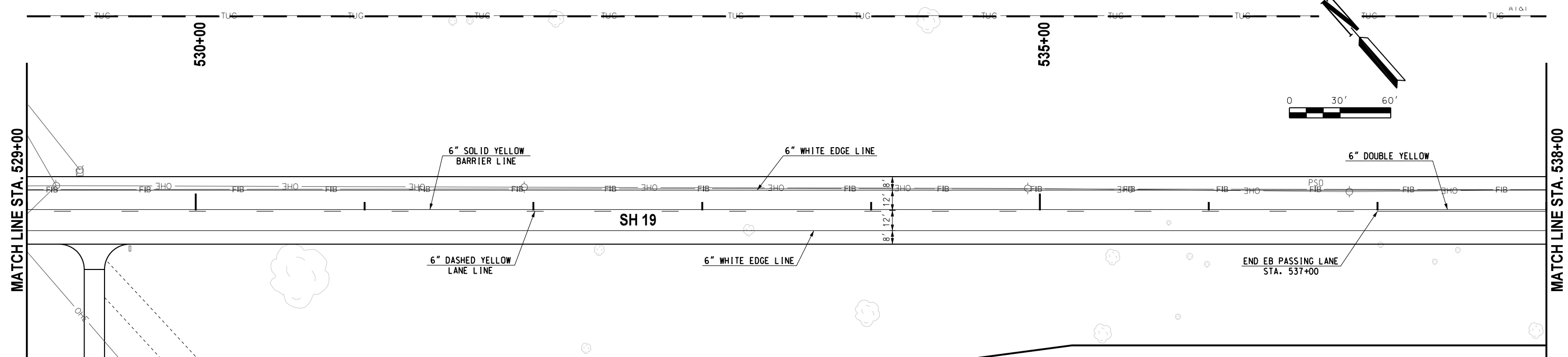
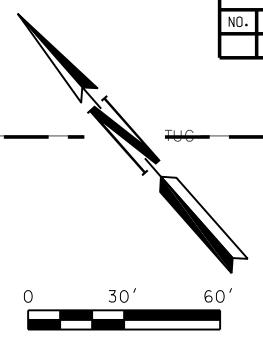
SIGNING & STRIPING

State Job No. 30425(07) Sheet No. T003



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REVISIONS		
NO.	DESCRIPTION	DATE



MULTI-POLY STRIPING SUM. TABLE		
DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (MULTI-POLY) 4" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 6" WHITE	L.F.	3840
TRAFFIC STRIPE (MULTI-POLY) 6" YELLOW	L.F.	2990
TRAFFIC STRIPE (MULTI-POLY) 6" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 24" WHITE	L.F.	70
TRAFFIC STRIPE (MULTI-POLY) ARROWS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) WORDS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) SYMBOLS	EA.	0

FOR DIMENSIONS NOT SHOWN ON THE PLANS FOR PAVEMENT MARKING, REFERENCE SHALL BE MADE TO THE STANDARD O.D.O.T. DRAWINGS (LATEST REV.).

Design	RWR	06-22-22
Drawn	TCC	06-22-22



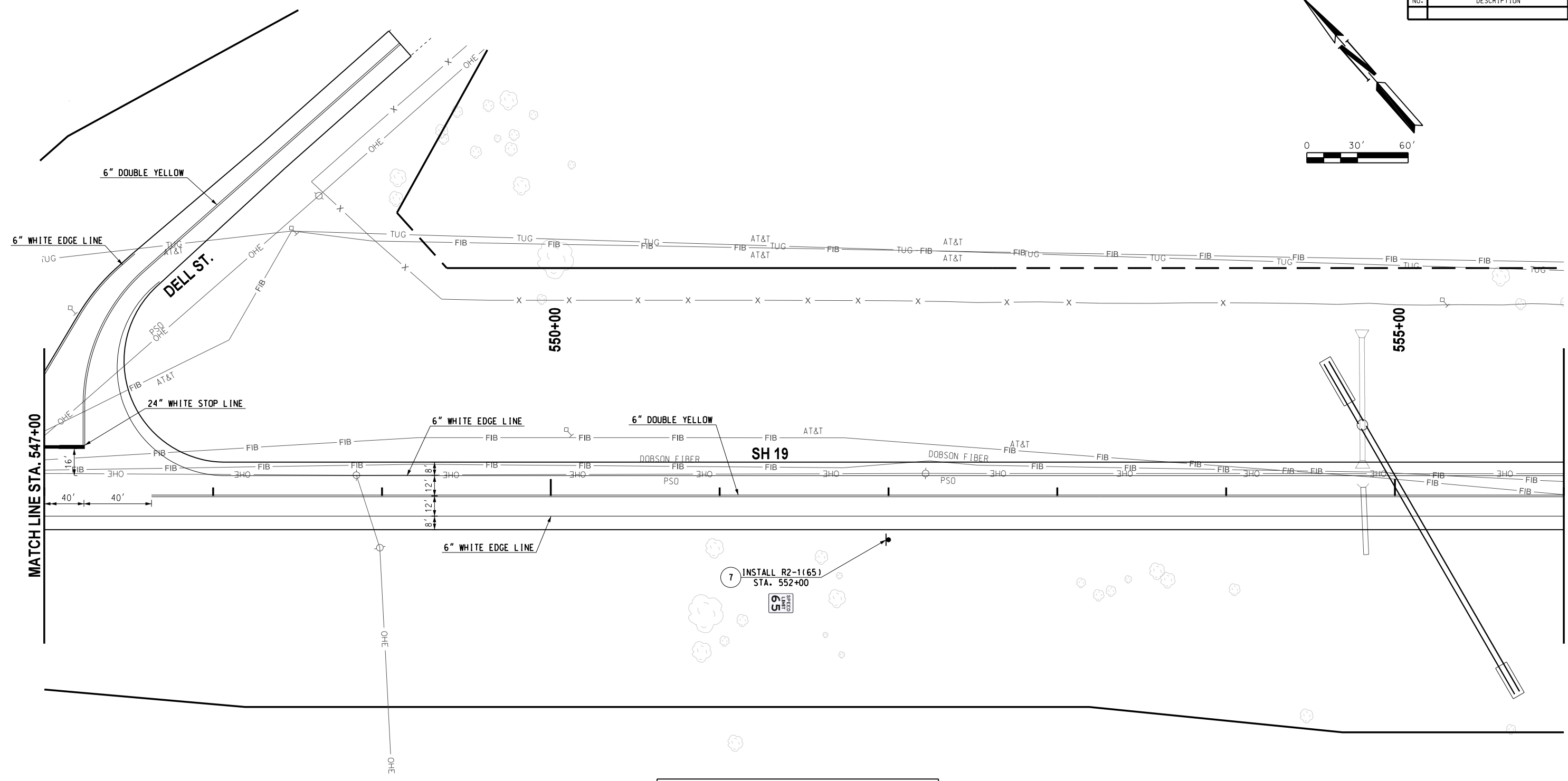
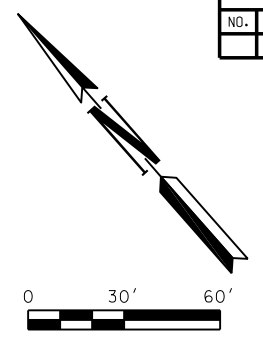
SIGNING & STRIPING

State Job No. 30425(07) Sheet No. T004



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REVISIONS		
NO.	DESCRIPTION	DATE



MULTI-POLY STRIPING SUM. TABLE		
DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (MULTI-POLY) 4" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 6" WHITE	L.F.	1945
TRAFFIC STRIPE (MULTI-POLY) 6" YELLOW	L.F.	2440
TRAFFIC STRIPE (MULTI-POLY) 6" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 24" WHITE	L.F.	25
TRAFFIC STRIPE (MULTI-POLY) ARROWS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) WORDS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) SYMBOLS	EA.	0



Design	RWR	06-22-22
Drawn	TCC	06-22-22

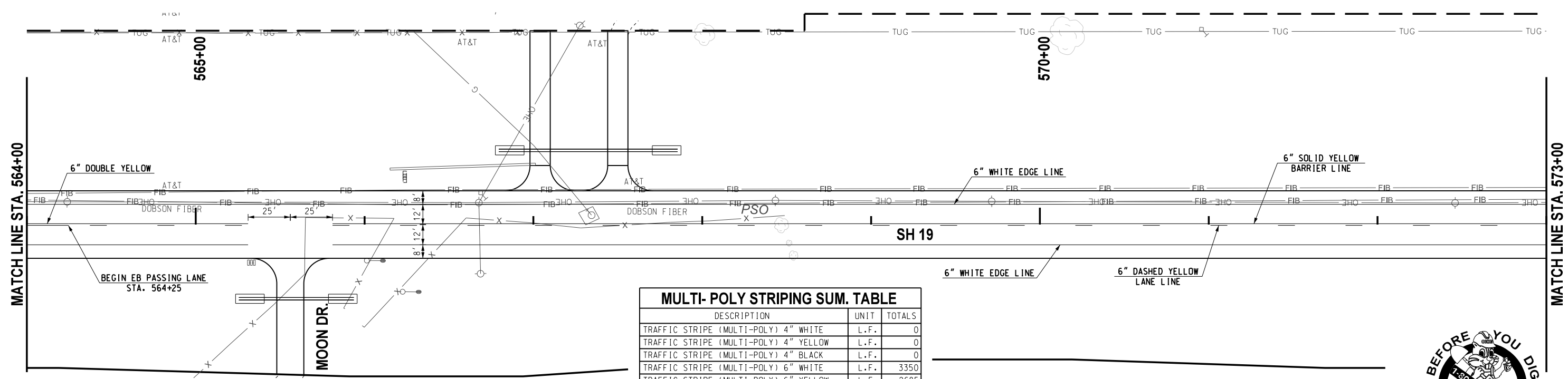
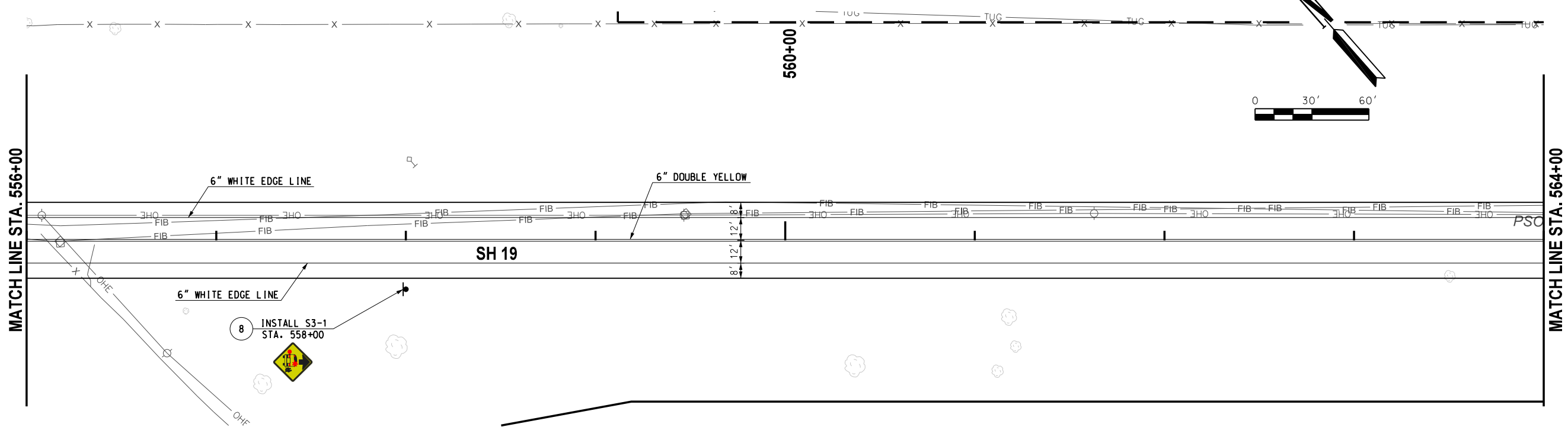
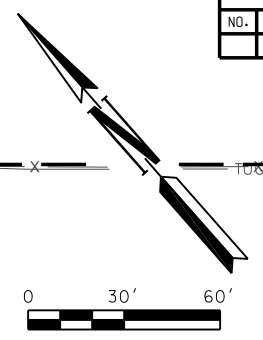


SIGNING & STRIPING

FOR DIMENSIONS NOT SHOWN ON THE PLANS FOR PAVEMENT MARKING, REFERENCE SHALL BE MADE TO THE STANDARD O.D.O.T. DRAWINGS (LATEST REV.).

06-22-22 G:\V\Projects\1-2799 - TC, EC-1709 JP_30425(07) - SH 19 - Grady Co\CAD\1005-30425(07)-STRIPING.dgn

REVISIONS		
NO.	DESCRIPTION	DATE



MULTI-POLY STRIPING SUM. TABLE

DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (MULTI-POLY) 4" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 6" WHITE	L.F.	3350
TRAFFIC STRIPE (MULTI-POLY) 6" YELLOW	L.F.	2685
TRAFFIC STRIPE (MULTI-POLY) 6" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 24" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) ARROWS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) WORDS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) SYMBOLS	EA.	0



Design	RWR	06-22-22
Drawn	TCC	06-22-22

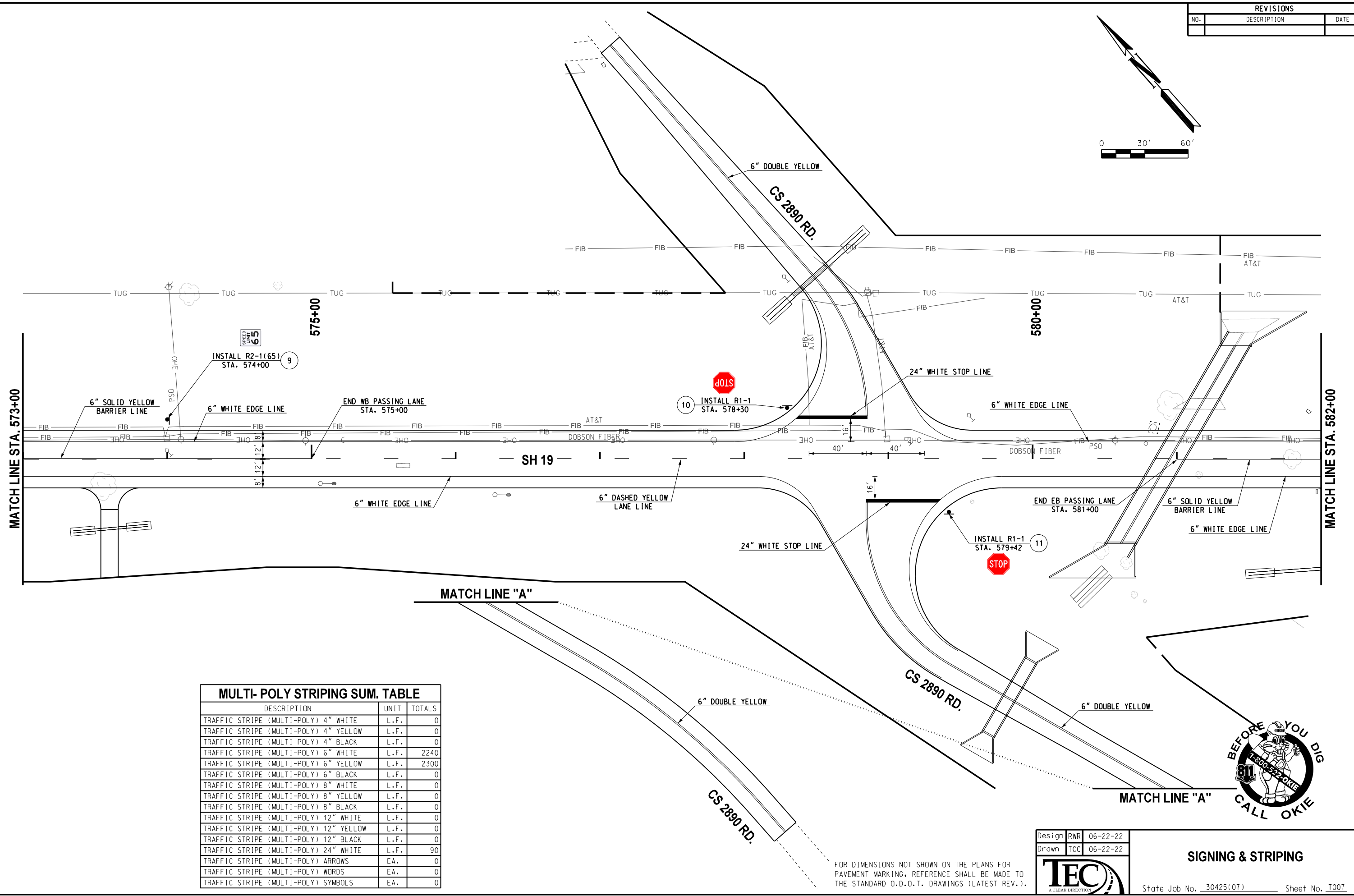
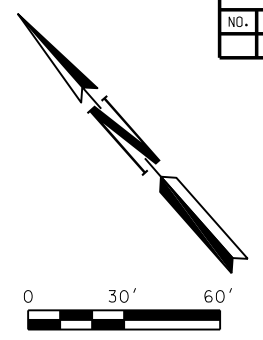


SIGNING & STRIPING

FOR DIMENSIONS NOT SHOWN ON THE PLANS FOR PAVEMENT MARKING, REFERENCE SHALL BE MADE TO THE STANDARD O.D.O.T. DRAWINGS (LATEST REV.).

06-22-22 G:\V\Projects\2799 - TC, EC-1709_IP_30425(07) - S.H.19 - Grady Co\CAD\1006-3042507-STRIPING.dgn

REVISIONS		
NO.	DESCRIPTION	DATE



MULTI- POLY STRIPING SUM. TABLE		
DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (MULTI-POLY) 4" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 6" WHITE	L.F.	2240
TRAFFIC STRIPE (MULTI-POLY) 6" YELLOW	L.F.	2300
TRAFFIC STRIPE (MULTI-POLY) 6" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 24" WHITE	L.F.	90
TRAFFIC STRIPE (MULTI-POLY) ARROWS	E.A.	0
TRAFFIC STRIPE (MULTI-POLY) WORDS	E.A.	0
TRAFFIC STRIPE (MULTI-POLY) SYMBOLS	E.A.	0

Design	RWR	06-22-22
Drawn	TCC	06-22-22



SIGNING & STRIPING

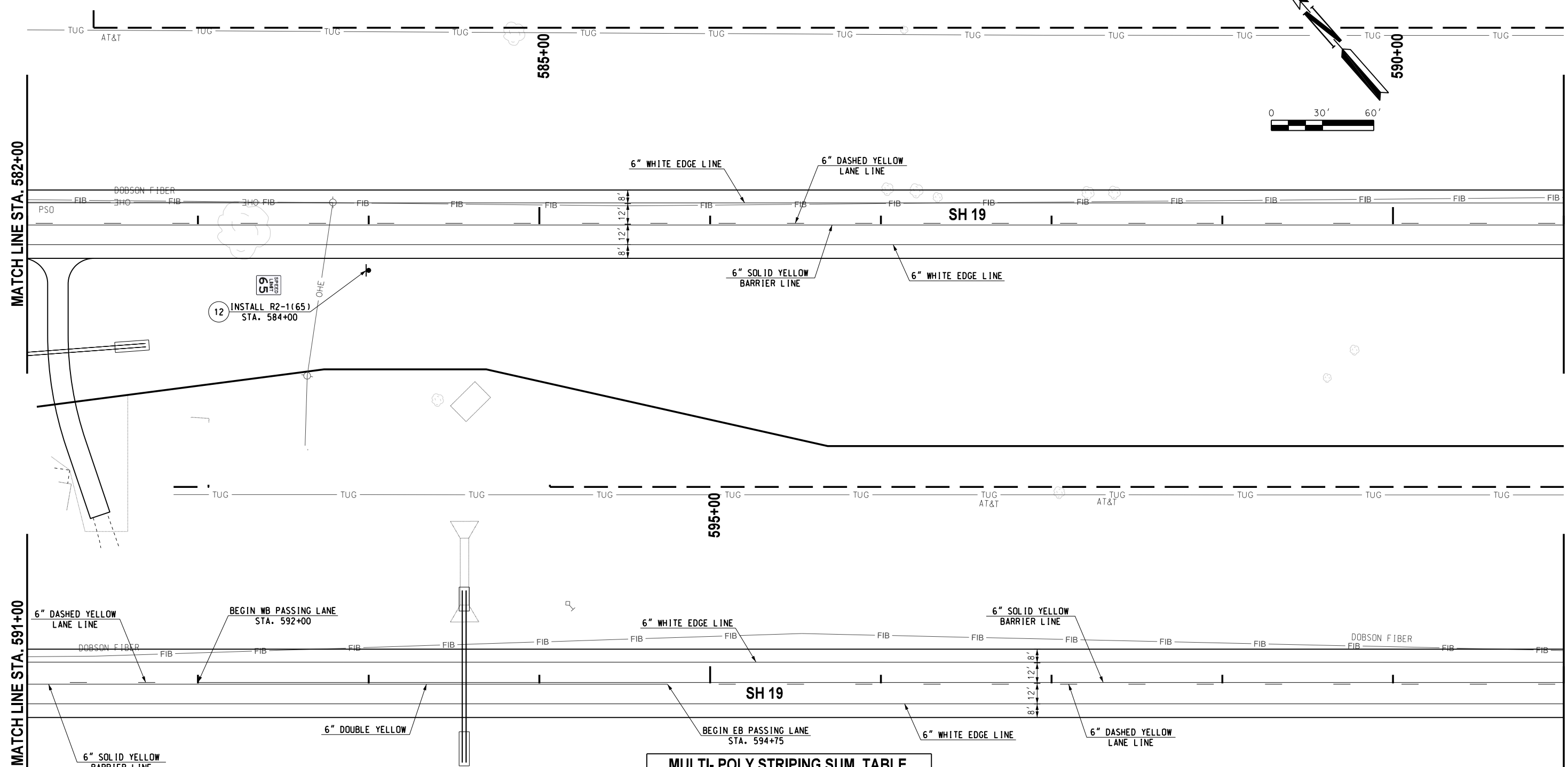
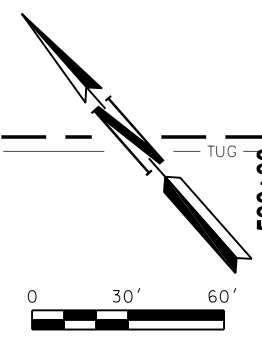
State Job No. 30425(07) Sheet No. 1007

FOR DIMENSIONS NOT SHOWN ON THE PLANS FOR PAVEMENT MARKING, REFERENCE SHALL BE MADE TO THE STANDARD O.D.O.T. DRAWINGS (LATEST REV.).



06-22-22 G:\V\Projects\1-2789 - TC, EC-1709 JP_30425(07) - SH, 19 - Grady Co\CAD\1007-3042507-STRPE 6.dgn

REVISIONS		
NO.	DESCRIPTION	DATE



MULTI-POLY STRIPING SUM. TABLE

DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (MULTI-POLY) 4" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 6" WHITE	L.F.	3600
TRAFFIC STRIPE (MULTI-POLY) 6" YELLOW	L.F.	2460
TRAFFIC STRIPE (MULTI-POLY) 6" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 24" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) ARROWS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) WORDS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) SYMBOLS	EA.	0

FOR DIMENSIONS NOT SHOWN ON THE PLANS FOR PAVEMENT MARKING, REFERENCE SHALL BE MADE TO THE STANDARD O.D.O.T. DRAWINGS (LATEST REV.).

Design	RWR	06-22-22
Drawn	TCC	06-22-22



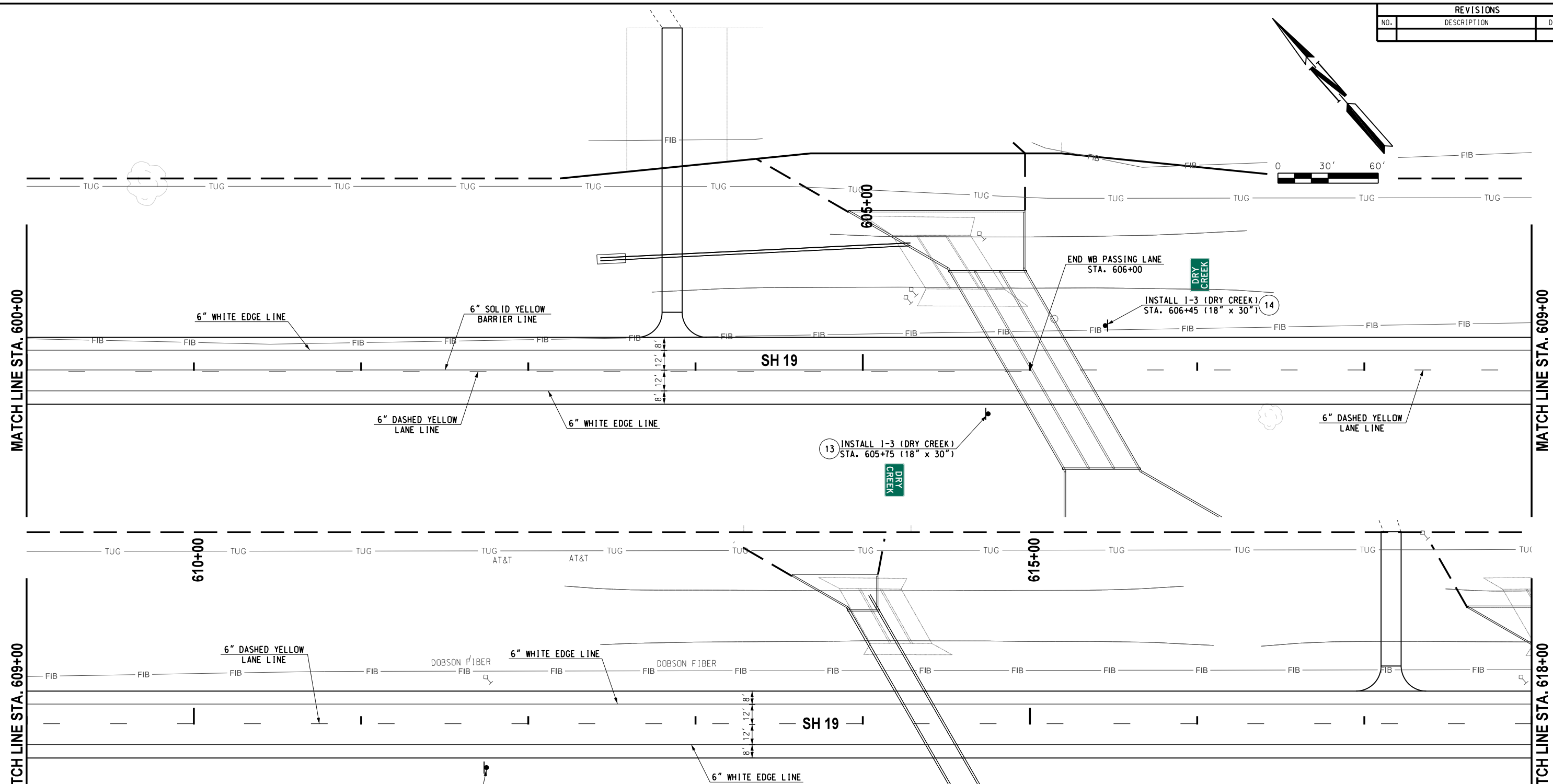
SIGNING & STRIPING

State Job No. 30425(07) Sheet No. 1008



06-22-22 Grady Co\CAD\1008-3042507-STRIPING.dgn

REVISIONS		
NO.	DESCRIPTION	DATE



MULTI-POLY STRIPING SUM. TABLE

DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (MULTI-POLY) 4" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 6" WHITE	L.F.	3600
TRAFFIC STRIPE (MULTI-POLY) 6" YELLOW	L.F.	1040
TRAFFIC STRIPE (MULTI-POLY) 6" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 24" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) ARROWS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) WORDS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) SYMBOLS	EA.	0

REMOVE & RESET EXIST.
ADOPT A HIGHWAY SIGN
STA. 611+75

FOR DIMENSIONS NOT SHOWN ON THE PLANS FOR PAVEMENT MARKING, REFERENCE SHALL BE MADE TO THE STANDARD O.D.O.T. DRAWINGS (LATEST REV.).

Design	RWR	06-22-22
Drawn	TCC	06-22-22



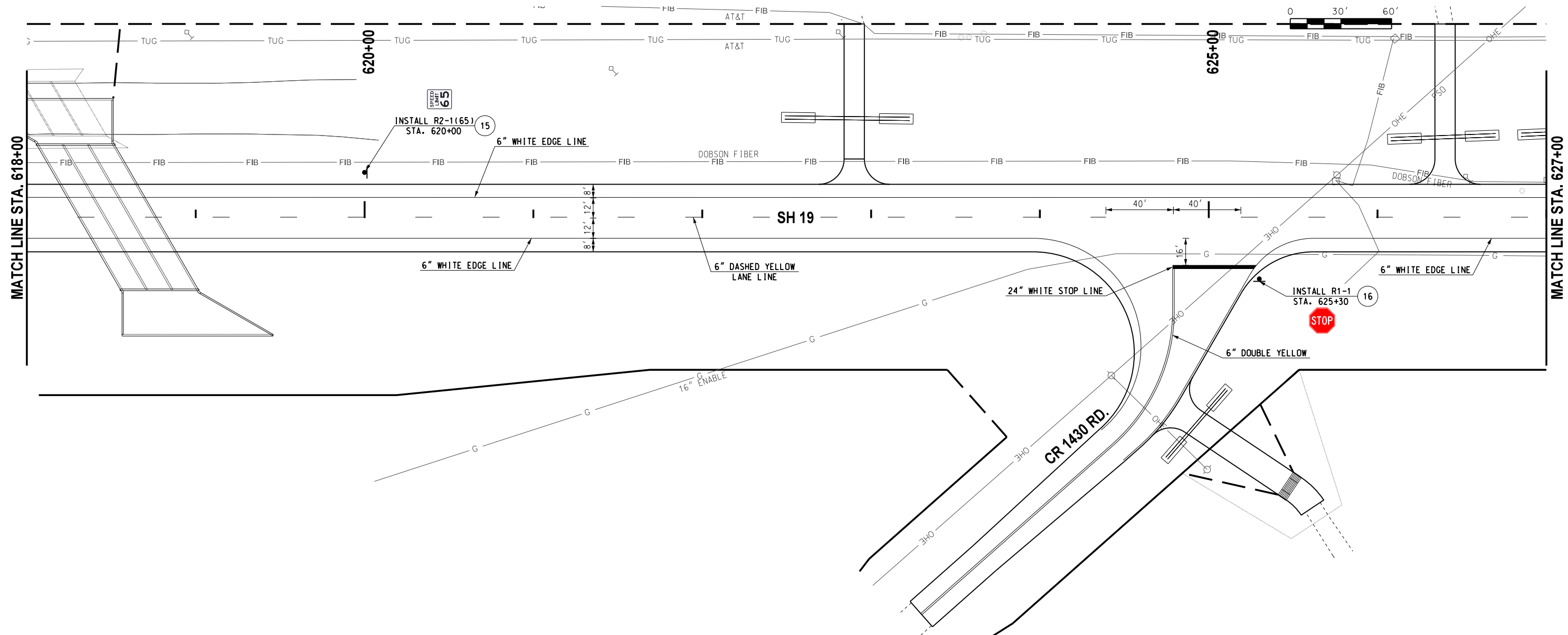
SIGNING & STRIPING

State Job No. 30425(07) Sheet No. 1009



06-22-22 Gr\VP\Projects\1-2789 - TC_EC-1709 JP_30425(07) - SH 19 - Grady Co\CAD\1009-30425(07)-STRPE_B.dgn

REVISIONS		
NO.	DESCRIPTION	DATE



MULTI-POLY STRIPING SUM. TABLE		
DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (MULTI-POLY) 4" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 6" WHITE	L.F.	2020
TRAFFIC STRIPE (MULTI-POLY) 6" YELLOW	L.F.	710
TRAFFIC STRIPE (MULTI-POLY) 6" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 24" WHITE	L.F.	50
TRAFFIC STRIPE (MULTI-POLY) ARROWS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) WORDS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) SYMBOLS	EA.	0

FOR DIMENSIONS NOT SHOWN ON THE PLANS FOR PAVEMENT MARKING, REFERENCE SHALL BE MADE TO THE STANDARD O.D.O.T. DRAWINGS (LATEST REV.).

Design	RWR	06-22-22
Drawn	TCC	06-22-22



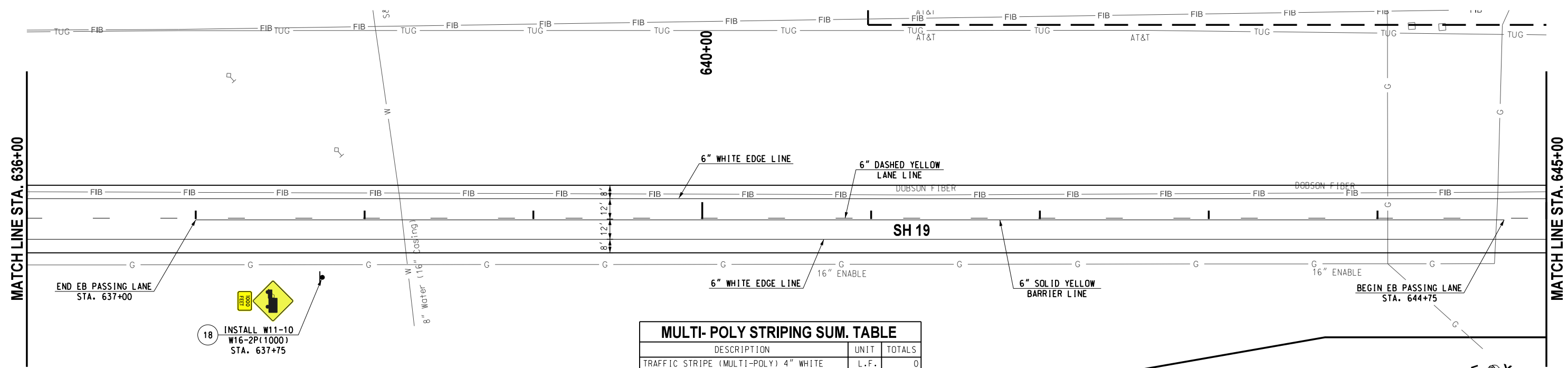
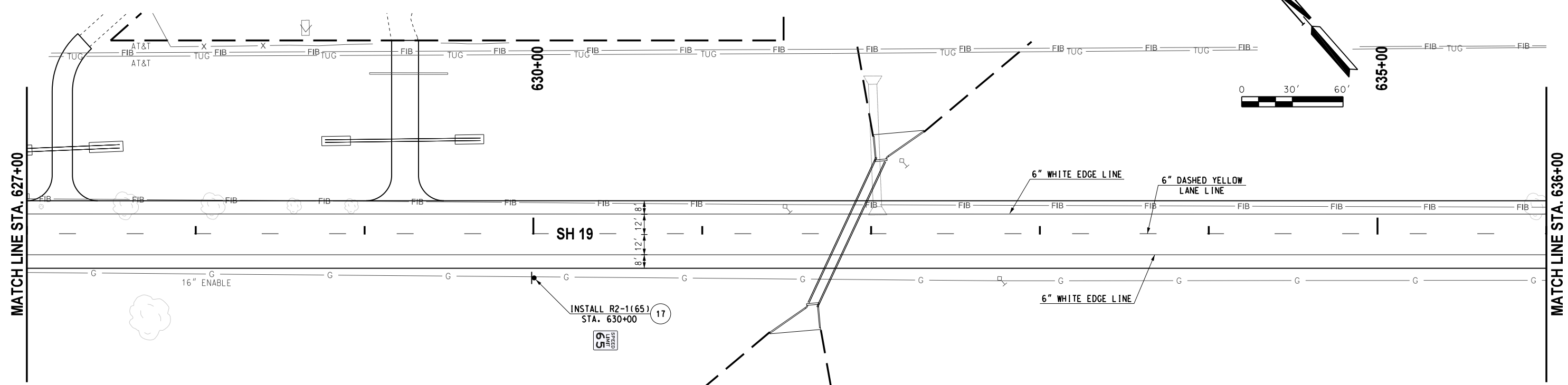
SIGNING & STRIPING

State Job No. 30425(07) Sheet No. T010



06-22-22 G:\V\Projects\1-2799 - TC, EC-1709_LP_30425(07) - S.H.19 - Grady Co\CAD\T010-3042507-STRIPING.dgn

REVISIONS		
NO.	DESCRIPTION	DATE



MULTI-POLY STRIPING SUM. TABLE		
DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (MULTI-POLY) 4" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 6" WHITE	L.F.	3600
TRAFFIC STRIPE (MULTI-POLY) 6" YELLOW	L.F.	1215
TRAFFIC STRIPE (MULTI-POLY) 6" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 24" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) ARROWS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) WORDS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) SYMBOLS	EA.	0

FOR DIMENSIONS NOT SHOWN ON THE PLANS FOR PAVEMENT MARKING, REFERENCE SHALL BE MADE TO THE STANDARD O.D.O.T. DRAWINGS (LATEST REV.).

Design	RWR	06-22-22
Drawn	TCC	06-22-22



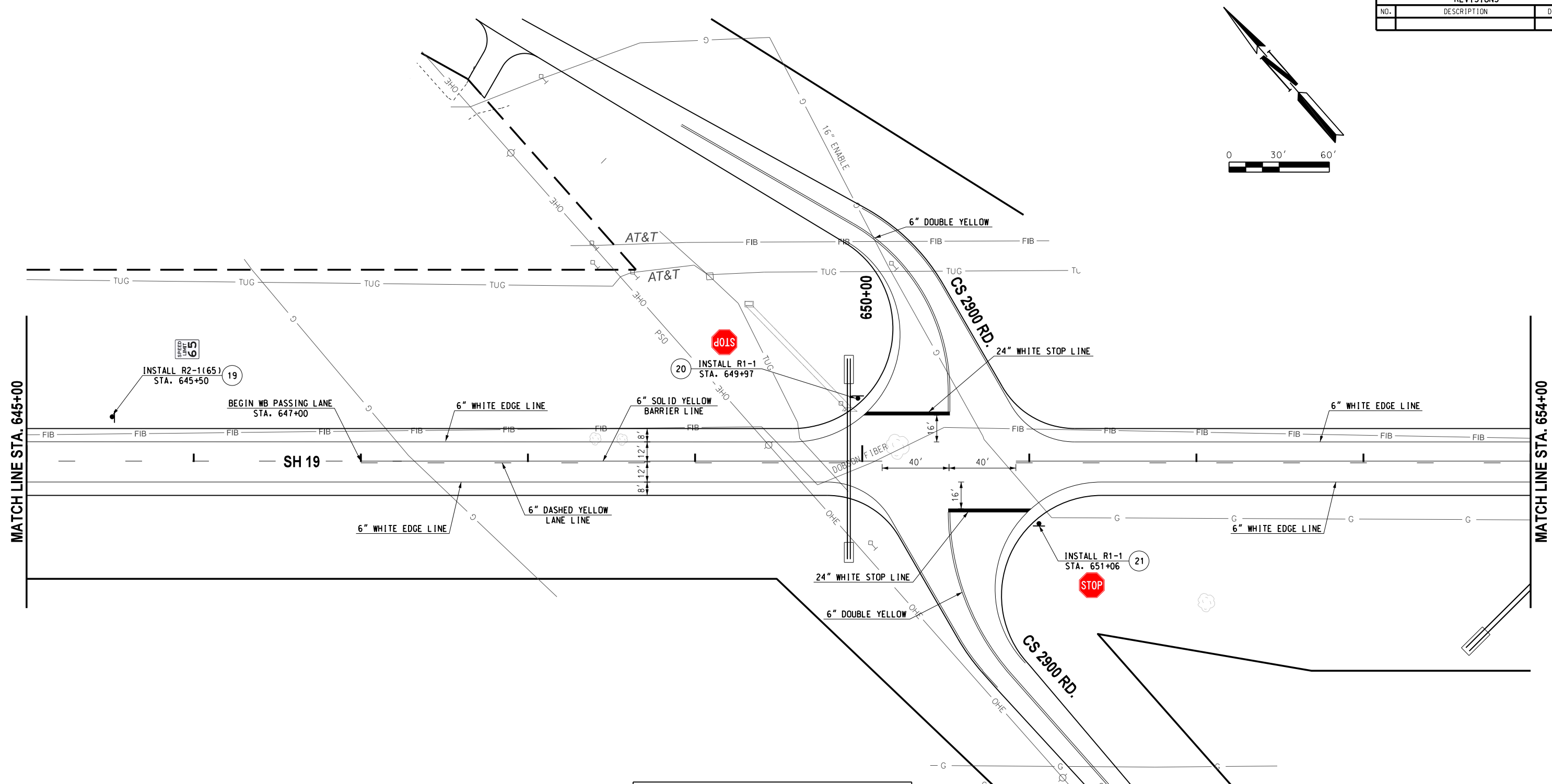
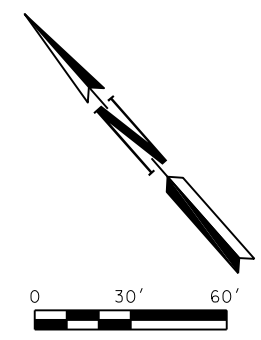
SIGNING & STRIPING

State Job No. 30425(07) Sheet No. T011



06-22-22 G:\V\Projects\T-2799 - TC_EC-1709_LP_30425(07) - S.H.19 - Grady Co.CAD\T011-30425(07)-STRIPING.dwg

REVISIONS		
NO.	DESCRIPTION	DATE



MULTI- POLY STRIPING SUM. TABLE		
DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (MULTI-POLY) 4" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 6" WHITE	L.F.	2240
TRAFFIC STRIPE (MULTI-POLY) 6" YELLOW	L.F.	1815
TRAFFIC STRIPE (MULTI-POLY) 6" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 24" WHITE	L.F.	90
TRAFFIC STRIPE (MULTI-POLY) ARROWS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) WORDS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) SYMBOLS	EA.	0

FOR DIMENSIONS NOT SHOWN ON THE PLANS FOR PAVEMENT MARKING, REFERENCE SHALL BE MADE TO THE STANDARD O.D.O.T. DRAWINGS (LATEST REV.).

Design	RWR	06-22-22
Drawn	TCC	06-22-22



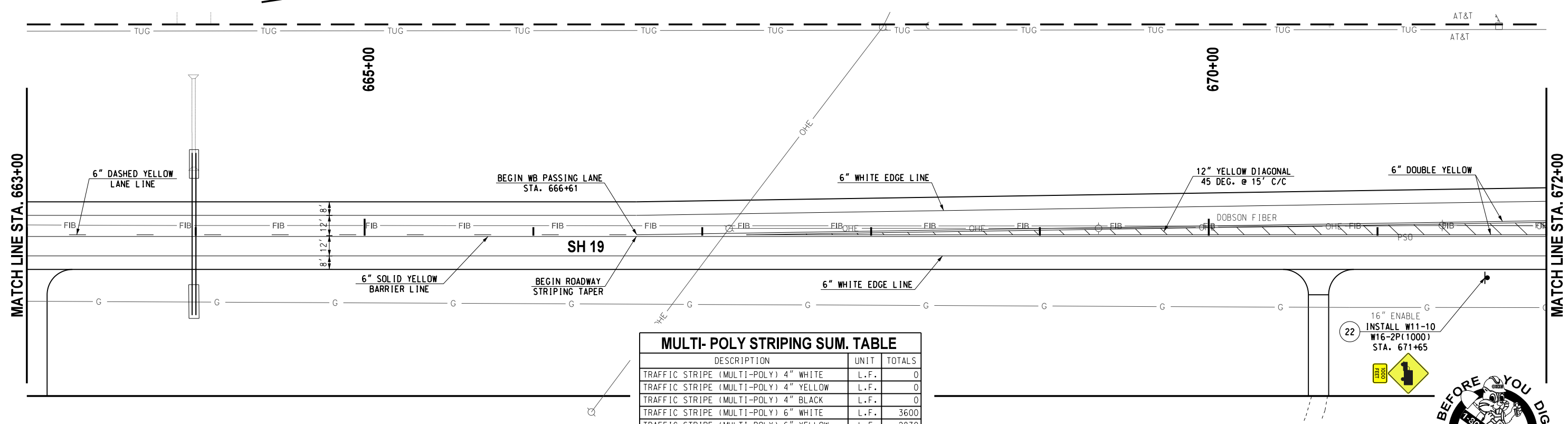
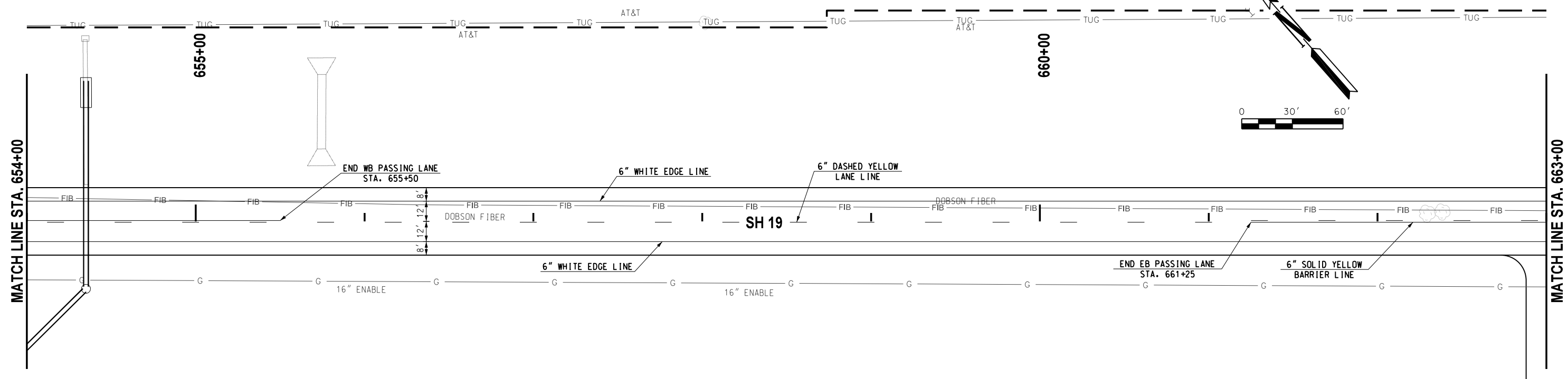
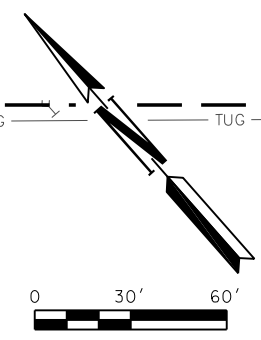
SIGNING & STRIPING

State Job No. 30425(07) Sheet No. T012



06-22-22 G:\V\Projects\T-2799 - TC, EC-1709 JP_30425(07) - S.H.19 - Grady Co\CAD\T02-3042507-STRIPING.dwg

REVISIONS		
NO.	DESCRIPTION	DATE



MULTI-POLY STRIPING SUM. TABLE		
DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (MULTI-POLY) 4" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 6" WHITE	L.F.	3600
TRAFFIC STRIPE (MULTI-POLY) 6" YELLOW	L.F.	2830
TRAFFIC STRIPE (MULTI-POLY) 6" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" YELLOW	L.F.	150
TRAFFIC STRIPE (MULTI-POLY) 12" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 24" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) ARROWS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) WORDS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) SYMBOLS	EA.	0

16" ENABLE
INSTALL W11-10
W16-2P(1000)
STA. 671+65



Design	RWR	06-22-22
Drawn	TCC	06-22-22

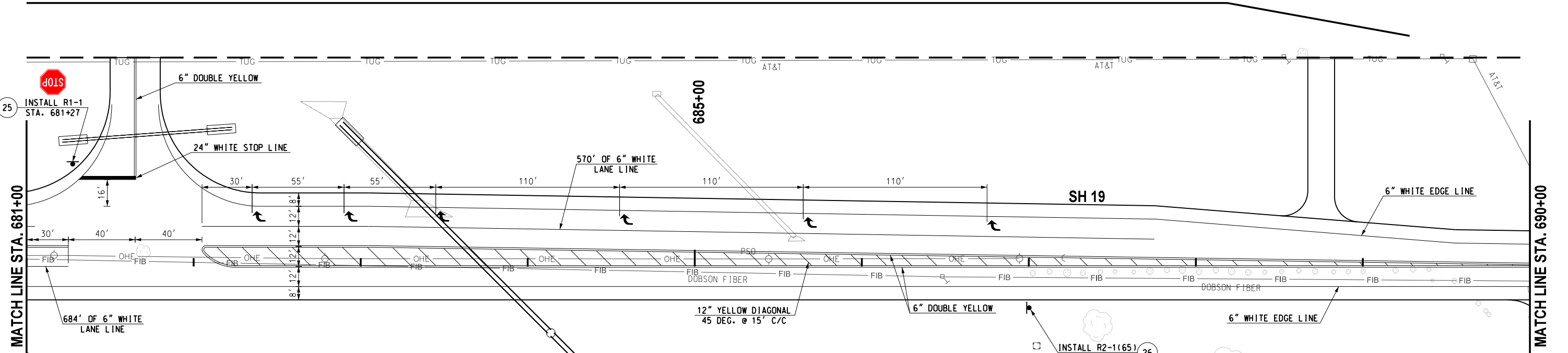
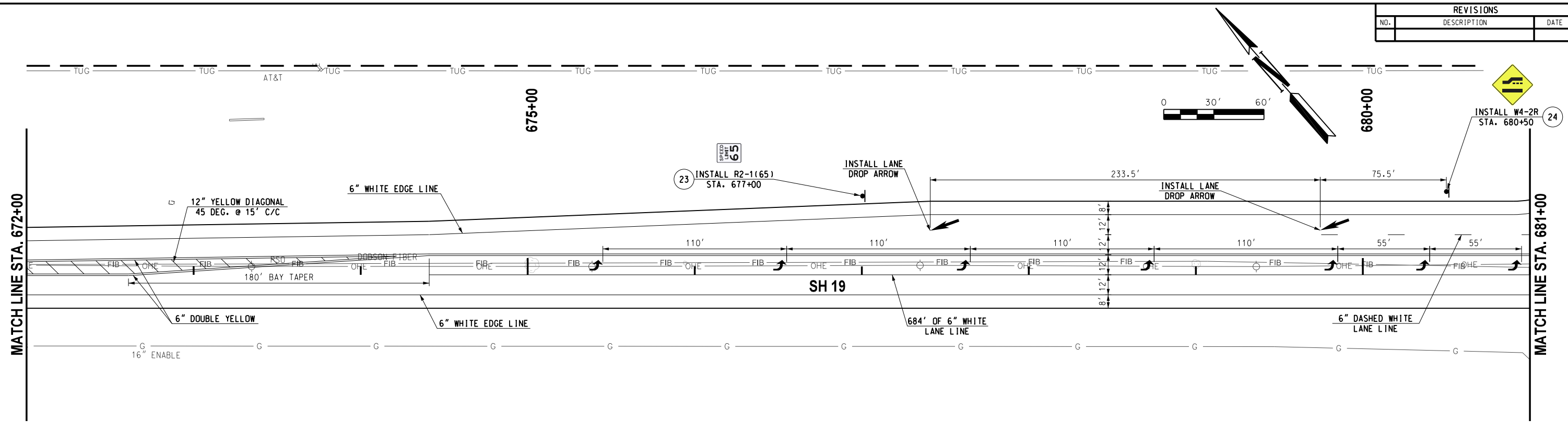


SIGNING & STRIPING

FOR DIMENSIONS NOT SHOWN ON THE PLANS FOR PAVEMENT MARKING, REFERENCE SHALL BE MADE TO THE STANDARD O.D.O.T. DRAWINGS (LATEST REV.).

06-22-22 G:\V\Projects\T-2789 - TC, EC-1709_IP_30425(07) - S.H.19 - Grady Co\CAD\T013-3042507-STRIPING.dgn

REVISIONS		
NO.	DESCRIPTION	DATE



MULTI-POLY STRIPING SUM. TABLE

DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (MULTI-POLY) 4" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 6" WHITE	L.F.	4915
TRAFFIC STRIPE (MULTI-POLY) 6" YELLOW	L.F.	5680
TRAFFIC STRIPE (MULTI-POLY) 6" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" YELLOW	L.F.	515
TRAFFIC STRIPE (MULTI-POLY) 12" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 24" WHITE	L.F.	35
TRAFFIC STRIPE (MULTI-POLY) ARROWS	EA.	15
TRAFFIC STRIPE (MULTI-POLY) WORDS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) SYMBOLS	EA.	0

FOR DIMENSIONS NOT SHOWN ON THE PLANS FOR PAVEMENT MARKING, REFERENCE SHALL BE MADE TO THE STANDARD O.D.O.T. DRAWINGS (LATEST REV.).

Design	RWR	06-22-22
Drawn	TCC	06-22-22

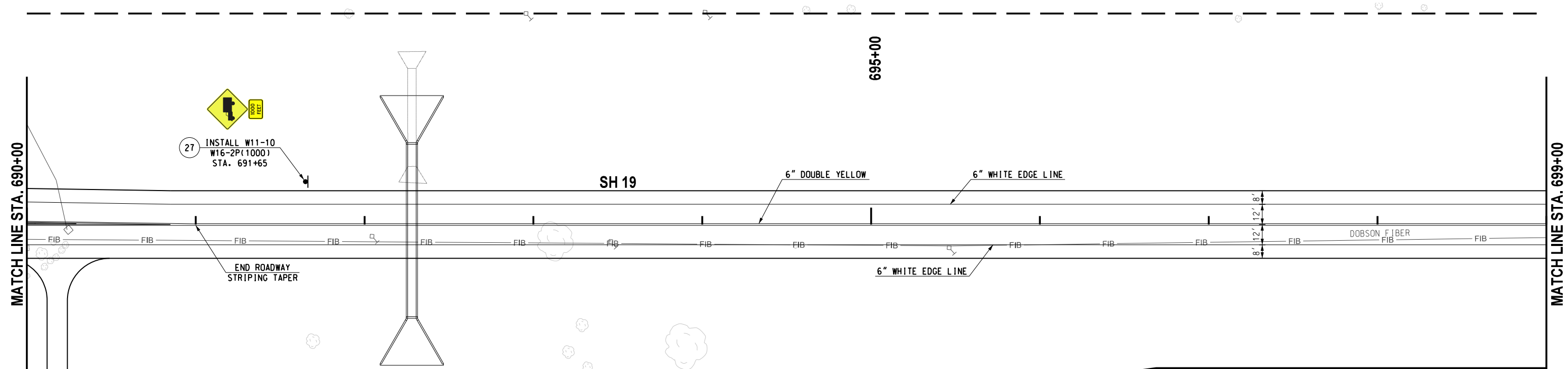
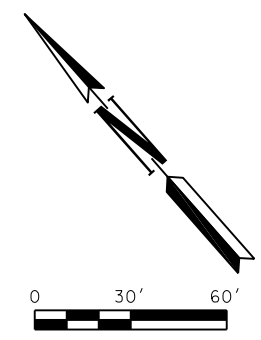


SIGNING & STRIPING



06-22-22 G:\V\Projects\T-2789 - TC_EC-1709_IP_30425(07) - SH.19 - Grady Co\CAD\T014-3042507-STRIPING.dgn

REVISIONS		
NO.	DESCRIPTION	DATE



MULTI-POLY STRIPING SUM. TABLE

DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (MULTI-POLY) 4" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 6" WHITE	L.F.	1800
TRAFFIC STRIPE (MULTI-POLY) 6" YELLOW	L.F.	1860
TRAFFIC STRIPE (MULTI-POLY) 6" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 24" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) ARROWS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) WORDS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) SYMBOLS	EA.	0

FOR DIMENSIONS NOT SHOWN ON THE PLANS FOR PAVEMENT MARKING, REFERENCE SHALL BE MADE TO THE STANDARD O.D.O.T. DRAWINGS (LATEST REV.).

Design	RWR	06-22-22
Drawn	TCC	06-22-22

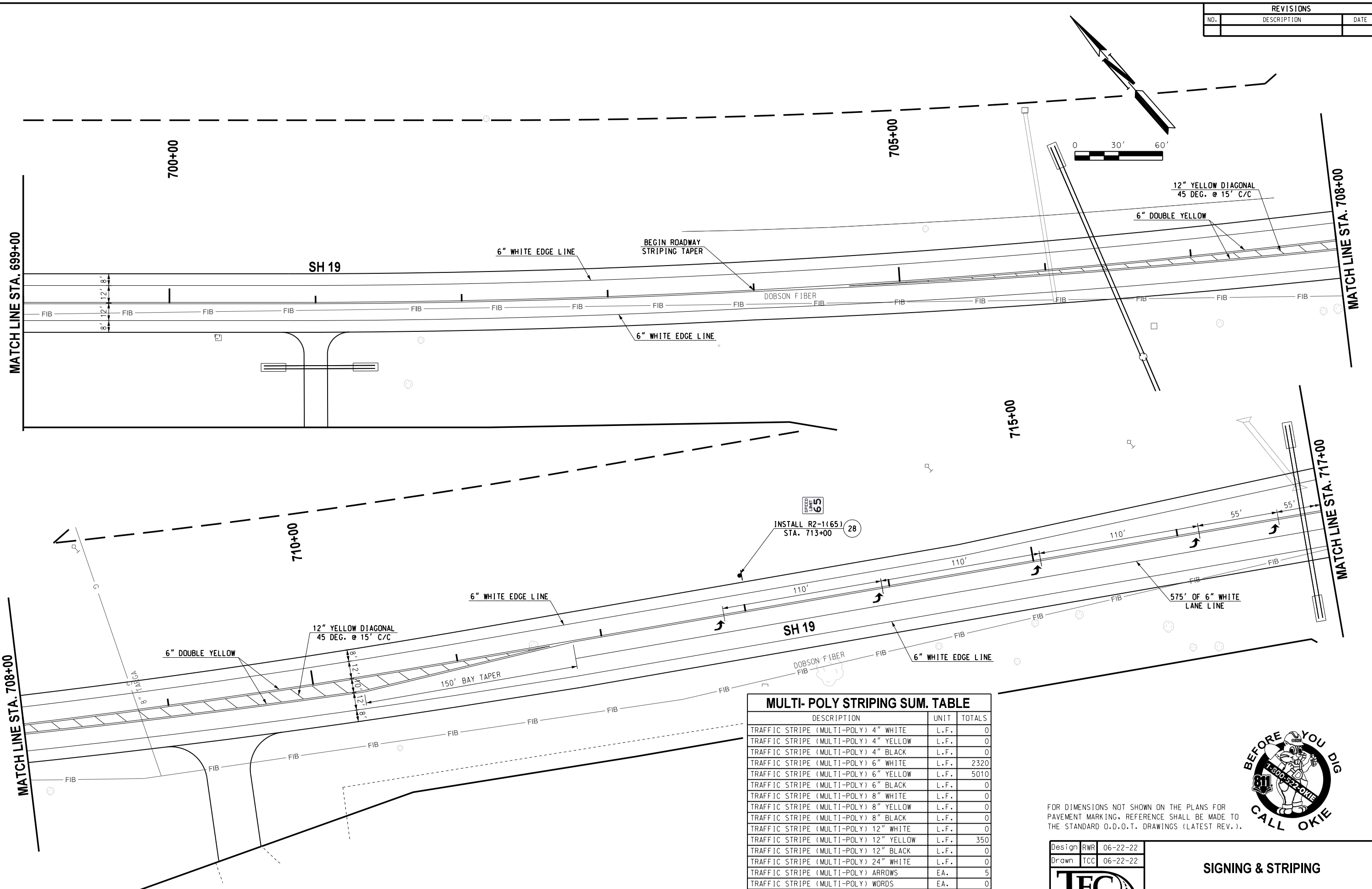


SIGNING & STRIPING

State Job No. 30425(07) Sheet No. T015

06-22-22 G:\V\Projects\T-2799 - TC, EC-1709 JP_30425(07) - S.H.19 - Grady Co\CAD\T015-3042507-STRIPING.dgn

REVISIONS		
NO.	DESCRIPTION	DATE



MULTI- POLY STRIPING SUM. TABLE

DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (MULTI-POLY) 4" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 6" WHITE	L.F.	2320
TRAFFIC STRIPE (MULTI-POLY) 6" YELLOW	L.F.	5010
TRAFFIC STRIPE (MULTI-POLY) 6" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" YELLOW	L.F.	350
TRAFFIC STRIPE (MULTI-POLY) 12" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 24" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) ARROWS	EA.	5
TRAFFIC STRIPE (MULTI-POLY) WORDS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) SYMBOLS	EA.	0

FOR DIMENSIONS NOT SHOWN ON THE PLANS FOR PAVEMENT MARKING, REFERENCE SHALL BE MADE TO THE STANDARD O.D.O.T. DRAWINGS (LATEST REV.).



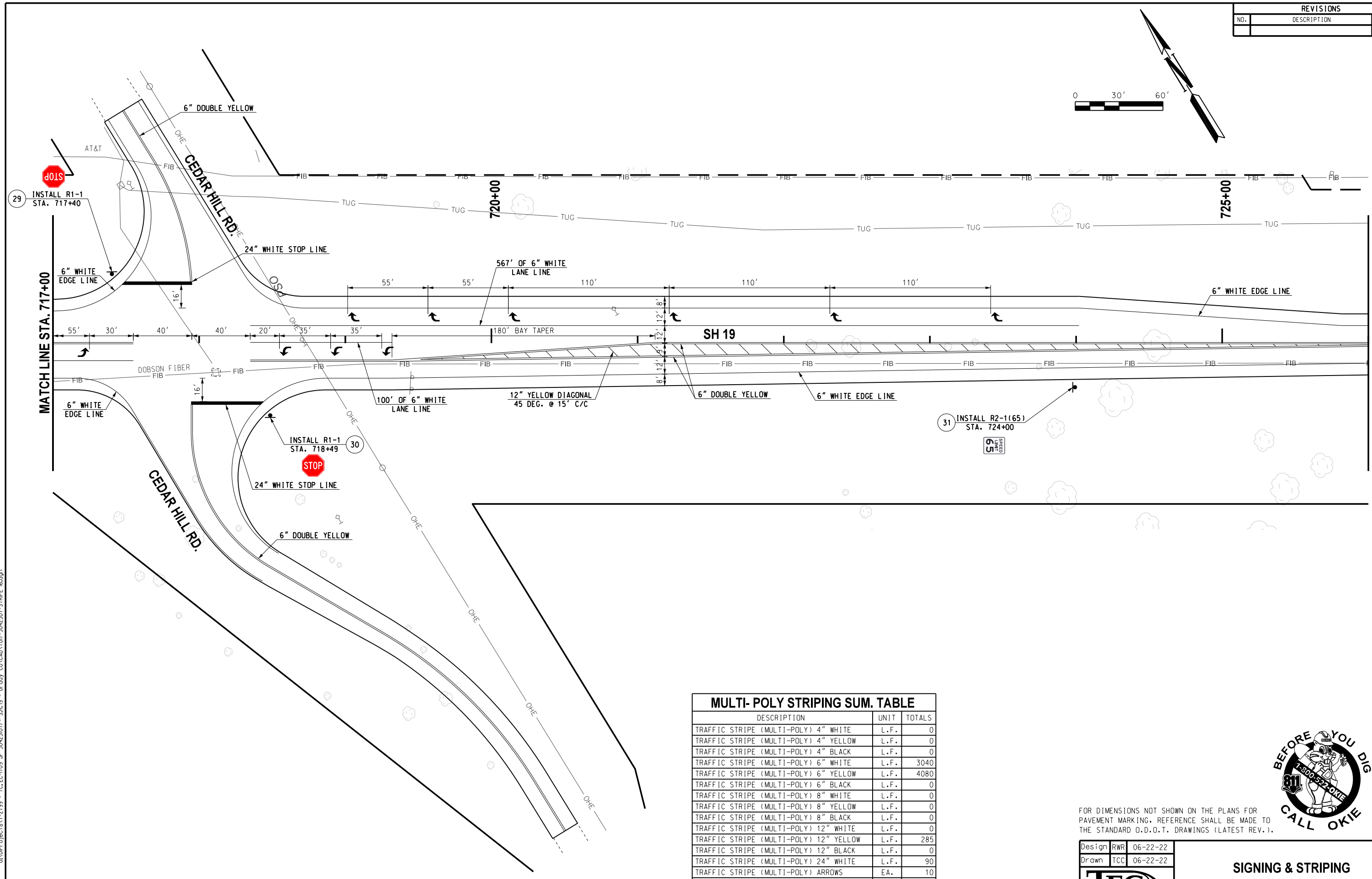
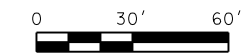
Design	RWR	06-22-22
Drawn	TCC	06-22-22



SIGNING & STRIPING

06-22-22 G:\V\Projects\T-2799 - TC, EC-1709 - TP_30425(07) - SH, I9 - Grady Co\CAD\106-3042507-STRIPING IS.dgn

REVISIONS		
NO.	DESCRIPTION	DATE



MULTI- POLY STRIPING SUM. TABLE

DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (MULTI-POLY) 4" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 6" WHITE	L.F.	3040
TRAFFIC STRIPE (MULTI-POLY) 6" YELLOW	L.F.	4080
TRAFFIC STRIPE (MULTI-POLY) 6" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" YELLOW	L.F.	285
TRAFFIC STRIPE (MULTI-POLY) 12" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 24" WHITE	L.F.	90
TRAFFIC STRIPE (MULTI-POLY) ARROWS	EA.	10
TRAFFIC STRIPE (MULTI-POLY) WORDS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) SYMBOLS	EA.	0



FOR DIMENSIONS NOT SHOWN ON THE PLANS FOR PAVEMENT MARKING, REFERENCE SHALL BE MADE TO THE STANDARD O.D.O.T. DRAWINGS (LATEST REV.).

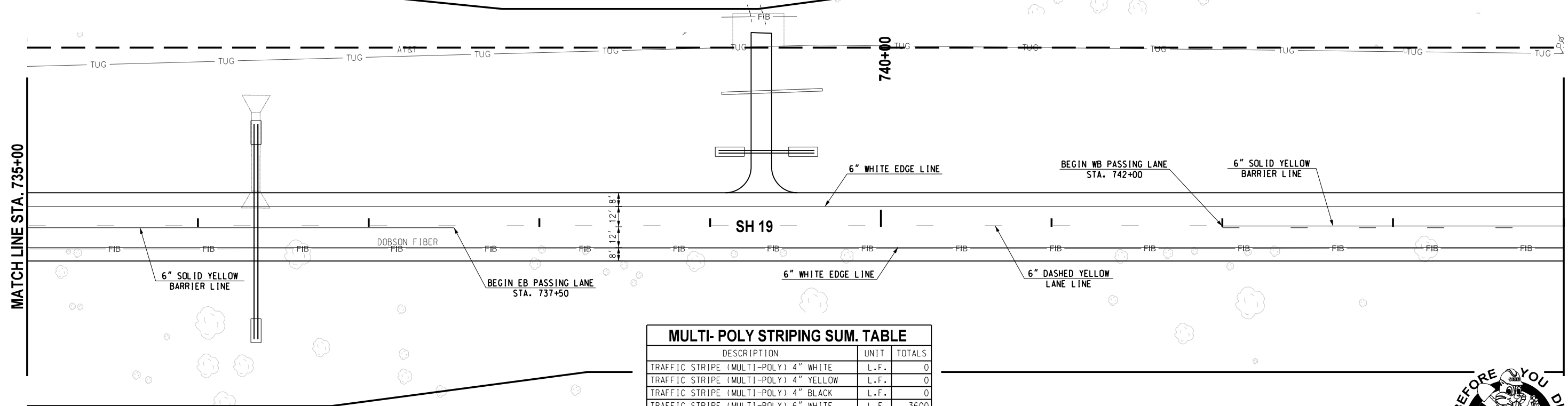
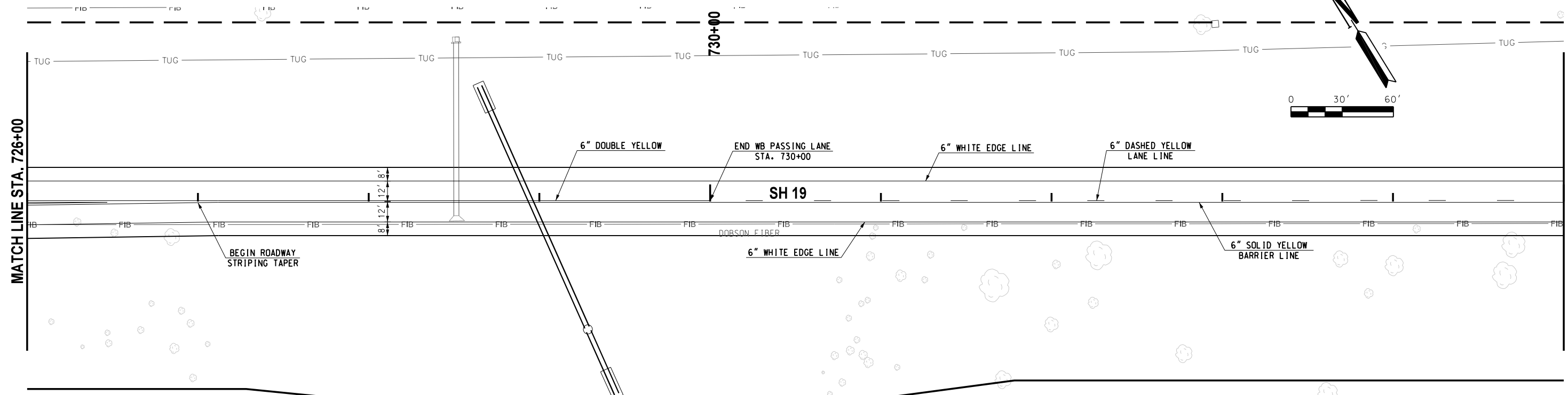
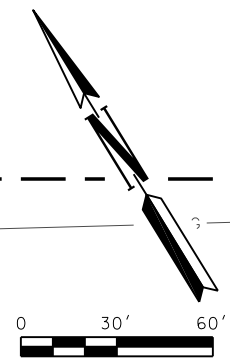
Design	RWR	06-22-22
Drawn	TCC	06-22-22



SIGNING & STRIPING

06-22-22 G:\V\Projects\T-2789 - TC, EC-1709 - S.H.19 - Grady Co\CAD\T017-3042507-STRIPING.dgn

REVISIONS		
NO.	DESCRIPTION	DATE



MULTI-POLY STRIPING SUM. TABLE		
DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (MULTI-POLY) 4" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 6" WHITE	L.F.	3600
TRAFFIC STRIPE (MULTI-POLY) 6" YELLOW	L.F.	2140
TRAFFIC STRIPE (MULTI-POLY) 6" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 24" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) ARROWS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) WORDS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) SYMBOLS	EA.	0

FOR DIMENSIONS NOT SHOWN ON THE PLANS FOR PAVEMENT MARKING, REFERENCE SHALL BE MADE TO THE STANDARD O.D.O.T. DRAWINGS (LATEST REV.).

Design	RWR	06-22-22
Drawn	TCC	06-22-22



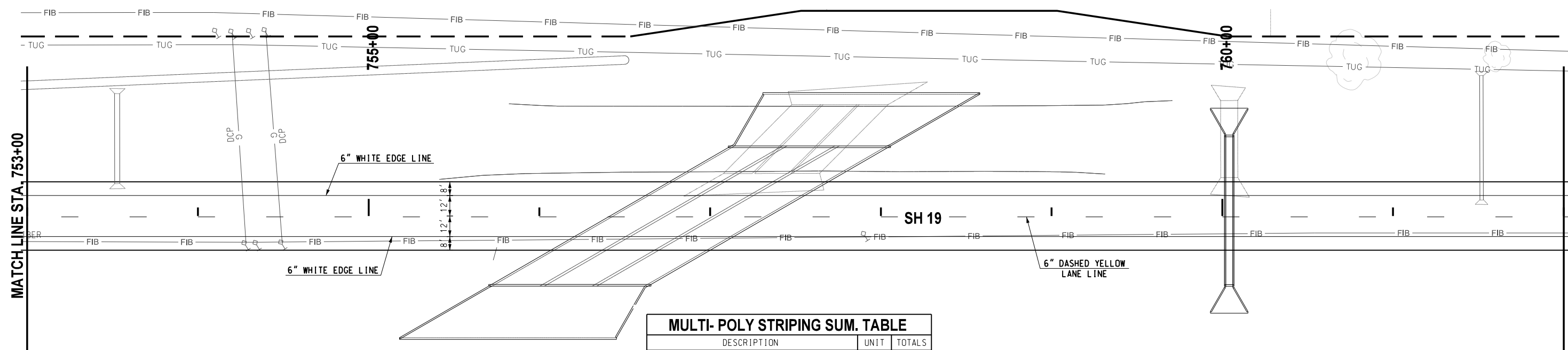
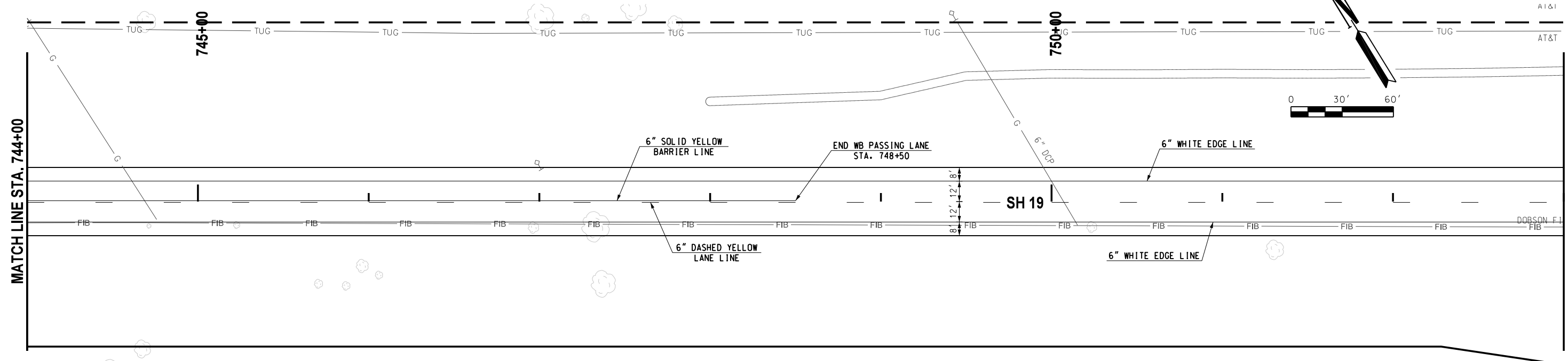
SIGNING & STRIPING

State Job No. 30425(07) Sheet No. T018



06-22-22 G:\V\Projects\1-2799 - TC_EC-1709_IP_30425(07) - S.H.19 - Grady Co\CAD\T018-3042507-STRIPING.TXD

REVISIONS		
NO.	DESCRIPTION	DATE



MULTI-POLY STRIPING SUM. TABLE

DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (MULTI-POLY) 4" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 6" WHITE	L.F.	3600
TRAFFIC STRIPE (MULTI-POLY) 6" YELLOW	L.F.	890
TRAFFIC STRIPE (MULTI-POLY) 6" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 24" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) ARROWS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) WORDS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) SYMBOLS	EA.	0

FOR DIMENSIONS NOT SHOWN ON THE PLANS FOR PAVEMENT MARKING, REFERENCE SHALL BE MADE TO THE STANDARD O.D.O.T. DRAWINGS (LATEST REV.).

Design	RWR	06-22-22
Drawn	TCC	06-22-22



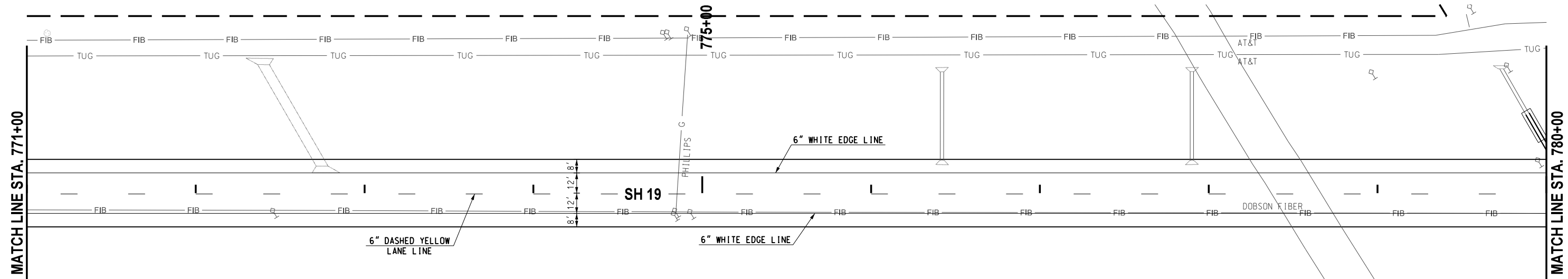
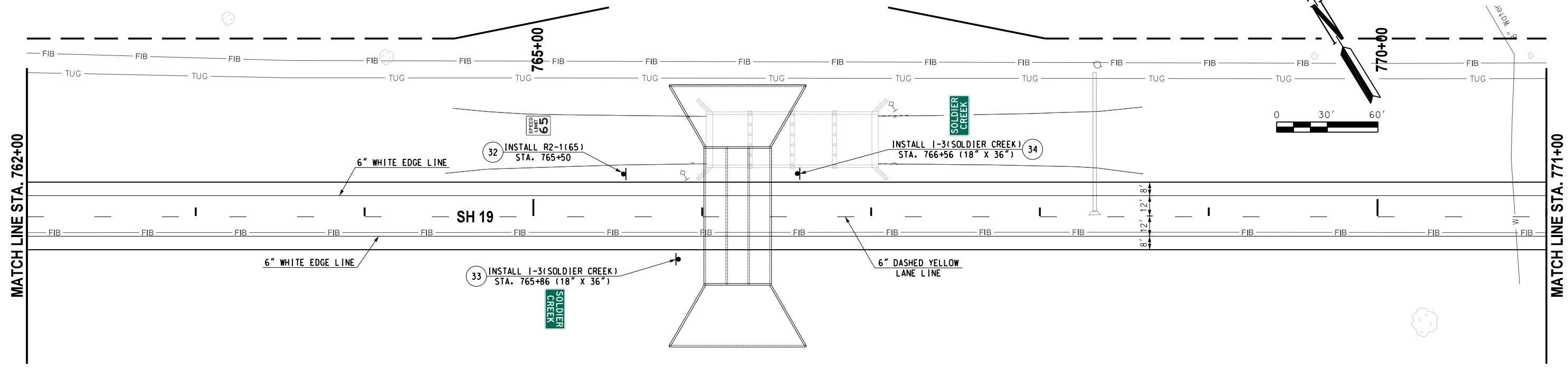
SIGNING & STRIPING

State Job No. 30425(07) Sheet No. T019



06-22-22 G:\V\Projects\T-2799 - TC, EC-1709 JP_30425(07) - S.H.19 - Grady Co\CAD\T09-3042507-STRIPING.dgn

REVISIONS		
NO.	DESCRIPTION	DATE



MULTI-POLY STRIPING SUM. TABLE		
DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (MULTI-POLY) 4" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 6" WHITE	L.F.	3600
TRAFFIC STRIPE (MULTI-POLY) 6" YELLOW	L.F.	440
TRAFFIC STRIPE (MULTI-POLY) 6" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 24" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) ARROWS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) WORDS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) SYMBOLS	EA.	0

FOR DIMENSIONS NOT SHOWN ON THE PLANS FOR PAVEMENT MARKING, REFERENCE SHALL BE MADE TO THE STANDARD O.D.O.T. DRAWINGS (LATEST REV.).

Design	RWR	06-22-22
Drawn	TCC	06-22-22



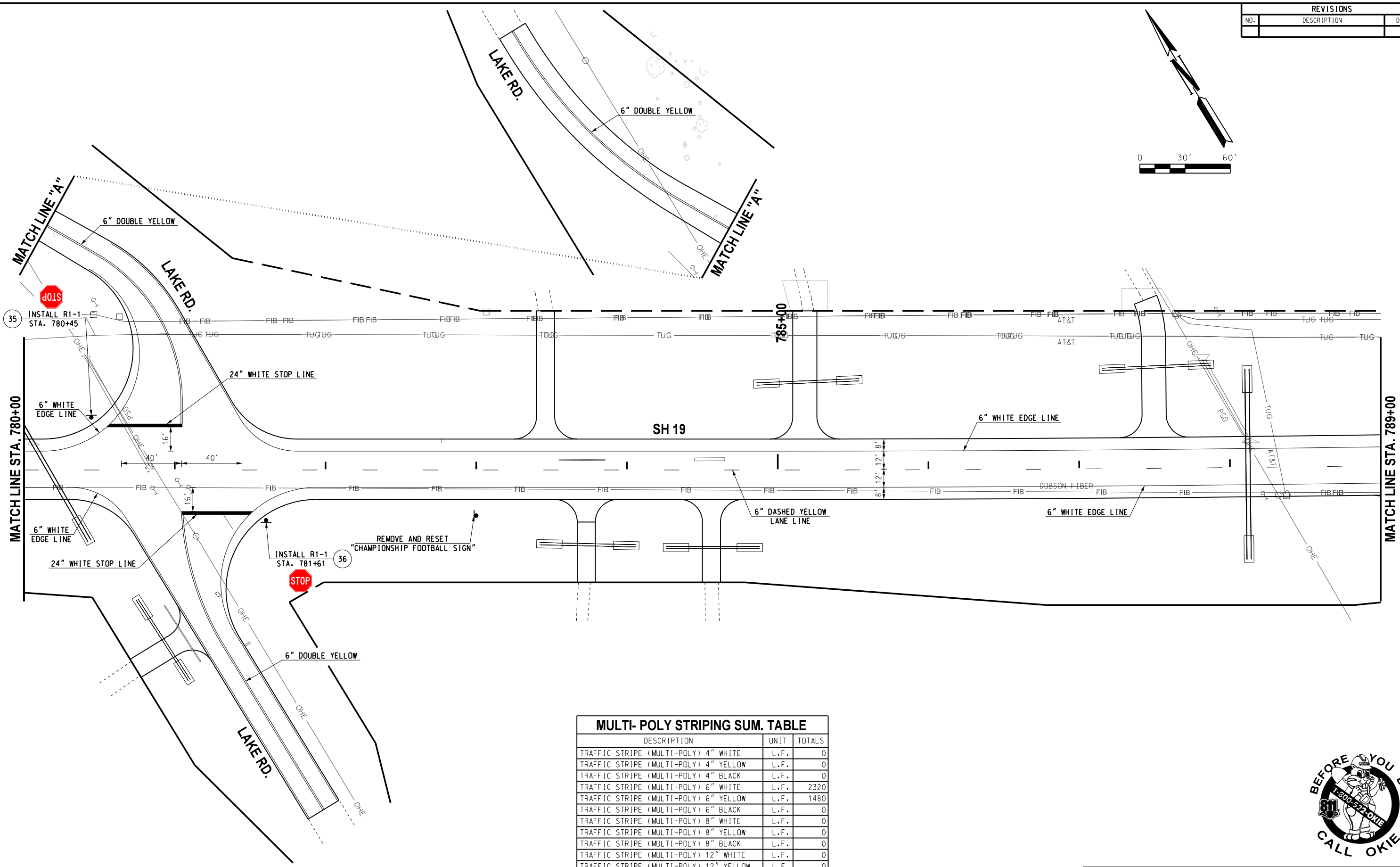
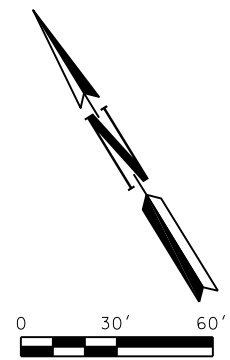
SIGNING & STRIPING

State Job No. 30425(07) Sheet No. 1020



06-22-22 G:\V\Projects\1-2799 - TC, EC-1709 JP_30425(07) - S.H.19 - Grady Co\CAD\1020-30425(07)-STRPE 19.dgn

REVISIONS		
NO.	DESCRIPTION	DATE



MULTI- POLY STRIPING SUM. TABLE		
DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (MULTI-POLY) 4" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 6" WHITE	L.F.	2320
TRAFFIC STRIPE (MULTI-POLY) 6" YELLOW	L.F.	1480
TRAFFIC STRIPE (MULTI-POLY) 6" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 24" WHITE	L.F.	75
TRAFFIC STRIPE (MULTI-POLY) ARROWS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) WORDS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) SYMBOLS	EA.	0

Design	RWR	06-22-22
Drawn	TCC	06-22-22



SIGNING & STRIPING

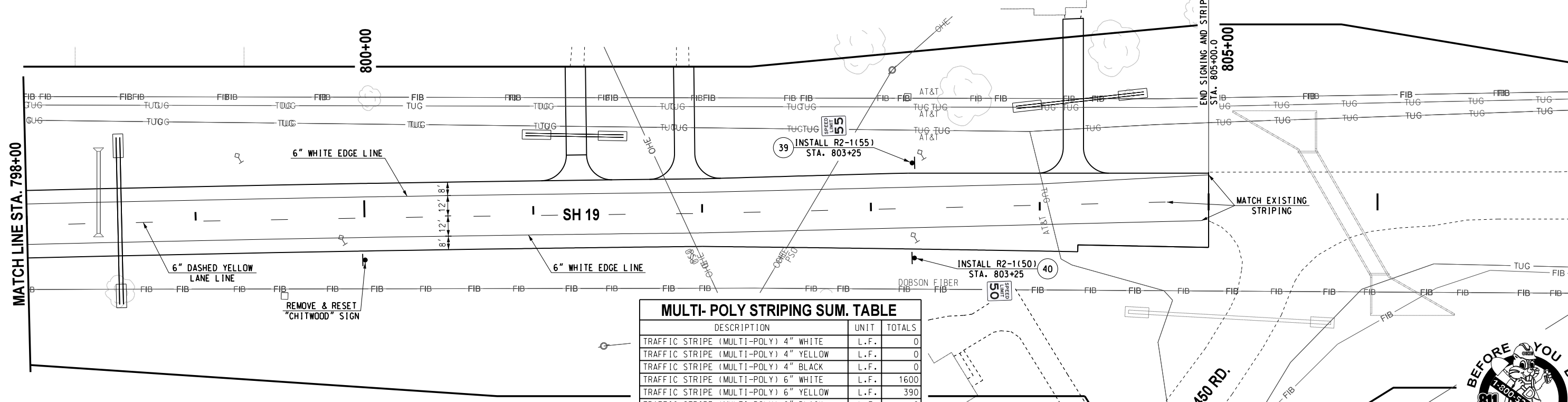
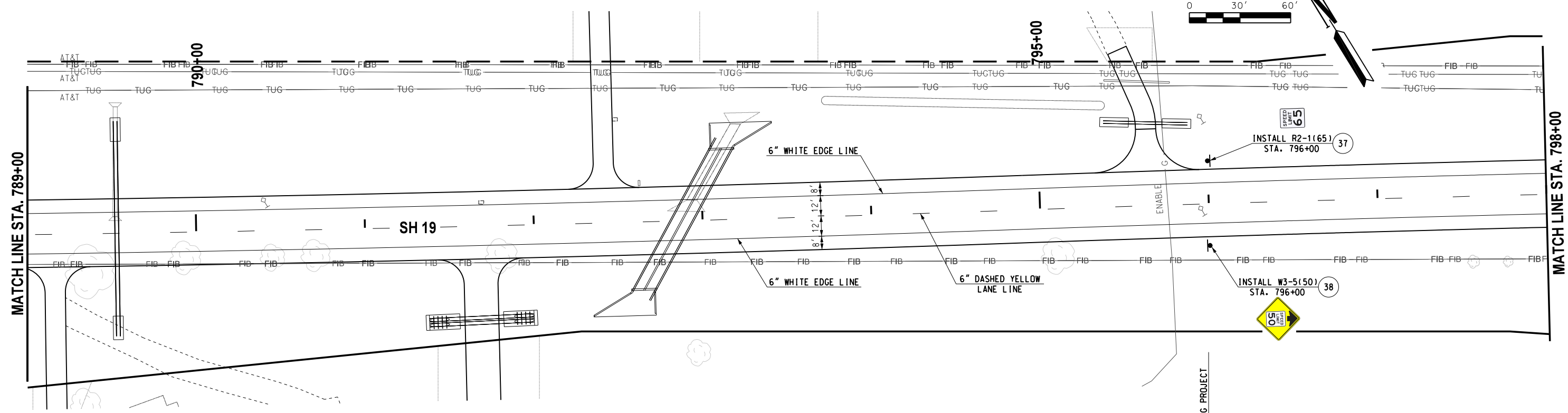
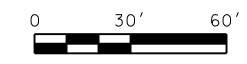
State Job No. 30425(07) Sheet No. T021

FOR DIMENSIONS NOT SHOWN ON THE PLANS FOR PAVEMENT MARKING, REFERENCE SHALL BE MADE TO THE STANDARD O.D.O.T. DRAWINGS (LATEST REV.).



06-22-22 G:\V\Projects\T-2799 - TC, EC-1709_IP_30425(07) - SH.19 - Grady Co\CAD\T021-3042507-STRIPING_20.dgn

REVISIONS		
NO.	DESCRIPTION	DATE



MULTI-POLY STRIPING SUM. TABLE

DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (MULTI-POLY) 4" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 4" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 6" WHITE	L.F.	1600
TRAFFIC STRIPE (MULTI-POLY) 6" YELLOW	L.F.	390
TRAFFIC STRIPE (MULTI-POLY) 6" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 8" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 12" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) 24" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI-POLY) ARROWS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) WORDS	EA.	0
TRAFFIC STRIPE (MULTI-POLY) SYMBOLS	EA.	0

FOR DIMENSIONS NOT SHOWN ON THE PLANS FOR PAVEMENT MARKING, REFERENCE SHALL BE MADE TO THE STANDARD O.D.O.T. DRAWINGS (LATEST REV.).

Design	RWR	06-22-22
Drawn	TCC	06-22-22



SIGNING & STRIPING

State Job No. 30425(07) Sheet No. 1022



06-22-22 G:\V\Projects\1-2789 - TC, EC-1709_LP_30425(07) - SH.19 - Grady Co\CAD\1022-3042507-STRIPING 2.dgn

REVISIONS		
NO.	DESCRIPTION	DATE



CONTRACTOR SIGN

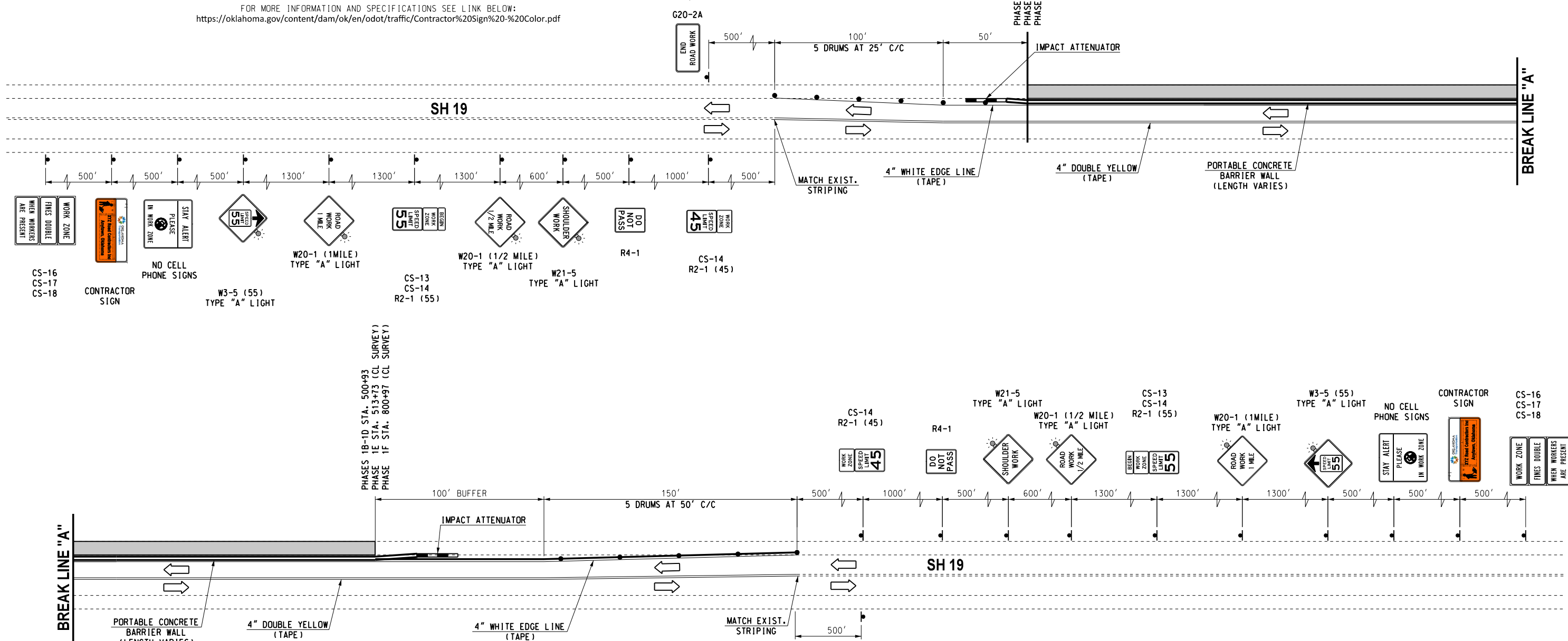
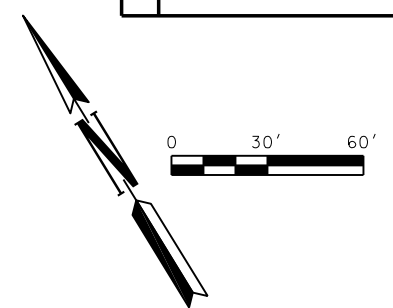
FOR MORE INFORMATION AND SPECIFICATIONS SEE LINK BELOW:
<https://oklahoma.gov/content/dam/ok/en/odot/traffic/Contractor%20Sign%20-%20Color.pdf>

ROAD WORK NEXT XX MILES

EST. COMPLETION - SUMMER 20XX

CONTRACTOR SUPPLEMENTAL PLAQUES

CONTRACTOR SHALL BUILD ALL STREETS AND DRIVEWAYS HALF AT A TIME TO ALLOW ACCESS, WHILE MAINTAINING 11' MINIMUM LANE WIDTHS.



LEGEND

- △△ - TYPE III BARRICADE W/ TWO TYPE "A" LIGHTS
- ◀▶ - VERTICAL PANEL
- - DRUM
- - CHANNELIZER CONE
- - PORTABLE LONGITUDINAL BARRIER
- ▬ - CONSTRUCTION ZONE IMPACT ATTENUATOR
- - WORK AREA

Design	CCC	06-22-22
Drawn	RWR	06-22-22



PHASE 1
TYP. TRAFFIC CONTROL DETAIL

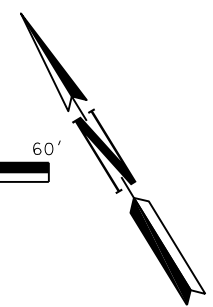
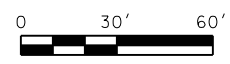
State Job No. 30425(07) Sheet No. 1023

06-22-22 G:\V\Projects\T-2799 - TC, EC-1709 JP_30425(07) - S.H.19 - Grady Co\CAD\1023-3042507-TC_PHASE 1\TYP.dgn

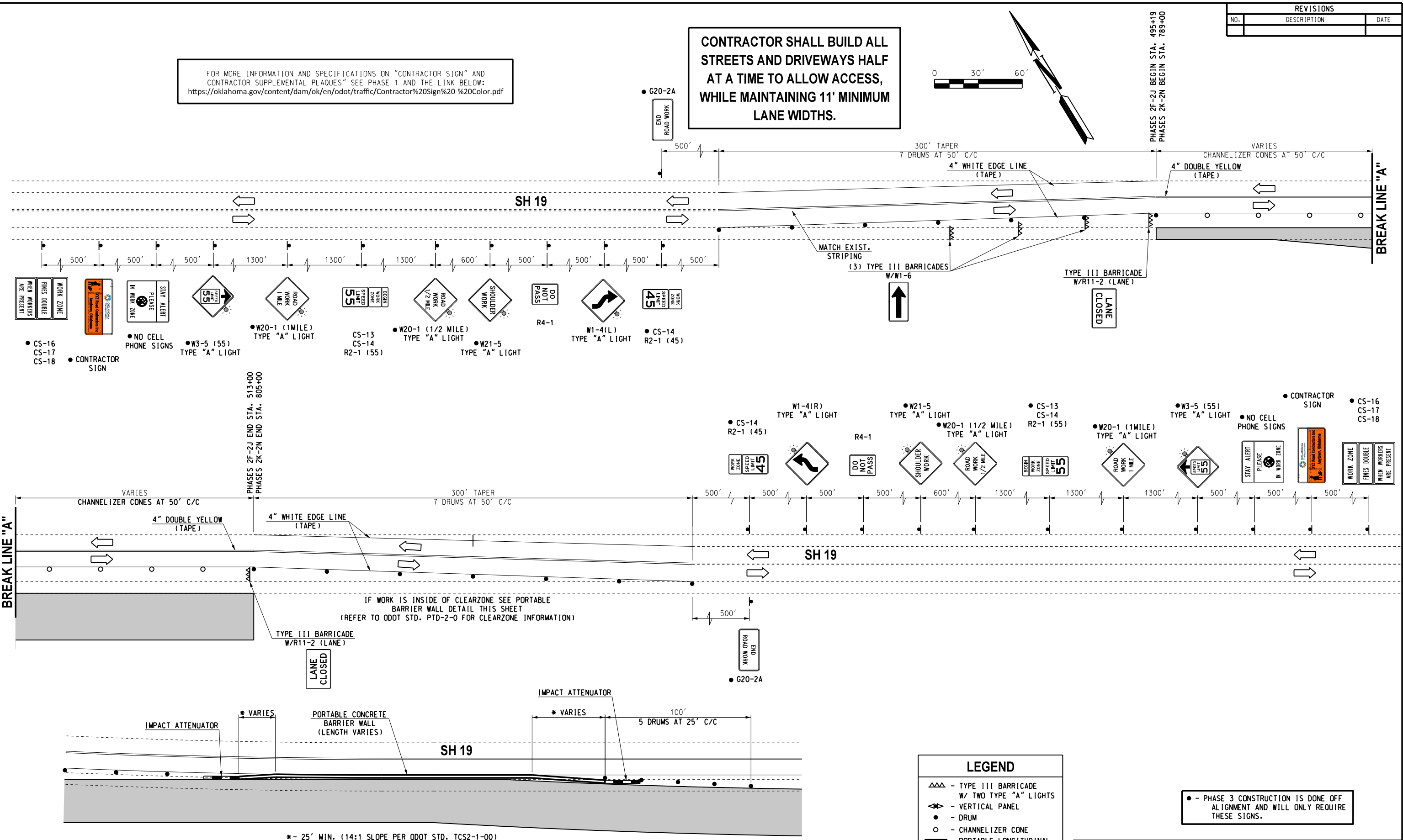
REVISIONS		
NO.	DESCRIPTION	DATE

FOR MORE INFORMATION AND SPECIFICATIONS ON "CONTRACTOR SIGN" AND CONTRACTOR SUPPLEMENTAL PLAQUES" SEE PHASE 1 AND THE LINK BELOW:
<https://oklahoma.gov/content/dam/ok/en/odot/traffic/Contractor%20Sign%20-%20Color.pdf>

CONTRACTOR SHALL BUILD ALL STREETS AND DRIVEWAYS HALF AT A TIME TO ALLOW ACCESS, WHILE MAINTAINING 11' MINIMUM LANE WIDTHS.



PHASES 2F-2J END STA. 495+19
 PHASES 2K-2N BEGIN STA. 789+00



PORTABLE CONCRETE BARRIER WALL DETAIL
 PHASE 2I APPROX. STA. 500+00 TO 506+00
 PHASE 2N APPROX. STA. 800+00 TO 806+00

LEGEND	
	- TYPE III BARRICADE W/ TWO TYPE "A" LIGHTS
	- VERTICAL PANEL
	- DRUM
	- CHANNELIZER CONE
	- PORTABLE LONGITUDINAL BARRIER
	- CONSTRUCTION ZONE IMPACT ATTENUATOR
	- WORK AREA

• - PHASE 3 CONSTRUCTION IS DONE OFF ALIGNMENT AND WILL ONLY REQUIRE THESE SIGNS.

Design	CCC	06-22-22
Drawn	RWR	06-22-22



PHASES 2 & 3
TYP. TRAFFIC CONTROL DETAIL

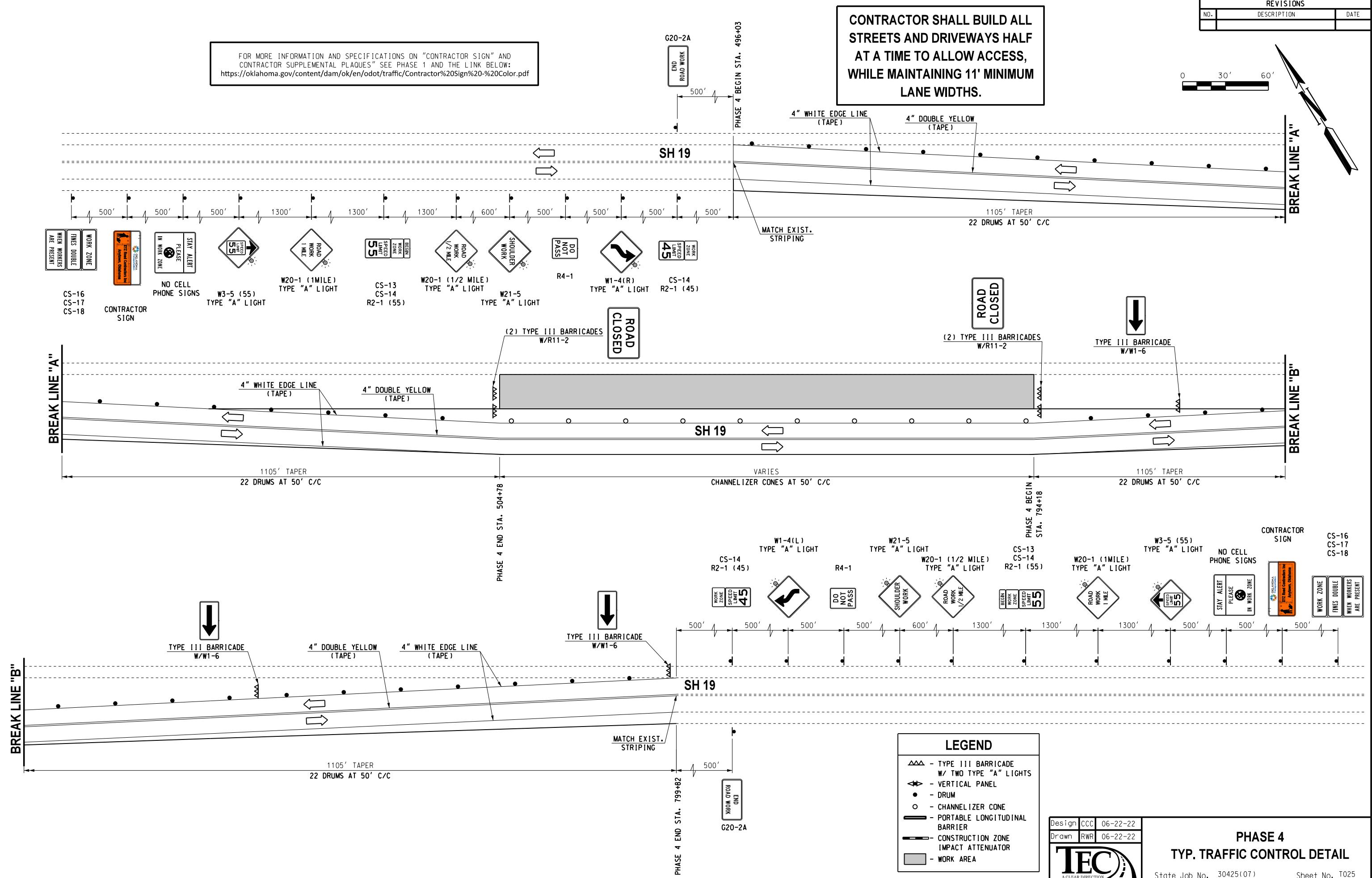
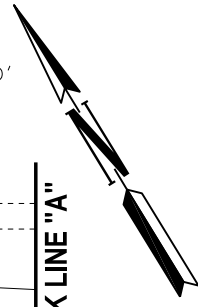
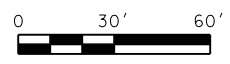
State Job No. 30425(07) Sheet No. 1024

06-22-22 G:\V\Projects\1-2789 - TC, EC-1709, IP_30425(07) - S.H.19 - Grady Co\CAD\1024-30425(07)-TC PHASES 2 & 3 TYP.dgn

REVISIONS		
NO.	DESCRIPTION	DATE

FOR MORE INFORMATION AND SPECIFICATIONS ON "CONTRACTOR SIGN" AND CONTRACTOR SUPPLEMENTAL PLAQUES" SEE PHASE 1 AND THE LINK BELOW:
<https://oklahoma.gov/content/dam/ok/en/odot/traffic/Contractor%20Sign%20-%20Color.pdf>

CONTRACTOR SHALL BUILD ALL STREETS AND DRIVEWAYS HALF AT A TIME TO ALLOW ACCESS, WHILE MAINTAINING 11' MINIMUM LANE WIDTHS.



- CS-16
- CS-17
- CS-18
- CONTRACTOR SIGN
- NO CELL PHONE SIGNS
- W3-5 (55) TYPE "A" LIGHT
- W20-1 (1 MILE) TYPE "A" LIGHT
- CS-13
- CS-14
- R2-1 (55)
- W20-1 (1/2 MILE) TYPE "A" LIGHT
- W21-5 TYPE "A" LIGHT
- R4-1
- W1-4(R) TYPE "A" LIGHT
- CS-14
- R2-1 (45)

ROAD CLOSED

LEGEND	
	- TYPE III BARRICADE W/ TWO TYPE "A" LIGHTS
	- VERTICAL PANEL
	- DRUM
	- CHANNELIZER CONE
	- PORTABLE LONGITUDINAL BARRIER
	- CONSTRUCTION ZONE IMPACT ATTENUATOR
	- WORK AREA

Design	CCC	06-22-22
Drawn	RWR	06-22-22



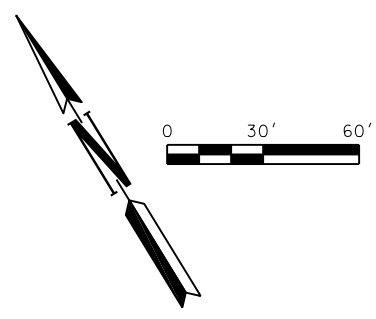
**PHASE 4
TYP. TRAFFIC CONTROL DETAIL**

State Job No. 30425(07) Sheet No. 1025

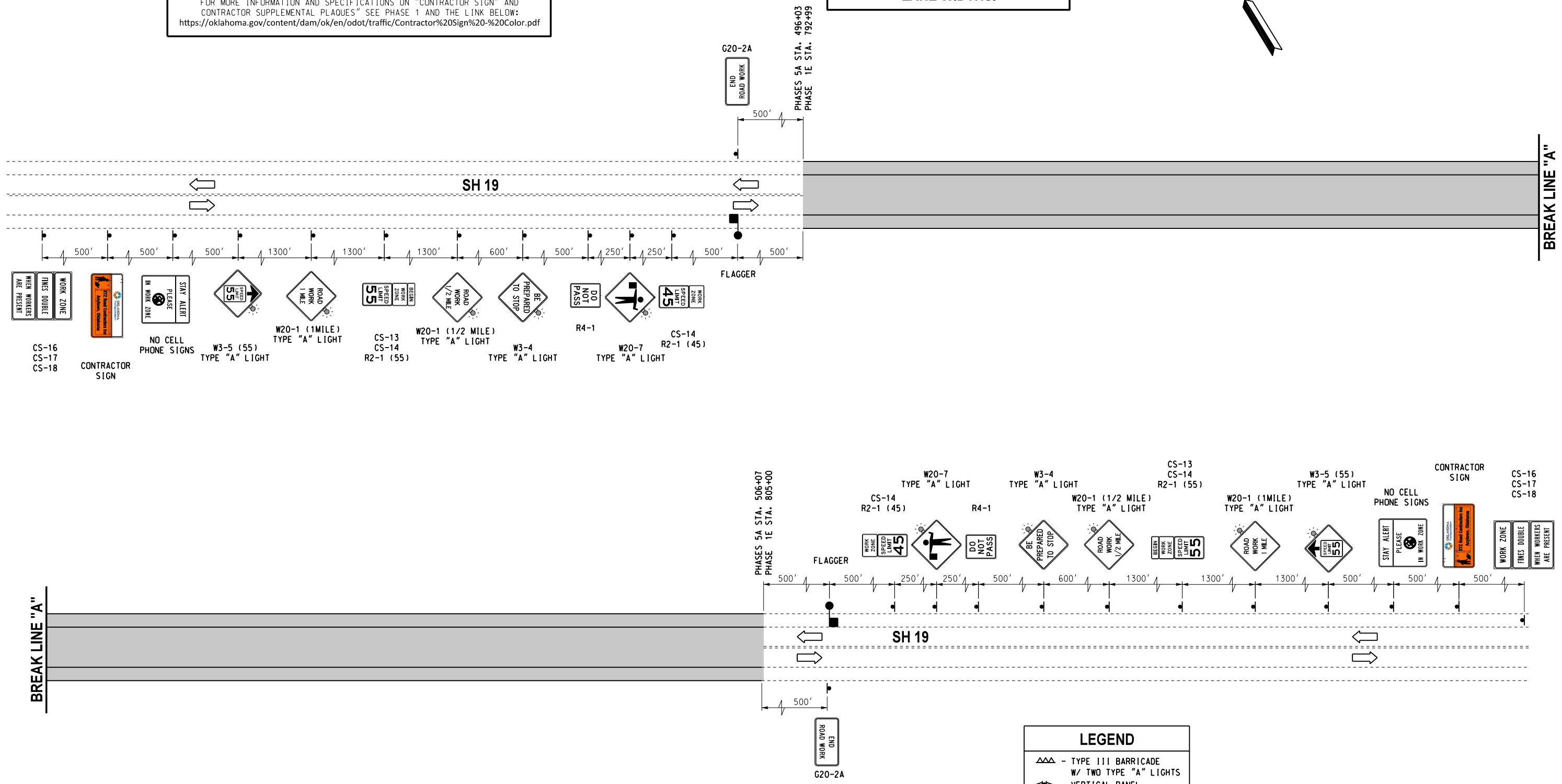
06-22-22 G:\V\Projects\1-2789 - TC, EC-1709 - S.H.19 - Grady Co\CAD\1025-3042507-TC PHASE 4 TYP.dgn

REVISIONS		
NO.	DESCRIPTION	DATE

CONTRACTOR SHALL BUILD ALL STREETS AND DRIVEWAYS HALF AT A TIME TO ALLOW ACCESS, WHILE MAINTAINING 11' MINIMUM LANE WIDTHS.



