

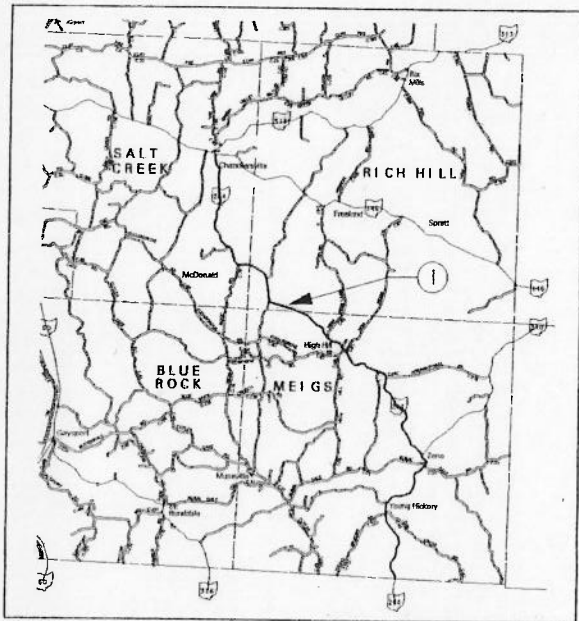
8003(03)

LOCATION MAP

OHIO DEPARTMENT OF TRANSPORTATION
 MUS-284-0.00
 MUSKINGUM COUNTY
 SALT CREEK, RICH HILL, MEIGS TOWNSHIP

FEDERAL PROJECT NO.
 NON-FEDERAL

MUS-284-0.00
 038003 PID #22634
 DIST 05 04-09-03



PROJECT DESCRIPTION:
 ASPHALT CONCRETE RESURFACING AND RELATED WORK

LOCATION	COUNTY	ROUTE	SECTIONS	PROJECT TERMINI		NET LENGTH MILES	VILLAGE
				BEGIN	END		
I	MUS	SR 284	(0.00-13.40)	0.00	13.40	13.33	

EQUATION: 6.47BK-6.51AH DED. 0.04 MI.
 EQUATION: 9.94BK-9.97AH DED. 0.03 MI.

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2002 SPECIFICATIONS

THE STANDARD 2002 SPECIFICATIONS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND THE PROPOSAL SHALL GOVERN THESE IMPROVEMENTS.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THESE IMPROVEMENTS WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON SHEETS 3 AND 4 OF THIS PLAN.

APPROVED *Christopher T. Enge*
 DATE 12/12/02 DISTRICT DEPUTY DIRECTOR

APPROVED *Jordan Proctor*
 DATE 12-31-02 DIRECTOR, DEPARTMENT OF TRANSPORTATION

— PORTION TO BE IMPROVED

DESIGN EXCEPTIONS: NONE

UNDERGROUND UTILITIES
 TWO WORKING DAYS
 BEFORE YOU DIG
 CALL 1-800-362-2764 (TOLL FREE)
 OHIO UTILITIES PROTECTION SERVICE
 NON-MEMBERS MUST BE CALLED DIRECTLY

DESIGN DESIGNATION	
Current ADT (2002)	520
Design Year ADT (2014)	600
Design Hourly Volume (2014)	60
Directional Distribution	50%
Trucks (24 Hour B&C)	4%
Design Speed	55 mph
Legal Speed	55 mph

STANDARD DRAWINGS		STANDARD DRAWINGS		SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	7-28-00	TC-65.10	10-19-01	908	4-19-02
BP-4.1	7-28-00	TC-65.11	10-19-01		
		TC-65.12	10-19-01		
		TC-71.10	4-19-02		
MT-97.10	4-19-02	TC-73.10	01-19-01		
MT-97.11	4-19-02				
MT-99.20M	1-30-95				



12/11/2002

PID NO.
 22634

CONSTRUCTION PROJECT NO.

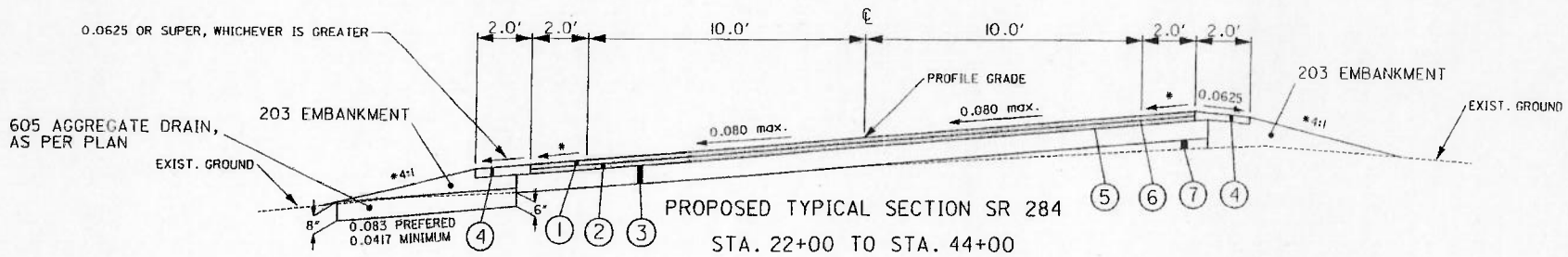
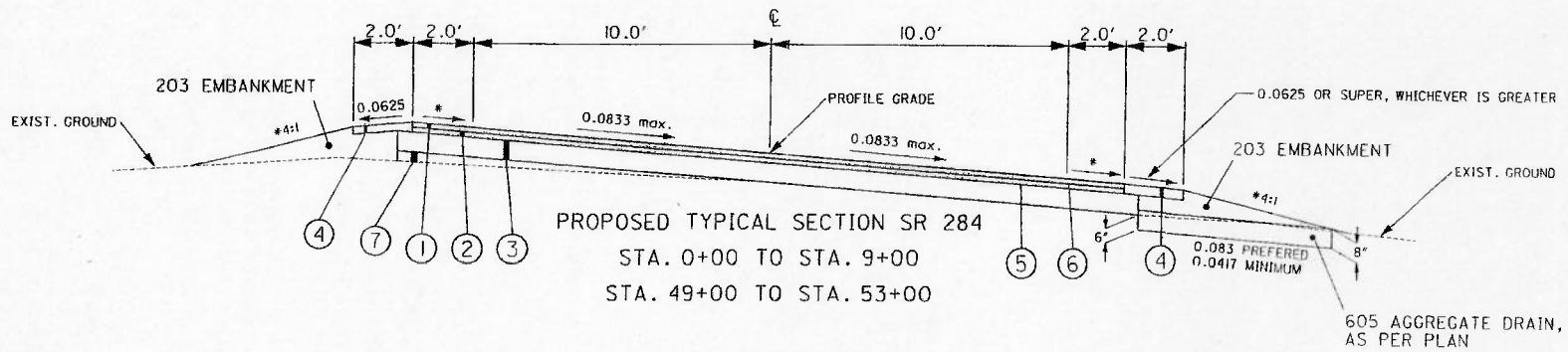
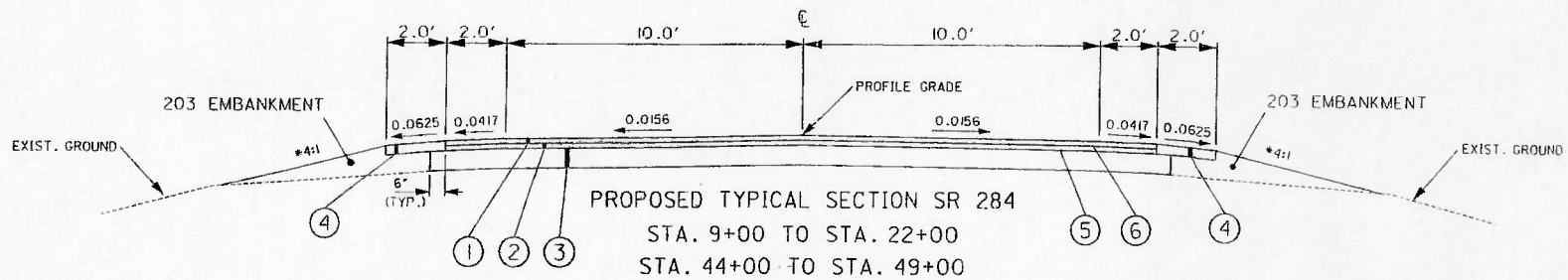
TITLE SHEET

MUS-284-0.00

PLAN PREPARED BY:
 District
 D5
 Production

8003(03)

20-10-01 s.m.i.004927

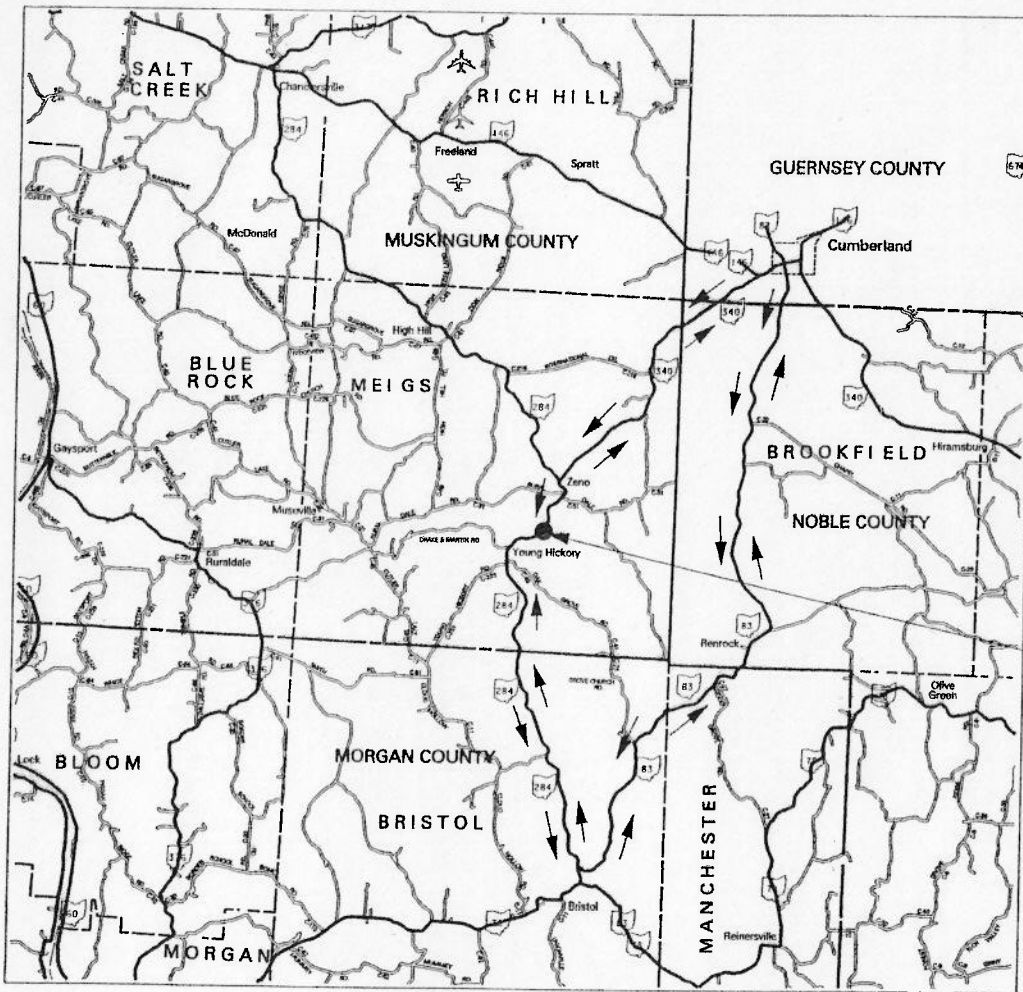


- ① 1.0"-448 ASPHALT CONCRETE SURFACE COURSE, TYPE I, PG 64-22
- ② 1.0"-448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I, PG 64-22
- ③ 8.0"-301 ASPHALT AGGREGATE BASE, PG 64-22
- ④ 617 COMPACTED AGGREGATE, AS PER PLAN
- ⑤ 407 TACK COAT
- ⑥ 407 TACK COAT FOR INTERMEDIATE COURSE
- ⑦ 301 ASPHALT AGGREGATE BASE, PG 64-22, AS PER PLAN

* OR AS SHOWN ON CROSS SECTION SHEETS
 * SAME AS PAVEMENT SLOPE

TYPICAL SECTIONS SR 284

MUS-284-0.00



STATE ROUTE DETOUR



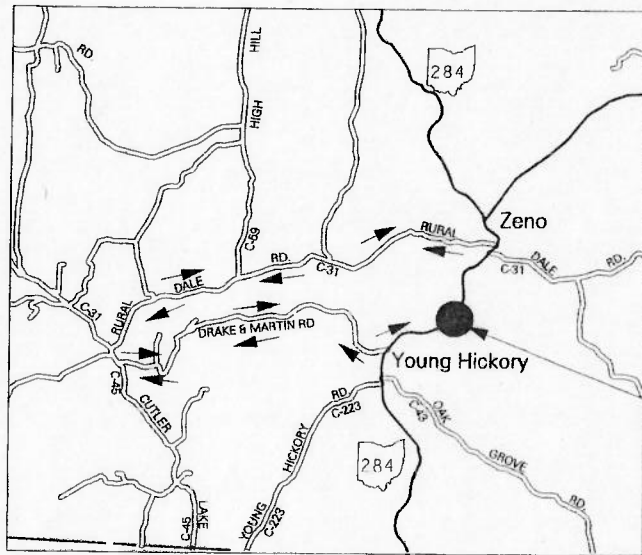
HORIZONTAL SCALE IN FEET

CALCULATED DISTANCE

DETOUR MAP

MUS - 284 - 0.00

MORGAN COUNTY



CLOSURE LOCATION

DESIGNATED LOCAL DETOUR

IN ADDITION TO THE OFFICIAL, SIGNED DETOUR ROUTE, LOCAL ROUTES HAVE BEEN DETERMINED TO BE THE SECONDARY, UNSIGNED DETOUR ROUTE OR DESIGNATED LOCAL DETOUR ROUTE. THIS ROUTE IS SHOWN ON THIS SHEET. DURING THE TIME THE TRAFFIC IS DETOURED, THE CONTRACTOR SHALL MAINTAIN THIS ROUTE IN A CONDITION WHICH IS REASONABLY SMOOTH AND FREE FROM HOLES, RUTS, RIDGES, BUMPS, DUST AND STANDING WATER. ONCE THE DETOUR IS REMOVED AND TRAFFIC RETURNED TO ITS NORMAL PATTERN, THE DESIGNATED LOCAL DETOUR ROUTE SHALL BE RESTORED TO A CONDITION THAT IS EQUIVALENT TO WHICH EXISTED PRIOR TO ITS USE FOR THIS PURPOSE. ALL SUCH WORK SHALL BE PERFORMED WHEN AND AS DIRECTED BY THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER TO MAINTAIN AND SUBSEQUENTLY RESTORE THE DESIGNATED LOCAL DETOUR:

ITEM 448 ASPHALT CONCRETE, MISC: SPOT TREATMENT - 75 CU.YD.



HORIZONTAL SCALE IN FEET

DATE

BY

DETOUR MAP

MUS-284-0.00

4
68

**WORK RESTRICTIONS AND LANE CLOSURES
FOR ASPHALT CONCRETE PLANING AND RESURFACING**

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS: MEMORIAL DAY, JULY 4, LABOR DAY AND THANKSGIVING. THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF THE WEEK	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 12:00N MONDAY
MONDAY	12:00N FRIDAY THROUGH 12:00N TUESDAY
TUESDAY	12:00N MONDAY THROUGH 12:00N WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 12:00N THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 12:00N MONDAY
FRIDAY	12:00N THURSDAY THROUGH 12:00N MONDAY
SATURDAY	12:00N THURSDAY THROUGH 12:00N MONDAY

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY-WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA WIDE. SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES IN ACCORDANCE WITH CMS 108.07 EXCEPT AS FOLLOWS.

PAYMENT FOR THE ABOVE MENTIONED WORK SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 614 MAINTAINING TRAFFIC - LUMP SUM

DETOUR LIMITATIONS

TWO WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT FOR A PERIOD OF TIME NOT TO EXCEED FIVE (5) CONSECUTIVE CALENDAR DAYS IN WHICH DETOURING OF TRAFFIC SHALL BE PERMITTED BETWEEN SLM 2.02 AND SLM 3.02. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES FOR CLOSURE AS PER ITEM 614 MAINTAINING TRAFFIC.

ITEM 614 - MAINTAINING TRAFFIC

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

RECONSTRUCTION OF S.R. 284 BETWEEN S.L.M. 2.02 AND S.L.M. 3.02

WORK ON THE ABOVE SECTION OF S.R. 284 SHALL BEGIN NO LATER THAN 6/1/03 WITH AN INTERIM COMPLETION DATE WHERE THE ROADWAY SHALL BE OPENED TO TRAFFIC BY 6/20/03. FAILURE TO OPEN THE ROADWAY BY THIS DATE SHALL RESULT IN LIQUIDATED DAMAGES OF \$ 1,000.00 PER DAY IN ACCORDANCE WITH CMS 108.07.

<table border="1"> <tr> <td>DATE</td> <td>BY</td> </tr> <tr> <td> </td> <td> </td> </tr> </table>	DATE	BY			MAINTENANCE OF TRAFFIC
DATE	BY				
MUS-284-0.00					
<table border="1"> <tr> <td>614</td> </tr> </table>	614				
614					

101 DEFINITION AND TERMS FOR INCENTIVE/DISINCENTIVE PAYMENT

101.101 CONTRACT TIME
THE TOTAL TIME ESTABLISHED FOR THE COMPLETION OF ALL CONTRACT WORK.

101.151 CRITICAL WORK
COMPLETE ALL PREPARATORY WORK (EXCAVATION, ETC.) FOR THE PLACEMENT OF ITEM 301 ASPHALT AGGREGATE BASE BETWEEN SLM 2.02 AND SLM 3.02.
COMPLETE PLACEMENT OF ITEM 301 ASPHALT AGGREGATE BASE BETWEEN SLM 2.02 AND SLM 3.02 AS PER TYPICAL SECTIONS, PLAN SHEETS AND CROSS SECTION SHEETS IN THE PLAN. COMPLETE PLACEMENT OF ALL EMBANKMENT AT THE AFOREMENTIONED LOCATION.

101.221 INCENTIVE/DISINCENTIVE CLAUSES FOR COMPLETION OF CRITICAL WORK
AN INCENTIVE CLAUSE IS A CONTRACT PROVISION WHICH COMPENSATES THE CONTRACTOR A FIXED AMOUNT OF MONEY FOR EACH CALENDAR DAY THE WORK DESIGNATED AS CRITICAL WORK COMPLETED AND UNRESTRICTED TRAFFIC RESTORED ON THE PROJECT BEFORE THE EXPIRATION OF THE INCENTIVE/DISINCENTIVE TIME ESTABLISHED IN THE CONTRACT.

A DISINCENTIVE CLAUSE IS A CONTRACT PROVISION WHICH ASSESSES A DEDUCTION FROM THE CONTRACT AMOUNT FOR EACH CALENDAR DAY THE CONTRACTOR OVERRUNS THE INCENTIVE/DISINCENTIVE TIME ESTABLISHED IN THE CONTRACT FOR THE COMPLETION OF THE WORK DESIGNATED AS CRITICAL WORK.

101.222 INCENTIVE/DISINCENTIVE DAILY AMOUNT
A FIXED AMOUNT OF MONEY AWARDED OR ASSESSED THE CONTRACTOR FOR EACH DAY ALL IDENTIFIED CRITICAL WORK DEFINED IN 101.151 IS COMPLETED PRIOR TO THE EXPIRATION OF INCENTIVE/DISINCENTIVE TIME DEFINED IN 101.223.

101.223 INCENTIVE/DISINCENTIVE TIME
ALL CRITICAL WORK AS DEFINED IN 101.151 SHALL BE COMPLETED BY 15 (FIFTEEN) CONSECUTIVE CALENDAR DAYS.

101.251 LIQUIDATED DAMAGES
THE DAILY AMOUNT OF MONEY ESTABLISHED IN 108.07 TO BE DEDUCTED FROM THE CONTRACT AMOUNT FOR ADDITIONAL COSTS, OTHER THAN THE DISINCENTIVE DAILY AMOUNT, INCURRED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S FAILURE TO COMPLETE ALL CONTRACT WORK ON OR BEFORE THE COMPLETION DATE OF THE CONTRACT TIME ESTABLISHED IN THE CONTRACT OR EXTENDED CONTRACT TIME GRANTED UNDER 108.06.

108.04 LIMITATION OF OPERATIONS

ADD THE FOLLOWING:

THE CONTRACTOR IS ADVISED THAT TIME IS OF THE ESSENCE IN THE CONTRACT AND THAT HE WILL BE PERMITTED TO WORK AT NIGHT. SHOULD THE CONTRACTOR'S PROGRESS FALL BEHIND THE APPROVED PROGRESS SCHEDULE THE DEPARTMENT WILL ALLOW AND THE CONTRACTOR SHALL WORK ADDITIONAL CREWS AND/OR ADDITIONAL SHIFTS AS MAY BE NECESSARY IN ORDER TO MAINTAIN THE ACCEPTED PROGRESS SCHEDULE.

108.05 DATE OF COMPLETION

DELETE THE ENTIRE TEXT UNDER THIS ARTICLE OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS AND SUBSTITUTE THE FOLLOWING THEREFORE:

THE CONTRACTOR SHALL COMPLETE THE WORK ON OR BEFORE THE COMPLETION TIME SPECIFIED IN THE CONTRACT. OTHERWISE, THE DEPARTMENT SHALL PROCEED AS PROVIDED IN 108.07 OR 108.08. SHOULD THE CONTRACTOR COMPLETE THE CRITICAL WORK BEFORE OR AFTER THE SCHEDULED DATE OF COMPLETION THEREOF, OR BEFORE OR AFTER AN EXTENDED DATE DETERMINED AS SPECIFIED HEREIN, THE DEPARTMENT SHALL AWARD INCENTIVE PAYMENT OR ASSESS DISINCENTIVE PAYMENT AS PROVIDED IN 109.021.

IF THE CONTRACT IS REVISED IN ANY MATERIAL RESPECT AND IS DETERMINED THAT SAID REVISION WILL CAUSE DELAY IN THE COMPLETION OF THE WORK, THE DEPARTMENT MAY POSTPONE THE COMPLETION DATE FOR THE CONTRACT TIME DEFINED UNDER 101.101 BY THE NUMBER OF CALENDAR DAYS DETERMINED BY THE ENGINEER.

IF THE CONTRACTOR FINDS IT IMPOSSIBLE DUE TO ANY OF THE REASONS SET OUT BELOW TO COMPLETE THE WORK BY THE DATE SPECIFIED OR AS EXTENDED IN ACCORDANCE WITH THE PROVISIONS OF THIS SUBSECTION, THE CONTRACTOR MAY MAKE A WRITTEN REQUEST TO THE ENGINEER FOR AN EXTENSION OF TIME SETTING FORTH THEREIN ONE OR MORE OF THE BELOW LISTED REASONS WHICH THE CONTRACTOR BELIEVE WILL JUSTIFY THE GRANTING OF THEIR REQUEST. REQUESTS FOR EXTENSIONS OF TIME SHALL BE FILED IN WRITING BY THE CONTRACTOR WITH THE ENGINEER NOT LATER THAN TEN (10) DAYS FOLLOWING THE TERMINATION OF THE DELAY. THE CONTRACTOR'S PLEAS THAT INSUFFICIENT TIME WAS SPECIFIED IS NOT A VALID REASON FOR EXTENSION OF TIME.

IF THE ENGINEER FINDS THAT THE WORK WAS DELAYED DUE TO ONE OR MORE OF THE REASONS SET OUT BELOW, THEN THE ENGINEER MAY EXTEND THE TIME FOR COMPLETION OF THE CONTRACT AND, WHERE WARRANTED, THE CRITICAL WORK TIME IN SUCH AMOUNT AS THE CONDITIONS JUSTIFY.

EXTENSIONS OF TIME SHALL NOT BE GRANTED FOR DELAYS IN MATERIAL DELIVERY UNLESS SUCH DELAYS ARE INDUSTRY-WIDE, FOR LABOR STRIKES UNLESS SUCH STRIKES ARE AREA-WIDE AND FOR WEATHER EXCEPT IN CASES OF SITE SPECIFIC FLOODING OR SITE SPECIFIC WIND OR TORNADO DAMAGES.

THERE SHALL BE NO EXTENSION OF TIME GRANTED FOR OTHER WEATHERED-RELATED CONDITIONS, INCLUDING BUT NOT LIMITED TO, INCLEMENT WEATHER.

FURTHER, EXTENSIONS OF TIME MAY BE GRANTED FOR INCREASES IN BID ITEM QUANTITIES WHICH EXCEED THE LIMITS SET IN SECTION 5525.14 OF THE OHIO REVISED CODE AND FOR WORK NOT ORIGINALLY CONTEMPLATED BY THE CONTRACT.

EXTENSIONS OF DISINCENTIVE TIME WILL NOT BE GRANTED UNLESS, IN THE DETERMINATION OF THE ENGINEER, ONE OR MORE OF THE ABOVE-REFERENCED EXTRAORDINARY CIRCUMSTANCES OCCUR. THE CONTRACTOR SHALL FULLY JUSTIFY WHY ADDITIONAL MANPOWER AND EQUIPMENT, ADDITIONAL SHIFTS AND EXTENDED WORK DAYS CANNOT BE UTILIZED TO MAINTAIN THE ORIGINAL INCENTIVE/DISINCENTIVE TIME SCHEDULE, AT THE SOLE EXPENSE OF THE CONTRACTOR.

109 ACCEPTANCE, MEASUREMENT AND PAYMENT

ADD THE FOLLOWING:

109.021 INCENTIVE/DISINCENTIVE PAYMENT PLAN

THIS PROJECT CANNOT BE SAFELY AND EFFICIENTLY USED UNTIL THE CRITICAL WORK UNDER THIS CONTRACT, AS DEFINED IN 101.151, IS COMPLETED AND ACCEPTED BY THE DEPARTMENT.

ON THIS BASIS, THE CONTRACTOR SHALL BE ENTITLED TO AN INCENTIVE PAYMENT FOR THE EARLY COMPLETION OF ALL WORK DESIGNATED AS CRITICAL WORK, BEFORE THE EXPIRATION OF THE INCENTIVE/DISINCENTIVE TIME AS DEFINED AND SPECIFIED IN 101.223.

INCENTIVE PAYMENTS WILL BE AWARDED THE CONTRACTOR IN THE AMOUNT OF THE INCENTIVE/DISINCENTIVE DAILY AMOUNT MULTIPLIED BY THE TOTAL NUMBER OF FULL DAYS COMPLETION IS ACHIEVED PRIOR TO EXPIRATION OF THE INCENTIVE/DISINCENTIVE TIME AS DEFINED IN 101.223; HOWEVER THE TOTAL INCENTIVE PAYMENT SHALL NOT EXCEED \$22,500.00.

FAILURE OF THE CONTRACTOR TO COMPLETE WORK AS REQUIRED BY THE CONTRACT BEFORE EXPIRATION OF THE INCENTIVE/DISINCENTIVE TIME AS DEFINED IN 101.223, SHALL RESULT IN ASSESSMENT OF A DISINCENTIVE PAYMENT. DISINCENTIVE PAYMENT SHALL BE DEDUCTED FROM PAYMENTS DUE TO THE CONTRACTOR OR THEIR SURETY. THERE SHALL BE NO MAXIMUM DISINCENTIVE PAYMENT.

SHOULD IT BECOME APPARENT THAT DUE TO SIGNIFICANT DELAYS CAUSED BY THE CONTRACTOR, A DISINCENTIVE PAYMENT WILL BE ASSESSED, THE DEPARTMENT MAY DEVELOP AND IMPLEMENT A WITHHOLDING SCHEDULE TO RETAIN FUNDS FROM PARTIAL PAYMENTS DUE THE CONTRACTOR. IF THE TOTAL DISINCENTIVE PAYMENT EXCEEDS THE AMOUNT PAYABLE TO THE CONTRACTOR, THE EXCESS SHALL BE PAID TO THE STATE BY THE CONTRACTOR OR THEIR SURETY.

SUBSTANTIAL COMPLETION, AS DISCUSSED IN 109.071 AND 109.072, OF CRITICAL WORK SHALL NOT QUALIFY FOR COMPLETION OF CRITICAL WORK. ANY LANE CLOSURE (NORTHBOUND OR SOUTHBOUND) REQUIRED TO COMPLETE ANY ITEM OF CRITICAL WORK AFTER REOPENING TO UNRESTRICTED HIGHWAY TRAFFIC, SHALL BE CAUSE TO REVISE THE COMPLETION DATE OF CRITICAL WORK AND REDUCE INCENTIVE PAYMENT, IF THE CLOSURE OCCURS AFTER THE END OF THE INCENTIVE/DISINCENTIVE, FOR EACH DAY A CLOSURE IS IN EFFECT.

THE INCENTIVE/DISINCENTIVE DAILY AMOUNT WILL BE ONE THOUSAND FIVE HUNDRED DOLLARS (\$1,500.00).

FOR THE PURPOSE OF CALCULATING INCENTIVE/DISINCENTIVE PAYMENTS, A DAY SHALL BE DEFINED AS EACH 24 HOUR PERIOD PRECEDING OR FOLLOWING 12:00 O'CLOCK MIDNIGHT.

THE INCENTIVE PAYMENT DUE OR THE DISINCENTIVE PAYMENT CHARGED THE CONTRACTOR, WILL BE PROCESSED BY CHANGE ORDER AFTER COMPLETION AND ACCEPTANCE OF THE CRITICAL WORK ON THE PROJECT.

SHOULD DELAYS CAUSE THE CRITICAL WORK TO BE COMPLETED AFTER THE COMPLETION DATE AS SET OUT IN THE CONTRACT OR AS EXTENDED PER 108.05, ONLY DISINCENTIVE PAYMENTS WILL BE ASSESSED UNTIL COMPLETION OF CRITICAL WORK. FROM THAT TIME UNTIL COMPLETION OF THE TOTAL PROJECT, LIQUIDATED DAMAGES, AS DEFINED IN 108.07, WILL BE ASSESSED. THE DEPARTMENT WILL NOT ASSESS DISINCENTIVE PAYMENT AND LIQUIDATED DAMAGES CONCURRENTLY.

109.071 ACCEPTANCE - TRAFFIC DETOURED
ADD THE FOLLOWING:

(D) ACCEPTANCE OF CRITICAL WORK

WHEN THE CRITICAL WORK IS COMPLETED TO THE SATISFACTION OF THE ENGINEER AND THE PROJECT IS UNRESTRICTED TRAFFIC, THE DEPARTMENT WILL MAKE A PARTIAL ACCEPTANCE OF THE CRITICAL WORK. THIS WILL RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR MAINTENANCE OF THE COMPLETED WORK, BUT THEY WILL BE REQUIRED TO REPAIR ANY DAMAGE CAUSED BY HIS OPERATIONS, DEFECTIVE WORK, OR NONCOMPLIANCE WITH THE PLANS, SPECIFICATIONS AND CONTRACT, UNTIL THE FINAL ESTIMATE HAS BEEN APPROVED BY THE DEPARTMENT. FINAL ACCEPTANCE OF THE TOTAL PROJECT WILL BE IN ACCORDANCE WITH 109.12.

CALCULATE
CHECK

INCENTIVE / DISINCENTIVE TERMS

MUS - 284 - 0.00

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UTILITIES

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT SHOULD NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA. BELOW IS A LIST OF UTILITIES LOCATED WITHIN THE WORK AREA AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT OWNERS AND VERIFY LOCATIONS

AMERICAN ELECTRIC POWER CO.
850 TECH CENTER DRIVE
GAHANNA, OHIO 43230
ATTN: 614-883-6829

AMERICAN ELECTRIC POWER TRANSMISSION
825 TECH CENTER DRIVE
GAHANNA, OHIO 43230
ATTN: TODD WICK
614-552-1899

AMERITECH OF OHIO
3935 NORTH POINT ROAD
ZANESVILLE, OHIO 43701
ATTN: SANDY RANDOLPH
740-454-3455

EAST OHIO GAS CO.
7015 FREEDOM AVENUE
NORTH CANTON, OHIO 44720
ATTN: TIM MCNUTT
1-800-723-5133

DUKE ENERGY (TEXAS EASTERN TRANSMISSION)
1895 BIG INCH ROAD
SOMERSET, OHIO 43783
ATTN: JERRY SORRELL
740-743-1309

NATIONAL GAS
1500 GRANVILLE ROAD
P.O. BOX 4970
NEWARK, OHIO 43058-4970
ATTN: GREG WILSON
740-348-1254

GUERNSEY-MUSKINGUM ELECTRIC COOPERATIVE, INC
17 SOUTH LIBERTY STREET
NEW CONCORD, OHIO 43762
ATTN: JOHN MARSHALL
740-826-7661

EL PASO ENERGY (TENNESSEE PIPE LINE)
740-638-2101

NOTIFICATION OF ROAD CLOSURE OR RESTRICTION

IN ORDER FOR ODOT TO PROPERLY PERMIT OVERSIZE LOADS, PREPARE PROPER SIGNING WHEN REQUIRED AND FURTHER TO NOTIFY THE GENERAL MOTORING PUBLIC, THE CONTRACTOR SHALL NOTIFY (IN WRITING) THE DISTRICT 5 HIGHWAY MANAGEMENT ADMINISTRATOR WITH COPIES FOR THE DISTRICT 5 ROADWAY SERVICES MANAGER AND PROJECT ENGINEER NOT LESS THAN 21 DAYS BEFORE SUCH CLOSURE OR LANE RESTRICTIONS.

SEND NOTIFICATION TO:

DISTRICT 5 HIGHWAY MANAGEMENT ADMINISTRATOR
P.O. BOX 306
JACKSONTOWN, OH. 43030
PHONE: (740) 323-4400 EXT. 5241

FEATHERING

FEATHERING OF THE ASPHALT CONCRETE WHERE REQUIRED SHALL BE ACCORDING TO DRAWING BP-3.1, 7-28-00.

