STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED

ONETA ROAD

PHASE I - E. 121st SOUTH TO E. 101st SOUTH

S.A. PROJECT NO. CIRB-173C(146)RB
GRADING, DRAINAGE, AND SURFACING PLANS

WAGONER COUNTY

BEGIN PROJECT
LATITUDE 35° 57' 06" N
LONGITUDE 95° 39' 03" W

SURVEY CONTROL DATA

1. HORIZONTAL CONTROL
   A. OKLAHOMA STATE PLANE COORDINATE SYSTEM NORTH ZONE 3501 NAD83 (1993)
2. VERTICAL CONTROL
   A. NAVD1988

COUNTY RESPONSIBILITY

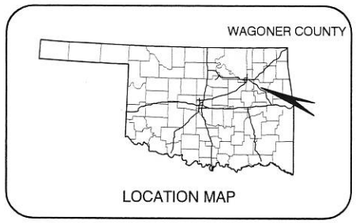
R/W ACQUISITION
UTILITY RELOCATION

INDEX OF SHEETS:

1	TITLE SHEET
2,3	TYPICAL SECTIONS
4	CONSTRUCTION DETAILS
5	SUMMARY OF PAY QUANTITIES AND NOTES
6,7	SUMMARY OF QUANTITIES
8	DRAINAGE AREA MAP
9	STORMWATER MANAGEMENT PLAN
10	SURVEY DATA
11-18	PLAN AND PROFILES
19	EROSION CONTROL PLAN
X1-X19	CROSS SECTIONS

STANDARD DRAWINGS

ROADWAY -2009-	TRAFFIC CONTROL -2009-	TRAFFIC SIGNING -2009-	BRIDGE -2009-
ASCD-5-1	TCS1-1-01	DU1-1-00	RCB-C1-8(2-14)-01E
CSCD-5-2	TCS2-1-00	DU2-1-00	RCB-C1-10(2-14)-01E
FHTCP-3-0	TCS3-1-01	PM3-1-02	RCB-E1-H3-0-1-01E
FHTMP-5-0	TCS4-1-01	GMS1-1-00	RCB-E1-H3-0-2-01E
CET4S-3-1	TCS5-1-00	RSD1-1-00	RCB-E1-H5-0-1-01E
PUD-3-2	TCS6-1-02	SBS1-1-00	RCB-E1-H5-0-2-01E
RDI-3-1	TCS7-1-02	SBS2-1-00	RCB-E1-H6-0-1-01E
SPB-1-3	TCS8-1-00	SSA1-1-00	RCB-E1-H6-0-2-01E
SPI-4-0	TCS9-1-01	SSP1-1-02	RCB-CW1-D4-0-01E
SSS-1-1	TCS10-1-00	WSD1-1-00	
TSC2-3-2	TCS11-1-01		
TSD-2-0	TCS12-1-00		
M1-3-0	TCS13-1-00		
PCES-4-1	TCS14-1-00		
PR-3-0	TCS15-1-00		
RWF1-2-2	TCS20-1-00		
RWF2-2-1	TCS21-1-02		
RWF3-2-2			
SBI-4-2			
MJB-3-1			



DESIGN DATA

ADT 2013	=	911
ADT 2033	=	1,400
FLEX ESALS	=	1.76M
DESIGN	=	45 MPH

VERTICAL CURVATURE
(k VALUES)

CREST	=	60 MIN
SAG	=	79 MIN

SCALES (1")

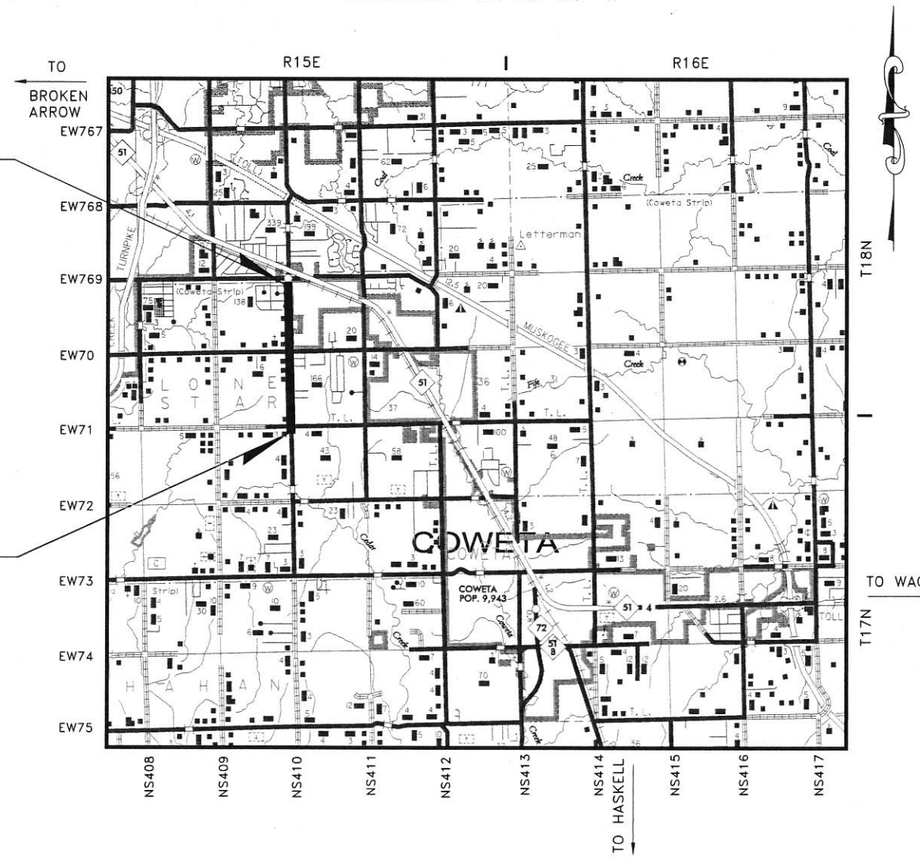
PLAN	1"=50'
PROFILE HOR.	1"=50'
VER.	1"=10'
LAYOUT MAP	1"= 5,280'

CONVENTIONAL SYMBOLS

PROPOSED ROAD
RAILROAD-Large Scale
RAILROAD-Small Scale
RANGE AND TOWNSHIP
SECTION LINE
QUARTER SECTION LINE
FENCE
GROUND LINE
EXISTING ROAD
BASE LINE
GRADE LINES
TELEPHONE AND TELEGRAPH
POWER LINES
OIL WELLS
BUILDINGS
DRAINAGE STRUCTURES (Existing)
DRAINAGE STRUCTURES (New)
RIGHT OF WAY LINES (Existing)
RIGHT OF WAY (New)
RIGHT OF WAY MARKERS (In Place)
RIGHT OF WAY MARKERS (New)
CONTROL OF ACCESS
RIGHT OF WAY FENCE

STA 326+54
END PROJECT
PHASE 1

STA 221+00
BEGIN PROJECT
PHASE 1



90% PRELIMINARY PLANS
NOT FOR CONSTRUCTION

APPROVED
THIS_____ DAY OF_____ ,2013
BOARD OF COUNTY COMMISSIONERS
WAGONER COUNTY, OKLAHOMA

CHAIRMAN

MEMBER

MEMBER

ATTEST: _____
COUNTY CLERK

plans prepared by:
MDesign, LLC, DBE
CIVIL INFRASTRUCTURE AND LAND DEVELOPMENT
Professional Computer Aided Design and Drafting Services

MONTY L. PROCTOR, P.E. DATE
OKLAHOMA P.E. NO. 23098

2009 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION-ENGLISH GOVERN, APPROVED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, JANUARY 4, 2010.

DESIGN INFORMATION

ROADWAY LENGTH	10,554 FT.	2.000 MI
BRIDGE LENGTH	0 FT.	0.000 MI
PROJECT LENGTH		2.000 MI

EXCEPTIONS NONE
EQUATIONS NONE

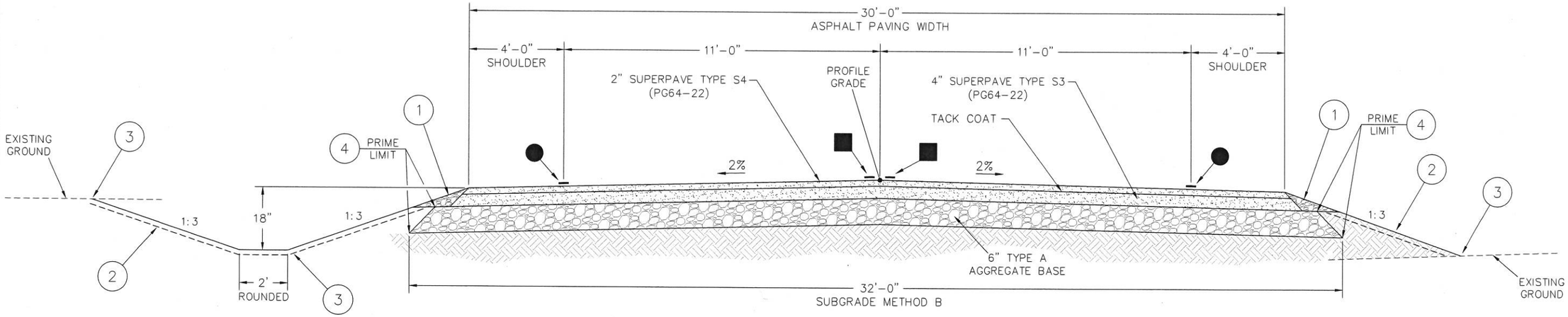
PROJECT LENGTH IS BASED ON PROJECT CRL

OKLAHOMA DEPARTMENT OF TRANSPORTATION	DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION
DATE APPROVED	DATE APPROVED
BY	BY
CHIEF ENGINEER	DIVISION ADMINISTRATOR

S.A. Project No. CIRB-173C(146)RB — Sheet No. 1

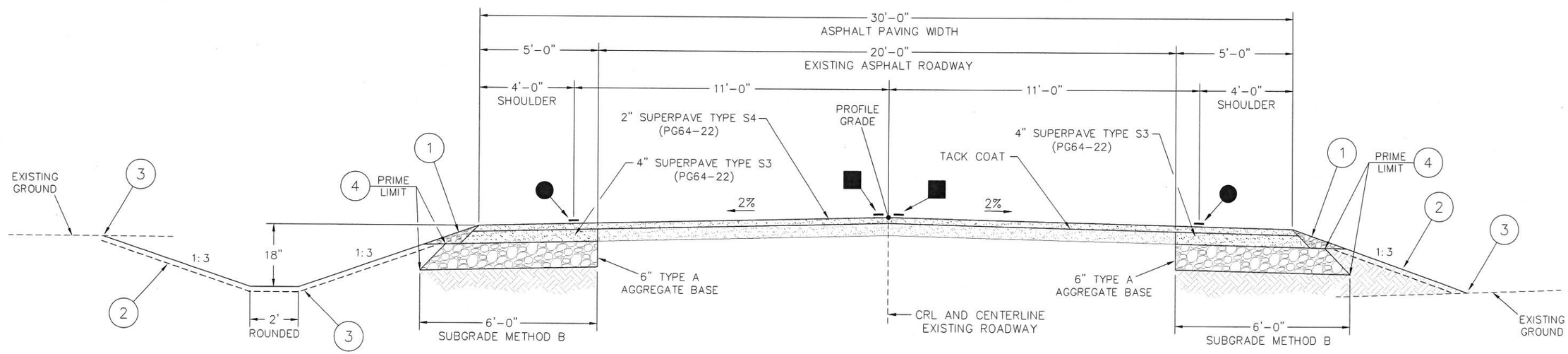
WAGONER CO. COMM. TIM KELLEY DIST. #3

REVIEWED BY: GARRY HARRISON P.E. NO.24824(01)
LOCAL GOVERNMENT DIVISION



TYPICAL SECTION 1

STA 221+00 TO STA 225+50
STA 251+00 TO STA 262+50



TYPICAL SECTION 2

STA 225+50 TO STA 251+00
STA 262+50 TO STA 268+00
STA 268+90 TO STA 319+00

(1) THIS AREA TO BE BACKFILLED WITH T.B.S.C. TYPE E AND COMPACTED AS PART OF THE FINISHING OPERATIONS. ESTIMATED AT 0.13 TONS/FT FOR BOTH SIDES

(2) THE CONTRACTOR SHALL STRIP ALL OF THE AVAILABLE TOPSOIL WITHIN THE LIMITS OF CONSTRUCTION, APPROXIMATELY 5" DEEP, STOCKPILE THE MATERIAL AND REPLACE THE TOPSOIL ON THE FINISHED SLOPES OF THE GRADING SECTION IN ACCORDANCE WITH SECTION 205 OF THE STANDARD SPECIFICATIONS. ALL ADDITIONAL COSTS NOT COVERED IN OTHER ITEMS OF WORK SHALL BE INCLUDED IN THE UNCLASSIFIED EXCAVATION PAY ITEM.

(3) SEE TYPICAL ROUNDING DETAILS SHEET 3.

(4) ESTIMATED AT 0.25 GALLONS PER SQ. YD. TOP OF BASE COURSE AND 0.35 GALLONS PER SQ. YD. TOP OF SUBGRADE.

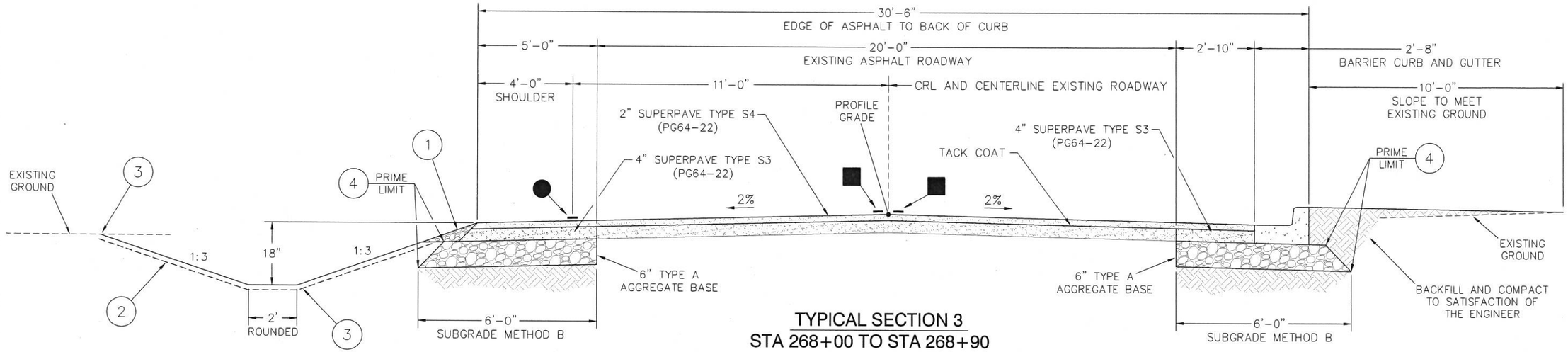
● 4" WHITE STRIPE

■ 4" YELLOW STRIPE

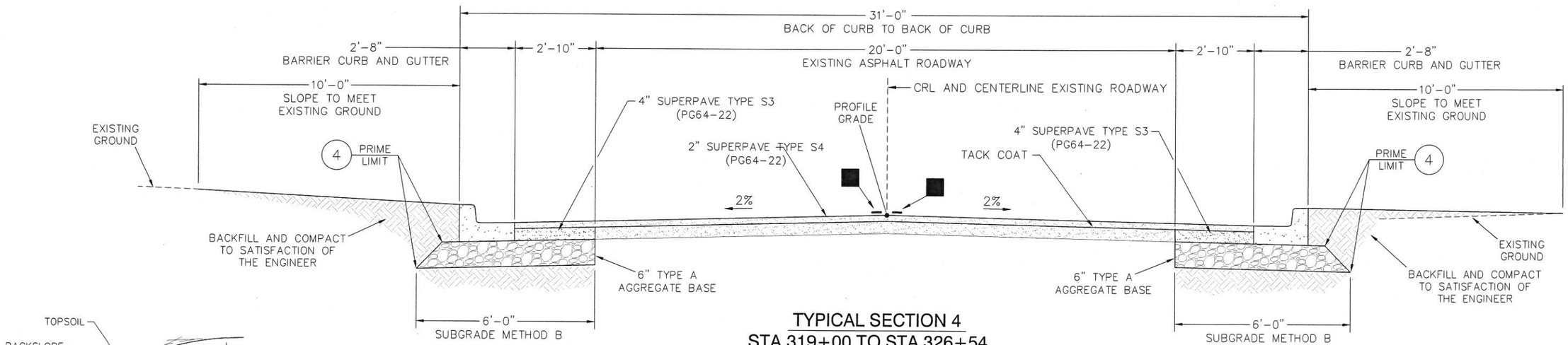
WAGONER COUNTY ONETA ROAD – 101st to 121st

TYPICAL SECTIONS

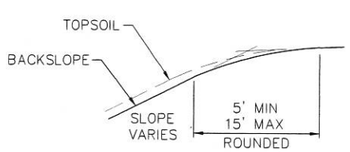
S.A. PROJECT NO. CIRB-173C(146)RB Sheet No. 2



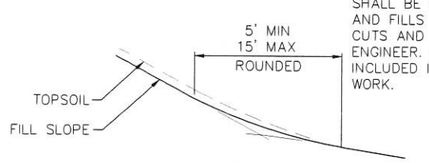
TYPICAL SECTION 3
STA 268+00 TO STA 268+90



TYPICAL SECTION 4
STA 319+00 TO STA 326+54



TOP OF CUT ROUNDING



TOE OF FILL ROUNDING

INTERSECTION OF CUT AND/OR FILL SLOPES WITH GROUND LINE TO BE ROUNDED AS PART OF THE FINISHING OPERATIONS. ROUNDING SHALL BE 5' MINIMUM FOR SMALLER CUTS AND FILLS TO 15' MAXIMUM FOR LARGER CUTS AND FILLS OR AS DESIGNATED BY THE ENGINEER. COST OF ROUNDING TO BE INCLUDED IN PRICE BID FOR OTHER ITEMS OF WORK.

TYPICAL ROUNDING DETAILS

(1) THIS AREA TO BE BACKFILLED WITH T.B.S.C. TYPE E AND COMPACTED AS PART OF THE FINISHING OPERATIONS. ESTIMATED AT 0.13 TONS/FT FOR BOTH SIDES

(2) THE CONTRACTOR SHALL STRIP ALL OF THE AVAILABLE TOPSOIL WITHIN THE LIMITS OF CONSTRUCTION, APPROXIMATELY 5" DEEP, STOCKPILE THE MATERIAL AND REPLACE THE TOPSOIL ON THE FINISHED SLOPES OF THE GRADING SECTION IN ACCORDANCE WITH SECTION 205 OF THE STANDARD SPECIFICATIONS. ALL ADDITIONAL COSTS NOT COVERED IN OTHER ITEMS OF WORK SHALL BE INCLUDED IN THE UNCLASSIFIED EXCAVATION PAY ITEM.

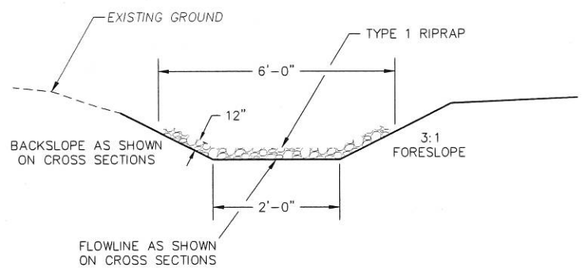
(3) SEE TYPICAL ROUNDING DETAILS THIS SHEET.

(4) ESTIMATED AT 0.25 GALLONS PER SQ. YD. TOP OF BASE COURSE AND 0.35 GALLONS PER SQ. YD. TOP OF SUBGRADE.

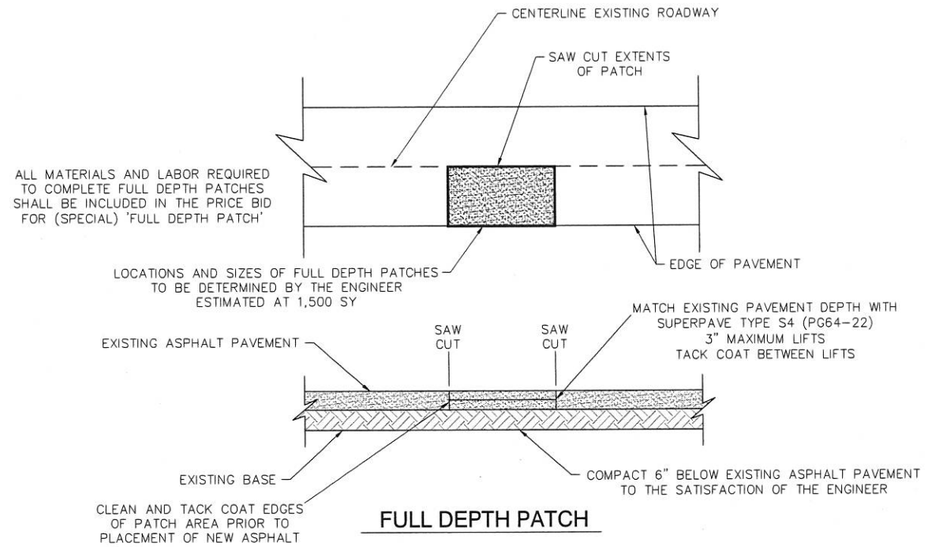
● 4" WHITE STRIPE

■ 4" YELLOW STRIPE

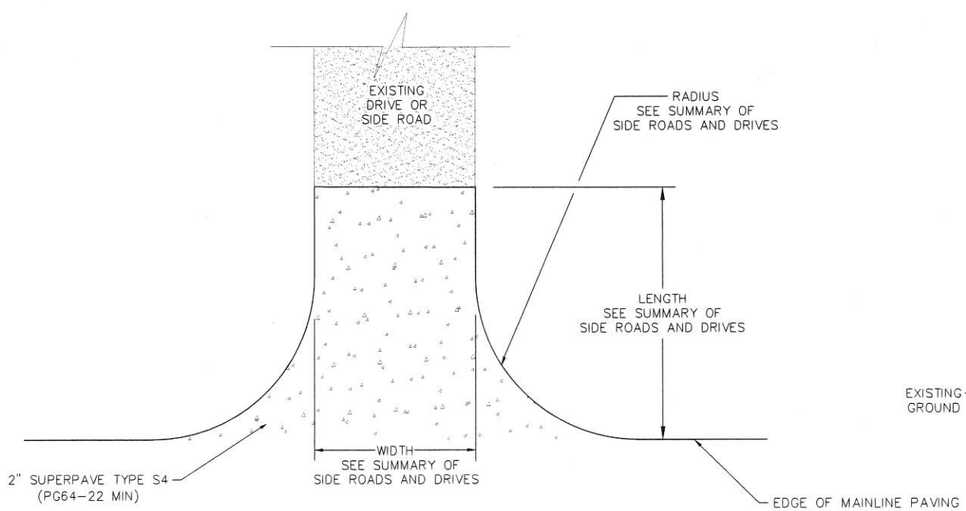
WAGONER COUNTY	ONETA ROAD – 101st to 121st
TYPICAL SECTIONS	
S.A. PROJECT NO. CIRB-173C(146)RB	Sheet No. 3



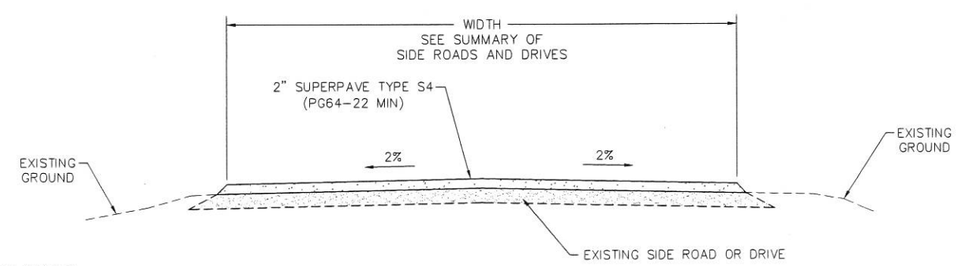
RIPRAP LINED DITCH



FULL DEPTH PATCH



PLAN
SIDE ROAD AND DRIVES



TYPICAL SECTION
SIDE ROAD AND DRIVES

WAGONER COUNTY ONETA ROAD – 101st to 121st

CONSTRUCTION DETAILS

S.A. PROJECT NO. CIRB-173C(146)RB Sheet No. 4

ROADWAY GENERAL CONSTRUCTION NOTES:

ALL TREES, BRUSH AND OTHER DEBRIS THAT MIGHT INTERFERE WITH THE FLOW OF WATER IS TO BE CLEANED OUT TO THE RIGHT OF WAY LINE AT EACH STRUCTURE AND BRIDGE, IN A MANNER APPROVED BY THE ENGINEER. ALL COSTS TO BE INCLUDED IN OTHER ITEMS OF WORK.

TEMPORARY RIGHT OF WAY FENCE WILL BE REQUIRED. CONSTRUCTION AND REMOVAL OF THE TEMPORARY FENCE SHALL BE INCLUDED IN OTHER ITEMS OF WORK. THE TEMPORARY FENCE SHALL BE REMOVED ONLY AFTER THE PERMANENT RIGHT OF WAY FENCE IS COMPLETED AND APPROVED BY THE ENGINEER.

IN ORDER TO ALLEVIATE DUST CONDITIONS DURING GRADING OPERATIONS AND BEFORE PAVEMENT WORK IS COMPLETED, THE CONTRACTOR SHALL SPRINKLE THE GRADING AT INTERVALS APPROVED BY THE ENGINEER. COST OF SPRINKLING TO BE INCLUDED IN OTHER ITEMS OF WORK.

PRIME COAT SHALL BE APPLIED TO THE SUBGRADE IMMEDIATELY AFTER FINAL COMPACTION AND SHAPING TO RETAIN MOISTURE.

THE CONTRACTOR SHALL KEEP THE OPEN TRENCH DRAINED. COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

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. COST TO BE INCLUDED IN THE PRICE BID FOR SALVAGED TOPSOIL.

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 EXCAVATIONS. OKLAHOMA ONE-CALL SYSTEM, INC. 'CALL OKIE' 1-800-522-6543 OR 811.

THE CONTRACTOR SHALL GIVE NOTICE TO WAGONER COUNTY AND THE MUSCOGEE (CREEK) NATION IN WRITING 14 DAYS BEFORE WORK BEGINS ON THE PROJECT.

TIME CHARGES SHALL BEGIN WHEN THE CONTRACTOR BEGINS WORK OR ON THE EFFECTIVE DATE OF THE NOTICE TO PROCEED, WHICHEVER OCCURS FIRST, AND SHALL END WHEN SUBSTANTIAL COMPLETION IS APPROVED BY THE CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE. SUBSTANTIAL COMPLETION IS DEFINED AS WHEN ALL ASPHALT CONCRETE OPERATIONS, STRIPING OPERATIONS, AND BACKFILL OPERATIONS HAVE BEEN COMPLETED TO THE SATISFACTION OF THE CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE.

THE CONTRACTOR SHALL CONFINE HIS WORK TO WITHIN THE LIMITS OF RIGHT-OF-WAY. ANY DAMAGE CAUSED BY THE CONTRACTOR OUTSIDE THE LIMITS OF RIGHT-OF-WAY WILL BE REPAIRED OR RESTORED TO ORIGINAL CONDITION OR BETTER AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE AND PROPERTY OWNER.

OPERATIONS THAT PRESENT AN EDGE DROP-OFF OF GREATER THAN TWO INCHES SHALL BE LIMITED TO ONE SIDE AT A TIME.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCESS TO ALL EXISTING STREET RETURNS, DRIVEWAYS, AND FIELD ENTRANCES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN OTHER ITEMS OF WORK.

REFERENCE IS MADE TO THE UNDERGROUND FACILITIES DAMAGE PREVENTION ACT (63 O.S. SECTION 412.1 ET. SEQ.), INCLUDING AMENDMENTS, WHICH IS MADE PART OF THE CONTRACT. THE CONTRACTOR SHALL MAKE ALL NECESSARY PROTECTIVE MEASURES BEFORE WORK COMMENCES AND SHALL NOTIFY THE CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE IMMEDIATELY UPON OBSERVING ANY UTILITY THAT CONFLICTS WITH CONSTRUCTION. ANY DAMAGE TO UTILITIES TO UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

PAY QUANTITY NOTES:

(1) PRICE BID TO INCLUDE THE COST OF SILT REMOVAL.

(2) ESTIMATED QUANTITY ONLY TO BE USED FOR EROSION AND SEDIMENT CONTROL IN A MANNER APPROVED BY THE ENGINEER.