FOR MORE INFORMATION AND SPECIFICATIONS ON "CONTRACTOR SIGN" AND CONTRACTOR SUPPLEMENTAL PLAQUES" SEE PHASE 1 AND THE LINK BELOW:
<https://oklahoma.gov/content/dam/ok/en/odot/traffic/Contractor%20Sign%20-%20Color.pdf>



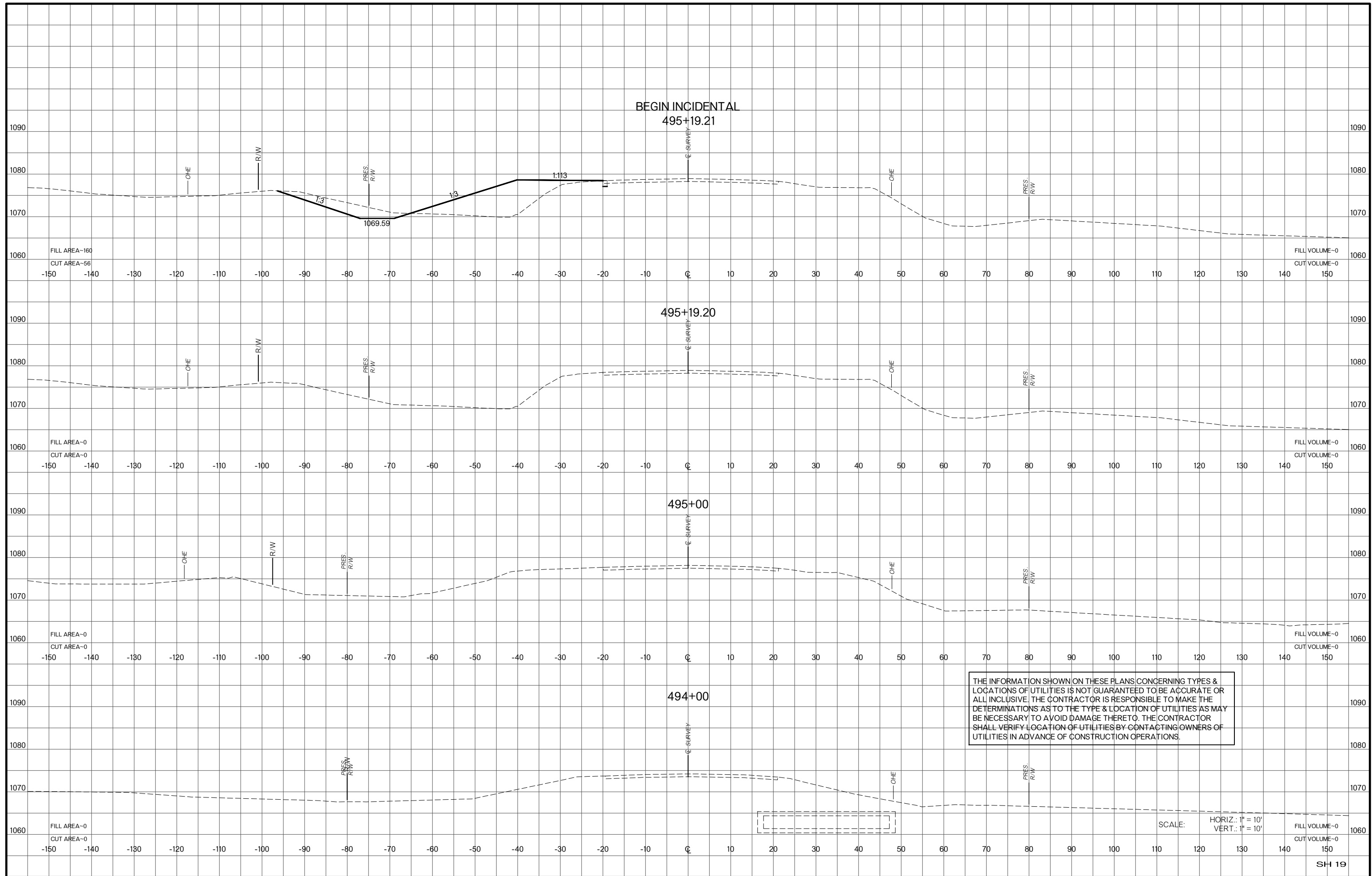
LEGEND	
	- TYPE III BARRICADE W/ TWO TYPE "A" LIGHTS
	- VERTICAL PANEL
	- DRUM
	- CHANNELIZER CONE
	- PORTABLE LONGITUDINAL BARRIER
	- CONSTRUCTION ZONE IMPACT ATTENUATOR
	- WORK AREA

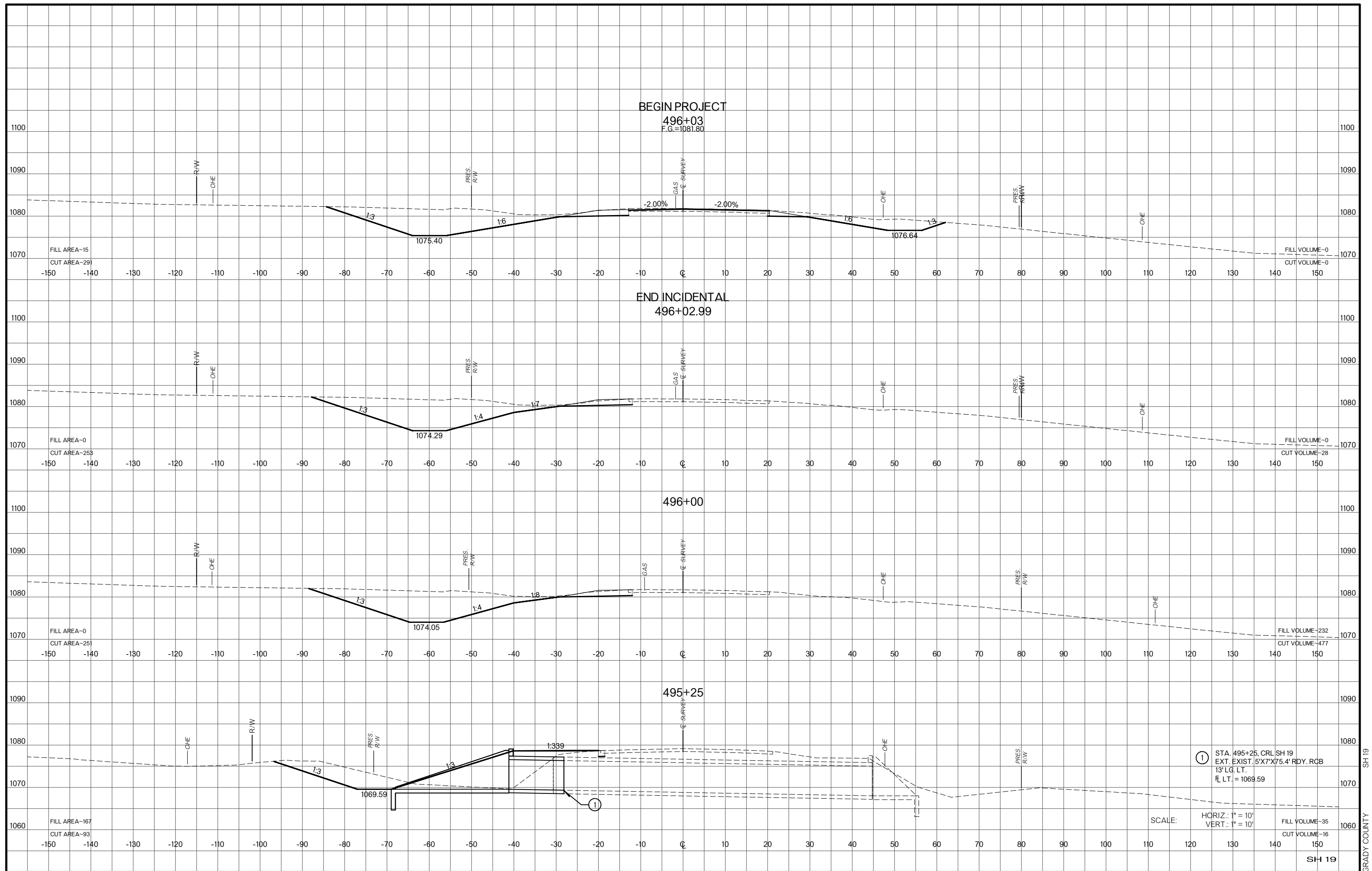
Design	CCC	06-22-22
Drawn	RWR	06-22-22



PHASE 5
TYP. TRAFFIC CONTROL DETAIL
 State Job No. 30425(07) Sheet No. 1026

06-22-22 G:\01\Projects\1-2789 - TC, EC-1709_IP_30425(07) - S.H.19 - Grady Co\CAD\1026-3042507-TC_PHASE 5_TYP.dgn





BEGIN PROJECT
496+03
F.G.=1081.80

END INCIDENTAL
496+02.99

496+00

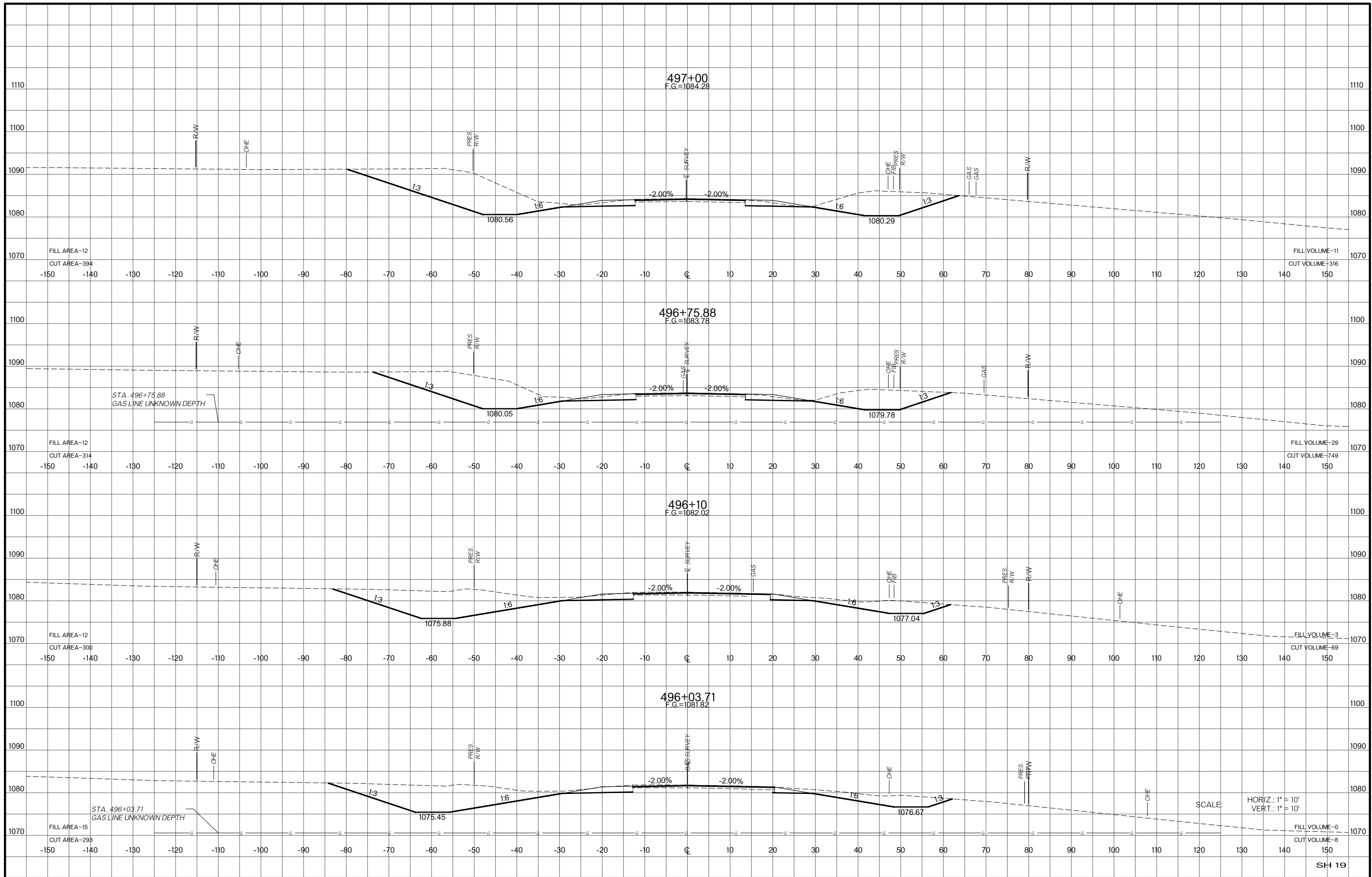
495+25

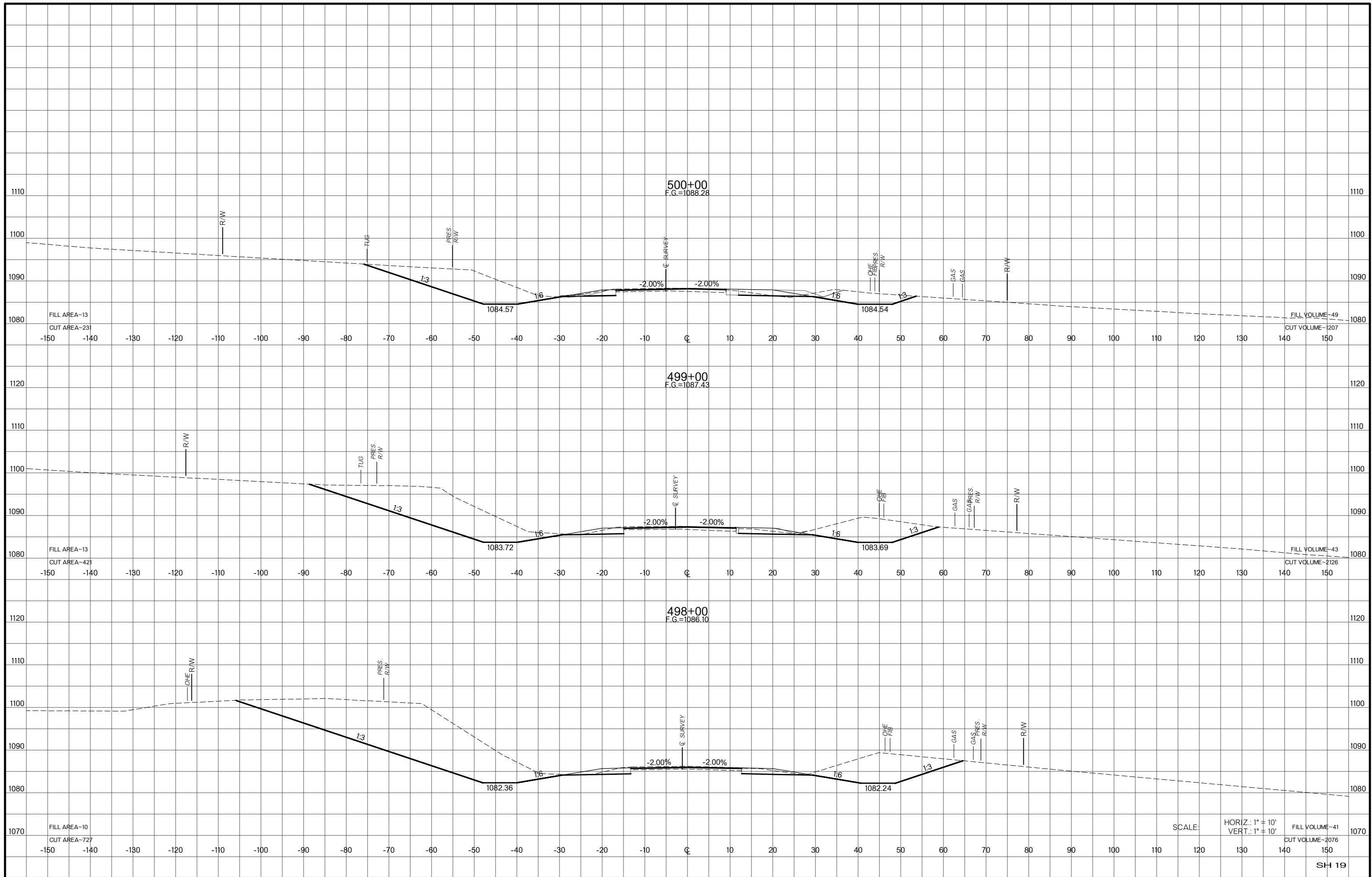
① STA. 495+25, CRL SH 19
EXT. EXIST. 5'X7'X75.4' RDY. RCB
13' LG. LT.
FL LT. = 1069.59

SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

FILL VOLUME-35
CUT VOLUME-16

SH 19

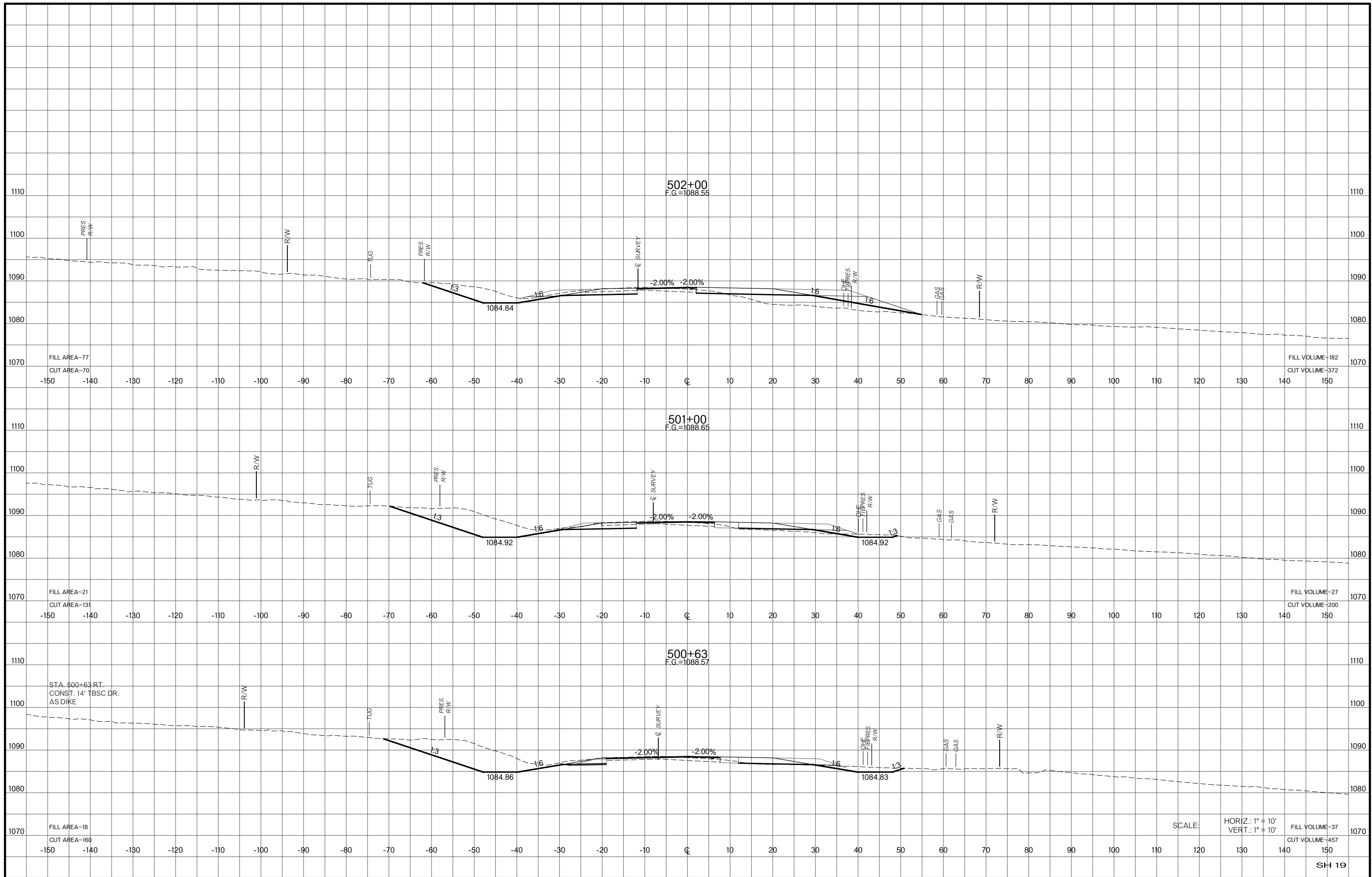




SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

SH 19

GRADY COUNTY



502+00
F.G.=1088.55

501+00
F.G.=1088.65

500+63
F.G.=1088.57

FILL AREA=77
CUT AREA=70

FILL VOLUME=182
CUT VOLUME=372

FILL AREA=21
CUT AREA=131

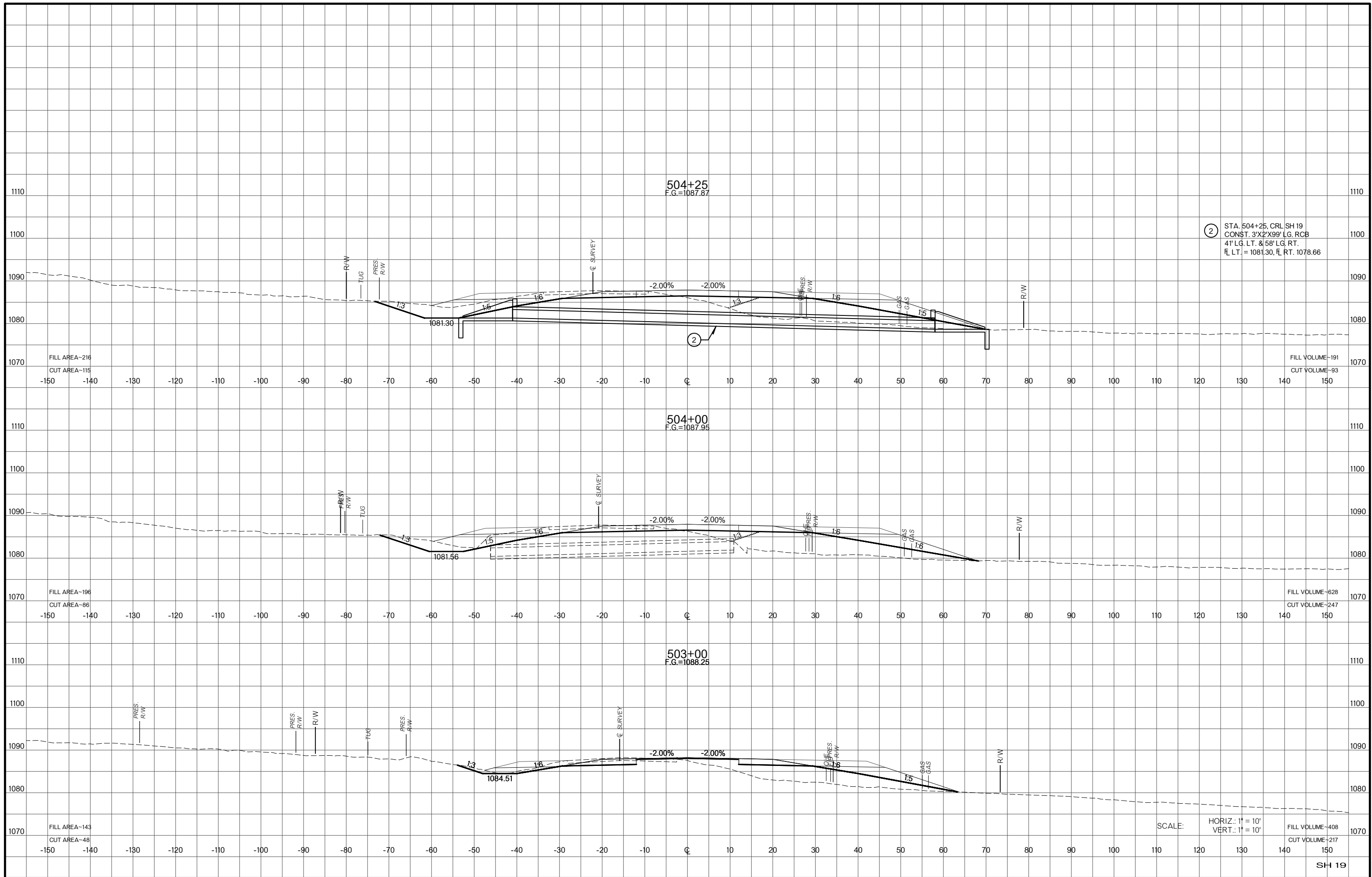
FILL VOLUME=27
CUT VOLUME=200

FILL AREA=18
CUT AREA=160

FILL VOLUME=37
CUT VOLUME=457

SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

SH 19

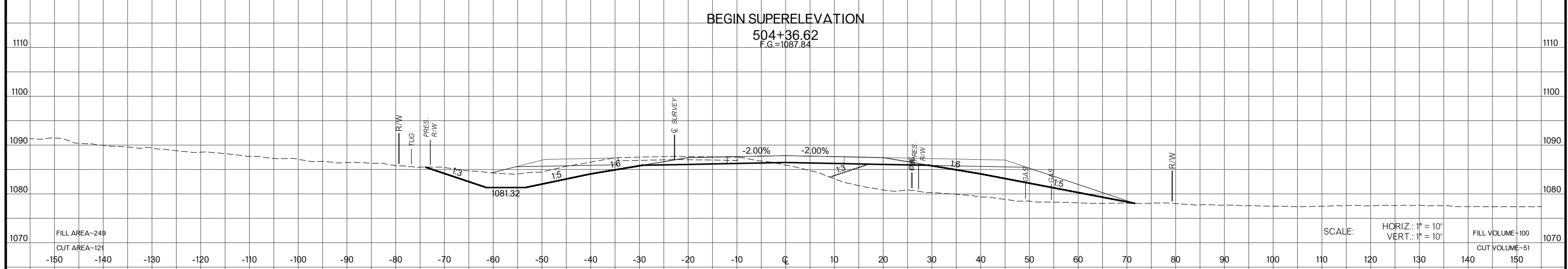
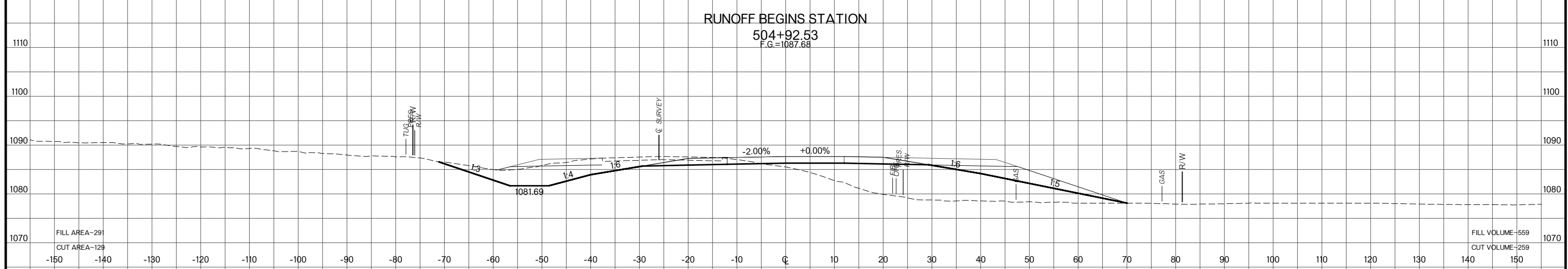
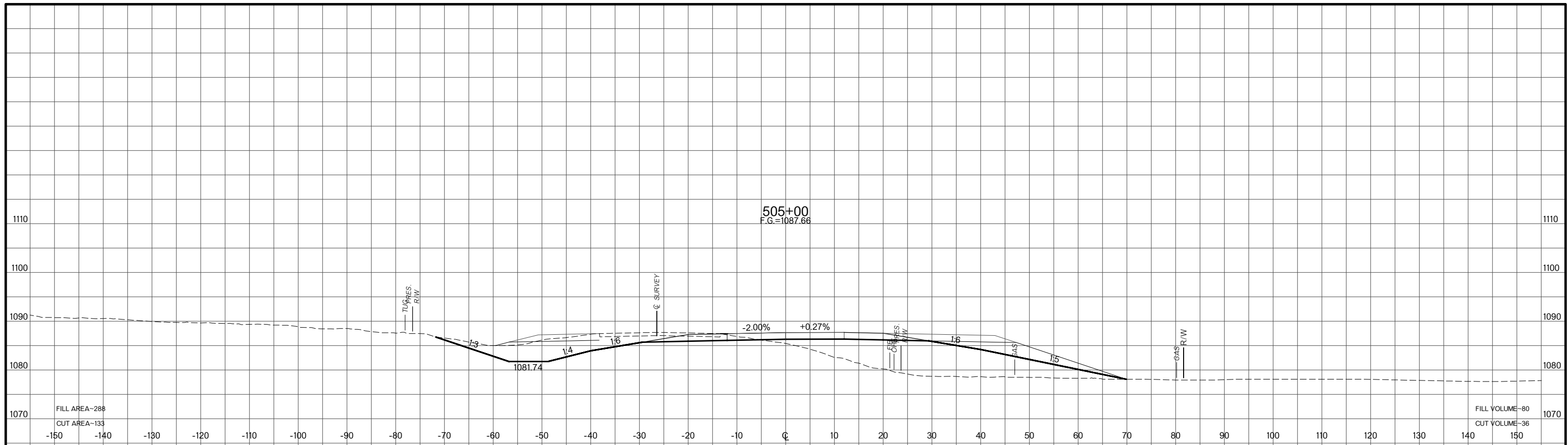


② STA. 504+25, CRL SH 19
 CONST. 3'X2'X99" LG. RCB
 4' LG. LT. & 58' LG. RT.
 FL LT. = 1081.30, FL RT. 1078.66

SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

FILL VOLUME-408
 CUT VOLUME-217

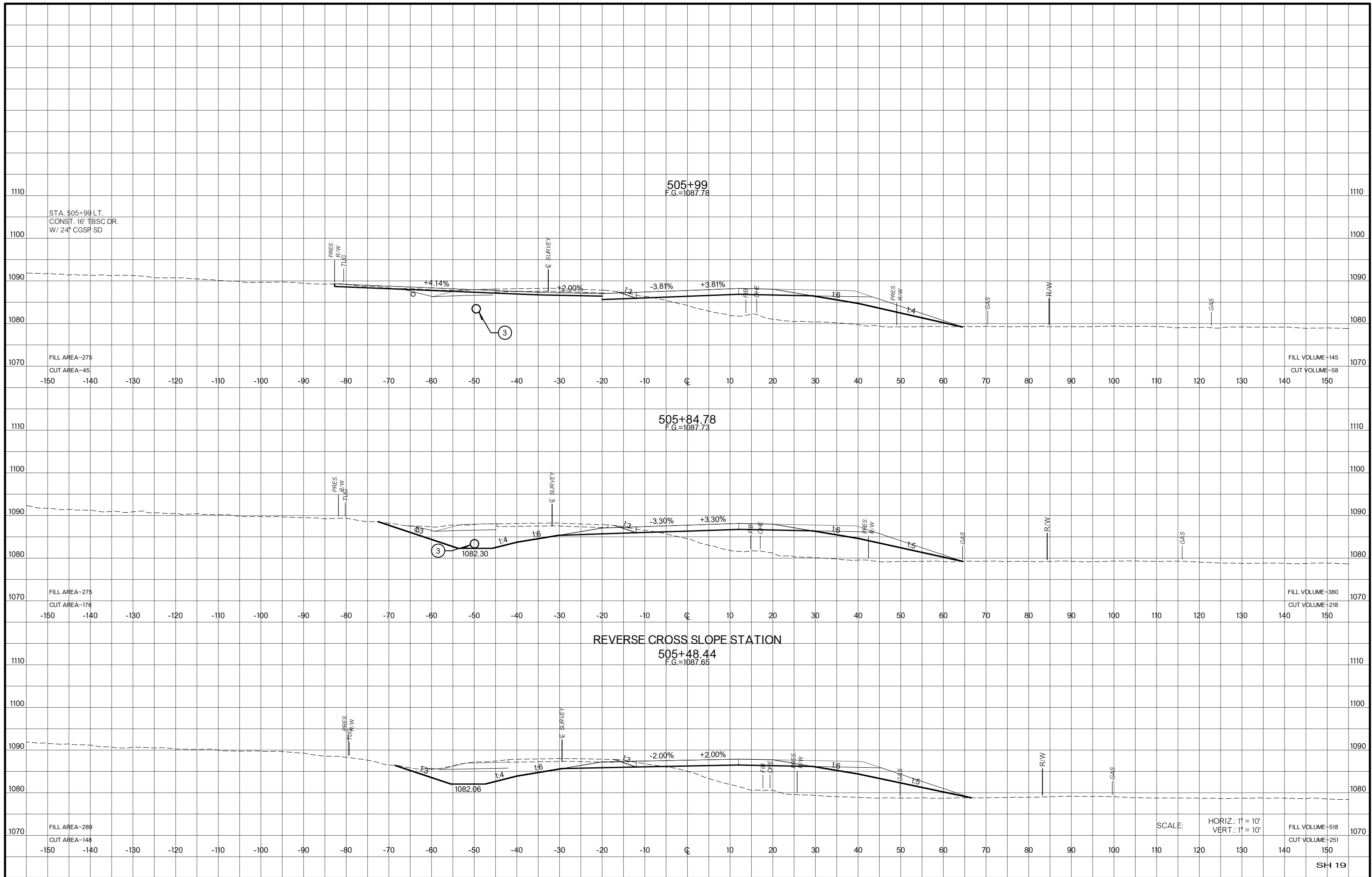
SH 19



SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

FILL VOLUME-100
CUT VOLUME-51

SH 19



STA. 505+99 LT.
CONST. 16' TBSC DR.
W/ 24' CGSP SD

505+99
F.G.=1087.78

FILL AREA-275
CUT AREA-45

FILL VOLUME-145
CUT VOLUME-68

505+84.78
F.G.=1087.73

FILL AREA-275
CUT AREA-176

FILL VOLUME-380
CUT VOLUME-218

REVERSE CROSS SLOPE STATION

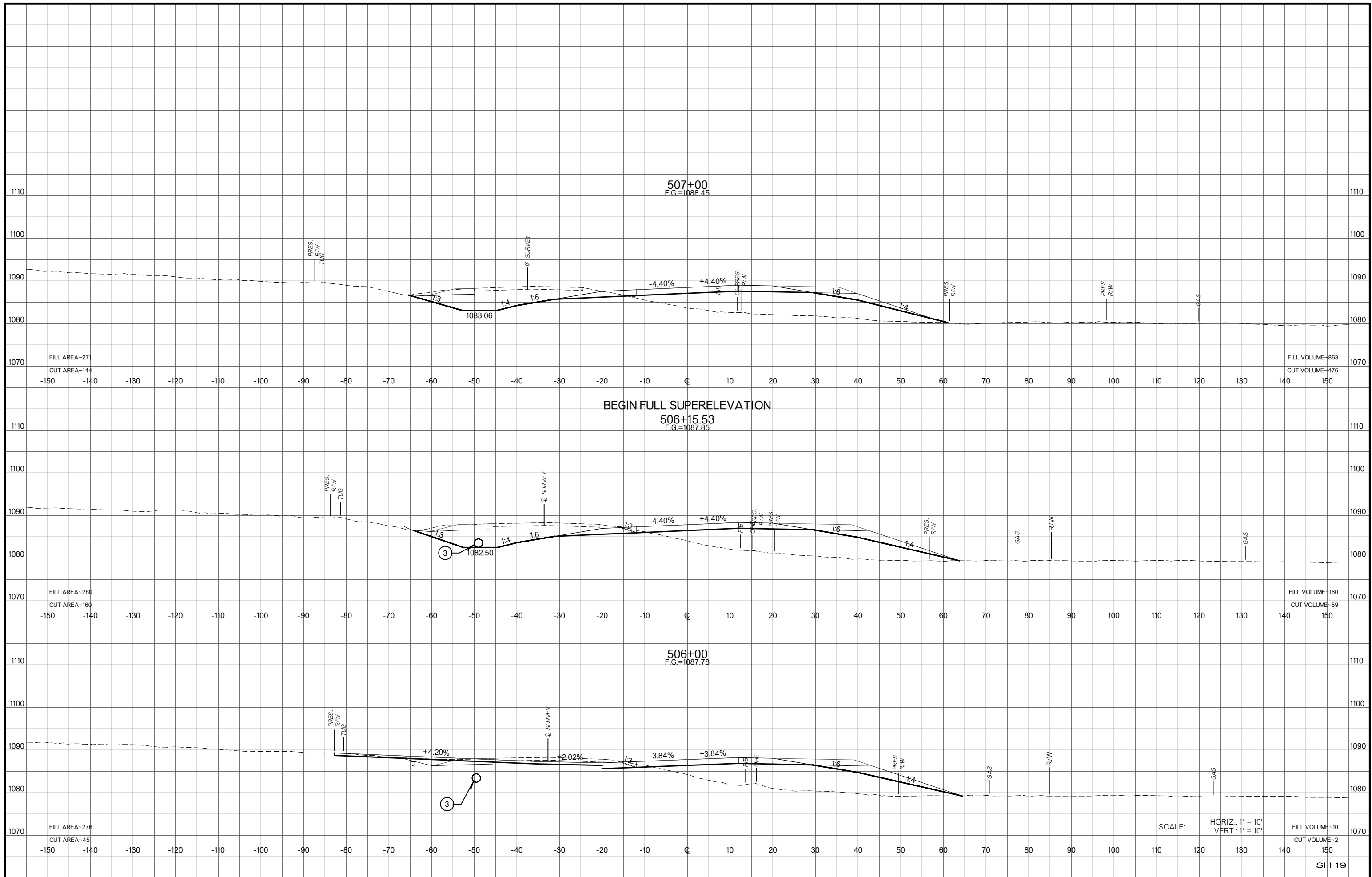
505+48.44
F.G.=1087.65

FILL AREA-289
CUT AREA-148

FILL VOLUME-518
CUT VOLUME-251

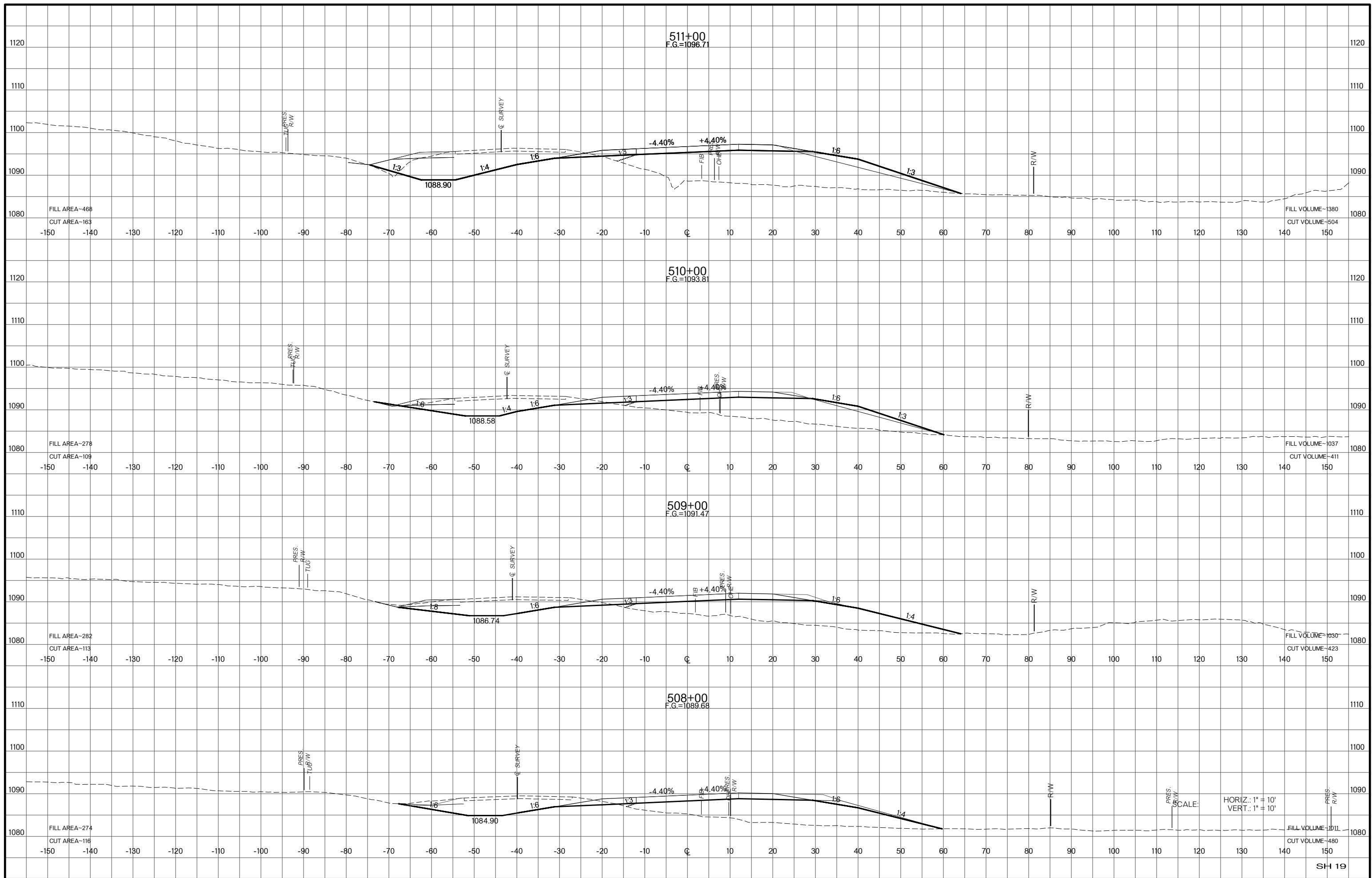
SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

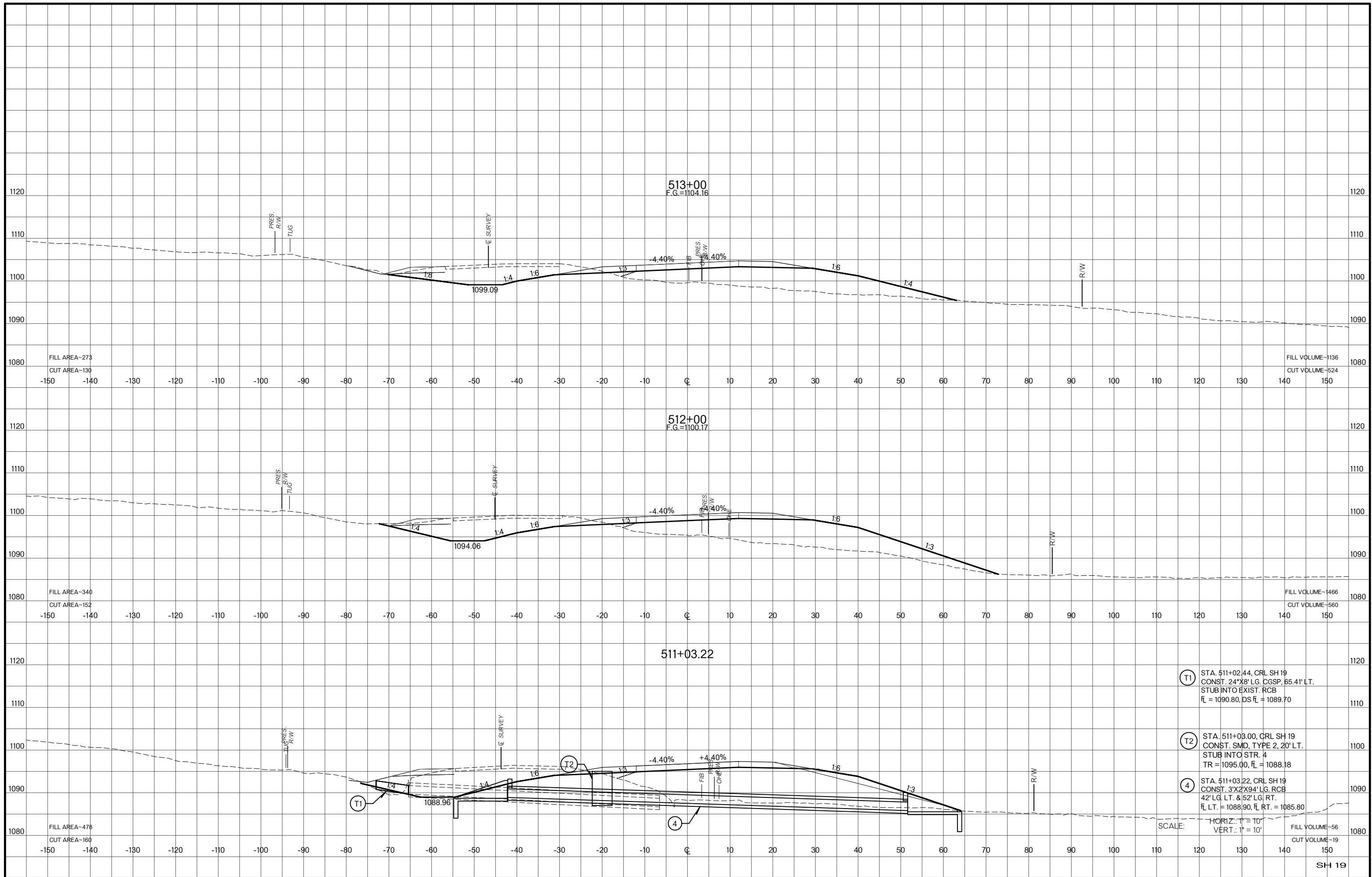
SH 19



SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

SH 19



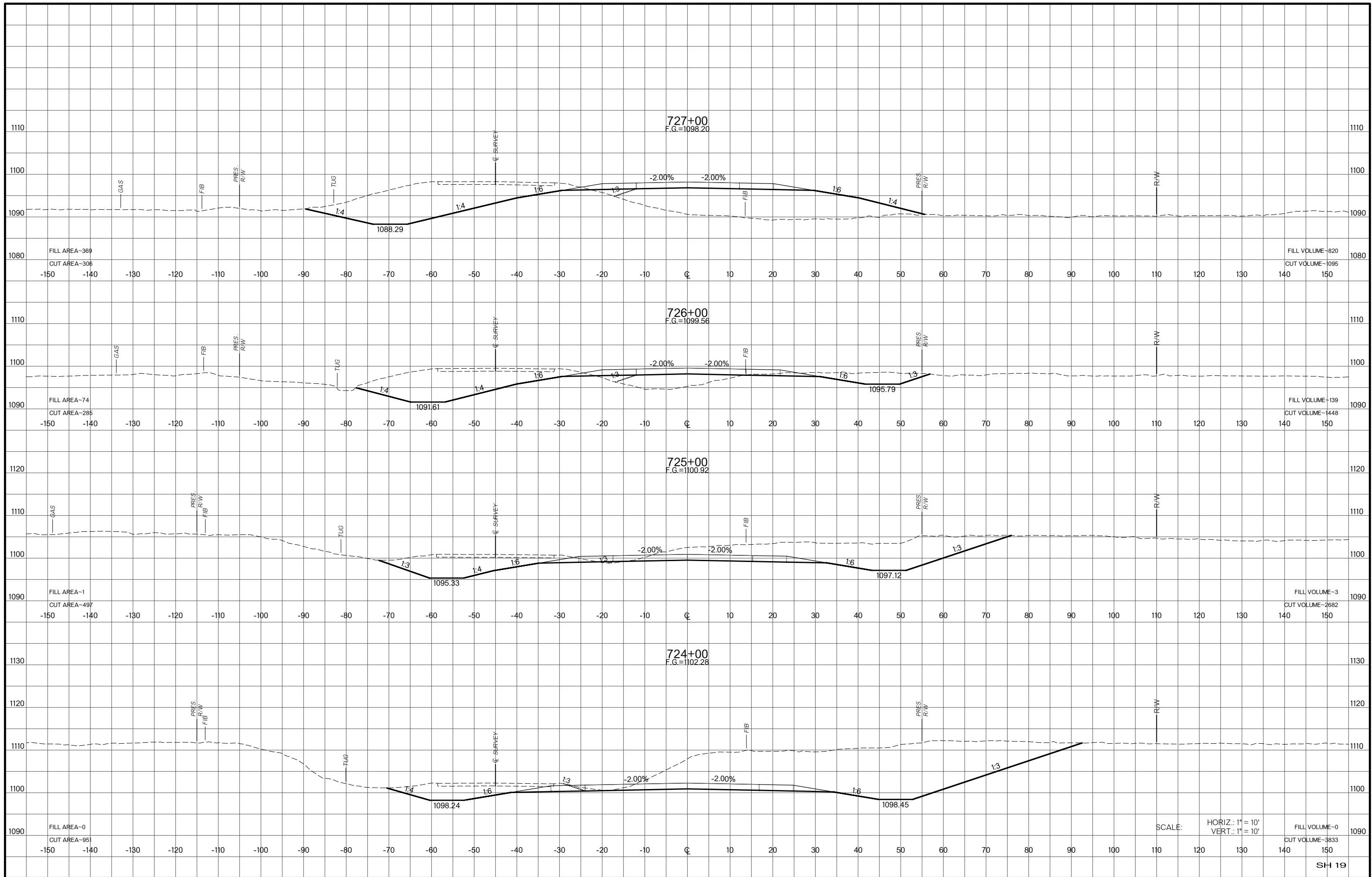


- (T1) STA. 511+02.44, CRL SH 19
CONST. 24"x8" LG. CGSP, 65.41' LT.
STUB INTO EXIST. RCB
FL = 1090.80, DS FL = 1089.70
- (T2) STA. 511+03.00, CRL SH 19
CONST. SMD, TYPE 2, 20' LT.
STUB INTO STR. 4
TR = 1095.00, FL = 1088.18
- (4) STA. 511+03.22, CRL SH 19
CONST. 3'x2'x94' LG. RCB
42' LG. LT. & 52' LG. RT.
FL LT. = 1088.90, FL RT. = 1085.80

SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

FILL VOLUME=56
CUT VOLUME=19

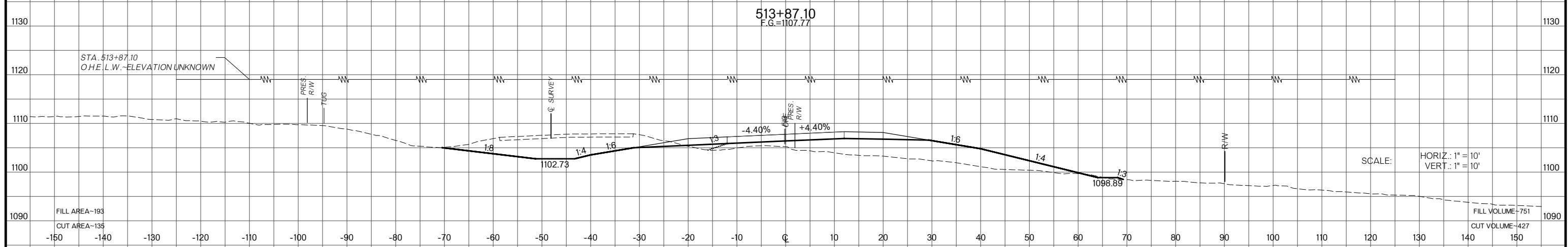
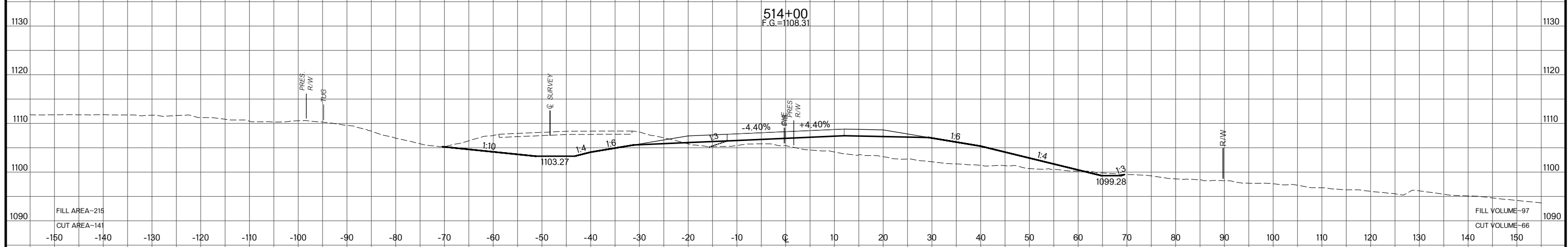
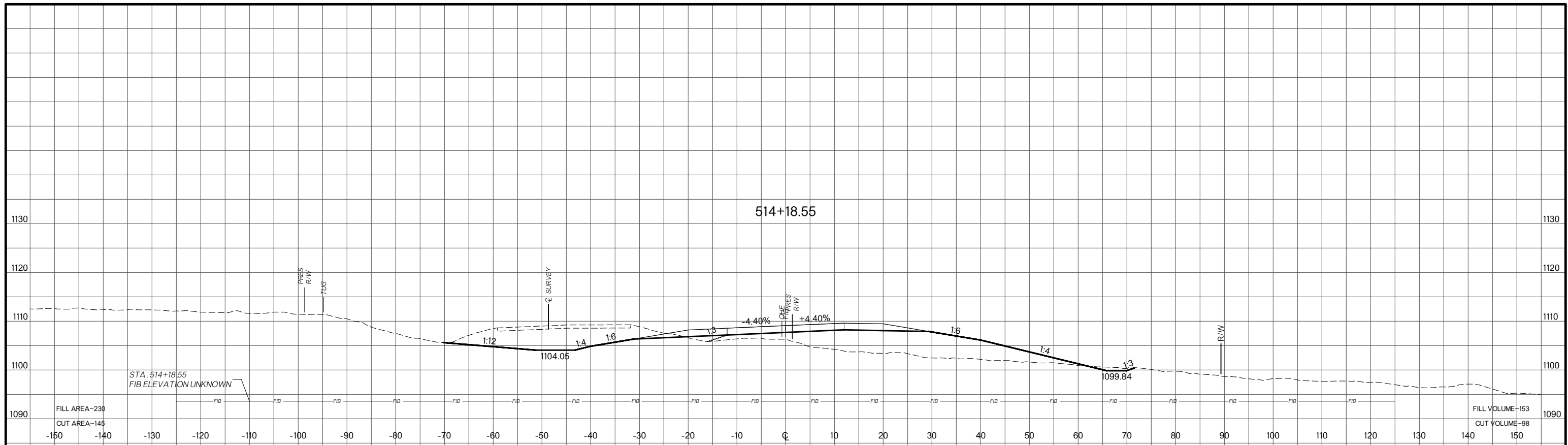
SH 19



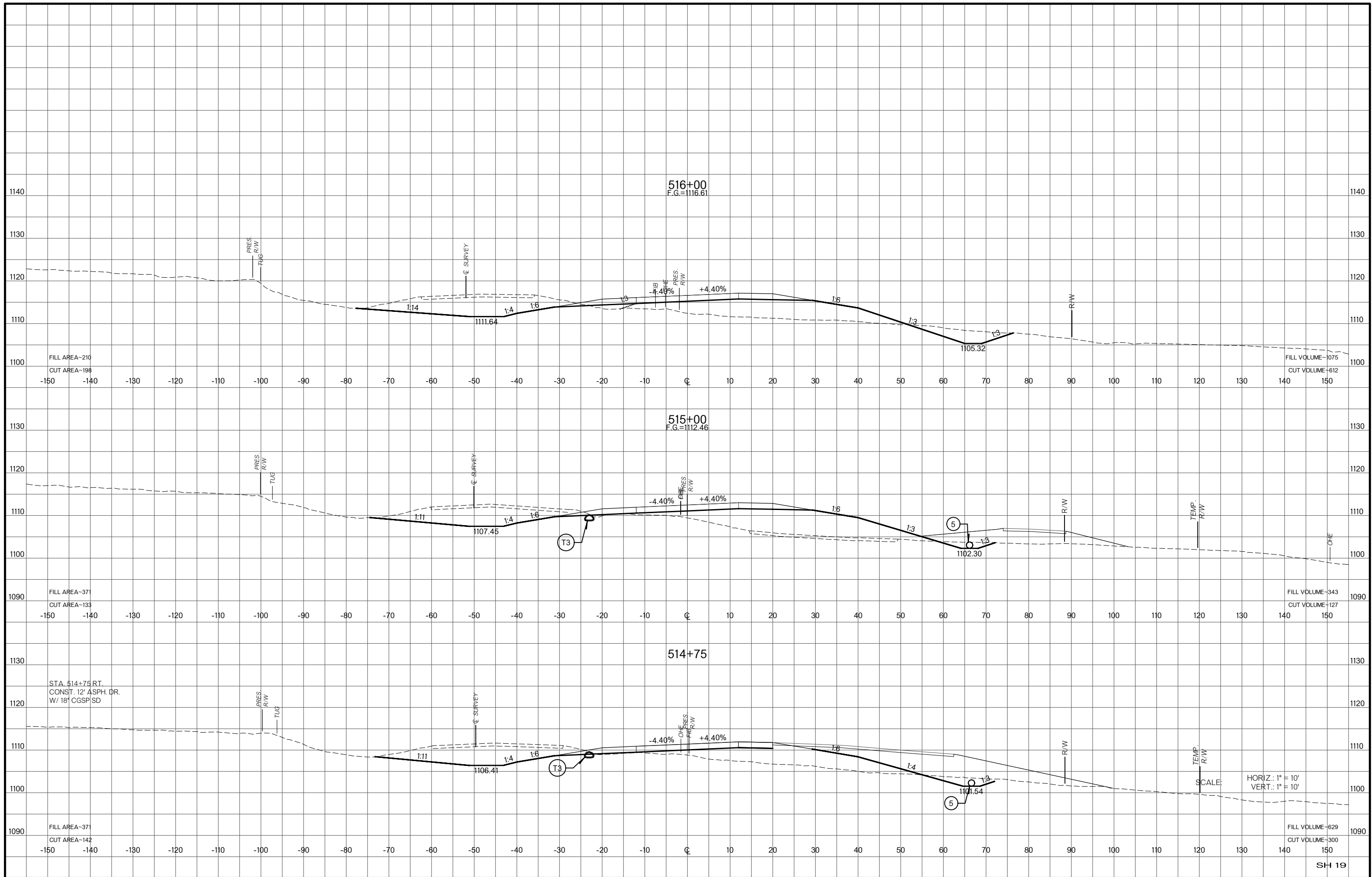
SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

FILL VOLUME-0
CUT VOLUME-3833

SH 19



SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'



516+00
F.G.=1116.61

515+00
F.G.=1112.46

514+75

FILL AREA-210
CUT AREA-198

FILL VOLUME-1075
CUT VOLUME-612

FILL AREA-371
CUT AREA-133

FILL VOLUME-343
CUT VOLUME-127

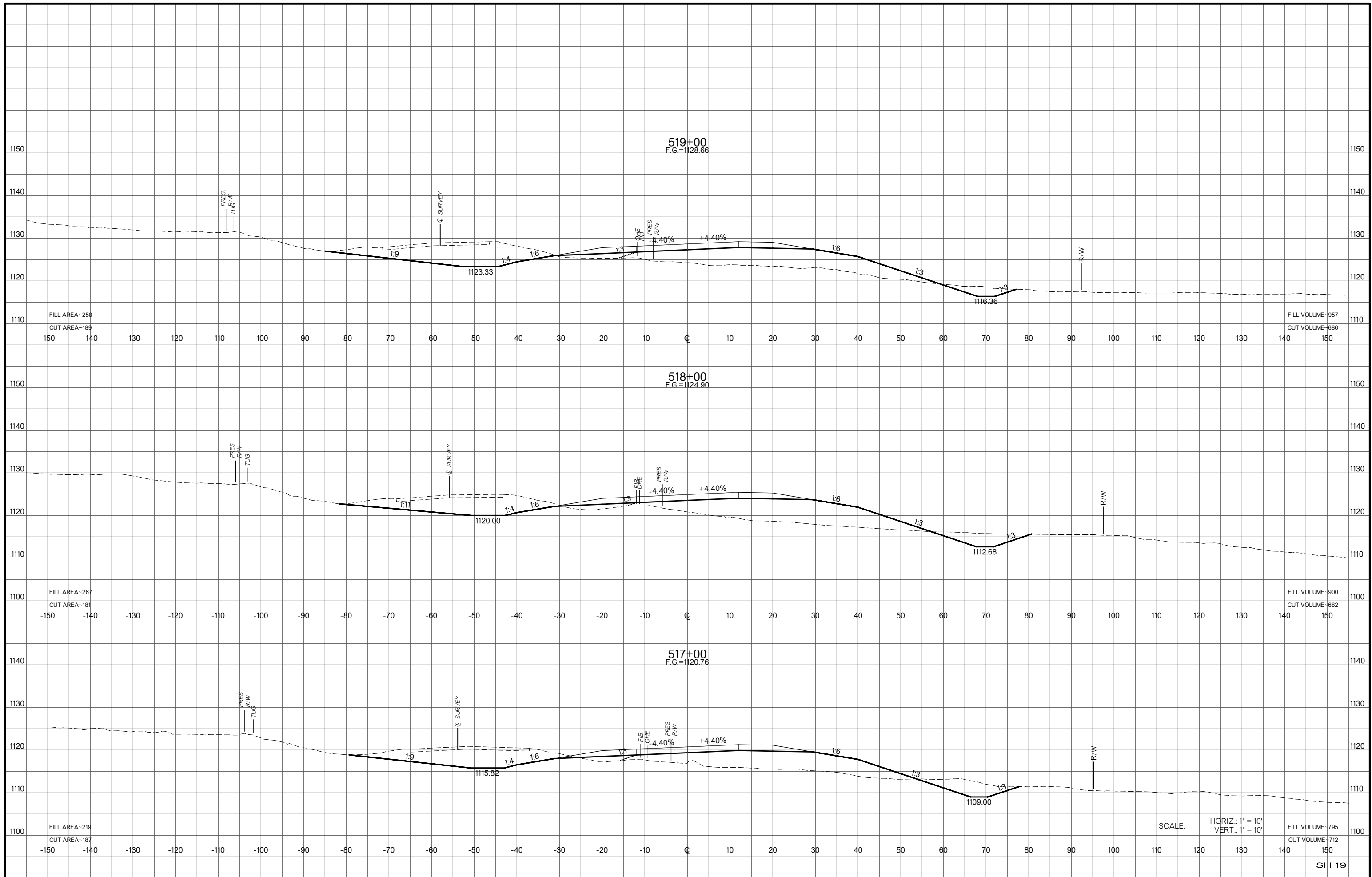
FILL AREA-371
CUT AREA-142

FILL VOLUME-629
CUT VOLUME-300

STA. 514+75 RT.
CONST. 12' ASPH. DR.
W/ 18" CGSP SD

SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

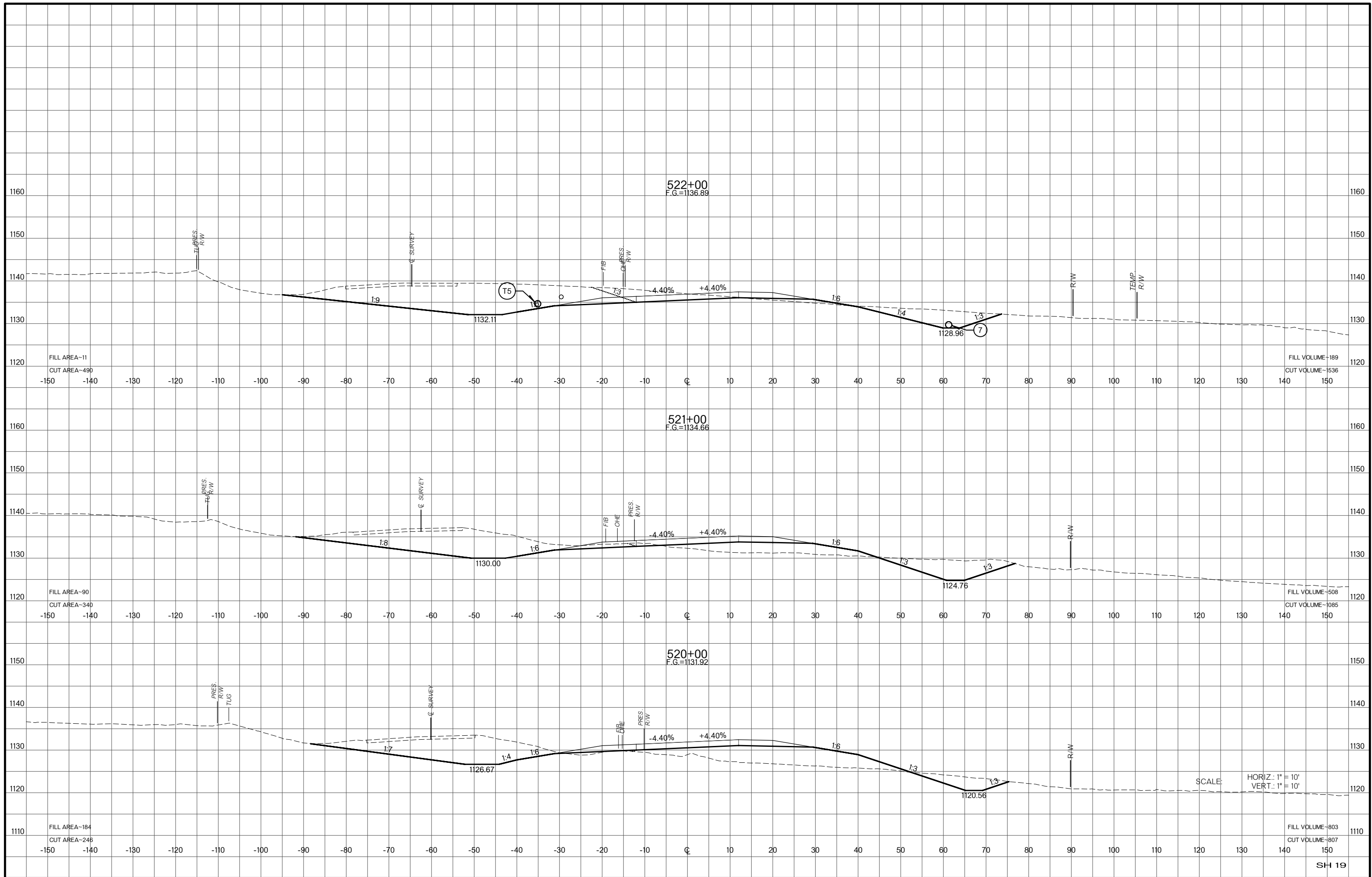
SH 19



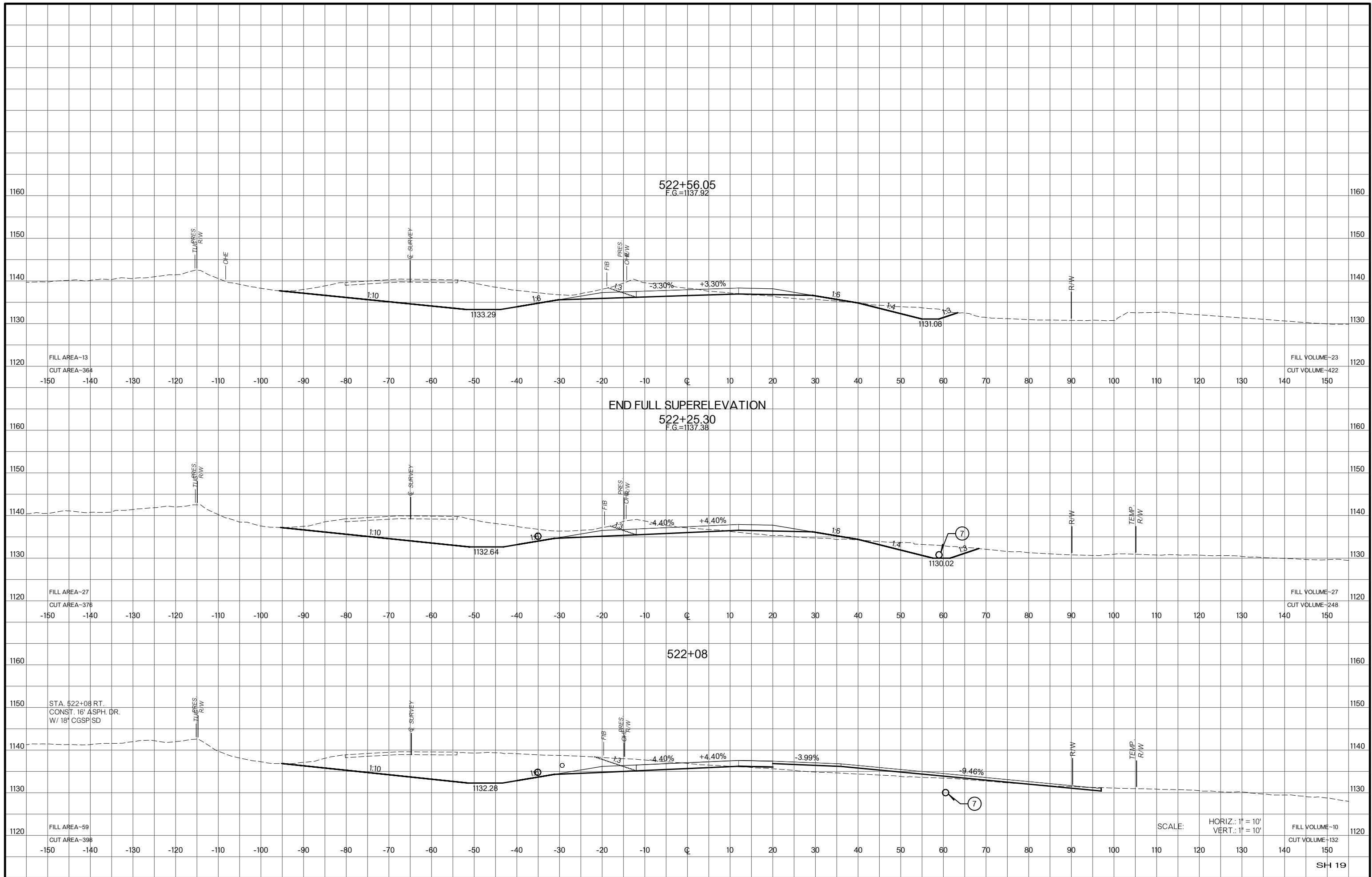
SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

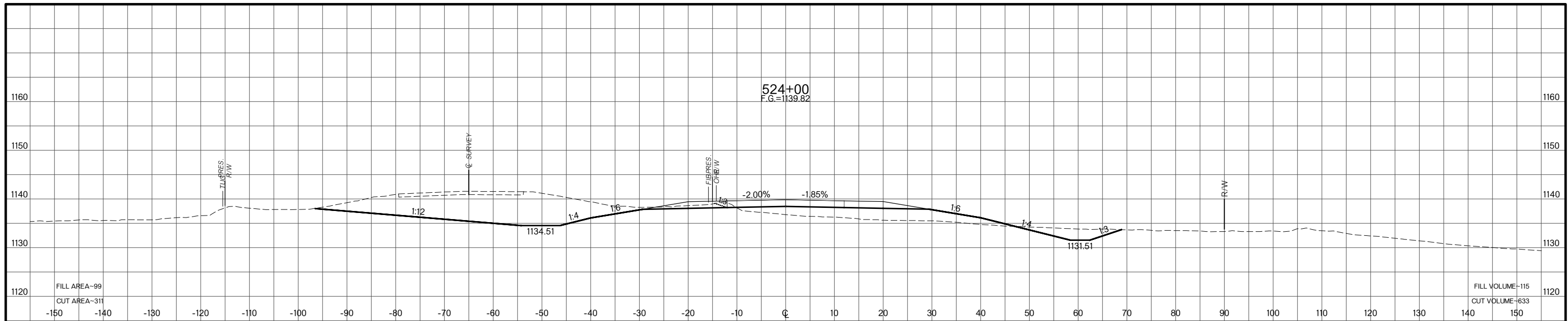
FILL VOLUME=795
 CUT VOLUME=712

SH 19

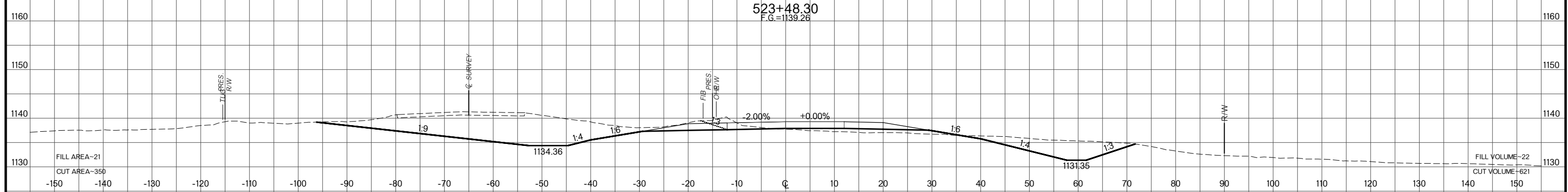


SCALE
HORIZ.: 1" = 10'
VERT.: 1" = 10'

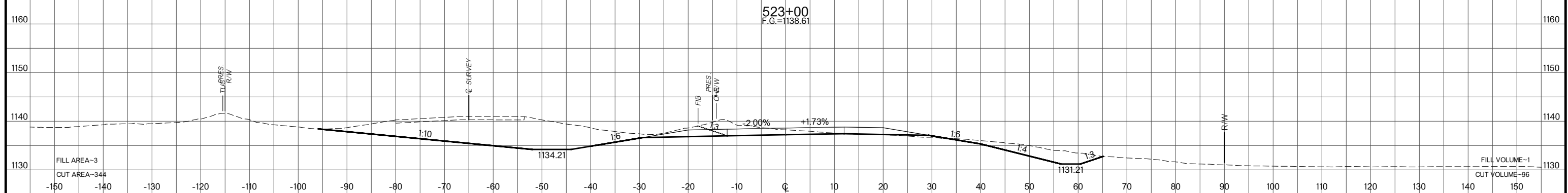




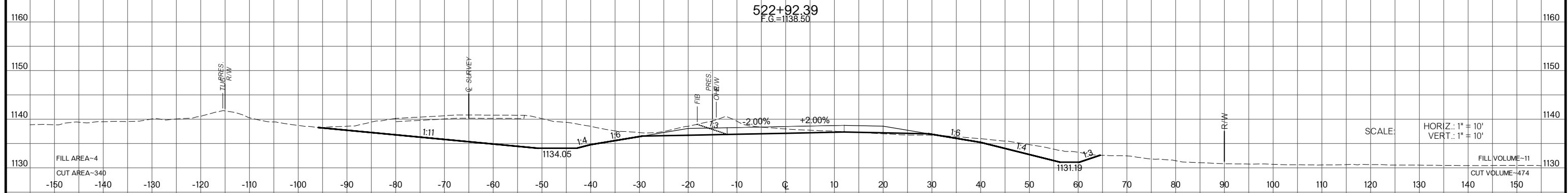
RUNOFF ENDS STATION



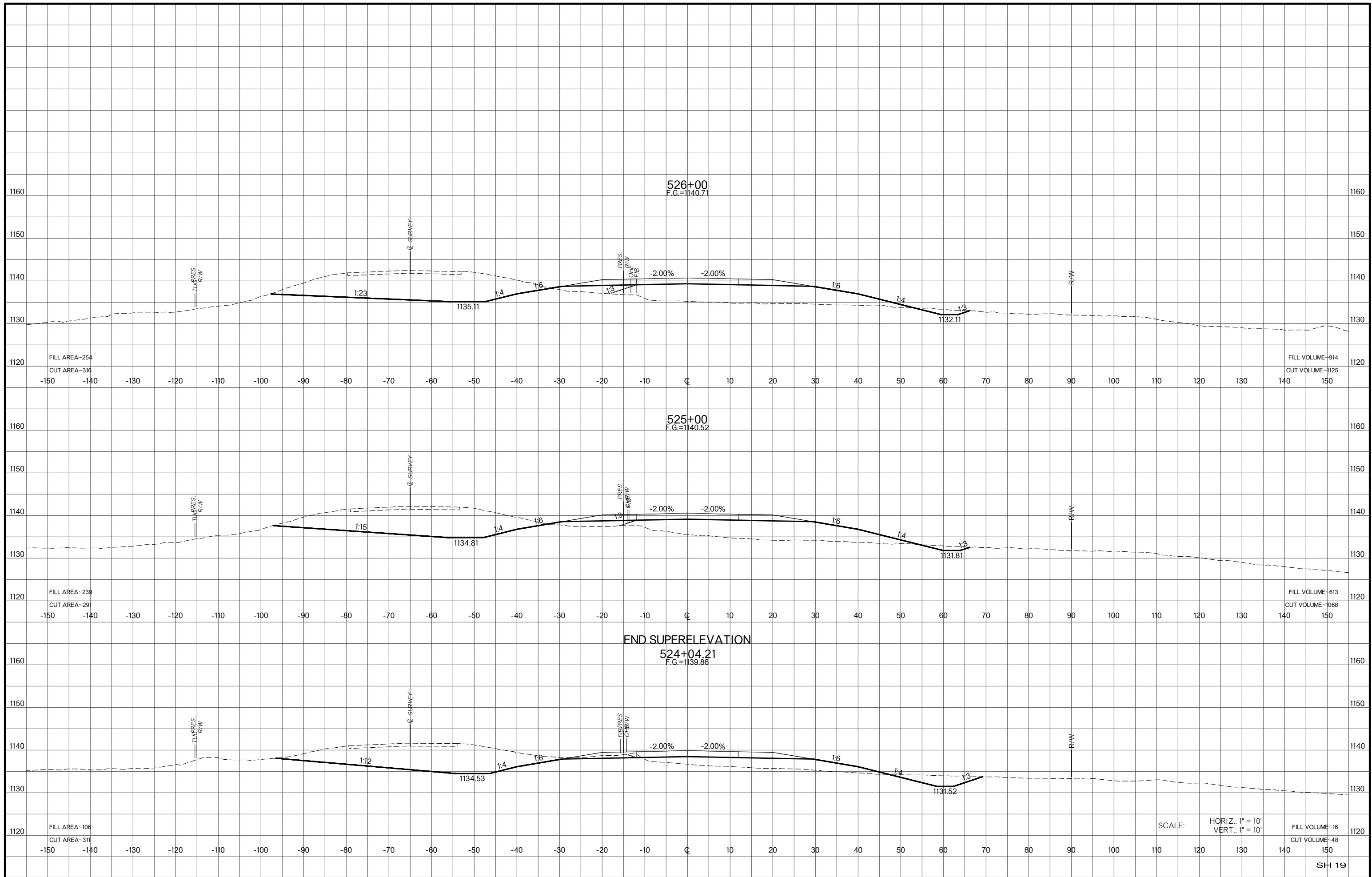
523+00

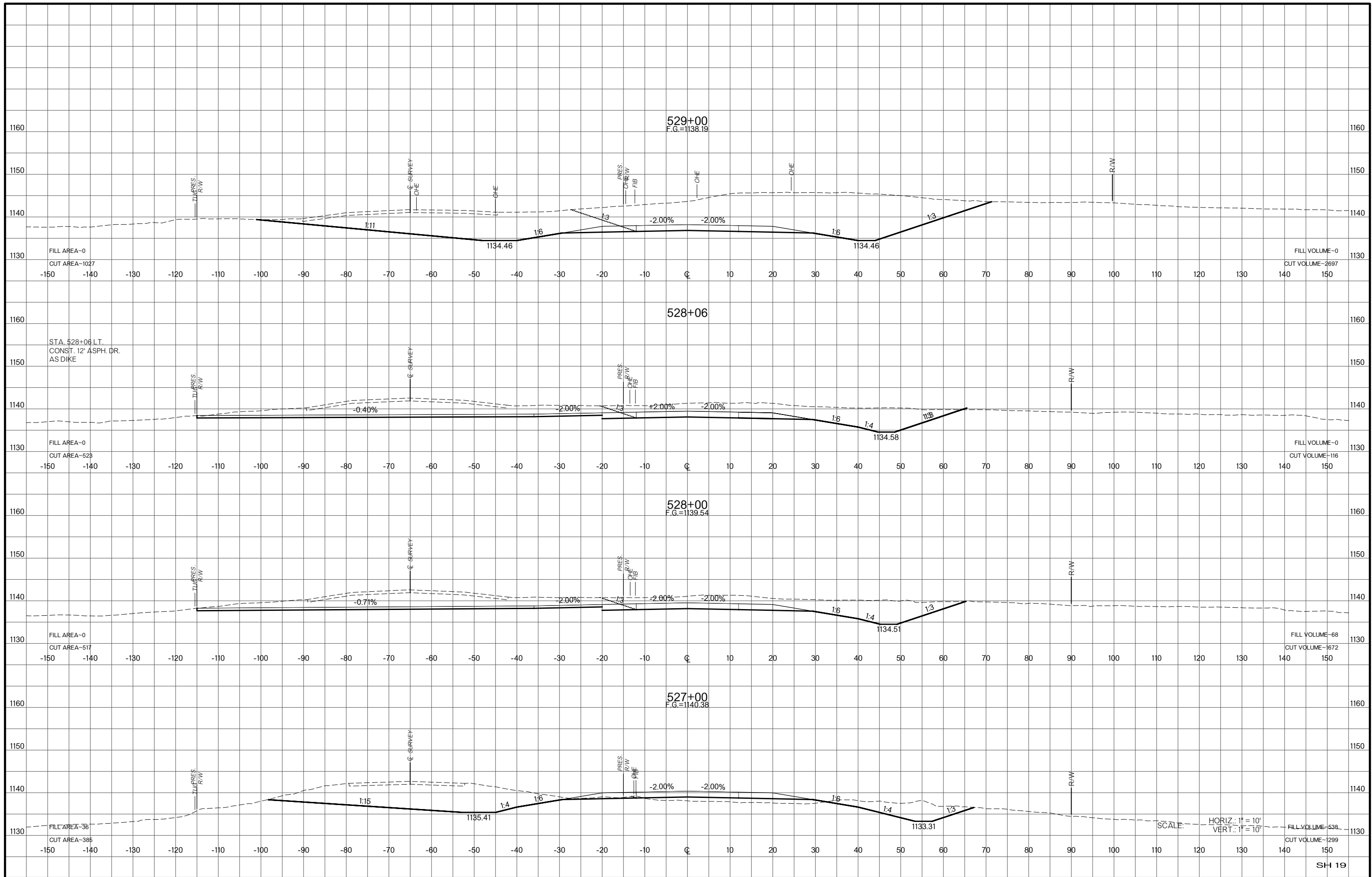


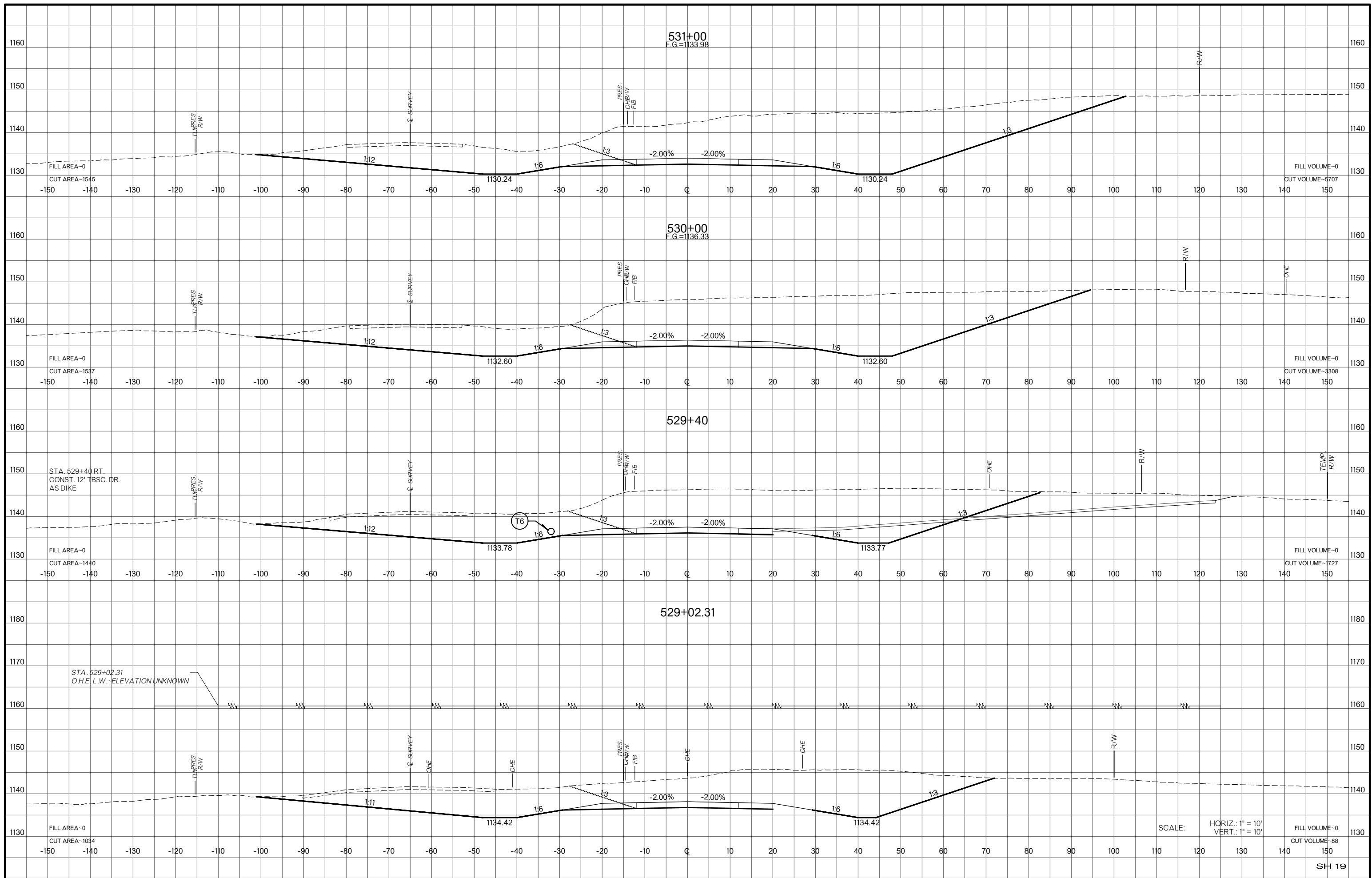
REVERSE CROSS SLOPE STATION



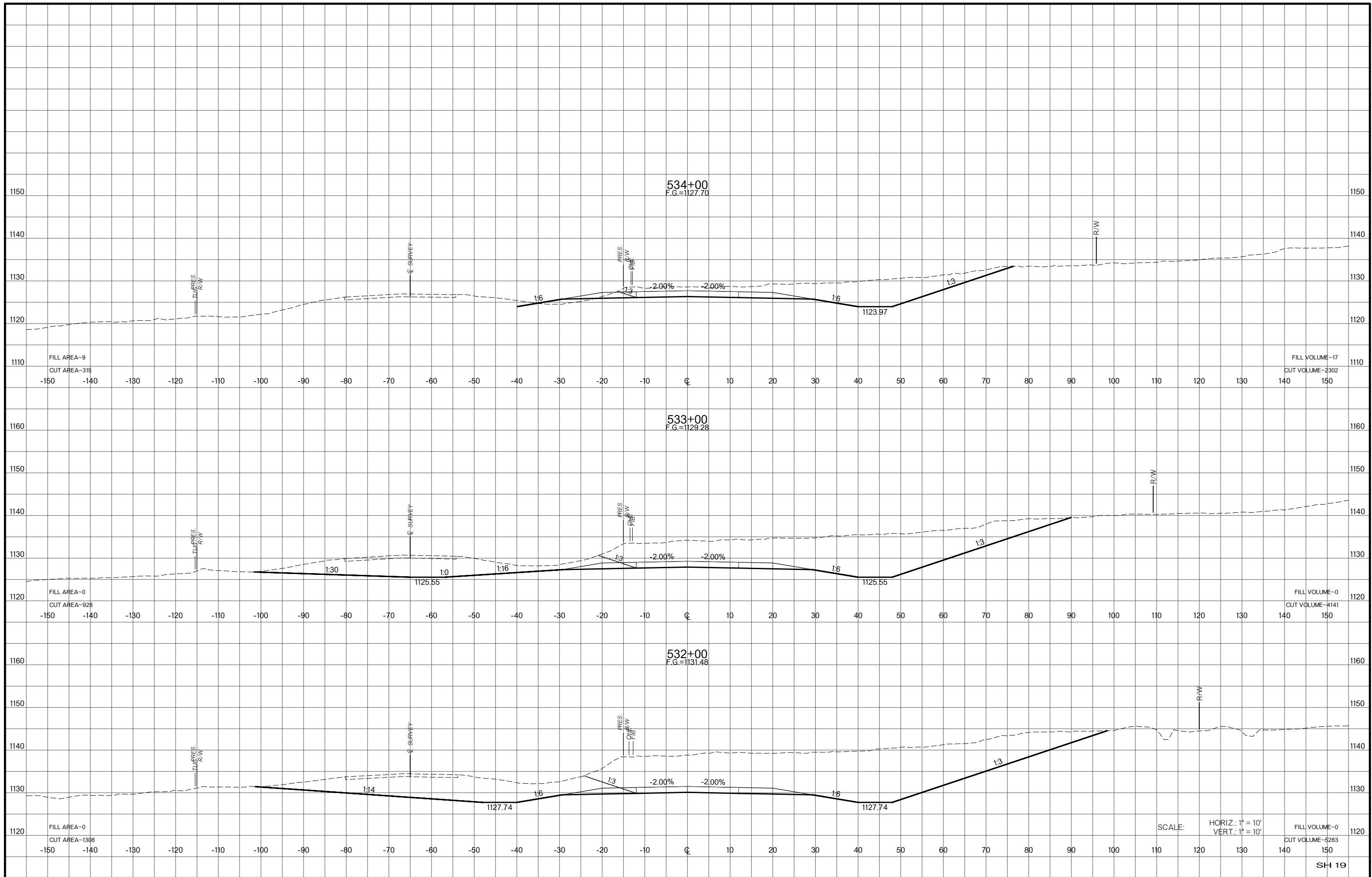
SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'







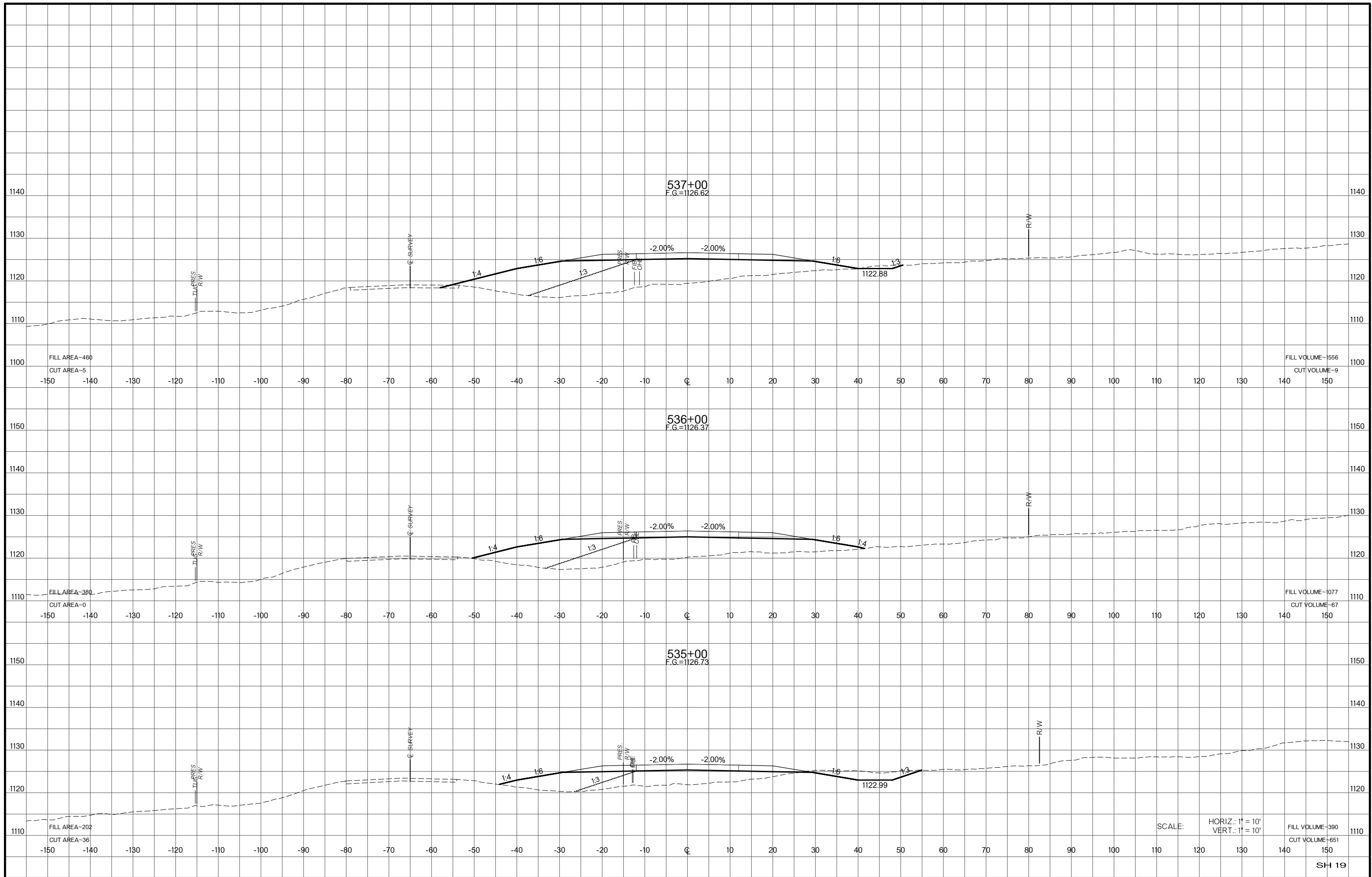
SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'



SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

FILL VOLUME-0
CUT VOLUME-5283

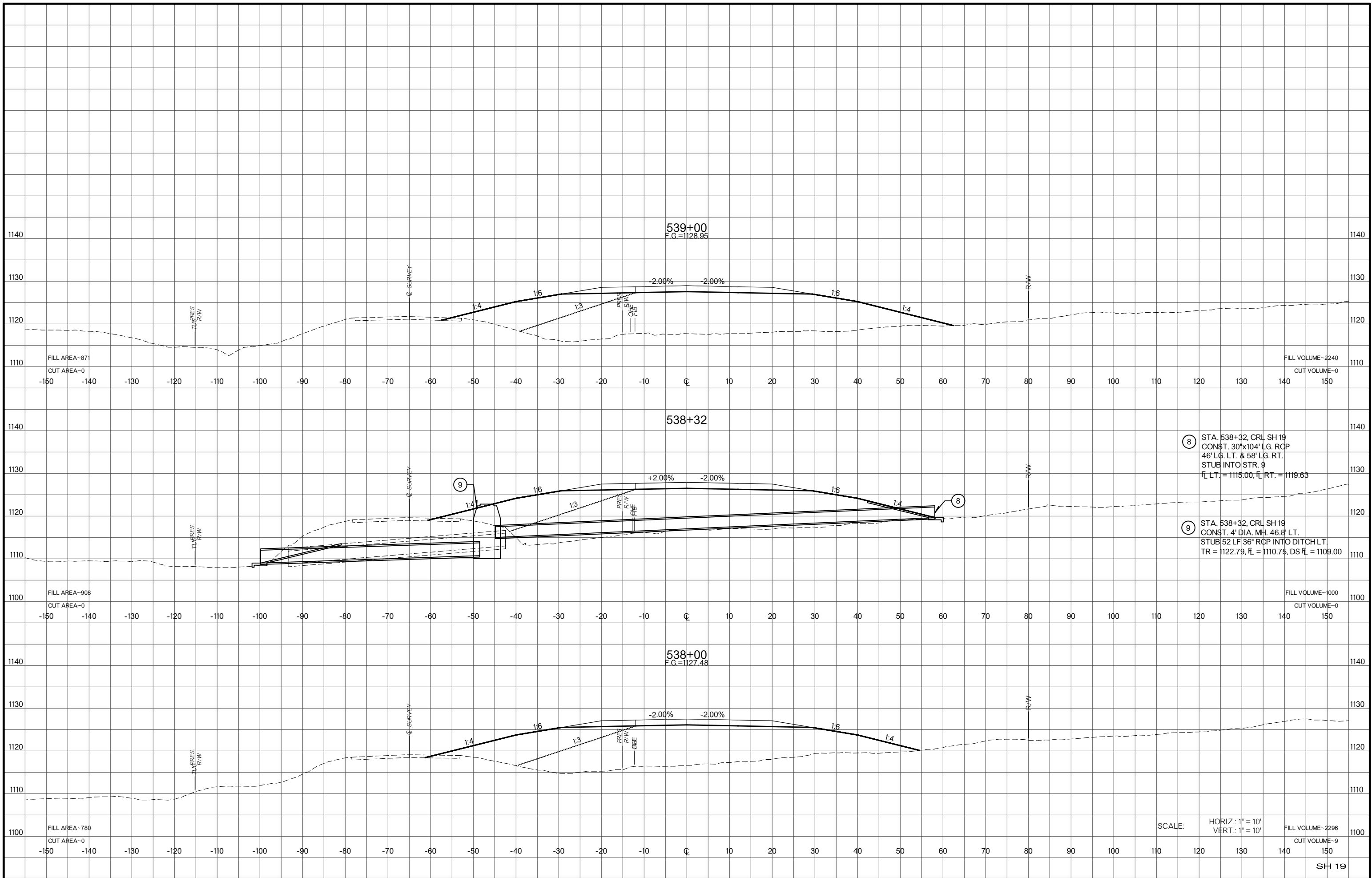
SH 19



SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

FILL VOLUME-390
CUT VOLUME-651

SH 19



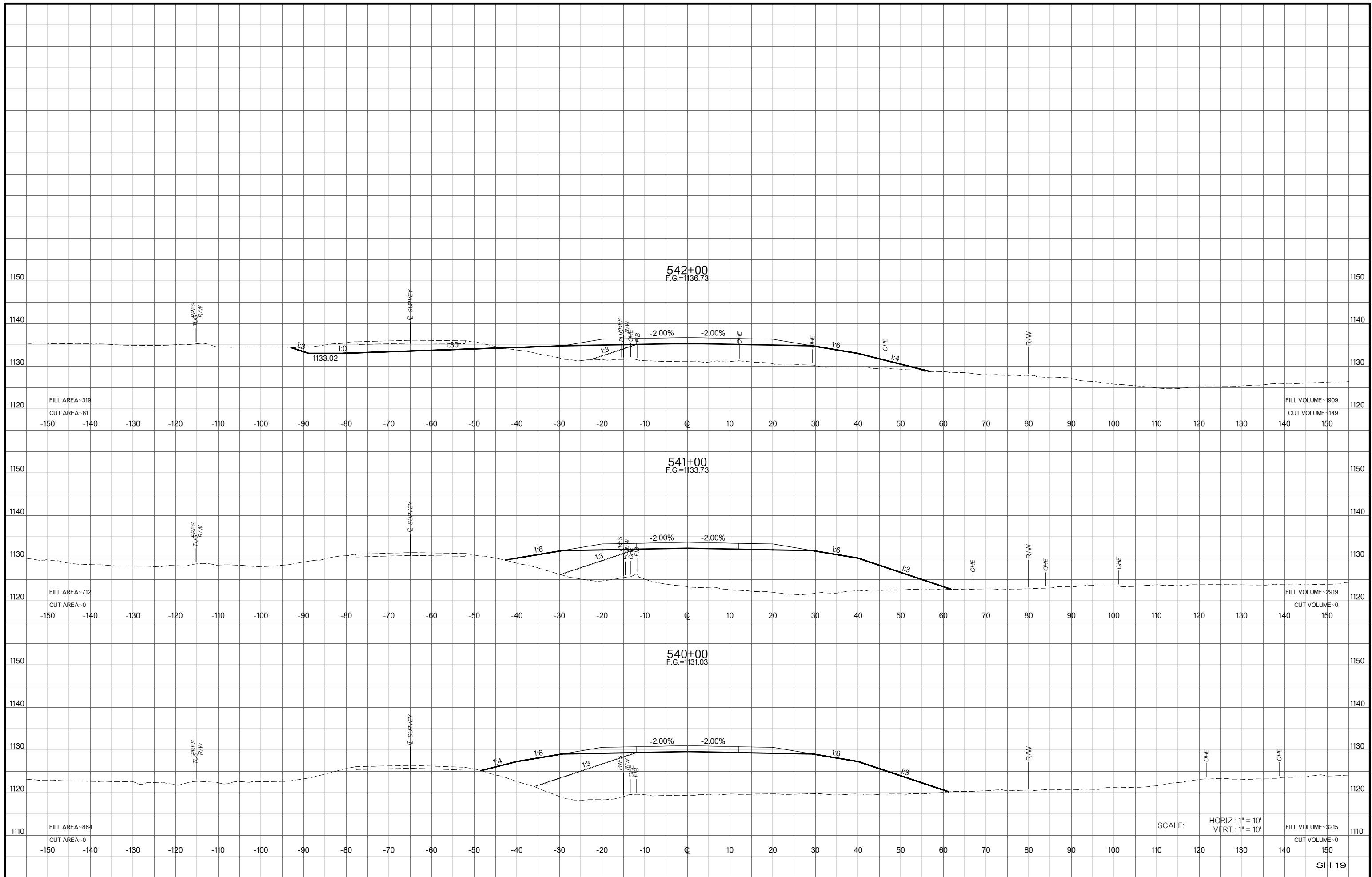
⑧ STA. 538+32, CRL SH 19
 CONST. 30"x104' LG. RCP
 46' LG. LT. & 58' LG. RT.
 STUB INTO STR. 9
 FL LT. = 1115.00, FL RT. = 1119.63

⑨ STA. 538+32, CRL SH 19
 CONST. 4' DIA. MH. 46.8' LT.
 STUB 52 LF 36" RCP INTO DITCH LT.
 TR = 1122.79, FL = 1110.75, DS FL = 1109.00

SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

FILL VOLUME - 2296
 CUT VOLUME - 9

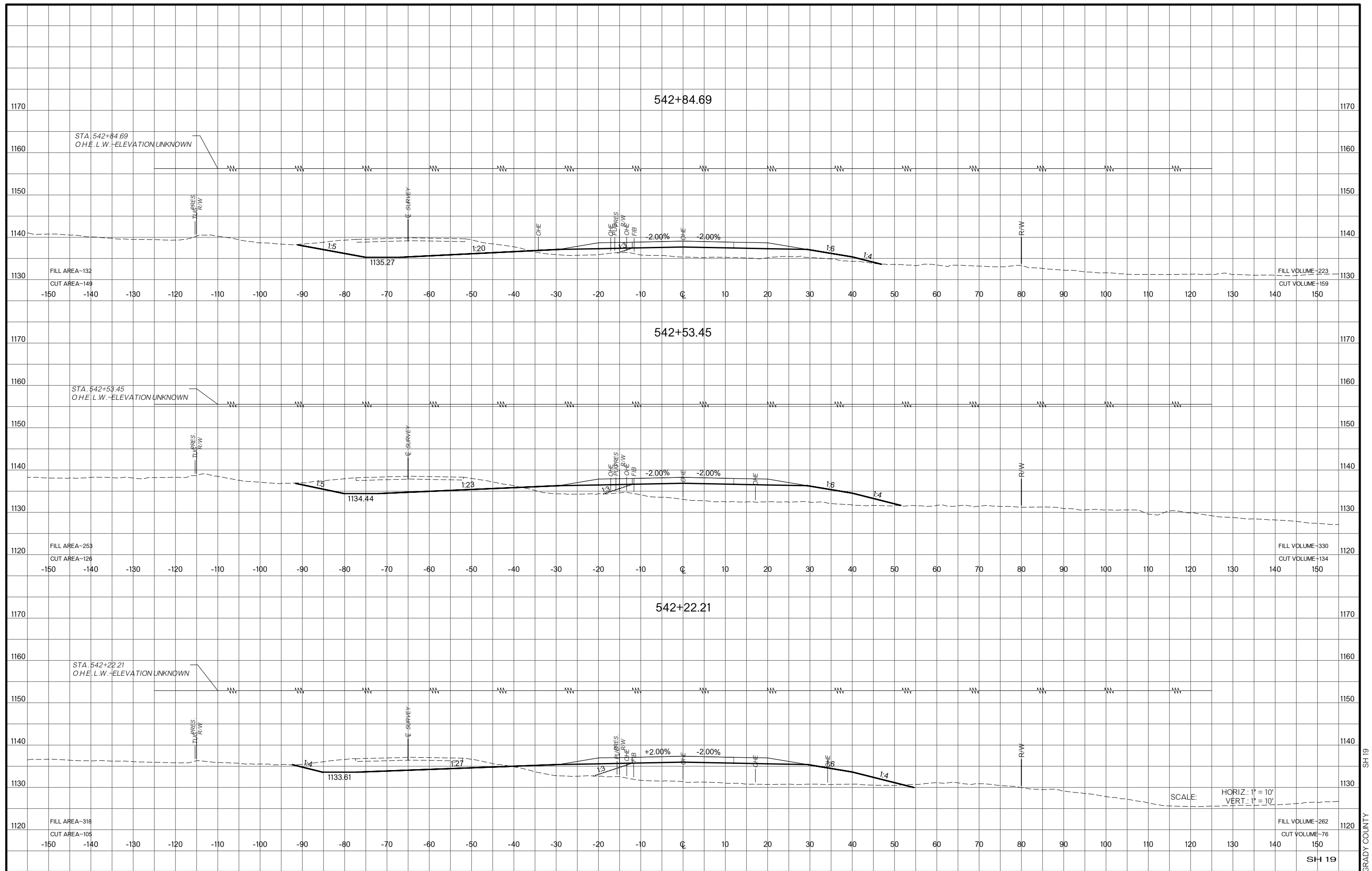
SH 19



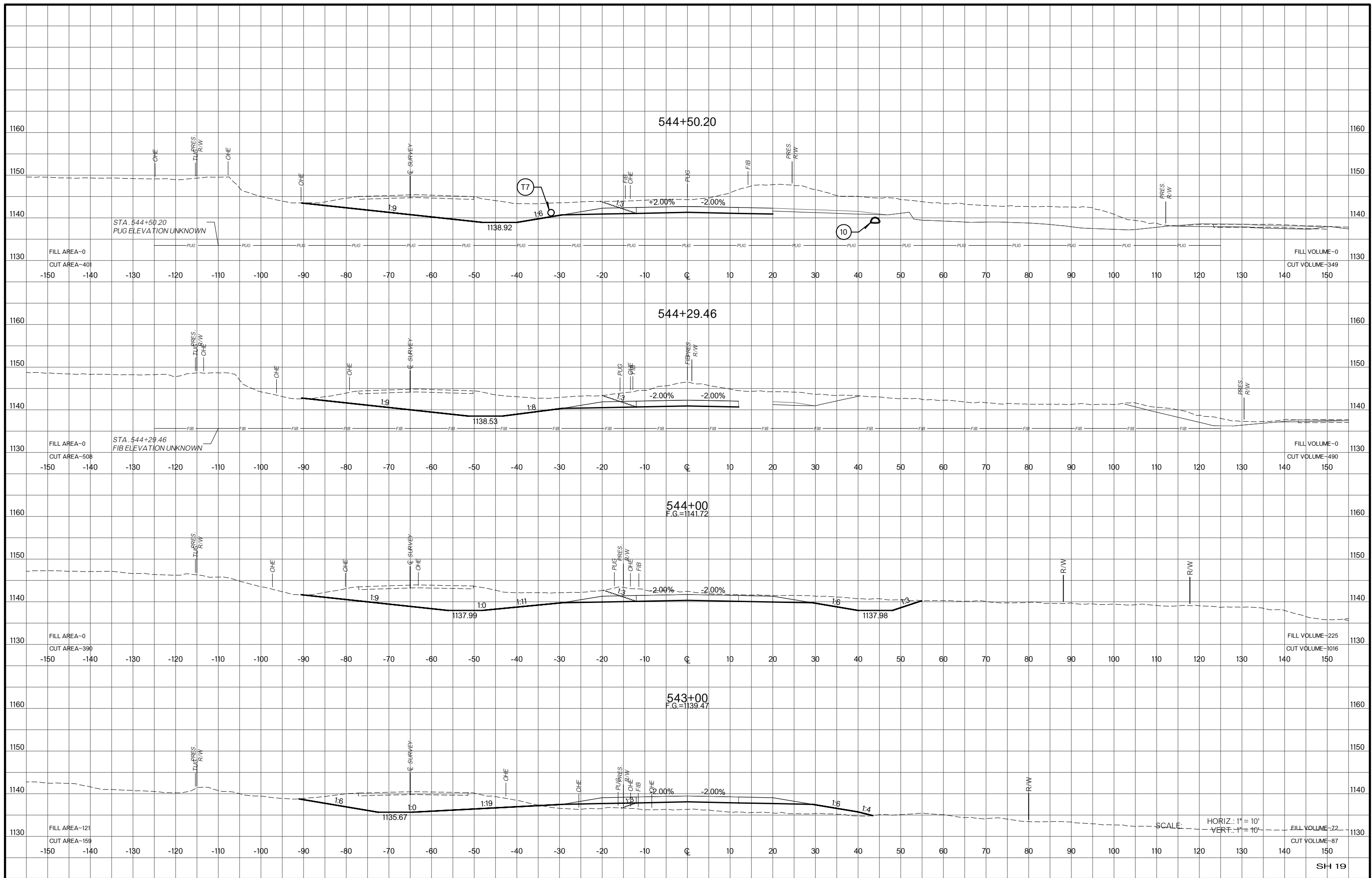
SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

FILL VOLUME-3215
CUT VOLUME-0

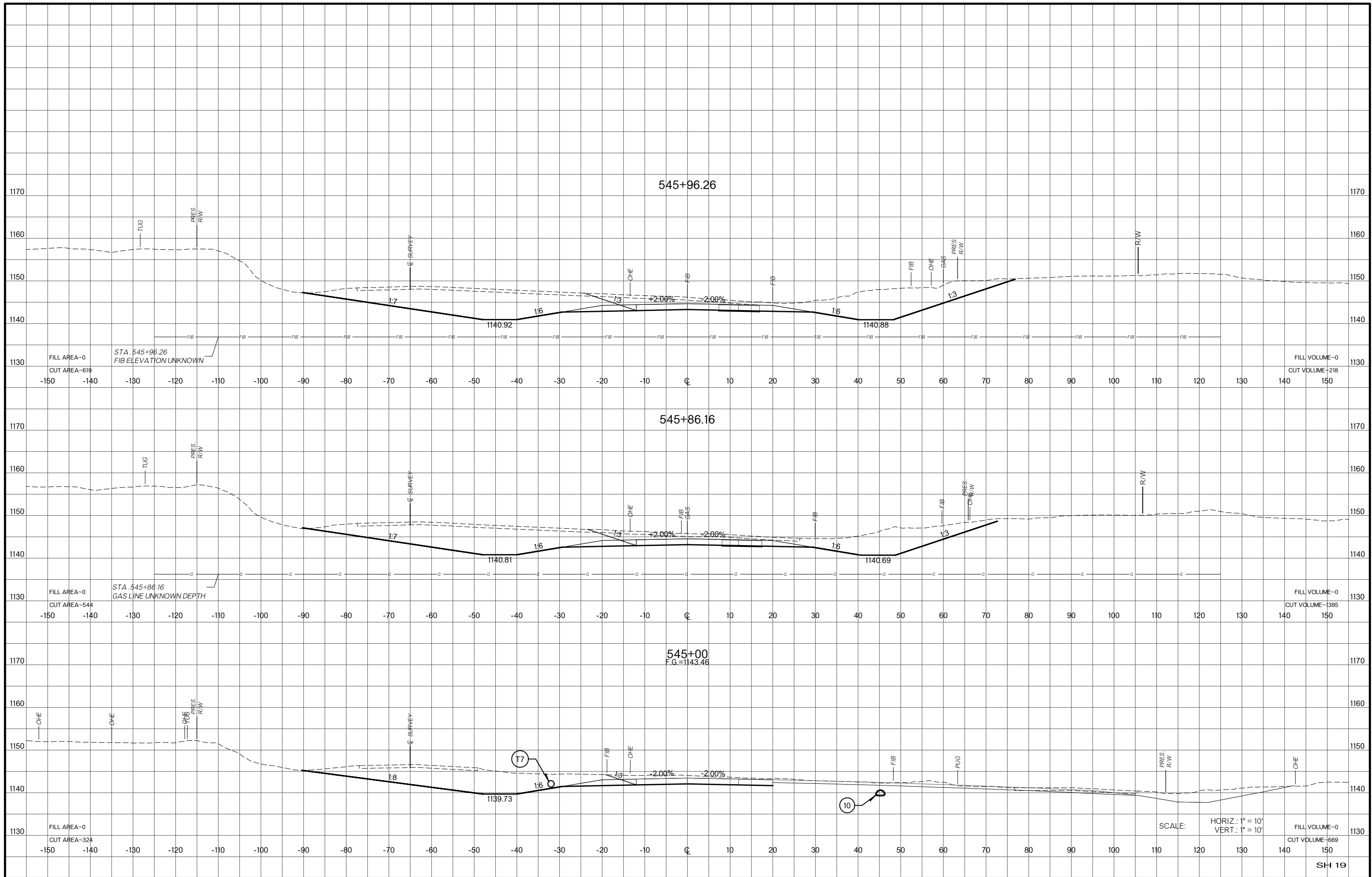
SH 19

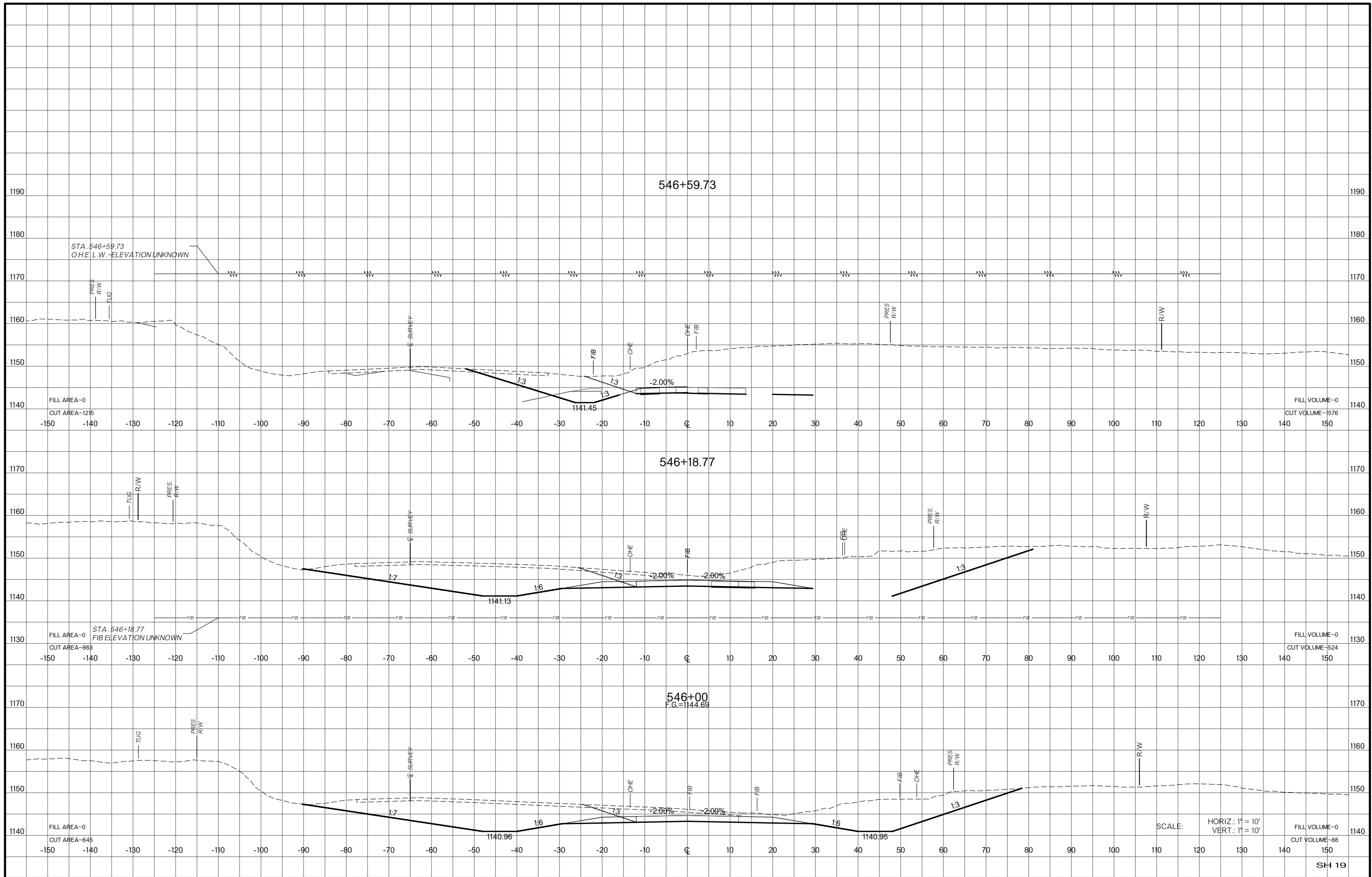


SH 19
GRADY COUNTY



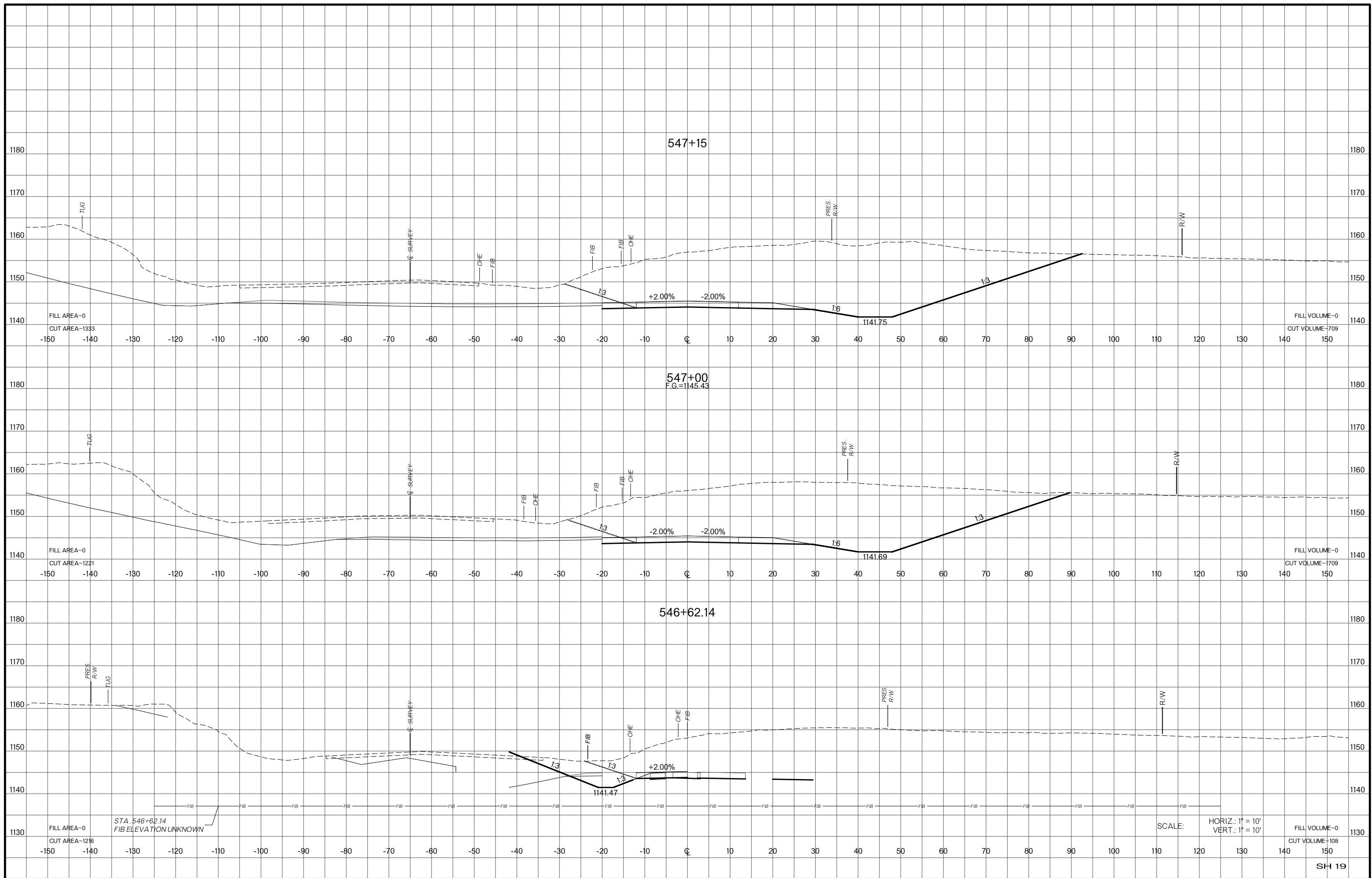
SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'