ITEM 617 COMPACTED AGGREGATE, AS PER PLAN

THIS ITEM SHALL BE USED IN CONJUNCTION WITH SHOULDER PREPARATION ITEM TO RESTORE ROADWAY SHOULDERS. THE CONTRACTOR SHALL PLACE RECYCLED ASPHALT CONCRETE PAVEMENT. THE QUANTITIES SHOWN ON GENERAL SUMMARY ARE CONTINGENCY QUANTITIES AND SHALL BE USED AS DIRECTED BY THE ENGINEER TO MINIMIZE SHOULDER DROP-OFFS AFTER THE PAVING OPERATION. ALL GRADATION REQUIREMENTS OF 703.18 SHALL BE WAIVED. MAXIMUM SIZE OF CRUSHED MATERIAL SHALL BE NO GREATER THAN 1".

TACK COAT

THE RATE OF APPLICATION OF THE 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.075 GALLONS PER SQUARE YARD FOR ESTIMATING PURPOSES ONLY.

TACK COAT FOR INTERMEDIATE COURSE

THE RATE OF APPLICATION OF THE 407 TACK COAT FOR INTERMEDIATE COURSE SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.05 GALLONS PER SQUARE YARD FOR ESTIMATING PURPOSES ONLY.

CONVERSION OF METRIC DRAWINGS

THE METRIC STANDARD DRAWINGS REFERENCED IN THIS PLAN SHALL BE CONVERTED TO ENGLISH UNITS USING THE SI (METRIC) OF THE 2002 CONSTRUCTION AND MATERIALS SPECIFICATIONS. TO ENGLISH CONVERSION FACTORS PROVIDED IN SECTION 109.02 IEEE/ASTM SI 10 SHALL BE UTILIZED FOR ANY ADDITIONAL CONVERSION FACTORS REQUIRED. CONVERSIONS SHALL BE APPROPRIATELY PRECISE AND SHALL REFLECT STANDARD INDUSTRY ENGLISH VALUES WHERE SUITABLE.

PAVEMENT MARKING

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DOCUMENT THE LOCATION OF ALL EXISTING PAVEMENT MARKINGS AND TO PLACE PROPOSED PAVEMENT MARKINGS AT THE SAME LOCATION UNLESS DIRECTED OTHERWISE BY PLAN OR BY THE PROJECT ENGINEER.

SCALE
DATE
REVISION

GENERAL NOTES

MUS-284-0.00

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ITEM 253 - PAVEMENT REPAIR, AS PER PLAN

AN ESTIMATED QUANTITY FOR PAVEMENT REPAIR HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER. REPAIRS SHALL TAKE PLACE PRIOR TO THE PAVEMENT PLANING OPERATION. THERE MAY BE A NEED TO MAKE FURTHER REPAIRS IF MORE FAILURES ARE PRESENT AFTER PLANING AND PAVING OF THE INTERMEDIATE COURSE. THE INTENT OF THIS OPERATION IS TO REPAIR THOSE AREAS OF PAVEMENT WHICH HAVE COMPLETELY FAILED (PUMPING OF SUBBASE MATERIAL) AND NOT TO CORRECT SURFACE IRREGULARITIES. DEPTH OF EXCAVATION SHALL BE APPROXIMATELY 7". AFTER EXCAVATION HAS BEEN COMPLETED, THE FACE OF THE REPAIR SHALL BE COATED WITH 407 TACK COAT. REPLACEMENT MATERIAL WILL BE 7" OF ITEM 301 ASPHALT CONCRETE BASE, PG64-22 (PLACED AND COMPACTED AS DIRECTED). ALL EXCAVATION NEEDED TO ACHIEVE THE PROPER SLOPES FOR DRAINAGE ON BERMS AND ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE PAID FOR UNDER ITEM 253 PAVEMENT REPAIR, AS PER PLAN.

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE ABOVE DESCRIBED PURPOSE.

ITEM 253 PAVEMENT REPAIR, AS PER PLAN 1000 SQ.YD. LOCATION 1

SHOULDER RESTORATION

IN ORDER TO PROVIDE POSITIVE DRAINAGE FROM THE ROADWAY SURFACE TO THE SHOULDER BREAK, THE EXISTING ROADWAY SHOULDERS SHALL BE GRADED AND SHAPED USING A GRADER OF ADEQUATE SIZE TO PERFORM THE WORK TO THE SATISFACTION OF THE ENGINEER. THIS SHALL BE DONE AFTER THE PAVEMENT PLANING AND PLACING OF THE INTERMEDIATE COURSE. PAYMENT FOR ALL OF THE ABOVE GRADING AND SHAPING WORK, INCLUDING LABOR AND INCIDENTALS, SHALL BE THE UNIT PRICE BID FOR ITEM SPECIAL - GRADER RENTAL, AND SHALL BE PAID FOR THE ACTUAL NUMBER OF GRADER HOURS WORKED.

ALL EXCESS MATERIAL REMAINING AROUND GUARDRAIL AND OTHER AREAS AFTER THE GRADER WORK IS COMPLETED AND NOT DISPOSED OF ON THE SITE, SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. PAYMENT FOR ALL OF THE ABOVE REMOVAL WORK SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM SPECIAL - LOADER RENTAL, AND SHALL BE FOR THE ACTUAL NUMBER OF LOADER HOURS WORKED. ANY OTHER EQUIPMENT, LABOR OR INCIDENTALS REQUIRED TO COMPLETE THIS ITEM SHALL BE INCLUDED THEREIN FOR PAYMENT.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE ABOVE PURPOSES.

ITEM SPECIAL	LOC. 1
GRADER RENTAL (HOURS)	4
LOADER RENTAL (HOURS)	2

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN

THE ROADWAY SURFACE SHALL BE PLANED AS DESCRIBED BELOW: FROM SLM 0.00 TO SLM 2.02, PLANE 1.25" IN DEPTH. FROM SLM 2.02 TO 3.02, DO NOT PLANE. FROM SLM 3.02 TO SLM 13.40, PLANE 1.25" IN DEPTH. WORK SHALL BE AS DIRECTED BY THE ENGINEER. THE ROADWAY SHALL BE PLANED SUCH THAT A MINIMUM SLOPE OF 0.0156 FT/FT IS CREATED FROM THE CENTER LINE TO THE EDGE OF PAVEMENT. THIS MAY REQUIRE ADDITIONAL MILLING DEPTH DUE TO EXISTING GRADER PATCHES AND PAVEMENT REPAIR. ALL SPECIFICATIONS OF ITEM 254 SHALL APPLY.

THE QUANTITY FOR ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN IS SHOWN ON SHEET 9 AND IS CARRIED TO THE GENERAL SUMMARY FOR THE ABOVE DESCRIBED PURPOSE. 1000 TONS OF GRINDINGS FROM THE PLANING OPERATION SHALL BE DELIVERED TO THE OHIO DEPARTMENT OF TRANSPORTATION: MUSKINGUM COUNTY GARAGE ZANESVILLE, OHIO. THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN.

BUTT JOINT

A BUTT JOINT WILL BE REQUIRED AT LOCATIONS SPECIFIED BELOW AND AT EXTRA AREAS WITH WEARING COURSE REMOVED. AFTER THE JOINT IS CONSTRUCTED, THE DROP OFF CREATED SHALL BE MINIMIZED BY PLACING THE ASPHALT CONCRETE INTERMEDIATE COURSE TO WITHIN 1" OF THE EXISTING ROADWAY SURFACE. BUTT JOINTS SHALL BE AS PER SCD BP-3.1, 7-28-00.

LOCATION	ROUTE	DESCRIPTION	SLM
1	SR 284	BEGIN PROJECT	0.00
1	SR 284	END PROJECT	13.40

ITEM 605 AGGREGATE DRAIN, AS PER PLAN

THE FOLLOWING QUANTITIES SHALL BE USED AS DIRECTED BY THE ENGINEER TO PLACE AGGREGATE DRAINS ON THE LOW SIDE OF SUPER ELEVATED SECTIONS BETWEEN SLM 2.20 (STA. 0+00) AND SLM 3.02 (STA. 53+00) AT APPROXIMATELY 50' INTERVALS. THE FOLLOWING QUANTITY IS BASED ON AVERAGE LENGTH OF 10' PER DRAIN.

LOCATION 1 - 700 FT.

CALCULATED BY: LNK
 CHECKED BY: TJD
 GENERAL NOTES
 MUS-284-0.00
 8/68

RESIDENCE AND COMMERCIAL DRIVES

An estimated quantity of Item 448 Asphalt Concrete has been included in the plan to be used as directed by the Engineer to pave approach areas to existing driveways. Paving shall typically extend 4' into the driveway (measured from the edge of the pavement).

There are 5 types of drives: concrete, asphalt, gravel, gravel with asphalt apron, and field/oil well drives. Field drives and oil well drives shall not be paved. Gravel drives shall be paved back 4' into the driveway. Concrete and asphalt drives shall have butt joints or as short a asphalt taper as possible (up to 4') as directed by the Engineer so as to provide a smooth transition. Gravel drives with asphalt aprons shall also have butt joints or as short a asphalt taper as possible (up to 4') but only if the existing asphalt apron is in an acceptable condition to be paved over as directed by the Engineer. If the asphalt apron cannot be paved over (for example, broken into small pieces) as determined by the Engineer, it shall be removed before being paved back 4' into the driveway. All grading, prime or tack coat, materials, labor, equipment tools and incidentals necessary to complete the drives shall be included in the unit price bid for Item 448 Asphalt Concrete Surface Course, Type 1, PG 64-22

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22
LOCATION 1 - 10 CU.YD.

ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 64-22
LOCATION 1 - 2 CU.YD.

ITEM 614 WORK ZONE MARKING SIGNS

A QUANTITY OF WORK ZONE MARKING SIGNS HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

WORK ZONE MARKING SIGNS	LOC. 1
OW-167 (NO EDGE LINES)	12
R-33 (DO NOT PASS)	9
R-34 (PASS WITH CARE)	8
OW-128 (BEGIN ROAD CONSTRUCTION AHEAD)	12
OC-8 (END ROAD CONSTRUCTION)	12
TOTAL	53

BENCHMARKS/CENTER LINE REFERENCES

BENCHMARKS AND CENTER LINE REFERENCES SHALL BE FURNISHED TO THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING.

MAIL BOX TURN OUTS

A QUANTITY OF ASPHALT CONCRETE HAS BEEN PROVIDED IN THE PLAN TO COVER MAIL BOX TURN OUTS. TURN OUTS SHALL BE PAVED AS SHOWN IN THE DETAIL IN DRAWING BP-4.1, 7-28-00.

ANY EXTRA GRADING OF THE SHOULDERS, PRIME OR TACK COAT, MATERIALS, LABOR, EQUIPMENT TOOLS AND INCIDENTALS NECESSARY TO COMPLETE MAIL BOX TURN OUTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 64-22 AND ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22

ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 64-22
LOCATION 1 - 15 CU.YD.

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22
LOCATION 1 - 15 CU.YD.

QUANTITIES CARRIED TO GENERAL SUMMARY

ITEM 202: RAISED PAVEMENT MARKERS, REMOVED FOR STORAGE

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE PLANS TO REMOVE RAISED PAVEMENT MARKERS FOR STORAGE. THE LICKING COUNTY MANAGER SHALL BE CONTACTED FOR INSTRUCTIONS ON WHERE TO DELIVER THE RAISED PAVEMENT MARKERS.

ITEM 202 RAISED PAVEMENT MARKERS, REMOVED FOR STORAGE: 1892 EACH

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

MAINTENANCE OF TRAFFIC

PLACING OF THE ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 64-22 SHALL OCCUR AS CLOSE BEHIND THE PLANING OPERATION AS POSSIBLE SUCH THAT TRAFFIC SHALL NOT BE MAINTAINED ON THE PLANNED SURFACE AT THE END OF THE WORK DAY.

301 ASPHALT AGGREGATE BASE, AS PER PLAN

THE FOLLOWING QUANTITY SHALL BE USED AS DIRECTED BY THE ENGINEER FOR FILL UNDER PROPOSED PAVEMENT AS SHOWN ON TYPICAL SECTIONS.
LOCATION 1 - 200 CU.YD.

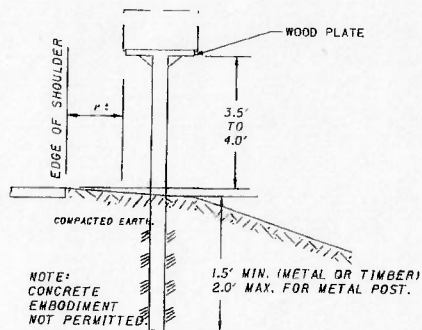
CALCULATED
LINE
SHEET
T.O.D

GENERAL NOTES

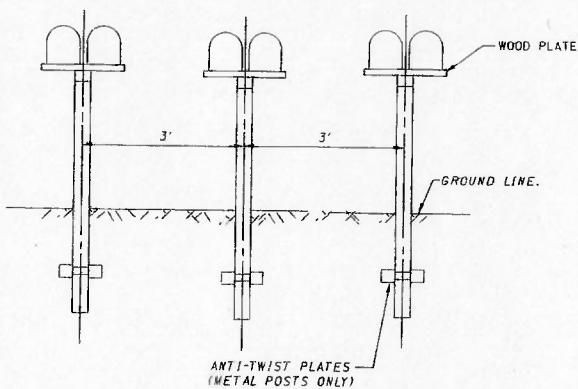
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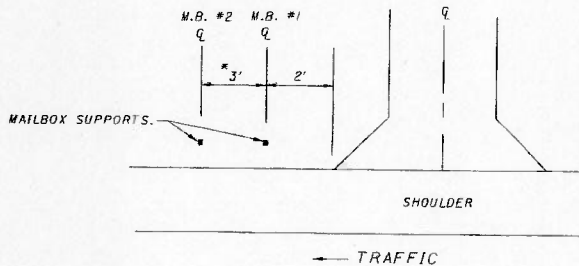
MAILBOX DETAILS



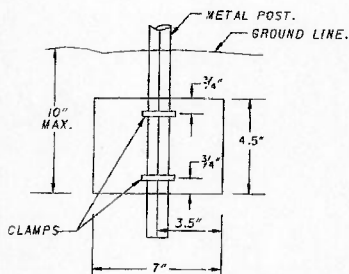
TYPICAL MAILBOX LOCATION AND MOUNTING HEIGHT



GROUP MAILBOX INSTALLATION



* ADD 3' FOR EACH ADDITIONAL MAILBOX.



ANTI-TWIST PLATE

ITEM SPECIAL - MAILBOX SUPPORT

DESCRIPTION

THIS WORK SHALL CONSIST OF FURNISHING AND ERECTING MAILBOX SUPPORTS AND ANY ASSOCIATED MOUNTING HARDWARE IN ACCORDANCE WITH PLAN DETAILS, AND ATTACHING AN OWNER-SUPPLIED MAILBOX AT LOCATION SPECIFIED IN THE PLAN, OR OTHERWISE ESTABLISHED BY THE ENGINEER. THIS ITEM SHALL INCLUDE THE REMOVAL OF THE EXISTING POSTS AND OTHER MATERIAL NOT CONSIDERED SALVAGEABLE AND DISPOSED OF IN ACCORDANCE WITH 202.02.

MATERIALS

WOOD POSTS SHALL BE NOMINAL 4" x 4" SQUARE OR 4" DIAMETER ROUND. ALL WOOD INCLUDING POST AND PLATES SHALL CONFORM TO 710.14.

STEEL POSTS SHALL BE NOMINAL PIPE SIZE 2" I.D., AND CONFORM TO AASHTO M 81.

HARDWARE (PLATES, SCREWS, BOLTS, ETC.) SHALL BE COMMERCIAL-GRADE GALVANIZED STEEL.

SETTING POSTS

POSTS SHALL BE SET PER THE FIRST PARAGRAPH OF 606.03 AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE.

MOUNTING BOXES

SUPPORT HARDWARE SHALL ACCOMMODATE EITHER A SINGLE OR A DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO BOXES MAY BE MOUNTED ON A SINGLE POST.

THE MAILBOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS, AND WASHERS) AS NECESSARY TO ACCOMMODATE THE COMPLETE INSTALLATION.

IN THE ABSENCE OF A NEW BOX SUPPLIED BY THE OWNER, THE CONTRACTOR SHALL SALVAGE THE EXISTING BOX AND PLACE IT ON THE NEW SUPPORT. DUE CARE SHALL BE EXERCISED IN SUCH AN OPERATION, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING ON HIS PART, AS JUDGED AND DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL POST MASTER REGARDING THE TIMING OF THE MOVEMENT OF ANY MAILBOX TO A NEW LOCATION.

BASIS OF PAYMENT

PAYMENT UNDER THIS ITEM SHALL BE LIMITED TO FINAL PERMANENT INSTALLATIONS. TEMPORARY INSTALLATIONS SHALL BE IN ACCORDANCE WITH 107.12. HOWEVER, THE SAME MATERIAL AND SIZE LIMITATIONS AS FOR PERMANENT INSTALLATIONS SHALL APPLY.

MAILBOX SUPPORTS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, FOR THE TYPE SPECIFIED, COMPLETE IN PLACE.

PAYMENT WILL BE MADE UNDER:

ITEM	UNIT	DESCRIPTION
SPECIAL	EACH	MAILBOX SUPPORT SYSTEM SINGLE
SPECIAL	EACH	MAILBOX SUPPORT SYSTEM DOUBLE

QUANTITY

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE ABOVE PURPOSE

SPECIAL MAILBOX SUPPORT SYSTEM SINGLE LOCATION + 2 EACH

CALCULATED
CHECKED
DATE

MAILBOX DETAILS AND QUANTITIES

MUS-284-0.00

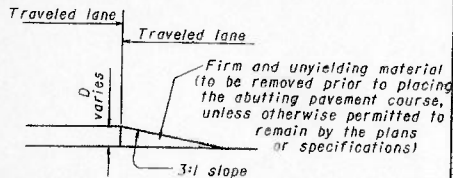
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GENERAL NOTES

- It is intended that this drawing be used for treatment of drop-offs that develop during construction operations, and that are not otherwise provided for in the construction plans. Where the plans do not provide specific items for labor, equipment, or materials to implement the drop-off treatments specified hereon, they shall be included for payment in the lump sum bid for Item 614 - Maintaining Traffic.
- While the need for certain advisory signing is noted hereon, it is not intended that this be indicative of all signing that may be required to advise or warn motorists, and all requirements of the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) must be fulfilled.
- In urban or otherwise heavily developed areas where pedestrians and/or bicyclists may be present in significant numbers, additional signing and protective measures other than those shown hereon may be required.
- The drop-off treatment selected for use at any given location shall be as appropriate for the prevailing conditions at the site.
- Where concrete barrier is specified, it shall be in accordance with Standard Construction Drawing MC-9.2 and Item 622.
- When drums are specified for a dropoff condition, a minimum number of four drums shall be used. Spacing shall be as indicated in the plans or as specified in the OMUTCD.
- When OW-151 (Low Shoulder) signs or OW-171 (Uneven Lanes) and OWP-171 signs are required, they shall be placed 750' in advance of the condition, on all intersecting entrance ramps within the limits of the condition and immediately beyond all intersecting roadways within the limits of the condition. When the dropoff condition extends more than one-half mile, additional signs should be erected at intervals of one mile or less.
- For locations, such as at ramps, lane shifts, lane closures, etc., where traffic is required to negotiate any difference in elevation between pavements, a 3:1 slope treatment similar to the Optional Wedge Treatment shall be provided.
- Portable concrete barrier shall be placed on the same level as the traffic surface and shall not encroach on lane width(s) designated as the minimum required for traffic use. Where drums are used, and their presence would reduce traveled lane widths to less than 10', drums may be placed on the opposite level from that of traffic provided the dropoff depth does not exceed 5" and approval is granted by the Project Engineer.
- Pavement Repairs (or similar work):
 - Lengths greater than 60 feet - utilize appropriate treatment from Condition I.
 - Lengths of 60 feet or less - repairs shall be effected in accordance with 255.08. Drums may be used as a separator adjacent to the traveled lane.

OPTIONAL WEDGE TREATMENT (MILLING OR RESURFACING)

- This treatment may be used when permitted for Condition I only.
- OW-171 and OWP-171 signs required.



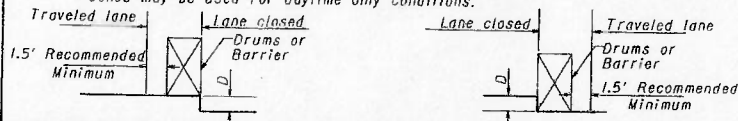
CONDITION I

DROPOFFS BETWEEN TRAVELED LANES

- These treatments are to be used for resurfacing, pavement planing, excavation, etc. between or within traveled lanes.

D (In.)	Treatment
$\leq 1\frac{1}{2}$	Erect OW-171 and OWP-171 signs.
$> 1\frac{1}{2} - 3$	1) Lane closure utilizing drums* as shown below OR 2) Optional Wedge Treatment
$> 3 - 5$	Lane closure utilizing drums as shown below.
> 5	Lane closure utilizing portable concrete barrier as shown below.

*Cones may be used for daytime only conditions.



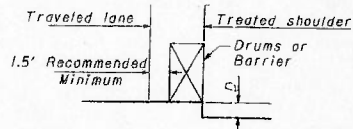
CONDITION II

DROPOFFS WITHIN GRADED SHOULDER AREA

- The treatments indicated below are for use in conjunction with resurfacing, planing, or excavations within the graded shoulder area.
- The graded shoulder area is that flat or gradually sloping area between the edge of a normally traveled lane and the more steeply sloping ditch foreslope or embankment slope. Its surface may be soil or turf, and/or it may be inclusive of a "treated" area (improved with aggregates, asphaltic materials, or concrete). For the purposes herein, its maximum width shall be considered to be twelve (12) feet.

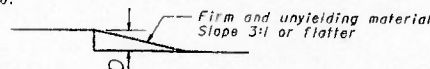
D (In.)	Treatment
$\leq 1\frac{1}{2}$	1) If edgelines are present, no treatment necessary OR 2) Erect OW-171 and OWP-171 signs.
$> 1\frac{1}{2} - 5$	1) If min. lane width requirements can be met, maintain lanes utilizing drums as shown below OR 2) If min. lane width requirements cannot be met, close adjacent lane utilizing drums OR 3) Optional Shoulder Treatment.
$> 5 - 12$ Daylight only	If min. lane width requirements can be met, maintain lanes utilizing drums as shown below.
$> 5 - 24$	1) If min. lane width requirements can be met, maintain lanes utilizing portable concrete barrier as shown below. OR 2) If min. lane width requirements cannot be met, close adjacent lane utilizing drums.
> 24	Lane closure utilizing portable concrete barrier as shown below.

*Minimum lane widths shall be 10' unless otherwise specified in the plans.



OPTIONAL SHOULDER TREATMENT

- This treatment may not be used within a bituminous shoulder where a hot longitudinal joint per 401.15 is required.
- OW-151 signs required.



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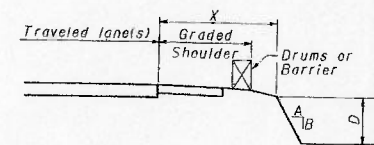
CONDITION III

DROPOFFS BEYOND GRADED SHOULDER OR BACK OF CURB

- See Note 2 under Condition II.
- Use Chart A or B below, as applicable.

CHART A

- USE FOR:
- Uncurbed Facilities.
 - Curbed Facilities, where:
 - Curbs are less than 6" in height.
 - Curbs are 6" or greater in height and the legal speed is greater than 40 mph.

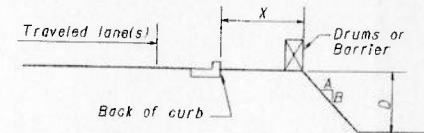


X (Ft.)	D (In.)	A/B	Treatment Required	
			Day	Night
0-4	Any	Any	(a)	(a)
4-30	Any	3:1 or Flatter	None	None
4-12	< 3	Steeper than 3:1	None	None
4-12	> 3	Steeper than 3:1	Drums	Drums
4-12	> 12	Steeper than 3:1	Drums	Barrier
$> 12 - 20$	< 12	Steeper than 3:1	None	None
$> 12 - 20$	$> 12 - 24$	Steeper than 3:1	Drums	Drums
$> 12 - 20$	> 24	Steeper than 3:1	Drums	Barrier
$> 20 - 30$	< 24	Steeper than 3:1	None	None
$> 20 - 30$	> 24	Steeper than 3:1	Drums	Barrier
> 30	Any	Any	None	None

(a) Use treatment specified under Condition II.

CHART B

- USE FOR: Curbed facilities, where the curb is 6" or greater in height and the legal speed is 40 mph or less.



X (Ft.)	D (In.)	A/B	Treatment Required	
			Day	Night
0-10	< 12	Any	None	Drums
0-10	> 12	Any	Drums	Drums
> 10	Any	Any	None	None

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
BUREAU OF LOCATION AND DESIGN

DROPOFFS IN WORK ZONES

DESIGNED DRAWN TRACED CHECKED REVIEWED DATE REVISED

11
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RPM GENERAL NOTES

MATERIALS SUPPLIED BY THE DEPARTMENT

ALL MATERIALS ARE TO BE CONTRACTOR FURNISHED, EXCEPT THAT THE DEPARTMENT SHALL SUPPLY RAISED PAVEMENT MARKING CASTINGS IN THE QUANTITIES SHOWN HEREIN TO THE CONTRACTOR. PAY ITEMS FOR THE DEPARTMENT SUPPLIED MATERIALS SHALL BE INDICATED IN "INSTALLATION ONLY". THE QUANTITY AND TYPE OF DEPARTMENT SUPPLIED MATERIALS ARE SHOWN ON SHEETS 66 & 67.

THE CONTRACTOR SHALL PICK UP THE SUPPLIED RAISED PAVEMENT MARKER MATERIALS AT THE
O.P.I.
315 PHILLIPI RD.
COLUMBUS, OHIO 45895

FOR TRANSPORT TO THE WORK SITE OR TO THE CONTRACTOR'S STORAGE FACILITY. THE RECYCLED RAISED PAVEMENT MARKER (RPM) AUTHORIZATION FORM (SS 1082) IS TO BE SIGNED BY THE DISTRICT CONSTRUCTION ENGINEER PRIOR TO PICK UP OF THE RPM'S. THE CONTRACTOR SHALL NOTIFY THE DISTRICT AND/OR THE PARTIES LISTED ON THE AUTHORIZATION FORM IN WRITING AT LEAST FIVE CALENDAR DAYS PRIOR TO PICK UP OF THE DEPARTMENT SUPPLIED MATERIALS. THE CONTRACTOR SHALL STORE THE RPM'S WITHOUT DAMAGE OR CONTAMINATION WITH FOREIGN MATTER. A DEDUCTION IN THE AMOUNT OF THE ACTUAL COST TO THE DEPARTMENT SHALL BE MADE FOR THE MATERIALS DAMAGED BY THE CONTRACTOR OR FOR CASTINGS RECEIVED BY THE CONTRACTOR WHICH WERE NOT INSTALLED AND WERE NOT RETURNED TO THE DEPARTMENT.

RETURN OF NON-PERFORMED RAISED PAVEMENT MARKER MATERIALS SUPPLIED BY THE DEPARTMENT

RAISED PAVEMENT MARKER MATERIALS SUPPLIED BY THE DEPARTMENT, THAT ARE NON-PERFORMED, SHALL BE CAREFULLY PACKED OR REPACKED IN THE BOXES SUPPLIED BY THE RAISED PAVEMENT MARKER RECYCLER. BOXES SHALL BE MARKED WITH THE RECYCLER'S PART OR CATALOG NUMBER, THE ODOT PROJECT NUMBER, THE STYLE OF THE CASTING, AND THE COLOR OF THE PRISMATIC RETRO-REFLECTOR. THE RECYCLER'S CATALOG OR PART NUMBERS MAY BE OBTAINED FOR THE OFFICE OF TRAFFIC ENGINEERING IN COLUMBUS, OHIO. CASTING STYLES SHALL NOT BE MIXED WITHIN A BOX. ANY BOXES NOT PROPERLY PACKED OR MARKED WILL NOT BE ACCEPTED AT THE RECYCLER'S WAREHOUSE.

THE BOXES SHALL BE PLACED ON SKIDS OR PALLETS WITH ONLY ONE STYLE (LOW PROFILE OR CONVENTIONAL, REFLECTORIZED OR NON-REFLECTORIZED) AND NO MORE THAN TWENTY-ONE BOXES (420 RPM'S) ON EACH SKID.

NON-PERFORMED MATERIALS SHALL BE RETURNED, TO A LOCATION SPECIFIED BY THE DISTRICT CONSTRUCTION ENGINEER, WITHIN THIRTY CALENDAR DAYS OF THE COMPLETION OF THE PROJECT.

THE ABOVE WORK INCLUDING ALL LABOR, EQUIPMENT, AND MATERIAL NEEDED TO PERFORM THE WORK, SHALL BE CONSIDERED INCIDENTAL TO THE RESPECTIVE PAY ITEM.

IF THE DEPARTMENT HAS TO REPACKAGE THE RPM'S CORRECTLY, THE CONTRACTOR WILL BE ASSESSED THE ACTUAL COST FOR REPACKAGING THE MATERIALS BY THE DEPARTMENT'S FORCES.

LOADING OF MATERIALS SUPPLIED BY THE DEPARTMENT OF THE RECYCLER'S WAREHOUSE

TRUCKS SHALL HAVE A LOADING HEIGHT OF 48 INCHES AND BE ABLE TO BACK UP FLUSH TO THE LOADING DOCK. TRUCKS SHALL NOT HAVE ANY OBSTRUCTIONS THAT PREVENT THE LOADING BY A STANDARD FORKLIFT OR LIFT TRUCK.

SEMI-TRUCKS OR 20 FOOT COMMERCIAL TRUCKS ARE THE MOST APPROPRIATE TRUCKS FOR LOADS IN EXCESS OF FOUR PALLETS (ONE PALLET=21 BOXES=2100 POUNDS).

STAKE BODY TRUCKS ARE APPROPRIATE TO LOAD LESS THAN FOUR PALLETS, PROVIDED THE TRUCK IS RATED FOR THE LOAD AND THE LOAD CAN BE SAFELY SECURED FOR TRANSPORT BY CHAINING OR STRAPPING DOWN AS NEEDED.

PICKUP TRUCKS ARE APPROPRIATE FOR LOADS OF APPROXIMATELY ONE PALLET, PROVIDED THE PICKUP TRUCK IS RATED FOR THE LOAD AND THE LOAD CAN BE SAFELY SECURED FOR TRANSPORT.

DUMP TRUCKS, TILT BED TRUCKS, AND NON COMMERCIAL MOVING VANS WILL NOT BE LOADED BY THE RECYCLER'S WAREHOUSE.

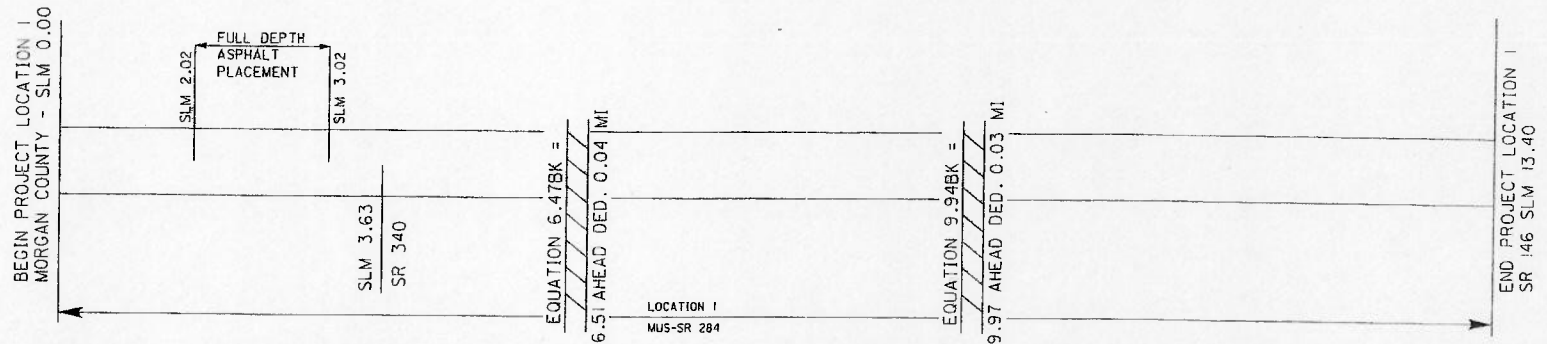
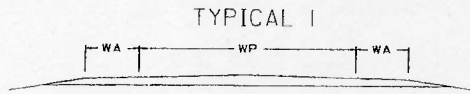
THE WAREHOUSE SUPERVISOR WILL REFUSE TO LOAD ANY TRUCK THAT IS UNSAFE TO LOAD OR UNSUITABLE FOR THE LOAD BEING PLACED ON THE TRUCK.

