



**OHIO TURNPIKE AND
INFRASTRUCTURE COMMISSION**

ADDENDUM NO. 1

PROJECT NO. 43-19-06

BRIDGE REHABILITATION AND 3RD LANE WIDENING M.P. 237.17 TO M.P. 238.63
OHIO TURNPIKE OVER POLAND-UNITY ROAD M.P. 237.8, OHIO TURNPIKE OVER
COLUMBIANA-NEW CASTLE ROAD M.P. 238.1
MAHONING COUNTY, OHIO

OPENING DATE:

2:00 P.M. (EASTERN TIME), OCTOBER 26, 2018

ATTENTION OF BIDDERS IS DIRECTED TO:

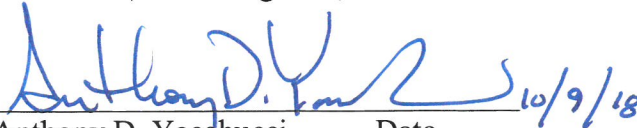
ANSWERS TO QUESTIONS RECEIVED THROUGH 12:00 PM ON OCTOBER 9, 2018

MODIFICATIONS TO THE CONTRACT DOCUMENTS

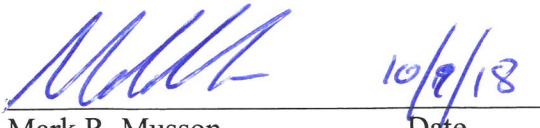
Plan Sheets: 11, 14, 52-71, 92-109, 112

Bid Schedule of Items and Estimated Quantities Worksheet
Ref. Nos. 9, 11

Issued by the Ohio Turnpike and Infrastructure Commission on October 9, 2018 by Anthony D. Yacobucci, Chief Engineer, and Mark R. Musson, Director of Contracts Administration.



Anthony D. Yacobucci Date 10/9/18



Mark R. Musson Date 10/9/18

ANSWERS TO QUESTIONS RECEIVED THROUGH 12:00 PM ON OCTOBER 9, 2018:

Q#1 Excavation APP note on page 11 of 186 mentions a “pavement layer thickness measurement inspection report dated September 12, 2014”. Where can this report be found for review?

A#1 The Excavation APP Note on Sheet 11 has been changed to reference pavement boring performed in 2018. The pavement borings will be included in Addendum No 2.

Q#2 Please see the attached cross section plan sheet. The cross section end areas/volumes appear to be incorrect. Please verify.

A#2 Existing pavement removed is not included nor modeled as ITEM 203 EXCAVATION in the cross sections, but was accounted for as ITEM 202 - PAVEMENT REMOVED, AS PER PLAN, based on the Existing Two Lane Typical Section. A discrepancy in the plans was corrected, and erroneous Cut and Fill quantities were updated between cross sections at STA. 1076+94.15 to STA. 1102+00, and STA. 1130+00 to 1152+00. The following sheets, including the General Summary, were updated: 14, 52-71, 92-109, 112. The Bid Schedule of Items has also been updated with revised quantities for Reference Items 9 and 11.

Q#3 Please provide soil borings for the structure work.

A#3 This question will be addressed in a future addendum.

Q#4 There is a quantity error for the Drilled Shaft, 48” Diameter, above Bedrock bid item. The quantity is overstated for the Bridge at M.P. 238.1 based on the elevations given in the plans for this structure. Please review and adjust the bid quantity.

A#4 This question will be addressed in a future addendum.

Q#5 The Maintenance of Traffic Plans for both Phase 1 & 2 show continuous portable barrier wall for the length of the work zone. The plans do not show any construction access points to access the work areas between the two bridges. In order to meet the schedule for this project, all four bridges will need to be worked on at the same time during each phase and in order to get material and equipment to work areas between the bridges these access points will be critical. Please confirm that Construction Access Points similar to Ohio Department of Transportation Standard Drawing MT-103.10 will be allowed to be installed.

A#5 This question will be addressed in a future addendum.

Q#6 Under Special Provisions Section SP 104 – Access to Turnpike and Restrictions, Part G. States that “Access for all material deliveries shall be achieved through public Toll plaza ramps only. No access drives, maintenance building facilities, service plazas or back-gate entrance locations will be permitted for use without prior written approval of the Chief Engineer.” Will the Chief Engineer grant access through the back-gates to both the north & south side service plazas (M.P. 237.2) that provide access to East South Range Road and Glacier Road? Also, will the Chief Engineer grant access to the gate on the north side at the Toll Plaza (M.P. 239) that provides access to East Pine Lake Road?

A#6 This question will be addressed in a future addendum.

Q#7 The plan note on Pg. 31 under Maintaining Traffic Part V. states that if the contractor desires to close the road(s) during this project, it must first be approved by the chief engineer. It is assumed that this note pertains to Unity Rd and Columbiana-New Castle Roadways. Will these local roads be allowed to close? Will they be allowed to be closed at the same times? Has OTIC previously coordinated the closure of these roads with Mahoning County Engineer’s Office?

A#7 This question will be addressed in a future addendum.

Q#8 Note 1 on standard construction drawing CBR-2 (9/19/18) states the concrete barrier wall may be slip formed. The toe detail on the upper right corner on this drawing states the vertical face below the pavement shall be formed. Please clarify if the Type B and C wall can be slip formed. If slip forming is acceptable, can the vertical face below the pavement be tapered to allow slip forming?

Q#8 This question will be addressed in a future addendum.

MODIFIED CONTRACT DOCUMENTS

With this Addendum No. 1, the Commission substitutes the enclosed material for the following Contract Documents:

Plan Sheets:

11, 14, 52-71, 92-109, 112 with additions to the Plan Drawings are called out with a cloud and deletions are marked with a revision triangle as thus:



With this Addendum No. 1, the Commission modifies the Bid Schedule of Items for the following Reference Numbers: 9, 11

**Receipt of Addendum No. 1
Project No. 43-19-06 is hereby acknowledged:**

(Firm Name) _____

(Signature) _____

(Printed Name) _____

(Date) _____

**BIDDERS MUST RETURN THE ABOVE ACKNOWLEDGEMENT
OF RECEIPT OF ADDENDUM NO. 1 WITH THEIR BID.**

ITEM 203 - EXCAVATION, AS PER PLAN

THIS ITEM SHALL CONSIST OF THE REMOVAL AND REPLACEMENT OF THE FULL DEPTH OF ALL SLAG MATERIAL COURSES ENCOUNTERED WITHIN THE LIMITS OF SUBGRADE COMPACTION AREAS WITH MATERIAL CONFORMING TO 203.02. FILL MATERIAL SHALL CONFORM TO 203.02 AND BE PLACED ACCORDING TO 203.06.

APPROXIMATE SLAG EXCAVATION LIMITS (LOCATION AND DEPTH) HAVE BEEN DETERMINED FROM PAVEMENT BORINGS PERFORMED IN 2018.

APPROXIMATE SLAG EXCAVATION AND EMBANKMENT QUANTITIES AS SHOWN BELOW ARE BASED UPON THESE BORINGS.

THE FOLLOWING ADDITIONAL ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR REMOVAL AND REPLACEMENT OF THE SLAG MATERIAL COURSE:

ITEM 203 - EXCAVATION, AS PER PLAN	4,000 CY
ITEM 203 - EMBANKMENT	4,000 CY

ITEM 206 - CHEMICALLY STABILIZED SUBGRADE, AS PER PLAN

THIS WORK SHALL COMPLY WITH ALL REQUIREMENTS SPECIFIED IN ITEM 206 - CHEMICALLY STABILIZED SUBGRADE OF ODOT 2016 CMS EXCEPT AS NOTED BELOW:

ITEM 206.01 DESCRIPTION

THIS WORK CONSISTS OF CONSTRUCTING A CHEMICALLY STABILIZED SUBGRADE BY THE APPLICATION OF PORTLAND CEMENT USING THE METHODS AND APPLICATION RATES OF EACH CHEMICAL AS SPECIFIED. SPREAD AND MIX EACH CHEMICAL PER THE SPECIFICATION REQUIREMENTS AND AS NOTED BELOW. AFTER APPLICATION AND MIXING OF THE PORTLAND CEMENT COMPACT AND CURE PER THE SPECIFICATION REQUIREMENTS AND AS NOTED BELOW.

ITEM 206.02 MATERIALS: FOR THE CURING COAT, FURNISH CURING MATERIALS SPECIFIED IN 451.02

ITEM 206.03 SUBMITTALS: MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS IS NOT REQUIRED BY THE CONTRACTOR. ALL OTHER REQUIREMENTS ARE DUE TO BE SUBMITTED AND APPROVED BY THE OTC PRIOR TO THE PRE-STABILIZATION MEETING

ITEM 206.05 CONSTRUCTION

A. SPREADING - USE AN APPLICATION RATE OF 6% PORTLAND CEMENT BY DRY UNIT WEIGHT. THE APPLICATION RATE WILL VARY DEPENDING ON THE IN-SITU DRY UNIT WEIGHT OF THE SOIL. QUANTITIES OF PORTLAND CEMENT ARE BASED ON AN IN-SITU DRY UNIT WEIGHT OF 115 LBS/FT³.

B. CURING - THE TREATED AREA SHALL BE SHAPED TO THE REQUIRED LINES, GRADES, AND CROSS-SECTION AND FINAL COMPACTION AFTER APPLICATION OF THE CEMENT USING A SMOOTH DRUM ROLLER WEIGHING AT LEAST 10 TONS AND SHALL CONTINUE UNTIL UNIFORM AND THE REQUIRED COMPACTION IS OBTAINED. UNIFORMLY APPLY CURING COAT ON THE SURFACE OF THE CHEMICALLY STABILIZED SOIL SUBGRADE AT AN APPLICATION RATE OF 1 GALLON PER 150 SQUARE FEET. APPLY THE CURING COAT BEFORE THE SURFACE DRIES. IF THE CURING COAT IS DELAYED OR THE SURFACE STARTS TO DRY OUT, INDICATED BY TURNING WHITE, APPLY WATER FOR THE TEMPORARY CURING UNTIL THE CURING COAT CAN BE APPLIED. DO NOT APPLY THE CURING COAT UNLESS THE CURING COAT CAN BE SET UP BEFORE IT RAINS. WHEN THE APPLICATION OF THE CURING COAT MUST BE DELAYED, KEEP THE CHEMICALLY STABILIZED SUBGRADE WET BY USING WATER UNTIL THE CURING COAT CAN BE APPLIED. COMPLETED SECTIONS OF THE STABILIZED SUBGRADE THAT ARE USED DURING THE CONSTRUCTION OF ADJOINING SECTIONS SHALL BE PROTECTED TO PREVENT EQUIPMENT FROM MARRING OR DAMAGING THE COMPLETED WORK. THE STABILIZED SOIL SUBGRADE SHALL NOT BE SUBJECT TO CONSTRUCTION TRAFFIC UNTIL ACCEPTANCE OF THE STABILIZED SOIL SUBGRADE. THE ACCEPTANCE OF THE STABILIZED SOIL SUBGRADE WILL BE EVALUATED AFTER 72 HOURS OF CURING AS DETERMINED IN ITEM C OF THESE PLAN NOTES. SUFFICIENT PROTECTION FROM FREEZING SHALL BE GIVEN TO THE CHEMICALLY STABILIZED MATERIAL FOR 7 DAYS AFTER ITS CONSTRUCTION OR AS APPROVED BY THE CHIEF ENGINEER. THE CONTRACTOR SHALL REPAIR ANY STABILIZED SOIL SUBGRADE CAUSED BY CONSTRUCTION TRAFFIC AND OPERATIONS AT THE CONTRACTOR'S OWN COST. THE CONTRACTOR SHALL SUBMIT THE PROPOSED SUBGRADE REPAIR METHOD TO THE CHIEF ENGINEER FOR APPROVAL.

C. PROOF ROLLING - AFTER THE INITIAL 72-HOUR CURE PERIOD AND AT THE CONTRACTOR'S REQUEST, THE COMMISSION'S AGENT WILL USE A DUAL-MASS DYNAMIC CONE PENETROMETER (DCP) TO MEASURE THE PENETRATION RATE (PR) IN MM/BLOW OF THE STABILIZED SOIL SUBGRADE THROUGH THE TOTAL TREATMENT DEPTH. TESTING SHALL BE CONDUCTED EVERY 200 LINEAR FEET.

- IF THE AVERAGE PR IS ABOVE 11 MM/BLOW THE CURE PERIOD SHALL BE EXTENDED FOR 2 DAYS FOLLOWED BY TEST ROLLING PER ODOT ITEM 206.
- IF THE AVERAGE PR IS 11 MM/BLOW OR LOWER THE CONTRACTOR SHALL PROCEED WITH PROOF ROLLING PER ODOT ITEM 206 FOR FINAL ACCEPTANCE OF THE STABILIZED SUBGRADE.

D. PROTECTION - ALL THE PROVISIONS OF 206.05 PARAGRAPH F APPLY AS WELL AS THE FOLLOWING: COMPLETED AND ACCEPTED PORTIONS OF THE STABILIZED SOIL SUBGRADE THAT ARE TRAVELED ON BY EQUIPMENT USED IN CONSTRUCTING ANY OTHER SECTION, OR ANY OTHER WORK, SHALL BE PROTECTED IN SUCH A MANNER AS TO PREVENT EQUIPMENT AND OPERATIONS FROM MARRING OR DAMAGING THE SUBGRADE IN ANY WAY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ANY DAMAGE AND IS REQUIRED TO REPAIR THE STABILIZED SOIL SUBGRADE THAT ARISES DUE TO HIS OPERATIONS.

E. IN CASES WHERE SUBGRADE STABILITY USING SOIL STABILIZATION IS NOT EFFECTIVE AS DETERMINED BY PROOF ROLLING AND CONCURRENCE BY THE CHIEF ENGINEER, THE AREA SHALL BE REPAIRED BY ONE OF THE FOLLOWING OPTIONS AS DETERMINED BY THE CHIEF ENGINEER:

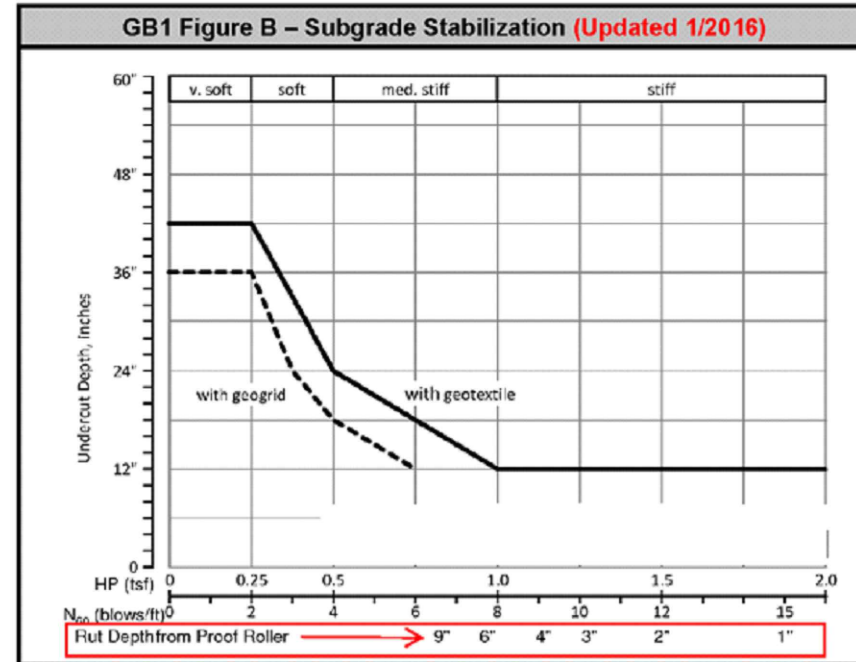
- EXCAVATE THE TOP 16 INCHES OF SUBGRADE MATERIAL AND STOCKPILE THE EXCAVATED MATERIAL. IN THE EXCAVATION PERFORM SOIL STABILIZATION ON THE NEWLY EXPOSED SOIL AT THE APPLICATION RATE STATED IN PLAN NOTE ITEM 206.05.A WITH A TREATMENT DEPTH OF 16 INCHES. COMPACT THE SOIL STABILIZATION IN ACCORDANCE WITH ODOT ITEM 206. BACKFILL THE EXCAVATION WITH THE EXCAVATED MATERIAL AND PERFORM SOIL STABILIZATION AT THE APPLICATION RATE STATED IN PLAN NOTE ITEM 206.06.A WITH A TREATMENT DEPTH OF 16

INCHES. COMPACT THE SOIL STABILIZATION IN ACCORDANCE WITH ODOT ITEM 206. LIMITS OF THE REPAIR SHALL BE DETERMINED BY THE CHIEF ENGINEER.

- PERFORM SOIL STABILIZATION IN ACCORDANCE WITH PLAN SHEET ITEM 206.05 EXCEPT USE AN APPLICATION RATE OF 6% PORTLAND CEMENT (WITH AN IN-SITU DRY UNIT WEIGHT OF 115 PCF) AND A TREATMENT DEPTH OF 16 INCHES.

3. UNDERCUT USING THE FOLLOWING CHART FROM ODOT GEOTECHNICAL BULLETIN 1, BASED ON THE RUT DEPTH FROM PROOF ROLLING:

- IF THE REPLACEMENT IS LESS THAN 16 INCHES IN DEPTH, PLACE GEOGRID AT THE BOTTOM OF THE EXCAVATION.
- IF THE REPLACEMENT IS 16 INCHES OR GREATER, PLACE THE GEOGRID IN THE MIDDLE OF THE GRANULAR MATERIAL AND THE GEOTEXTILE FABRIC ON THE BOTTOM OF THE EXCAVATION.



F. SOIL-STABILIZATION AT CULVERTS

- BOX CULVERTS WHERE DEPTH OF COVER IS GREATER THAN 4 FEET:

CHEMICALLY STABILIZE ACCORDING TO PROJECT DOCUMENTS

- BOX CULVERTS WHERE DEPTH OF COVER IS BETWEEN 2-4 FEET:

EXCAVATE 16 INCHES OF THE EXPOSED SOIL SUBGRADE FROM THE BOX CULVERT TO DISTANCE 20 FEET LONGITUDINALLY ON EACH SIDE (FORWARD AND REAR). SPREAD THE EXCAVATED SOIL AND PERFORM CHEMICAL STABILIZATION ON THE EXCAVATED SOIL USING THE SAME REQUIREMENTS AS THE ADJACENT SUBGRADE. AFTER CHEMICALLY STABILIZING THE EXCAVATED SOIL, PLACE THE EXCAVATED SOIL BACK IN THE EXCAVATION TO A DISTANCE OF 20 FEET LONGITUDINALLY ON EACH SIDE OF THE BOX CULVERT. COMPACT ACCORDING TO THE SPECIAL PROVISIONS DETAILED BELOW.

- BOX CULVERTS WHERE DEPTH OF COVER IS LESS THAN 2 FEET:

EXCAVATE 12 INCHES OF THE EXPOSED SOIL SUBGRADE FROM THE BOX CULVERT TO A DISTANCE 20 FEET LONGITUDINALLY EACH SIDE (FORWARD AND REAR). SPREAD THE EXCAVATED SOIL AND PERFORM CHEMICAL STABILIZATION ON THE EXCAVATED SOIL USING THE SAME REQUIREMENTS AS THE ADJACENT SUBGRADE. AFTER CHEMICALLY STABILIZING THE EXCAVATED SOIL, PLACE THE EXCAVATED SOIL BACK IN THE EXCAVATION TO A DISTANCE OF 20 FEET LONGITUDINALLY ON EACH SIDE OF THE BOX CULVERT. COMPACT ACCORDING TO THE SPECIAL PROVISIONS DETAILED BELOW.

SPECIAL PROVISIONS FOR COMPACTION OF ITEMS 2 AND 3 ABOVE

COMPACT THE EXISTING SUBGRADE MATERIAL OVER THE BOX CULVERT USING A NON-VIBRATORY ROLLER AND TEST FOR PERCENT COMPACTION ACCORDING TO THE PROJECT SPECIFICATIONS. DO NOT PROOF ROLL. IF THE COMPACTED SOIL DOES NOT MEET THE SPECIFICATION REQUIREMENTS FOR DENSITY, THE ENGINEER WILL DELINEATE THE AREA TO BE UNDERCUT AND BACKFILL WITH ITEM SP304 MATERIAL.

FOR ALL SCENARIOS LISTED ABOVE, AND IN OTHER AREAS INACCESSIBLE TO THE SPECIFIED COMPACTION EQUIPMENT, THE CONTRACTOR SHALL ENSURE THAT THE SPECIFIED COMPACTION IS OBTAINED USING OTHER SUITABLE EQUIPMENT.

G. BRIDGE APPROACH SLABS

- EXCAVATE 14 INCHES OF THE EXPOSED SOIL SUBGRADE FROM THE EDGE OF THE BRIDGE FACE TO 20 FEET BEYOND THE BRIDGE FACE AND SPREAD THE EXCAVATED SOIL IN THE AREA TO BE CHEMICALLY STABILIZED. PERFORM CHEMICAL STABILIZATION ON THE EXCAVATED SOIL USING THE SAME REQUIREMENTS AS THE ADJACENT SUBGRADE. AFTER CHEMICALLY STABILIZING THE EXCAVATED SOIL, PLACE THE EXCAVATED SOIL BACK IN THE EXCAVATION FROM THE BRIDGE FACE TO 20 FEET BEYOND THE BRIDGE FACE AND COMPACT ACCORDING TO SPECIFICATIONS.

PAYMENT FOR EXCAVATION AND EMBANKMENT REQUIRED TO COMPLETE THE STABILIZATION IN THE AREAS SHALL BE INCLUDED IN AND INCIDENTAL TO ITEMS 206 - CEMENT STABILIZED SUBGRADE, 16 INCHES DEEP, AS PER PLAN.

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK UNDER ITEM 206 - CEMENT STABILIZED SUBGRADE, AS PER PLAN:

ITEM 206 - CEMENT STABILIZED SUBGRADE, 16 INCHES DEEP, AS PER PLAN	(SEE SHEET 30) SQ. YD.
ITEM 206 - CEMENT	2,600 TON
ITEM 206 - CURING COAT, AS PER PLAN	3,500 GAL.
ITEM 206 - TEST ROLLING	30 HOURS

THE FOLLOWING CONTINGENCY QUANTITIES SHALL BE USED TO EXCAVATE AND STABILIZE THE UNSTABLE SUBGRADE SOILS AS DESCRIBED ABOVE IN SECTION E.1:

ITEM 203 - ROADWAY EXCAVATION & EMBANKMENT	1,800 CU. YD.
ITEM 206 - CEMENT STABILIZED SUBGRADE, 16 INCHES DEEP	8,000 SQ. YD.
ITEM 206 - CEMENT	320 TON
ITEM 206 - CURING COAT, AS PER PLAN	240 GAL.
ITEM 206 - TEST ROLLING	10 HOURS

THE FOLLOWING CONTINGENCY QUANTITIES SHALL BE USED TO EXCAVATE AND STABILIZE THE UNSTABLE SUBGRADE SOILS AS DESCRIBED ABOVE IN SECTION E.2:

ITEM 206 - CEMENT STABILIZED SUBGRADE, 16 INCHES DEEP	4,000 SQ. YD.
ITEM 206 - CEMENT	360 TON
ITEM 206 - CURING COAT, AS PER PLAN	240 GAL.
ITEM 206 - TEST ROLLING	10 HOURS

THE FOLLOWING CONTINGENCY QUANTITIES SHALL BE USED TO UNDERCUT AND REPLACE THE UNSTABLE SUBGRADE SOILS AS DESCRIBED ABOVE IN SECTION E.3:

ITEM 203 - EXCAVATION	178 CU. YD.
SP 304 - GRANULAR MATERIAL	178 CU. YD.
ITEM 204 - SUBGRADE COMPACTION	227 SQ. YD.
ITEM 204 - TYPE D GEOTEXTILE, 712.09	227 SQ. YD.
ITEM 861 - GEOGRID FOR SUBGRADE STABILIZATION, AS PER PLAN, TENSAR TRIAX 160 GEOGRID	227 SQ. YD.

ITEM 209 - LINEAR GRADING, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ITEM 209, THE CONTRACTOR SHALL PERFORM THE FOLLOWING ADJACENT TO NEW PAVEMENT AND/OR SP304 BERM. THIS WORK CONSISTS OF PERFORMING LINEAR GRADING TO BACK UP THE NEW PAVEMENT UNDER SP627 OR SP304 BERM AND FILLING ANY LOW SPOTS TO RE-ESTABLISH THE AREA OUTSIDE OF THE THREE-FOOT AGGREGATE BERM, CONCRETE CURB OR CONCRETE BARRIER IF NOT PAID FOR UNDER ITEM 622. THE EMBANKMENT MATERIALS USED TO BACK UP THE PAVEMENT SHALL MEET THE SPECIFICATIONS OF ODOT CMS 204 WHICH INCLUDES THE COMPACTION OF FILL MATERIAL IN 6" LIFTS (MAX). THE FINAL ELEVATION OF THE COMPACTED EMBANKMENT SHALL BE THREE INCHES BELOW THE FINISHED GRADE. ADJACENT TO ALL BERMS AND CURB, PLACE THREE INCHES OF ITEM 659 - TOPSOIL ON THE DISTURBED FORESLOPE AS DIRECTED BY THE CHIEF ENGINEER.

