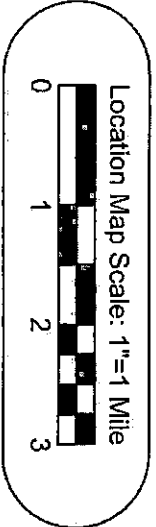
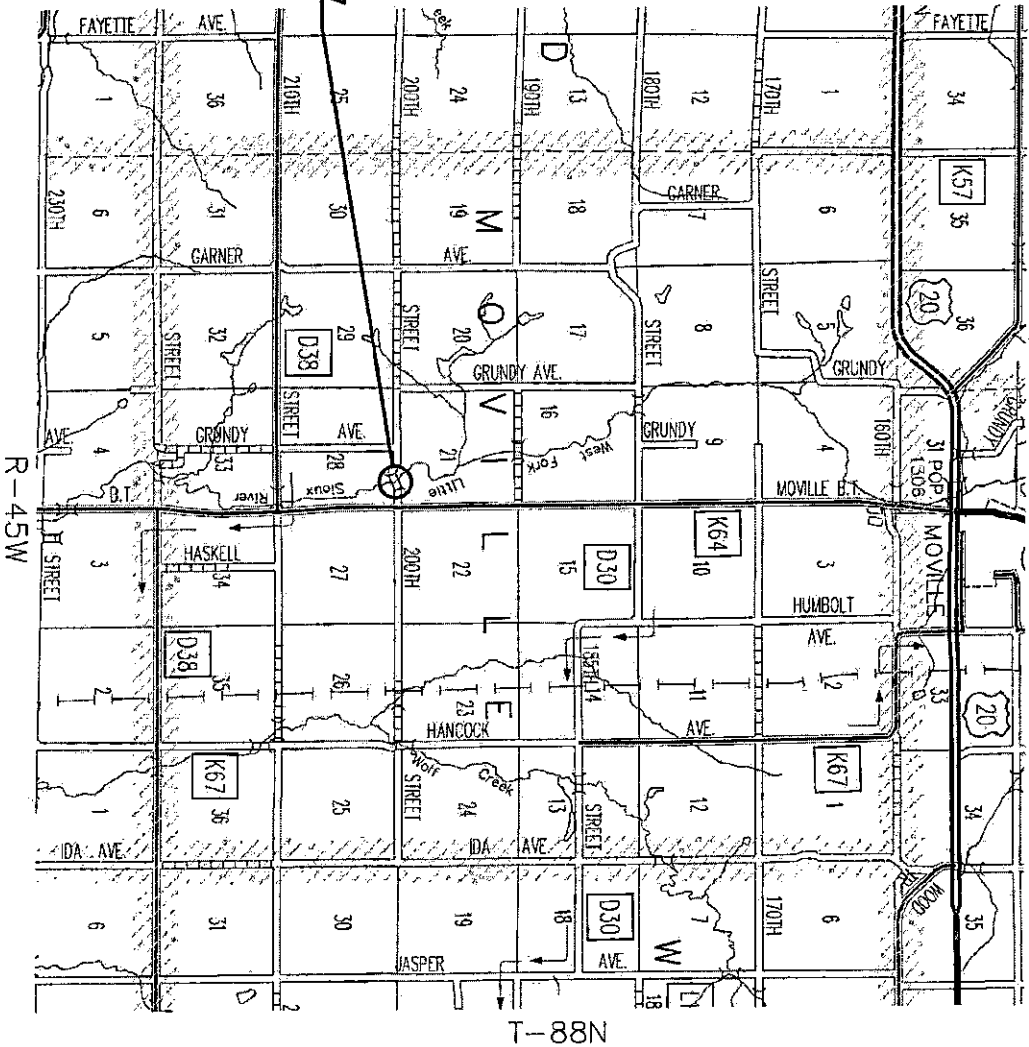
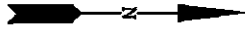


**BROS-SWAP-C097(140)--SE-97
BRIDGE REPLACEMENT
STA. 7+90 TO 12+20**



PROJECT NO. BROS-SWAP-C097(140)-SE-97 SHEET 1 2	PROJECT DESCRIPTION: BRIDGE REPLACEMENT ON 200TH ST NORTH LINE SEC. 28-T88N-R45W MOVILLE TOWNSHIP	BSB DRAWN BY: _____ BK DESIGNED BY: _____ M.J.N APPROVED BY: _____ DATE: _____ REVISION: _____ DATE: _____	WOODBURY COUNTY ENGINEERS OFFICE
	SHEET DESCRIPTION: LOCATION MAP		

ESTIMATE REFERENCE INFORMATION

ITEM NO.	ITEM CODE	DESCRIPTION
1	2101-0850001	CLEARING AND GRUBBING CLEAR AND GRUBB SHALL CONSIST OF REMOVAL OF ALL VEGETATION IN THE CONSTRUCTION LIMITS. ALL MATERIALS BRUSH, TREES, ETC. SHALL BE DISPOSED OF OFF OF THE PROJECTS LIMITS. NO BURNING WITHIN THE PROJECT LIMITS ALLOWED. IF THE CONTRACTOR WANTS TO BURN ON PRIVATE PROPERTY ADJACENT TO THE PROJECT THEY WILL SUPPLY THE PROJECT ENGINEER WITH A LETTER SIGNED BY THE LAND OWNER ALLOWING THE BURNING.
2	2102-2625000	EMBANKMENT-IN-PLACE SEE TABULATION ITEM 3 ON THIS SHEET FOR BREAKDOWN OF EXCAVATION QUANTITIES. TYPE "A" COMPACTION IS REQUIRED. AFTER ALL SUITABLE MATERIAL ON SITE HAS BEEN DEPLETED THE CONTRACTOR SHALL FURNISH ALL REMAINING MATERIAL REQUIRED. THE CONTRACTOR SHALL FURNISH THEIR OWN BORROW FOR EMBANKMENT-IN-PLACE. THE CONTRACTOR SHALL FAMILIARIZE THEMSELV WITH PROVISIONS OF IOWA LAW AS IT APPLIES TO REMOVAL AND REPLACEMENT OF TOPSOIL ON BORROW AREAS.
3	2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW MATERIAL SHALL BE FREE FROM FOREIGN MATERIAL AND HAVE ADEQUATE MOISTURE TO ALLOW COMPACTION AT THE CONTRACTOR'S EXPENSE. IF NECESSARY TO COMPLETE COMPACTION, ROADWAY PORTION OF CLASS 10 SHALL BE COMPACTED USING A VIBRATORY ROLLER. FILL CALCULATIONS INCLUDE A 40% SHRINKAGE FACTOR, NO PAYMENT FOR OVERHAUL WILL BE ALLOWED. THE APPROACH BERMS SHALL BE BUILT TO THE CONSTRUCTION LIMITS PRIOR TO THE ABUTMENT PILE BEING PLACED. MATERIAL FROM ITEM 3 MAY BE USED FOR BORROW MATERIAL IF SUITABLE. 1452 C.Y. (FILL+40%) - 30 C.Y. CUT = 1422 C.Y. BORROW TO BE SUPPLIED BY THE CONTRACTOR AS EMBANKMENT-IN-PLACE.
4	2102-2713090	EXCAVATION, CLASS 13 WASTE QUANTITY OF EXCAVATION IS 80 C.Y. MATERIAL MAY BE USED IN THE DITCH ON THE NORTHEAST CORNER OF THE BRIDGE. UNUSED MATERIAL SHALL BE DISPOSED OF OFF THE PROJECT SITE ACCORDING TO APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS. LOCATION OF THE MATERIAL SHOWN ON SHEET 8.
5	2104-2710020	EXCAVATION, CLASS 10 CHANNEL QUANTITY OF EXCAVATION IS 2591 C.Y. (FILL + 40%) - 851 C.Y. CUT = 1740 BORROW TO BE SUPPLIED BY THE CONTRACTOR. LIMITS OF THIS ITEM ARE SHOWN ON SHEET 8.
6	2312-8260310	GRANULAR SURFACING ON ROAD, CRUSHED CONCRETE GRANULAR SURFACING SHALL BE PLACED IN TWO (2), 2 INCH LIFTS. THE FIRST LIFT SHALL BE SCARIFIED INTO THE ROADWAY AND ROLLED WITH A SMOOTH DRUM ROLLER. THE SECOND LIFT SHALL BE PLACED AND BLADED TO THE CORRECT CROWN
7	2401-6745625	REMOVAL OF EXISTING BRIDGE BID ITEM SHALL INCLUDE THE REMOVAL AND DISPOSAL OF THE EXISTING BRIDGE AT STA. 9+93 (FHWA STR. NO. 353851). THE BRIDGE IS A 4-SPAN BRIDGE WITH A 75' LONG PONY TRUSS, ONE TIMBER AND TWO STEEL STRINGER APPROACH SPANS, 141' LONG AND 17' WIDE ON A 0° SKEW. THE SUBSTRUCTURE SHALL BE REMOVED TO A DEPTH OF 3 FEET BELOW STREAM BED, IF THE STRUCTURE INTERFERS WITH THE CONSTRUCTION OF THE NEW BRIDGE ALL OF THE SUBSTRUCTURE SHALL BE REMOVED. ALL MATERIALS SHALL BE DISPOSED OF OFF OF THE PROJECT LIMITS ACCORDING TO APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS. LABORATORY RESULTS SHOW NO TRACES OF ASBESTOS.
8	2402-2720000	EXCAVATION, CLASS 20 BID ITEM IS FOR EXCAVATION REQUIRED FOR CONSTRUCTION OF THE ABUTMENT FOOTINGS. SEE "SUMMARY OF BRIDGE QUANTITIES" TABLE ON SHEET 3 FOR EXCAVATION QUANTITY AT EACH ABUTMENT. BID ITEM ALSO INCLUDES .38 CY. CLASS 20 FOR ROADWAY PIPE SEE SHEET 7 FOR PLACEMENT