CALCULATED
SUB
GROUP
LIFT

GENERAL NOTES

MUS-284-0.00

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		(I) BRIDGE LENGTH X PAVEMENT WIDTH		* TACK COAT @ 0.25 GAL/SQ.YD.		PAVEMENT DATA													
LOCATION	COUNTY	ROUTE	LOG POINT TO LOG POINT		LENGTH		WP FEET	TYPICAL	EXISTING TYPE PAVEMENT	PAVEMENT AREA SQ. YDS.	PROPOSED PAVEMENT						254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (SEE NOTE) SQ. YD.	614 WORK ZONE CENTER LINE, CLASS II MILE	
			MILES	LIN. FT.	407						448 ASPHALT CONCRETE		301						
			TACK COAT @ 0.075 gal./s.y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 gal./s.y.	THICK INCHES	INTERMEDIATE COURSE, TYPE I, PG 64-22 CU.YD.					THICK INCHES	SURFACE COURSE, TYPE I, PG 64-22 CU.YD.	THICK INCHES	ASPHALT AGGREGATE BASE, PG 64-22 CU.YD.					
I	MUS	SR 284	0.00-2.02	2.02	10666	18	I	404	21332	1600	1067	1.0	593	1.0	593			21332	4.04
			2.02-3.02	1.00	5280	20	I	404	11733	880	587	1.0	326	1.0	326	8.0	2607		2.00
			3.02-6.47	3.45	18216	18	I	404	36432	2732	1822	1.0	1012	1.0	1012			36432	6.90
			6.51-9.94	3.43	18110	18	I	404	36220	2717	1811	1.0	1006	1.0	1006			36220	6.86
			9.97-13.40	3.43	18110	18	I	404	36220	2717	1811	1.0	1006	1.0	1006			36220	6.86
I			TOTALS							10646	7098		3943		3943		2607	130204	26.66

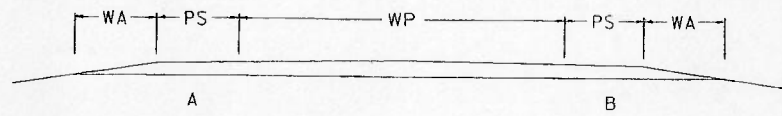
ASPHALT CONCRETE

MUS-284-0.00

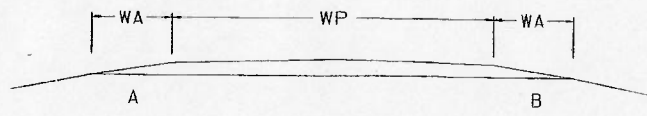
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ENGINEER
L.M.E.
CHECKED
J.C.

TYPICAL 1



TYPICAL 2



SHOULDER DATA

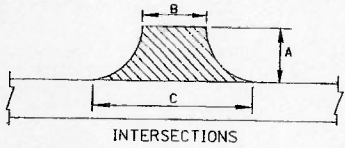
L O C A T I O N	R O U T E	L O G P O I N T T O L O G P O I N T	L E N G T H		T Y P I C A L	P R O P O S E D W I D T H (F T.)				S H O U L D E R A R E S Q. Y D.	4 0 7		3 0 1		4 4 8 A S P H A L T C O N C R E T E			6 1 7	S T E T E S	
			M I L E S	L I N. F T.		A	B	C	D		T A C K C O A T @ 0.075 G A L. /S. Y.	T A C K C O A T F O R I N T E R M E D I A T E C O U R S E @ 0.05 G A L. /S. Y.	T H I C K	A S P H A L T A G G R E G A T E B A S E, P G 64-22	T H I C K	I N T E R M E D I A T E C O U R S E, T Y P E 1, P G 64-22	T H I C K	S U R F A C E C O U R S E, T Y P E 1, P G 64-22		C O M P A C T E D A G G R E G A T E, A S P E R P L A N 2' x 2.0" AVERAGE THICKNESS
											G A L.	G A L.	I N C H	C U. Y D.	I N C H	I N C H	C U. Y D.	T O N		
I	SR 284	0.00-2.02	2.02	10666	2	2	2		4740											
		2.02-3.02	1.00	5280	1	2.5	2.5		2347	176	117	8.0	652	1.0	65	1.0	65	461		
		3.02-6.47	3.45	18216	2	2	2		8096									787		
		6.51-9.94	3.43	18110	2	2	2		8049									783		
		9.97-13.40	3.43	18110	2	2	2		8049									783		
I	SR 284	TOTALS								176	117		652		65		65	3042		

SHOULDER TREATMENT

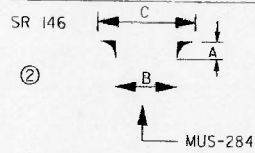
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M284001.MFS 11-29-02

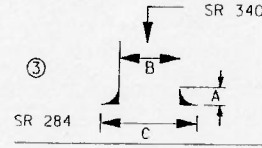
QUANTITIES CARRIED TO GENERAL SUMMARY



INTERSECTIONS

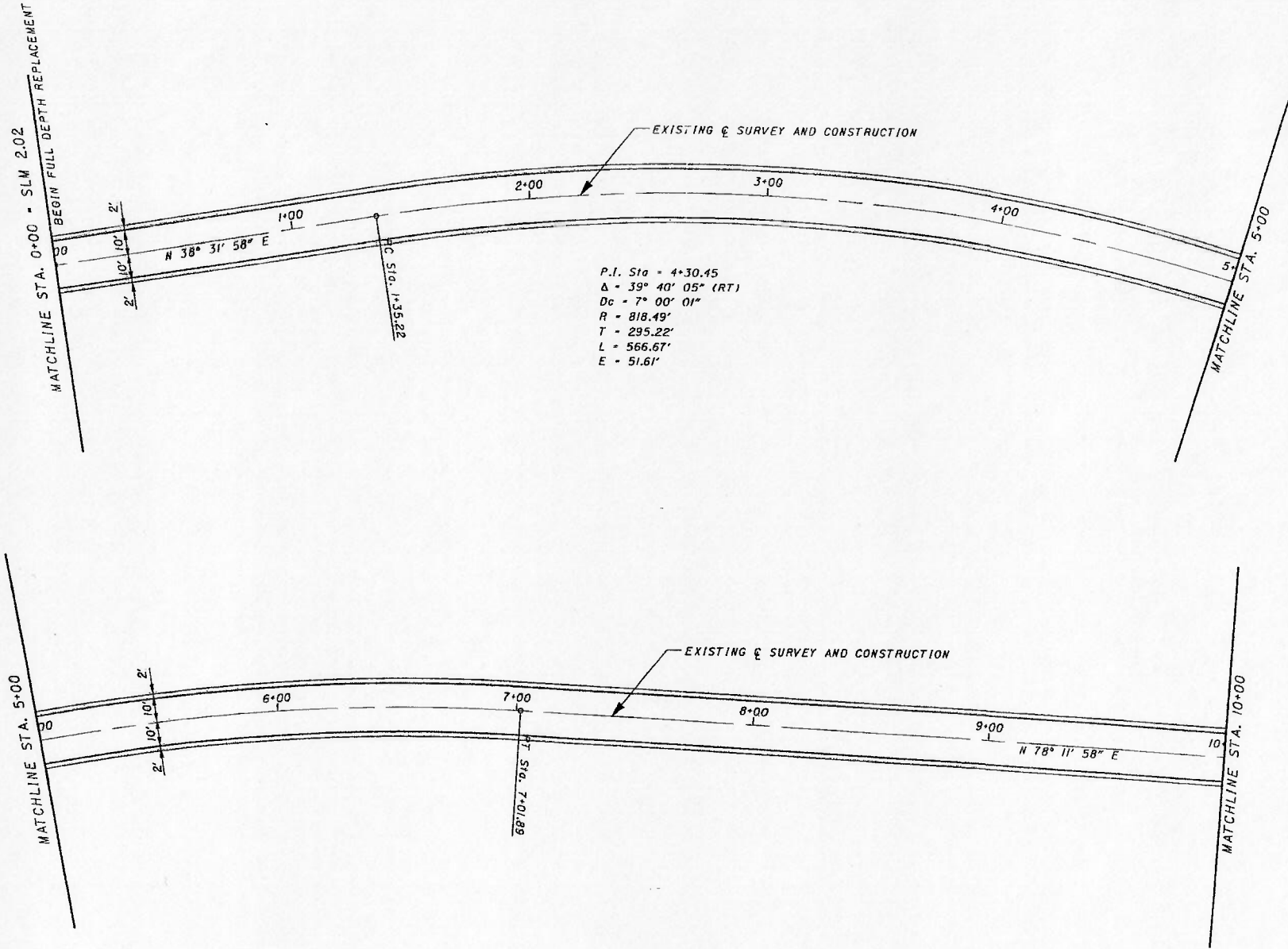


EXTRA AREAS



L C A T I O N	COUNTY	ROUTE	SIDE	DESCRIPTION	INTERSECTIONS			AREA IN SQ. YD.	407		448 ASPHALT CONCRETE			202 WEARING COURSE REMOVED SQ. YD.	EXISTING SURFACE		
					A IN FEET	B IN FEET	C IN FEET		TACK COAT @ 0.075 gal./s.y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 gal./s.y.	THICK	INTERMEDIATE COURSE, TYPE 1, PG 64-22	THICK			SURFACE COURSE, TYPE 1, PG 64-22	
I	MUS	SR 284	LT	YOUNG HICKORY RD	1.67	30	18	63	135	10					404		
			RT	OAK GROVE RD	1.71	30	16	50	110	8					404		
			LT	DRAKE MARTIN RD	1.91	35	17	51	132	10					404		
			RT	RURALDALE RD	3.30	55	24	117	431	32					404		
			LT	RURALDALE RD	3.38	35	20	90	214	16					404		
			RT	SR 340 ③	3.63	65	21	123	368	28	1.0	10.2			404		
			RT	INTERNATIONAL DR.	5.90	45	24	90	285	21				368	404		
			LT	PAISLEY RD	6.15	60	24	150	580	43					404		
			RT	ZION RIDGE RD	6.75	50	24	96	333	25					404		
			RT	TOWER RD	7.19	25	16	75	126	9					404		
			LT	SUGAR GROVE RD	7.21	50	18	95	314	23					404		
			RT	HIGH FREELAND RD	7.67	50	19	105	344	26					404		
			LT	FENTON RD	9.36	85	20	175	921	69					404		
			RT	LEEDOM RD	9.84	35	20	80	194	15					404		
			LT	WION HOLLOW RD	10.66	40	18	90	240	18					404		
			LT	HARMON HOLLOW RD	11.10	50	16	100	322	24					404		
			RT	AT SR 146 ②	13.40	33	24	58	62	5	3	1.0	1.7	1.0	1.7	62	404
I				TOTALS						382	21		11.9		142.0	430	

15
68
 MUS-284-0.000
 EXTRA AREAS
 SHEET 15 OF 68
 DATE: 10-07-02
 DRAWN BY: MEA

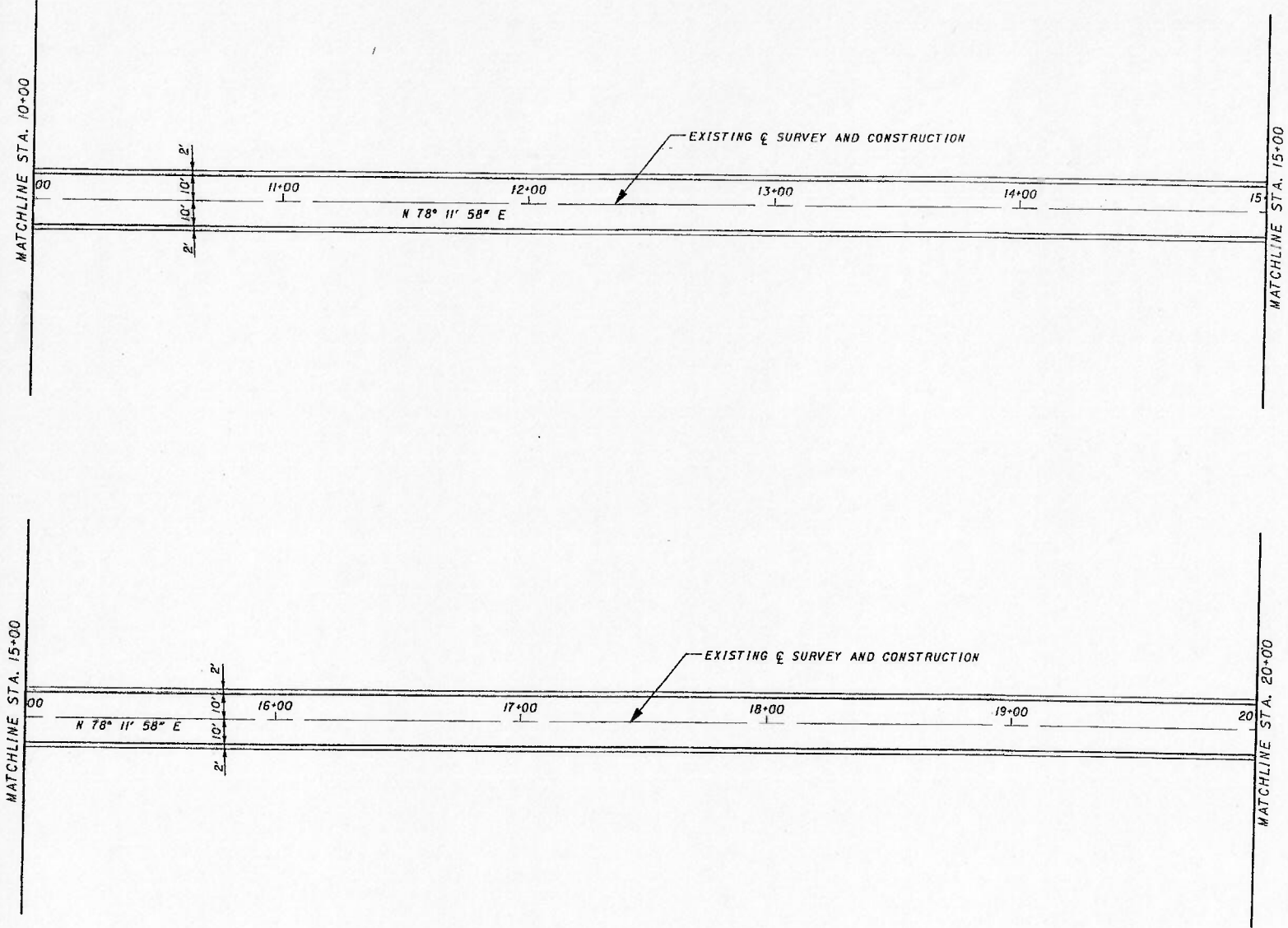


HORIZONTAL
SCALE IN FEET

DATE PLOTTED
CHECKED

PLAN SHEETS SR 284
STA 0+00 TO STA 10+00

MUS-284-0.00

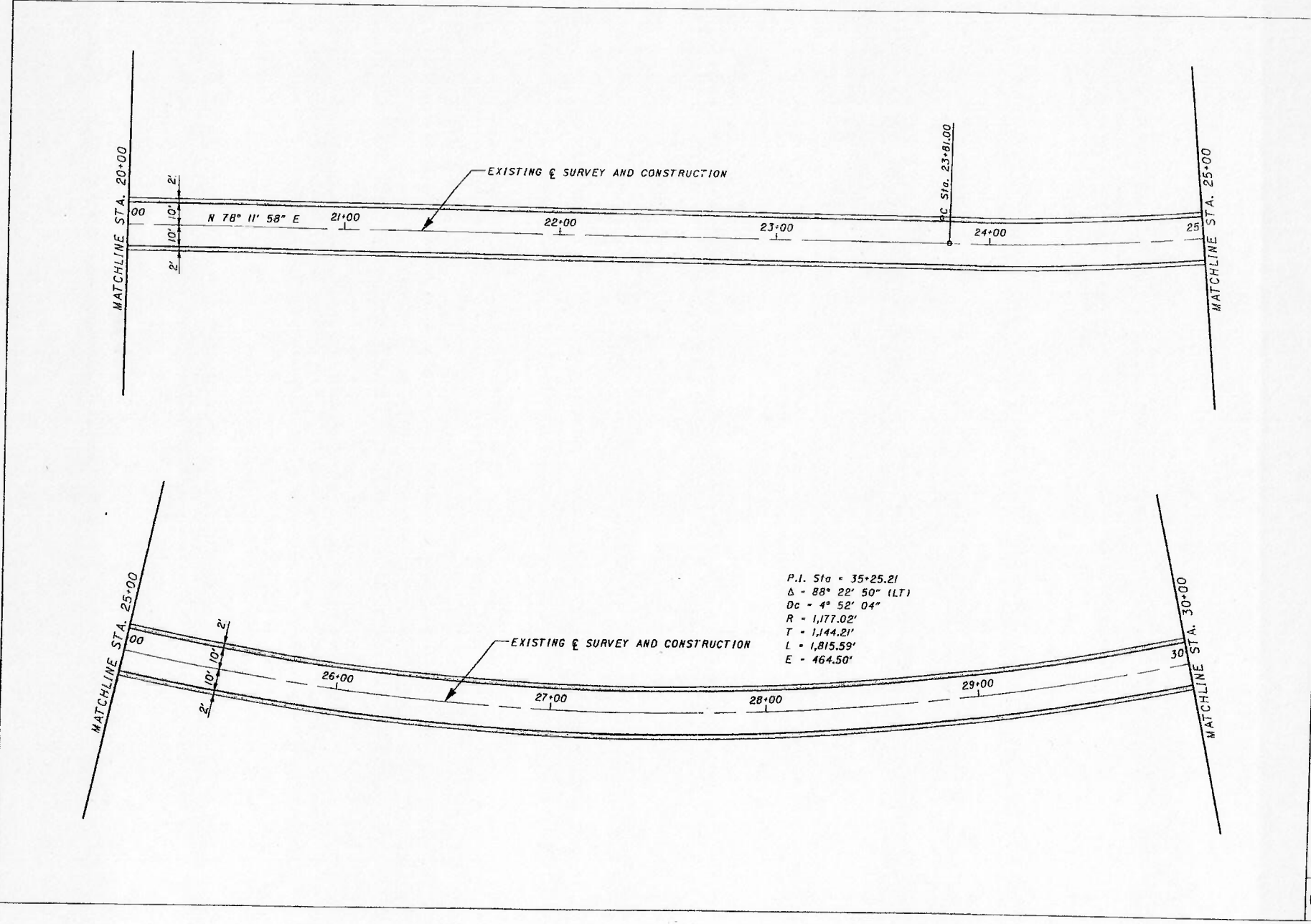


HORIZONTAL SCALE IN FEET

CALCULATE
CHECK

PLAN SHEETS SR 284
STA 10+00 TO STA 20+00

MUS-284-0.00



MATCHLINE STA. 20+00

MATCHLINE STA. 25+00

MATCHLINE STA. 25+00

MATCHLINE STA. 30+00

N 78° 11' 58" E 21+00

22+00

23+00

24+00

25+00

26+00

27+00

28+00

29+00

30+00

EXISTING & SURVEY AND CONSTRUCTION

EXISTING & SURVEY AND CONSTRUCTION

P.C. Sta. 23+81.00

P.I. Sta = 35+25.21
 Δ - 88° 22' 50" (LT)
 D_c = 4° 52' 04"
 R = 1,177.02'
 T = 1,144.21'
 L = 1,815.59'
 E = 464.50'

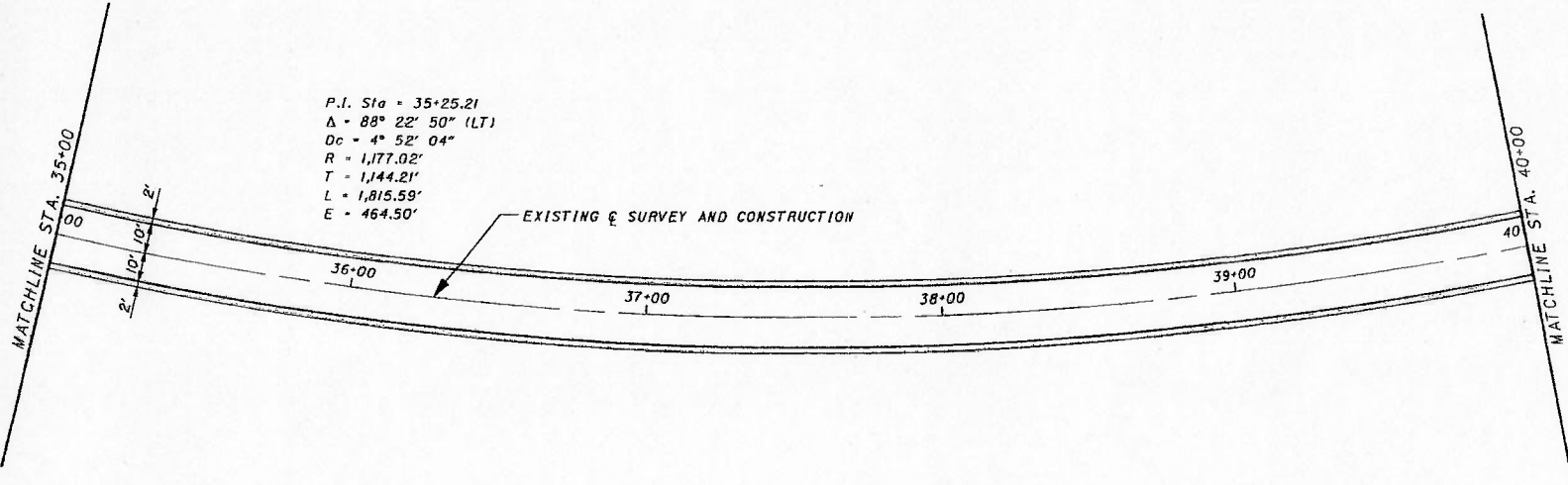
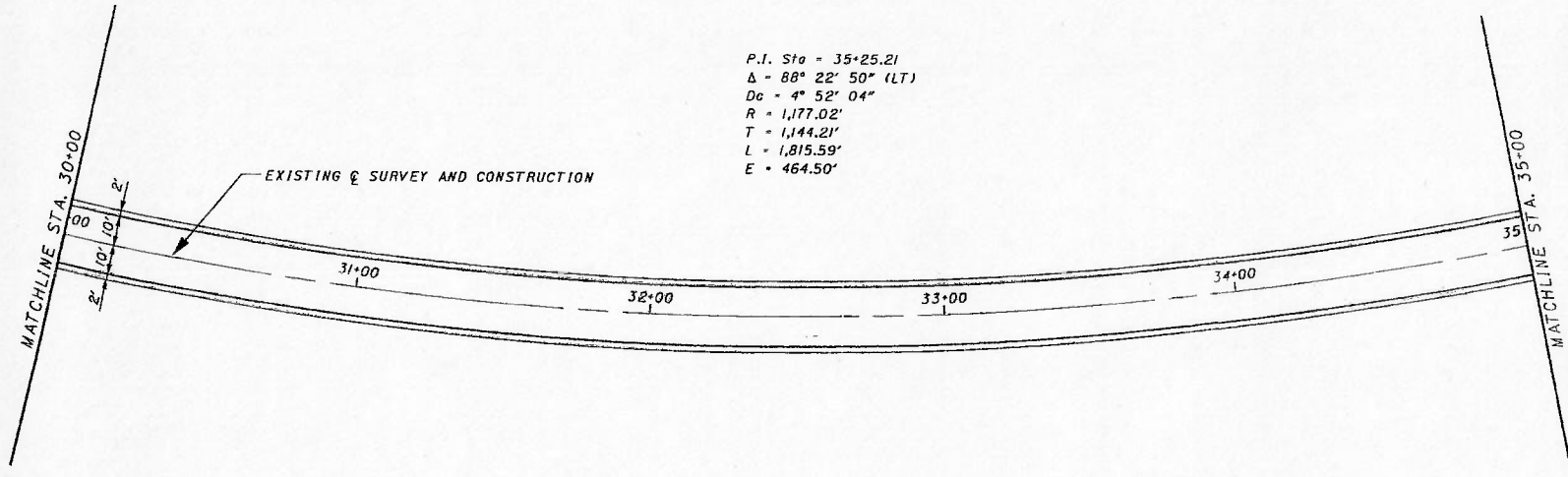


HORIZONTAL SCALE IN FEET

PLAN SHEETS SR 284
 STA 20+00 TO STA 30+00

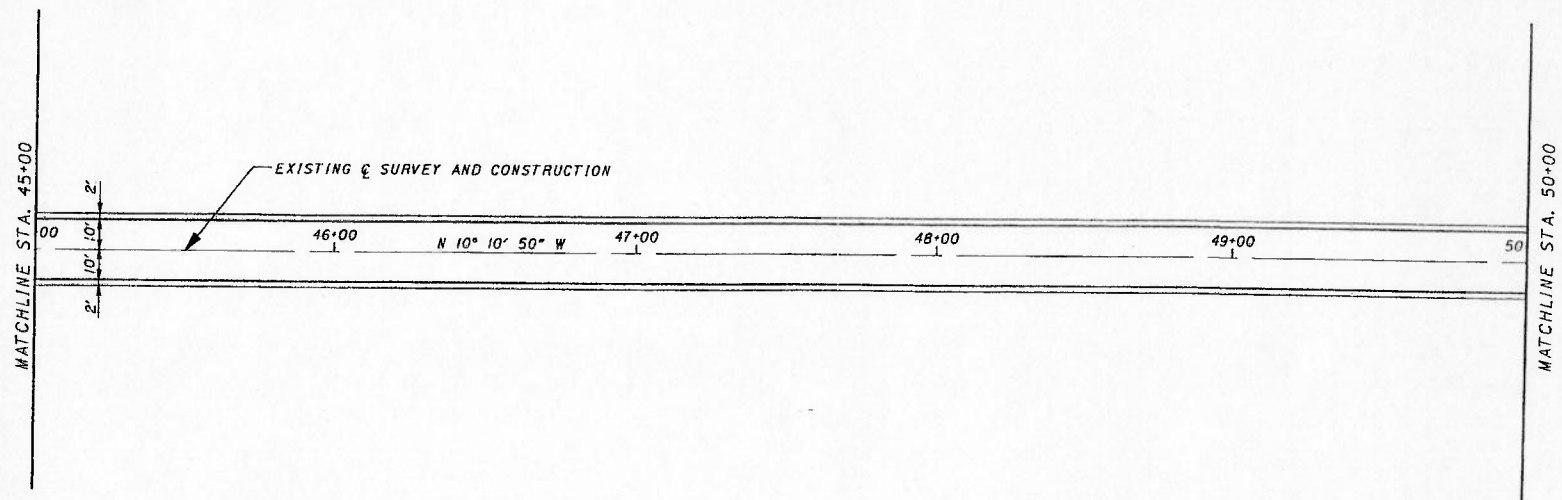
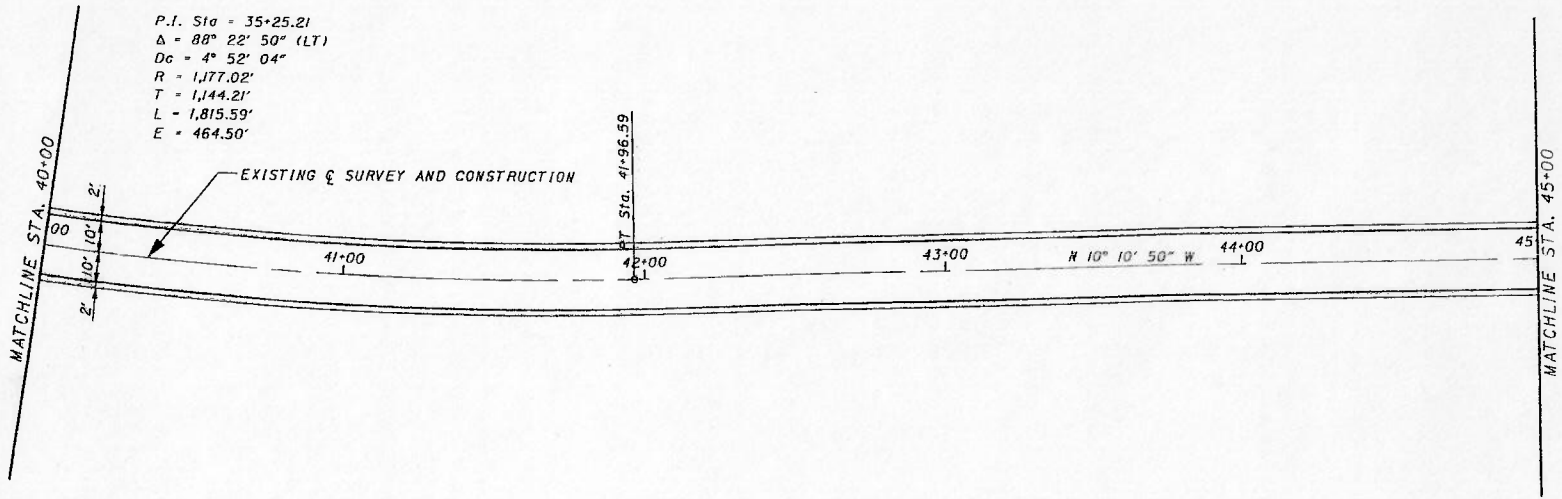
MUS-284-0.00

MUS-284-0.00 11-25-07



 HORIZONTAL SCALE IN FEET	CHECKED _____	PLAN SHEETS SR 284 STA 30+00 TO STA 40+00
	CALCULATED _____	
19 68	MUS-284-0.00	

P.I. Sta = 35+25.21
 $\Delta = 88^\circ 22' 50''$ (LT)
 $Dc = 4^\circ 52' 04''$
 $R = 1,177.02'$
 $T = 1,144.21'$
 $L = 1,815.59'$
 $E = 464.50'$



HORIZONTAL SCALE IN FEET

PLAN SHEETS SR 284
 STA 40+00 TO STA 50+00

MUS-284-0.00

20/68

MUS-284-0.00 11-26-02



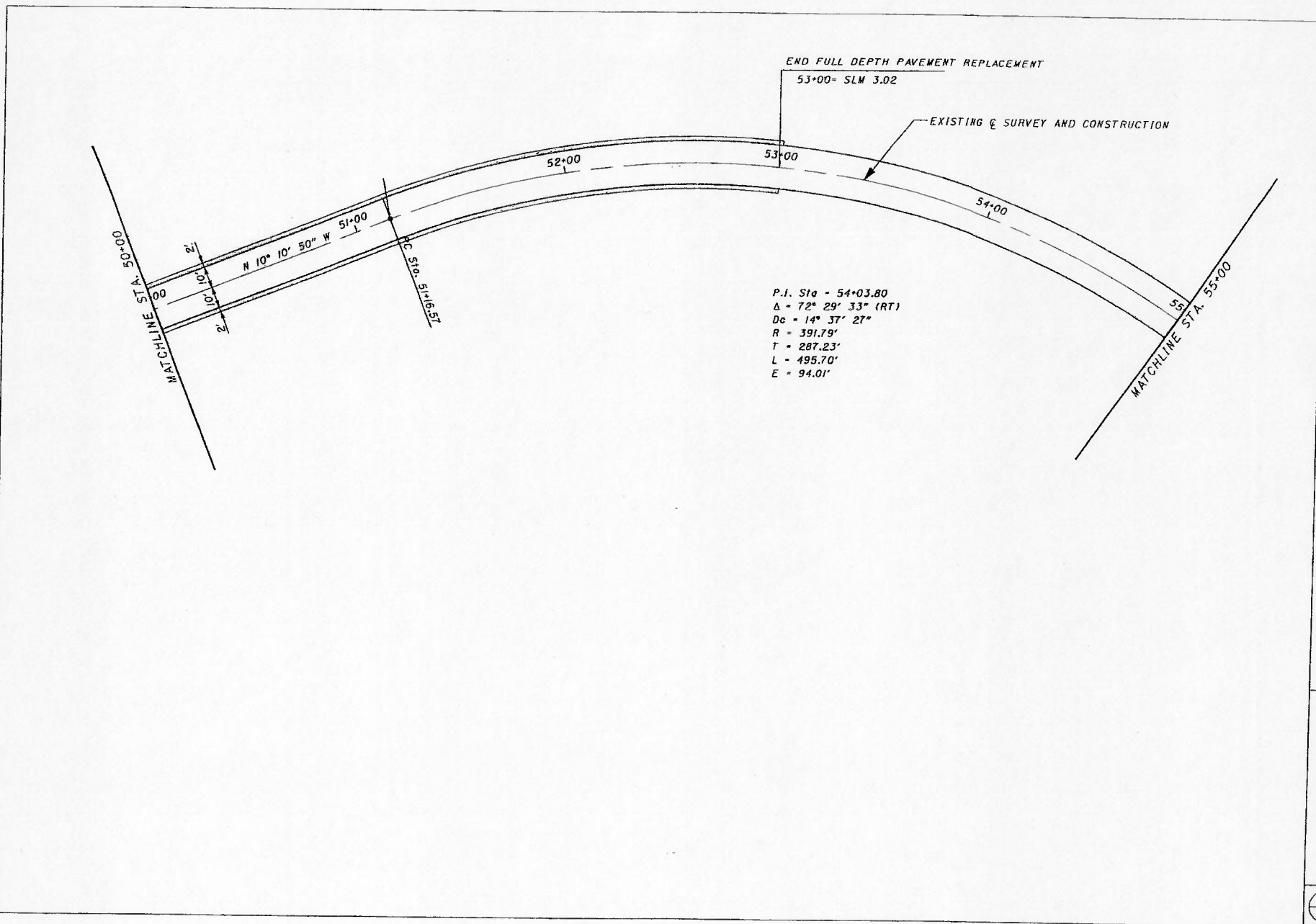
HORIZONTAL SCALE IN FEET

CALCULATED
CHECK

PLAN SHEETS SR 284
STA 50+00 TO STA 55+00

MUS-284-0.00

21
68



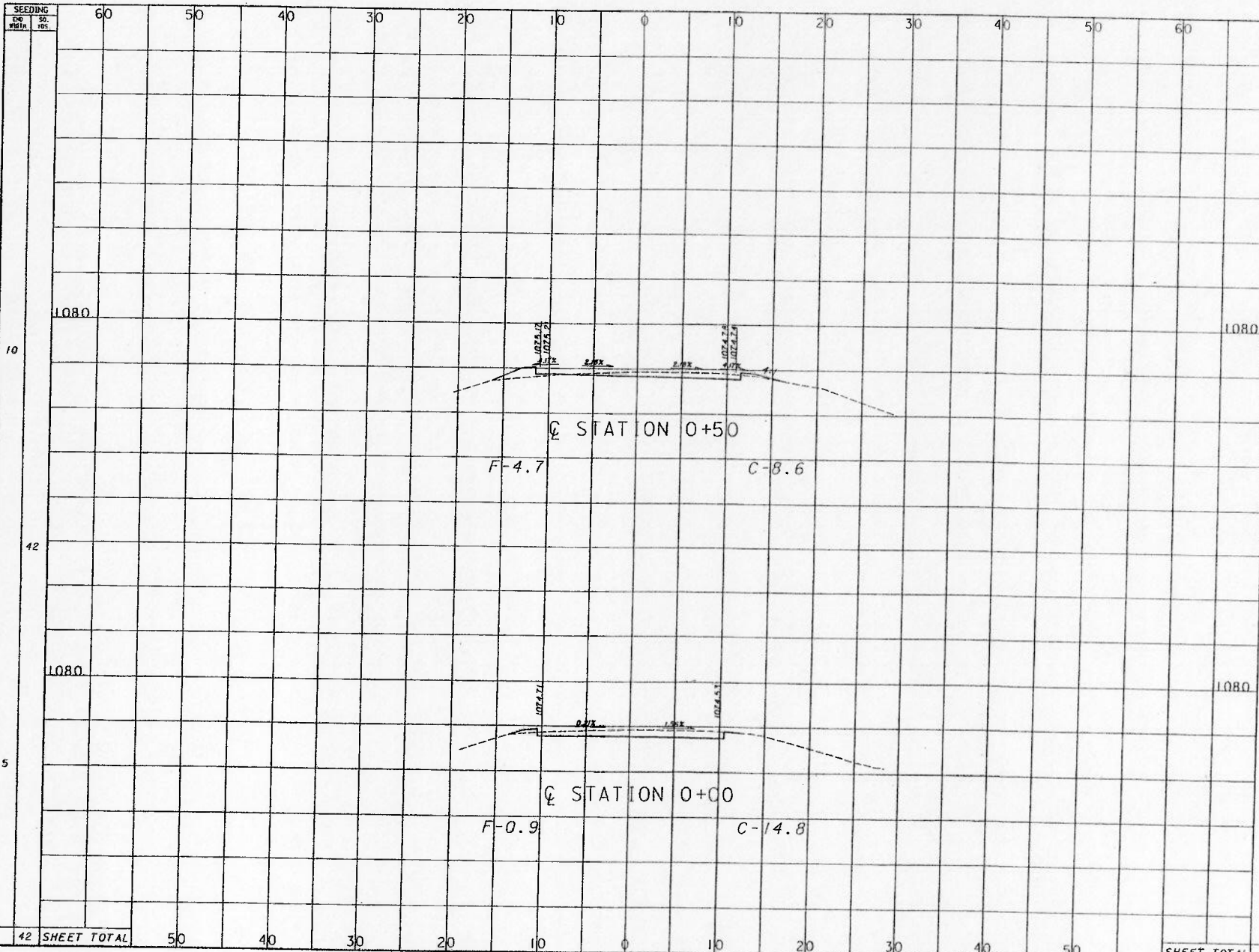
P.I. Sta - 54+03.80
 Δ - 72° 29' 33" (RT)
 Dc - 14° 37' 27"
 R - 391.79'
 T - 287.23'
 L - 495.70'
 E - 94.01'