ANY ADDITIONAL AREA DISTURBED BY THE CONTRACTOR OUTSIDE OF THE PLAN EXCAVATION LIMITS SHALL BE RE-ESTABLISHED TO THE EXISTING GRADE AND SHALL BE INCLUDED IN THIS ITEM. REMOVE THE LOOSE MATERIAL FROM THESE AREAS AND COMPACT THE UNDISTURBED SOIL BELOW PRIOR TO PLACEMENT OF THE LOOSE MATERIAL IN 6" LIFTS (MAX) IN ACCORDANCE WITH ODOT CMS 204. THE SURFACE ELEVATION OF COMPACTED LOOSE MATERIAL PLACED IN THE DISTURBED AREAS SHALL BE THREE INCHES BELOW THE FINISHED GRADE. PLACE THREE INCHES OF ITEM 659 - TOPSOIL ON THE RECONSTRUCTED FORESLOPE TO MATCH THE GRADE OF THE EXISTING FORE SLOPE. PERFORM SEEDING AND MULCHING IN ACCORDANCE WITH ODOT CMS 659.

IF BURIED GUARDRAIL CABLE IS ENCOUNTERED ADJACENT TO THE PAVEMENT, IT SHALL BE CUT AT THE POINT IT ENTERS THE GROUND AND THE LOOSE MATERIAL SHALL BE REMOVED IN ACCORDANCE WITH SP105. THE COST OF THIS WORK SHALL BE INCIDENTAL TO ITEM 209.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID PER LINEAR FOOT FOR ITEM 209 - LINEAR GRADING, AS PER PLAN, AND SHALL INCLUDE ANY EXCAVATION, EMBANKMENT, TOPSOIL, SEEDING AND MULCHING, SUBGRADE COMPACTION, COMPACTION, PROOF ROLLING, GUARDRAIL CABLE REMOVAL, ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THIS WORK.

ITEM 203 - ROADWAY EXCAVATION AND EMBANKMENT

THIS WORK SHALL COMPLY WITH ALL REQUIREMENTS SPECIFIED IN ITEM 203 - EXCAVATION AND EMBANKMENT OF ODOT 2016 CMS EXCEPT AS NOTED BELOW:

ITEM 203.03 SUITABLE MATERIALS:

ALL SUITABLE EMBANKMENT MATERIALS SHALL MEET THE REQUIREMENTS OF 203.03 AS WELL AS THE FOLLOWING:

- ALL EMBANKMENT MATERIAL SHALL CONTAIN A SULFATE CONTENT LESS THAN 3,000 PPM AS TESTED PER ODOT S 1122. THE CONTRACTOR SHALL SUBMIT SULFATE RESULTS FOR THE PROPOSED EMBANKMENT MATERIAL EVERY 500 CY TO THE CHIEF ENGINEER FOR APPROVAL.

- NATURAL SOIL CLASSIFIED AS A-7-6 OR A-7-5 SHALL NOT BE USED AS EMBANKMENT MATERIAL. THE CONTRACTOR SHALL SUBMIT SOIL CLASSIFICATION RESULTS FOR THE PROPOSED EMBANKMENT MATERIAL EVERY 500 CY TO THE CHIEF ENGINEER FOR APPROVAL.

OTC037_GENERAL NOTES & SUMMARY.dwg: 10/08/18 - 10:02am

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OHIO TURNPIKE

BY	DATE	REVISIONS	NO.	CHECKED	DESIGNED
RBP	10/18	ADDENDUM NO. 1	1	JAH	KF
				IN CHARGE	DRAWN
				RBP	BA

GENERAL NOTES

PROJECT 43-19-06 DATE: 09-17-2018

2 / 4

11

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OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

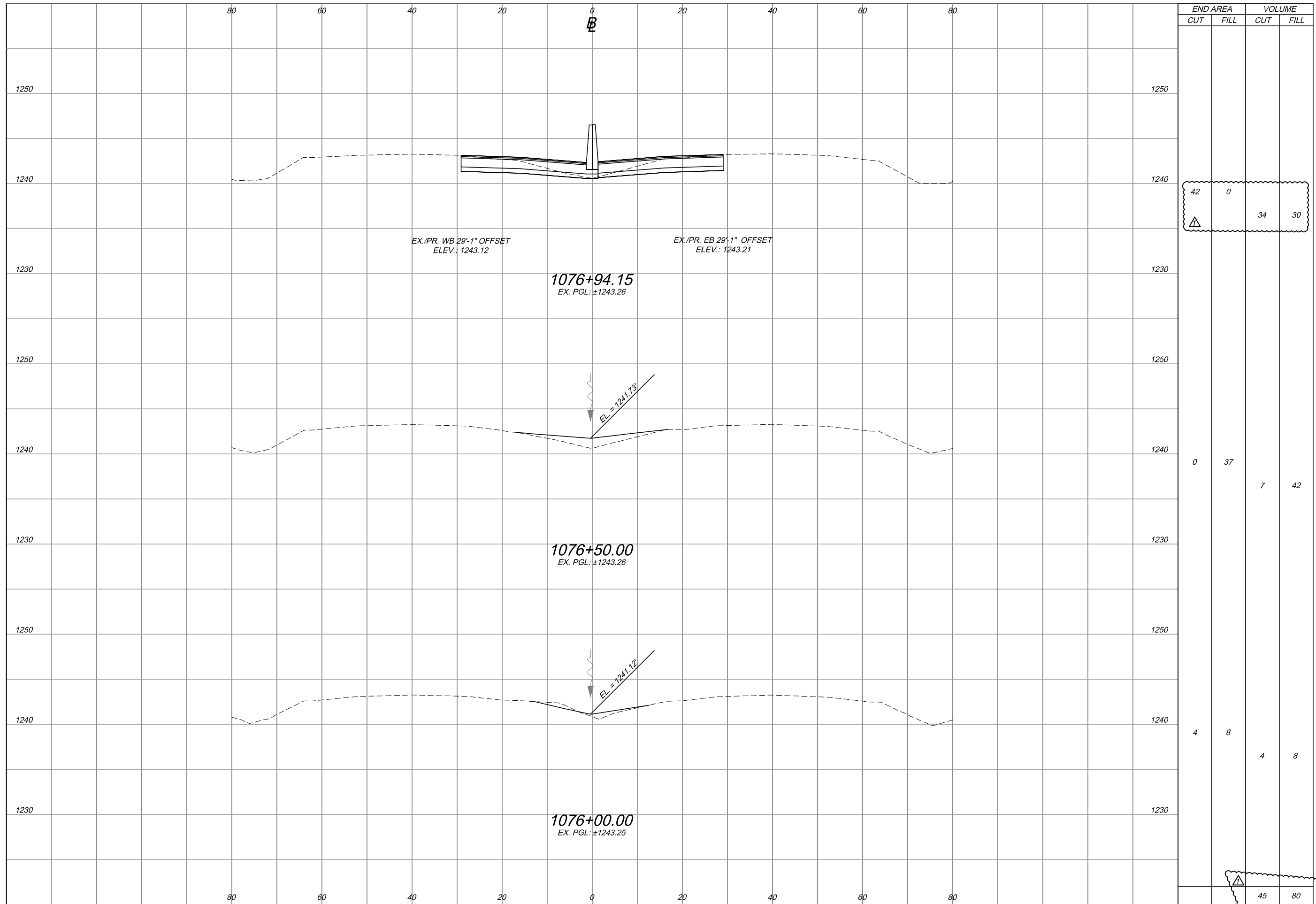
OTC037_GENERAL NOTES & SUMMARY.dwg; 10/08/18 - 10:02am

SHEET NUMBER													ITEM	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
10	11	12	13	18	19	20	22	27	28	30	112						
ROADWAY																	
	1												201	1	LUMP	CLEARING AND GRUBBING	10
										660			202	660	SQ. YD.	APPROACH SLAB REMOVED	
1,230							16,312			13,585			202	31,127	SQ. YD.	PAVEMENT REMOVED, AS PER PLAN	10
				5,375									202	5,375	FOOT	GUARDRAIL REMOVED	
				230									202	230	FOOT	FENCE REMOVED	
390					628								202	1,018	FOOT	PIPE REMOVED, 24" AND UNDER	
					17								202	17	EACH	CATCH BASIN OR INLET REMOVED, AS PER PLAN	12
			1										202	1	EACH	REMOVAL MISC.: SIGN REMOVED	13
	178												203	7,036	CU. YD.	EXCAVATION	
													203	4,000	CU. YD.	EXCAVATION, AS PER PLAN	11
	4,000												203	10,960	CU. YD.	EMBANKMENT	
	4,000												203	1,800	CU. YD.	ROADWAY EXCAVATION & EMBANKMENT	
	1,800												203	1,800	CU. YD.	ROADWAY EXCAVATION & EMBANKMENT	
	227												204	227	SQ. YD.	SUBGRADE COMPACTION	
													204	227	SQ. YD.	TYPE D GEOTEXTILE, 712.09	
	3,280												206	3,280	TON	CEMENT	
	12,000												206	12,000	SQ. YD.	CEMENT STABILIZED SUBGRADE, 16 INCHES DEEP	
										58,037			206	58,037	SQ. YD.	CEMENT STABILIZED SUBGRADE, 16 INCHES DEEP, AS PER PLAN	11
	3,980												206	3,980	GAL.	CURING COAT, AS PER PLAN	11
													206	50	HOURS	TEST ROLLING	
	50												206	50	HOURS	TEST ROLLING	
				2.98									209	2.98	MILE	LINEAR GRADING, AS PER PLAN	11
				3,167									606	3,167	FOOT	GUARDRAIL, TYPE MGS WITH LONG STEEL POSTS	
				4									606	4	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
				4									606	4	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	
								2					SP 606B	2	EACH	IMPACT ATTENUATOR, TYPE 1	
				3,701									622	3,701	FOOT	CONCRETE BARRIER, SINGLE SLOPE, TYPE B-50, AS PER PLAN	13
				2,758									622	2,758	FOOT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C-50, AS PER PLAN	13
			240										622	240	FOOT	BARRIER, MISC.: REMOVE AND REPLACE TYPE D BARRIER	13
				152									622	152	FOOT	PORTABLE BARRIER 32", AS PER PLAN	XOV-3
													622	10	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B	
													622	5	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C	
	227												861	227	SQ. YD.	GEOGRID FOR SUBGRADE STABILIZATION, AS PER PLAN, TENSAR TRIAX 160 GEOGRID	11
EROSION CONTROL																	
			1										SP 113	1	LUMP	SWP3 MANAGEMENT	
					13.2								601	13.2	CU. YD.	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
			2										659	2	EACH	SOIL ANALYSIS TEST	
			2,036										659	2,036	CU. YD.	TOPSOIL	12
			18,341										659	18,341	SQ. YD.	SEEDING AND MULCHING	
			918										659	918	SQ. YD.	REPAIR SEEDING AND MULCHING	
			918										659	918	SQ. YD.	INTER SEEDING	
			2.56										659	2.56	TON	COMMERCIAL FERTILIZER	
			3.79										659	3.79	ACRE	LIME	
			100										659	100	M. GAL.	WATER	
			700										670	700	SQ. YD.	SLOPE EROSION PROTECTION	
			1										832	1	LUMP	STORM WATER POLLUTION PREVENTION PLAN	
			1,000										832	1,000	FOOT	PERIMETER GEOTEXTILE FABRIC FENCE	12
			20,000										832	20,000	EACH	EROSION CONTROL	

GENERAL SUMMARY	NO. 1 CHECKED JAH IN CHARGE RBP	DATE 10/18 JAH	REVISIONS ADDENDUM NO. 1	BY DATE JAH 10/18	PROJECT 43-19-06 DATE: 09-17-2018
1 / 3					
14 186					

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OTC037_CROSS SECTION - MAINLINE.dwg; 10/08/18 - 10:03am

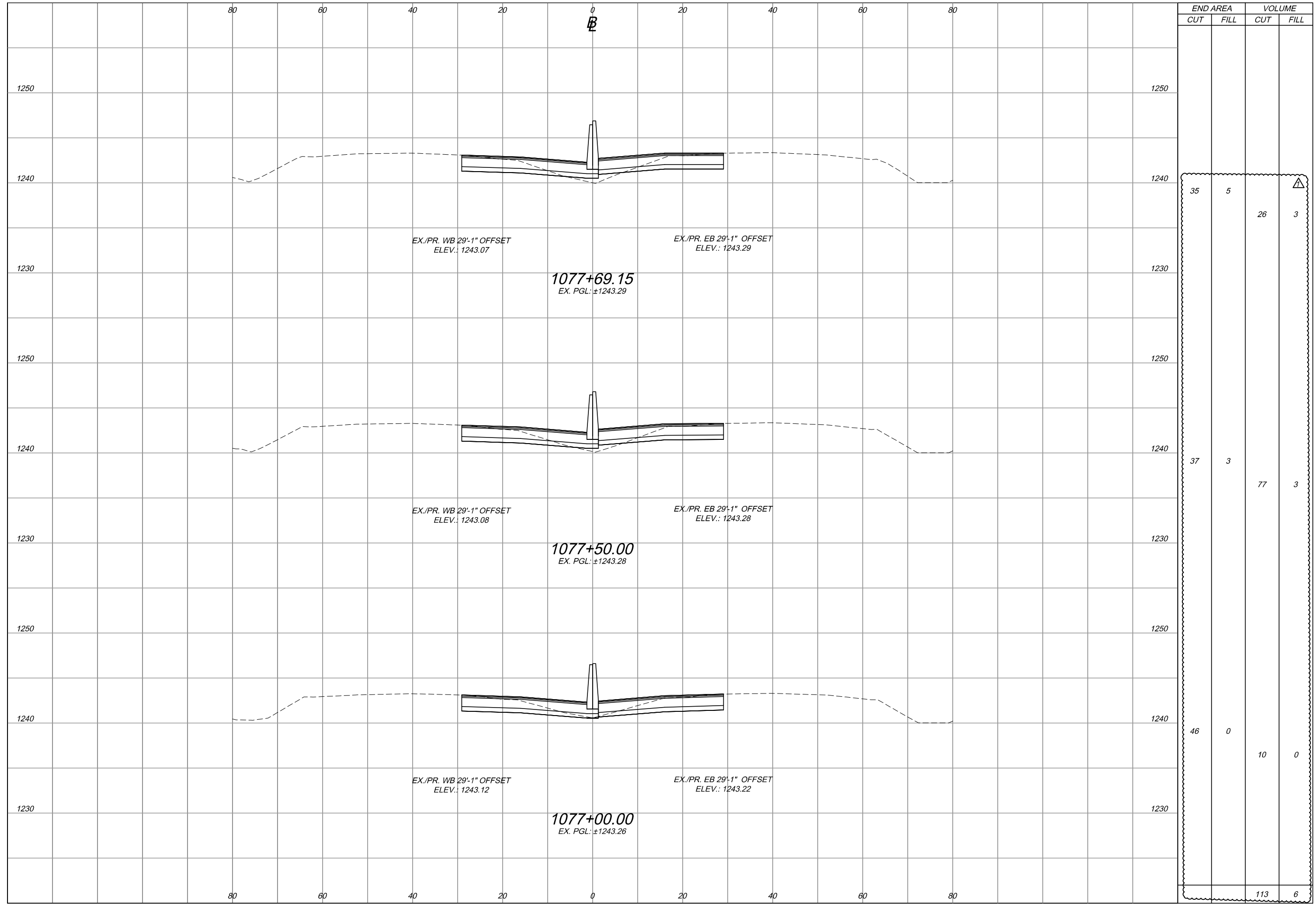


STATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
1076+94.15	42	0	34	30
1076+50.00	0	37	7	42
1076+00.00	4	8	4	8
TOTAL	46	45	45	80

PROJECT 43-19-06 **DATE: 09-17-2018**
CROSS SECTIONS
 STA. 1076+00 TO STA. 1076+94.15
 2 / 62
 52 / 186

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OTC037_CROSS SECTION - MAINLINE.dwg: 10/08/18 - 10:04am



END AREA	VOLUME	
	CUT	FILL
35	5	26
37	3	77
46	0	10
113	6	

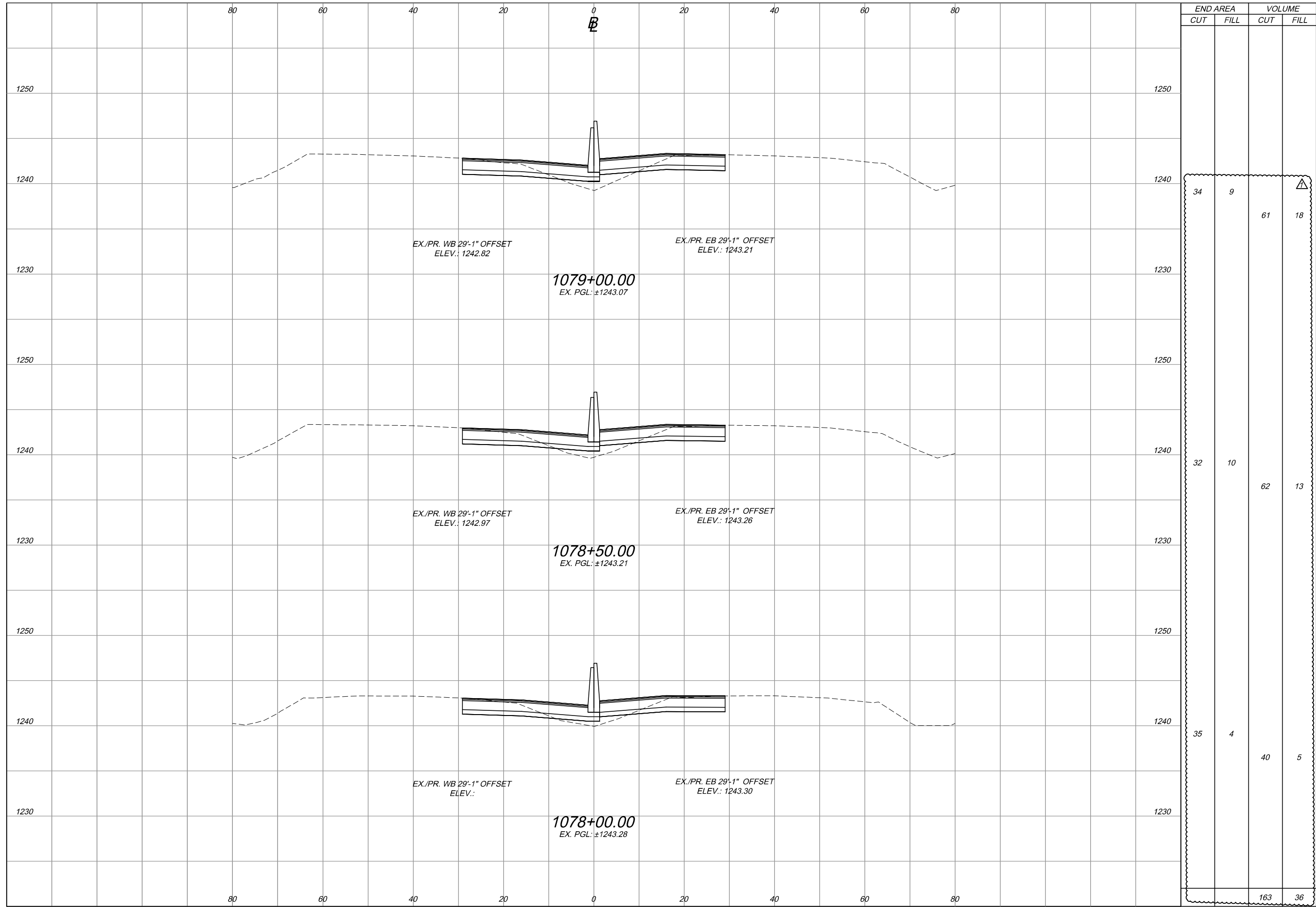
PROJECT 43-19-06 **DATE: 09-17-2018**
3 / 62 **53**
186

CROSS SECTIONS
 STA. 1077+00 TO STA. 1077+69.15

DESIGNED	CHECKED	NO.	REVISIONS	BY	DATE
BA	JAH	1	ADDENDUM NO. 1	JAH	10/18
BA	RBP				

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OTC037_CROSS SECTION - MAINLINE.dwg: 10/08/18 - 10:04am



STATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
1079+00.00	34	9	61	18
1078+50.00	32	10	62	13
1078+00.00	35	4	40	5
TOTAL	101	23	163	36

PROJECT 43-19-06 **DATE: 09-17-2018**

4 / 62

54
186

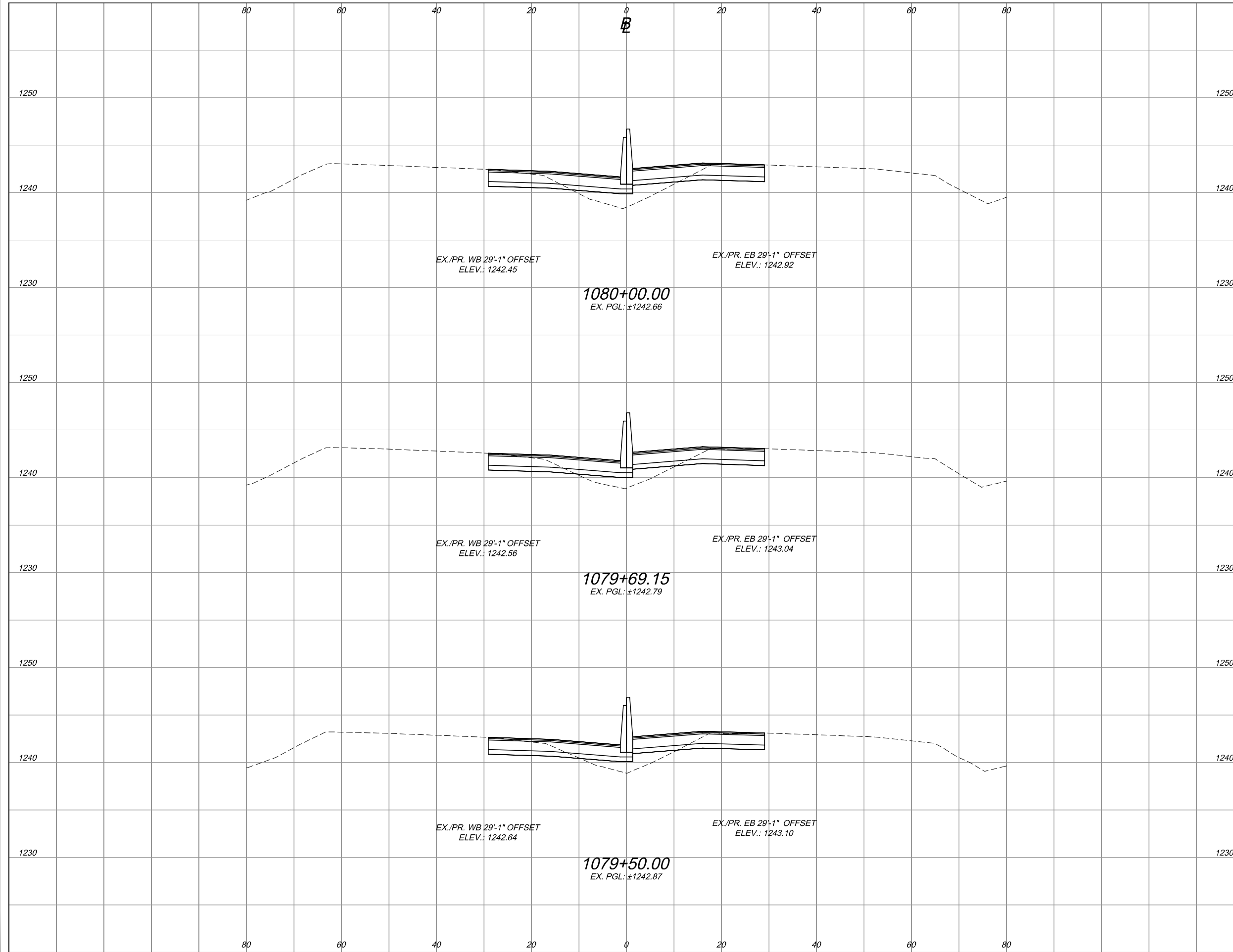
CROSS SECTIONS
STA. 1078+00 TO STA. 1079+00

DESIGNED	BA	CHECKED	JAH	NO.	1
DRAWN	BA	IN CHARGE	RBP		
REVISIONS	ADDENDUM NO. 1				
BY	JAH	DATE	10/18		

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OTC037_CROSS SECTION - MAINLINE.dwg: 10/08/18 - 10:04am



STATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
1079+50.00	30	17	59	24
1079+69.15	29	18	21	12
1080+00.00	29	20	33	22
TOTAL	88	55	113	58