(3)

(4) INCLUDES 20 TONS TO BE USED AS DIRECTED BY THE ENGINEER.

(5) CONSTRUCTION STAKING SHALL INCLUDE: ESTABLISHING AND RE-ESTABLISHING STAKING OF CENTERLINE, BENCHMARKS, AND RIGHT OF WAY. INCLUDES SLOPE STAKING, STRUCTURES, AND BRIDGE STAKING, ROADWAY STAKING (DRIVEWAYS INCLUDED), BLUETOPPING, AND CHECKING ALIGNMENTS AND ELEVATIONS AS REQUIRED.

(6) COST OF TRENCH EXCAVATION AND STANDARD BEDDING MATERIAL (CLASS B) SHALL BE INCLUDED IN THE PRICE BID PER O.D.O.T. STANDARD R-47 SPI-4 AND R-49 SPB-1.

(7) ESTIMATED QUANTITY. LOCATIONS AND SIZES OF FULL DEPTH PATCH TO BE DETERMINED BY THE ENGINEER. INCLUDES ALL SAW CUT, REMOVAL OF EXISTING ASPHALT, COMPACTION OF BASE, AND PLACEMENT OF NEW TYPE S4 ASPHALT TO MEET EXISTING PAVEMENT ELEVATION.

(8) ESTIMATED AT 0.15 GALLONS PER SQUARE YARD PRIOR TO DILUTION.

(TS-19) QUANTITY SHOWN INCLUDES 20,500 LF OF CENTERLINE TRAFFIC STRIPE (MULTI-POLYMER) (YELLOW) AND 19,342 LF OF EDGE TRAFFIC STRIPE AND 110 LF STOP BAR (MULTI-POLYMER) (WHITE).

(TS-26) 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, LATEST EDITION, AND APPLICABLE O.D.O.T. STANDARD DRAWINGS. ALL SIGNS, BARRICADES AND CHANNELIZING DEVICES WHICH ARE SHOWN WITH EITHER TYPE 'A' OR 'C' LIGHTS IN THE STANDARD DRAWINGS SHALL HAVE THE CORRESPONDING LIGHT ATTACHED DURING NON-DAYLIGHT HOURS.

(R-1) PAYMENT FOR THIS ITEM SHALL BE BASED IN PLAN QUANTITY ONLY. SEE SECTION 109.01B OF THE STANDARD SPECIFICATIONS.

(R-5) ESTIMATED QUANTITY TO BE RESERVED FOR REPLACEMENT OF APPROXIMATELY 5" ON COMPLETED FORESLOPES, BACKSLOPES AND DITCHES. THIS QUANTITY IS INCLUDED IN THE EARTHWORK BALANCE. ANY ADDITIONAL EXCAVATION REQUIRED IN CUT SECTIONS TO ALLOW FOR REPLACEMENT OF TOPSOIL TO FINAL GRADE SHALL BE INCLUDED IN THE PRICE BID.

(R-7) PRICE BID TO INCLUDE THE COST OF 10-20-10 FERTILIZER, ESTIMATED AT 200 POUNDS PER 1,000 SQUARE YARDS OF SODDING.

(R-8) PRICE BID TO INCLUDE THE PRICE FOR WATERING, ESTIMATED AT 80 GALLONS PER SQUARE YARD.

(R-11) THE QUANTITY ESTIMATED FOR TEMPORARY EROSION CONTROL IS 9.00 ACRES.

(R-28) PRIME COAT SHALL BE APPLIED AT AN ESTIMATED RATE OF 0.25 GALLONS PER SQUARE YARD ON TOP OF 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-32) ESTIMATED AT 112 POUNDS PER SQUARE YARD PER 1" THICKNESS.

(R-48) INCLUDES THE REMOVAL OF ALL EXISTING ROADWAY DRAINAGE STRUCTURES (UNLESS OTHERWISE SPECIFIED), HEADWALLS, GUARDRAIL, INLETS. FENCES AND OTHER STRUCTURES WITHIN THE RIGHT OF WAY.

(R-49) TO BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER.

PAY QUANTITIES

0100 ROADWAY

ITEM		DESCRIPTION	NOTES	UNIT	QUANTITY
201(A)	0102	CLEARING AND GRUBBING		LSUM	1.00
202(A)	0183	UNCLASSIFIED EXCAVATION		CY	11,605.00
202(E)	0186	SELECT BORROW		CY	2,000.00
205(A)	4229	TYPE A SALVAGED TOPSOIL	(R-5)(G-28)	LSUM	1.00
221(C)	2801	TEMPORARY SILT FENCE	(1)(2)	LF	1,800.00
221(F)	0100	TEMPORARY SILT DIKE	(1)(2)	LF	712.00
232(A)	2813	SEEDING METHOD A	(R-7)(R-8)	AC	9.00
233(A)	2817	VEGETATIVE MULCHING	(R-11)	AC	9.00
303(A)	2100	AGGREGATE BASE TYPE A		CY	2,938.00
310(B)	0149	SUBGRADE METHOD B	(R-1)	SY	17,628.00
402(E)	0225	TRAFFIC BOUND SURFACE COURSE, TYPE E		TON	1,268.00
407(B)	0250	TACK COAT	8	GAL	5,219.00
408	5774	PRIME COAT	(R-28)(G-12)	GAL	21,448.00
411(B)	5945	SUPERPAVE TYPE S3 (PG 64-22)	(R-30)(R-32)	TON	3,337.00
411(C)	5960	SUPERPAVE TYPE S4 (PG 64-22)	(R-30)(R-32)	TON	4,151.00
509(A)	0319	CLASS AA CONCRETE		CY	268.00
511(A)	0332	REINFORCING STEEL		LBS	40,040.00
601(A)	0297	TYPE I PLAIN RIPRAP	4	TON	216.00
609(B)	0383	COMBINED CURB AND GUTTER		LF	1,598.00
611(A)	2657	MANHOLE		EA	1.00
613(A)	0491	REINFORCED CONCRETE PIPE, ROUND, 18"	6	LF	132.00
613(A)	0492	REINFORCED CONCRETE PIPE, ROUND, 24"	6	LF	112.00
613(A)	0493	REINFORCED CONCRETE PIPE, ROUND, 30"	6	LF	80.00
613(E)	4784	CORRULGATED POLYETHYLENE PIPE, 18"	6	LF	1,144.00
613(L)	5726	PREFABRICATED CULV END SECTION, ROUND, 18"	(R-1)	EA	6.00
613(L)	5730	PREFABRICATED CULV END SECTION, ROUND, 24"	(R-1)	EA	4.00
613(L)	5732	PREFABRICATED CULV END SECTION, ROUND, 30"	(R-1)	EA	2.00
613(M)	7186	CULVERT END TREATMENT, TYPE A4	(R-1)	EA	60.00
619(A)	0920	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	(R-48)(R-49)	LSUM	1.00
624(A)	4281	FENCE, STYLE WWF		LF	2,277.00
624(C)	4459	FENCE, STYLE SWF		LF	8,518.00
624(E)	4290	FENCE, STYLE CLF		LF	1,674.00
629(A)	4958	MAILBOX INSTALLATION, SINGLE	(R-1)	EA	11.00
629(B)	4959	MAILBOX INSTALLATION, MULTIPLE	(R-1)	EA	2.00
629(C)	4960	MAILBOX	(R-1)	EA	15.00
(SPECIAL)		FULL DEPTH PATCH	7	SY	1,300.00

PAY QUANTITIES

0300 TRAFFIC

ITEM		DESCRIPTION	NOTES	UNIT	QUANTITY
850(A)	8110	SHEET ALUMINUM SIGNS	(R-1)	SF	96.98
851(C)	8324	SQUARE TUBE POSTS	(R-1)	LF	156.00
853	9039	DELINEATORS (TYPE 2 CODE 3)	(R-1)	EA	6.00
856(A)	8530	TRAFFIC STRIPE (MULTI-POLY) (4" WIDE)	(TS-19)	LF	39,842.00
856(A)	8555	TRAFFIC STRIPE (MULTI-POLY) (24" WIDE)	(TS-19)	LF	110.00
880(J)	8905	CONSTRUCTION TRAFFIC CONTROL	(TS-26)	LSUM	1.00

PAY QUANTITIES

0600 CONSTRUCTION STAKING

ITEM		DESCRIPTION	NOTES	UNIT	QUANTITY
642(B)	0096	CONSTRUCTION STAKING LEVEL II	(5)	LSUM	1.00

PAY QUANTITIES

0640 CONSTRUCTION

ITEM		DESCRIPTION	NOTES	UNIT	QUANTITY
220	2800	SWPPP DOCUMENTATION AND MANAGEMENT		LSUM	1.00
641	1552	MOBILIZATION		LSUM	1.00

WAGONER COUNTY ONETA ROAD - 101st to 121st

PAY QUANTITIES AND NOTES

S.A. PROJECT NO. CIRB-173C(146)RB Sheet No. 5

SUMMARY OF EARTHWORK

Station	Cut Area (SF)	Cut Volume (CY)	Cum Cut Vol (CY)	Fill Area (SF)	Fill Volume (CY)	Cum Fill Vol (CY)	Cum Net Vol (CY)
221+00	21.85	0.00	0.00	17.73	0.00	0.00	0.00
222+00	71.6	173.06	173.06	30.13	88.63	88.63	84.43
223+00	47.36	220.30	393.35	51.87	151.85	240.48	152.87
224+00	50.69	181.57	574.93	45.1	179.57	420.06	154.87
225+00	59.5	204.06	778.98	29.21	137.61	557.67	221.31
226+00	42.21	188.35	967.33	23.16	96.98	654.65	312.69
227+00	45.71	162.81	1130.15	17.75	75.76	730.41	399.74
228+00	67.86	210.31	1340.46	14.26	59.28	789.69	550.78
229+00	88.94	290.37	1630.83	13.79	51.94	841.63	789.20
230+00	58.15	272.39	1903.22	11.64	47.09	888.72	1,014.50
231+00	78.65	253.33	2156.56	11.48	42.81	931.54	1,225.02
232+00	77.36	288.91	2445.46	14.39	47.91	979.44	1,466.02
233+00	40.64	218.52	2663.98	20.04	63.76	1043.20	1,620.78
234+00	44.24	157.19	2821.17	15.11	65.09	1108.30	1,712.87
235+00	32.34	141.81	2962.98	18.41	62.07	1170.37	1,792.61
236+00	40.23	134.39	3097.37	18.09	67.59	1237.96	1,859.41
237+00	36.47	142.04	3239.41	16.22	63.54	1301.50	1,937.91
238+00	30.51	124.04	3363.44	17.61	62.65	1364.15	1,999.30
239+00	38.58	127.94	3491.39	15.01	60.41	1424.56	2,066.83
240+00	31.05	128.94	3620.33	18.13	61.37	1485.93	2,134.41
241+00	18.23	91.26	3711.59	16.98	65.02	1550.94	2,160.65
242+00	17.23	65.67	3777.26	15.79	60.69	1611.63	2,165.63
243+00	30.66	88.69	3865.94	14.68	56.43	1668.06	2,197.89
244+00	31.62	115.33	3981.28	15.56	56.00	1724.06	2,257.22
245+00	37.81	128.57	4109.85	13.33	53.50	1777.56	2,332.30
246+00	35.31	135.41	4245.26	11.91	46.74	1824.30	2,420.96
247+00	25.39	112.41	4357.67	12.73	45.63	1869.93	2,487.74
248+00	39.04	119.31	4476.98	0.99	25.41	1895.33	2,581.65
249+00	44.83	155.31	4632.30	18.35	35.81	1931.15	2,701.15
250+00	103.91	275.44	4907.74	21.13	73.11	2004.26	2,903.48
251+00	118.32	411.54	5319.28	18.48	73.35	2077.61	3,241.67
252+00	95.48	395.93	5715.20	29.63	89.09	2166.70	3,548.50
253+00	81.88	328.44	6043.65	30.17	110.74	2277.44	3,766.20
254+00	58	259.04	6302.69	26.04	104.09	2381.54	3,921.15
255+00	24.33	152.46	6455.15	21.08	87.26	2468.80	3,986.35
256+00	18.38	79.09	6534.24	21.19	78.28	2547.07	3,987.17
257+00	31.68	92.70	6626.94	32.41	99.26	2646.33	3,980.61
258+00	33.53	120.76	6747.70	43.73	141.00	2787.33	3,960.37
259+00	50.59	155.78	6903.48	42.63	159.93	2947.26	3,956.22
260+00	57.26	199.72	7103.20	41.77	156.30	3103.56	3,999.65
261+00	72.73	240.72	7343.93	3.81	84.41	3187.96	4,155.96
262+00	62.63	250.67	7594.59	3.13	12.85	3200.81	4,393.78
263+00	44.39	198.19	7792.78	12.33	28.63	3229.44	4,563.33
264+00	23.61	125.93	7918.70	9.99	41.33	3270.78	4,647.93
265+00	5.67	54.22	7972.93	18.39	52.56	3323.33	4,649.59
266+00	3.32	16.65	7989.57	23.45	77.48	3400.81	4,588.76
267+00	19.63	42.50	8032.07	22.26	84.65	3485.46	4,546.61
268+00	2.34	40.69	8072.76	32.26	100.96	3586.43	4,486.33
269+00	18.83	39.20	8111.96	12.43	82.76	3669.19	4,442.78
270+00	42.75	114.04	8226.00	16.28	53.17	3722.35	4,503.65
271+00	49.87	171.52	8397.52	16.26	60.26	3782.61	4,614.91
272+00	44.27	174.33	8571.85	18.58	64.52	3847.13	4,724.72
273+00	26.68	131.39	8703.24	19.89	71.24	3918.37	4,784.87
274+00	15.9	78.85	8782.09	2.56	41.57	3959.94	4,822.15
275+00	19.72	65.96	8848.06	12.29	27.50	3987.44	4,860.61
276+00	21.77	76.83	8924.89	11.8	44.61	4032.06	4,892.83
277+00	9.5	57.91	8982.80	12.26	44.56	4076.61	4,906.19
278+00	7.72	31.89	9014.69	12.18	45.26	4121.87	4,892.81
279+00	2.41	18.76	9033.44	18.68	57.15	4179.02	4,854.43
280+00	4.5	12.80	9046.24	21.78	74.93	4253.94	4,792.30
281+00	9.28	25.52	9071.76	18.45	74.50	4328.44	4,743.31
282+00	13.17	41.57	9113.33	15.27	62.44	4390.89	4,722.44
283+00	19.13	59.81	9173.15	12.13	50.74	4441.63	4,731.52
284+00	9.05	52.19	9225.33	13.69	47.81	4489.44	4,735.89
285+00	2.47	21.33	9246.67	16.88	56.61	4546.06	4,700.61
286+00	16.75	35.59	9282.26	17.82	64.26	4610.31	4,671.94
287+00	14.97	58.74	9341.00	11.86	54.96	4665.28	4,675.72
288+00	14.47	54.52	9395.52	7.28	35.44	4700.72	4,694.80
289+00	12.85	50.59	9446.11	4.9	22.56	4723.28	4,722.83
290+00	7.53	37.74	9483.85	8.31	24.46	4747.74	4,736.11
291+00	11.75	35.70	9519.56	18.53	49.70	4797.44	4,722.11
292+00	42.34	100.17	9619.72	62.41	149.89	4947.33	4,672.39

SUMMARY OF EARTHWORK

Station	Cut Area (SF)	Cut Volume (CY)	Cum Cut Vol (CY)	Fill Area (SF)	Fill Volume (CY)	Cum Fill Vol (CY)	Cum Net Vol (CY)
293+00	4.05	85.91	9705.63	27.74	166.94	5114.28	4,591.35
294+00	12.07	29.85	9735.48	13.57	76.50	5190.78	4,544.70
295+00	25.67	69.89	9805.37	8.36	40.61	5231.39	4,573.98
296+00	34.32	111.09	9916.46	8.49	31.20	5262.59	4,653.87
297+00	23.9	107.81	10024.28	11.98	37.91	5300.50	4,723.78
298+00	22.12	85.22	10109.50	11.27	43.06	5343.56	4,765.94
299+00	20.76	79.41	10188.91	7.32	34.43	5377.98	4,810.93
300+00	21.06	77.44	10266.35	11.9	35.59	5413.57	4,852.78
301+00	13.87	64.69	10331.04	8.8	38.33	5451.91	4,879.13
302+00	8.87	42.11	10373.15	14.11	42.43	5494.33	4,878.81
303+00	5.27	26.19	10399.33	24.21	70.96	5565.30	4,834.04
304+00	16	39.39	10438.72	23.2	87.80	5653.09	4,785.63
305+00	8.29	44.98	10483.70	23.18	85.89	5738.98	4,744.72
306+00	38.39	86.44	10570.15	25.89	90.87	5829.85	4,740.30
307+00	37.54	140.61	10710.76	42.96	127.50	5957.35	4,753.41
308+00	9.3	86.74	10797.50	18.42	113.67	6071.02	4,726.48
309+00	11.41	38.35	10835.85	12.77	57.76	6128.78	4,707.07
310+00	6.2	32.61	10868.46	8.91	40.15	6168.93	4,699.54
311+00	30.47	67.91	10936.37	12.35	39.37	6208.30	4,728.07
312+00	31.28	114.35	11050.72	11.82	44.76	6253.06	4,797.67
313+00	27.99	109.76	11160.48	12.82	45.63	6298.69	4,861.80
314+00	14.64	78.94	11239.43	9.86	42.00	6340.69	4,898.74
315+00	16.7	58.04	11297.46	11.07	38.76	6379.44	4,918.02
316+00	20.25	68.43	11365.89	9.96	38.94	6418.39	4,947.50
317+00	24.17	82.26	11448.15	8.57	34.31	6452.70	4,995.44
318+00	28.75	98.00	11546.15	9.06	32.65	6485.35	5,060.80
319+00	0.74	54.61	11600.76	22.39	58.24	6543.59	5,057.17
320+00	0	1.37	11602.13	27.18	91.80	6635.39	4,966.74
321+00	0	0.00	11602.13	22.35	91.72	6727.11	4,875.02
322+00	0	0.00	11602.13	34.92	106.06	6833.17	4,768.96
323+00	0	0.00	11602.13	26.95	114.57	6947.74	4,654.39
324+00	0	0.00	11602.13	29.81	105.11	7052.85	4,549.28
325+00	0.64	1.19	11603.31	26.23	103.78	7156.63	4,446.69
326+00	0.23	1.61	11604.93	28	100.43	7257.06	4,347.87

SUMMARY OF MAILBOX

STATION	LOCATION	MAILBOX INSTALL, SINGLE 629(A) (EA)	MAILBOX INSTALL, MULTIPLE 629(B) (EA)	MAILBOX 629(C) (EA)
230+02	RIGHT	1	-	1
233+78	RIGHT	-	1	2
234+81	RIGHT	1	-	1
237+70	RIGHT	1	-	1
239+00	RIGHT	1	-	1
241+56	RIGHT	1	-	1
242+54	RIGHT	1	-	1
244+64	RIGHT	1	-	1
248+24	RIGHT	-	1	2
266+53	LEFT	1	-	1
267+83	LEFT	1	-	1
294+94	LEFT	1	-	1
300+78	LEFT	1	-	1
TOTAL		11	2	15

SUMMARY OF SIGNS

STATION	LOCATION	SIGN	SIZE	SHEET ALUM SIGNS 850(A) (SF)	SQUARE TUBE POST 851(C) (LF)
221+10	18' RIGHT	R1-1E - STOP	36" X 36"	7.46	12
221+32	40' LEFT	R1-1E - STOP	36" X 36"	7.46	12
221+68	40' RIGHT	R1-1E - STOP	36" X 36"	7.46	12
221+91	18' LEFT	R1-1E - STOP	36" X 36"	7.46	12
246+37	25' RIGHT	R1-1E - STOP	36" X 36"	7.46	12
263+83	25' RIGHT	R1-1E - STOP	36" X 36"	7.46	12
269+12	30' RIGHT	R1-1E - STOP	36" X 36"	7.46	12
273+19	18' RIGHT	R1-1E - STOP	36" X 36"	7.46	12
274+07	35' LEFT	R1-1E - STOP	36" X 36"	7.46	12
274+43	35' RIGHT	R1-1E - STOP	36" X 36"	7.46	12
274+61	18' LEFT	R1-1E - STOP	36" X 36"	7.46	12
310+18	30' LEFT	R1-1E - STOP	36" X 36"	7.46	12
320+70	30' LEFT	R1-1E - STOP	36" X 36"	7.46	12
TOTAL				96.98	156

SUMMARY OF EROSION CONTROL

STATION	LOCATION	TEMP SILT FENCE 221(C) (LF)	TEMP SILT DIKE 221(F) (LF)	TYPE 1 PLAIN RIPRAP 601(A) (TONS)	DESCRIPTION
TEMPORARY SILT FENCE					
265+25 - 267+25	LEFT	200	-	-	PLACED AT TOE OF SLOPE SEE O.D.O.T. STANDARD TSC2-3-2
279+00 - 281+00	RIGHT	200	-	-	
308+00 - 310+00	RIGHT	200	-	-	
319+00 - 326+00	RIGHT	700	-	-	
321+00 - 326+00	LEFT	500	-	-	
TEMPORARY SILT DIKE					
221+00	LEFT AND RIGHT	-	16	-	8 LF OF SILT DIKE PLACED IN FLOWLINE OF EACH DITCH SEE O.D.O.T. STANDARD TSD-2-0
222+00	LEFT AND RIGHT	-	16	-	
224+00	LEFT AND RIGHT	-	16	-	
226+00	LEFT AND RIGHT	-	16	-	
228+00	LEFT AND RIGHT	-	16	-	
230+00	LEFT AND RIGHT	-	16	-	
232+00	LEFT AND RIGHT	-	16	-	
233+85	RIGHT	-	8	-	
234+00	LEFT	-	8	-	
236+00	LEFT AND RIGHT	-	16	-	
238+00	LEFT AND RIGHT	-	16	-	
240+00	LEFT AND RIGHT	-	16	-	
242+00	LEFT AND RIGHT	-	16	-	
244+00	LEFT AND RIGHT	-	16	-	
246+00	LEFT AND RIGHT	-	16	-	
249+00	LEFT AND RIGHT	-	16	-	
251+00	LEFT AND RIGHT	-	16	-	
253+00	LEFT AND RIGHT	-	16	-	
255+00	LEFT AND RIGHT	-	16	-	
257+00	LEFT AND RIGHT	-	16	-	
258+00	LEFT AND RIGHT	-	16	-	
260+00	LEFT AND RIGHT	-	16	-	
263+00	LEFT AND RIGHT	-	16	-	
265+00	LEFT AND RIGHT	-	16	-	
267+00	RIGHT	-	8	-	
268+50	LEFT	-	8	-	
271+00	LEFT AND RIGHT	-	16	-	
273+00	LEFT AND RIGHT	-	16	-	
276+00	LEFT AND RIGHT	-	16	-	
278+00	LEFT AND RIGHT	-	16	-	
280+00	LEFT	-	8	-	
282+00	LEFT AND RIGHT	-	16	-	
284+00	LEFT AND RIGHT	-	16	-	
286+00	LEFT AND RIGHT	-	16	-	
288+00	LEFT	-	8	-	
290+00	LEFT	-	8	-	
292+00	LEFT	-	8	-	
294+00	LEFT AND RIGHT		16		
298+00	LEFT AND RIGHT		16		
300+00	LEFT AND RIGHT	-	16	-	
302+00	LEFT AND RIGHT	-	16	-	
304+00	LEFT AND RIGHT	-	16	-	
305+00	LEFT AND RIGHT	-	16	-	
307+00	LEFT AND RIGHT	-	16	-	
309+00	LEFT	-	8	-	
311+00	LEFT AND RIGHT	-	16	-	
313+00	LEFT AND RIGHT	-	16	-	
315+00	LEFT AND RIGHT		16		
318+00	LEFT AND RIGHT	-	16		
TYPE 1 PLAIN RIPRAP					
257+00 - 258+00	RIGHT	-	-	30	PLACED IN FLOWLINE OF DITCH SEE DETAIL SHEET 4
286+00 - 288+33	RIGHT	-	-	70	
288+81 - 292+00	RIGHT	-	-	96	
TOTAL		1,800	712	196	

WAGONER COUNTY ONETA ROAD – 101st to 121st

SUMMARY OF QUANTITIES

S.A. PROJECT NO. CIRB-173C(146)RB Sheet No. 6

SUMMARY OF MAINLINE PAVING

STATION	WIDTH	SUPERPAVE TYPE S3 411(B) (TON)	SUPERPAVE TYPE S4 411(C) (TON)	SUBGRADE METH B 310(B) (SY)	AGG BASE TYPE A 303(A) (CY)	COMB CURB/GUTTER 609(B) (LF)	T.B.S.C. TYPE E 402(E) (TON)	TACK COAT 407(B) (GAL)	PRIME COAT 408 (GAL)
TYPICAL SECTION 1									
221+00 - 225+50	30'-0"	336	168	1,600	267	-	59	225	1,975
251+00 - 262+50	30'-0"	859	429	4,089	681	-	150	575	5,047
TYPICAL SECTION 2									
225+50 - 251+00	30'-0"	635	952	3,400	567	-	332	1,275	4,108
262+50 - 268+00	30'-0"	137	205	733	122	-	72	275	886
268+90 - 319+00	30'-0"	1,247	1,870	6,680	1,113	-	651	2,505	8,072
TYPICAL SECTION 3									
268+00 - 268+90	30'-6"	18	31	120	20	90	6	42	145
TYPICAL SECTION 4									
319+00 - 326+54	31'-0"	106	241	1,005	168	1,508	-	323	1,215
TOTAL		3,337	3,897	17,628	2,938	1,598	1,268	5,219	21,448

SUMMARY OF FENCE

STATION LEFT START	OFFSET	STOP	OFFSET	FENCE, WWF 624(A)	FENCE, SWF 624(C)	FENCE, CLF 624(E)
221+78	39.85	234+71	39.77		1,293	
248+59	38.53	261+08	39.91		1,249	
268+17	39.69	273+95	42.23		578	
284+91	32.68	291+00	32.10		609	
291+00	32.10	291+50	47.10		50	
291+50	47.10	292+50	47.08		100	
292+50	47.08	293+00	32.08		50	
293+00	32.08	294+88	32.06		188	
295+21	32.06	296+13	32.05			92
296+13	32.05	300+57	32.02	444		
302+25	33.18	303+22	33.90			97
305+37	35.47	307+60	36.63			223
313+13	33.34	317+34	33.18			421
TOTAL				444	4,117	833

STATION RIGHT START	OFFSET	STOP	OFFSET	FENCE, WWF 624(A)	FENCE, SWF 624(C)	FENCE, CLF 624(E)
221+77	40.15	228+11	37.36		634	
228+11	37.36	231+07	38.65	296		
231+07	38.65	232+36	39.21		129	
232+55	39.29	233+96	39.90	141		
261+07	40.09	263+46	40.17			239
237+00	41.00	237+42	41.14			42
237+56	41.18	238+00	41.33			44
238+00	41.33	239+08	41.69	108		
239+24	41.75	241+30	42.43		206	
241+50	42.41	242+24	42.35			74
248+19	41.70	261+07	40.09	1,288		
264+48	40.26	266+36	40.42			188
270+83	39.14	273+37	38.03			254
274+55	37.58	284+81	37.30		1,026	
291+50	57.90	292+50	57.92		100	
292+50	57.92	293+00	37.92		50	
293+00	37.92	298+83	37.97		583	
299+09	37.97	303+50	35.90		441	
303+50	35.90	304+00	45.53		50	
304+00	45.53	304+50	45.17		50	
304+50	45.17	305+00	34.80		50	
310+55	35.13	313+71	37.01		316	
314+13	37.06	321+79	37.67		766	
TOTAL				1,833	4,401	841

