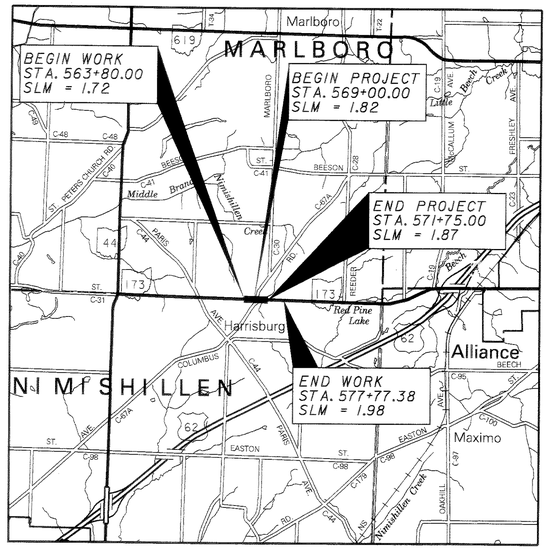
STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
STA-173-1.85
MARLBORO TOWNSHIP
NIMISHILLEN TOWNSHIP
STARK COUNTY



LOCATION MAP

LATITUDE: 40°54'00" LONGITUDE: 81°13'00"

SCALE IN MILES
0 1 2 3 4

PORTION TO BE IMPROVED
INTERSTATE & DIVIDED HIGHWAY
UNDIVIDED STATE & FEDERAL ROUTES
OTHER ROADS

DESIGN DESIGNATION	S. R. 173	C. R. 67
CURRENT ADT (2005)	5400	2400
DESIGN YEAR ADT (2025)	6200	2700
DESIGN HOURLY VOLUME (2025)	620	270
DIRECTIONAL DISTRIBUTION	55%	68%
TRUCKS (24 HOUR B&C)	3%	4%
DESIGN SPEED	55 MPH	55 MPH
LEGAL SPEED	55 MPH	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION -	RURAL MAJOR COLLECTOR	RURAL MINOR COLLECTOR

DESIGN EXCEPTIONS COUNTY ROAD 67	APPROVED
HORIZONTAL ALIGNMENT	01/08/04
SUPERELEVATION RATE	01/08/04
STOPPING SIGHT DISTANCE	01/08/04

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SHEET 14 NOT USED

EARTH DISTURBED AREAS:	
PROJECT EARTH DISTURBED AREA	3.51 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA	0.25 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA	4.90 ACRES

STANDARD CONSTRUCTION DRAWINGS								SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	7/28/00	HW-2.1	7/19/02	TC-41.20	1/19/01	MT-35.10	4/20/01	832	2/12/03
BP-4.1	7/28/00	HW-2.2	7/19/02	TC-42.20	4/20/01	MT-97.10	4/19/02	833	2/12/03
				TC-52.10	4/20/01	MT-97.11	4/19/02	836	12/6/01
		CB-1.1	7/19/02	TC-52.20	4/20/01	MT-101.60	10/18/02		
GR-1.1	4/18/03	CB-3.1	7/19/02	TC-65.10	10/19/01	MT-102.10	10/18/02		
GR-2.1	4/18/03	CB-3.2	7/19/02	TC-65.11	10/19/01	MT-102.20	10/18/02		
GR-2.4	4/18/03			TC-65.12	10/19/01	MT-105.10	10/18/02		
GR-4.2	4/18/03	DM-1.1	7/19/02	TC-71.10	4/19/02	MT-105.11	10/18/02		
GR-5.1	4/18/03	DM-1.2	7/19/02						
GR-5.2	4/18/03	DM-1.4	7/19/02					SPECIAL PROVISIONS	
		DM-3.1	7/19/02						
		DM-5.1	7/19/02					NWP#3 6/5/03	
RM-1.1	4/18/03								

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

ENGINEERS SEAL:

STATE OF OHIO — CRAIG L. ZIPPAY — 54600 — REGISTERED PROFESSIONAL ENGINEER

SIGNED: Craig L. Zippay
DATE: 1/7/2004

PROJECT DESCRIPTION

REALIGN EXISTING COUNTY ROAD 67 TO IMPROVE INTERSECTION ALIGNMENT WITH STATE ROUTE 173.