PROJECT 43-19-06 **DATE: 09-17-2018**

5 / 62

55
186

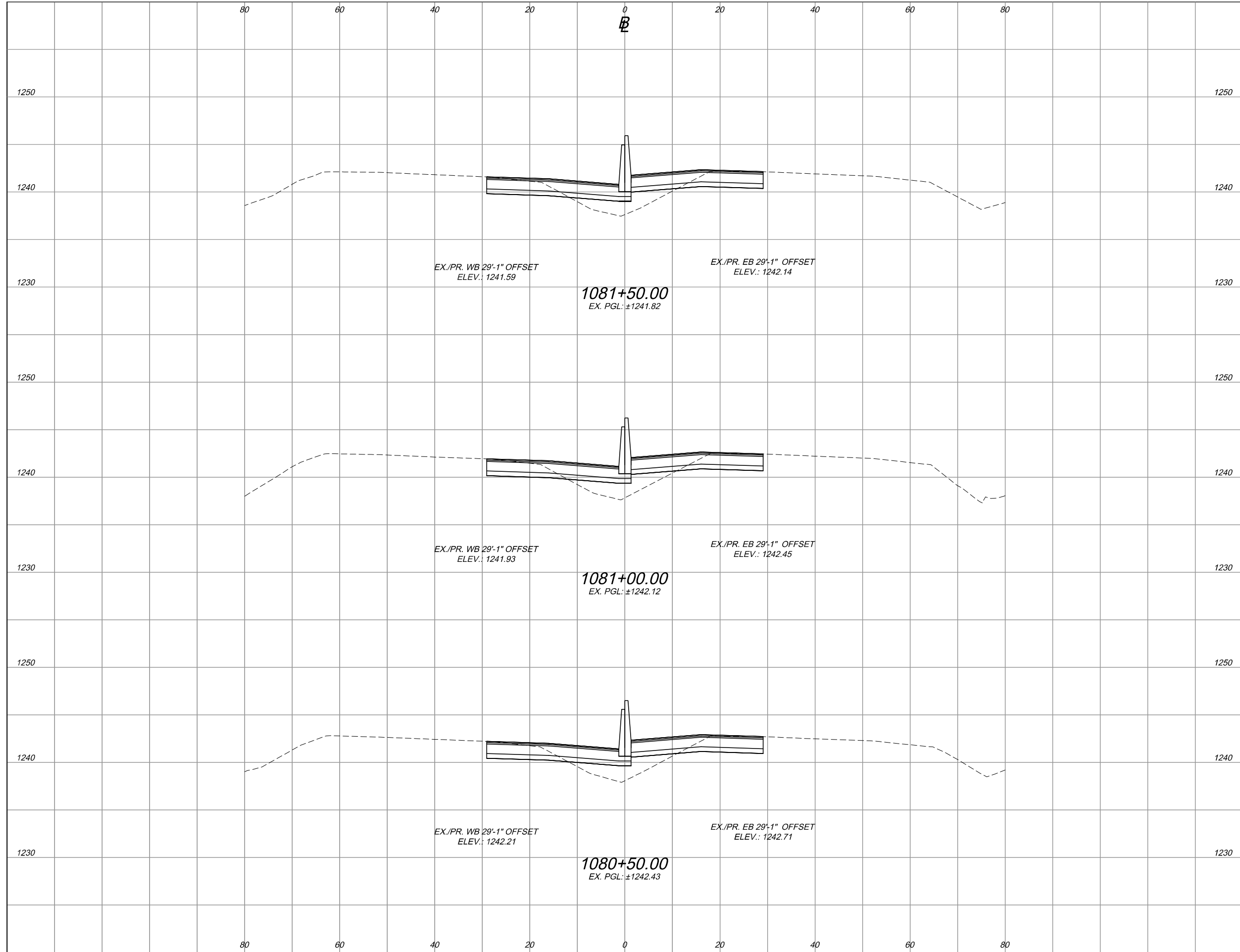
CROSS SECTIONS
STA. 1079+50 TO STA. 1080+00

DESIGNED	BA	CHECKED	JAH	NO.	1	REVISIONS	ADDENDUM NO. 1
DRAWN	BA	IN CHARGE	RBP				
BY	JAH	DATE	10/18				

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OTC037_CROSS SECTION - MAINLINE.dwg: 10/08/18 - 10:05am



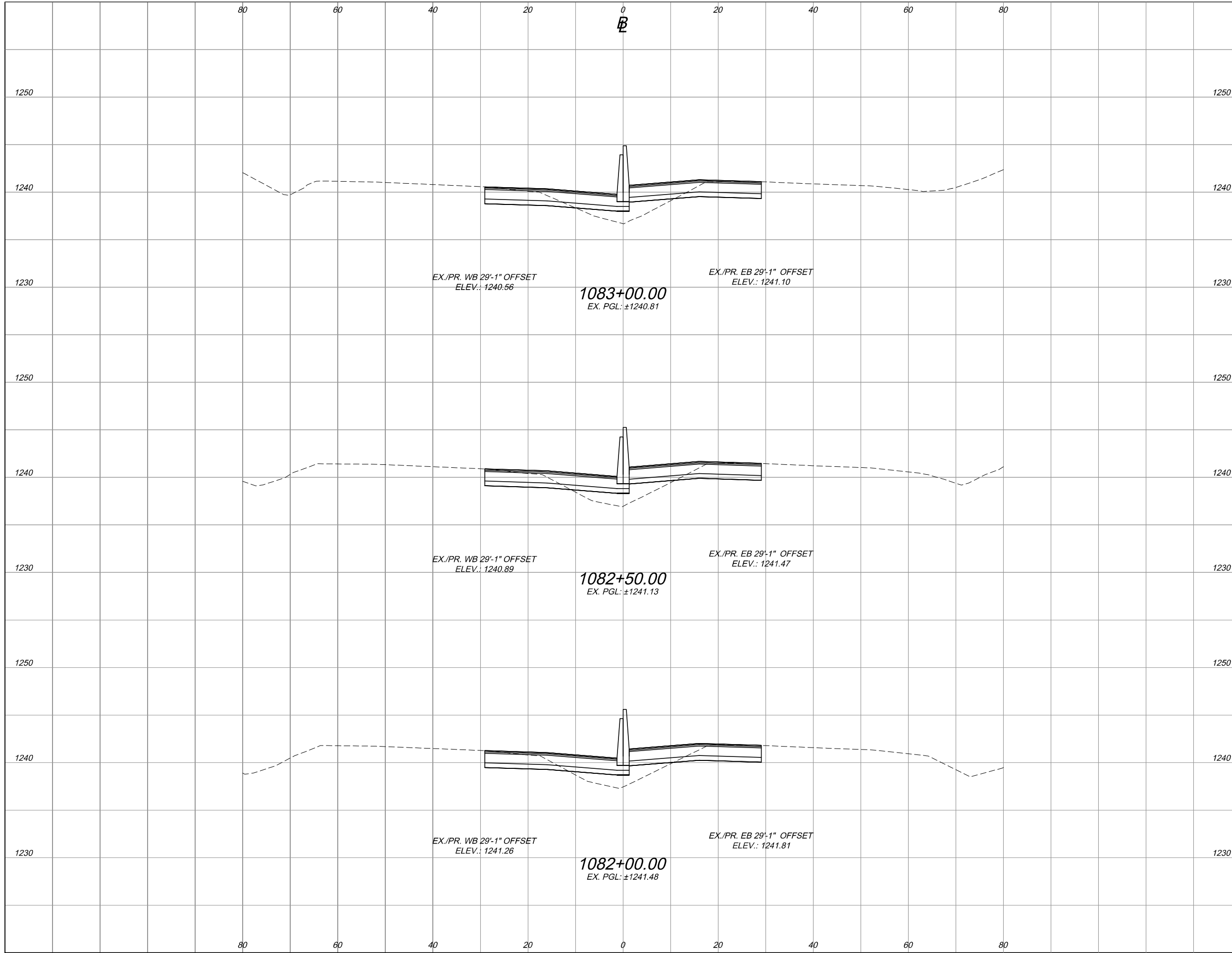
END AREA		VOLUME	
CUT	FILL	CUT	FILL
29	20	54	40
29	23	54	42
29	23	53	40
		161	122

PROJECT 43-19-06 **CROSS SECTIONS** **OHIO TURNPIKE**
DATE: 09-17-2018 **STA. 1080+50 TO STA. 1081+50** **OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION**
6 / 62 **56** **186**

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BY	DATE	REVISIONS	NO.	CHECKED	DESIGNED
JAH	10/18	ADDENDUM NO. 1	1	JAH	BA
				IN CHARGE	DRAWN
				RBP	BA

OTC037_CROSS SECTION - MAINLINE.dwg: 10/08/18 - 10:05am

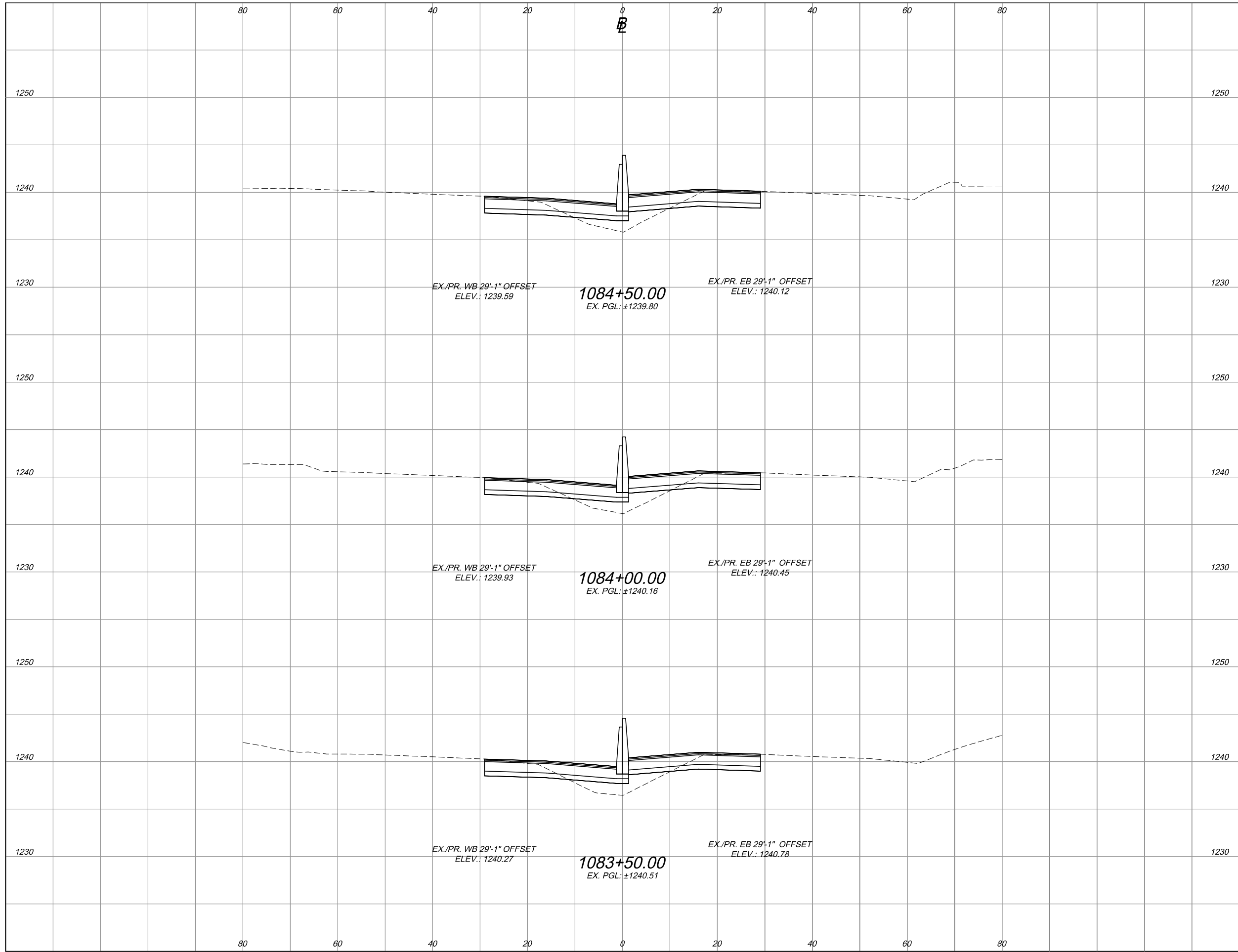


END AREA		VOLUME	
CUT	FILL	CUT	FILL
30	19	55	35
30	18	56	33
30	18	55	35
		166	103

PROJECT 43-19-06 DATE: 09-17-2018
 CROSS SECTIONS STA. 1082+00 TO STA. 1083+00
 7 / 62
 57
 186

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OTC037_CROSS SECTION - MAINLINE.dwg: 10/08/18 - 10:05am



STATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
1083+50.00	31	15	56	32
1084+00.00	31	14	57	27
1084+50.00	34	12	60	24
TOTAL	173	83		

PROJECT 43-19-06 **DATE: 09-17-2018**

8 / 62

58
186

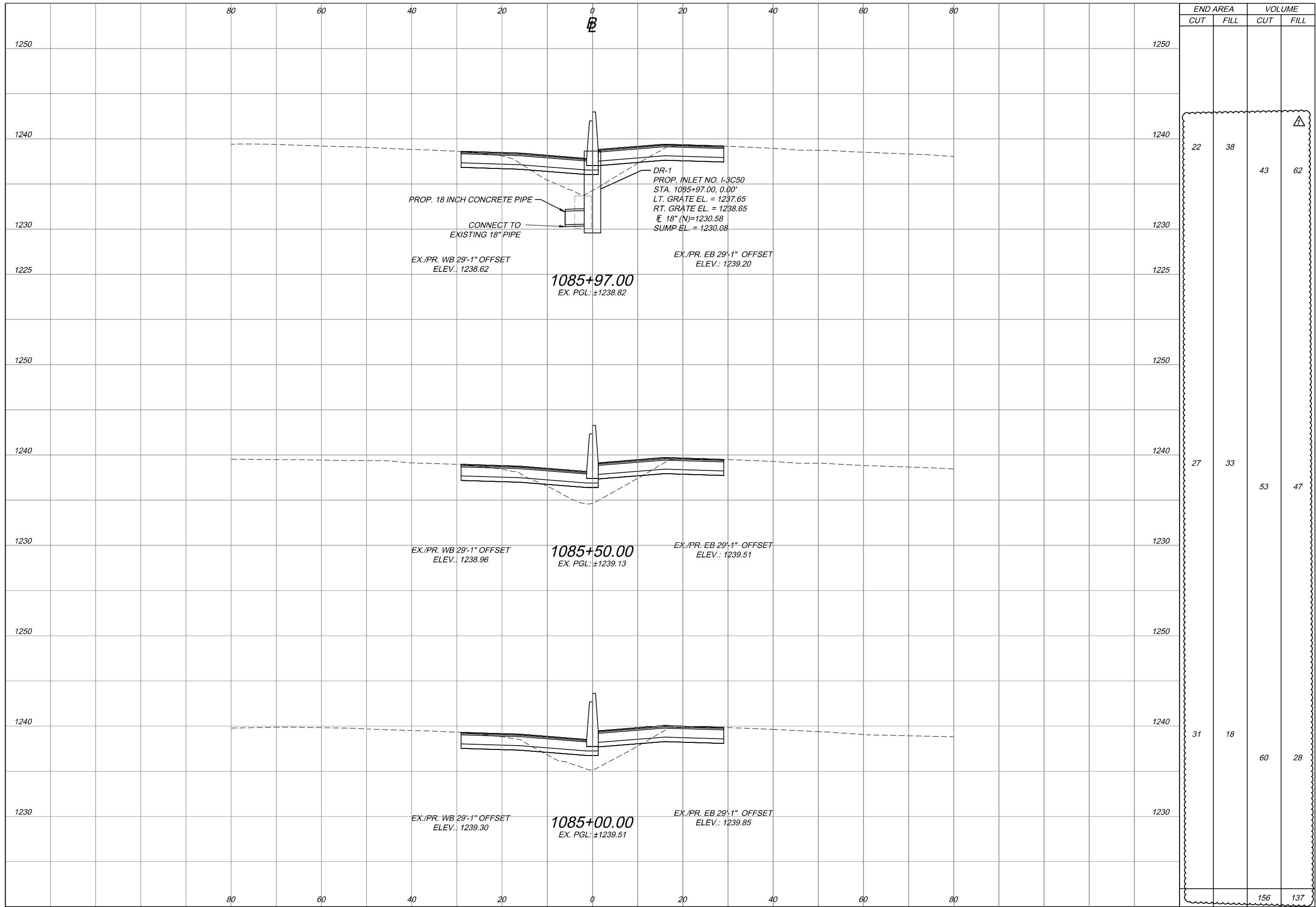
CROSS SECTIONS
STA. 1083+50 TO STA. 1084+50

DESIGNED	BA	CHECKED	JAH	NO.	1
DRAWN	BA	IN CHARGE	RBP	REVISIONS	
				ADDENDUM NO. 1	
				BY DATE	
				JAH	10/18

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OTC037_CROSS SECTION - MAINLINE.dwg: 10/08/18 - 10:06am



STATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
1250				
1240	22	38	43	62
1230				
1225				
1250				
1240	27	33	53	47
1230				
1250				
1240	31	18	60	28
1230				
			156	137

PROJECT 43-19-06 **DATE: 09-17-2018**

9 / 62

59
186

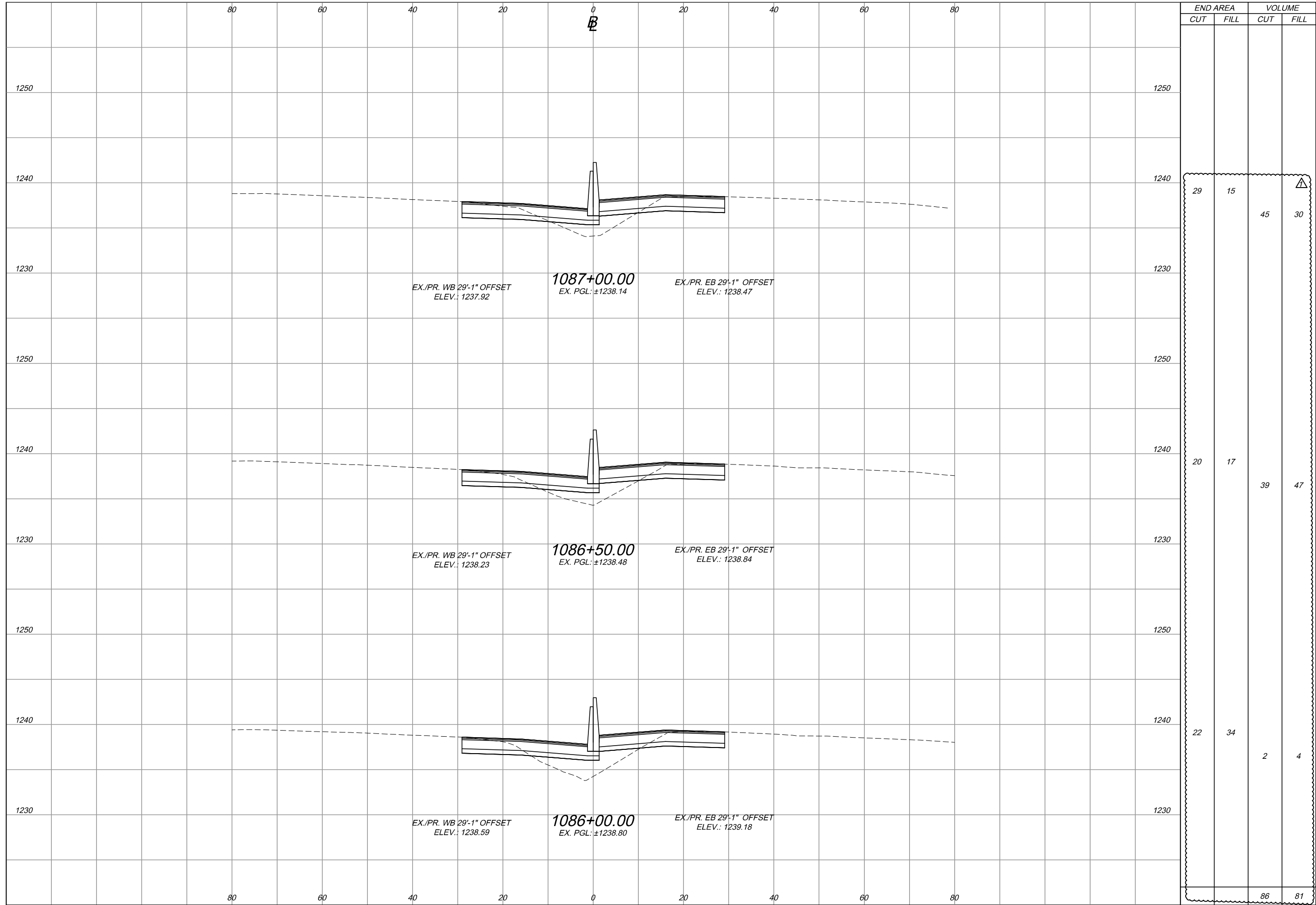
**CROSS SECTIONS
STA. 1085+00 TO STA. 1085+97**

DESIGNED	CHECKED	NO.	REVISIONS	BY	DATE
BA	JAH	1	ADDENDUM NO. 1	JAH	10/18
DRAWN	IN CHARGE				
BA	RBP				

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OTC037_CROSS SECTION - MAINLINE.dwg; 10/08/18 - 10:06am



END AREA		VOLUME	
CUT	FILL	CUT	FILL
29	15	45	30
20	17	39	47
22	34	2	4
		86	81

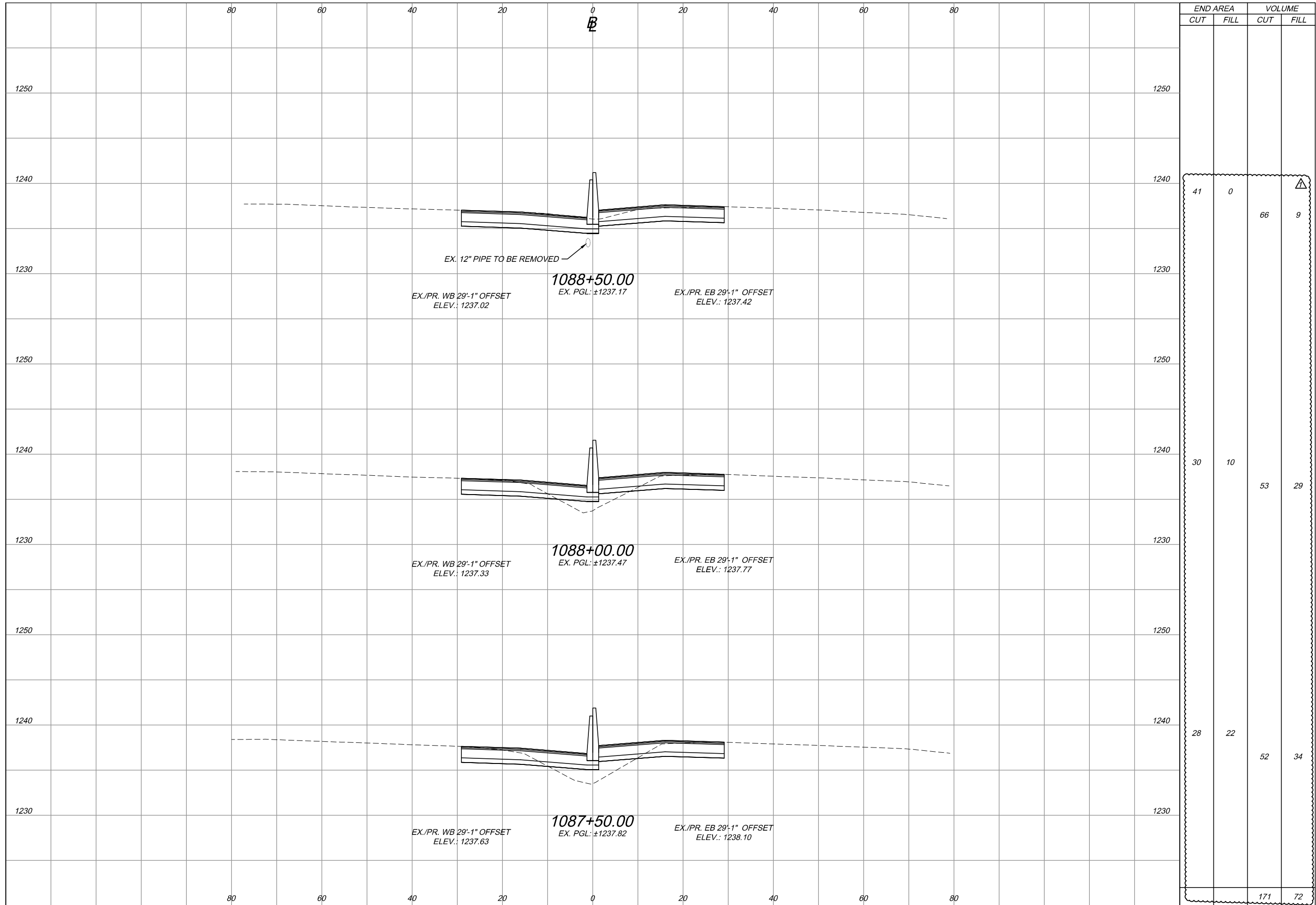
PROJECT 43-19-06 DATE: 09-17-2018
 STA. 1086+00 TO STA. 1087+00
 10/62
 60/186