SUMMARY OF SIDE ROADS/DRIVES AND SIDE DRAINS

STATION	LOCATION	LENGTH	WIDTH	RADIUS	CORR. POLY. PIPE 613(E) 18"	CULV. END TRMT. 613(M) TYPE A4	R.C.P., ROUND 613(A) 18"	R.C.P., ROUND 613(A) 24"	P.C.E.S., ROUND 613(L) 18"	P.C.E.S., ROUND 613(L) 24"	SUPERPAVE TYPE S4 411(C) (TON)
221+50	RIGHT	35	30	25	-	-	-	56	-	2	14
221+50	LEFT	35	30	25	-	-	-	56	-	2	14
229+78	RIGHT	23	12	10	34	2	-	-	-	-	4
230+29	LEFT	27	12	10	34	2	-	-	-	-	4
232+45	RIGHT	24	12	10	34	2	-	-	-	-	4
234+07	RIGHT	25	12	10	34	2	-	-	-	-	4
234+95	RIGHT	25	12	10	34	2	-	-	-	-	4
237+49	RIGHT	26	12	10	34	2	-	-	-	-	4
239+16	RIGHT	27	12	10	34	2	-	-	-	-	4
241+39	RIGHT	27	12	10	34	2	-	-	-	-	4
242+35	RIGHT	27	15	10	38	2	-	-	-	-	6
244+49	RIGHT	27	12	10	34	2	-	-	-	-	4
246+25	RIGHT	27	18	10	40	2	-	-	-	-	7
248+04	RIGHT	27	12	10	34	2	-	-	-	-	4
248+20	LEFT	23	16	10	38	2	-	-	-	-	5
261+22	LEFT	25	12	10	-	-	-	-	-	-	4
263+75	RIGHT	25	12	10	34	2	-	-	-	-	4
264+00	LEFT	25	12	10	34	2	-	-	-	-	4
266+20	RIGHT	25	16	10	38	2	-	-	-	-	5
266+83	LEFT	25	20	25	-	-	-	-	-	-	7
268+00	LEFT	25	12	15	36	2	-	-	-	-	4
268+16	RIGHT	-	-	-	-	-	60	-	1	-	-
268+80	RIGHT	-	-	-	-	-	30	-	1	-	-
269+03	RIGHT	35	20	15	-	-	42	-	2	-	10
270+69	RIGHT	24	18	10	44	2	-	-	-	-	6
274+24	LEFT	35	30	20	-	-	-	-	-	-	14
274+27	RIGHT	35	30	20	-	-	-	-	-	-	14
276+68	LEFT	18	12	10	34	2	-	-	-	-	3
277+67	LEFT	18	16	10	38	2	-	-	-	-	4
279+68	LEFT	18	24	10	46	2	-	-	-	-	6
283+10	LEFT	18	14	10	36	2	-	-	-	-	3
284+73	LEFT	18	24	10	46	2	-	-	-	-	6
288+57	RIGHT	23	18	10	48	2	-	-	-	-	6
295+10	LEFT	17	12	10	-	-	-	-	-	-	3
298+97	RIGHT	23	12	10	34	2	-	-	-	-	4
301+09	LEFT	17	16	10	38	2	-	-	-	-	4
303+41	LEFT	19	18	10	-	-	-	-	-	-	5
308+37	RIGHT	19	40	15	-	-	-	-	-	-	10
310+34	LEFT	20	24	15	46	2	-	-	-	-	7
310+40	RIGHT	20	12	10	34	2	-	-	-	-	3
313+94	RIGHT	22	28	15	50	2	-	-	-	-	8
320+86	LEFT	18	24	15	-	-	-	-	-	-	6
322+60	RIGHT	23	30	10	52	2	-	-	-	-	9
323+82	LEFT	16	26	10	-	-	-	-	-	-	6
TOTAL					1,144	60	132	112	4	4	254

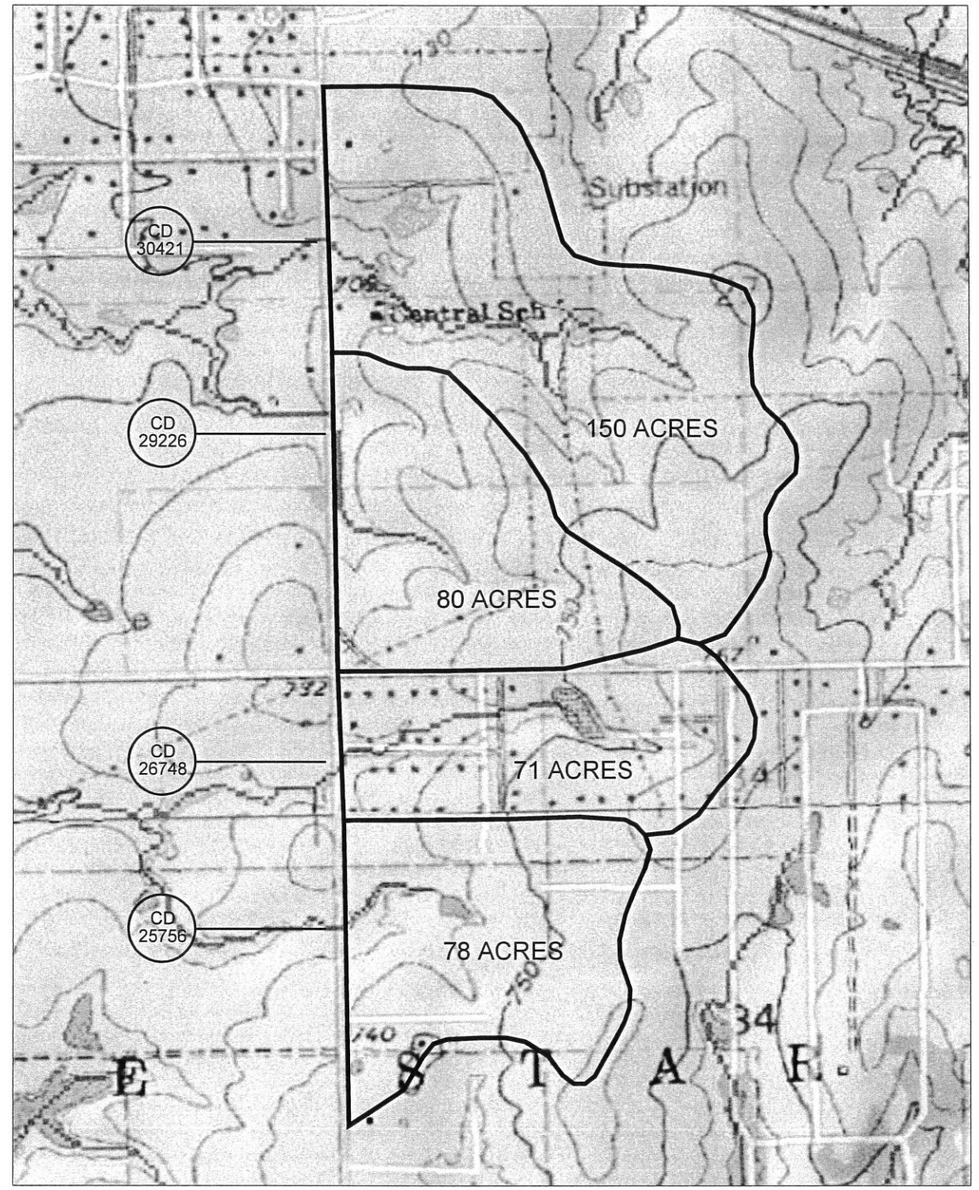
SUMMARY OF CROSS DRAINS

STRUCTURE NUMBER	STATION	DESCRIPTION	DESIGN	RCP, ROUND 30" DIA 613(A) LF	PCES, ROUND 30" 613(L) EA	CLASS AA CONCRETE 509(A) CY	REINFORCING STEEL 511(A) LBS
CD25756	257+56	(2) 30" DIA X 40' LONG REIFORCED CONCRETE PIPE W/P.C.E.S.	SPI-4, SPB-1, FHTCP-3, PCES-4	80	2	-	-
CD26748	267+48	8' X 3' X 36' LONG REINFORCED CONCRETE BOX	RCB-C1-8(2-14), RCB-E1-H3-0, RCB-CW1-D4-0	-	-	61	8,675
CD29226	292+26	10' X 5' X 36' LONG REINFORCED CONCRETE BOX	RCB-C1-10(2-14), RCB-E1-H5-0, RCB-CW1-D4-0	-	-	100	15,751
CD30421	304+21	8' X 6' X 36' LONG REINFORCED CONCRETE BOX	RCB-C1-8(2-14), RCB-E1-H6-0, RCB-CW1-D4-0	-	-	107	15,614
TOTAL				80	2	268	40,040

WAGONER COUNTY ONETA ROAD – 101st to 121st

SUMMARY OF QUANTITIES

S.A. PROJECT NO. CIRB-173C(146)RB Sheet No. 7



1" = 500'

DRAINAGE STRUCTURE DESIGN RECORD

STRUCTURE NO.	℄ STATION	EXISTING STRUCTURE SIZE AND TYPE	PROPOSED STRUCTURE SIZE AND TYPE	DRAINAGE AREA (ACRES)	Tc TIME OF CONCENTRATION (MIN)	DESIGN YEAR DISCHARGE CUBIC FEET/SECOND		FL INLET ELEV	FL OUTLET ELEV	PROPOSED STRUCTURE HEADWATER ELEVATION		DESIGN YEAR VELOCITY FEET/SECOND	
						Q50	Q100			Q50	Q100	V50	V100
CD25756	257+56	12" DIA X 26' LONG CMP	(2) 30" DIA X 40' LONG RCP	78	44.72	121.45	134.94	726.50	726.00	730.76	731.17	11.27	11.61
CD26748	267+48	EXISTING BOX STRUCTURE	8' X 3' X 36' LONG RCB	71	31.12	196.77	218.63	723.25	723.00	727.84	727.99	10.82	10.90
CD29226	292+26	10' X 6' X 26' LONG RCB	10' X 5' X 36' LONG RCB	80	46.20	122.15	135.72	704.00	703.75	706.55	706.74	8.95	9.22
CD30421	304+21	8' X 6' X 26' LONG RCB	8' X 6' X 36' LONG RCB	150	65.19	184.51	205.01	699.75	699.50	703.66	703.95	10.62	10.94

WAGONER COUNTY ONETA ROAD – 101st to 121st

DRAINAGE AREA MAP

S.A. PROJECT NO. CIRB-173C(146)RB Sheet No. 8

SITE DESCRIPTION

PROJECT LIMITS: B.O.P. STARTING NEAR THE INTERSECTION OF ONETA ROAD AND EAST 121ST STREET SOUTH, NEAR THE SOUTHWEST CORNER OF SECTION 34 T18N R15E, IN WAGONER COUNTY, AND EXTENDING NORTH TWO MILES NEAR THE INTERSECTION OF ONETA ROAD AND EAST 101ST STREET SOUTH.

LATITUDE AND LONGITUDE OF BOP: LATITUDE 35° 57' 06" N LONGITUDE 95° 39' 03" W

PROJECT DESCRIPTION: ASPHALT OVERLAY AND WIDENING OF AN EXISTING PAVED ROADWAY INCLUDING FULL RECONSTRUCTION AREAS AND DRAINAGE STRUCTURE REPLACEMENTS. ALSO INCLUDES REGRADING OF ROADSIDE DRAINAGE.

SUGGESTED SEQUENCE OF EROSION CONTROL ACTIVITIES:

1. INSTALL TRAFFIC CONTROL.
2. PERFORM CLEARING AND GRUBBING OPERATIONS, PRESERVING VEGETATION IF POSSIBLE.
3. REMOVE AND STOCKPILE TOPSOIL.
4. INSTALL TEMPORARY SEDIMENT CONTROL AS AREAS BECOME DISTURBED.
5. REPLACE EXISTING DRAINAGE STRUCTURES AND CONSTRUCT FENCING.
6. COMPLETE ROADWAY GRADING.
7. INSTALL VEGETATIVE MULCHING AS GRADING PROCEEDS.
8. COMPLETE PAVING OPERATIONS.
9. COMPLETE SIGNING AND STRIPING OPERATIONS.
10. REMOVE TEMPORARY SEDIMENT CONTROL AS GRASS IS ESTABLISHED (70% COVER)

AREA TO BE DISTURBED: APPROXIMATELY 19 ACRES

NOTE: THIS AREA IS TO BE CALCULATED AS "R/W TO R/W" FOR EXTENDS OF THE PROJECT. INCLUDING ANY INCIDENTAL CONSTRUCTION.

OFFSITE AREA TO BE DISTURBED: _____

(FOR CONTRACTOR USE)

WEIGHTED RUNOFF COEFFICIENT:

BEFORE CONSTRUCTION: 0.35

AFTER CONSTRUCTION: 0.35

NOTE: THIS SHOULD BE DETERMINED BY THE HYDRAULIC DESIGNER FOR THE PROJECT. THIS VALUE SHOULD BE THE AVERAGE "C" FACTOR USED ON THE PROJECT. IT SHOULD BE BASED ON THE ANTICIPATED FUTURE LAND USE.

NAME OF RECEIVING WATERS: BROKEN ARROW CREEK, ARKANSAS RIVER

NOTE: THIS SHOULD DESCRIBE EACH NAMED CREEK, RIVER OR BODY OF WATER WHICH IS RECEIVING STORM WATER RUNOFF.

NOTE:
THIS SHEET SHOULD BE USED IN CONJUCTION WITH A DRAINAGE MAP THAT ILLUSTRATES THE DRAINAGE CHARACTERISTICS AND RECEIVING WATERS FOR THIS PROJECT. THIS SHEET SHOULD ALSO BE USED WITH THE EROSION CONTROL SUMMARIES, PAY ITEMS, & NOTES.

EROSION AND SEDIMENT CONTROLS

SOIL STABILIZATION PRACTICES:

- X TEMPORARY SEEDING
- X PERMANENT SODDING, SPRIGGING OR SEEDING
- X VEGETATIVE MULCHING
- ___ SOIL RETENTION BLANKET
- X PRESERVATION OF EXISTING VEGETATION

NOTE: TEMPORARY EROSION CONTROL METHODS MUST BE USED ON ALL DISTURBED AREAS WHERE CONSTRUCTION ACTIVITIES HAVE CEASED FOR OVER 21 DAYS. METHODS USED WILL BE AS SHOWN ON PLANS, OR AS DIRECTED BY THE ENGINEER.

STRUCTURAL PRACTICES:

- ___ TEMPORARY BRUSH SEDIMENT BARRIERS
- X TEMPORARY SILT FENCE
- X TEMPORARY SILT DIKES
- ___ TEMPORARY BALE BARRIERS
- ___ DIVERSION, INTERCEPTOR OR PERIMETER DIKES
- ___ DIVERSION, INTERCEPTOR OR PERIMETER SWALES
- ___ SANDBAG BERMS
- ___ ROCK FILTER DAMS
- ___ TEMPORARY SLOPE DRAINS
- ___ PAVED DITCH W/ DITCH LINER PROTECTION
- ___ TEMPORARY DIVERSION CHANNELS
- X RIP RAP
- ___ TEMPORARY STREAM CROSSINGS
- ___ TEMPORARY SEDIMENT BASINS
- ___ TEMPORARY SEDIMENT TRAPS
- ___ TEMPORARY SEDIMENT FILTERS
- X TEMPORARY SEDIMENT REMOVAL
- ___ INLET SEDIMENT FILTERS
- X STABILIZED CONSTRUCTION EXIT

OFFSITE VEHICLE TRACKING:

- X HAUL ROADS DAMPENED FOR DUST CONTROL
- X LOADED HAUL TRUCKS TO BE COVERED WITH TARPAULIN
- ___ EXCESS DIRT ON ROAD REMOVED DAILY

NOTES:

CONTRACTOR SHALL REMOVE ALL SEDIMENTATION DEVICES FROM PROJECT LIMITS AFTER CONSTRUCTION IS COMPLETED.

THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE FOLLOWING:

MAINTENANCE AND INSPECTION:

All erosion and sediment controls will be maintained in good working order from the beginning of construction until an acceptable vegetative cover is established. Inspection by the Contractor and any necessary repairs shall be performed once every 7 calendar days and within 24 hours after any storm event greater than one-half (0.5) inch as recorded by a non-freezing rain gauge to be located on site. Potentially erodible areas, drainageways, material storage, structrual devices, construction entrances and exits along with erosion and sediment control location are examples of sites that need to be inspected.

WASTE MATERIALS:

Proper management and disposal of construction waste material is required by the Contractor. Materials include stockpiles, surplus, debris and other by-products from the construction process. Practices include disposal, proper materials handling, spill prevention, and cleanup measures. Controls and practices shall meet the requirements of all Federal, State and Local agencies.

HAZARDOUS MATERIALS:

Proper management and disposal of hazardous waste materials is required. The Contractor is responsible for following manufacturer's recommendations, State and Federal regulations to ensure correct handling, disposal spill prevention and cleanup measures. Examples include but are not limited to: paints, acids, cleaning solvents, chemical additives, concrete curing compounds and contaminated soils.

GENERAL NOTES:

A Storm Water Pollution Prevention Plan (SWPPP) is required to comply with the Oklahoma Pollution Discharge Elimination System (OPDES) regulations. This plan is initiated during the design phase, confirmed in the pre-work meeting and available on the job site along with copies of the Notice of Intent (NOI) forms that have been filed with the Enviromental Protection Agency (EPA). The plan must be kept current with up-to-date amendments during the progression of the project. The basic goal of the stormwater management is to improve water quality by reducing pollutants in storm water discharges. Runoff from construction sites has a potential for pollution due to exposed soils and presence of hazardous materials used in the construction process. The prevention of soil erosion, containment of hazardous materials and/or the interception of these pollutants before they leave the construction site are the best practices for controlling storm water pollution.

The following Subsections of the 2009 ODOT Standard Specifications should be noted:

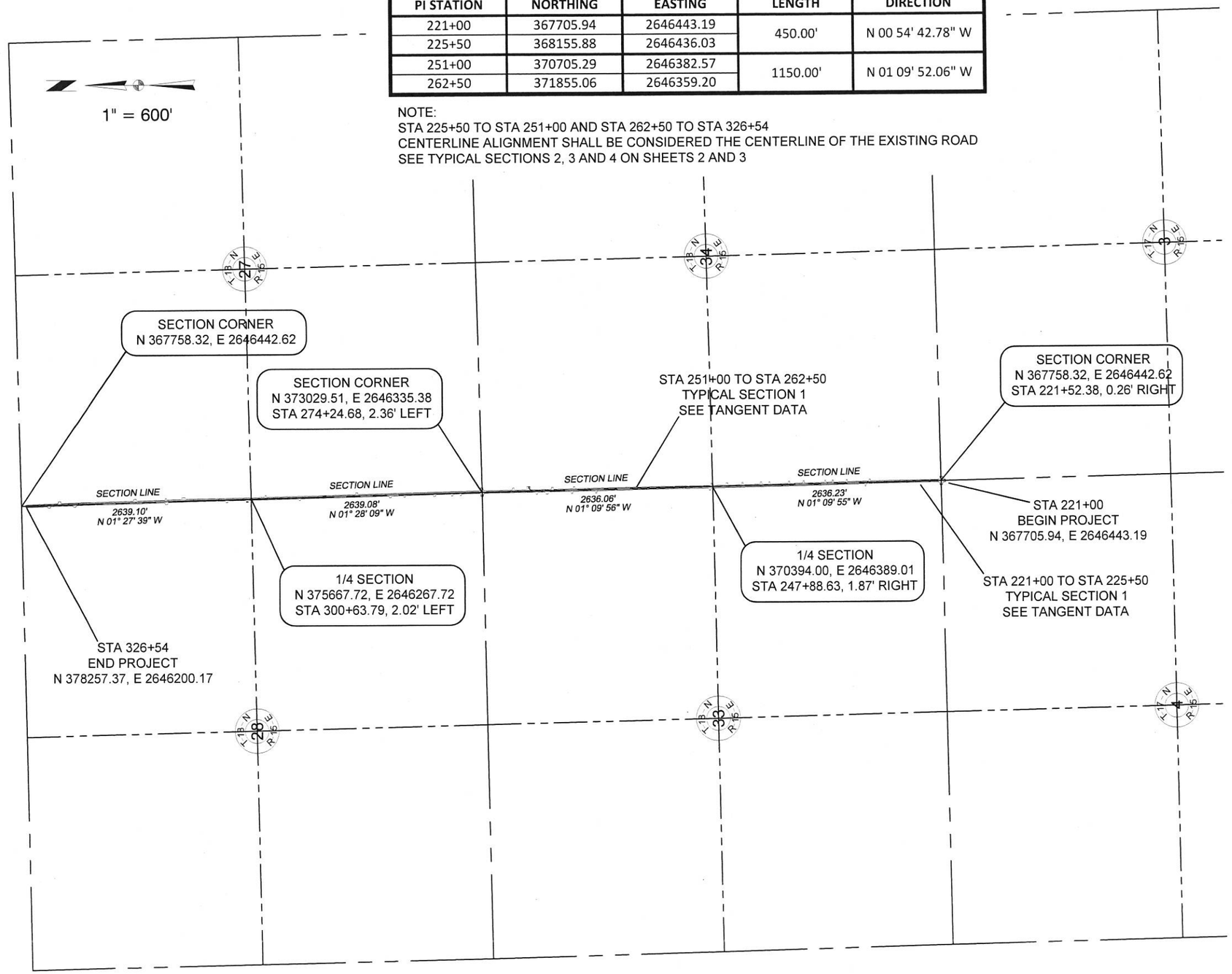
103.05	Bonding Requirements
104.10	Final Cleaning Up
104.12	Contractor's Responsibility for Work
104.13	Environmental Protection
106.08	Storage and Handling of Materials
107.01	Laws, Rules and Regulations To Be Observed
107.20	Stormwater Management
220	Management of Erosion, Sedimentation, and Stormwater Pollution Prevention and Control
221	Temporary Sediment Control

IN ADDITION:

"ODEQ GENERAL PERMIT (OKR10) FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES WITHIN THE STATE OF OKLAHOMA" ODEQ, WATER QUALITY DIVISION, SEPTEMBER 13, 2012.

ALIGNMENT - TYPICAL SECTION 1 - TANGENT DATA				
PI STATION	NORTHING	EASTING	LENGTH	DIRECTION
221+00	367705.94	2646443.19	450.00'	N 00 54' 42.78" W
225+50	368155.88	2646436.03		
251+00	370705.29	2646382.57	1150.00'	N 01 09' 52.06" W
262+50	371855.06	2646359.20		

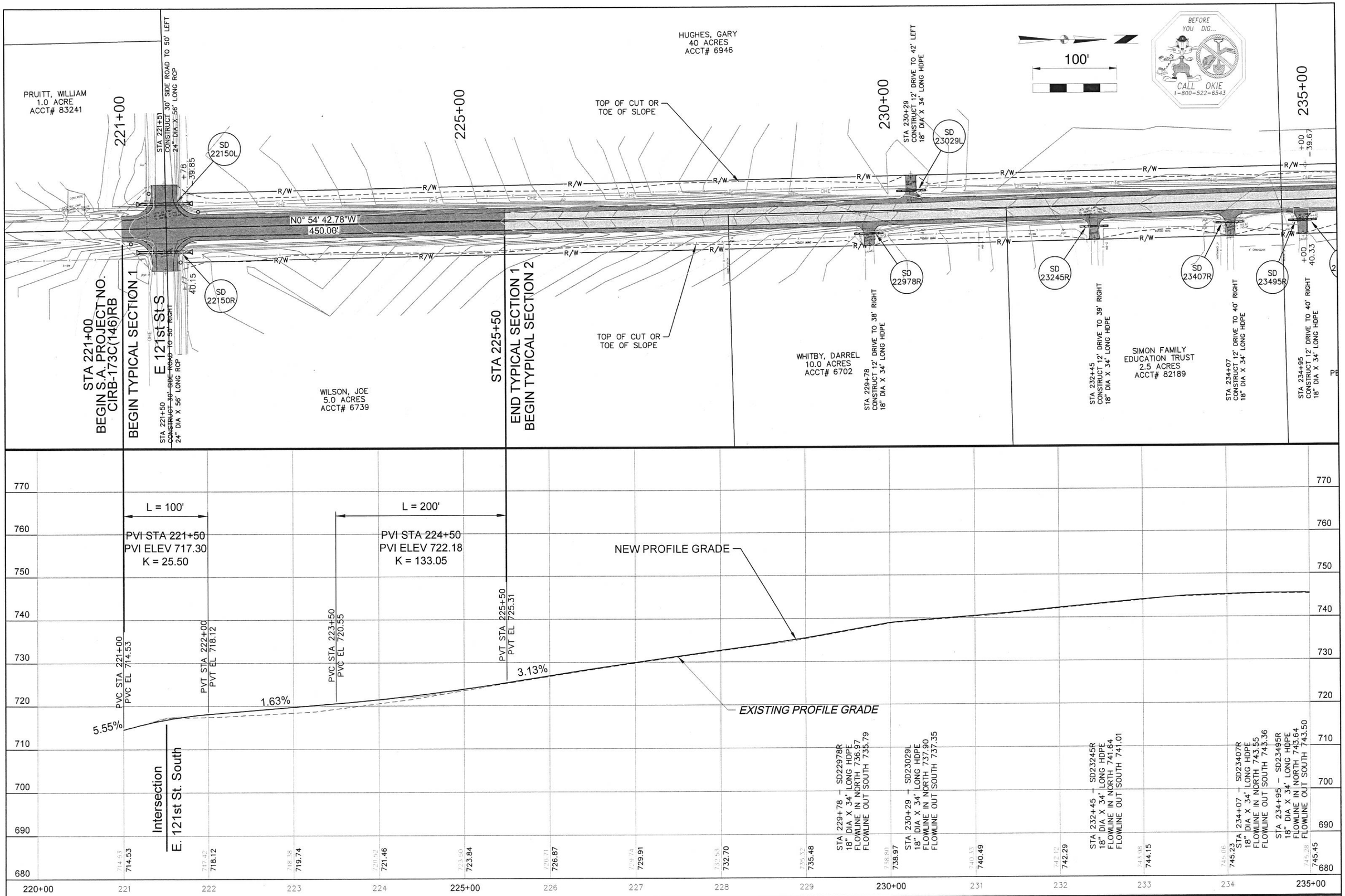
NOTE:
STA 225+50 TO STA 251+00 AND STA 262+50 TO STA 326+54
CENTERLINE ALIGNMENT SHALL BE CONSIDERED THE CENTERLINE OF THE EXISTING ROAD
SEE TYPICAL SECTIONS 2, 3 AND 4 ON SHEETS 2 AND 3



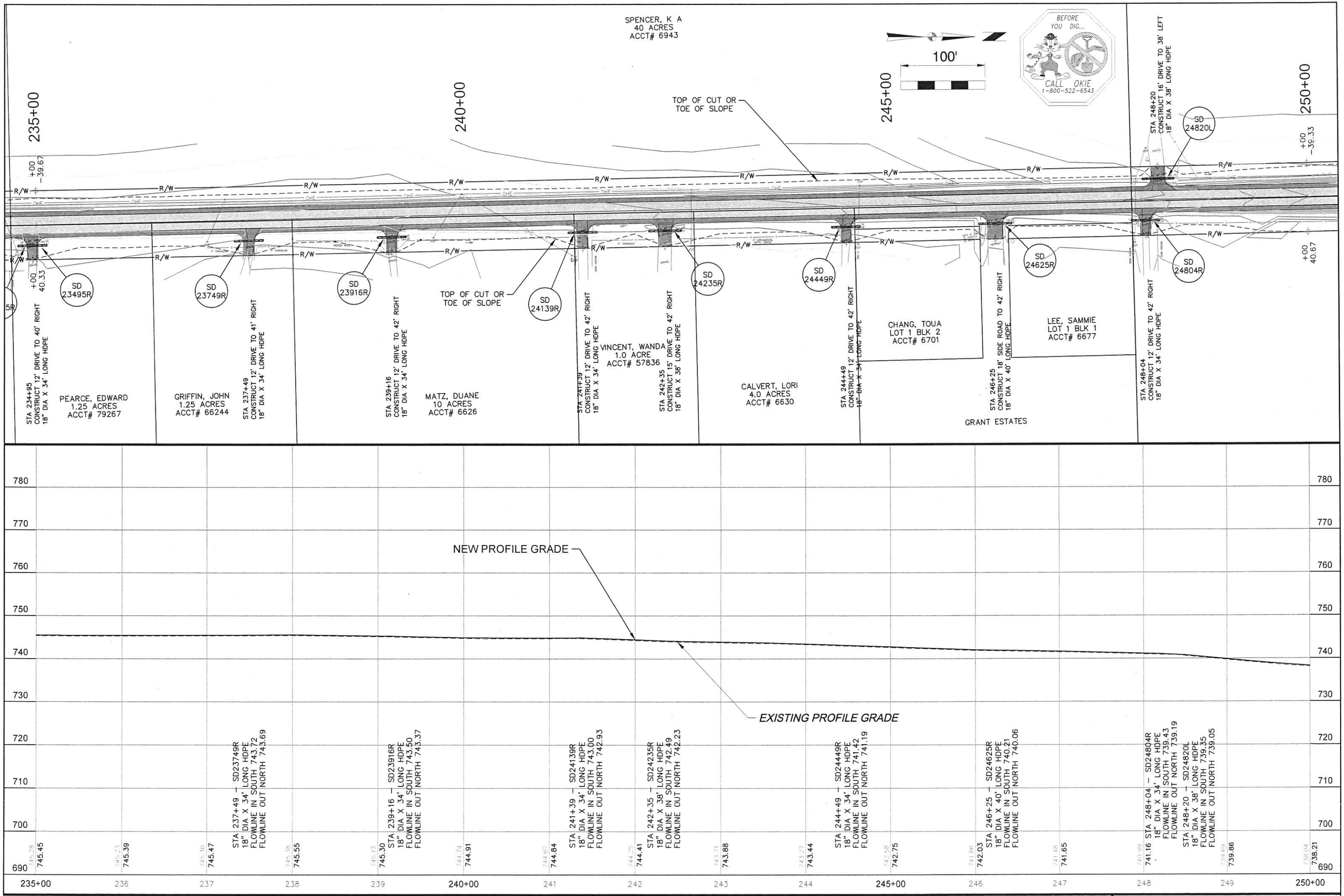
WAGONER COUNTY ONETA ROAD – 101st to 121st