SUPERELEVATION TABLE

SUPERELEVATION TABLE											REMARKS	
LEFT SIDE					CENTERLINE CONTROL		RIGHT SIDE					
EDGE ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	ELEVATION CORRECTION	TRANSITION RATE		EDGE ELEVATION
K07471		0.02	0.0021	10.00	0+00.00 R I	K07469	10.00	-0.0156	-0.16		K07453	
K07521		0.22	0.0218	10.00	0+50.00 R I	K07500	10.00	-0.0218	-0.22		K07478	
K07572		0.41	0.0415	10.00	1+00.00 R I	K07530	10.00	-0.0415	-0.41		K07489	
K07622		0.61	0.0612	10.00	1+50.00 R I	K07561	10.00	-0.0612	-0.61		K07500	
K07673		0.81	0.0809	10.00	2+00.00 R I	K07592	10.00	-0.0809	-0.81		K07511	
K07684		0.83	0.0830	10.00	2+50.00 R I	K07581	10.00	-0.0830	-0.83		K07498	
K07645		0.83	0.0830	10.00	3+00.00 R I	K07562	10.00	-0.0830	-0.83		K07479	
K07600		0.83	0.0830	10.00	3+50.00 R I	K07517	10.00	-0.0830	-0.83		K07434	
K07514		0.83	0.0830	10.00	4+00.00 R I	K07431	10.00	-0.0830	-0.83		K07348	
K07410		0.83	0.0830	10.00	4+50.00 R I	K07327	10.00	-0.0830	-0.83		K07244	
K07285		0.83	0.0830	10.00	5+00.00 R I	K07202	10.00	-0.0830	-0.83		K07119	
K07196		0.83	0.0830	10.00	5+50.00 R I	K07073	10.00	-0.0830	-0.83		K06990	
K07027		0.83	0.0830	10.00	6+00.00 R I	K06944	10.00	-0.0830	-0.83		K06861	
K06858		0.76	0.0759	10.00	6+50.00 R I	K06782	10.00	-0.0759	-0.76		K06707	
K06641		0.56	0.0561	10.00	7+00.00 R I	K06585	10.00	-0.0561	-0.56		K06529	
K06391		0.36	0.0364	10.00	7+50.00 R I	K06355	10.00	-0.0364	-0.36		K06319	
K06123		0.17	0.0167	10.00	8+00.00 R I	K06107	10.00	-0.0167	-0.17		K06090	
K05850		-0.03	-0.0030	10.00	8+50.00 R I	K05853	10.00	-0.0156	-0.16		K05838	
K05557		-0.16	-0.0156	10.00	9+00.00 R I	K05572	10.00	-0.0156	-0.16		K05557	
K05257		-0.16	-0.0156	10.00	9+50.00 R I	K05267	10.00	-0.0156	-0.16		K05251	
K04906		-0.16	-0.0156	10.00	10+00.00 R I	K04921	10.00	-0.0156	-0.16		K04906	
K04548		-0.16	-0.0156	10.00	10+50.00 R I	K04564	10.00	-0.0156	-0.16		K04548	
K04231		-0.16	-0.0156	10.00	11+00.00 R I	K04246	10.00	-0.0156	-0.16		K04231	
K04006		-0.16	-0.0156	10.00	11+50.00 R I	K04022	10.00	-0.0156	-0.16		K04006	
K03827		-0.16	-0.0156	10.00	12+00.00 R I	K03842	10.00	-0.0156	-0.16		K03827	
K03661		-0.16	-0.0156	10.00	12+50.00 R I	K03677	10.00	-0.0156	-0.16		K03661	
K03496		-0.16	-0.0156	10.00	13+00.00 R I	K03351	10.00	-0.0156	-0.16		K03496	
K03375		-0.16	-0.0156	10.00	13+50.00 R I	K03391	10.00	-0.0156	-0.16		K03375	
K03289		-0.16	-0.0156	10.00	14+00.00 R I	K03305	10.00	-0.0156	-0.16		K03289	
K03240		-0.16	-0.0156	10.00	14+50.00 R I	K03256	10.00	-0.0156	-0.16		K03240	
K03224		-0.16	-0.0156	10.00	15+00.00 R I	K03240	10.00	-0.0156	-0.16		K03224	
K03265		-0.16	-0.0156	10.00	15+50.00 R I	K03280	10.00	-0.0156	-0.16		K03265	
K03329		-0.16	-0.0156	10.00	16+00.00 R I	K03344	10.00	-0.0156	-0.16		K03329	
K03457		-0.16	-0.0156	10.00	16+50.00 R I	K03472	10.00	-0.0156	-0.16		K03457	
K03631		-0.16	-0.0156	10.00	17+00.00 R I	K03647	10.00	-0.0156	-0.16		K03631	
K03779		-0.16	-0.0156	10.00	17+50.00 R I	K03795	10.00	-0.0156	-0.16		K03779	
K03938		-0.16	-0.0156	10.00	18+00.00 R I	K03953	10.00	-0.0156	-0.16		K03938	
K04126		-0.16	-0.0156	10.00	18+50.00 R I	K04142	10.00	-0.0156	-0.16		K04126	
K04354		-0.16	-0.0156	10.00	19+00.00 R I	K04370	10.00	-0.0156	-0.16		K04354	
K04571		-0.16	-0.0156	10.00	19+50.00 R I	K04587	10.00	-0.0156	-0.16		K04571	
K04778		-0.16	-0.0156	10.00	20+00.00 R I	K04794	10.00	-0.0156	-0.16		K04778	
K04999		-0.16	-0.0156	10.00	20+50.00 R I	K05014	10.00	-0.0156	-0.16		K04999	
K05218		-0.16	-0.0156	10.00	21+00.00 R I	K05233	10.00	-0.0156	-0.16		K05218	
K05455		-0.16	-0.0156	10.00	21+50.00 R I	K05471	10.00	-0.0156	-0.16		K05455	
K05717		-0.16	-0.0156	10.00	22+00.00 R I	K05733	10.00	-0.0156	-0.16		K05717	
K05954		-0.16	-0.0156	10.00	22+50.00 R I	K05970	10.00	0.0018	0.02		K05972	
K06158		-0.22	-0.0215	10.00	23+00.00 R I	K06180	10.00	0.0215	0.22		K06201	
K06322		-0.41	-0.0412	10.00	23+50.00 R I	K06363	10.00	0.0412	0.41		K06404	
K06442		-0.61	-0.0609	10.00	24+00.00 R I	K06503	10.00	0.0609	0.61		K06564	
K06534		-0.80	-0.0800	10.00	24+50.00 R I	K06614	10.00	0.0800	0.80		K06694	

SUPERELEVATION TABLE

SUPERELEVATION TABLE											REMARKS	
LEFT SIDE					CENTERLINE CONTROL		RIGHT SIDE					
EDGE ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	ELEVATION CORRECTION	TRANSITION RATE		EDGE ELEVATION
K06636		-0.80	-0.0800	10.00	25+00.00 R I	K06716	10.00	0.0800	0.80		K06796	
K06720		-0.80	-0.0800	10.00	25+50.00 R I	K06800	10.00	0.0800	0.80		K06880	
K06786		-0.80	-0.0800	10.00	26+00.00 R I	K06866	10.00	0.0800	0.80		K06946	
K06842		-0.80	-0.0800	10.00	26+50.00 R I	K06922	10.00	0.0800	0.80		K07002	
K06938		-0.80	-0.0800	10.00	27+00.00 R I	K06978	10.00	0.0800	0.80		K07058	
K06960		-0.80	-0.0800	10.00	27+50.00 R I	K07040	10.00	0.0800	0.80		K07120	
K07033		-0.80	-0.0800	10.00	28+00.00 R I	K07113	10.00	0.0800	0.80		K07193	
K07104		-0.80	-0.0800	10.00	28+50.00 R I	K07184	10.00	0.0800	0.80		K07264	
K07153		-0.80	-0.0800	10.00	29+00.00 R I	K07233	10.00	0.0800	0.80		K07313	
K07159		-0.80	-0.0800	10.00	29+50.00 R I	K07239	10.00	0.0800	0.80		K07319	
K07148		-0.80	-0.0800	10.00	30+00.00 R I	K07228	10.00	0.0800	0.80		K07308	
K07091		-0.80	-0.0800	10.00	30+50.00 R I	K07171	10.00	0.0800	0.80		K07254	
K07035		-0.80	-0.0800	10.00	31+00.00 R I	K07115	10.00	0.0800	0.80		K07195	
K06978		-0.80	-0.0800	10.00	31+50.00 R I	K07058	10.00	0.0800	0.80		K07138	
K06917		-0.80	-0.0800	10.00	32+00.00 R I	K06997	10.00	0.0800	0.80		K07077	
K06869		-0.80	-0.0800	10.00	32+50.00 R I	K06949	10.00	0.0800	0.80		K07029	
K06806		-0.80	-0.0800	10.00	33+00.00 R I	K06896	10.00	0.0800	0.80		K06949	
K06769		-0.80	-0.0800	10.00	33+50.00 R I	K06844	10.00	0.0800	0.80		K06924	
K06710		-0.80	-0.0800	10.00	34+00.00 R I	K06788	10.00	0.0800	0.80		K06861	
K06658		-0.80	-0.0800	10.00	34+50.00 R I	K06738	10.00	0.0800	0.80		K06724	
K06606		-0.80	-0.0800	10.00	35+00.00 R I	K06688	10.00	0.0800	0.80		K06618	
K06554		-0.80	-0.0800	10.00	35+50.00 R I	K06638	10.00	0.0800	0.80		K06526	
K06502		-0.80	-0.0800	10.00	36+00.00 R I	K06588	10.00	0.0800	0.80		K06450	
K06450		-0.80	-0.0800	10.00	36+50.00 R I	K06538	10.00	0.0800	0.80		K06382	
K06398		-0.80	-0.0800	10.00	37+00.00 R I	K06488	10.00	0.0800	0.80		K06316	
K06346		-0.80	-0.0800	10.00	37+50.00 R I	K06438	10.00	0.0800	0.80		K06250	
K06294		-0.80	-0.0800	10.00	38+00.00 R I	K06388	10.00	0.0800	0.80		K06184	
K06242		-0.80	-0.0800	10.00	38+50.00 R I	K06338	10.00	0.0800	0.80		K06118	
K06190		-0.80	-0.0800	10.00	39+00.00 R I	K06288	10.00	0.0800	0.80		K06052	
K06138		-0.80	-0.0800	10.00	39+50.00 R I	K06238	10.00	0.0800	0.80		K05986	
K06086		-0.80	-0.0800	10.00	40+00.00 R I	K06188	10.00	0.0800	0.80		K05920	
K06034		-0.80	-0.0800	10.00	40+50.00 R I	K06138	10.00	0.0800	0.80		K05854	
K05982		-0.80	-0.0800	10.00	41+00.00 R I	K06088	10.00	0.0800	0.80		K05819	
K05930		-0.80	-0.0800	10.00	41+50.00 R I	K06038	10.00	0.0800	0.80		K05784	
K05878		-0.80	-0.0800	10.00	42+00.00 R I	K05988	10.00	0.0800	0.80		K05749	
K05826		-0.80	-0.0800	10.00	42+50.00 R I	K05938	10.00	0.0800	0.80		K05714	
K05774		-0.80	-0.0800	10.00	43+00.00 R I	K05888	10.00	0.0800	0.80		K05679	
K05722		-0.80	-0.0800	10.00	43+50.00 R I	K05838	10.00	0.0800	0.80		K05644	
K05670		-0.80	-0.0800	10.00	44+00.00 R I	K05788	10.00	0.0800	0.80		K05609	
K05618		-0.80	-0.0800	10.00	44+50.00 R I	K05738	10.00	0.0800	0.80		K05574	
K05566		-0.80	-0.0800	10.00	45+00.00 R I	K05688	10.00	0.0800	0.80		K05539	
K05514		-0.80	-0.0800	10.00	45+50.00 R I	K05638	10.00	0.0800	0.80		K05504	
K05462		-0.80	-0.0800	10.00	46+00.00 R I	K05588	10.00	0.0800	0.80		K05469	
K05410		-0.80	-0.0800	10.00	46+50.00 R I	K05538	10.00	0.0800	0.80		K05434	
K05358		-0.80	-0.0800	10.00	47+00.00 R I	K05488	10.00	0.0800	0.80		K05399	
K05306		-0.80	-0.0800	10.00	47+50.00 R I	K05438	10.00	0.0800	0.80		K05364	
K05254		-0.80	-0.0800	10.00	48+00.00 R I	K05388	10.00	0.0800	0.80		K05329	</



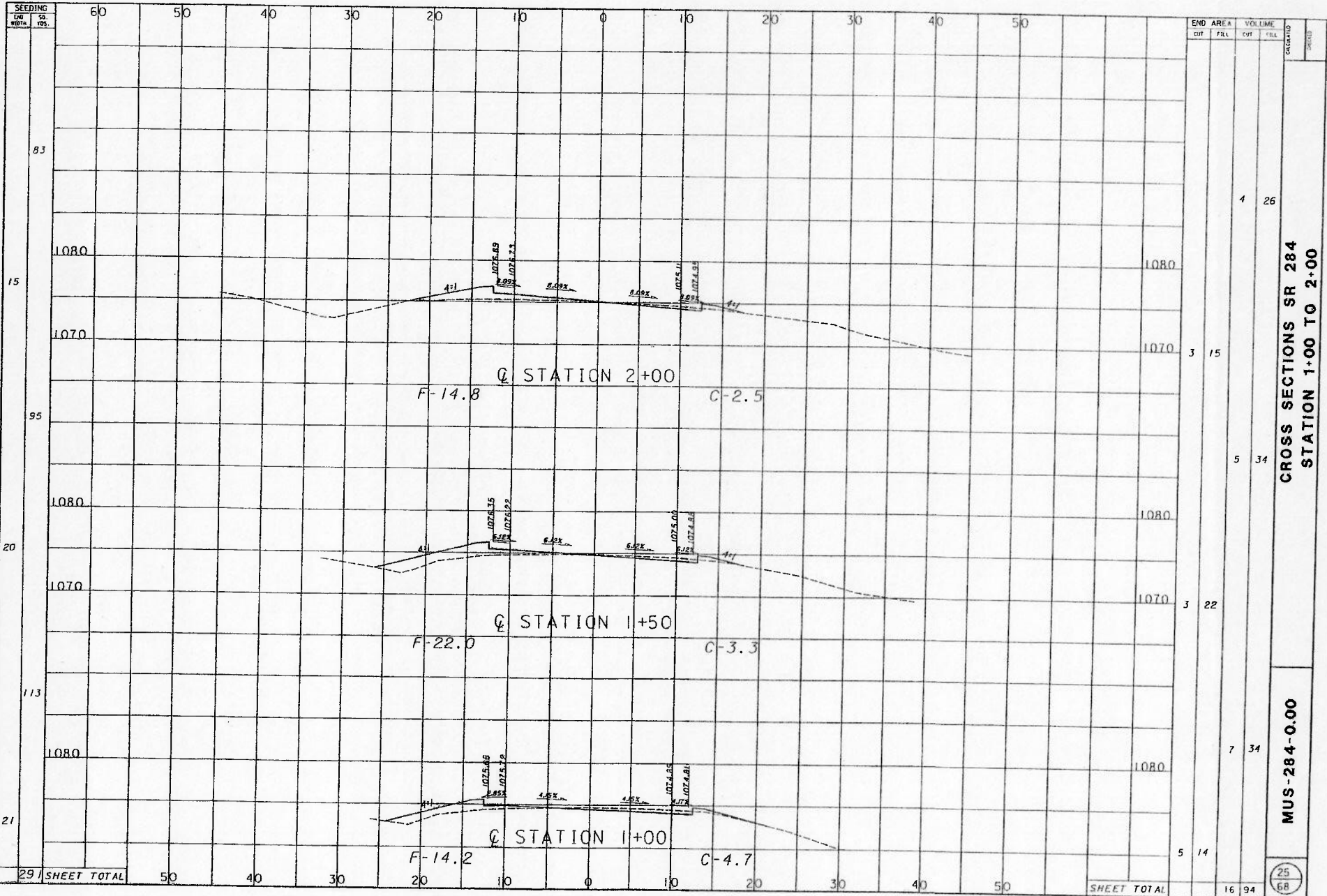
SEEDING		END AREA		VOLUME		CUBIC YARDS	FEET
END STATION	START STATION	CUT	FILL	CUT	FILL		
				12	17		
				9	5		
				22	5		
				15	1		
42	SHEET TOTAL	50	40	34	22		

CROSS SECTIONS SR 284
STATION 0+00 TO 0+05

MUS-284-0.00

MUS-284-0.00 11-27-02

M280XSSHT.DGN 11-27-02



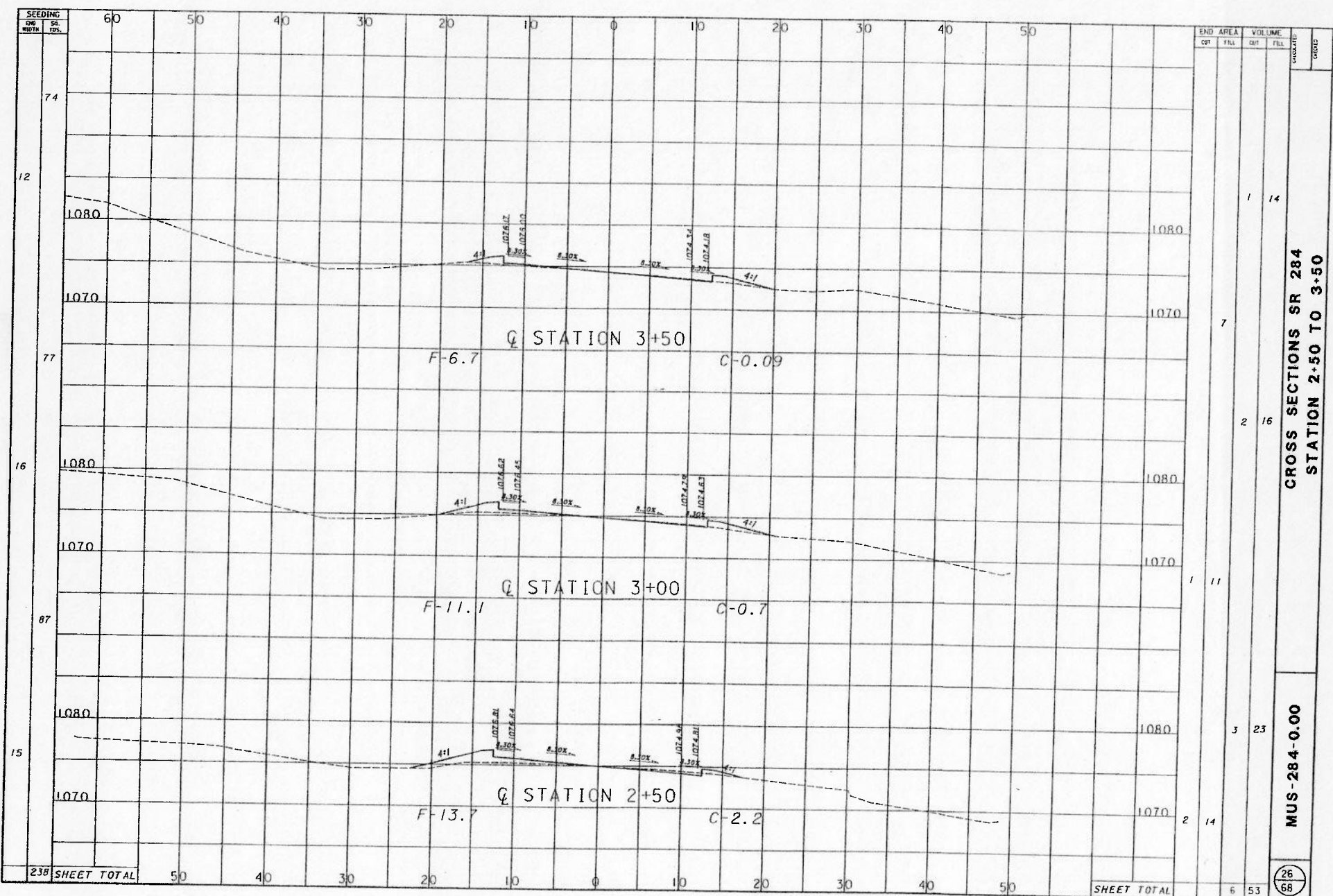
SEEDING	60	50	40	30	20	10	0	10	20	30	40	50
ENG												
FOOT												
105												
83												
15												
95												
20												
113												
21												
29	SHEET TOTAL											

END AREA	VOLUME		CLEARING	TOTAL
	CUT	FILL		
4	26			
3	15			
5	34			
3	22			
7	34			
5	14			
16	94			

CROSS SECTIONS SR 284
 STATION 1+00 TO 2+00

MUS-284-0.00

MPRAYSCHT DGN 11-27-02



CROSS SECTIONS SR 284
STATION 2+50 TO 3+50

MUS-284-0.00

26
68

SEEDING
SQ. YDS.
WIDTH

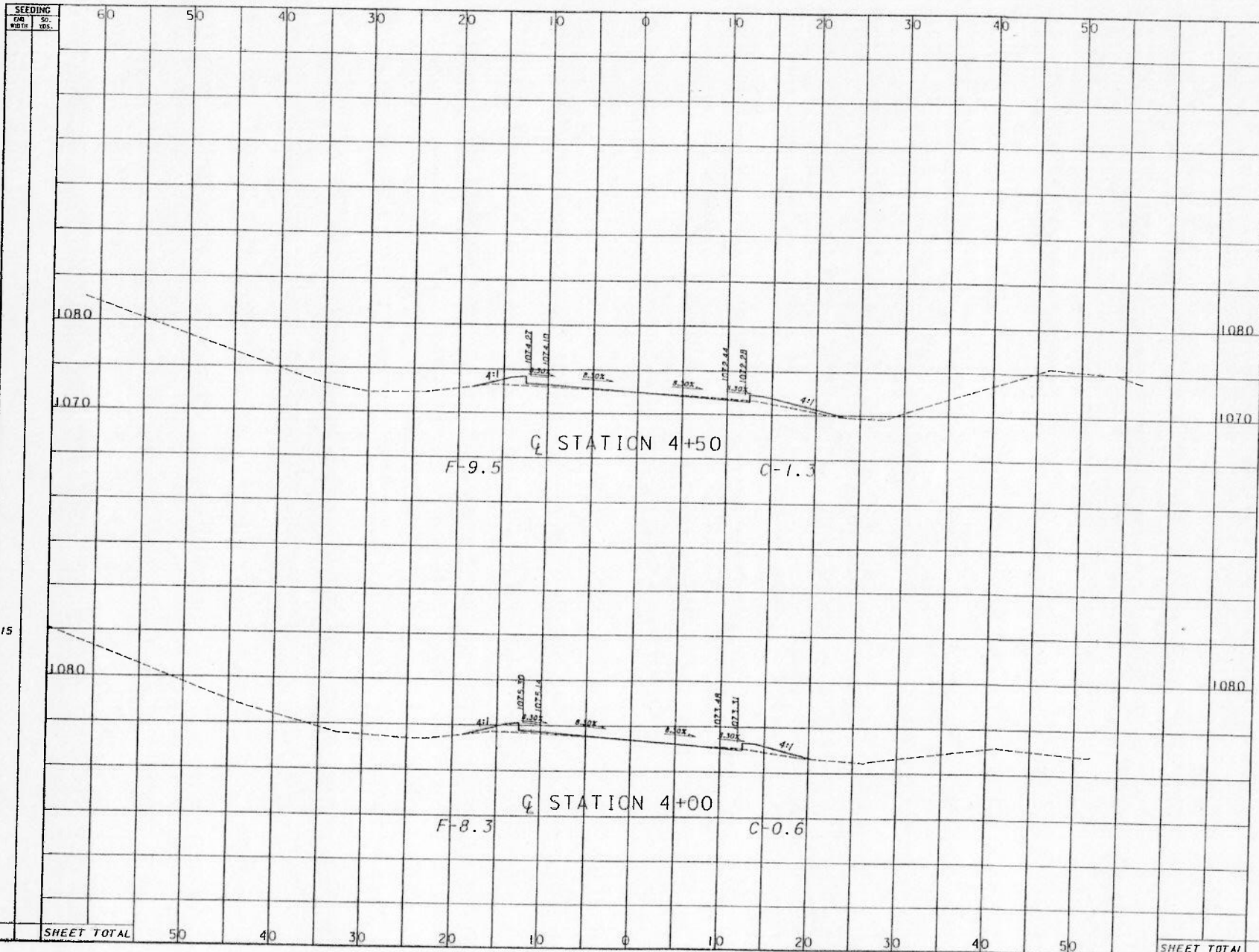
END AREA		VOLUME	
CUT	FILL	CUT	FILL
1	14	7	16
2	16	1	11
3	23	2	14
SHEET TOTAL		6	53

238 SHEET TOTAL

SHEET TOTAL

MPRANSNT.DGN 11-27-02

SEEDING
DIR SQ
WDR YDS.

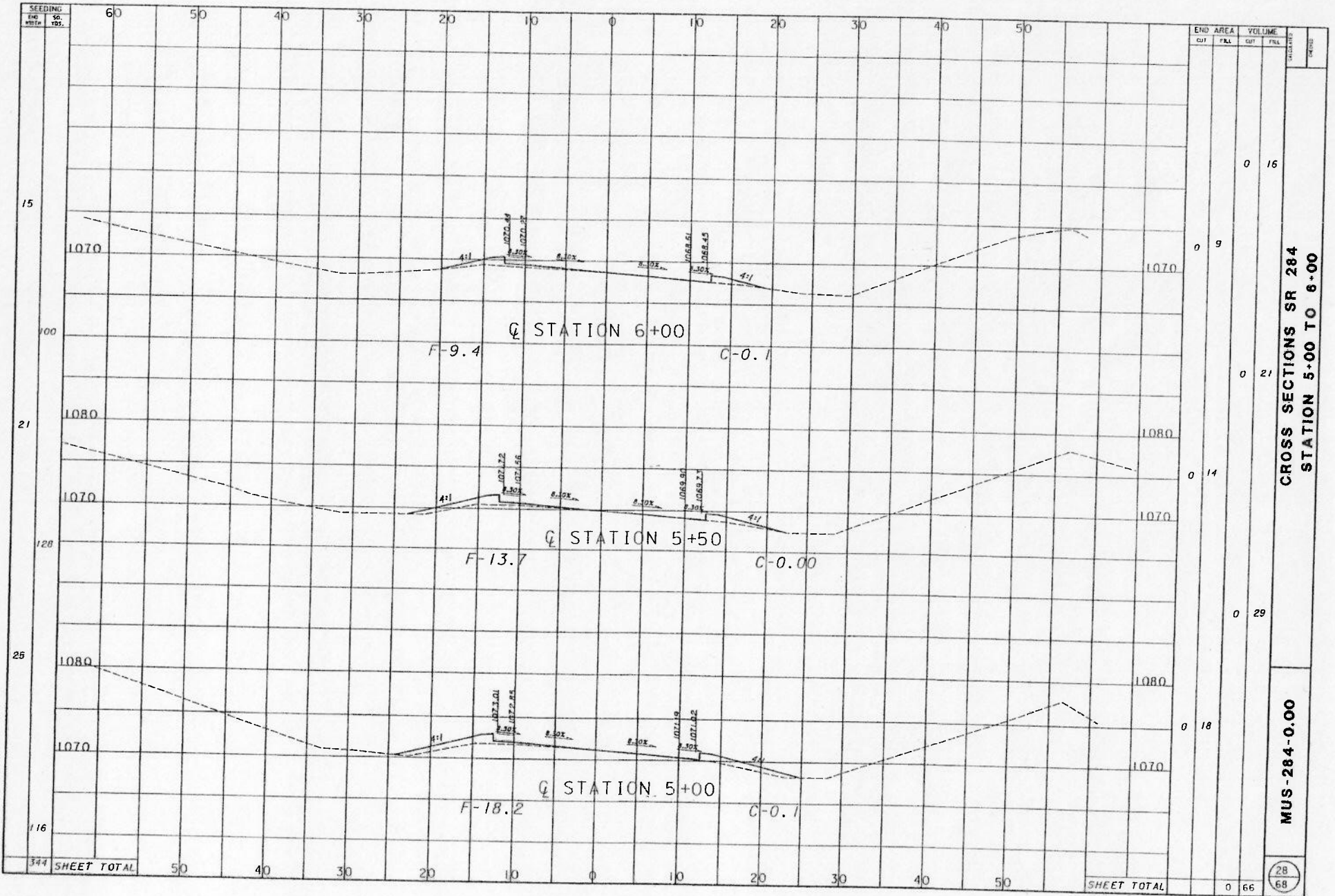


END CUT	AREA	VOL/IME		ACCOUNT	TOTAL
		CUT	FILL		
1	26				
1	10				
2	16				
1	8				
SHEET TOTAL		3	42		

CROSS SECTIONS SR 284
STATION 4+00 TO 4+50

MUS-284-0.00

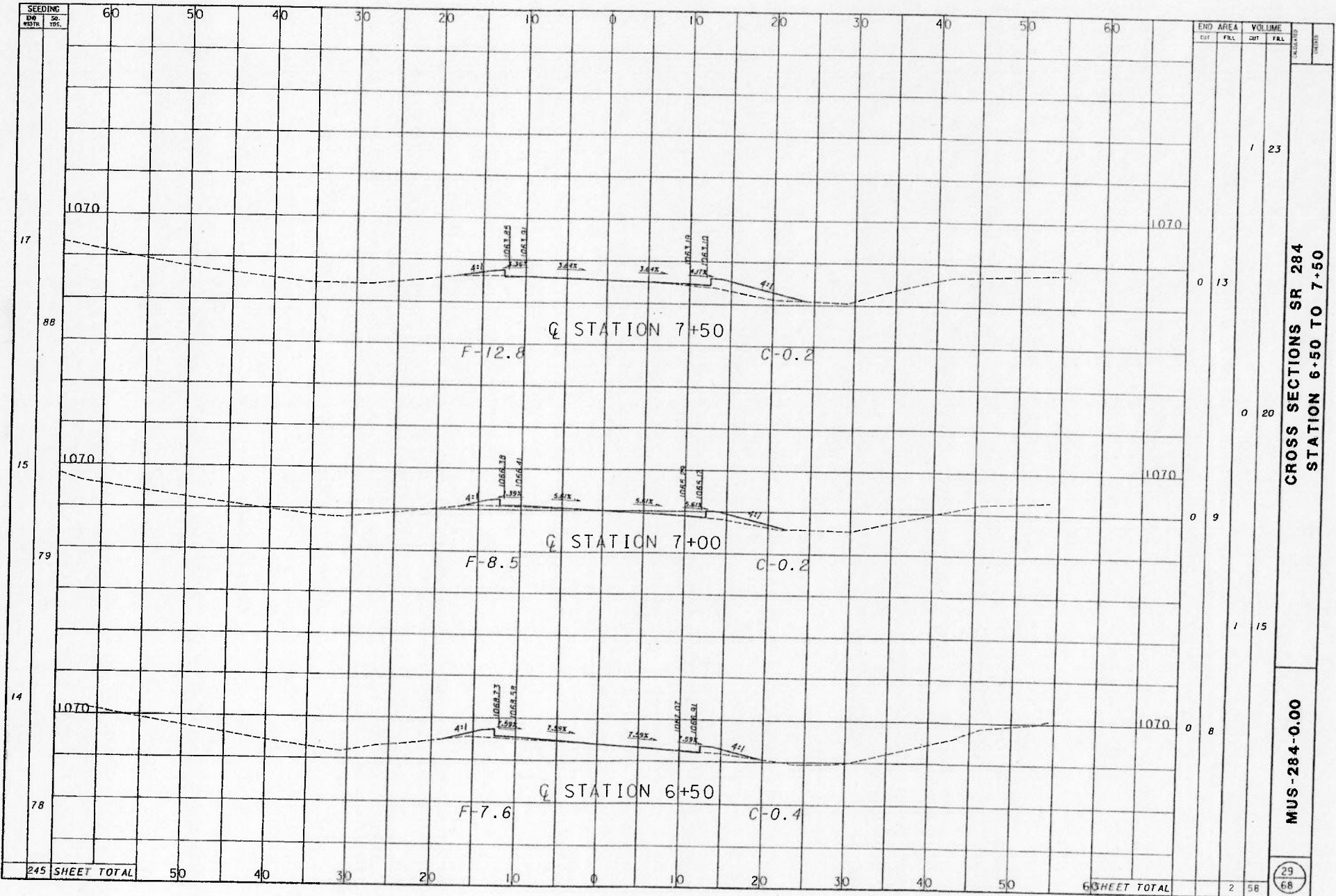
27
68



END STA	AREA		VOLUME	
	CUT	FILL	CUT	FILL
0+00	0	0	0	16
0+09	0	0	0	9
0+21	0	0	0	21
0+34	0	0	0	14
0+29	0	0	0	29
0+18	0	0	0	18
SHEET TOTAL	0	0	0	66