DESIGNED	CHECKED	NO.	REVISIONS	BY	DATE
BA	JAH	1	ADDENDUM NO. 1	JAH	10/18
DRAWN	IN CHARGE				
BA	RBP				

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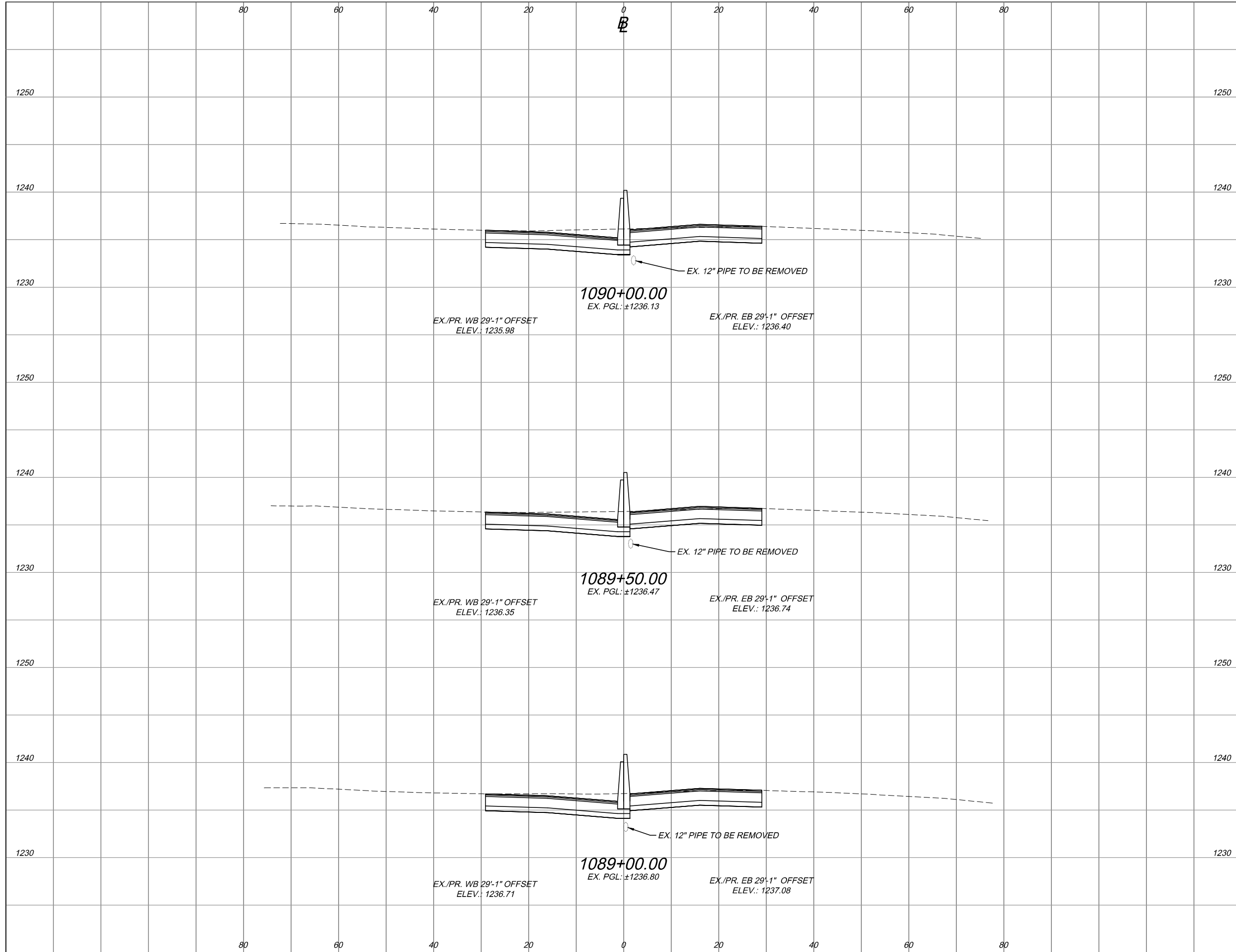
END AREA		VOLUME	
CUT	FILL	CUT	FILL
41	0	66	9
30	10	53	29
28	22	52	34
		171	72

PROJECT 43-19-06 **DATE: 09-17-2018**
11 / 62 **61**
186

CROSS SECTIONS
 STA. 1087+50 TO STA. 1088+50

DESIGNED	CHECKED	NO.	REVISIONS	BY	DATE
BA	JAH	1	ADDENDUM NO. 1	JAH	10/18
DRAWN	IN CHARGE				
BA	RBP				

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STATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
1089+00.00	55	0	90	1
1089+50.00	26	1	75	1
1090+00.00	24	1	46	1
TOTAL	105	1	211	3

PROJECT 43-19-06 **DATE: 09-17-2018**

CROSS SECTIONS
 STA. 1089+00 TO STA. 1090+00

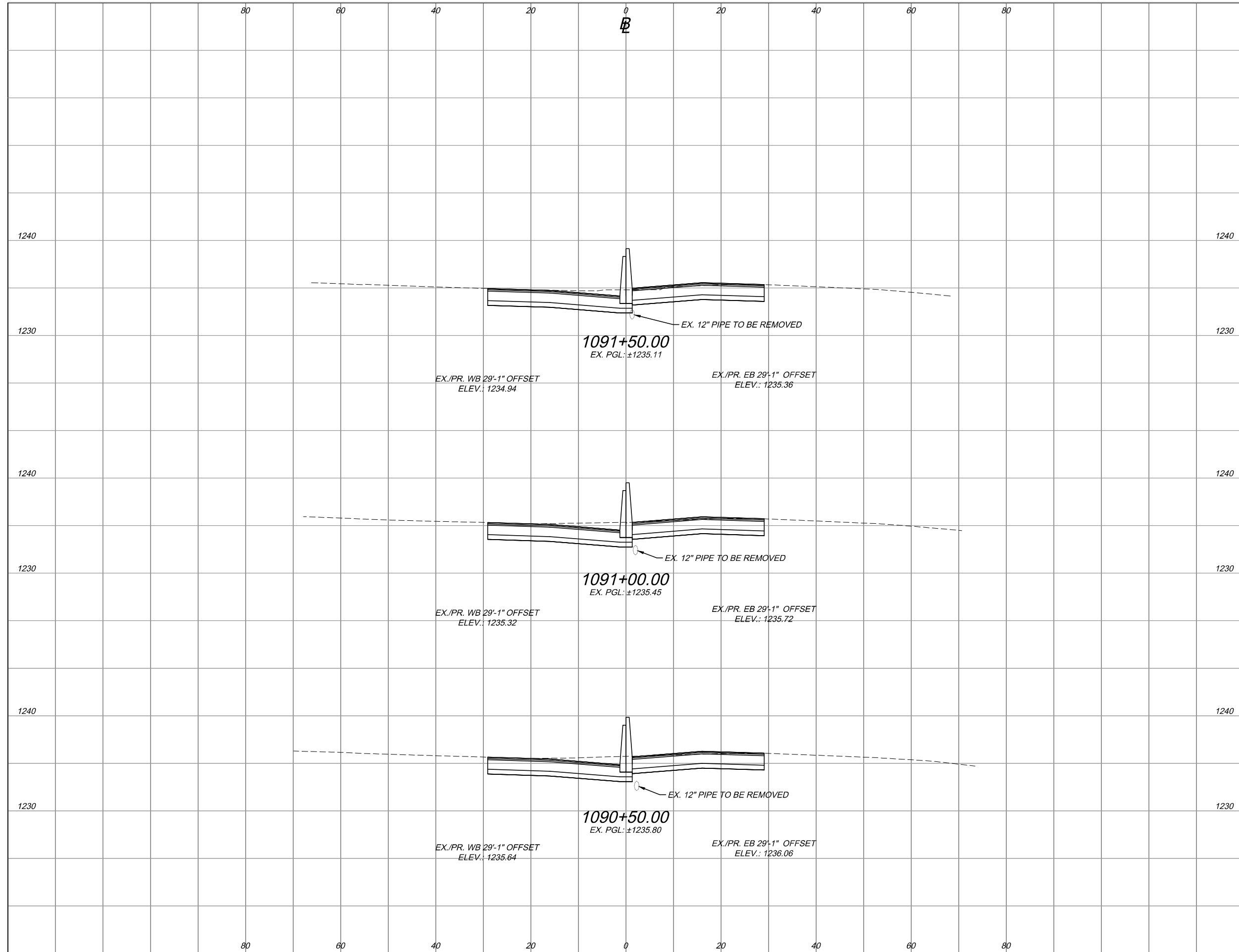
DESIGNED: BA CHECKED: JAH NO. 1
 DRAWN: BA IN CHARGE: RBP

REVISIONS:
 ADDENDUM NO. 1

BY DATE:
 JAH 10/18

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STATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
1090+50.00	21	1	42	1
1091+00.00	22	0	40	1
1091+50.00	43	1	60	1
TOTAL	142	3		

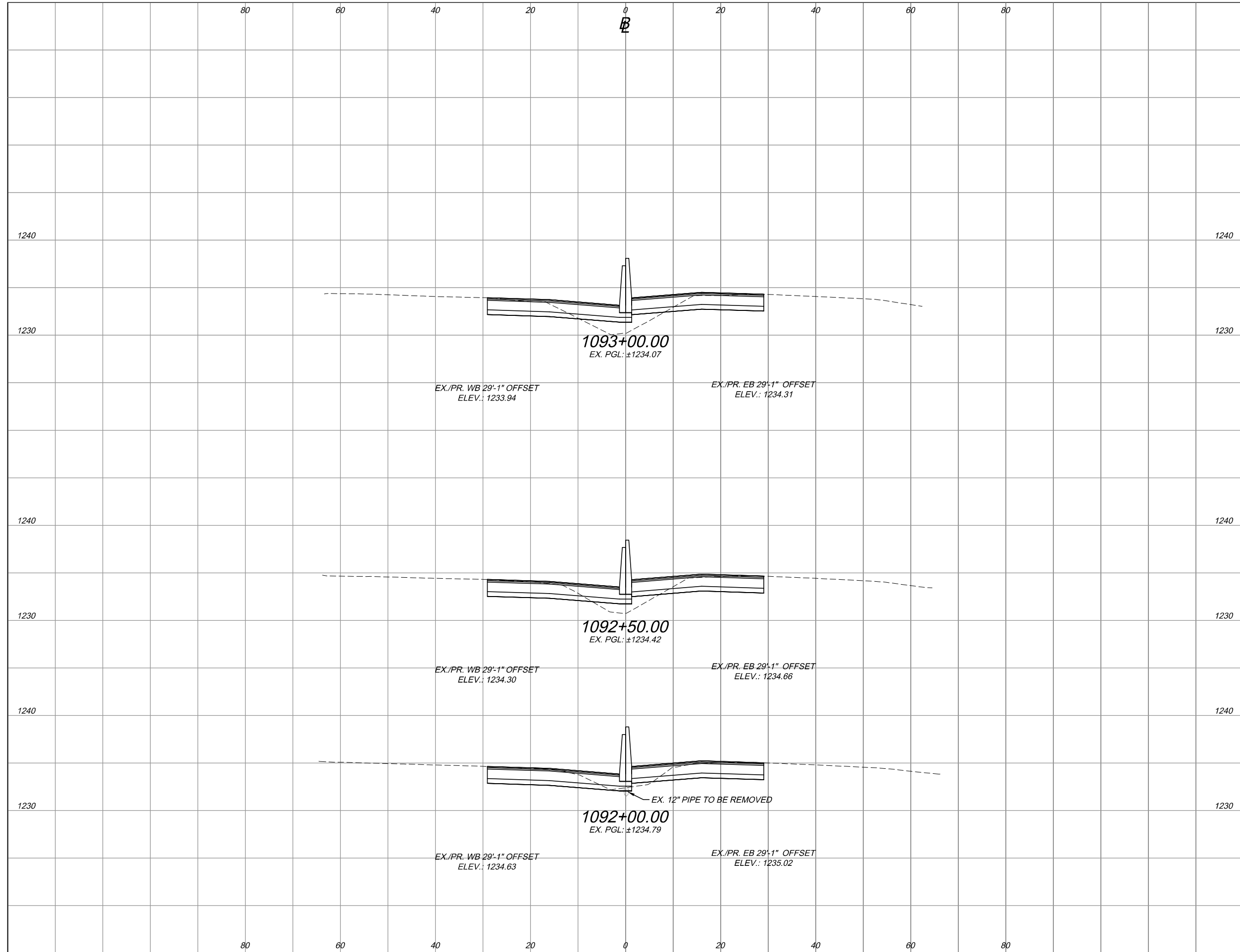
PROJECT 43-19-06 **DATE: 09-17-2018**
13 / 62 **63**
186

CROSS SECTIONS
 STA. 1090+50 TO STA. 1091+50

DESIGNED	CHECKED	NO.	REVISIONS
BA	JAH	1	ADDENDUM NO. 1
BA	RBP		

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STATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
1093+00.00	20	20	40	29
1092+50.00	24	12	45	11
1092+00.00	25	0	63	1
TOTAL	148	41		

PROJECT 43-19-06 **DATE: 09-17-2018**
14 / 62 **64**
186

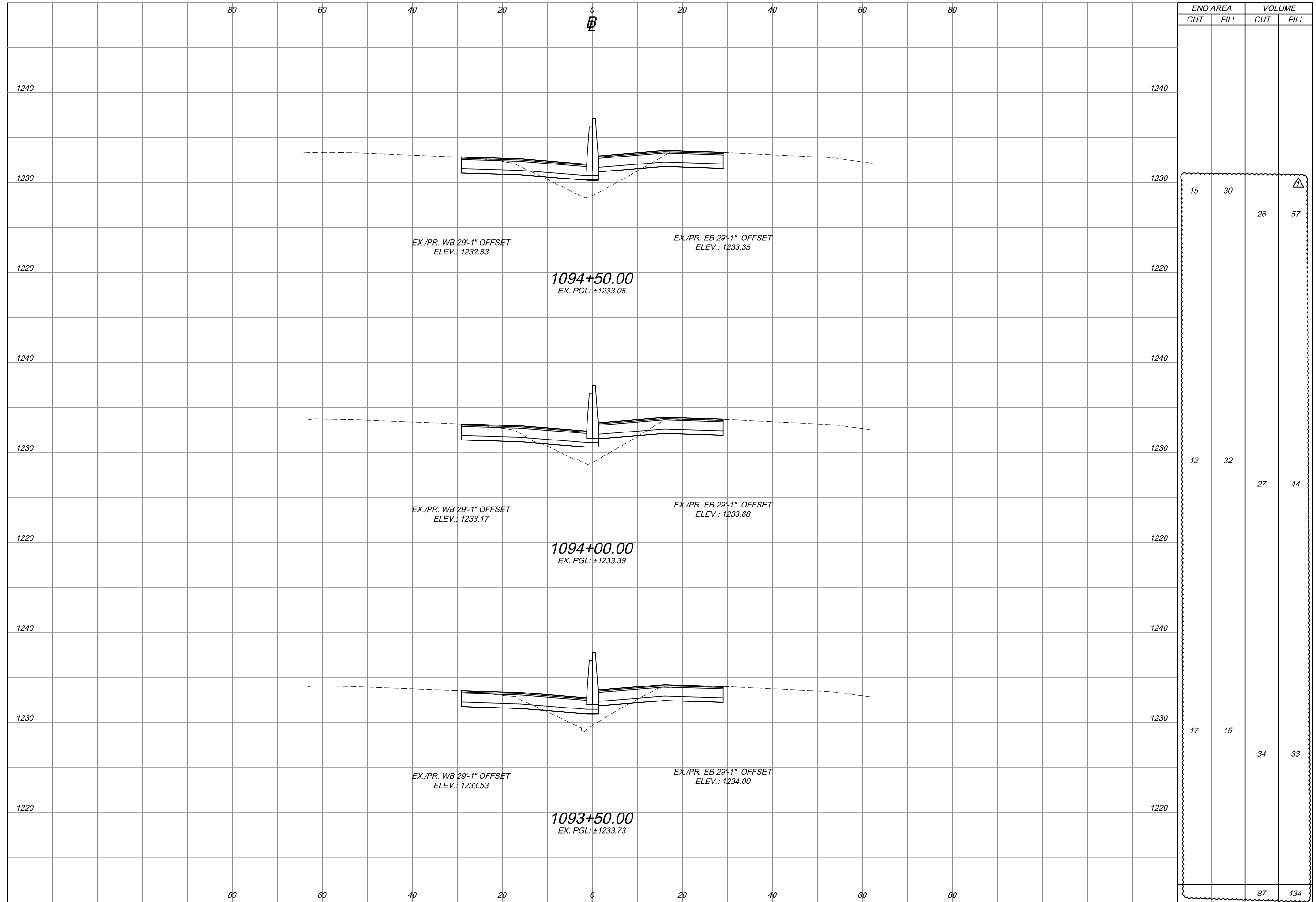
CROSS SECTIONS
 STA. 1092+00 TO STA. 1093+00

DESIGNED	BA	CHECKED	JAH	NO.	1	REVISIONS	ADDENDUM NO. 1
DRAWN	BA	IN CHARGE	RBP				

BY DATE
 JAH 10/18

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OTC037_CROSS SECTION - MAINLINE.dwg; 10/08/18 - 10:08am



END AREA	VOLUME	
	CUT	FILL
15	30	26
12	32	27
17	15	34
87	134	57

PROJECT 43-19-06 **DATE: 09-17-2018**

CROSS SECTIONS
STA. 1093+50 TO STA. 1094+50

DESIGNED BA **CHECKED** JAH **NO.** 1

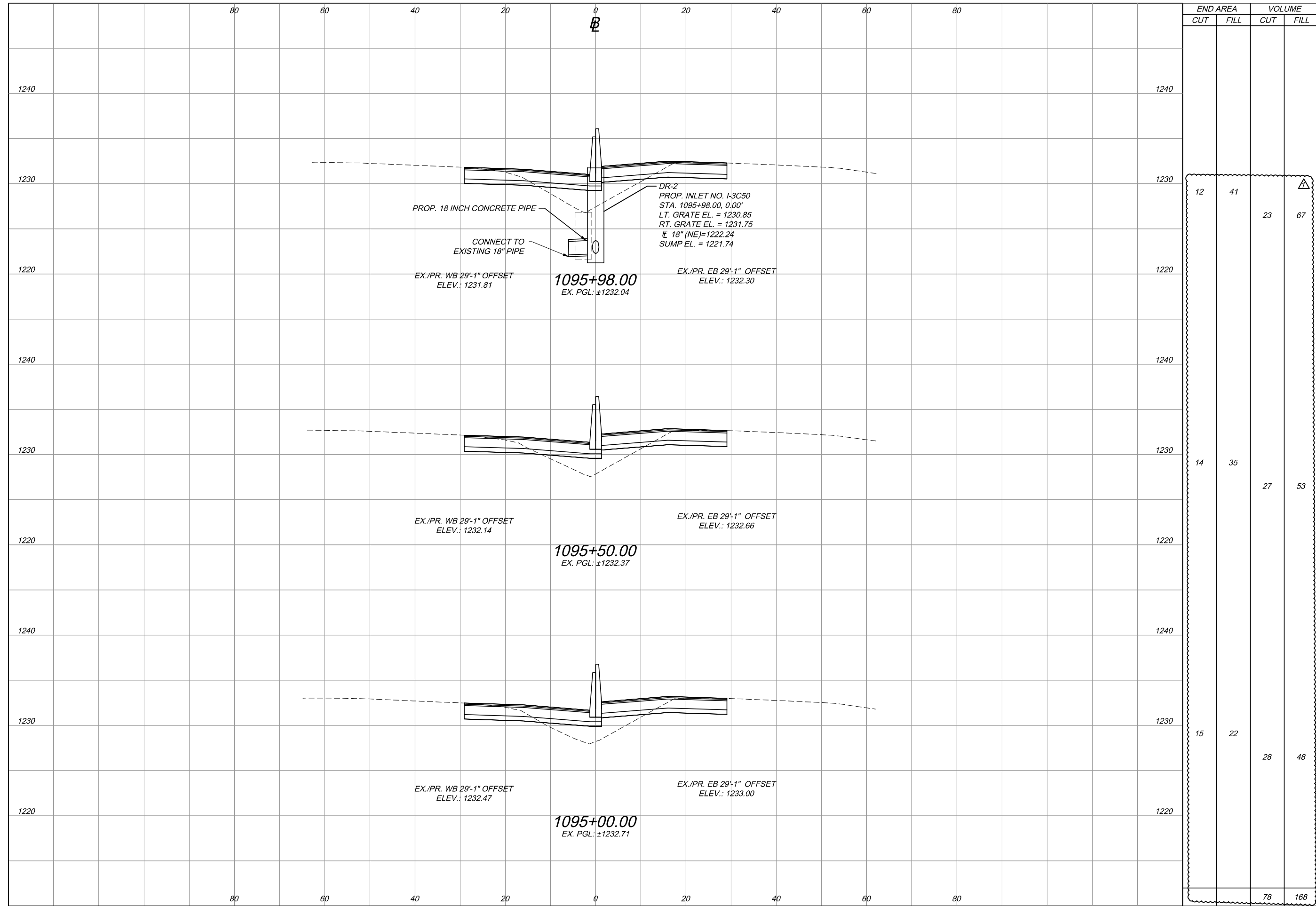
DRAWN BA **IN CHARGE** RBP

REVISIONS
ADDENDUM NO. 1

BY DATE
JAH 10/18

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STATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
1240				
1230	12	41	23	67
1220				
1240				
1230	14	35	27	53
1220				
1240				
1230	15	22	28	48
1220				
TOTAL	78	168		

PROJECT 43-19-06 **DATE: 09-17-2018**

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186

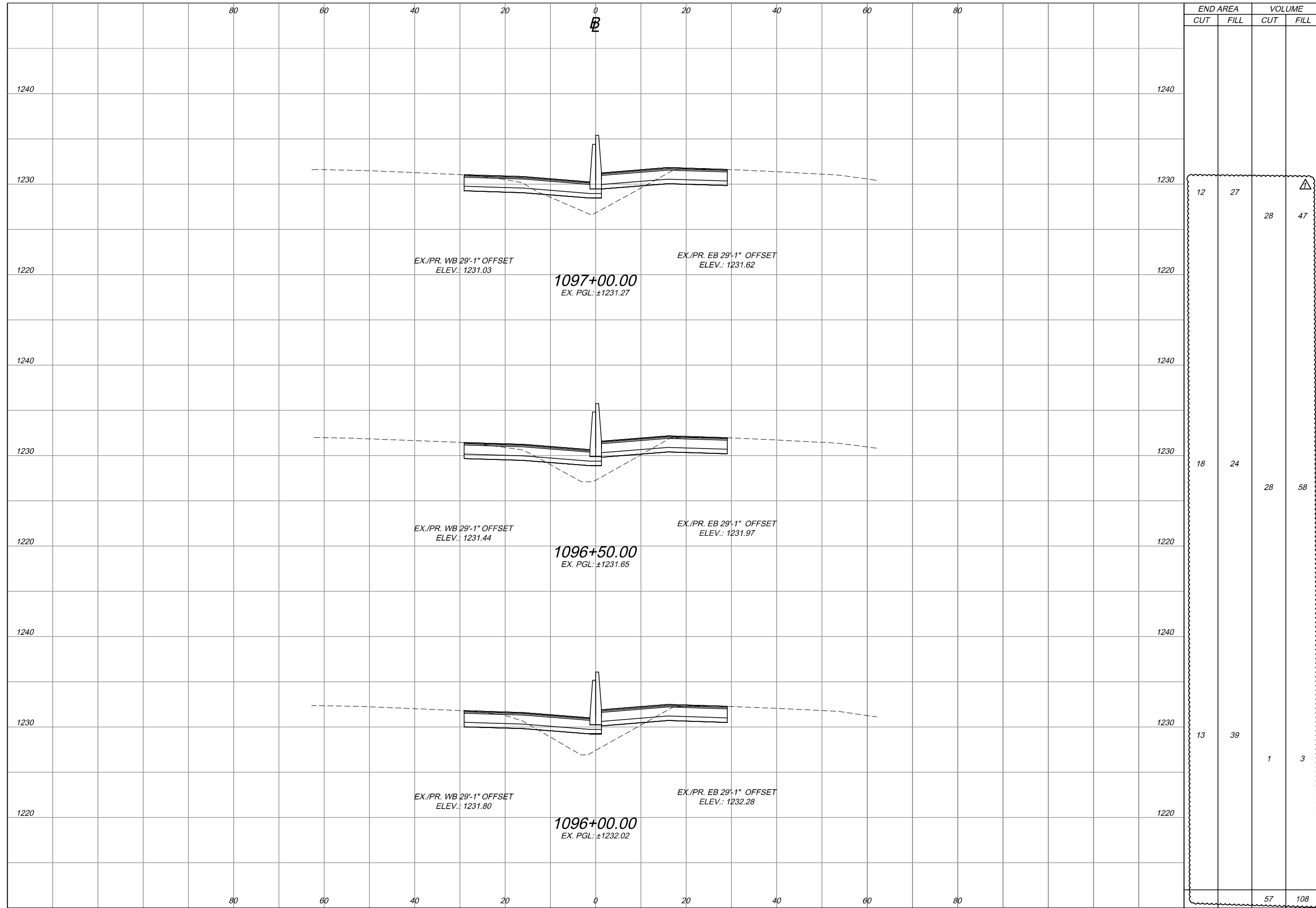
CROSS SECTIONS
STA. 1095+00 TO STA. 1095+98

DESIGNED	CHECKED	NO.	REVISIONS	BY	DATE
BA	JAH	1	ADDENDUM NO. 1	JAH	10/18
DRAWN	IN CHARGE				
BA	RBP				

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END AREA		VOLUME	
CUT	FILL	CUT	FILL
12	27	28	47
18	24	28	58
13	39	1	3
		57	108