SURVEY DATA

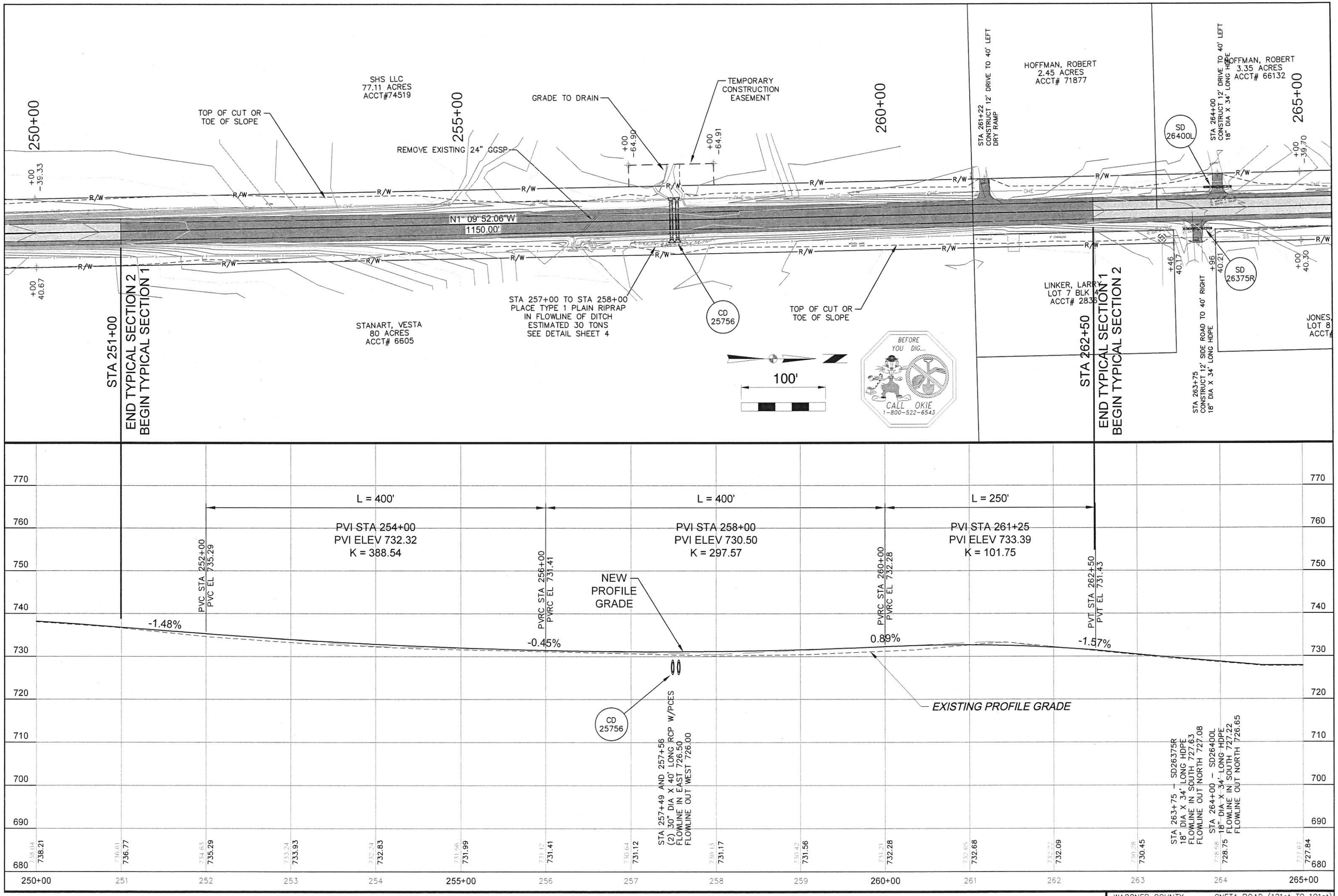
S.A. PROJECT NO. CIRB-173C(146)RB Sheet No. 10



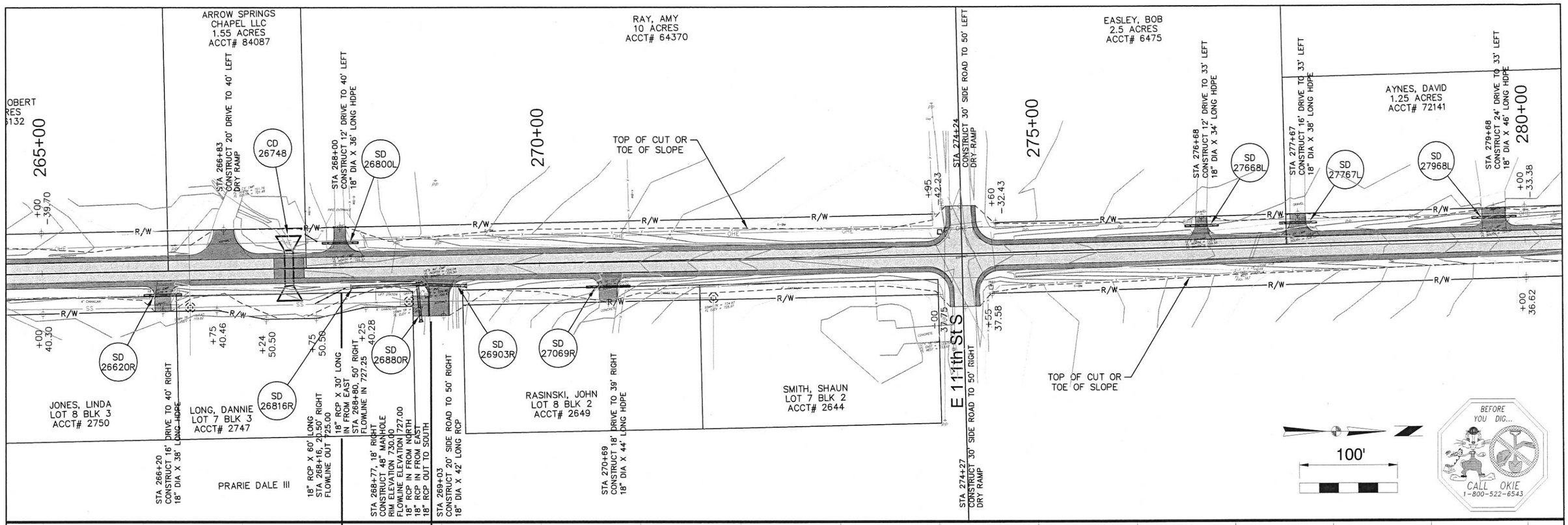
WAGONER COUNTY ONETA ROAD (121st TO 101st)
S.A. Project No. CIRB-173C(146)RB Sheet No. 11



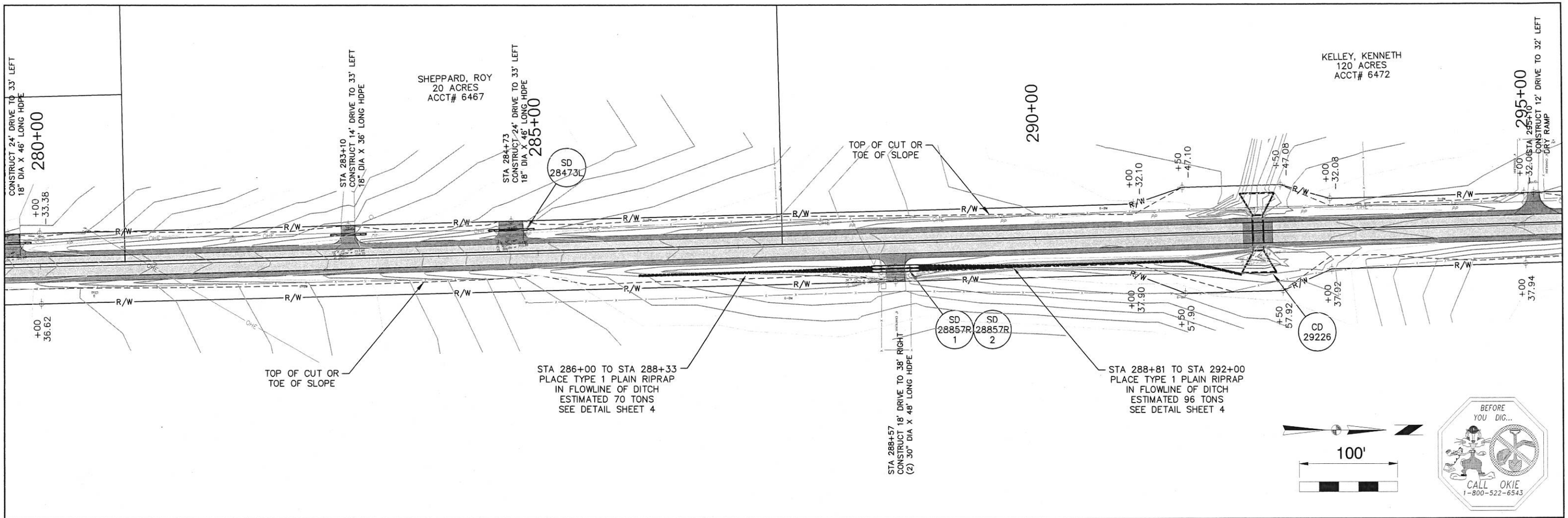
WAGONER COUNTY ONETA ROAD (121st TO 101st)
S.A. Project No. CIRB-173C(146)RB Sheet No. 12

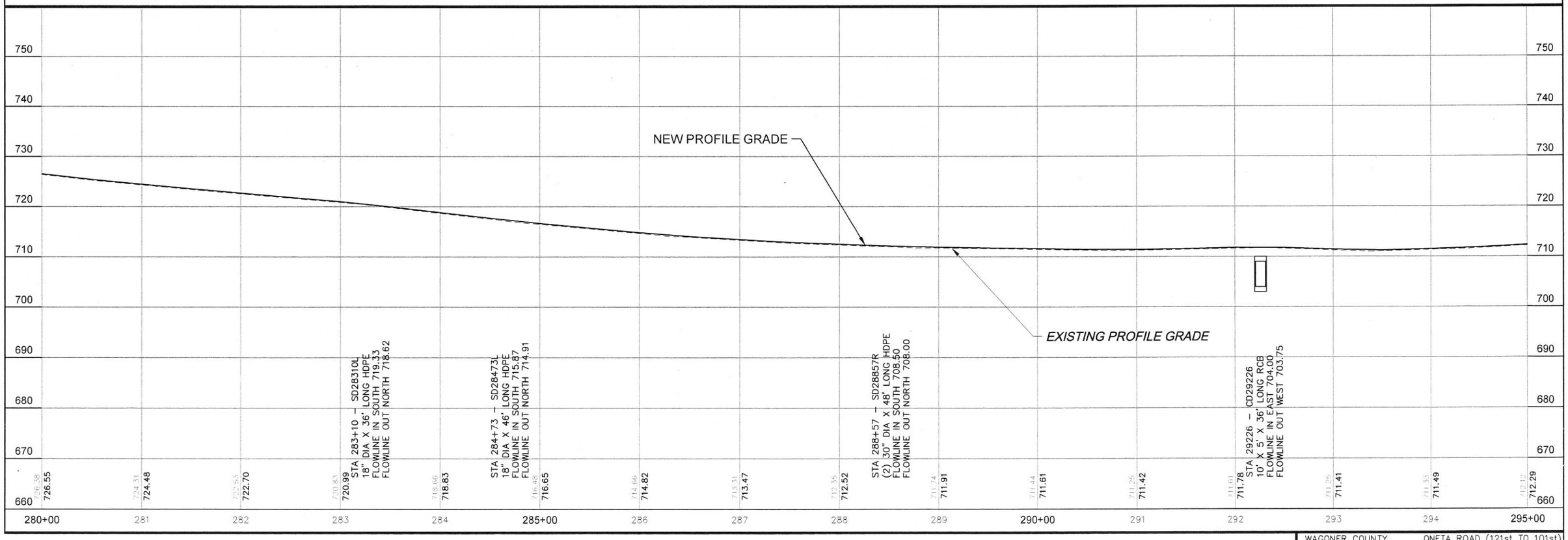


WAGONER COUNTY ONETA ROAD (121st TO 101st)
S.A. Project No. CIRB-173C(146)RB Sheet No. 13

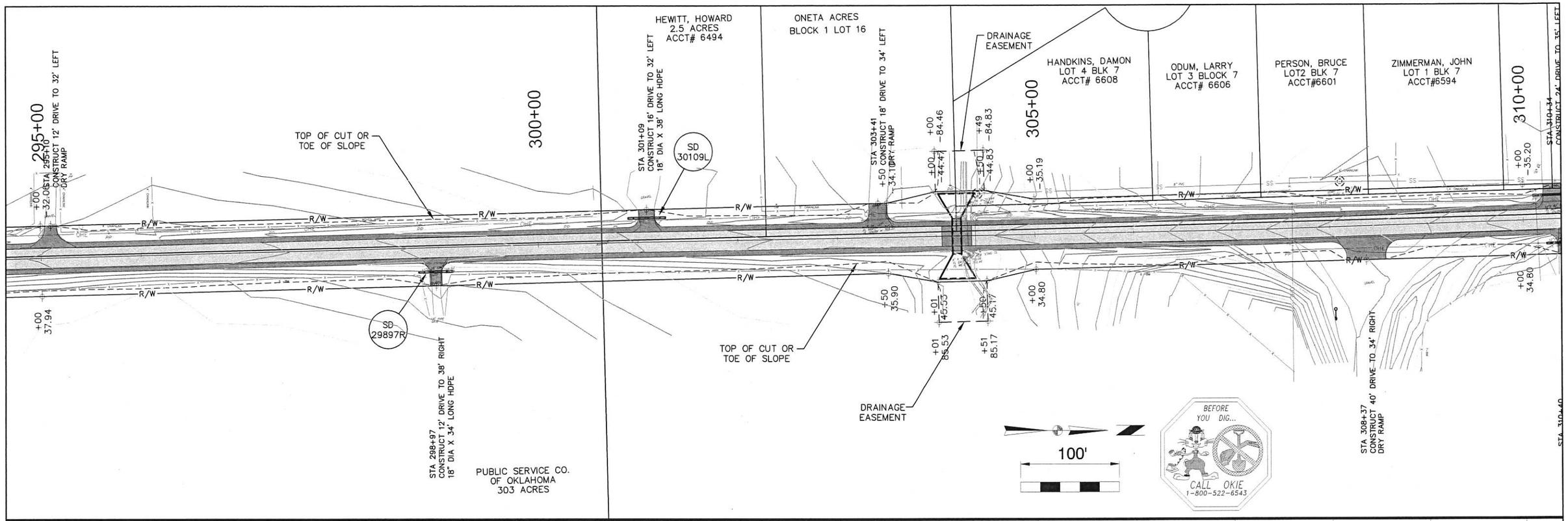


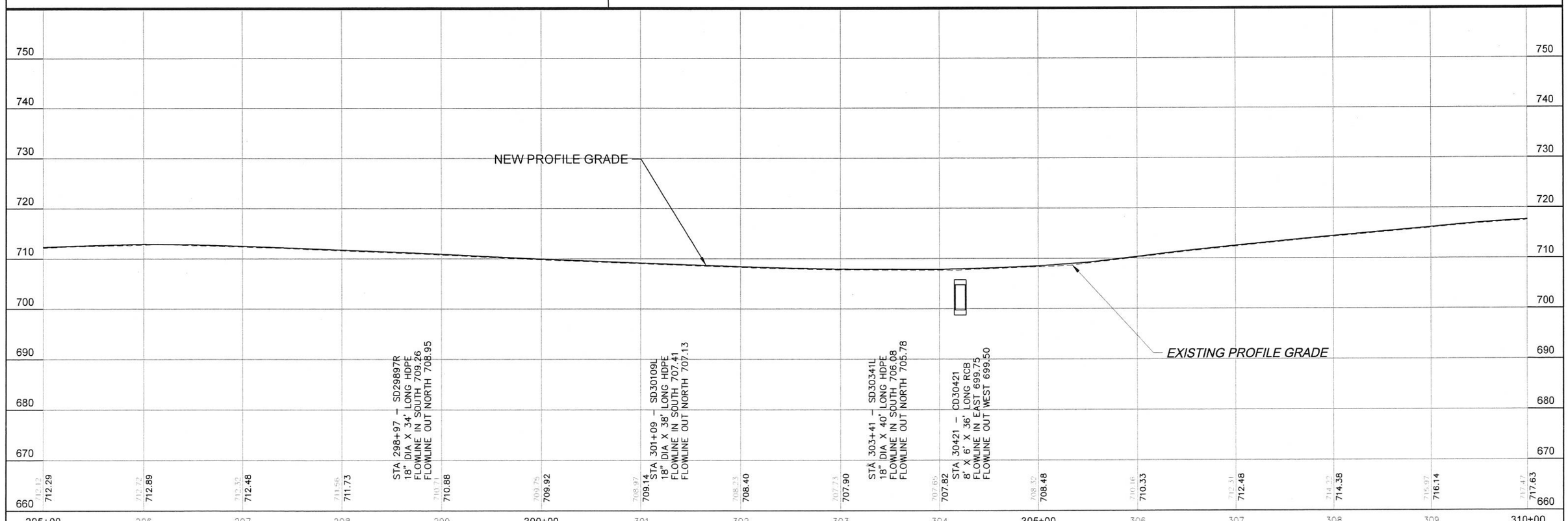
WAGONER COUNTY ONETA ROAD (121st TO 101st)
S.A. Project No. CIRB-173C(146)RB Sheet No. 14



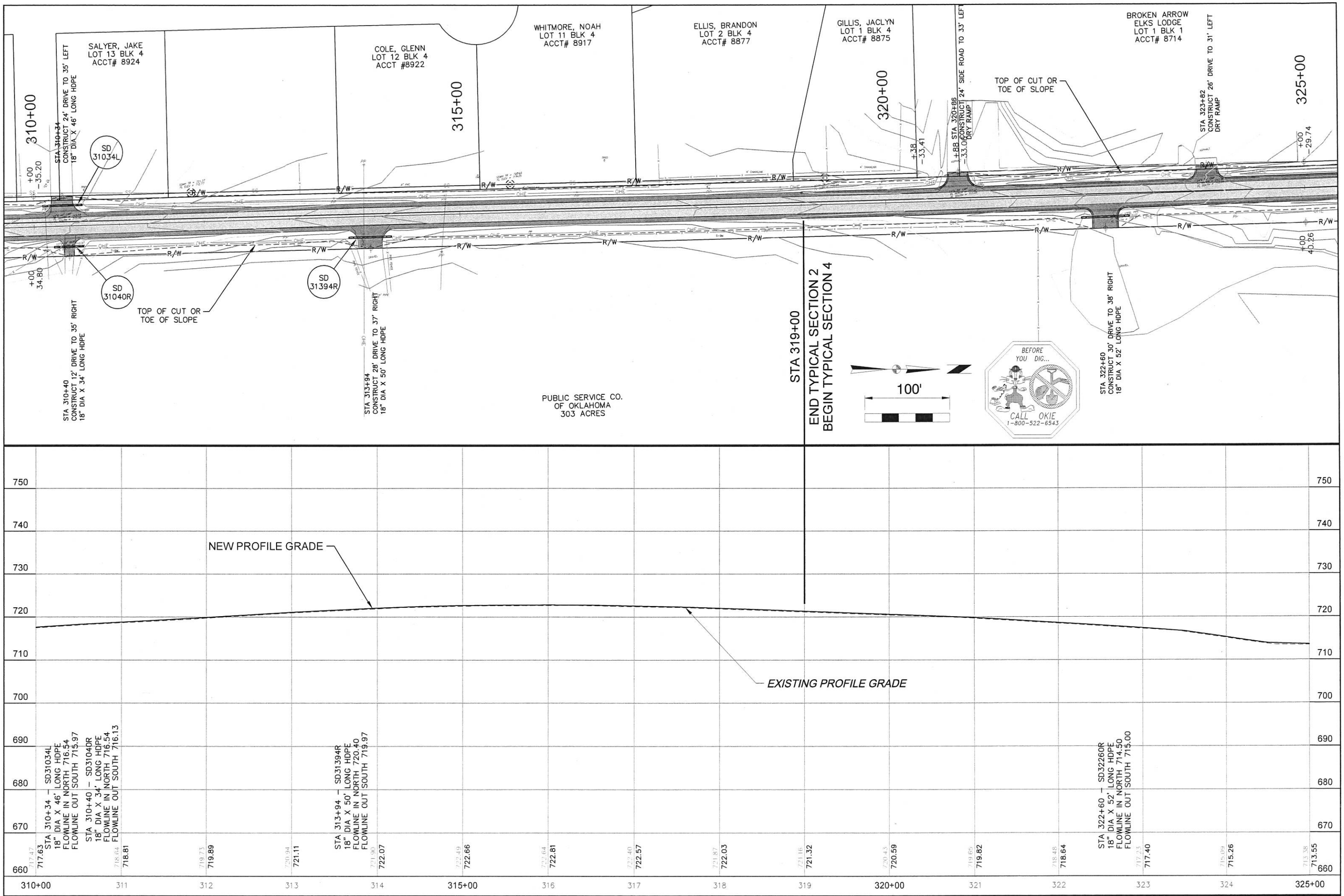


WAGONER COUNTY ONETA ROAD (121st TO 101st)
S.A. Project No. CIRB-173C(146)RB Sheet No. 15

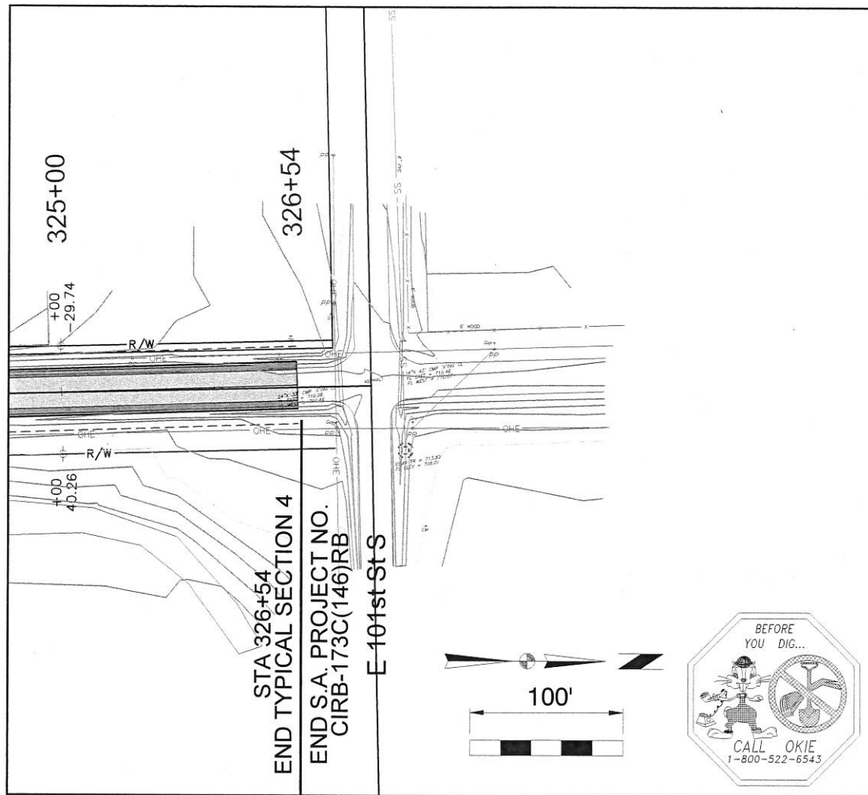


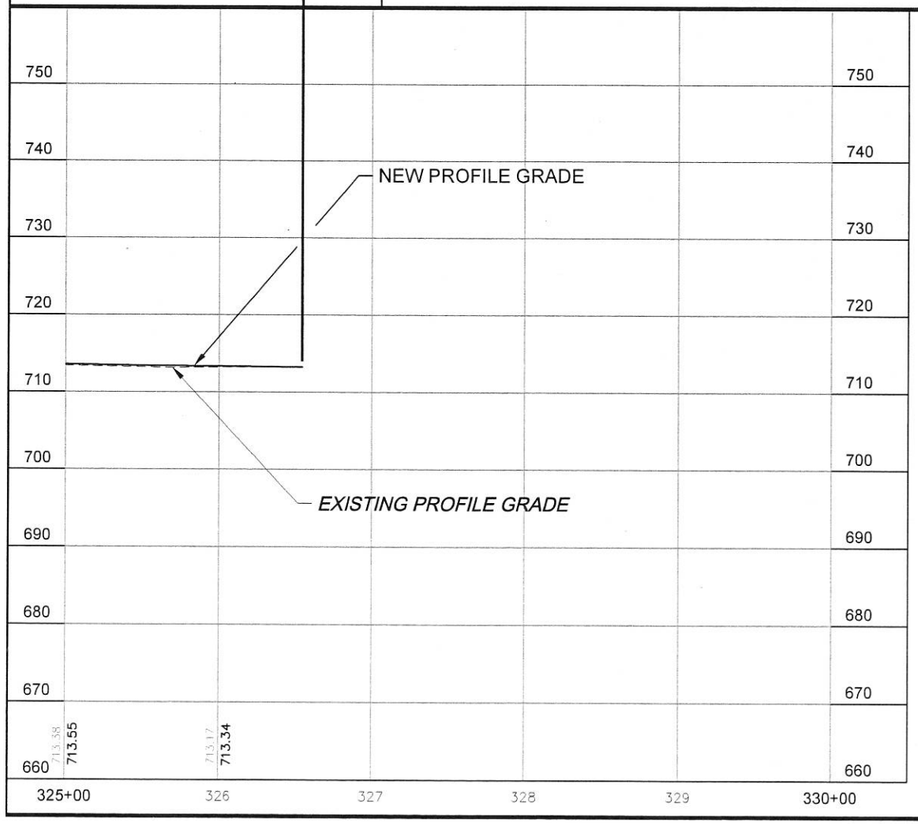


WAGONER COUNTY ONETA ROAD (121st TO 101st)
S.A. Project No. CIRB-173C(146)RB Sheet No. 16



WAGONER COUNTY ONETA ROAD (121st TO 101st)
S.A. Project No. CIRB-173C(146)RB Sheet No. 17


325+00
326+54
+00
-29.74
R/W
R/W
+00
40.26
STA 326+54
END TYPICAL SECTION 4
END S.A. PROJECT NO.
CIRB-173C(146)RB
E 101st St S
100'
BEFORE
YOU DIG...
CALL OKIE
1-800-522-6543