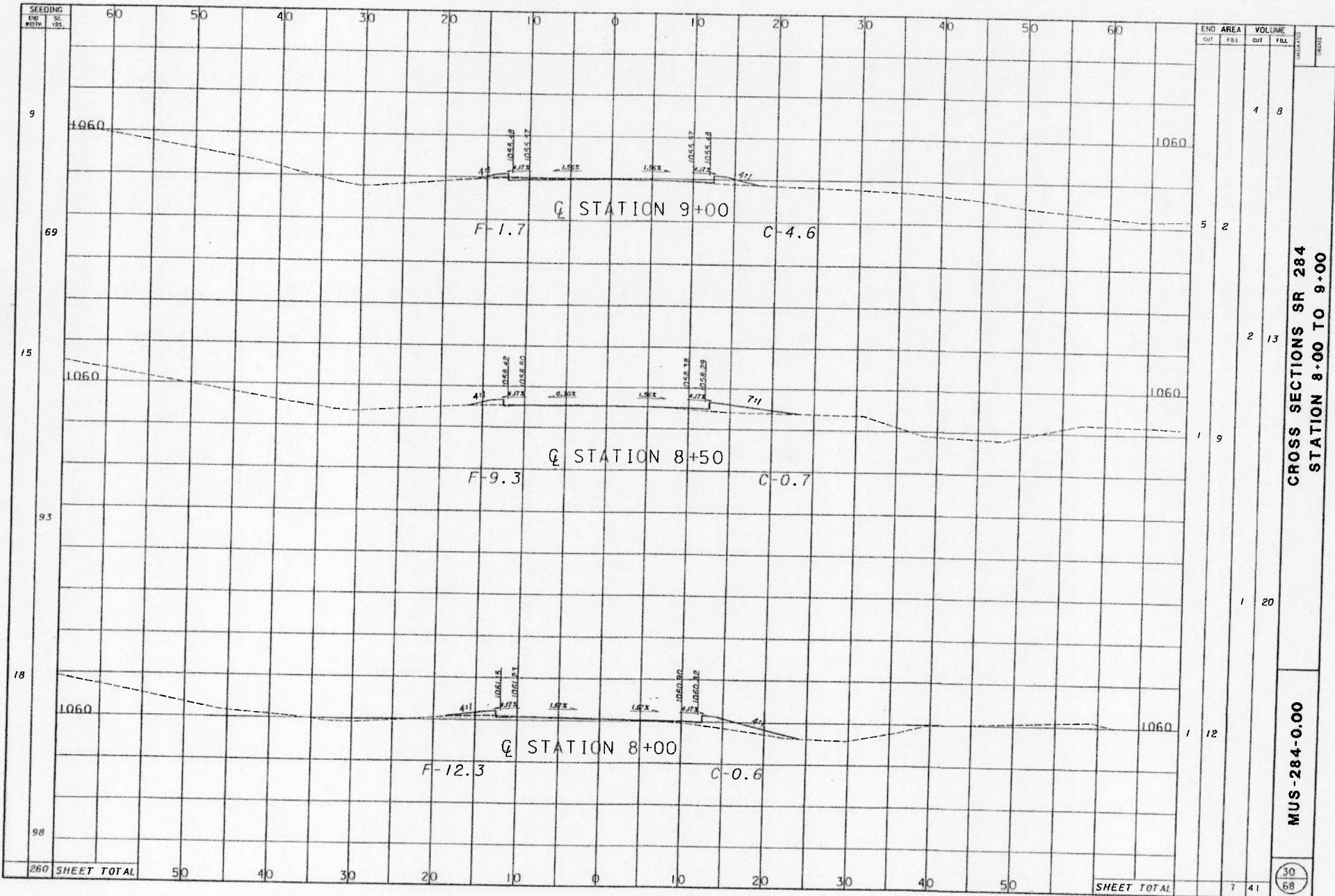
CROSS SECTIONS SR 284
STATION 5+00 TO 6+00

MUS-284-0.00



END STA	AREA		VOLUME	
	CUT	FILL	CUT	FILL
17	0	13	1	23
15	0	9	0	20
14	0	8	1	15
245 SHEET TOTAL	0	29	2	58

CROSS SECTIONS SR 284
STATION 6+50 TO 7+50
MUS-284-0.00

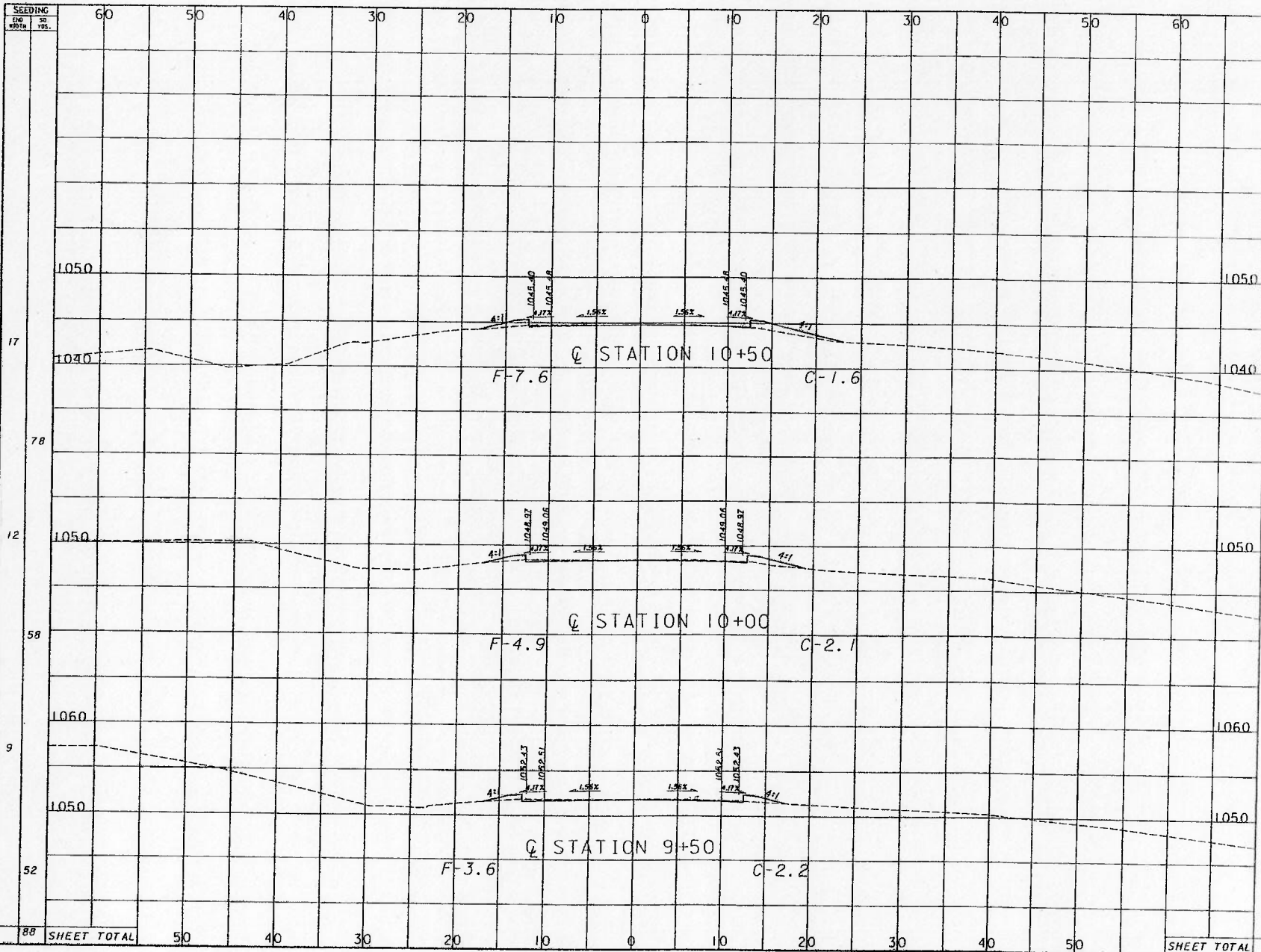


END	AREA		VOLUME	
	Cut	Fill	Cut	Fill
9			4	8
69			5	2
15			2	13
93			1	9
18			1	20
98			1	12
SHEET TOTAL			7	41

**CROSS SECTIONS SR 284
 STATION 8+00 TO 9+00**

MUS-284-0.00

M284XSSHT.DGN 11-27-02



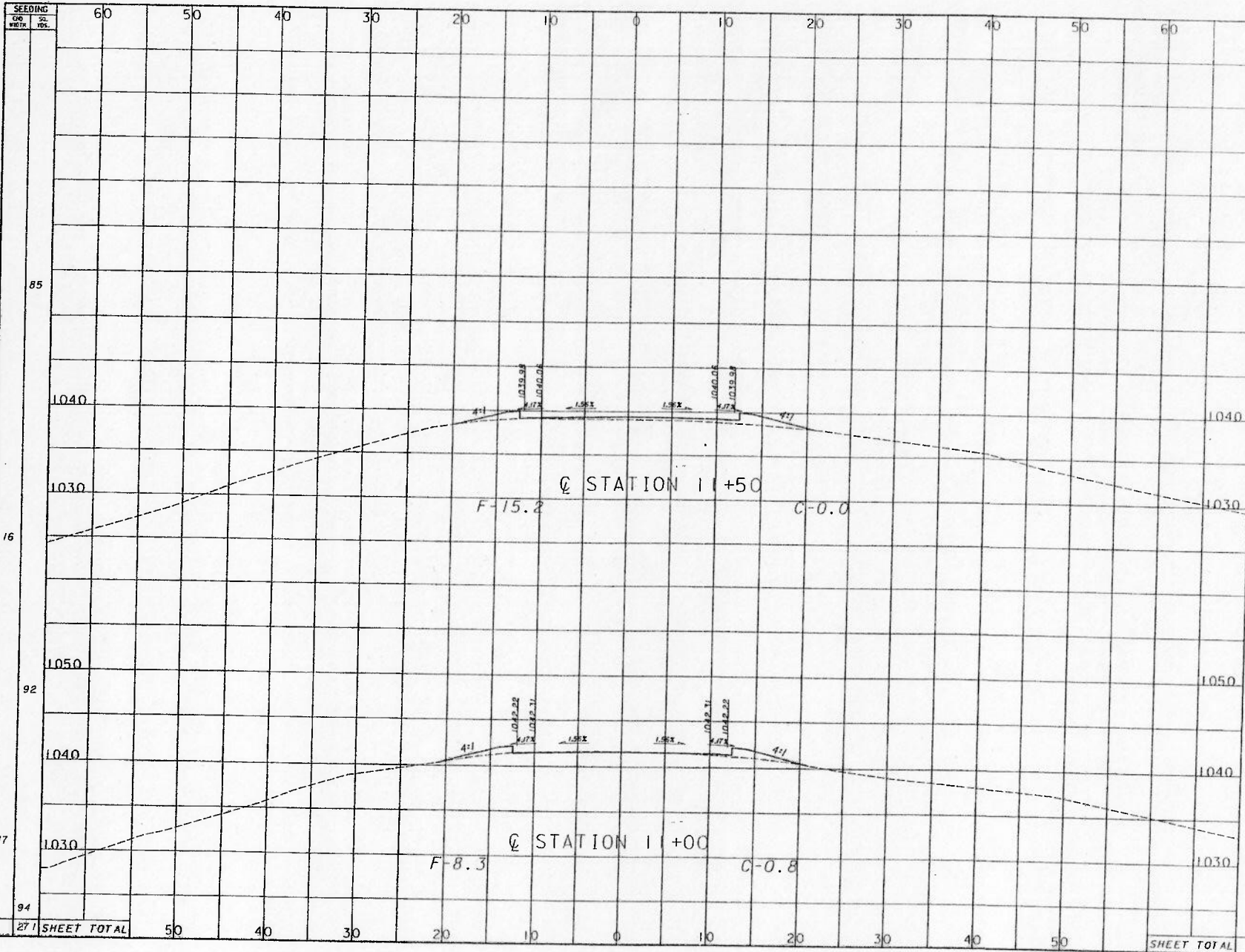
END CUT	AREA		VOLUME		TOTAL CUT	TOTAL FILL
	FILL	CUT	CUT	FILL		
2			15		15	
2	8				8	
3		12				12
2	5				5	
4		8				8
2	4				4	
9		35			35	

**CROSS SECTIONS SR 284
STATION 9+50 TO 10+50**

MUS-284-0.00

31
68

SEEDING
 06 52
 1957K 195.

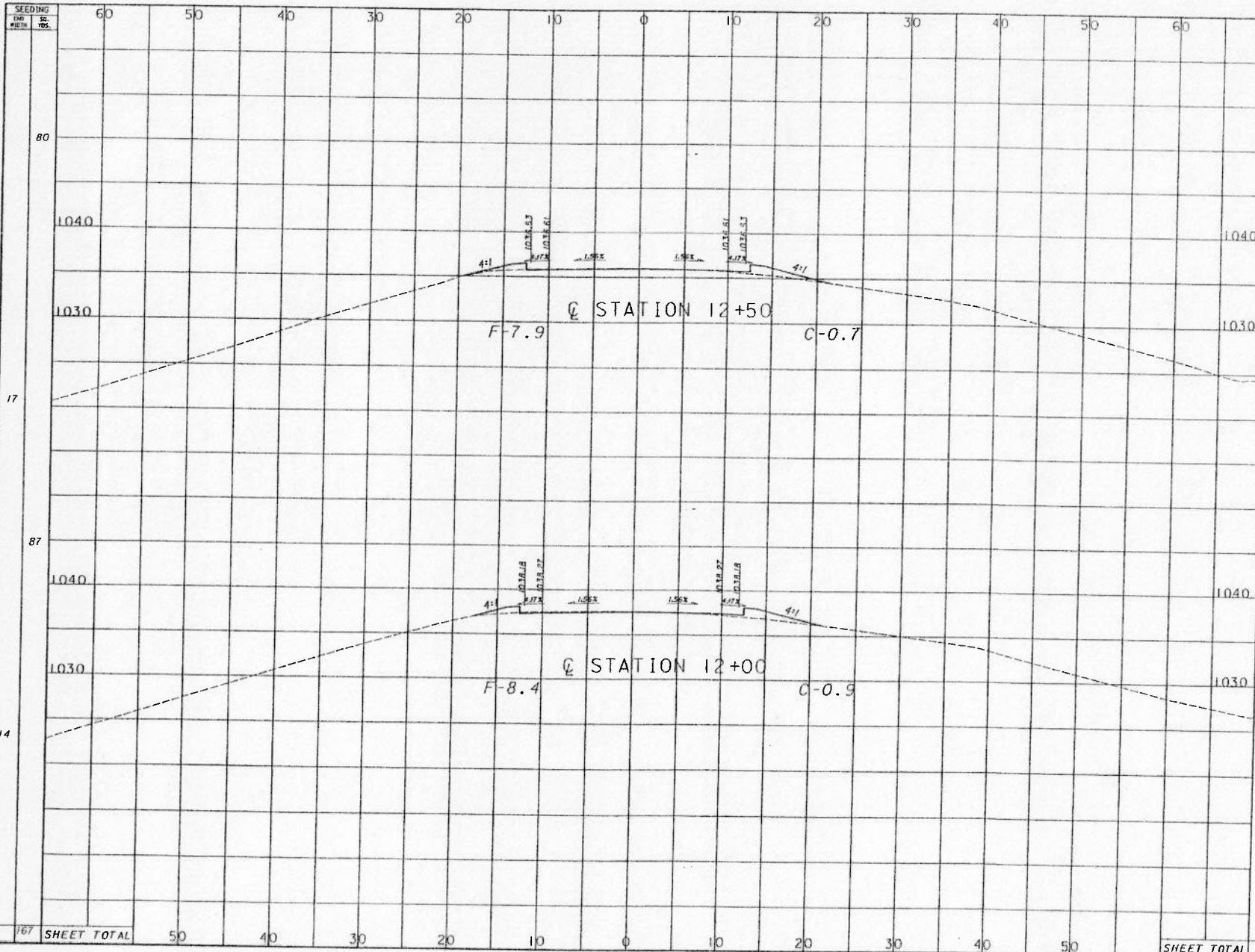


NO.	FWD AREA		VOLUME		CALCULATED	CHECKED
	sq. ft.	cu. yd.	cu. yd.	cu. yd.		
1			22			
0			15			
1			22			
1			8			
SHEET TOTAL		2	44			

CROSS SECTIONS SR 284
 STATION 11+00 TO 11+50

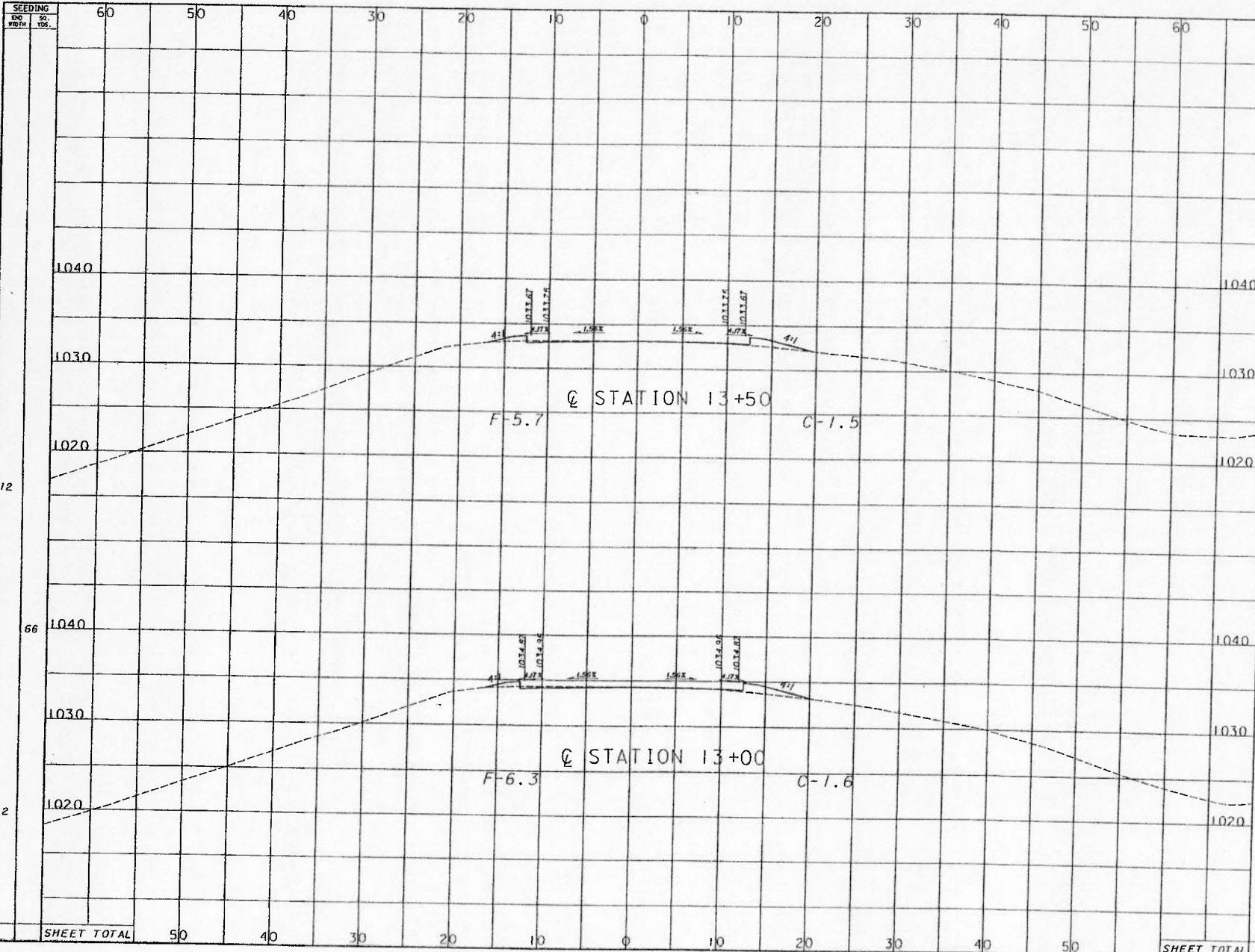
MUS-284-0.00

MP24845CSHT.DGN 11-21-09



SEEDING		END AREA		VOLUME		CROSSING	CROSSING
EST.	SO.	CUT	FILL	CUT	FILL		
17		1	8	2	13	CROSS SECTIONS SR 284 STATION 12+00 TO 12+50	MUS-284-0.00
87		1	8	2	15		
14		4	28				
167	SHEET TOTAL						33 68

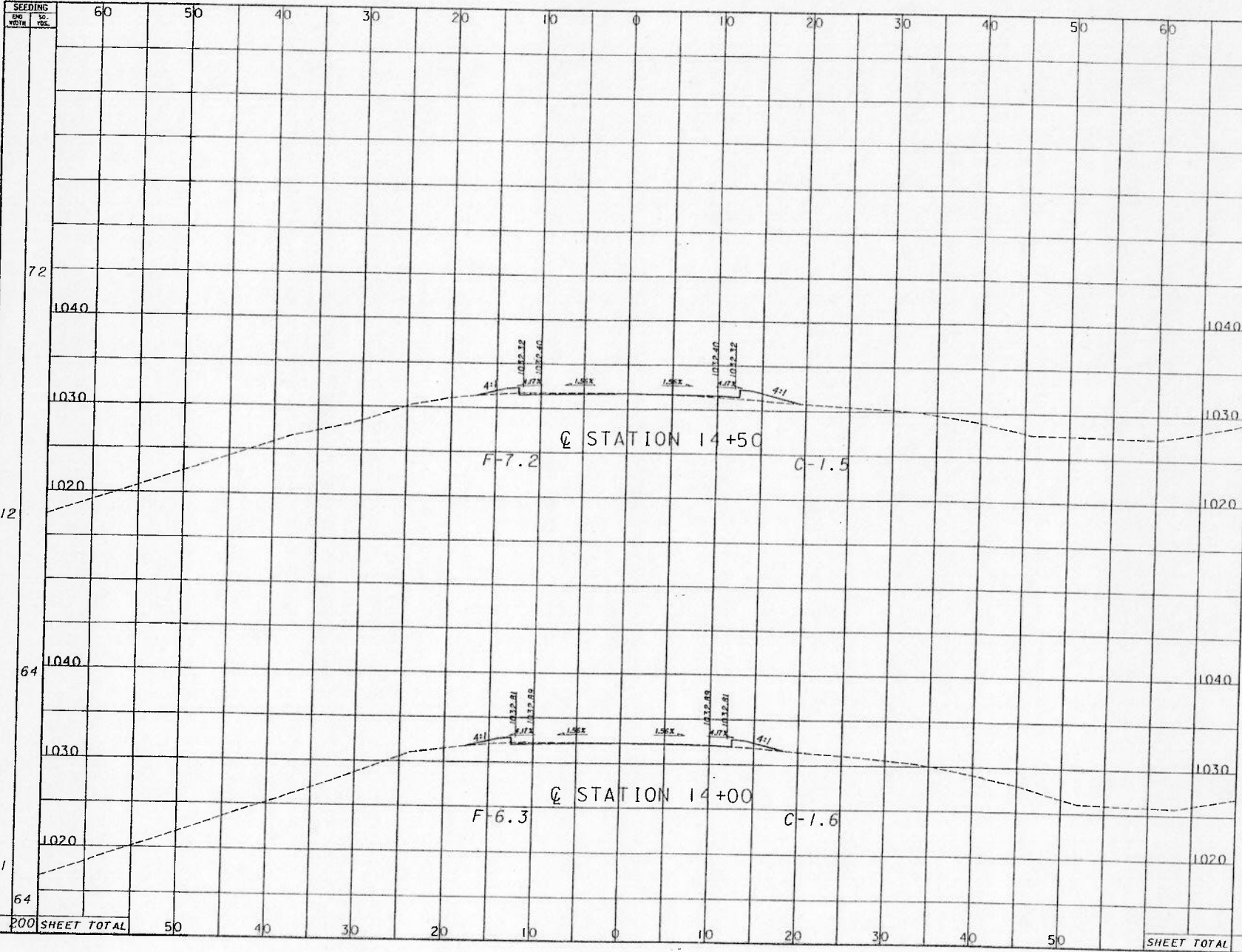
M28XSSHT.DGN II-27-02



END STA	AREA	VOLUME		CALCULATED	CHECKED
		CUT	FILL		
13+50	3	11			
13+00	3	11			
SHEET TOTAL	6	22			

CROSS SECTIONS SR 284
STATION 13+00 TO 13+50

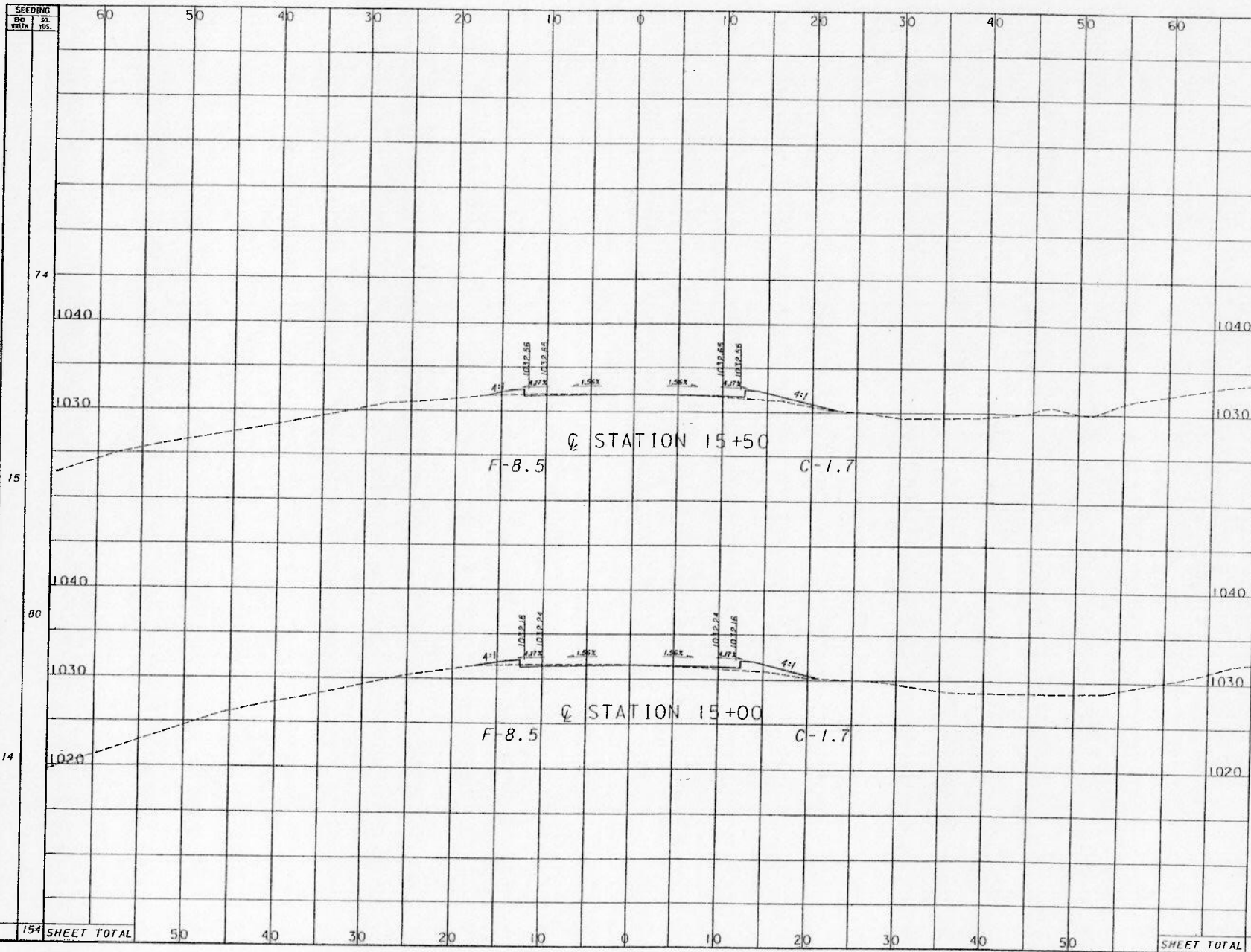
MUS-284-0.00



END AREA		VOLUME		CALCULATED	CHECKED
CUT	FILL	CUT	FILL		
3	15	2	7		
3	13	6	2		
6	28				

CROSS SECTIONS SR 284
 STATION 14+00 TO 14+50

MUS-284-0.00

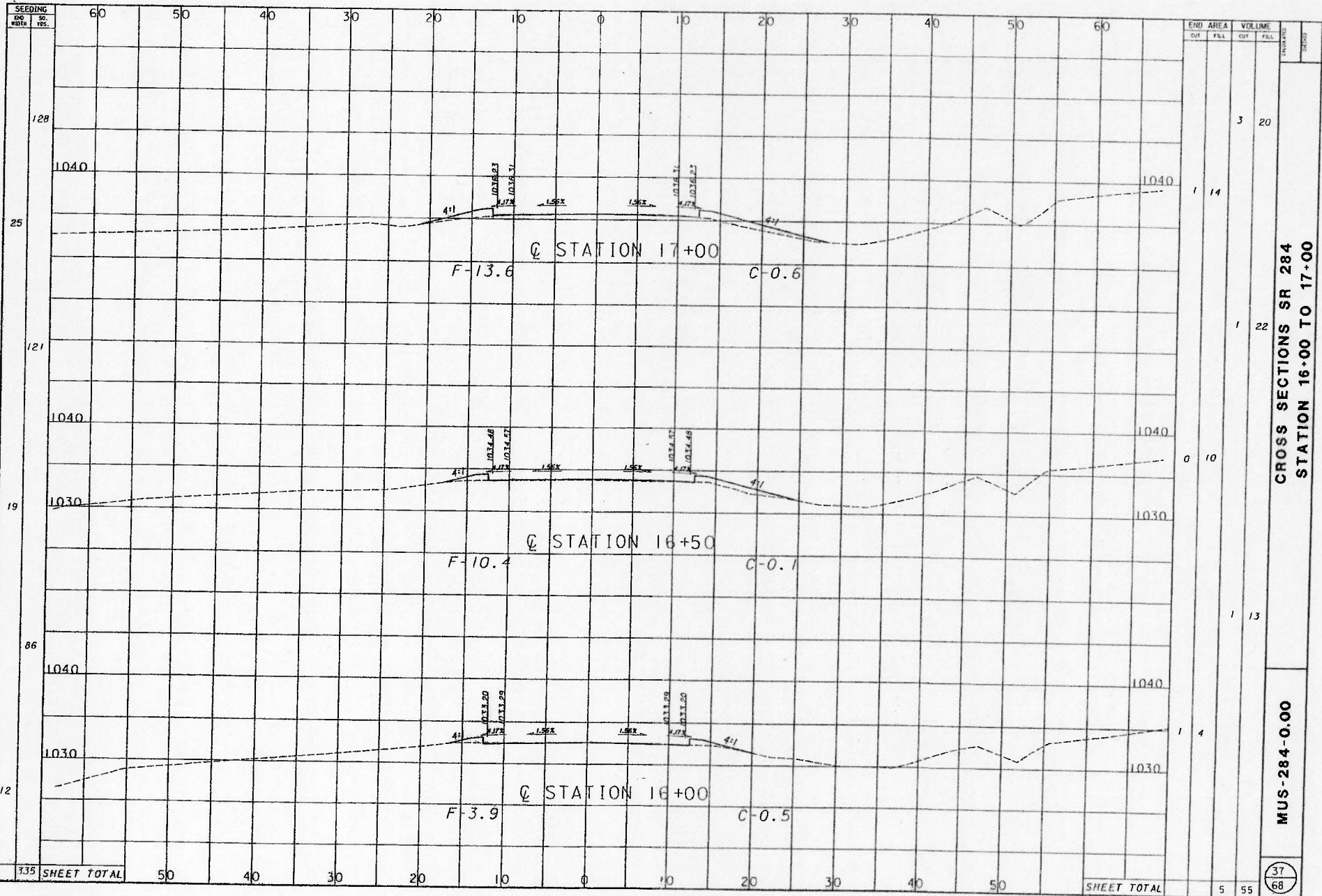


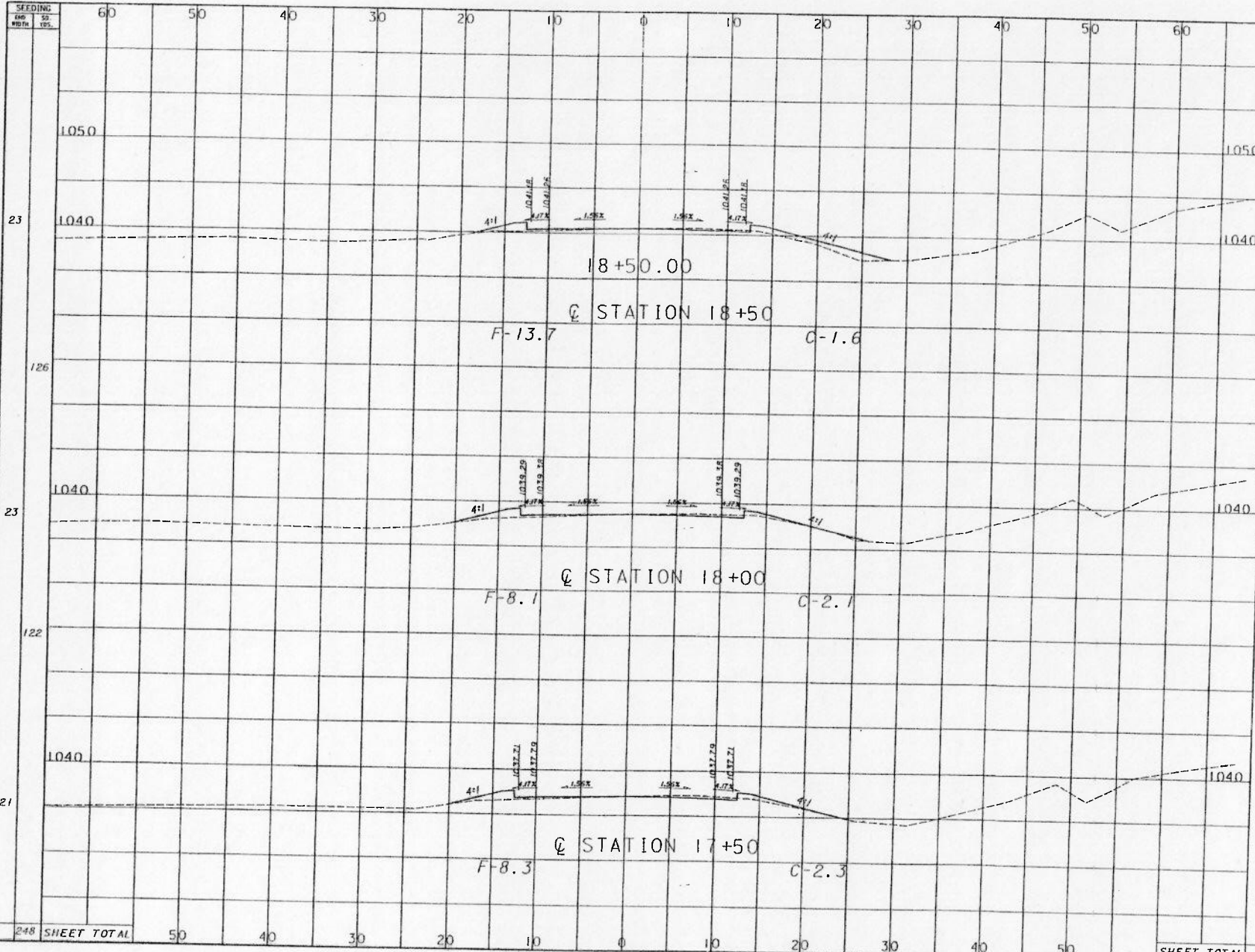
END AREA		VOLUME		INCLINED	GRADE
CUT	FILL	CUT	FILL		
		2	11		
9	2				
		3	16		
2	9				
5	27				