PROJECT 43-19-06
DATE: 09-17-2018

CROSS SECTIONS
STA. 1096+00 TO STA. 1097+00

DESIGNED: BA
DRAWN: BA

CHECKED: JAH
IN CHARGE: RBP

NO. 1

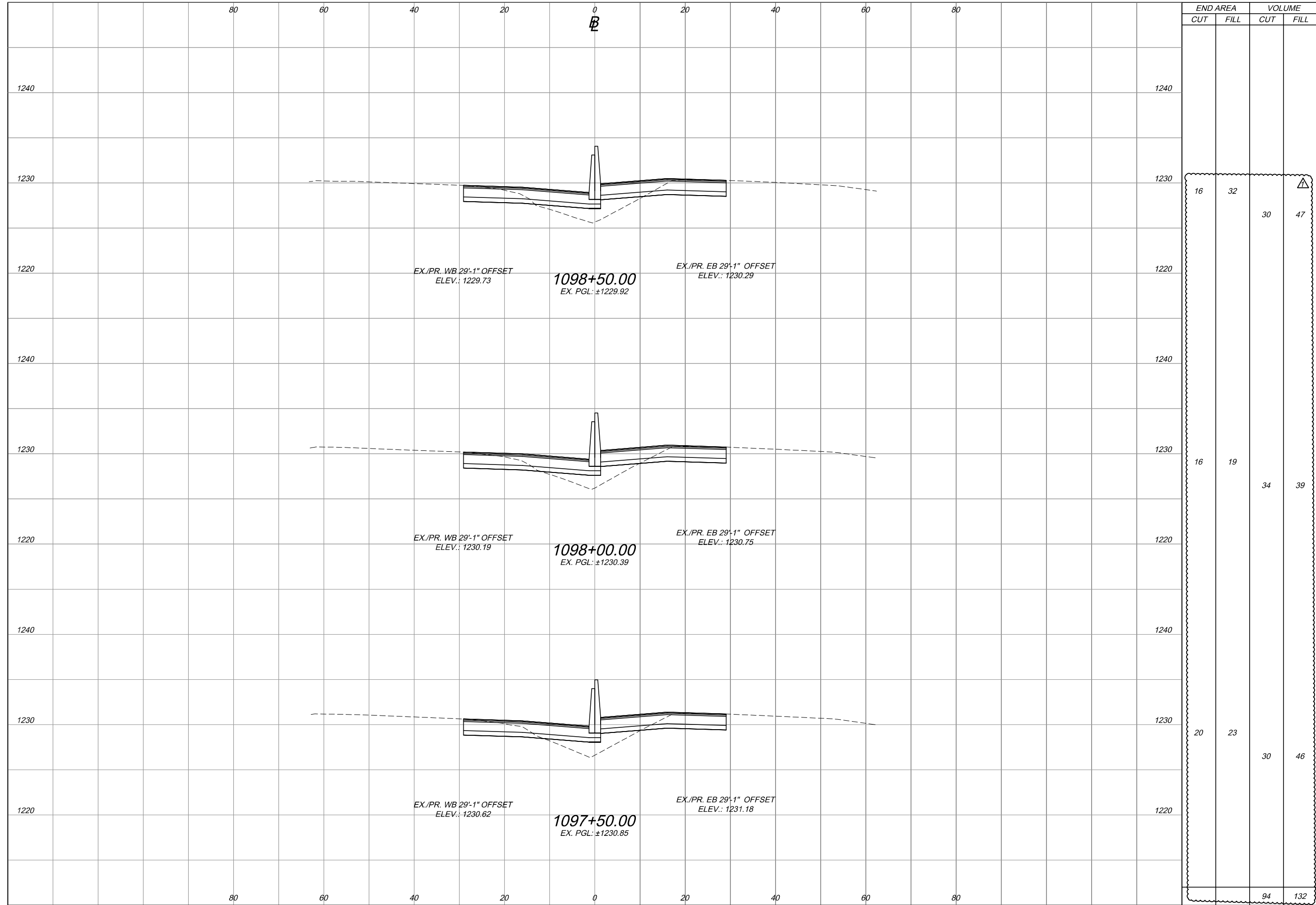
REVISIONS
ADDENDUM NO. 1

BY DATE
JAH 10/18

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OTC037_CROSS SECTION - MAINLINE.dwg; 10/08/18 - 10:09am



STATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
1097+50.00	20	23	30	46
1098+00.00	16	19	34	39
1098+50.00	16	32	30	47
TOTAL	94	132		

PROJECT 43-19-06 **DATE: 09-17-2018**
18 / 62 **68**
186

CROSS SECTIONS
 STA. 1097+50 TO STA. 1098+50

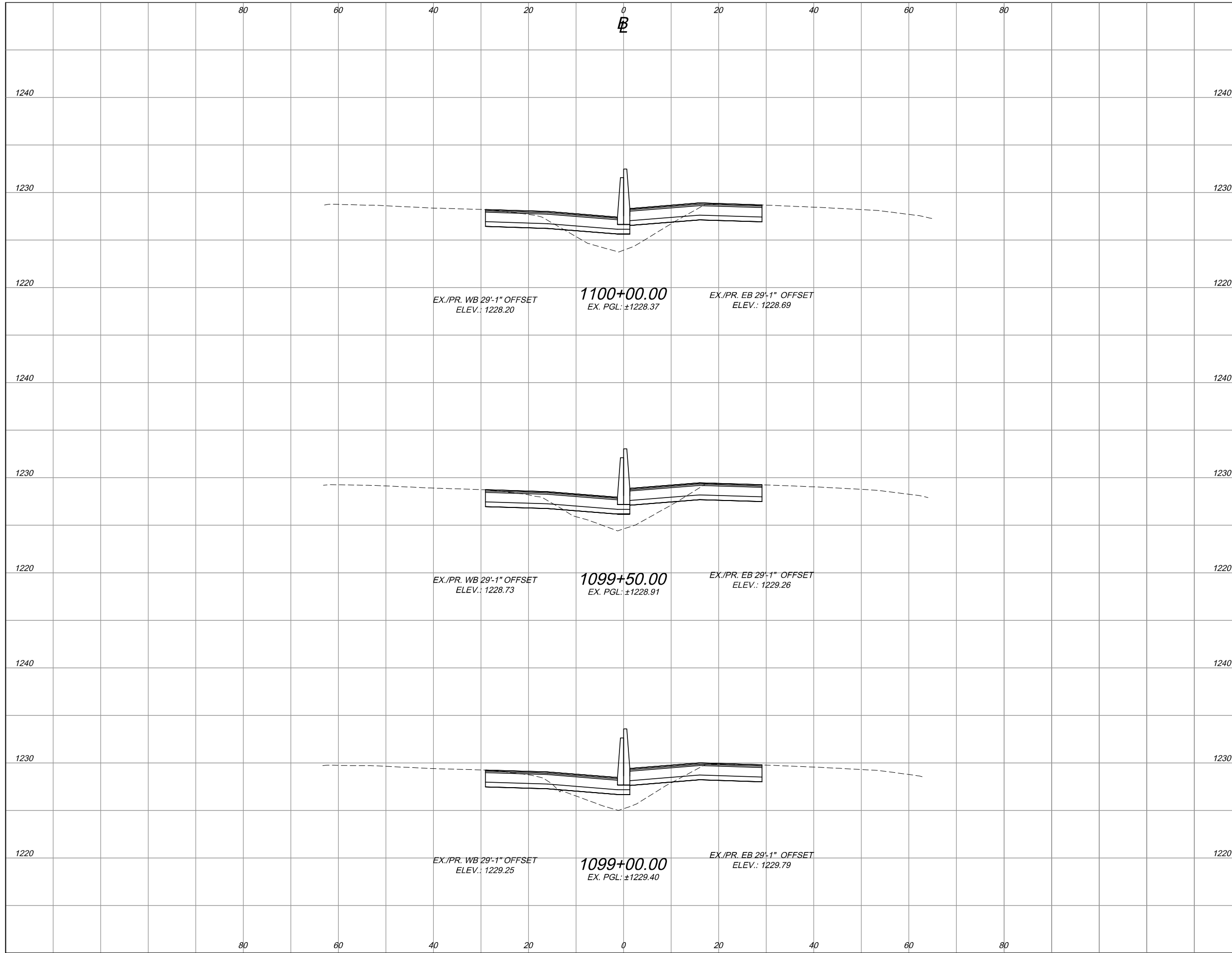
DESIGNED	BA	CHECKED	JAH
DRAWN	BA	IN CHARGE	RBP

NO.	1
ADDENDUM NO.	1

REVISIONS
 BY DATE
 JAH 10/18

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END AREA		VOLUME	
CUT	FILL	CUT	FILL
15	36	28	58
16	27	30	47
16	24	29	52
87	155		

EX./PR. WB 29'-1" OFFSET ELEV.: 1228.20
1100+00.00
 EX. PGL: ±1228.37
 EX./PR. EB 29'-1" OFFSET ELEV.: 1228.69

EX./PR. WB 29'-1" OFFSET ELEV.: 1228.73
1099+50.00
 EX. PGL: ±1228.91
 EX./PR. EB 29'-1" OFFSET ELEV.: 1229.26

EX./PR. WB 29'-1" OFFSET ELEV.: 1229.25
1099+00.00
 EX. PGL: ±1229.40
 EX./PR. EB 29'-1" OFFSET ELEV.: 1229.79

PROJECT 43-19-06
 DATE: 09-17-2018

CROSS SECTIONS
 STA. 1099+00 TO STA. 1100+00

DESIGNED: BA
 DRAWN: BA

CHECKED: JAH
 IN CHARGE: RBP

REVISIONS
 ADDENDUM NO. 1

BY DATE
 JAH 10/18

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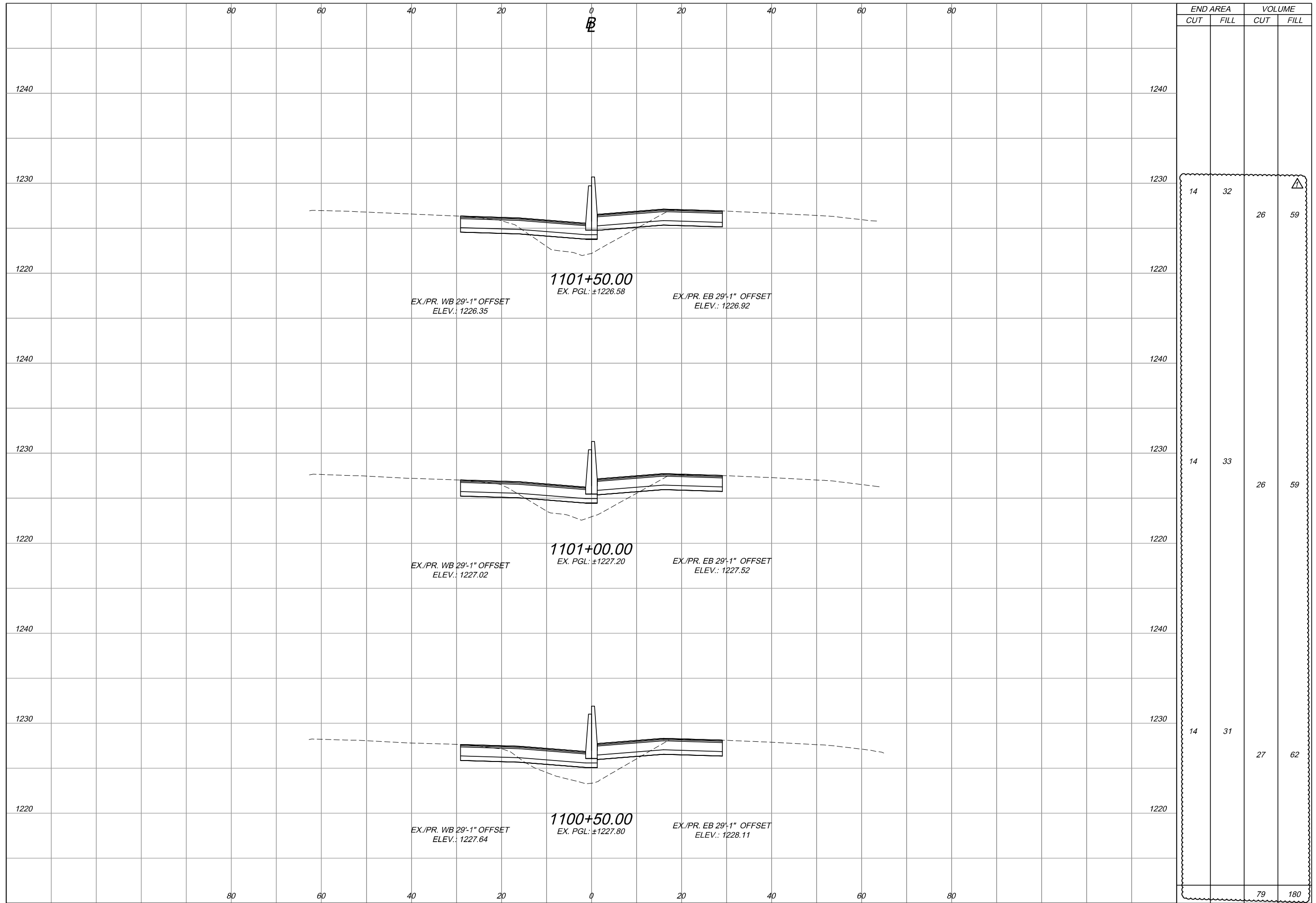
19 / 62

69
186

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE

OTC037_CROSS SECTION - MAINLINE.dwg: 10/08/18 - 10:09am



END AREA		VOLUME	
CUT	FILL	CUT	FILL
14	32	26	59
14	33	26	59
14	31	27	62
79	180		

PROJECT 43-19-06 **DATE: 09-17-2018**
20 / 62 **70 / 186**
CROSS SECTIONS
 STA. 1100+50 TO STA. 1101+50

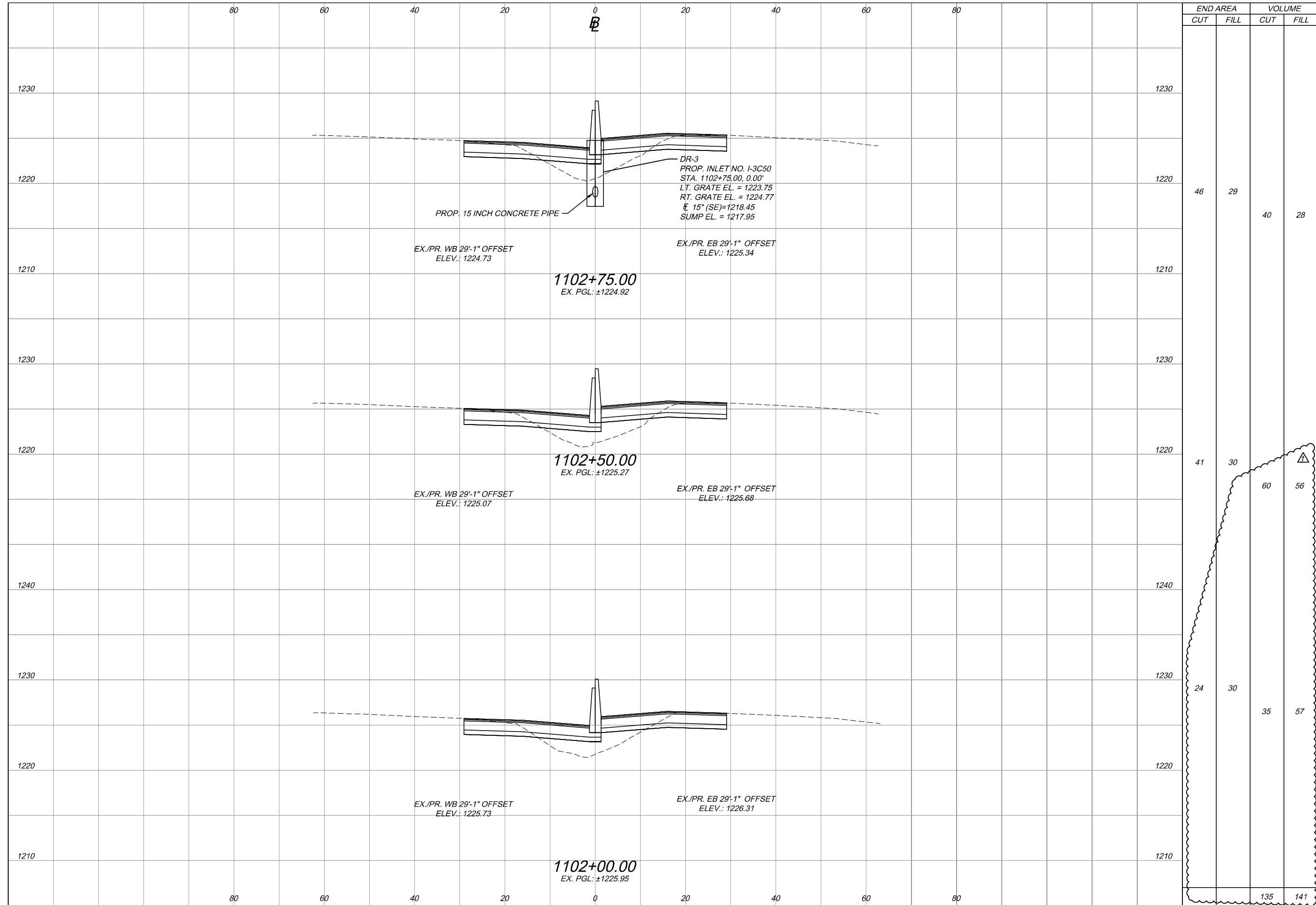
NO.	REVISIONS	DATE
1	ADDENDUM NO. 1	10/18

CHECKED	DESIGNED
JAH	BA
IN CHARGE	DRAWN
RBP	BA

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OHIO TURNPIKE

PROJECT 43-19-06 DATE: 09-17-2018

CROSS SECTIONS STA. 1102+00 TO STA. 1102+75

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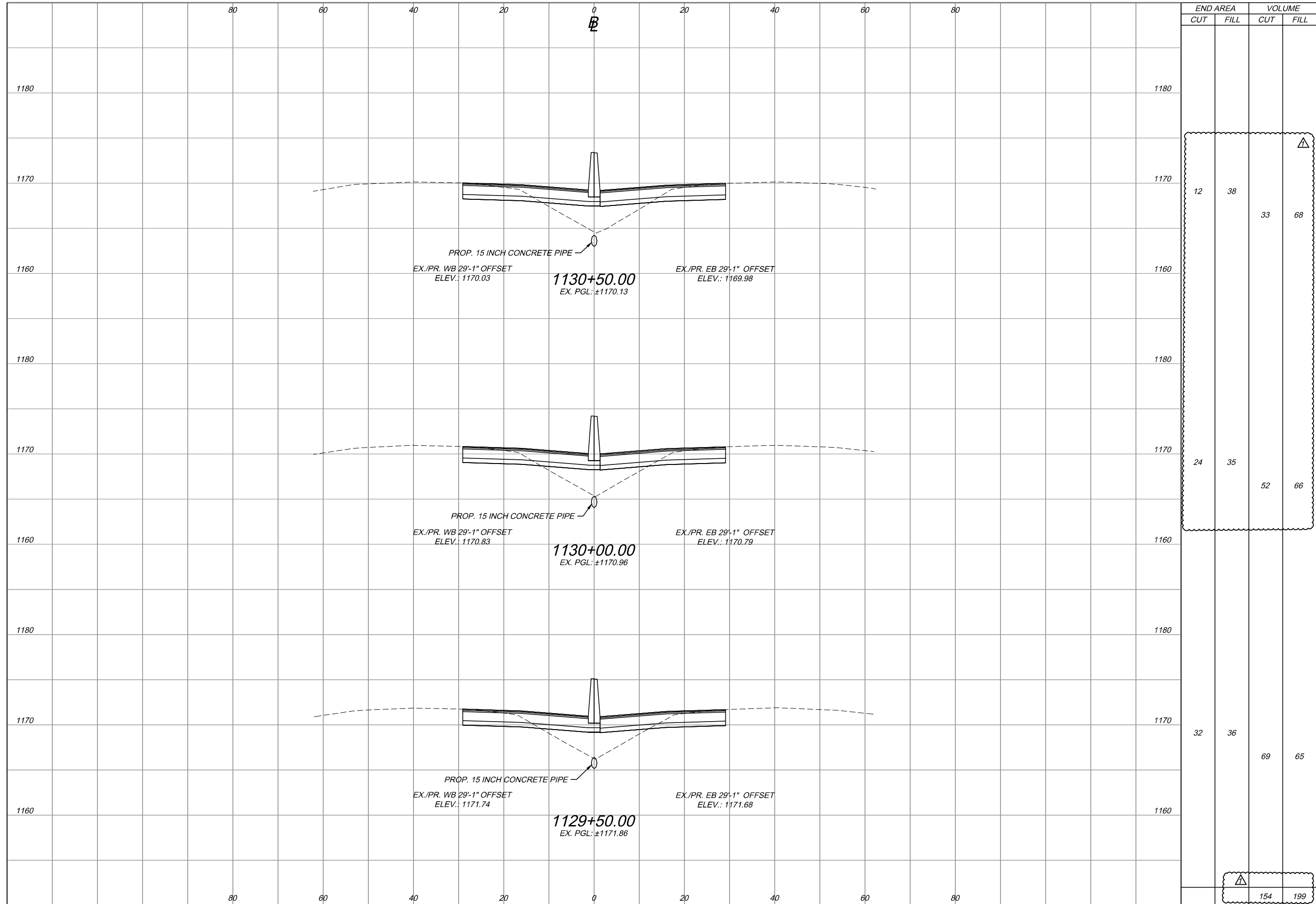
DESIGNED	CHECKED	NO.	REVISIONS	BY	DATE
BA	JAH	1	ADDENDUM NO. 1	JAH	10/18
DRAWN	IN CHARGE				
BA	RBP				

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OHIO TURNPIKE

OTC037_CROSS SECTION - MAINLINE.dwg; 10/08/18 - 10:10am



END AREA		VOLUME	
CUT	FILL	CUT	FILL
12	38	33	68
24	35	52	66
32	36	69	65
		154	199

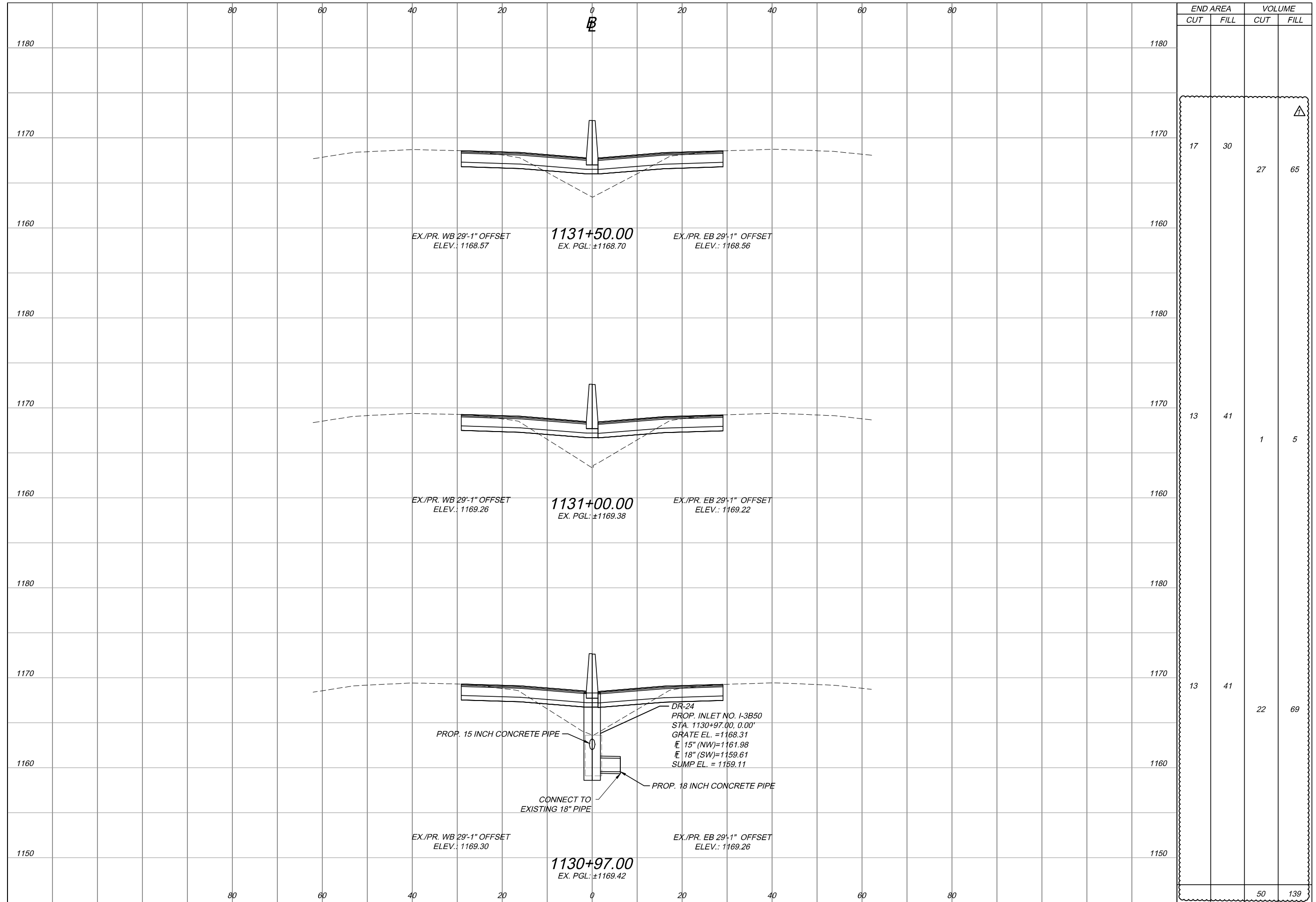
PROJECT 43-19-06 **CROSS SECTIONS** **OHIO TURNPIKE**
DATE: 09-17-2018 **STA. 1129+50 TO STA. 1130+50** **OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION**
42 / 62 **92** **186**