ESTIMATE REFERENCE INFORMATION

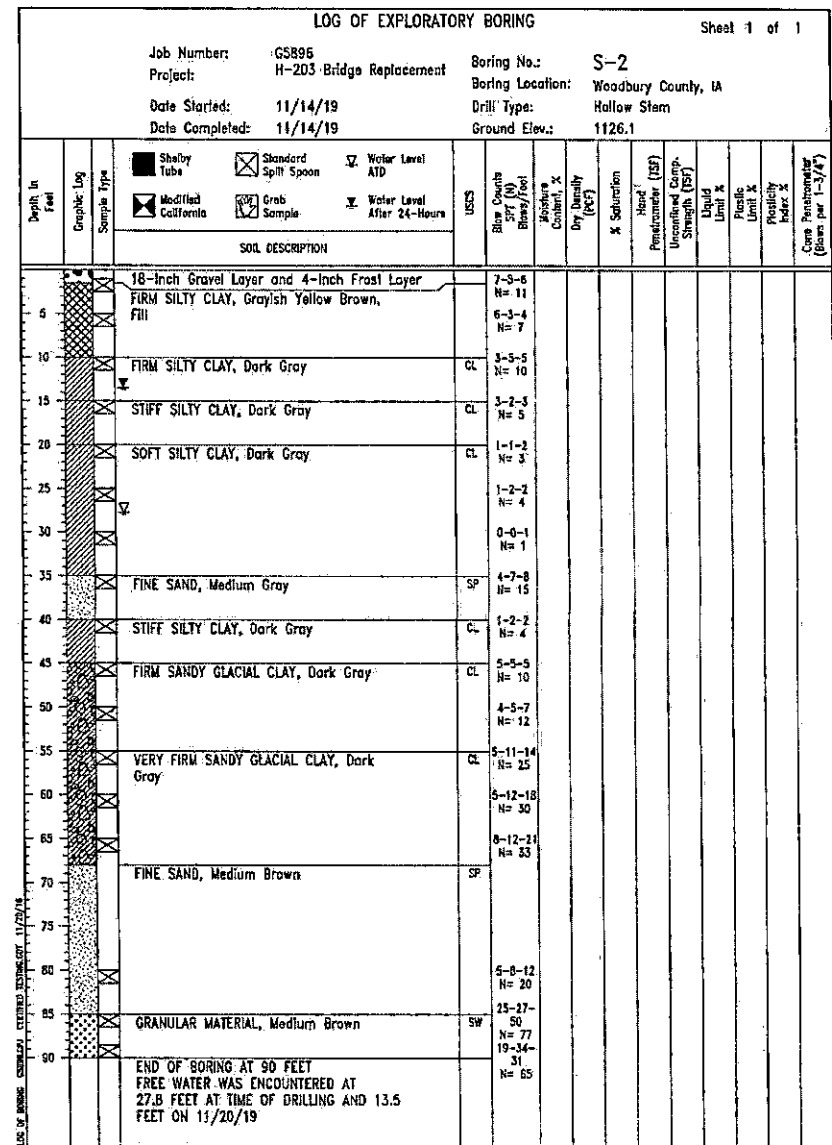
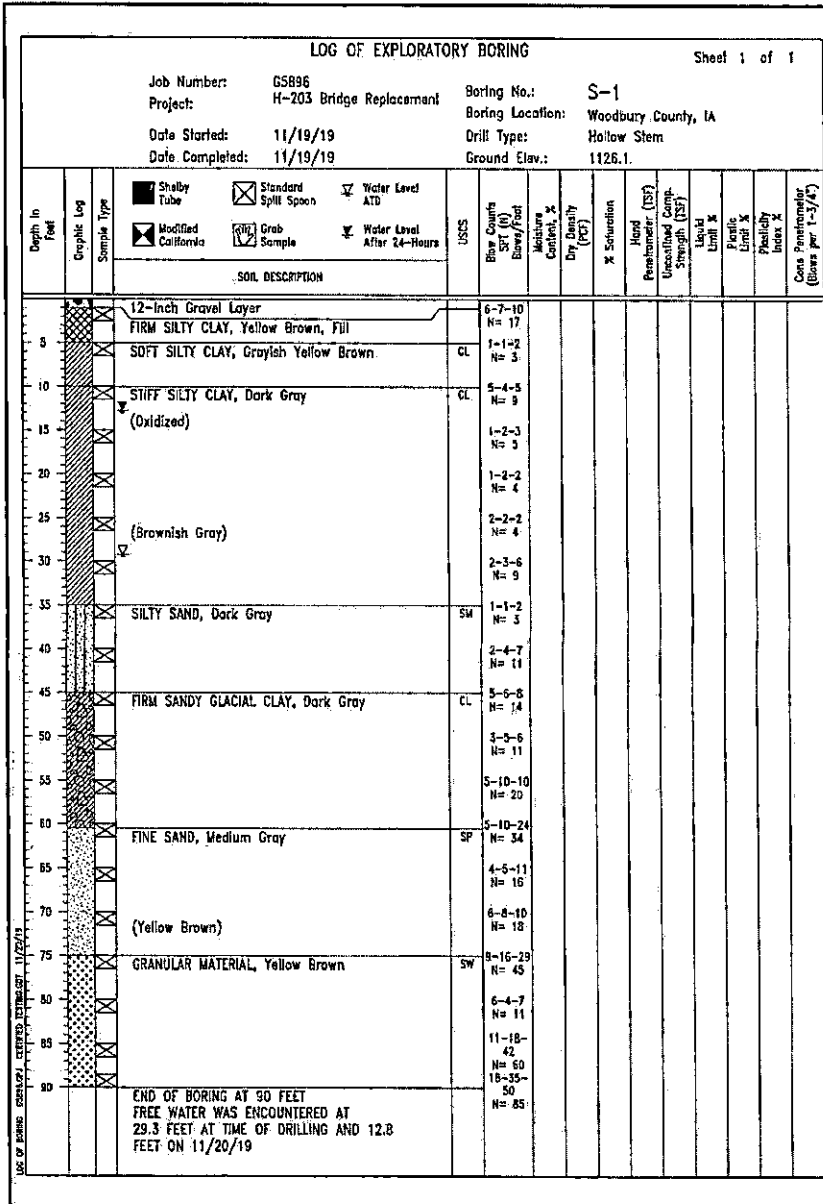
ITEM NO.	ITEM CODE	DESCRIPTION
9	2403-0100010	STRUCTURAL CONCRETE (BRIDGE) INCLUDES COST OF FURNISHING AND PLACING SUBDRAIN (INCLUDING EXCAVATION), GRANULAR BACKFILL AND POROUS BACKFILL AT ABUTMENTS. THE CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION FOR THE CONCRETE USED IN THE BRIDGE CONSTRUCTION. THE COST OF THIS INSPECTION SHALL BE INCIDENTAL TO THIS ITEM.
12	2414-6424124	CONCRETE OPEN RAILING, TL-4 THE CONTRACTOR SHALL SUPPLY CERTIFIED PLANT INSPECTION FOR THIS ITEM.
13	2417-1060024	CULVERT, CORRUGATED METAL ROADWAY PIPE, 24IN. DIA. CULVERT SHALL BE INSTALLED AT STA. 10+30± 39' LT TO STA. 11+78± 26' LT. THE CULVERT SHALL BE RIVETED AND 12 GAUGE.
14	2501-0201042	PILES, STEEL, HP 10x42 PILE POINTS TO BE ADDED TO PILES DUE TO SOIL CONDITIONS AT AN ELEVATION BETWEEN 1041.10± TO 1051.10± AND ALL COSTS FOR FURNISHING AND ATTACHING PILE POINTS TO 14 ABUTMENT PILES TO BE INCIDENTAL TO THIS BID ITEM.
15	2501-0201253	PILES, STEEL, HP 12x53 PILE POINTS TO BE ADDED TO PILES DUE TO SOIL CONDITIONS AT AN ELEVATION BETWEEN 1041.10± TO 1051.10± AND ALL COSTS FOR FURNISHING AND ATTACHING PILE POINTS TO 22 PIER PILES TO BE INCIDENTAL TO THIS BID ITEM.
16	2414-5478053	CONCRETE ENCASEMENT OF STEEL H PILES, HP 12X53 (PI0L TYPE 3) THE CONTRACTOR SHALL SUPPLY CERTIFIED PLANT INSPECTION FOR THIS ITEM.
20	2507-3250005	ENGINEERING FABRIC ENGINEERING FABRIC SHALL BE PLACED UNDERNEATH AND AT THE LIMITS OF THE CLASS "E" REVETMENT. SEE SHEET 7 FOR DETAILS.
21	2507-6800061	REVETMENT, CLASS E REVETMENT SHALL BE PLACED AT A THICKNESS OF APPROXIMATELY 2'. SEE THE PLAN VIEW ON SHEET 7 FOR PLACEMENT LIMITS.
22	2518-6910000	SAFETY CLOSURE THIS ITEM SHALL INCLUDE PROVIDING, INSTALLING, MAINTAINING AND REMOVING SAFETY CLOSURES ACCORDING TO IDOT STANDARD SPECIFICATIONS AT THE LOCATIONS INDICATED IN THE TABLE ON SHEET 6.
23	2528-8445110	TRAFFIC CONTROL THIS ITEM SHALL INCLUDE FURNISHING, INSTALLING, MAINTAINING AND REMOVING SIGNING AS PER THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" AS ADOPTED BY THE DEPARTMENT PER 761 OF THE IOWA ADMINISTRATIVE CODE (IAC) CHAPTER 130 AND STANDARD ROAD PLAN TC-252.
27	2601-2634100	MULCHING
28	2601-2636043	SEEDING AND FERTILIZING (RURAL) THE CONTRACTOR IS TO RESHAPE, FERTILIZE AND MULCH AREAS DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL CONDITION. THIS SHALL BE INCLUDED IN THE PRICES BID FOR ITEMS 27 & 28. THE CONTRACTOR SHALL VERIFY WITH THE ENGINEER ALL AREAS TO BE SEEDED PRIOR TO COMMENCING ANY WORK ON THIS ITEM.
29	2602-0000020	SILT FENCE SILT FENCE SHALL BE PLACED AS DIRT WORK IS COMPLETED. SEE TABULATIONS ON SHEET 6 FOR LOCATIONS.