750
740
730
720
710
700
690
680
670
660
NEW PROFILE GRADE
EXISTING PROFILE GRADE
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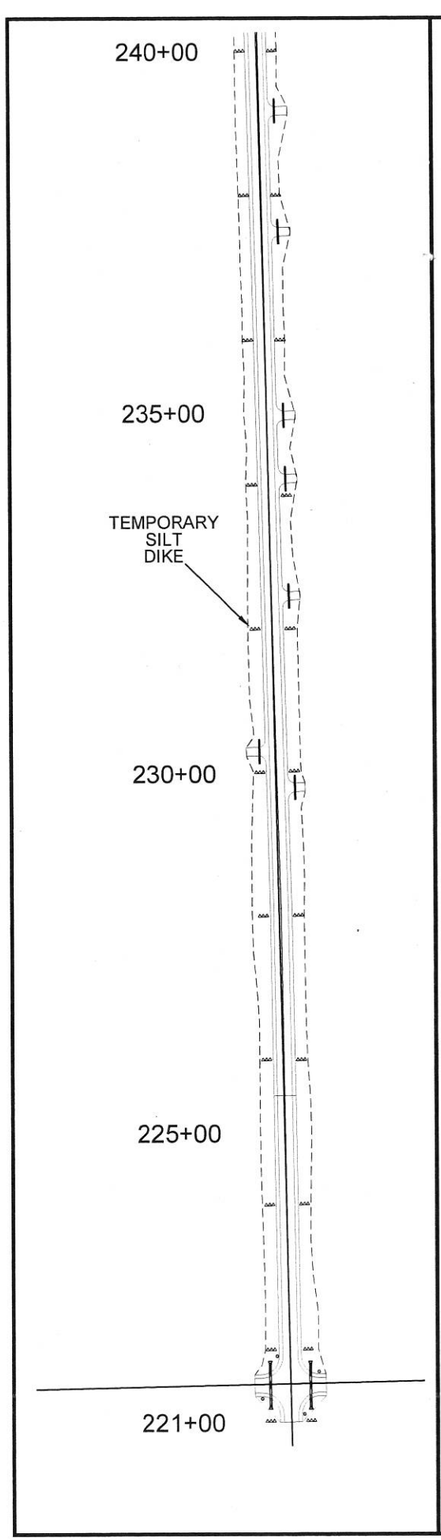
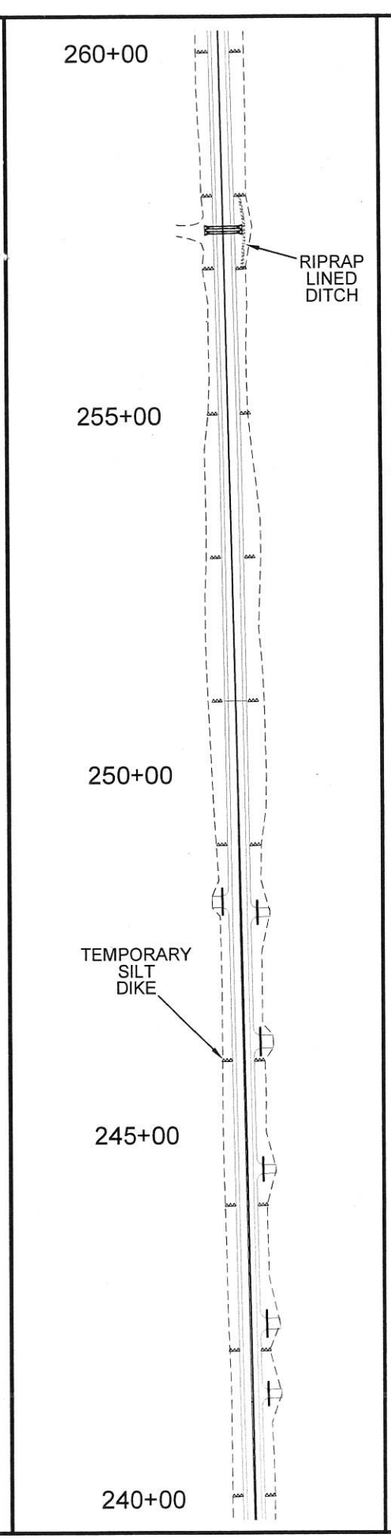
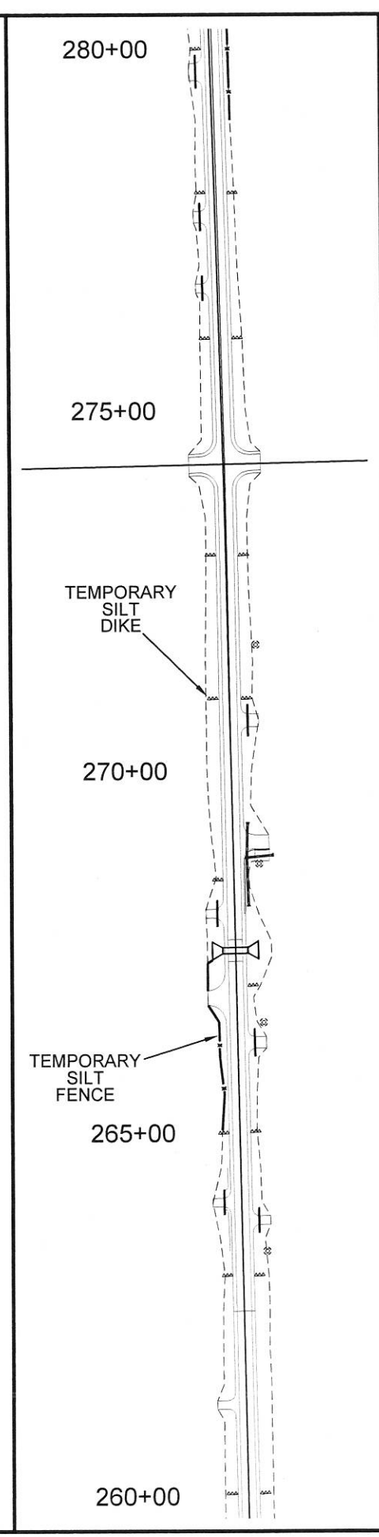
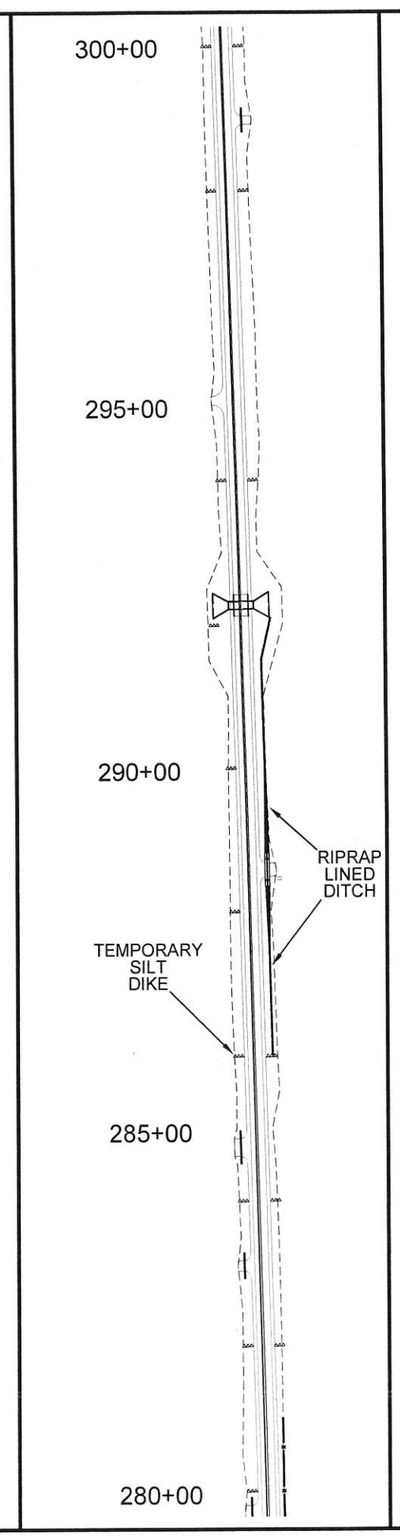
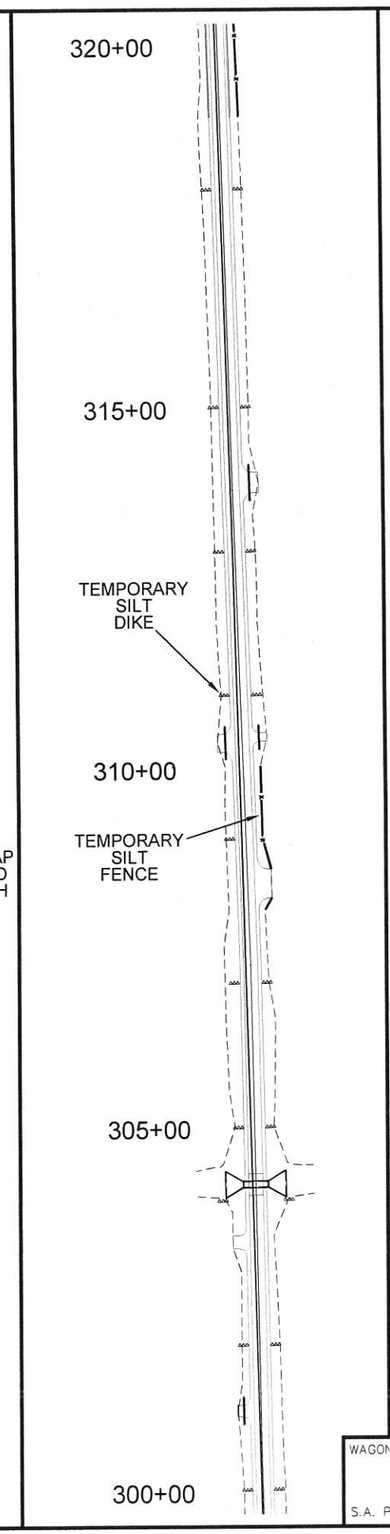
713.55
713.17
713.34
325+00
326
327
328
329
330+00

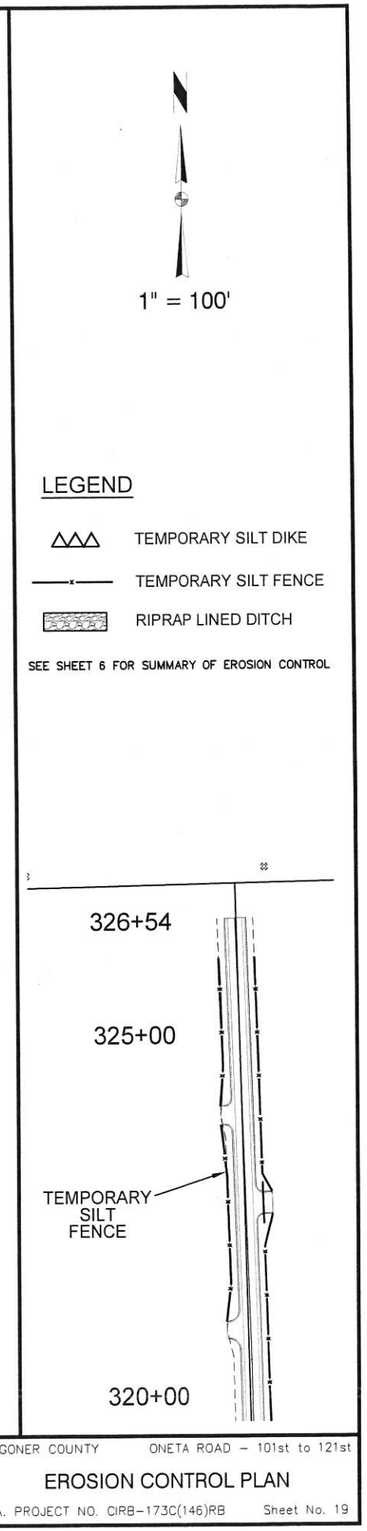








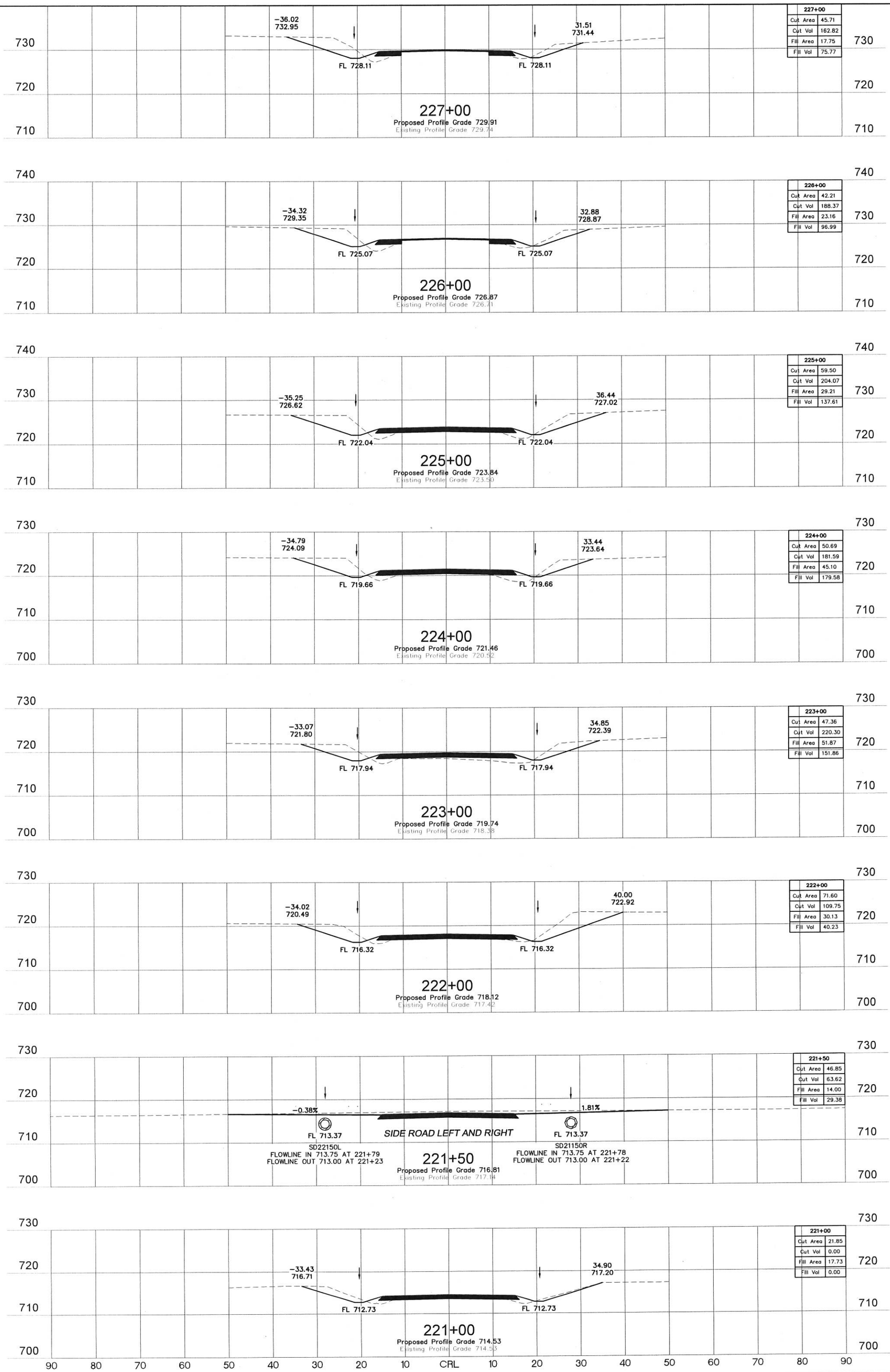




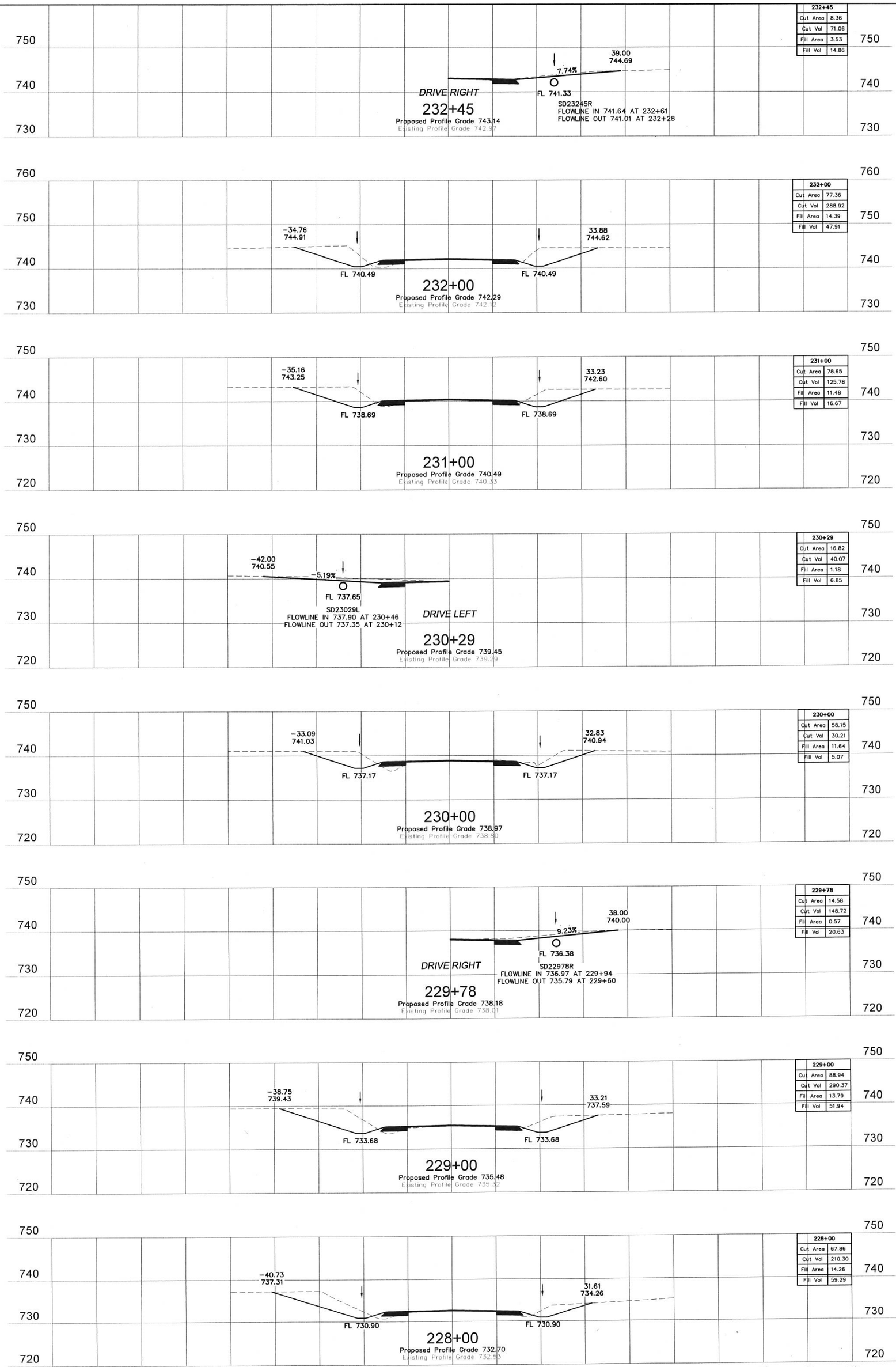
WAGONER COUNTY ONETA ROAD – 101st to 121st

EROSION CONTROL PLAN

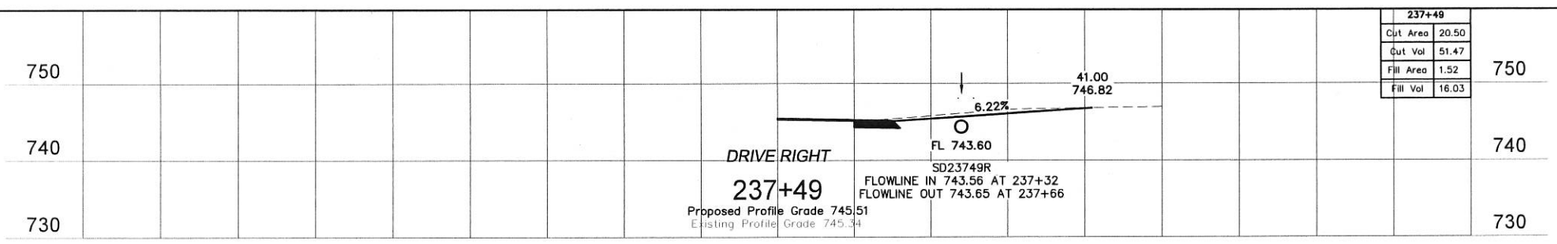
S.A. PROJECT NO. CIRB-173C(146)RB Sheet No. 19



WAGONER COUNTY ONETA ROAD (121st TO 101st)
S.A. Project No. CIRB-173C(146)RB Sheet No. X1



WAGONER COUNTY ONETA ROAD (121st TO 101st)
S.A. Project No. CIRB-173C(146)RB Sheet No. X2



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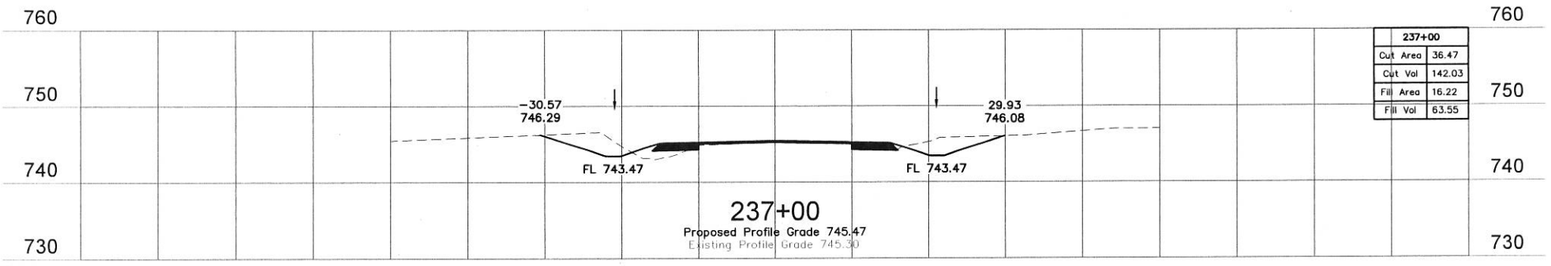
Fill Vol	16.03



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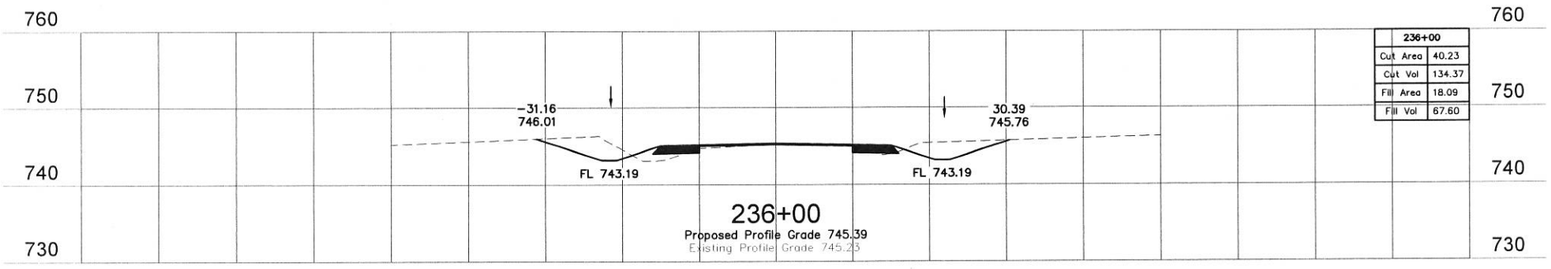

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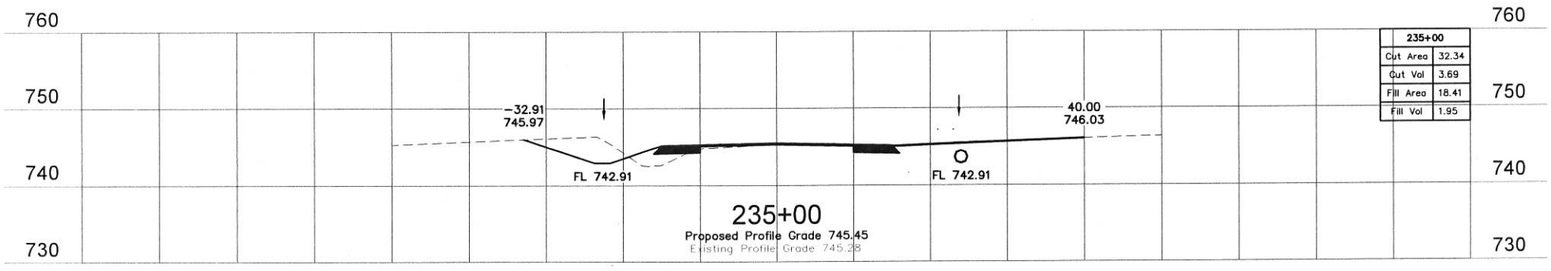

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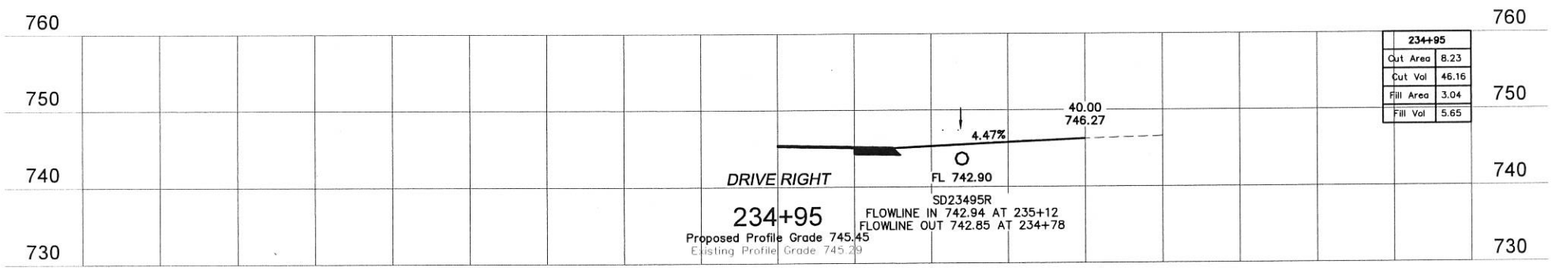

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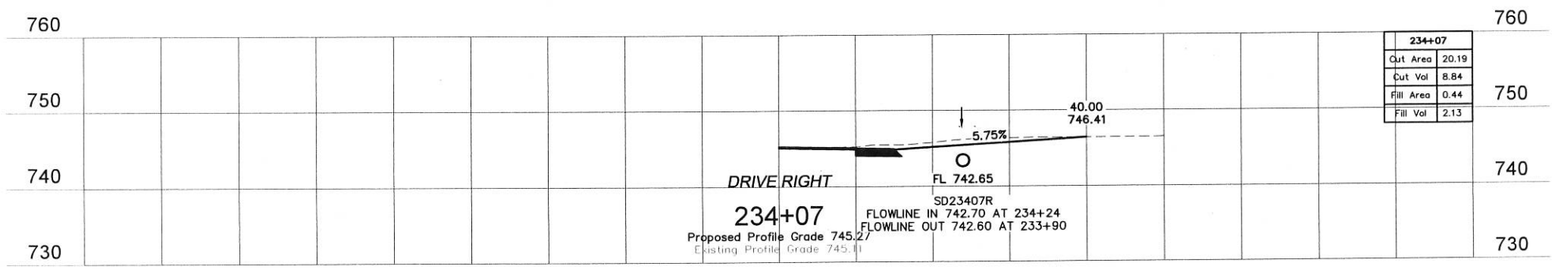

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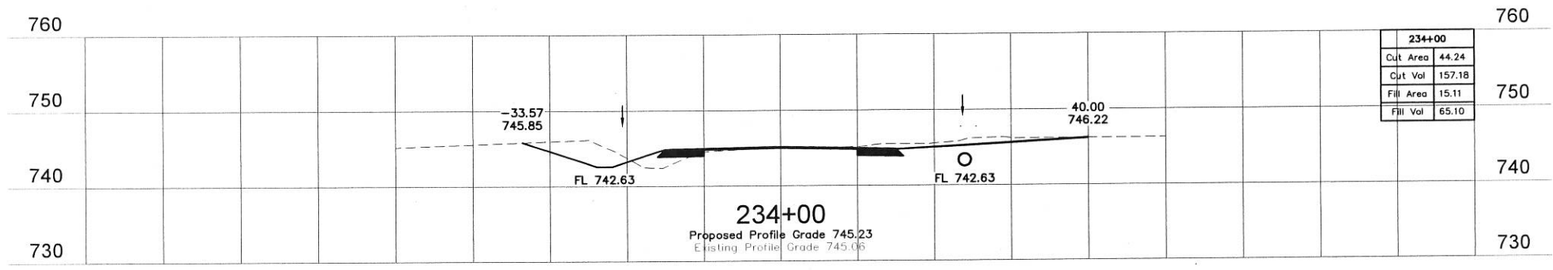