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NO.	DATE	BY	REVISIONS
1	10/18	JAH	ADDENDUM NO. 1

CHECKED	DESIGNED	NO.	DATE
JAH	BA	1	10/18
IN CHARGE	DRAWN		
RBP	BA		

OTC037_CROSS SECTION - MAINLINE.dwg: 10/08/18 - 10:10am



ELEVATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
1180				
1170	17	30	27	65
1160				
1180				
1170	13	41	1	5
1160				
1180				
1170	13	41	22	69
1160				
1150			50	139

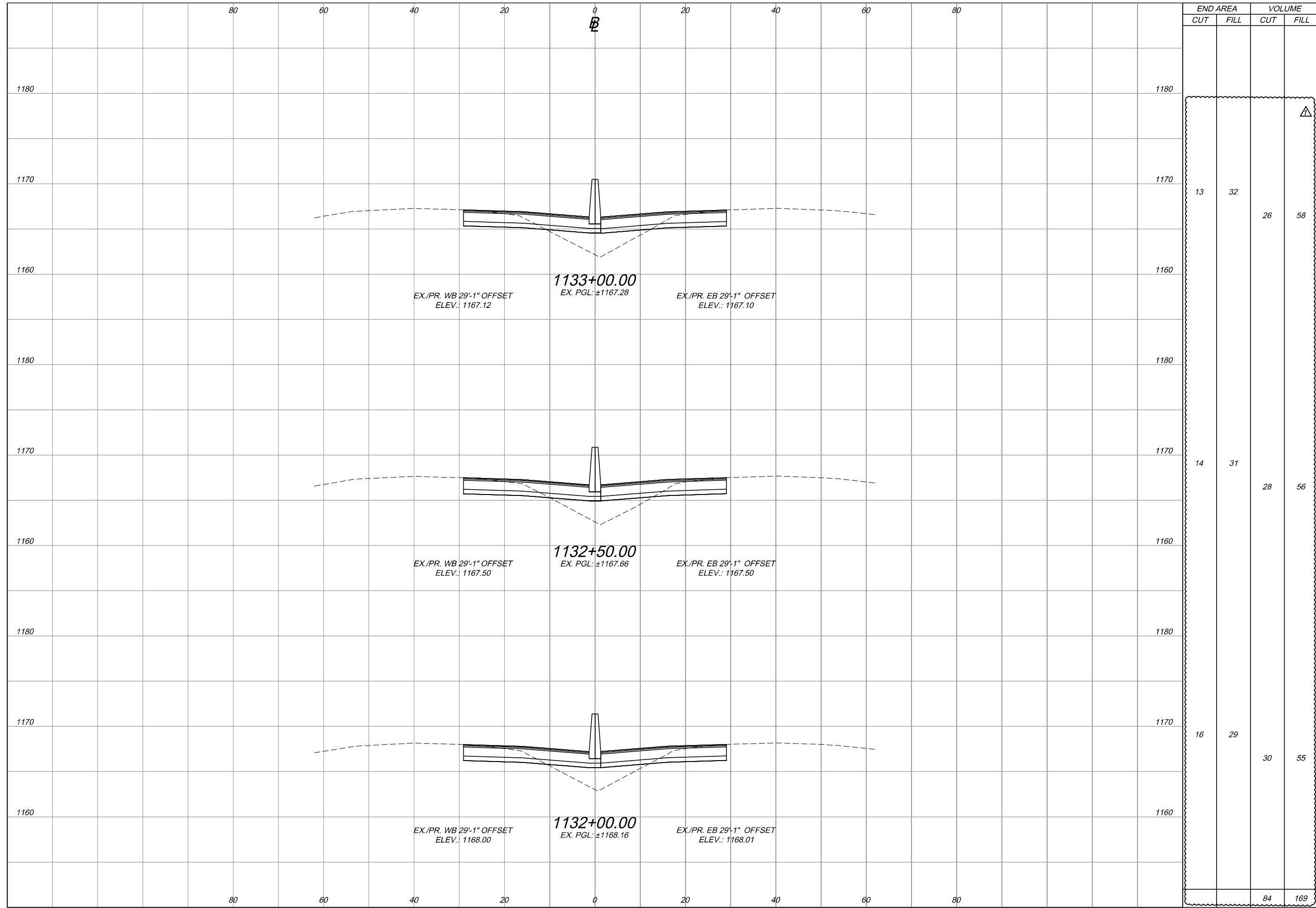
PROJECT 43-19-06 **DATE: 09-17-2018**
43 / 62 **93 / 186**

CROSS SECTIONS
 STA. 1130+97 TO STA. 1131+50

DESIGNED	CHECKED	NO.	REVISIONS	BY	DATE
BA	JAH	1	ADDENDUM NO. 1	JAH	10/18
DRAWN	IN CHARGE				
BA	RBP				

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OTC037_CROSS SECTION - MAINLINE.dwg: 10/08/18 - 10:11am



STATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
1132+00.00	16	29	30	55
1132+50.00	14	31	28	56
1133+00.00	13	32	26	58
TOTAL	43	92	84	169

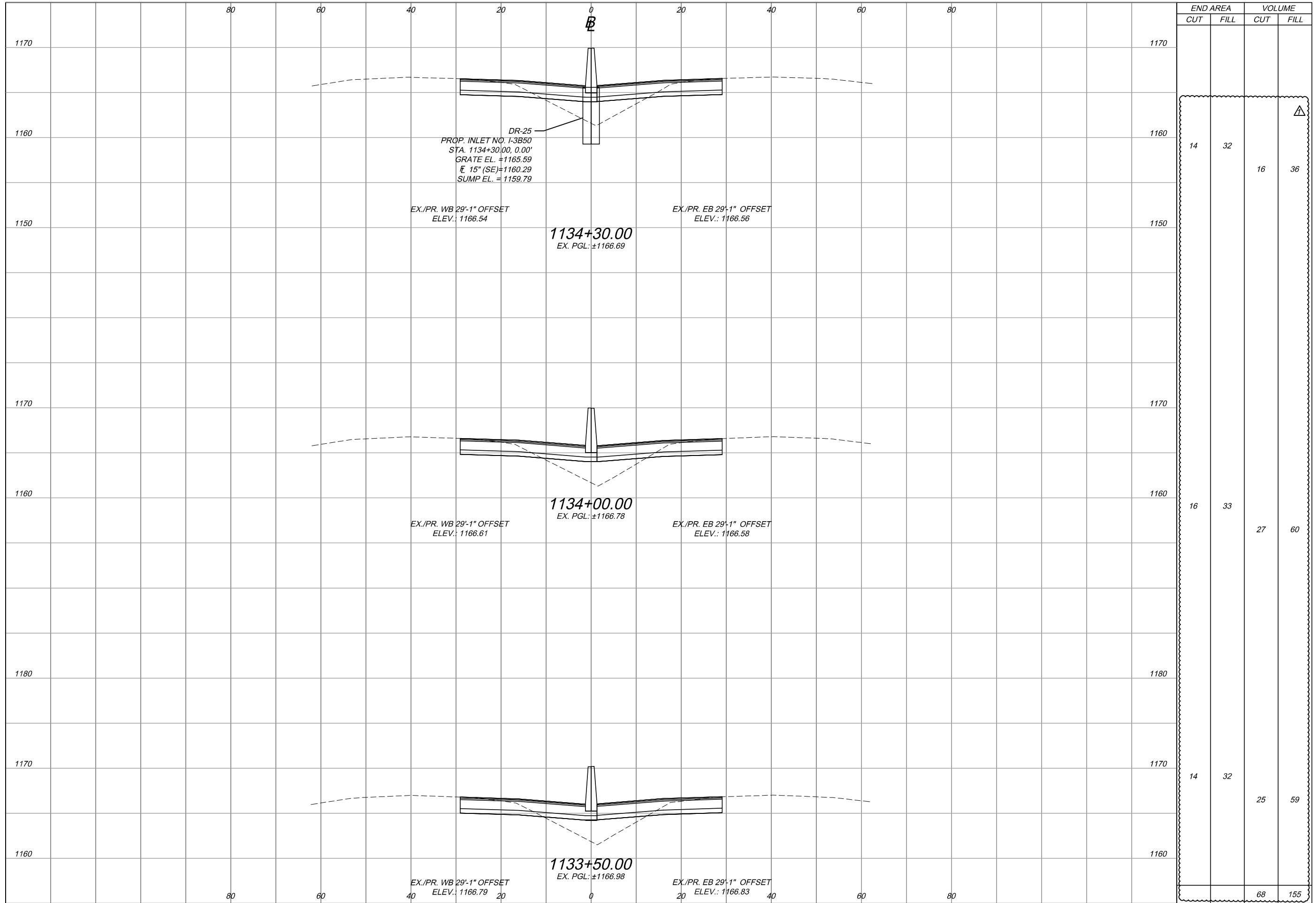
PROJECT 43-19-06 **DATE: 09-17-2018**
44 / 62 **94 / 186**

CROSS SECTIONS
 STA. 1132+00 TO STA. 1133+00

DESIGNED	CHECKED	NO.	REVISIONS	BY	DATE
BA	JAH	1	ADDENDUM NO. 1	JAH	10/18
DRAWN	IN CHARGE				
BA	RBP				

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OTC037_CROSS SECTION - MAINLINE.dwg: 10/08/18 - 10:11am



DR-25
 PROP. INLET NO. 1-3B50
 STA. 1134+30.00, 0.00'
 GRATE EL. = 1165.59
 E. 15" (SE) = 1160.29
 SUMP EL. = 1159.79

EX./PR. WB 29'-1" OFFSET
 ELEV.: 1166.54

EX./PR. EB 29'-1" OFFSET
 ELEV.: 1166.56

1134+30.00
 EX. PGL: ±1166.69

EX./PR. WB 29'-1" OFFSET
 ELEV.: 1166.61

EX./PR. EB 29'-1" OFFSET
 ELEV.: 1166.58

1134+00.00
 EX. PGL: ±1166.78

EX./PR. WB 29'-1" OFFSET
 ELEV.: 1166.79

EX./PR. EB 29'-1" OFFSET
 ELEV.: 1166.83

1133+50.00
 EX. PGL: ±1166.98

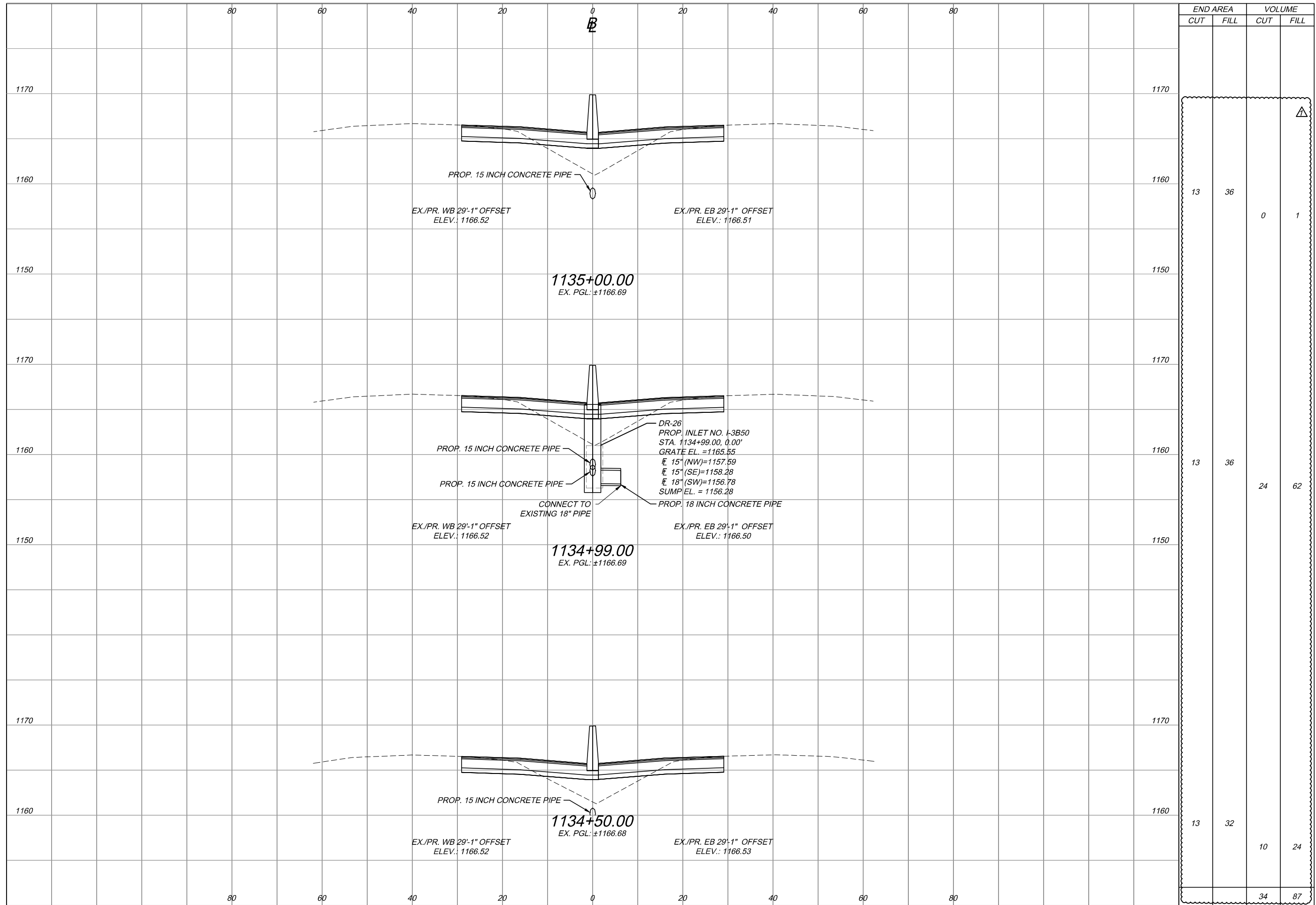
ELEVATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
1170				
1160	14	32	16	36
1150				
1170				
1160	16	33	27	60
1180				
1170	14	32	25	59
1160			68	155

PROJECT 43-19-06
 DATE: 09-17-2018
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CROSS SECTIONS
 STA. 1133+50 TO STA. 1134+30

DESIGNED	CHECKED	NO.	REVISIONS	BY	DATE
BA	JAH	1	ADDENDUM NO. 1	JAH	10/18
DRAWN	IN CHARGE				
BA	RBP				

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STATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
1134+50.00	13	32	10	24
1134+99.00	13	36	24	62
1135+00.00	13	36	0	1
TOTAL	39	104	34	87

PROJECT 43-19-06 **DATE: 09-17-2018**

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186

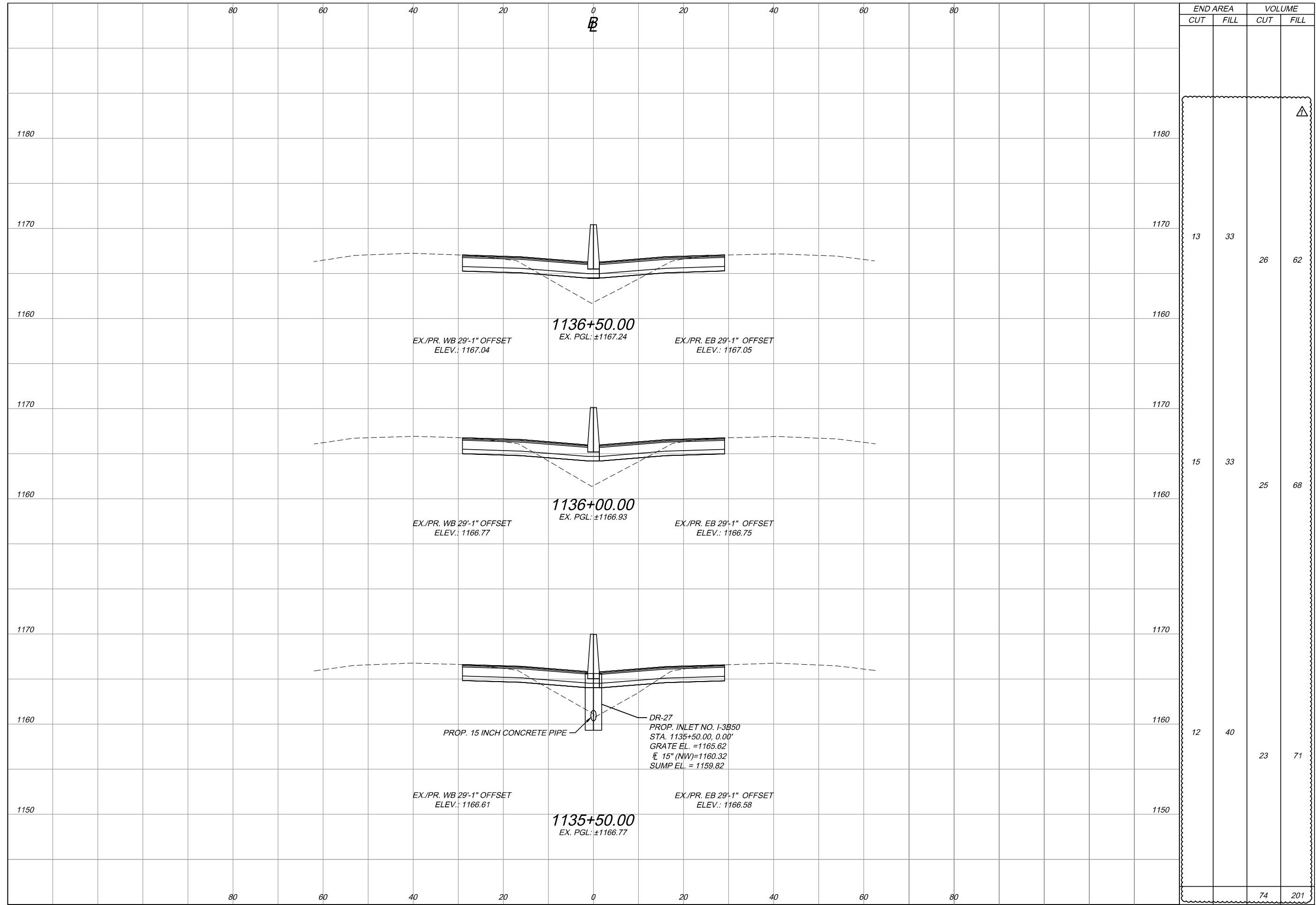
CROSS SECTIONS
STA. 1134+50 TO STA. 1135+00

DESIGNED	BA	DRAWN	BA
CHECKED	JAH	IN CHARGE	RBP
NO.	1		
REVISIONS	ADDENDUM NO. 1		
BY	JAH	DATE	10/18

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OTC037_CROSS SECTION - MAINLINE.dwg: 10/08/18 - 10:12am



ELEVATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
1180				
1170	13	33	26	62
1160				
1170	15	33	25	68
1160				
1170				
1160	12	40	23	71
1150				
			74	201

PROJECT 43-19-06
DATE: 09-17-2018
47 / 62
97
186

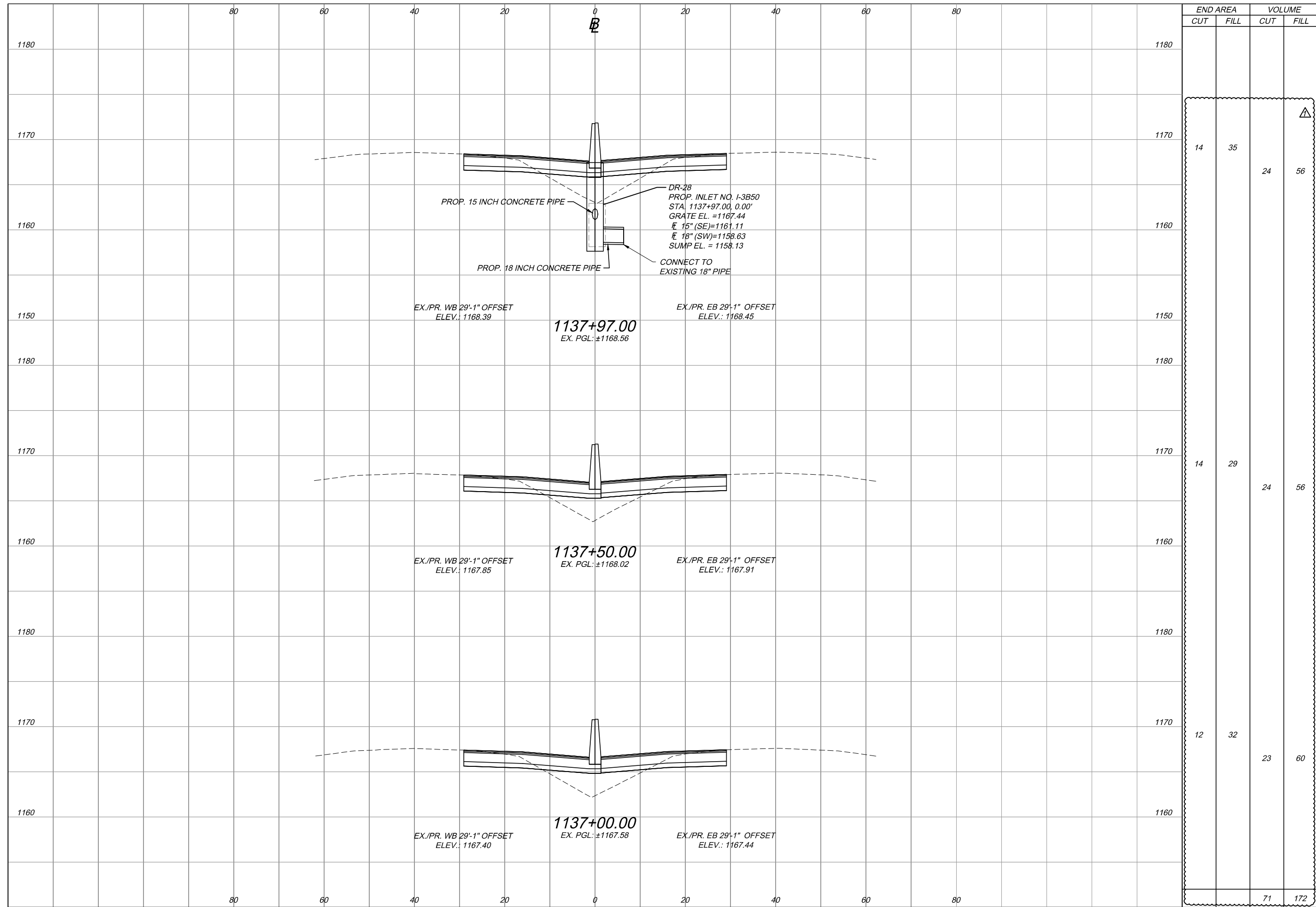
CROSS SECTIONS
STA. 1135+50 TO STA. 1136+50

DESIGNED	CHECKED	NO.	REVISIONS	BY	DATE
BA	JAH	1	ADDENDUM NO. 1	JAH	10/18
DRAWN	IN CHARGE				
BA	RBP				

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STATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
1180				
1170	14	35	24	56
1160				
1150				
1180				
1170	14	29	24	56
1160				
1180				
1170	12	32	23	60
1160				
TOTAL	71	172		