WOODBURY COUNTY
ENGINEERS OFFICE

DATE: _____
REVISION: _____
APPROVED BY: _____
DRAWN BY: _____
DESIGNED BY: _____

PROJECT DESCRIPTION: BRIDGE REPLACEMENT ON 200TH ST NORTH
LINE SEC. 28-T88N-R45W MOVILLE TOWNSHIP
ESTIMATE REFERENCE INFORMATION

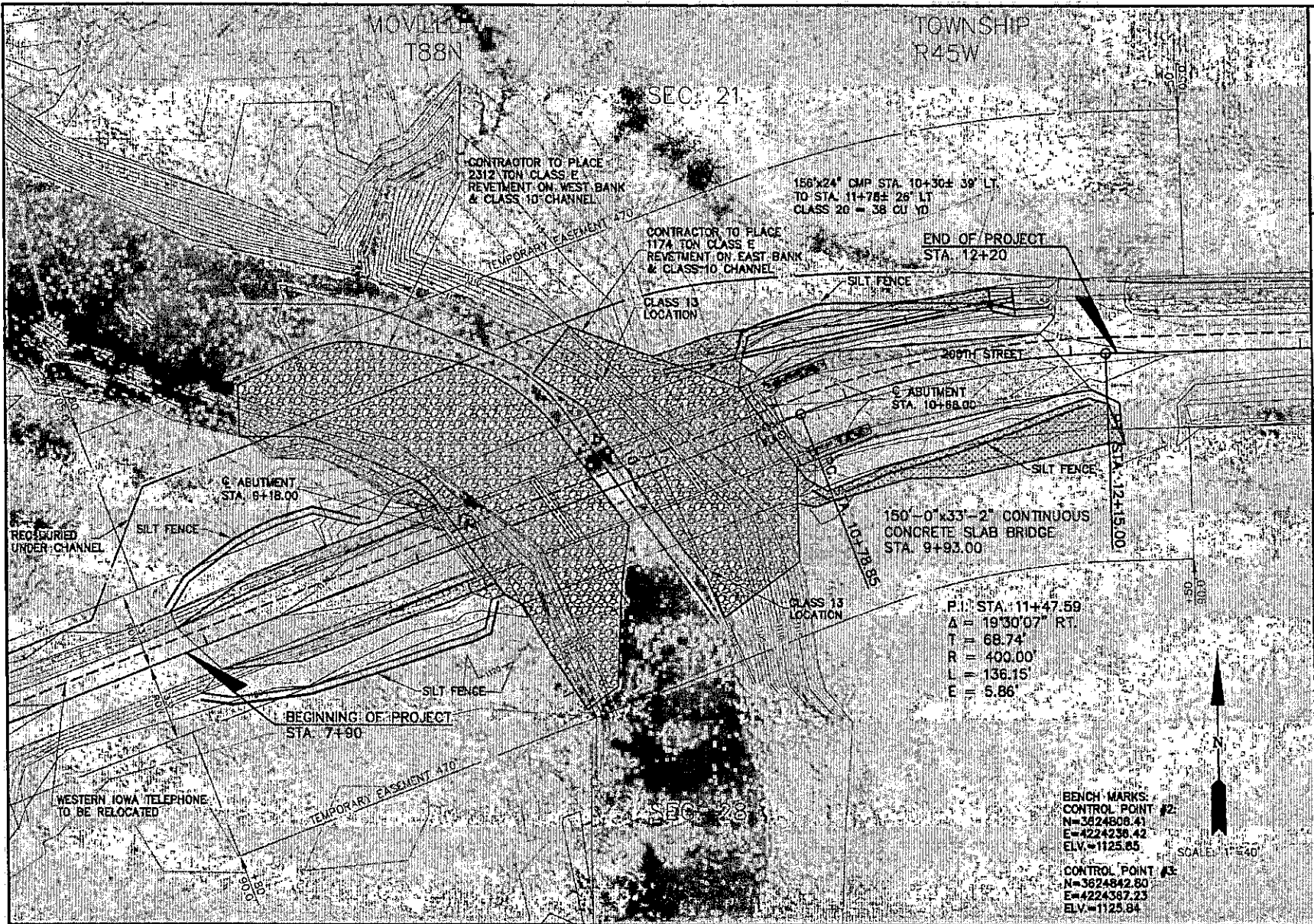
PROJECT NO.
BDCS-SHIP-CO27(140)-SE-01



**WOODBURY COUNTY
ENGINEERS OFFICE**

CDR DRAWN BY: _____ DATE: _____
 BK DESIGNED BY: _____ REVISION: _____
 MJN APPROVED BY: _____
 PROJECT DESCRIPTION: BRIDGE REPLACEMENT ON 200TH ST NORTH
 LINE SEC. 28-T88N-R45W-MOVILLE TOWNSHIP
 SHEET DESCRIPTION: SOIL BORING LOGS
 PROJECT NO.: _____
 SHEET _____