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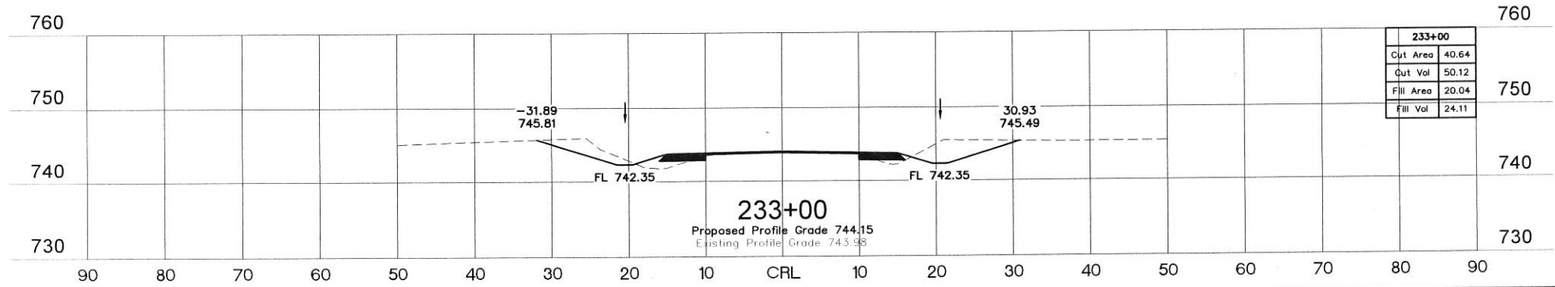

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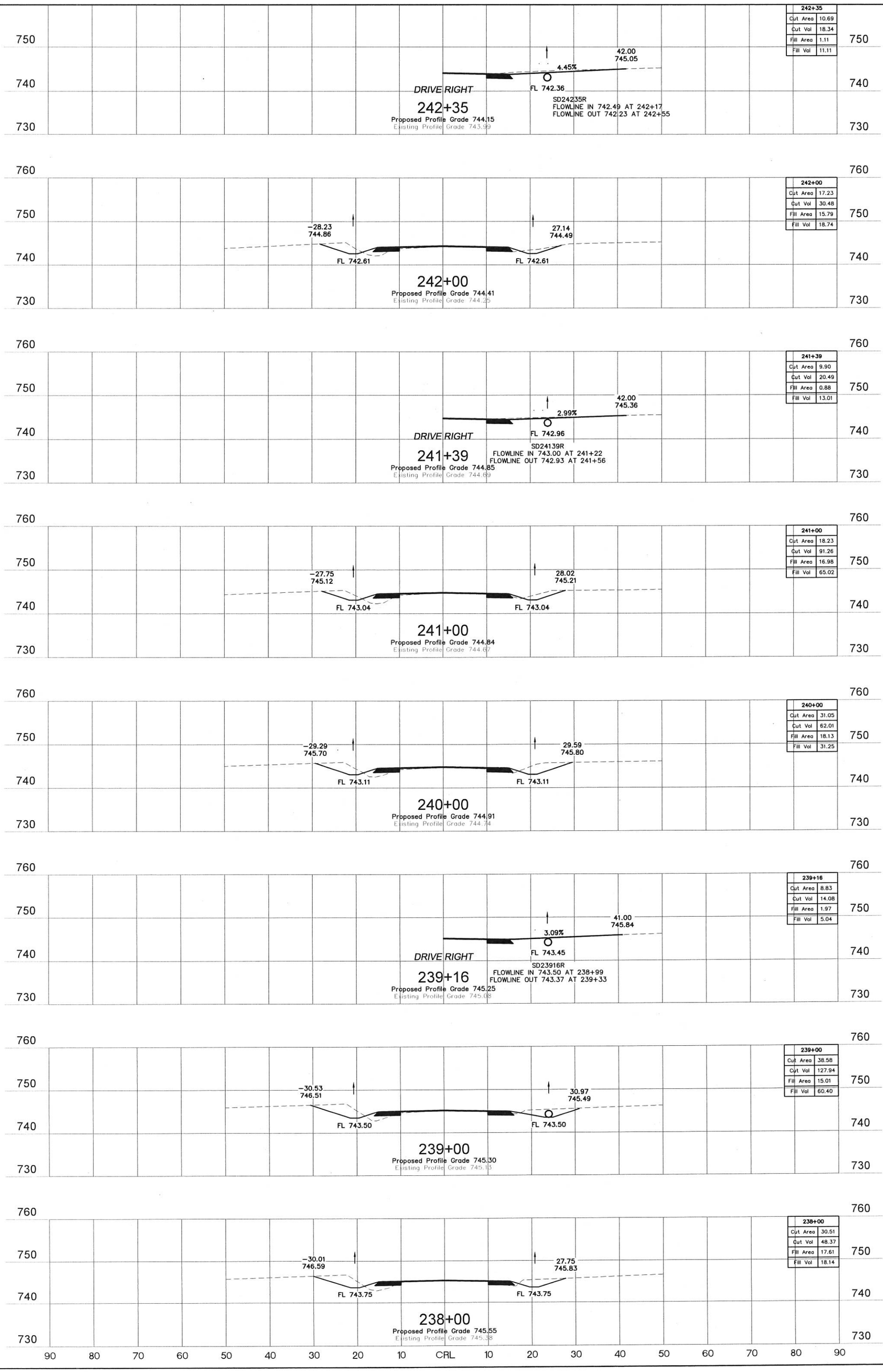
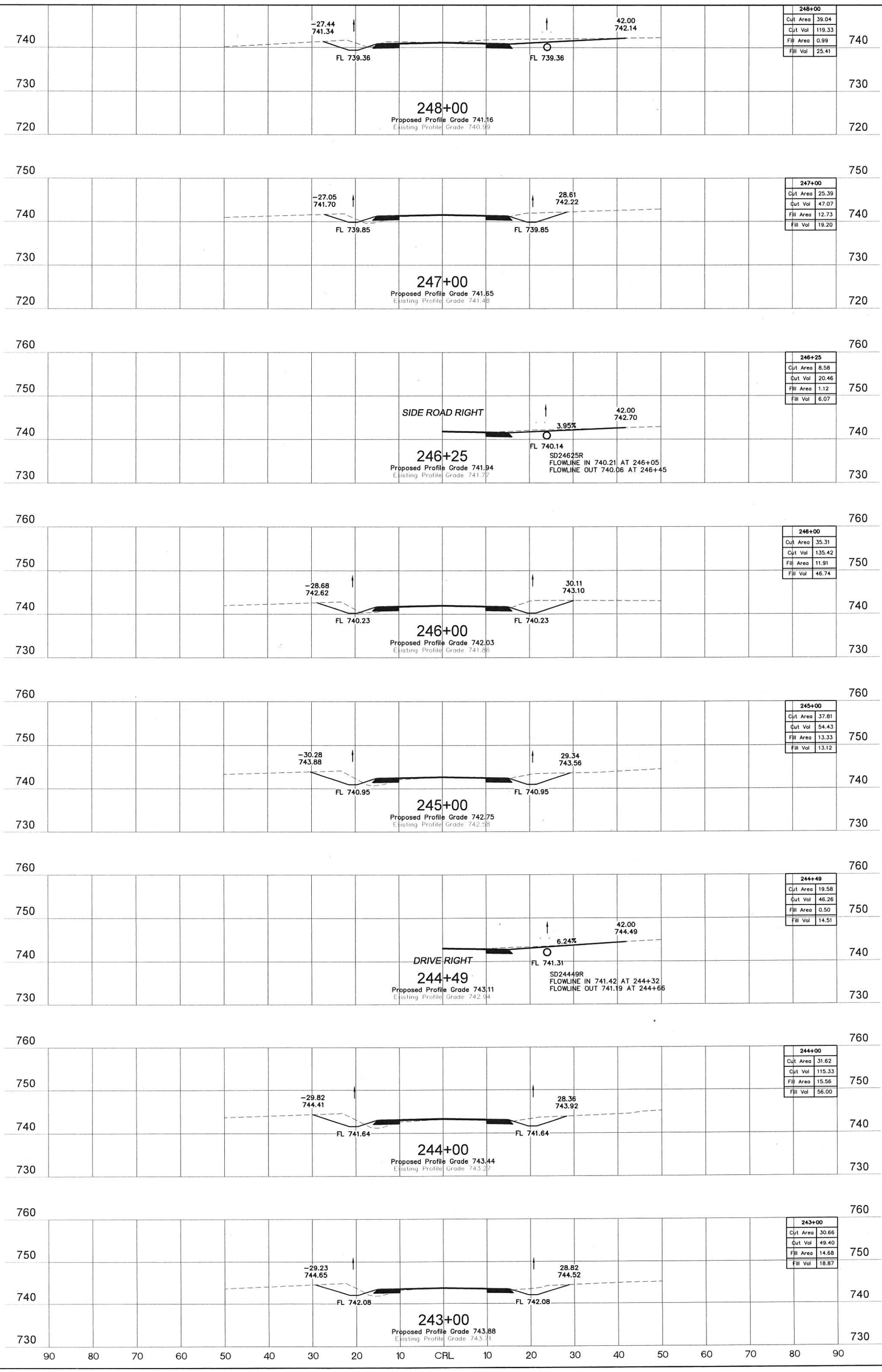
Fill Vol	24.11

90 80 70 60 50 40 30 20 10 CRL 10 20 30 40 50 60 70 80 90

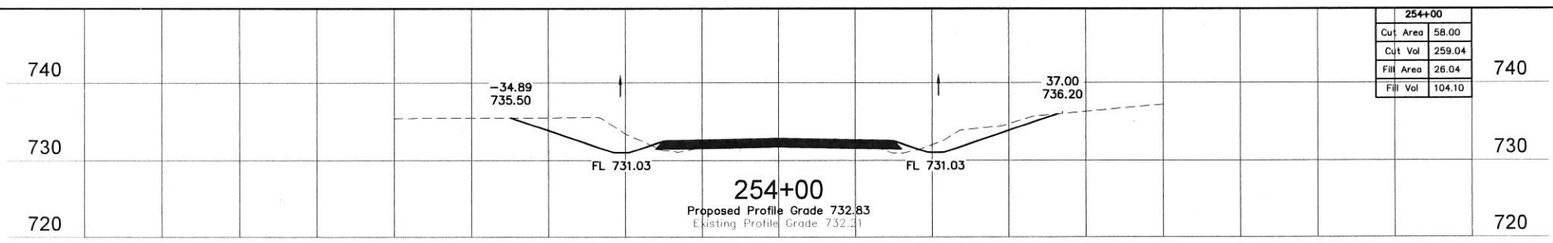
WAGONER COUNTY ONETA ROAD (121st TO 101st)
S.A. Project No. CIRB-173C(146)RB Sheet No. X3



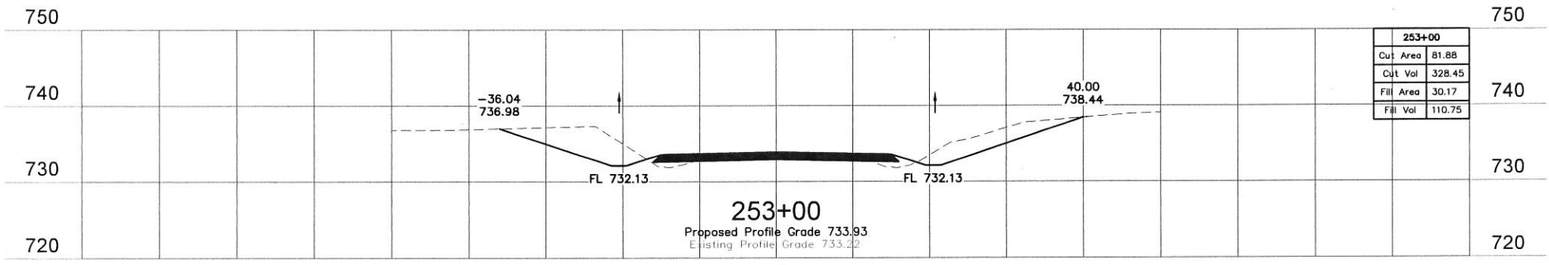
WAGONER COUNTY ONETA ROAD (121st TO 101st)
S.A. Project No. CIRB-173C(146)RB Sheet No. X4



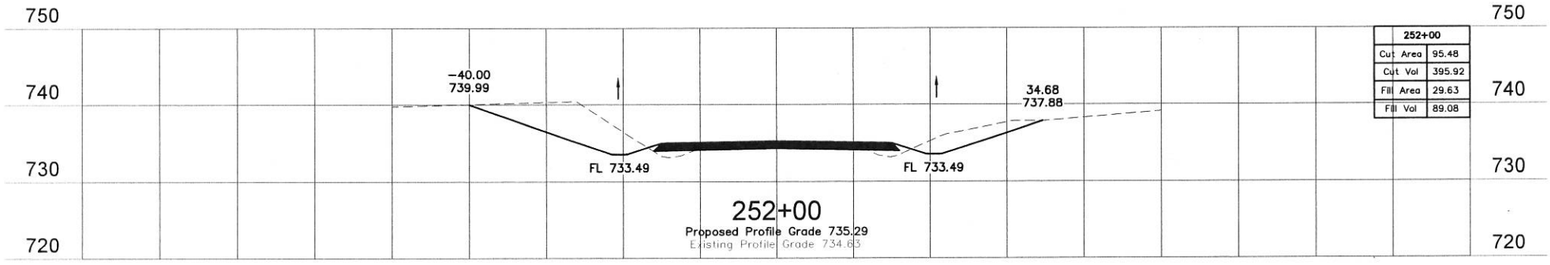
WAGONER COUNTY ONETA ROAD (121st TO 101st)
S.A. Project No. CIRB-173C(146)RB Sheet No. XS



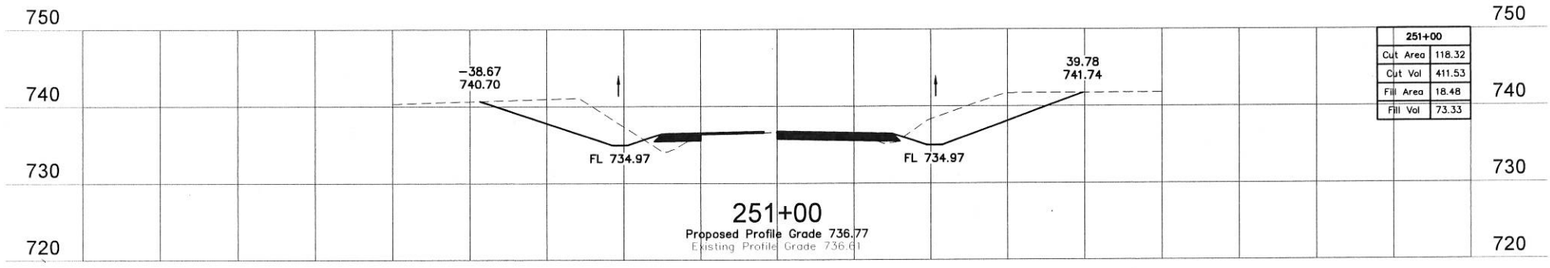
254+00	
Cut Area	58.00
Cut Vol	259.04
Fill Area	26.04
Fill Vol	104.10



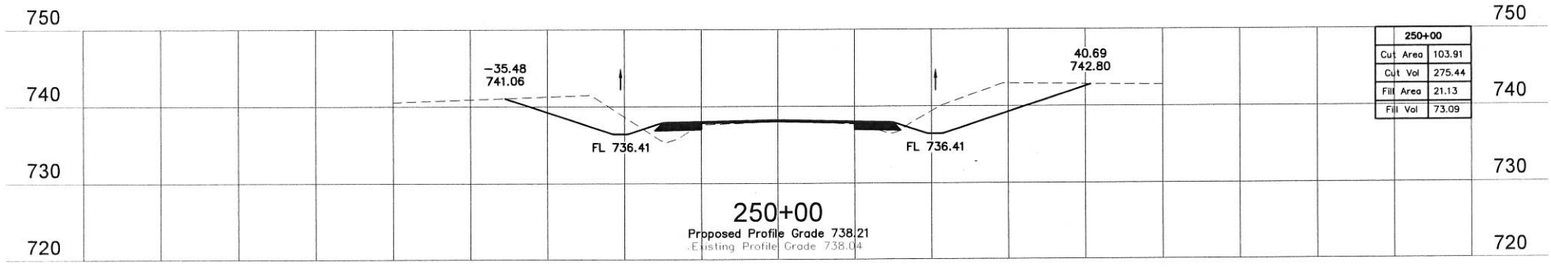
253+00	
Cut Area	81.88
Cut Vol	328.45
Fill Area	30.17
Fill Vol	110.75



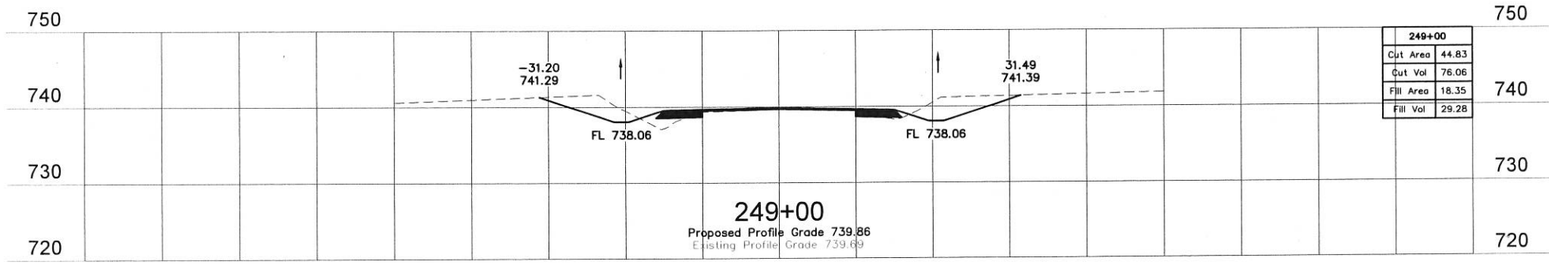
252+00	
Cut Area	95.48
Cut Vol	395.92
Fill Area	29.63
Fill Vol	89.08



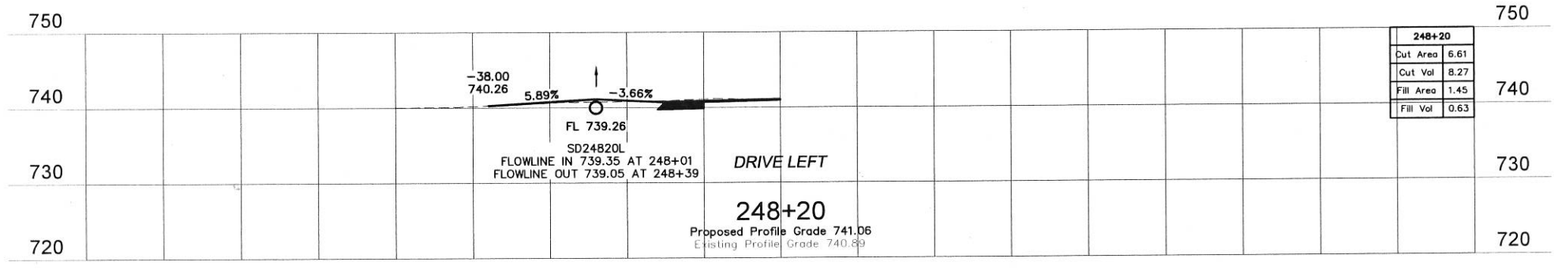
251+00	
Cut Area	118.32
Cut Vol	411.53
Fill Area	18.48
Fill Vol	73.33



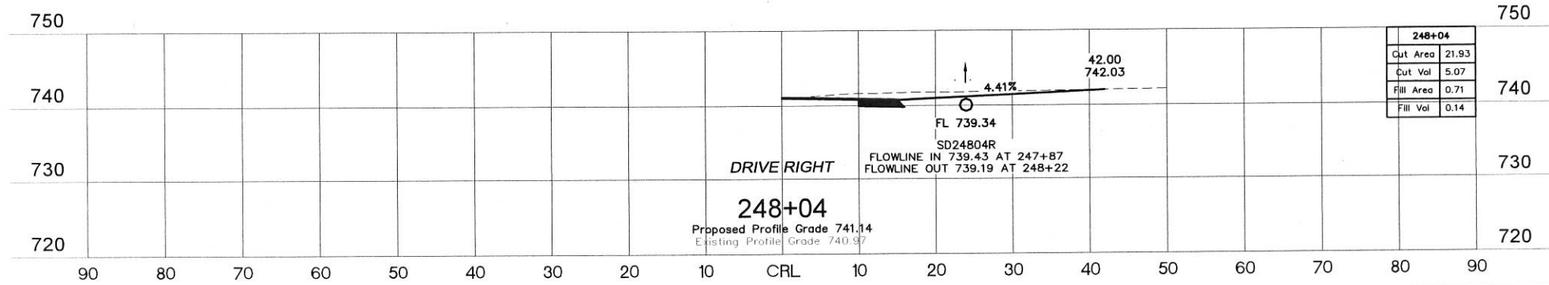
250+00	
Cut Area	103.91
Cut Vol	275.44
Fill Area	21.13
Fill Vol	73.09



249+00	
Cut Area	44.83
Cut Vol	76.06
Fill Area	18.35
Fill Vol	29.28



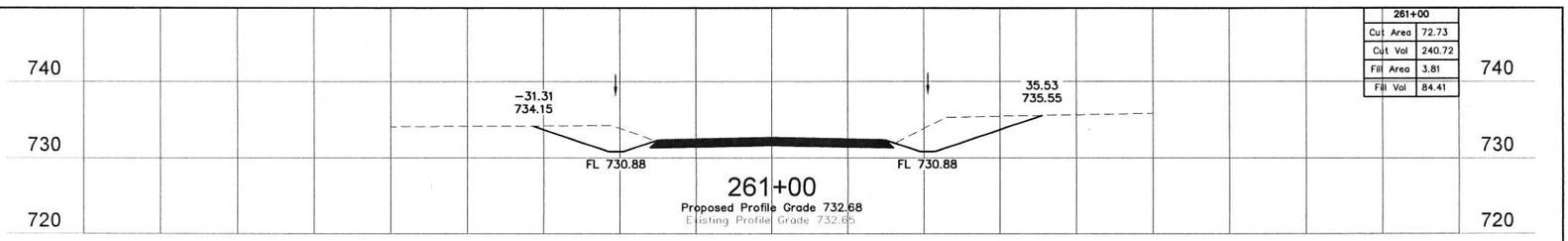
248+20	
Cut Area	6.61
Cut Vol	8.27
Fill Area	1.45
Fill Vol	0.63



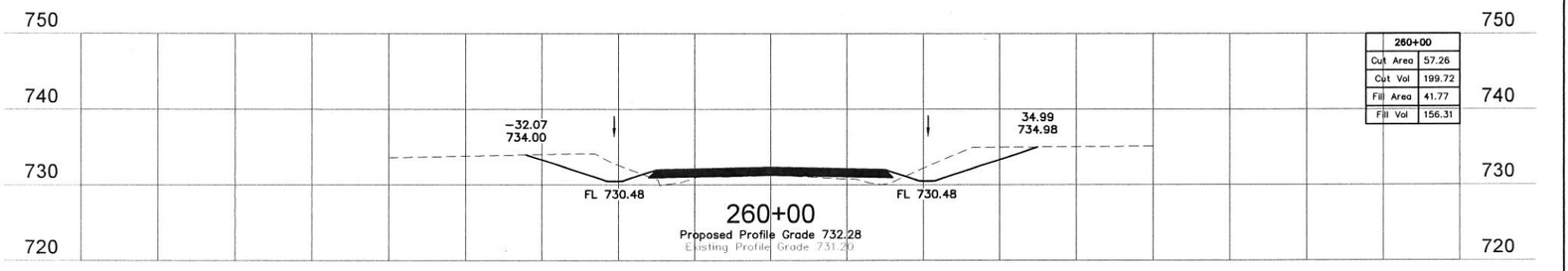
248+04	
Cut Area	21.93
Cut Vol	5.07
Fill Area	0.71
Fill Vol	0.14

90 80 70 60 50 40 30 20 10 CRL 10 20 30 40 50 60 70 80 90

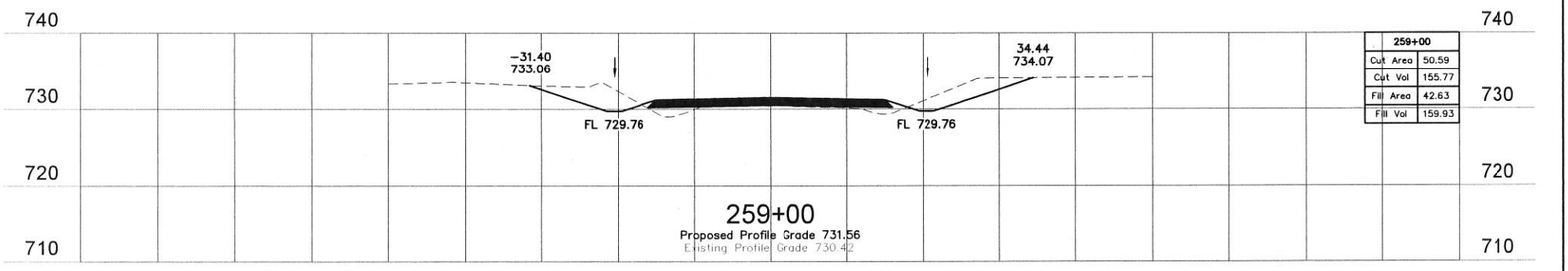
WAGONER COUNTY ONETA ROAD (121st TO 101st)
S.A. Project No. CIRB-173C(146)RB Sheet No. X6



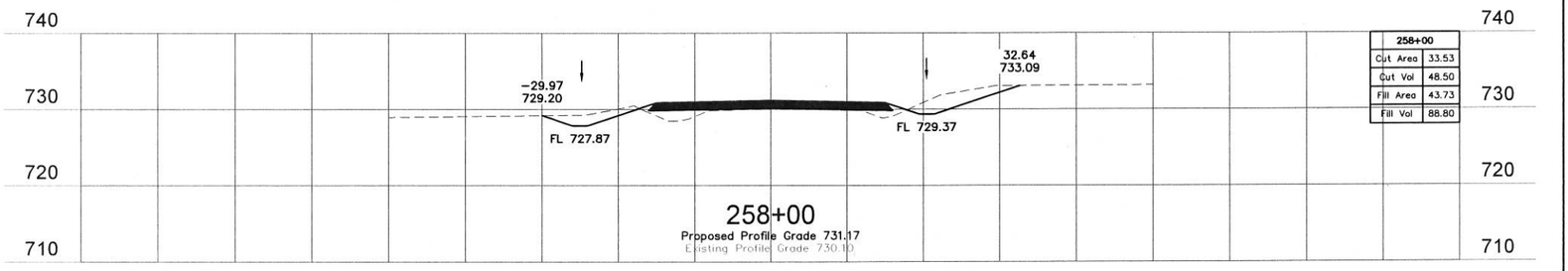
261+00	
Cut Area	72.73
Cut Vol	240.72
Fill Area	3.81
Fill Vol	84.41



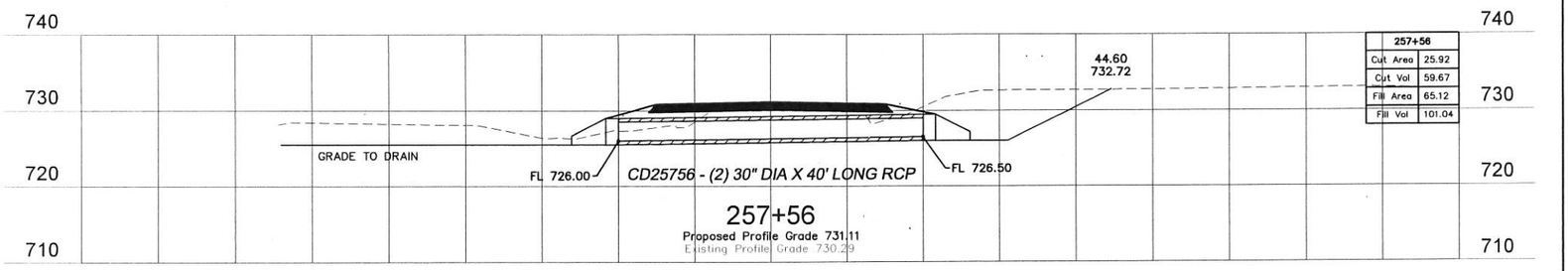
260+00	
Cut Area	57.26
Cut Vol	199.72
Fill Area	41.77
Fill Vol	156.31