PROJECT 43-19-06 **DATE: 09-17-2018**

48 / 62

98
186

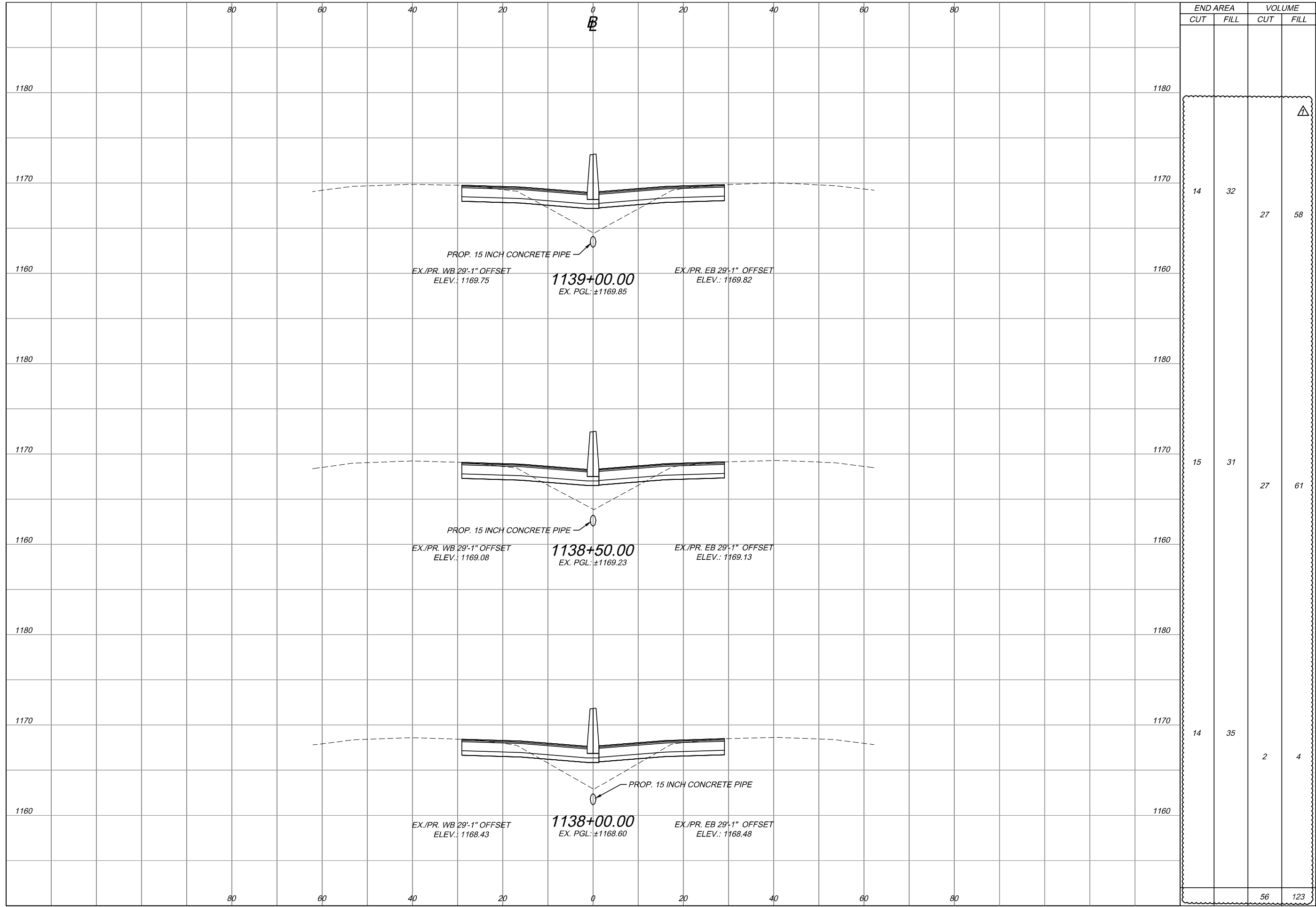
**CROSS SECTIONS
STA. 1137+00 TO STA. 1137+97**

DESIGNED	CHECKED	NO.	REVISIONS	BY	DATE
BA	JAH	1	ADDENDUM NO. 1	JAH	10/18
DRAWN	IN CHARGE				
BA	RBP				

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STATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
1139+00.00	14	32	27	58
1138+50.00	15	31	27	61
1138+00.00	14	35	2	4
TOTAL	43	98	56	123

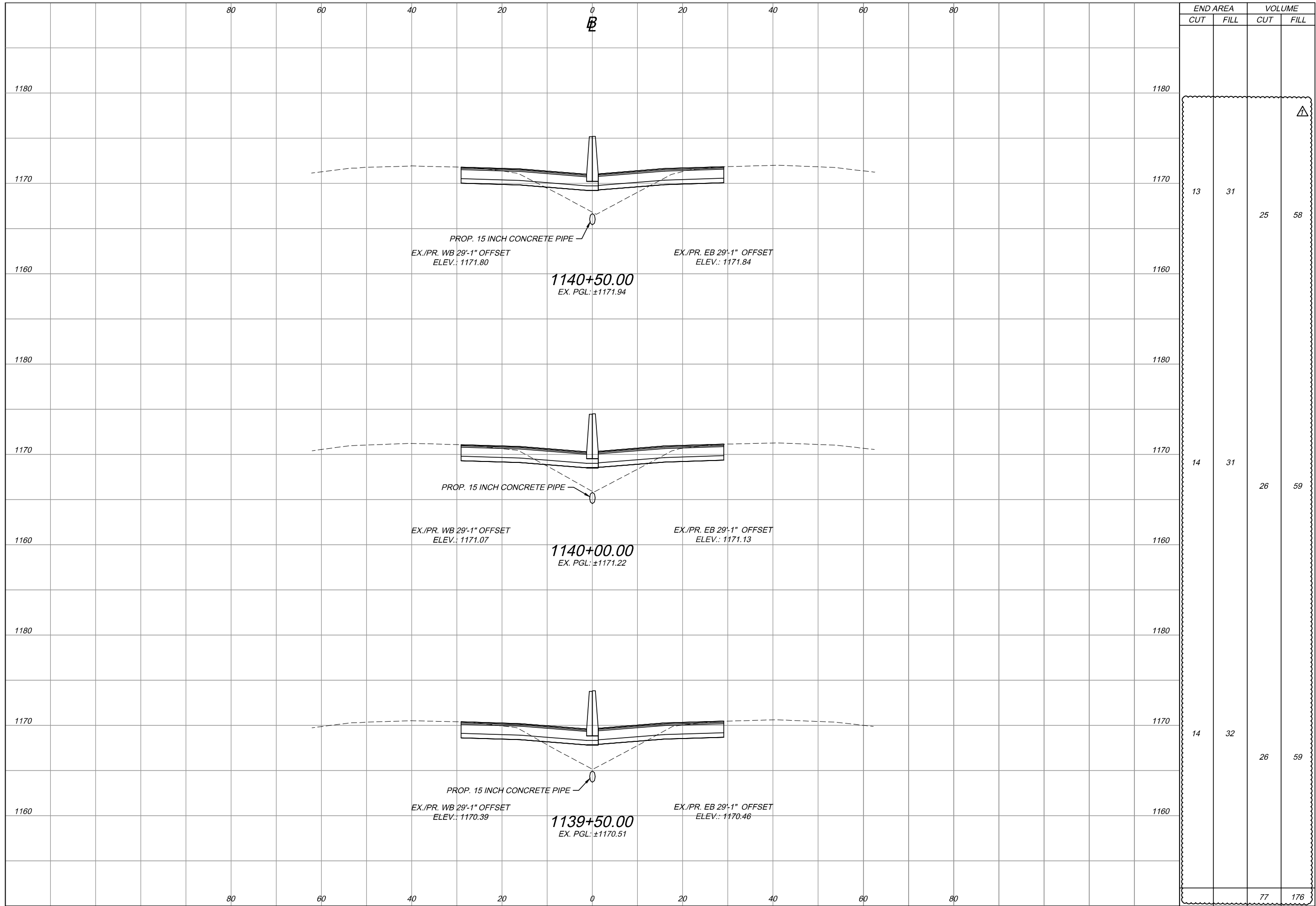
PROJECT 43-19-06 **DATE: 09-17-2018**
49 / 62 **99**
186

CROSS SECTIONS
 STA. 1138+00 TO STA. 1139+00

DESIGNED	BA	DRAWN	BA
CHECKED	JAH	IN CHARGE	RBP
NO.	1		
REVISIONS	ADDENDUM NO. 1		
BY	JAH	DATE	10/18

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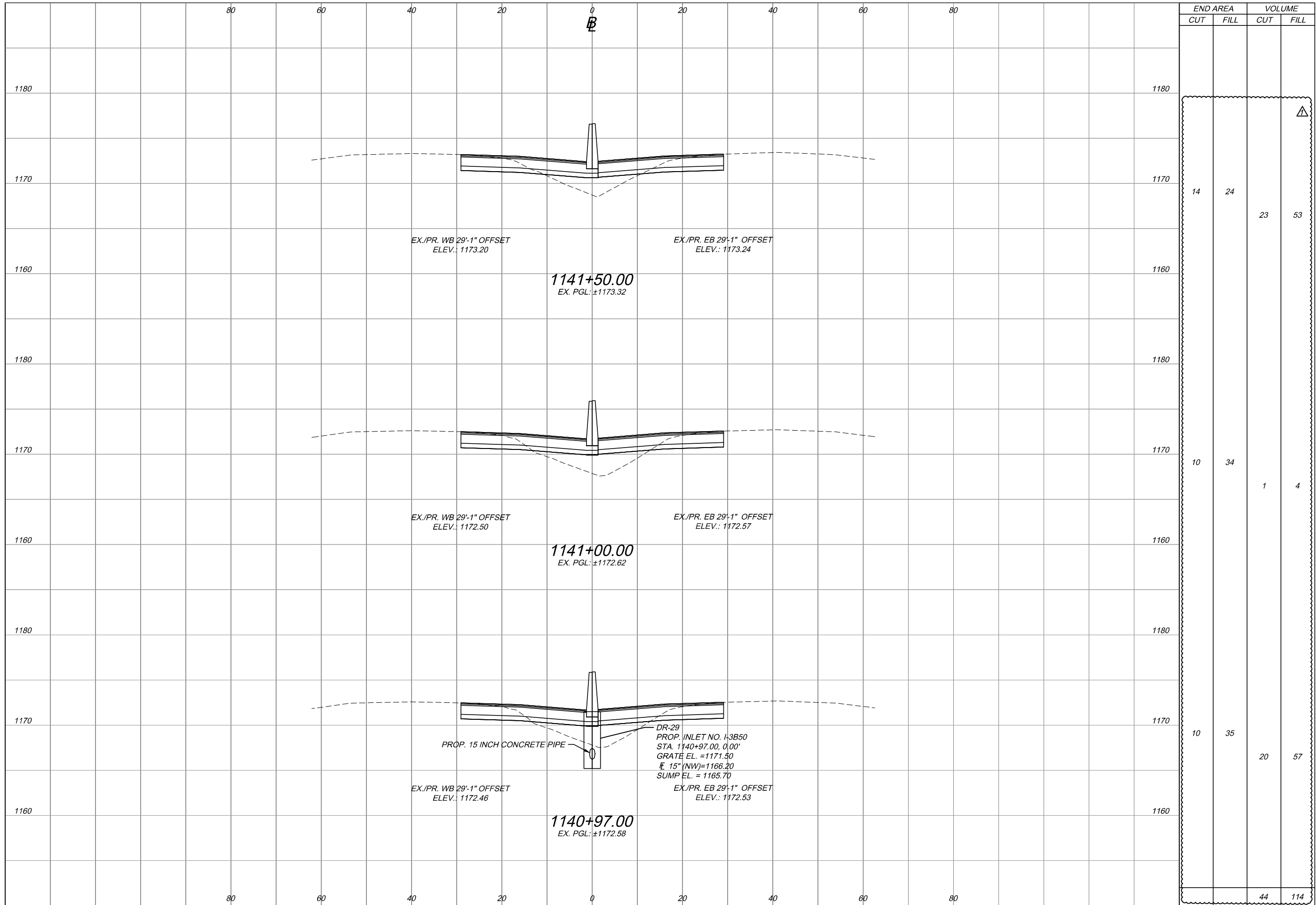


STATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
1139+50.00	14	32	26	59
1140+00.00	14	31	26	59
1140+50.00	13	31	25	58
TOTAL	41	94	77	176

PROJECT 43-19-06 DATE: 09-17-2018
 STA. 1139+50 TO STA. 1140+50
 CROSS SECTIONS
 50 / 62
 100 / 186

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END AREA		VOLUME	
CUT	FILL	CUT	FILL
14	24	23	53
10	34	1	4
10	35	20	57
		44	114

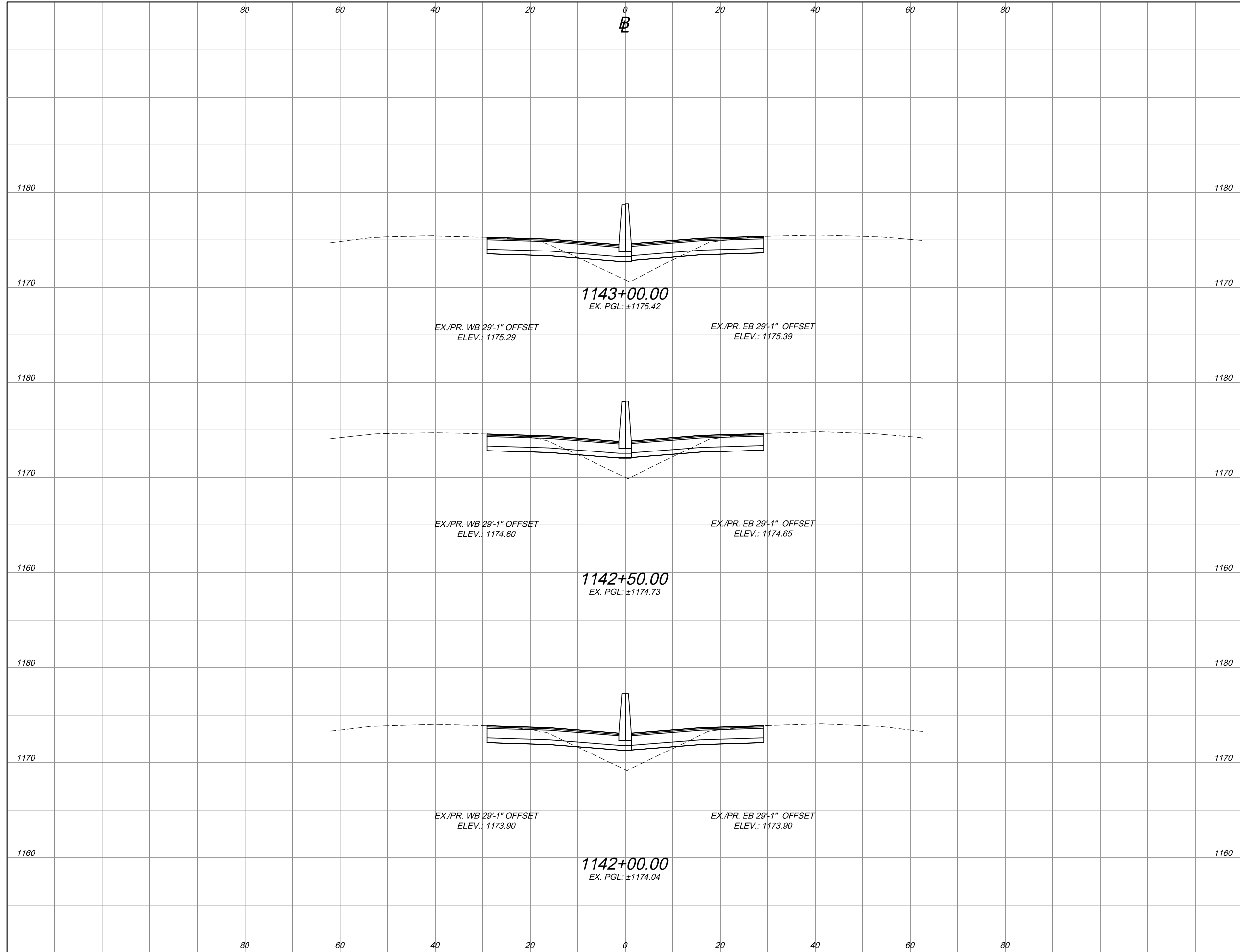
PROJECT 43-19-06
DATE: 09-17-2018
51 / 62
101
186

CROSS SECTIONS
 STA. 1140+97 TO STA. 1141+50

DESIGNED	CHECKED	NO.	REVISIONS	BY	DATE
BA	JAH	1	ADDENDUM NO. 1	JAH	10/18
BA	RBP				

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OTC037_CROSS SECTION - MAINLINE.dwg; 10/08/18 - 10:13am



STATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
1180				
1170	16	23	29	42
1180				
1170	15	23	28	43
1160				
1180				
1170	15	23	27	44
1160				
			84	129

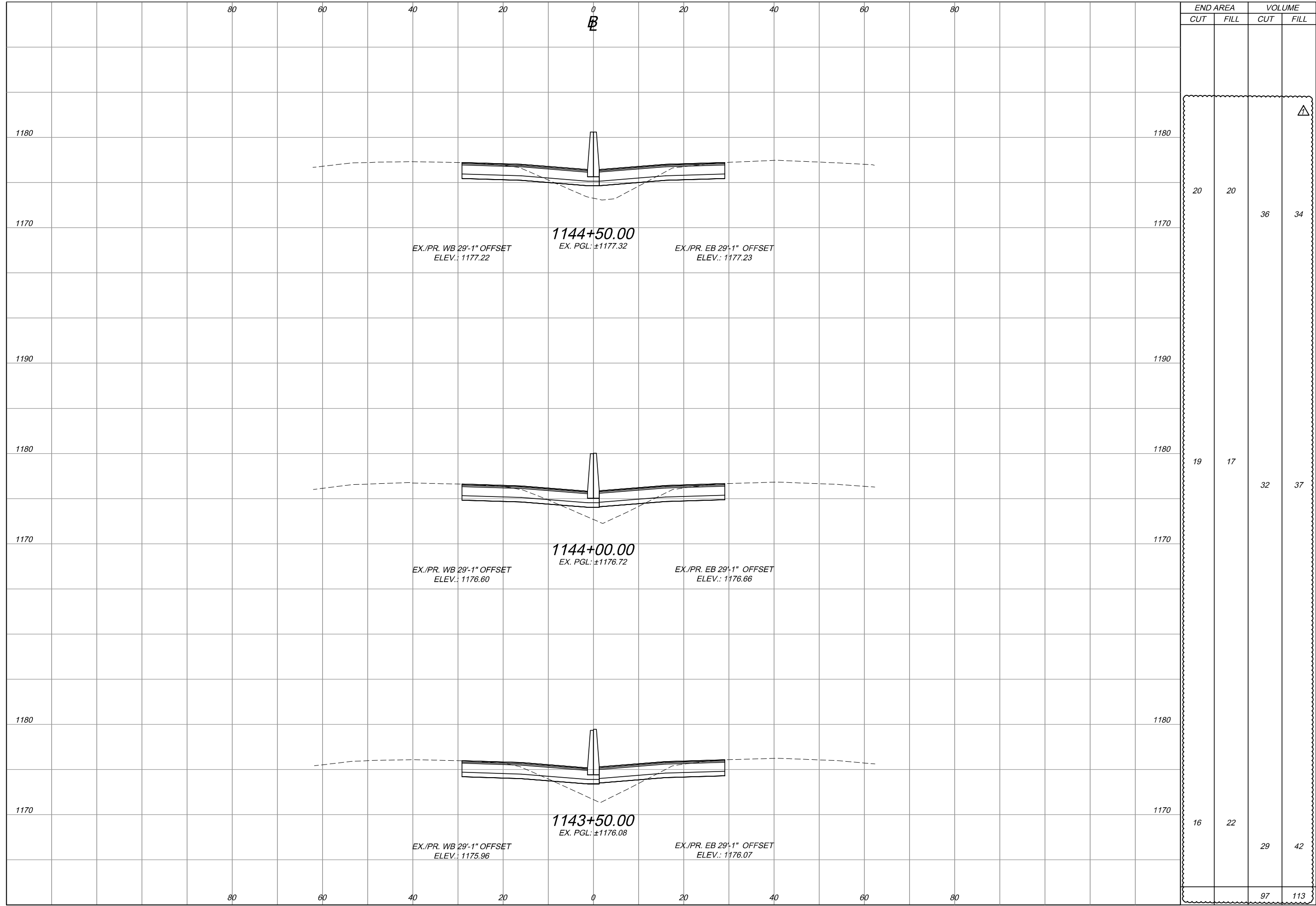
PROJECT 43-19-06 **DATE: 09-17-2018**
52 / 62 **102 / 186**

CROSS SECTIONS
 STA. 1142+00 TO STA. 1143+00

DESIGNED	BA	DRAWN	BA
CHECKED	JAH	IN CHARGE	RBP
NO.	1		
REVISIONS	ADDENDUM NO. 1		
BY	JAH	DATE	10/18

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OTC037_CROSS SECTION - MAINLINE.dwg; 10/08/18 - 10:14am



END AREA		VOLUME	
CUT	FILL	CUT	FILL
20	20	36	34
19	17	32	37
16	22	29	42
97	113		

PROJECT 43-19-06 **DATE: 09-17-2018**
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103
186

CROSS SECTIONS
 STA. 1143+50 TO STA. 1144+50

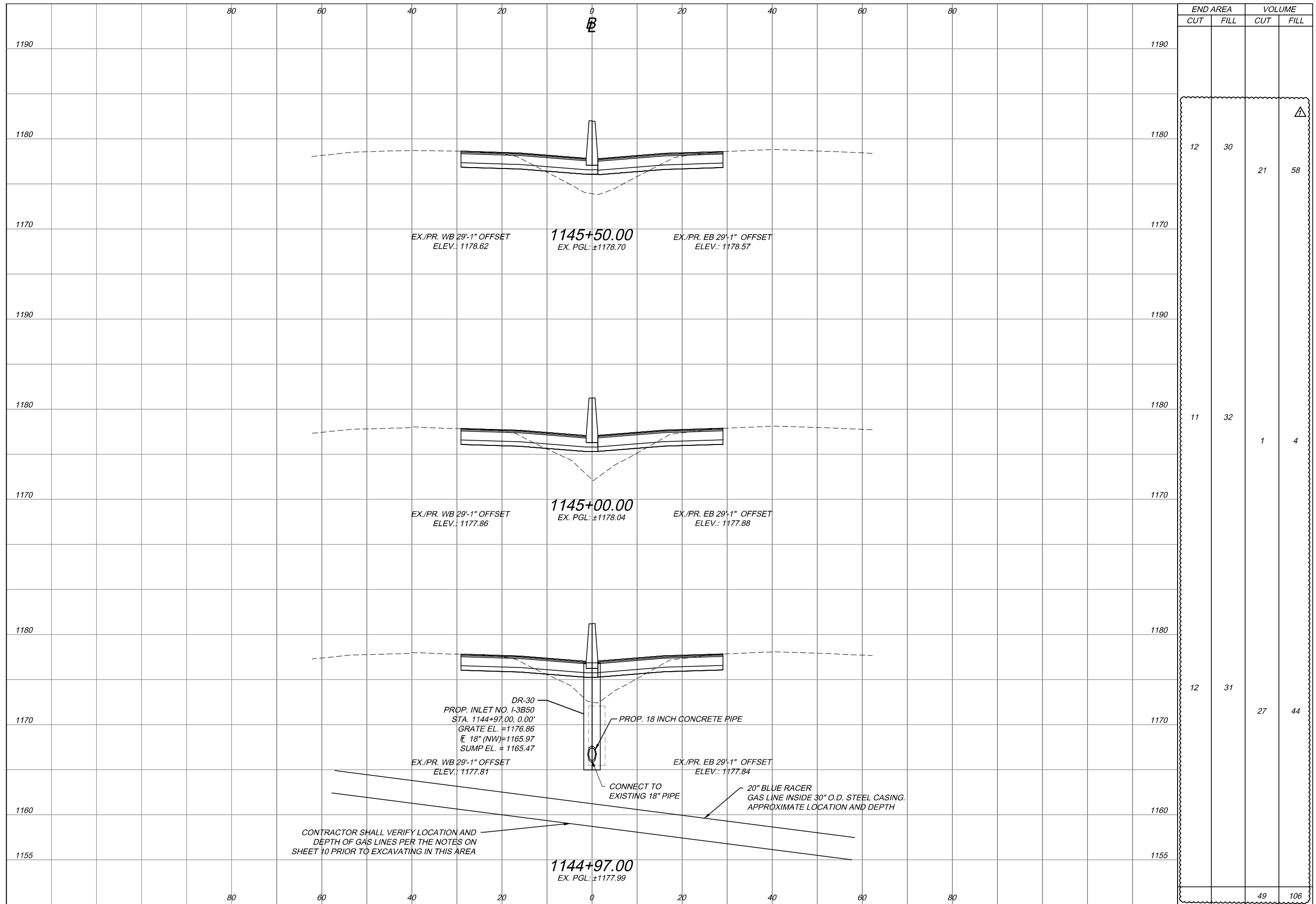
DESIGNED	CHECKED	NO.	REVISIONS	BY	DATE
BA	JAH	1	ADDENDUM NO. 1	JAH	10/18
DRAWN	IN CHARGE				
BA	RBP				

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OTC037_CROSS SECTION - MAINLINE.dwg; 10/08/18 - 10:14am



ELEVATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
1190				
1180	12	30	21	58
1170				
1190				
1180	11	32	1	4
1170				
1180				
1170	12	31	27	44
1160				
1155			49	106