7



WOODBURY COUNTY
ENGINEERS OFFICE

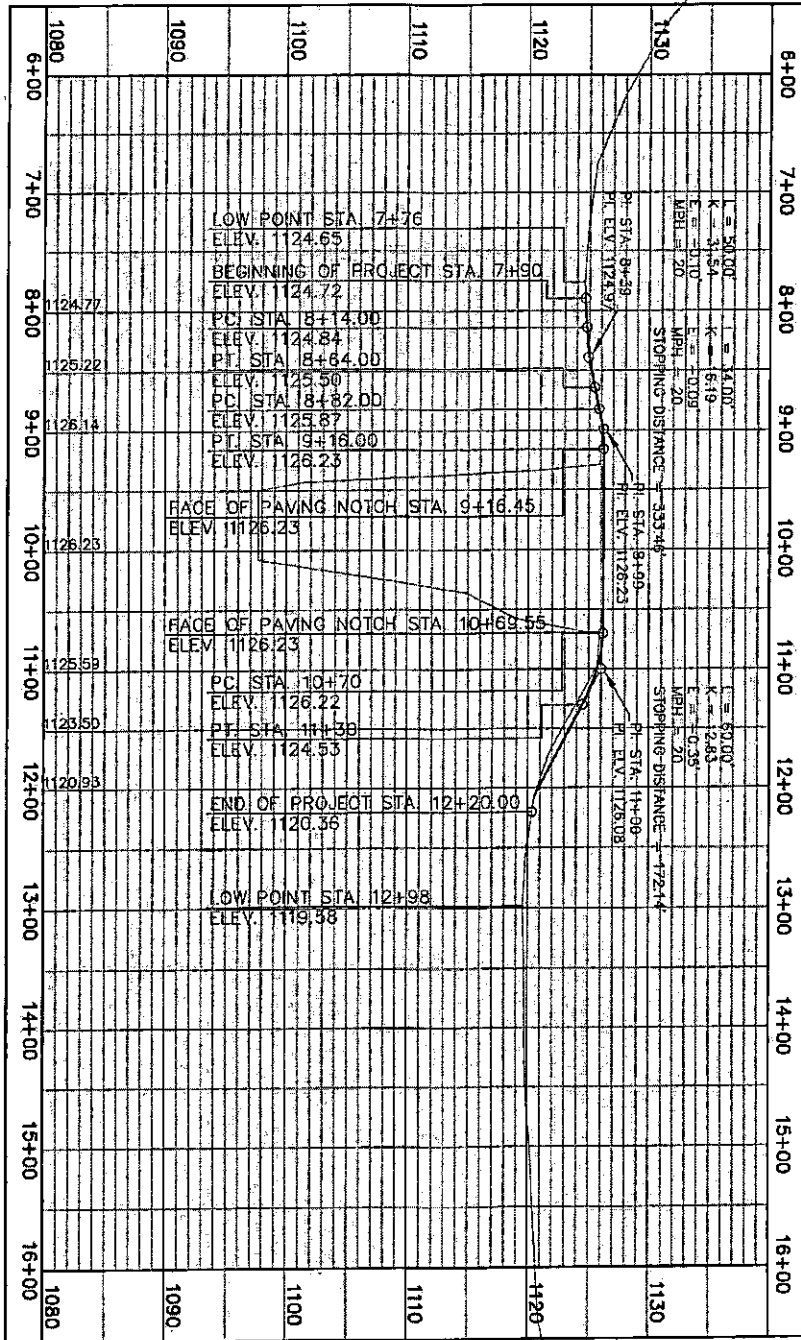
BSU	DATE
DRAWN BY:	REVISION
DESIGNED BY:	DATE
APPROVED BY:	
DATE	

PROJECT DESCRIPTION: BRIDGE REPLACEMENT ON 200TH ST NORTH
 LINE SEC. 28-T88N-R45W MOVILLE TOWNSHIP

SHEET DESCRIPTION: PLAN VIEW

PROJECT NO.
BROS-SHW-PC09(147)-SE-01

SHEET
8



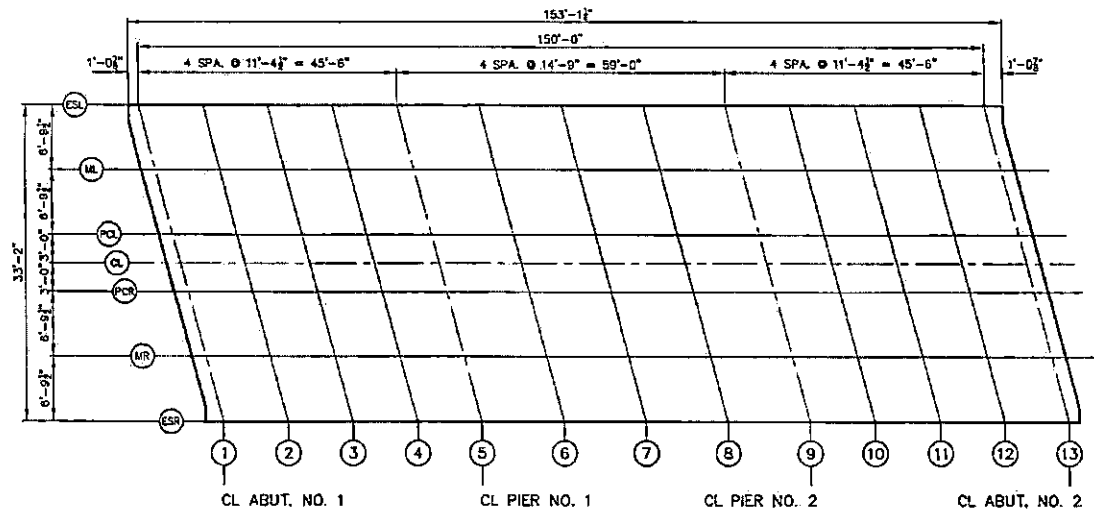
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SHEET
9

PROJECT DESCRIPTION: BRIDGE REPLACEMENT ON 200TH ST NORTH
LINE SEC. 28-T88N-R45W MOVILLE TOWNSHIP
SHEET DESCRIPTION: PLAN VIEW

BSS
DRAWN BY: _____
BK
DESIGNED BY: _____
MJN
APPROVED BY: _____
DATE: _____ REVISION: _____ DATE: _____

WOODBURY COUNTY
ENGINEERS OFFICE

TOP OF SLAB ELEVATIONS															
LOCATION	☉ WEST ABUTMENT BEARING					☉ PIER 1					☉ PIER 2				☉ EAST ABUTMENT BEARING
	LINE 1	LINE 2	LINE 3	LINE 4	LINE 5	LINE 6	LINE 7	LINE 8	LINE 9	LINE 10	LINE 11	LINE 12	LINE 13		
ESL (EDGE OF SLAB LEFT)	1125.93	1125.93	1125.93	1125.93	1125.93	1125.93	1125.93	1125.93	1125.93	1125.93	1125.93	1125.93	1125.93		
ML (MIDPOINT LEFT)	1126.06	1126.06	1126.06	1126.06	1126.06	1126.06	1126.06	1126.06	1126.06	1126.06	1126.06	1126.06	1126.06		
PCL (PARABOLIC CROWN LEFT)	1126.20	1126.20	1126.20	1126.20	1126.20	1126.20	1126.20	1126.20	1126.20	1126.20	1126.20	1126.20	1126.20		
☉ (☉ BRIDGE & ROADWAY)	1126.23	1126.23	1126.23	1126.23	1126.23	1126.23	1126.23	1126.23	1126.23	1126.23	1126.23	1126.23	1126.23		
PCR (PARABOLIC CROWN RIGHT)	1126.20	1126.20	1126.20	1126.20	1126.20	1126.20	1126.20	1126.20	1126.20	1126.20	1126.20	1126.20	1126.20		
MR (MIDPOINT RIGHT)	1126.06	1126.06	1126.06	1126.06	1126.06	1126.06	1126.06	1126.06	1126.06	1126.06	1126.06	1126.06	1126.06		
ESR (EDGE OF SLAB RIGHT)	1125.93	1125.93	1125.93	1125.93	1125.93	1125.93	1125.93	1125.93	1125.93	1125.93	1125.93	1125.93	1125.93		