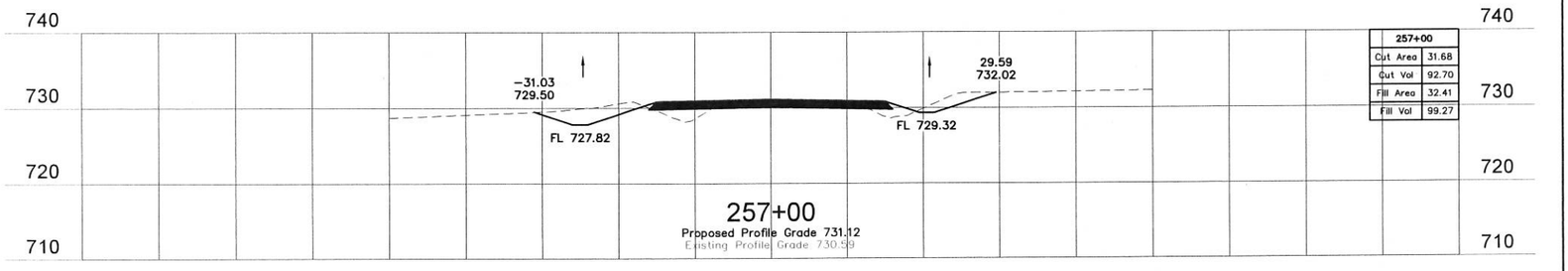
259+00	
Cut Area	50.59
Cut Vol	155.77
Fill Area	42.63
Fill Vol	159.93



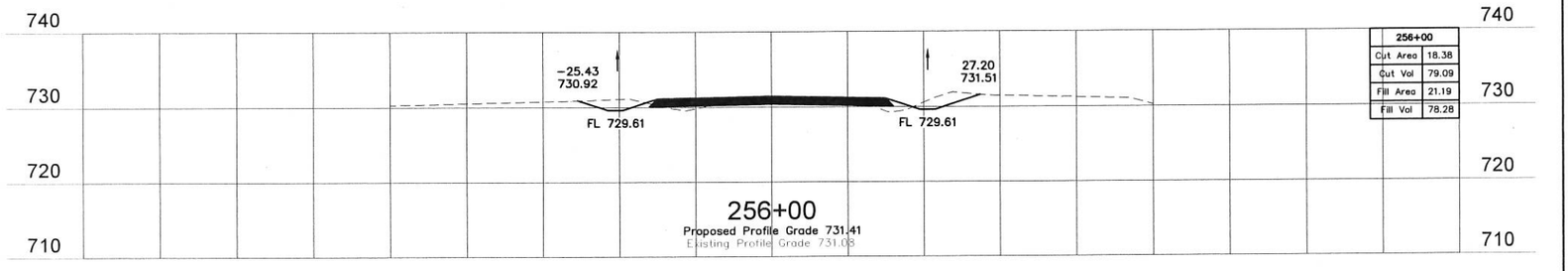
258+00	
Cut Area	33.53
Cut Vol	48.50
Fill Area	43.73
Fill Vol	88.80



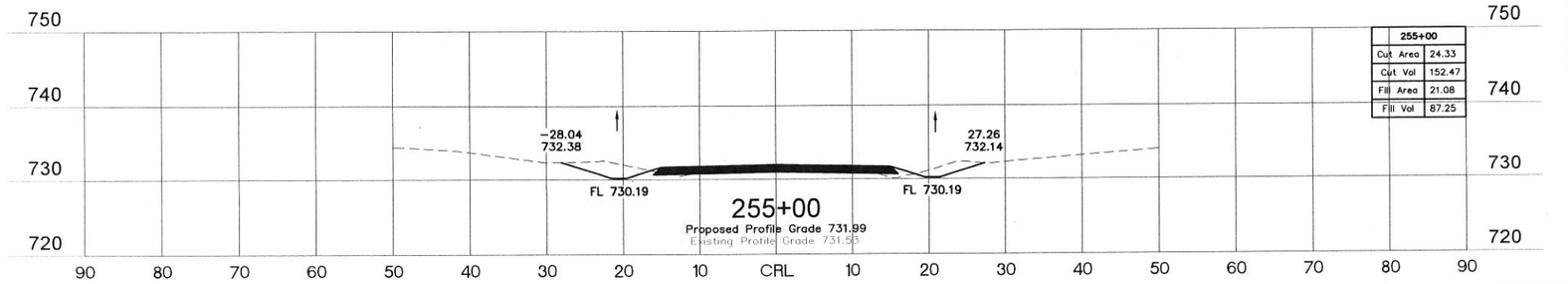
257+56	
Cut Area	25.92
Cut Vol	59.67
Fill Area	65.12
Fill Vol	101.04



257+00	
Cut Area	31.68
Cut Vol	92.70
Fill Area	32.41
Fill Vol	99.27



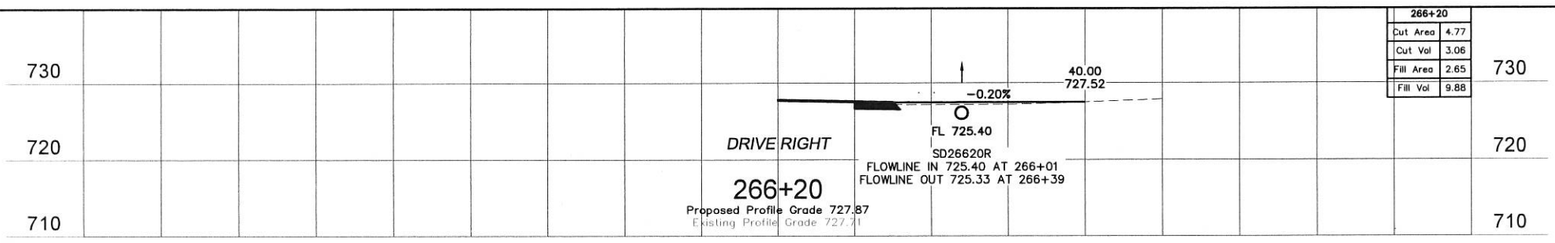
256+00	
Cut Area	18.38
Cut Vol	79.09
Fill Area	21.19
Fill Vol	78.28



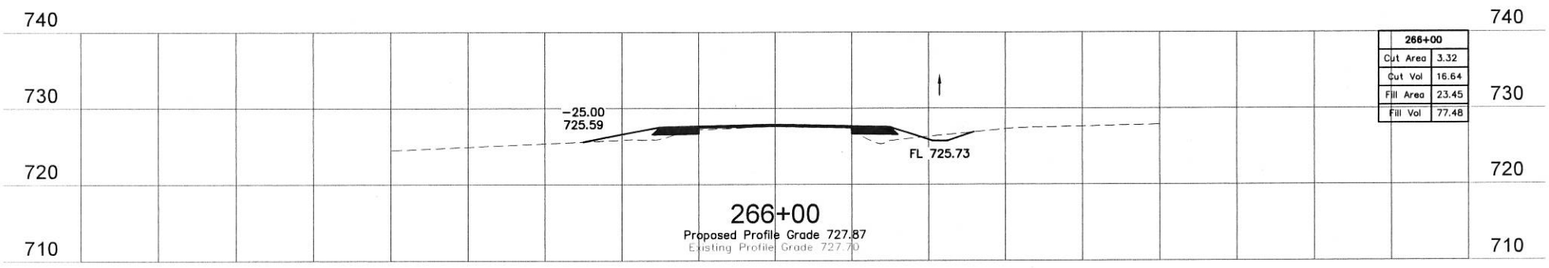
255+00	
Cut Area	24.33
Cut Vol	152.47
Fill Area	21.08
Fill Vol	87.25

90 80 70 60 50 40 30 20 10 CRL 10 20 30 40 50 60 70 80 90

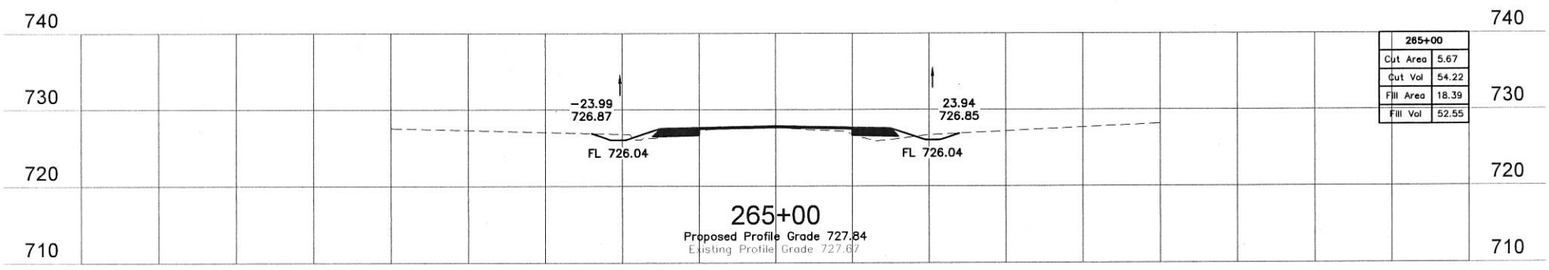
WAGONER COUNTY ONETA ROAD (121st TO 101st)
S.A. Project No. CIRB-173C(146)RB Sheet No. X7



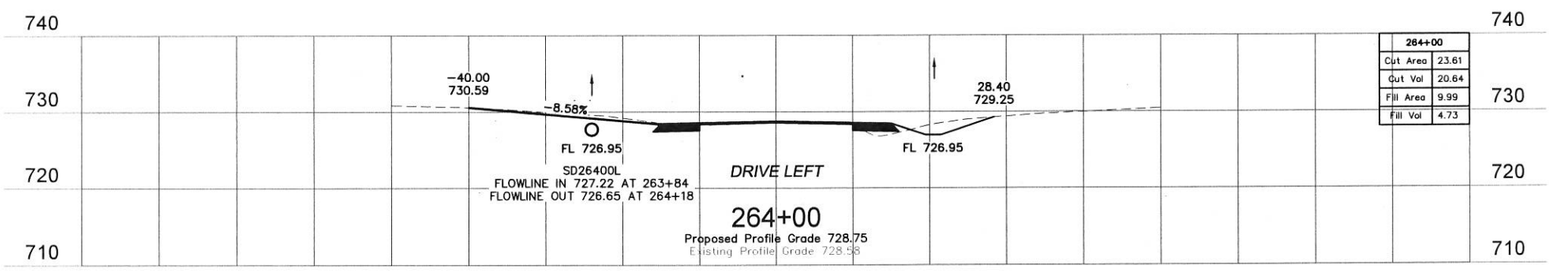
266+20	
Cut Area	4.77
Cut Vol	3.06
Fill Area	2.65
Fill Vol	9.88



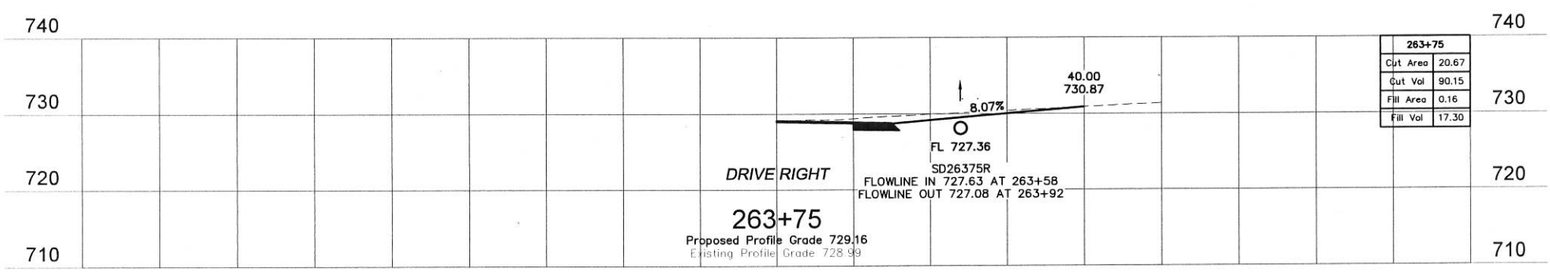
266+00	
Cut Area	3.32
Cut Vol	16.64
Fill Area	23.45
Fill Vol	77.48



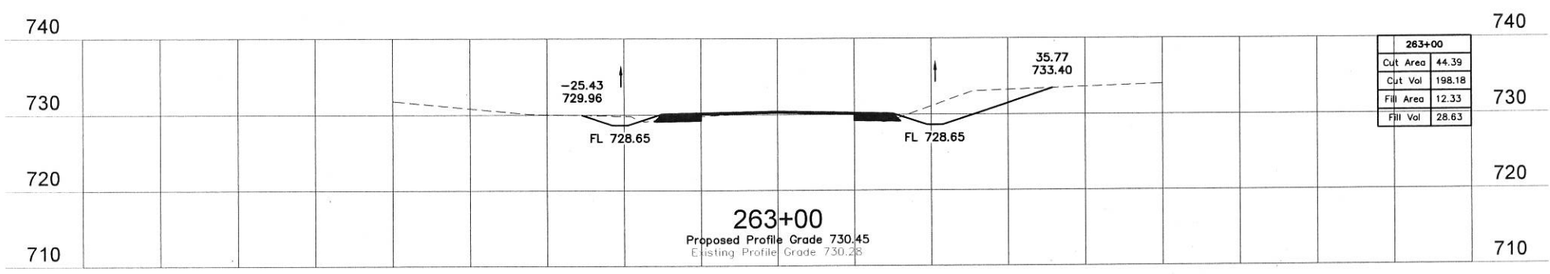
265+00	
Cut Area	5.67
Cut Vol	54.22
Fill Area	18.39
Fill Vol	52.55



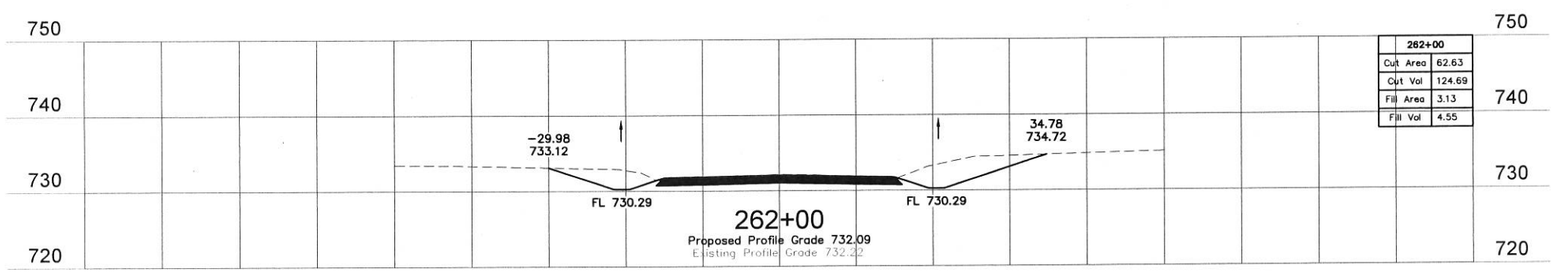
264+00	
Cut Area	23.61
Cut Vol	20.64
Fill Area	9.99
Fill Vol	4.73



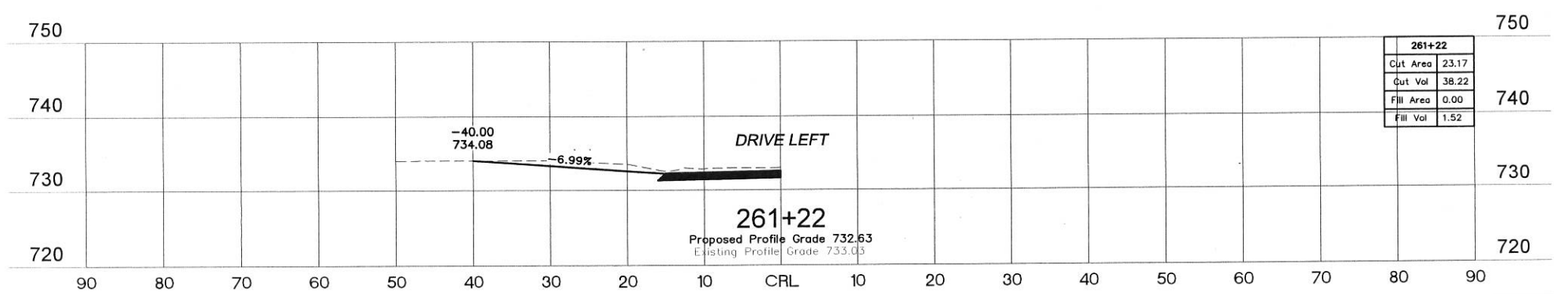
263+75	
Cut Area	20.67
Cut Vol	90.15
Fill Area	0.16
Fill Vol	17.30



263+00	
Cut Area	44.39
Cut Vol	198.18
Fill Area	12.33
Fill Vol	28.63

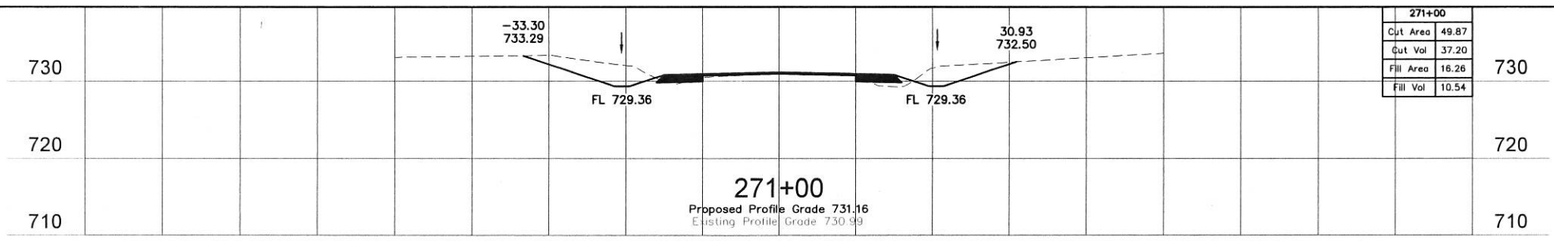


262+00	
Cut Area	62.63
Cut Vol	124.69
Fill Area	3.13
Fill Vol	4.55

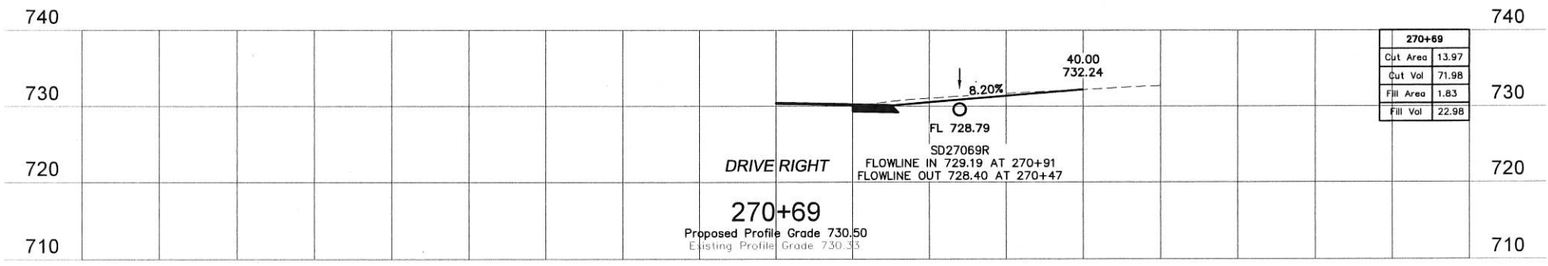


261+22	
Cut Area	23.17
Cut Vol	38.22
Fill Area	0.00
Fill Vol	1.52

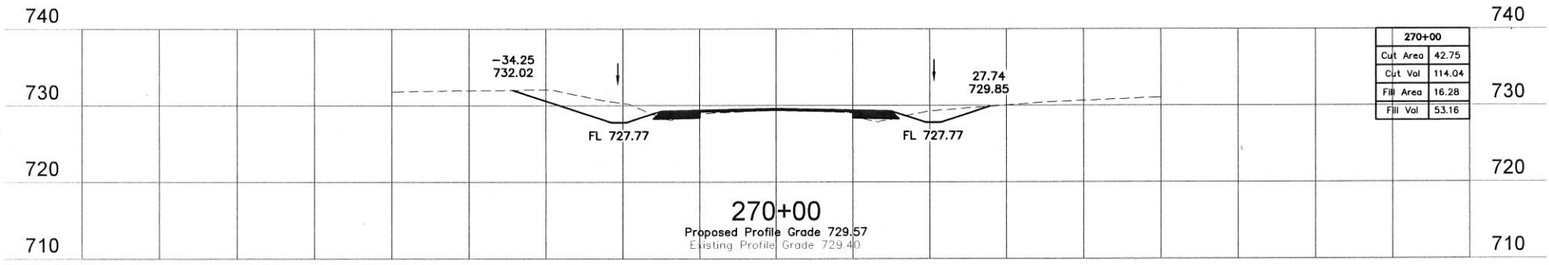
WAGONER COUNTY ONETA ROAD (121st TO 101st)
S.A. Project No. OPB-173C(146)RB Sheet No. X8



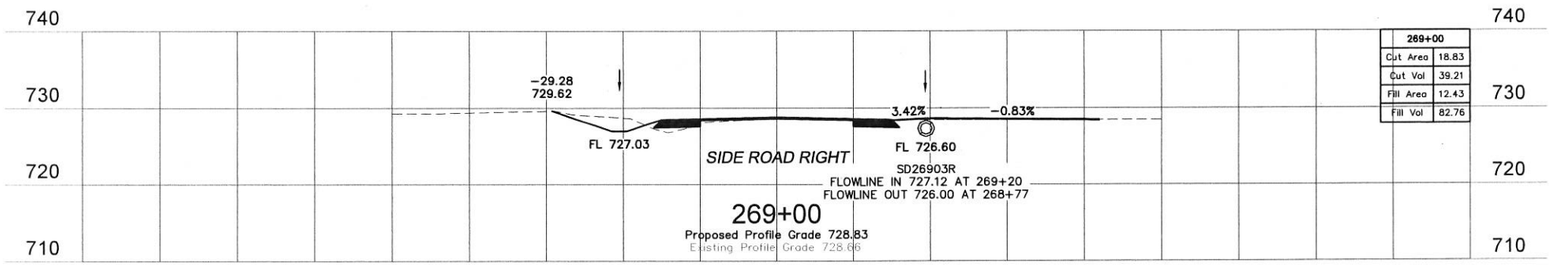
271+00	
Cut Area	49.87
Cut Vol	37.20
Fill Area	16.26
Fill Vol	10.54



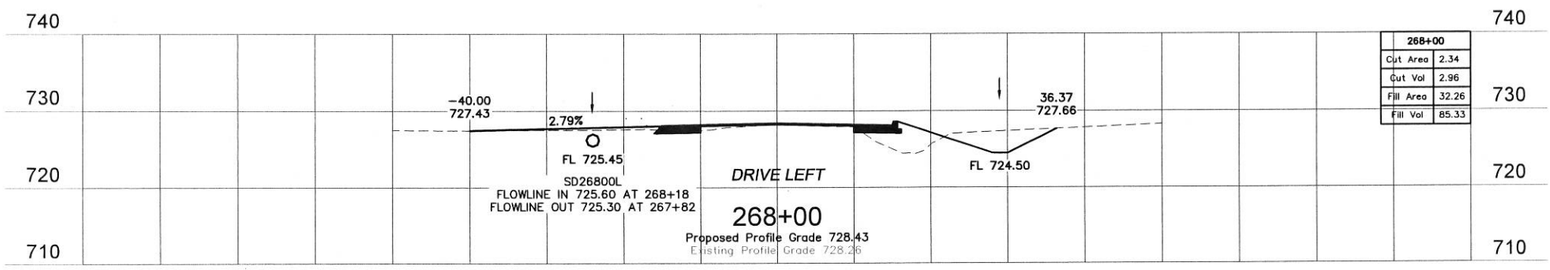
270+69	
Cut Area	13.97
Cut Vol	71.98
Fill Area	1.83
Fill Vol	22.98



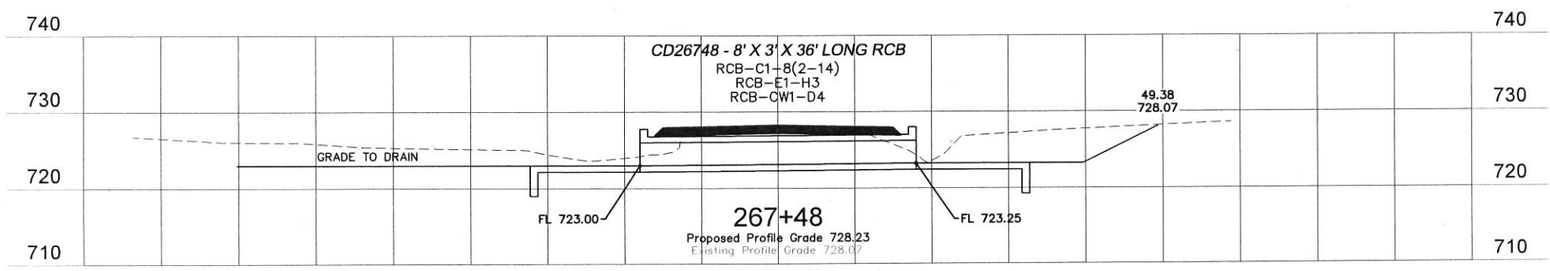
270+00	
Cut Area	42.75
Cut Vol	114.04
Fill Area	16.28
Fill Vol	53.16