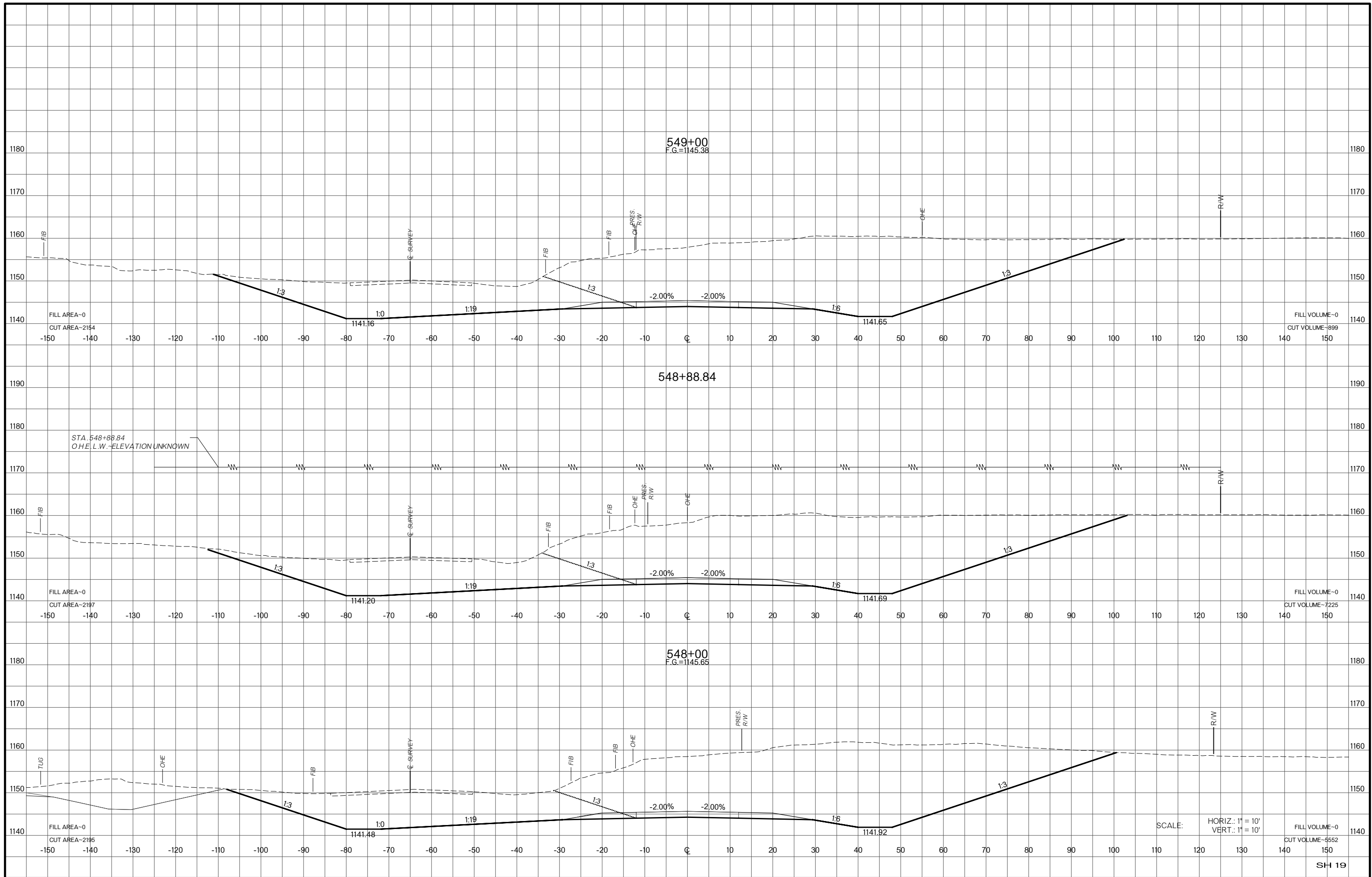


SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

SH 19



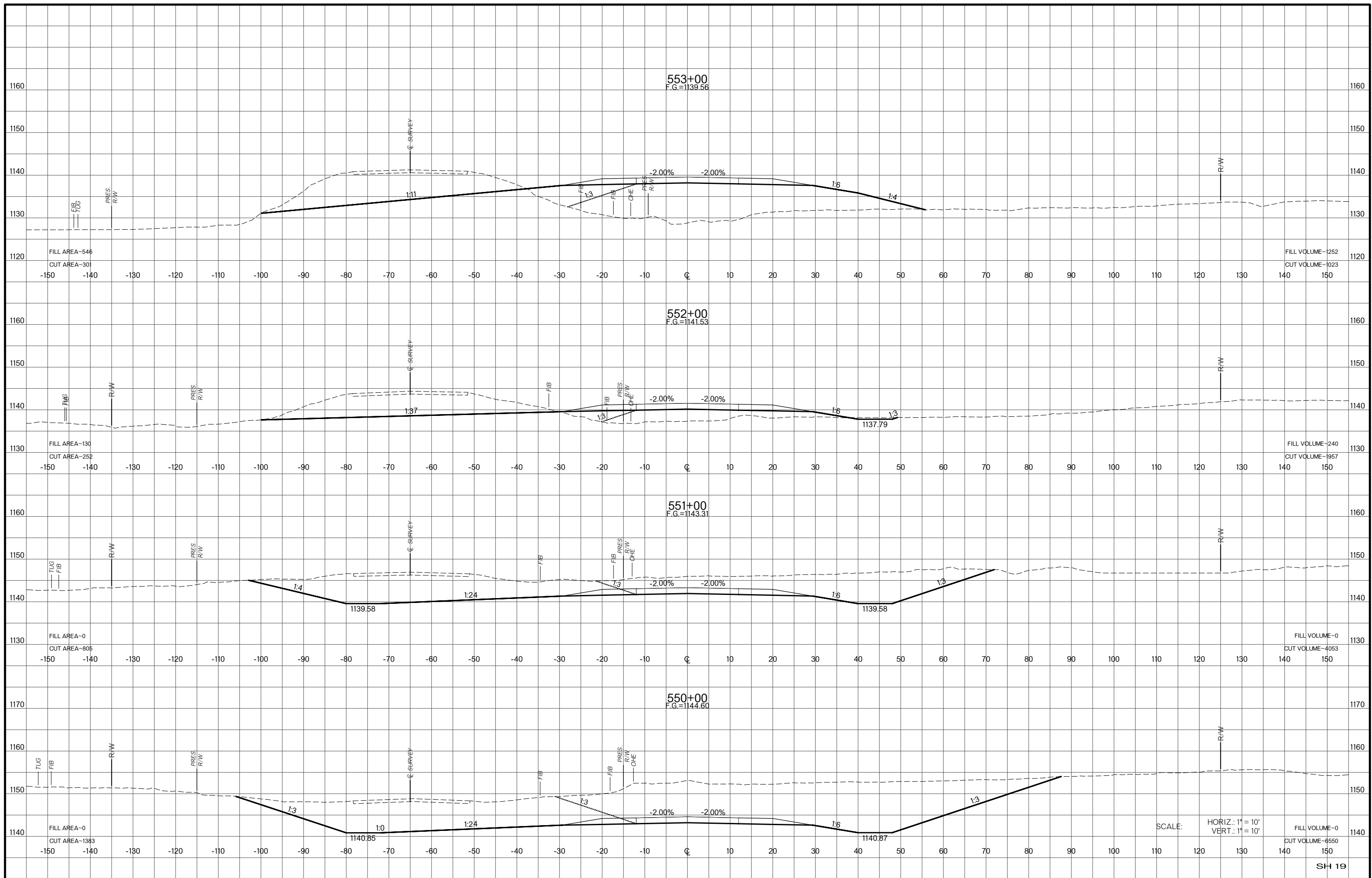
SH 19
GRADY COUNTY

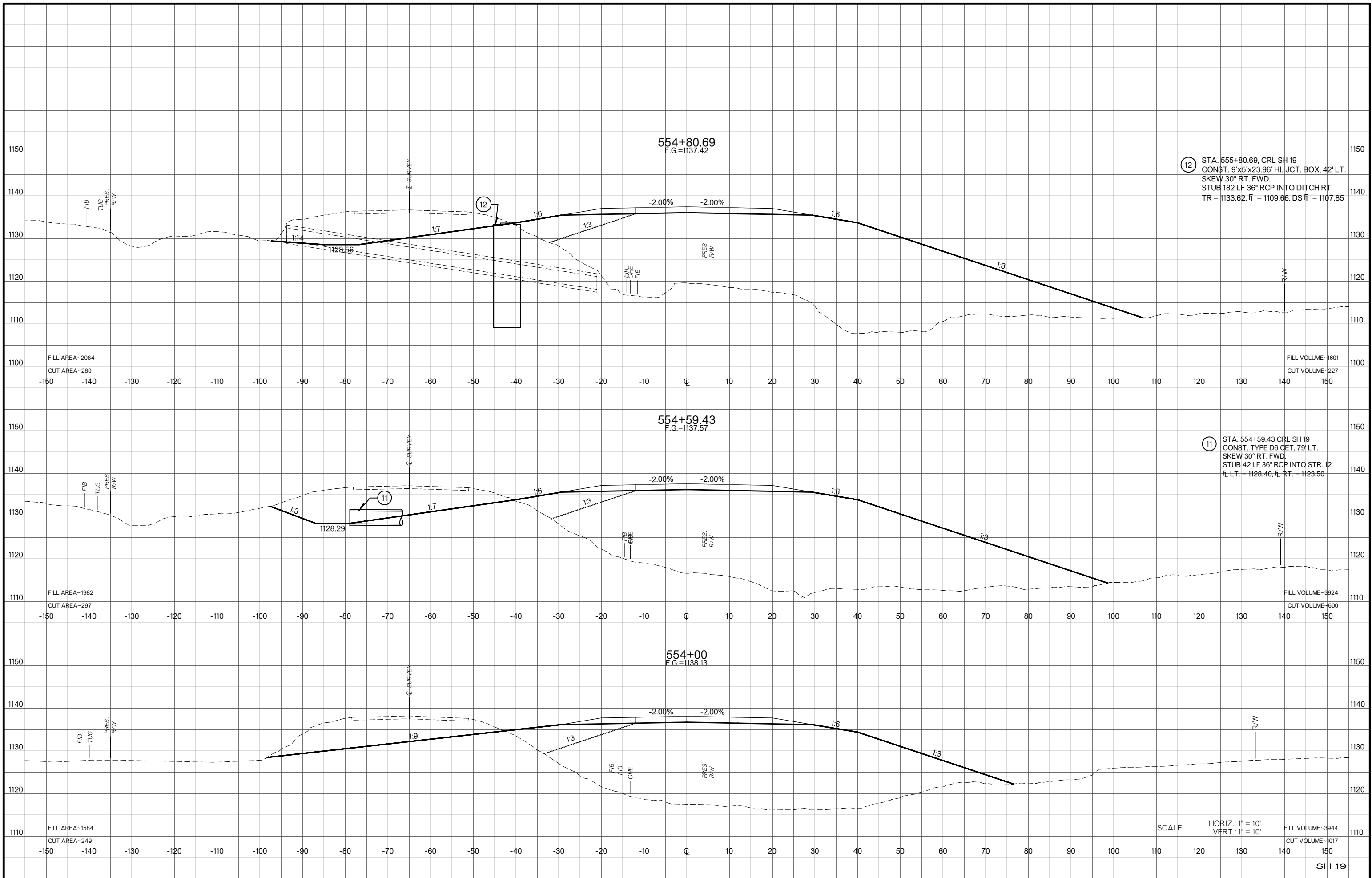


SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

SH 19

GRADY COUNTY





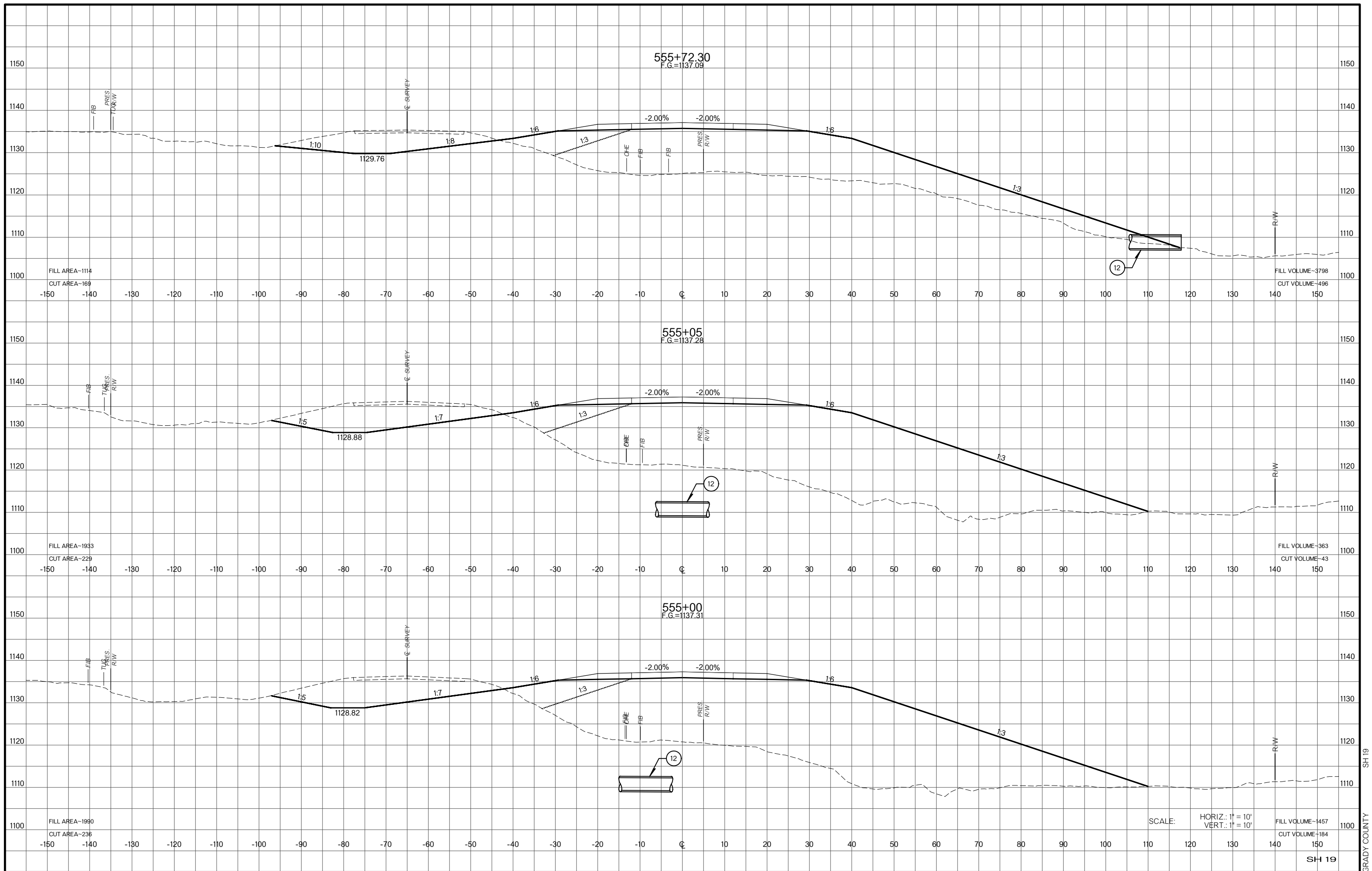
(12) STA. 555+80.69, CRL SH 19
 CONST. 9'x5'x23.96' HI. JCT. BOX, 42' LT.
 SKEW 30° RT. FWD.
 STUB 182 LF 36" RCP INTO DITCH RT.
 TR = 1133.62, FL = 1109.66, DS FL = 1107.85

(11) STA. 554+59.43 CRL SH 19
 CONST. TYPE D6 COT, 79' LT.
 SKEW 30° RT. FWD.
 STUB 42 LF 36" RCP INTO STR. 12
 FL LT. = 1128.40, FL RT. = 1129.50

SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

FILL VOLUME-3944
 CUT VOLUME-1017

SH 19

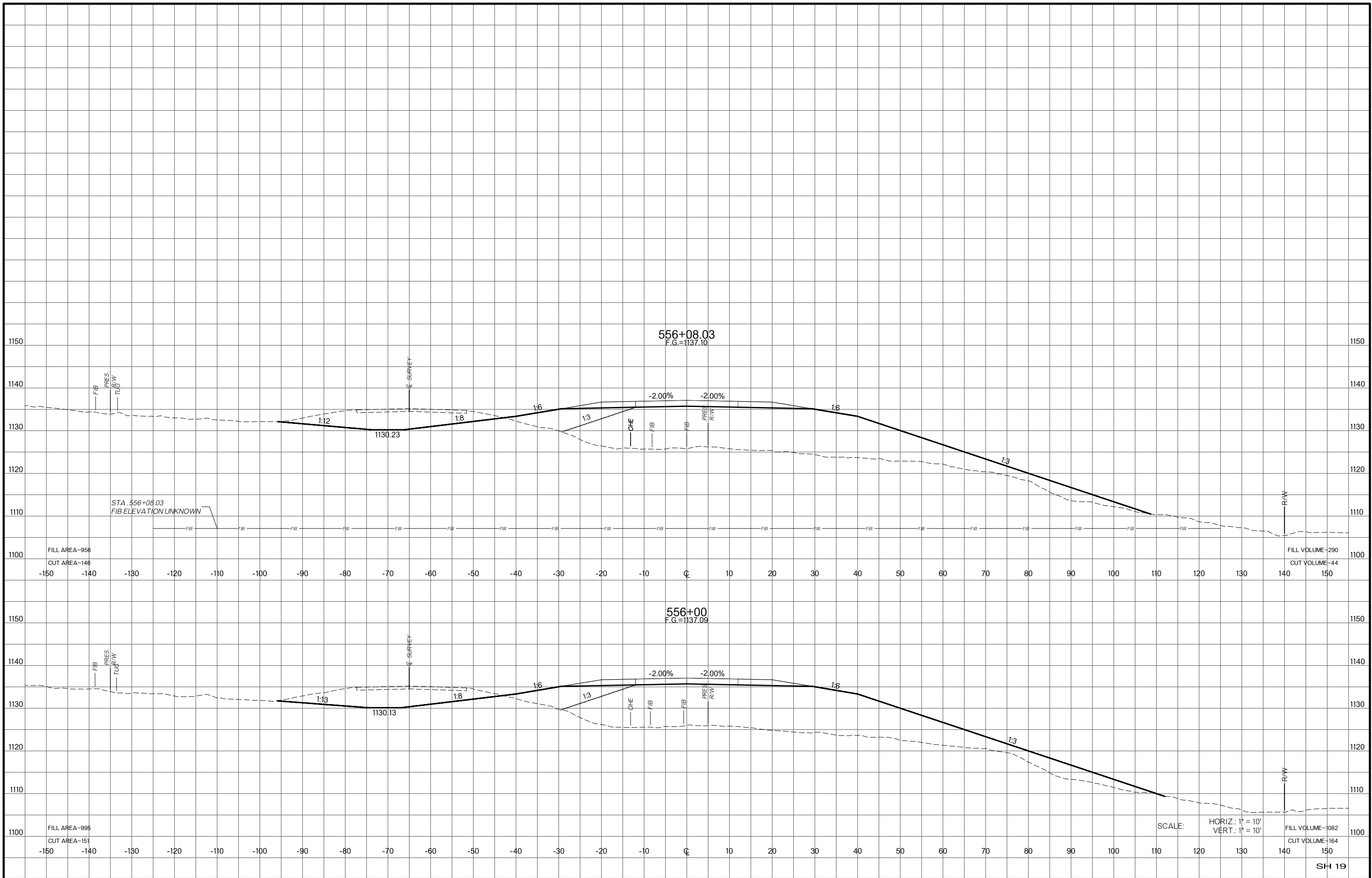


SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

FILL VOLUME ~ 1457
 CUT VOLUME ~ 184

SH 19

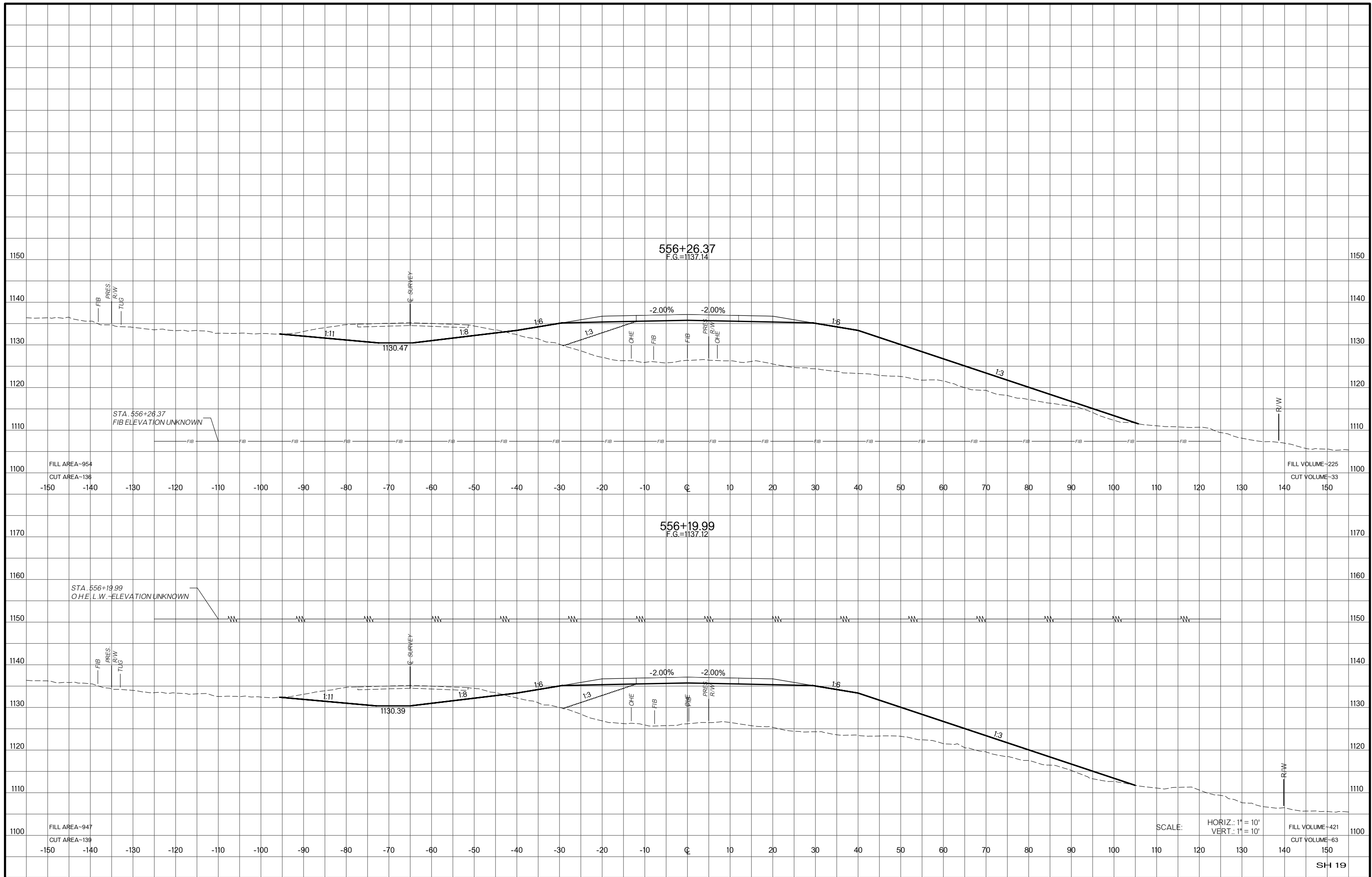
GRADY COUNTY



STA. 556+08.03
 FIB ELEVATION UNKNOWN

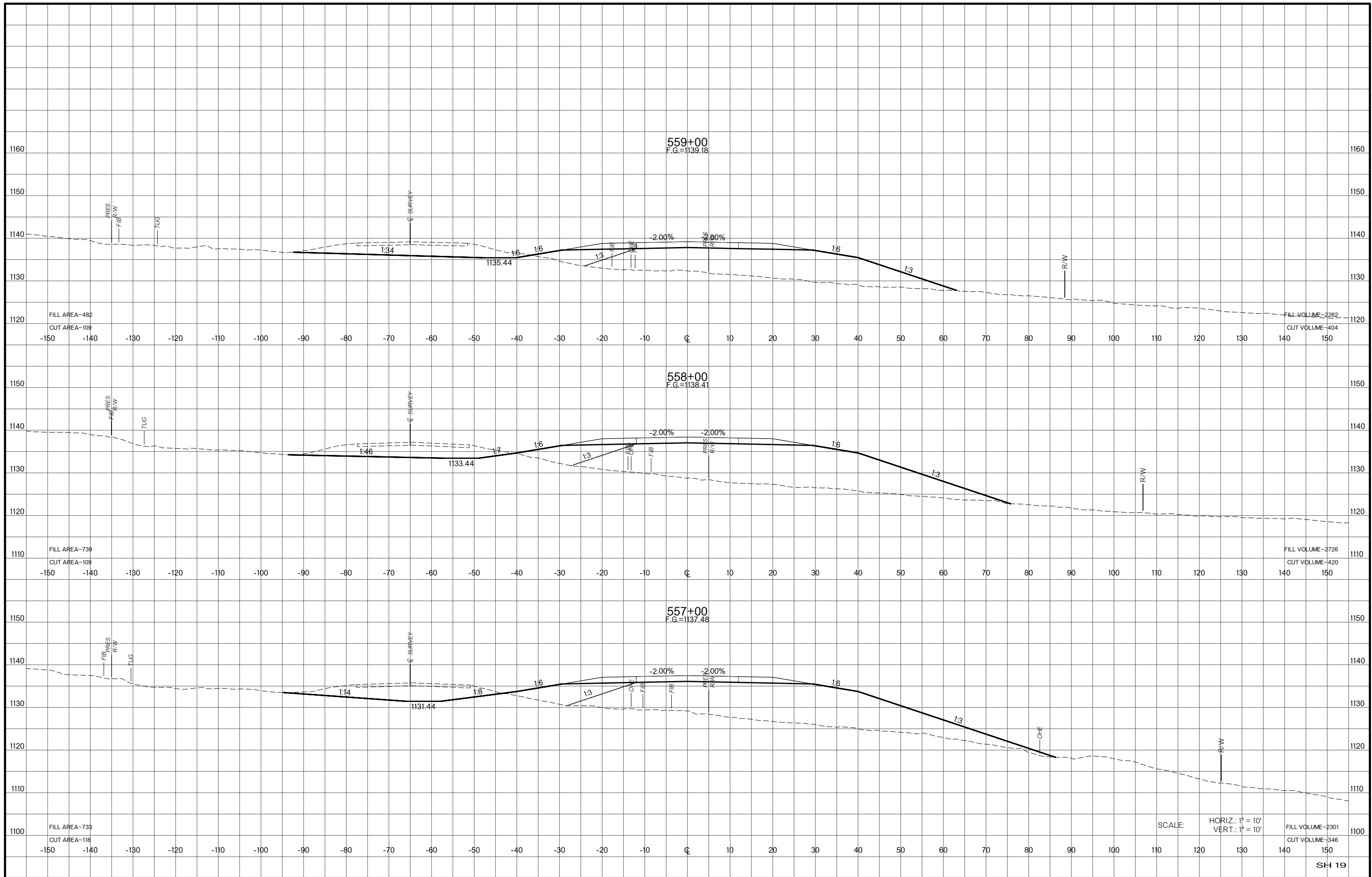
SCALE:
 HORIZ.: 1" = 10'
 VERT.: 1" = 10'

SH 19



SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

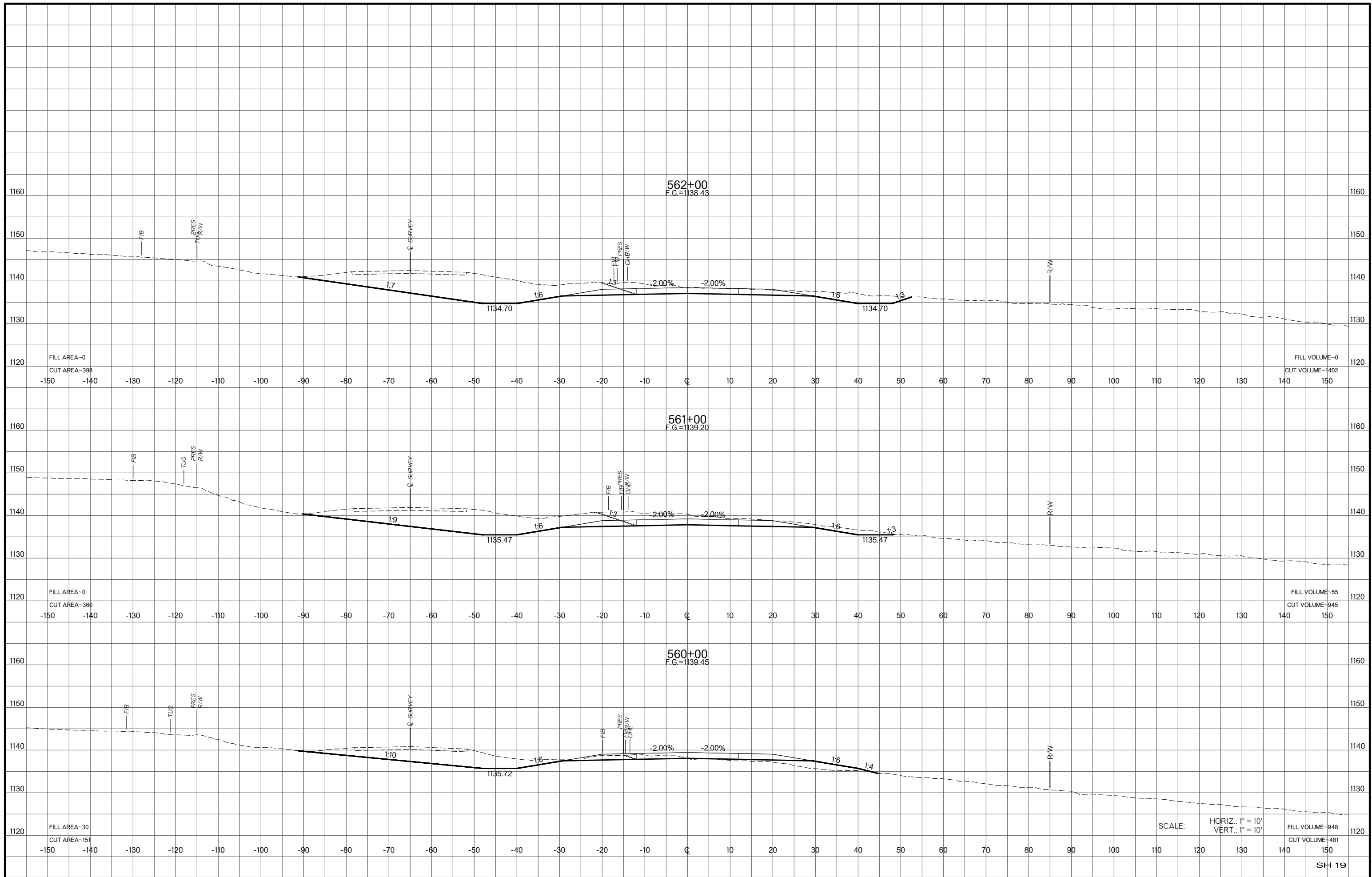
SH 19



SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

FILL VOLUME-2301
CUT VOLUME-346

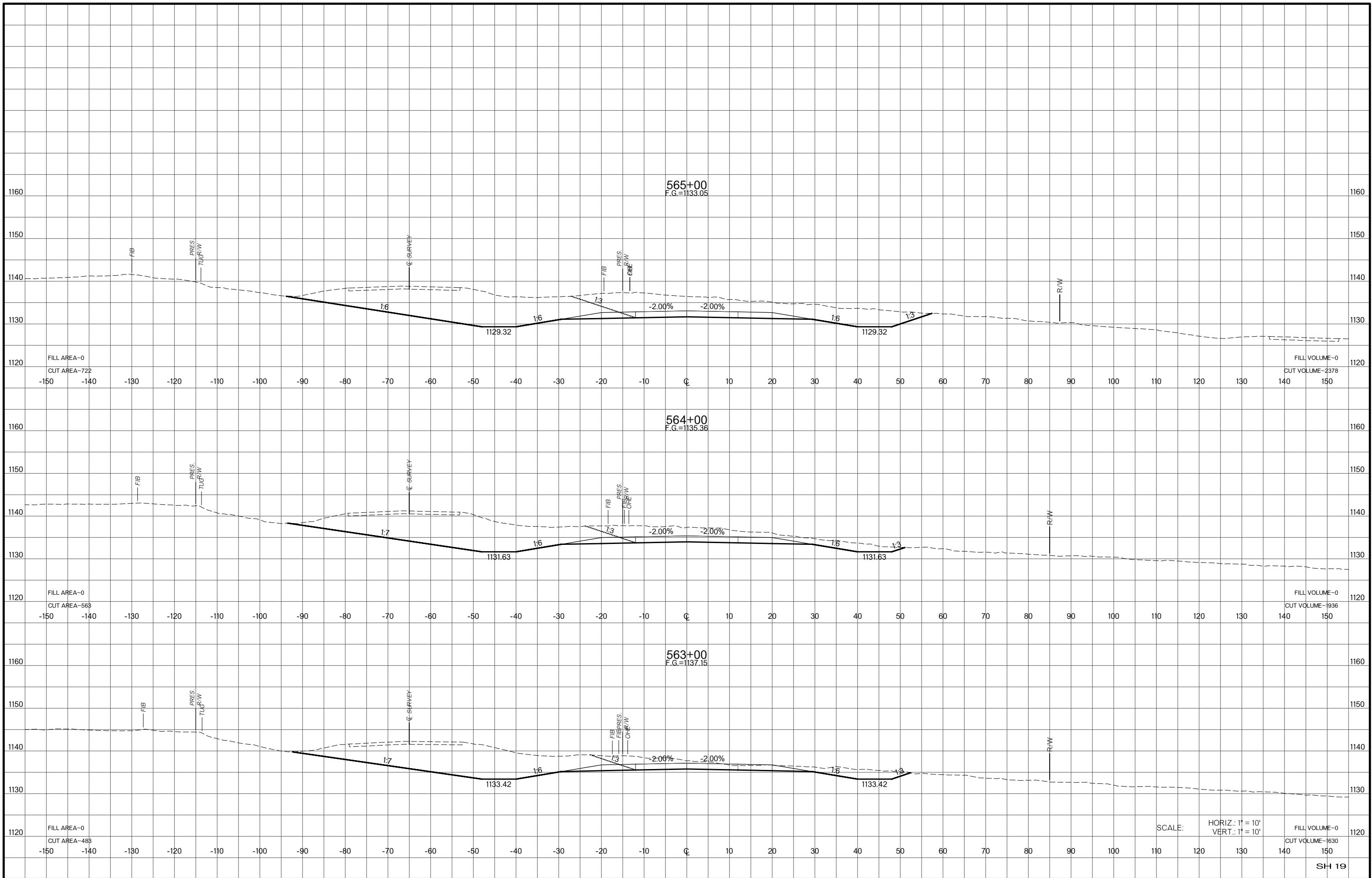
SH 19



SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

FILL VOLUME=948
 CUT VOLUME=481

SH 19



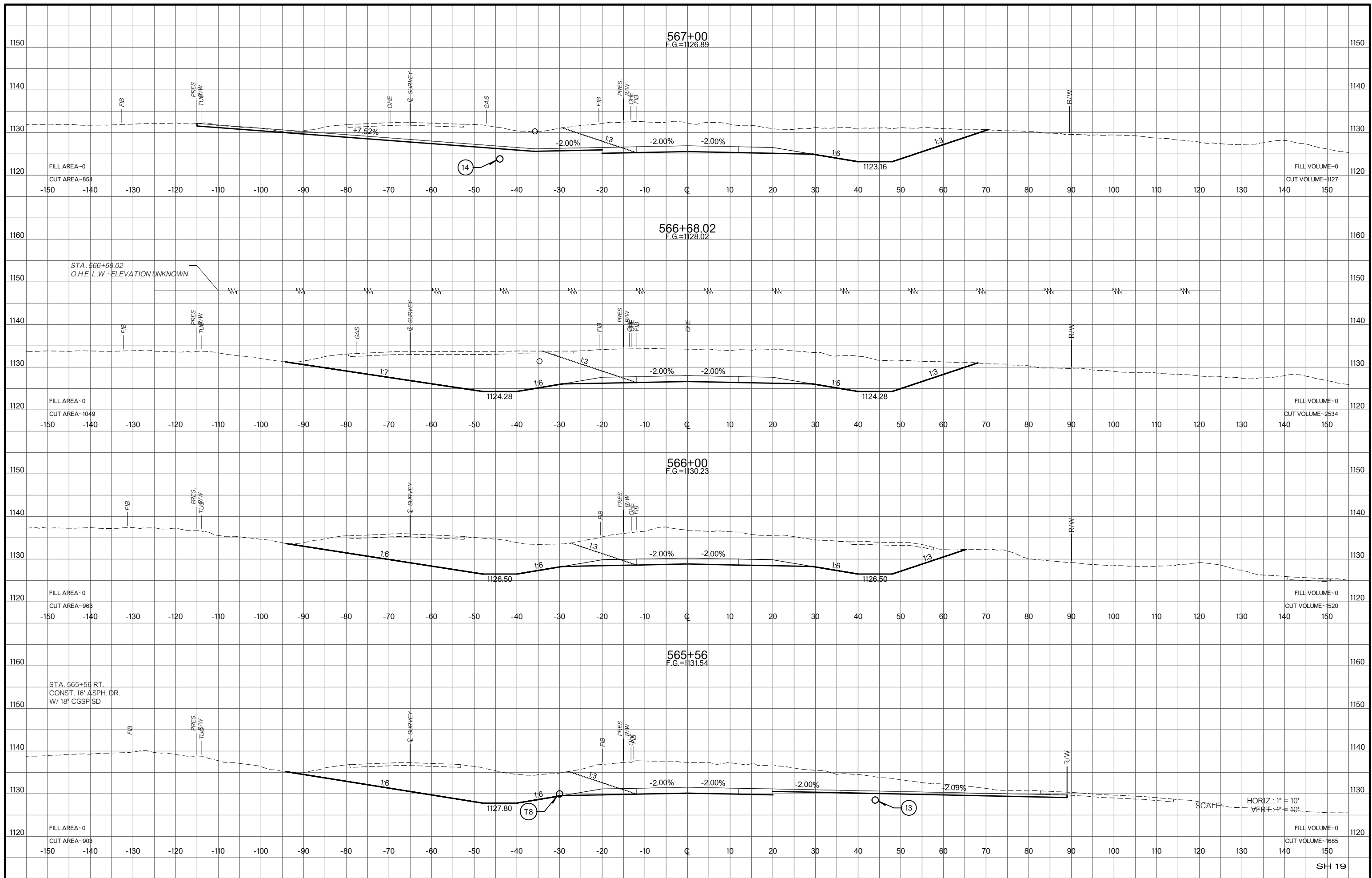
SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

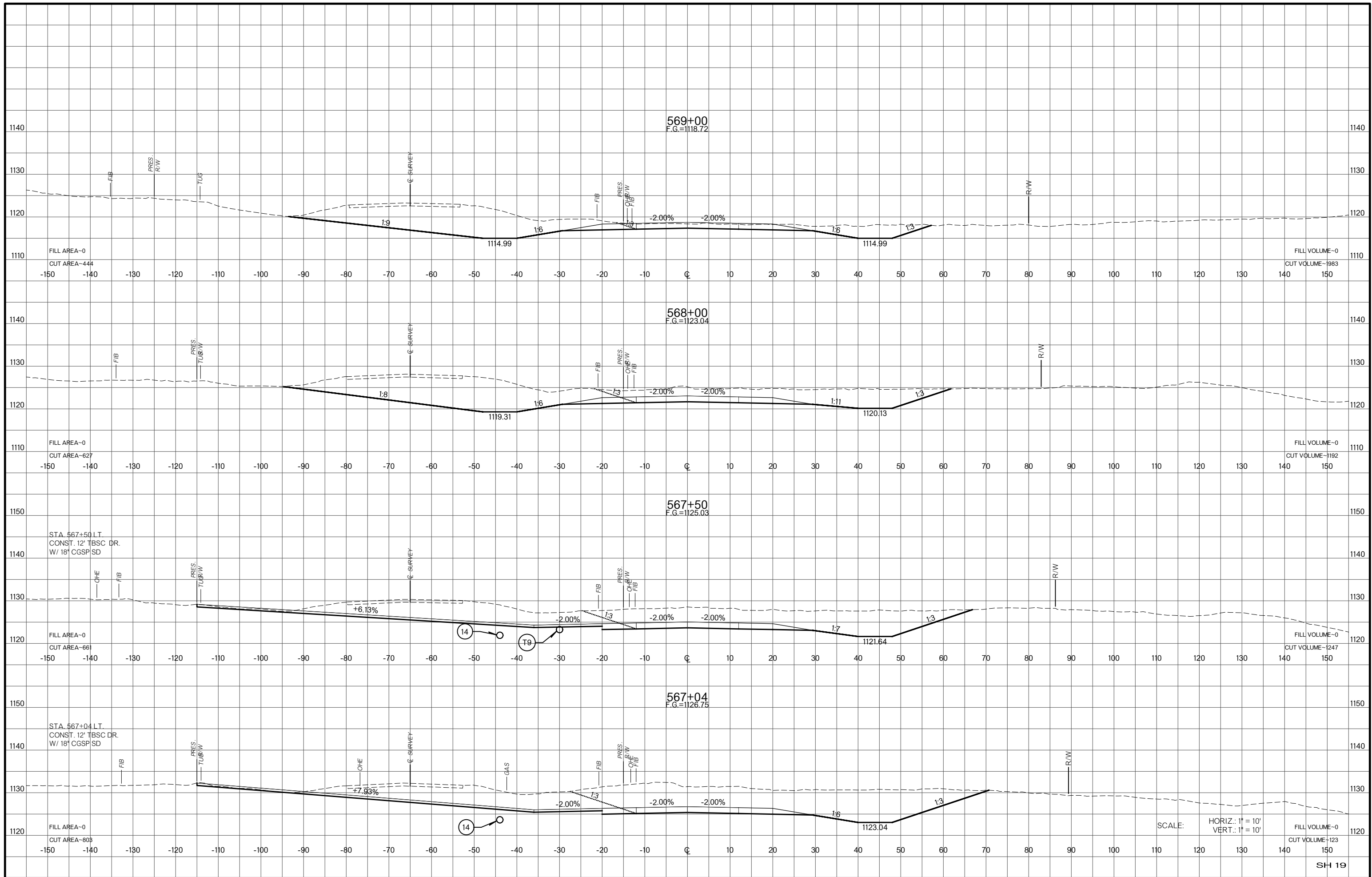
FILL VOLUME-0
CUT VOLUME-2378

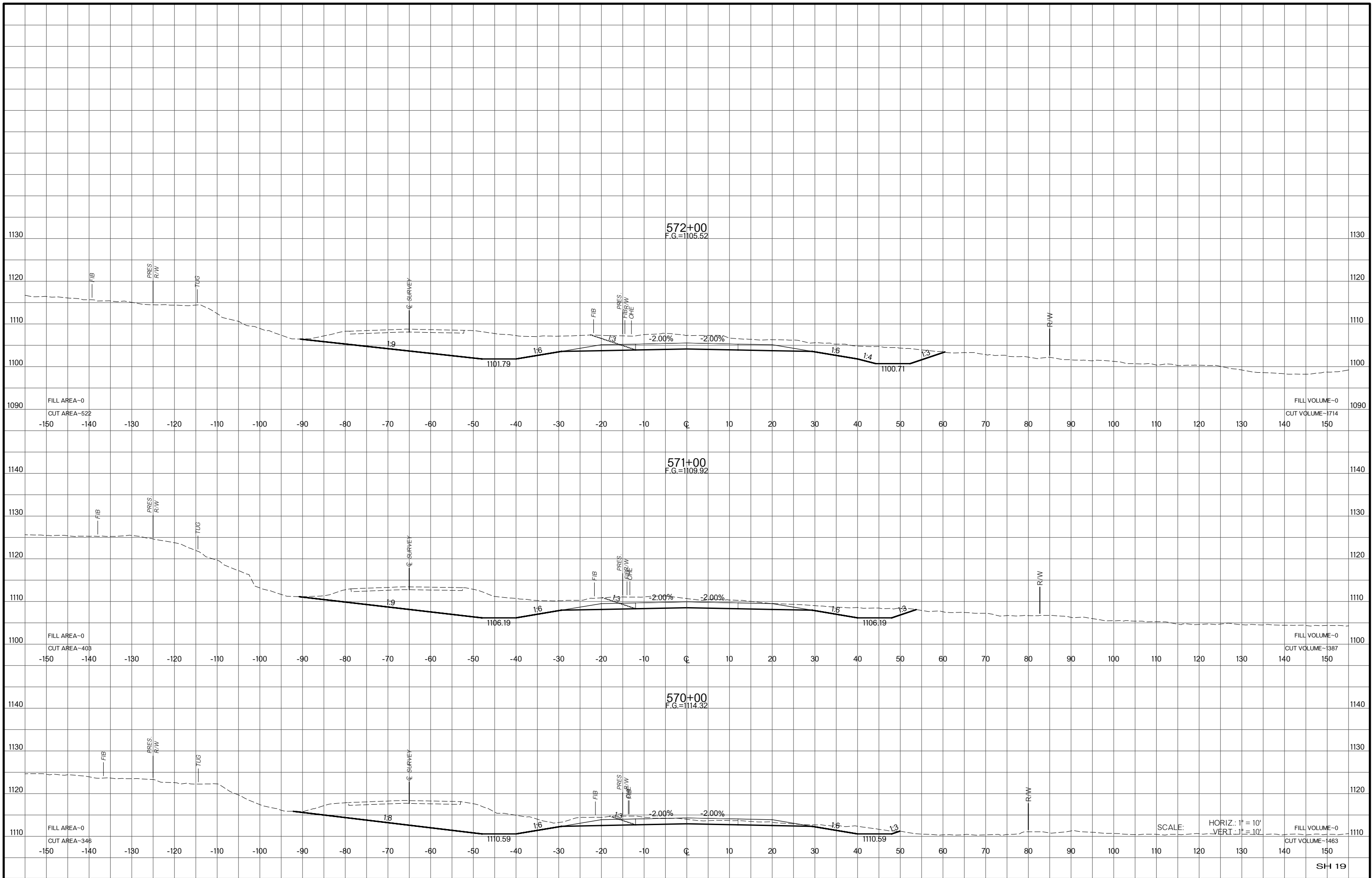
FILL VOLUME-0
CUT VOLUME-1936

FILL VOLUME-0
CUT VOLUME-1630

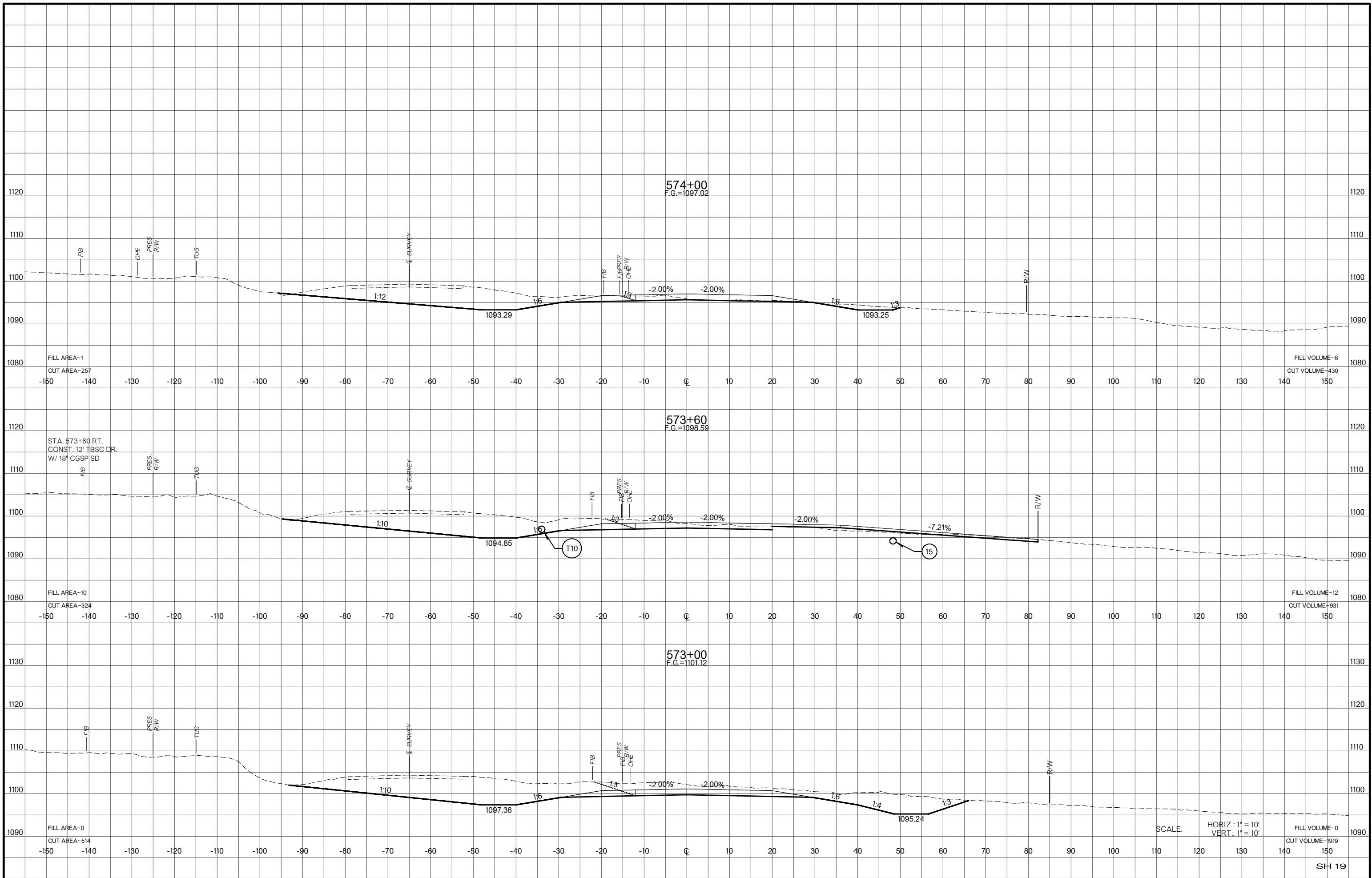
SH 19







SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'



574+00
F.G.=1097.02

573+60
F.G.=1098.59

573+00
F.G.=1101.12

FILL AREA-1
CUT AREA-257

FILL VOLUME-8
CUT VOLUME-430

FILL AREA-10
CUT AREA-324

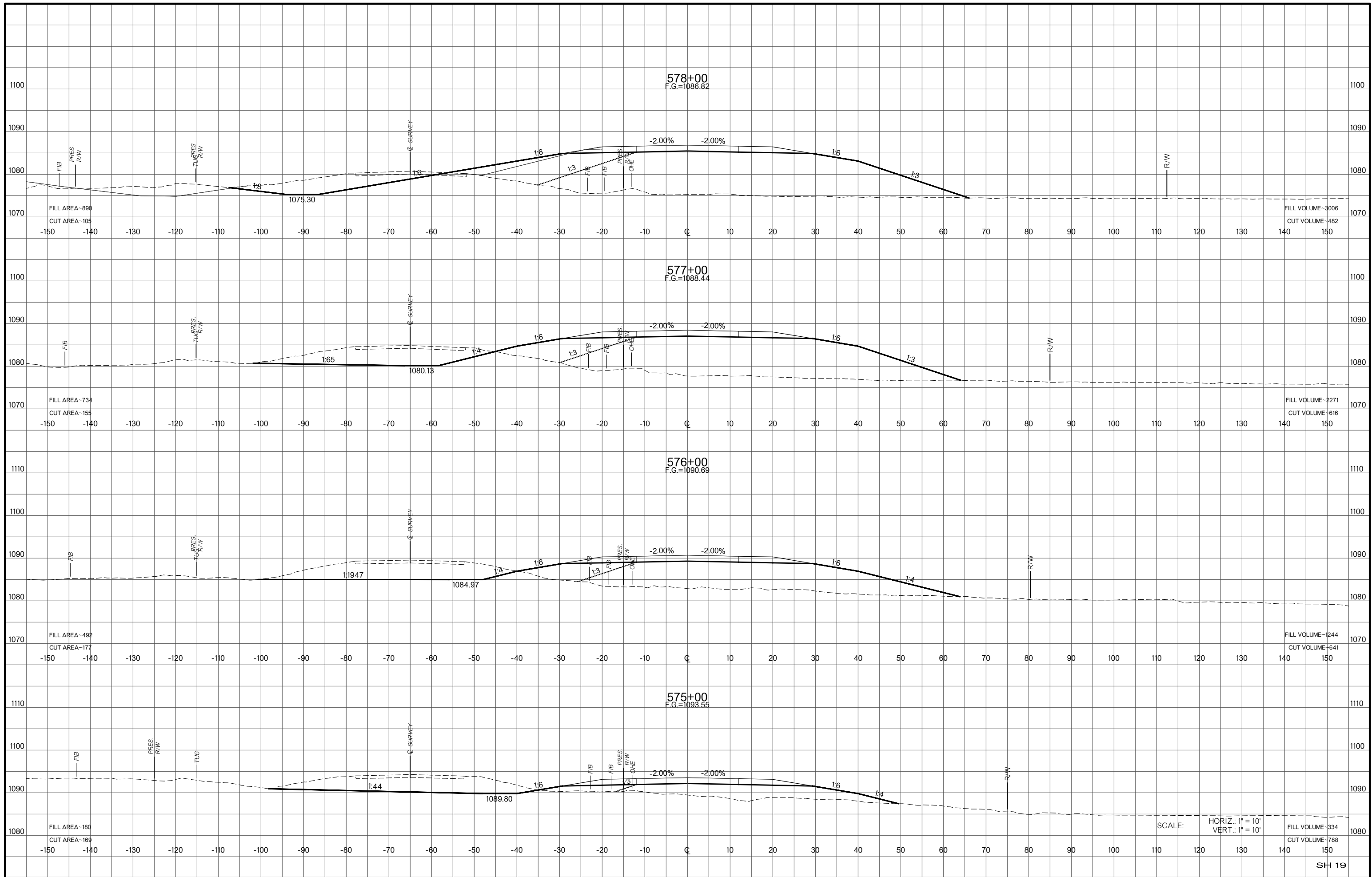
FILL VOLUME-12
CUT VOLUME-931

FILL AREA-0
CUT AREA-514

FILL VOLUME-0
CUT VOLUME-1919

SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

SH 19



FILL AREA-890
CUT AREA-105

FILL VOLUME-3006
CUT VOLUME-482

FILL AREA-734
CUT AREA-155

FILL VOLUME-2271
CUT VOLUME-616

FILL AREA-492
CUT AREA-177

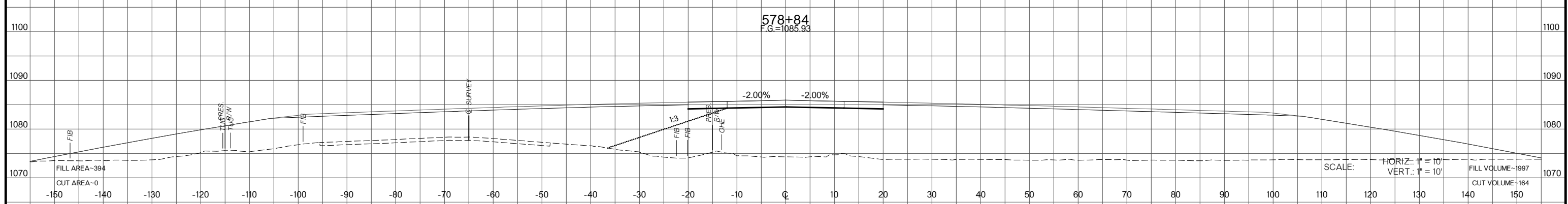
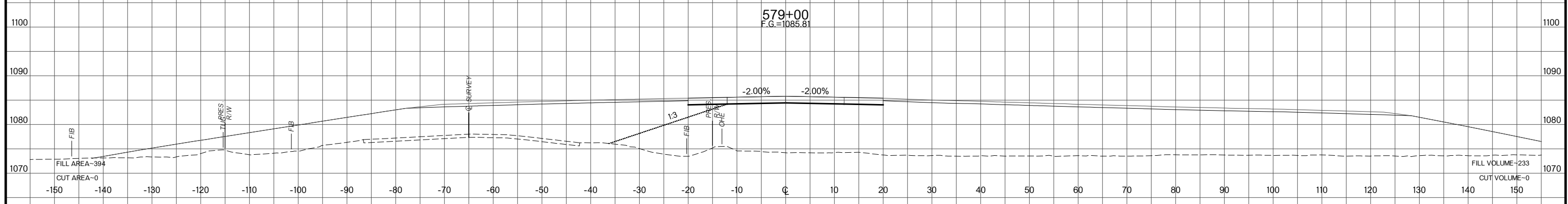
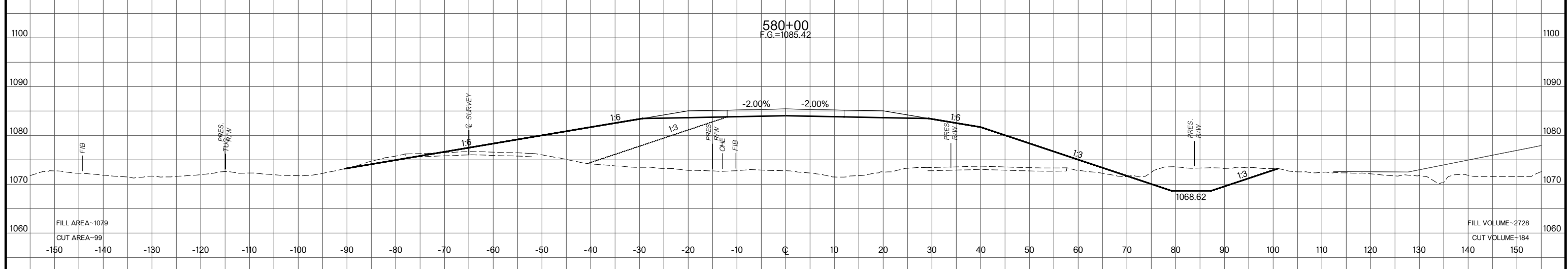
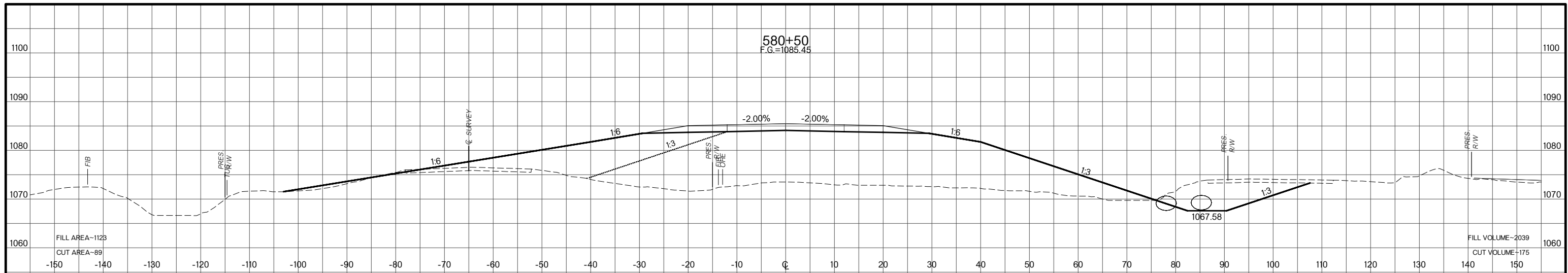
FILL VOLUME-1244
CUT VOLUME-641

FILL AREA-180
CUT AREA-169

FILL VOLUME-334
CUT VOLUME-788

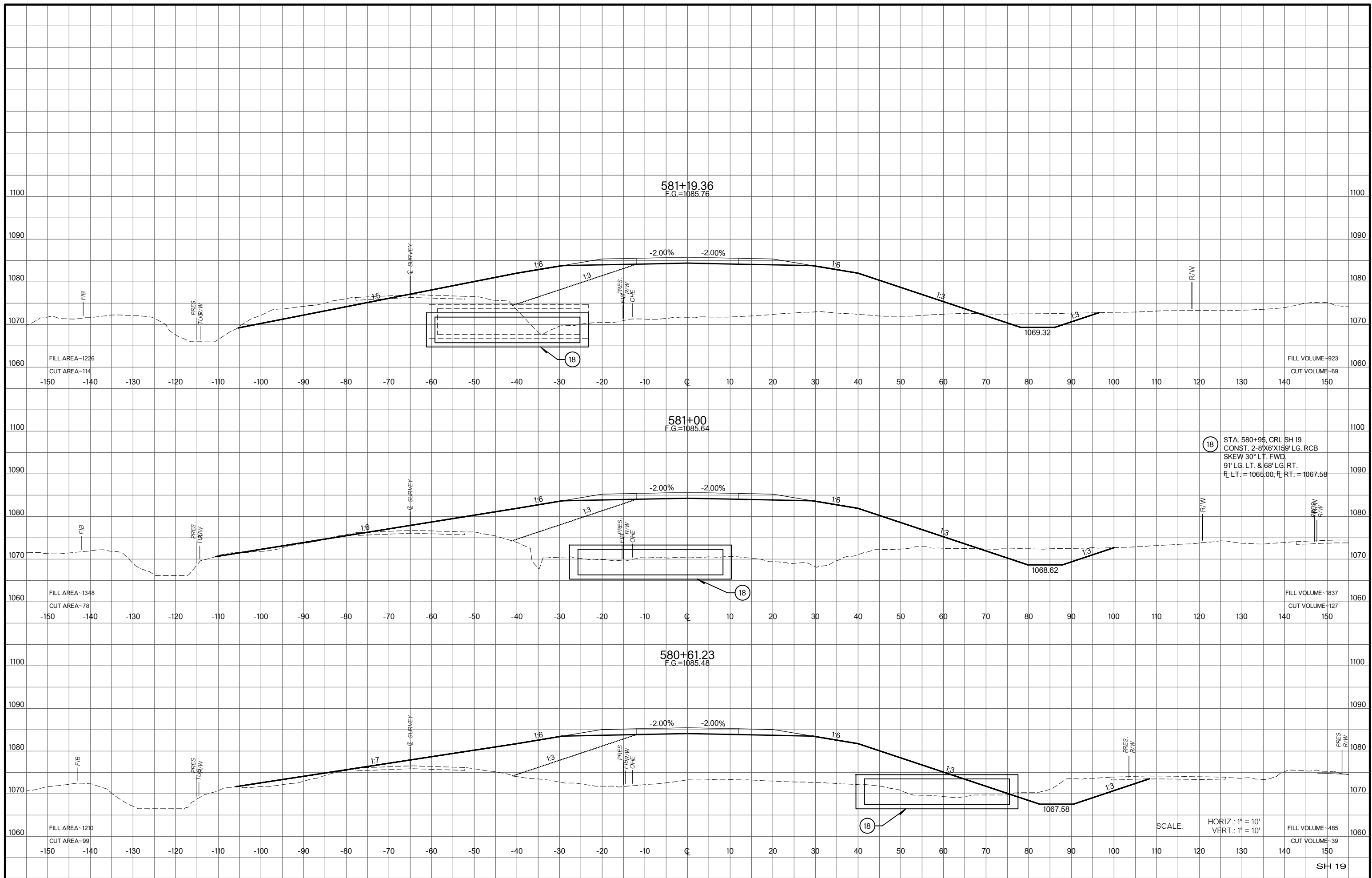
SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

SH 19



SH 19

GRADY COUNTY

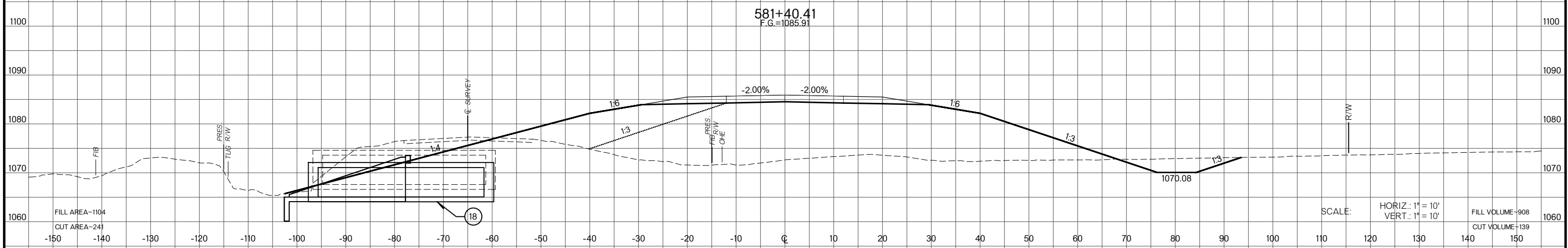
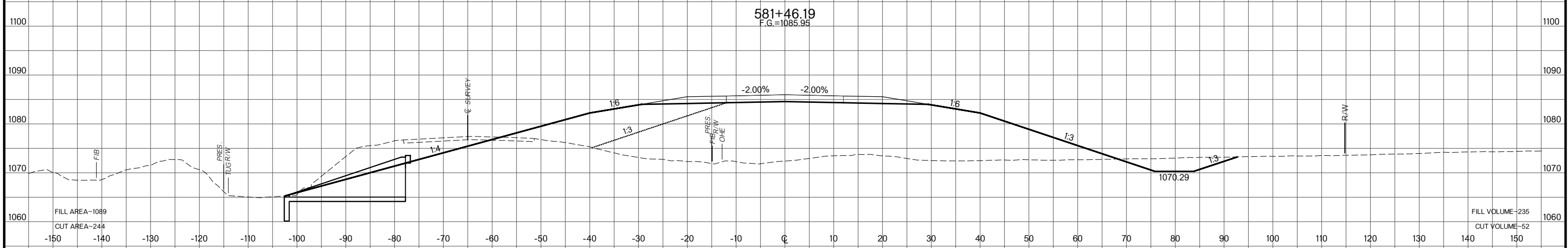


18 STA. 580+95, CRL SH 19
 CONST. 2-8'X6'X159' LG. RCB
 SKEW 30° LT. FWD.
 9' LG. LT. & 68' LG. RT.
 FLT. = 1065.00, FRT. = 1067.58

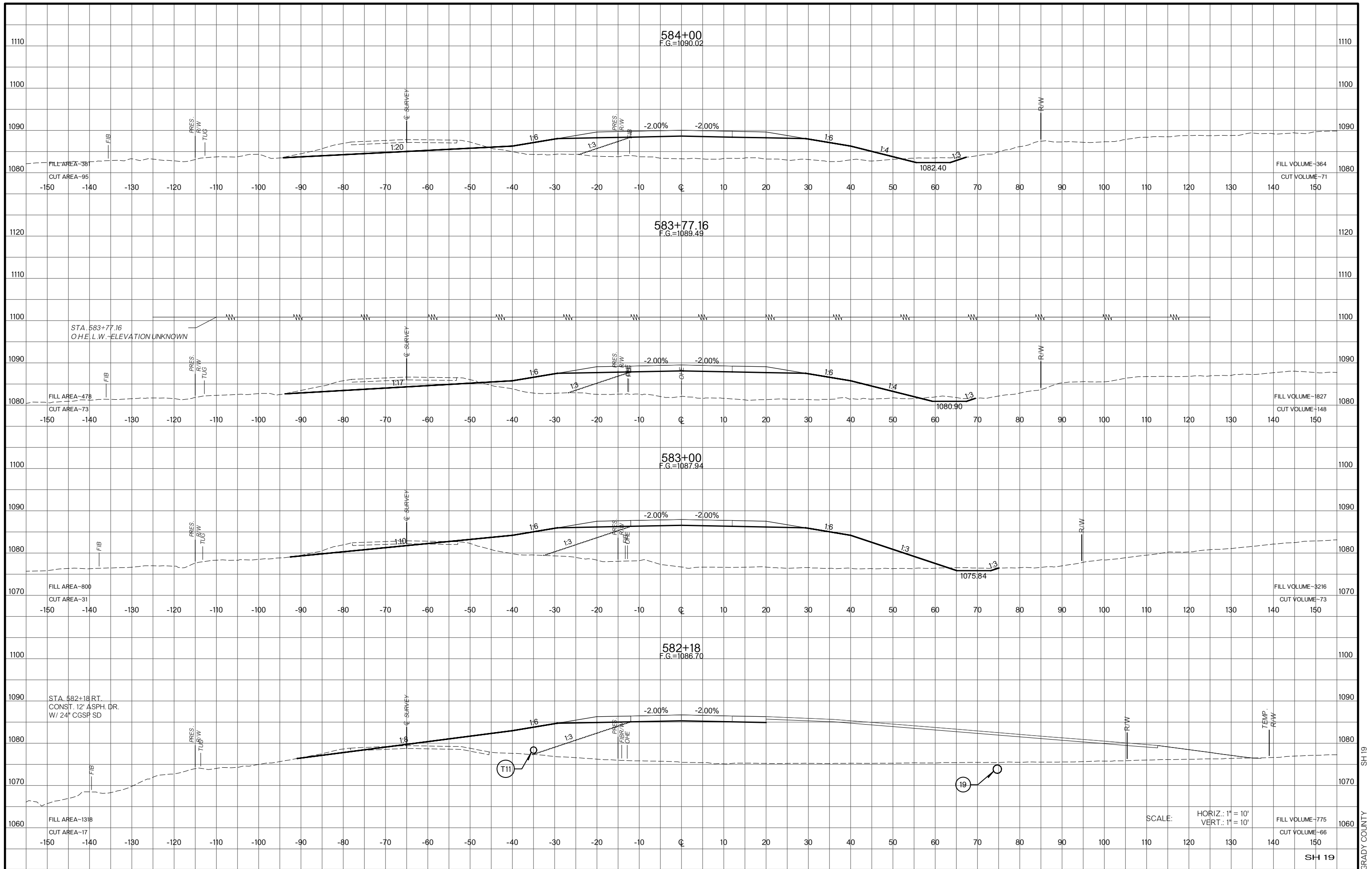
SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

FILL VOLUME-485
 CUT VOLUME-39

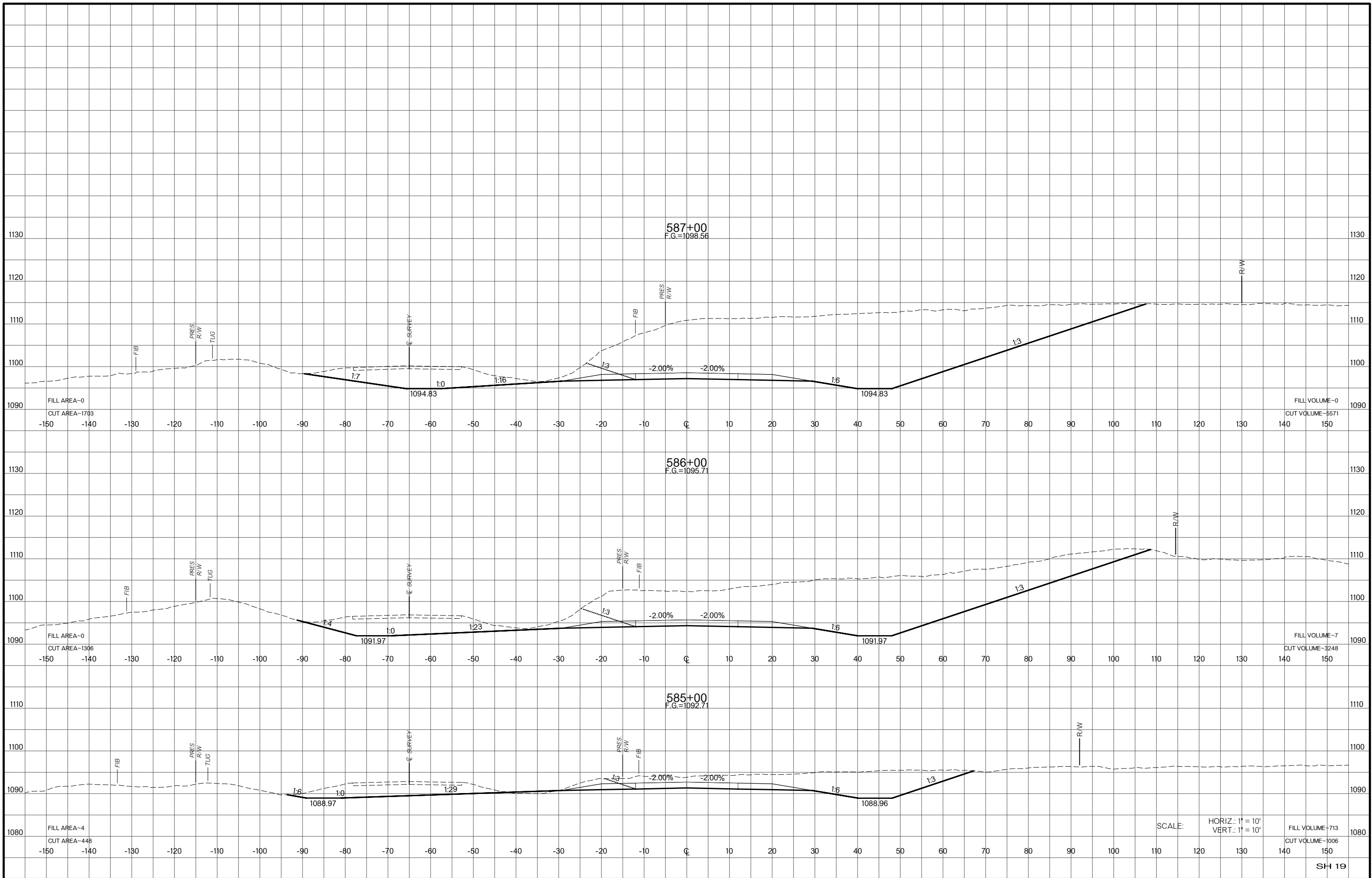
SH 19



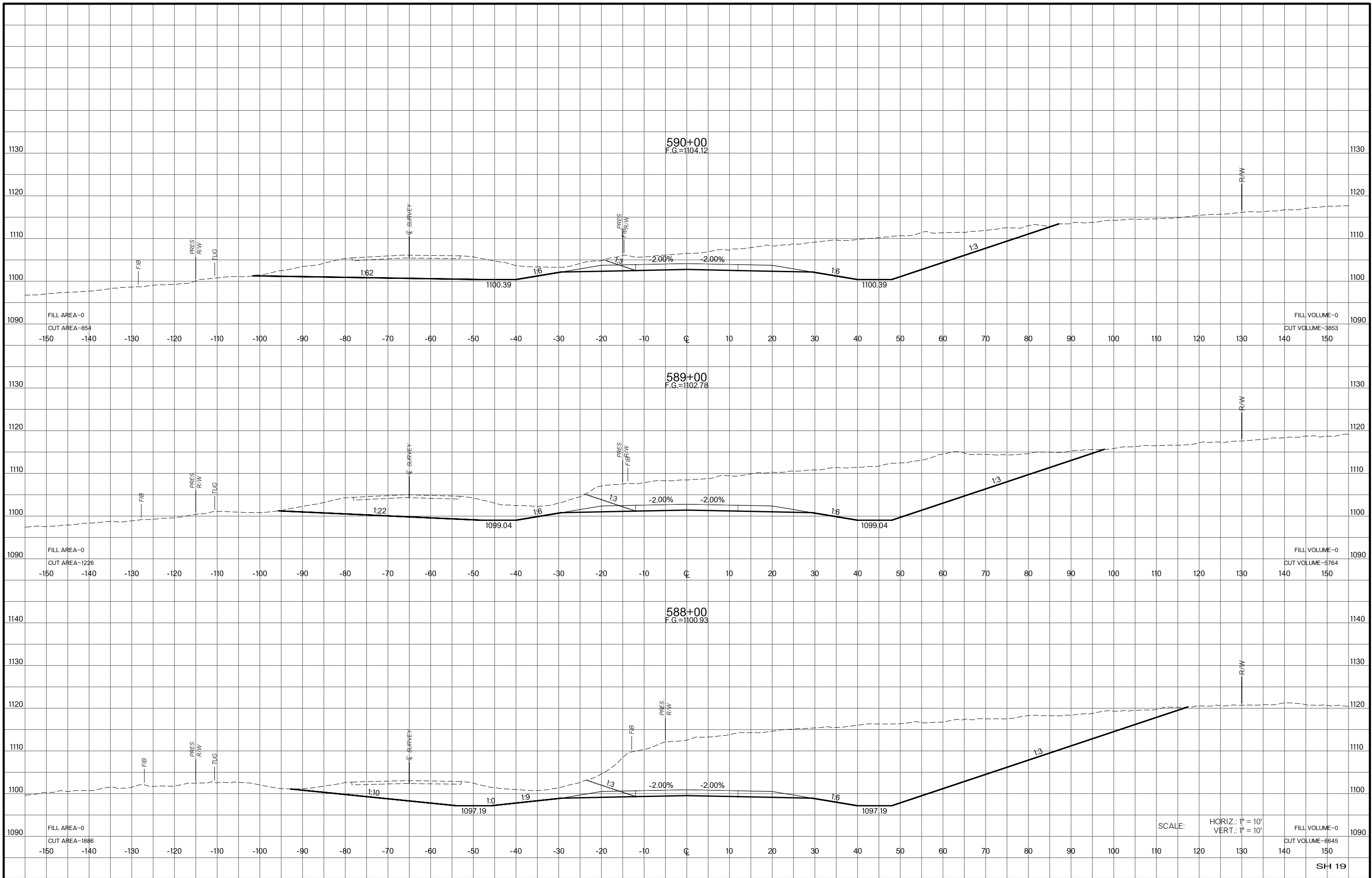
SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

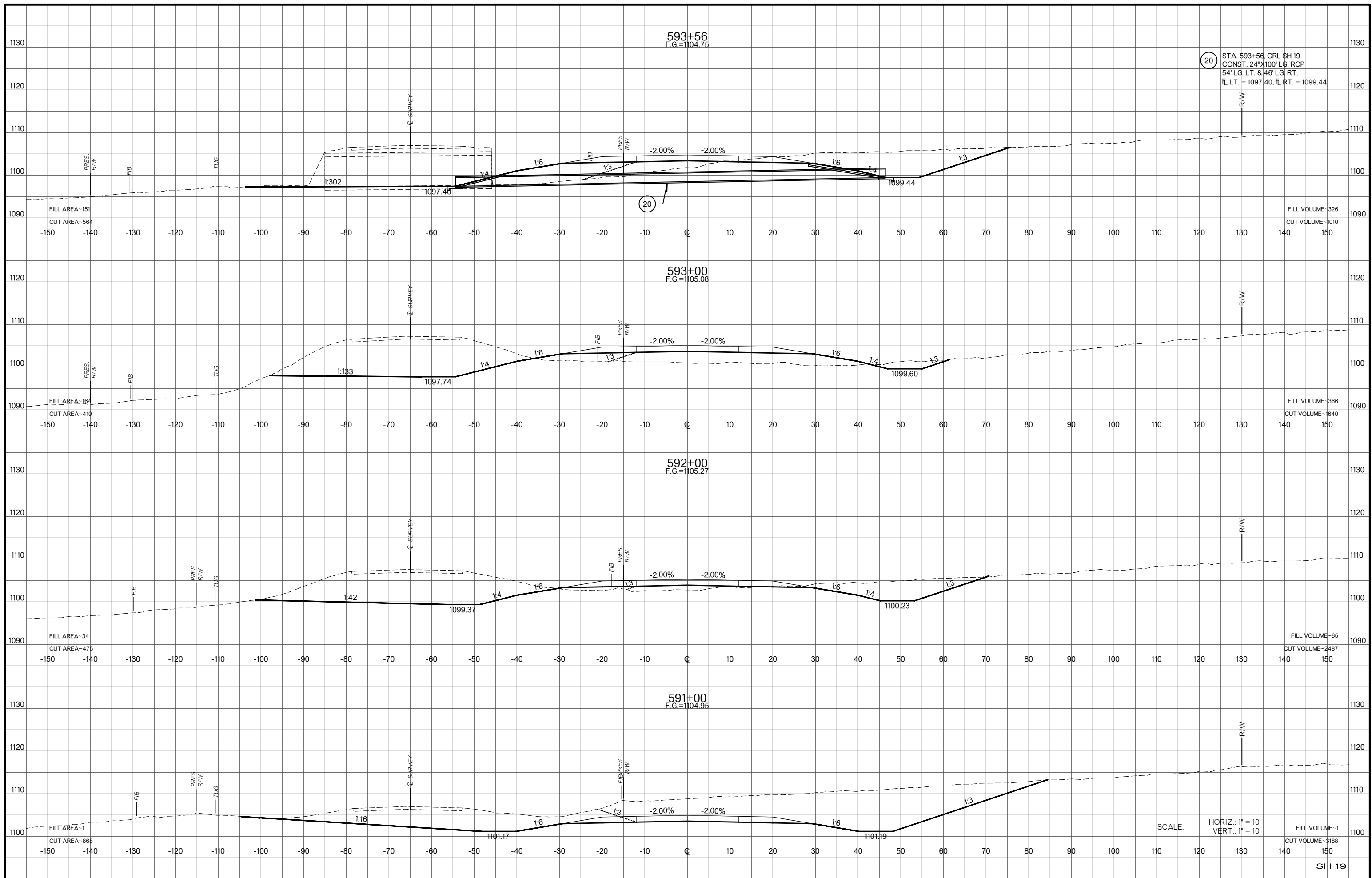


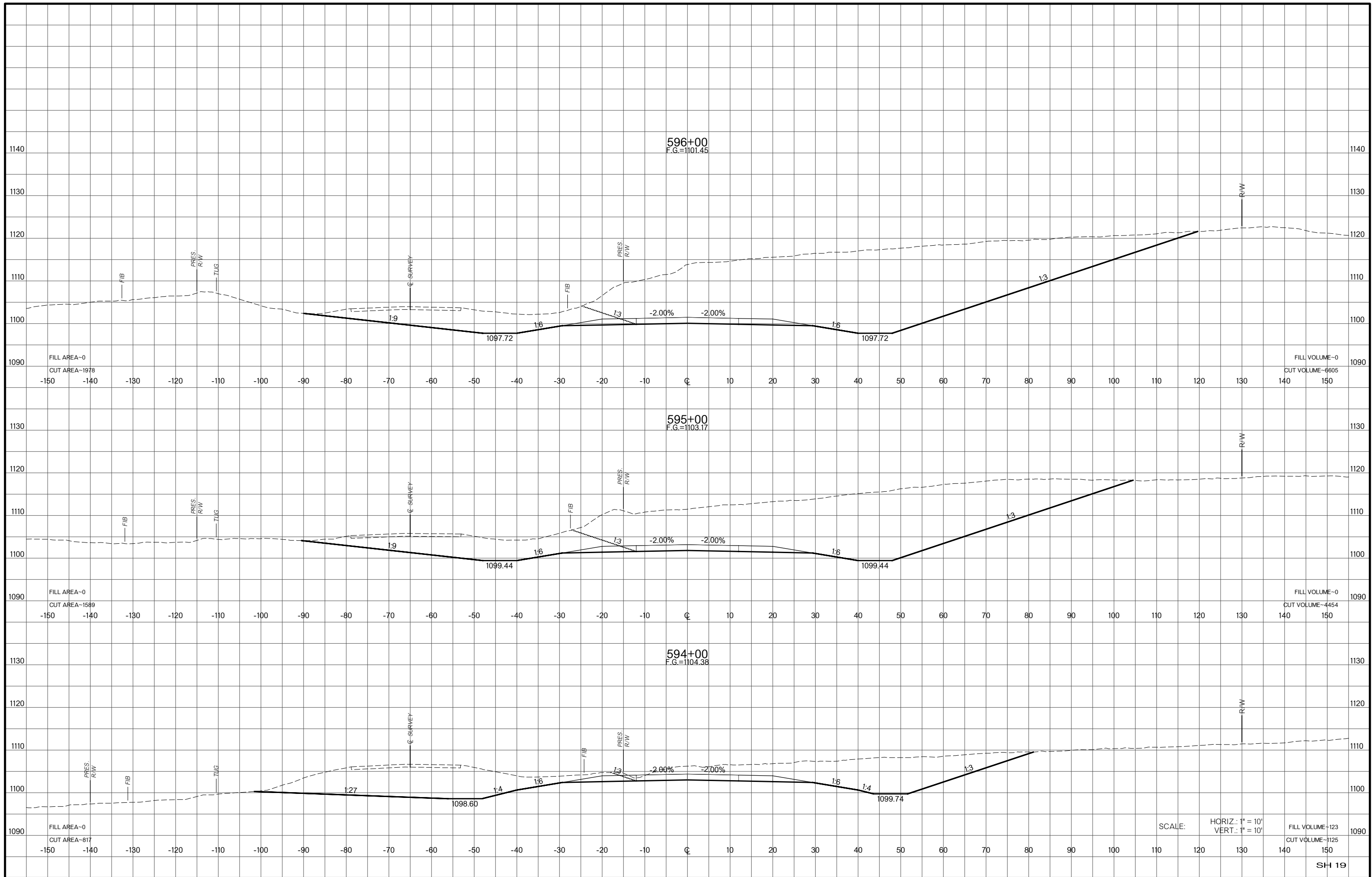
SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'



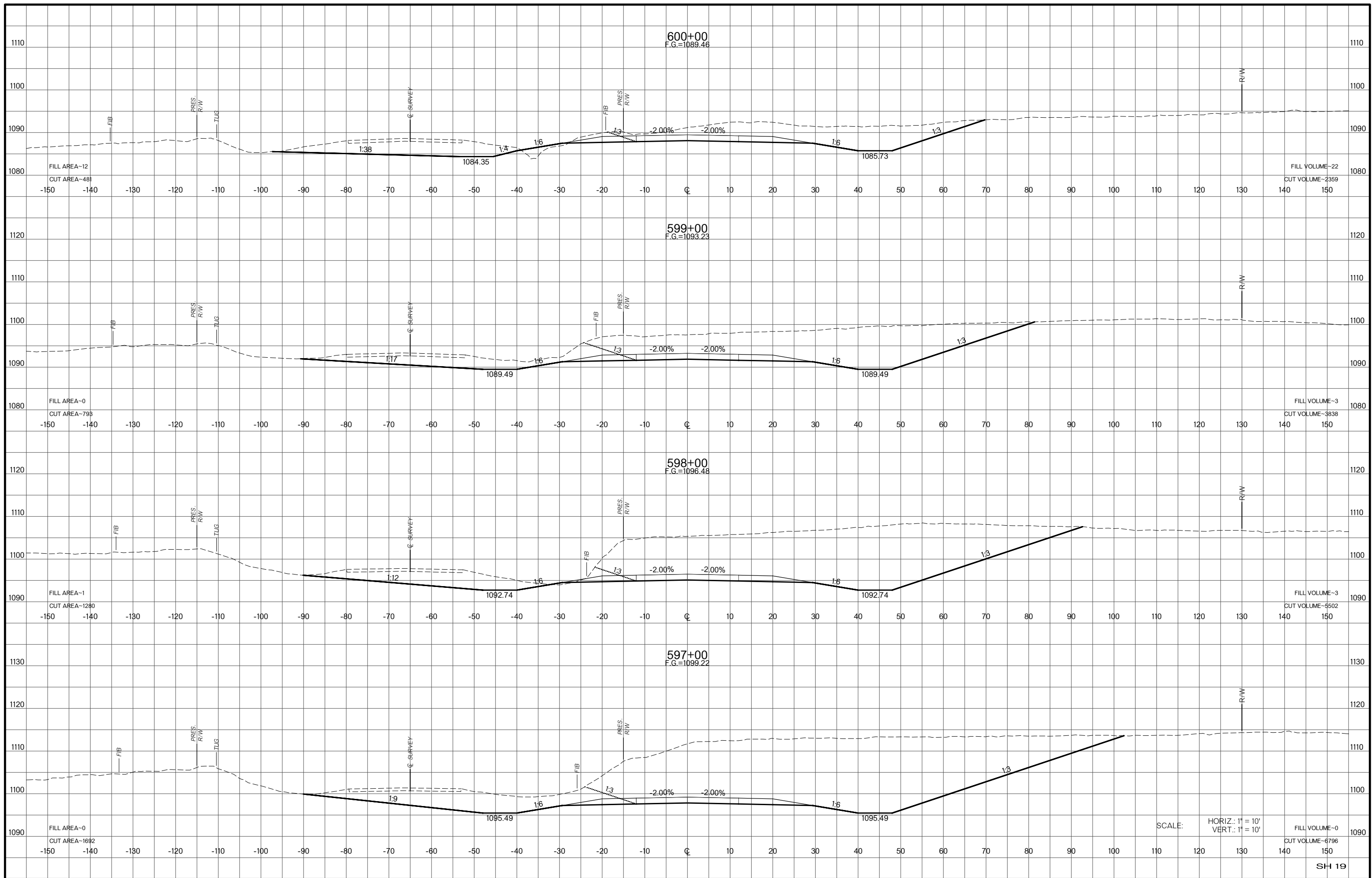
SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'





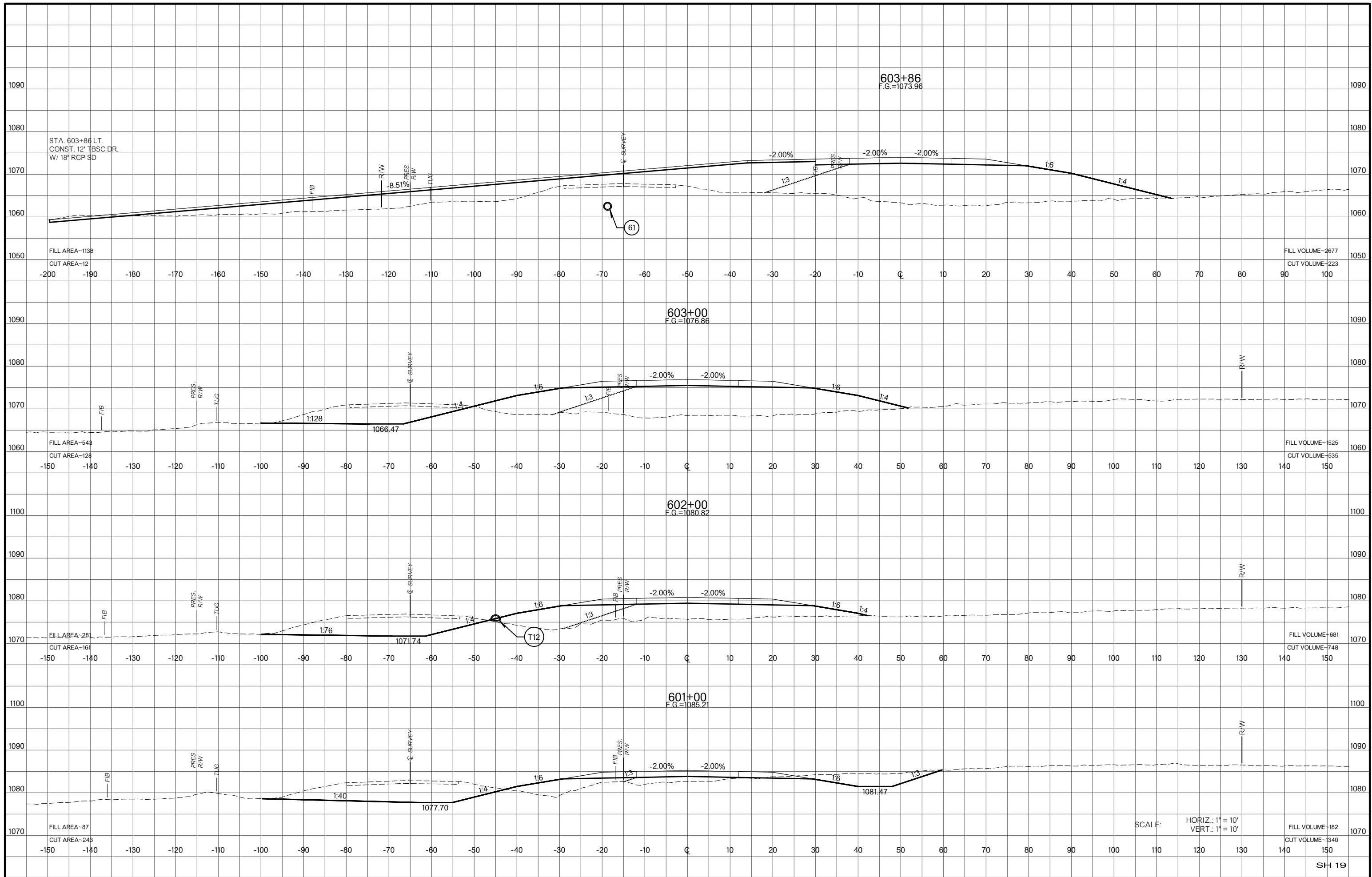


SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

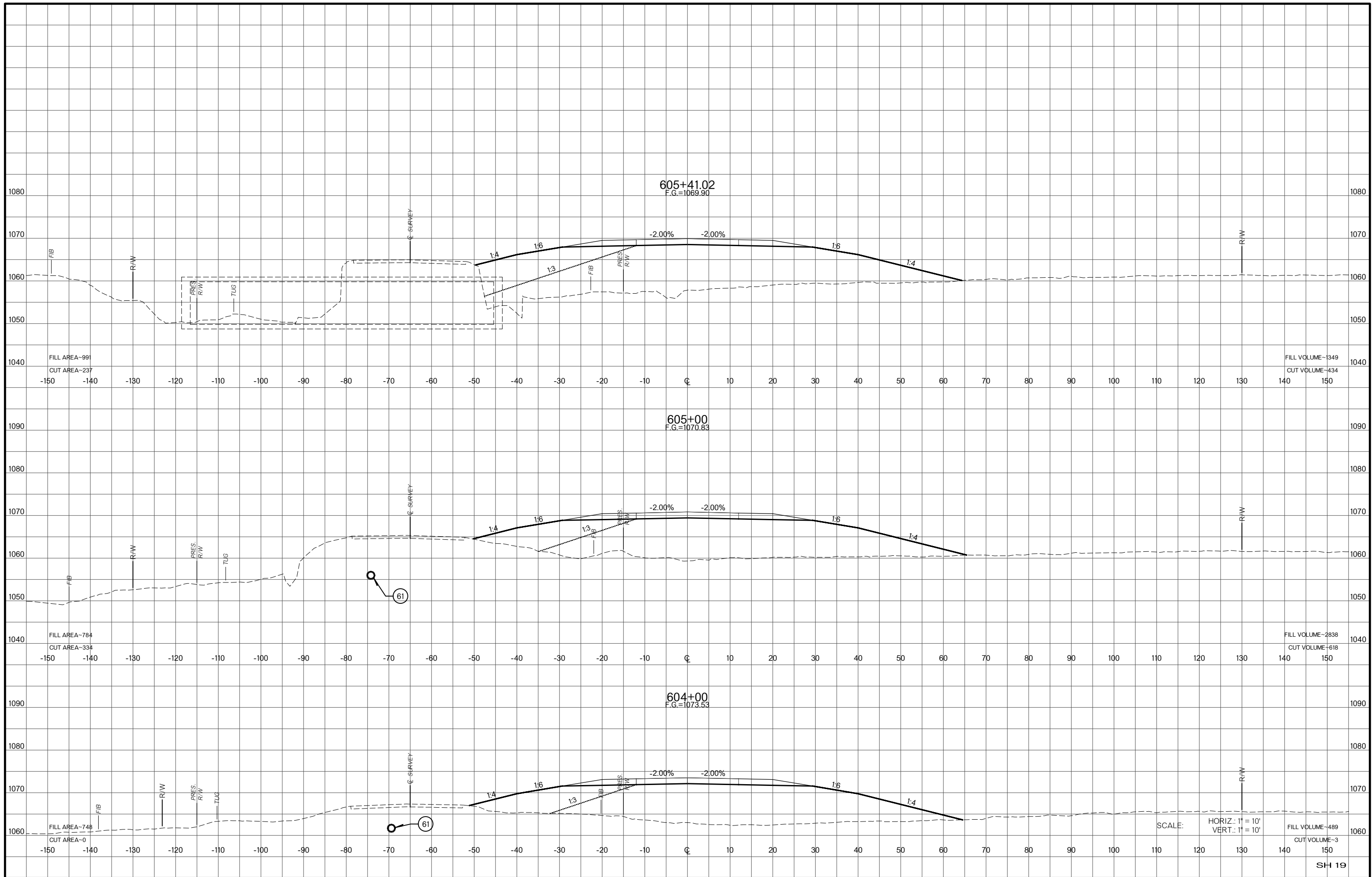


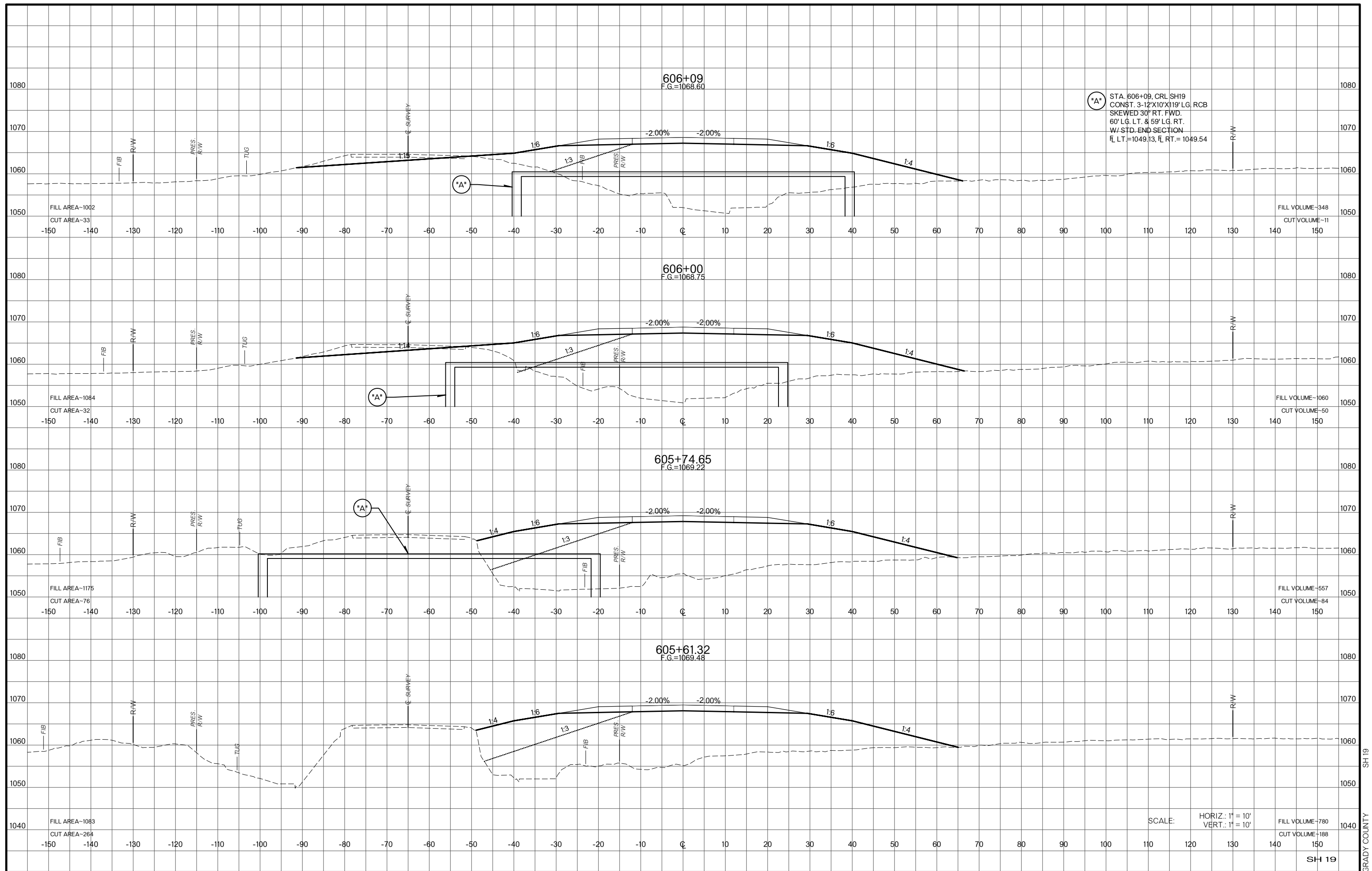
SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

SH 19



SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'



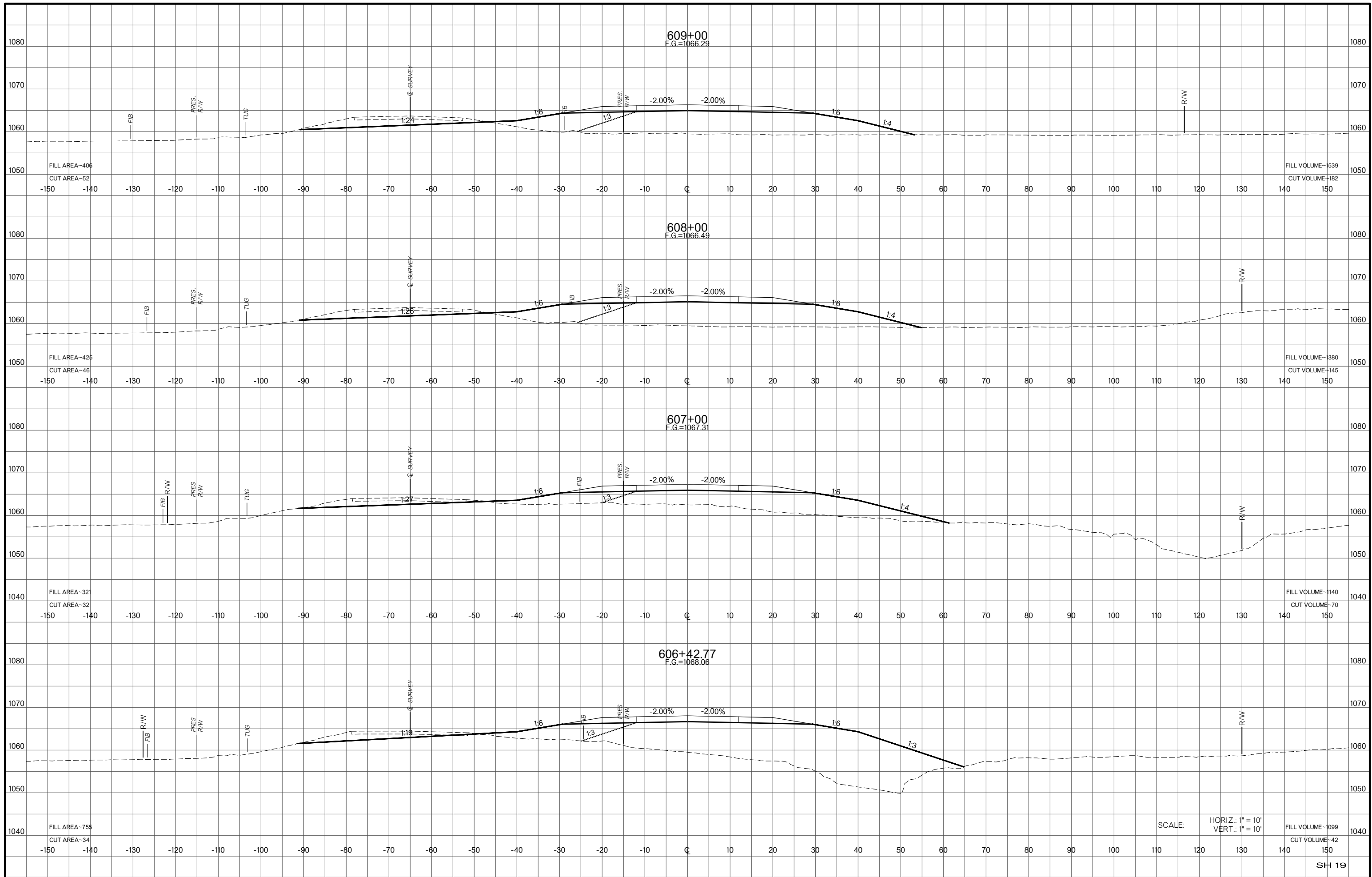


"A" STA. 606+09, CRL SH19
 CONST. 3-12'X10'X119' LG. RCB
 SKEWED 30° RT. FWD.
 60' LG. LT. & 59' LG. RT.
 W/ STD. END SECTION
 FL LT. = 1049.13, FL RT. = 1049.54

SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

FILL VOLUME = 780
 CUT VOLUME = 188

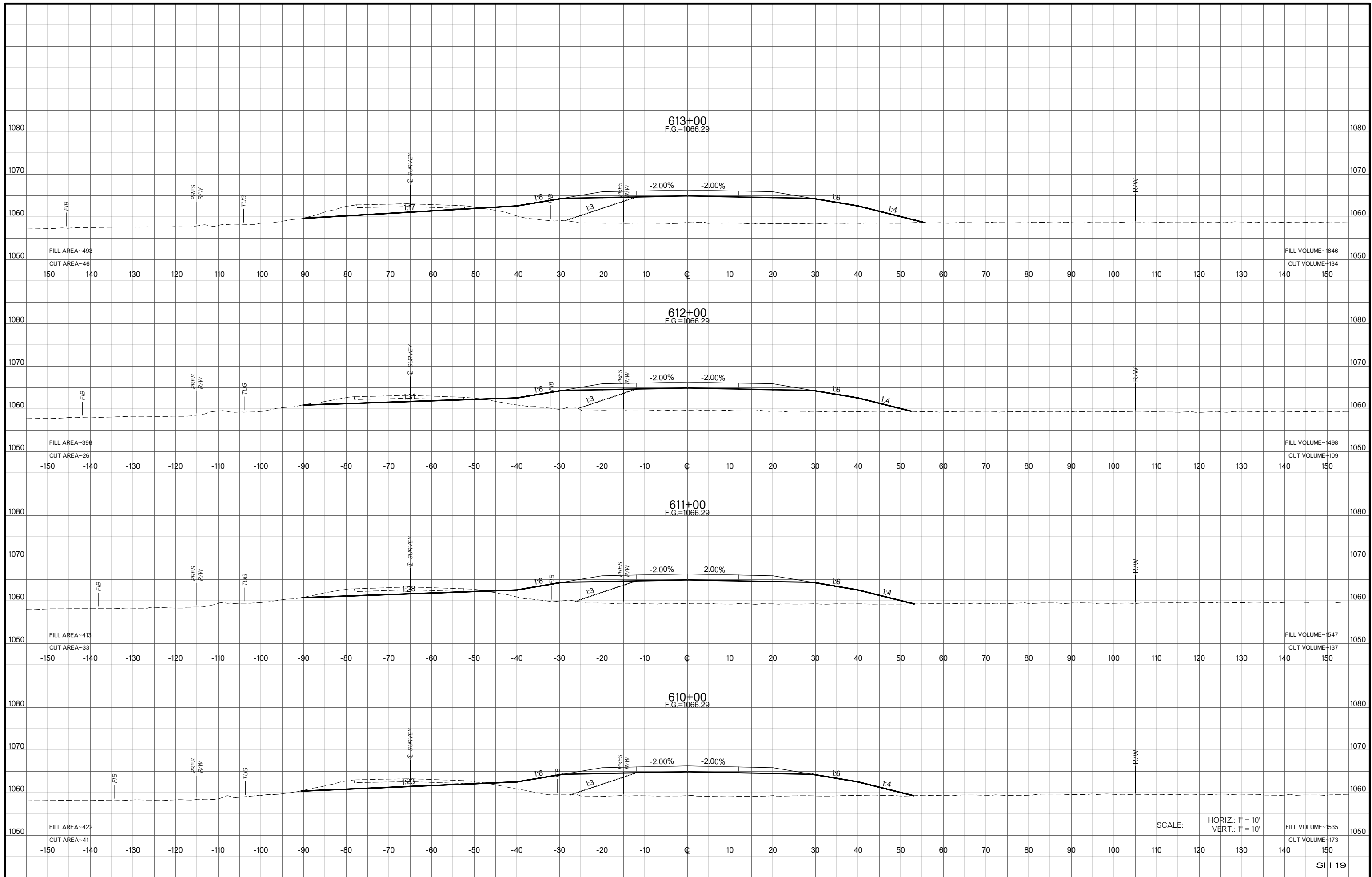
SH 19



SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

SH 19

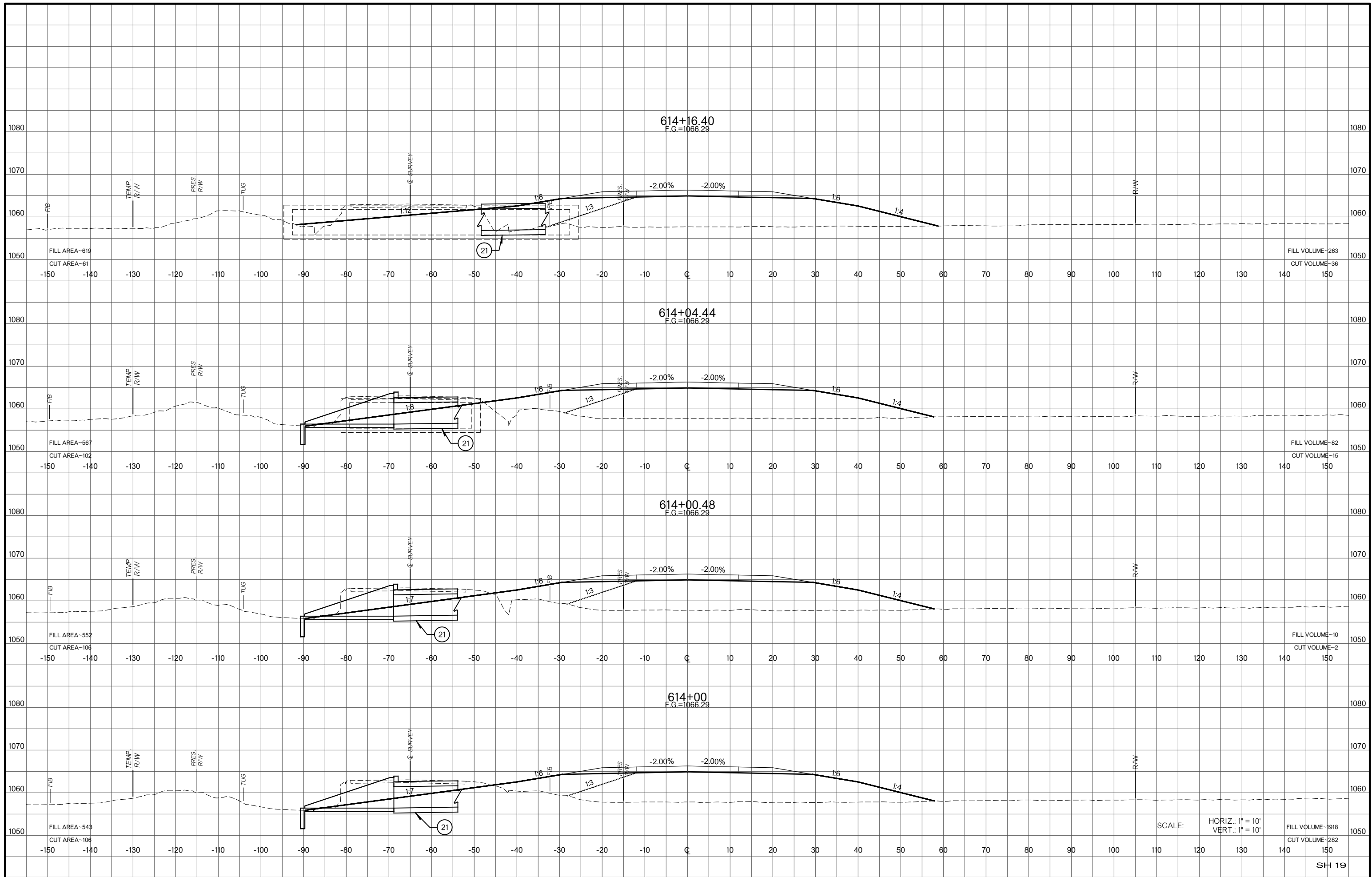
GRADY COUNTY

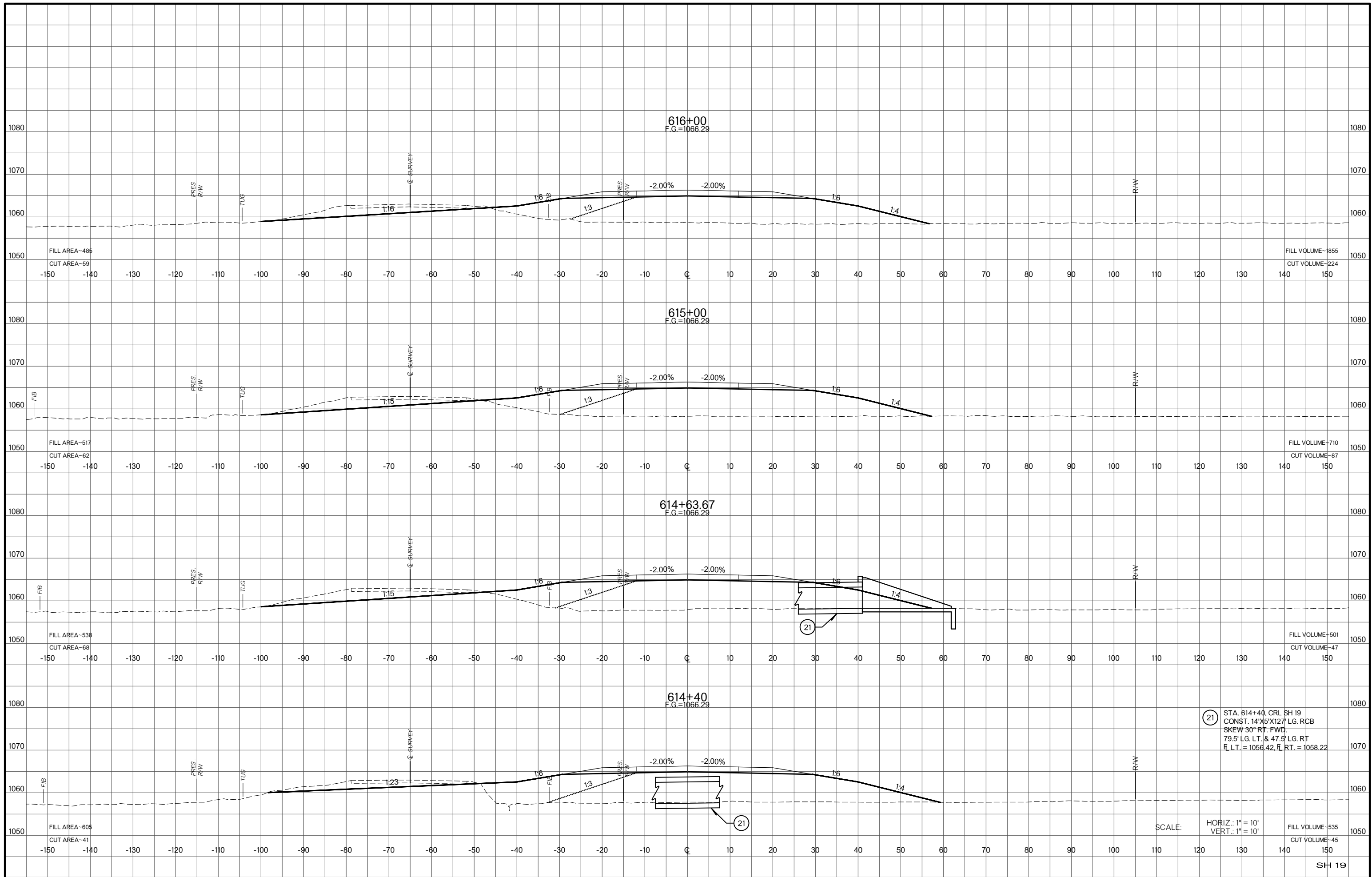


SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

SH 19

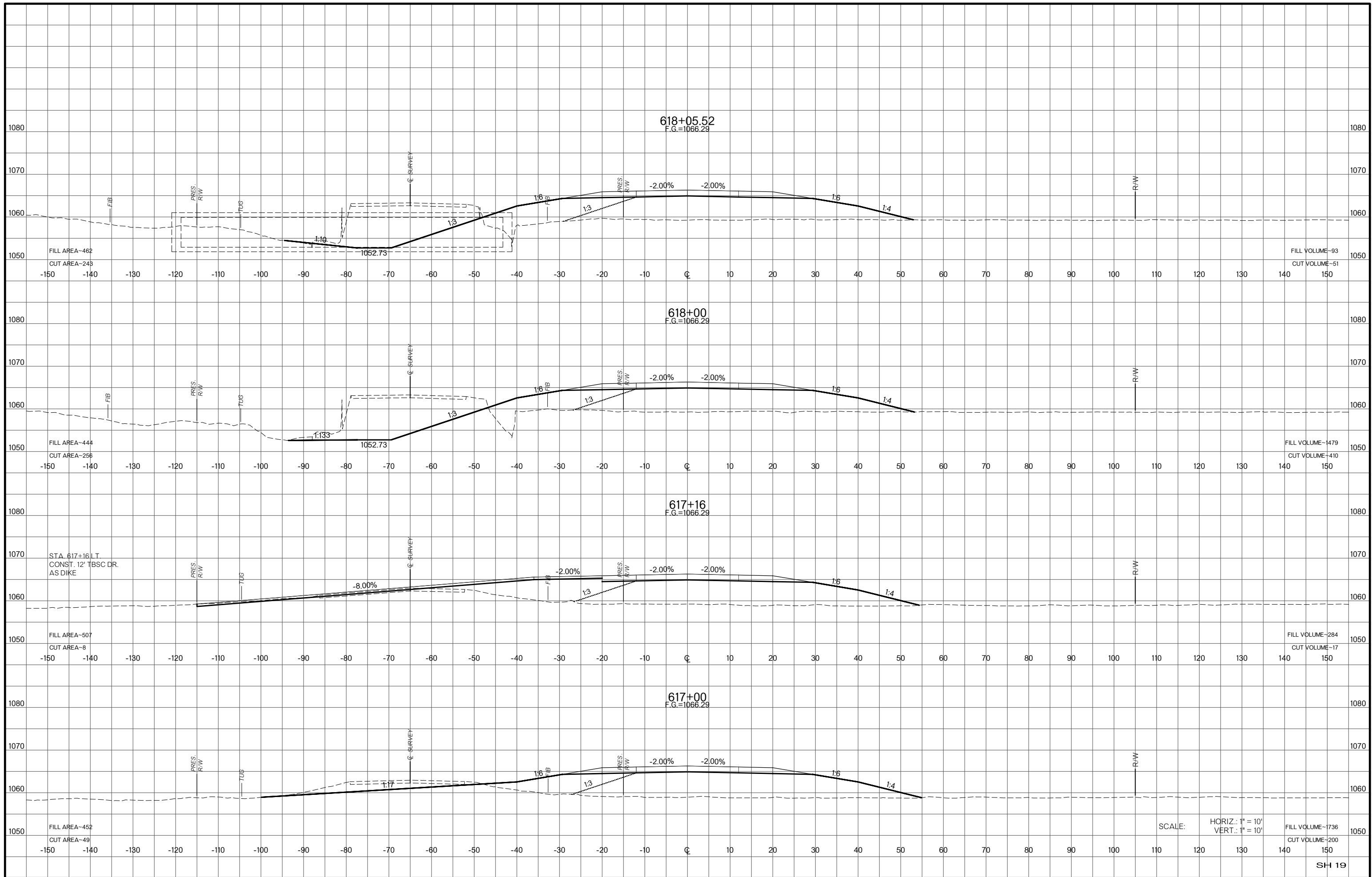
GRADY COUNTY

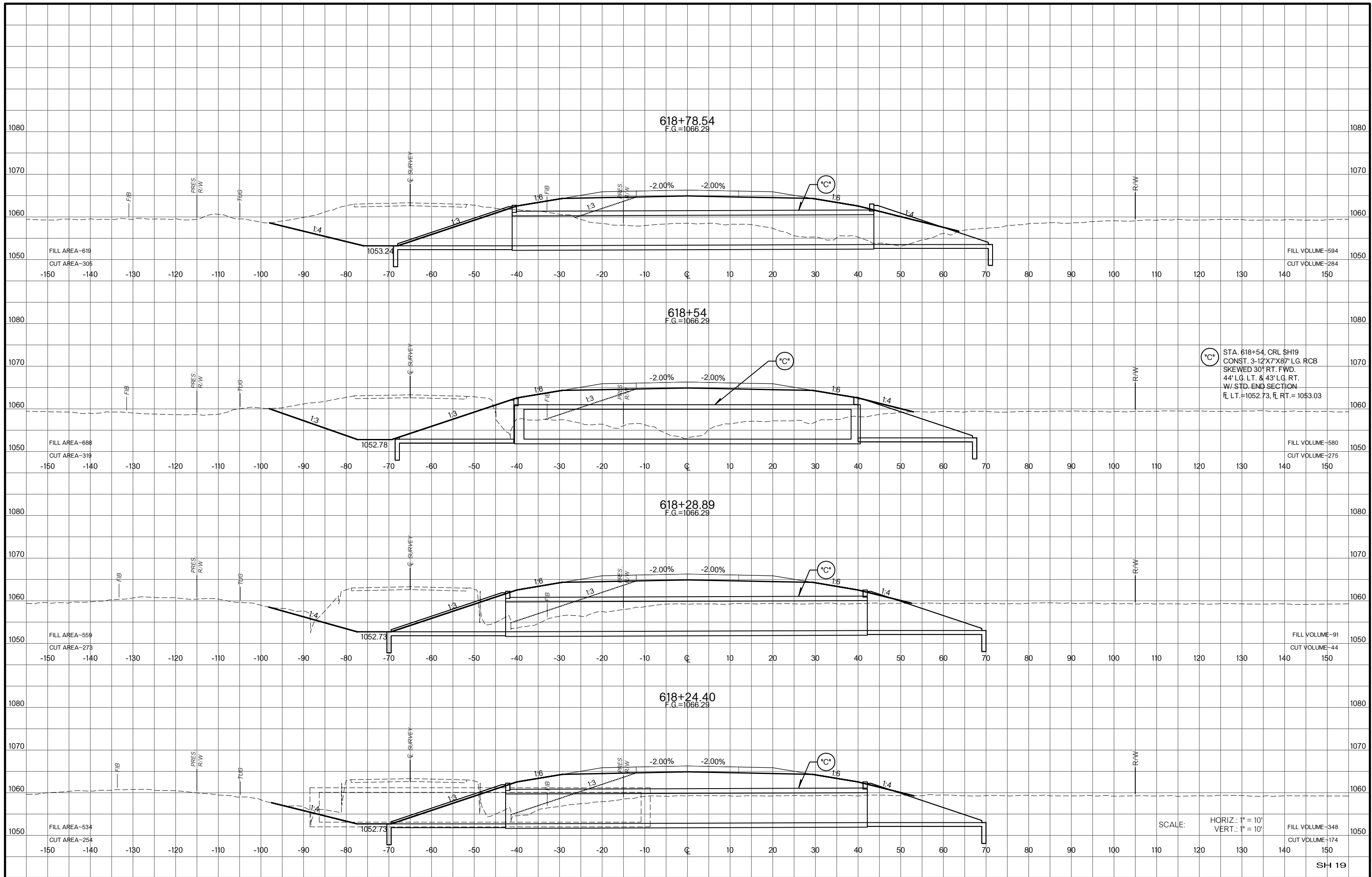




21 STA. 614+40, CRL SH 19
 CONST. 14'x5'x127' LG. RCB
 SKEW 30° RT. FWD.
 79.5' LG. LT. & 47.5' LG. RT
 F.L.T. = 1056.42, F.R.T. = 1058.22

SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'





618+78.54
F.G.=1066.29

618+54
F.G.=1066.29

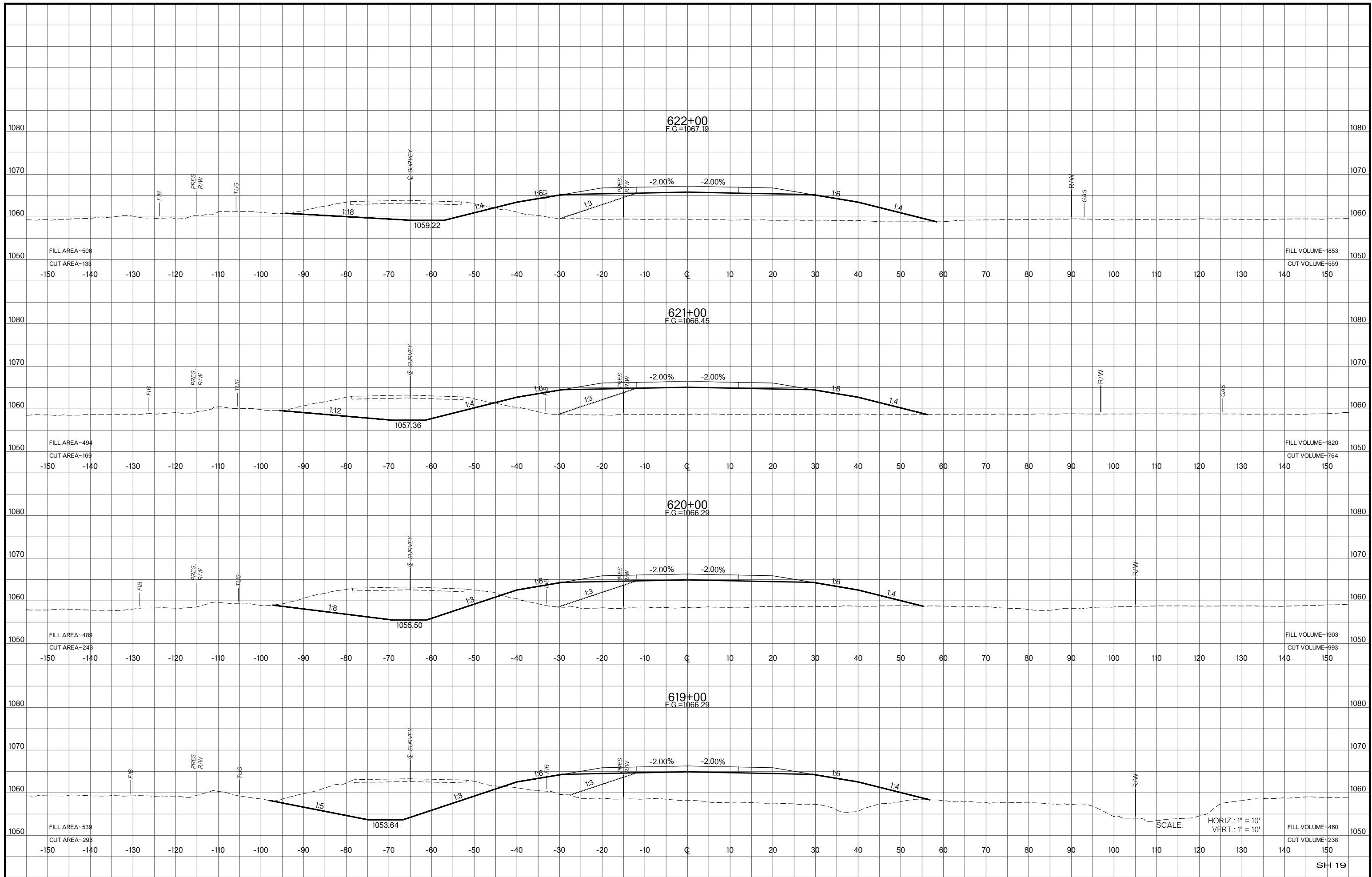
618+28.89
F.G.=1066.29

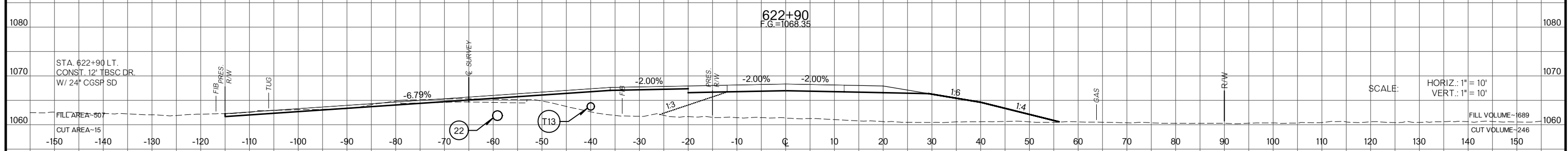
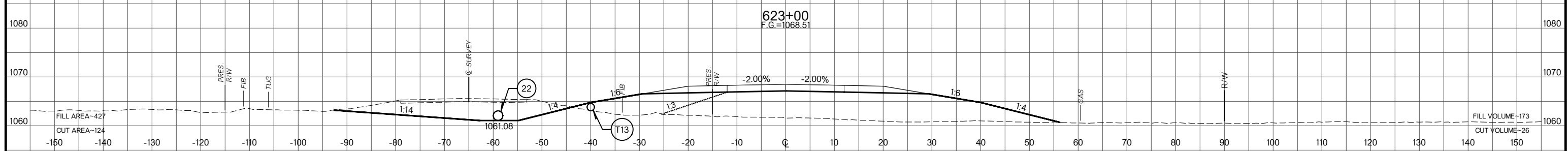
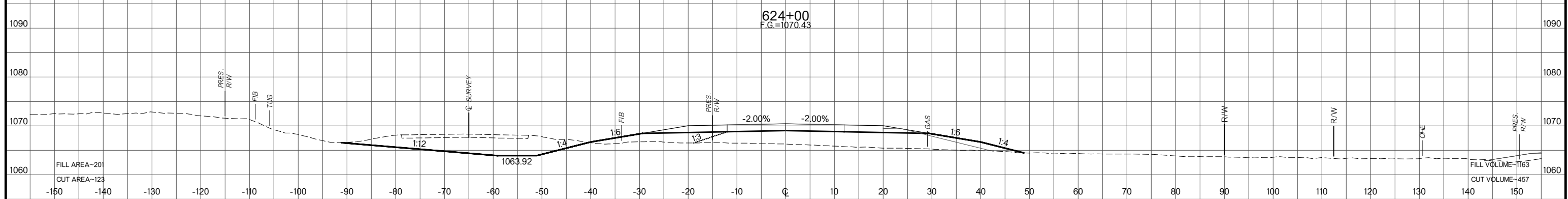
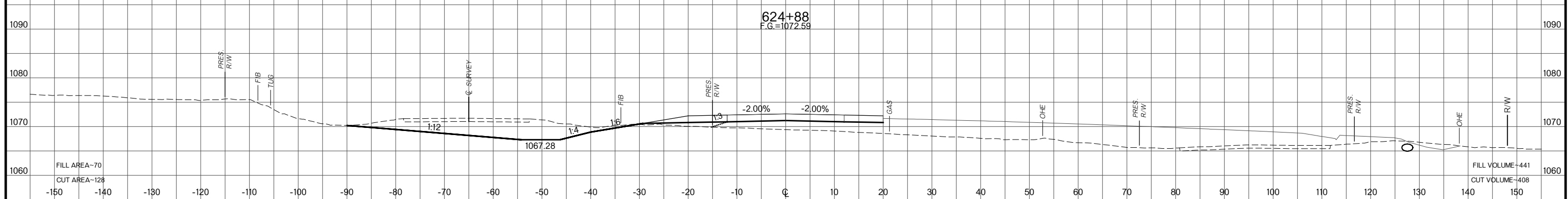
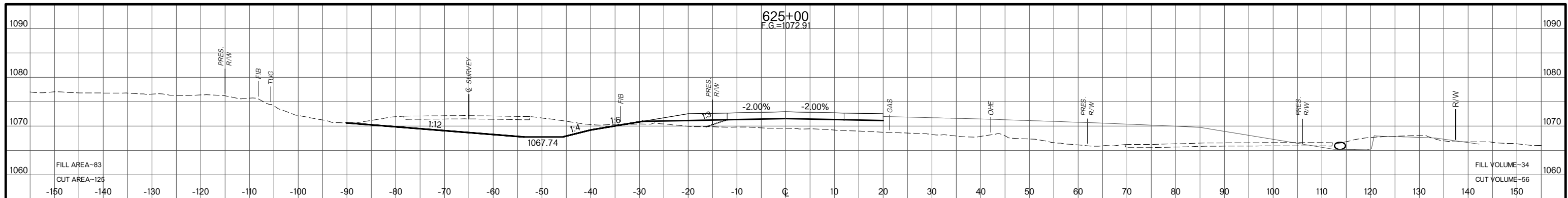
618+24.40
F.G.=1066.29

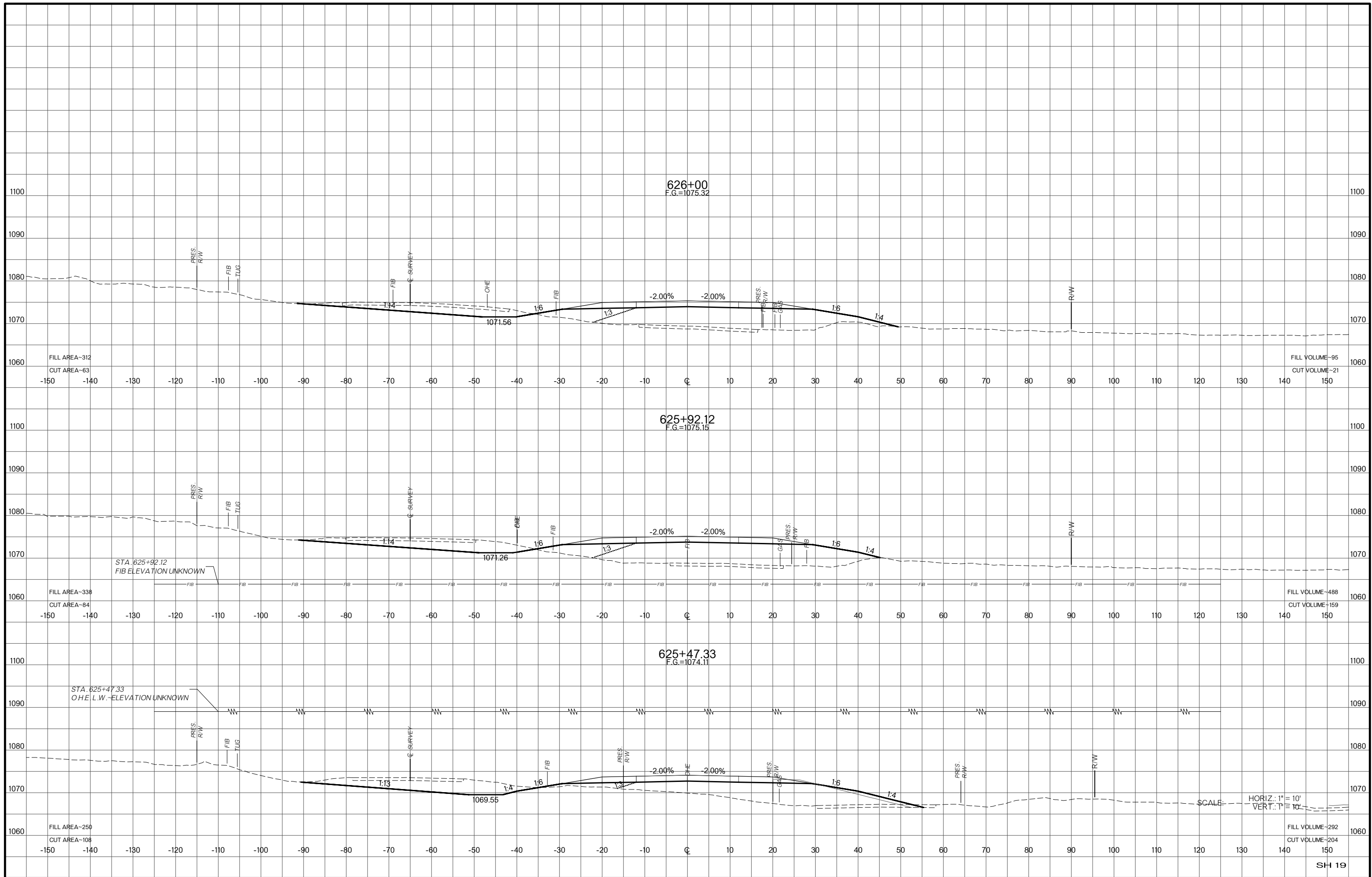
(C) STA. 618+54, CRL SH19
CONST. 3-12'X7'X8' LG. RCB
SKEWED 30° RT. FWD.
44' LG. LT. & 43' LG. RT.
W/ STD. END SECTION
FL LT.=1052.73, FL RT.= 1053.03

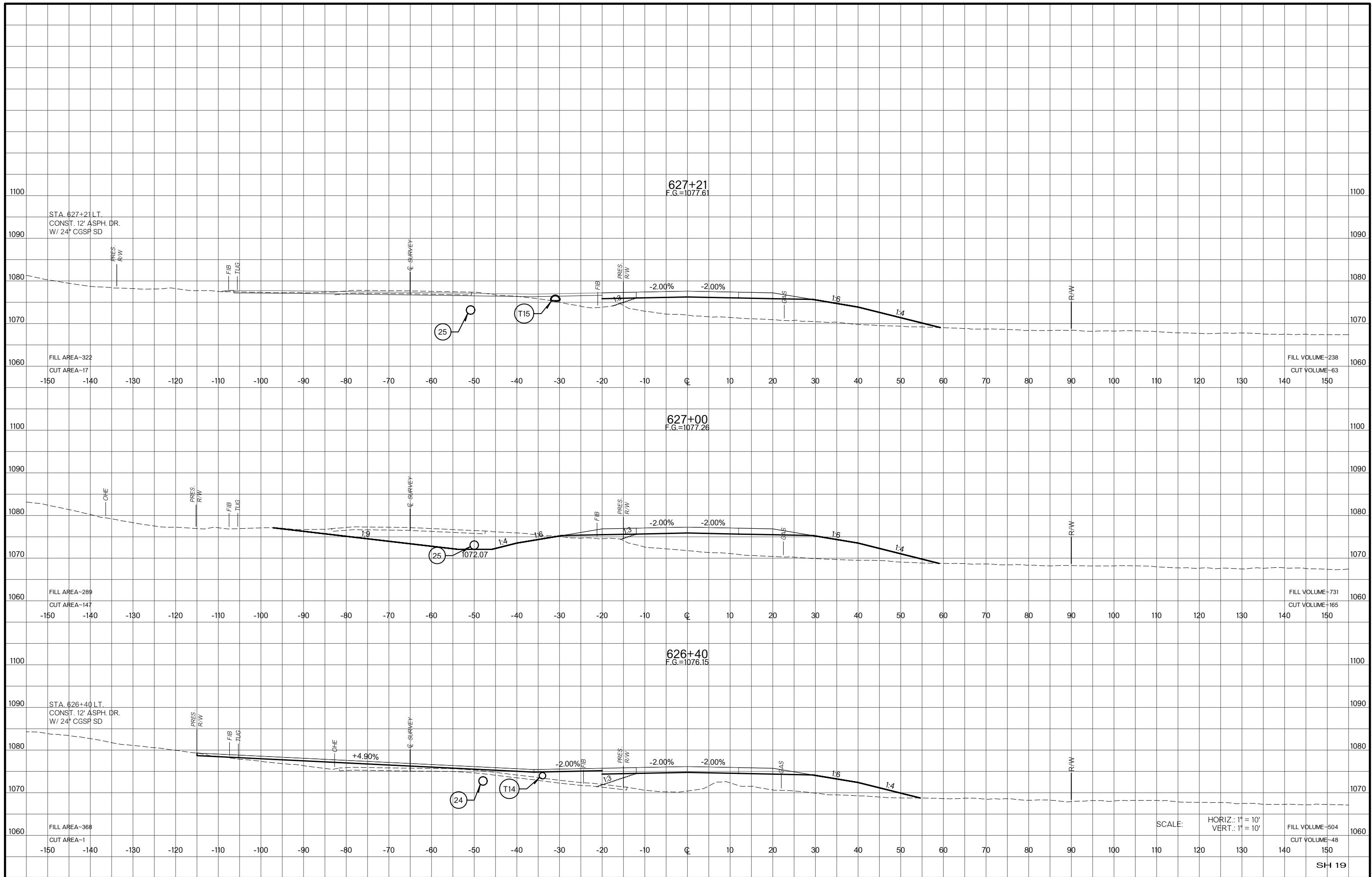
SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

SH 19





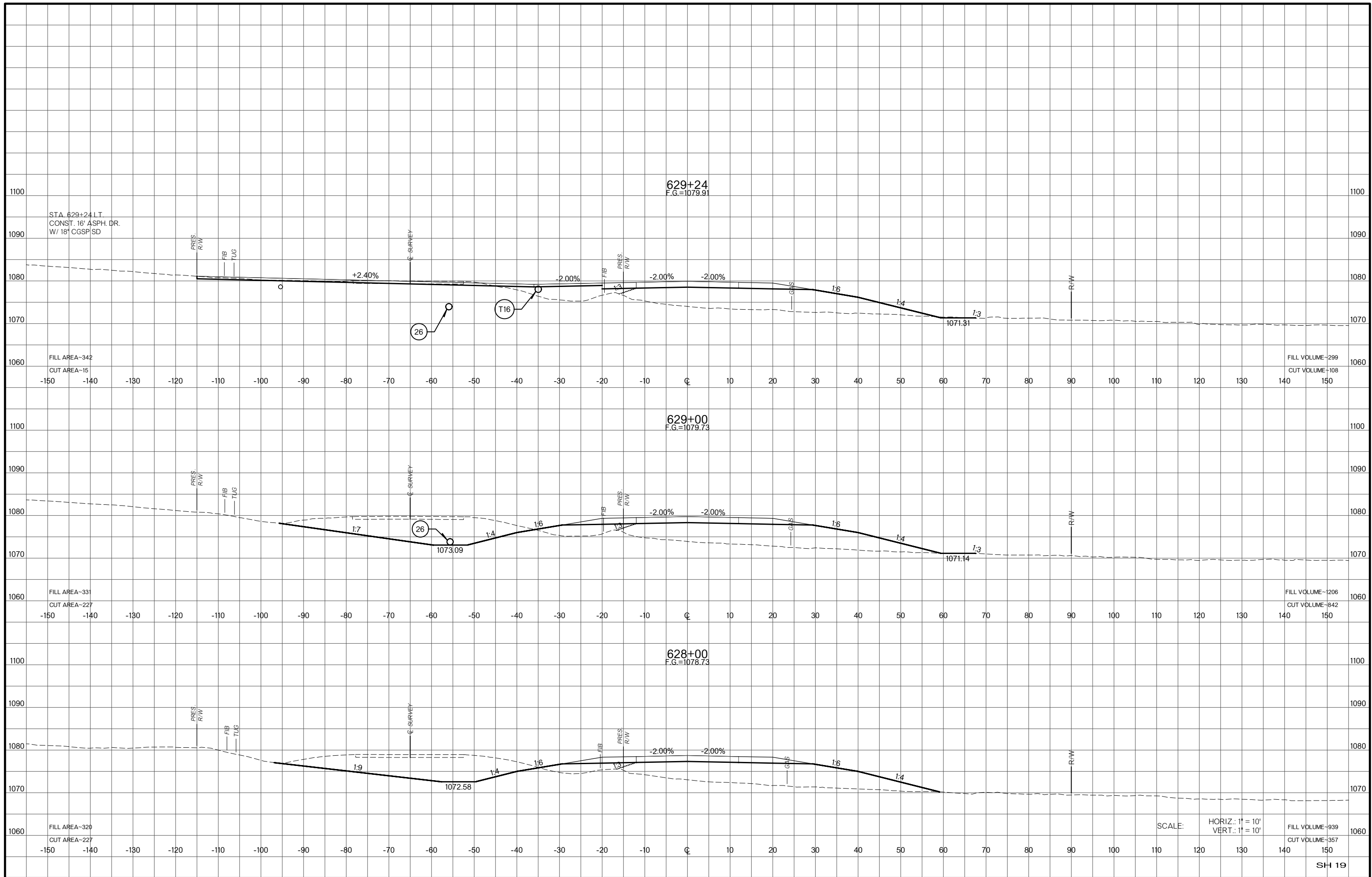


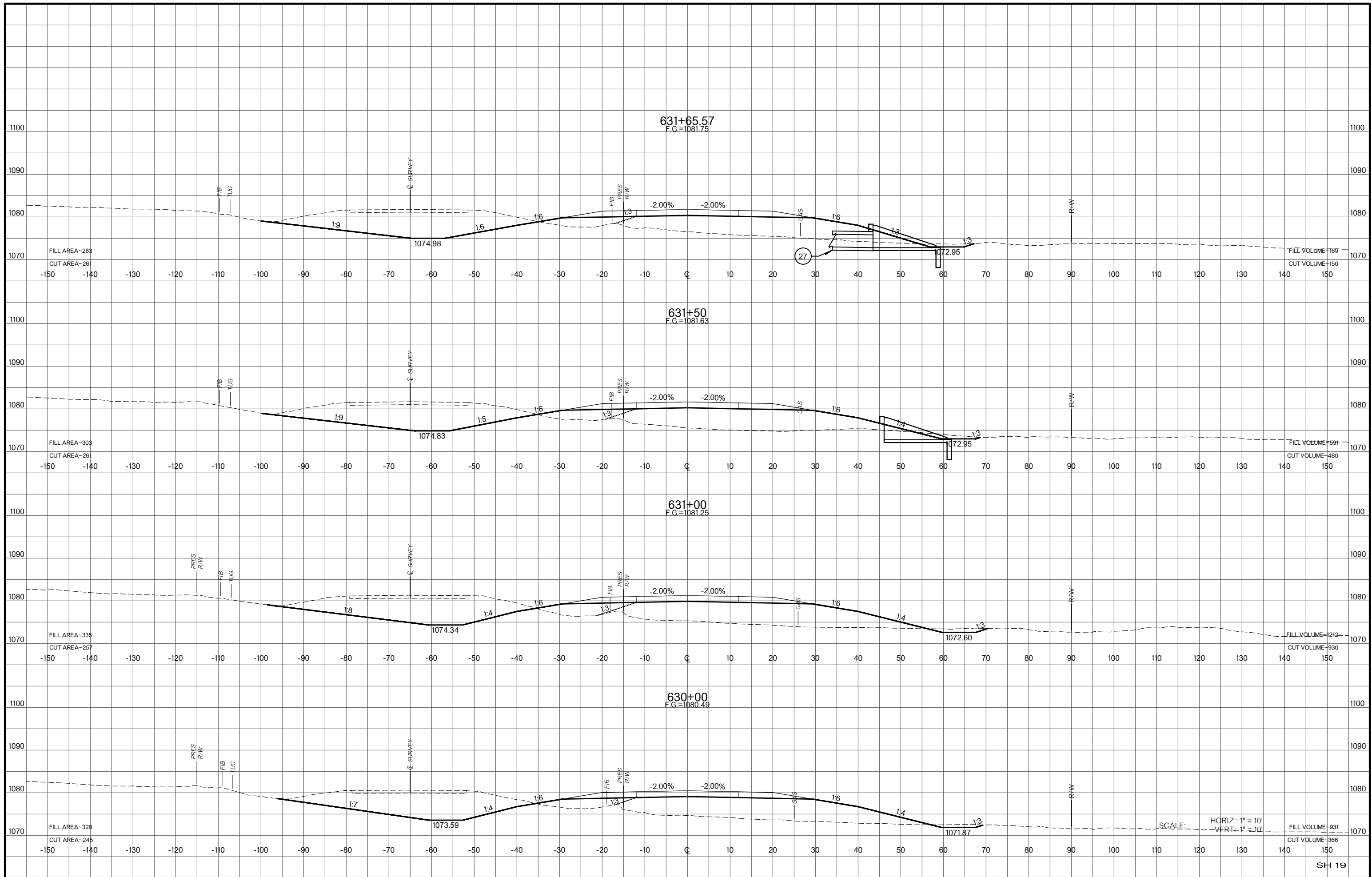


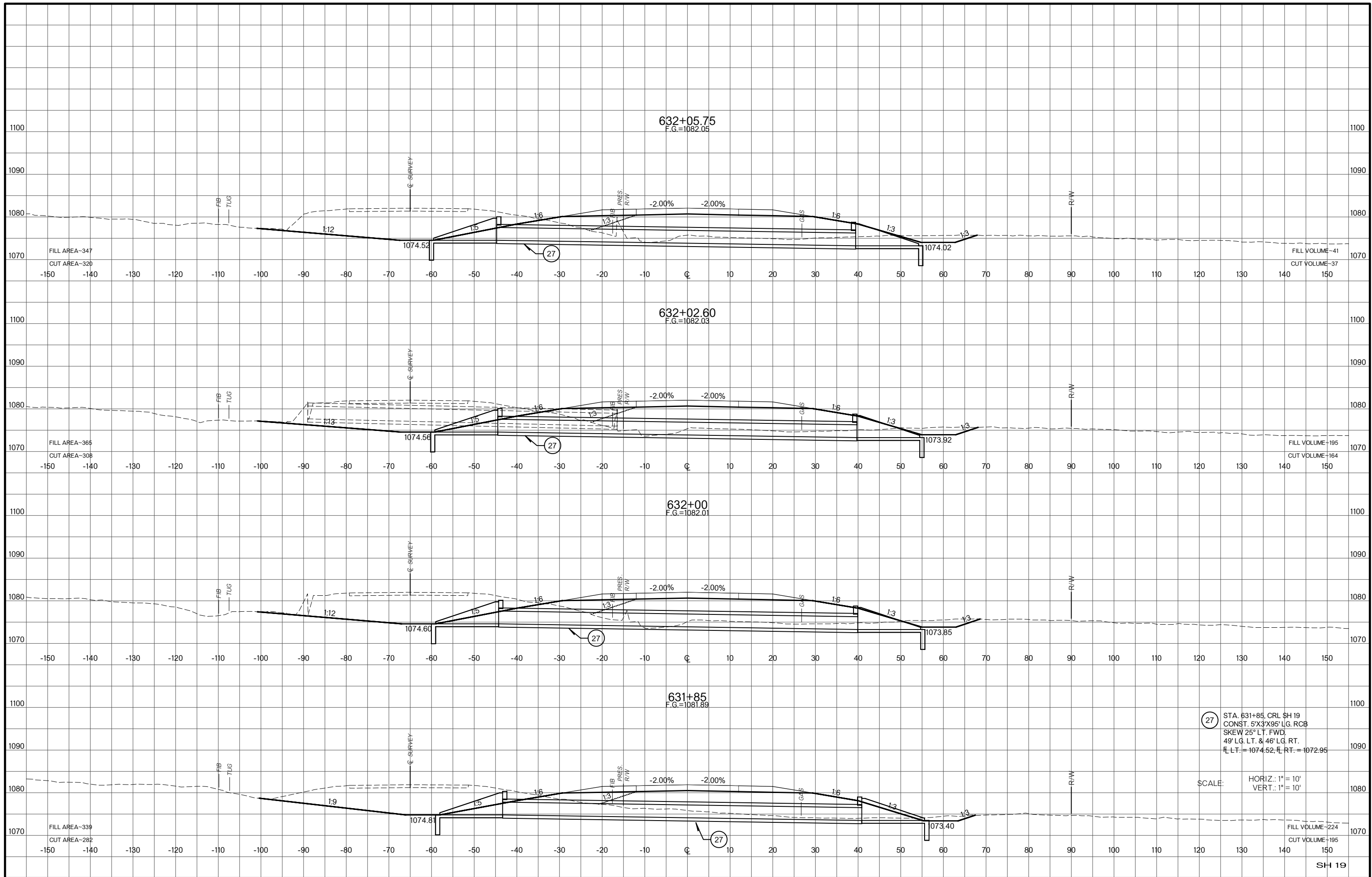
SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

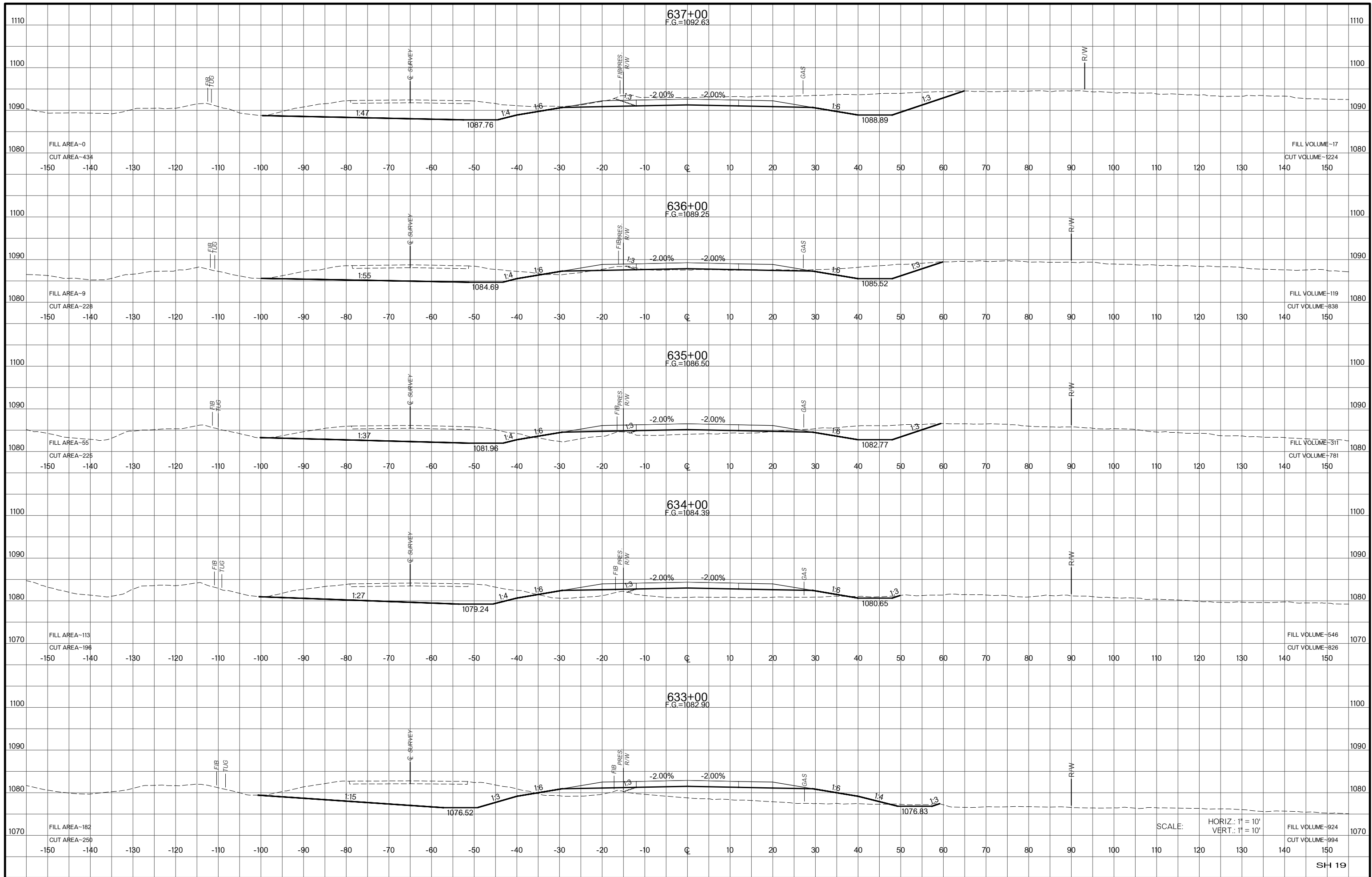
SH 19

GRADY COUNTY





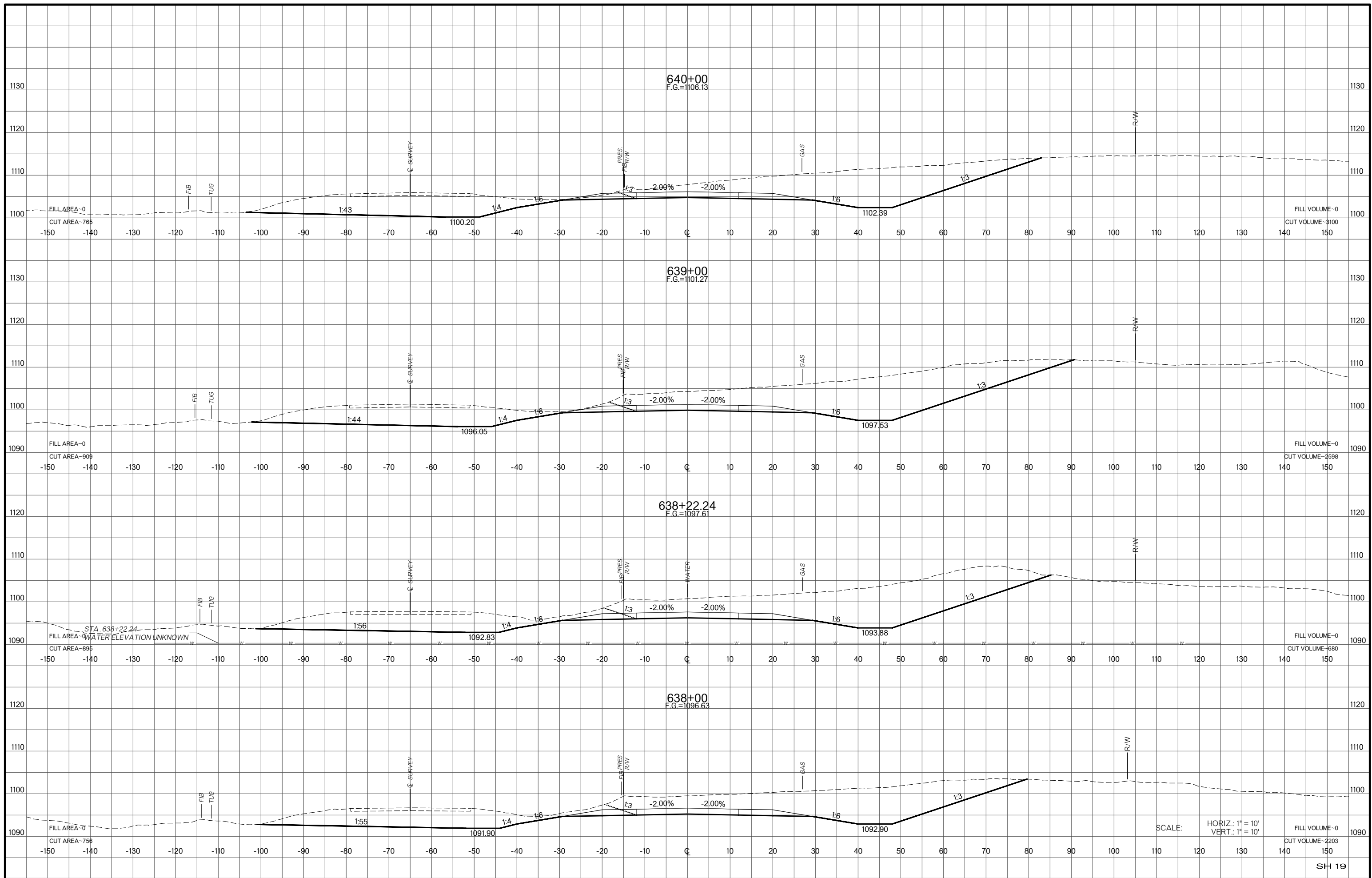




SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

FILL VOLUME=924
CUT VOLUME=994

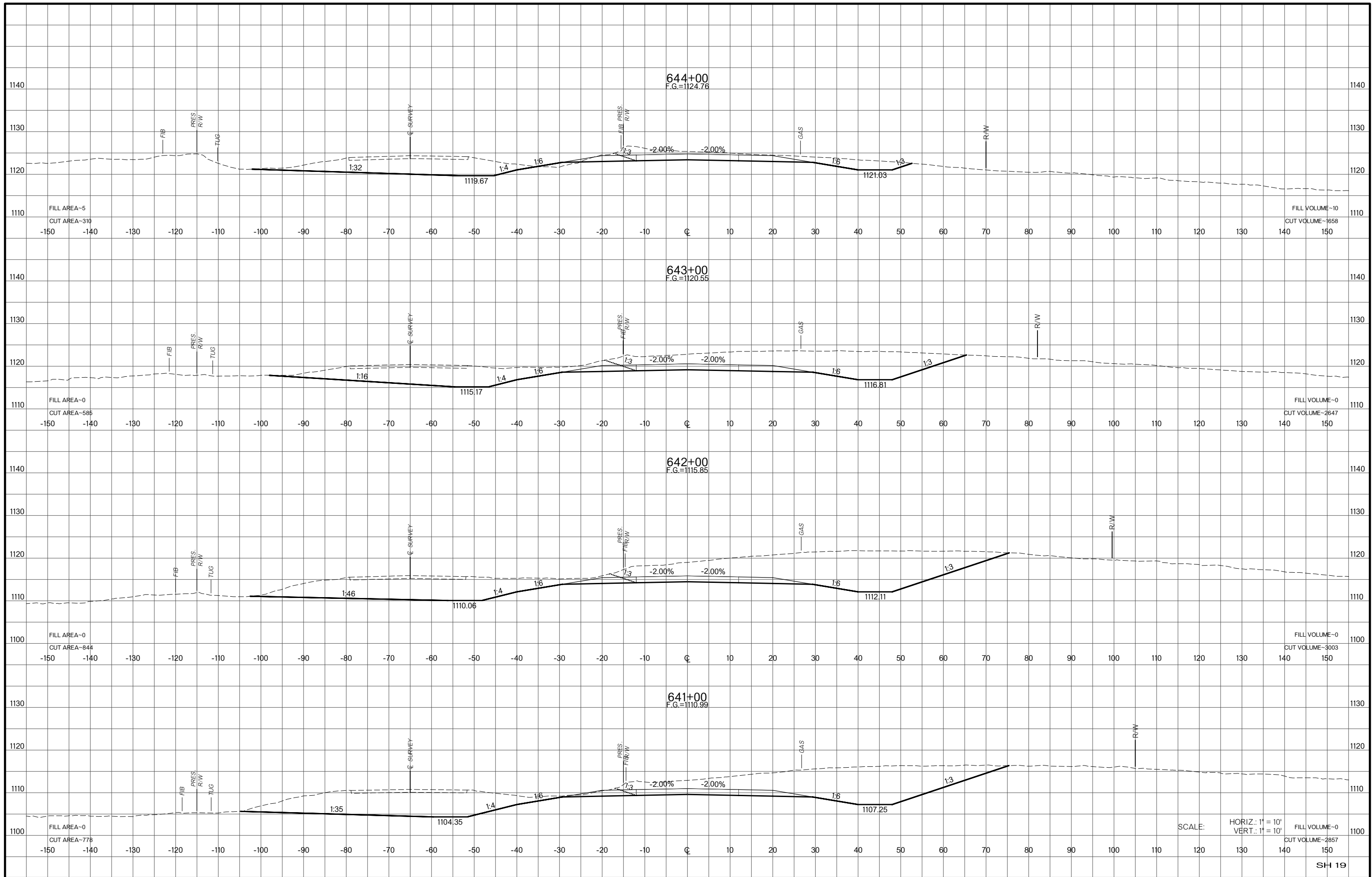
SH 19



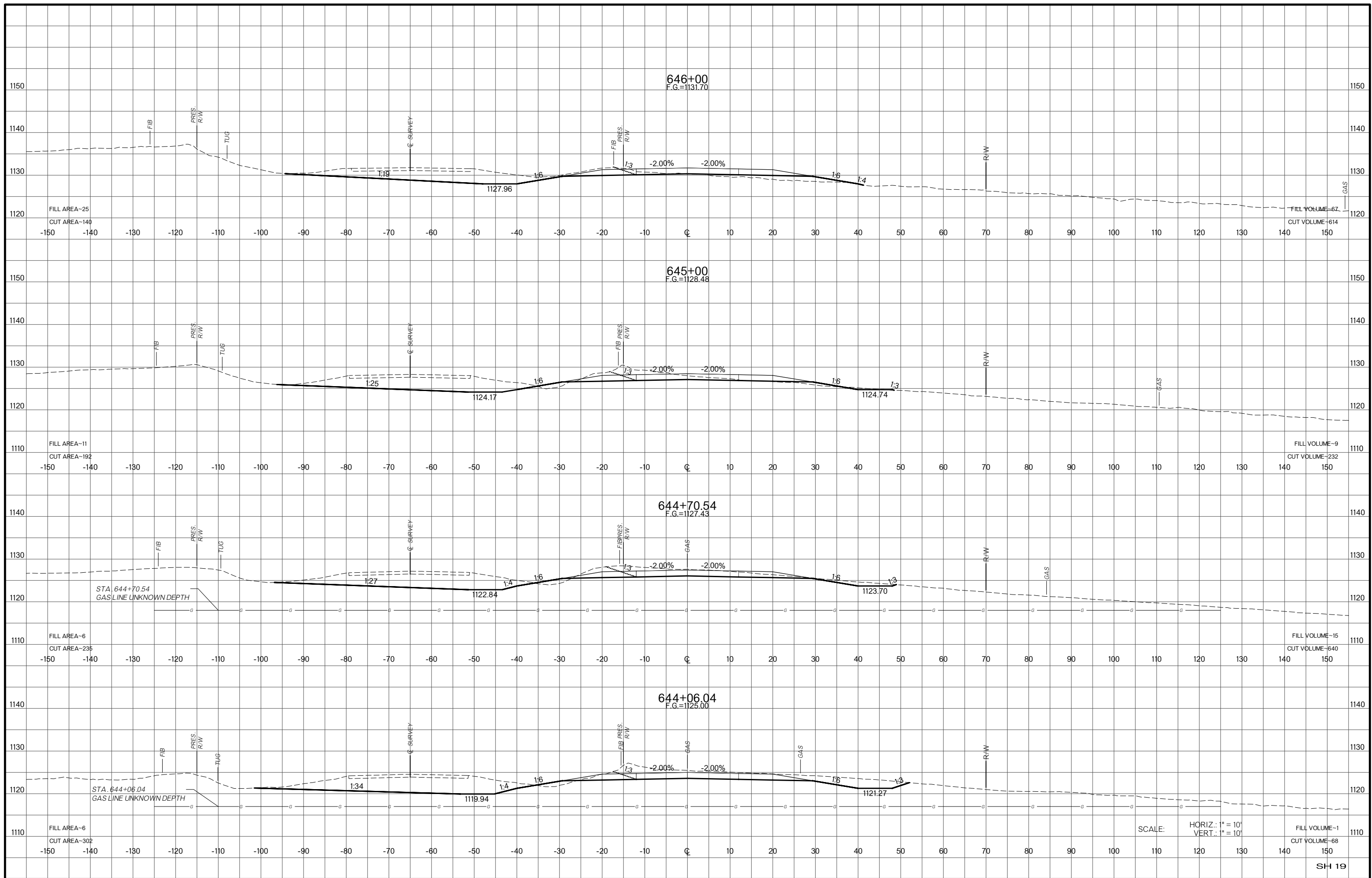
SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

FILL VOLUME-0
CUT VOLUME-2203

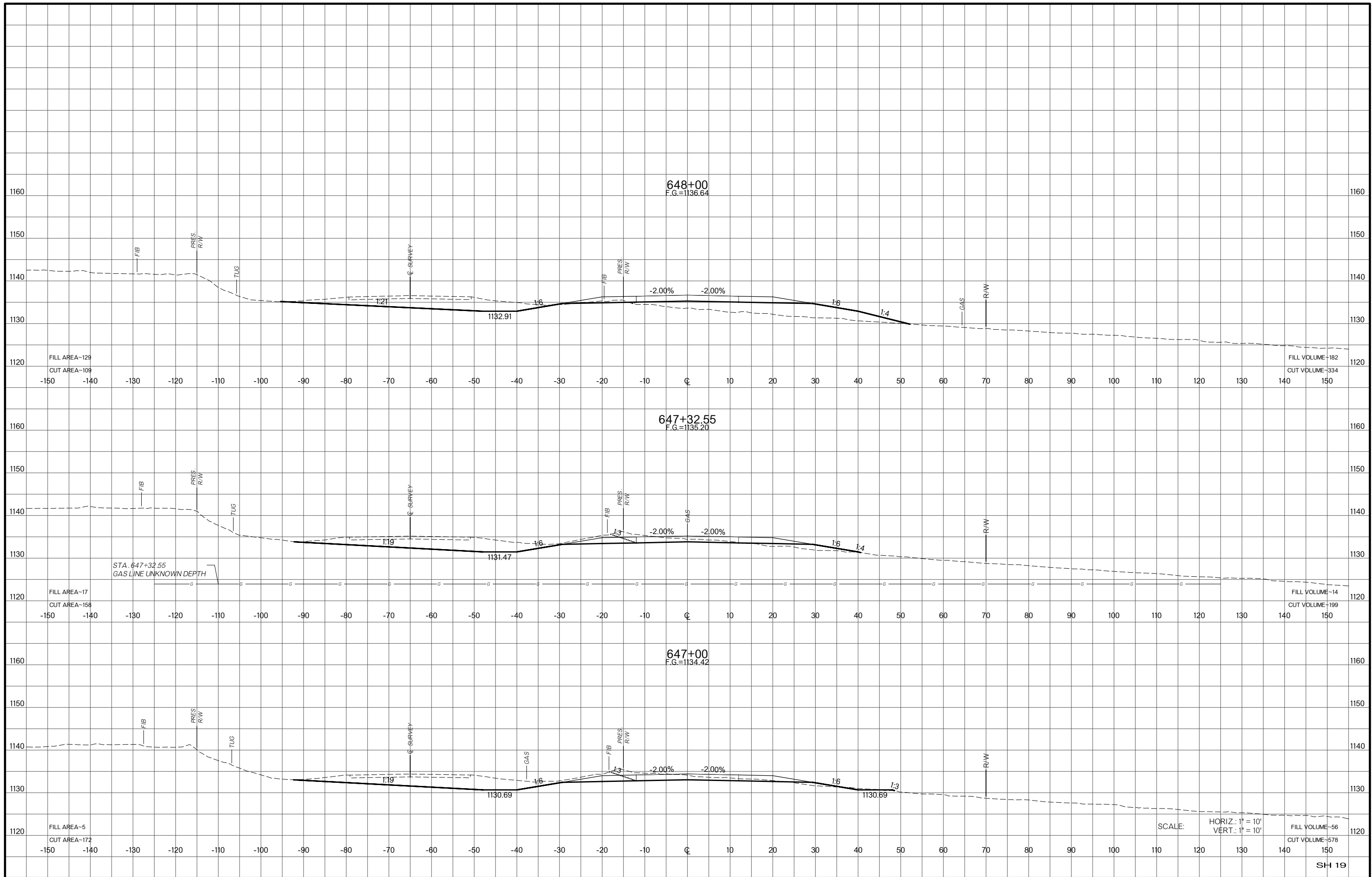
SH 19



SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'



SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

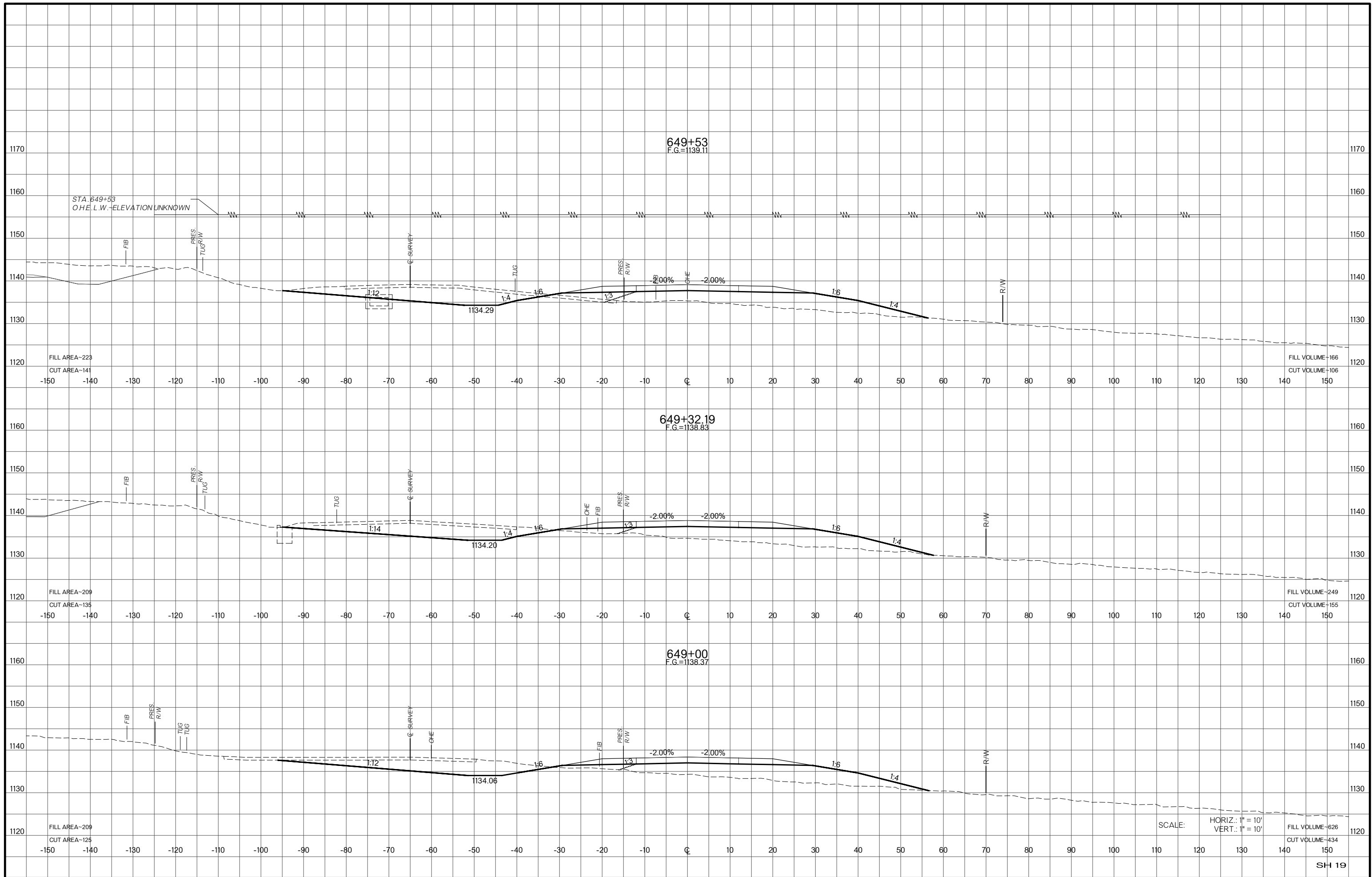


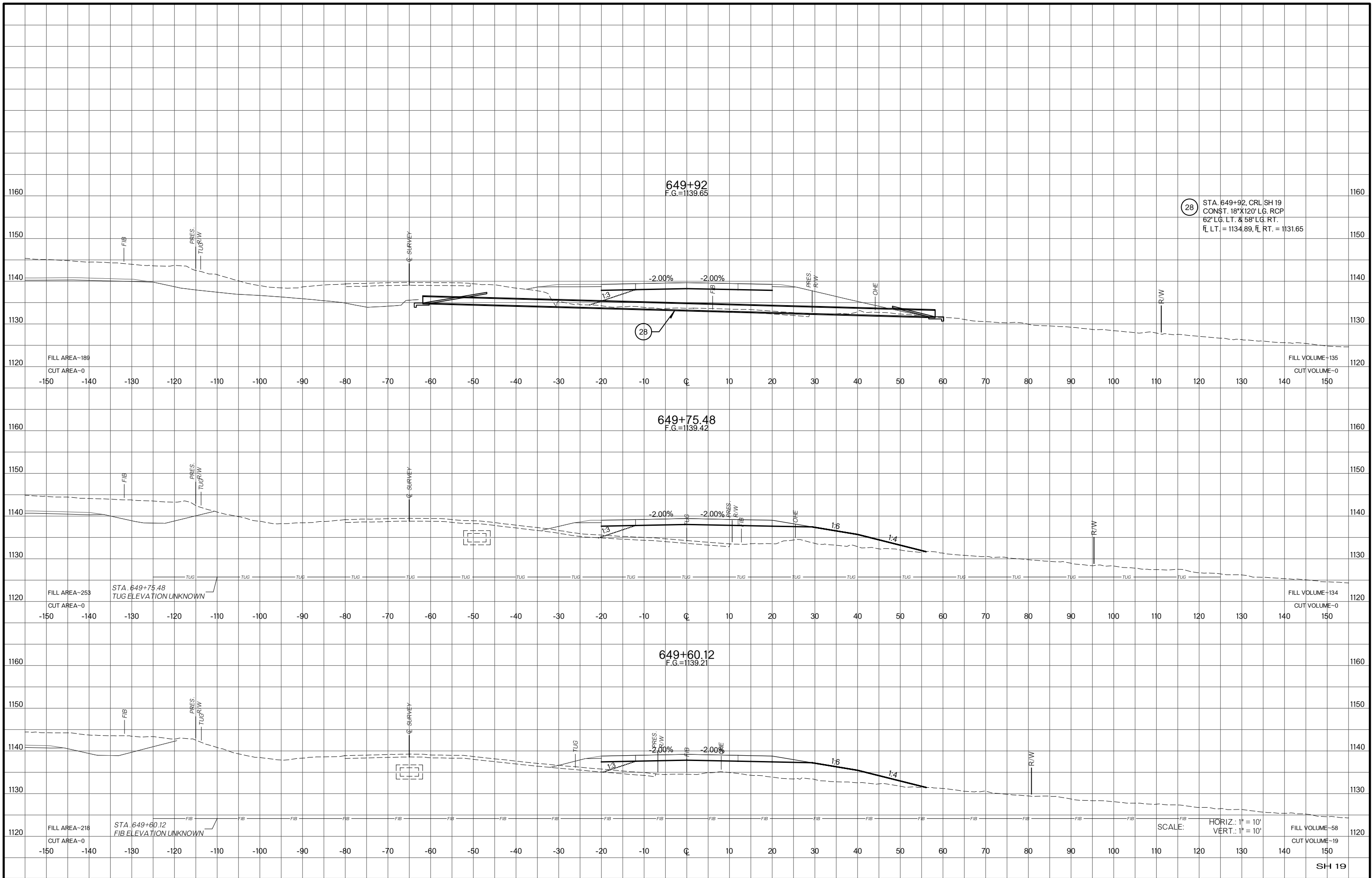
SH 19
GRADY COUNTY

SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

FILL VOLUME-56
CUT VOLUME-578

SH 19





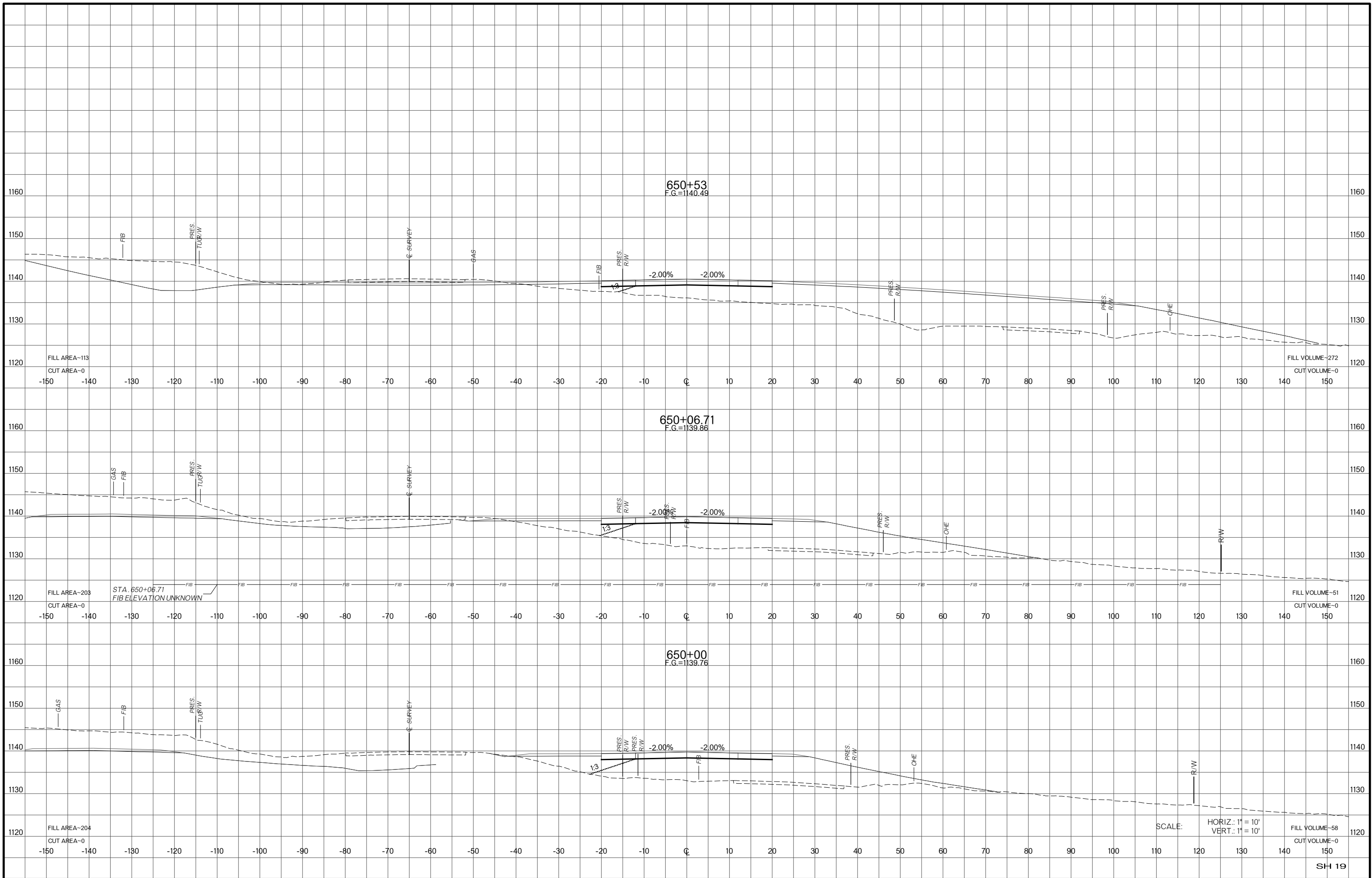
(28) STA. 649+92, CRL SH 19
 CONST. 18"X120' LG. RCP
 62" LG. LT. & 58" LG. RT.
 f_L LT. = 1134.89, f_R RT. = 1131.65

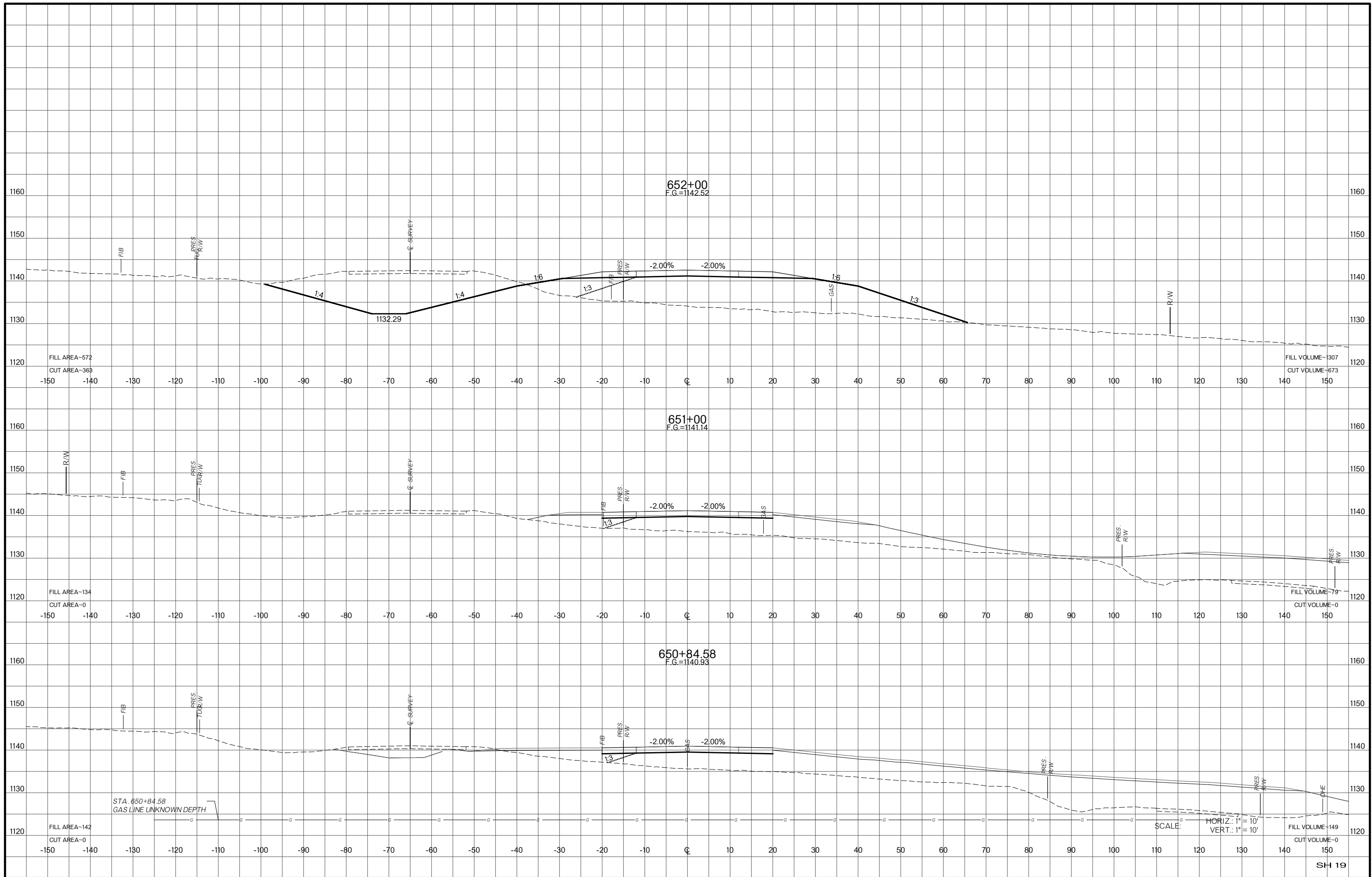
STA. 649+75.48
 TUG ELEVATION UNKNOWN

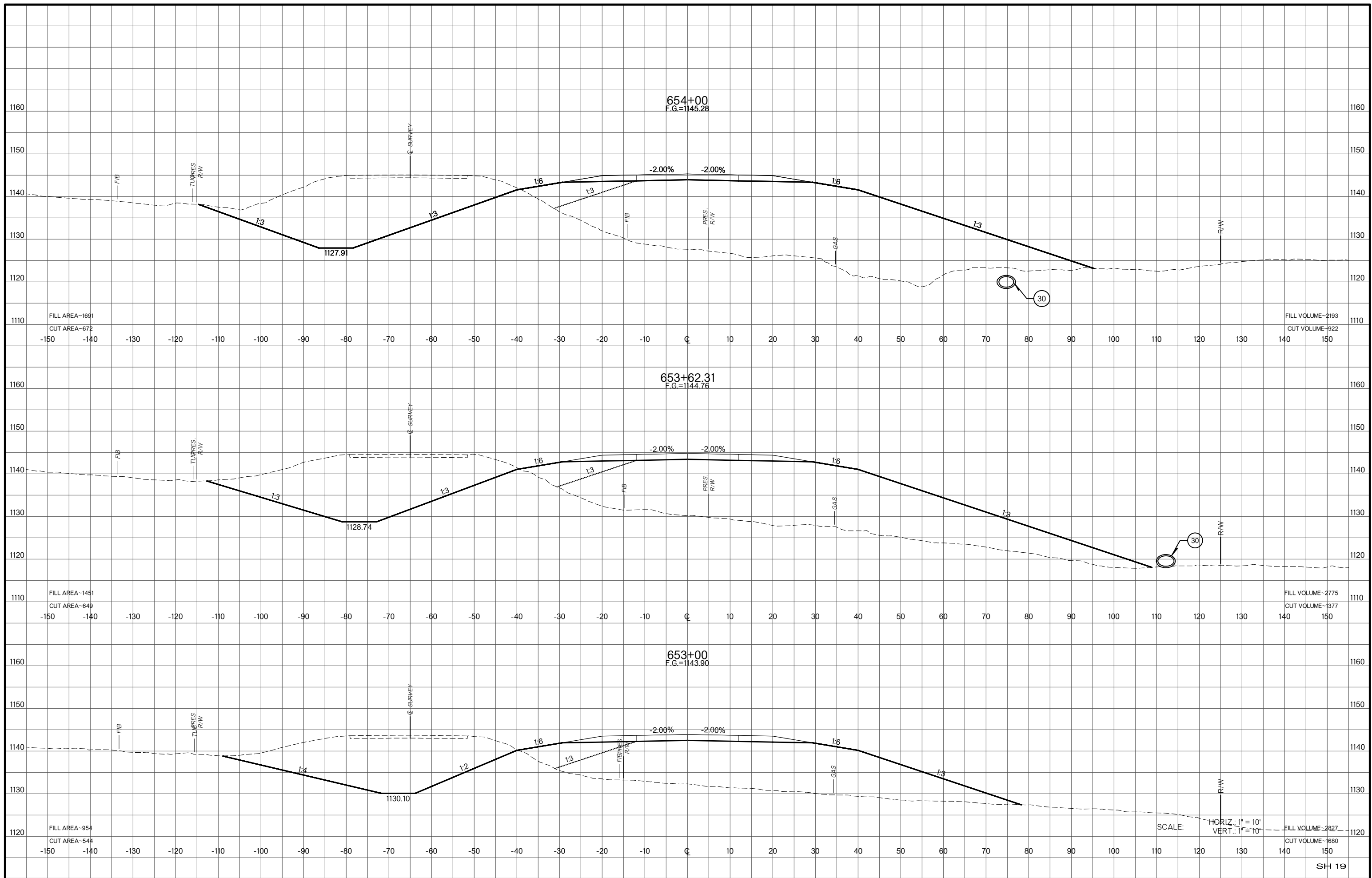
STA. 649+60.12
 FIB ELEVATION UNKNOWN

SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

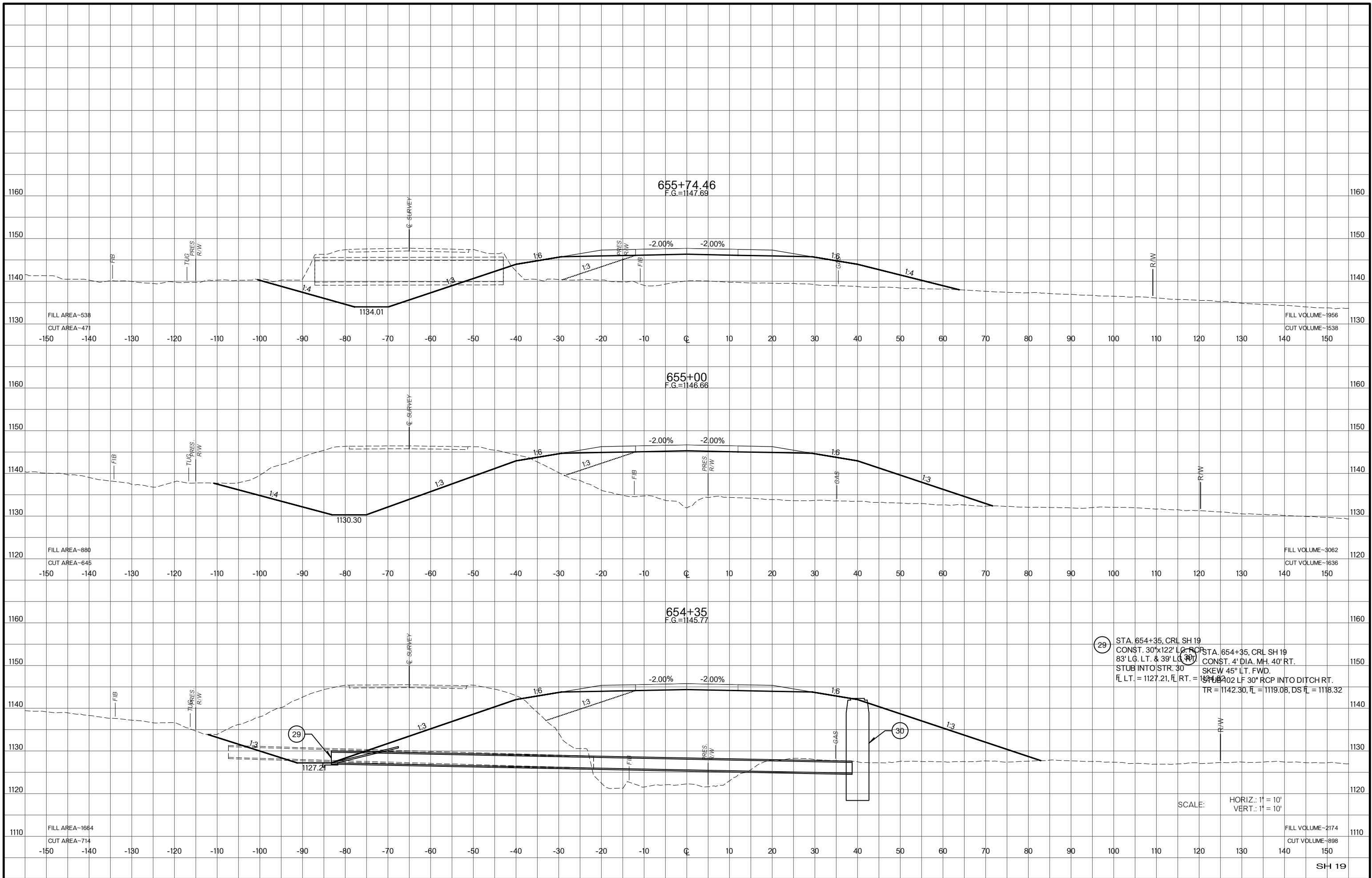
SH 19







SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

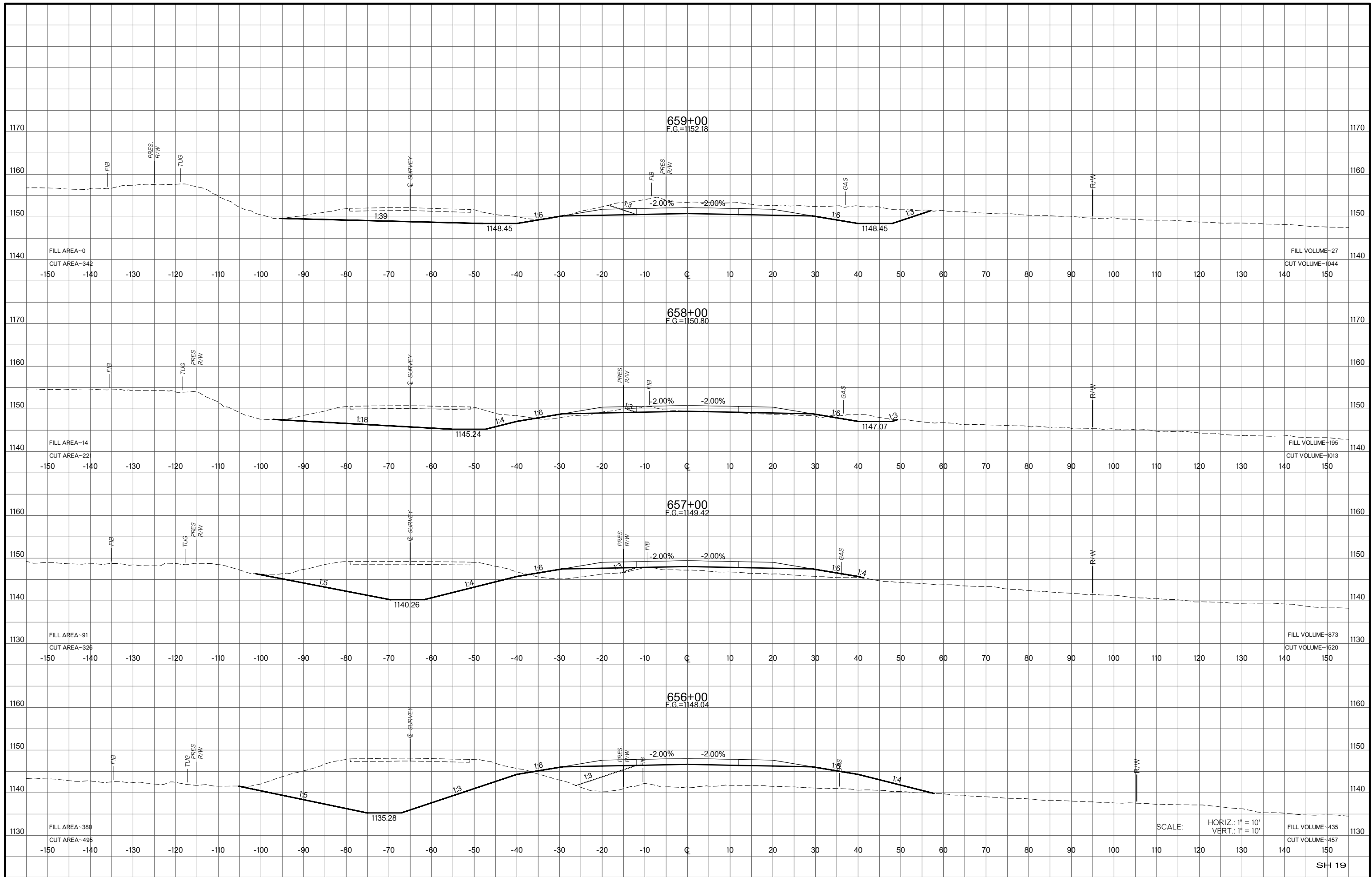


(29) STA. 654+35, CRL SH 19
 CONST. 30"x122' LG. RCP
 83' LG. LT. & 39' LG. RT.
 STUB INTO STR. 30'
 FL LT. = 1127.21, FL RT. = 1127.21

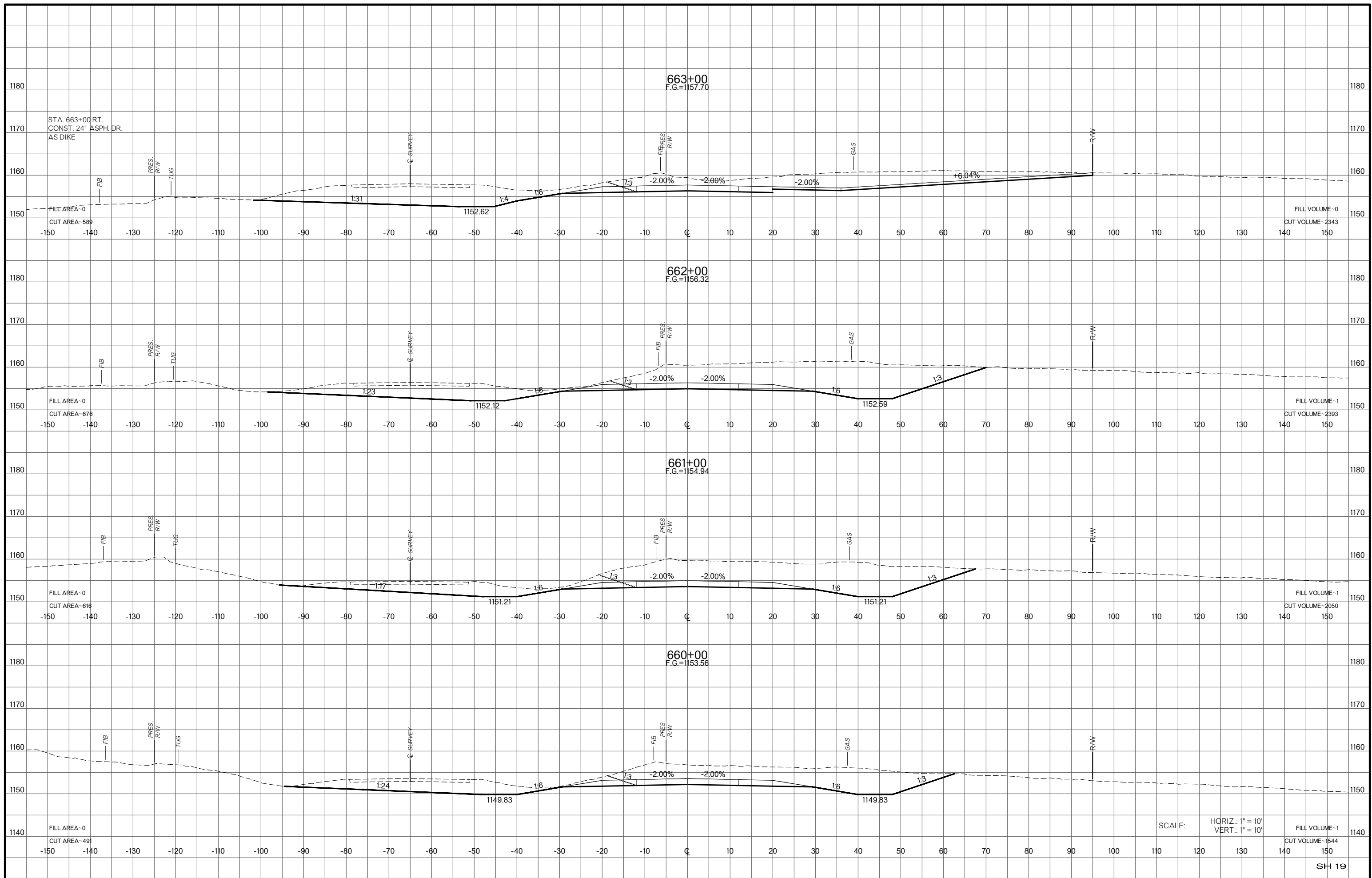
(30) STA. 654+35, CRL SH 19
 CONST. 4' DIA. MH. 40' RT.
 SKEW 45° LT. FWD.
 15' LG. 2' LF 30" RCP INTO DITCH RT.
 TR = 1142.30, FL = 1119.08, DS FL = 1118.32

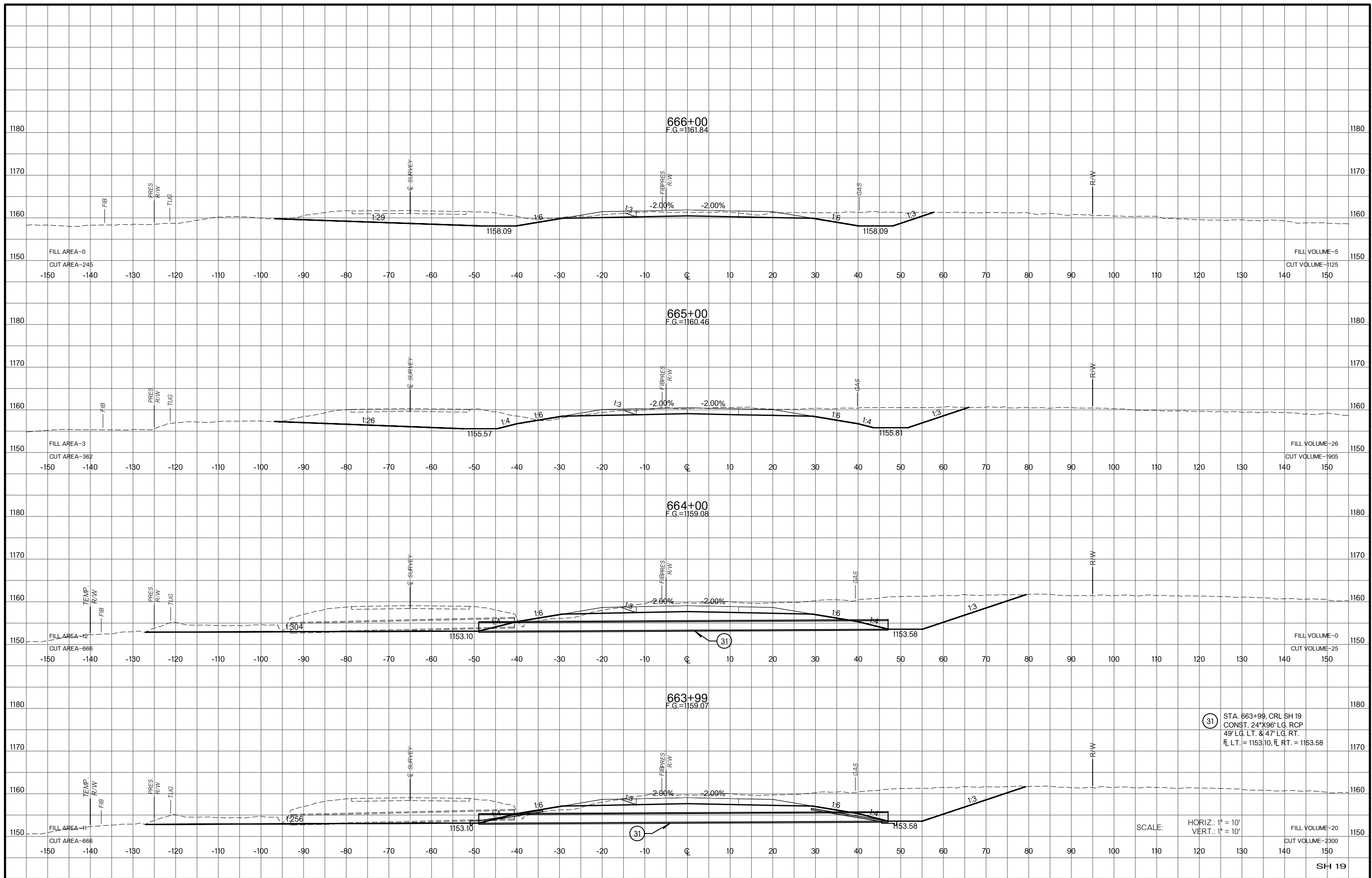
SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

GRADY COUNTY



SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

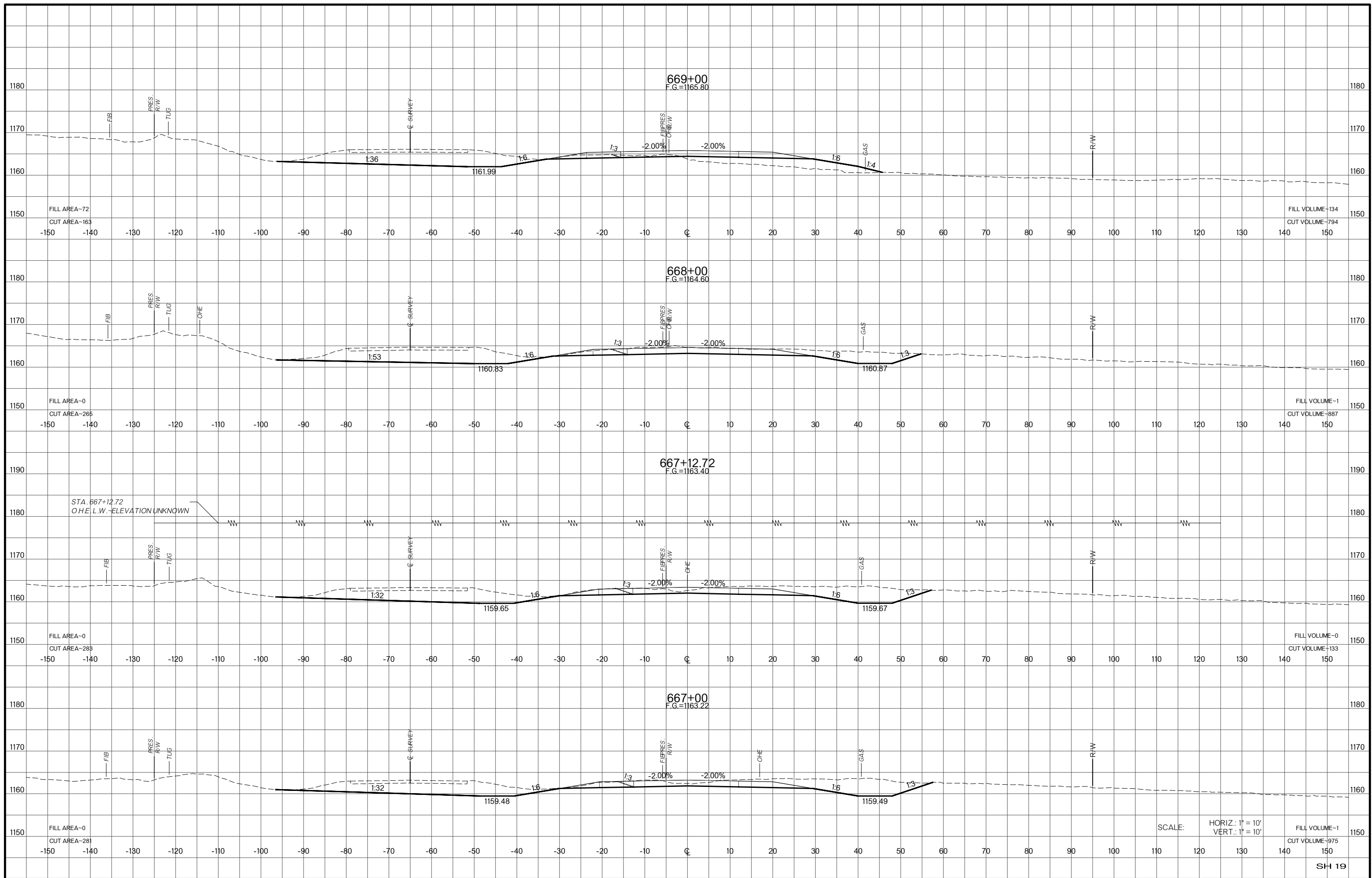




(31) STA. 663+99, CRL SH 19
CONST. 24"X96" LG. RCP
49' LG. LT. & 47' LG. RT.
FL LT. = 1153.10, FL RT. = 1153.58

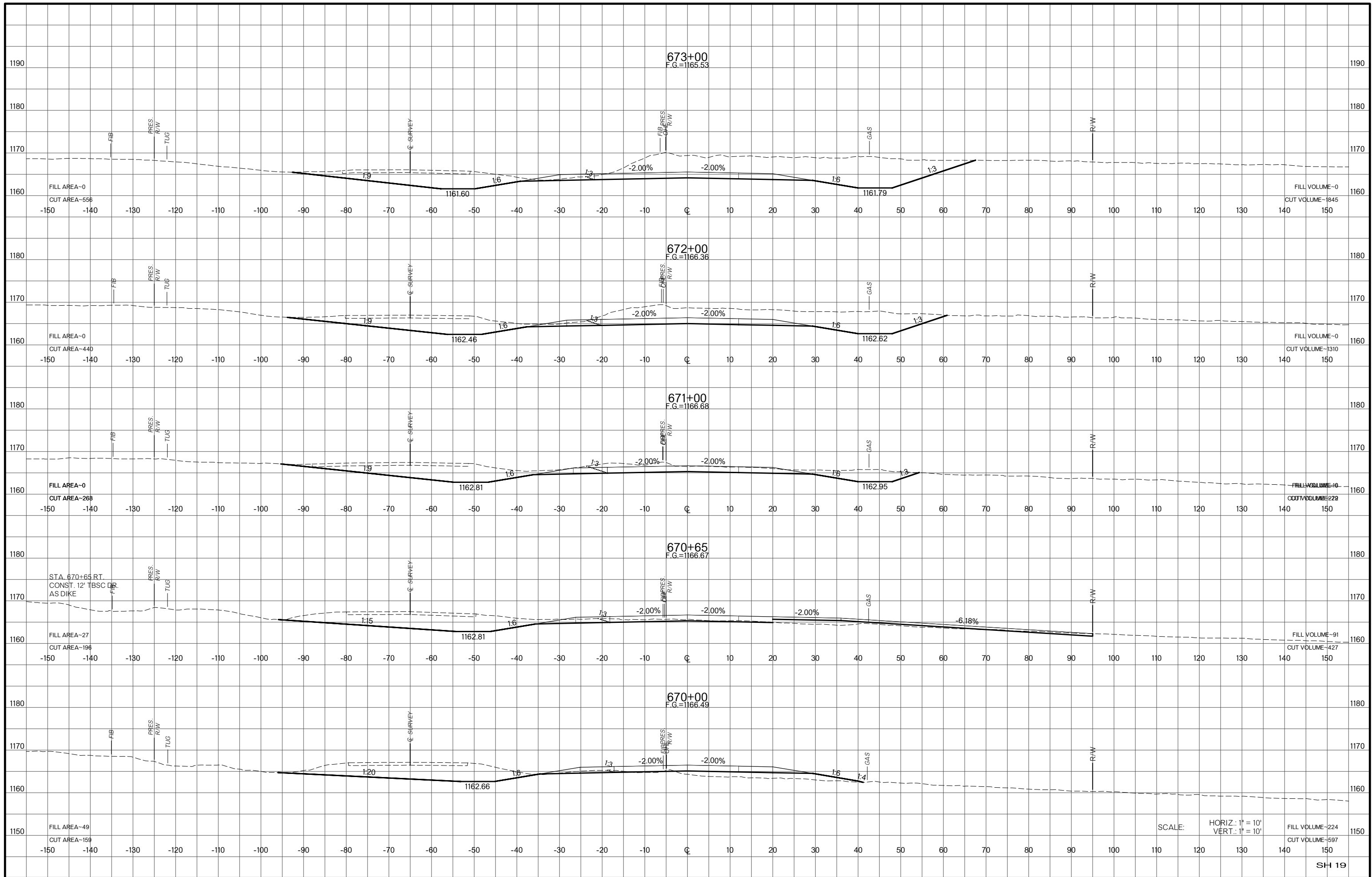
SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

SH 19

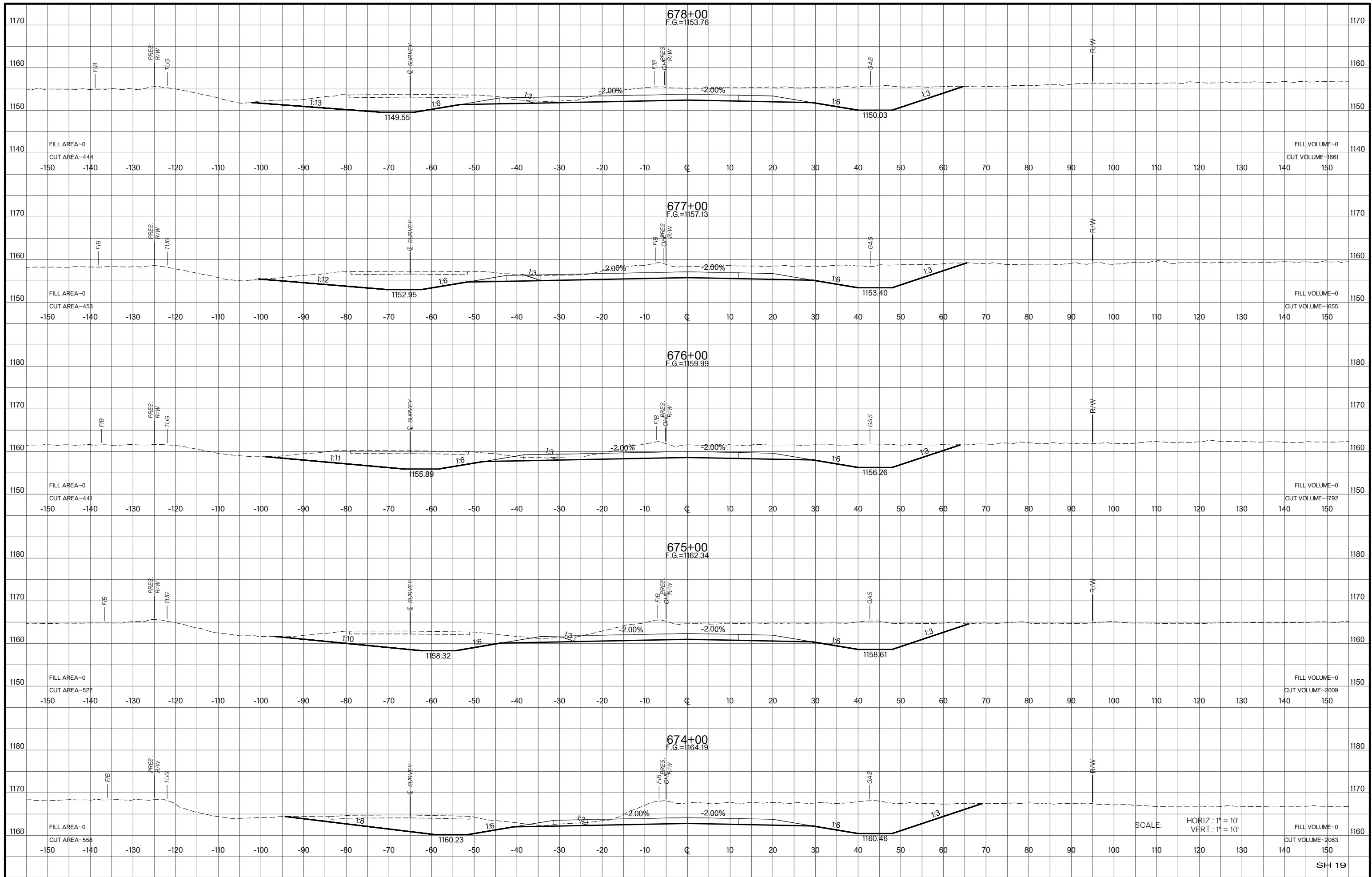


SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

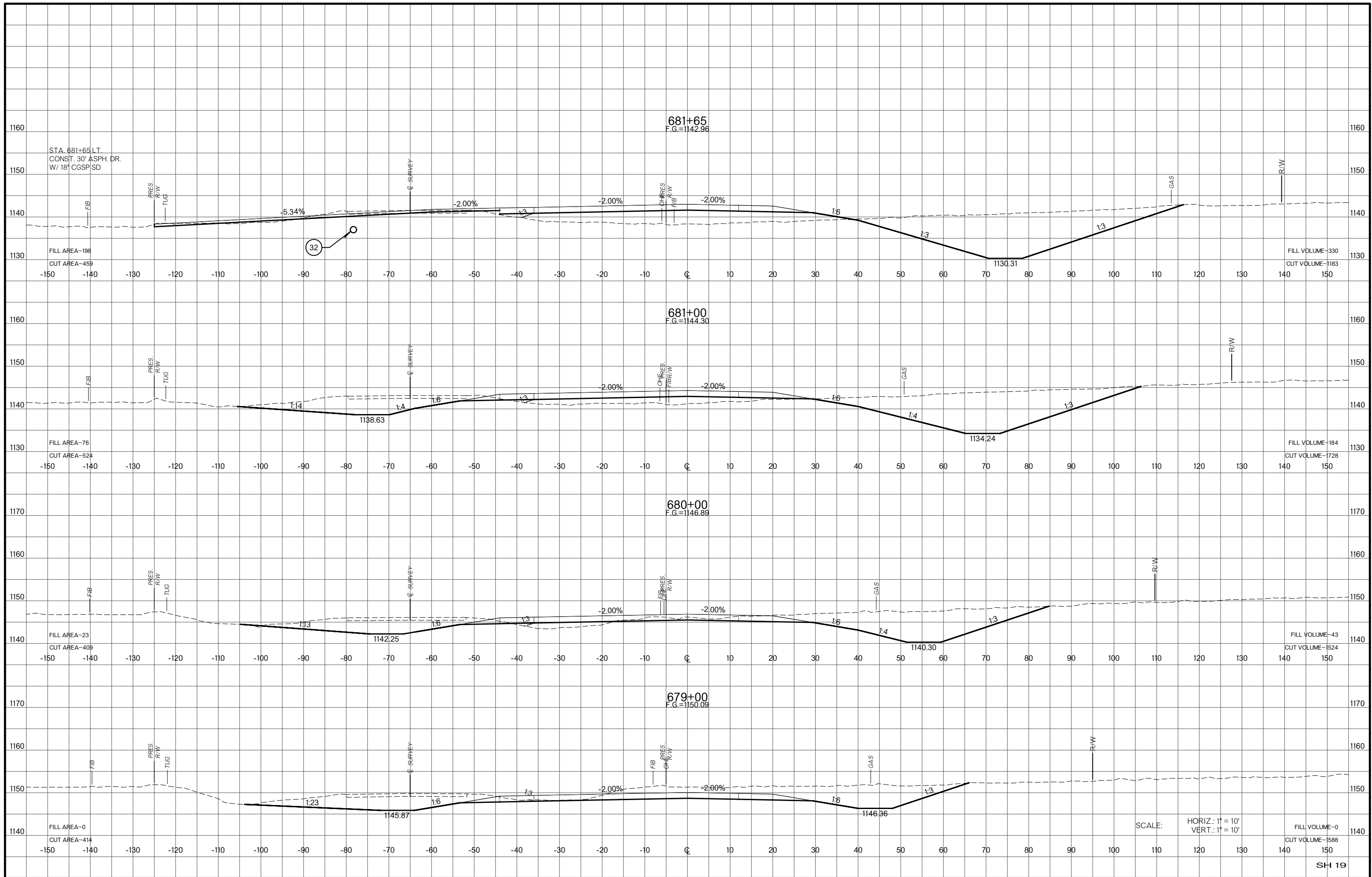
SH 19



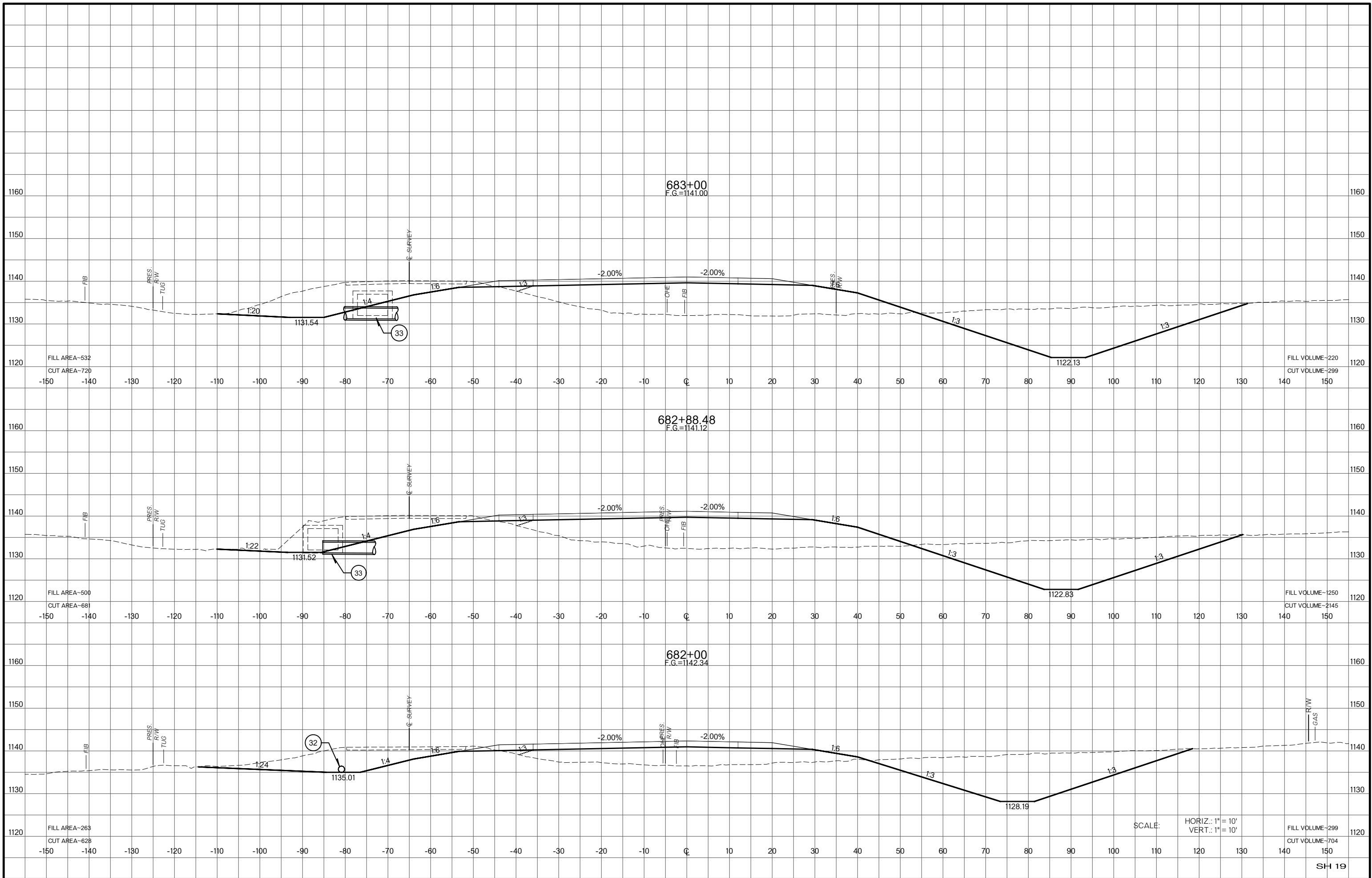
SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'



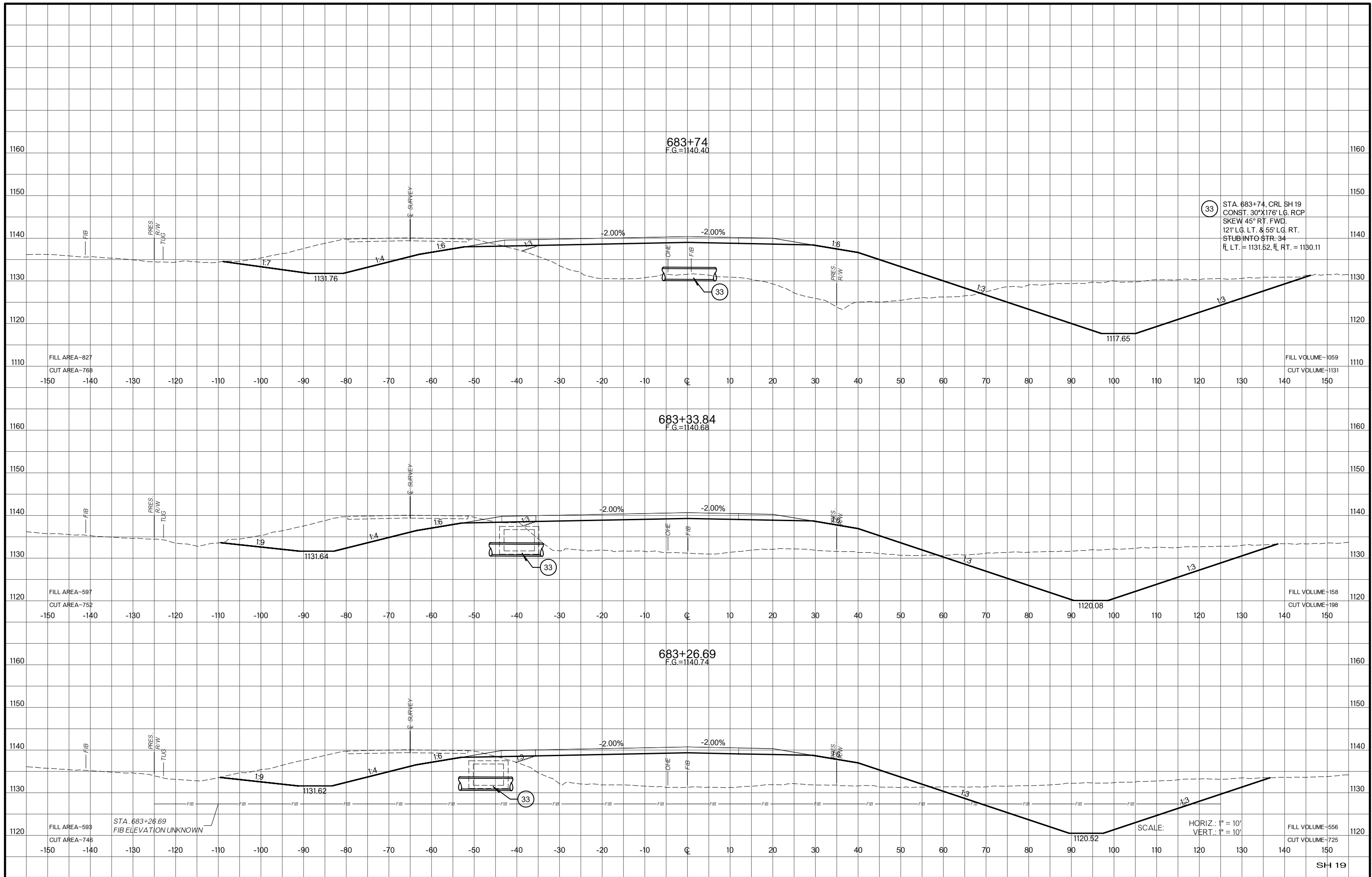
SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'



SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'



SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'



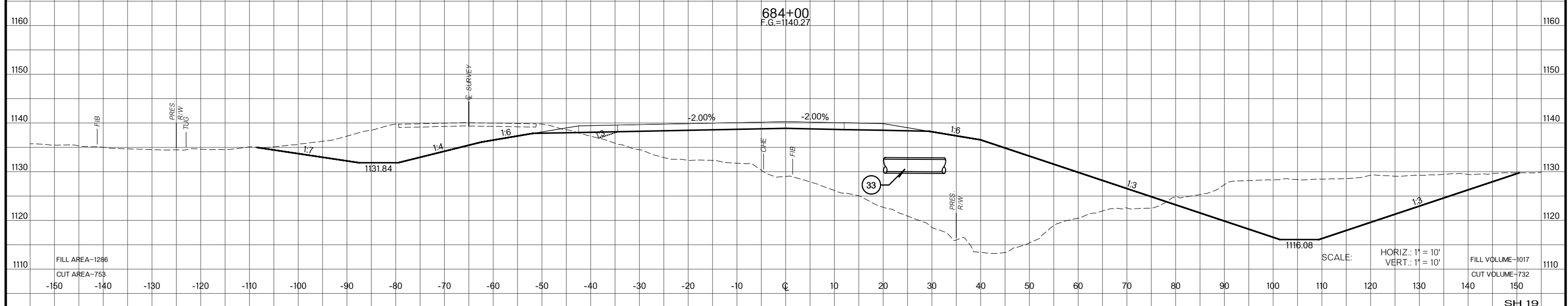
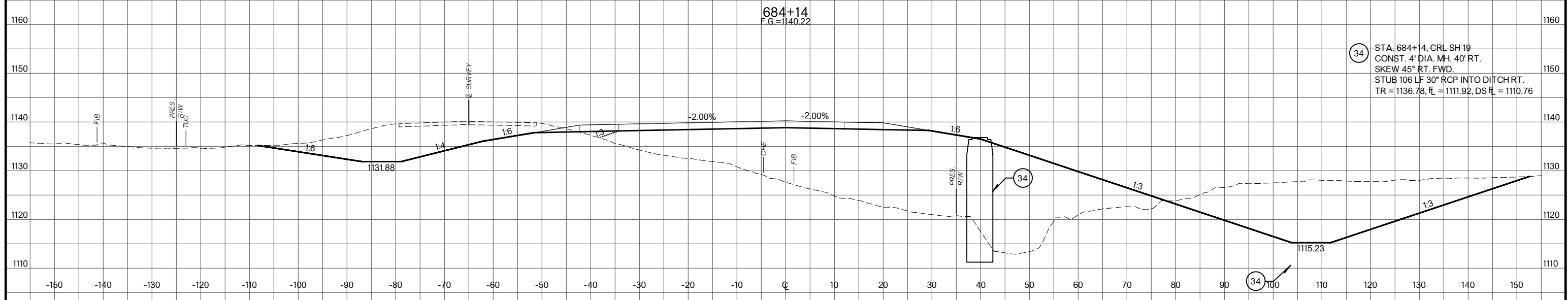
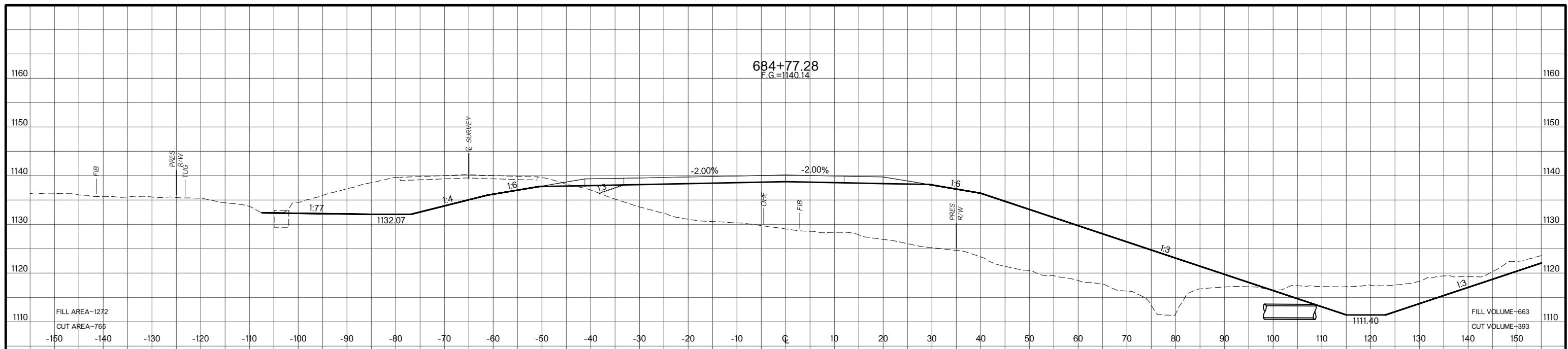
(33) STA. 683+74, CRL SH 19
 CONST. 30°X176' LG. RCP
 SKEW 45° RT. FWD.
 121' LG. LT. & 55' LG. RT.
 STUB INTO STR. 34
 FL LT. = 1131.52, FL RT. = 1130.11

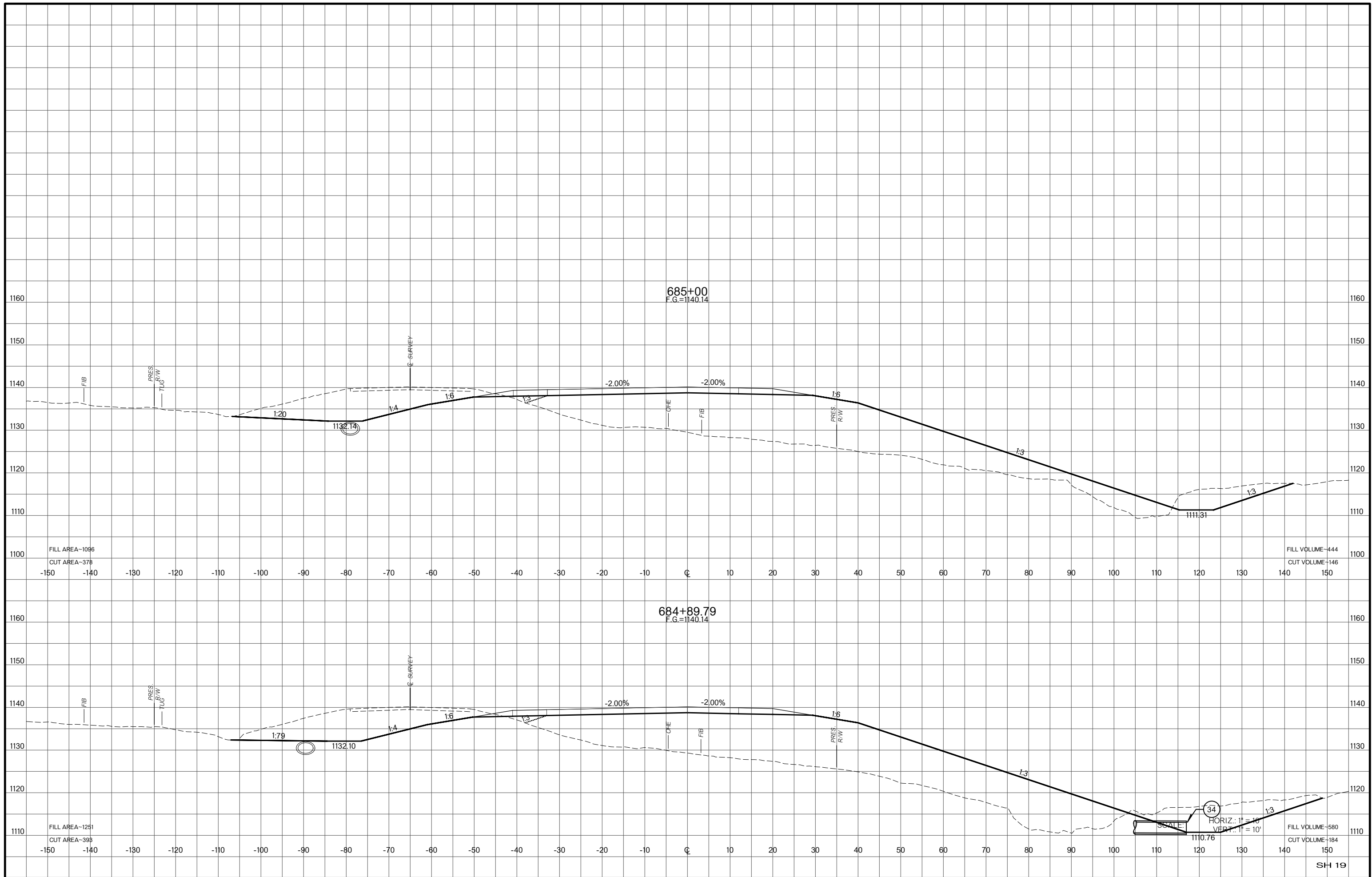
STA. 683+26.69
 FIB ELEVATION UNKNOWN

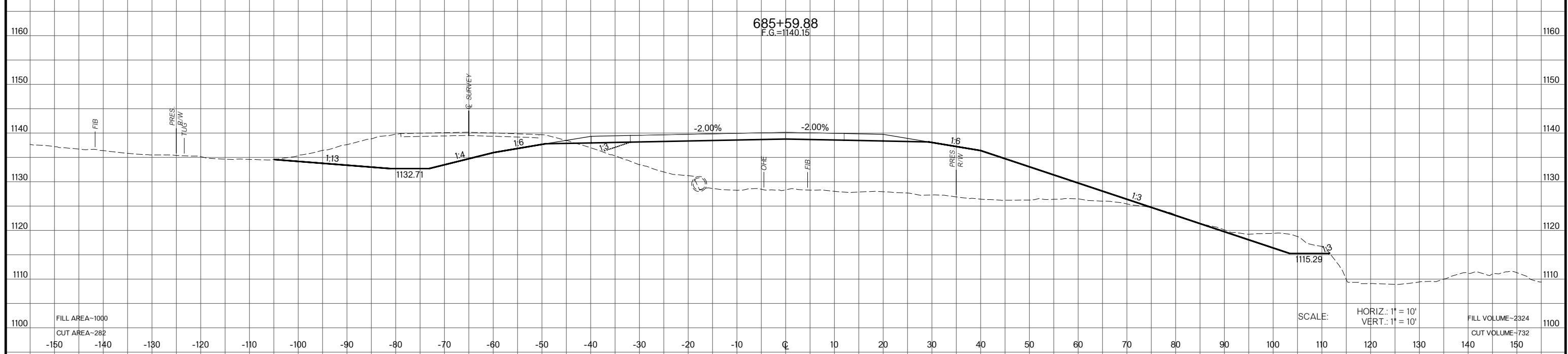
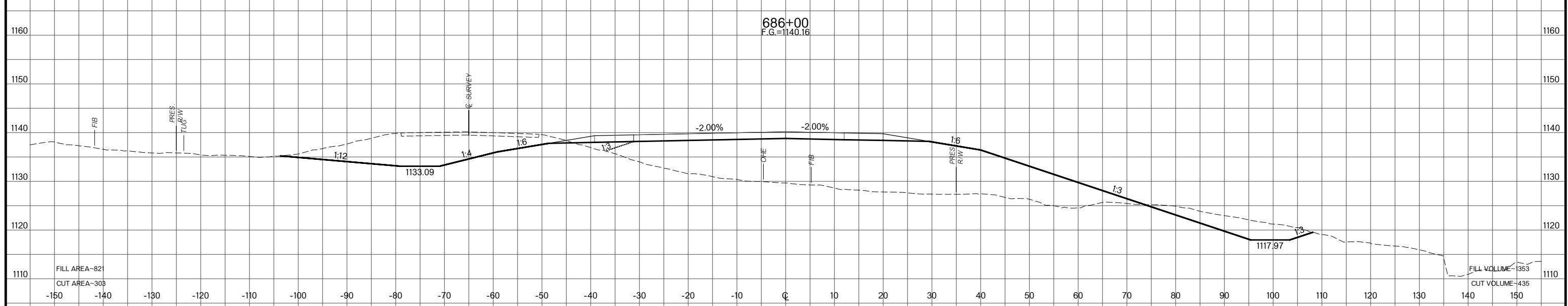
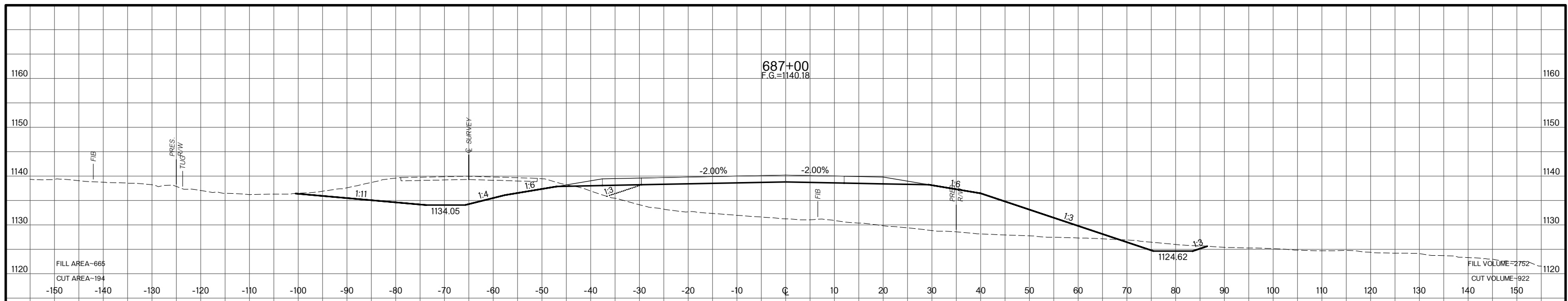
SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

FILL VOLUME=556
 CUT VOLUME=725

SH 19





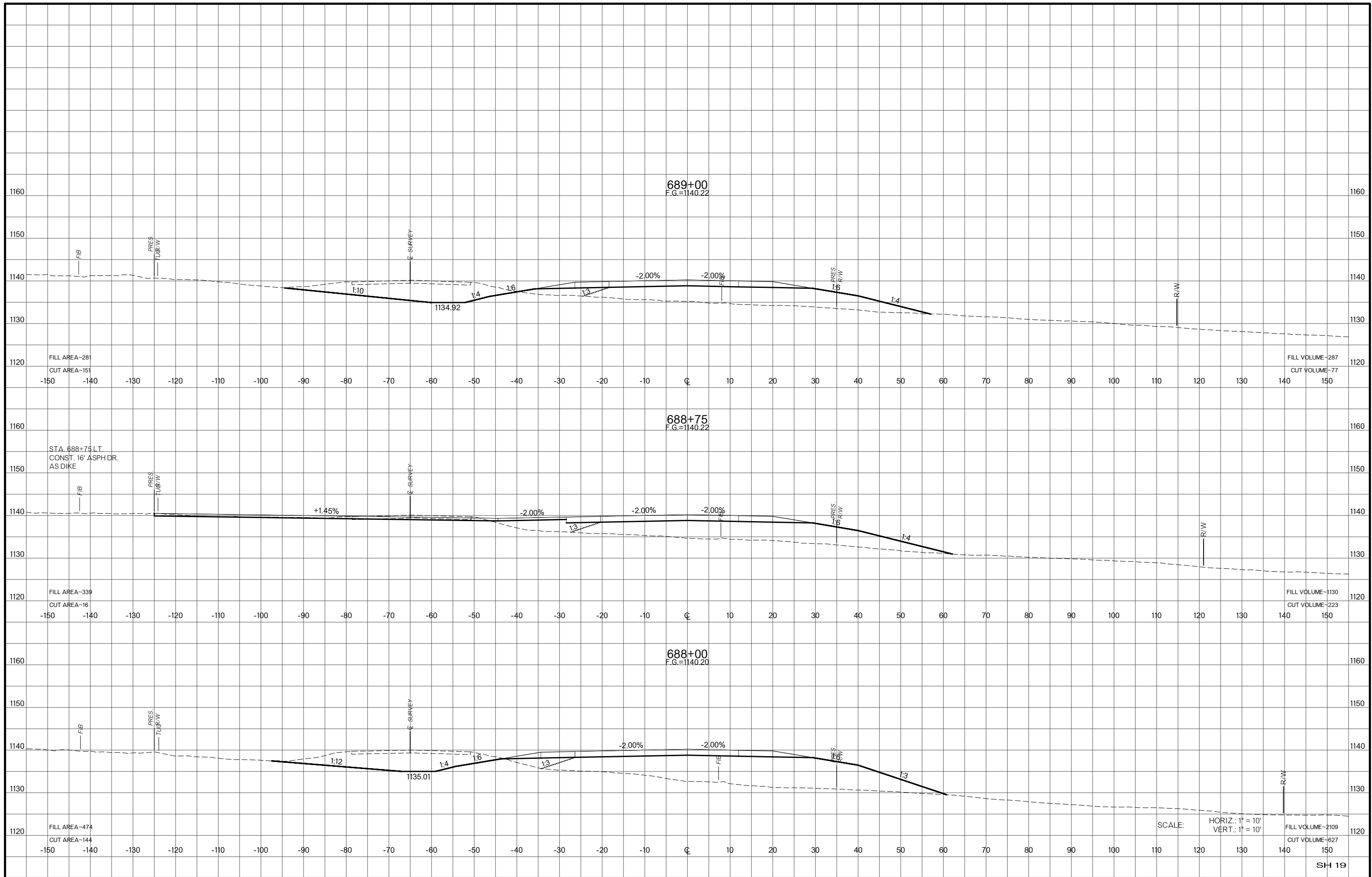


SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

SH 19

State Job No. 30425(07) Sheet No. X091

GRADY COUNTY



689+00
F.G.=1140.22

688+75
F.G.=1140.22

688+00
F.G.=1140.20

FILL AREA-281
CUT AREA-151

FILL VOLUME-287
CUT VOLUME-77

FILL AREA-339
CUT AREA-16

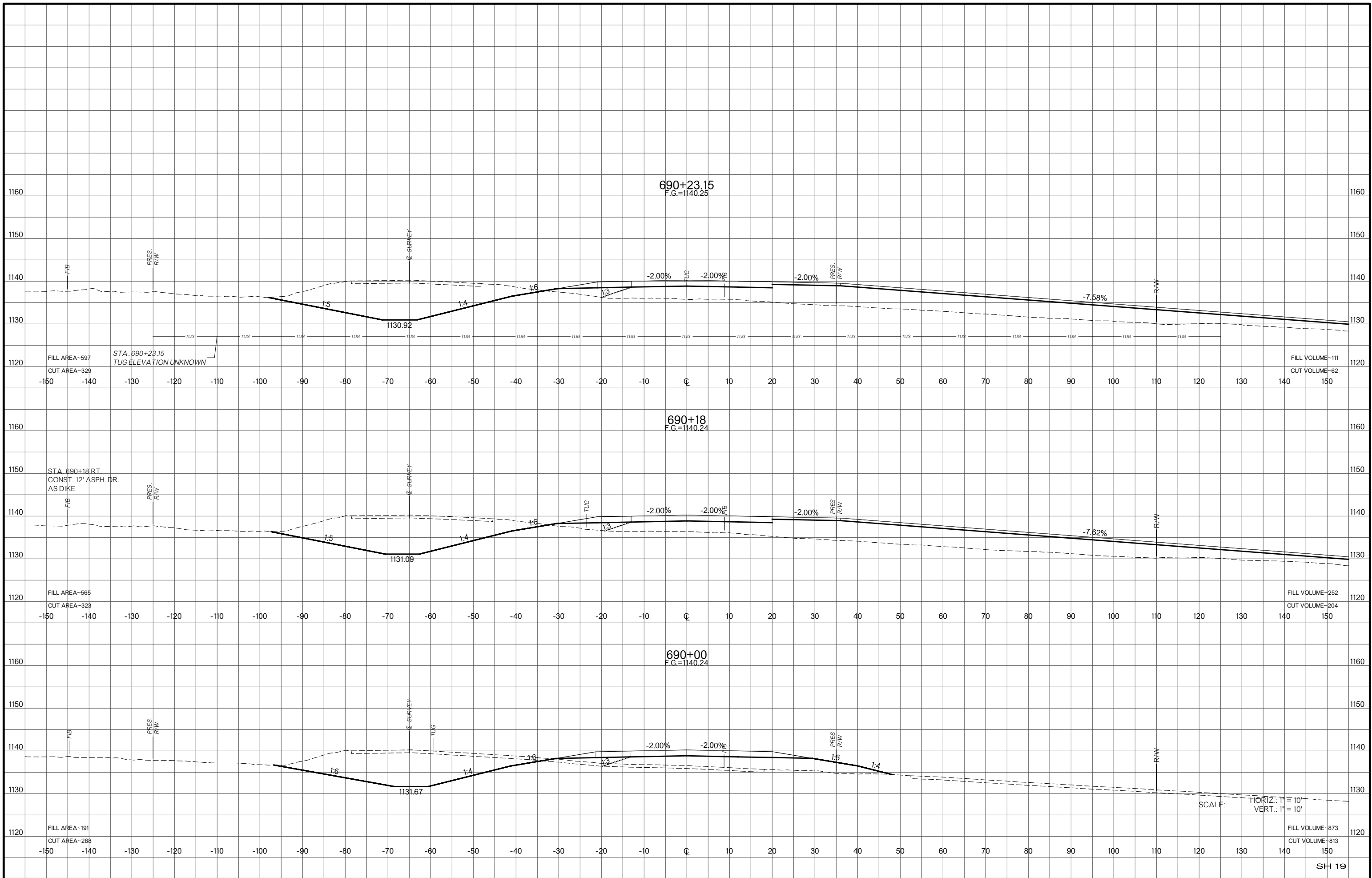
FILL VOLUME-1130
CUT VOLUME-223

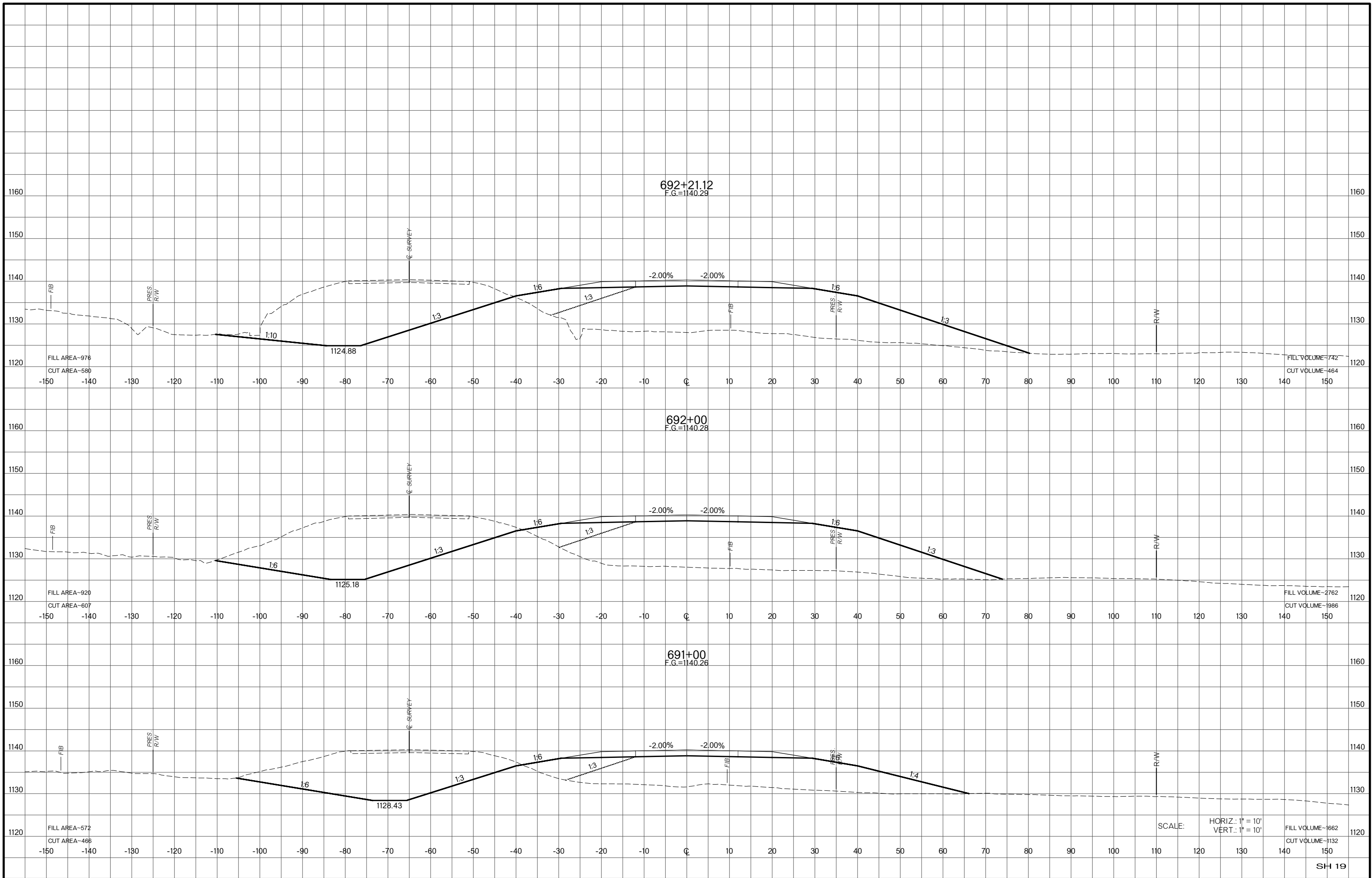
FILL AREA-474
CUT AREA-144

FILL VOLUME-2109
CUT VOLUME-627

SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

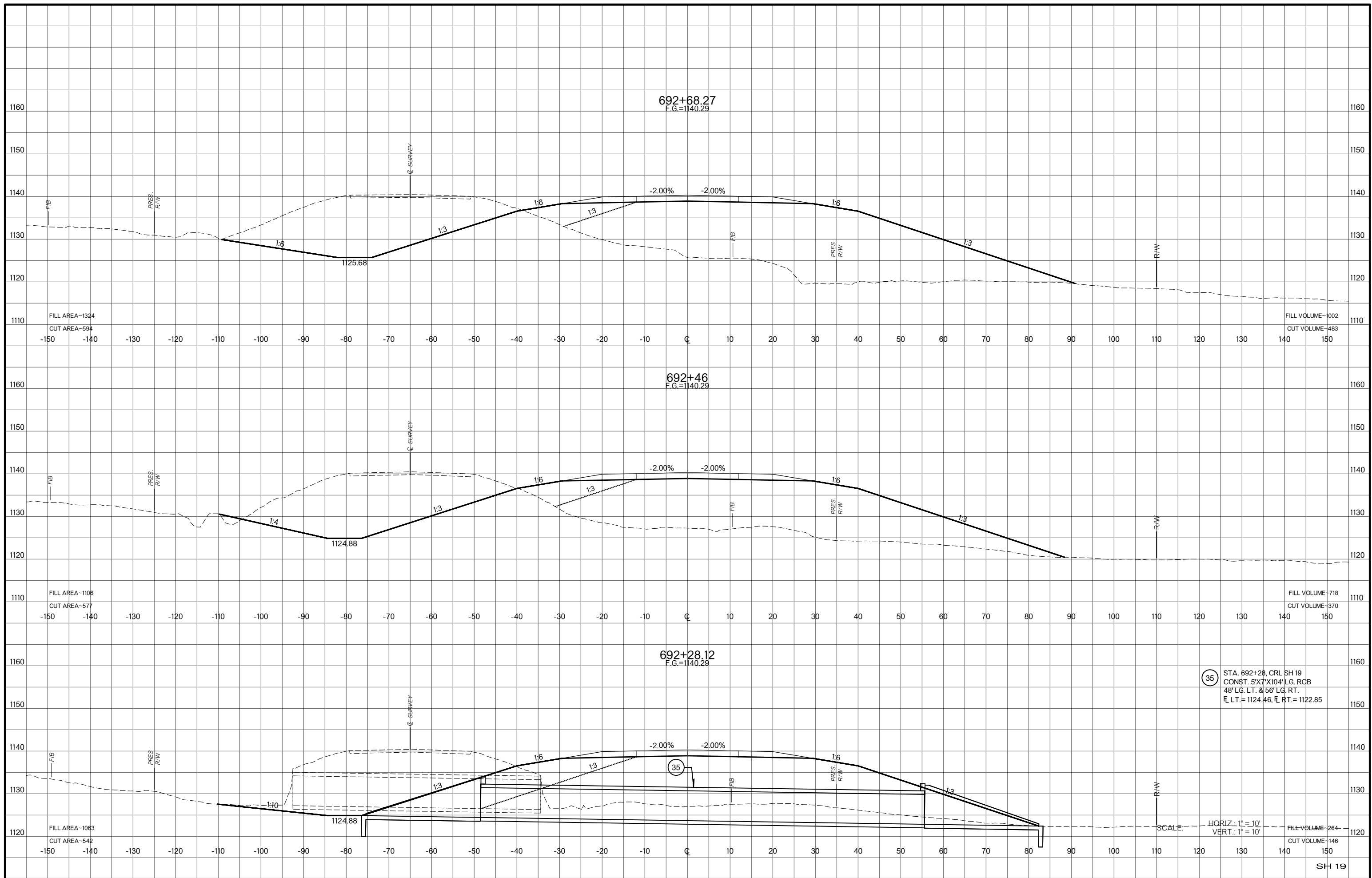
SH 19





SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

FILL VOLUME=1662
CUT VOLUME=1132



692+68.27
F.G.=1140.29

692+46
F.G.=1140.29

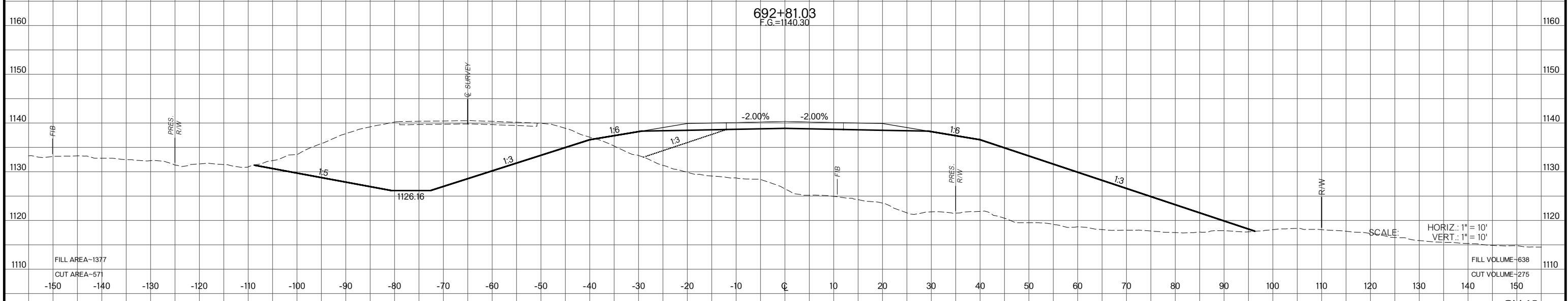
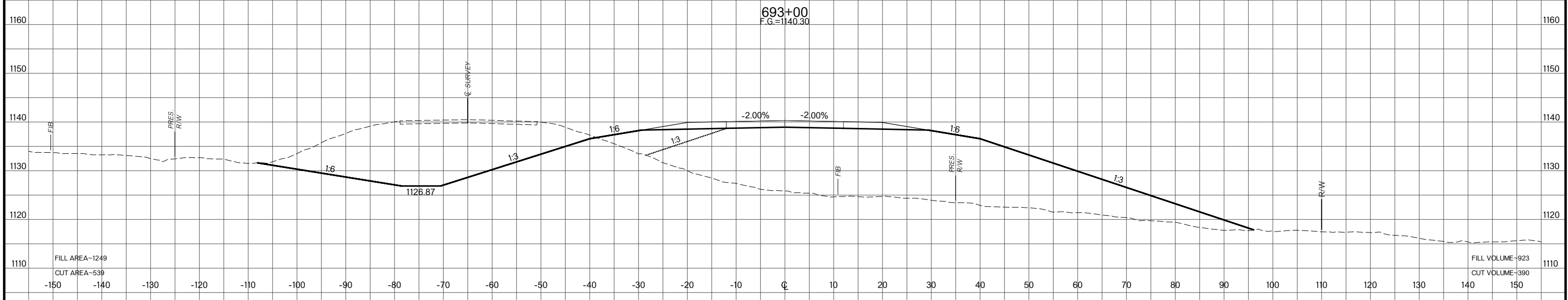
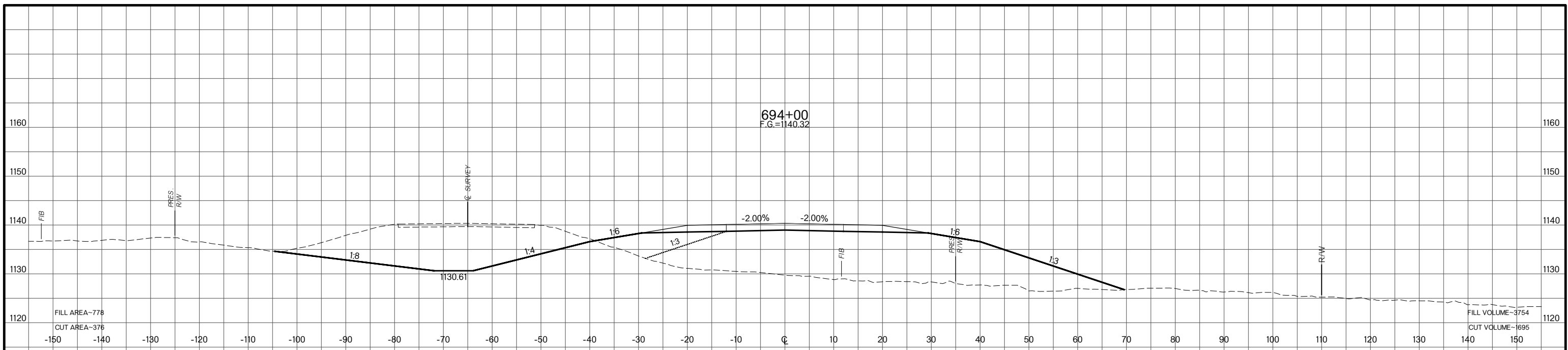
692+28.12
F.G.=1140.29

35 STA. 692+28, CRL SH 19
CONST. 5'X7'X104' LG. RCB
48' LG. LT. & 56' LG. RT.
FL LT.= 1124.46, FL RT.= 1122.85

SCALE: HORIZ.: 1"=10'
VERT.: 1"=10'

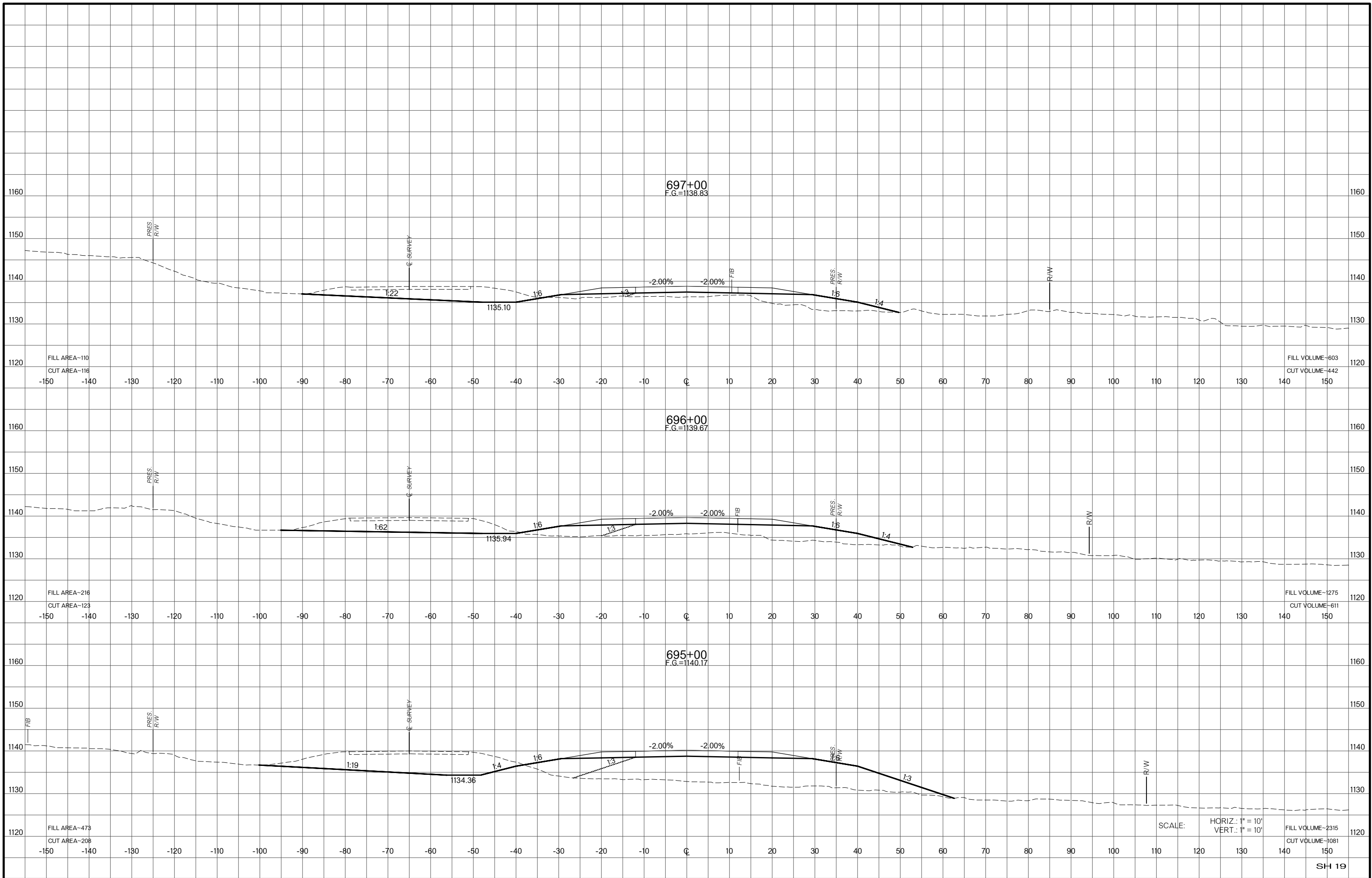
SH 19

GRADY COUNTY

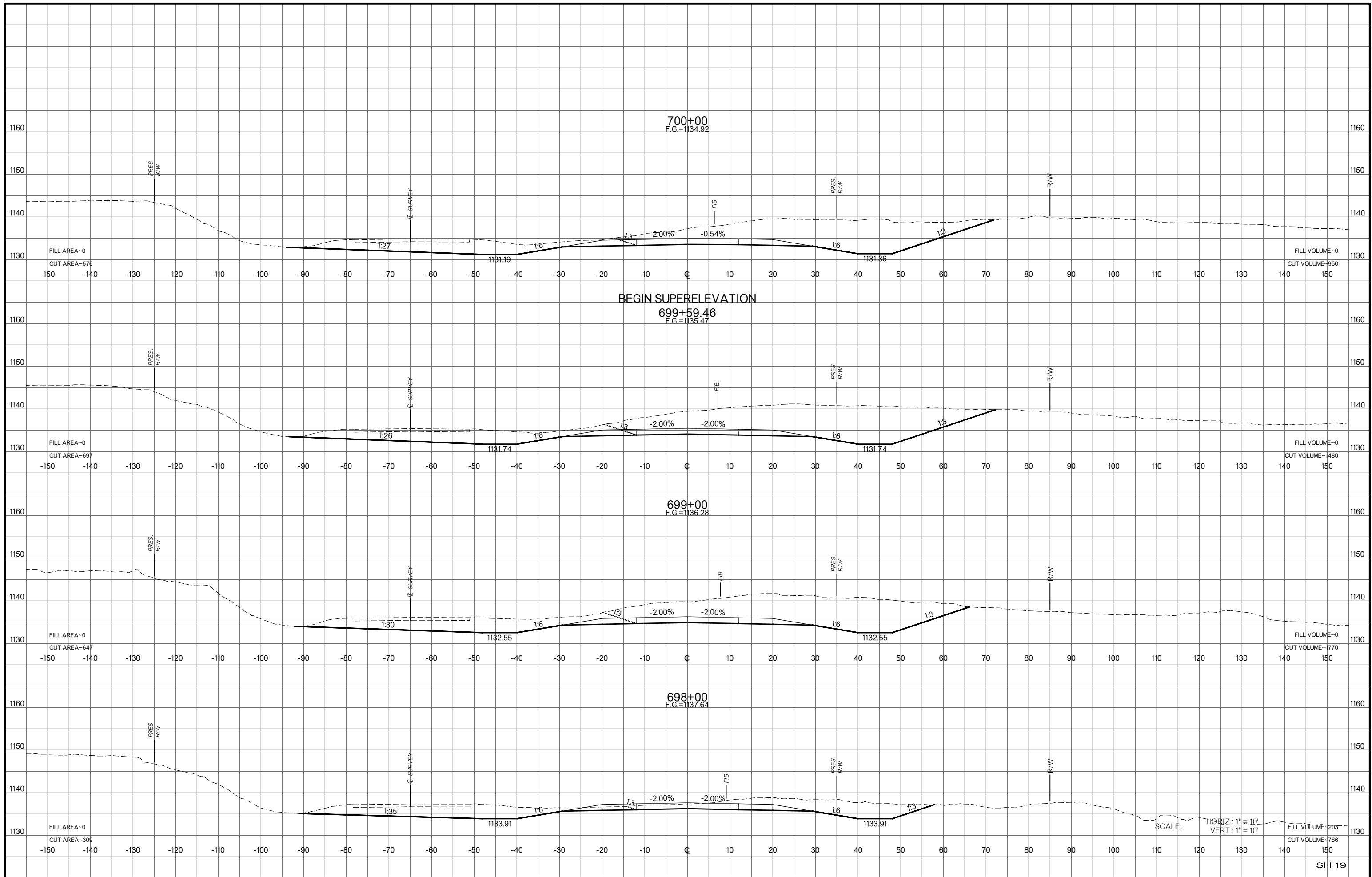


SH 19

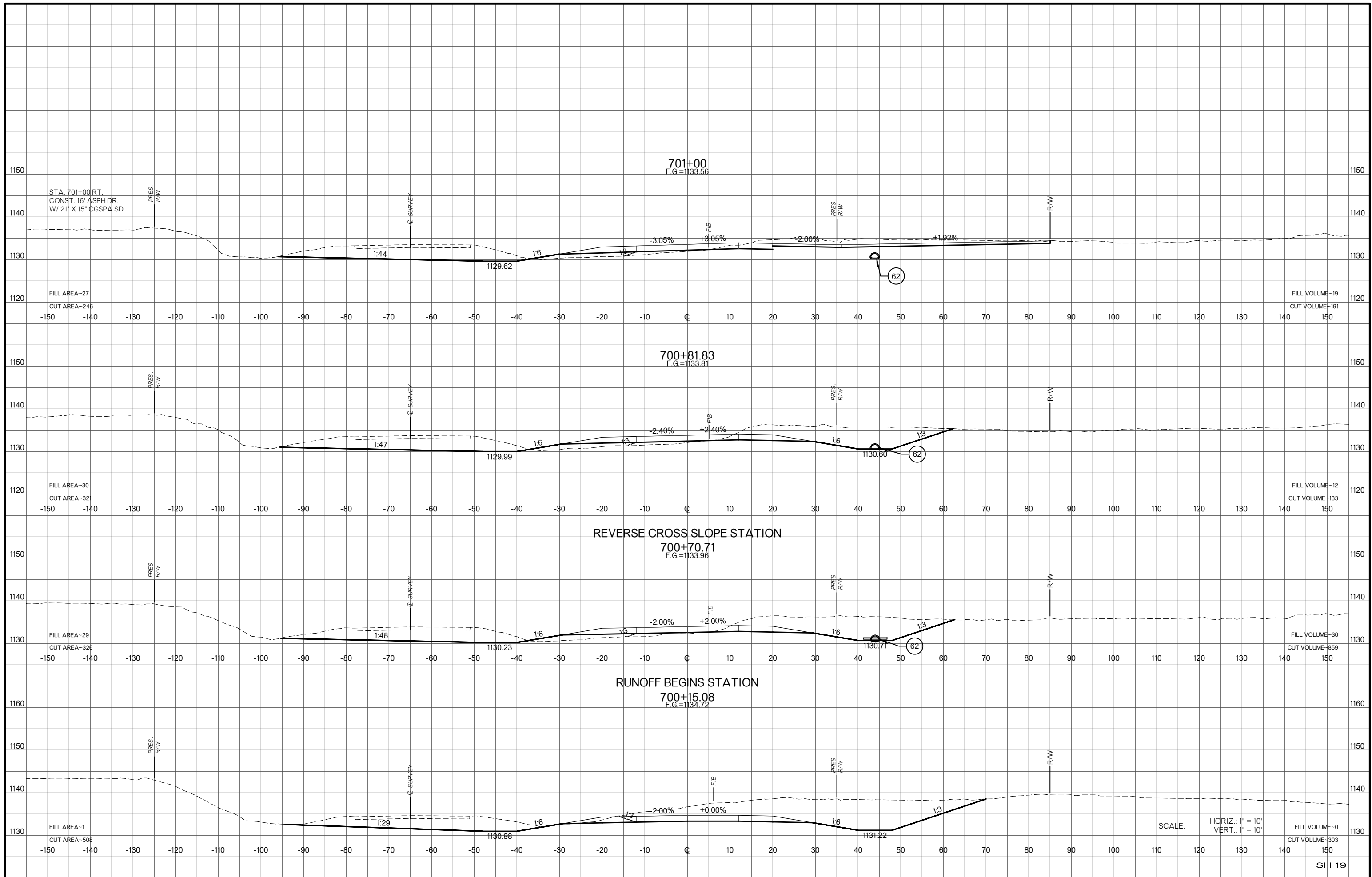
GRADY COUNTY



SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'



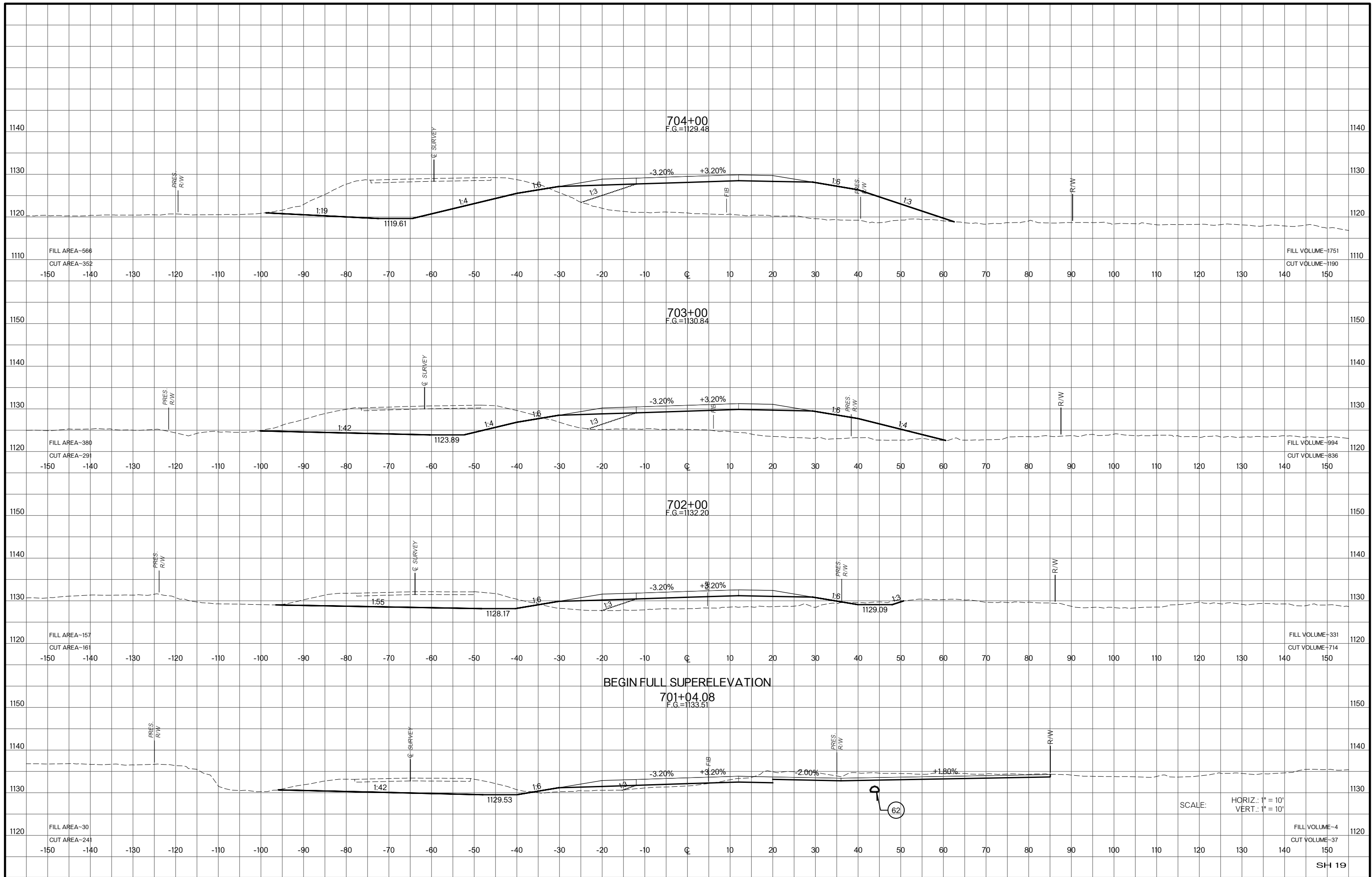
SH 19
GRADY COUNTY

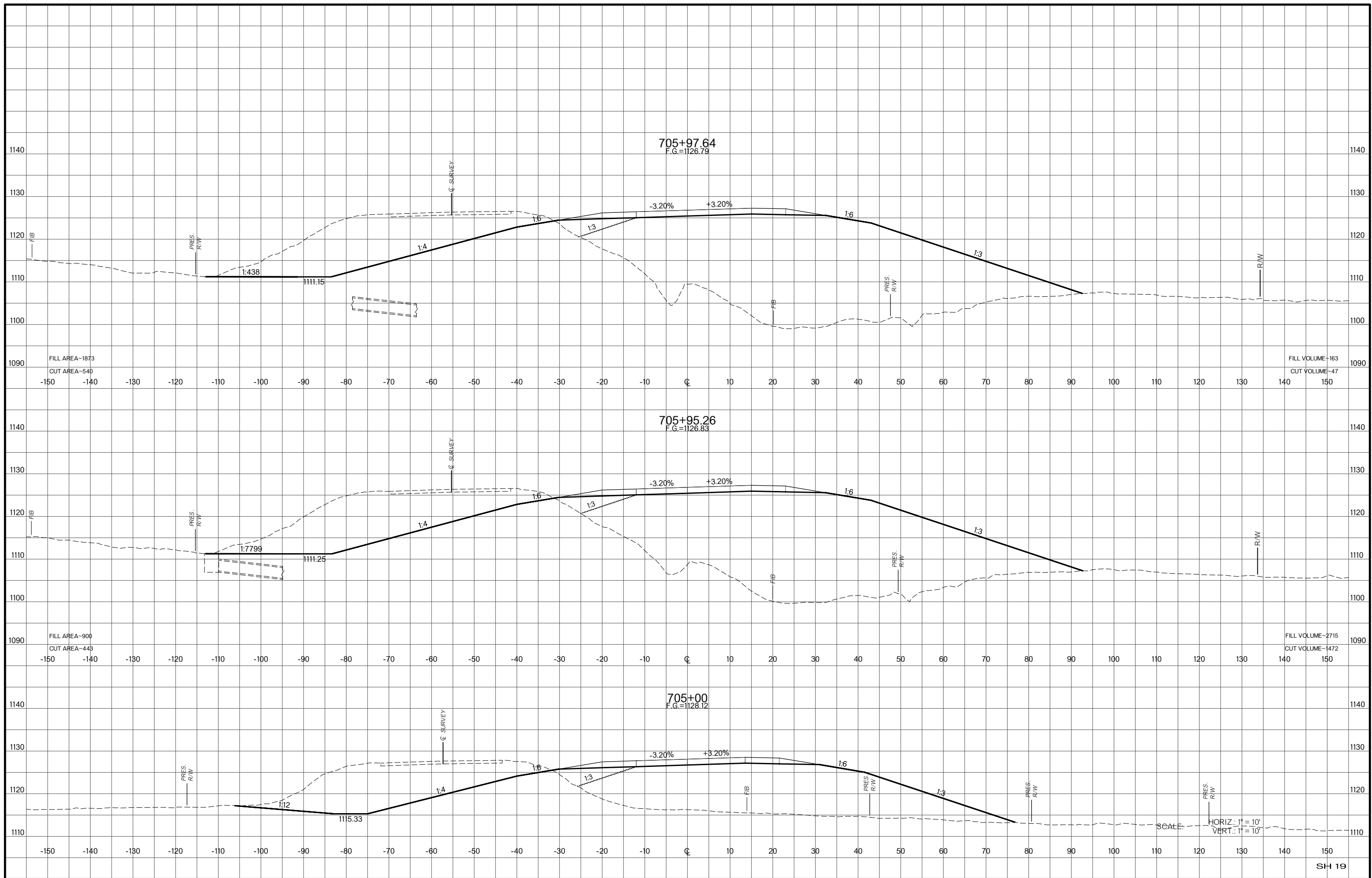


SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

FILL VOLUME=0
CUT VOLUME=303

SH 19





705+97.64
F.G.=1126.79

705+95.26
F.G.=1126.83

705+00
F.G.=1128.12

FILL AREA-1873
CUT AREA-540

FILL VOLUME-163
CUT VOLUME-47

FILL AREA-900
CUT AREA-443

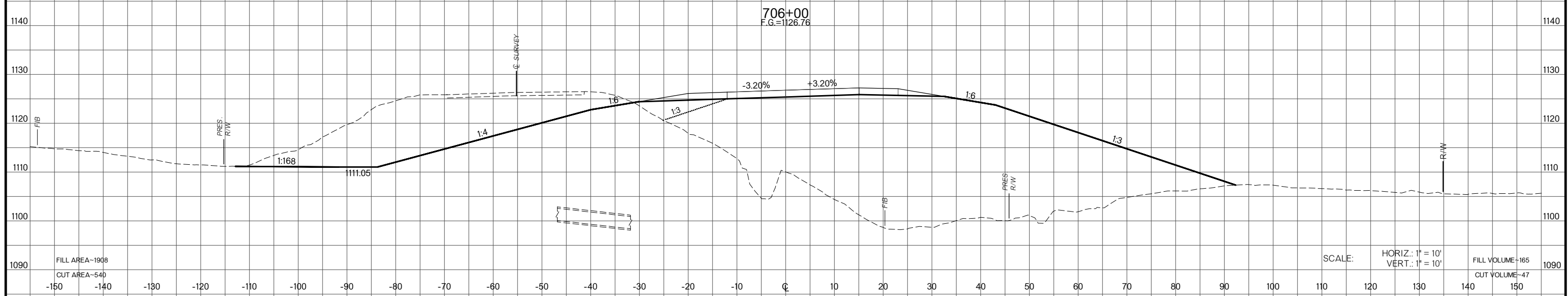
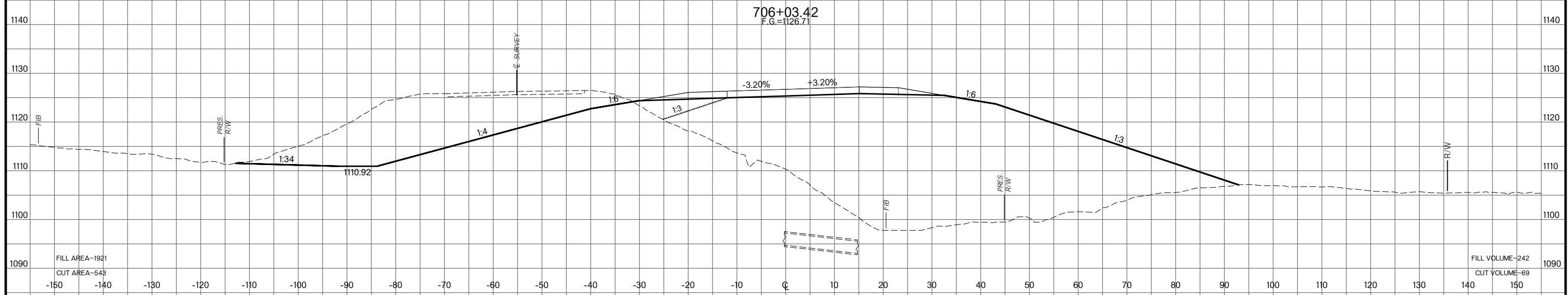
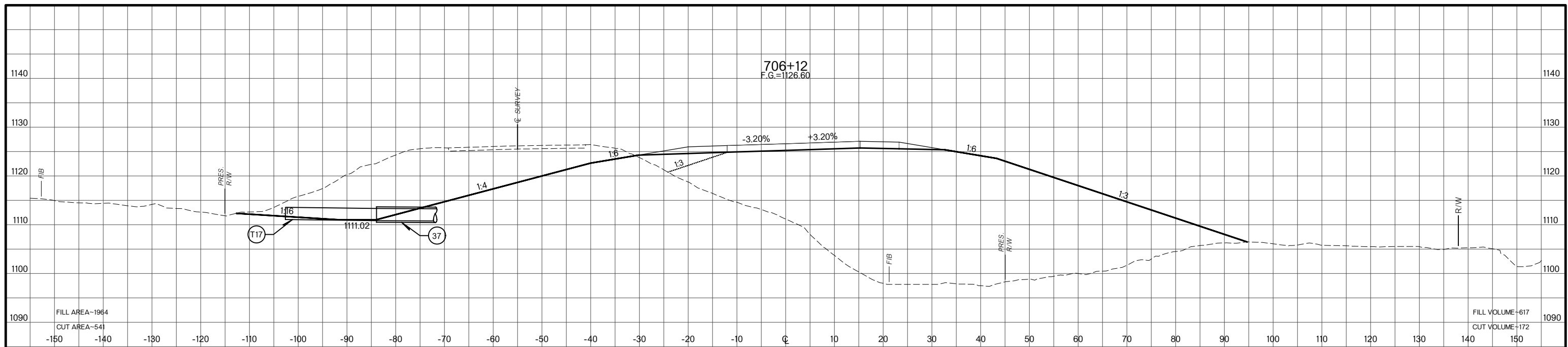
FILL VOLUME-2715
CUT VOLUME-1472

FILL AREA-900
CUT AREA-443

FILL VOLUME-2715
CUT VOLUME-1472

SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

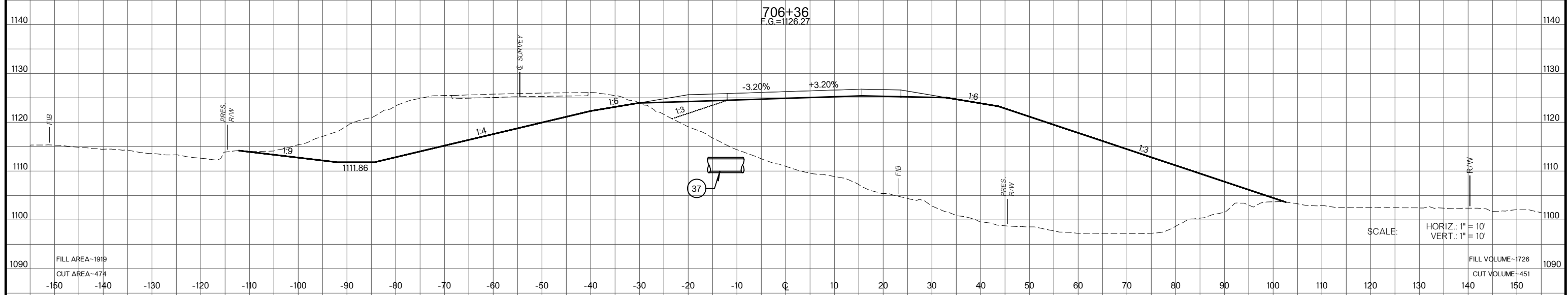
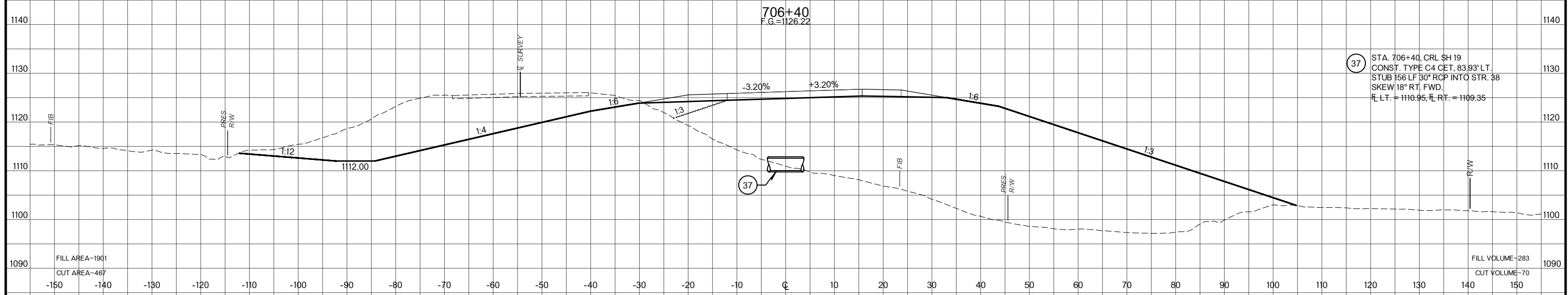
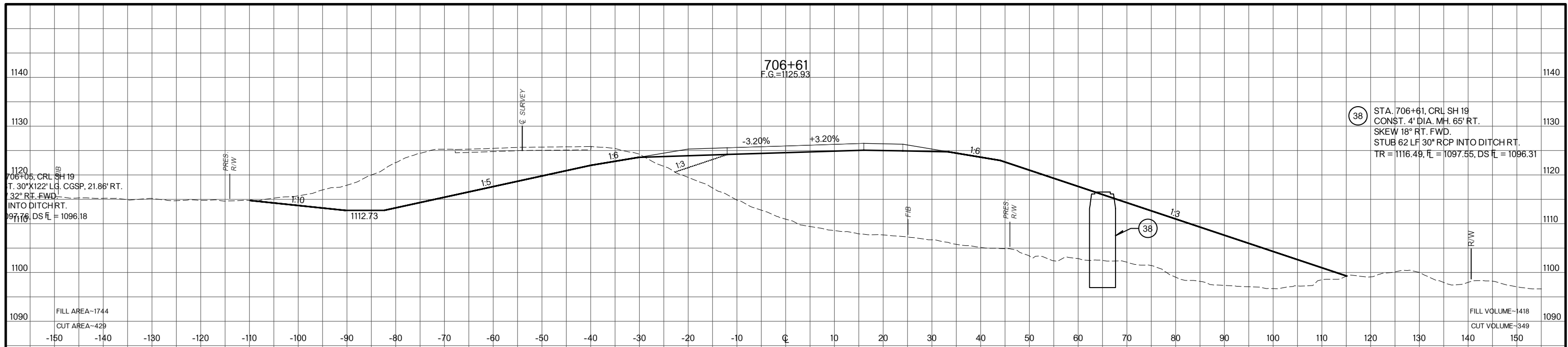
SH 19

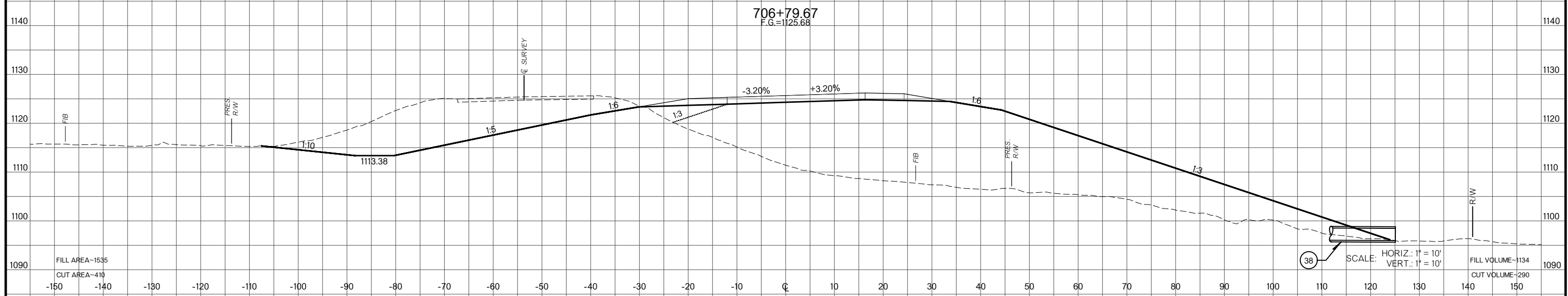
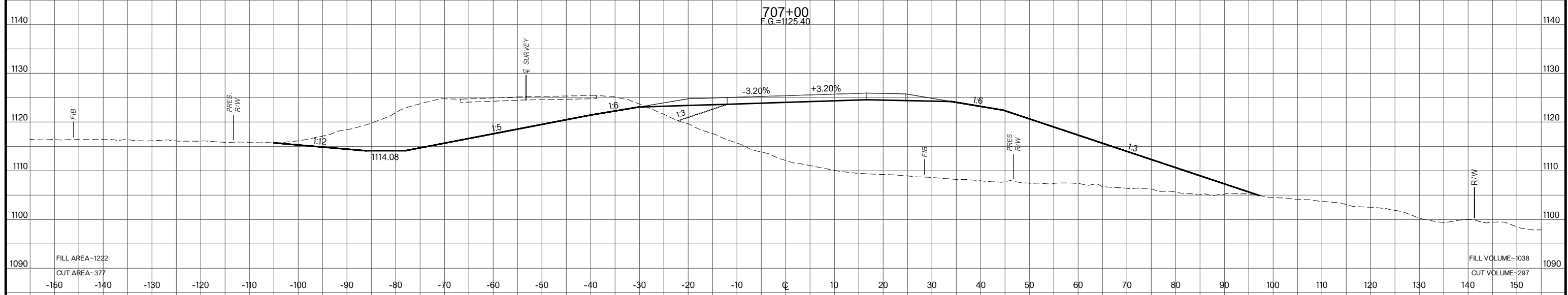
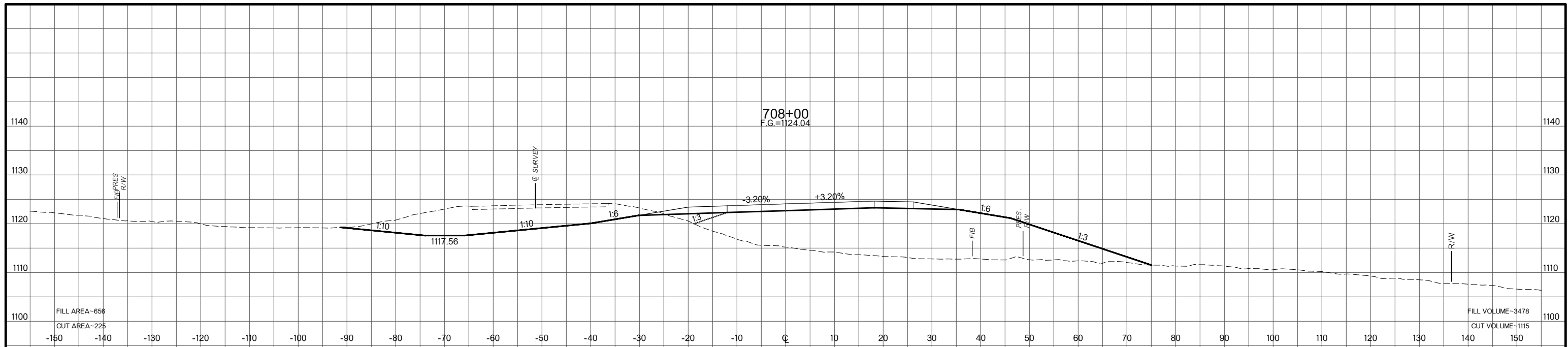


SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

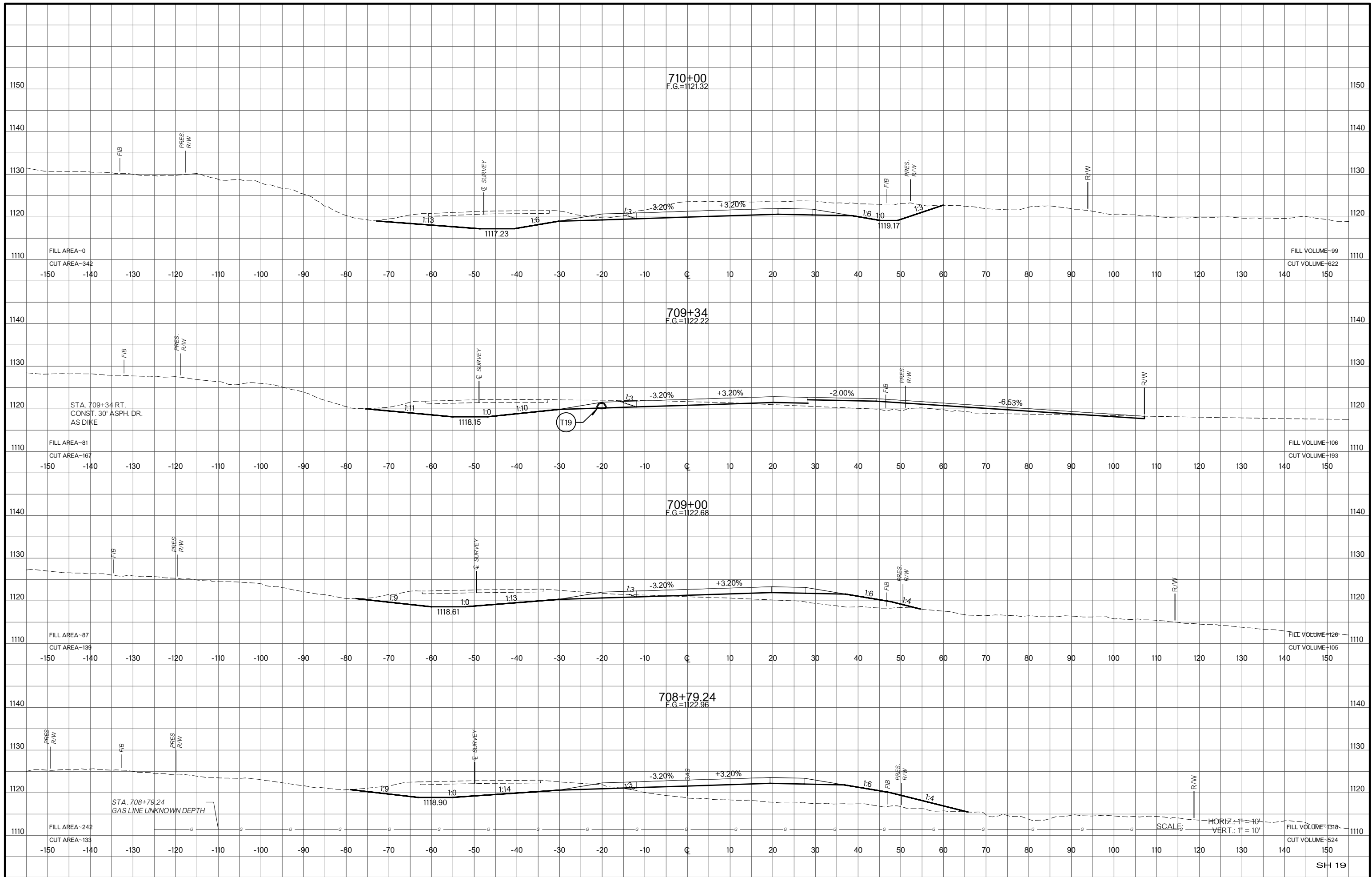
FILL VOLUME-165
CUT VOLUME-47

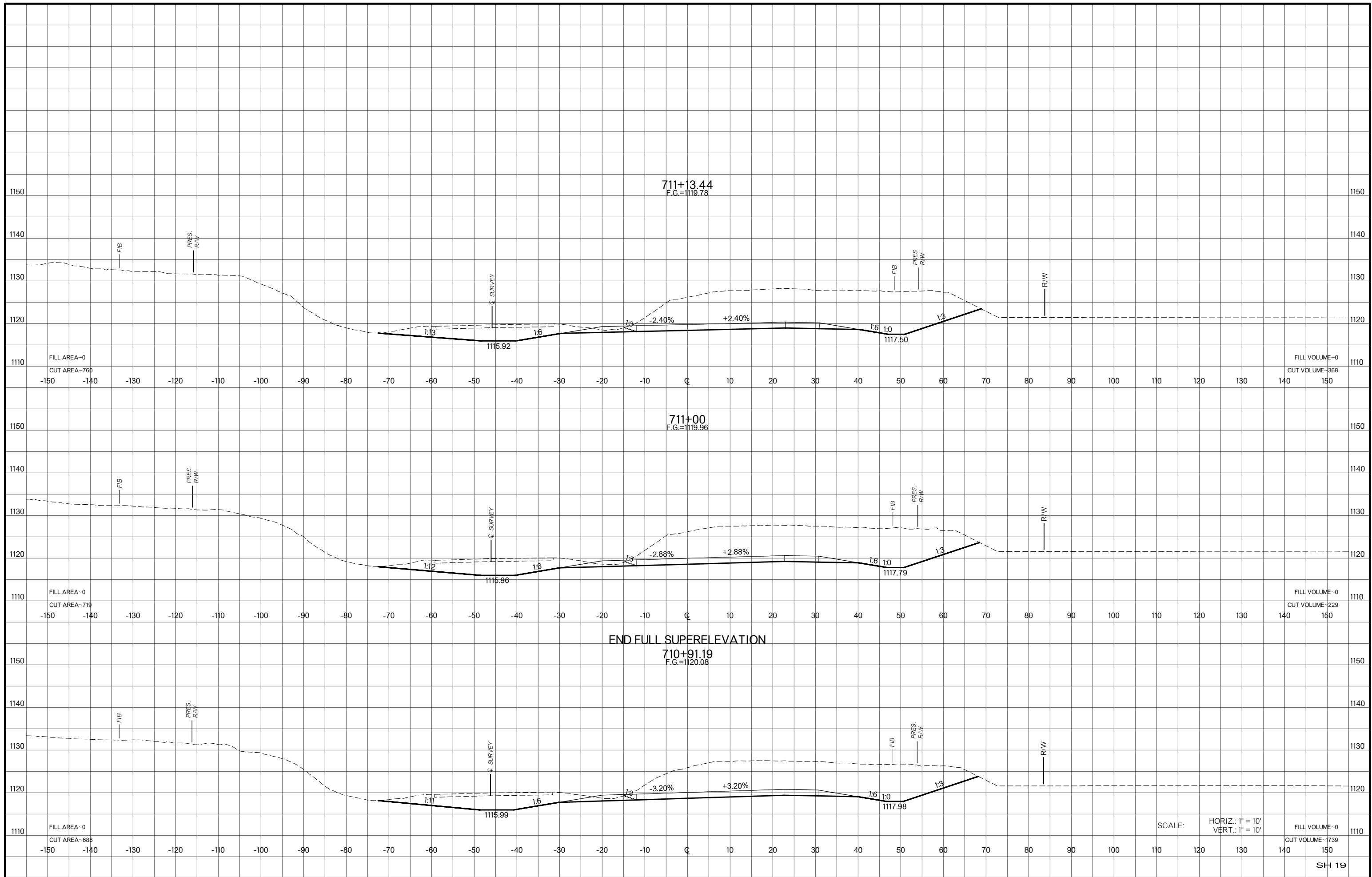
SH 19





38 SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

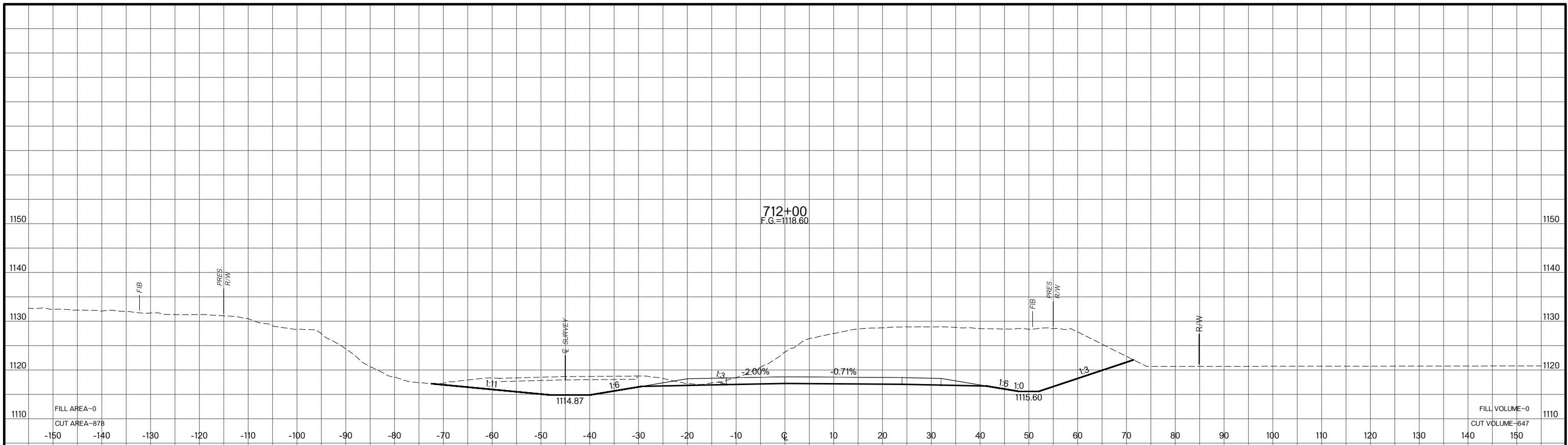




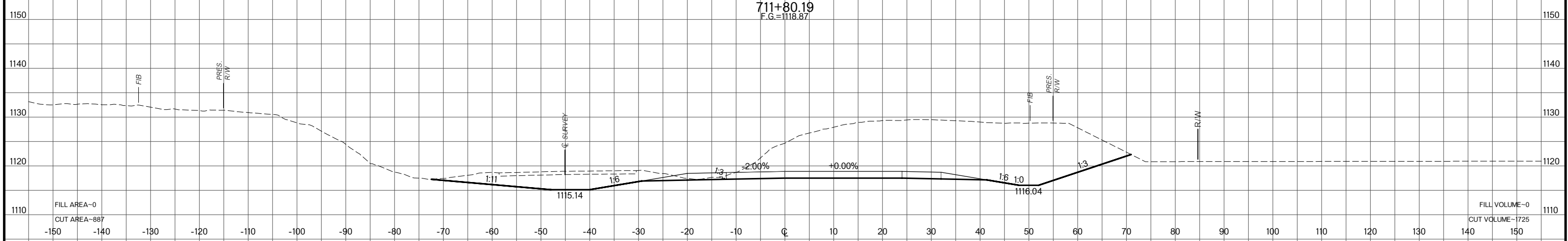
SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

FILL VOLUME=0
CUT VOLUME=1739

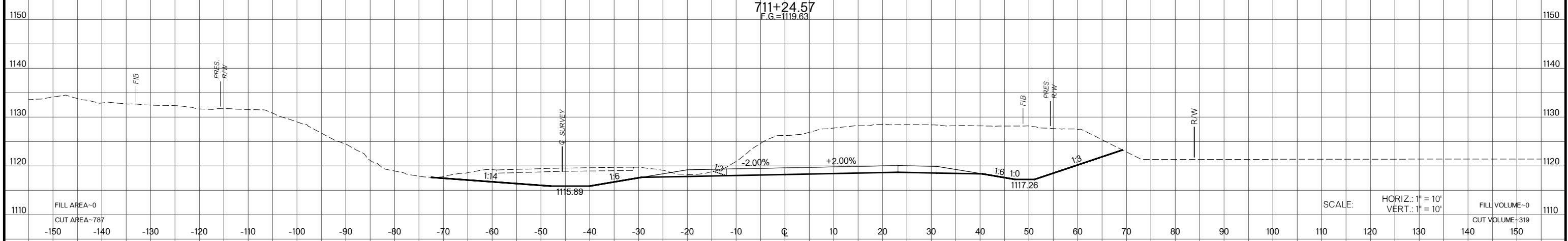
SH 19



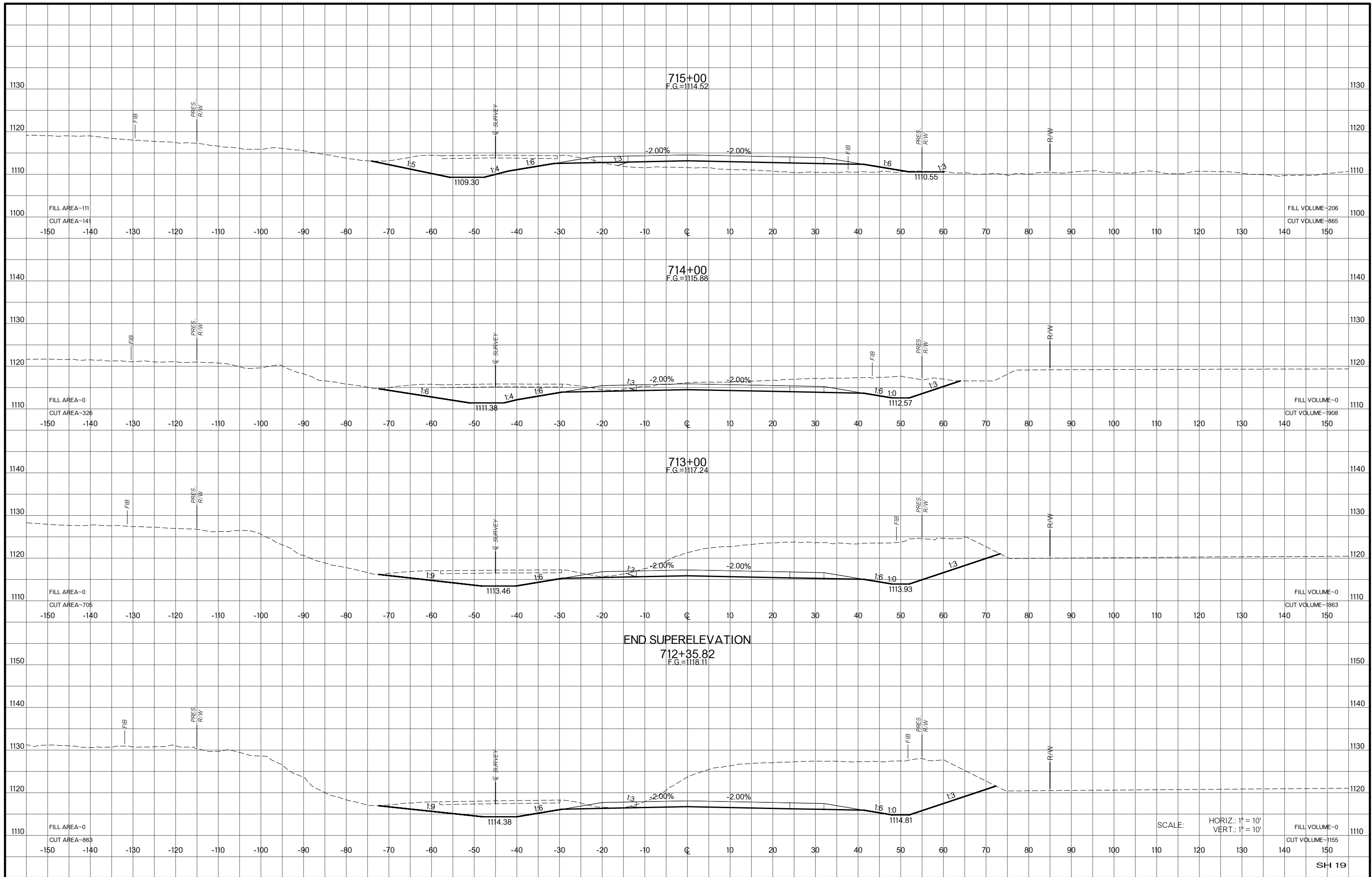
RUNOFF ENDS STATION

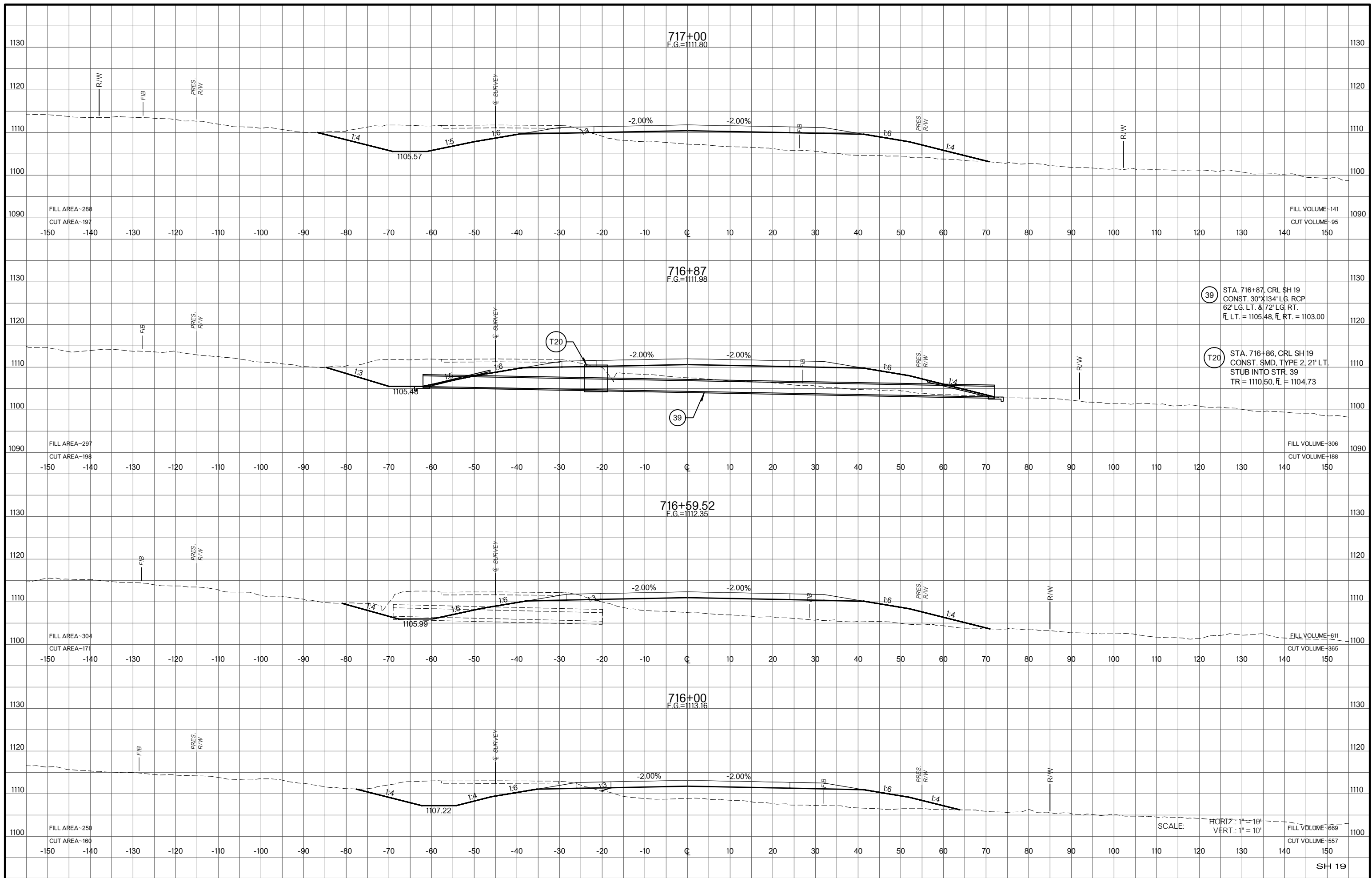


REVERSE CROSS SLOPE STATION



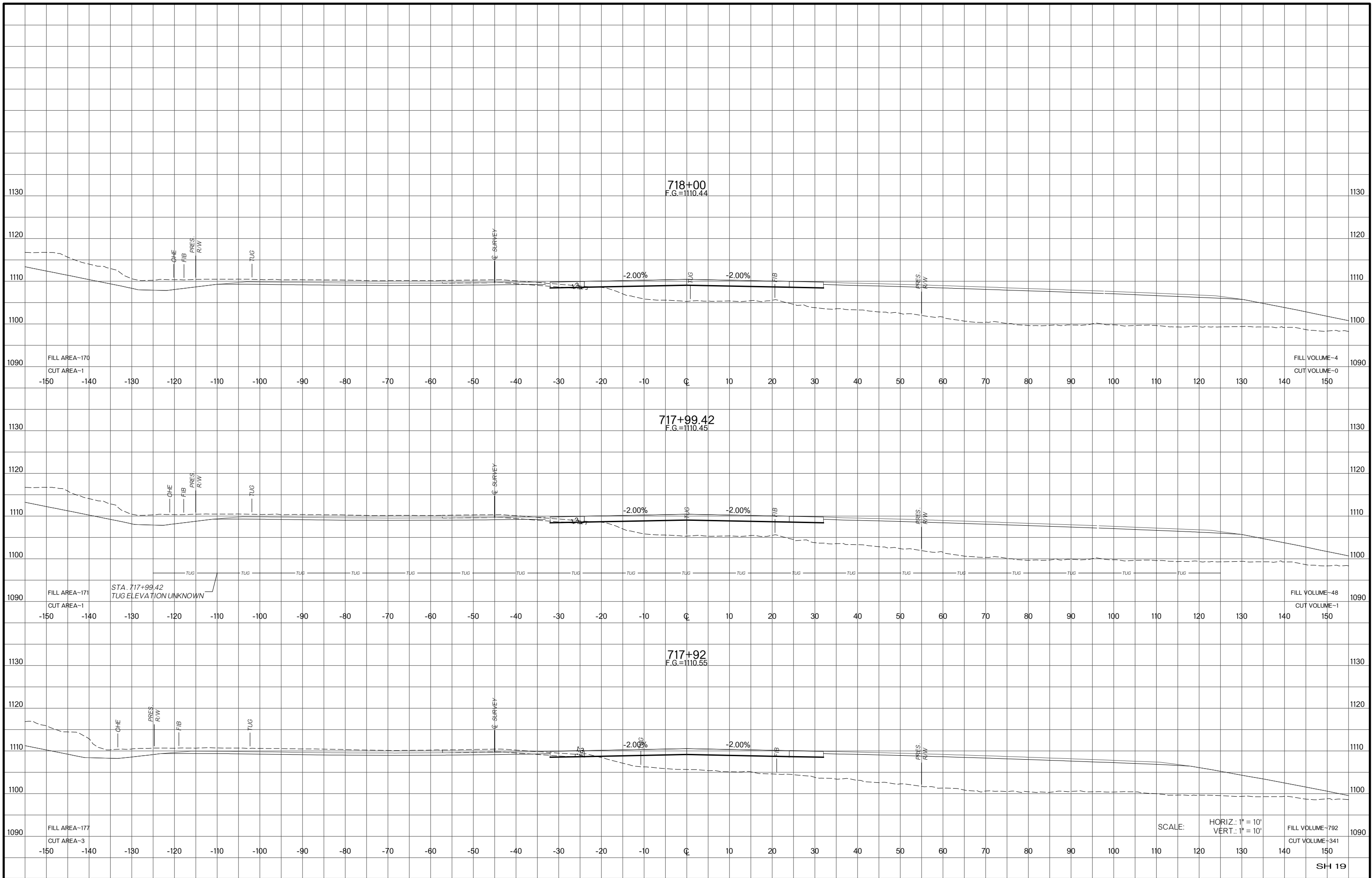
SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'



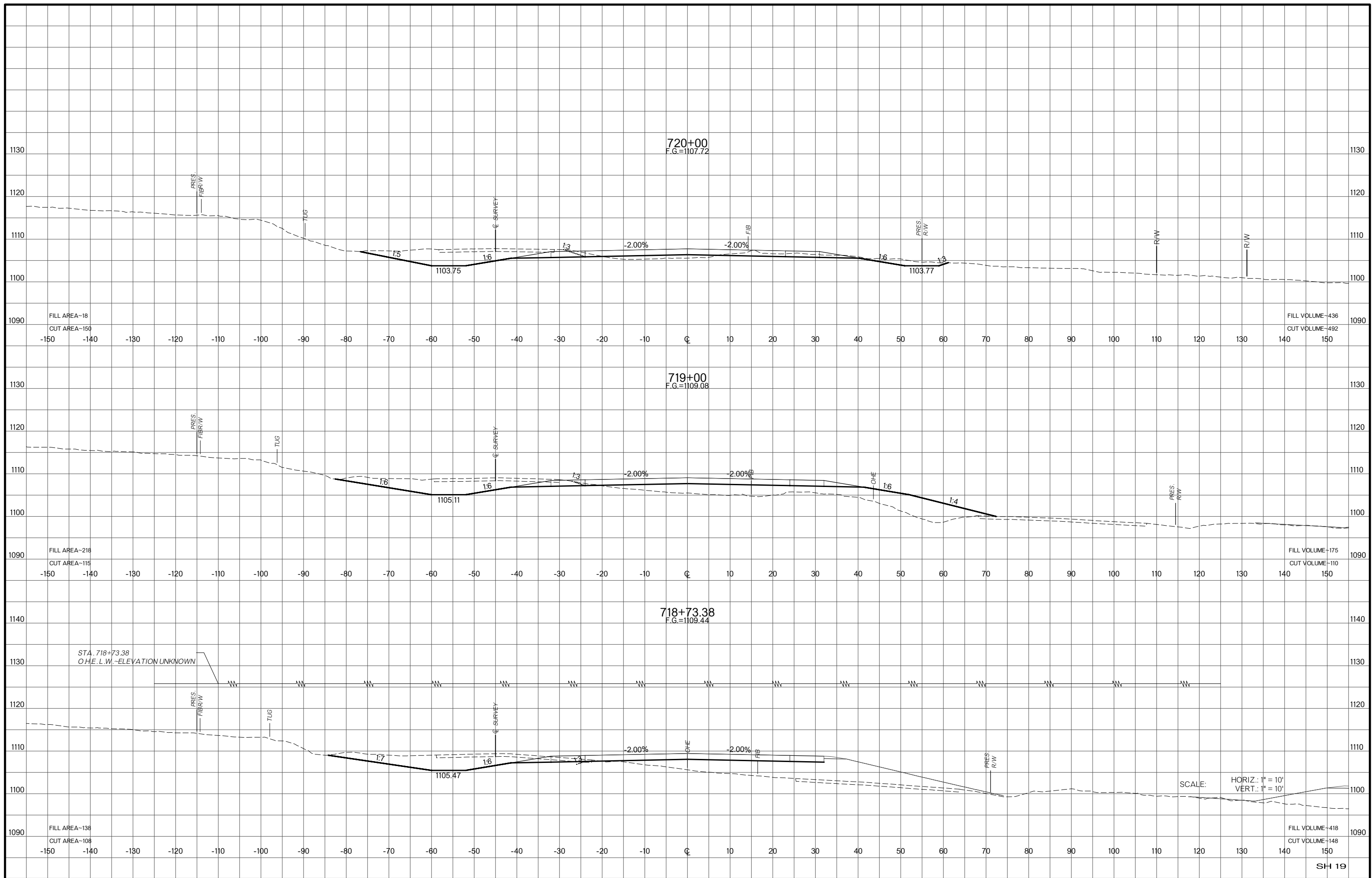


(39) STA. 716+87, CRL SH 19
CONST. 30"X134' LG. RCP
62' LG. LT. & 72' LG. RT.
FL LT. = 1105.48, FL RT. = 1103.00

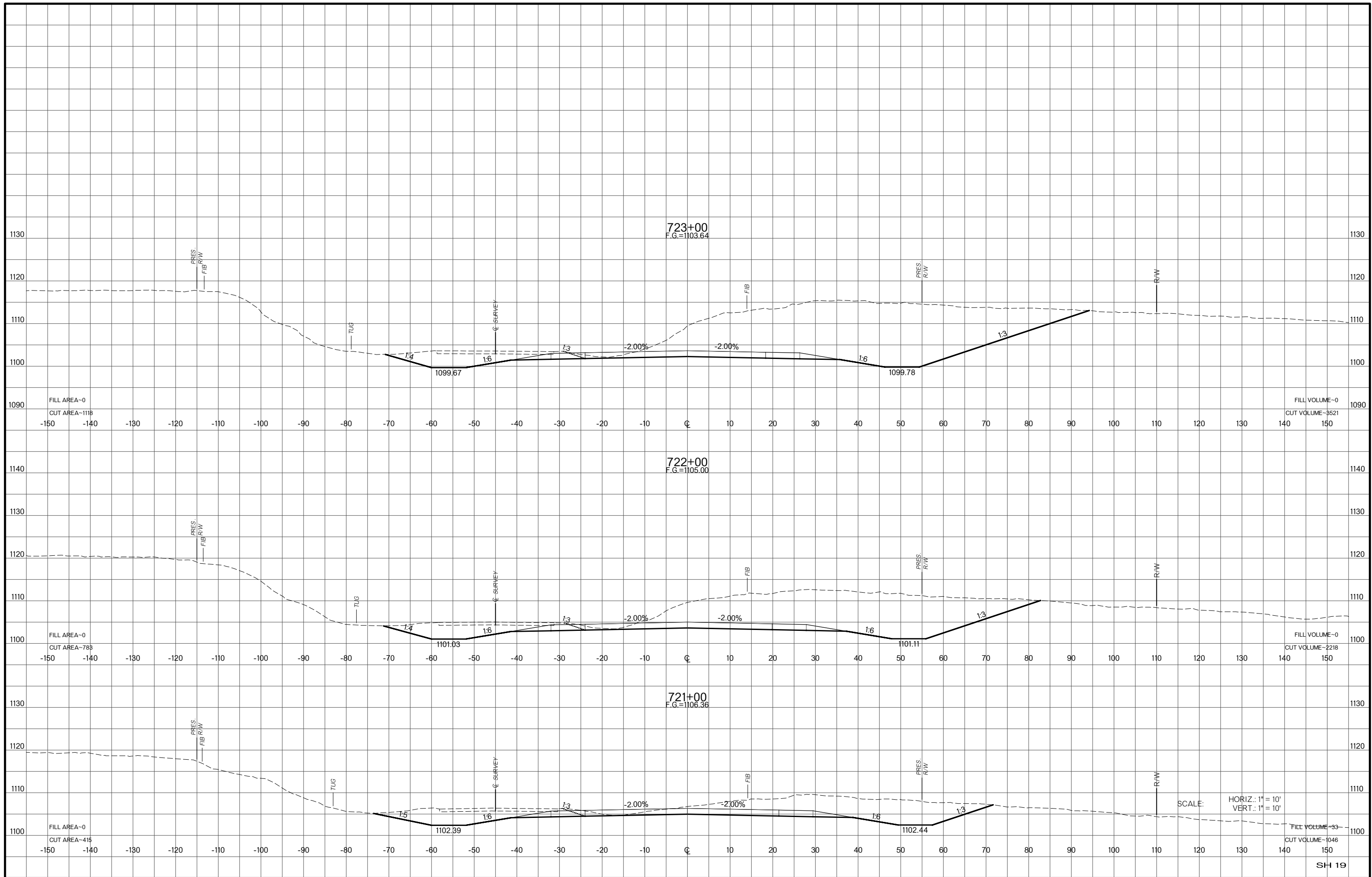
(T20) STA. 716+86, CRL SH 19
CONST. SMD. TYPE 2, 21' LT.
STUB INTO STR. 39
TR = 1110.50, FL = 1104.73

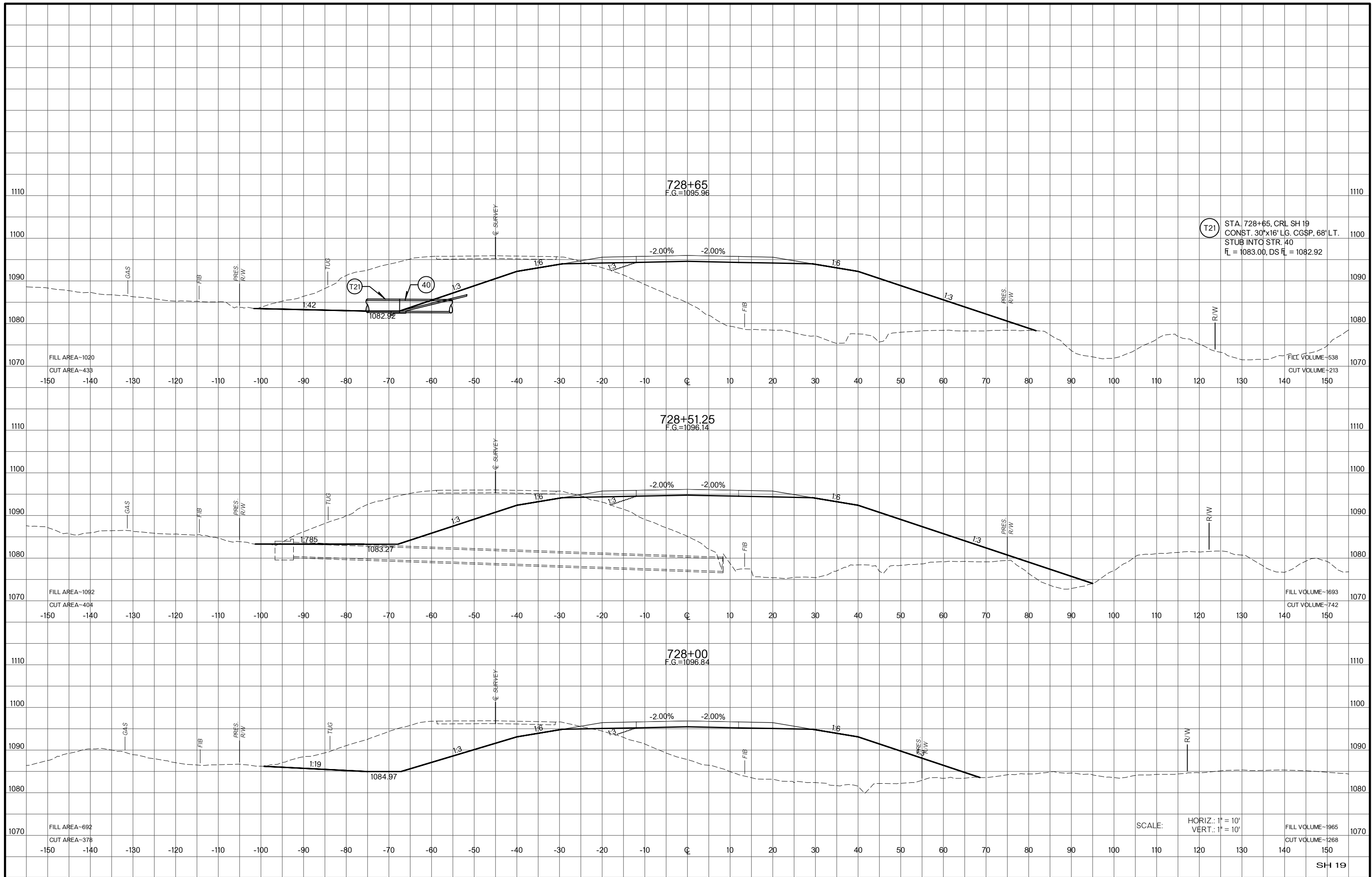


SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'



SH 19
GRADY COUNTY



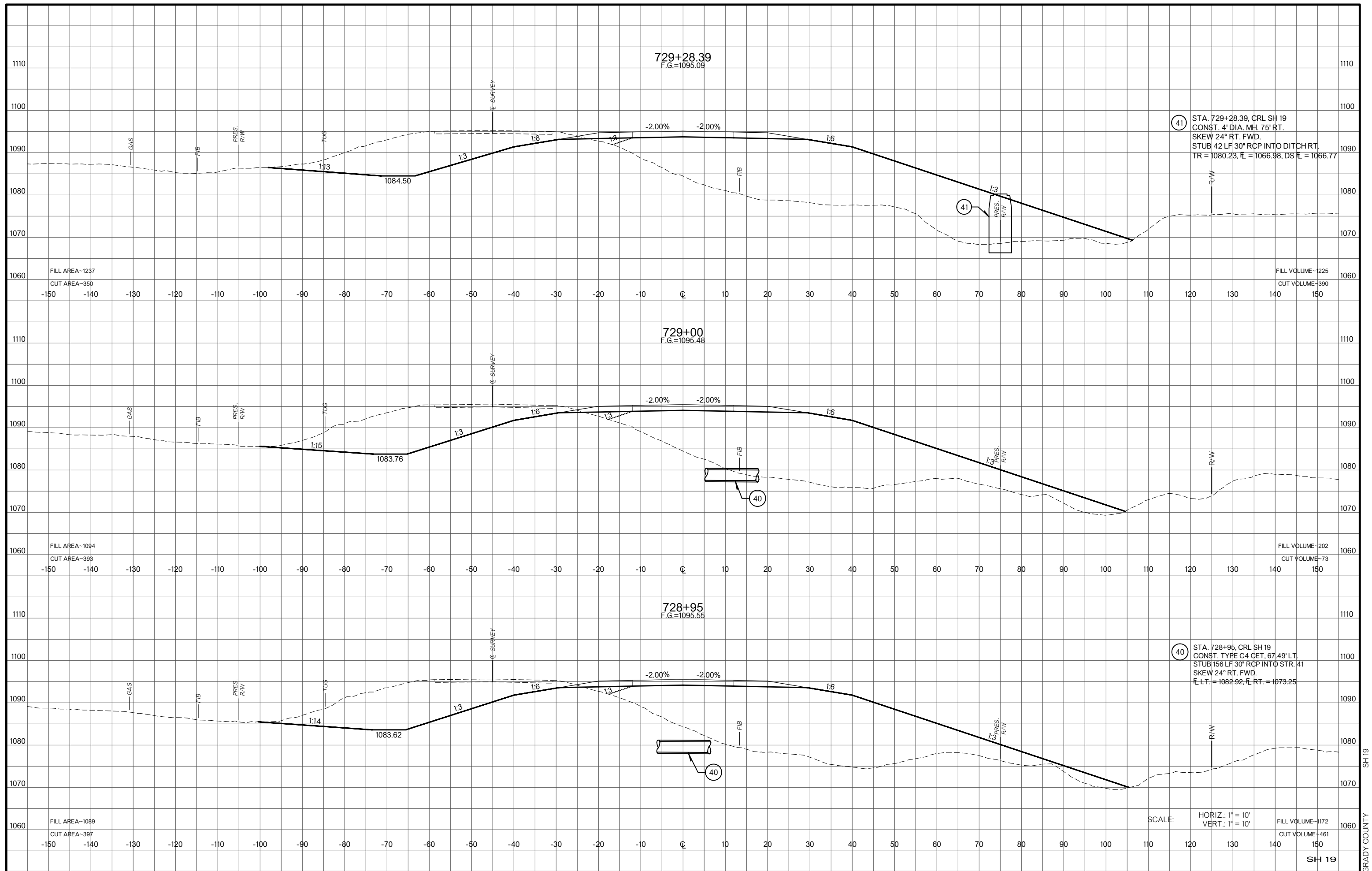


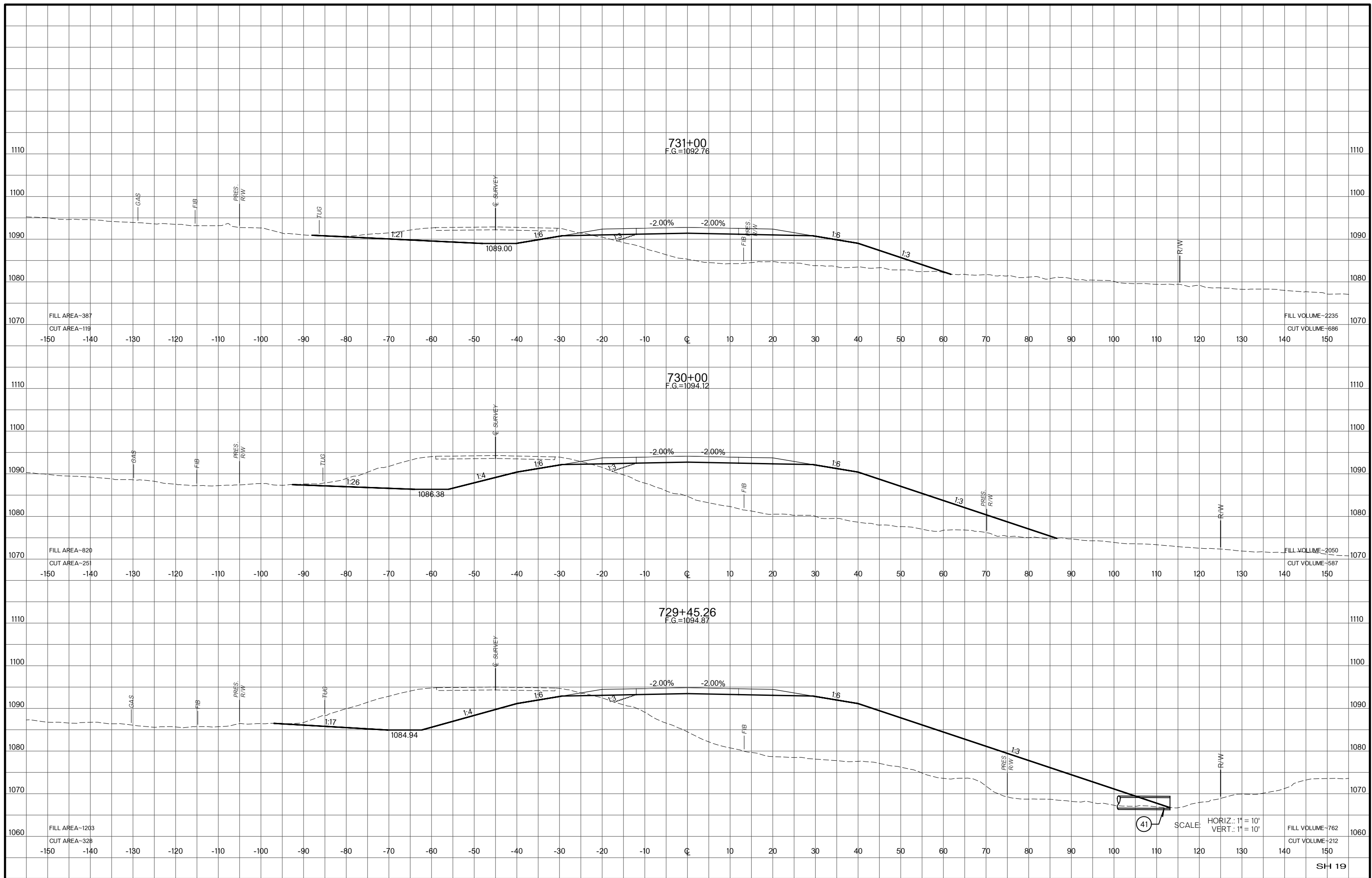
(T21) STA. 728+65, CRL SH 19
 CONST. 30"x16" LG. CGSP, 68" LT.
 STUB INTO STR. 40
 FL = 1083.00, DS FL = 1082.92

SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

FILL VOLUME ~ 1965
 CUT VOLUME ~ 1268

SH 19

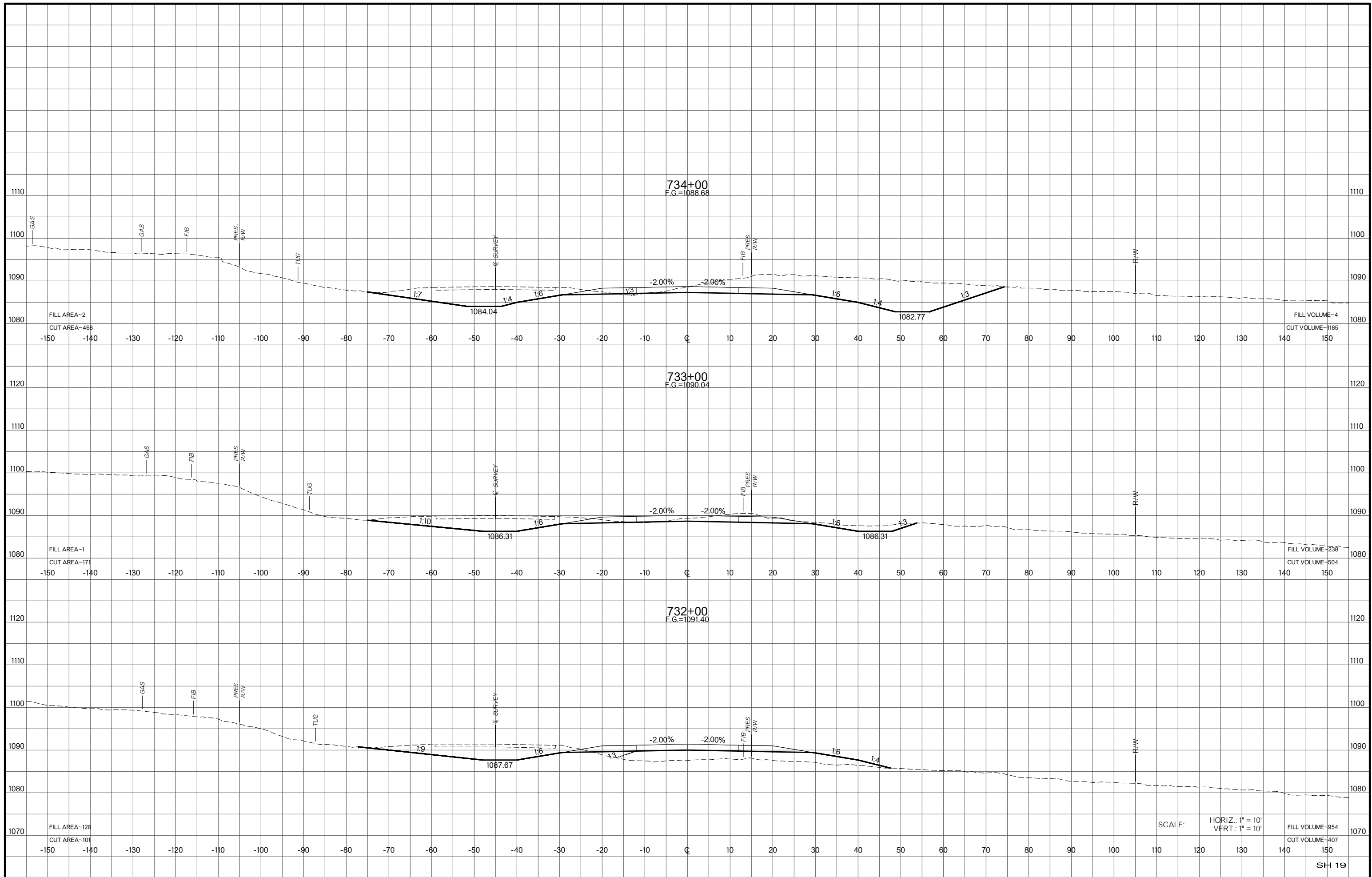




SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

41

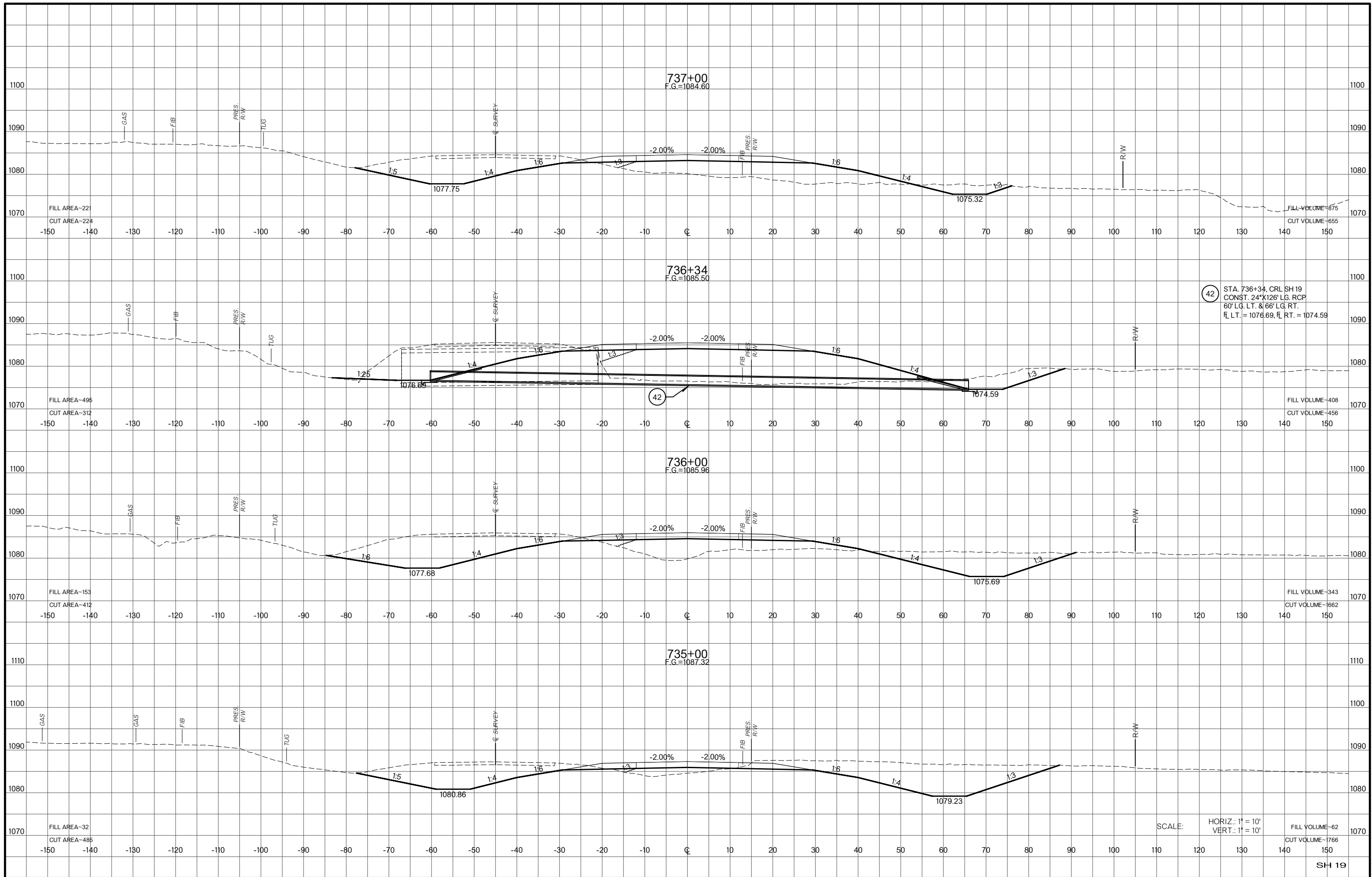
SH 19



SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

FILL VOLUME-954
CUT VOLUME-407

SH 19

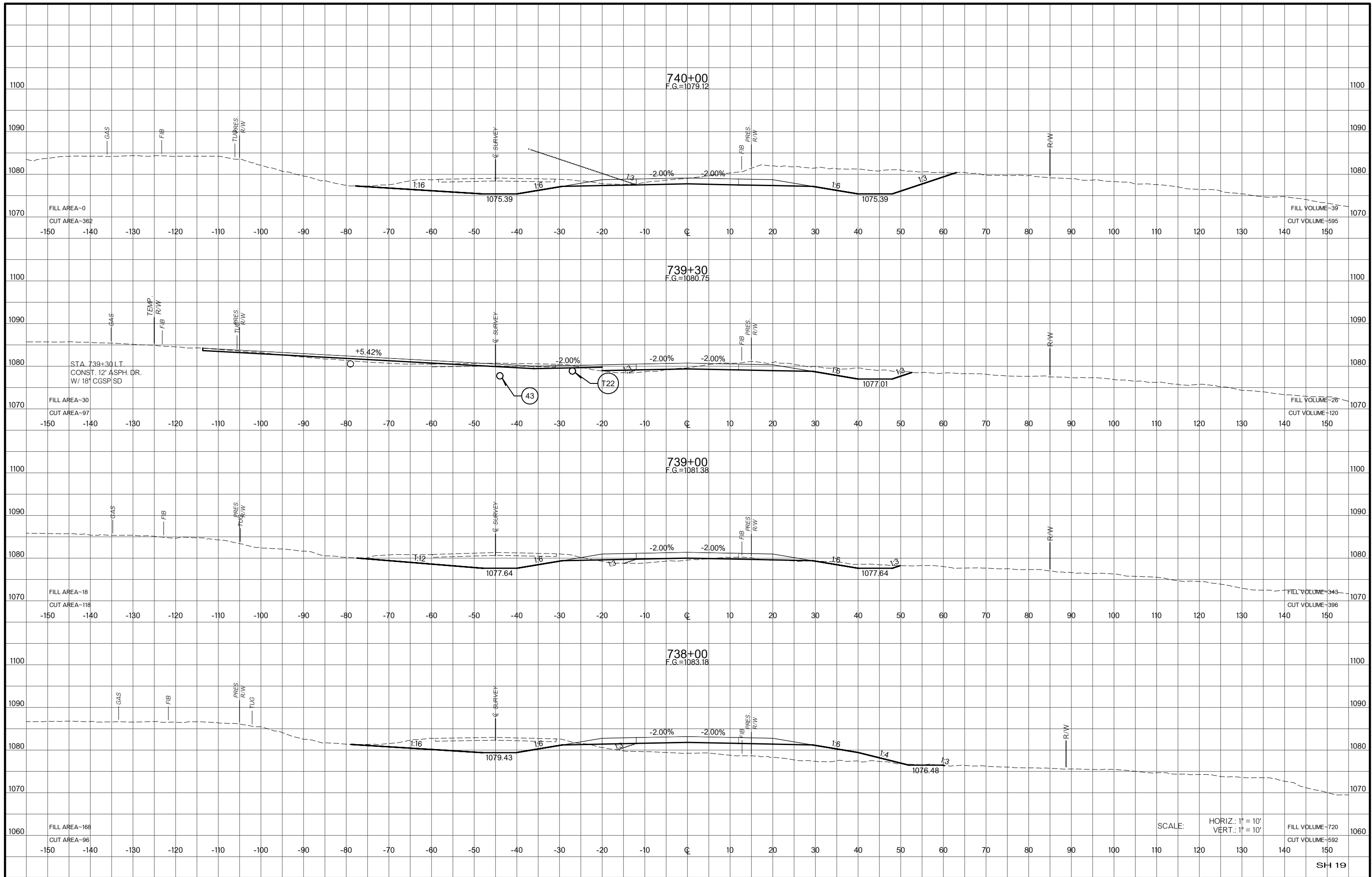


42 STA. 736+34, CRL SH 19
 CONST. 24"X126' LG. RCP
 60' LG. LT. & 66' LG. RT.
 FL LT. = 1076.69, FL RT. = 1074.59

SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

FILL VOLUME=62
 CUT VOLUME=1766

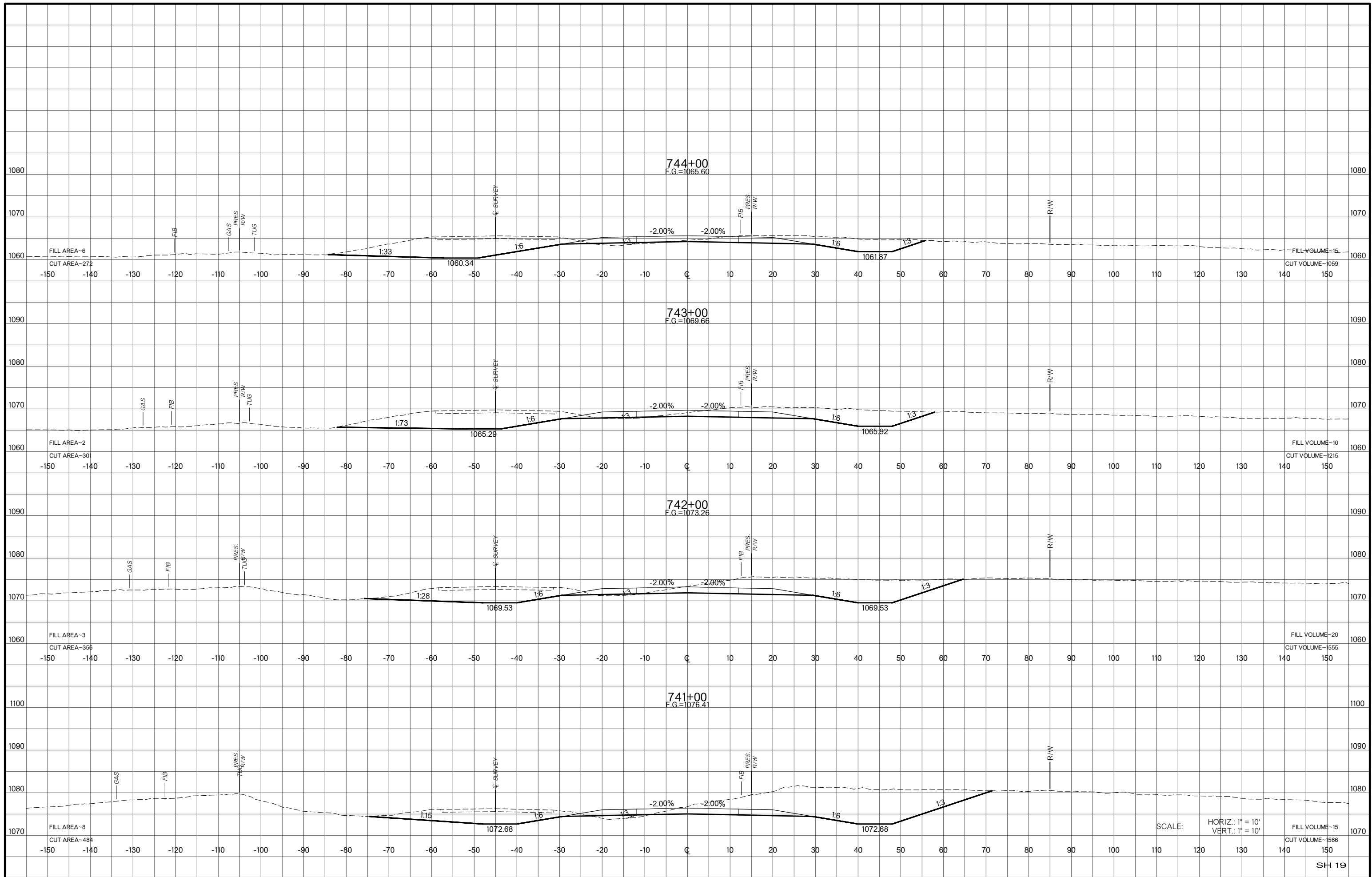
SH 19



SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

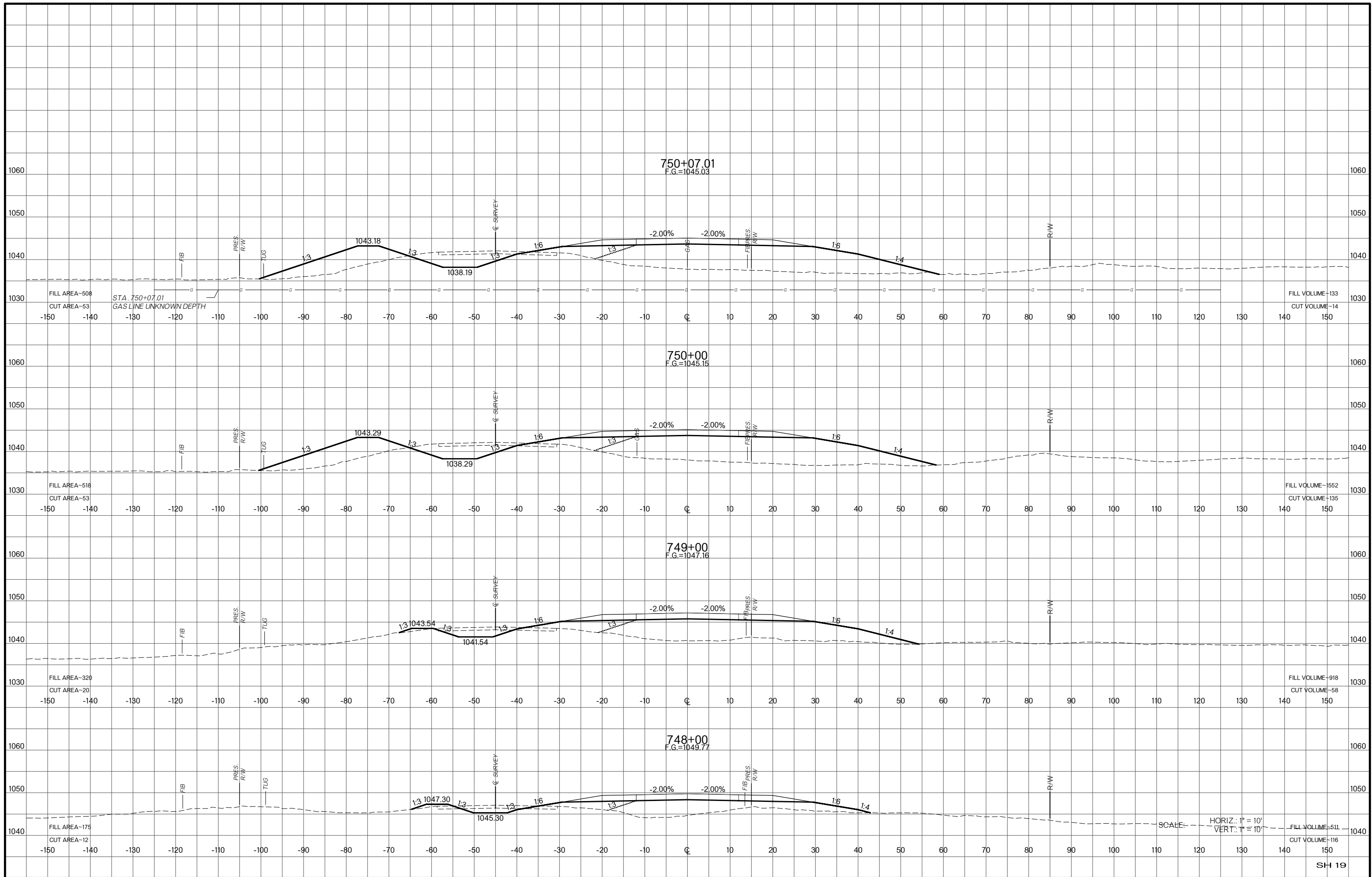
SH 19

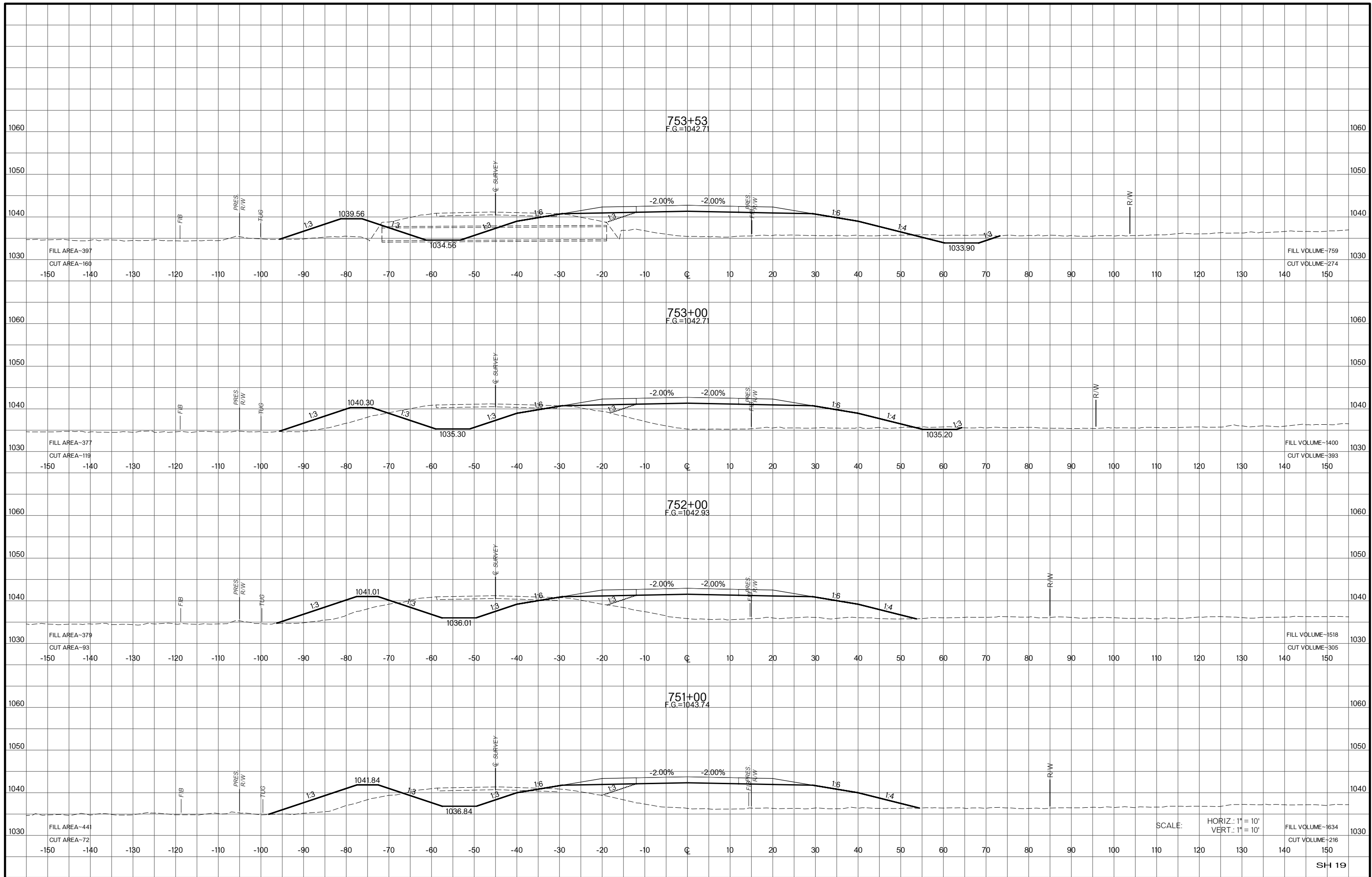
GRADY COUNTY



SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

SH 19

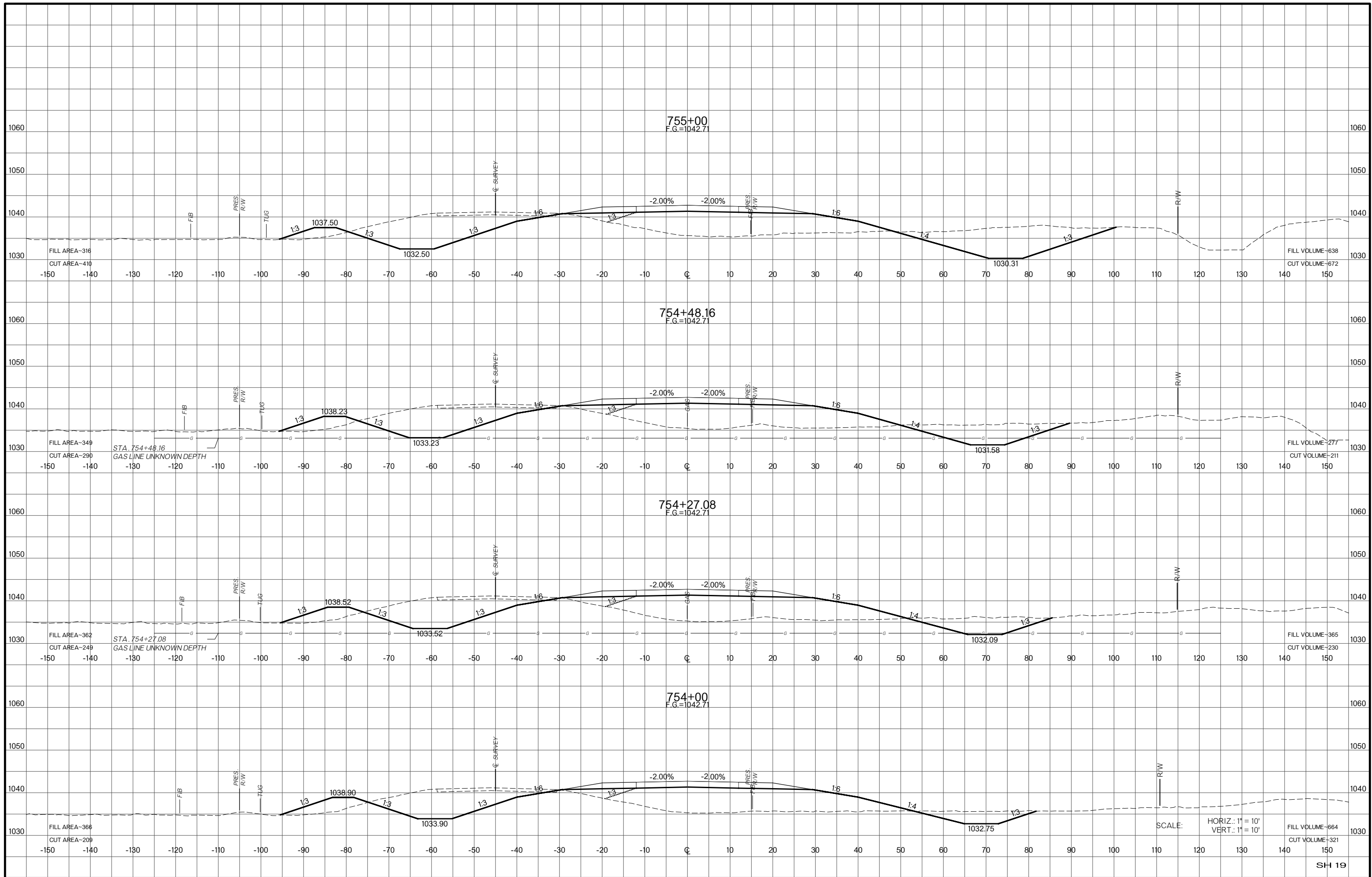


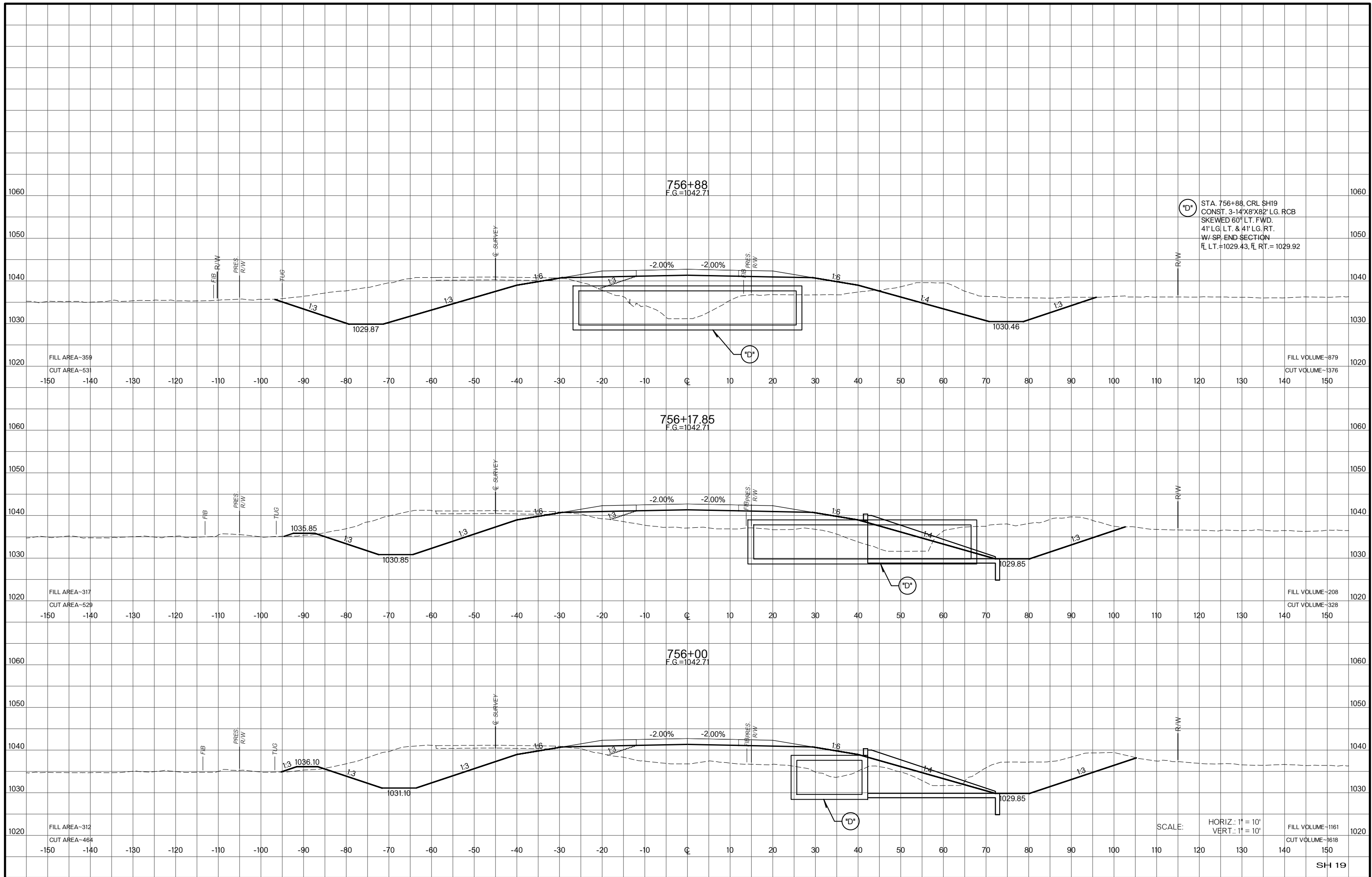


SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

FILL VOLUME-1634
CUT VOLUME-216

SH 19





"D"
 STA. 756+88, CRL SH19
 CONST. 3-14"X8"X82" LG. RCB
 SKEWED 60° LT. FWD.
 4' LG. LT. & 4' LG. RT.
 W/ SP. END SECTION
 FL LT.=1029.43, FL RT.= 1029.92

756+88
F.G.=1042.71

756+17.85
F.G.=1042.71

756+00
F.G.=1042.71

FILL AREA-359
CUT AREA-531

FILL VOLUME-879
CUT VOLUME-1376

FILL AREA-317
CUT AREA-529

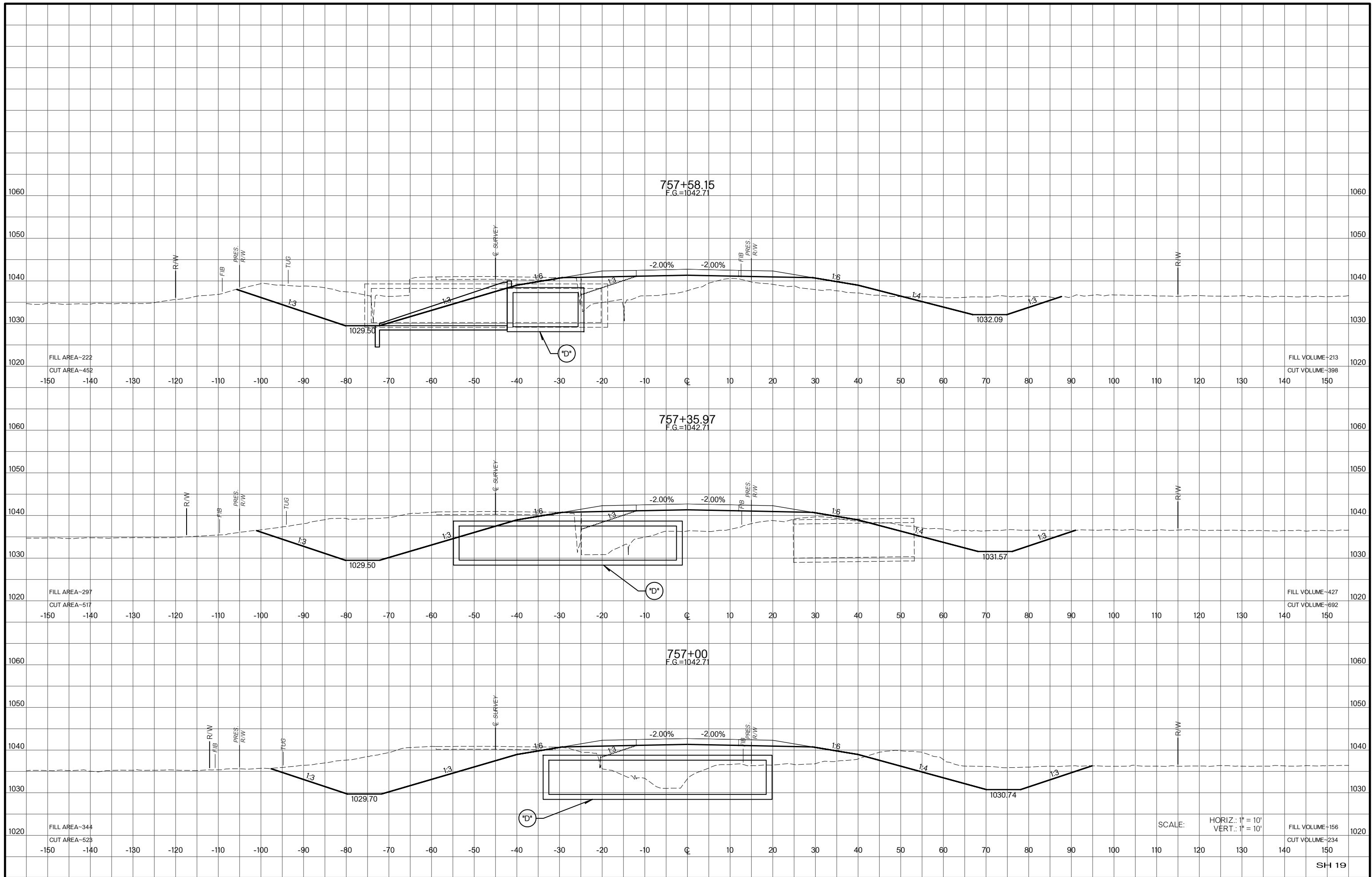
FILL VOLUME-208
CUT VOLUME-328

FILL AREA-312
CUT AREA-464

FILL VOLUME-1161
CUT VOLUME-1618

SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

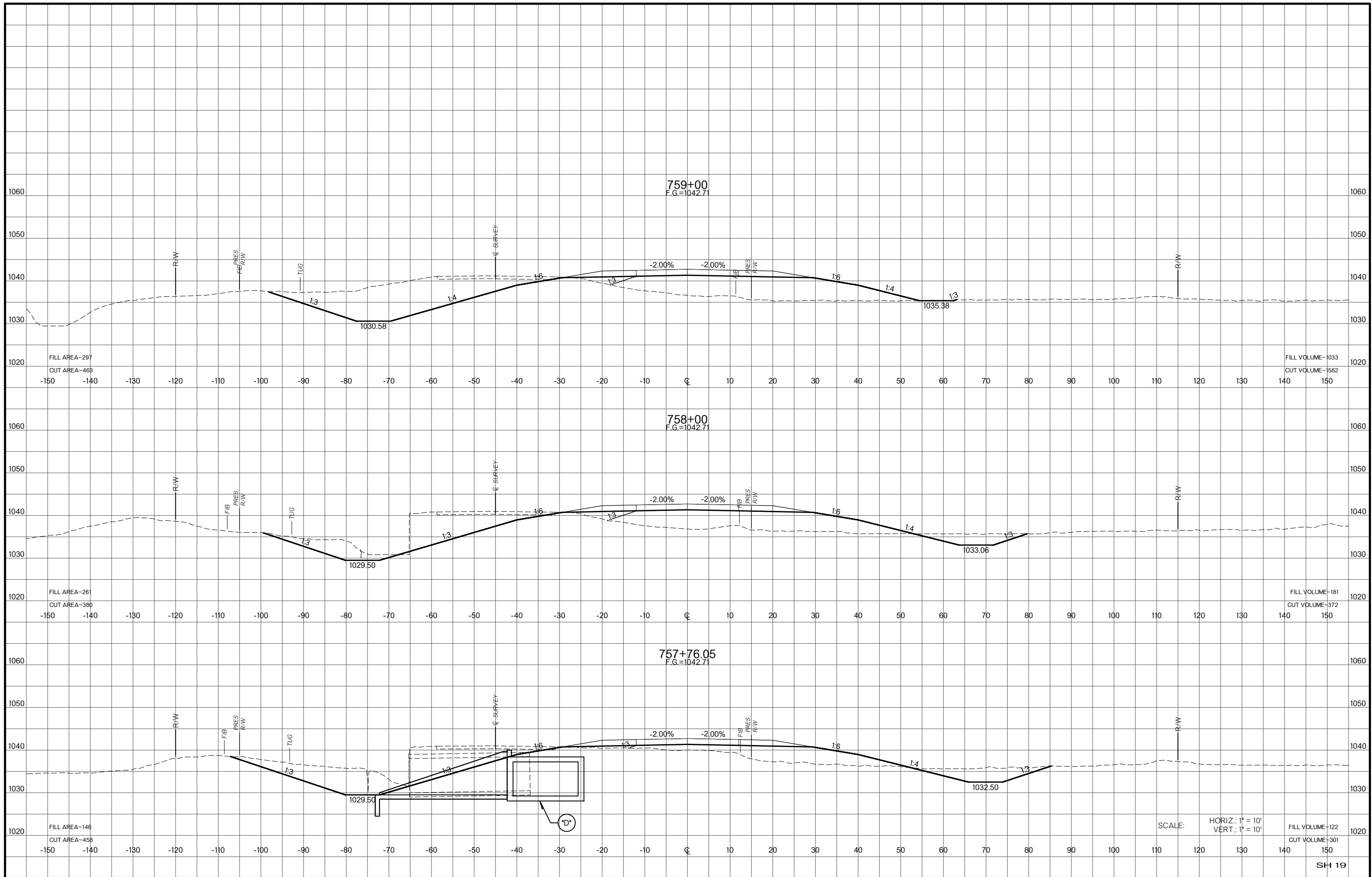
SH 19



SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

FILL VOLUME-156
CUT VOLUME-234

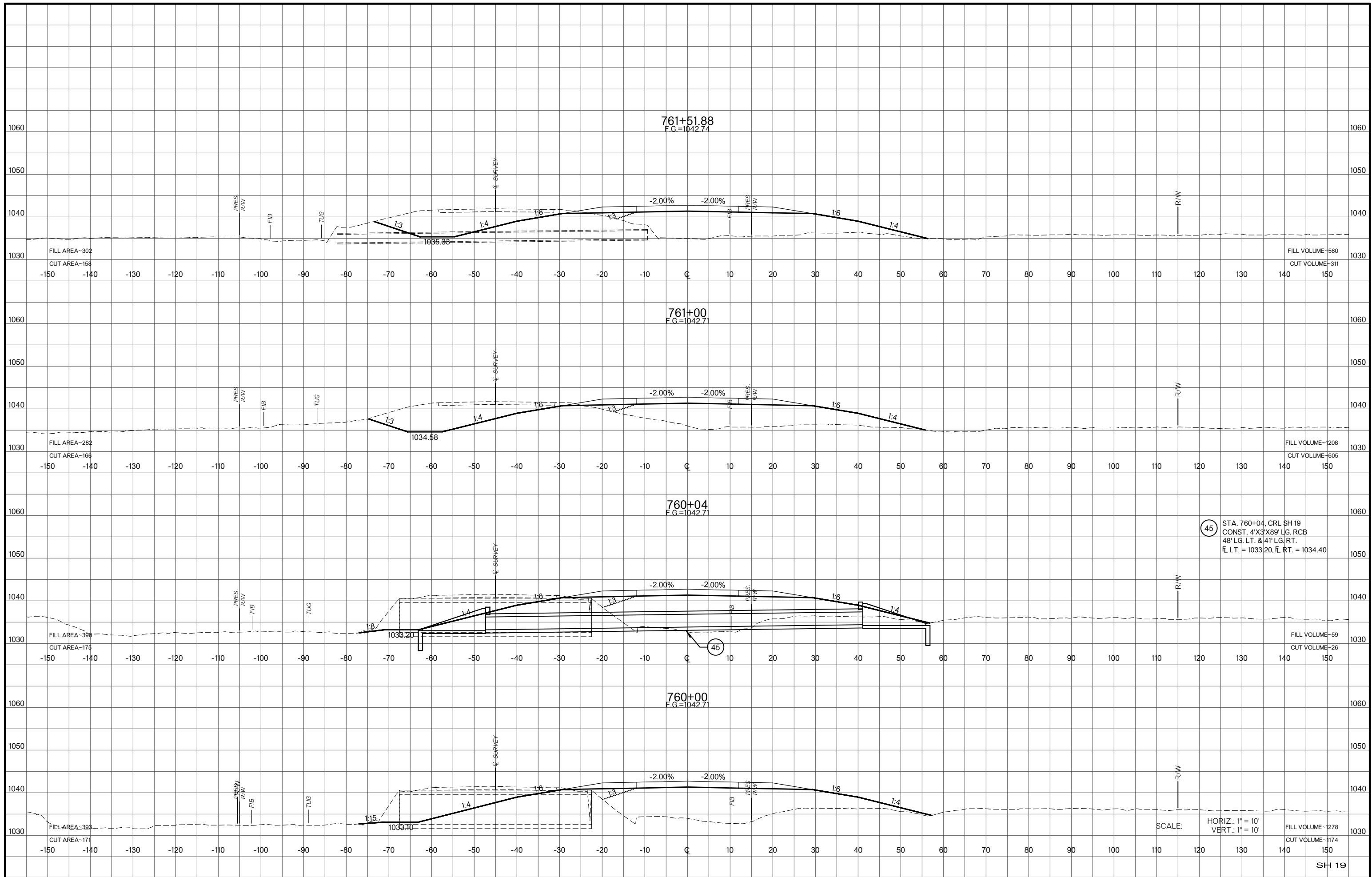
SH 19

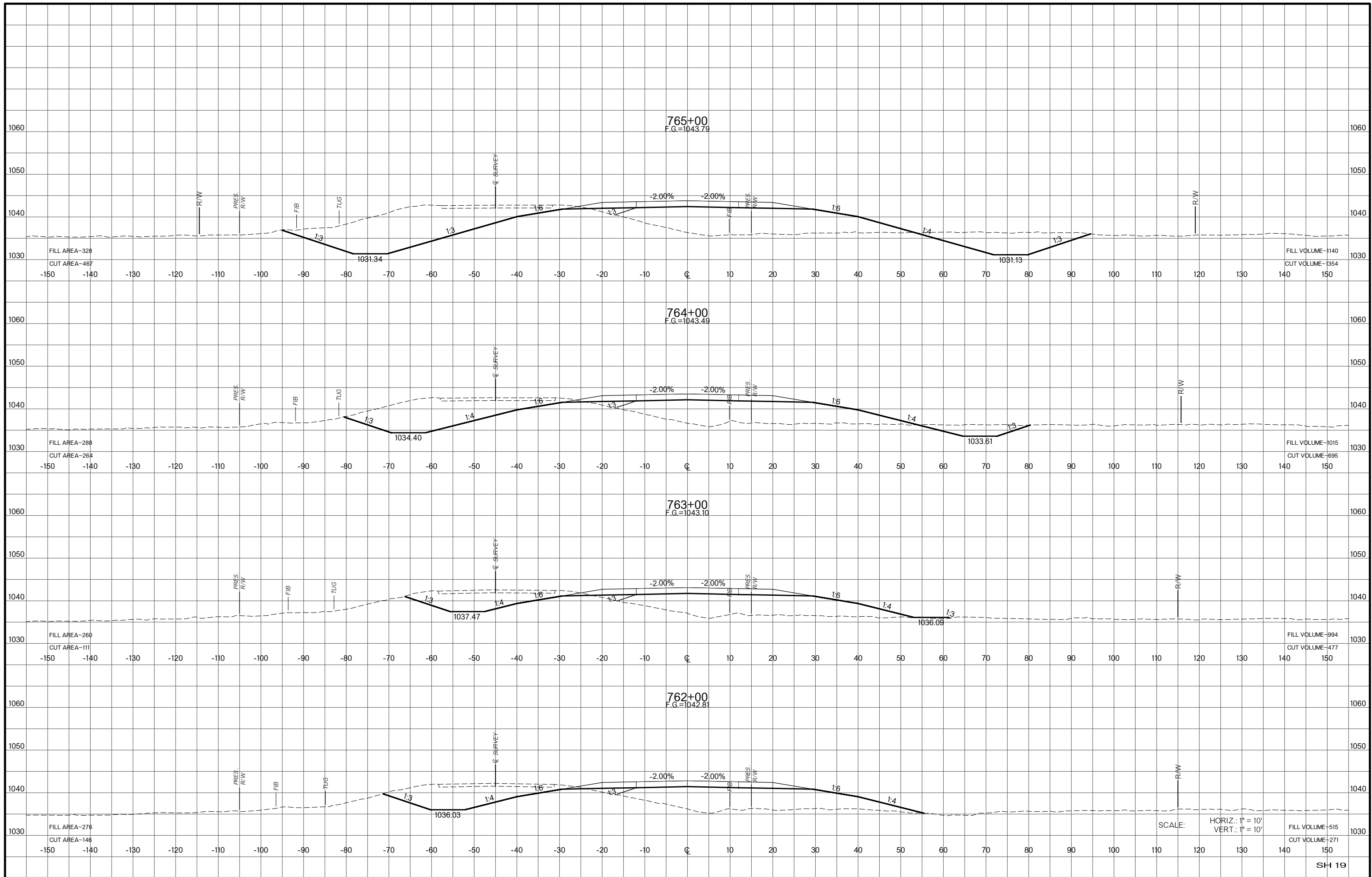


SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

FILL VOLUME-122
CUT VOLUME-301

SH 19

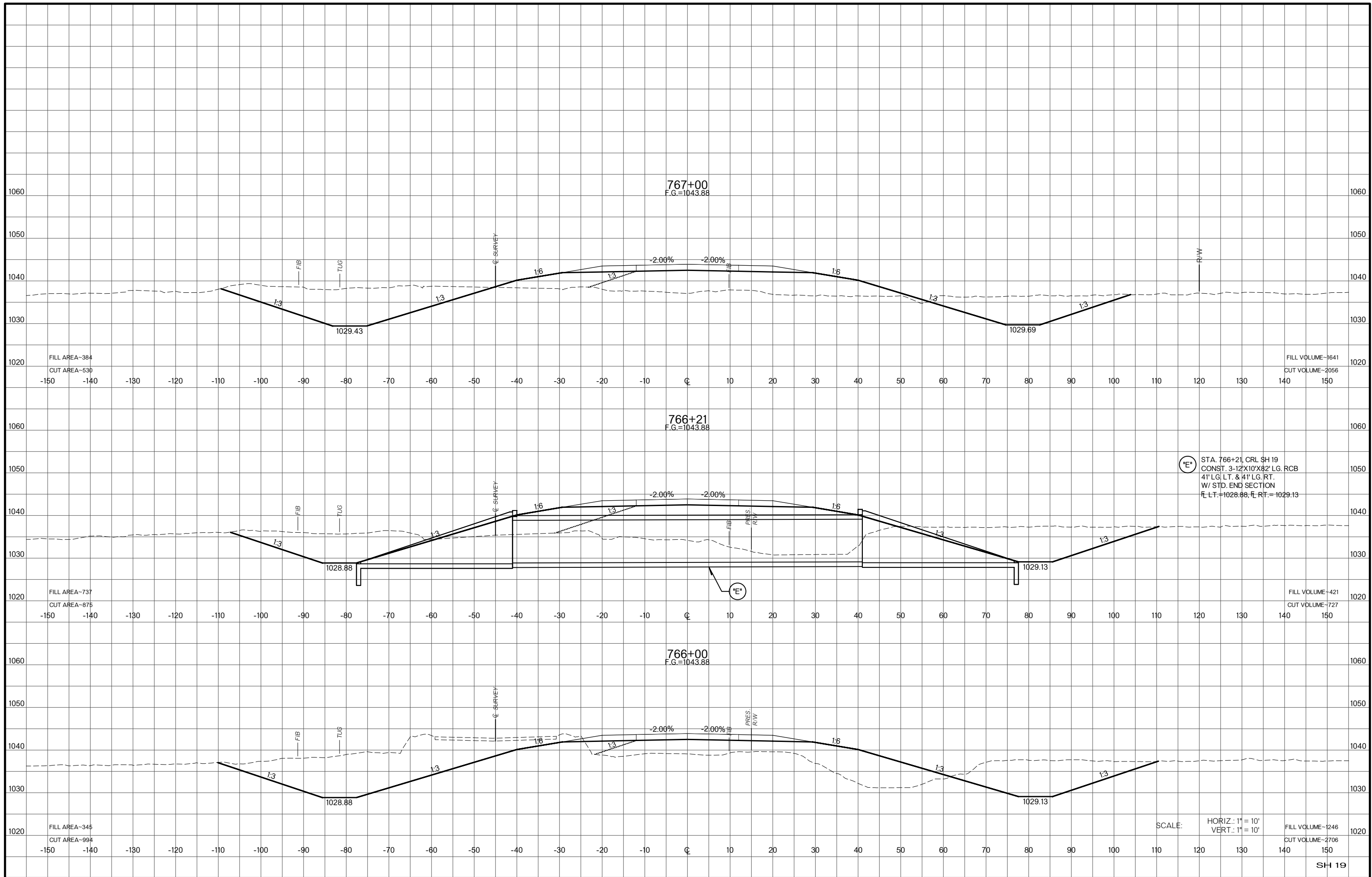




SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

FILL VOLUME-515
CUT VOLUME-271

SH 19

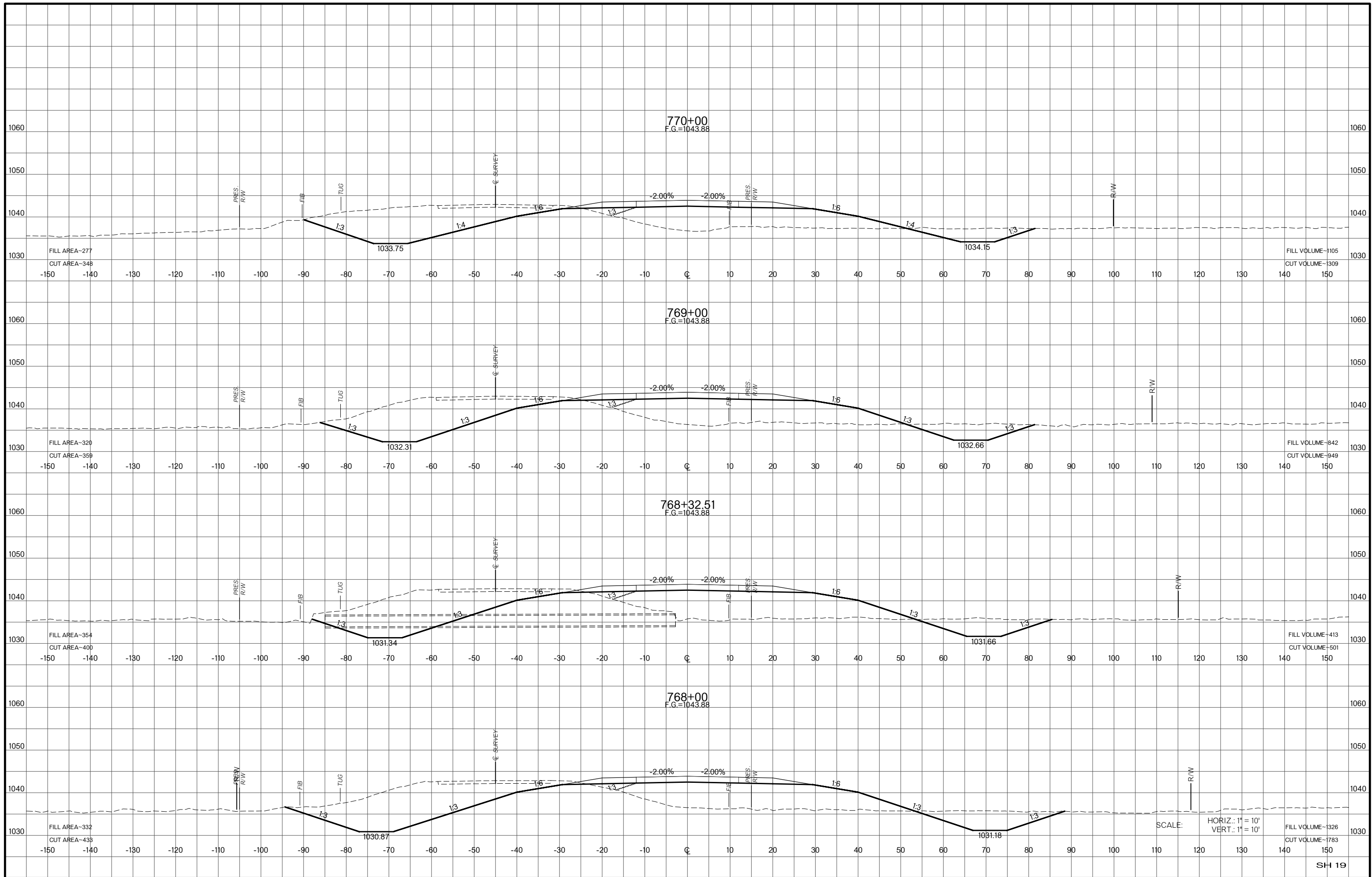


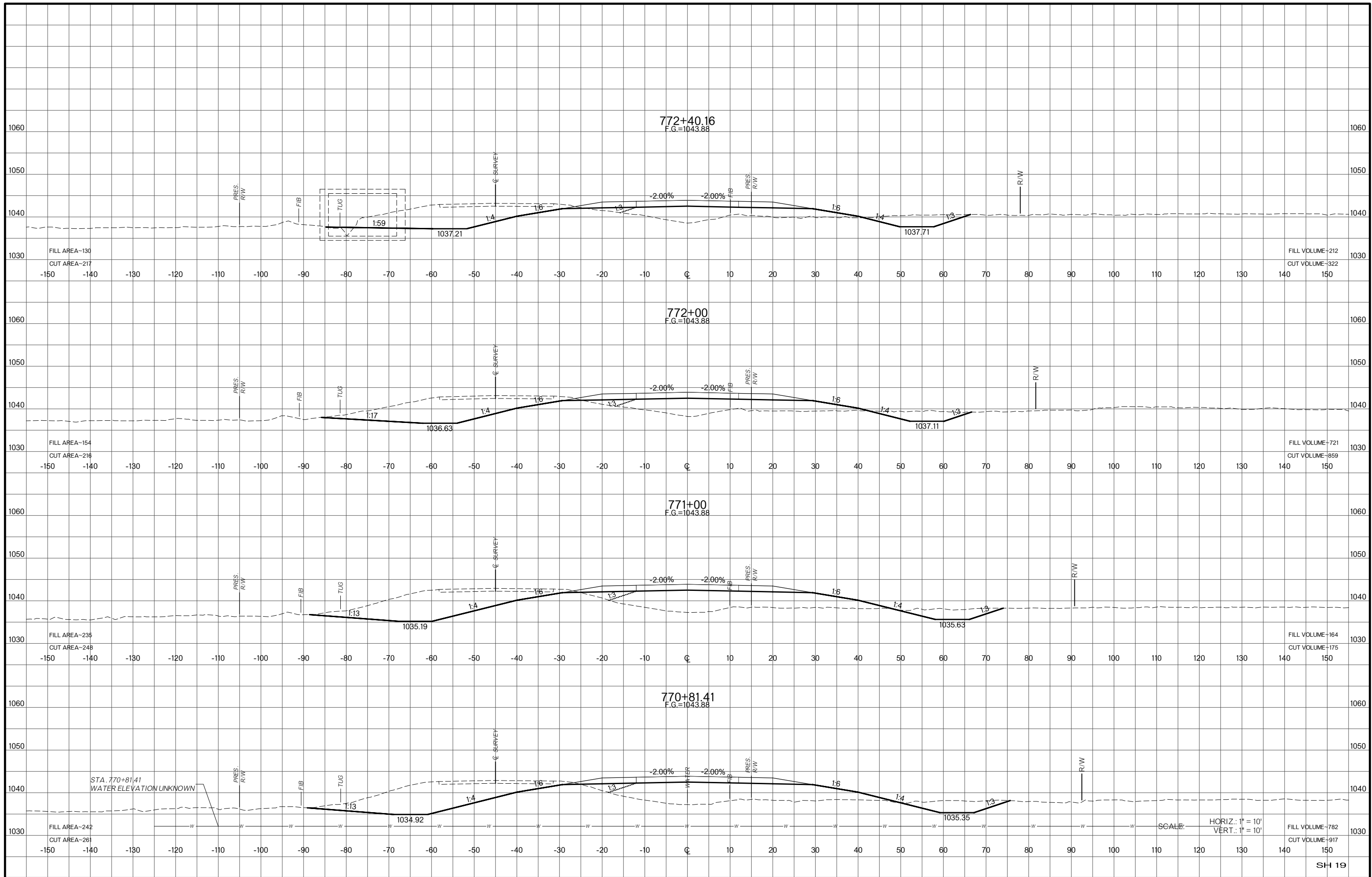
ⓔ STA. 766+21, CRL SH 19
 CONST. 3'-12"X10'X8' 2" LG. RCB
 4' LG. LT. & 4' LG. RT.
 W/ STD. END SECTION
 FLT.=1028.88, FLRT.=1029.13

ⓔ

SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

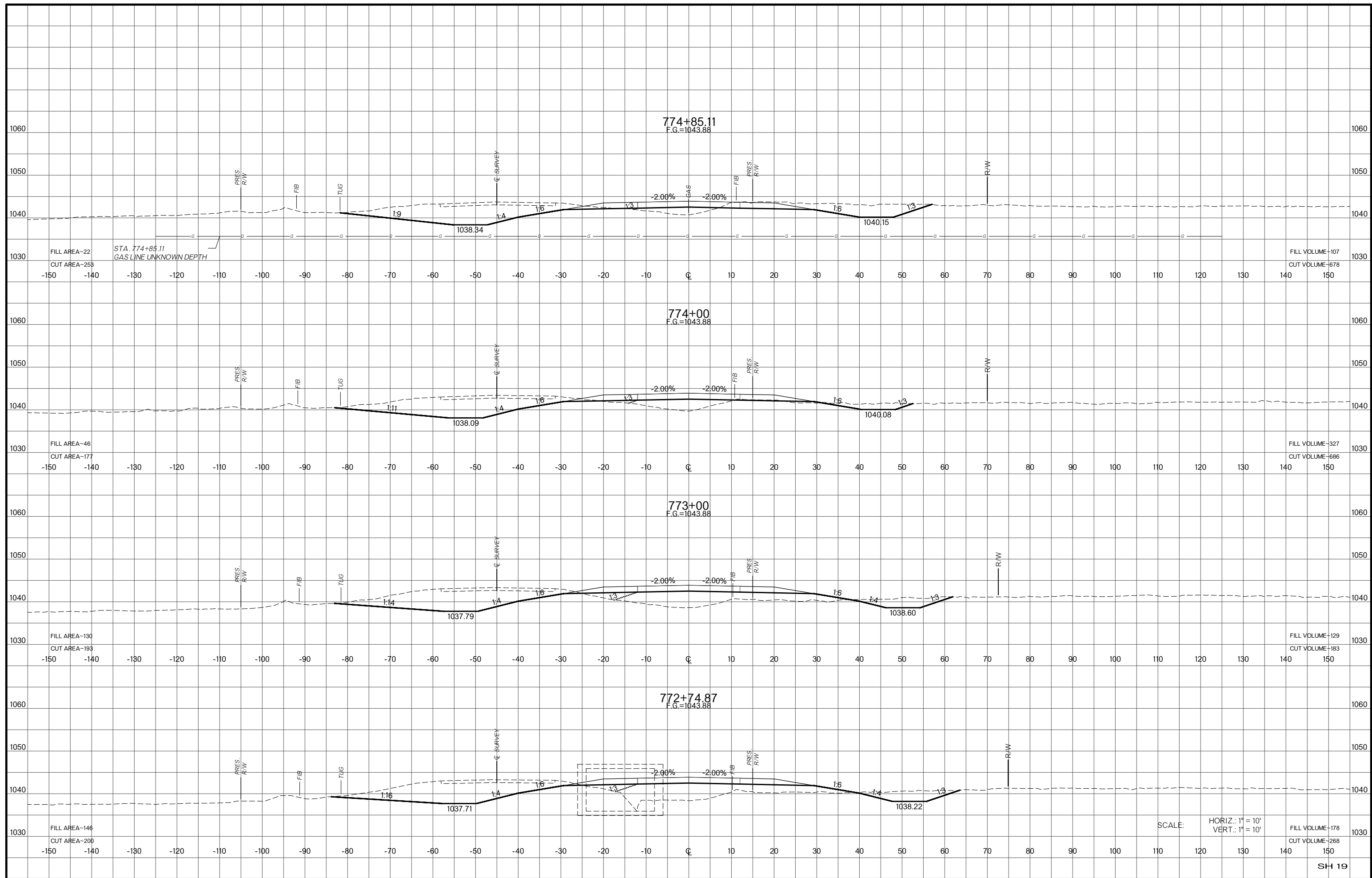
SH 19





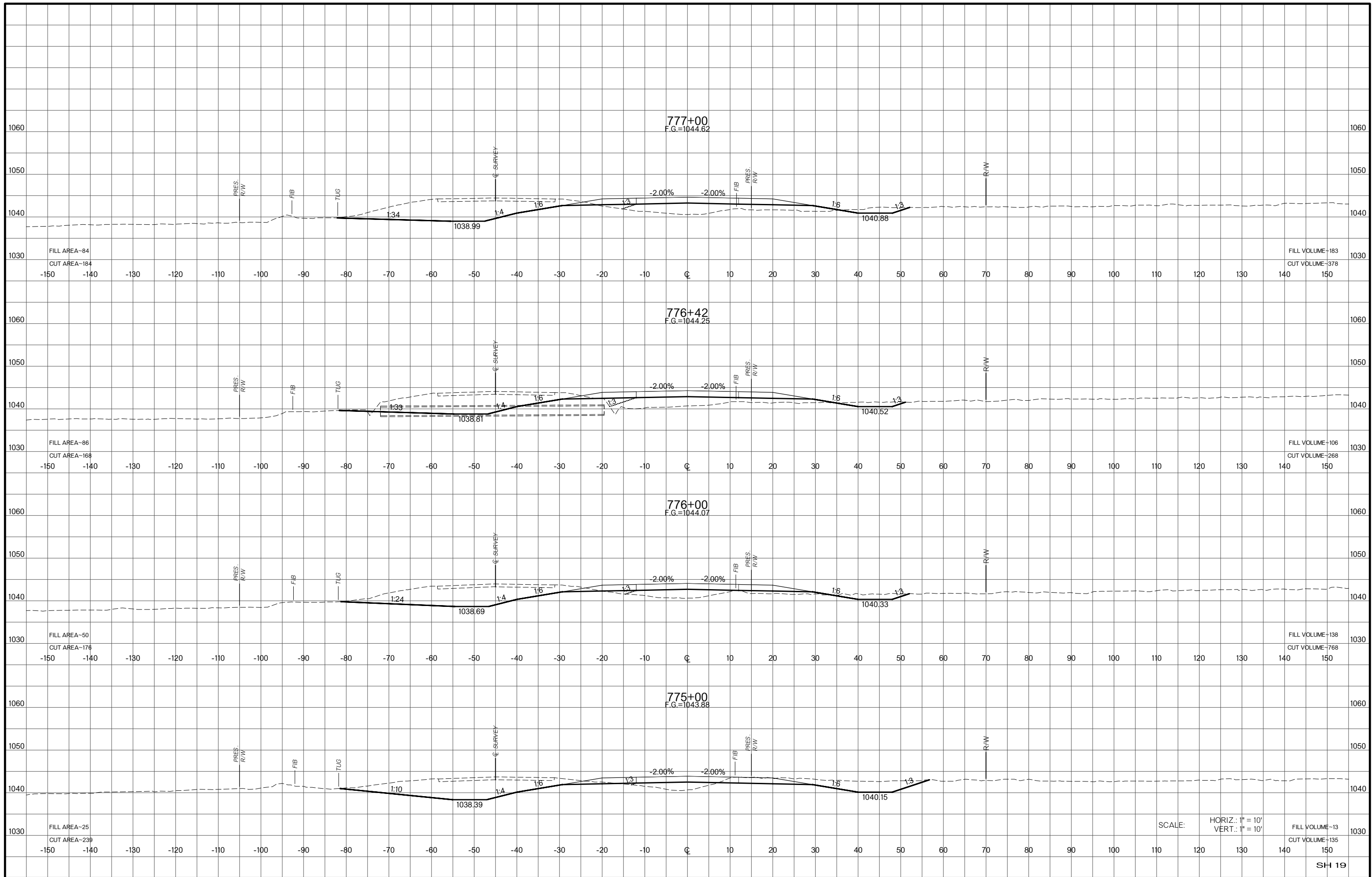
SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

SH 19



SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

SH 19



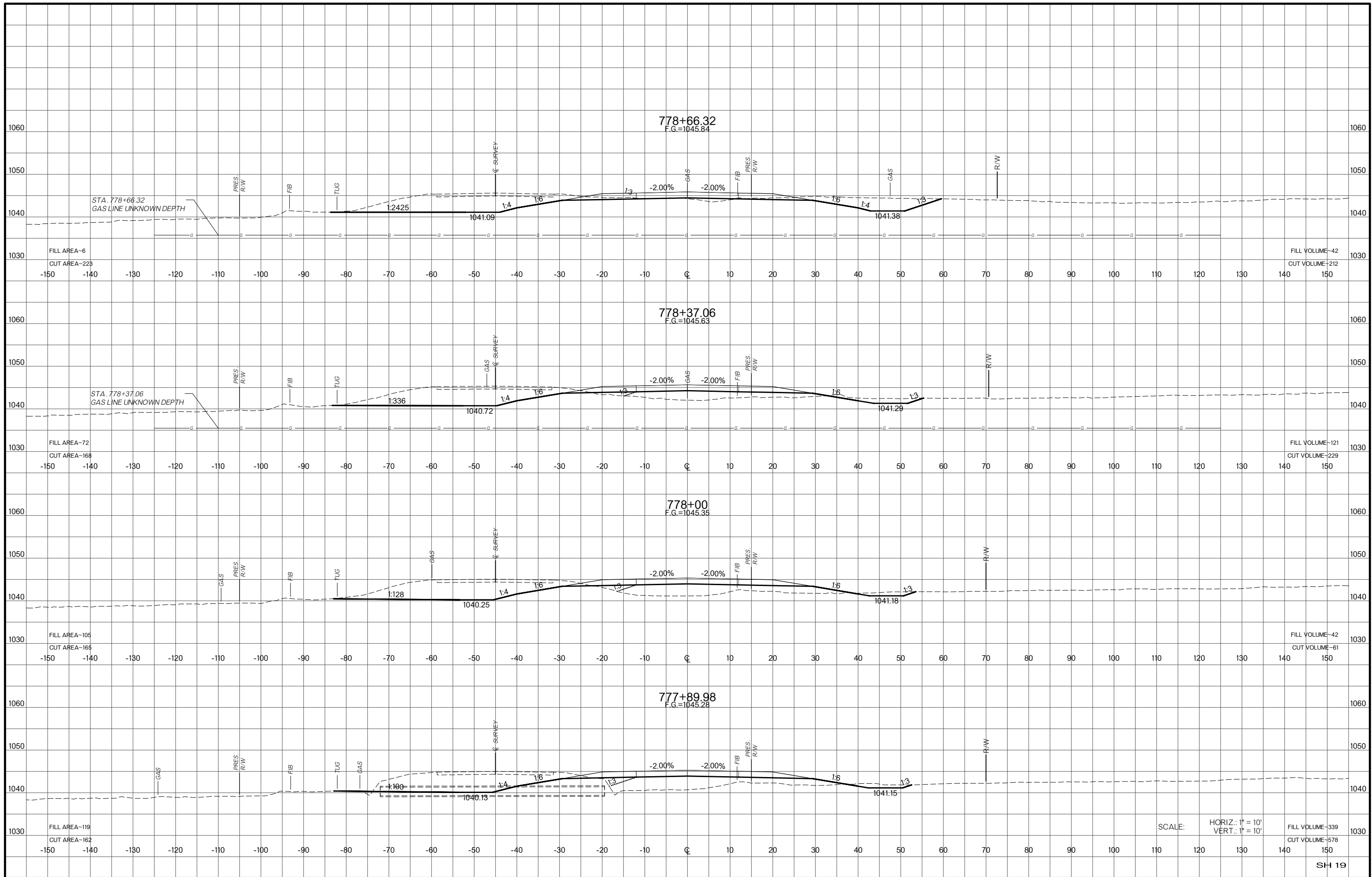
SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

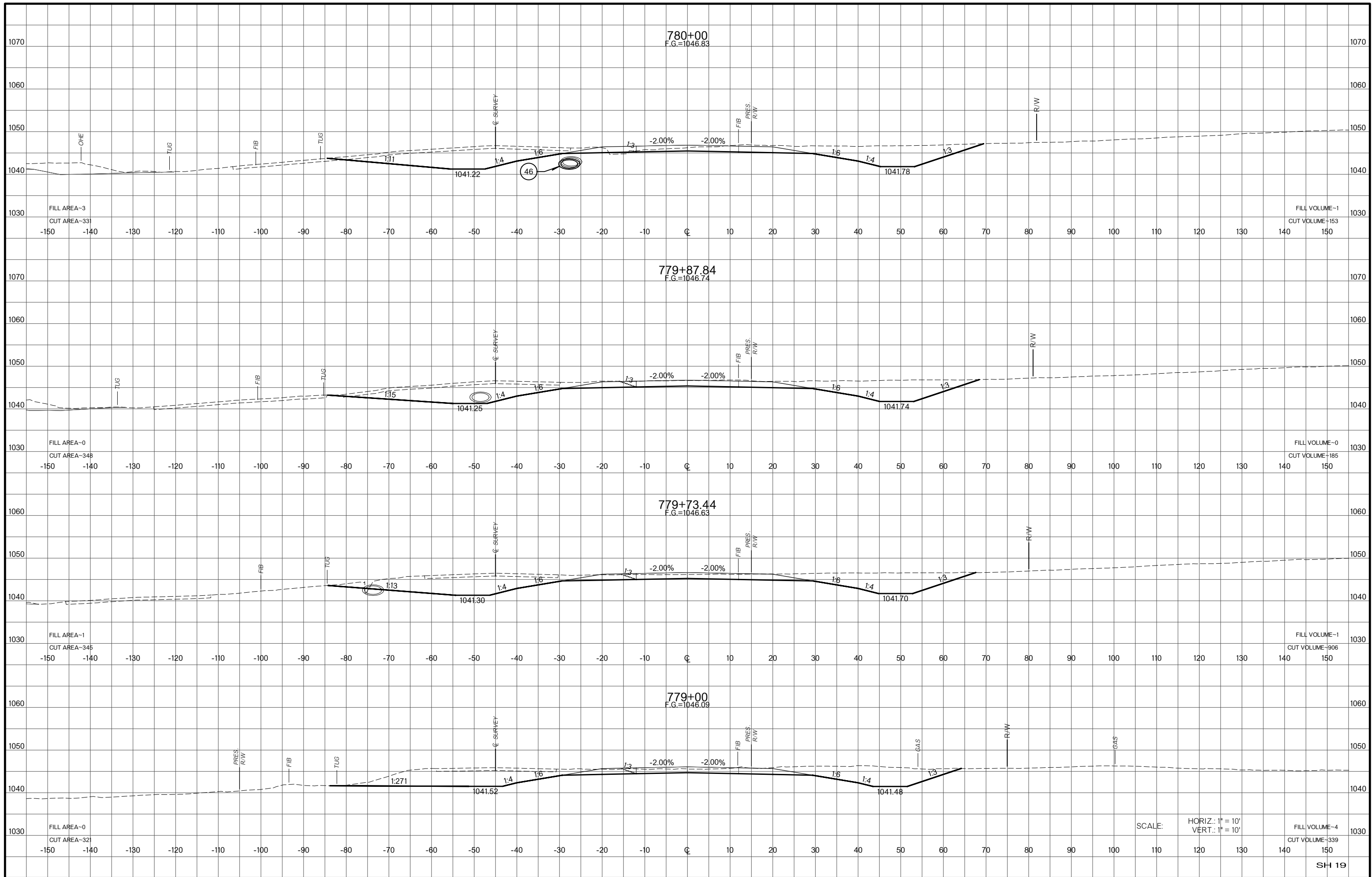
FILL VOLUME-13
 CUT VOLUME-135

SH 19

State Job No. 30425(07) Sheet No. X134

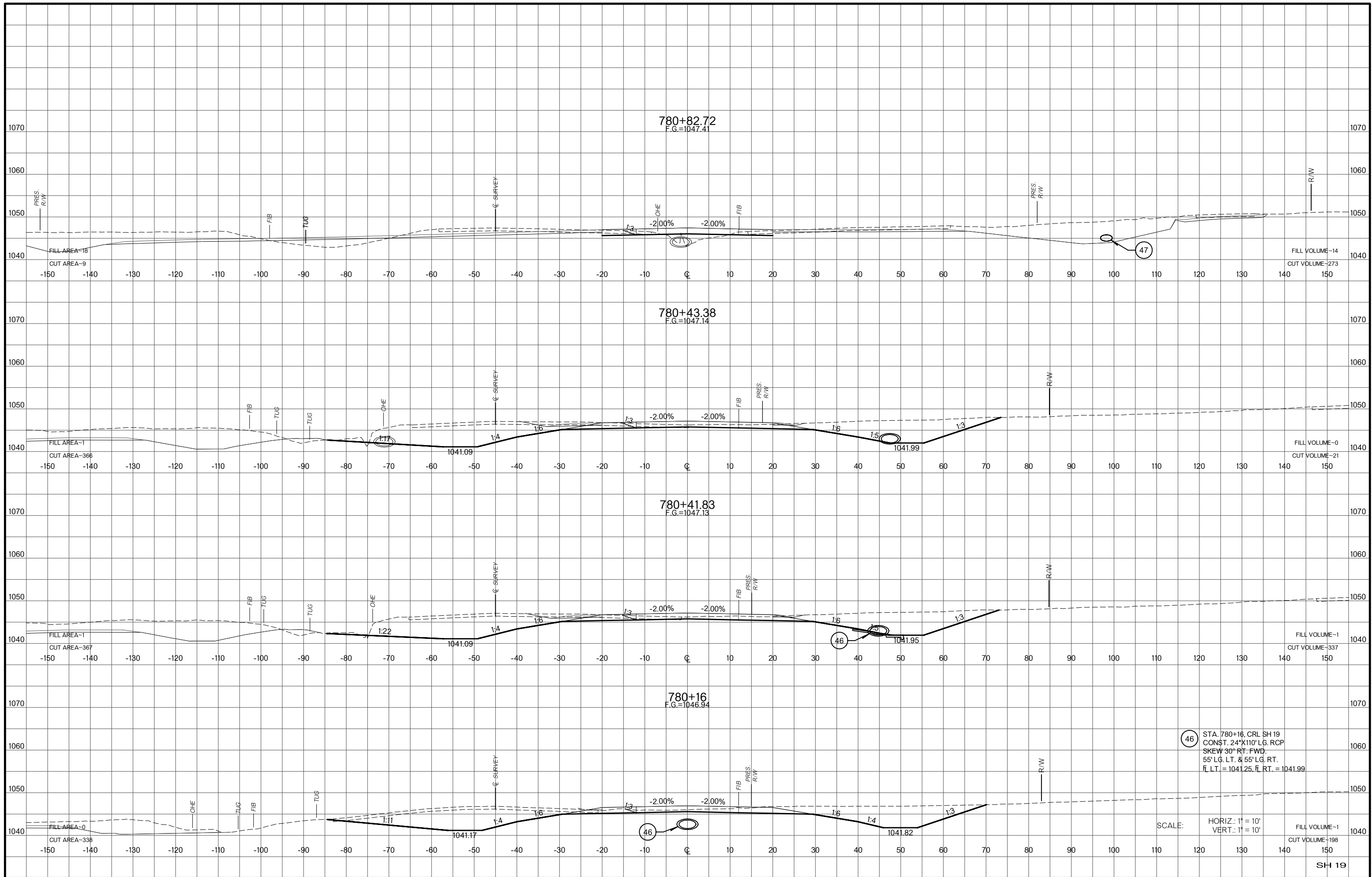
GRADY COUNTY

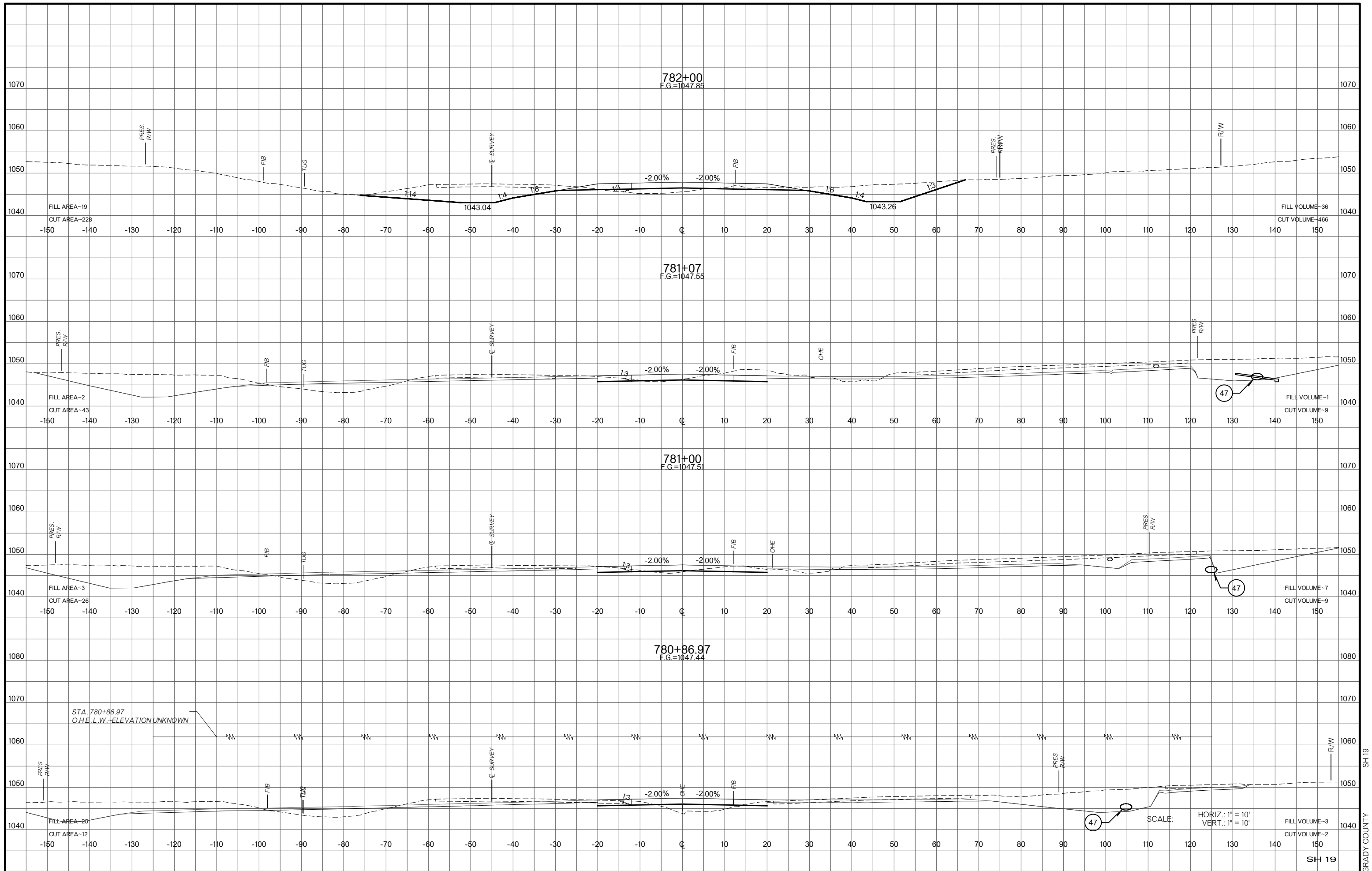


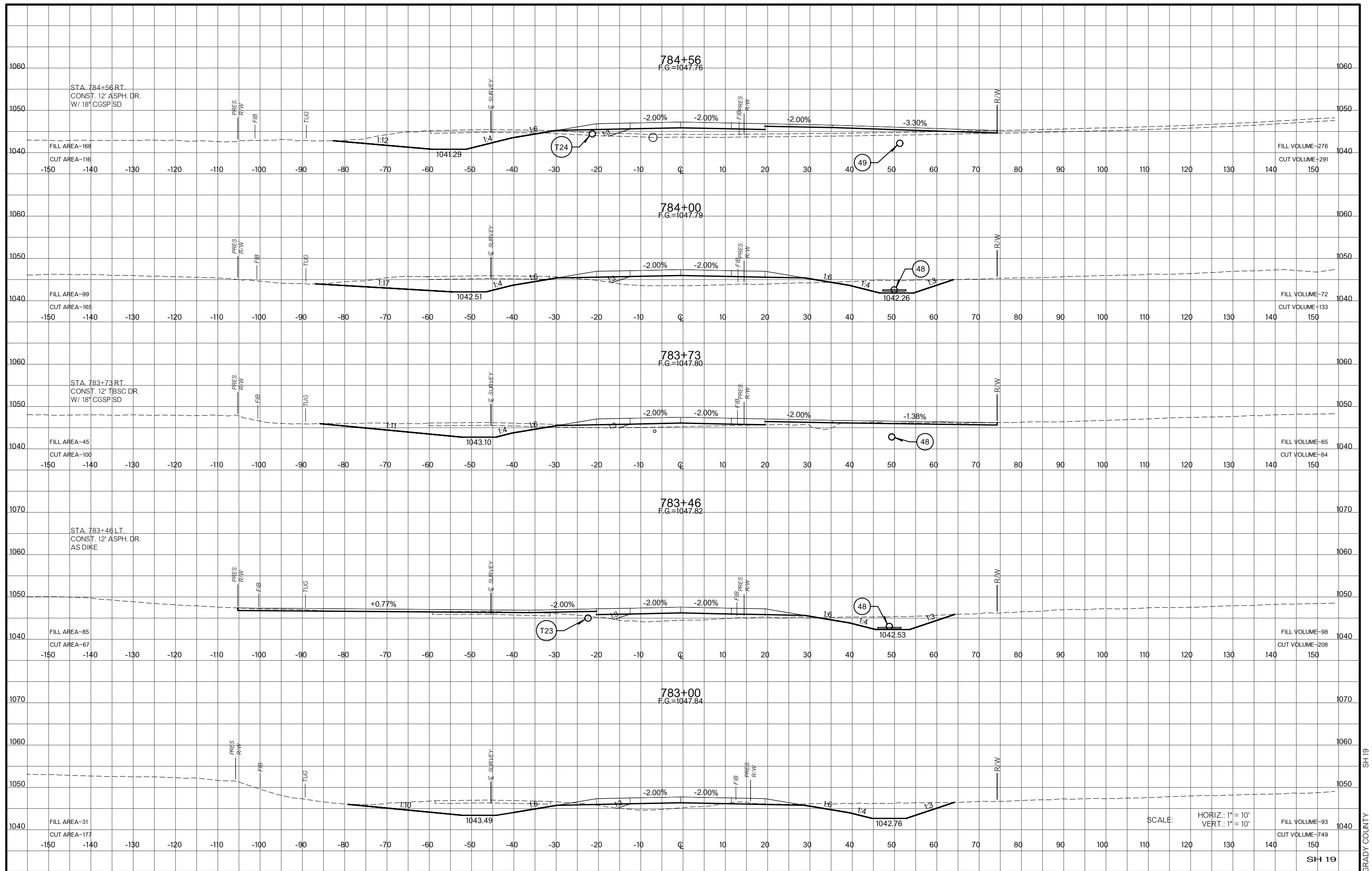


SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

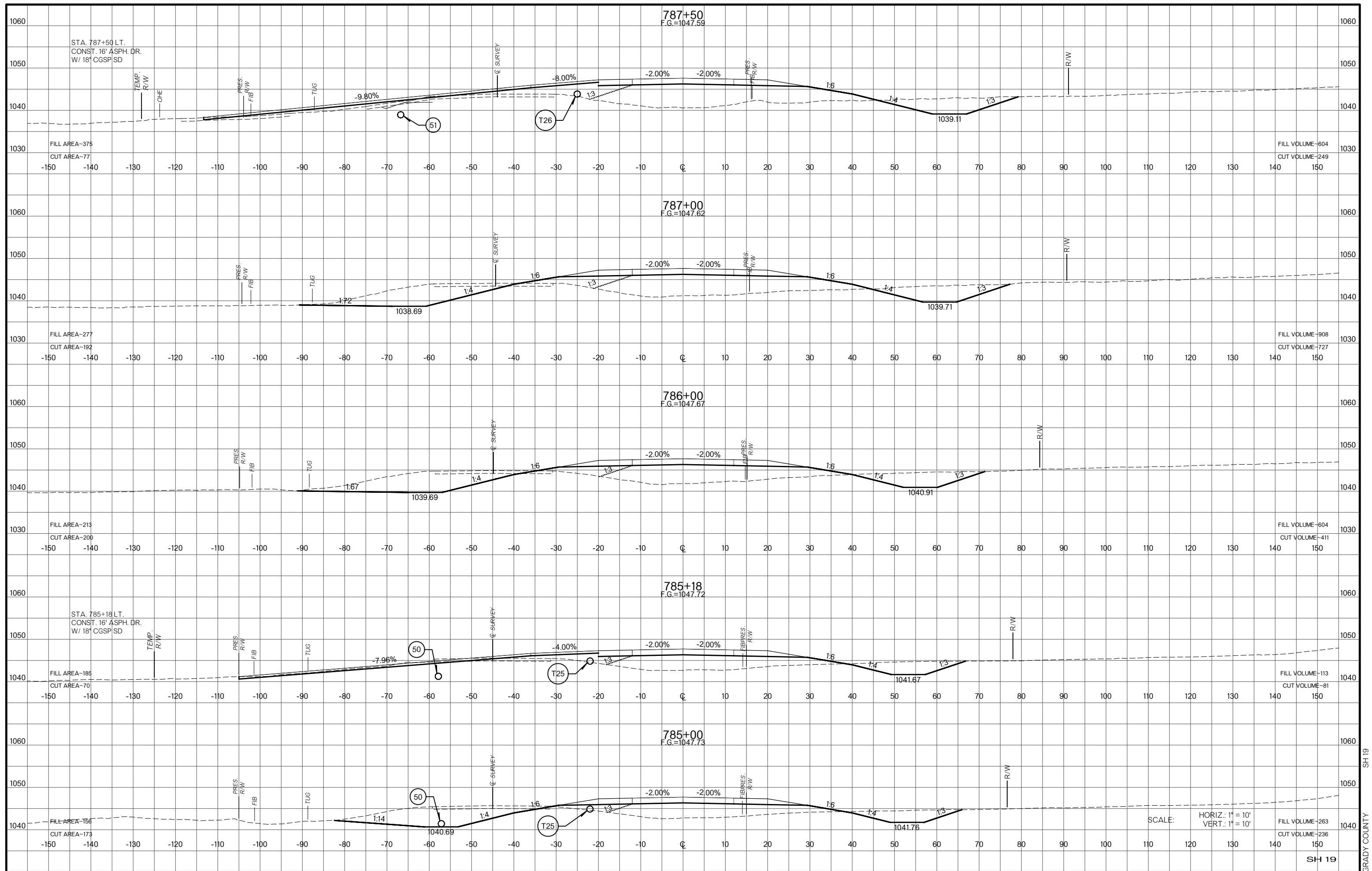
SH 19 GRADY COUNTY

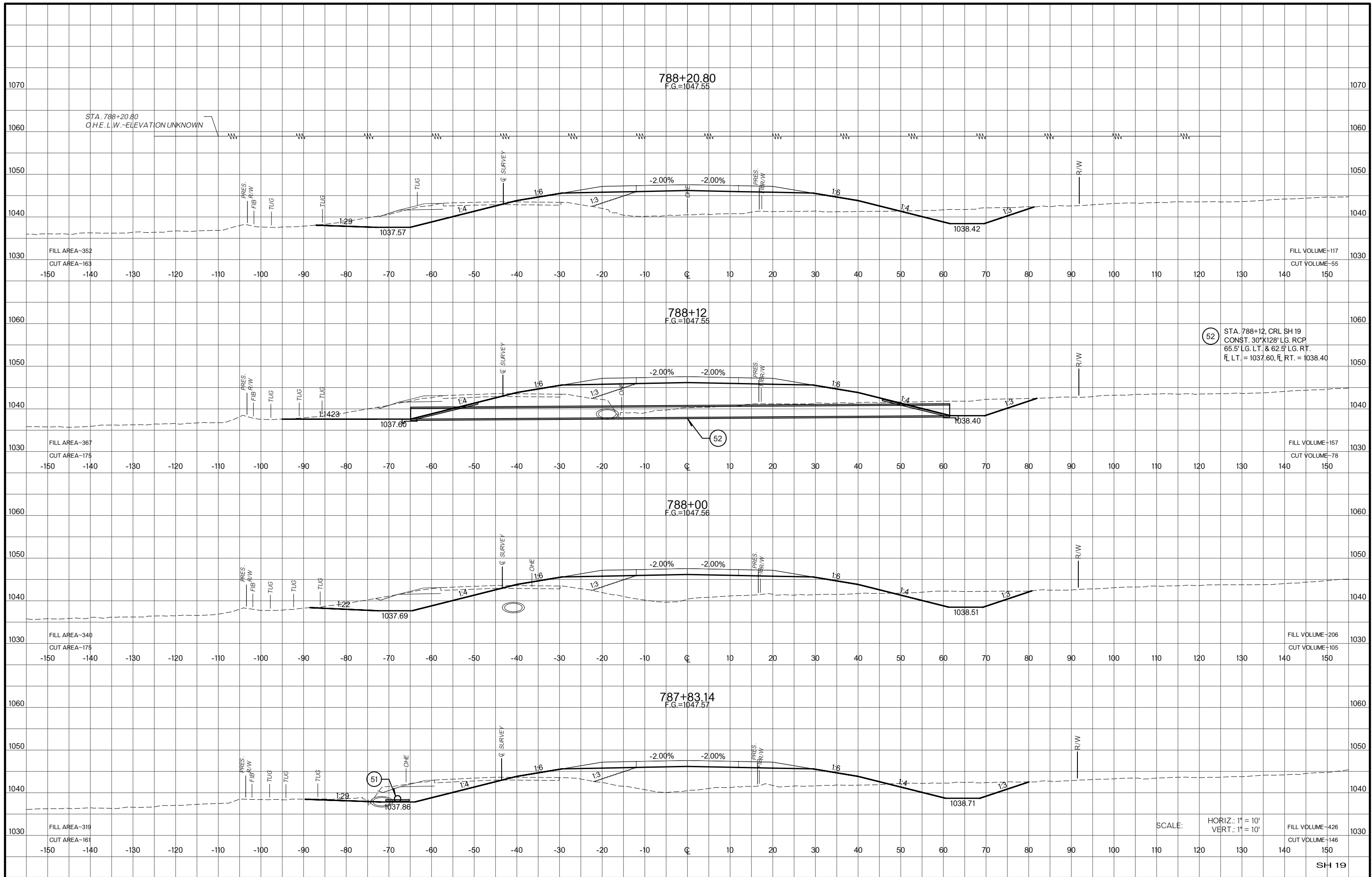






SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'



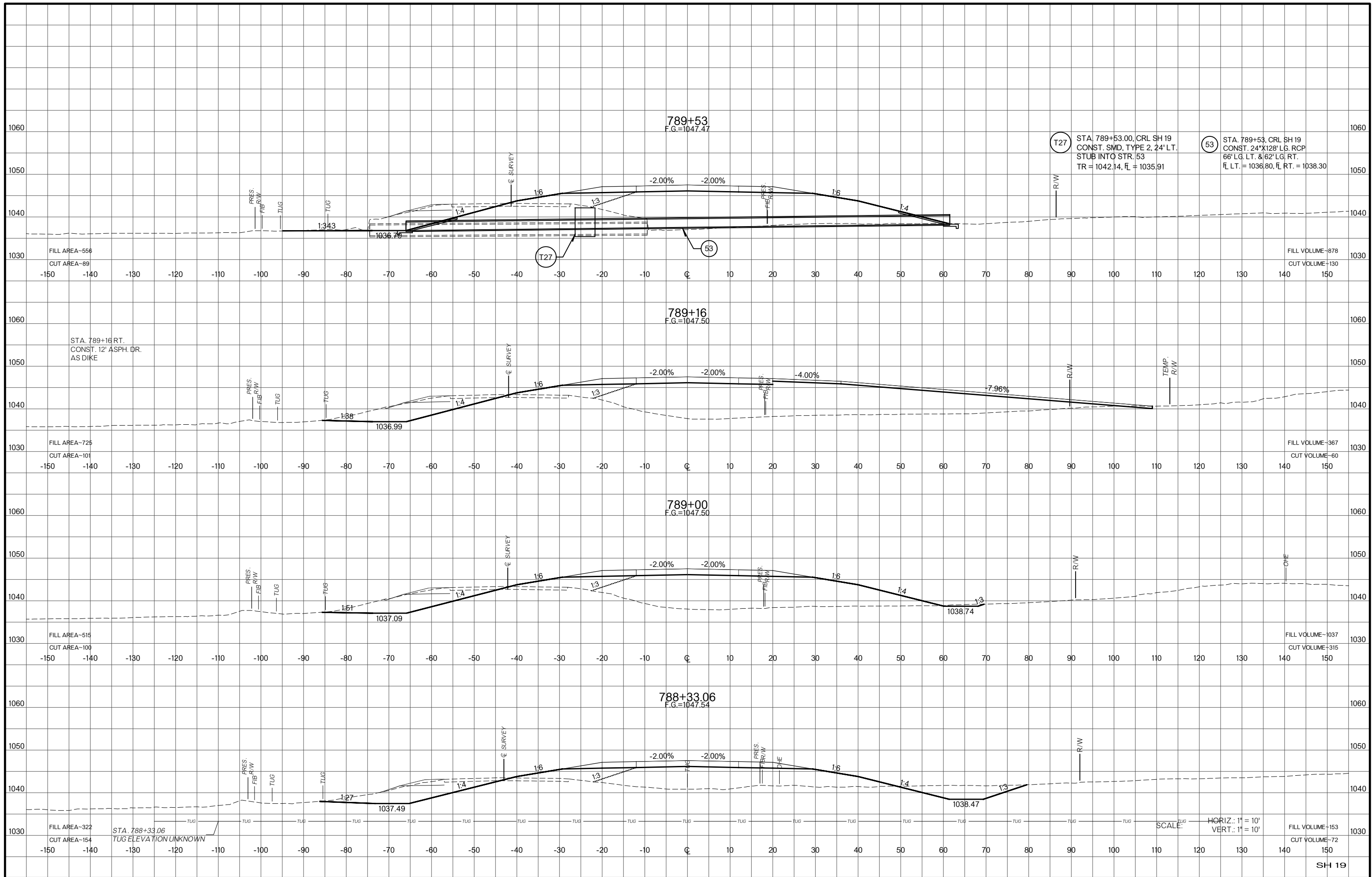


52 STA. 788+12, CRL SH 19
 CONST. 30"x128" LG. RCP
 65.5' LG. LT. & 62.5' LG. RT.
 FL LT. = 1037.60, FL RT. = 1038.40

SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

FILL VOLUME=426
 CUT VOLUME=146

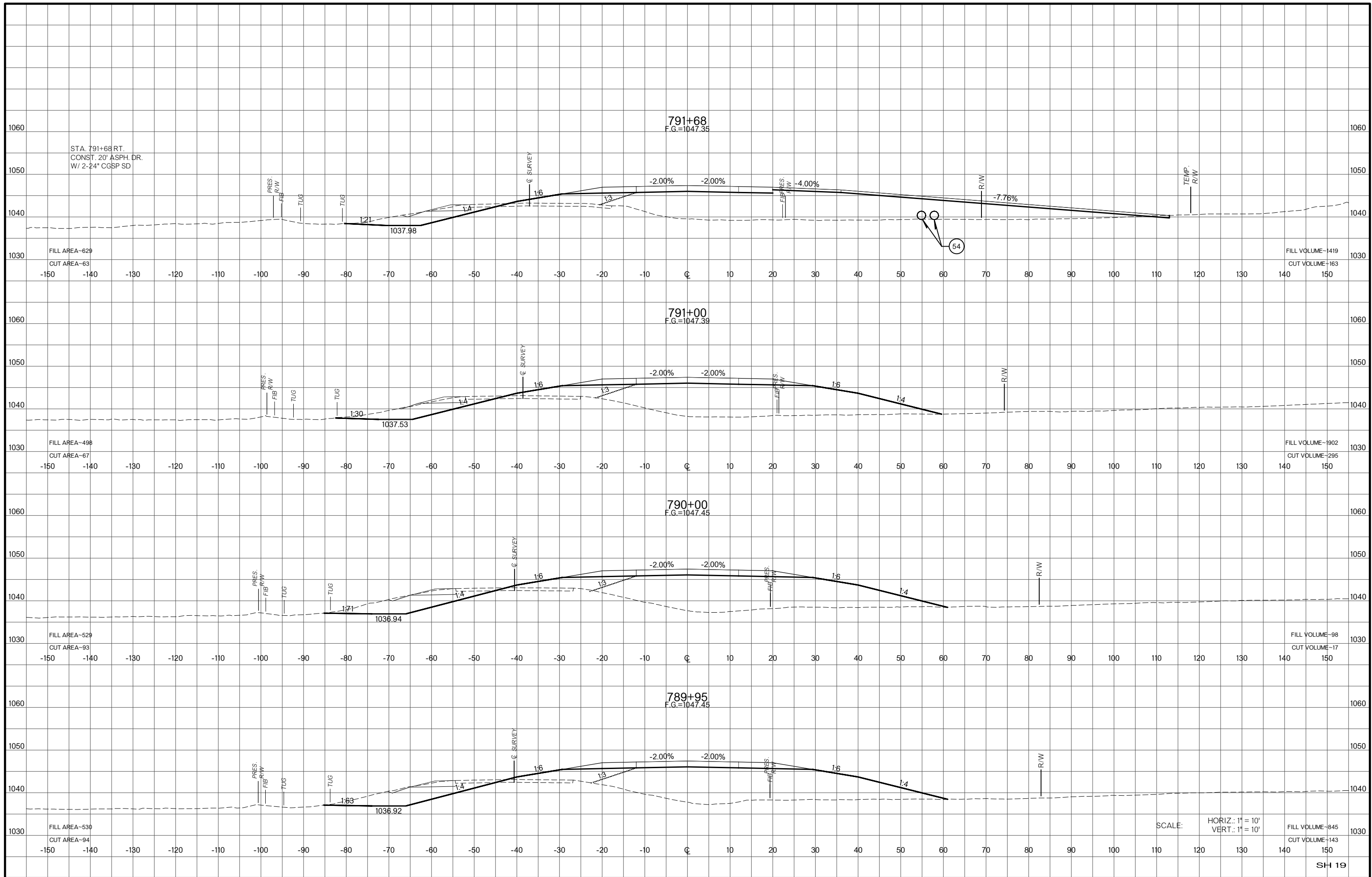
SH 19



STA. 788+33.06
TUG ELEVATION UNKNOWN

SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

SH 19



STA. 791+68 RT.
CONST. 20' ASPH. DR.
W/ 2-24" CGSP SD

FILL AREA-629
CUT AREA-63

FILL VOLUME-1419
CUT VOLUME-163

FILL AREA-498
CUT AREA-67

FILL VOLUME-1902
CUT VOLUME-295

FILL AREA-529
CUT AREA-93

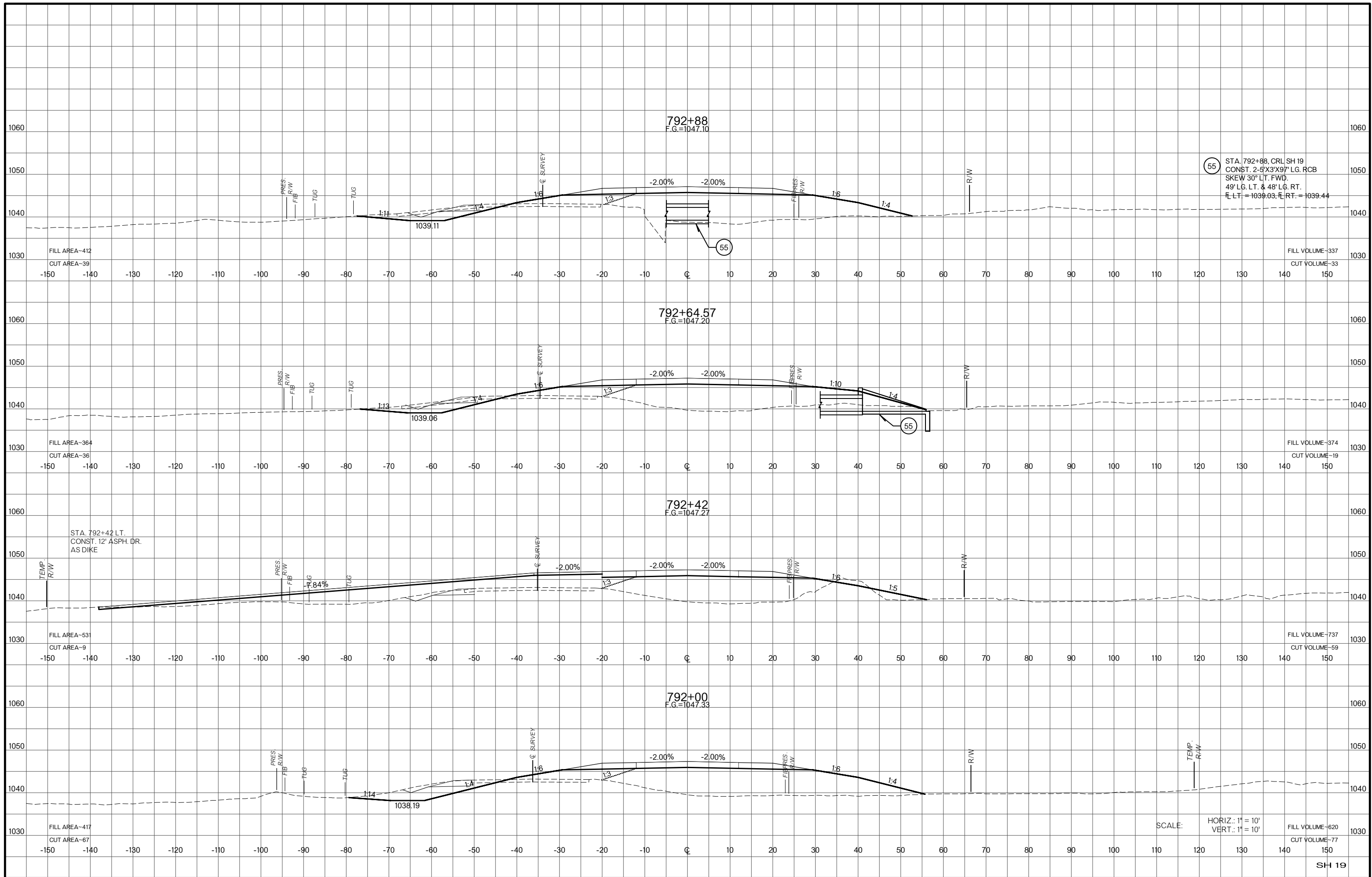
FILL VOLUME-98
CUT VOLUME-17

FILL AREA-530
CUT AREA-94

FILL VOLUME-845
CUT VOLUME-143

SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

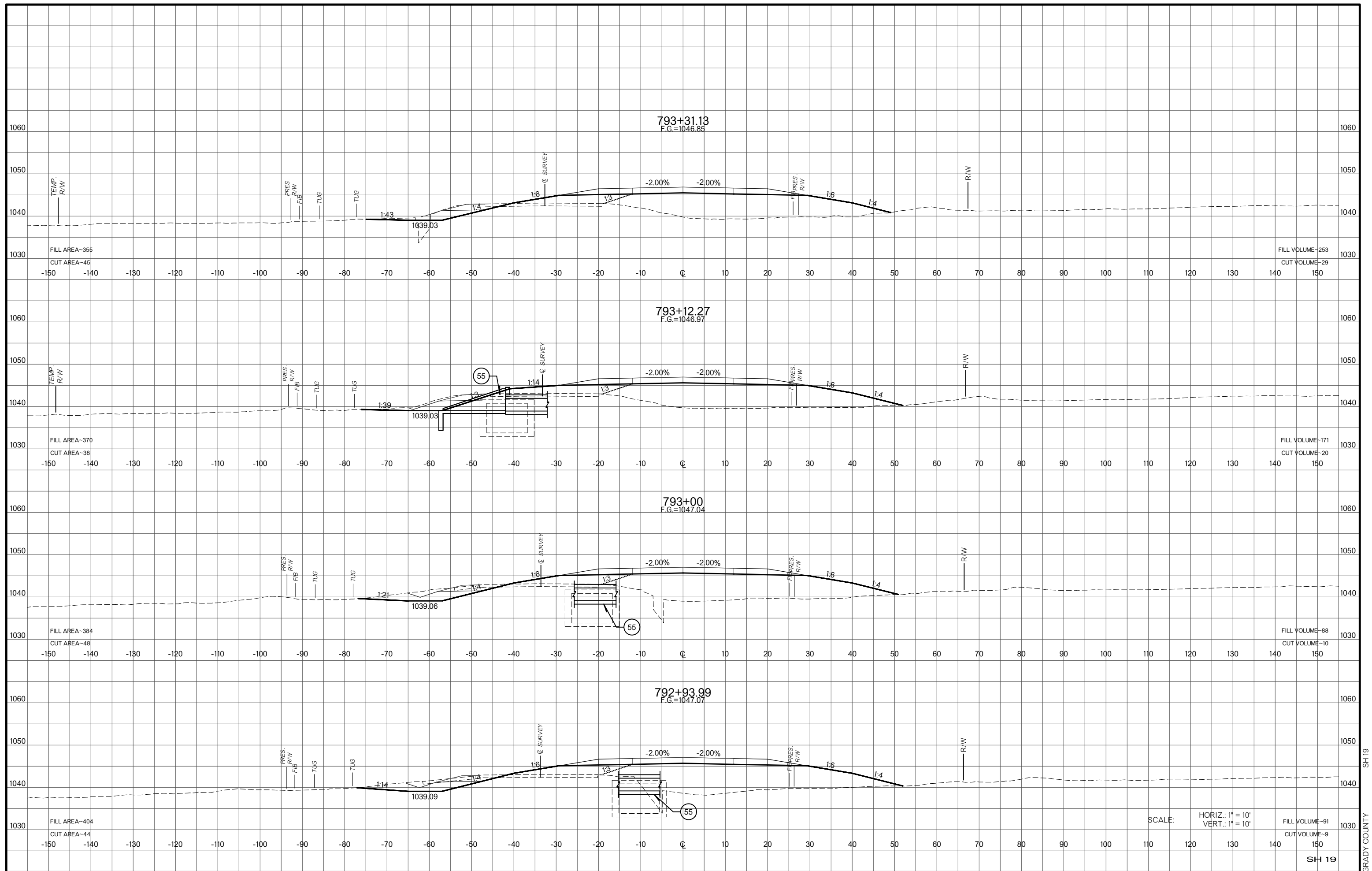
SH 19



SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

FILL VOLUME=620
CUT VOLUME=77

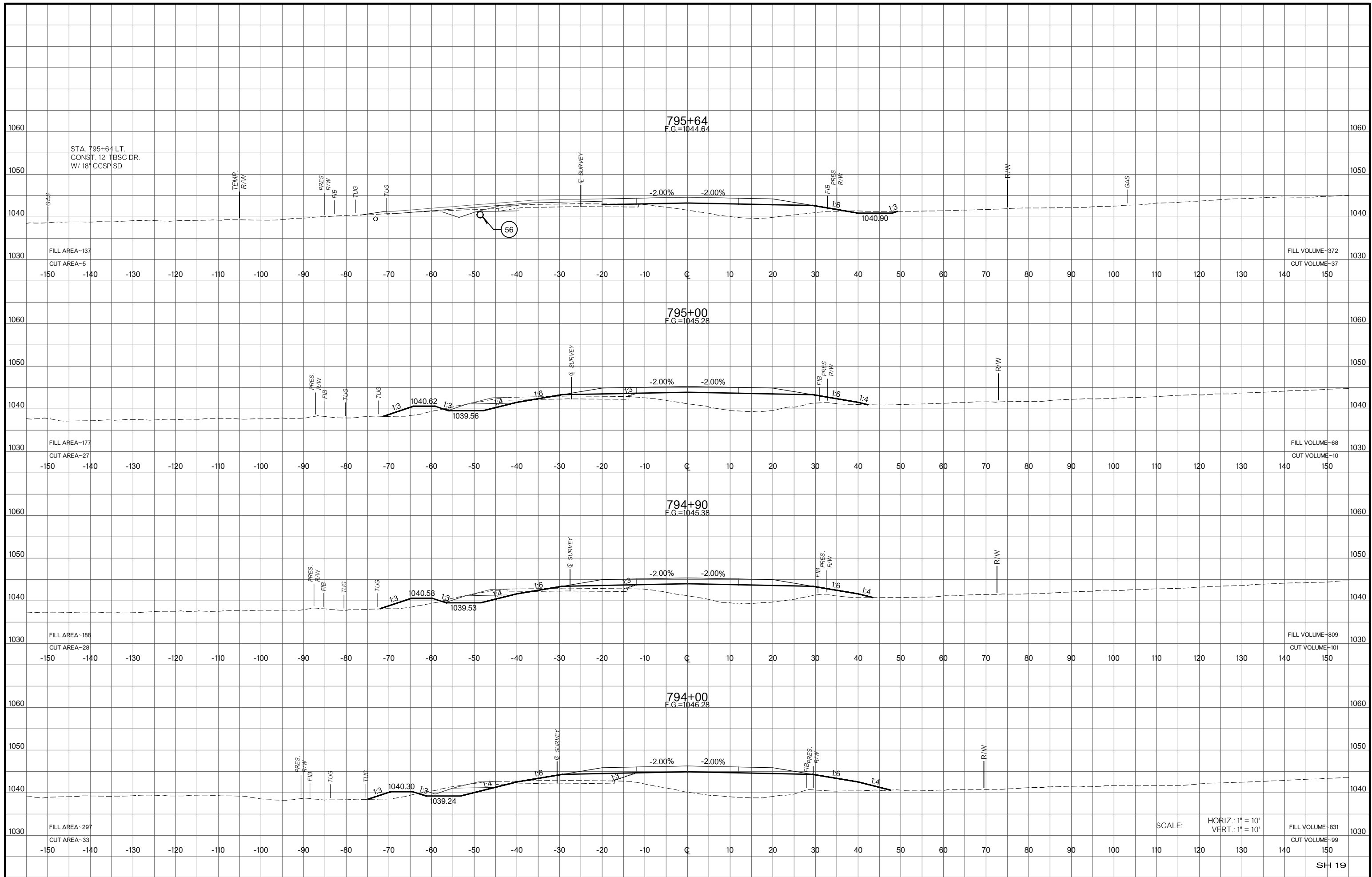
SH 19



SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

FILL VOLUME-91
 CUT VOLUME-9

SH 19



STA. 795+64 L.T.
CONST. 12' TBSC DR.
W/ 18' CGSP SD

FILL AREA-137
CUT AREA-5

FILL VOLUME-372
CUT VOLUME-37

FILL AREA-177
CUT AREA-27

FILL VOLUME-68
CUT VOLUME-10

FILL AREA-188
CUT AREA-28

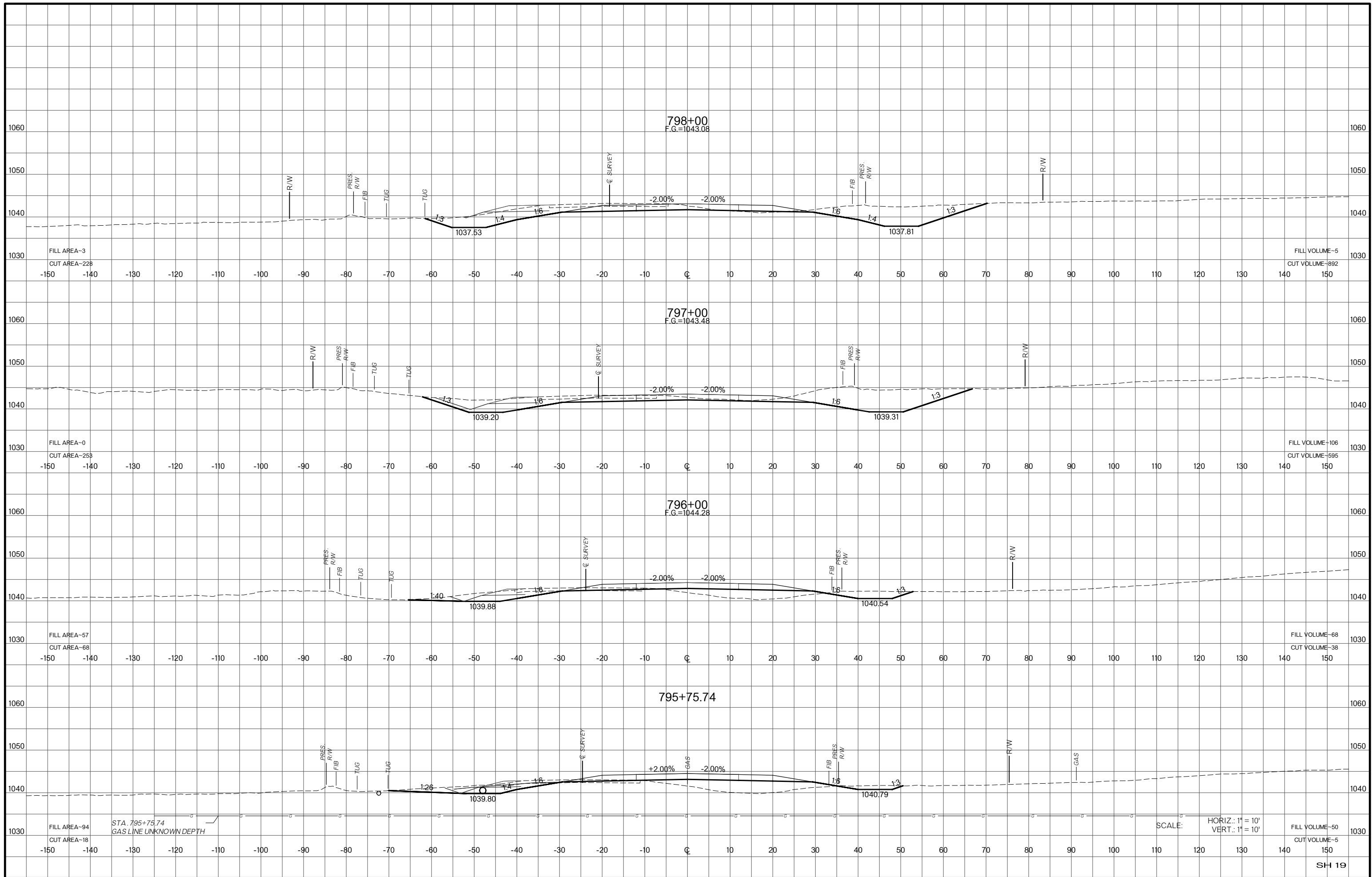
FILL VOLUME-809
CUT VOLUME-101

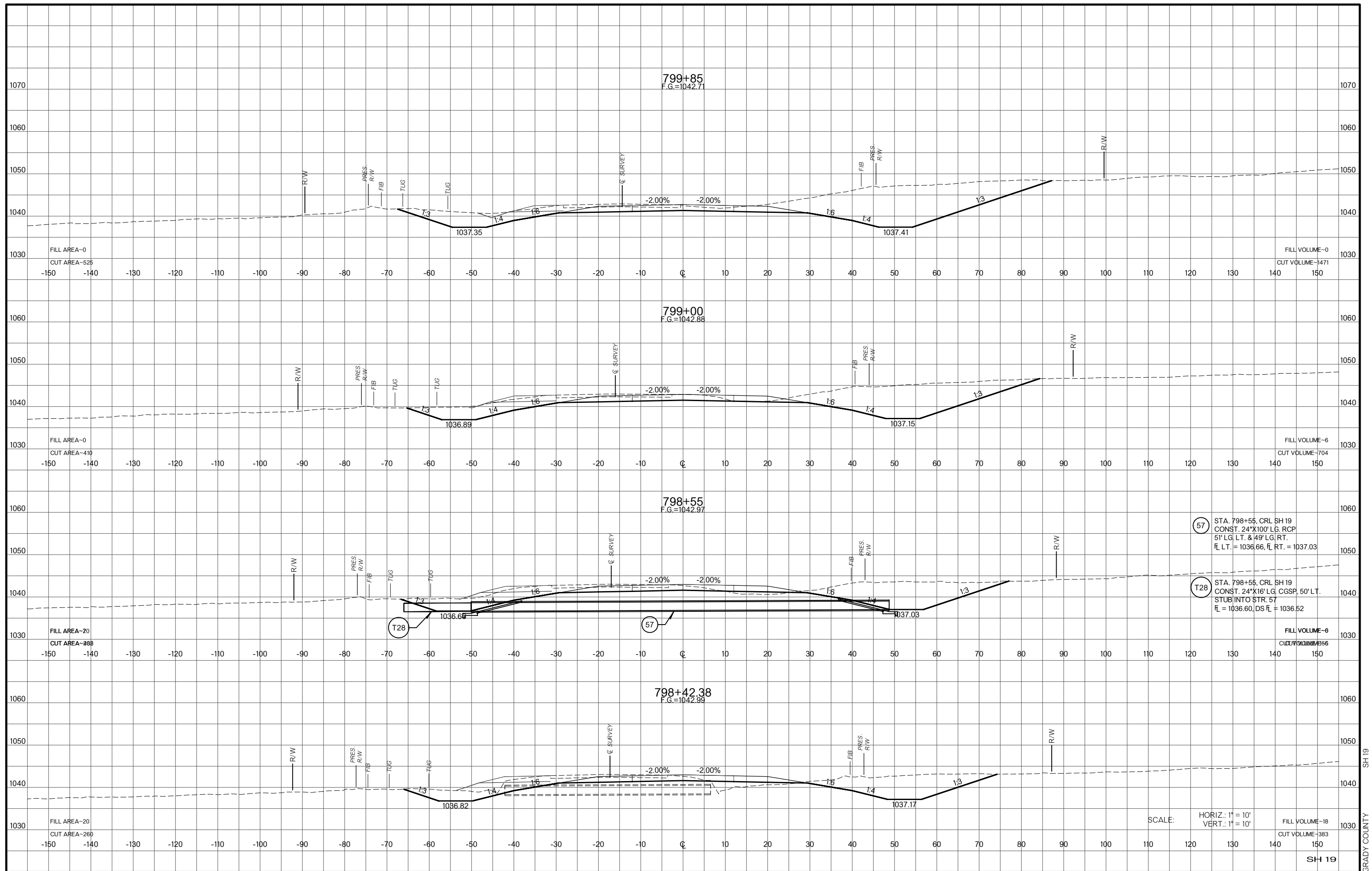
FILL AREA-297
CUT AREA-33

FILL VOLUME-831
CUT VOLUME-99

SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

SH 19





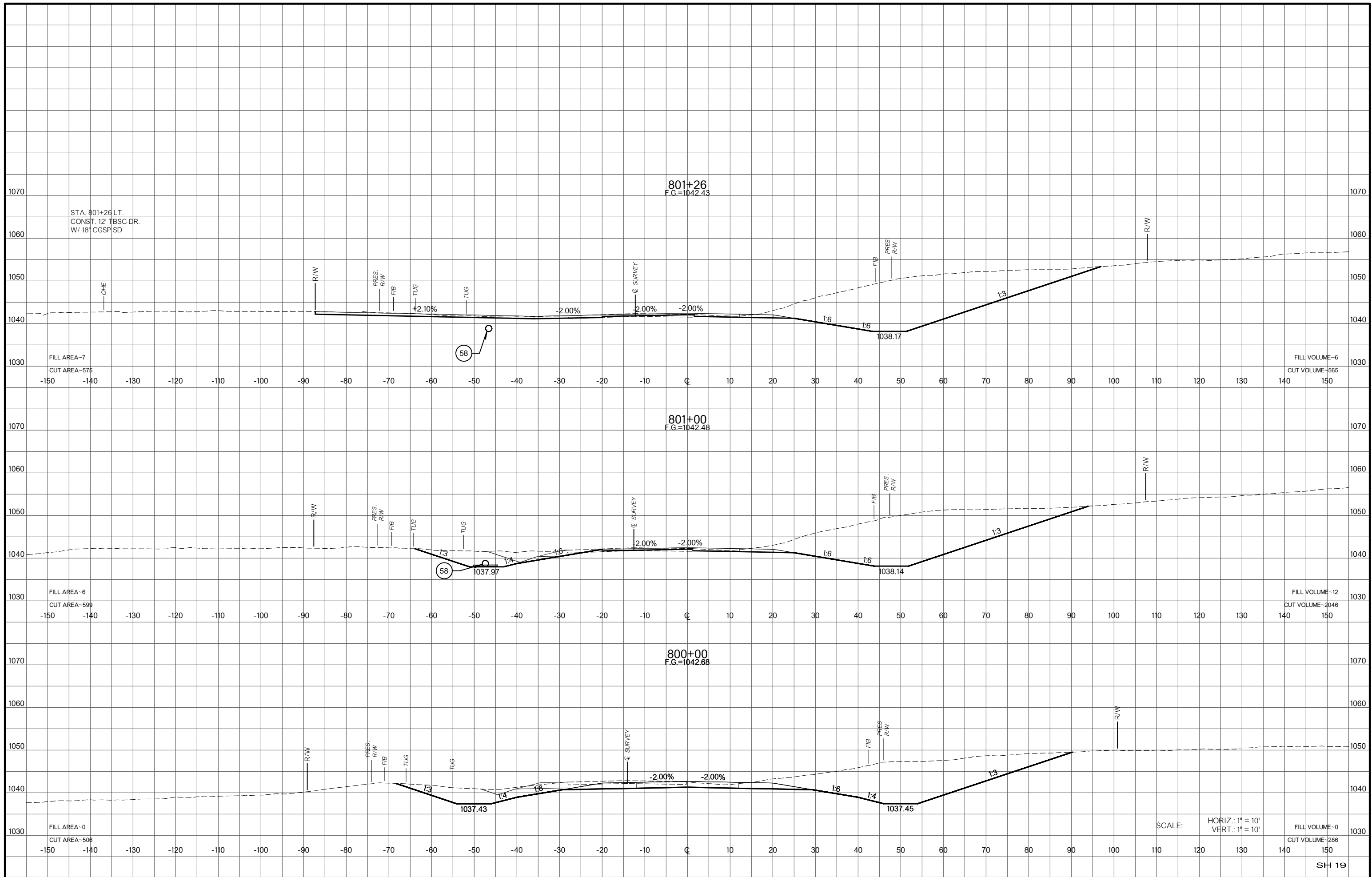
(57) STA. 798+55, CRL SH 19
CONST. 24"x100" LG. RCP
5' LG. LT. & 49' LG. RT.
FL LT. = 1036.66, FL RT. = 1037.03