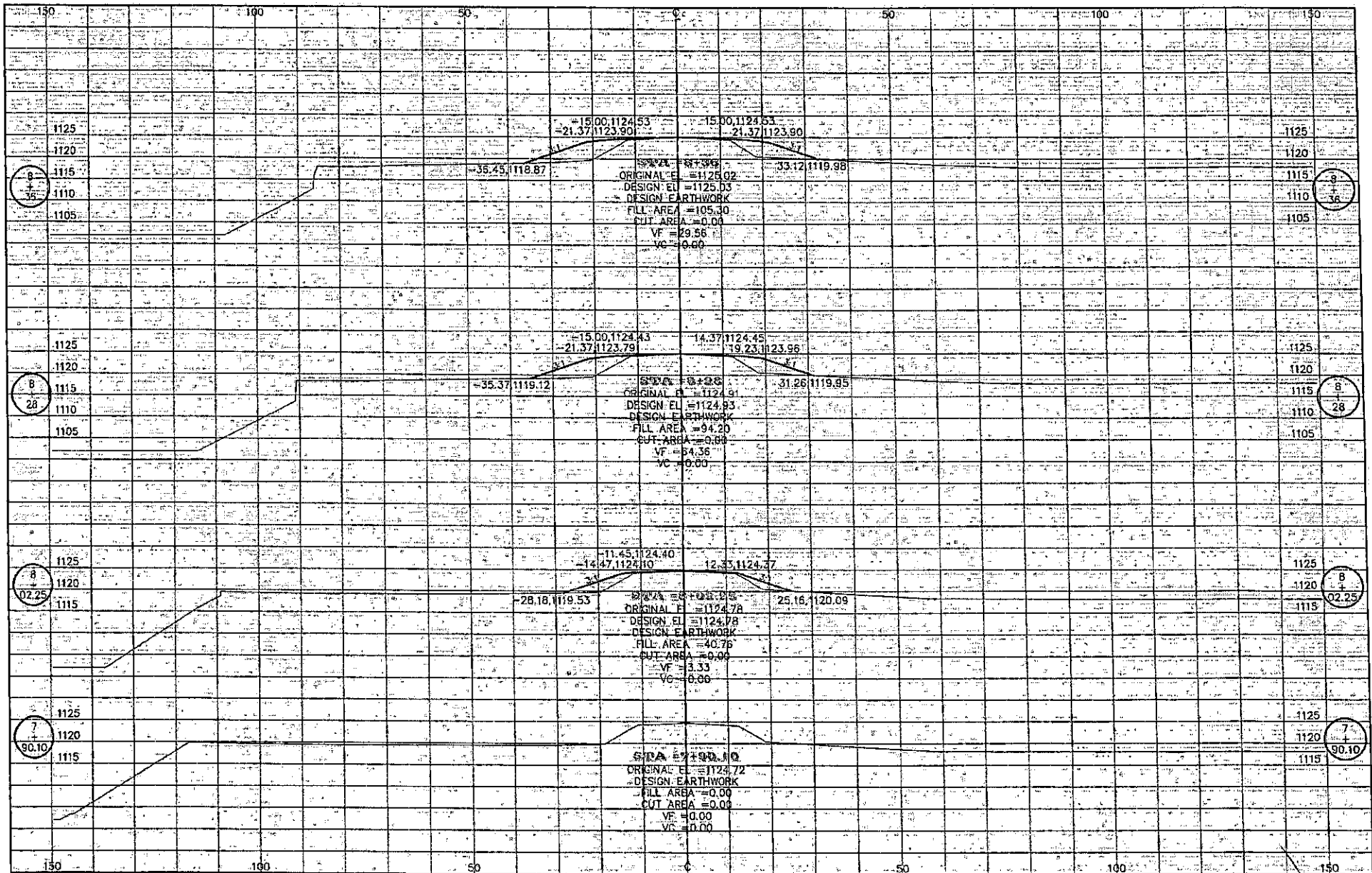
LOCATIONS FOR TOP OF SLAB ELEVATIONS
NO SCALE

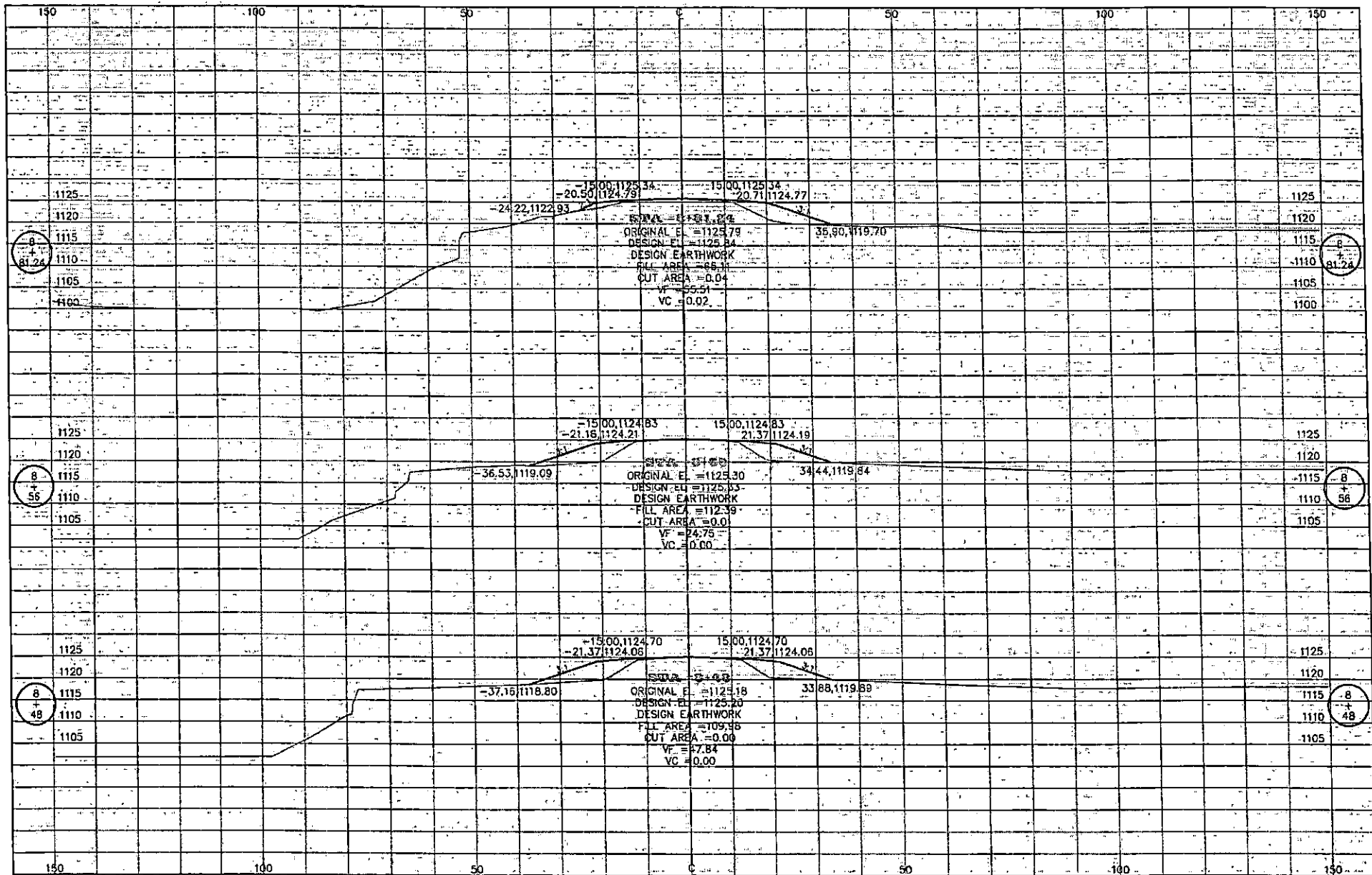
NOTE:
Slab elevations do not include form
camber required for slab replacement.
See IDOT Bridge Standard J30-18E-D6
for details