**CROSS SECTIONS SR 284
 STATION 15+00 TO 15+50**

MUS-284-0.00

36
68

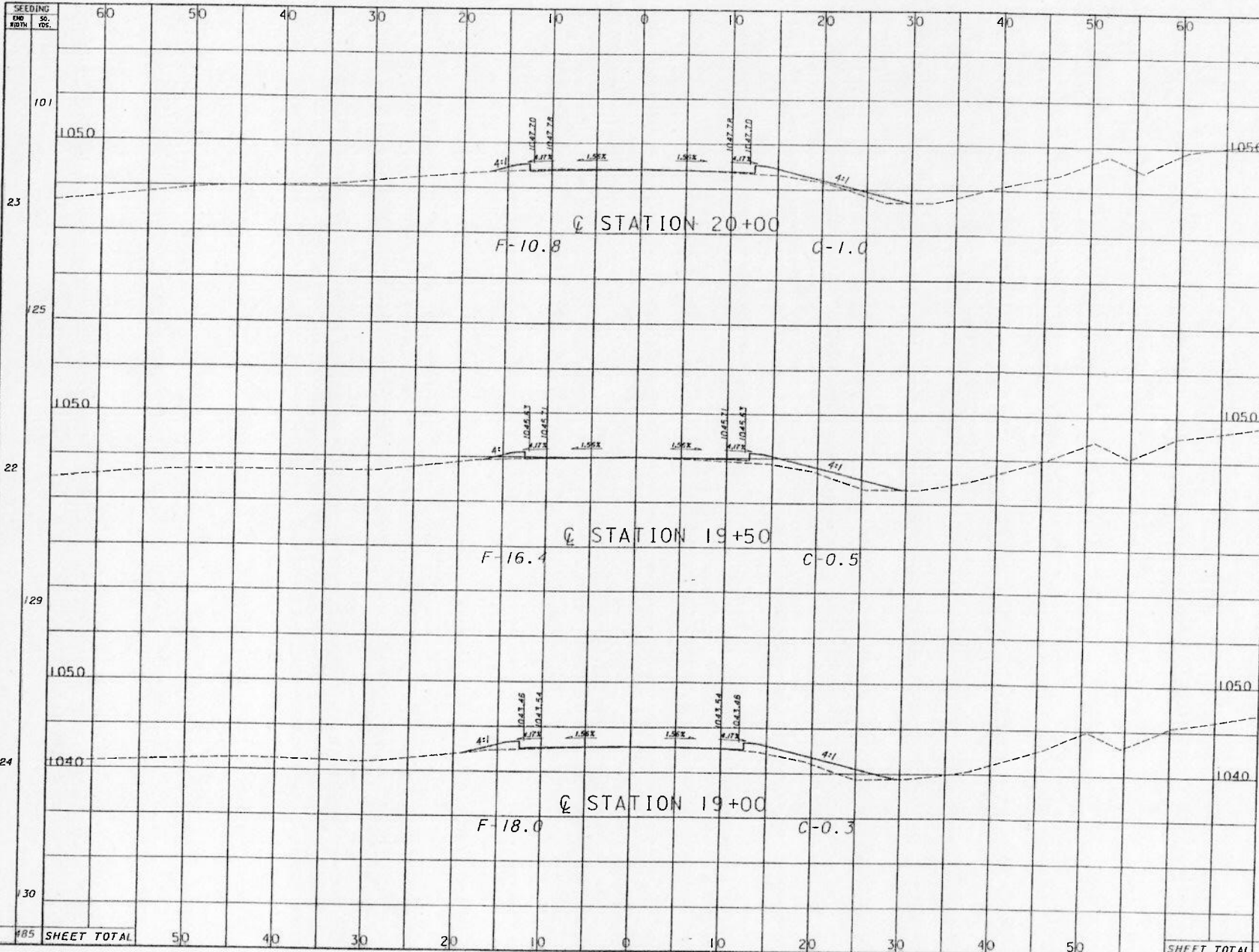




END STA	AREA		VOLUME	
	CUT	FILL	CUT	FILL
18+50	2	14	2	29
18+00	2	8	3	20
17+50	2	8	4	15
TOTAL	6	30	13	64

**CROSS SECTIONS SR 284
STATION 17+50 TO 18+50**

MUS-284-0.00

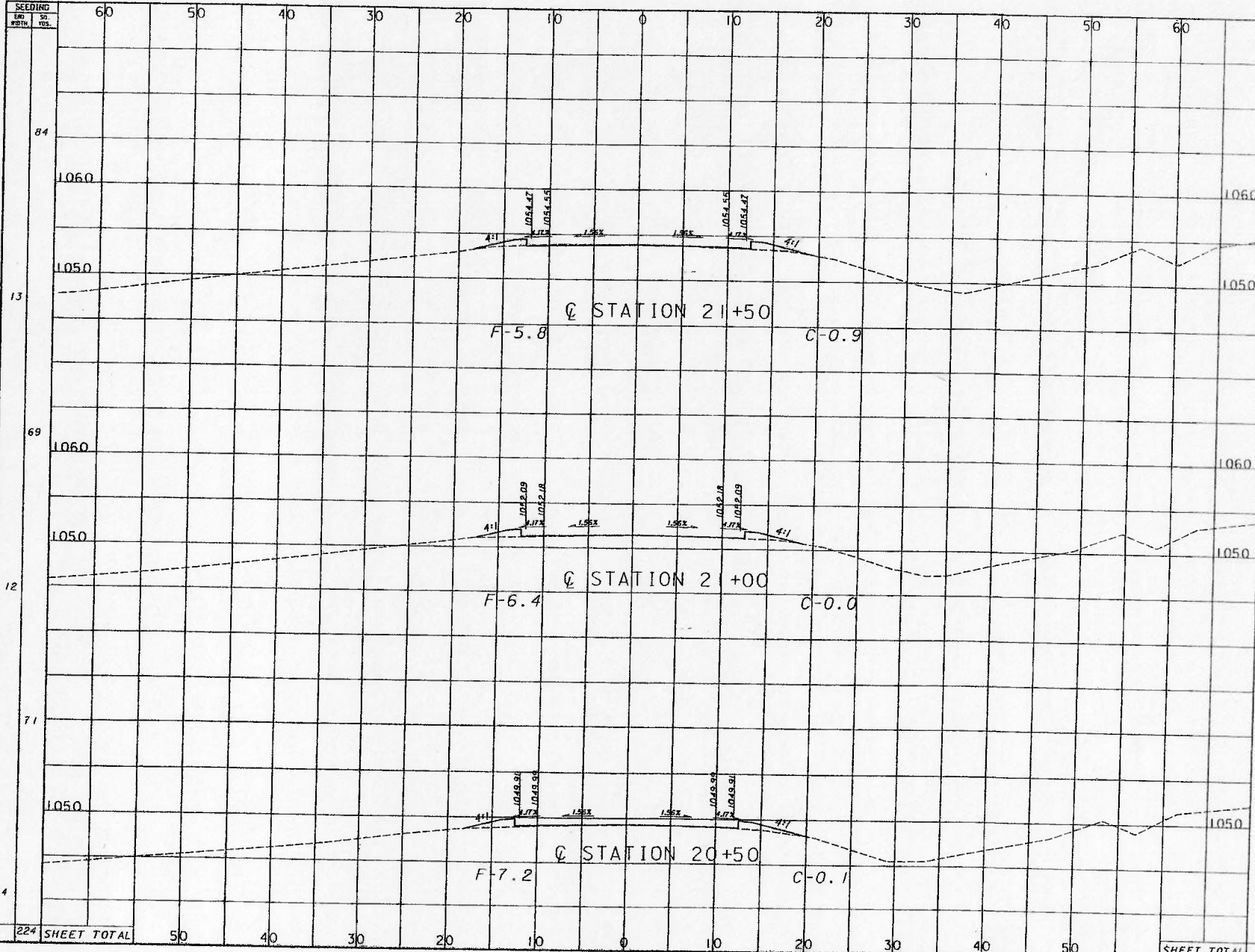


END CUT	AREA		VOLUME		SHEET
	CUT	FILL	CUT	FILL	
1			17		
1			11		
1			25		
1			16		
1			32		
0			18		
SHEET TOTAL		3	74		

CROSS SECTIONS SR 284
STATION 19+00 TO 20+00

MUS-284-0.00

M284XSHT.DGN IP-27-02



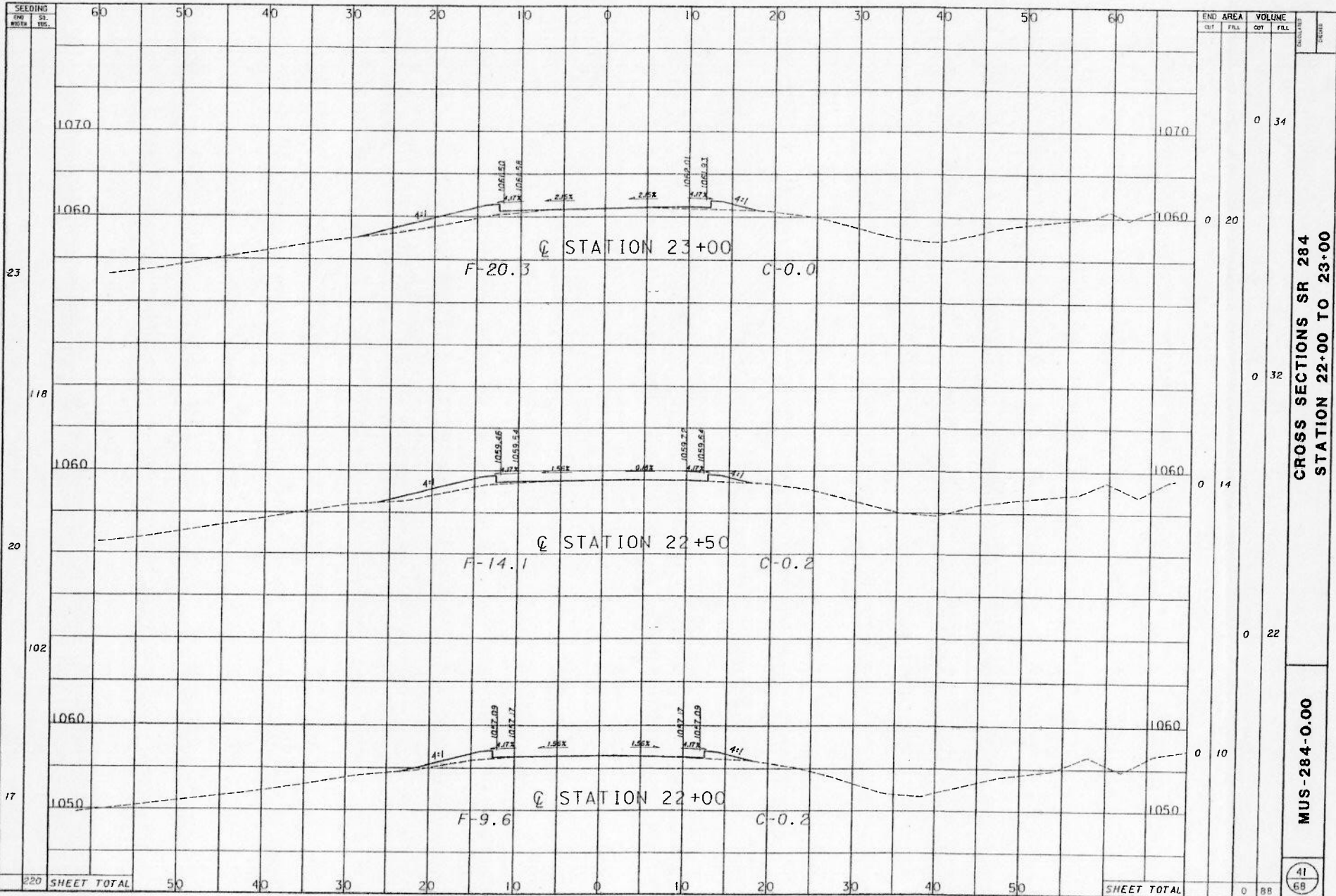
END CUT	AREA FILL	VOLUME		CALCULATED	CHECK
		CUT	FILL		
1	14				
1	9				
1	11				
0	6				
0	13				
0	7				
SHEET TOTAL		2	38		

CROSS SECTIONS SR 284
STATION 20+50 TO 21+50

MUS-284-0.00

40
68

M284YSSHT.DGN 11-27-02



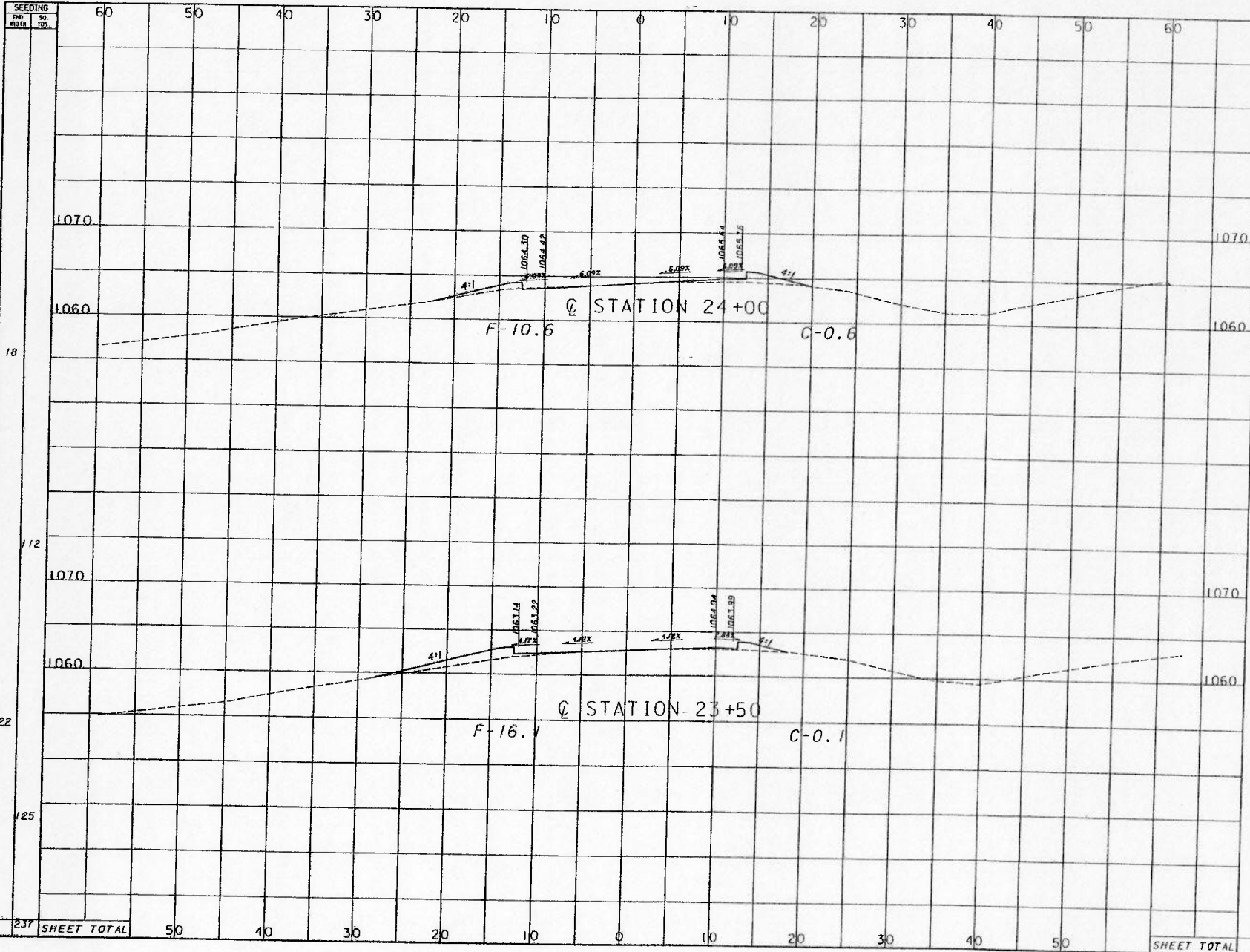
SEEDING END NO. 1	SS. YES	STATION						END 1017	AREA FILL	VOLUME		CALCULATED DEGREE					
		60	50	40	30	20	10			0	10		20	30	40	50	60
										0	34						
										0	20						
										0	32						
										0	14						
										0	22						
220		SHEET TOTAL														0	88

CROSS SECTIONS SR 284
STATION 22+00 TO 23+00

MUS-284-0.00

41
68

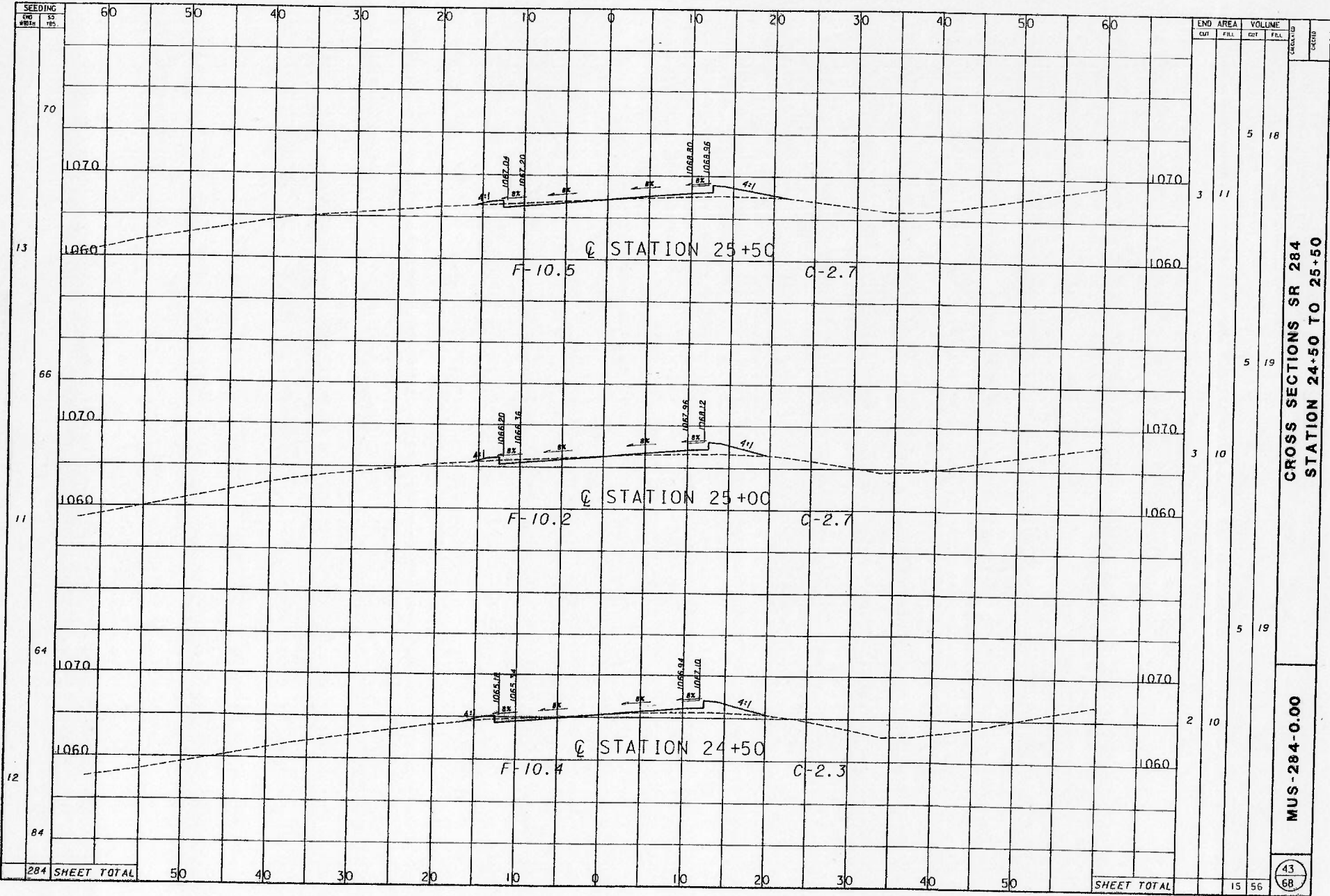
SEEDING	
sq. yds.	sq. ft.



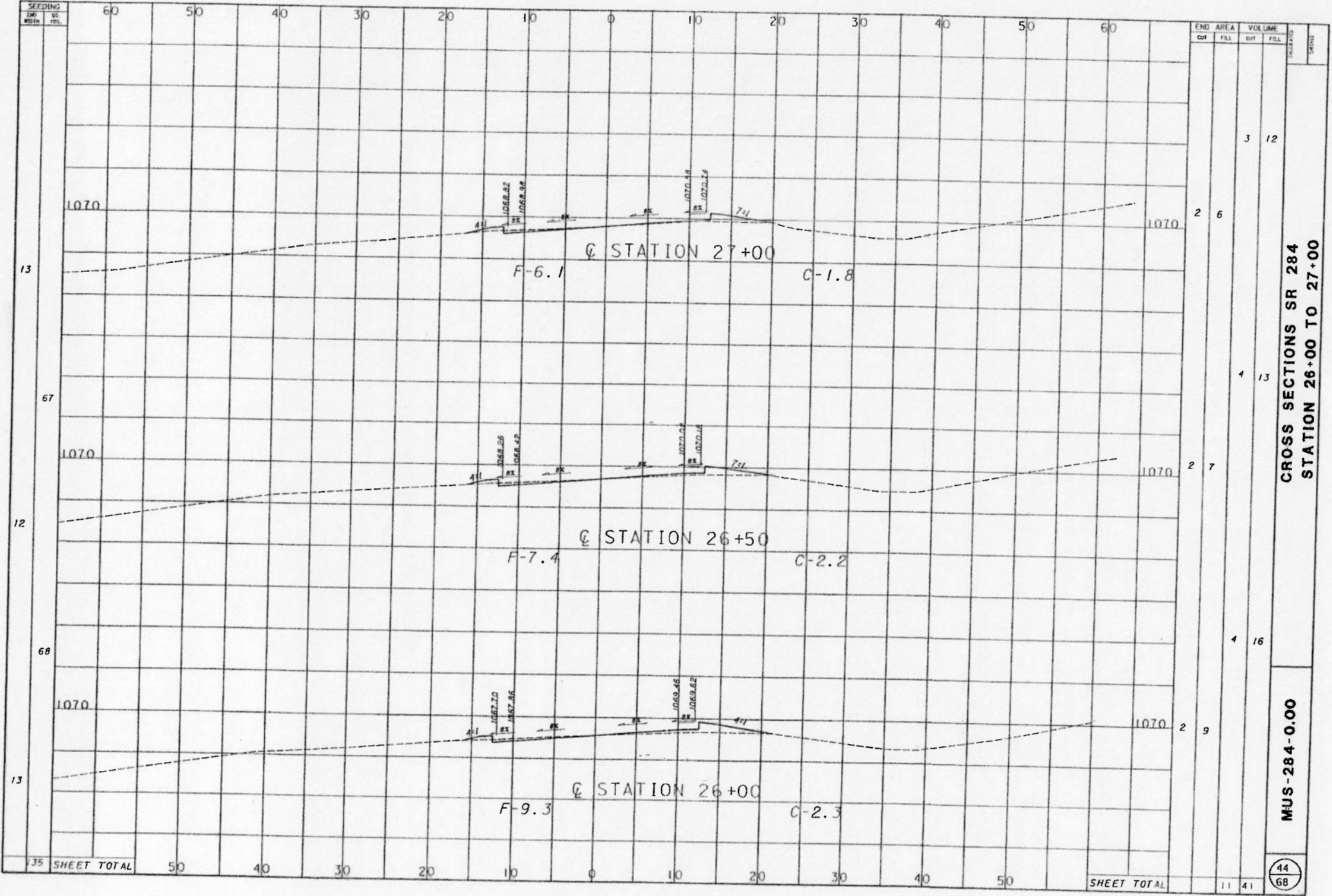
END STA	AREA		VOLUME	
	CUT	FILL	CUT	FILL
18	3	19	1	11
112	1	25	0	16
22	4	44	4	44

CROSS SECTIONS SR 284
STATION 23+50 TO 24+00

MUS-284-0.00



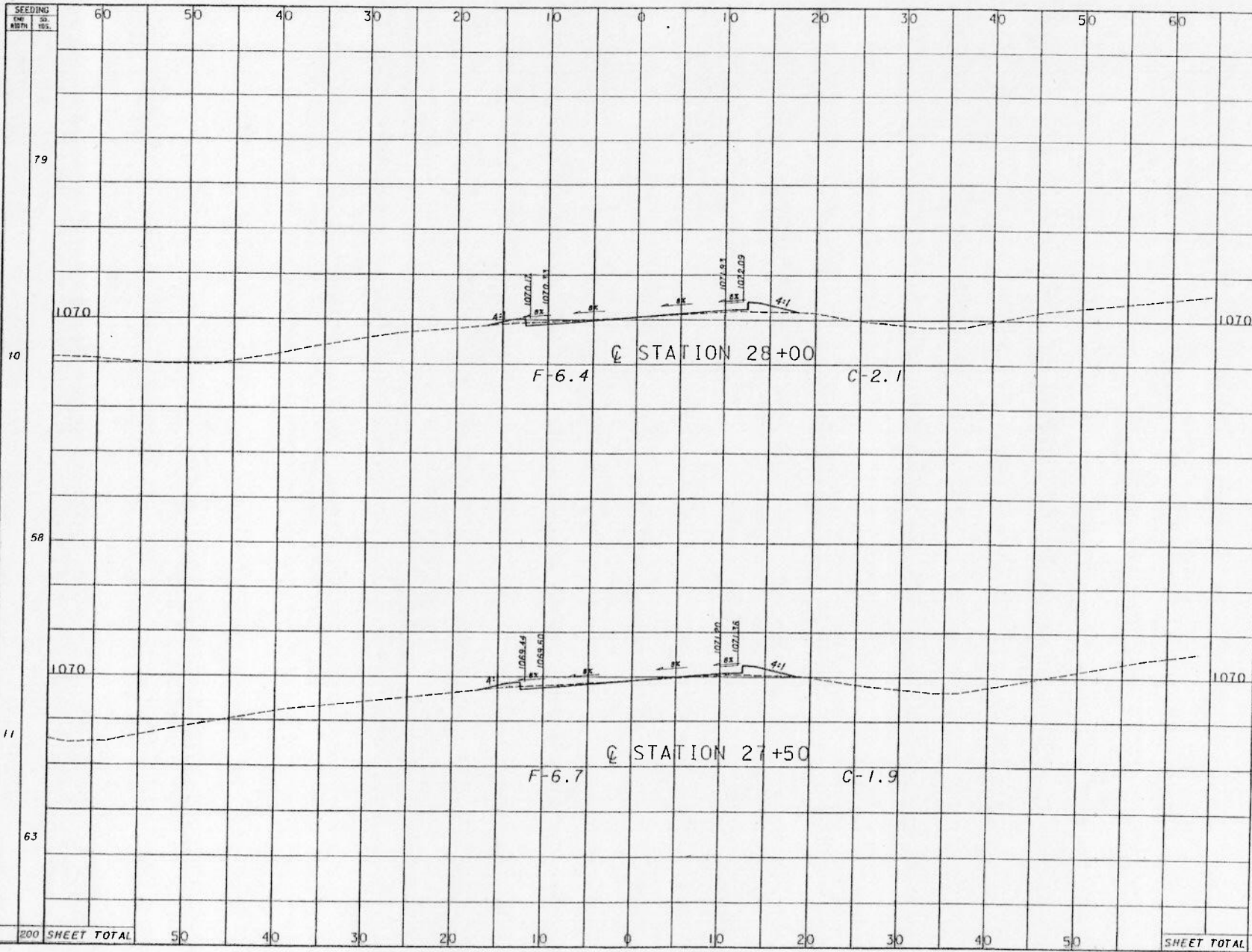
M284\SSHT.DWG 11-27-02



SEEDING		STATIONING												END		AREA		VOLUME		TOTAL				
100%	50%	60	50	40	30	20	10	0	10	20	30	40	50	60	cut	fill	cut	fill	cut	fill	cut	fill		
															2	6	3	12						
															4	13	4	13						
															2	7	4	16						
															2	9								
135	SHEET TOTAL	50	40	30	20	10	0	10	20	30	40	50	60			11	41							

CROSS SECTIONS SR 284
STATION 26+00 TO 27+00

MUS-284-0.00



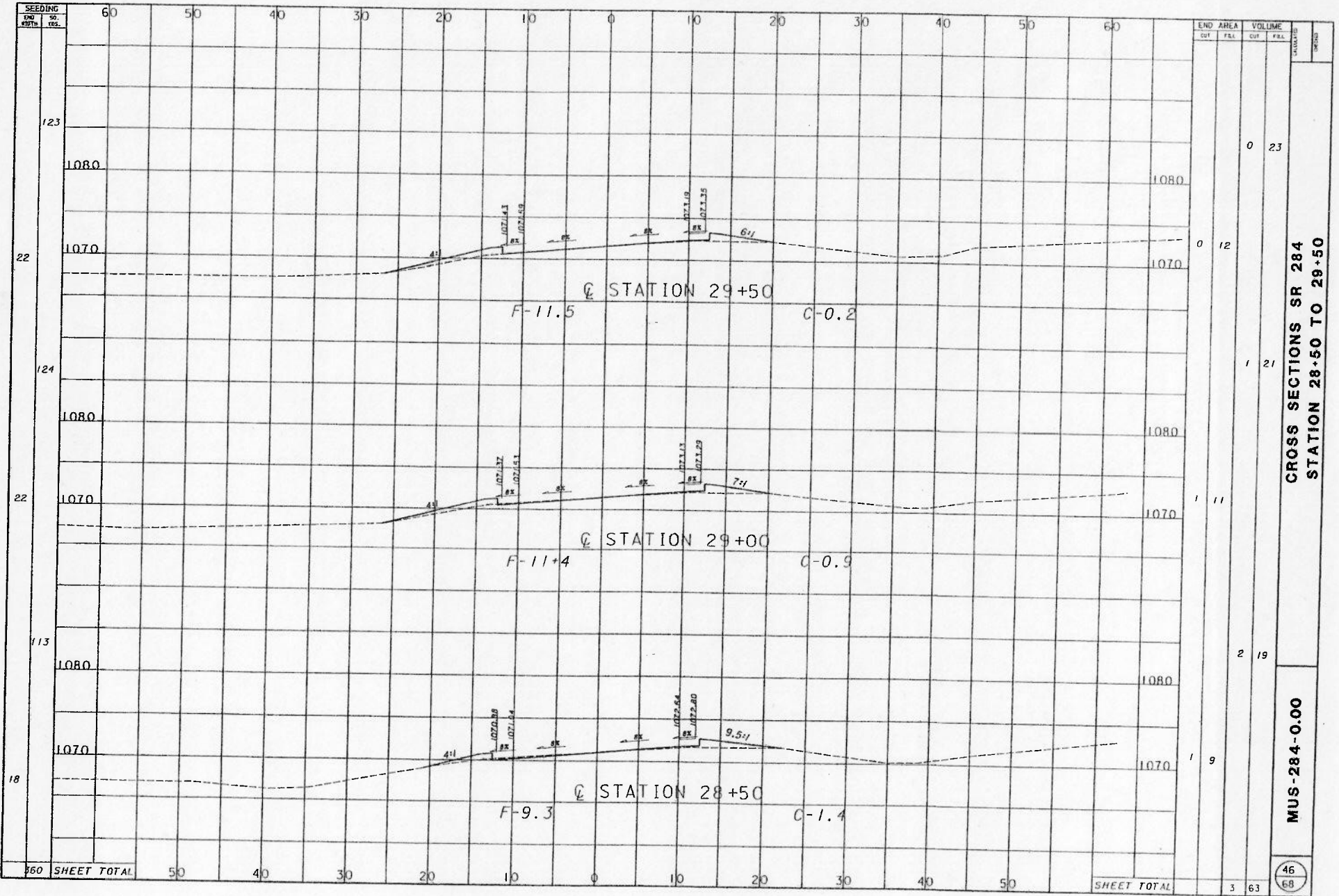
END AREA		VOLUME		CROSS-SECTION	STATION
CUT	FILL	CUT	FILL		
		3	15		
2	6	4	12		
2	7				
SHEET TOTAL		7	27		