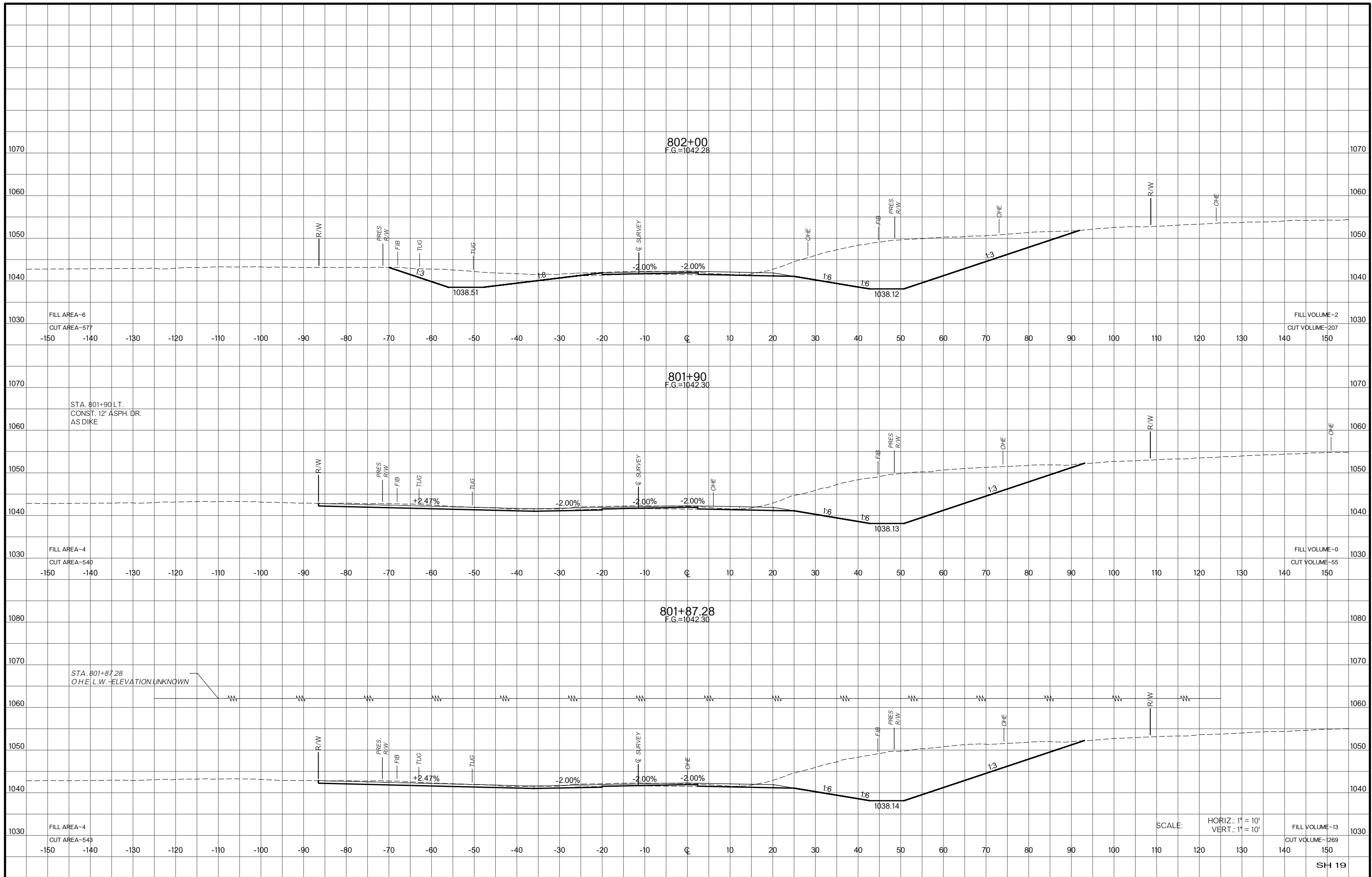
(T28) STA. 798+55, CRL SH 19
CONST. 24"x16" LG. CGSP, 50' LT.
STUB INTO STR. 57
FL = 1036.60, DS FL = 1036.52

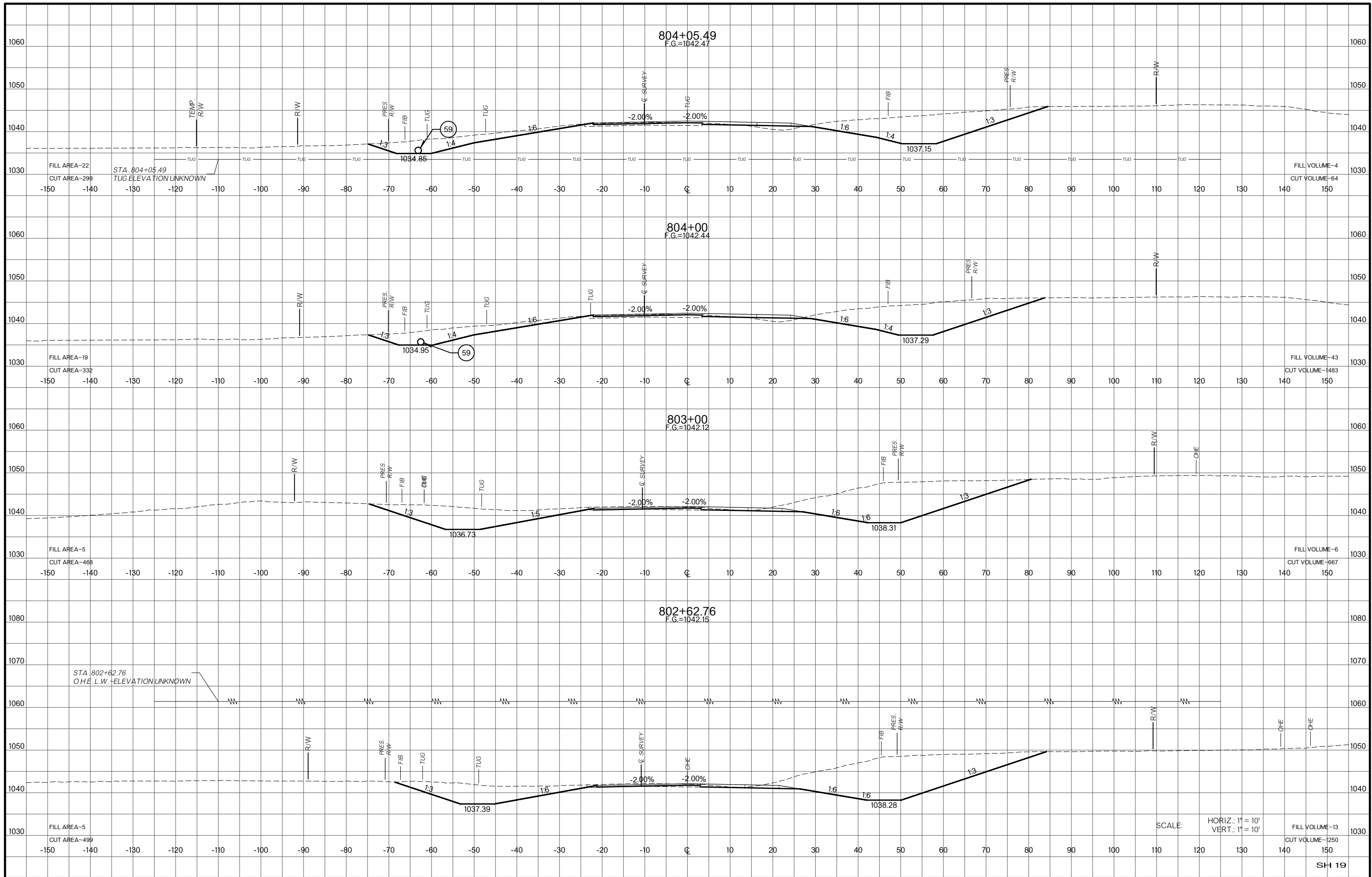
SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

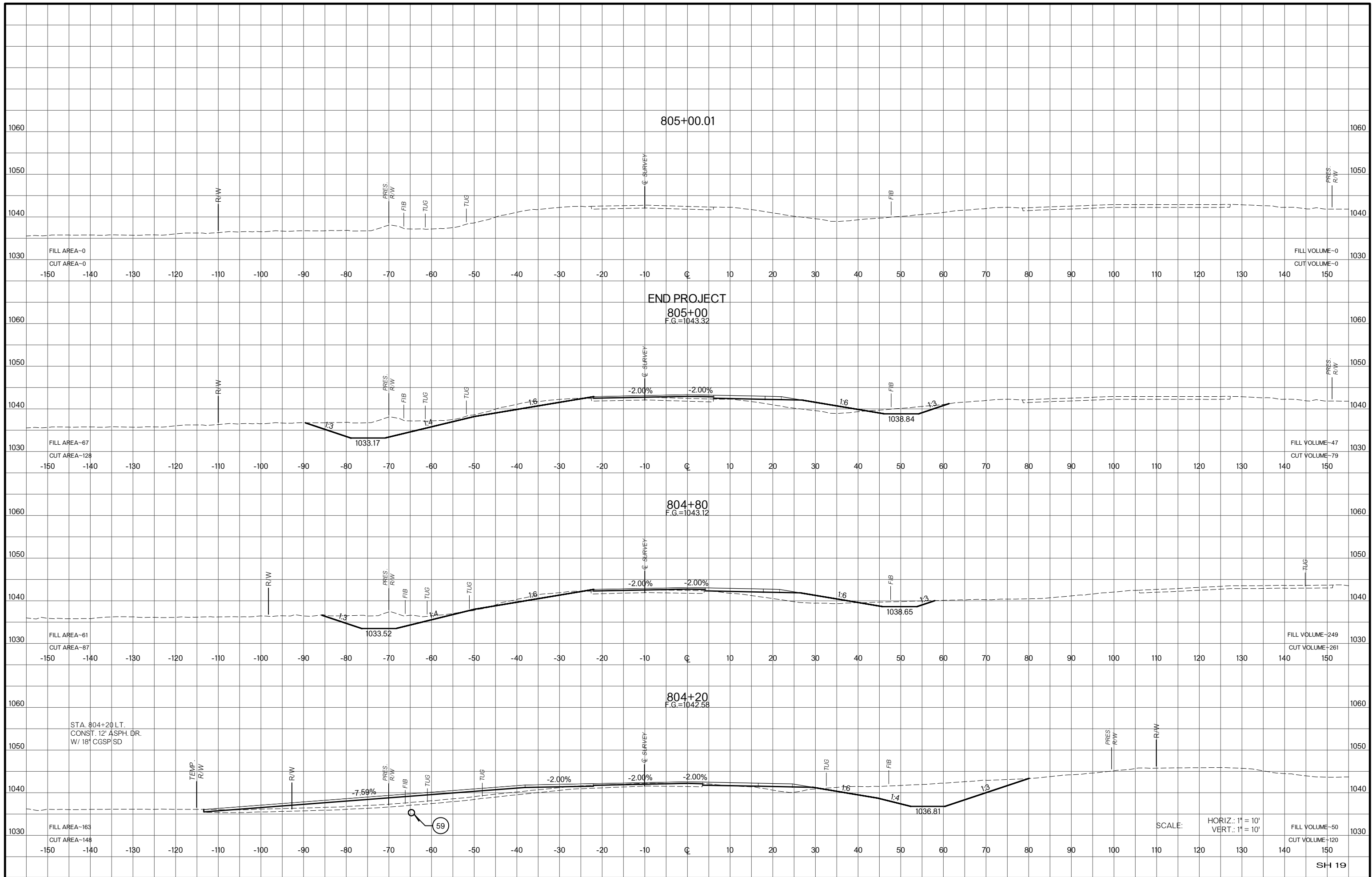
FILL VOLUME-18
CUT VOLUME-383

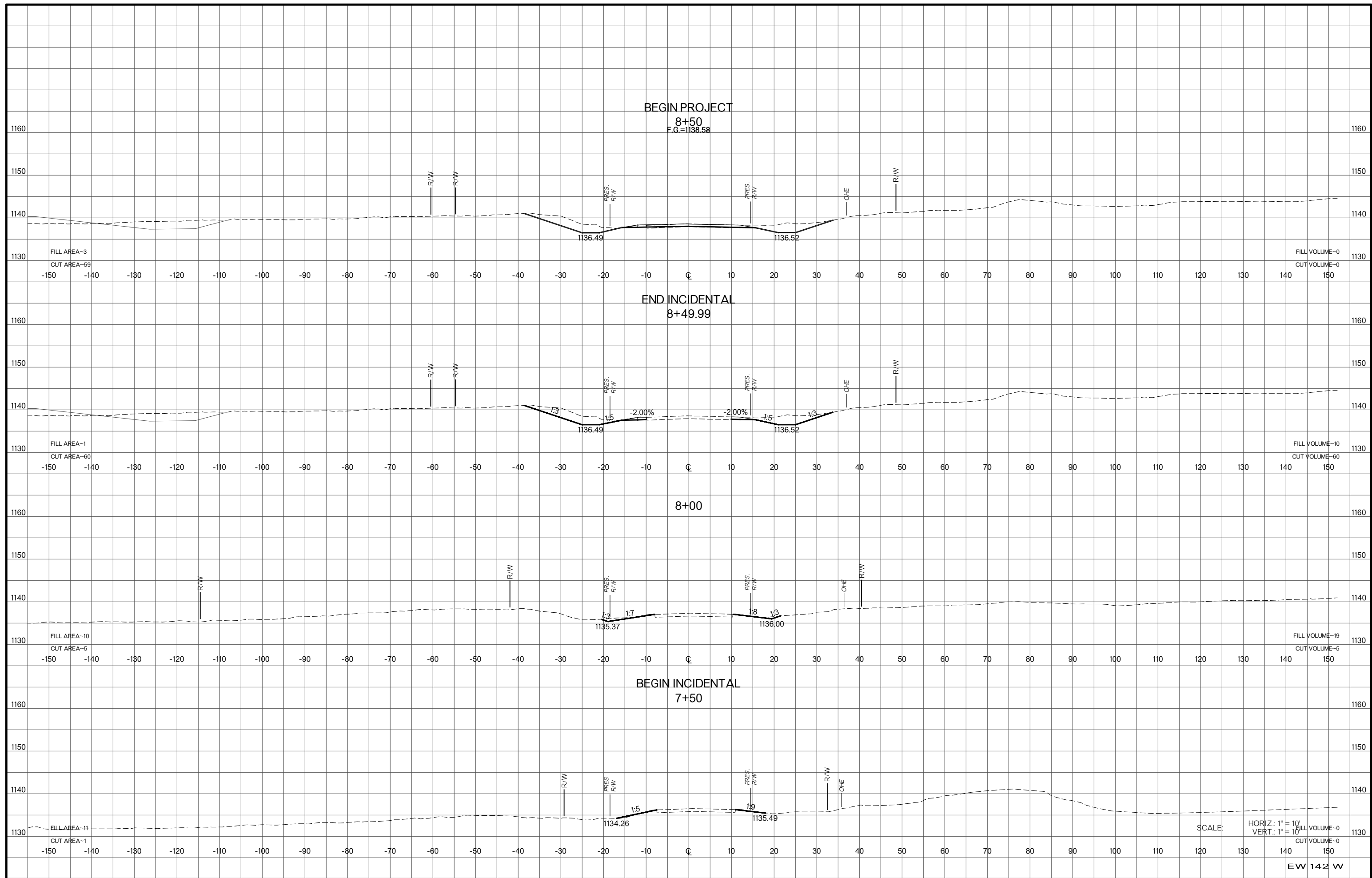
SH 19

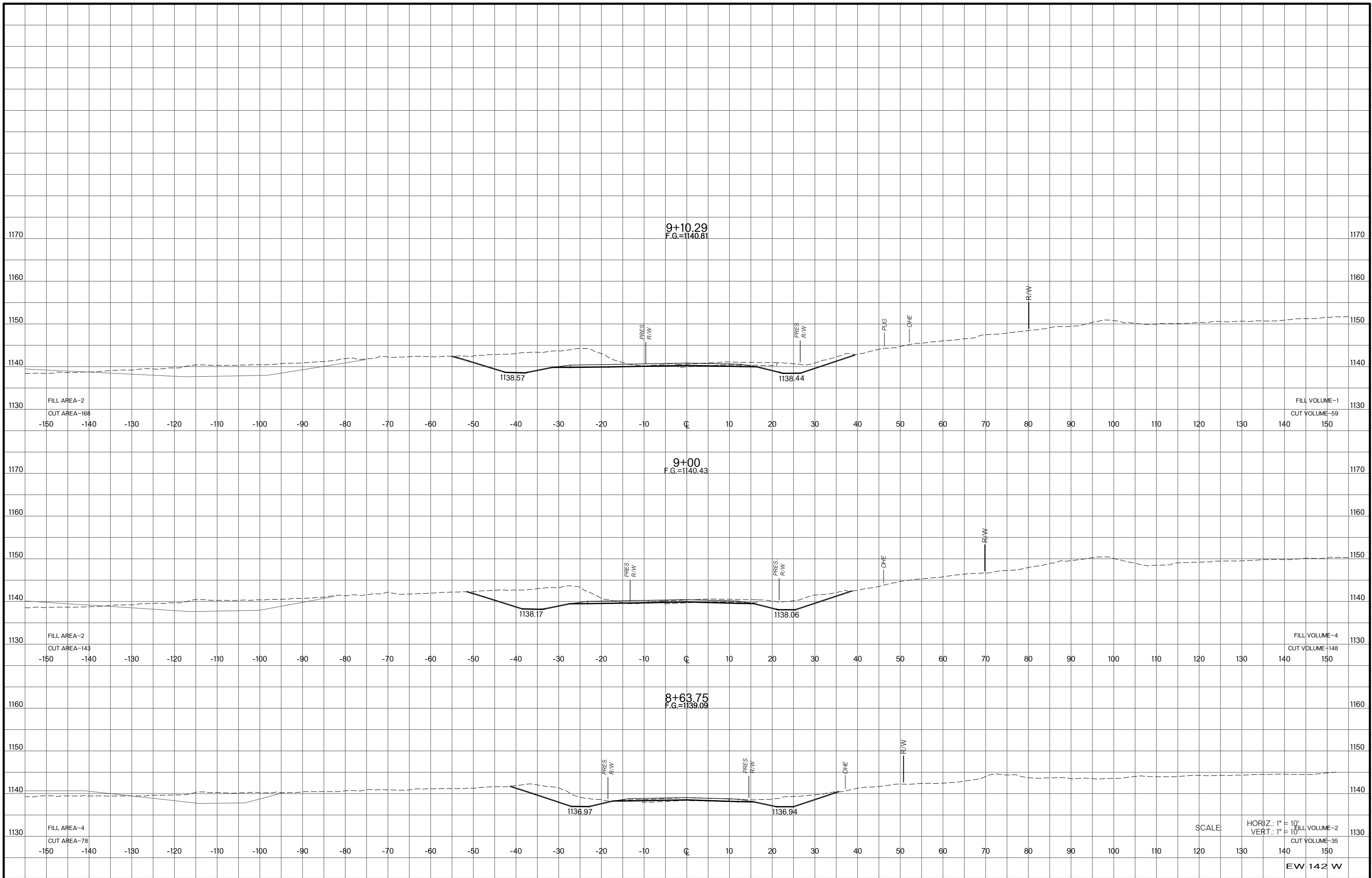


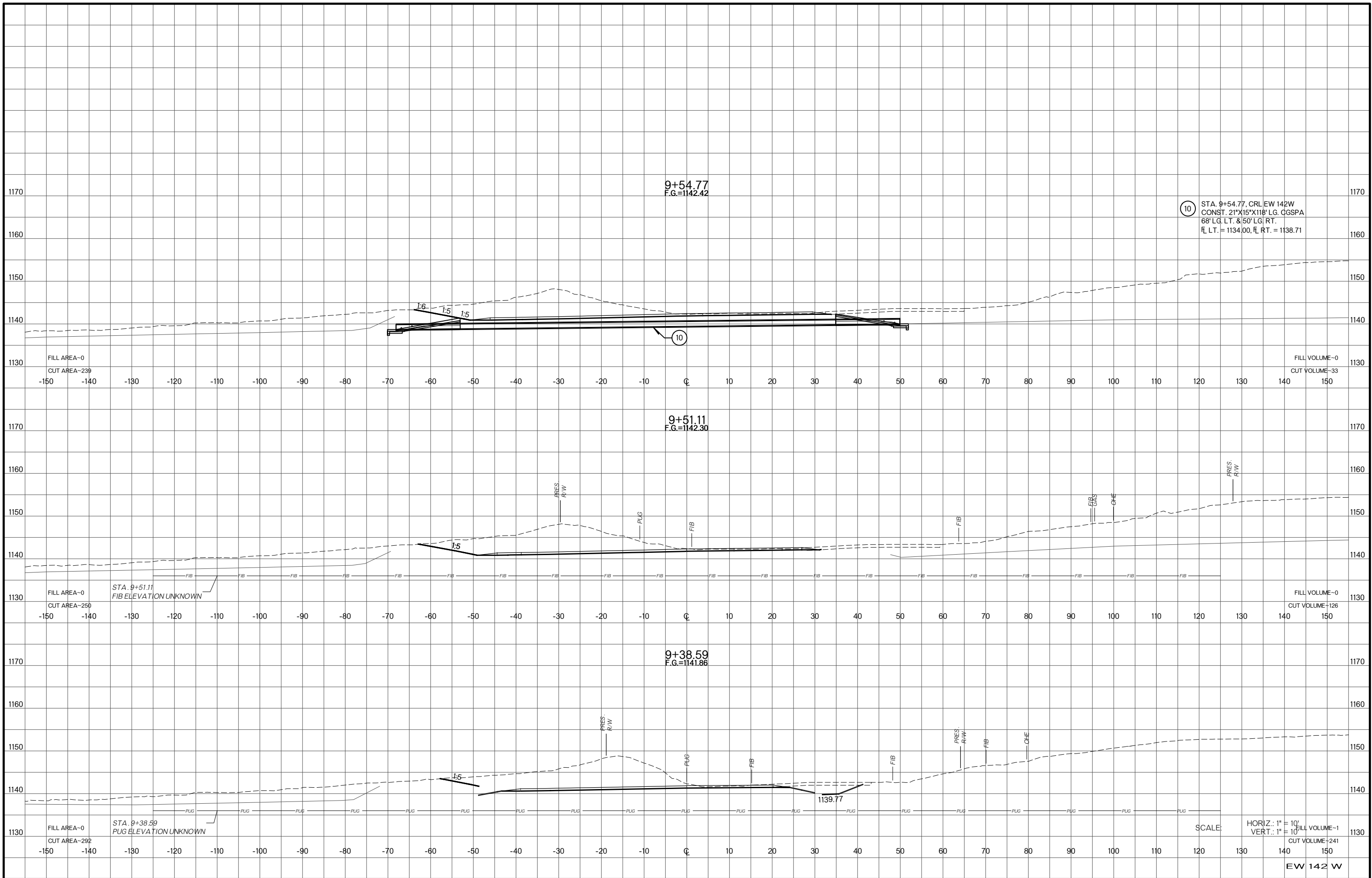


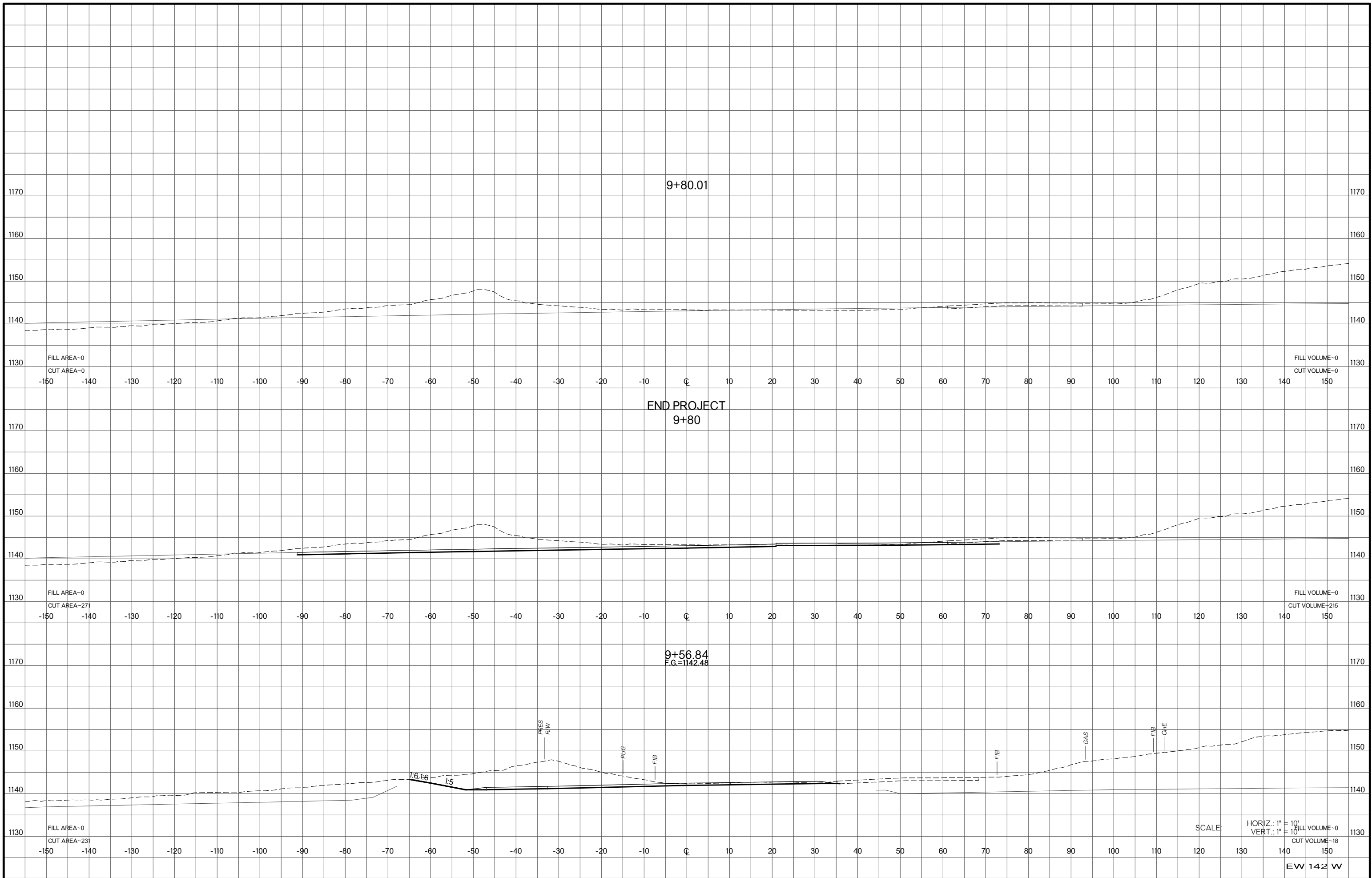


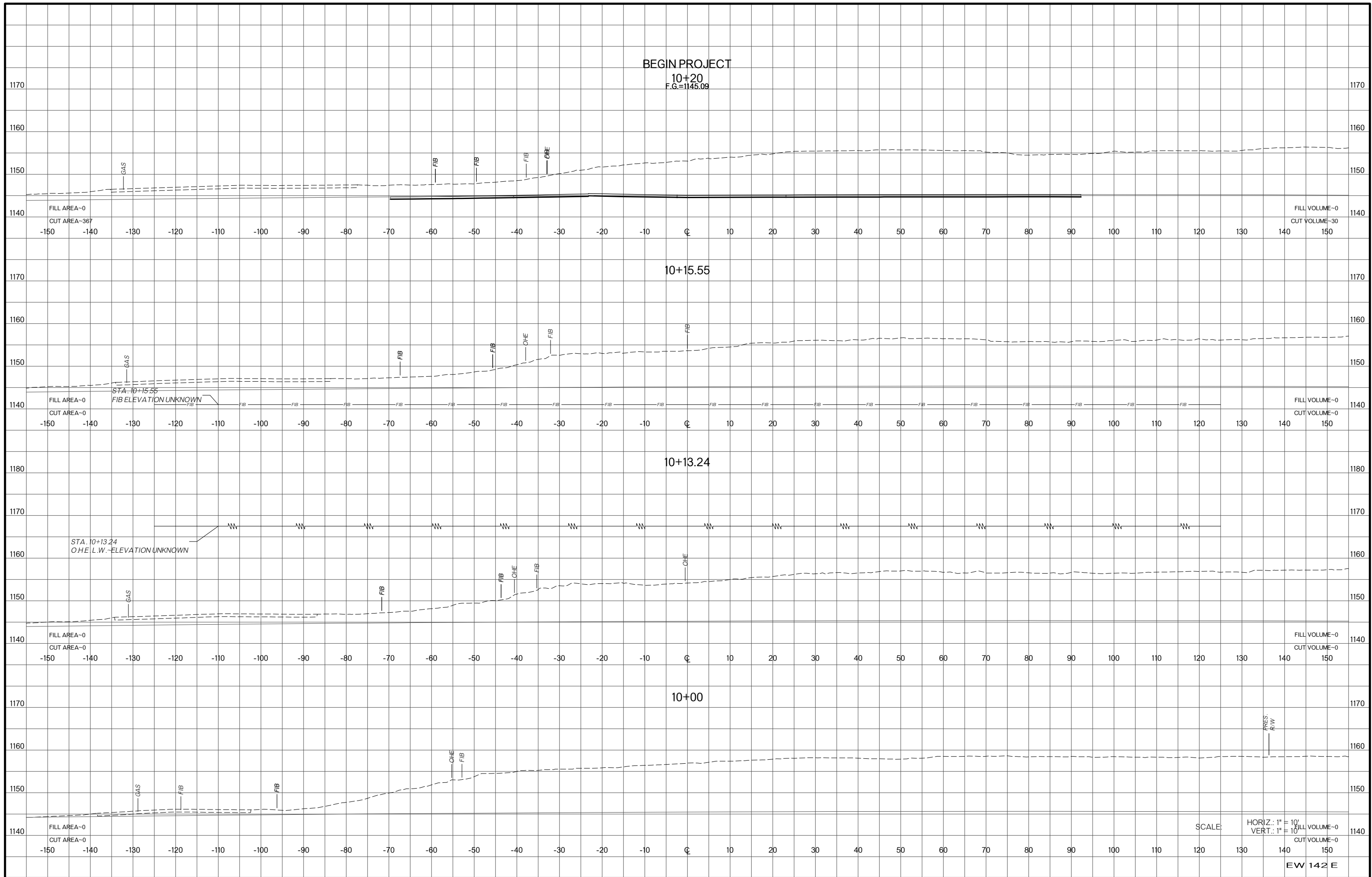


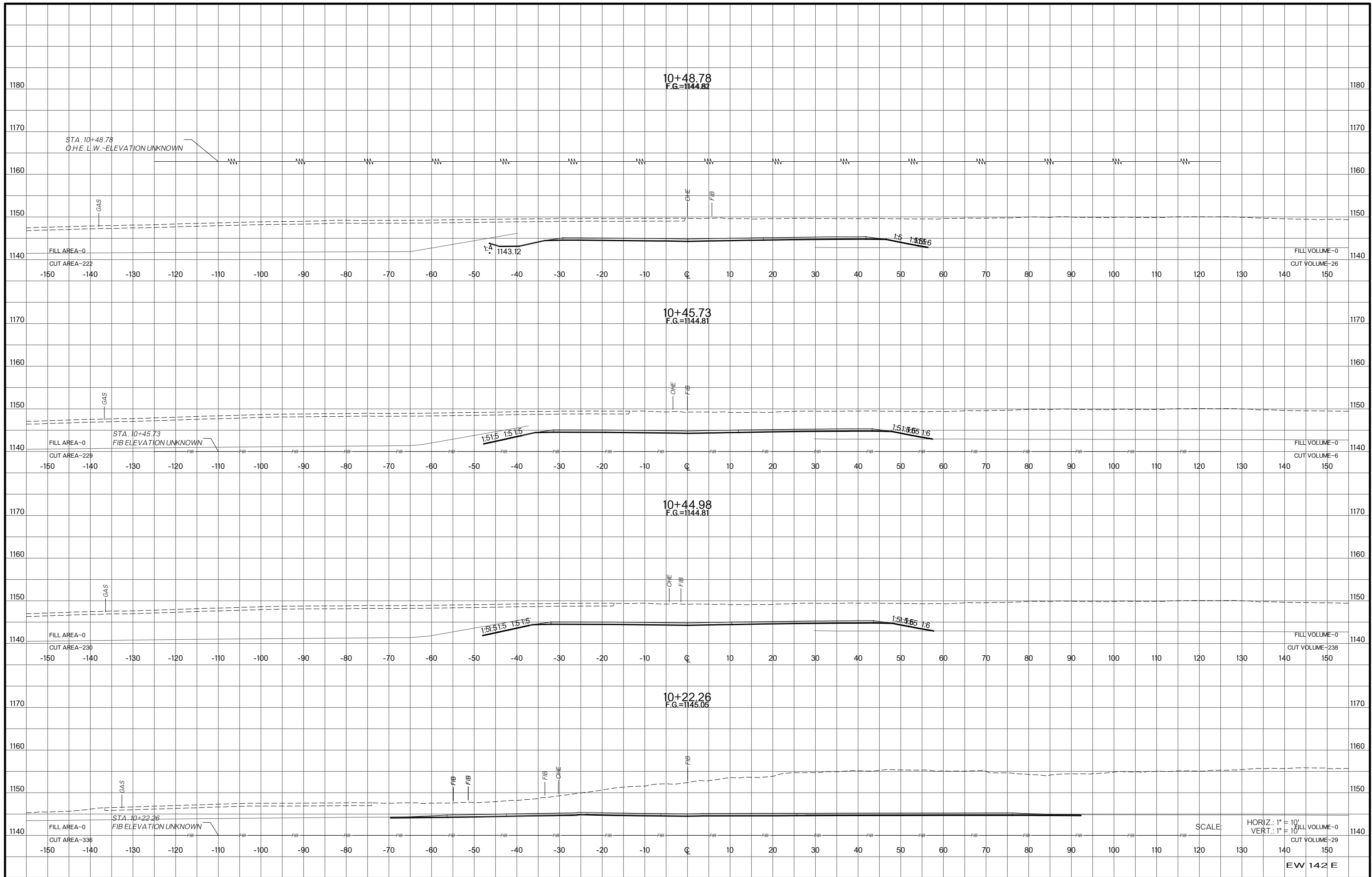






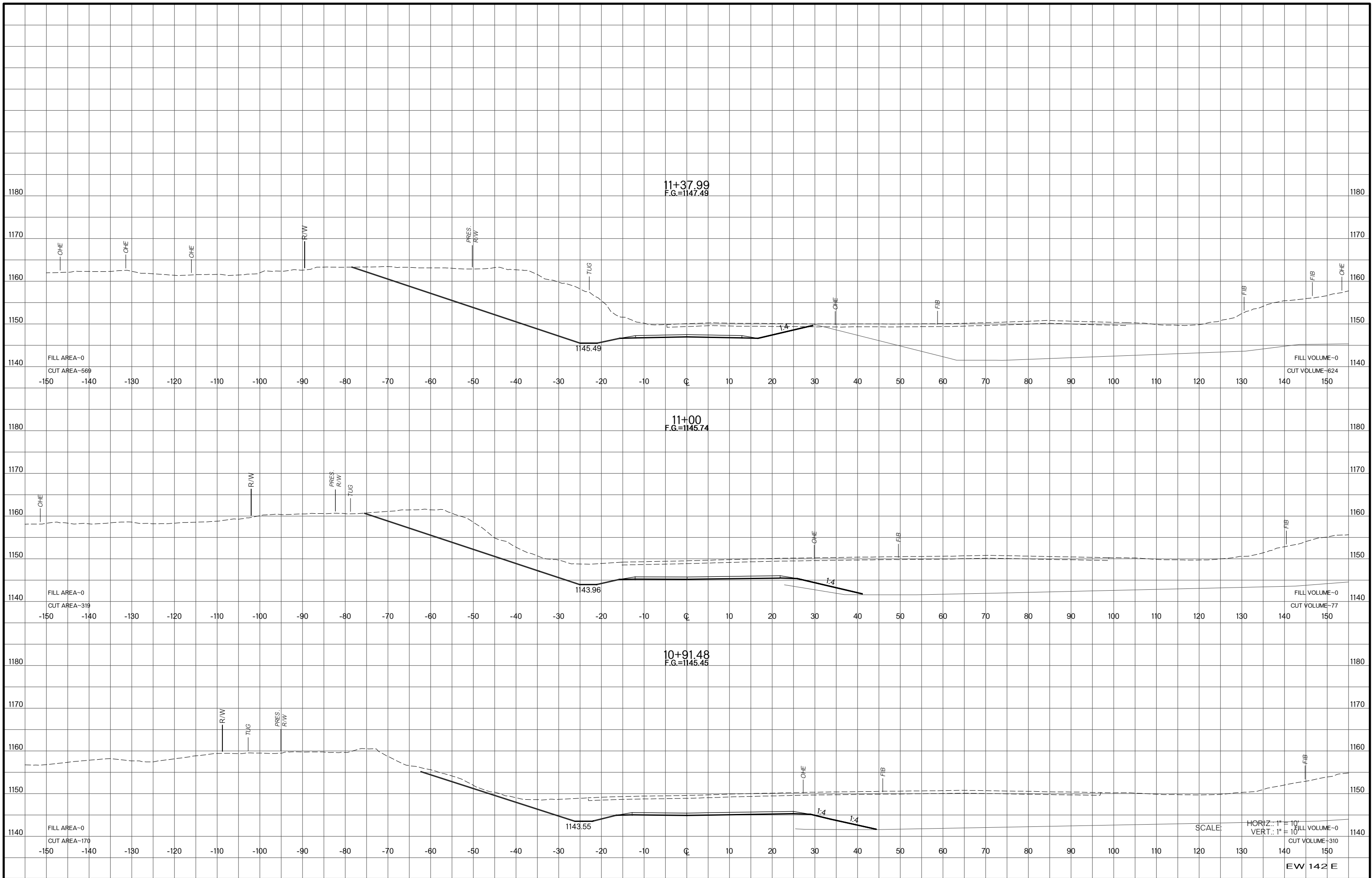


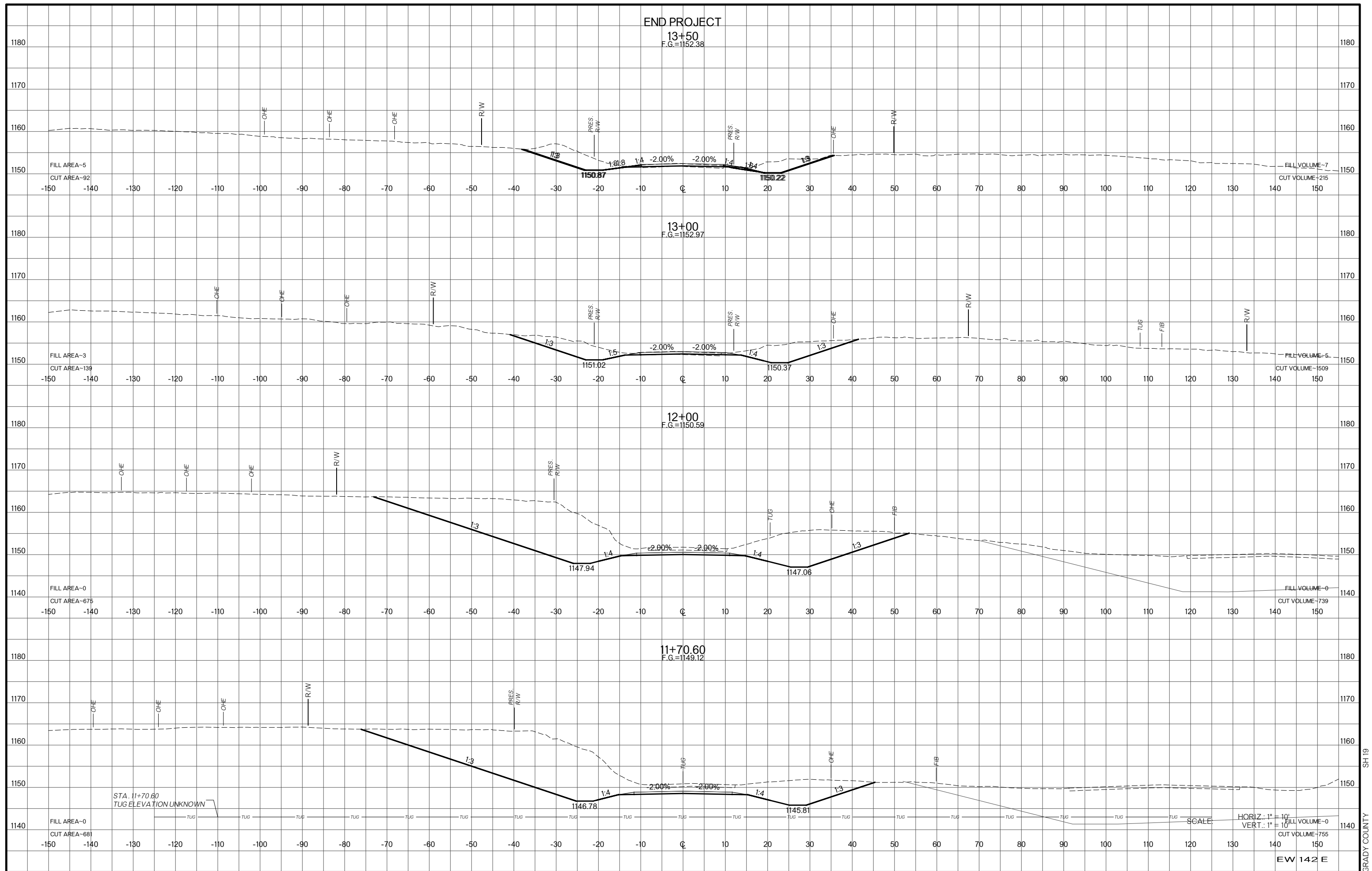


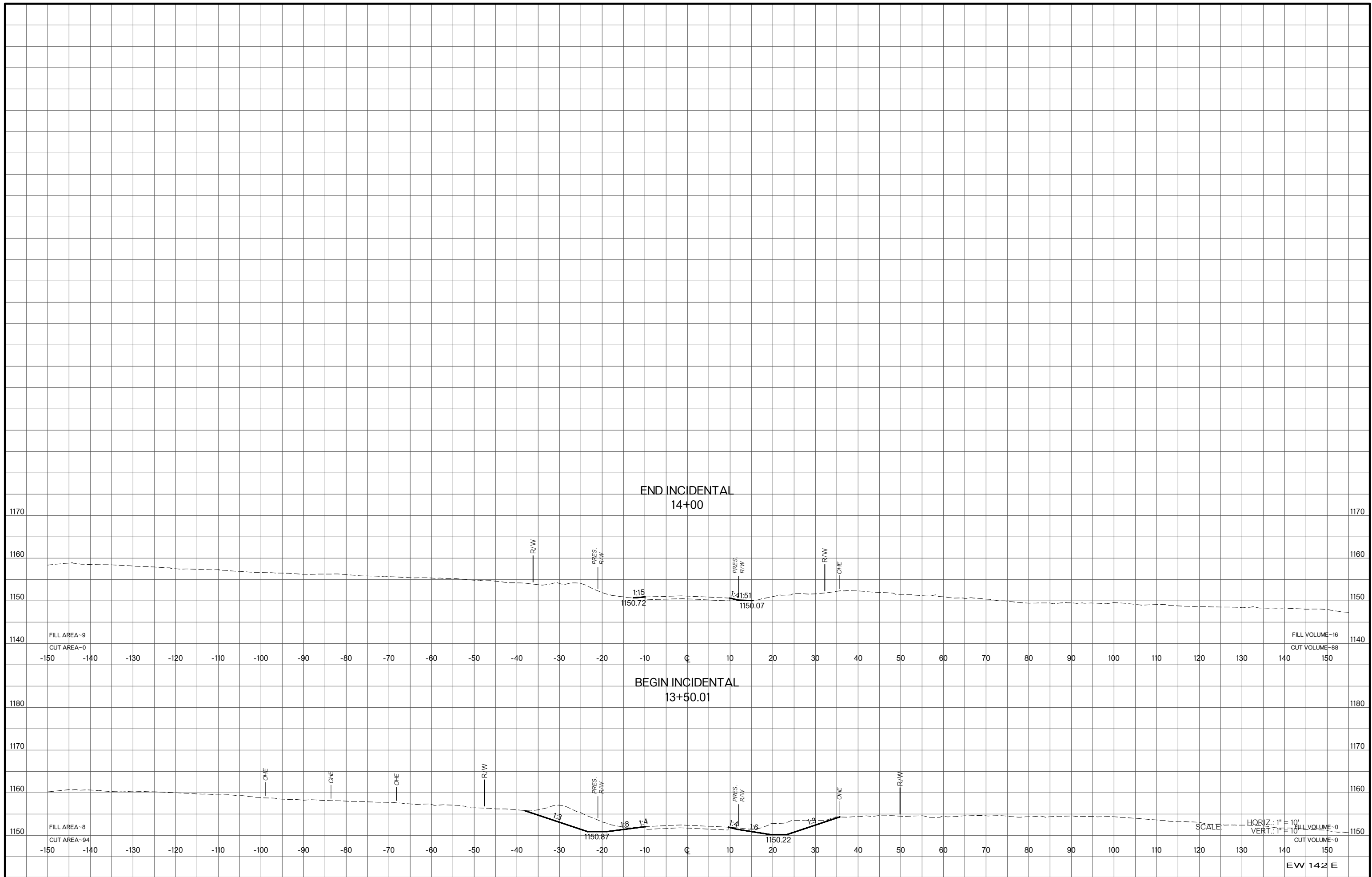


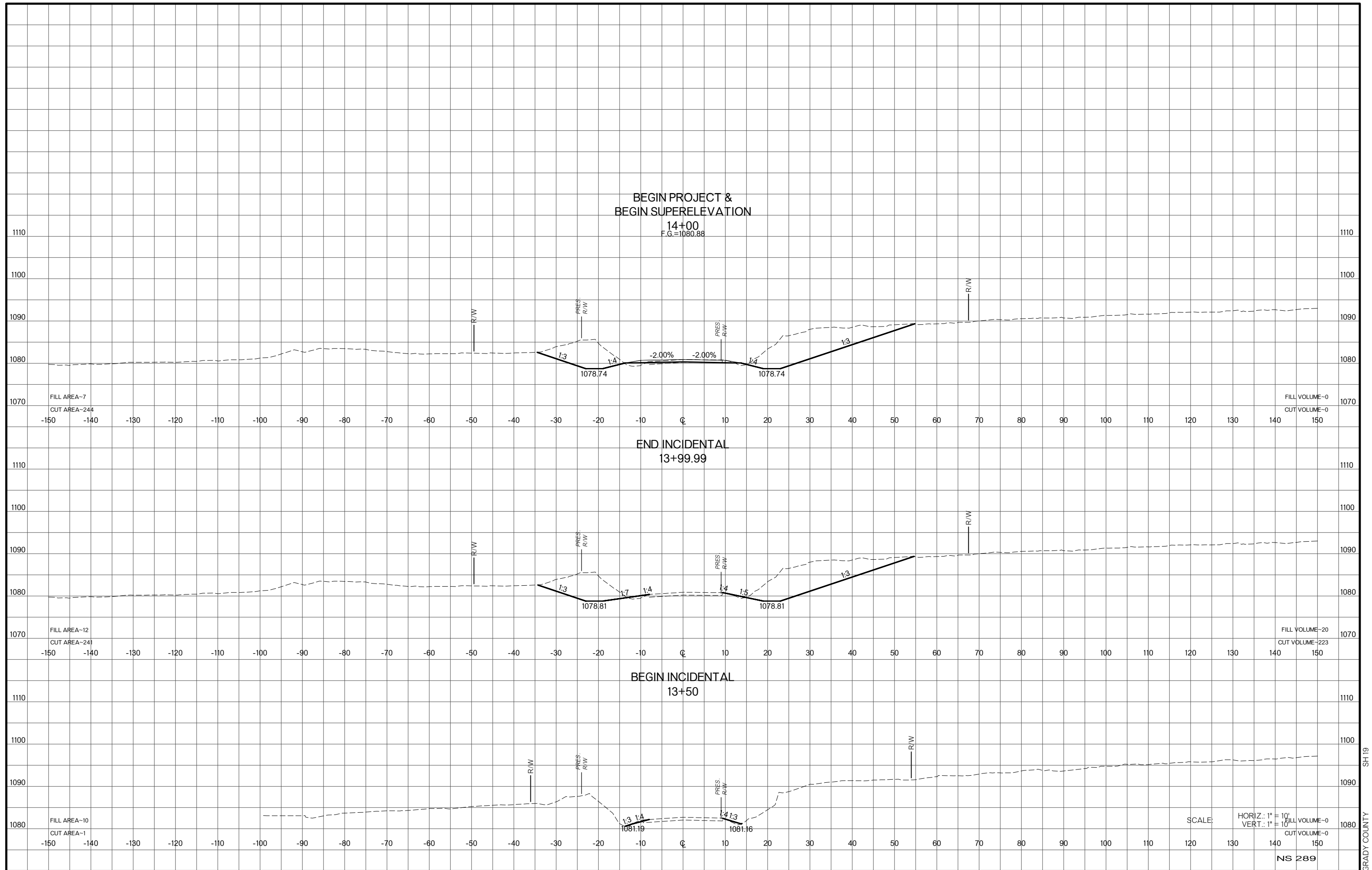
SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

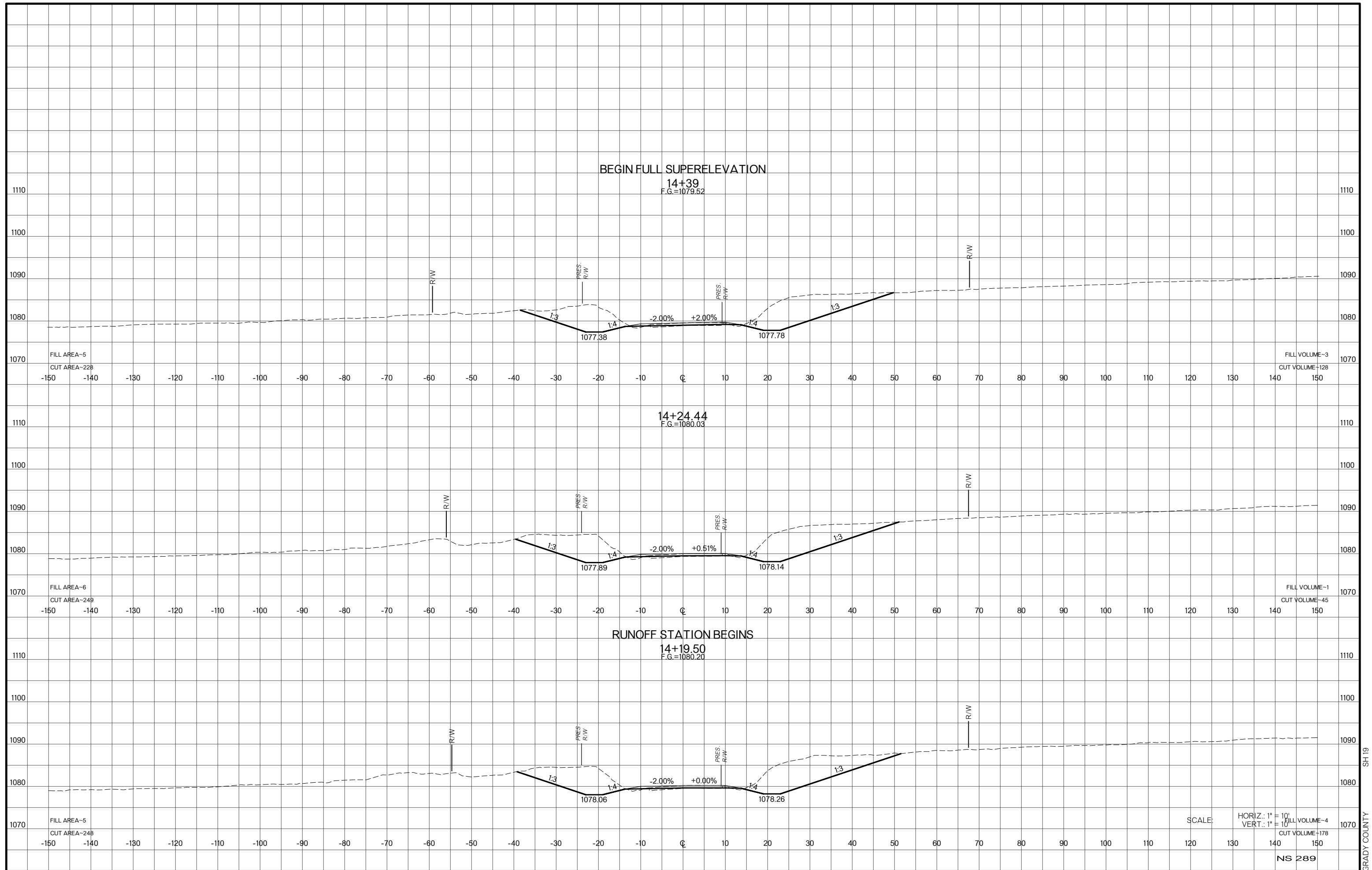
EW 142 E





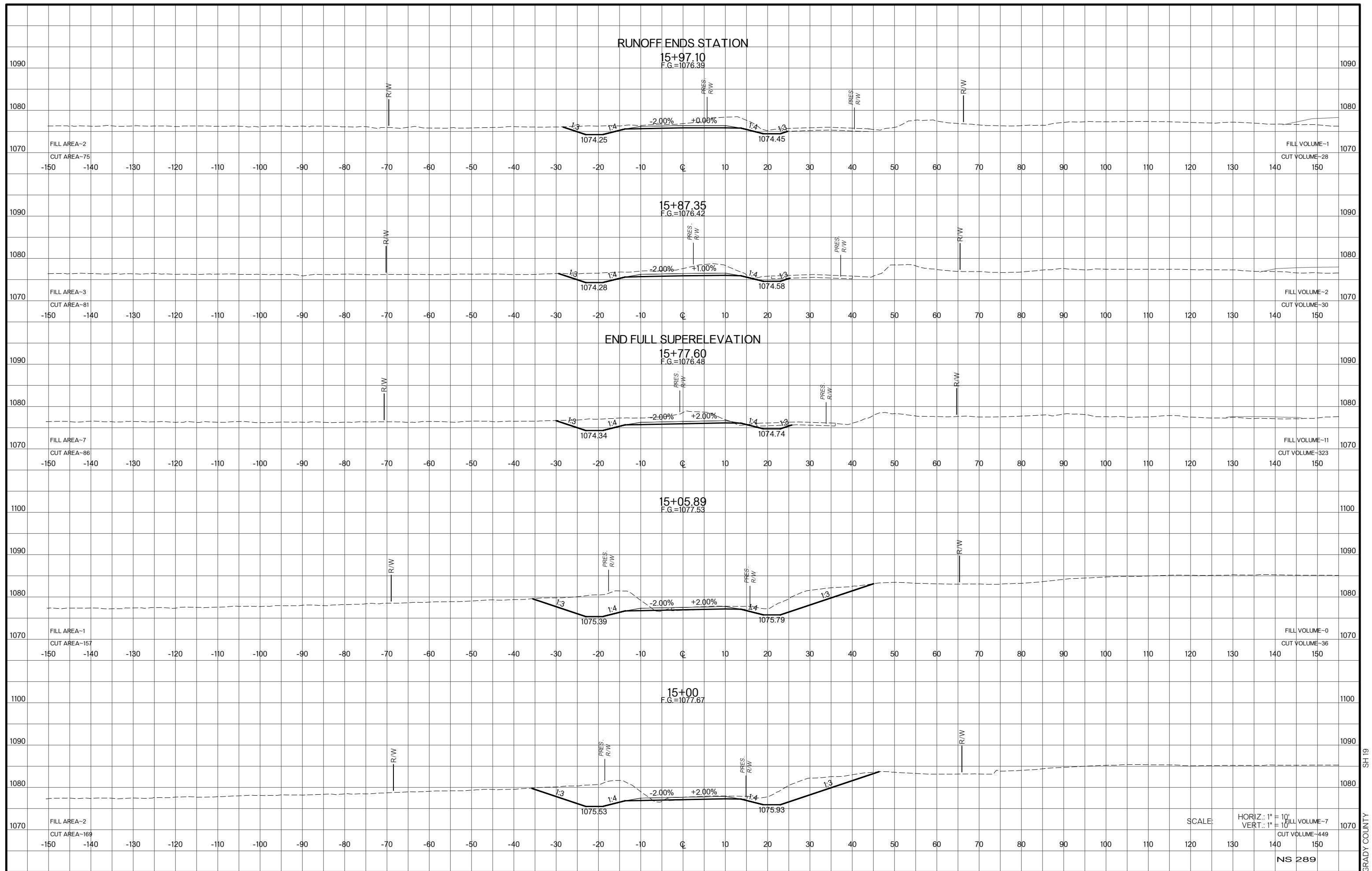






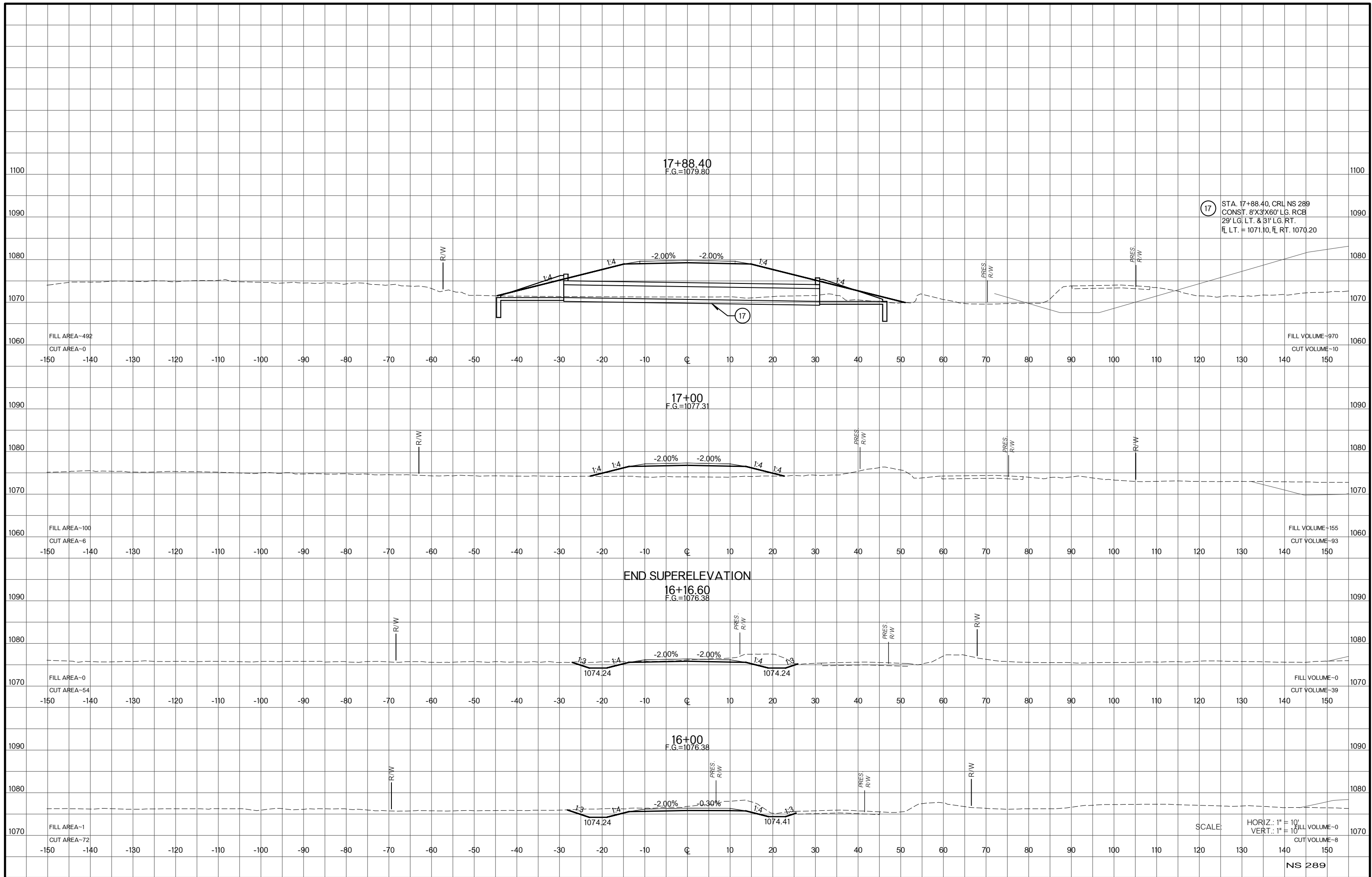
SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

NS 289



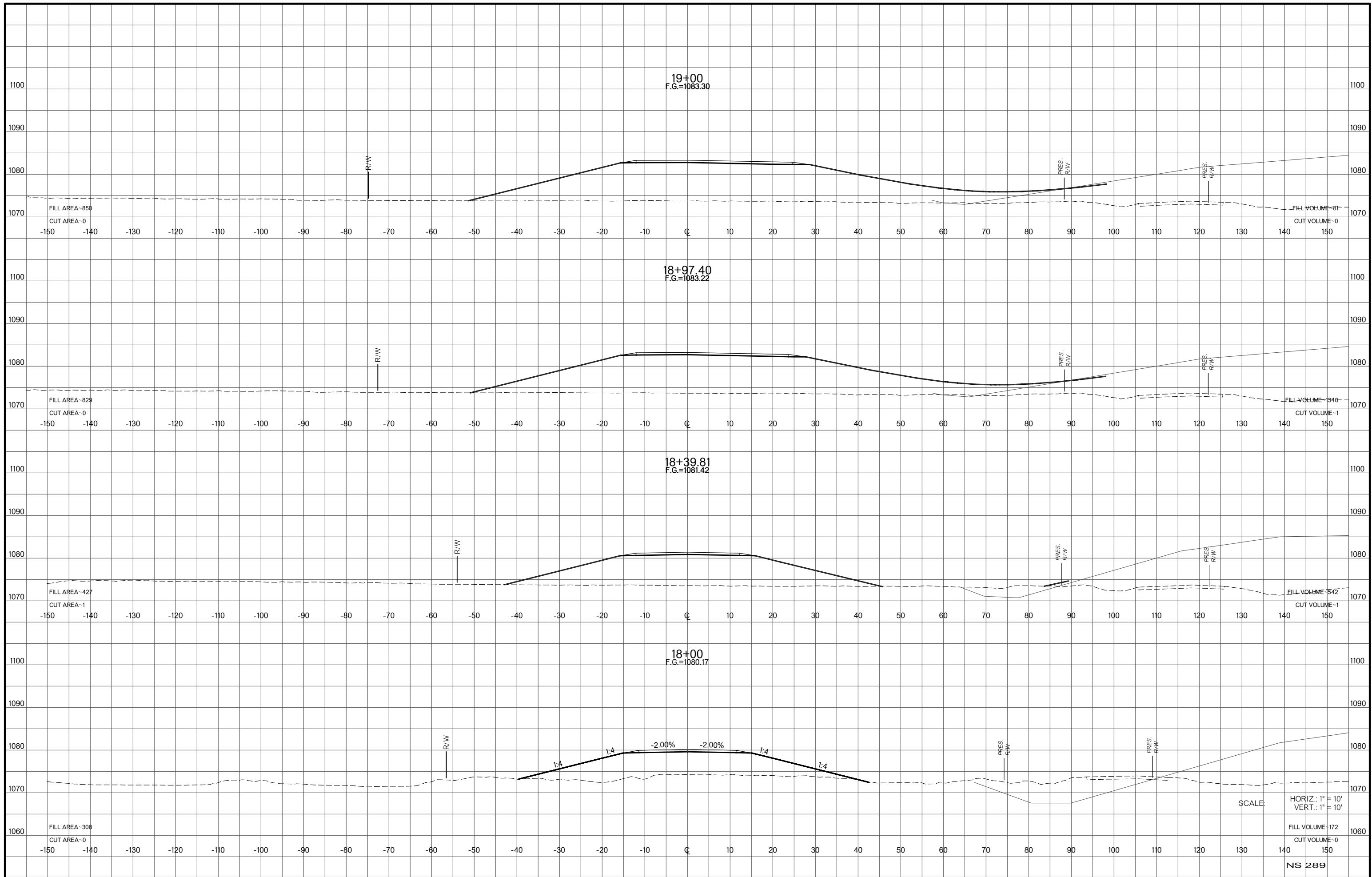
SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

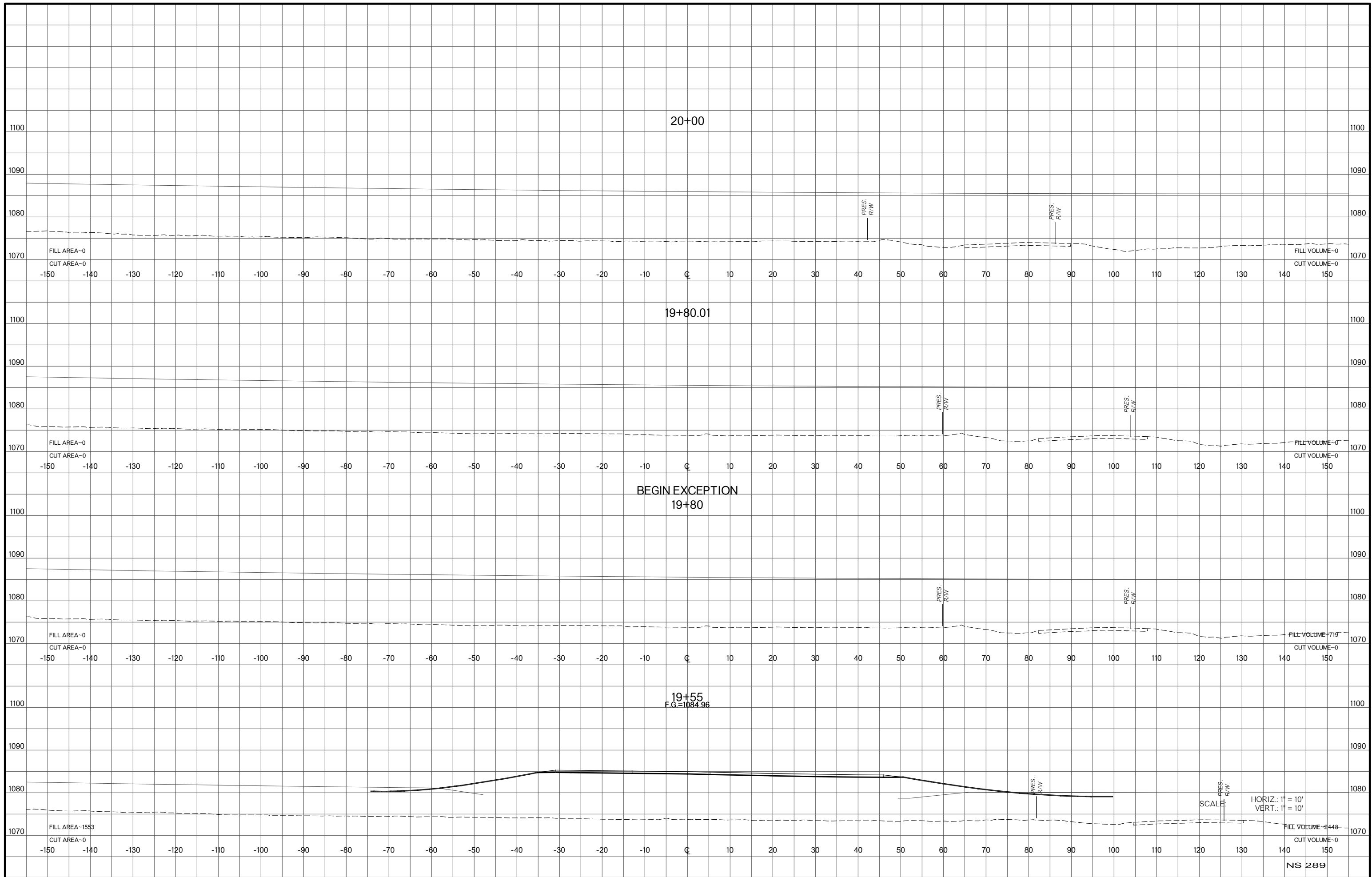
NS 289



SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

NS 289





20+00

19+80.01

BEGIN EXCEPTION
19+80

19+55
F.G.=1084.96

FILL AREA-0
CUT AREA-0

FILL VOLUME-0
CUT VOLUME-0

FILL AREA-0
CUT AREA-0

FILL VOLUME-0
CUT VOLUME-0

FILL AREA-0
CUT AREA-0

FILL VOLUME-719
CUT VOLUME-0

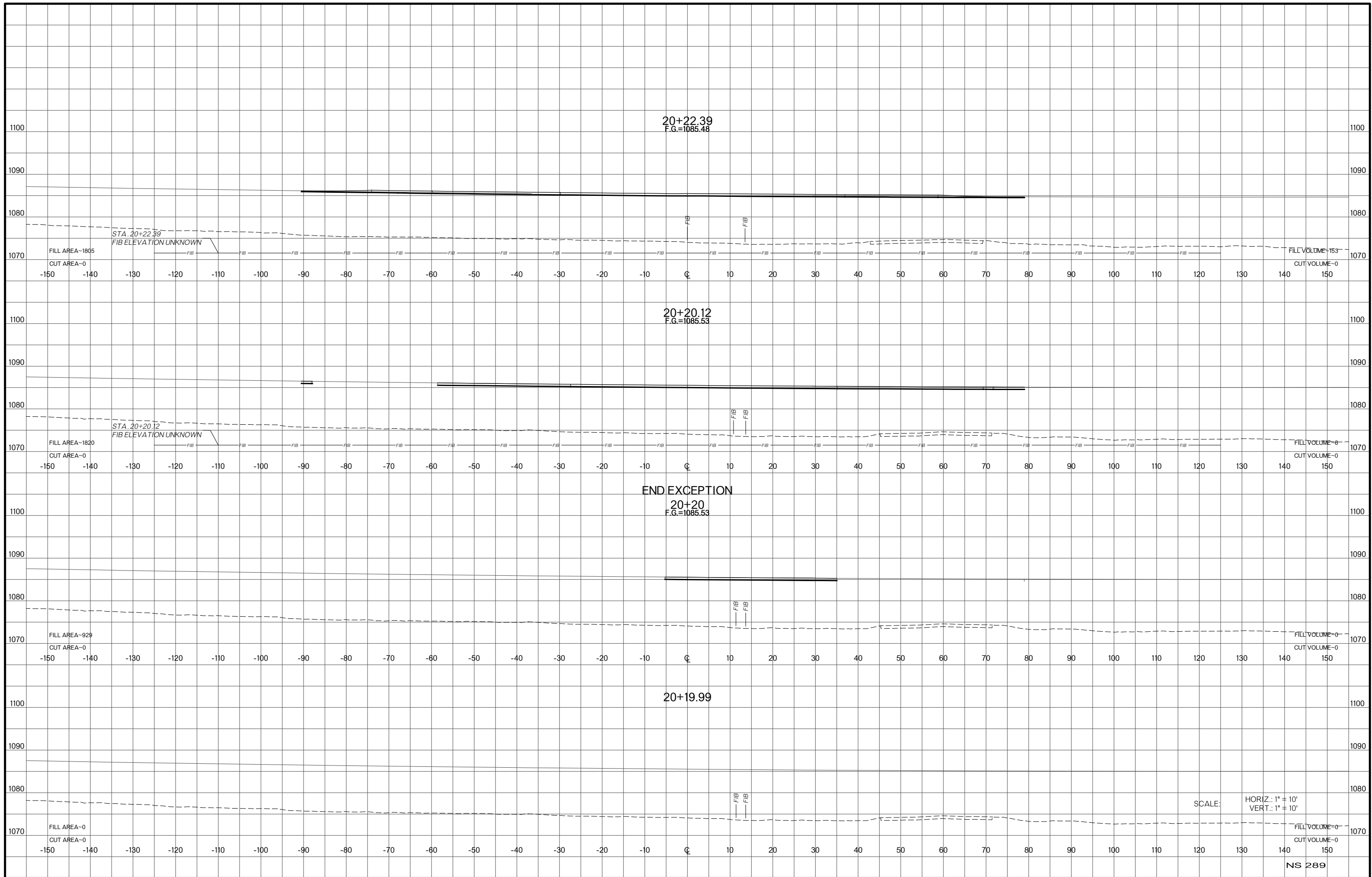
FILL AREA-1553
CUT AREA-0

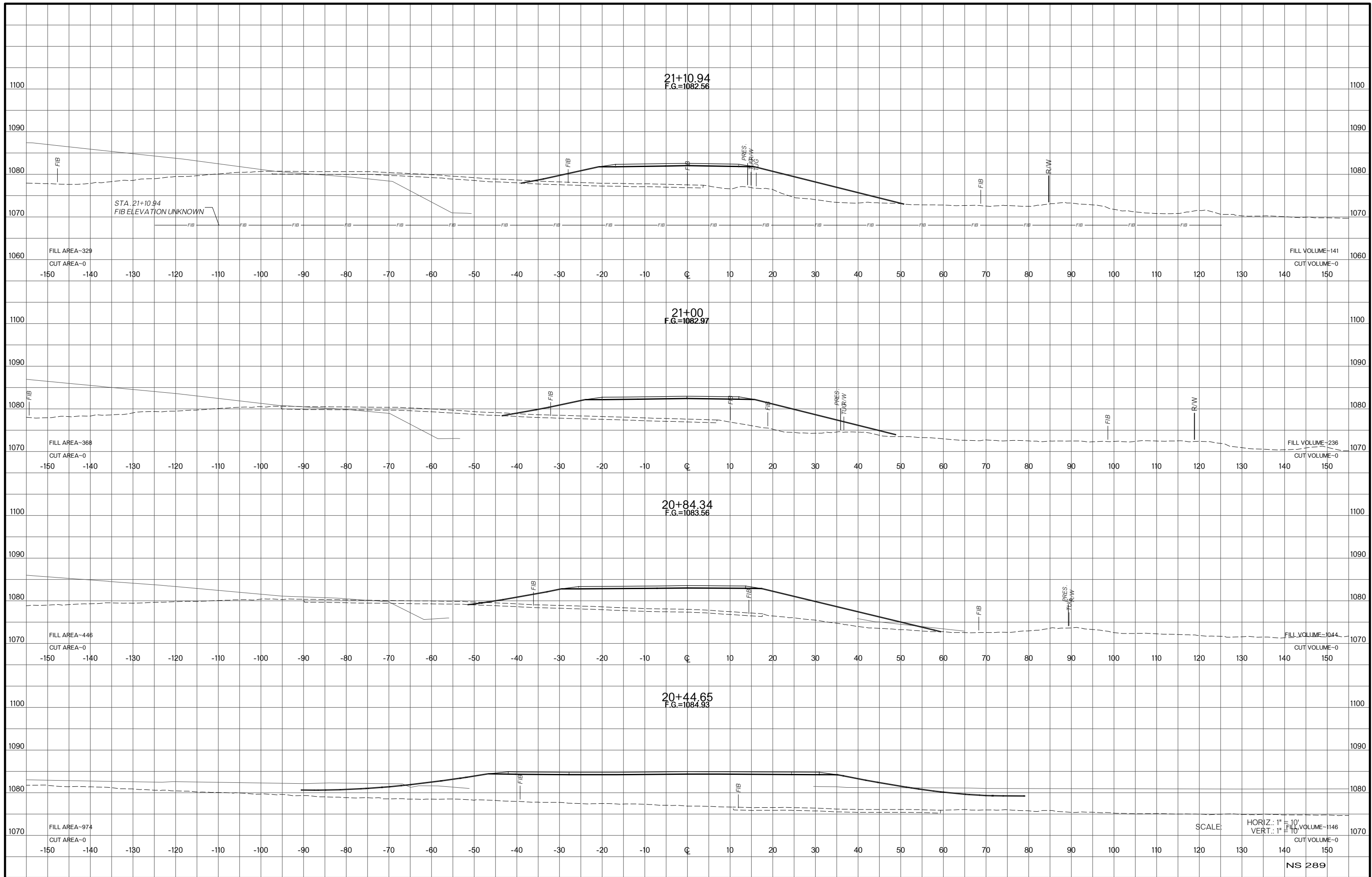
FILL VOLUME-2448
CUT VOLUME-0

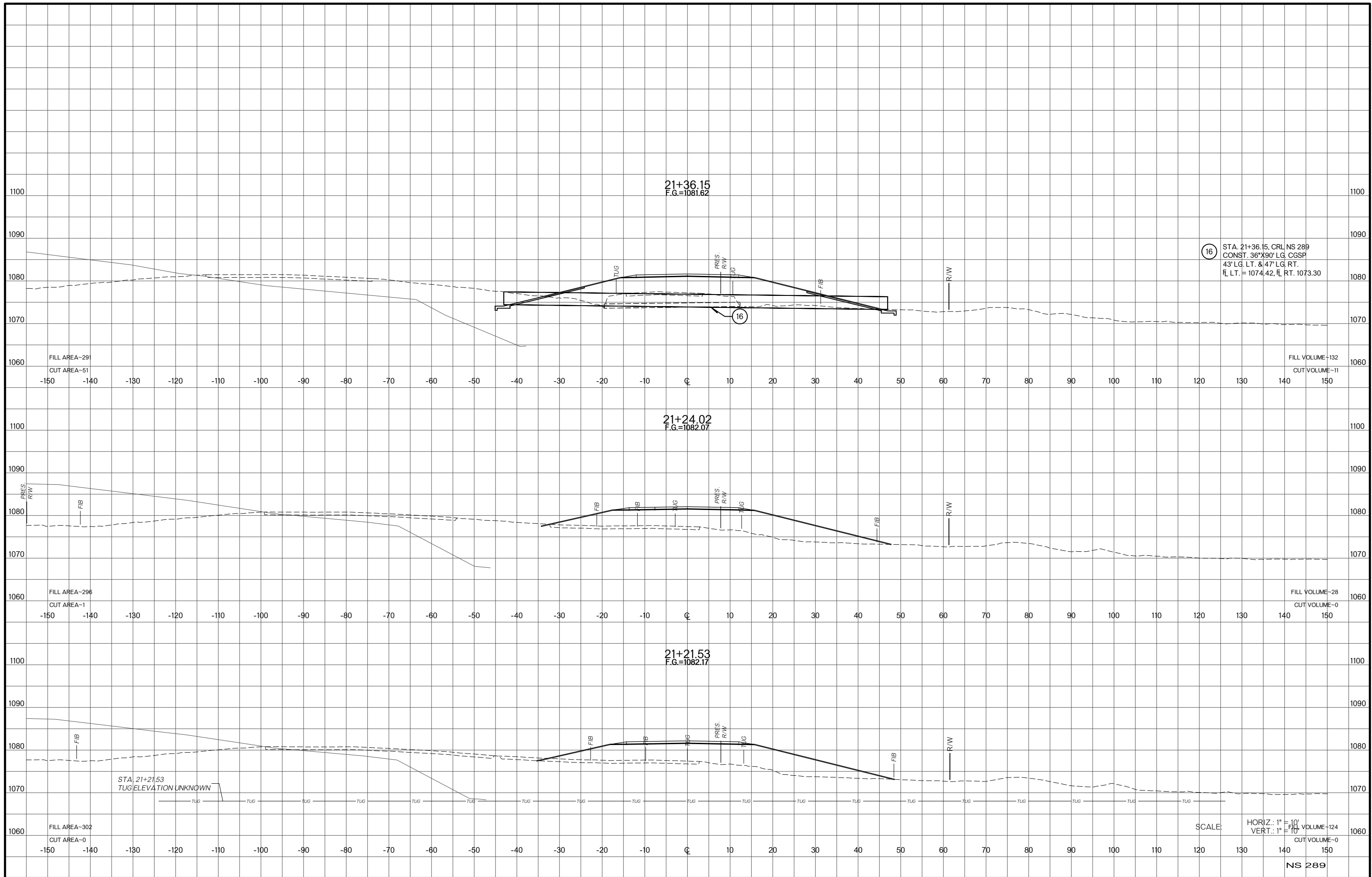
SCALE

HORIZ.: 1" = 10'
VERT.: 1" = 10'

NS 289

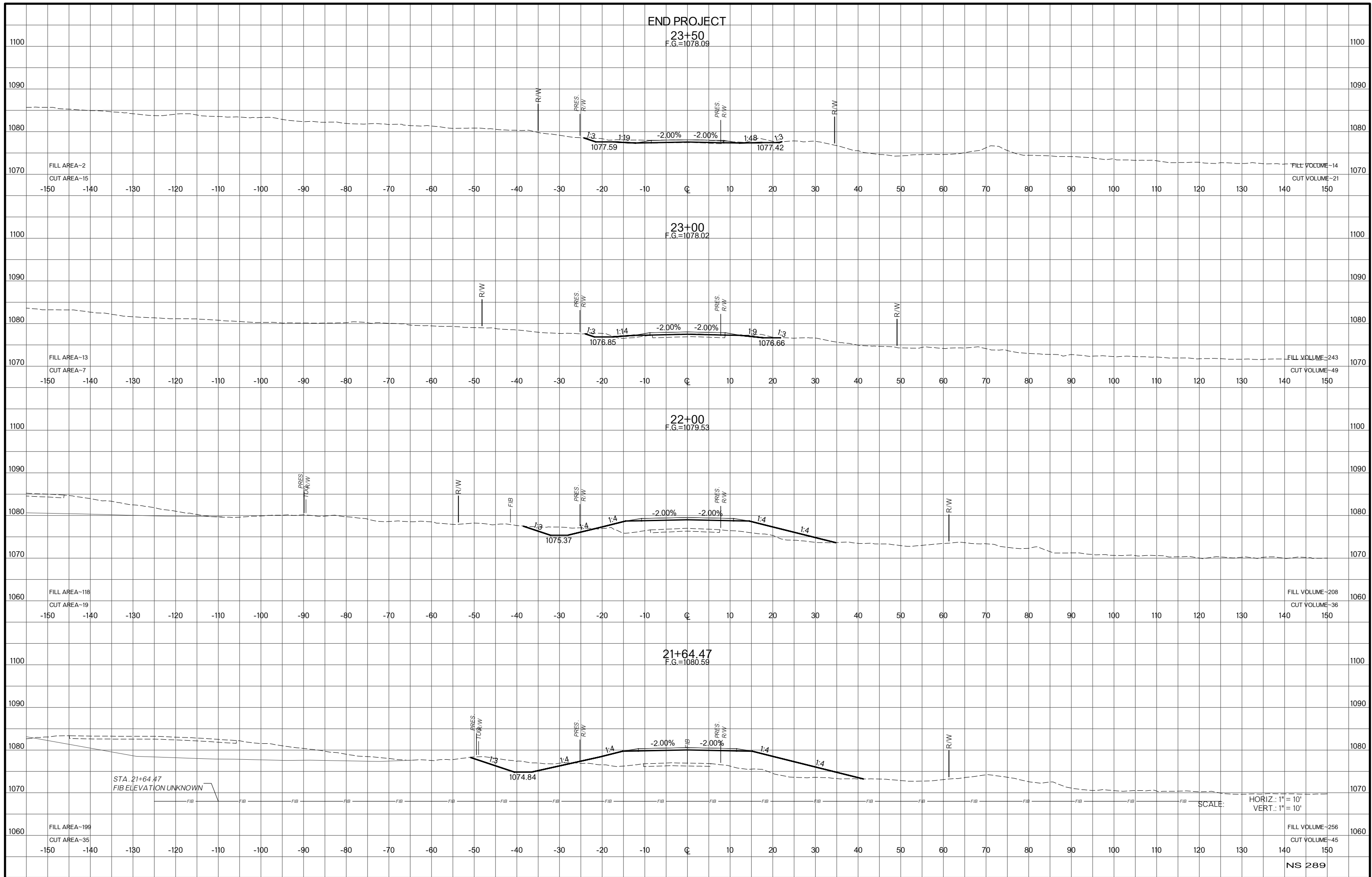


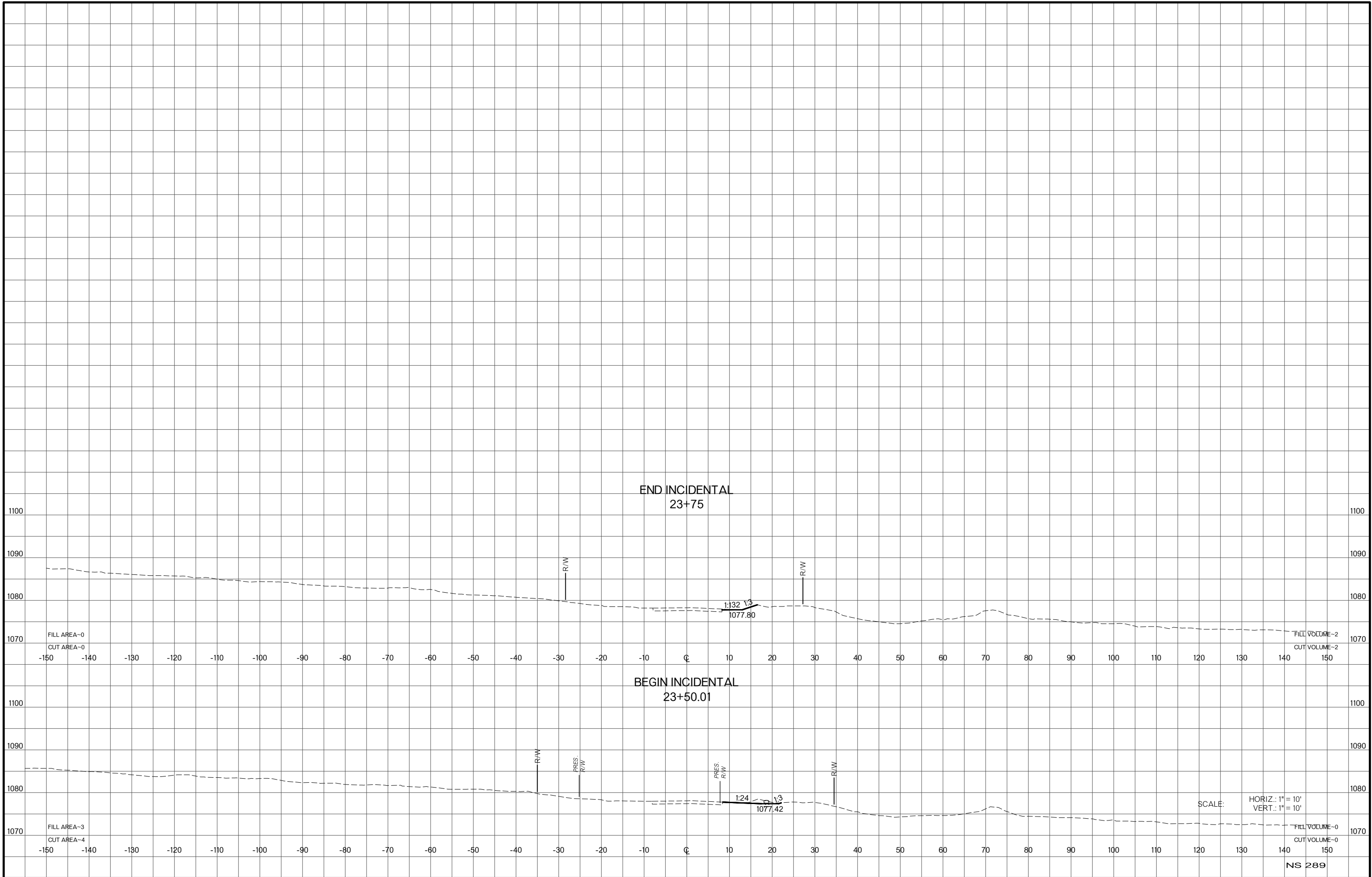




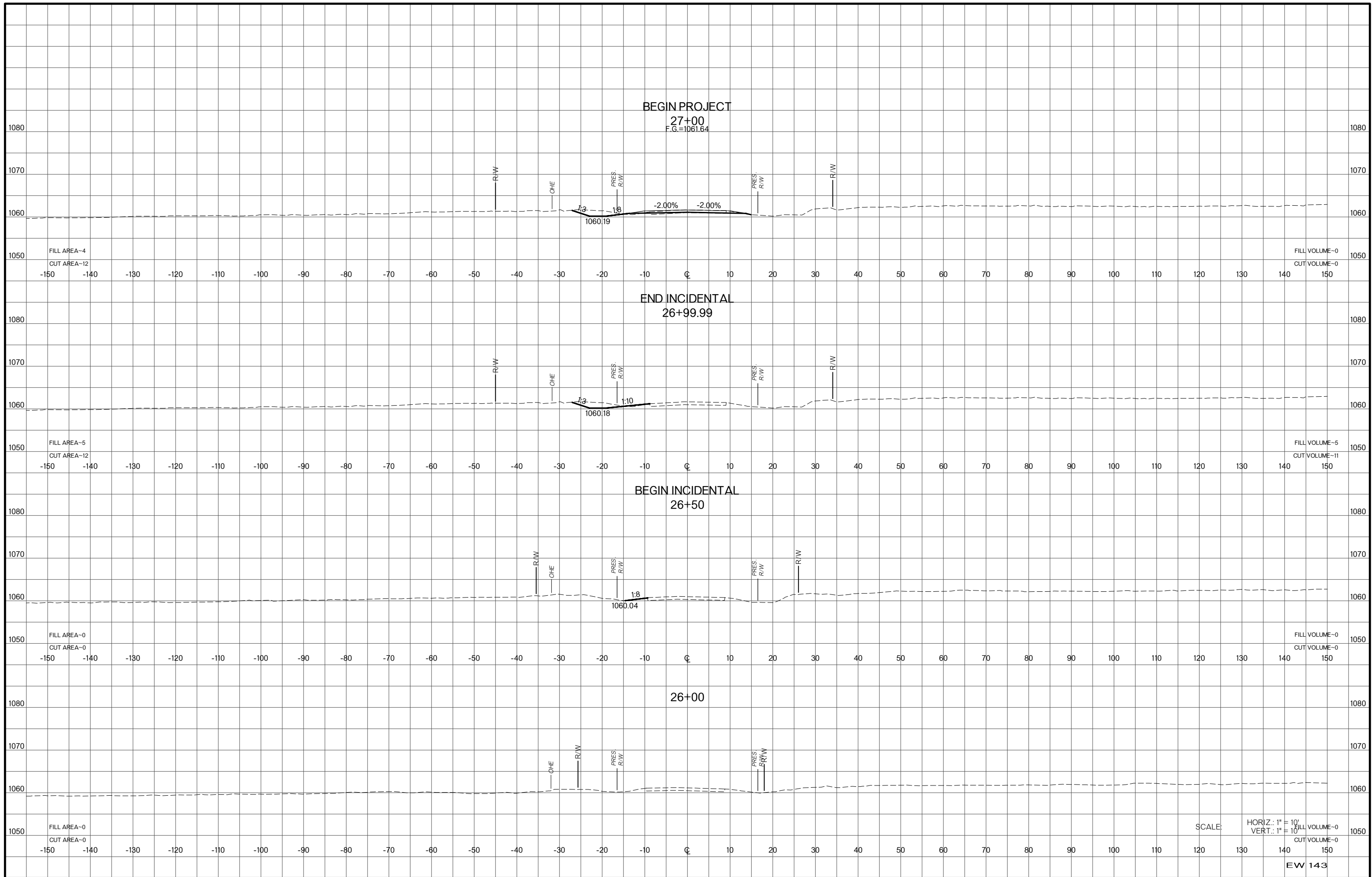
SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

NS 289



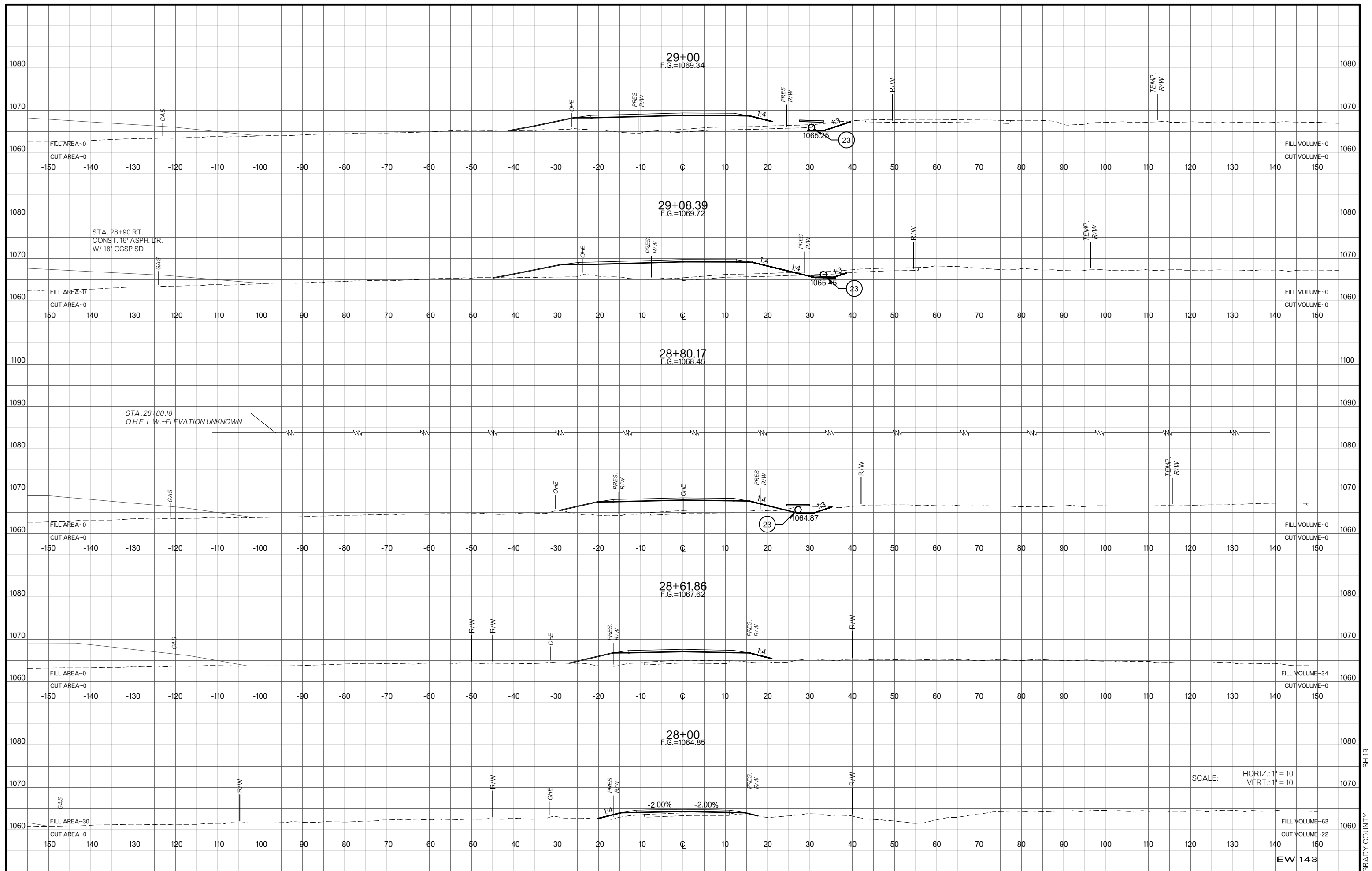


GRADY COUNTY SH 19

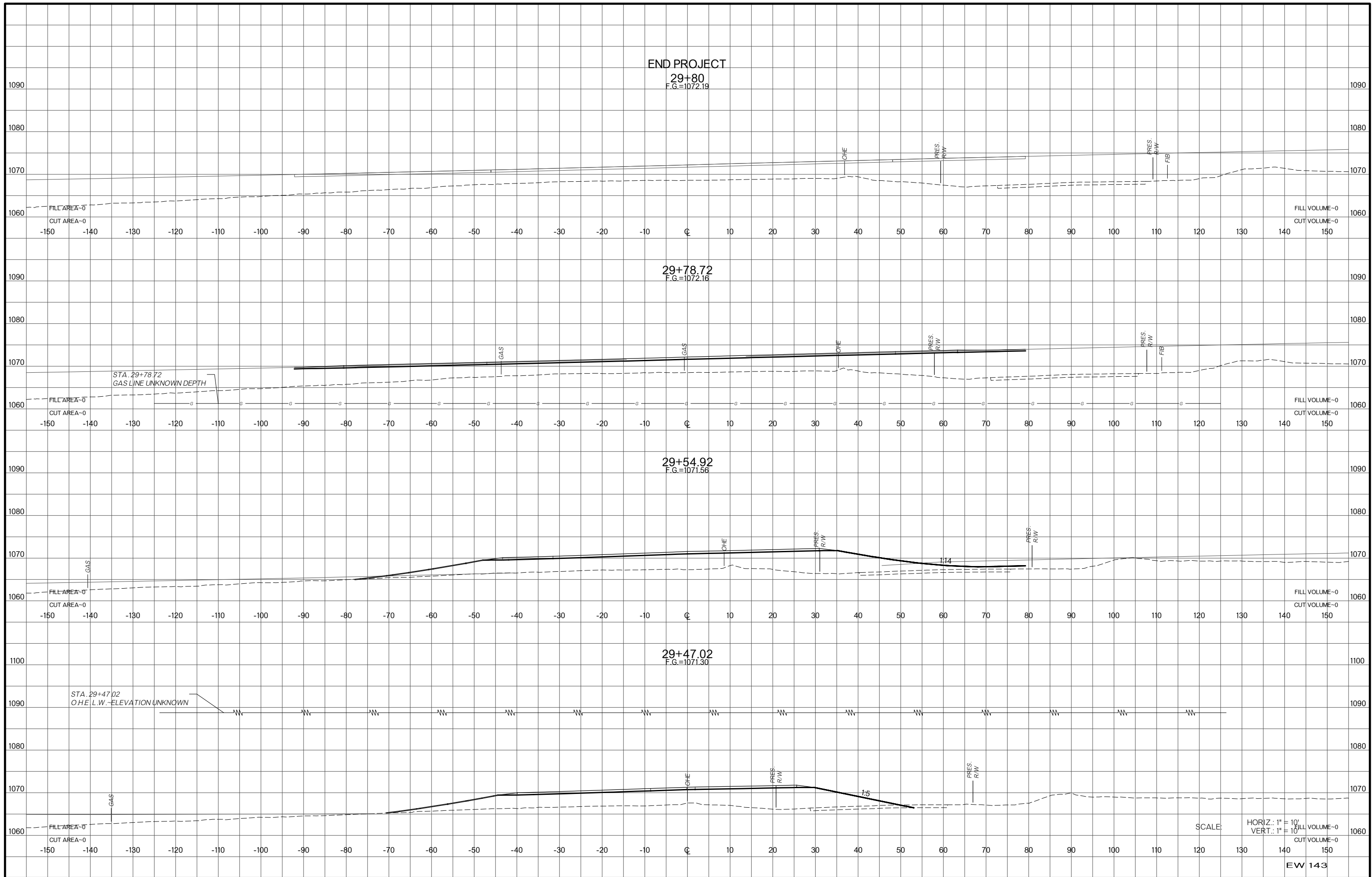


SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

EW 143

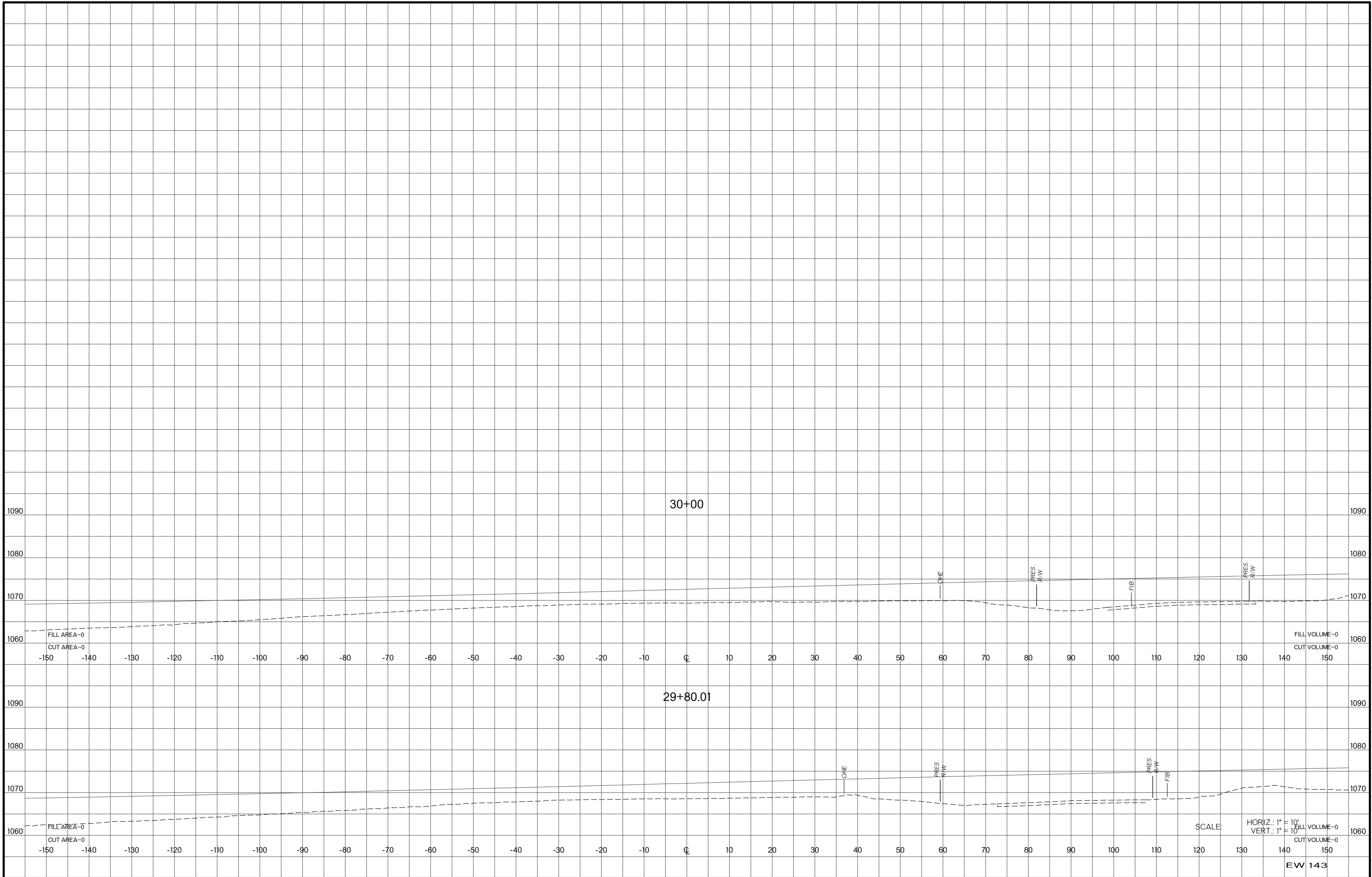


SH 19
GRADY COUNTY



SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

EW 143



30+00

29+80.01

FILL AREA-0
CUT AREA-0

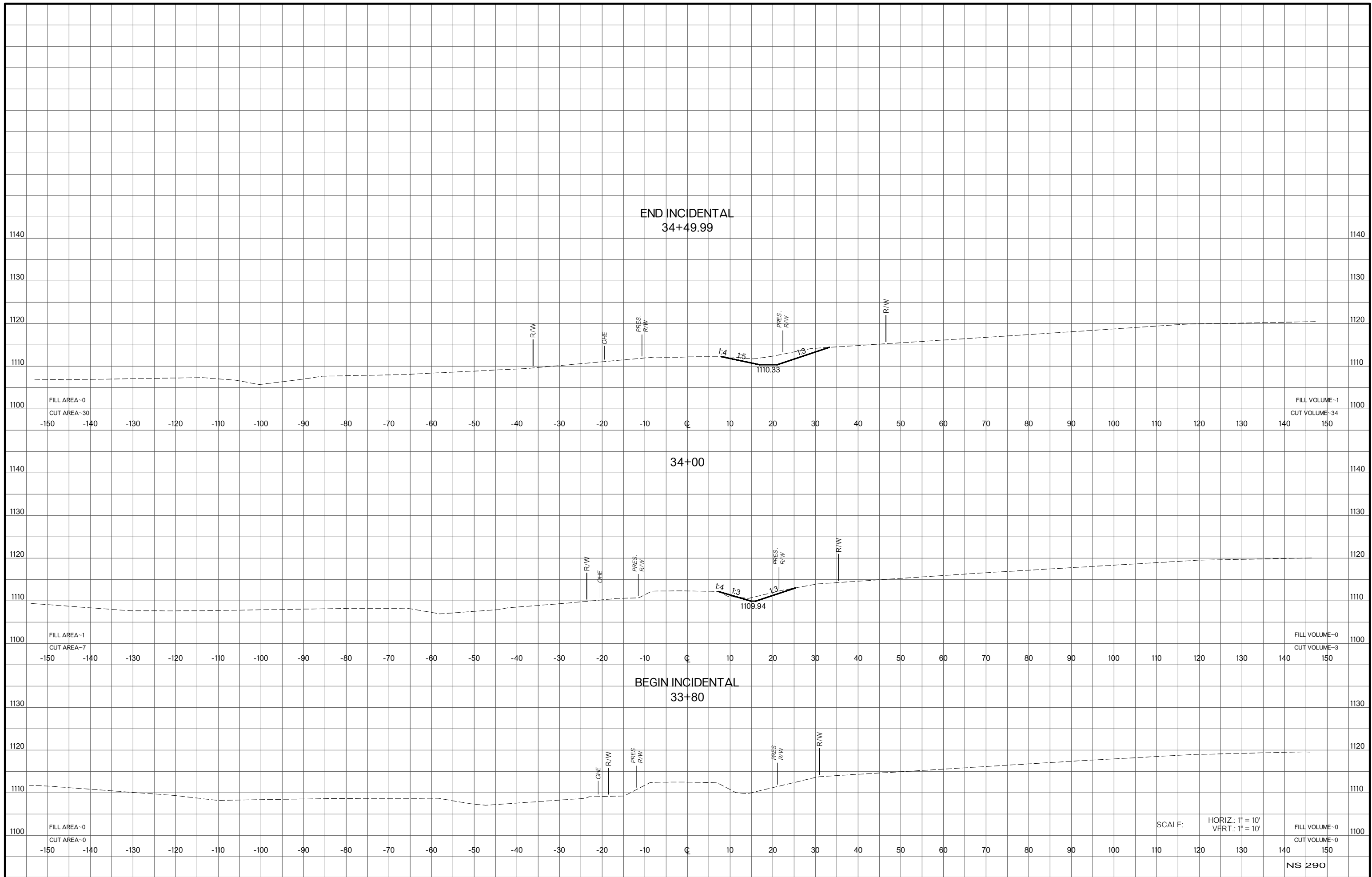
FILL VOLUME-0
CUT VOLUME-0

FILL AREA-0
CUT AREA-0

FILL VOLUME-0
CUT VOLUME-0

SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

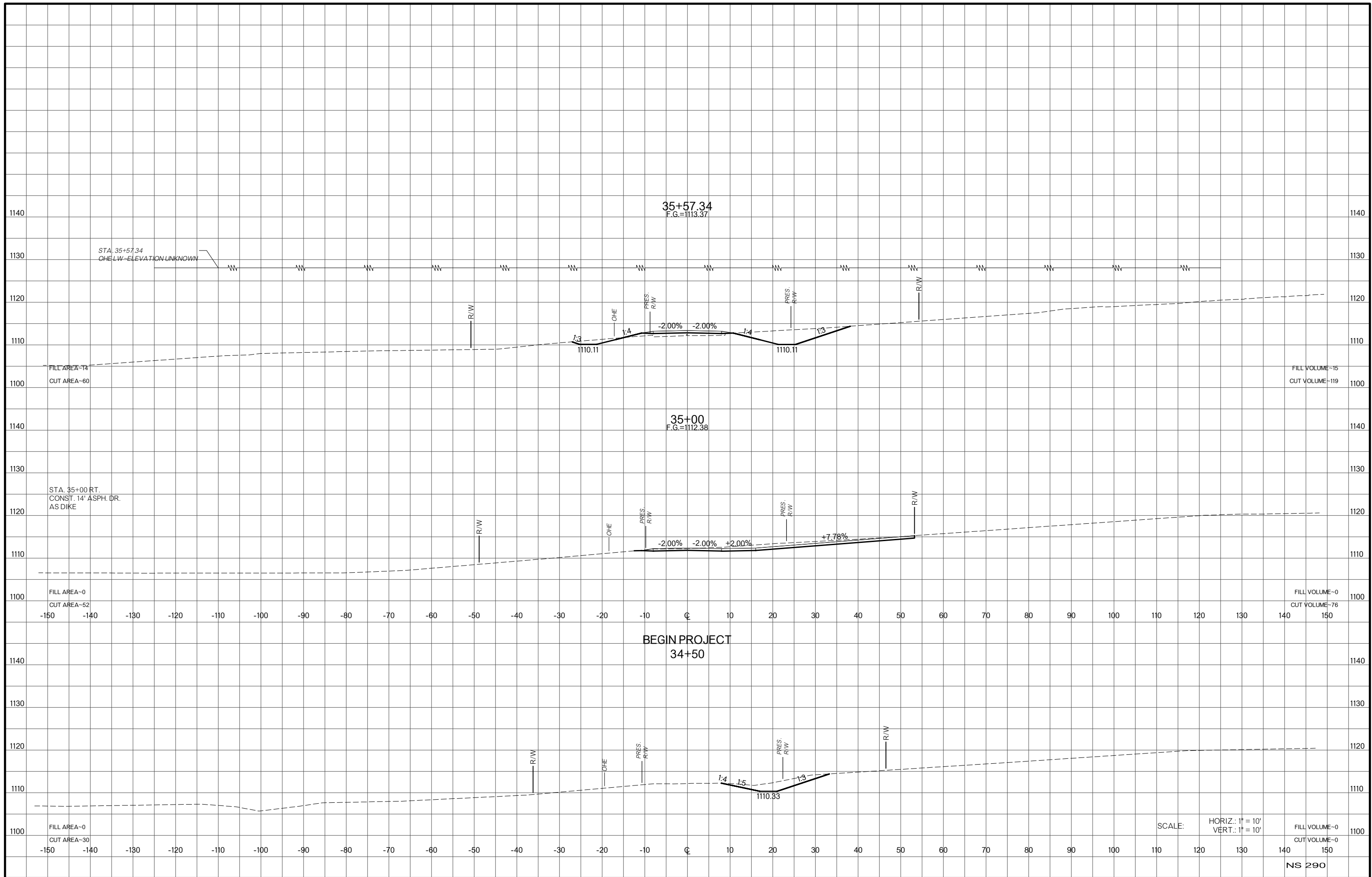
EW 143



SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

FILL VOLUME-0
CUT VOLUME-0

NS 290



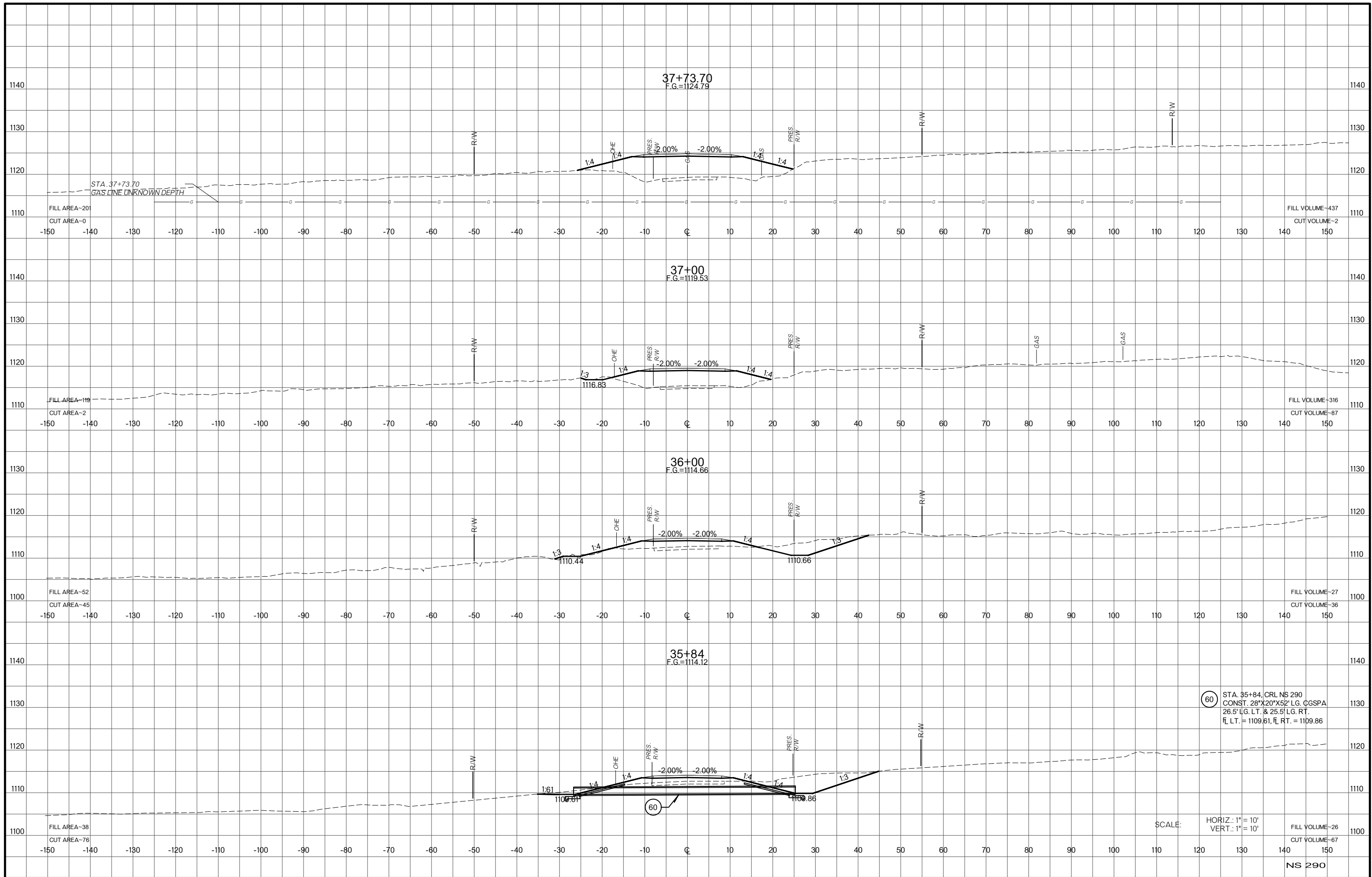
SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