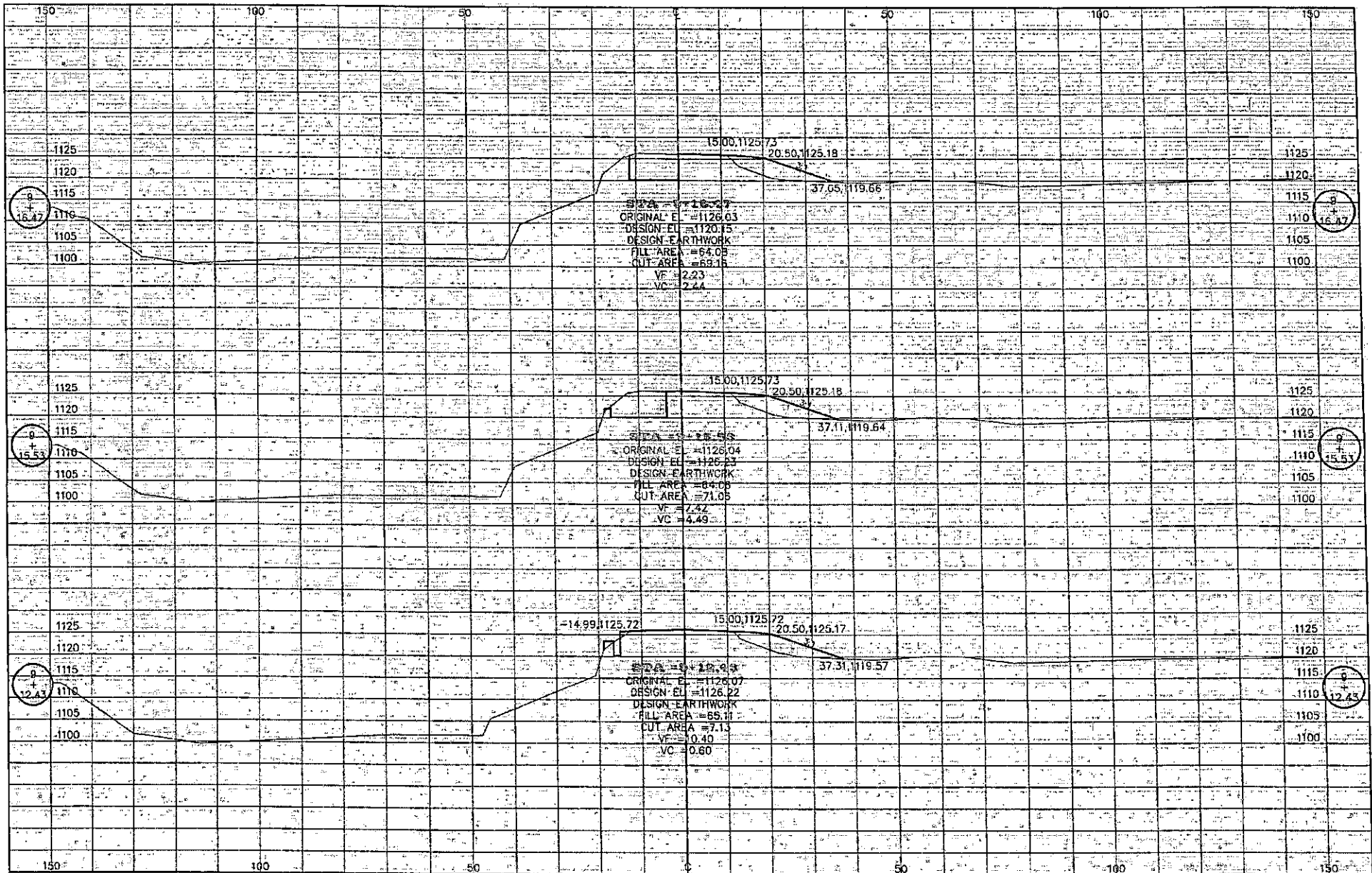
CDR _____ DATE _____
DRAWN BY _____ REVISION _____
BK _____
DESIGNED BY _____
M/JN _____
APPROVED BY _____
DATE _____

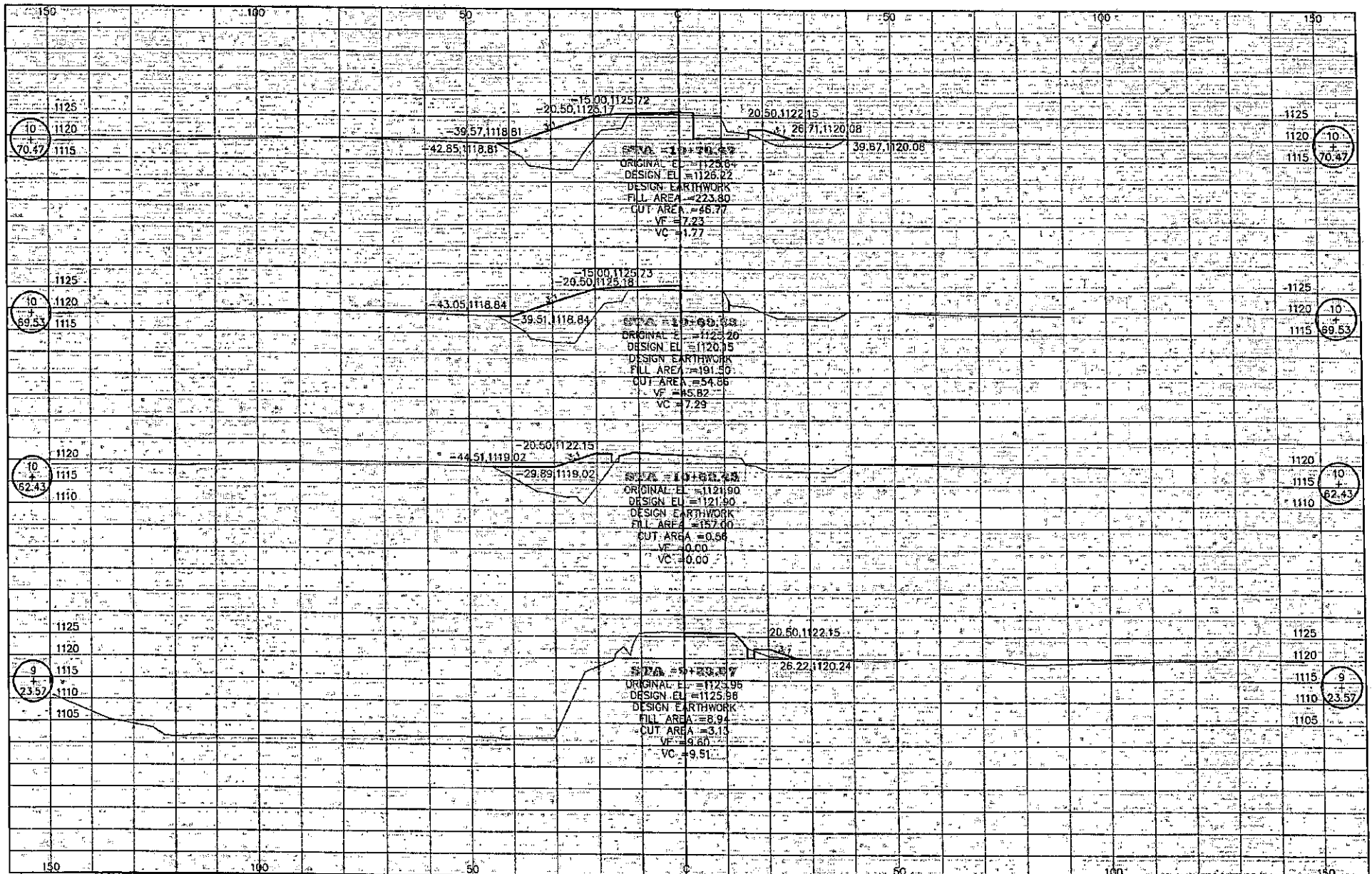
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LINE SEC. 28-T88N-R45W MOVILLE TOWNSHIP
SHEET DESCRIPTION: TOP OF SLAB ELEVATIONS