CROSS SECTIONS
STA. 1144+97 TO STA. 1145+50

PROJECT 43-19-06 DATE: 09-17-2018

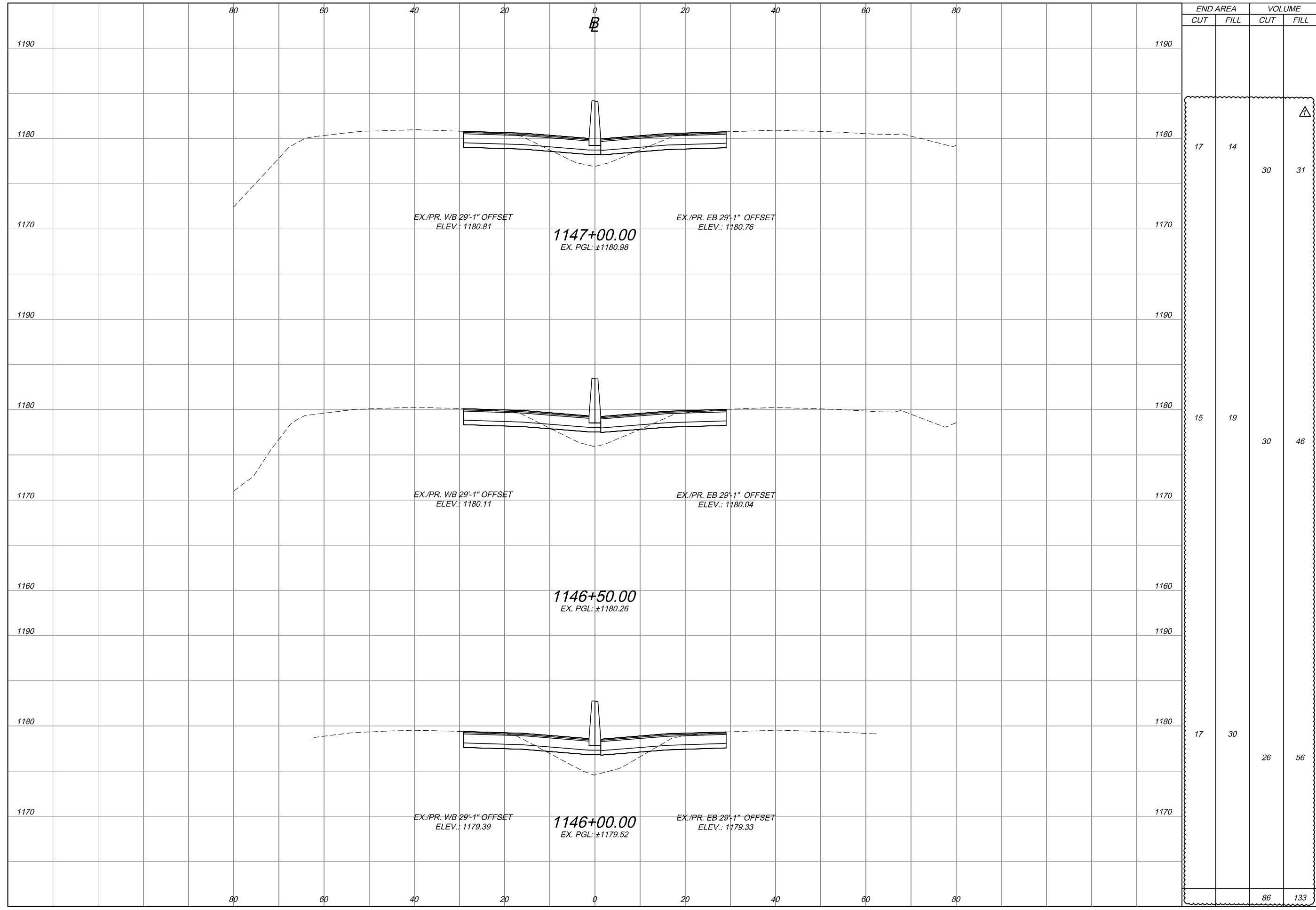
54 / 62

104
186

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OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OTC037_CROSS SECTION - MAINLINE.dwg: 10/08/18 - 10:14am



ELEVATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
1190				
1180	17	14	30	31
1170				
1190				
1180	15	19	30	46
1170				
1160				
1190				
1180	17	30	26	56
1170				
			86	133

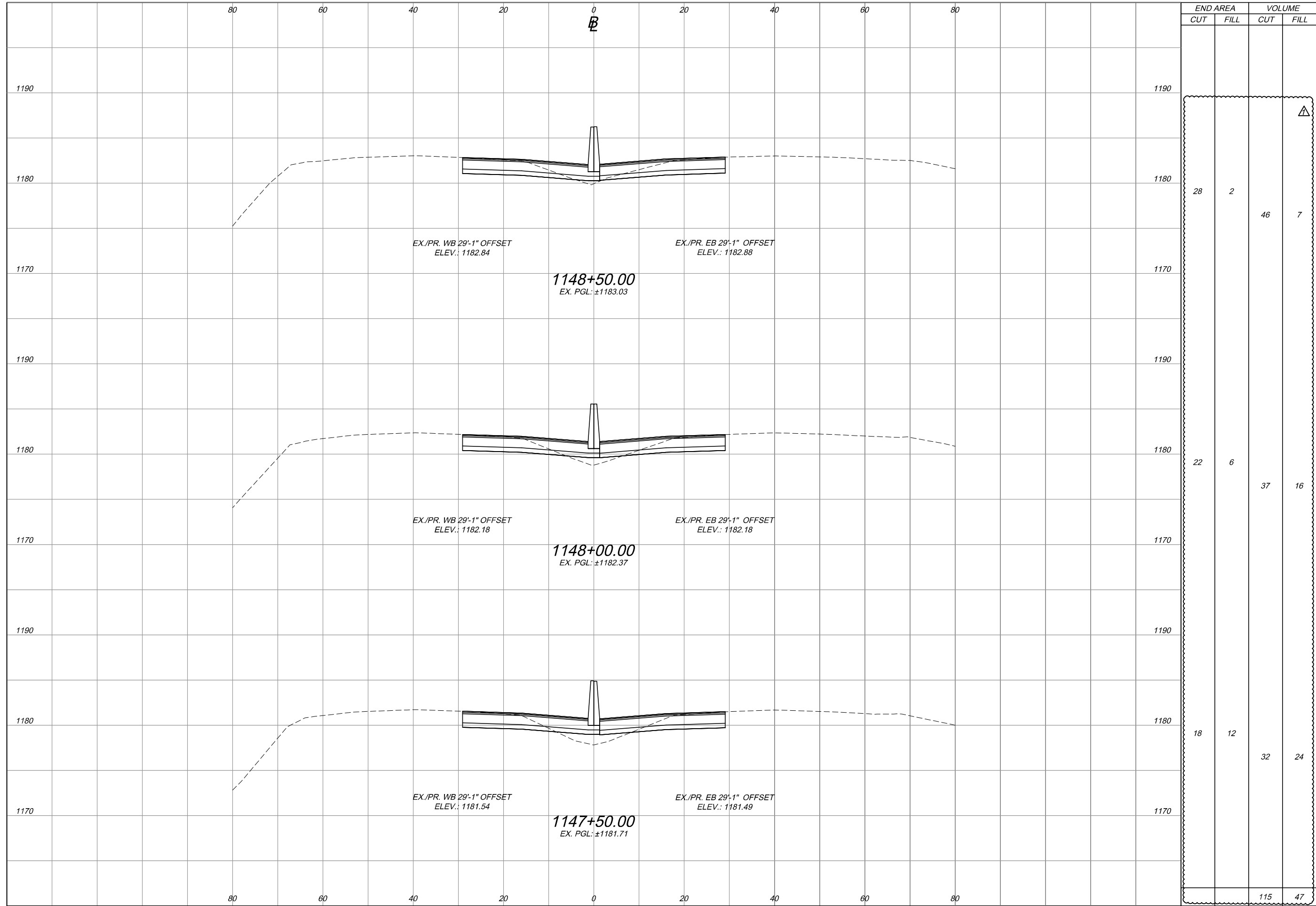
PROJECT 43-19-06
DATE: 09-17-2018
55 / 62
105
186

CROSS SECTIONS
 STA. 1146+00 TO STA. 1147+00

DESIGNED	CHECKED	NO.	REVISIONS	BY	DATE
BA	JAH	1	ADDENDUM NO. 1	JAH	10/18
DRAWN	IN CHARGE				
BA	RBP				

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OTC037_CROSS SECTION - MAINLINE.dwg; 10/08/18 - 10:15am



STATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
1147+50.00	18	12	32	24
1148+00.00	22	6	37	16
1148+50.00	28	2	46	7
TOTAL	68	20	105	47

PROJECT 43-19-06 **DATE: 09-17-2018**

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106
186

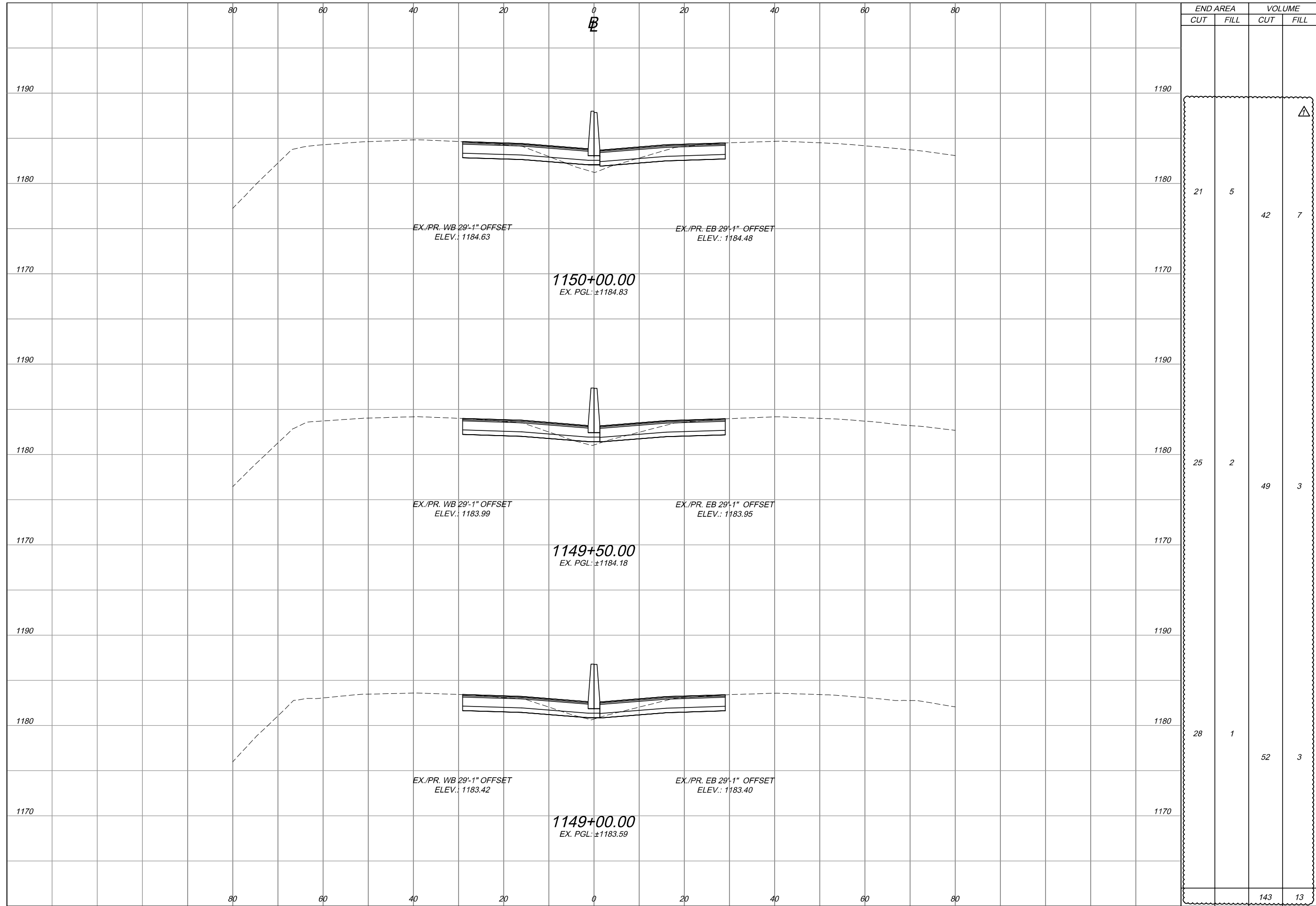
CROSS SECTIONS
STA. 1147+50 TO STA. 1148+50

DESIGNED	BA	CHECKED	JAH
DRAWN	BA	IN CHARGE	RBP
NO.	1	NO.	1
REVISIONS	ADDENDUM NO. 1	BY	JAH
		DATE	10/18

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OTC037_CROSS SECTION - MAINLINE.dwg; 10/08/18 - 10:15am



END AREA		VOLUME	
CUT	FILL	CUT	FILL
21	5	42	7
25	2	49	3
28	1	52	3
		143	13

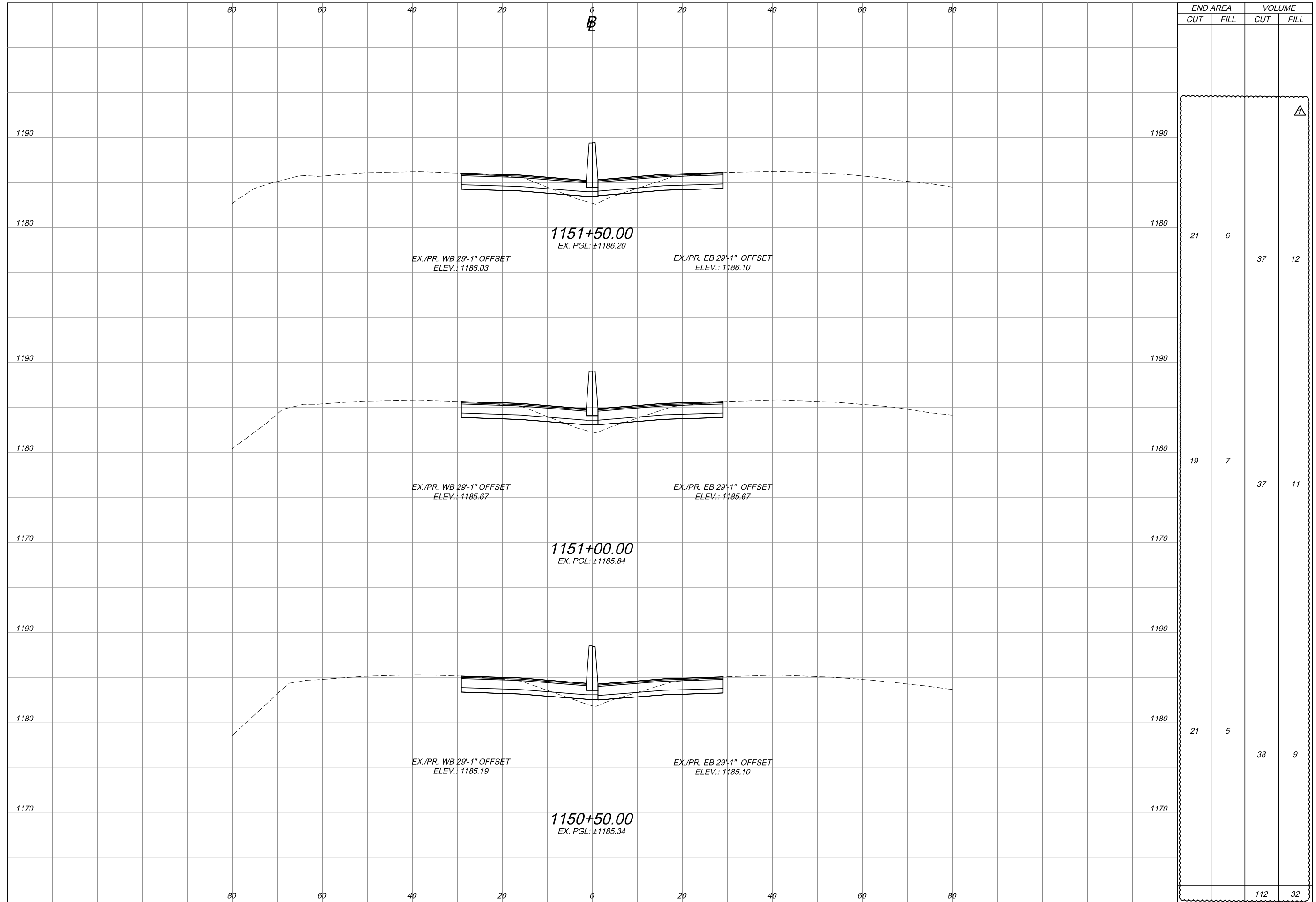
PROJECT 43-19-06 **DATE: 09-17-2018**
57 / 62 **107 / 186**

CROSS SECTIONS
 STA. 1149+0 TO STA. 1150+00

DESIGNED	CHECKED	NO.	REVISIONS	BY	DATE
BA	JAH	1	ADDENDUM NO. 1	JAH	10/18
DRAWN	IN CHARGE				
BA	RBP				

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OTC037_CROSS SECTION - MAINLINE.dwg: 10/08/18 - 10:15am



END AREA	VOLUME	
	CUT	FILL
21	6	37
19	7	37
21	5	38
112	32	

PROJECT 43-19-06 **DATE: 09-17-2018**
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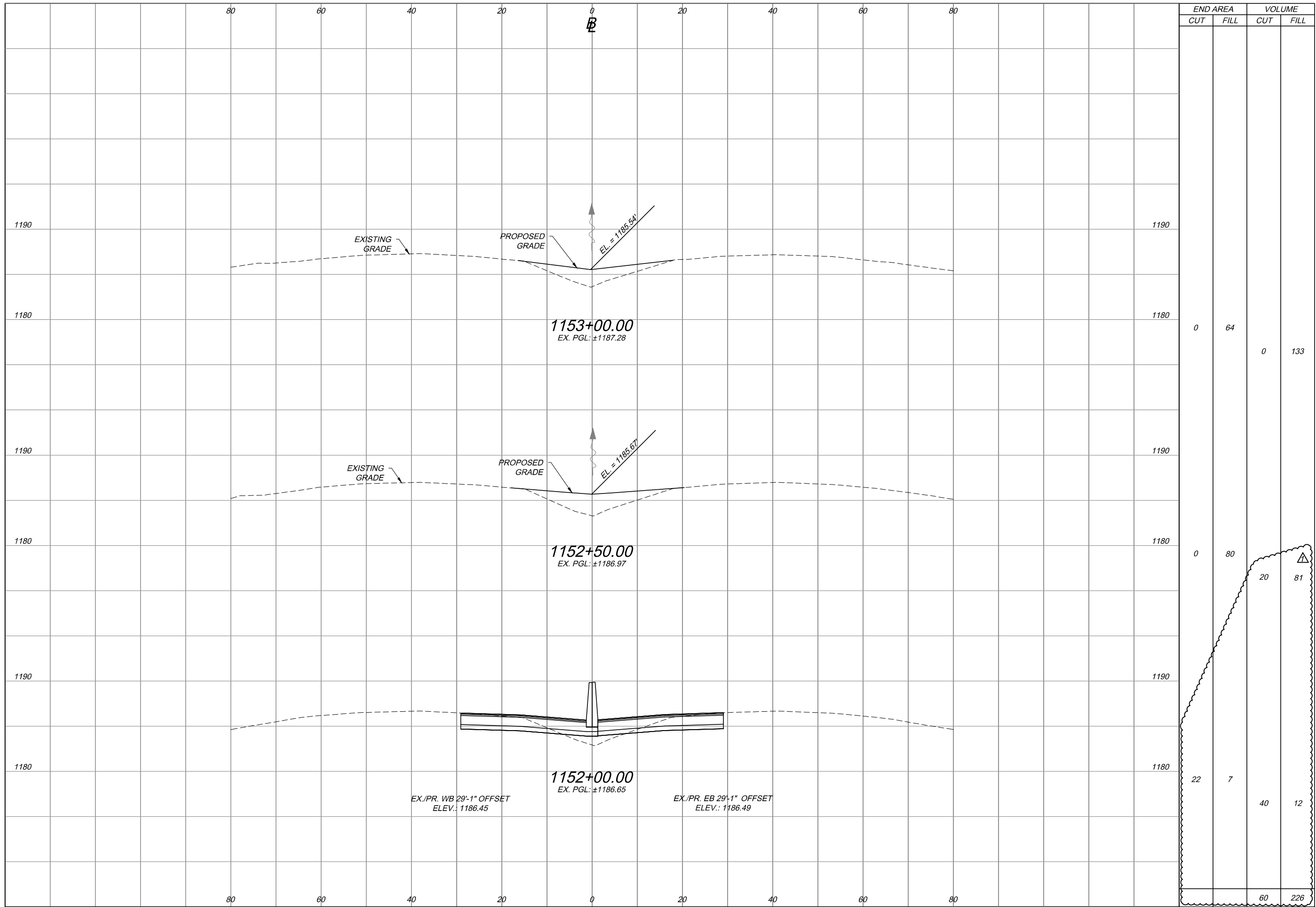
CROSS SECTIONS
 STA. 1150+50 TO STA. 1151+50

DESIGNED	CHECKED	NO.	REVISIONS	BY	DATE
BA	JAH	1	ADDENDUM NO. 1	JAH	10/18
DRAWN	IN CHARGE				
BA	RBP				

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OTC037_CROSS SECTION - MAINLINE.dwg; 10/08/18 - 10:16am



STATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
1153+00.00 EX. PGL: ±1187.28	0	64	0	133
1152+50.00 EX. PGL: ±1186.97	0	80	20	81
1152+00.00 EX. PGL: ±1186.65	22	7	40	12
			60	226

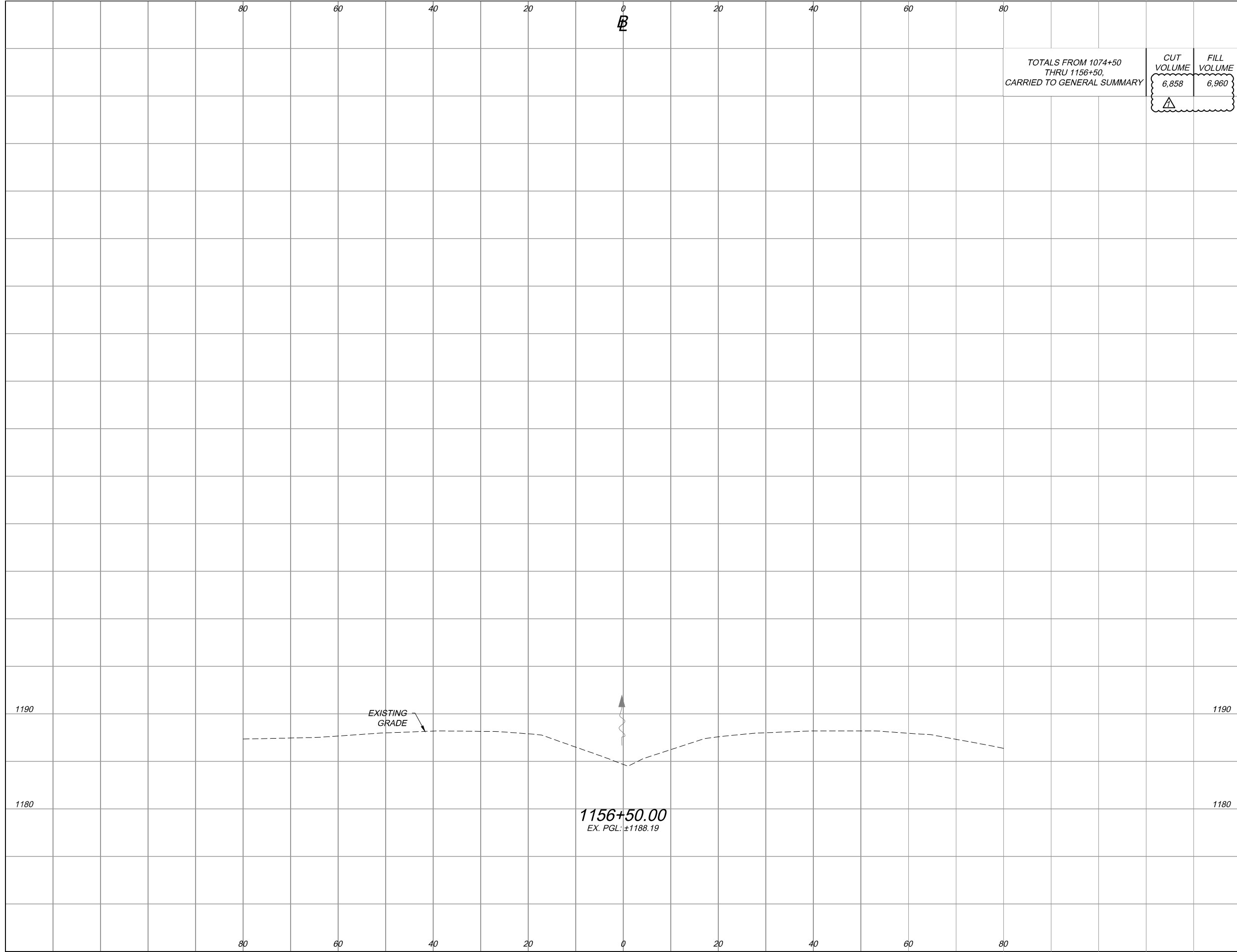
PROJECT 43-19-06 **DATE: 09-17-2018**
59 / 62 **109 / 186**

CROSS SECTIONS
 STA. 1152+00 TO STA. 1153+00

DESIGNED	BA	DRAWN	BA
CHECKED	JAH	IN CHARGE	RBP
NO.	1		
REVISIONS		ADDENDUM NO.	1
BY	JAH	DATE	10/18

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1156+50.00
EX. PGL: ±1188.19

EXISTING GRADE

TOTALS FROM 1074+50
THRU 1156+50,
CARRIED TO GENERAL SUMMARY

CUT VOLUME	FILL VOLUME
6,858	6,960

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	0	0	2
0	0	0	2

PROJECT 43-19-06
 DATE: 09-17-2018
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 CROSS SECTIONS
 STA. 1156+50 TO END PROJECT
 REVISIONS
 ADDENDUM NO. 1
 NO. 1
 CHECKED
 JAH
 IN CHARGE
 RBP
 DESIGNED
 BA
 DRAWN
 BA
 BY DATE
 JAH 10/18
 Jobes Henderson
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