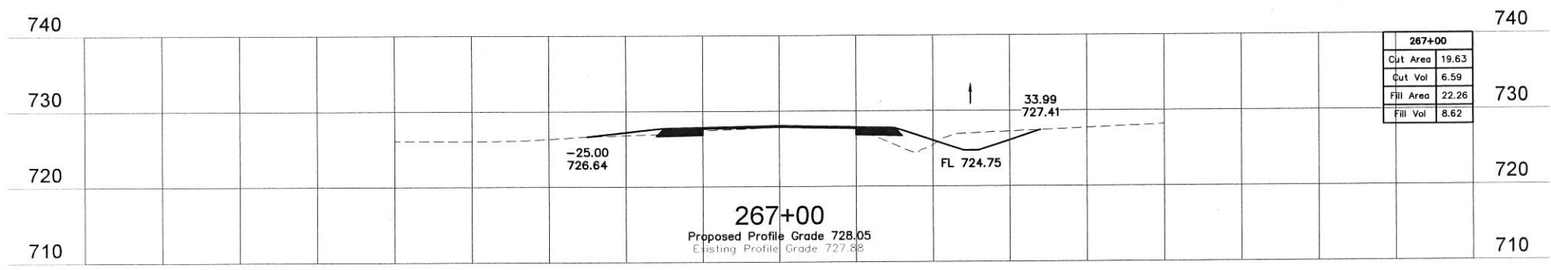


269+00	
Cut Area	18.83
Cut Vol	39.21
Fill Area	12.43
Fill Vol	82.76

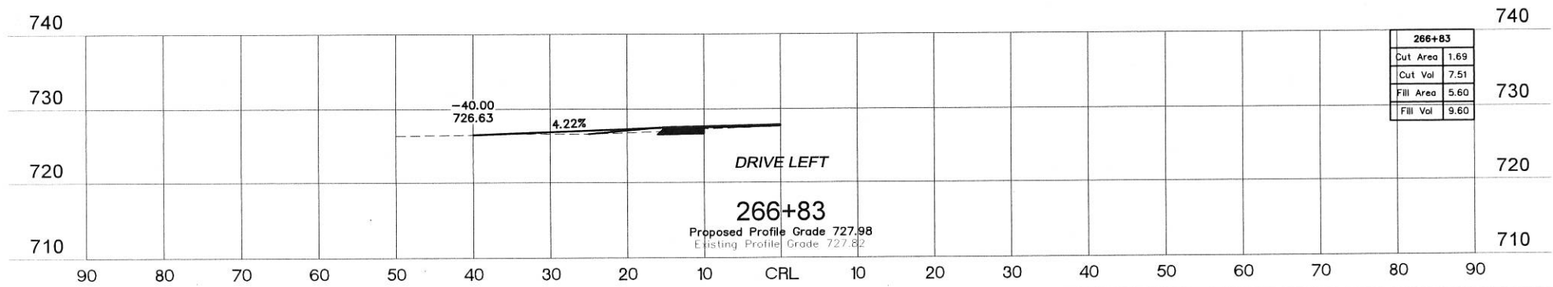


268+00	
Cut Area	2.34
Cut Vol	2.96
Fill Area	32.26
Fill Vol	85.33





267+00	
Cut Area	19.63
Cut Vol	6.59
Fill Area	22.26
Fill Vol	8.62

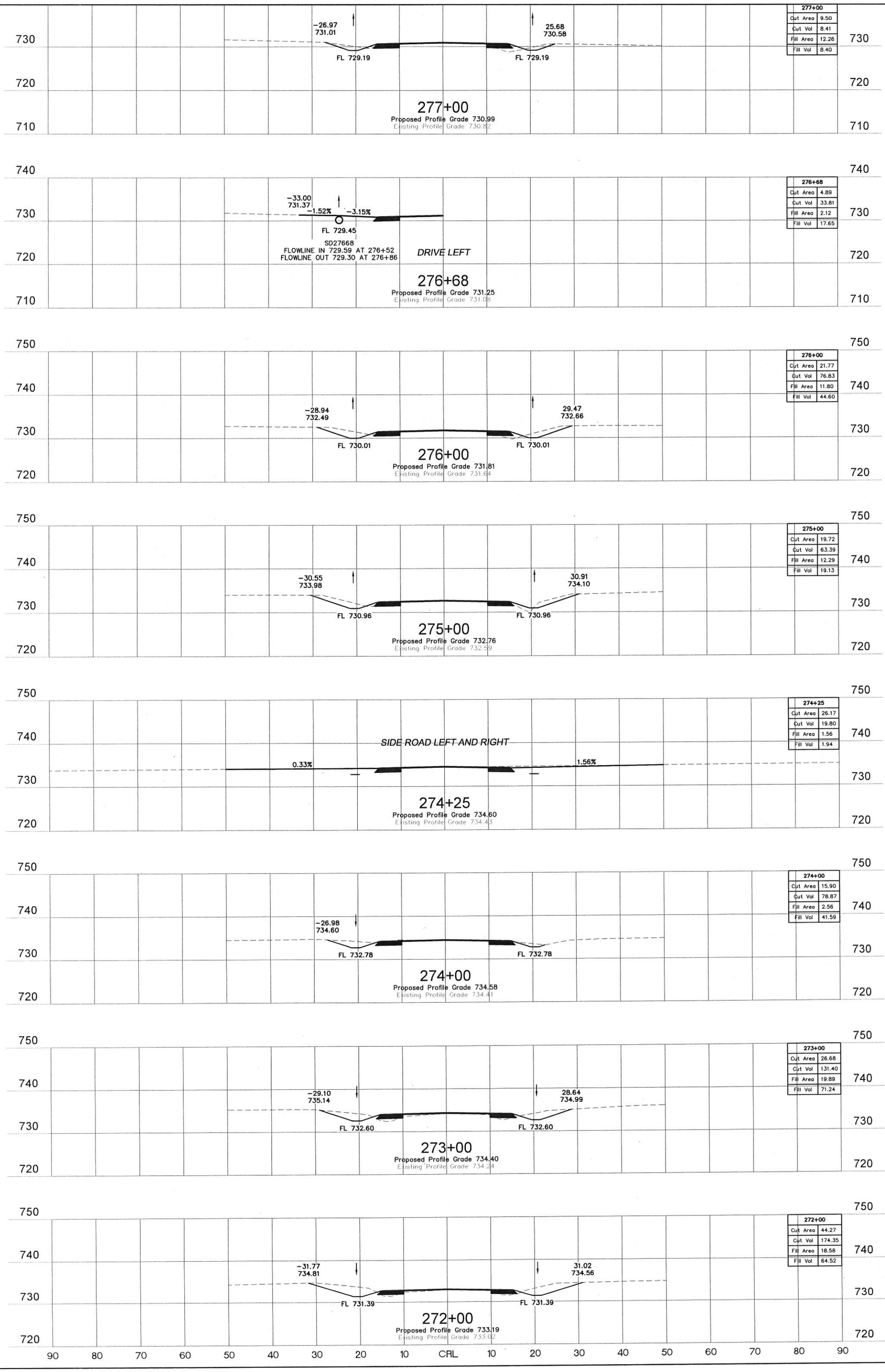


266+83	
Cut Area	1.69
Cut Vol	7.51
Fill Area	5.60
Fill Vol	9.60

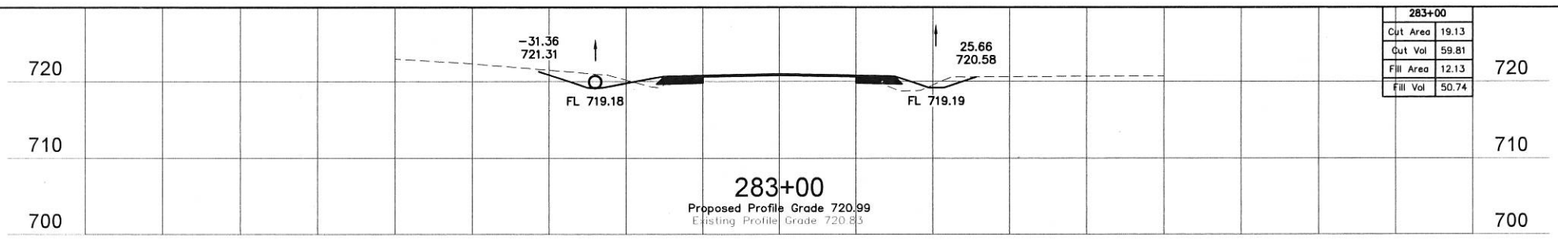
730 720 710 740

90 80 70 60 50 40 30 20 10 CRL 10 20 30 40 50 60 70 80 90

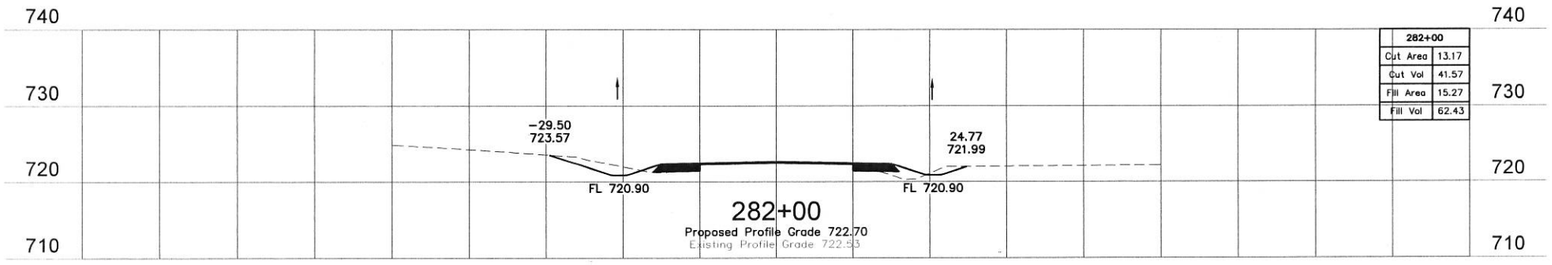
WAGONER COUNTY ONETA ROAD (121st TO 101st)
S.A. Project No. CIRB-173C(146)RB Sheet No. X9



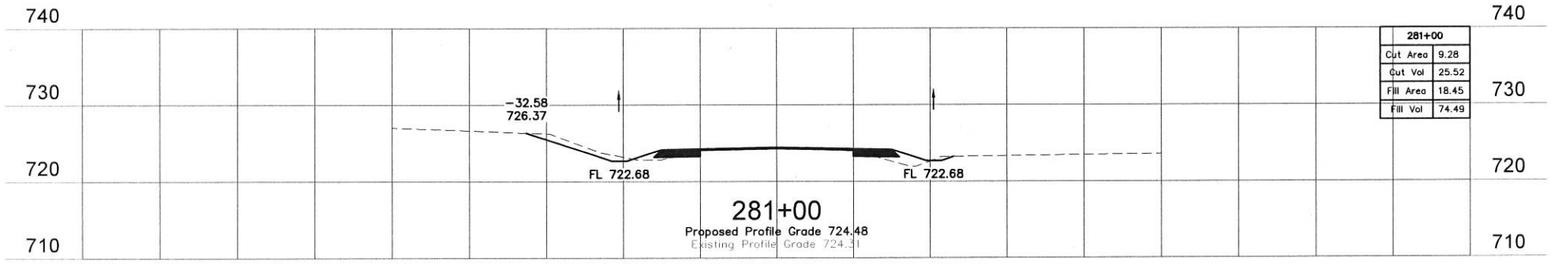
WAGONER COUNTY ONETA ROAD (121st TO 101st)
S.A. Project No. CIRB-173C(146)RB Sheet No. X10



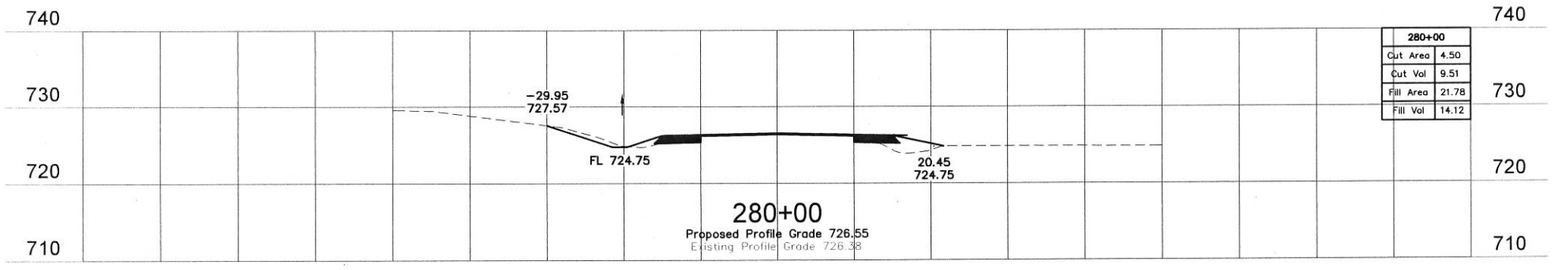
283+00	
Cut Area	19.13
Cut Vol	59.81
Fill Area	12.13
Fill Vol	50.74



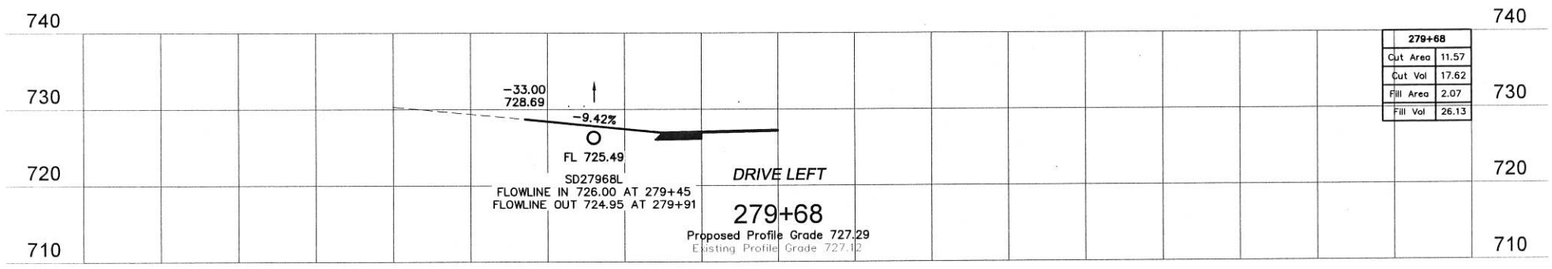
282+00	
Cut Area	13.17
Cut Vol	41.57
Fill Area	15.27
Fill Vol	62.43



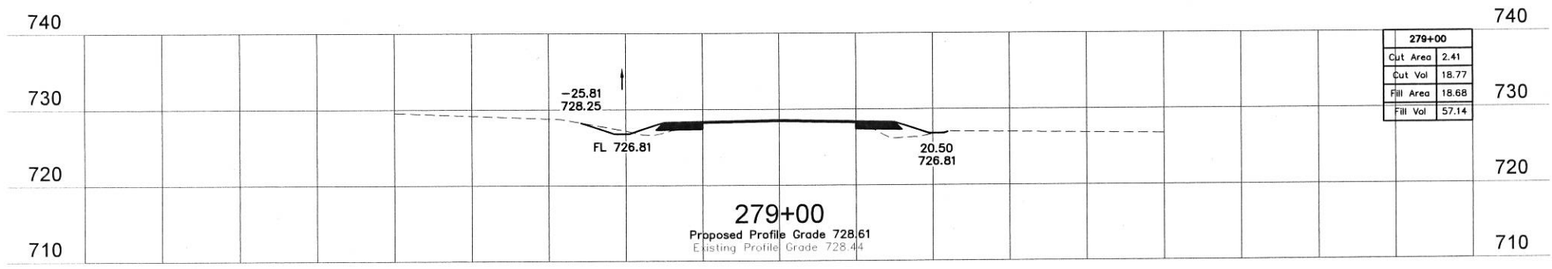
281+00	
Cut Area	9.28
Cut Vol	25.52
Fill Area	18.45
Fill Vol	74.49



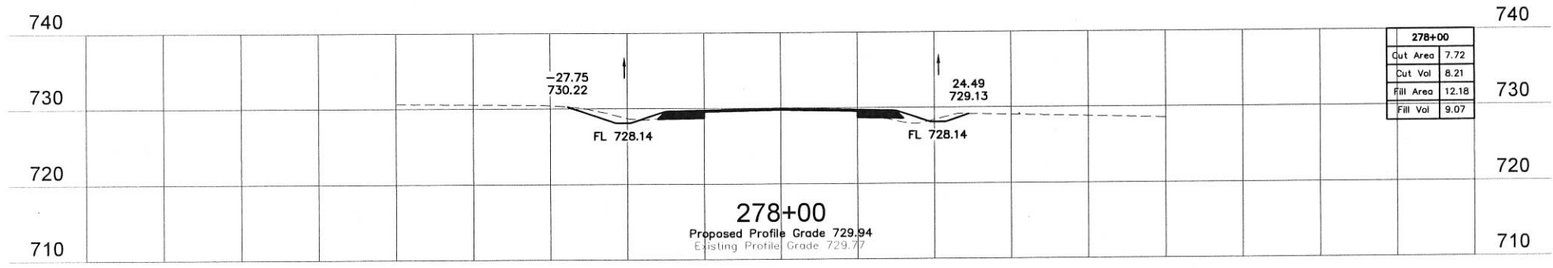
280+00	
Cut Area	4.50
Cut Vol	9.51
Fill Area	21.78
Fill Vol	14.12



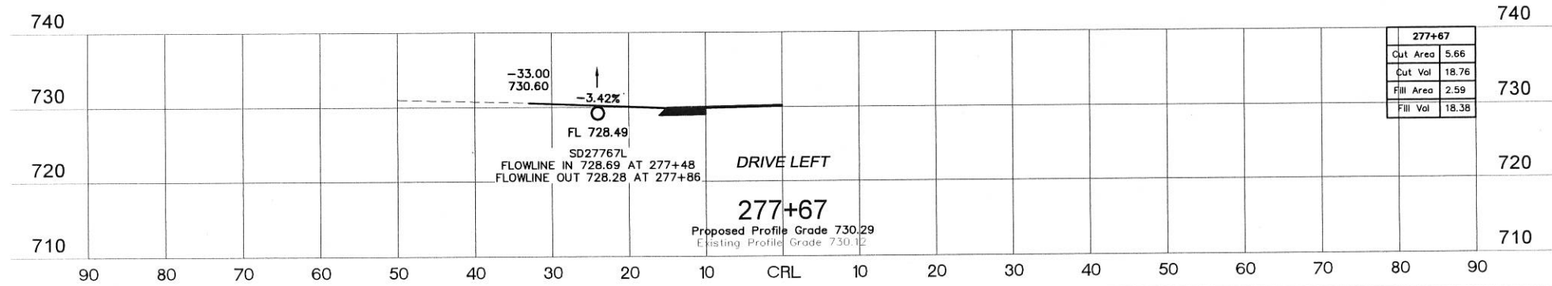
279+68	
Cut Area	11.57
Cut Vol	17.62
Fill Area	2.07
Fill Vol	26.13



279+00	
Cut Area	2.41
Cut Vol	18.77
Fill Area	18.68
Fill Vol	57.14



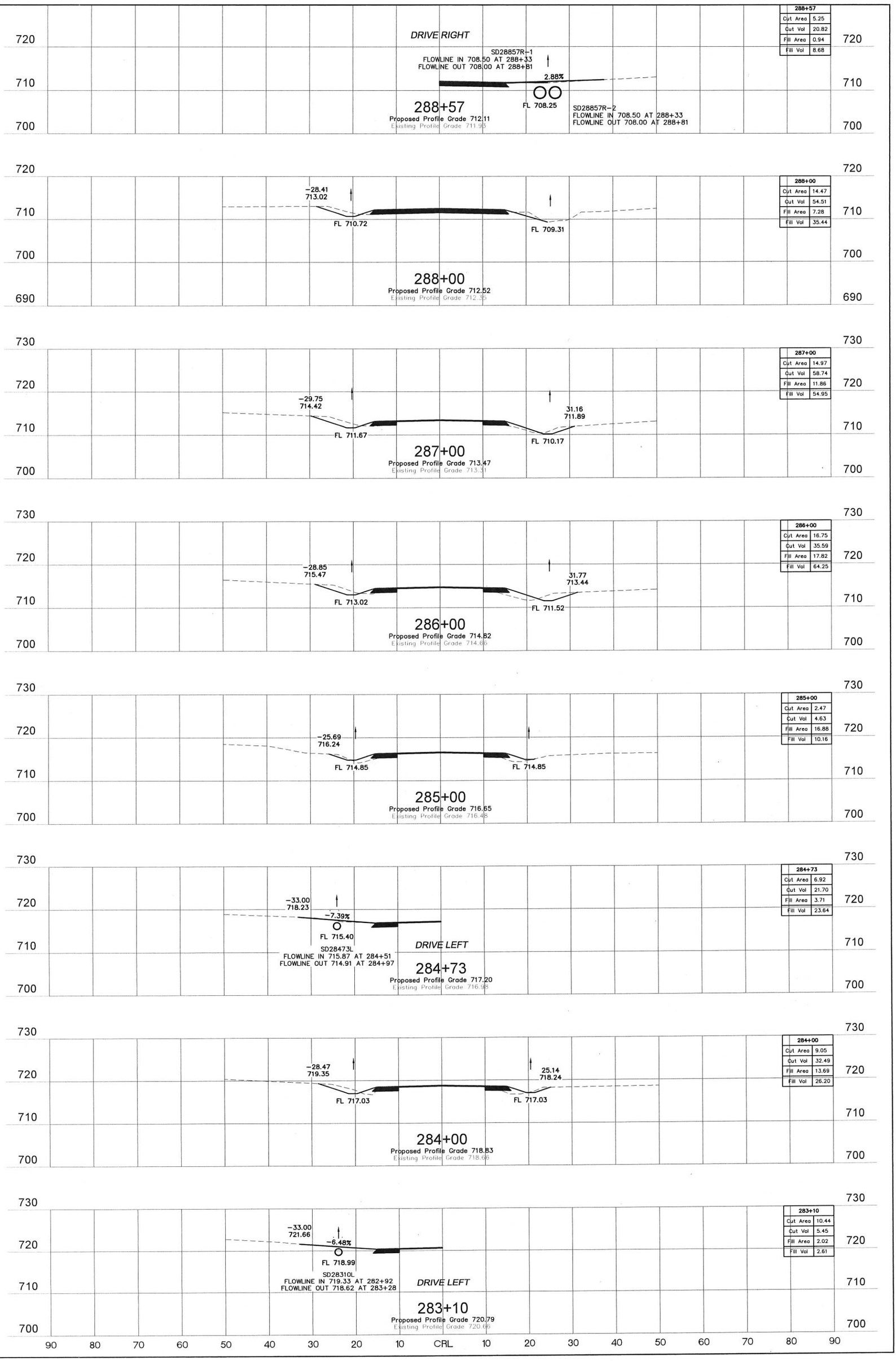
278+00	
Cut Area	7.72
Cut Vol	8.21
Fill Area	12.18
Fill Vol	9.07



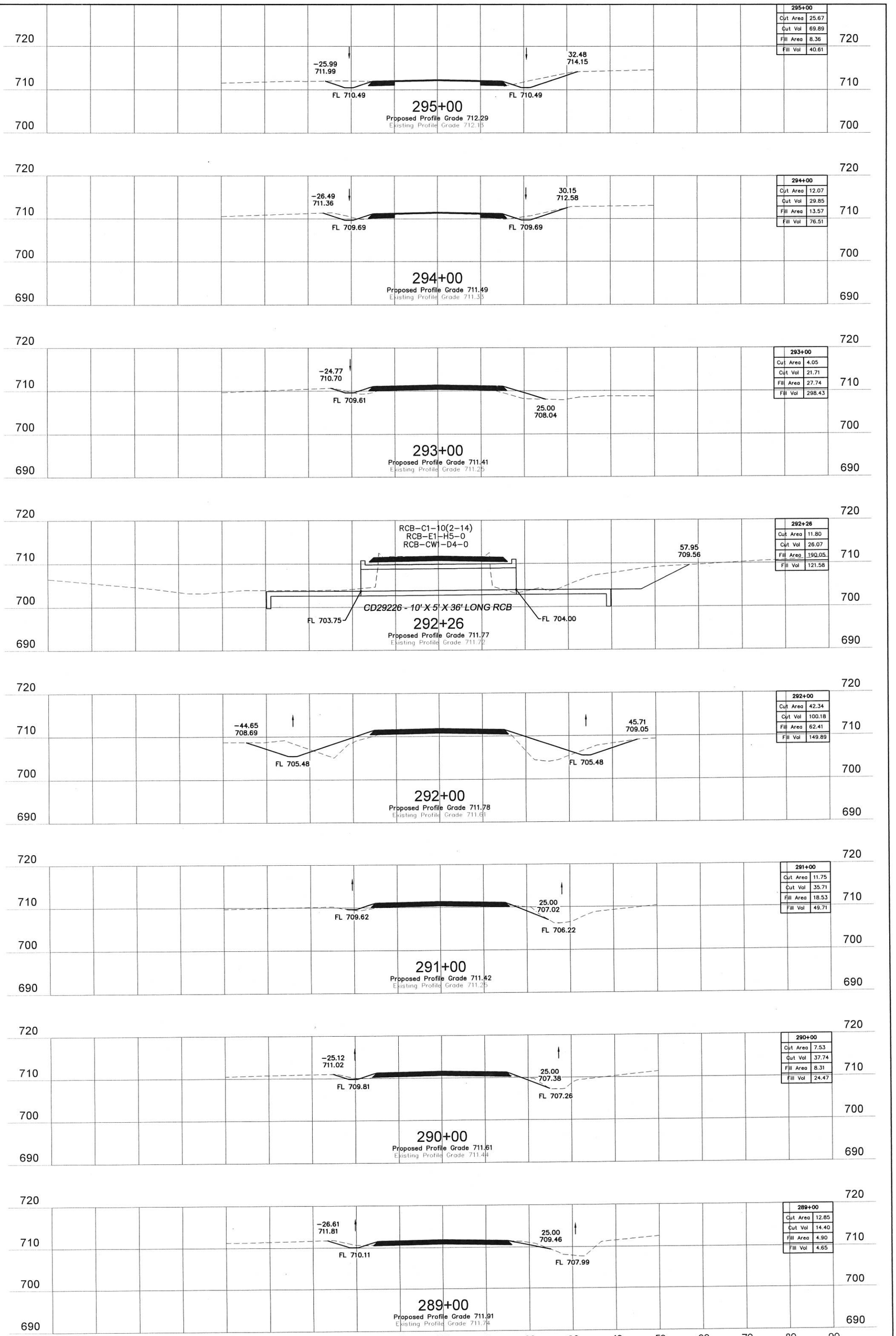
277+67	
Cut Area	5.66
Cut Vol	18.76
Fill Area	2.59
Fill Vol	18.38

90 80 70 60 50 40 30 20 10 CRL 10 20 30 40 50 60 70 80 90

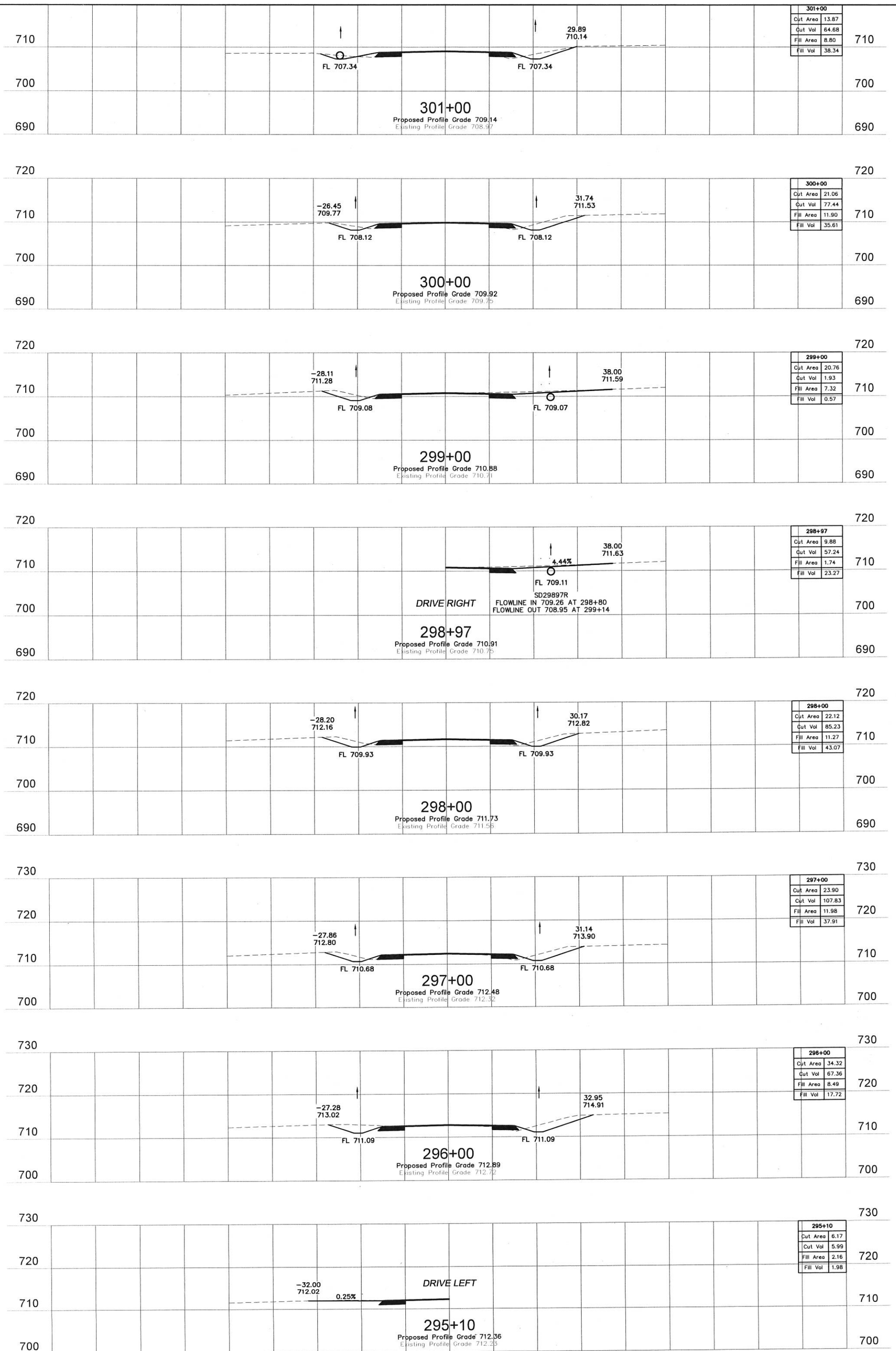
WAGONER COUNTY ONETA ROAD (121st TO 101st)
S.A. Project No. CIRB-173C(146)RB Sheet No. X11



WAGONER COUNTY ONETA ROAD (121st TO 101st)
S.A. Project No. CIRB-173C(146)RB Sheet No. X12



WAGONER COUNTY ONETA ROAD (121st TO 101st)
S.A. Project No. CIRB-173C(145)RB Sheet No. X13



301+00	
Cut Area	13.87
Cut Vol	64.68
Fill Area	8.80
Fill Vol	38.34

300+00	
Cut Area	21.06
Cut Vol	77.44
Fill Area	11.90
Fill Vol	35.61

299+00	
Cut Area	20.76
Cut Vol	1.93
Fill Area	7.32
Fill Vol	0.57

298+97	
Cut Area	9.88
Cut Vol	57.24
Fill Area	1.74
Fill Vol	23.27

298+00	
Cut Area	22.12
Cut Vol	85.23
Fill Area	11.27
Fill Vol	43.07

297+00	
Cut Area	23.90
Cut Vol	107.83
Fill Area	11.98
Fill Vol	37.91

296+00	
Cut Area	34.32
Cut Vol	67.36
Fill Area	8.49
Fill Vol	17.72

295+10	
Cut Area	6.17
Cut Vol	5.99
Fill Area	2.16
Fill Vol	1.98

WAGONER COUNTY ONETA ROAD (121st TO 101st)
S.A. Project No. CIRB-173C(146)RB Sheet No. X14