FILL VOLUME-0
 CUT VOLUME-0

NS 290

State Job No. 30425(07) Sheet No. X178

GRADY COUNTY SH 19

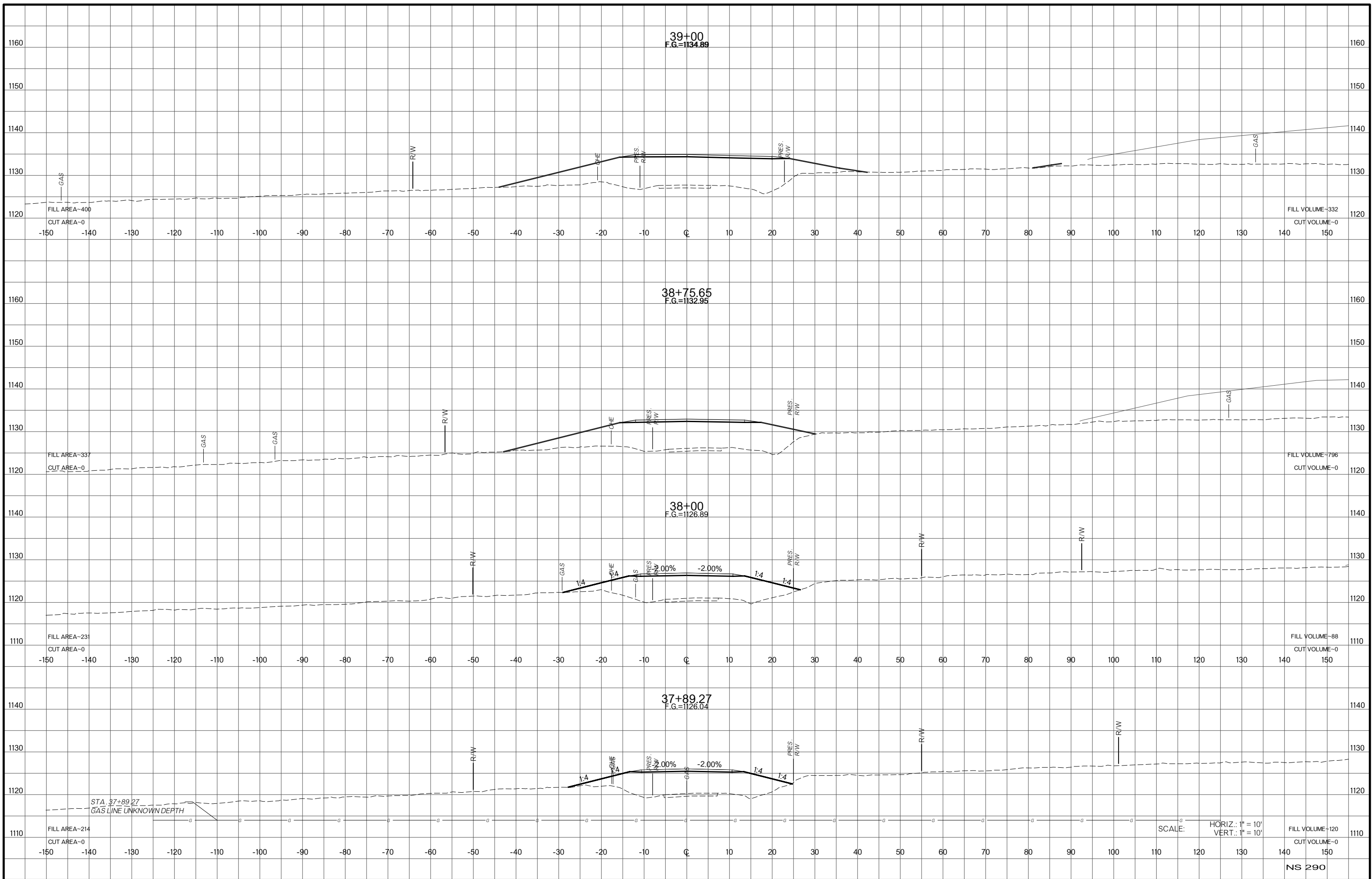


(60) STA. 35+84, CRL NS 290
 CONST. 28"X20"X52" LG. CGSPA
 26.5' LG. LT. & 25.5' LG. RT.
 FL LT. = 1109.61, FL RT. = 1109.86

SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

FILL VOLUME-26
 CUT VOLUME-67

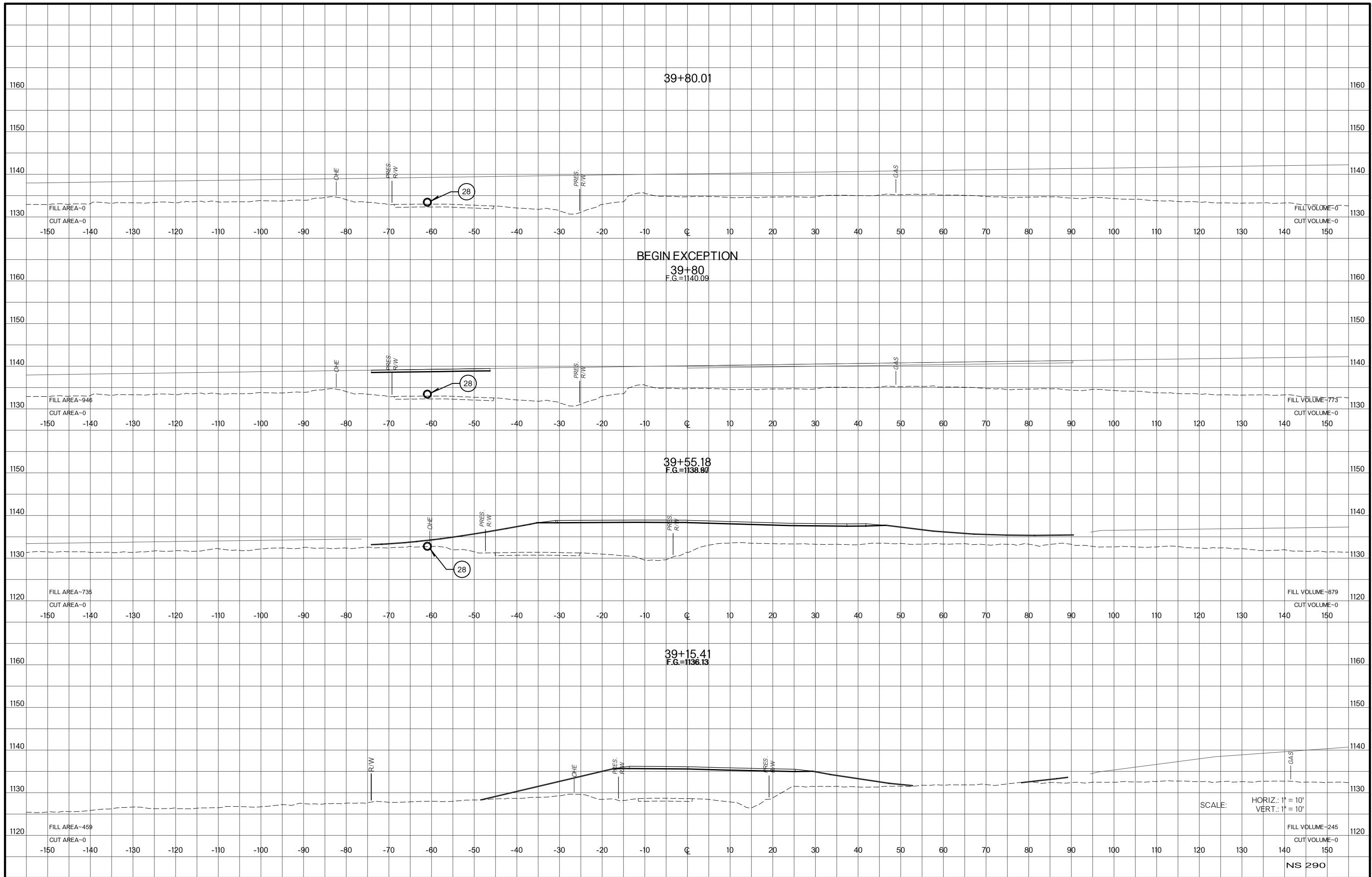
NS 290

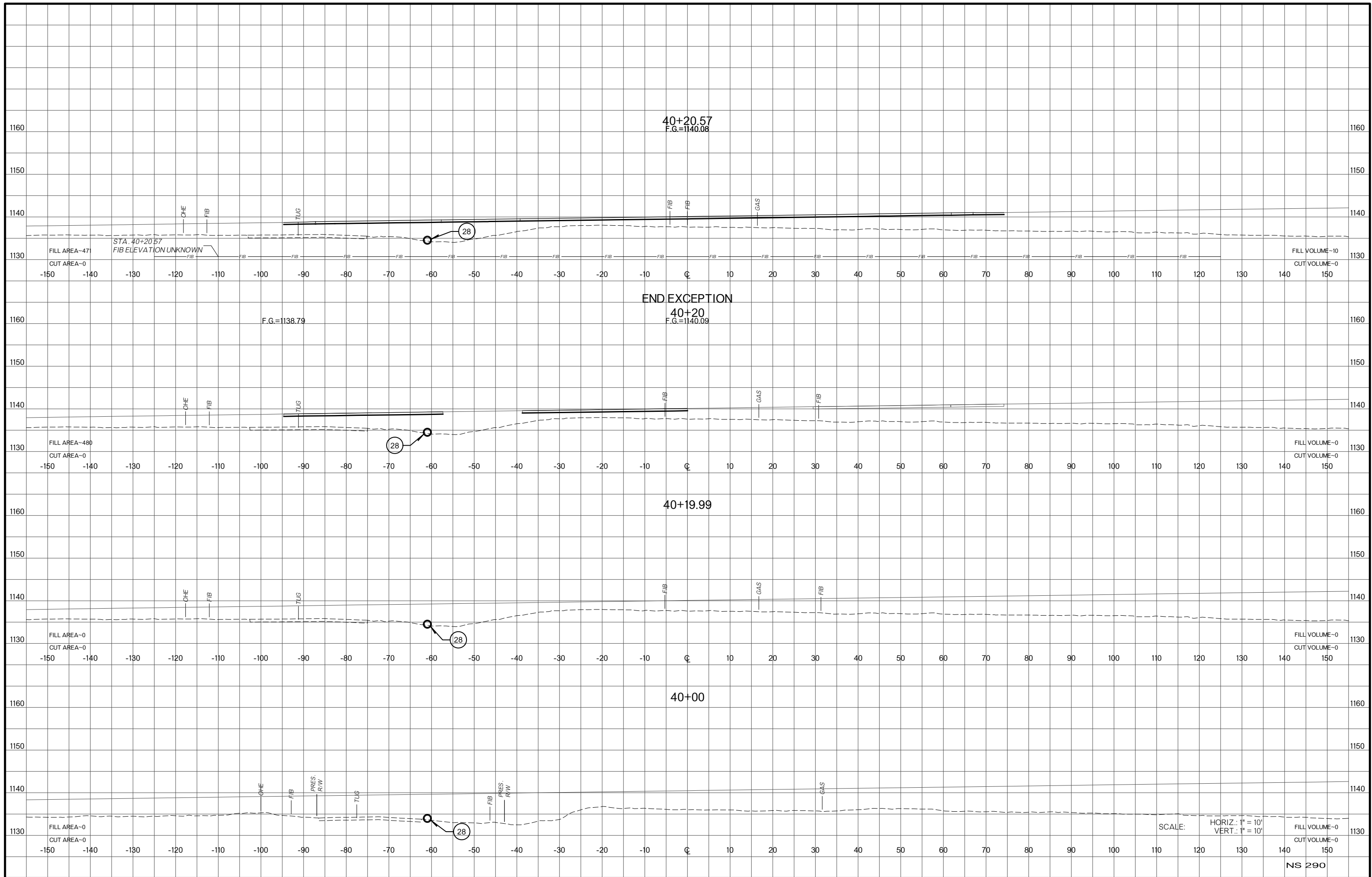


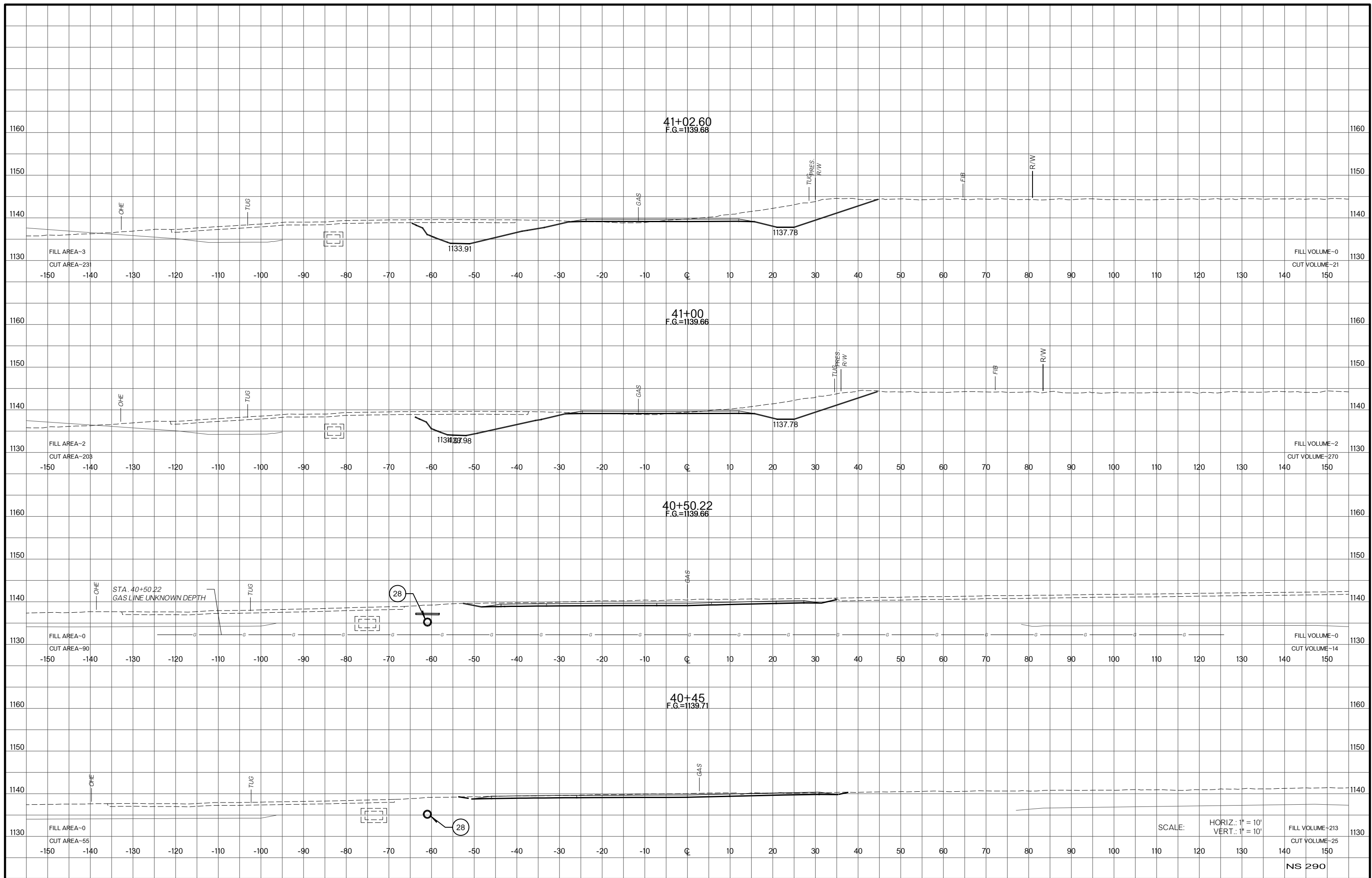
SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

FILL VOLUME=120
CUT VOLUME=0

NS 290



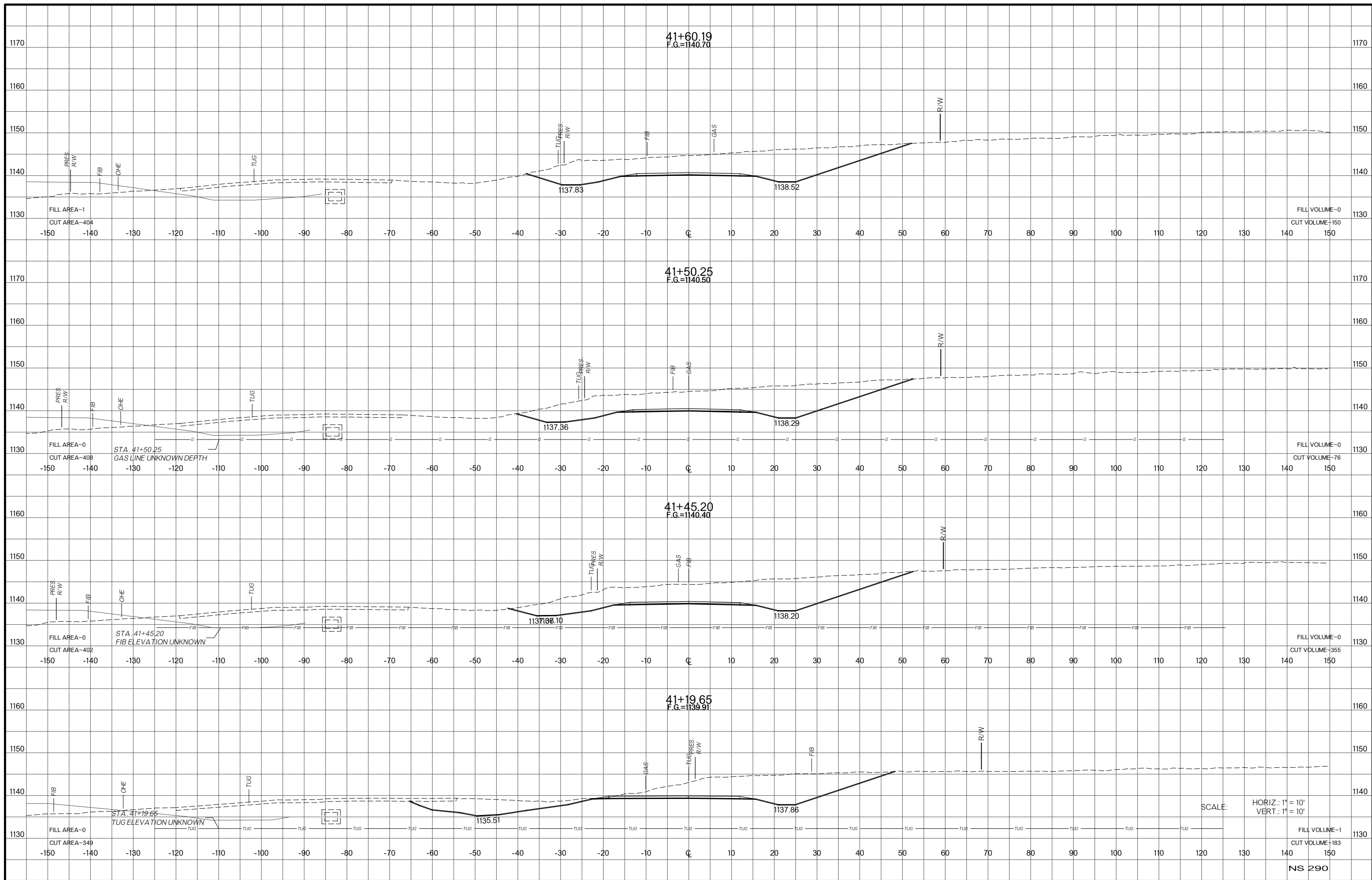




SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

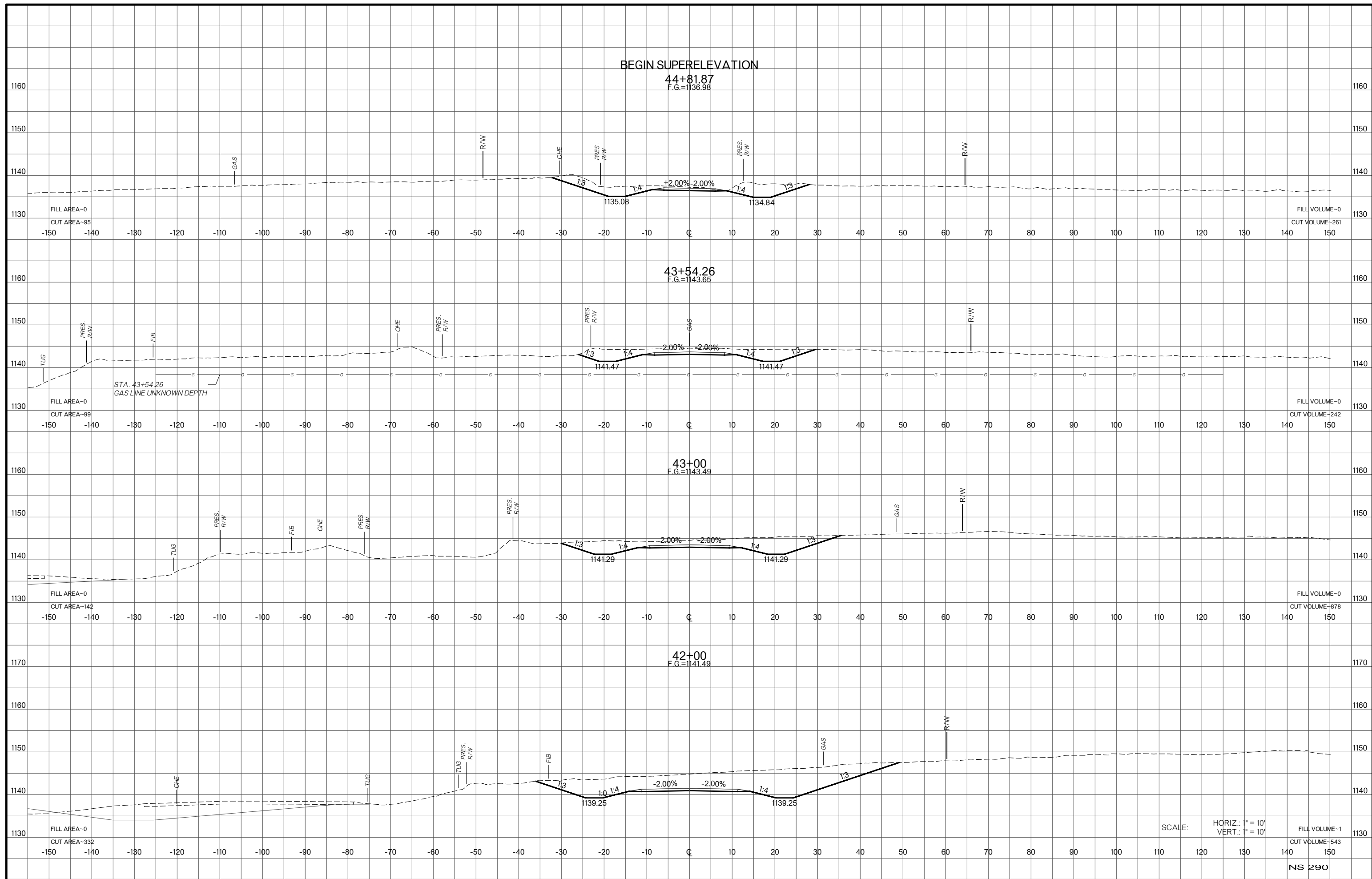
FILL VOLUME=213
 CUT VOLUME=25

NS 290



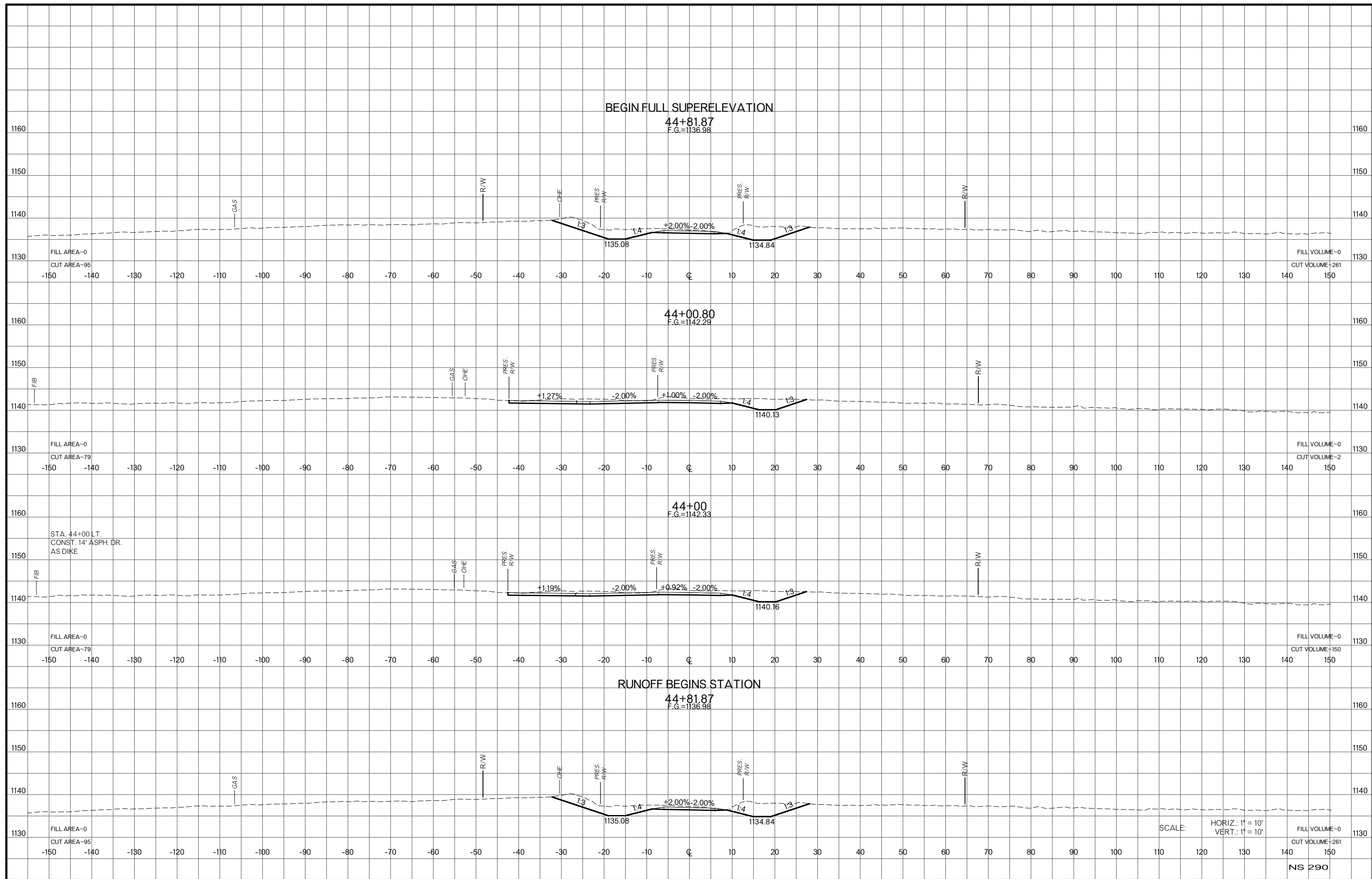
SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

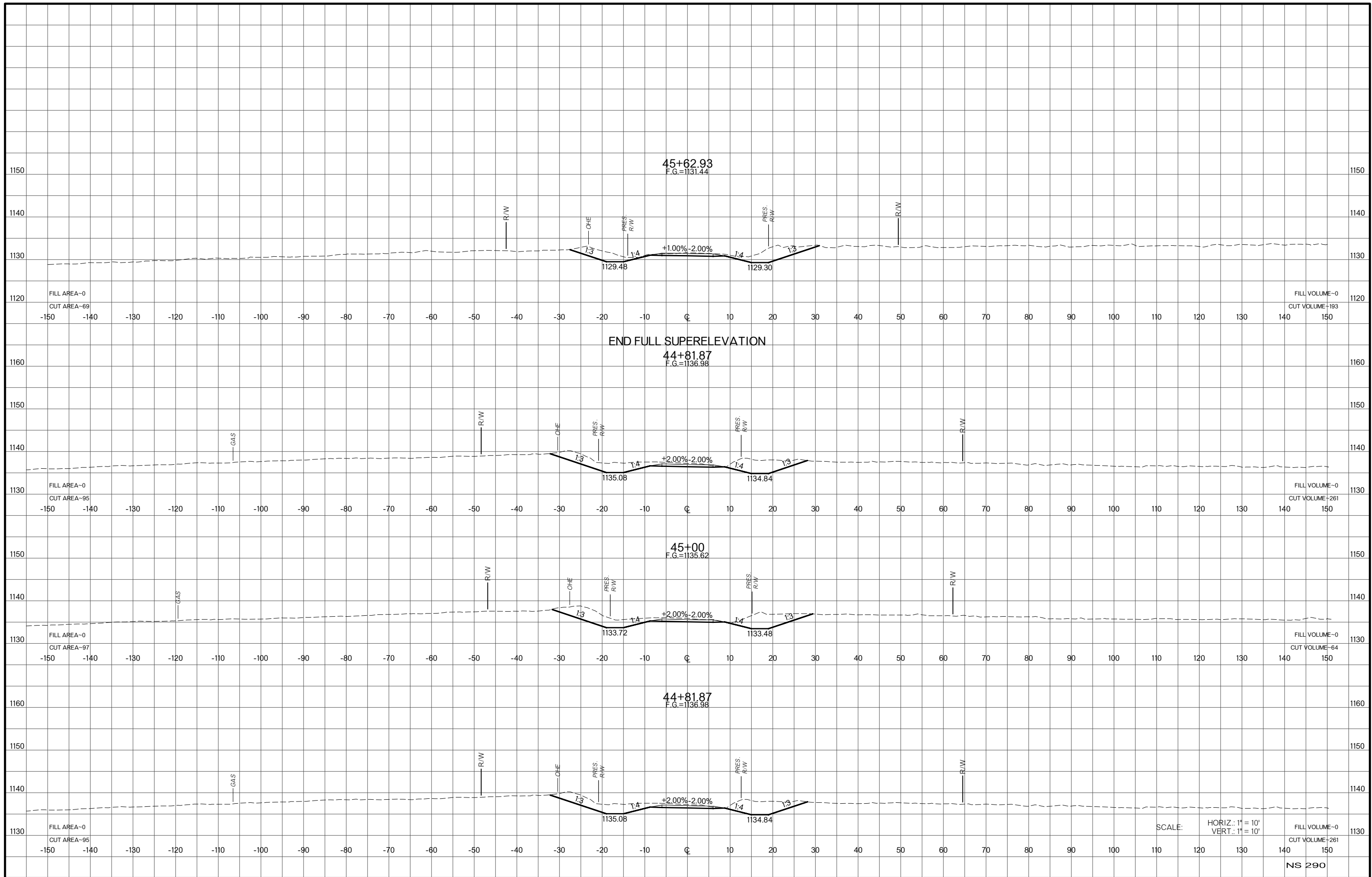
NS 290



SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

NS 290

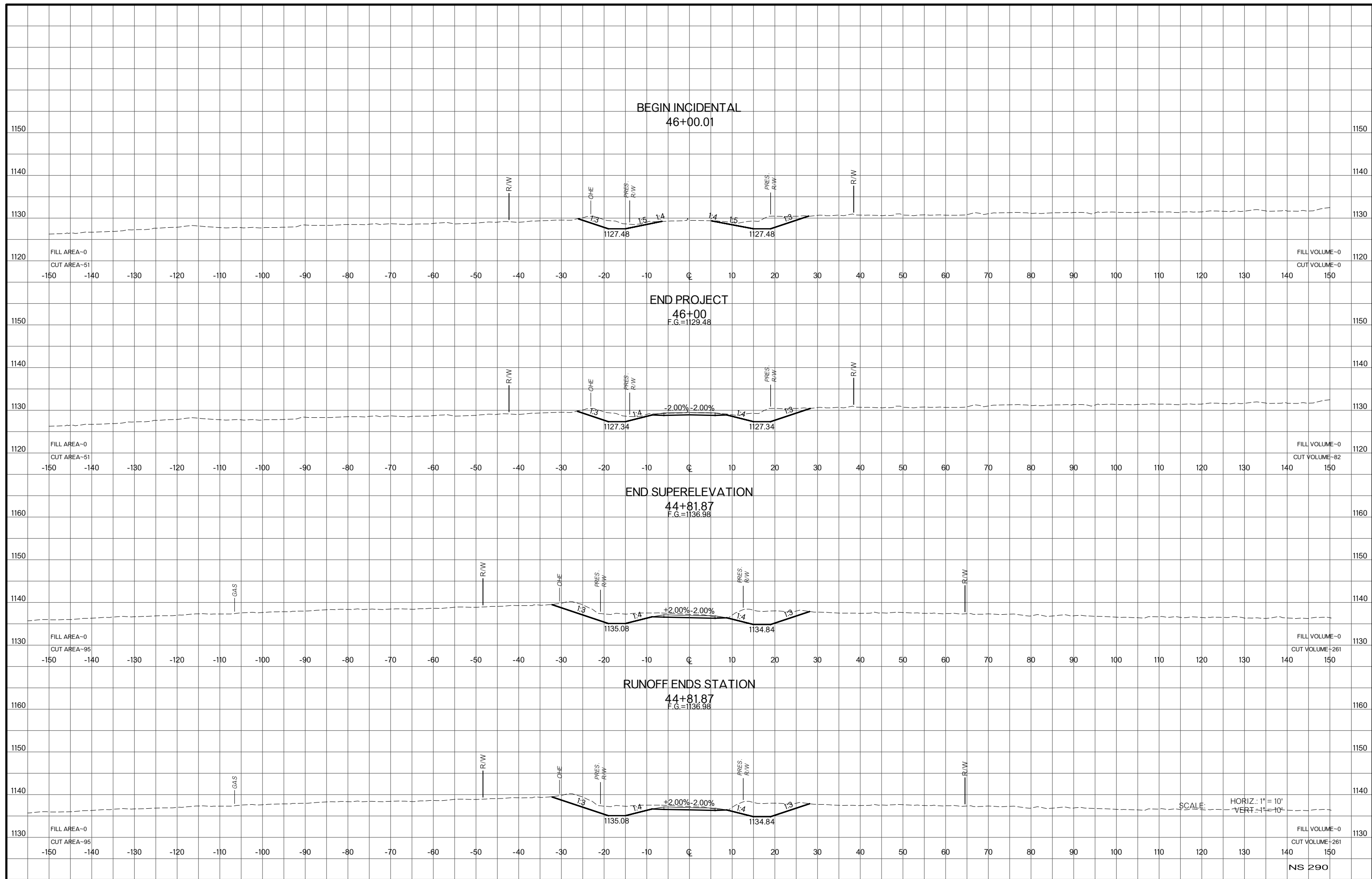


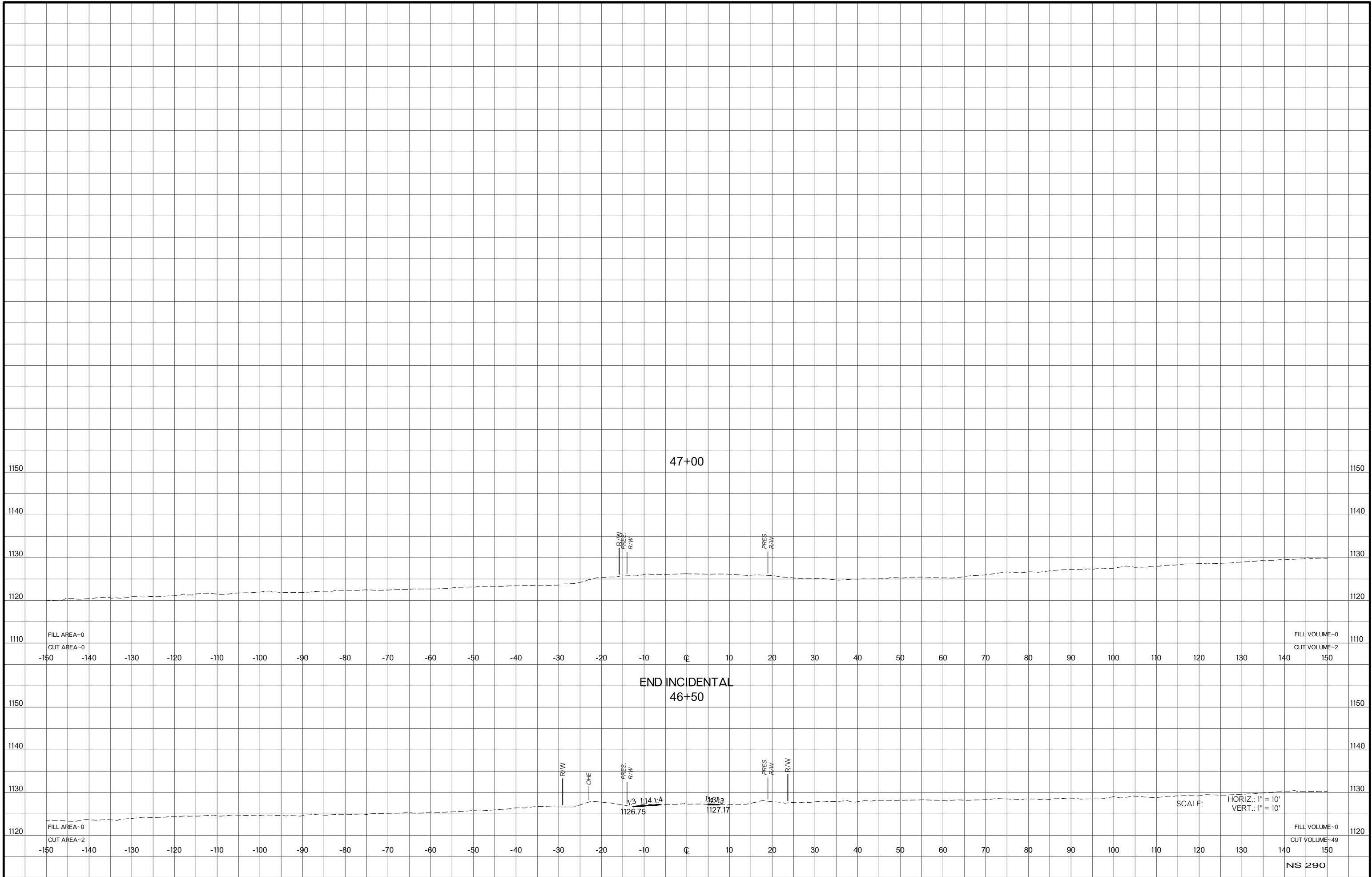


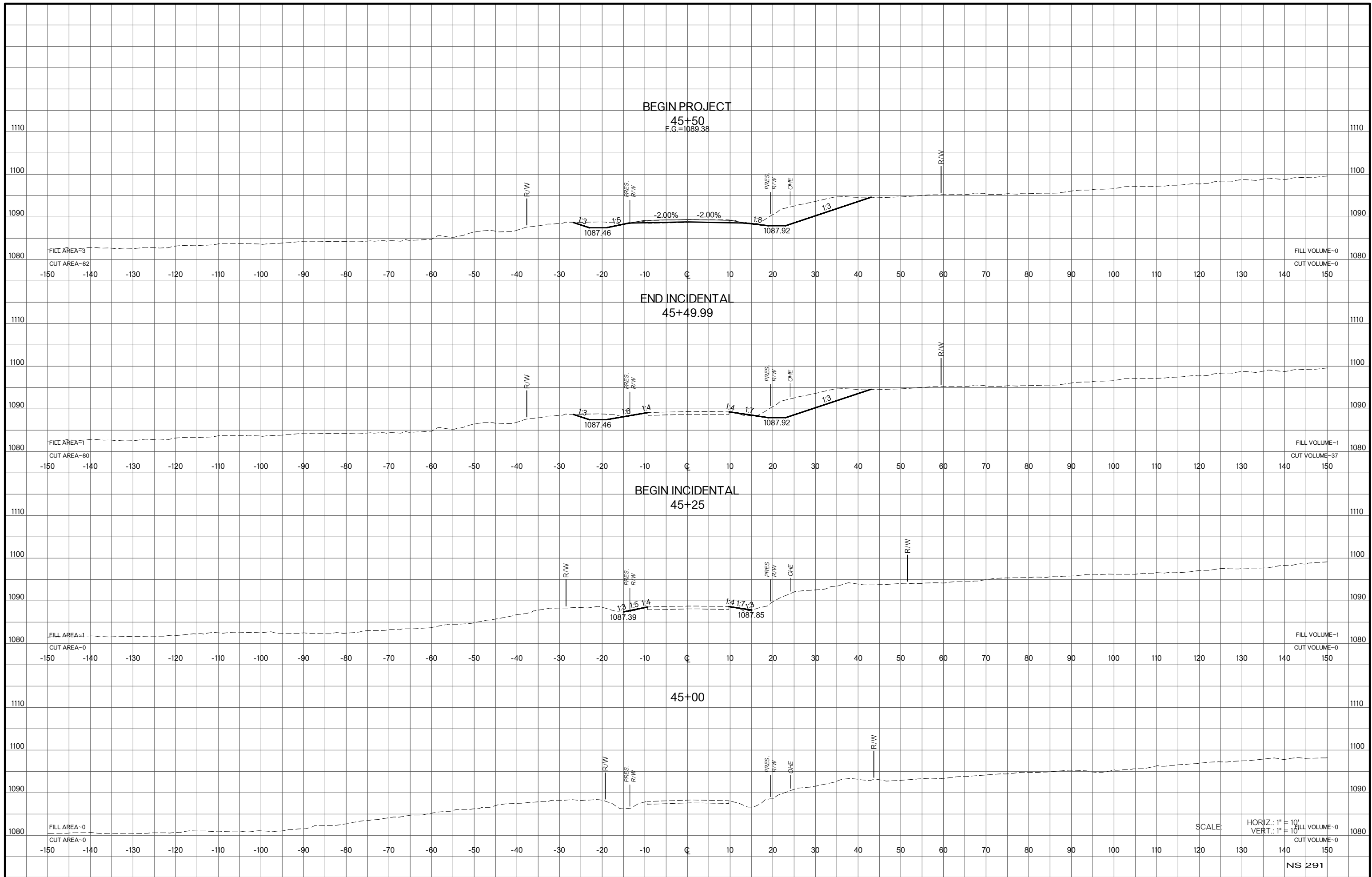
END FULL SUPERELEVATION

SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

NS 290







BEGIN PROJECT
45+50
F.G.=1089.38

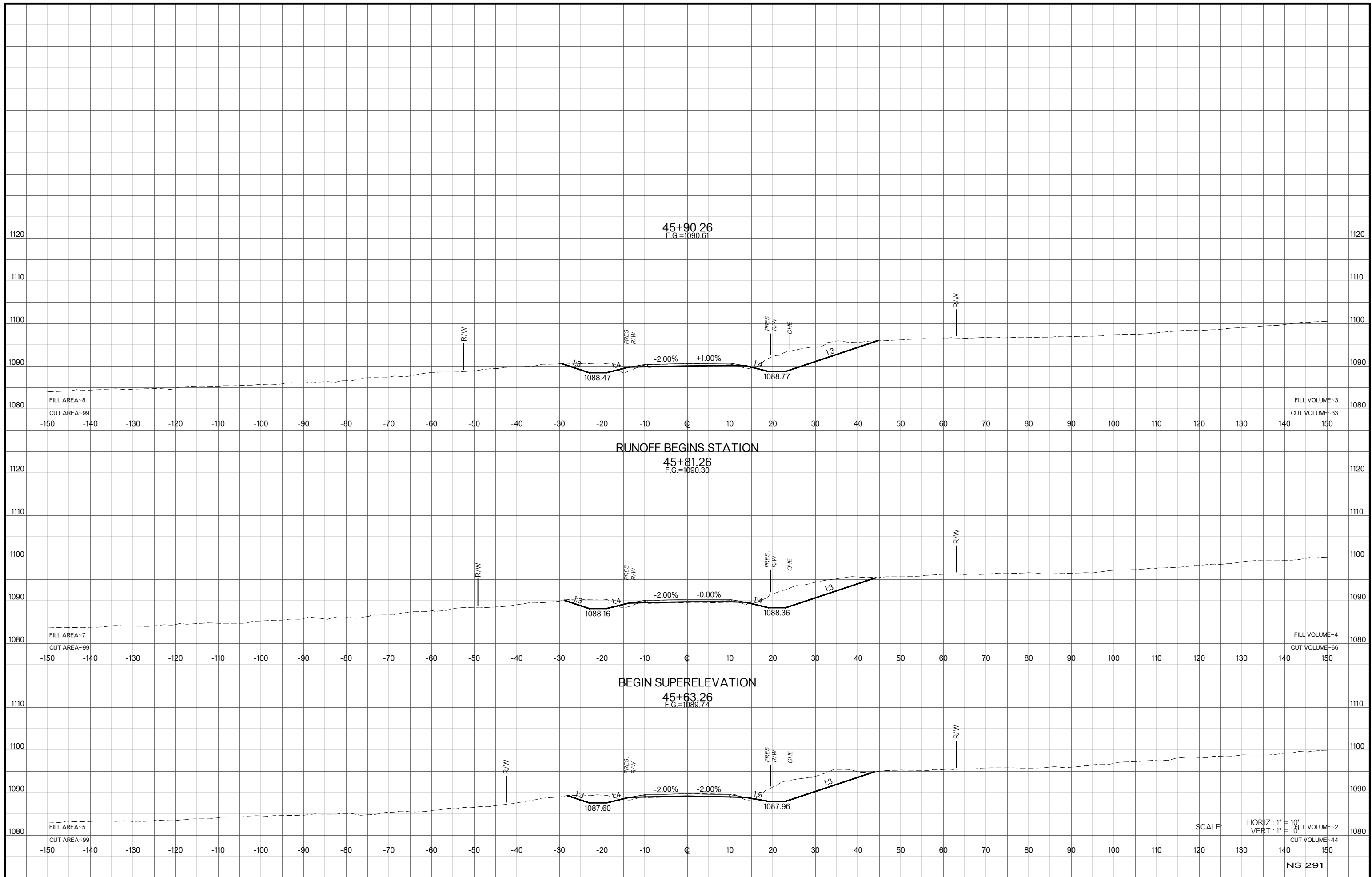
END INCIDENTAL
45+49.99

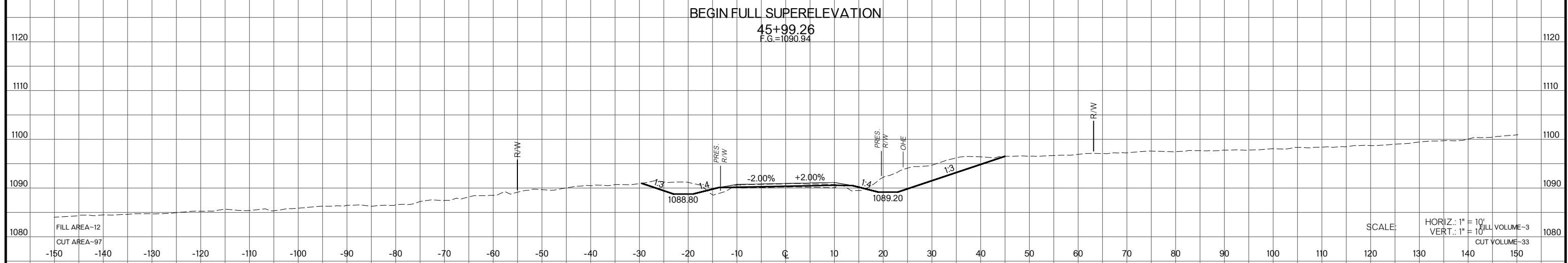
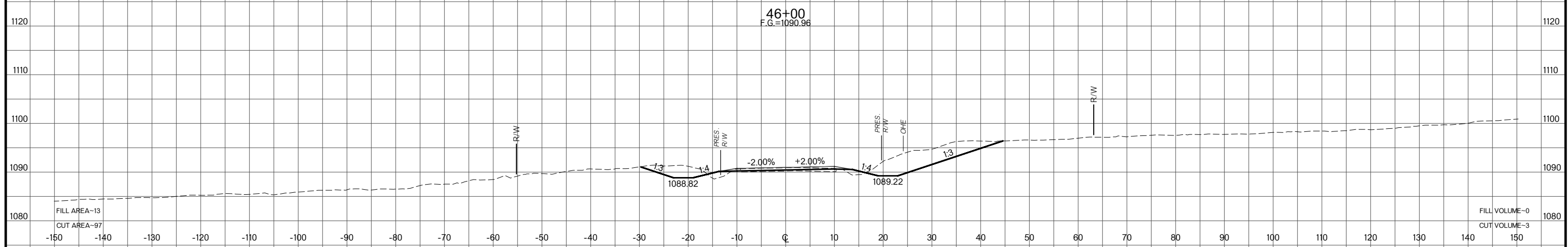
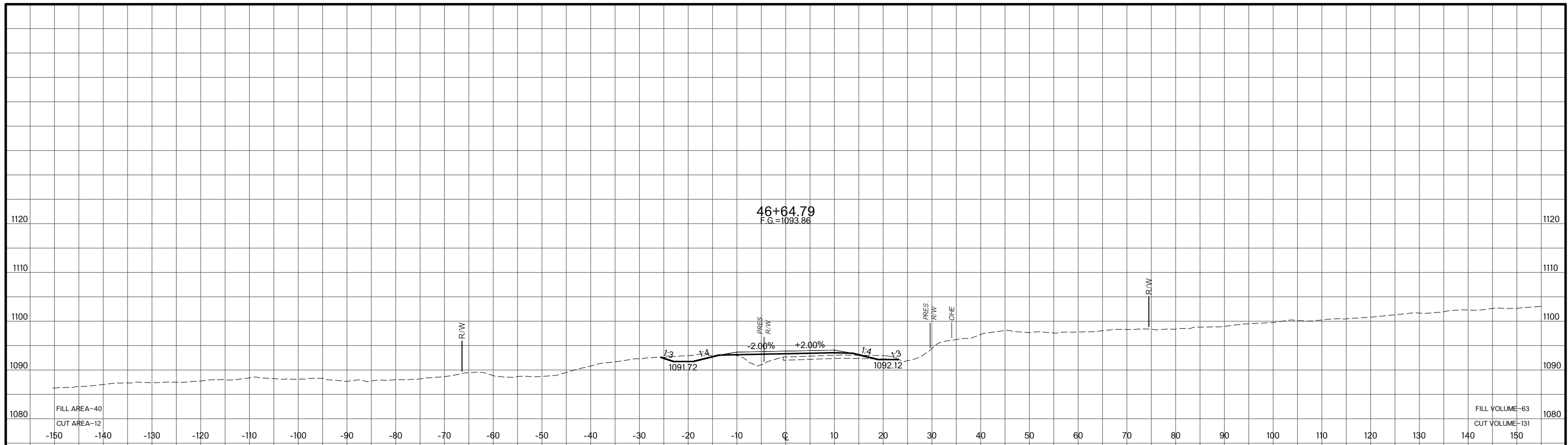
BEGIN INCIDENTAL
45+25

45+00

SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

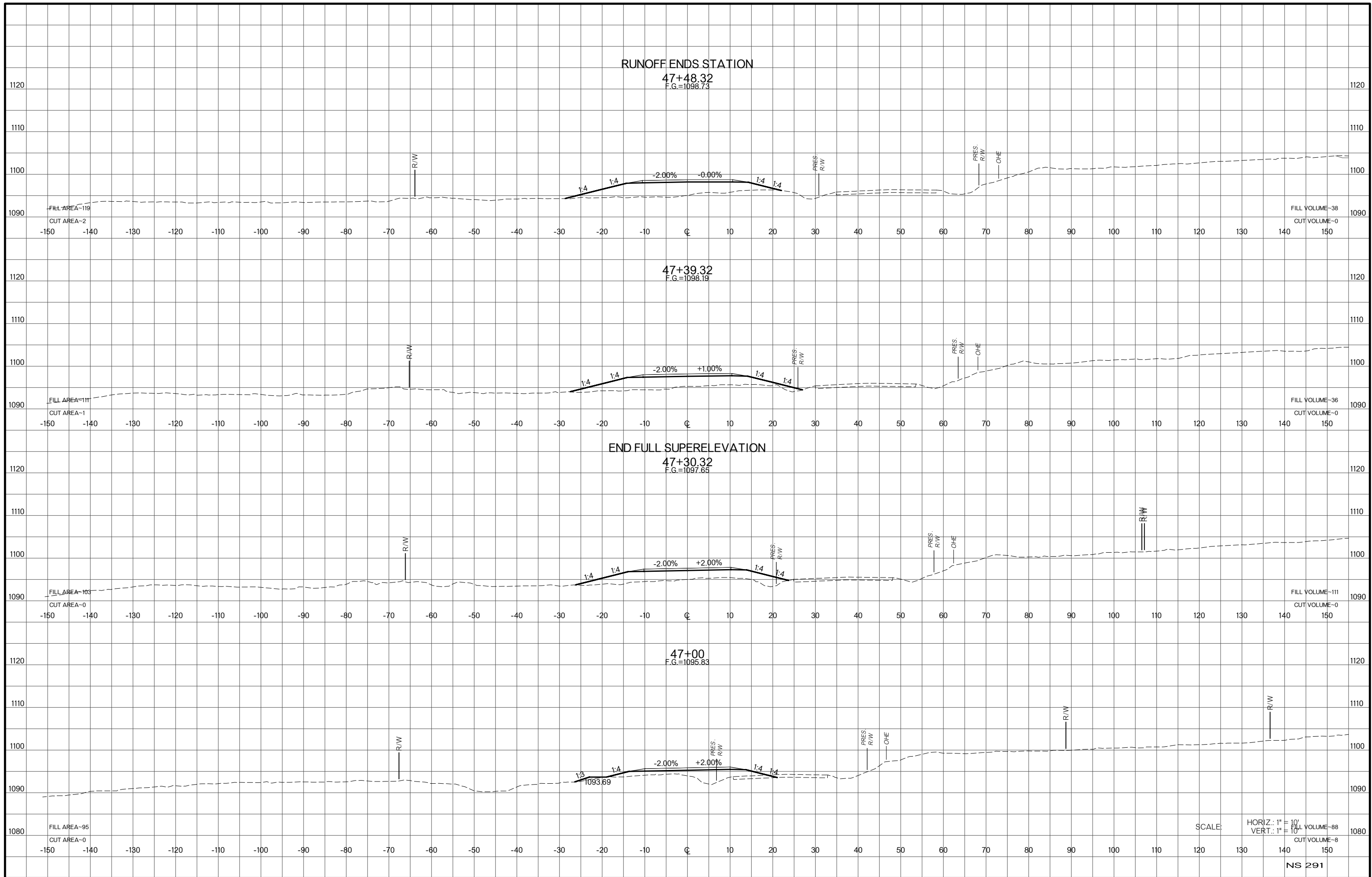
NS 291





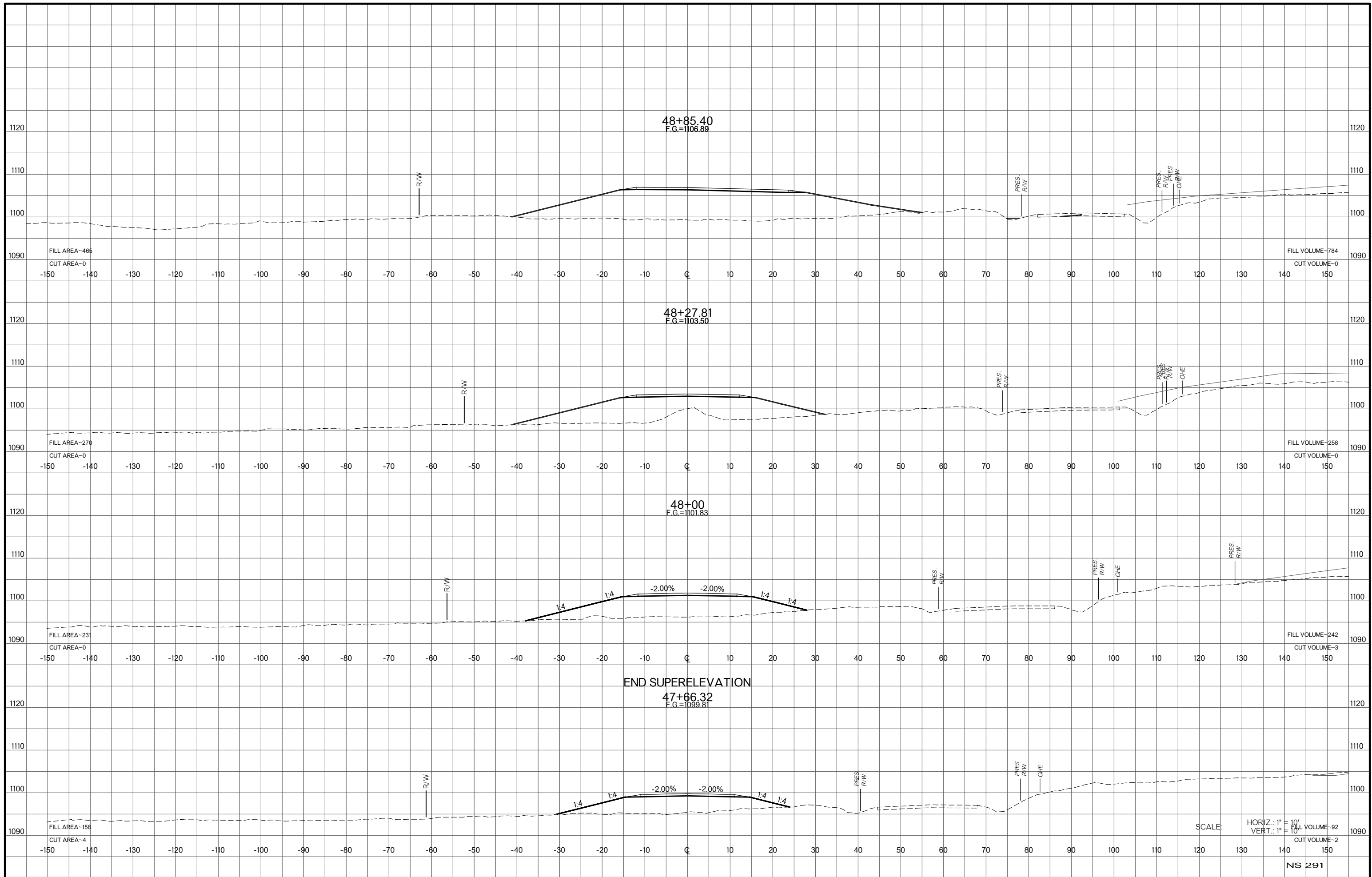
SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

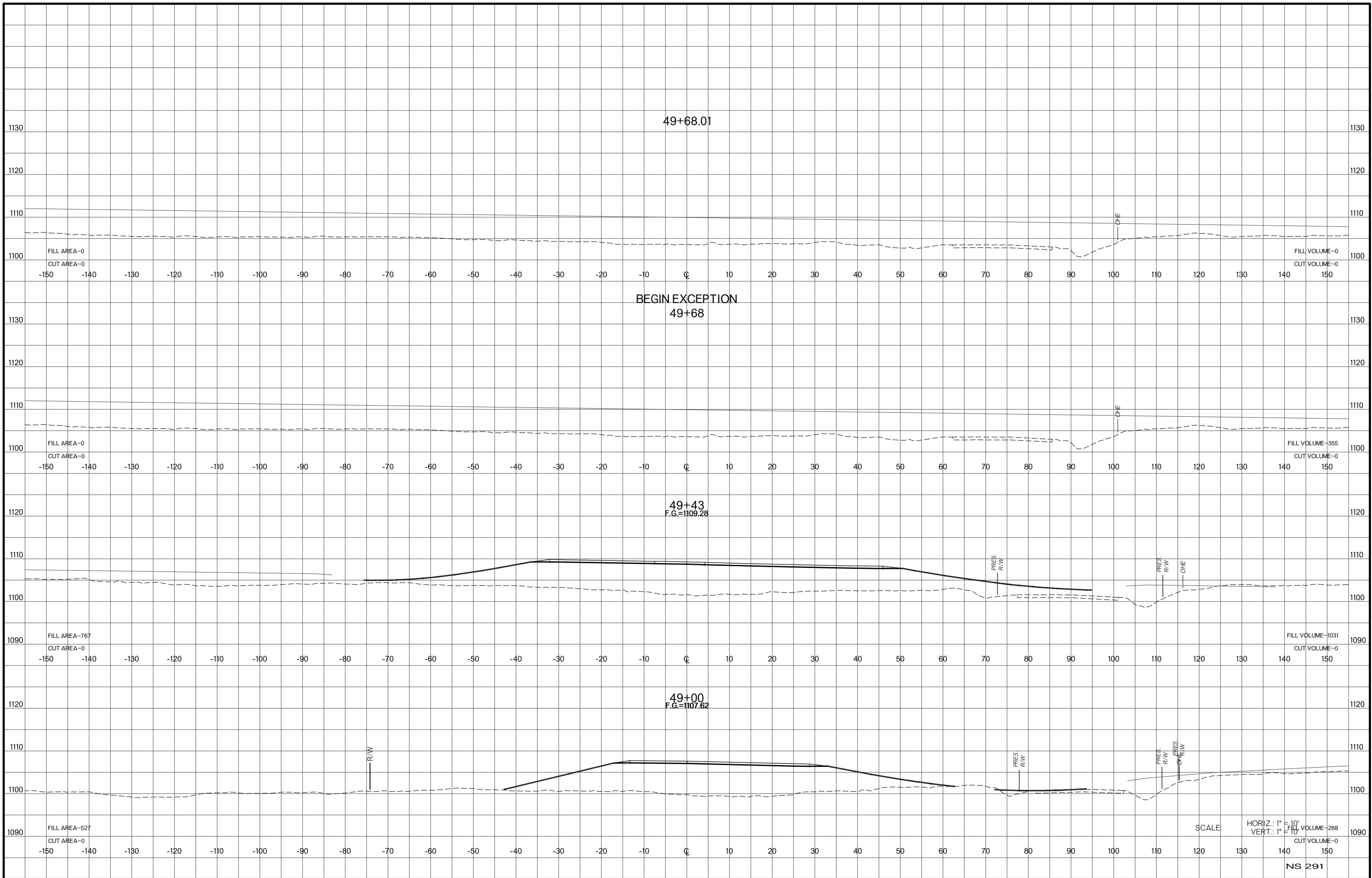
NS 291

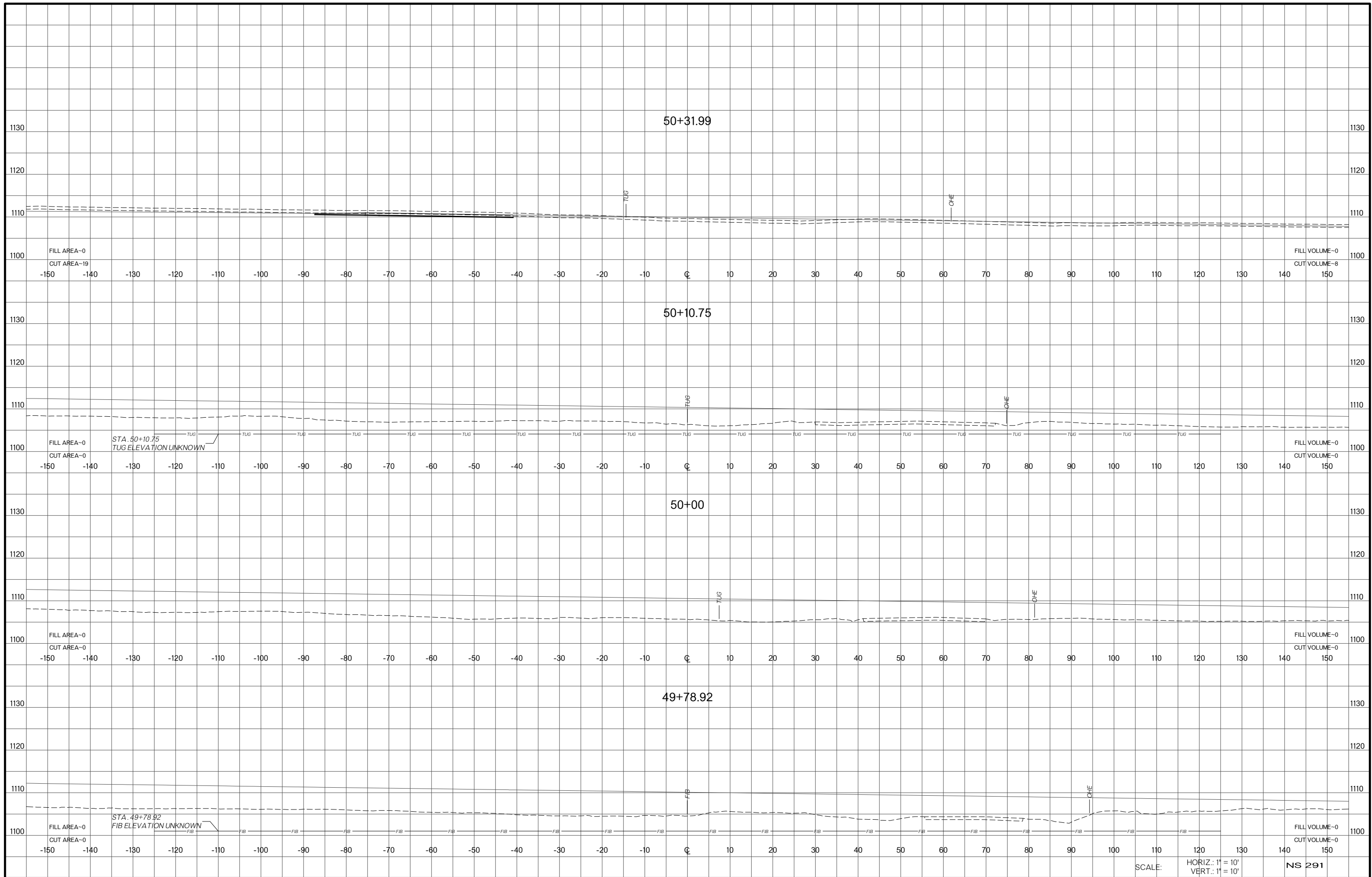


SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

NS 291





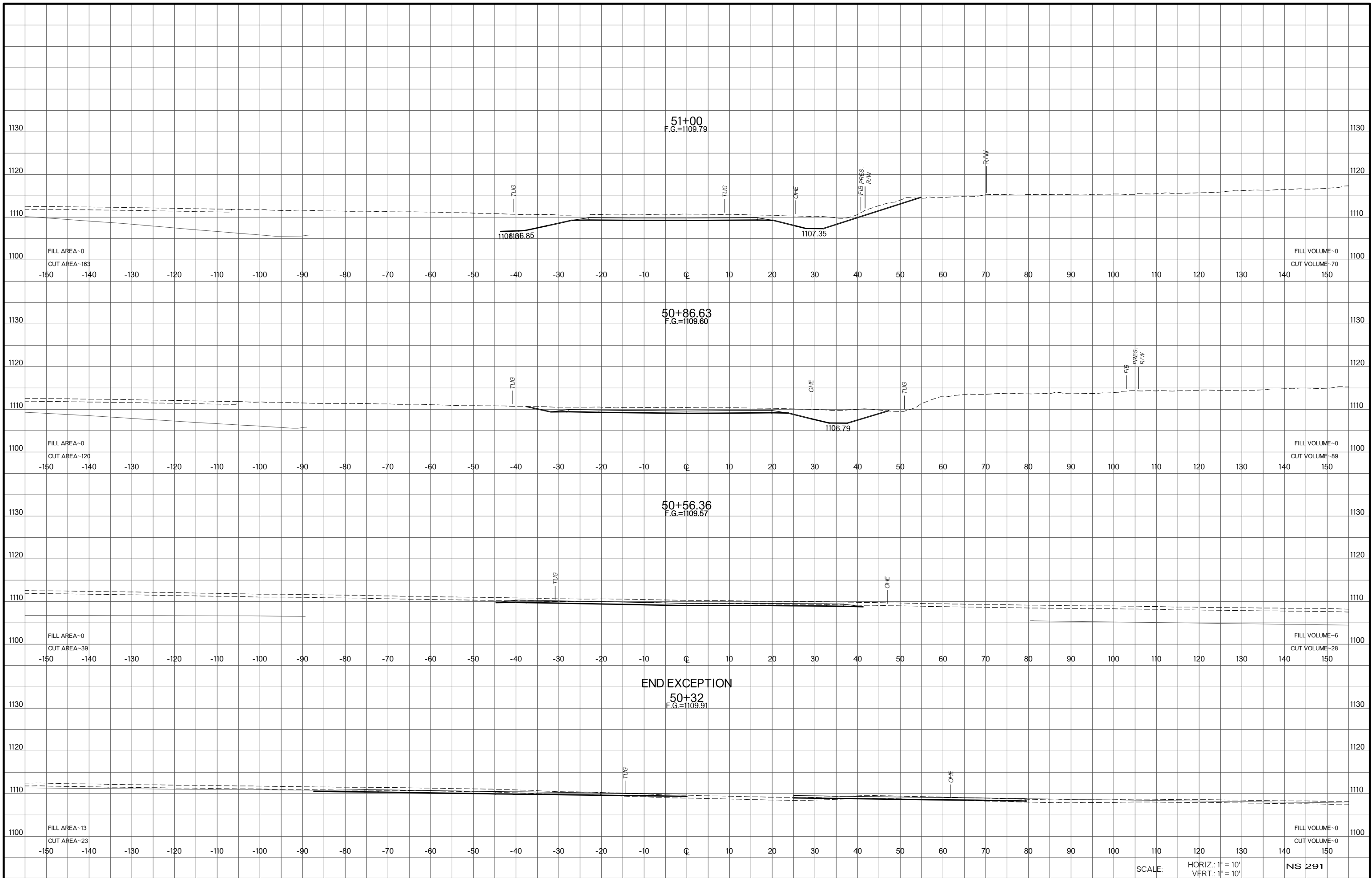


SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

NS 291

State Job No. 30425(07) Sheet No. X196

GRADY COUNTY SH 19



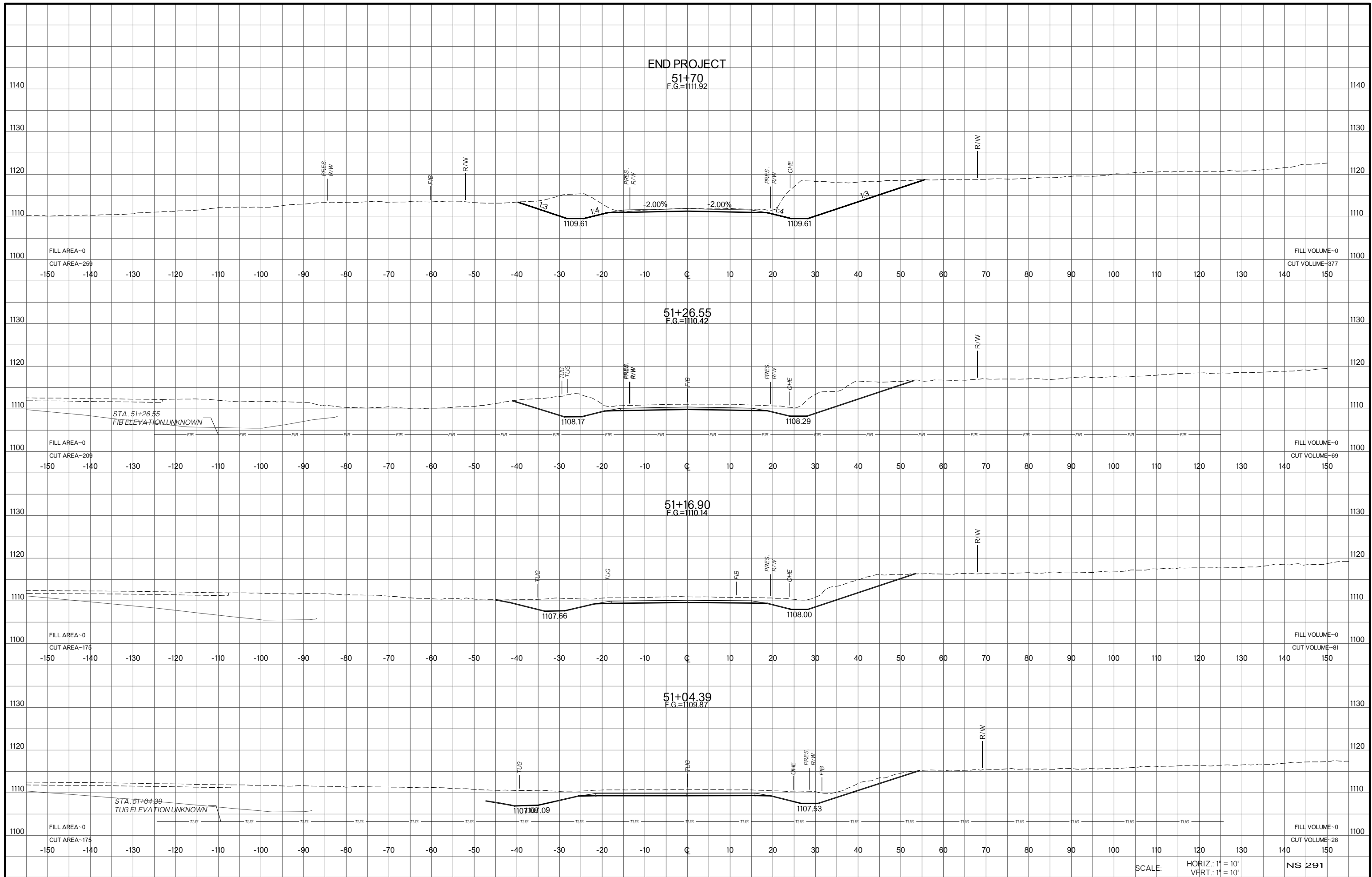
END EXCEPTION

SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

NS 291

State Job No. 30425(07) Sheet No. X197

SH 19
GRADY COUNTY

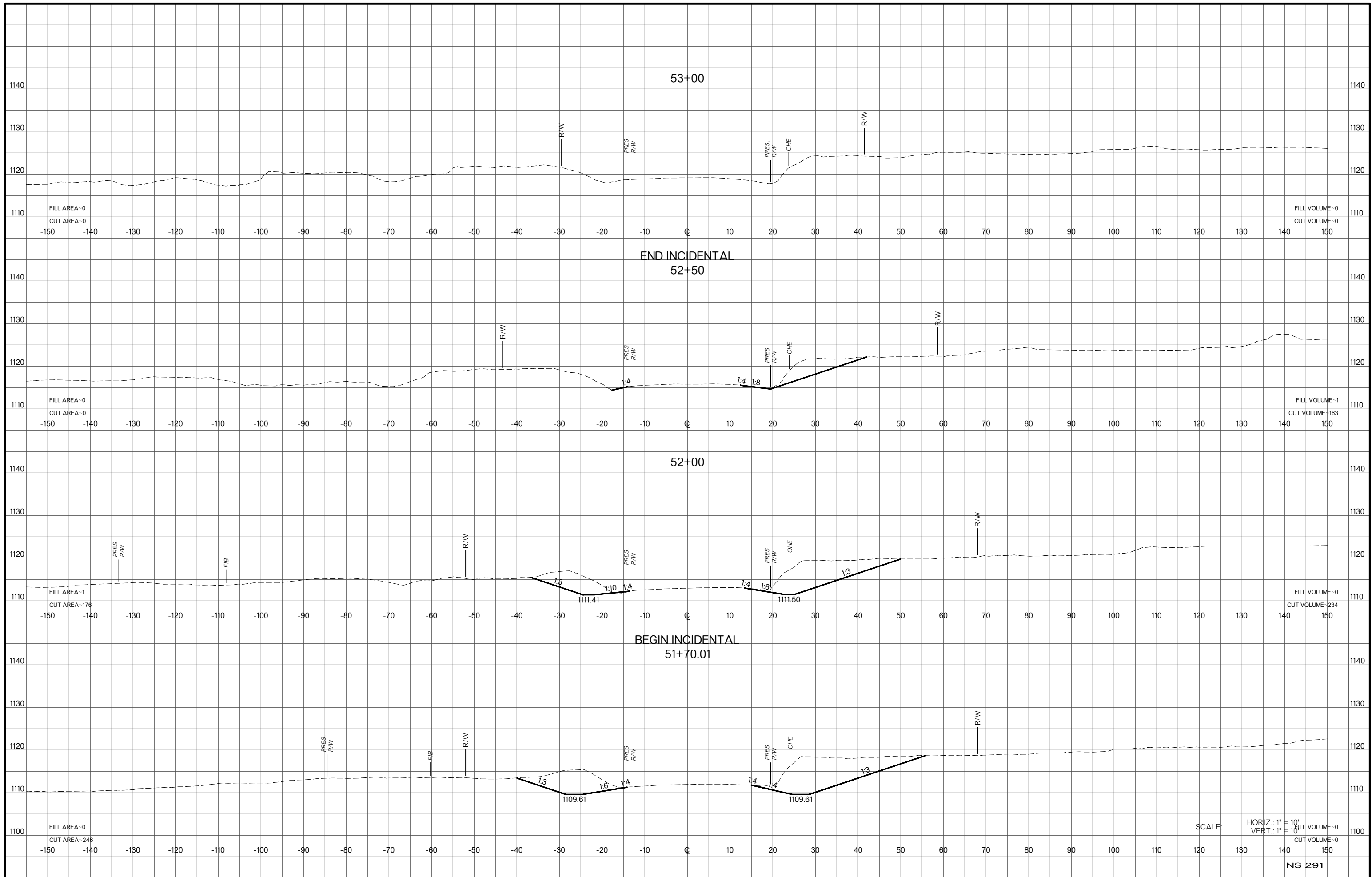


SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

NS 291

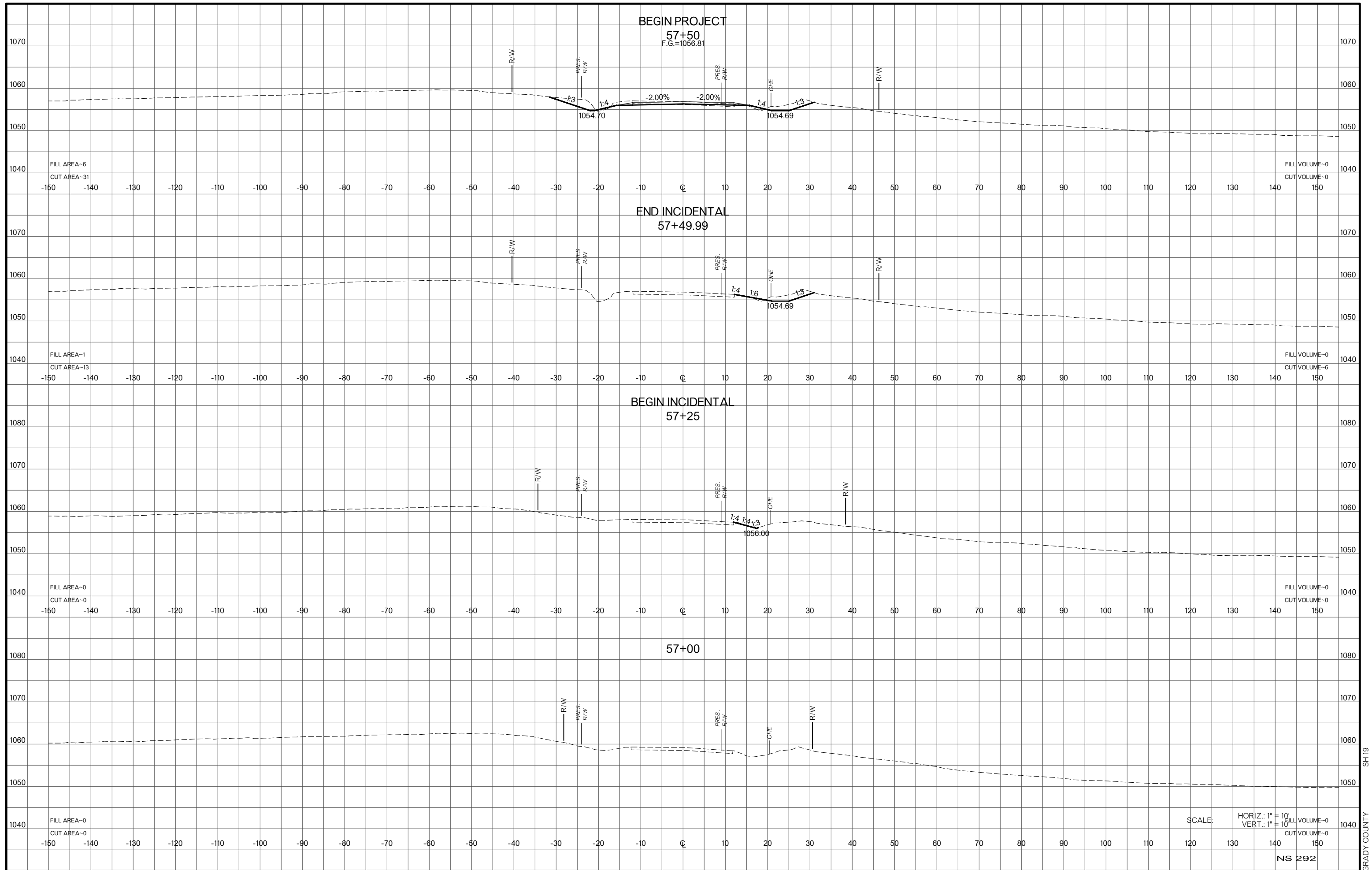
State Job No. 30425(07) Sheet No. X198

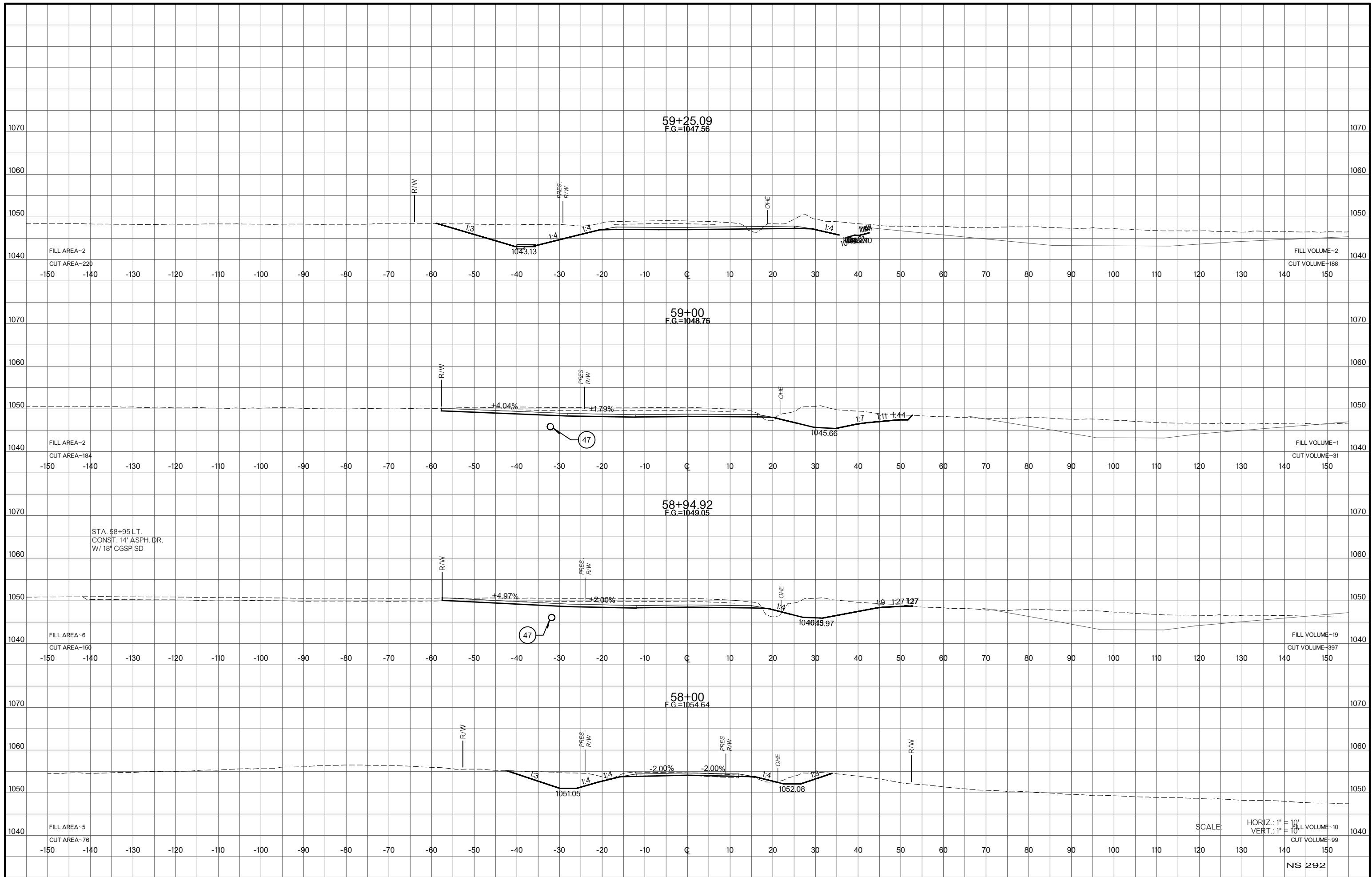
SH 19 GRADY COUNTY



SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

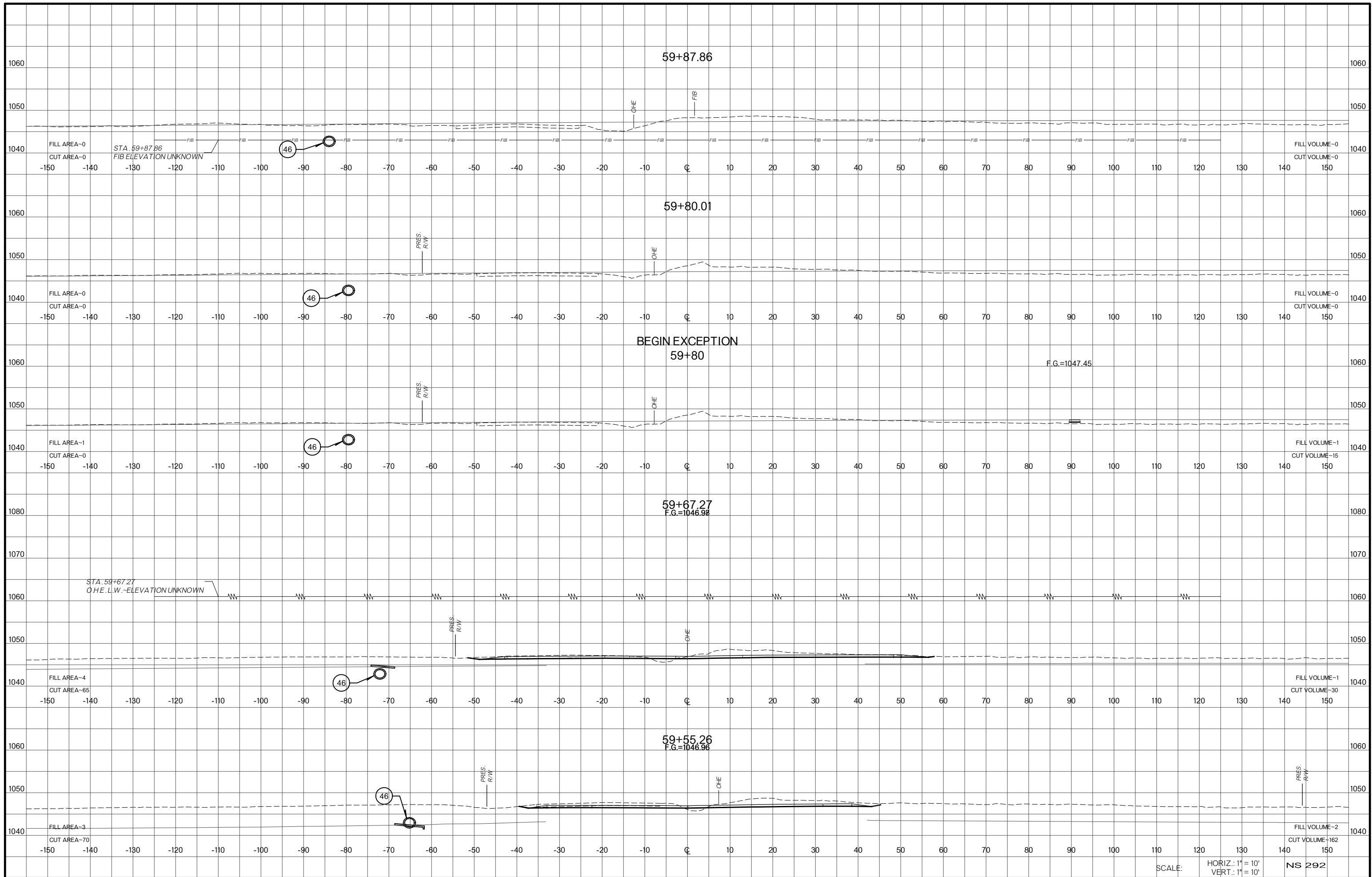
NS 291





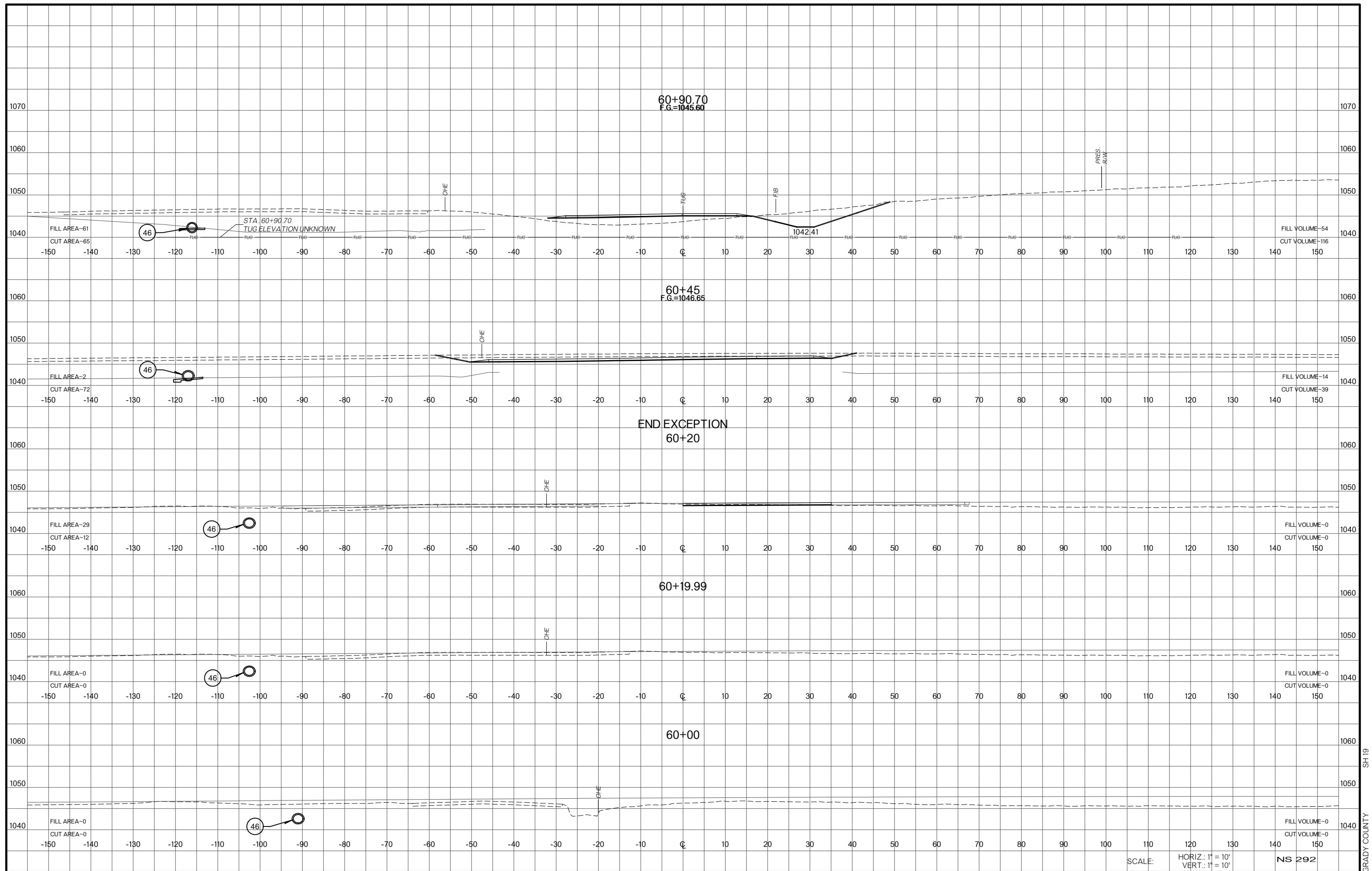
SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

NS 292

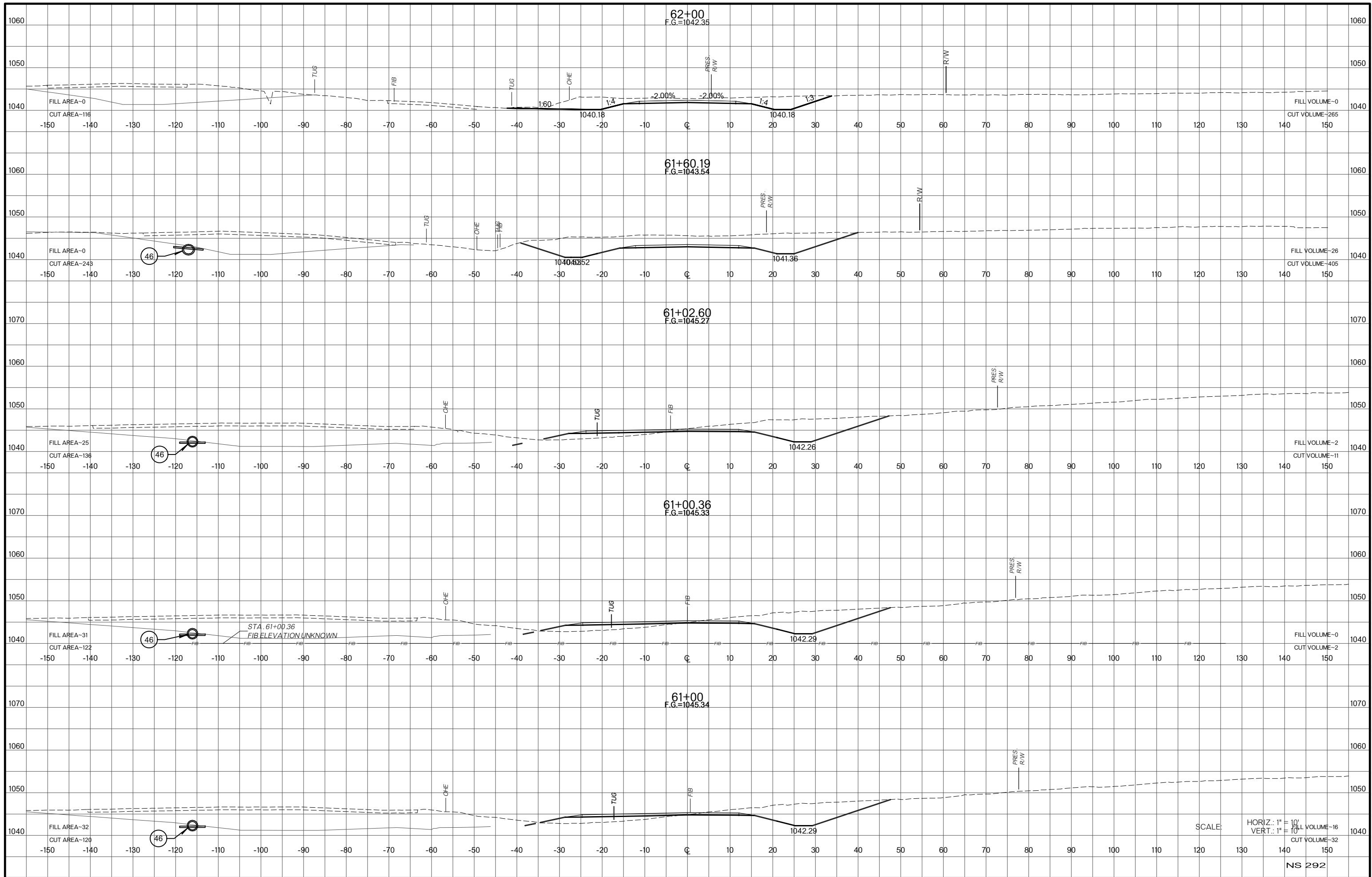


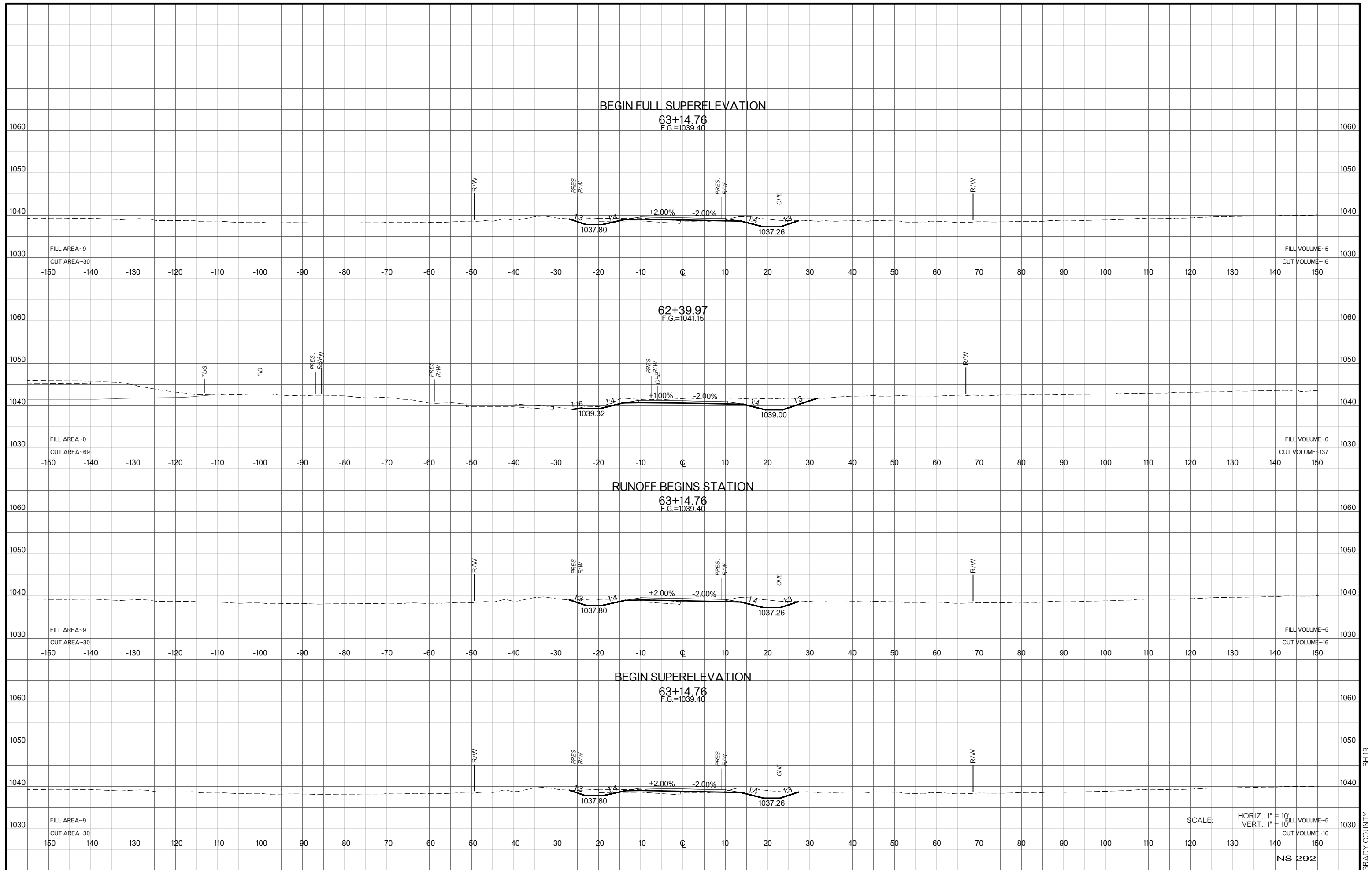
SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

NS 292



END EXCEPTION
 60+20



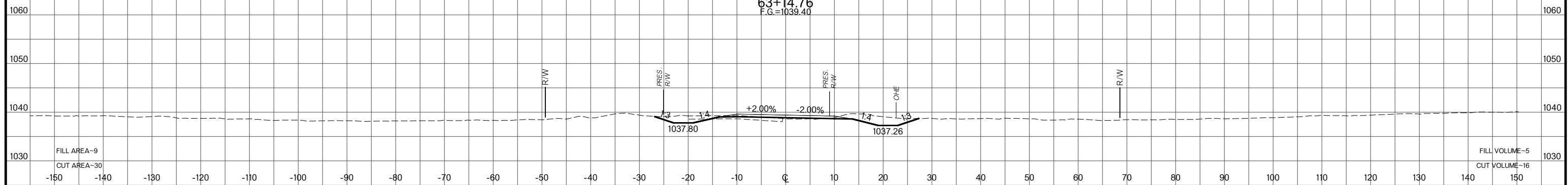


SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

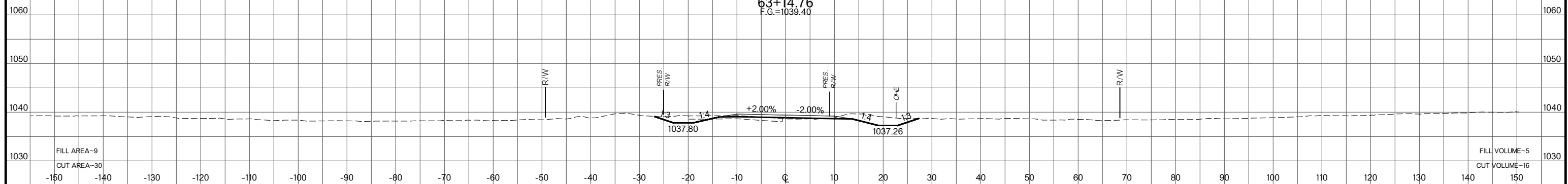
NS 292

END FULL SUPERELEVATION

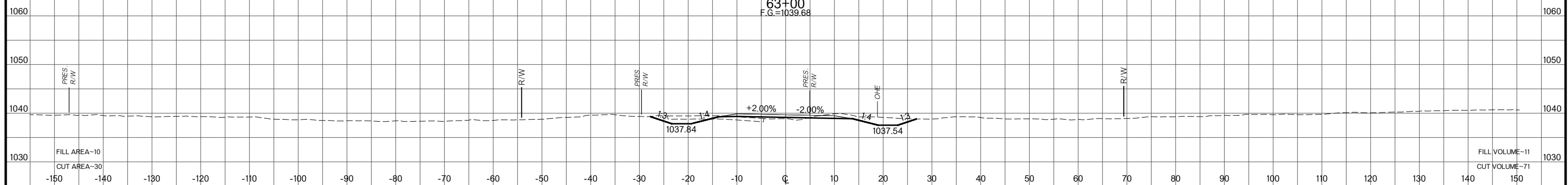
63+14.76
F.G.=1039.40



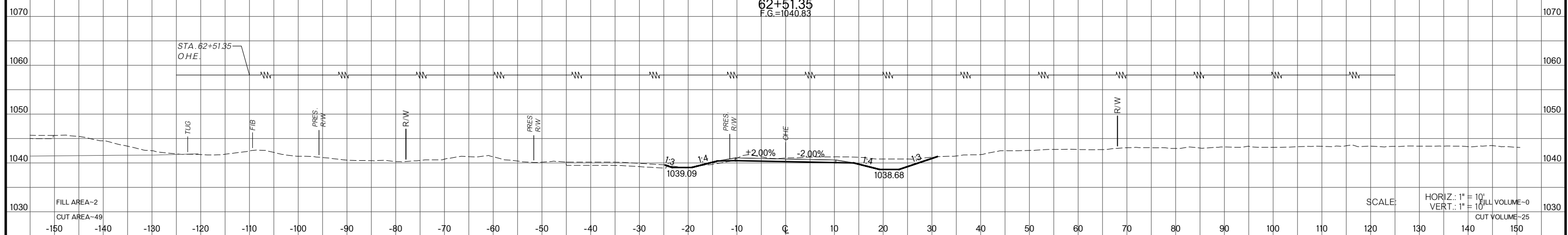
63+14.76
F.G.=1039.40



63+00
F.G.=1039.68

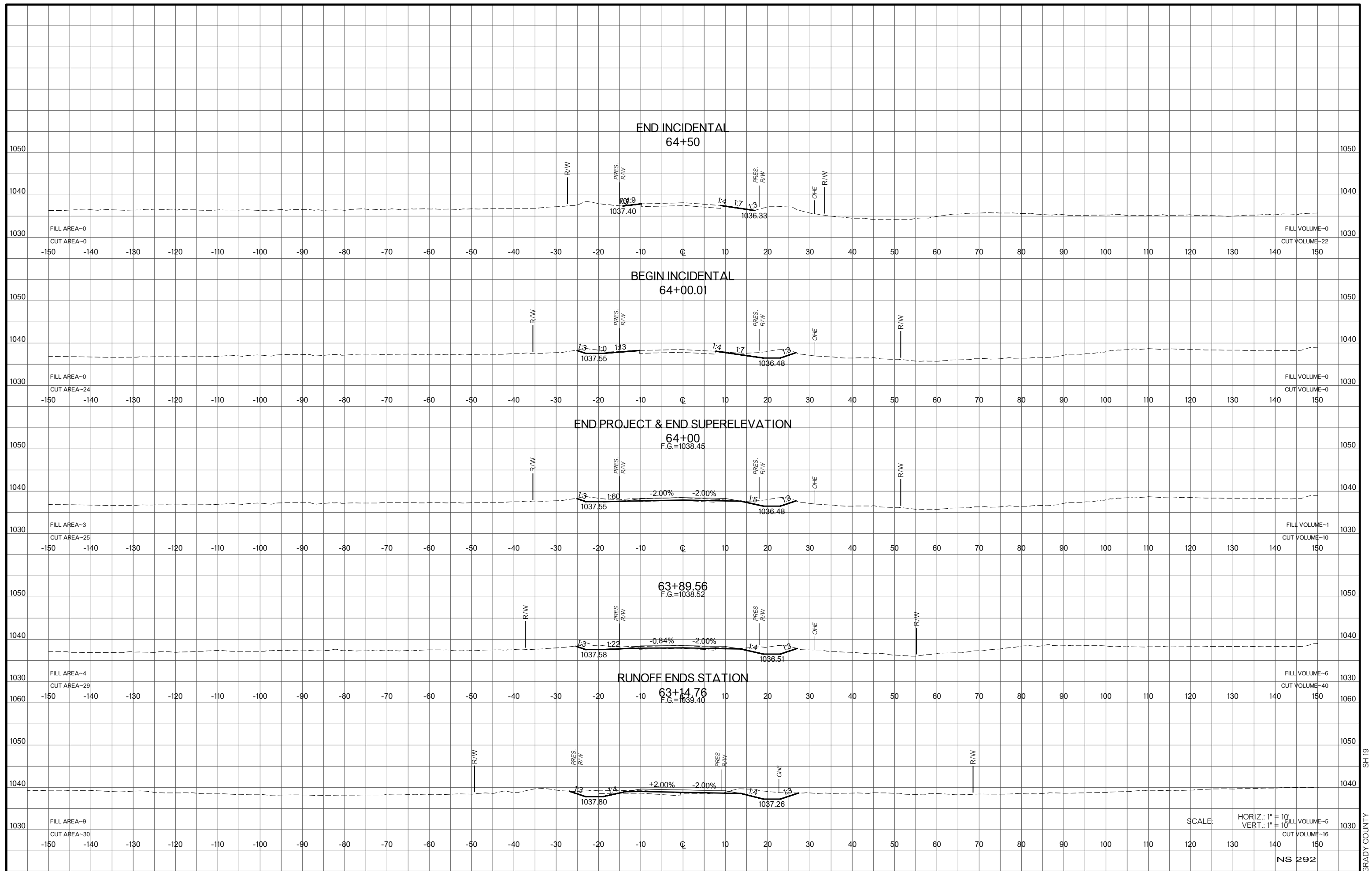


62+51.35
F.G.=1040.83



SCALE: HORIZ.: 1" = 10'
VERT.: 1" = 10'

NS 292



SCALE: HORIZ.: 1" = 10'
 VERT.: 1" = 10'

NS 292