**CROSS SECTIONS SR 284
 STATION 27+50 TO 27+00**

MUS-284-0.00

45
68

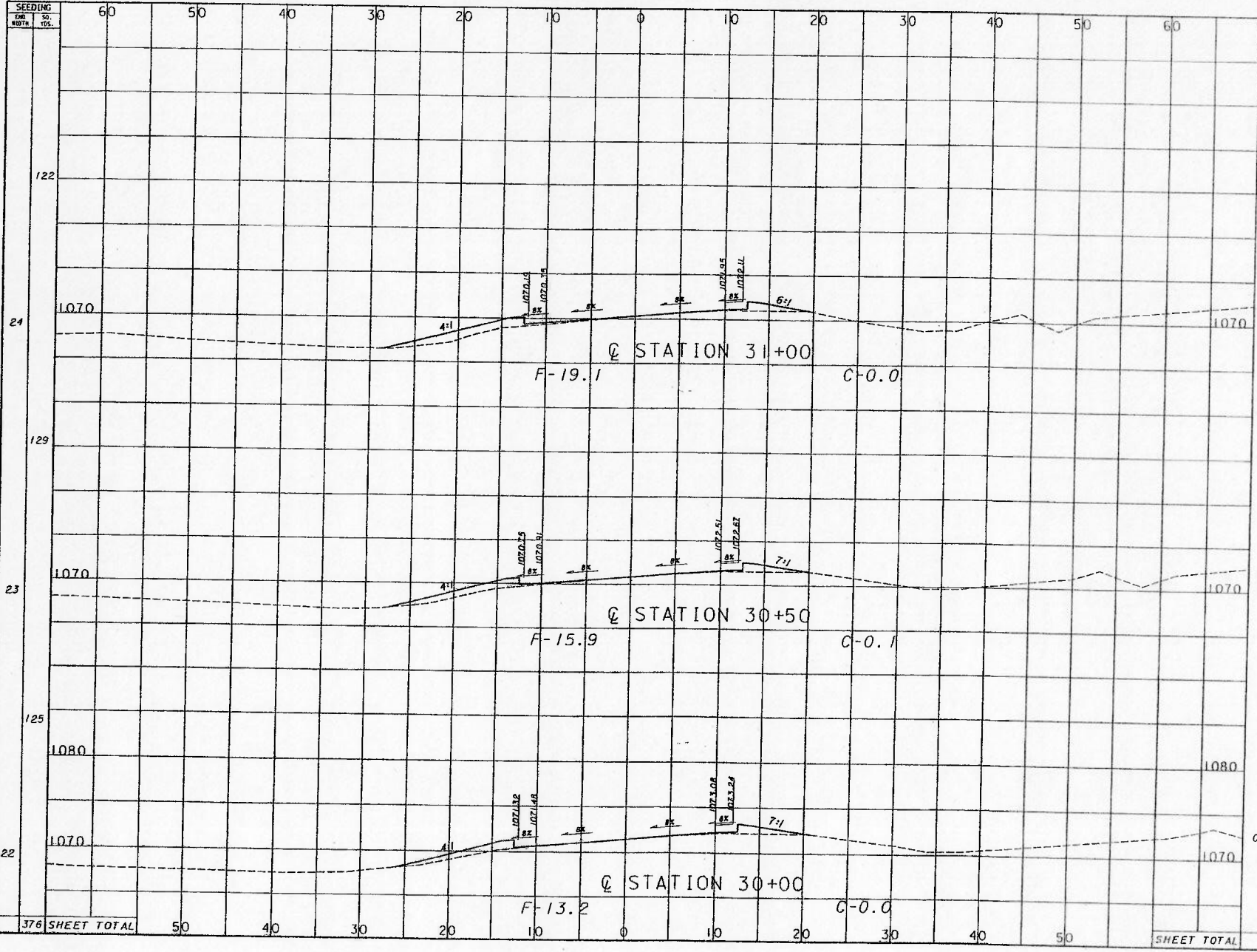
MP284XSSHT.DGN 11-27-68



CROSS SECTIONS SR 284
STATION 28+50 TO 29+50

MUS-284-0.00

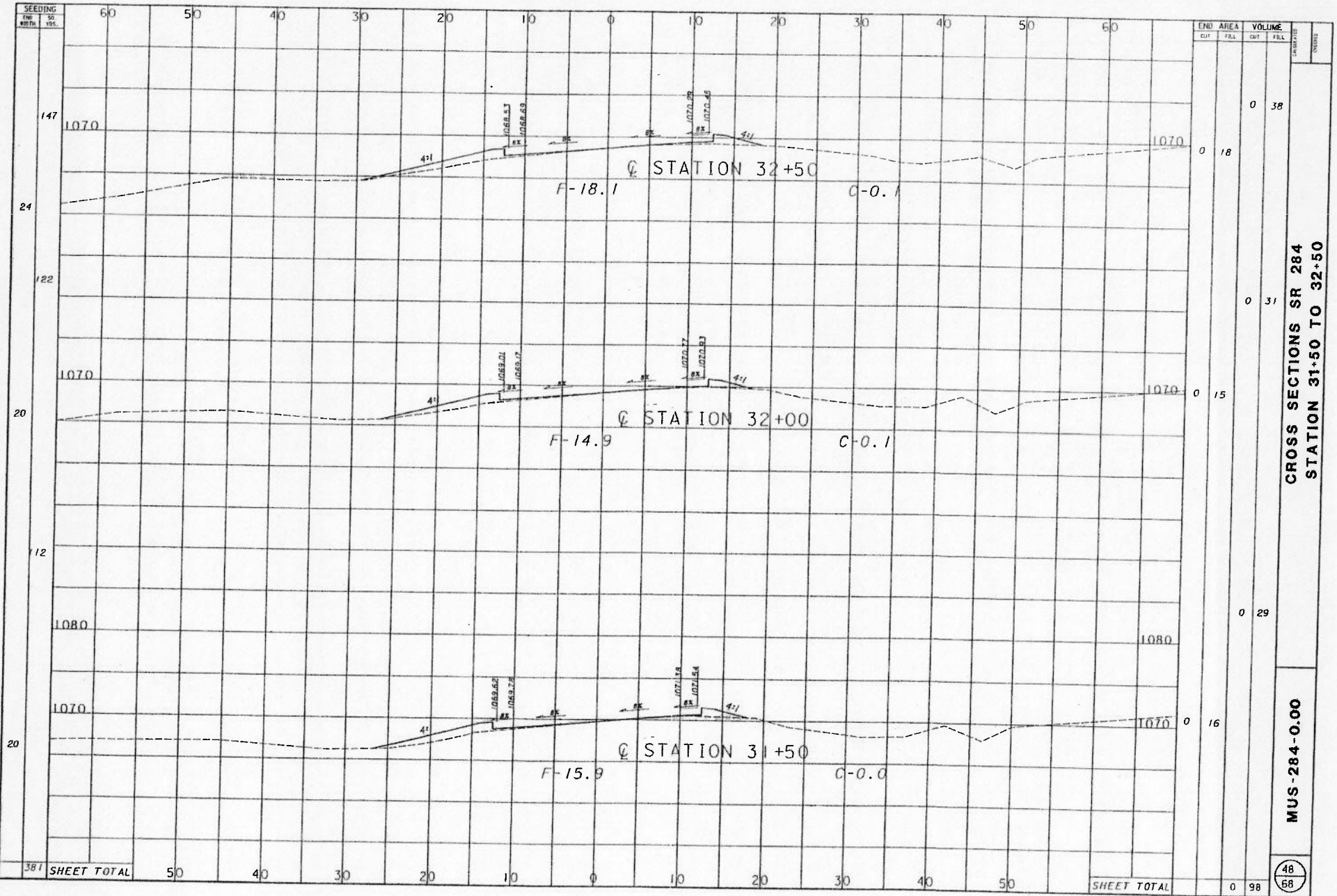
MZB\AKSSH1.DGN 11-27-02

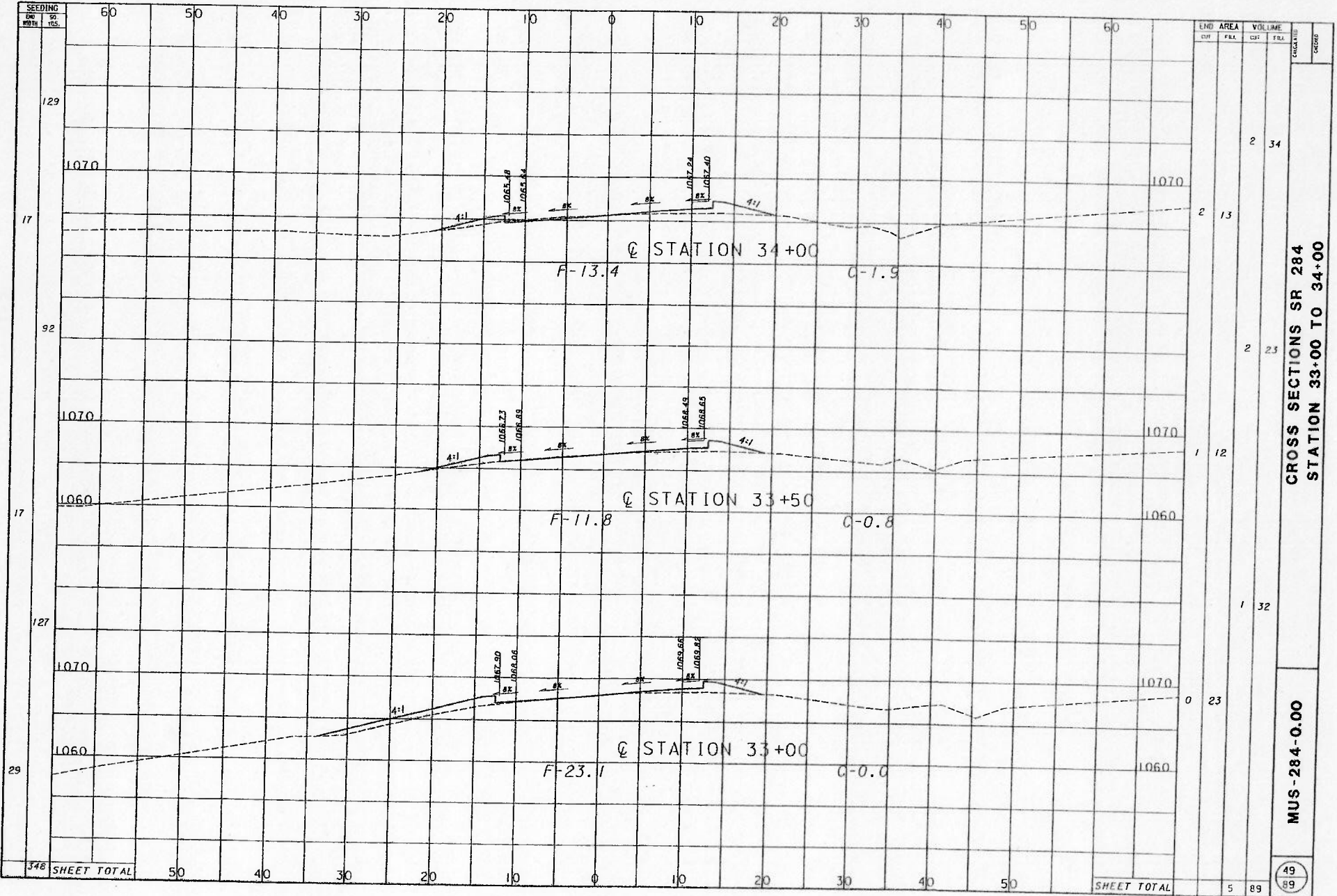


SEEDING		60	50	40	30	20	10	0	10	20	30	40	50	60
ONE	TWO													
WIDTH	YDS.													

END	AREA		VOL		LIME
	CUT	FILL	CUT	FILL	
122	0	32			
24	0	19			
129	0	32			
23	0	16			
125	0	27			
1080					
22	0	13			
1080					
376 SHEET TOTAL					
SHEET TOTAL					
0	91				

CROSS SECTIONS SR 284
STATION 30+00 TO 31+00
MUS-284-0.00



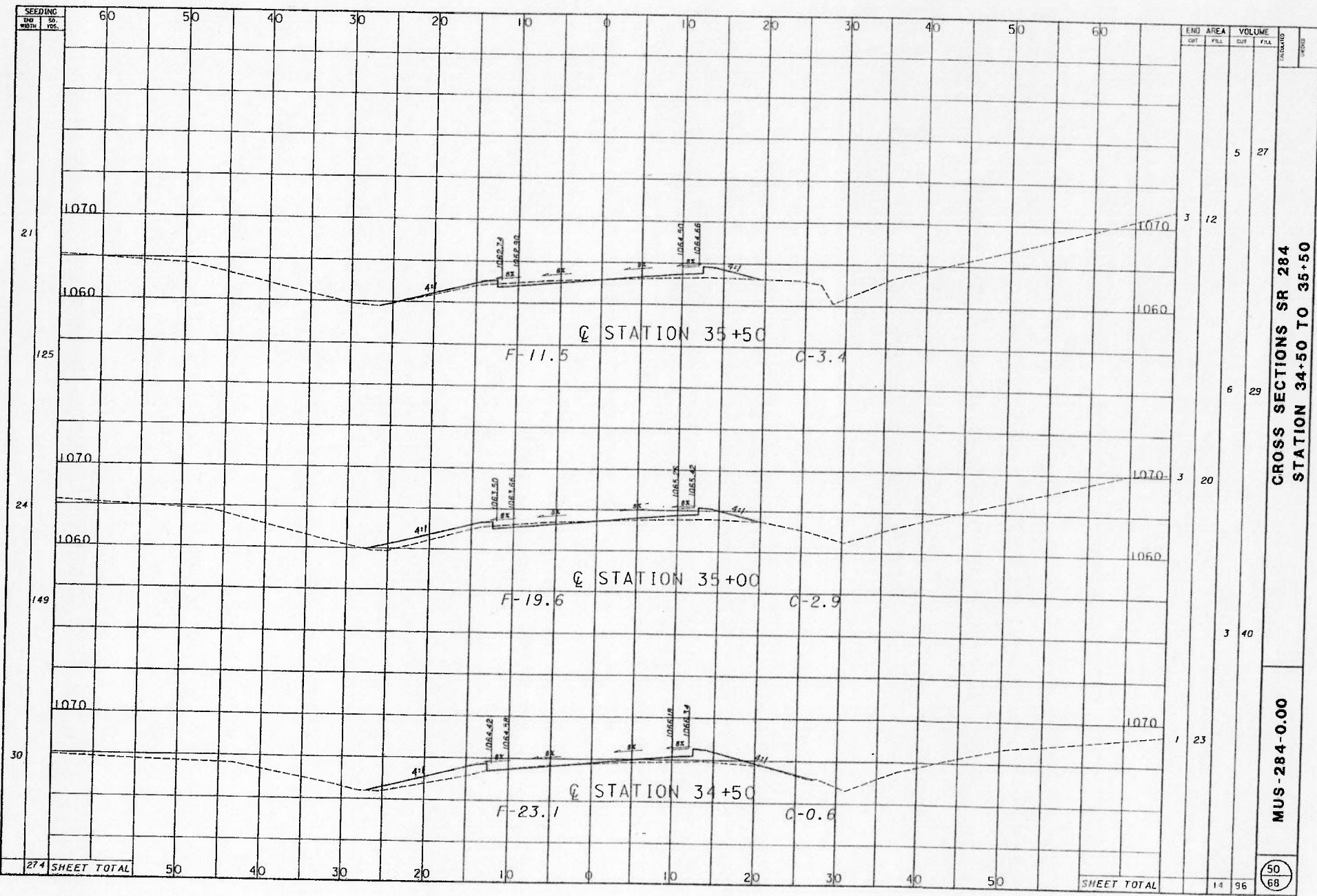


END CUT	AREA	VOLUME		CUT	FILL
		CUT	FILL		
2	34				
2	13				
2	23				
1	12				
1	32				
0	23				
SHEET TOTAL		5	89		

CROSS SECTIONS SR 284
 STATION 33+00 TO 34+00

MUS - 284 - 0.00

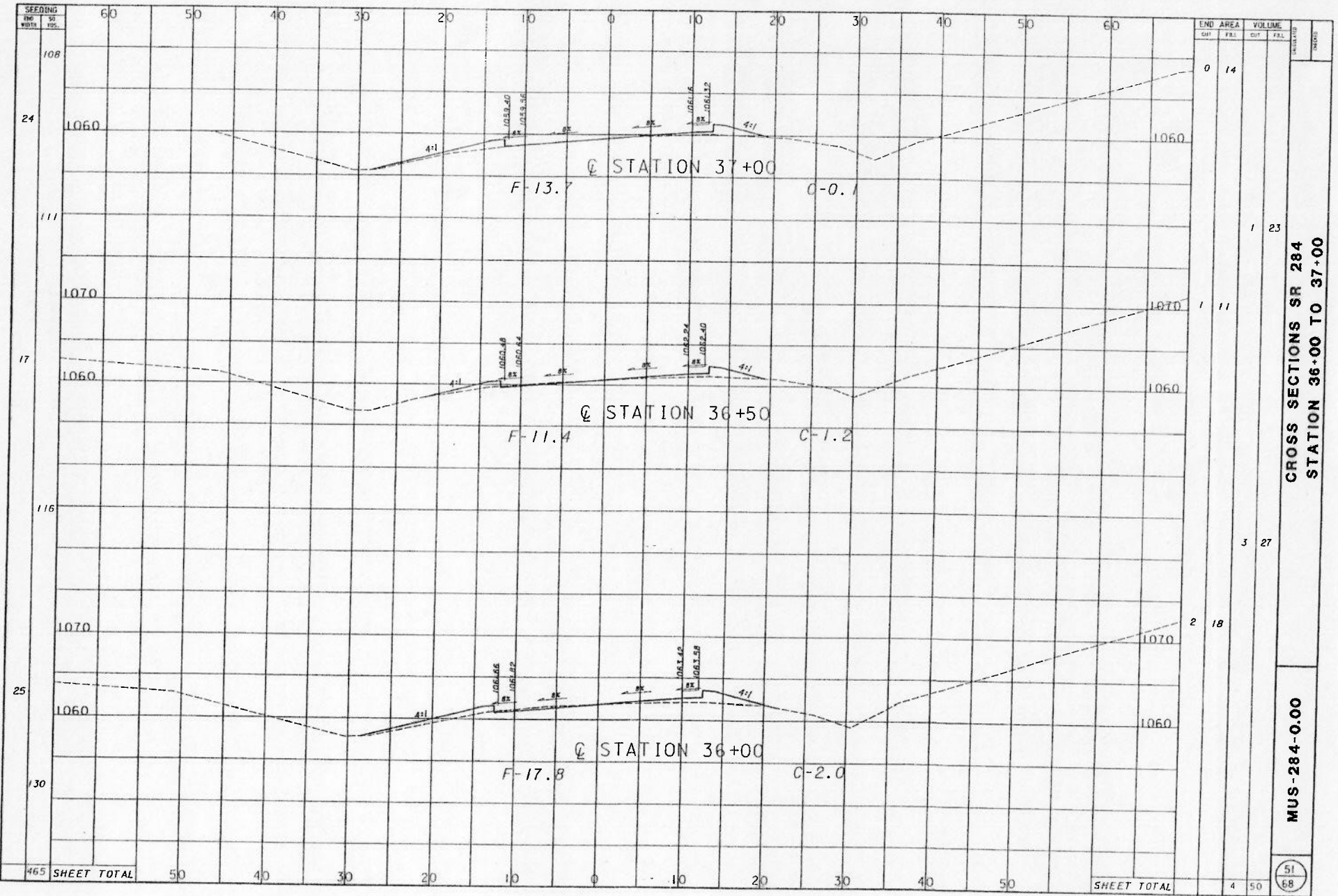
M284\KSSH1.DGN 11-27-02



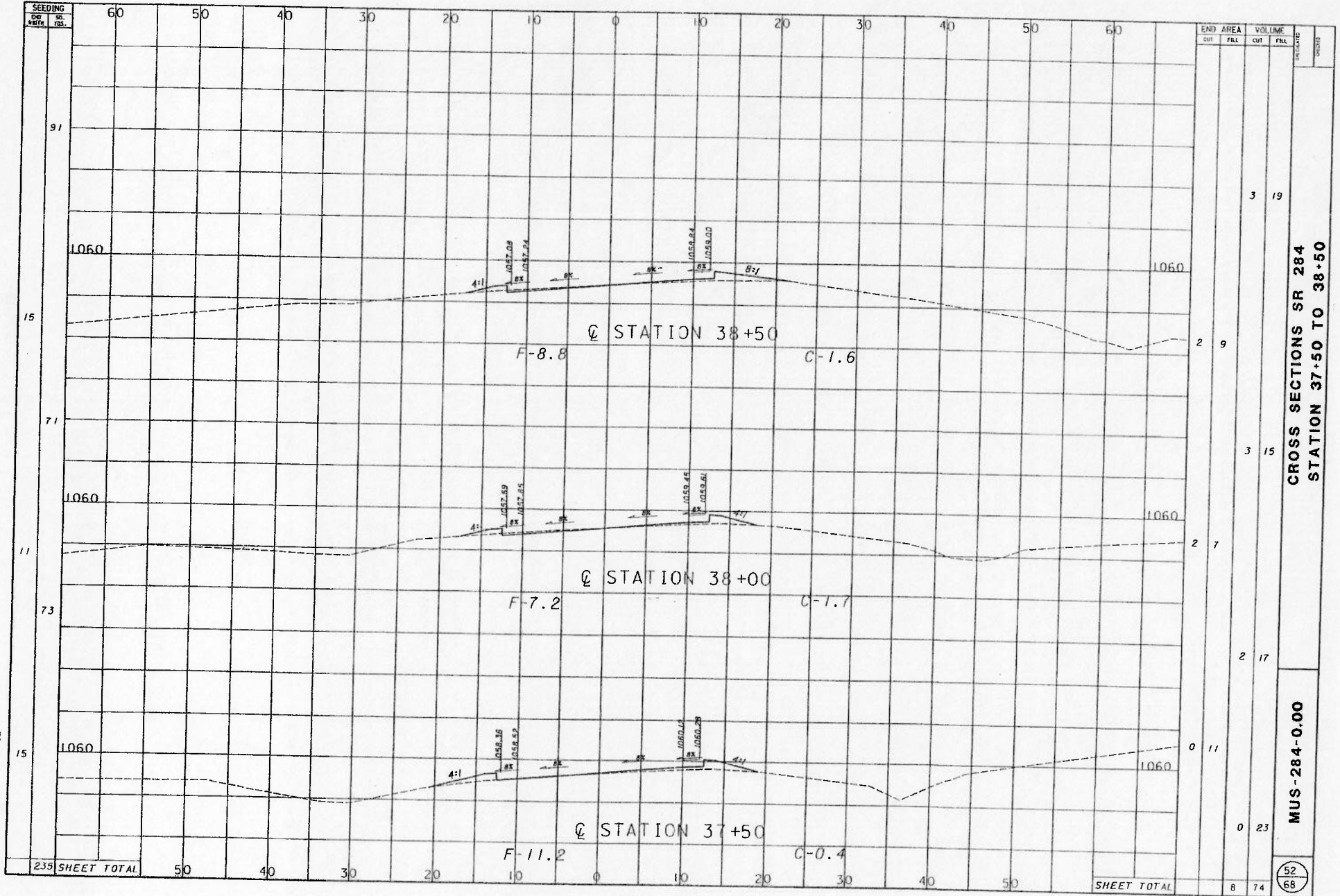
CROSS SECTIONS SR 284
STATION 34+50 TO 35+50

MUS-284-0.00

50
68

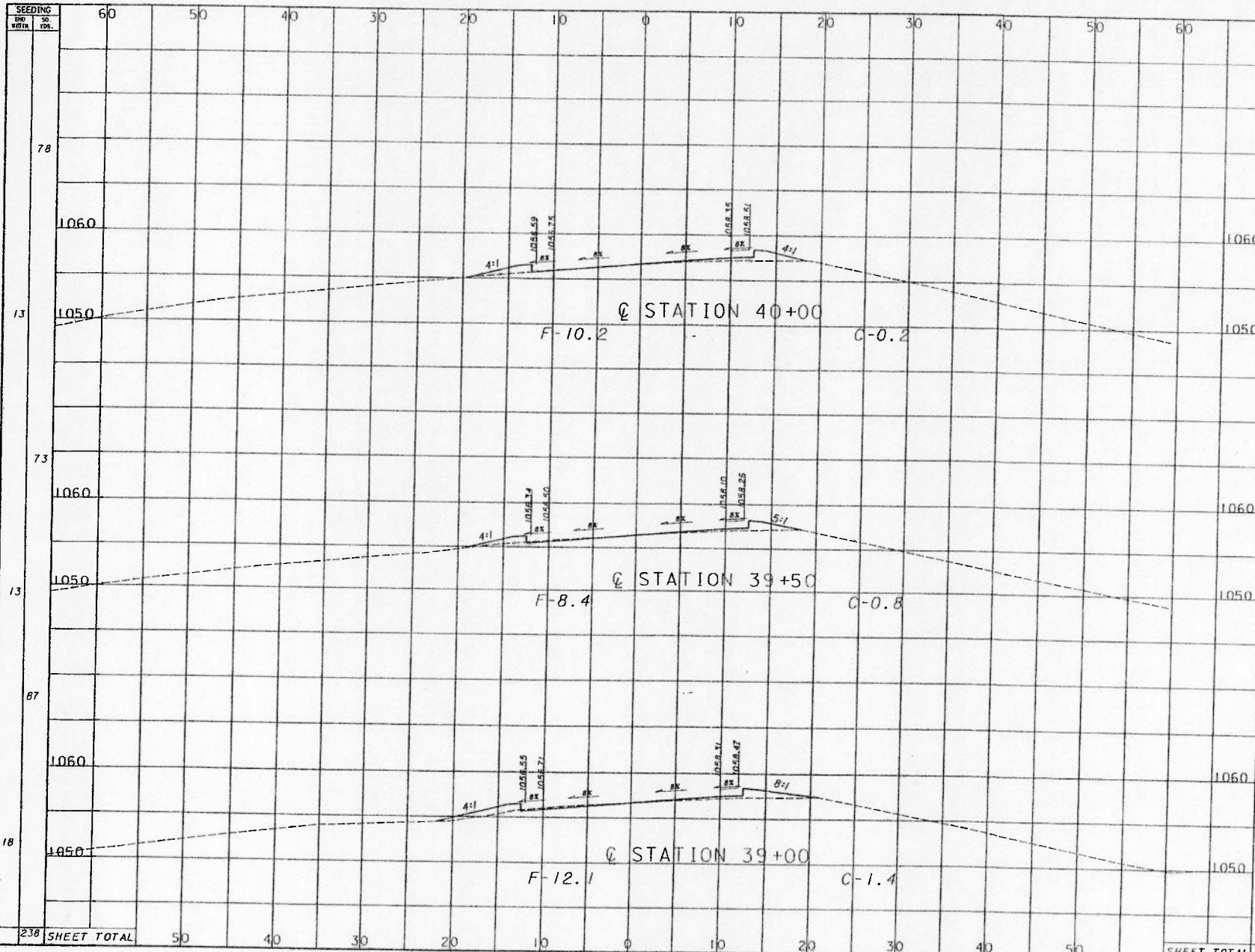


M284XSHT.DGN 11-27-02



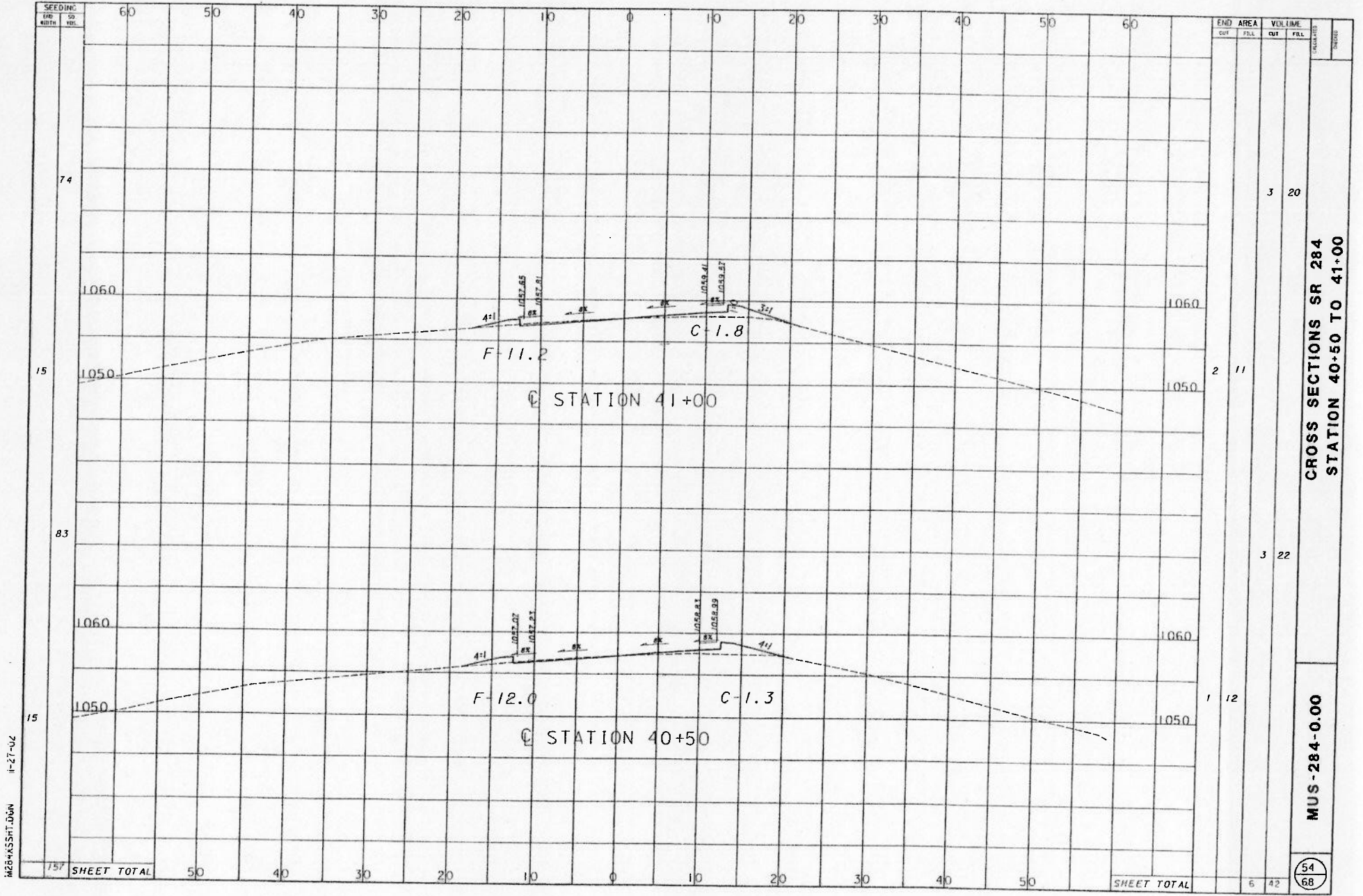
CROSS SECTIONS SR 284
STATION 37+50 TO 38+50