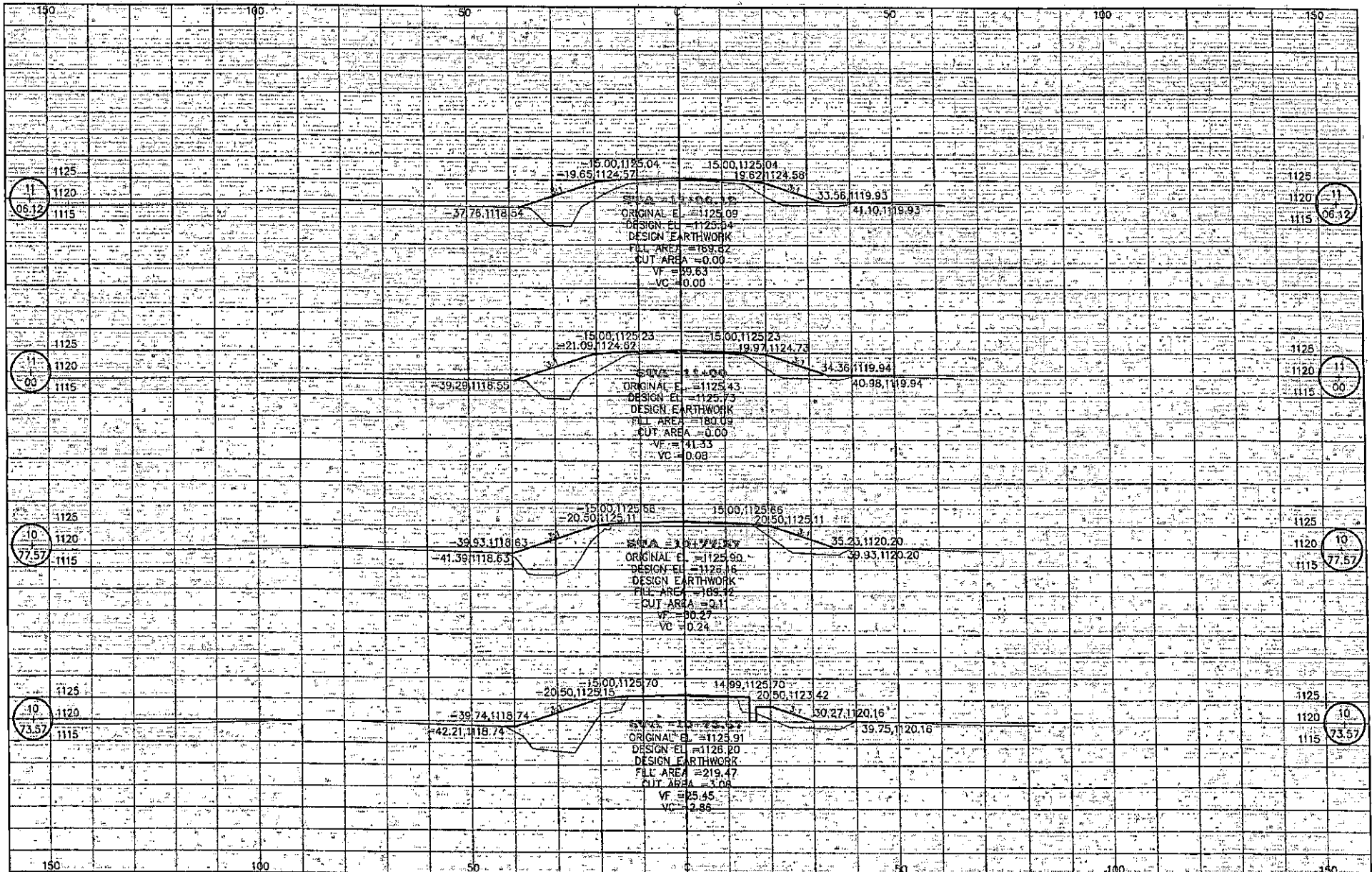
PROJECT NO. _____
SHEET

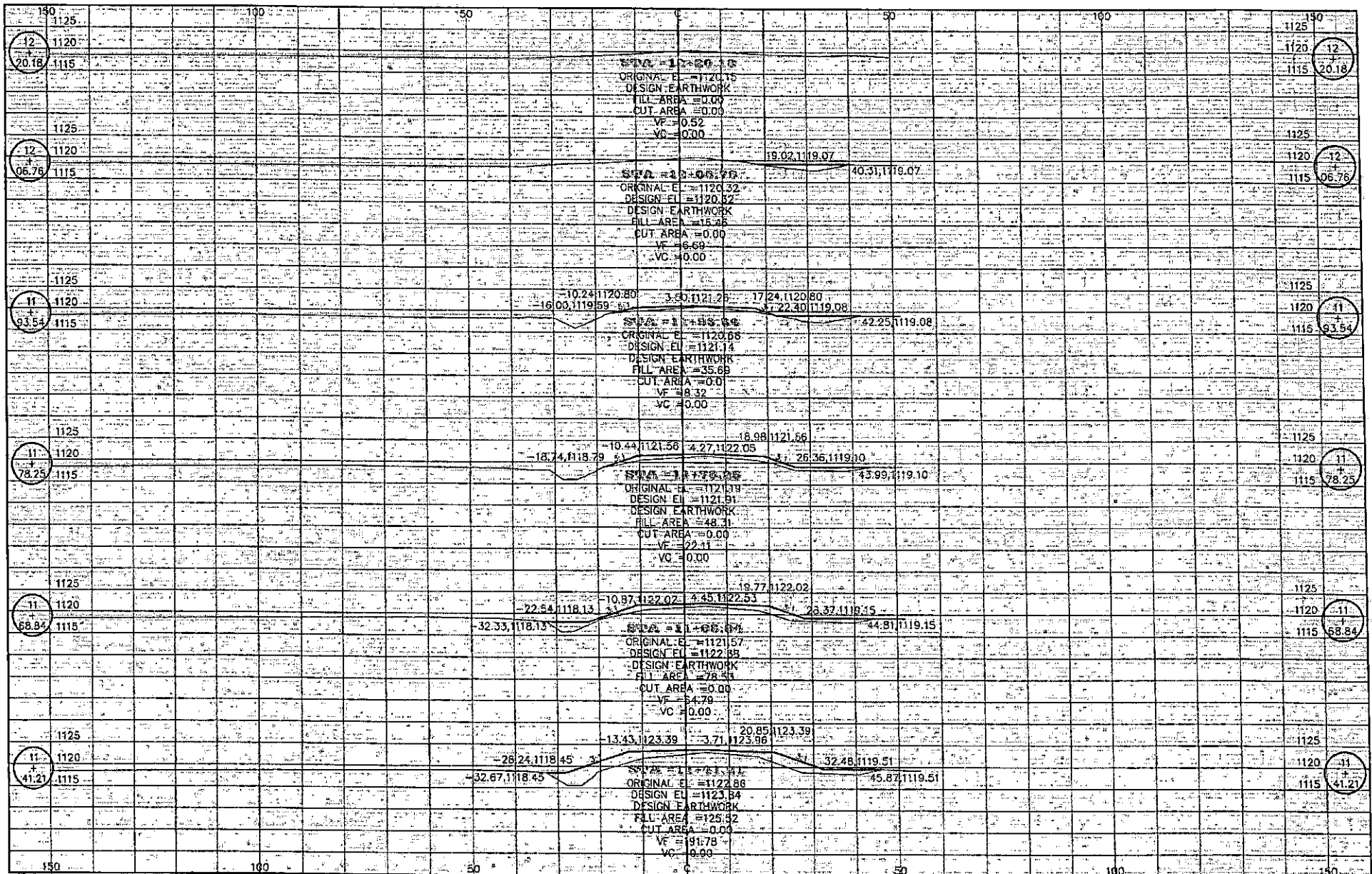


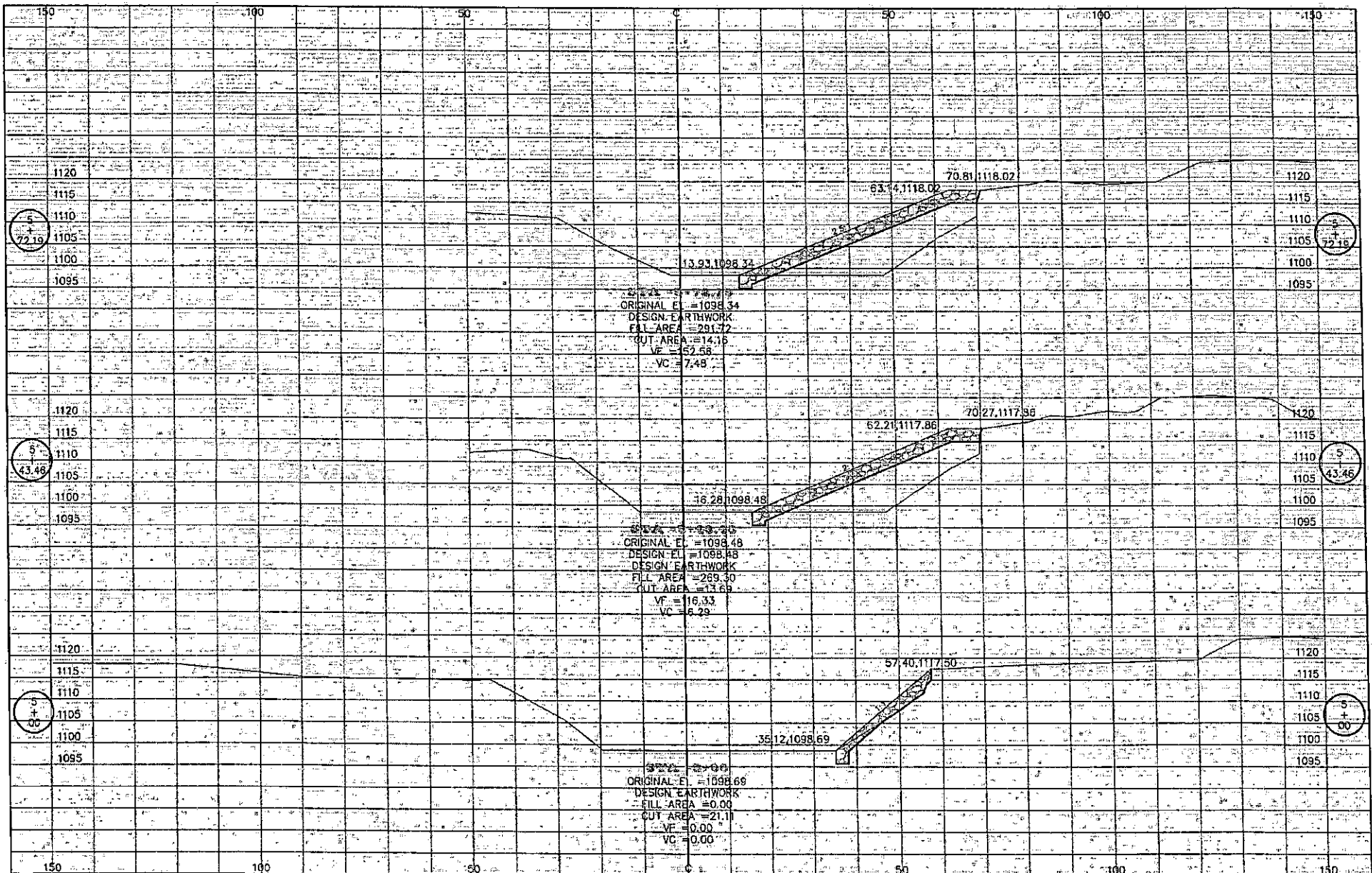


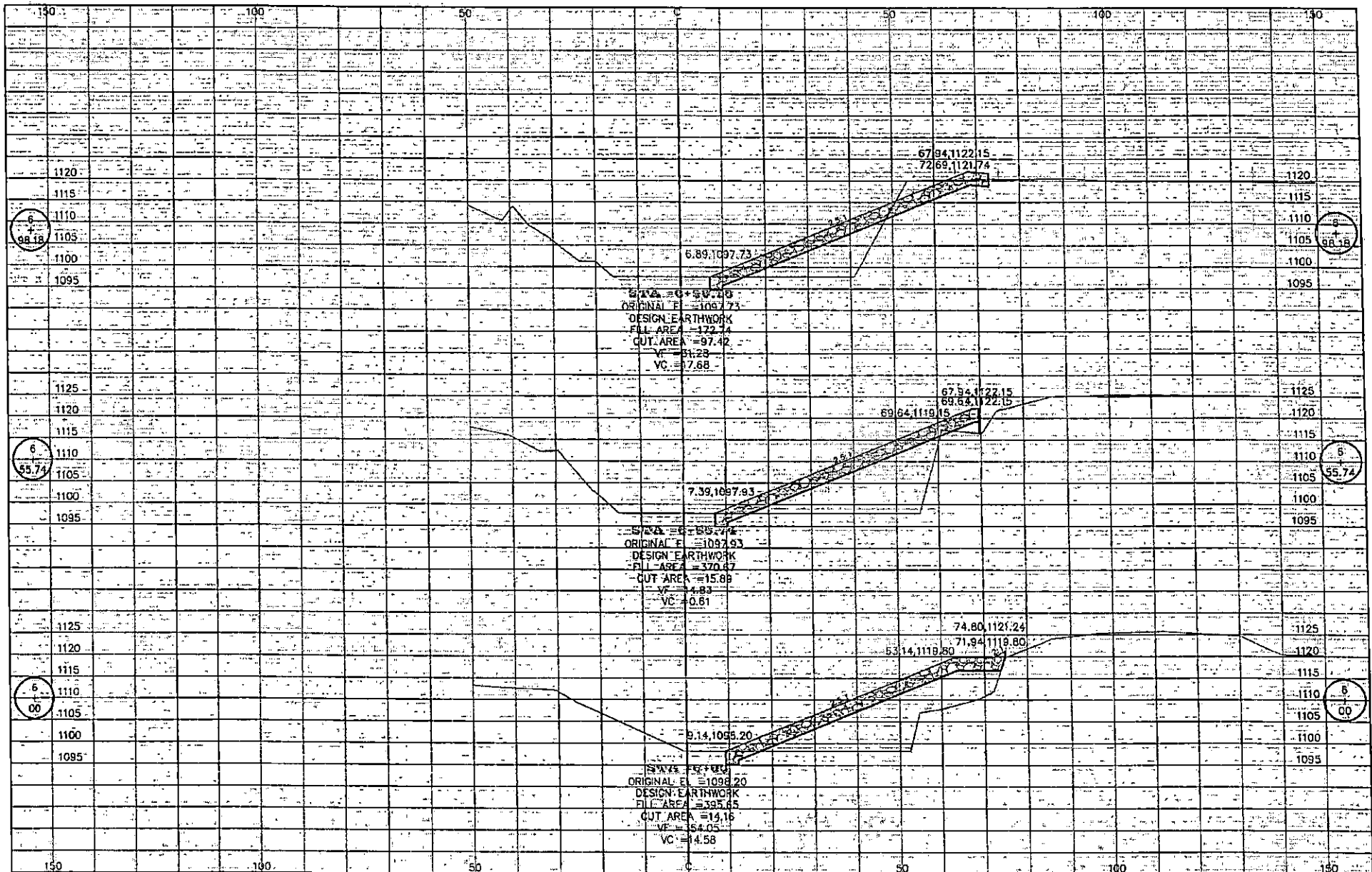


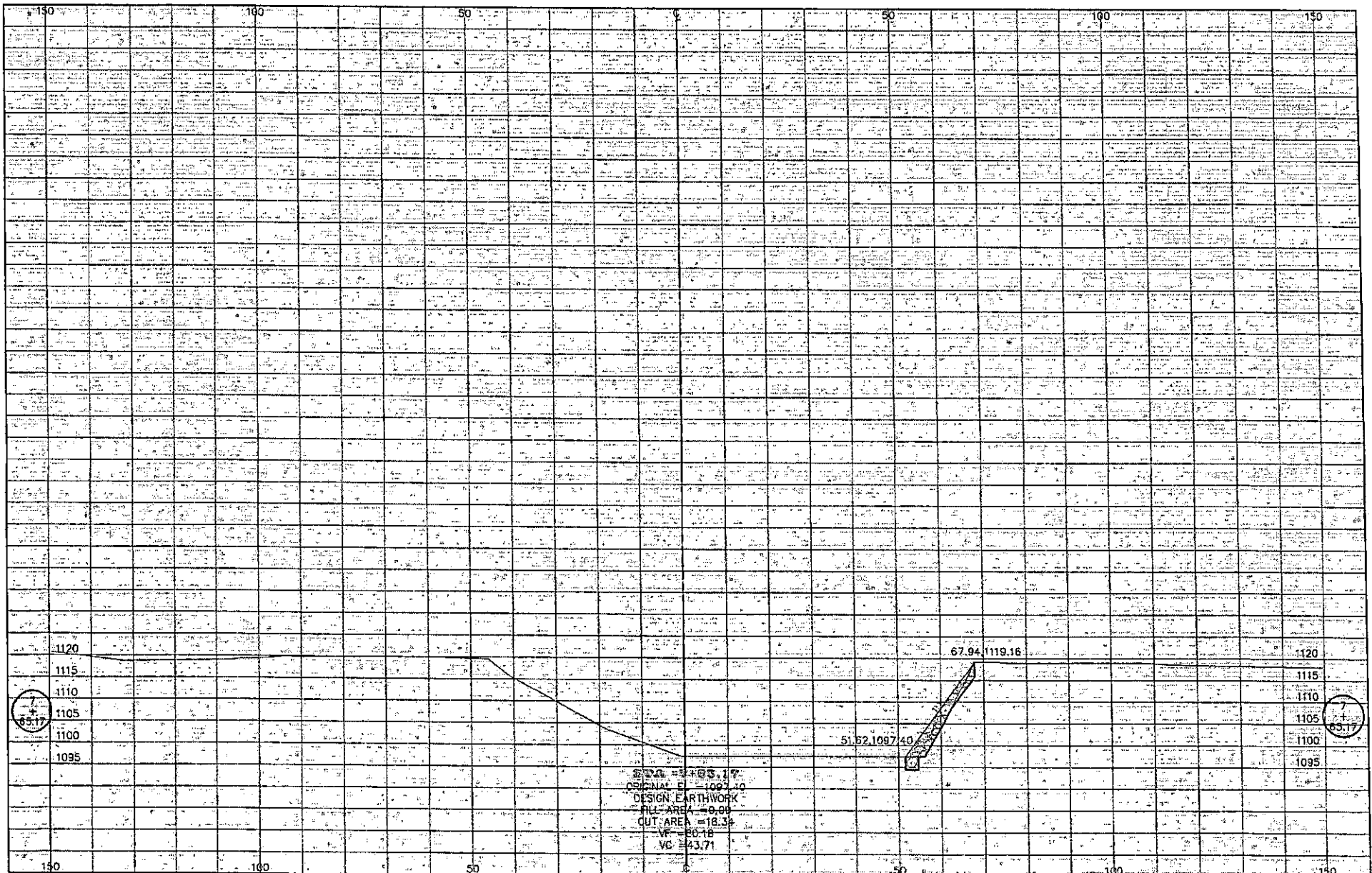












STA = 1095.17
 ORIGINAL E = 1097.40
 DESIGN EARTHWORK
 FILL AREA = 0.00
 CUT AREA = 18.34
 V = 60.18
 VC = 43.71