MUS-284-0.00



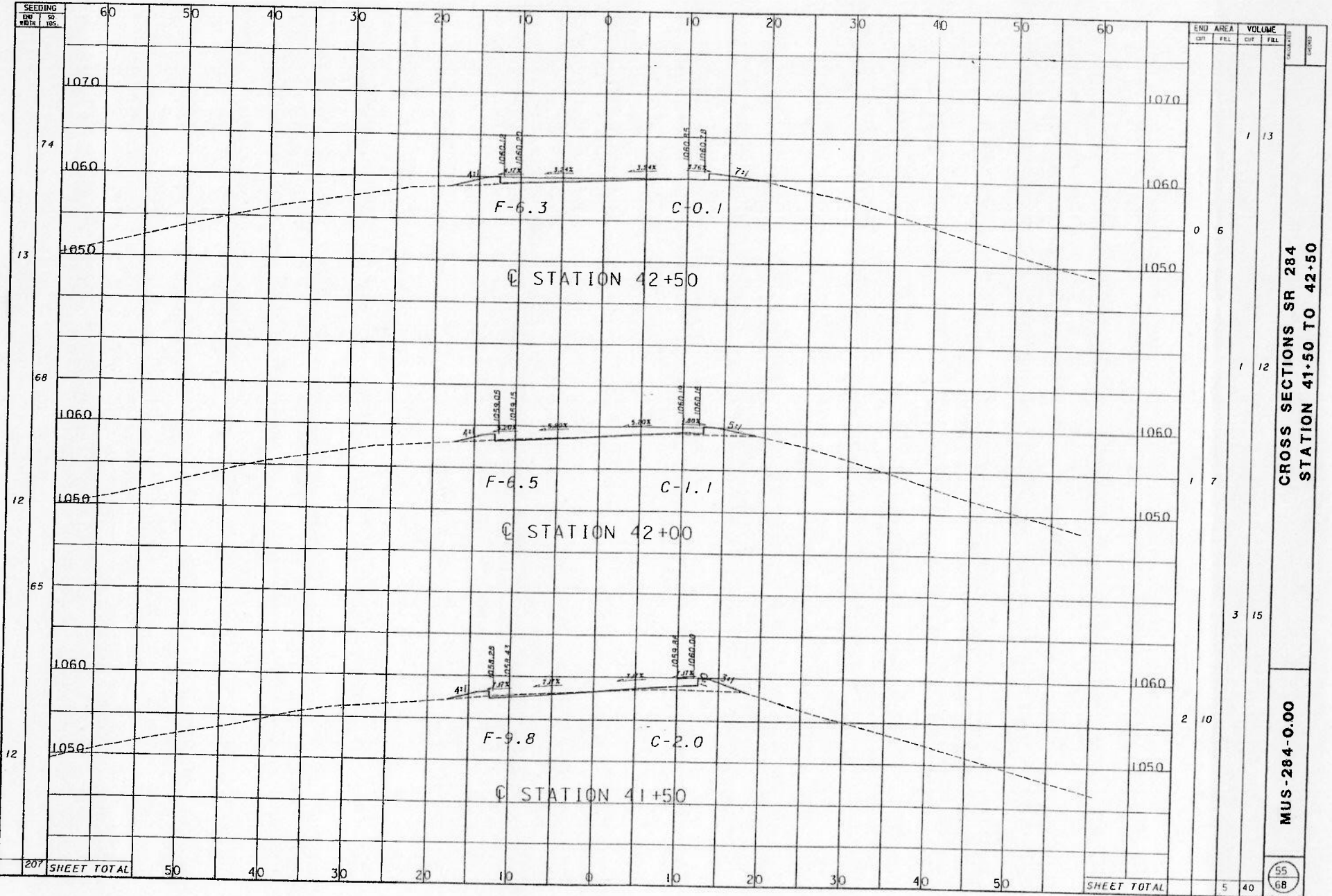
END STA	AREA		VOLUME		CHECKED	DATE
	CUT	FILL	CUT	FILL		
39+00	1	8	1	17		
39+50	0	10	1	21		
40+00	2	19				
SHEET TOTAL	4	57				

CROSS SECTIONS SR 284
STATION 39+00 TO 40+00
MUS-284-0.00



M28-K5SHT.DWG 11-27-02

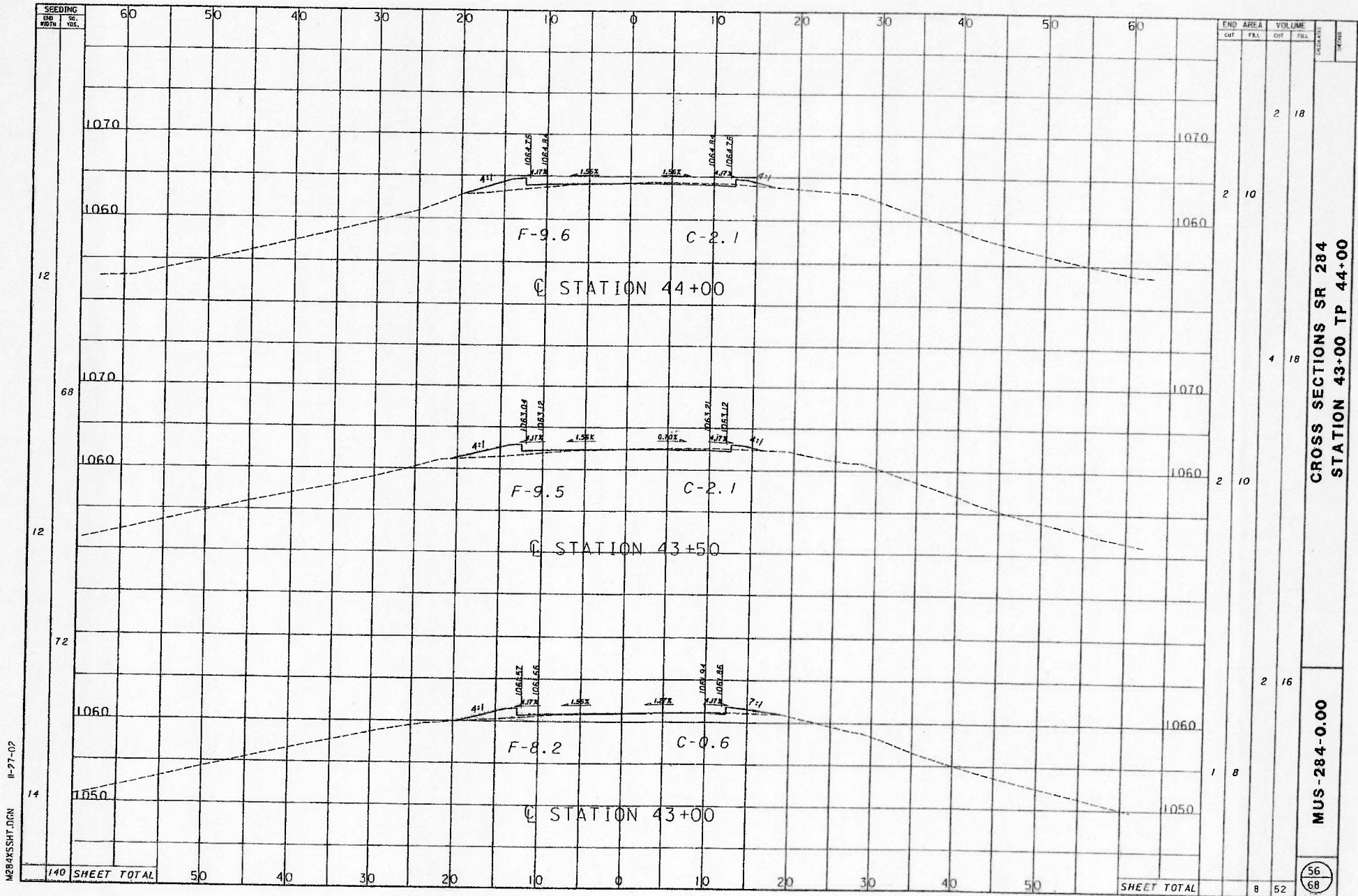
M284N5SHT.DGN 11-27-02



CROSS SECTIONS SR 284
STATION 41+50 TO 42+50

MUS-284-0.00

55
68



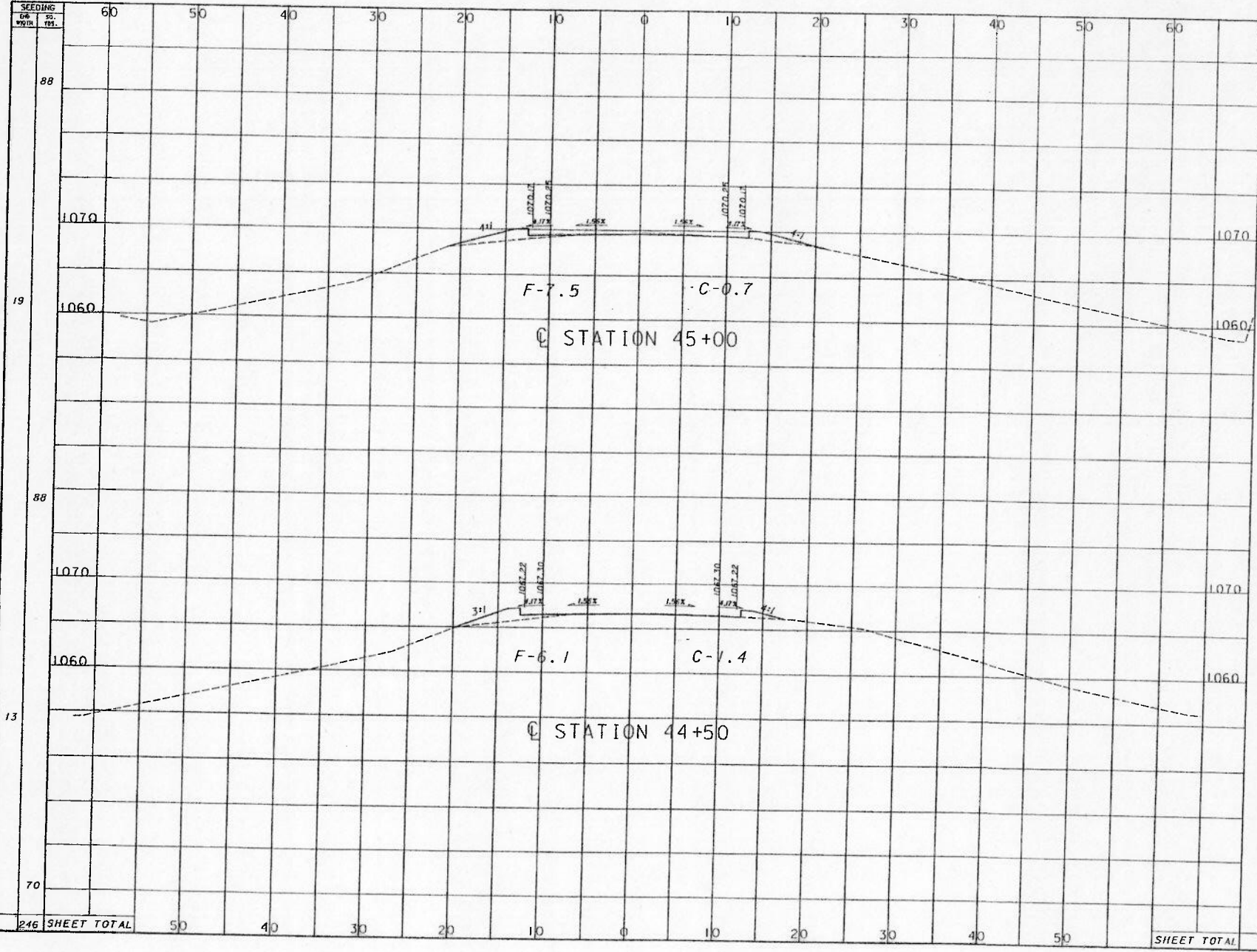
CROSS SECTIONS SR 284
STATION 43+00 TP 44+00

MUS-284-0.04

56
68

M284XSHT.DGN II-27-02

MUS-284-SCHT. 100N 11-27-07



END STA	AREA		VOLUME		CROSS-SECTION	SCALE
	CUT	FILL	CUT	FILL		
44+50	1	8	1	8	CROSS SECTIONS SR 284 STATION 44+50 TO 45+00	1" = 20'
45+00	2	16	2	16		
SHEET TOTAL	3	36	3	36	MUS-284-0.00	57 68

SEEDING
100%
100%

88

1070

1060

88

1070

1060

13

70

246 SHEET TOTAL

1070

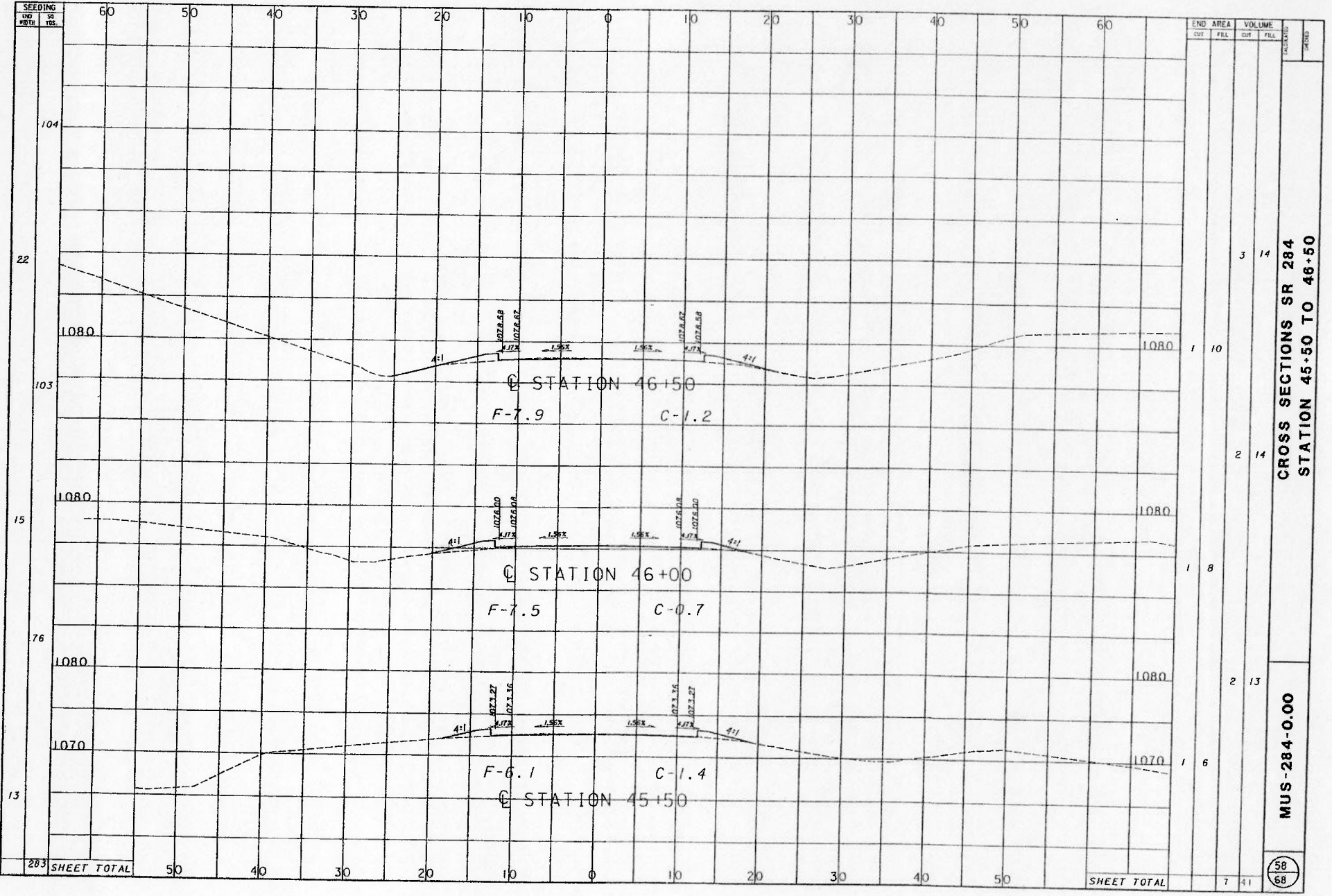
1060

1070

1060

SHEET TOTAL

57
68



60 50 40 30 20 10 0 10 20 30 40 50 60

104

22

1080

103

1080

15

1080

1070

13

283 SHEET TOTAL

SHEET TOTAL

STATION 46+50
F-7.9 C-1.2

STATION 46+00
F-7.5 C-0.7

STATION 45+50
F-6.1 C-1.4

50

40

30

20

10

0

10

20

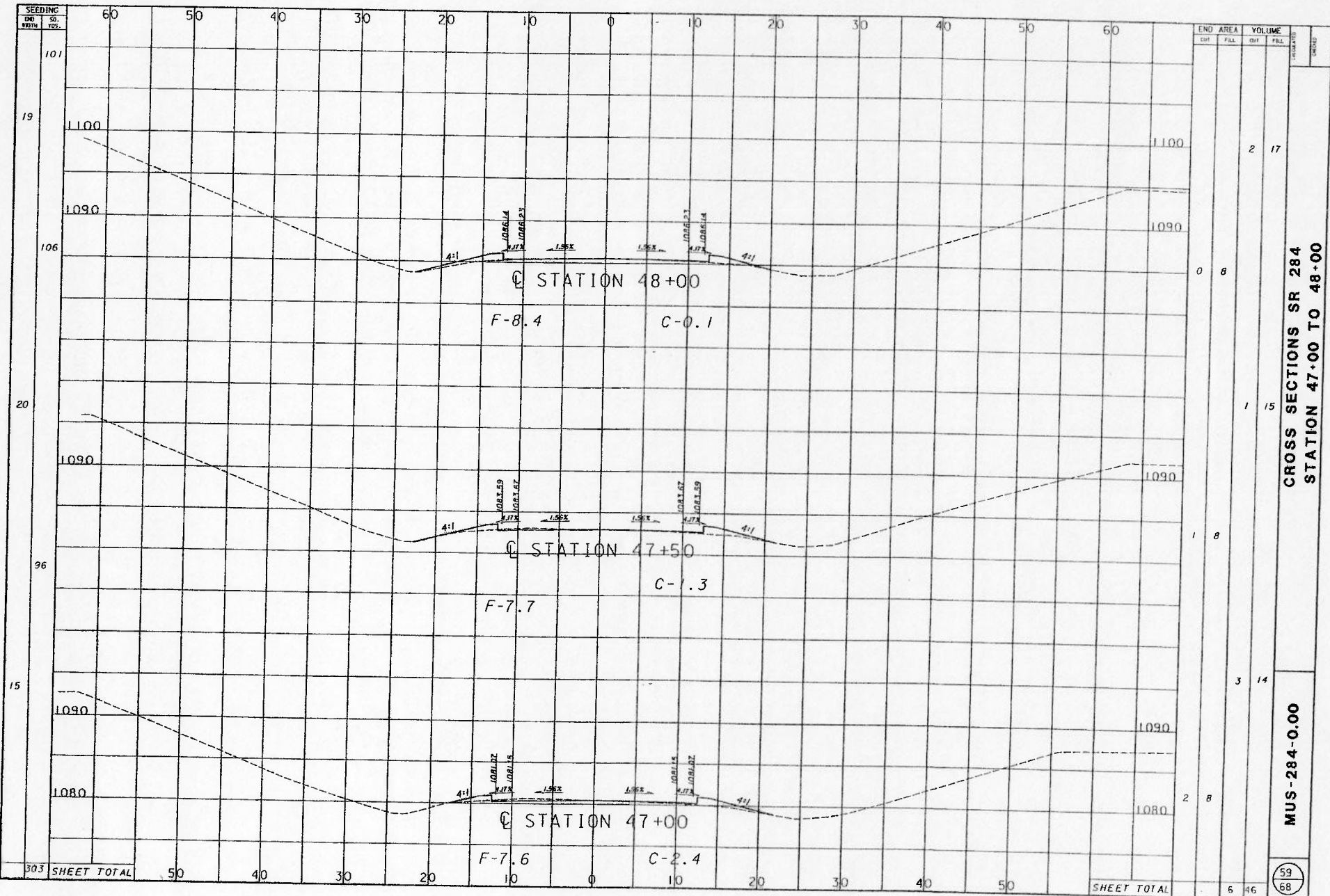
30

40

50

60

ME84XSHT.DGN 11-27-02

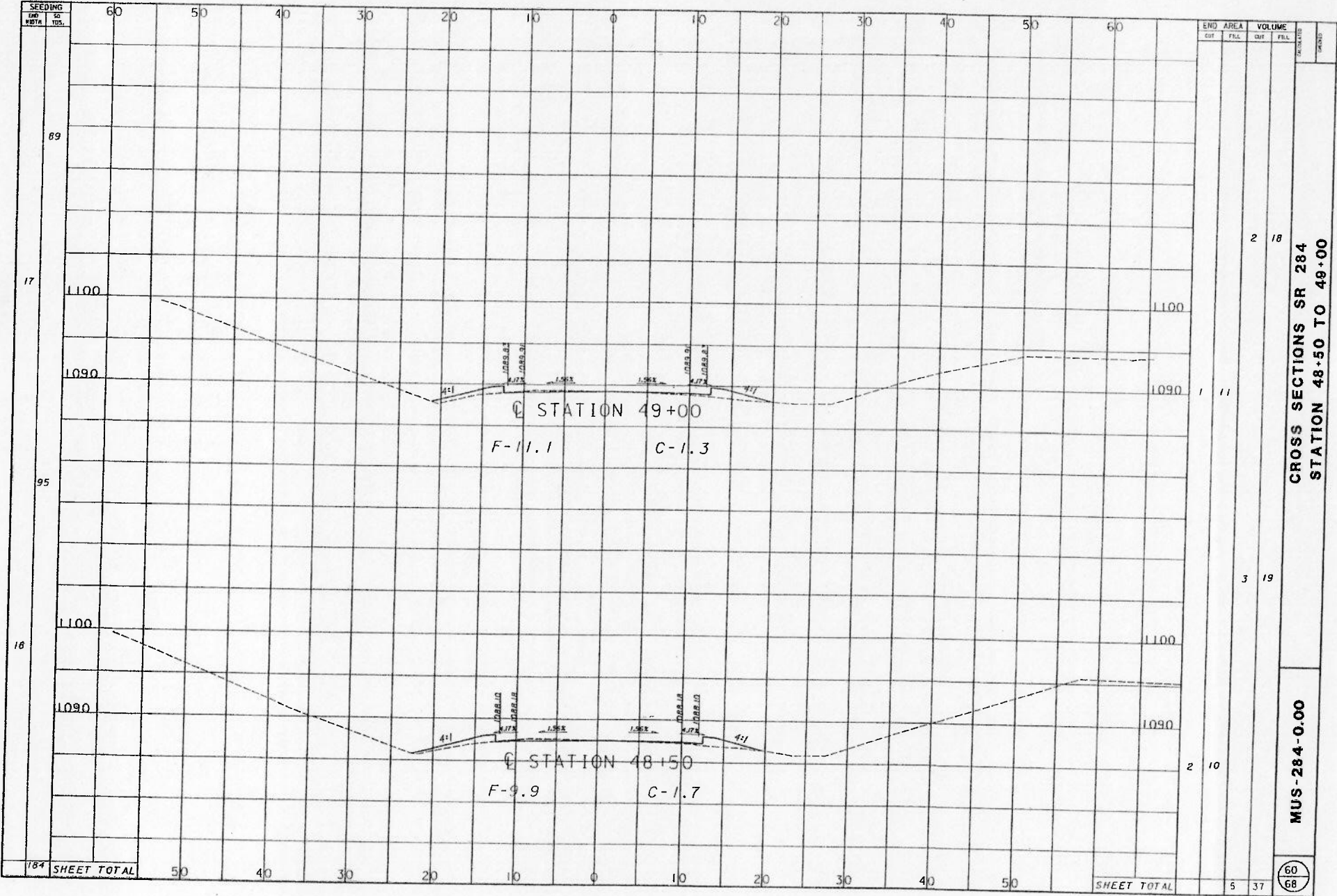


END STA	AREA		VOLUME		TOTAL
	CUT	FILL	CUT	FILL	
48+00	0	8	0	8	17
47+50	1	8	1	8	15
47+00	3	8	3	8	14
SHEET TOTAL	4	24	4	24	46

CROSS SECTIONS SR 284
STATION 47+00 TO 48+00

MUS-284-0.00

59
68

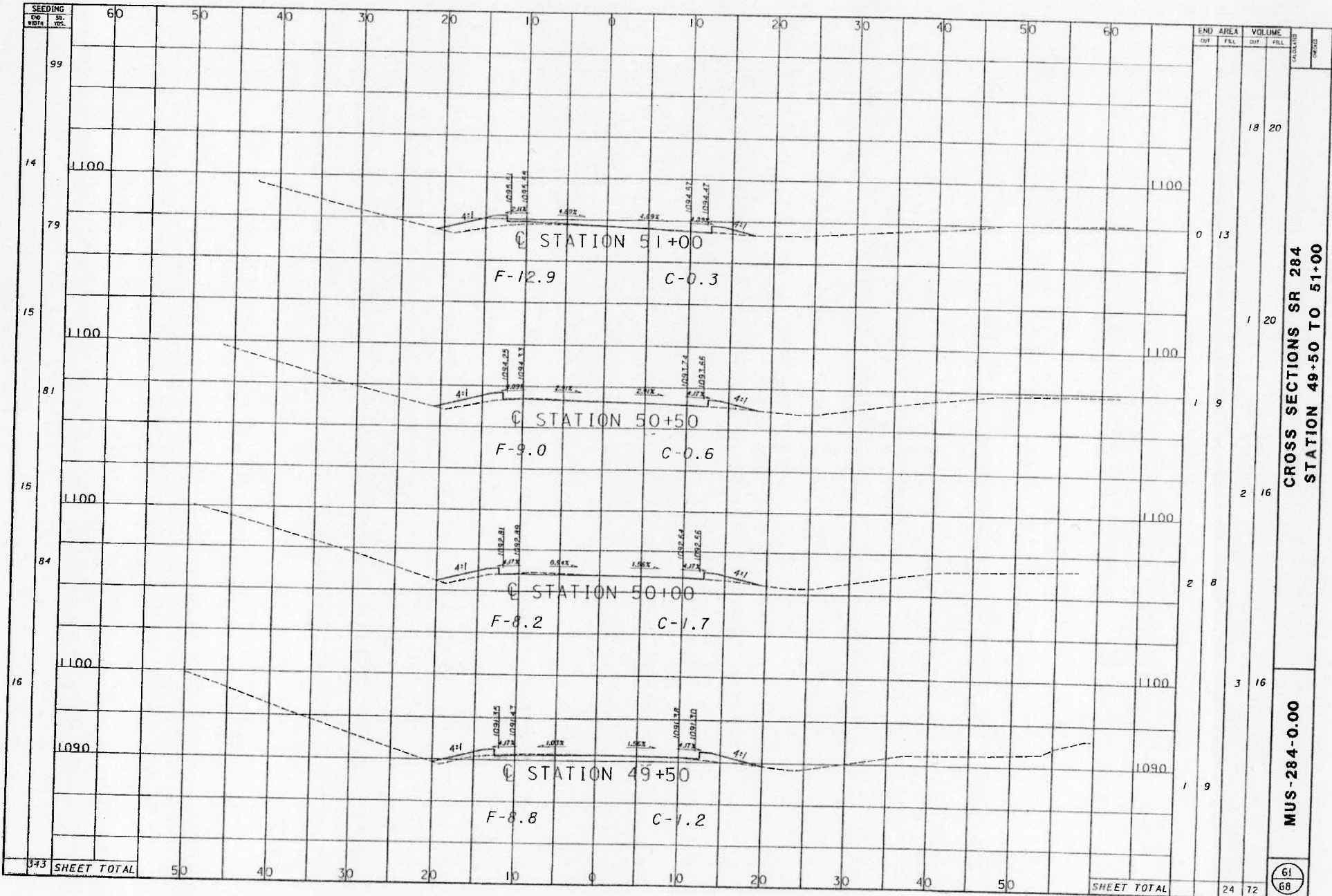


END STA	AREA		VOLUME		TOTAL
	CUT	FILL	CUT	FILL	
17	1	11			18
18	2	10	3	19	19
184	SHEET TOTAL		5	37	60/68

CROSS SECTIONS SR 284
STATION 48+50 TO 49+00

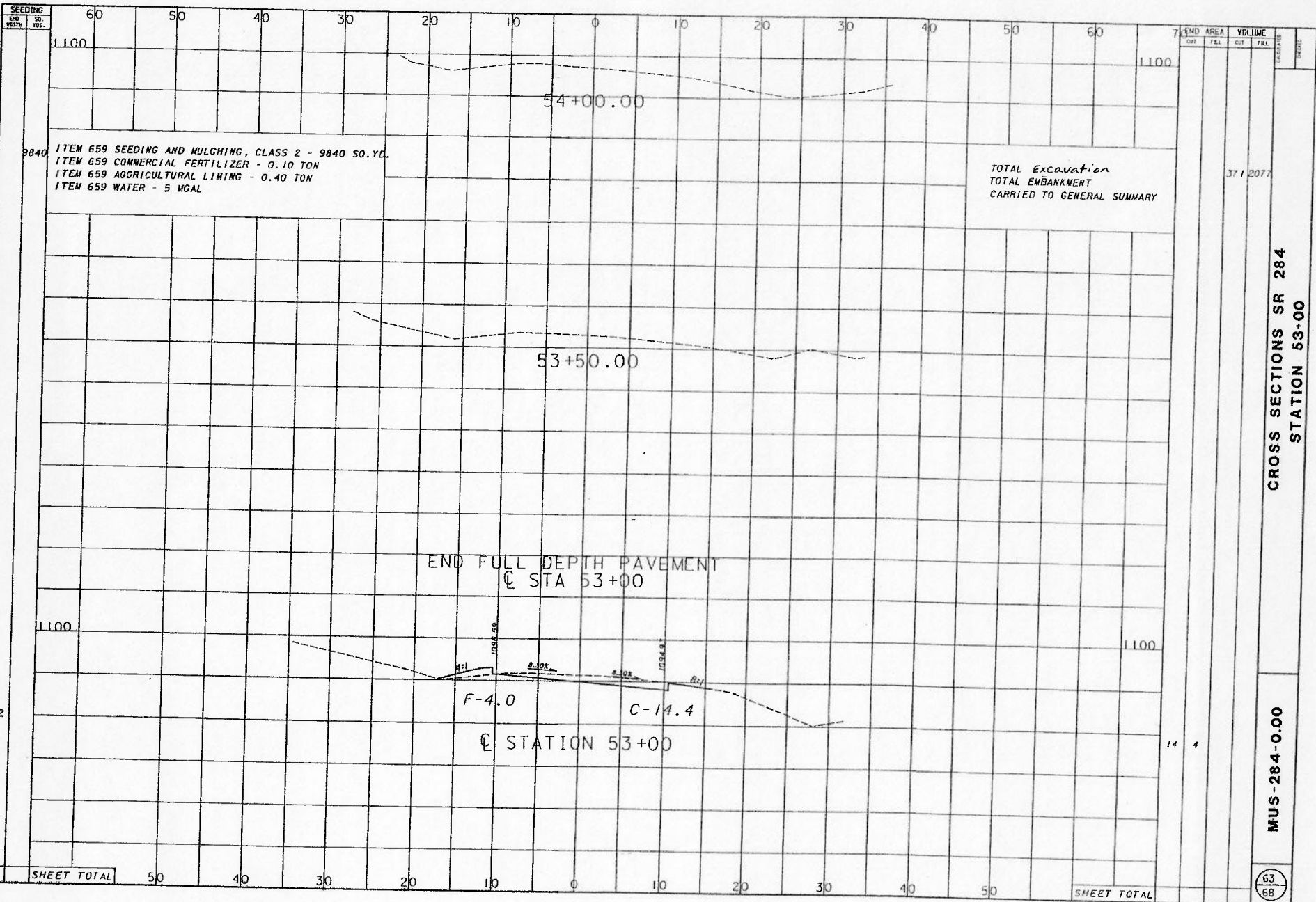
MUS-284-0-00

60
68



CROSS SECTIONS SR 284
STATION 49+50 TO 51+00

MUS-284-0.00



9840
 ITEM 659 SEEDING AND MULCHING, CLASS 2 - 9840 SQ. YD.
 ITEM 659 COMMERCIAL FERTILIZER - 0.10 TON
 ITEM 659 AGRICULTURAL LIMING - 0.40 TON
 ITEM 659 WATER - 5 MGAL

TOTAL Excavation
 TOTAL EMBANKMENT
 CARRIED TO GENERAL SUMMARY

371.2077

END FULL DEPTH PAVEMENT
 @ STA 53+00

F-4.0
 C-14.4
 @ STATION 53+00

CROSS SECTIONS SR 284
 STATION 53+00

MUS-284-0-00

63
68

MEB\ASBHT.DGN 11-27-02

ITEM 644 AUXILIARY PAVEMENT MARKING SUMB-SUMMARY

644 THERMOPLASTIC

QUANTITY	CONTRACT	PROJECT	DESCRIPTION	SLM	SIDE	24" TRANSVERSE LINES		STOP LINE	12" CROSSWALK LINES		WORD ON PAVEMENT ONLY ONLY		SCHOOL SYMBOL MARKING		LANE ARROWS					RAILROAD SYMBOL MARKING	8" CHANNEL LINE	ISLAND MARKING (YELLOW)	24" DOTTED LINE		REMARKS			
						WHITE	YELLOW	24"	WHITE	72"	96"	72"	96"	LT/TH	RT/TH	LT	RT	TH	EA.	EA.	EA.	EACH	FEET	SO. FT.		FT.	FT.	
						FEET	FEET	FEET	FEET	EACH	EACH	EACH	EACH	EACH	EACH	EA.	EA.	EA.	EACH	FEET	SO. FT.	FT.	FT.					
1	MUS	SR 284	YOUNG HICKORY RD	1.67	LT			30																				
			OAK GROVE RD	1.71	RT			19																			PLACE 16' FROM SR 284 CENTERLINE	
			DRAKE MARTIN RD	1.91	LT			18																			PLACE 14' FROM SR 284 CENTERLINE	
			RURALDALE RD	3.30	RT			45																			PLACE 18' FROM SR 284 CENTERLINE	
			RURALDALE RD	3.38	LT			26																			PLACE 20' FROM SR 284 CENTERLINE	
			SR 340	3.63	RT			12																			PLACE 18' FROM SR 284 CENTERLINE	
			INTERNATIONAL DR.	5.90	RT			26																				
			PAISLEY RD	6.15	LT			43																				PLACE 18' FROM SR 284 CENTERLINE
			ZION RIDGE RD	6.75	RT			27																				PLACE 19' FROM SR 284 CENTERLINE
			TOWER RD	7.19	RT			20																				PLACE 16' FROM SR 284 CENTERLINE
			SUGAR GROVE RD	7.21	LT			30																				
			HIGH FREELAND RD	7.67	RT			35																				PLACE 15' FROM SR 284 CENTERLINE
			FENTON RD	9.36	LT			50																				PLACE 19' FROM SR 284 CENTERLINE
			LEEDOM RD	9.84	RT			30																				PLACE 20' FROM SR 284 CENTERLINE
			WTON HOLLOW RD	10.66	LT			30																				PLACE 16' FROM SR 284 CENTERLINE
			HARMON HOLLOW RD	11.10	LT			30																				PLACE 15' FROM SR 284 CENTERLINE
			ON SR 284 AT SR 146	13.40	RT			20																				PLACE 15' FROM SR 284 CENTERLINE
																												PLACE 20' FROM SR 146 CENTERLINE
			TOTALS					491																				

AUXILIARY PAVEMENT MARKING

MUS-284-0.00

LO13001.TAS 10-03-02

CALCULATED
SMB
CHECKED
LME