2002 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL WILL REQUIRE THE CLOSING TO TRAFFIC OF SR 173 AND CR 67 AS NOTED ON SHEETS 16 - 17, AND THAT THE PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED [signature]
DATE 1-20-04 DISTRICT DEPUTY DIRECTOR

APPROVED Gordon Proctor Jr.
DATE 2-23-04 DIRECTOR, DEPARTMENT OF TRANSPORTATION

PLAN PREPARED BY:
O.D.O.T DIST. 5
9600 JACKSONTOWN RD.
JACKSONTOWN OHIO

FEDERAL PROJECT NO. E 033 (269)
PID NO. 22417
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
STA-173-1.85
1 / 85

STA-SR 173-1.85
040276 PID - 22417
Dist 4 4/21/2004

SI73000I.GTS 8 JAN 03

EXISTING ℄ SURVEY AND CONST. S. R. 173

PROPOSED ℄ SURVEY AND CONST. S. R. 173

EXISTING ℄ SURVEY AND CONST. C. R. 67 NORTH

PROPOSED ℄ SURVEY AND CONST. C. R. 67 NORTH

PROPOSED ℄ SURVEY AND CONST. C. R. 67 SOUTH

EXISTING ℄ SURVEY AND CONST. C. R. 67 SOUTH

STA. 570+31.81 PROPOSED ℄ SURVEY & CONSTRUCTION S. R. 173 - STA. 253+46.82 PROPOSED ℄ SURVEY & CONSTRUCTION CO. RD. 67 NORTH - STA. 1654+36.93 PROPOSED ℄ SURVEY & CONSTRUCTION CO. RD. 67 SOUTH

MATCHLINE STA. 574+00

MATCHLINE STA. 574+00

BEGIN WORK
STA. 563+80.00
SLM = 1.72

BEGIN WORK
STA. 253+75.00
SLM = 7.98

BEGIN PROJECT
STA. 569+00.00
SLM = 1.82

END PROJECT
STA. 571+75.00
SLM = 1.87

END WORK
STA. 577+77.38
SLM = 1.98

BEGIN WORK
STA. 1645+00.00
SLM = 1.67

STATION EQUATION:
LEAVE S. R. 173 STA. 581+26.38 = SLM 1.97 LT
SURVEY S. R. 173 STA. 581+26.37 = PROPOSED ℄ SURVEY & CONST. STA. 581+26.37

Pr. S. R. 173 Curve 1
P.I. Sta = 565+49.74
Δ = 1° 20′ 47″ (LT)
Dc = 0° 30′ 00″
R = 11,459.16′
T = 134.63′
L = 269.25′
E = 0.79′

Pr. S. R. 173 Curve 2
P.I. Sta = 568+57.83
Δ = 0° 57′ 46″ (RT)
Dc = 0° 30′ 00″
R = 11,459.16′
T = 96.27′
L = 192.53′
E = 0.40′

Pr. S. R. 173 Curve 3
P.I. Sta = 572+07.82
Δ = 1° 36′ 49″ (RT)
Dc = 0° 30′ 00″
R = 11,459.16′
T = 161.38′
L = 322.74′
E = 1.14′

Pr. S. R. 173 Curve 4
P.I. Sta = 575+77.86
Δ = 1° 19′ 49″ (LT)
Dc = 0° 30′ 00″
R = 11,459.16′
T = 133.05′
L = 266.08′
E = 0.77′

Pr. Co. Rd. 67A Curve 2
P.I. Sta = 1652+60.34
Δ = 32° 59′ 53″ (LT)
Dc = 23° 00′ 00″
R = 249.11′
T = 73.79′
L = 143.47′
E = 10.70′

Pr. Co. Rd. 67A Curve 1
P.I. Sta = 1648+44.97
Δ = 8° 14′ 22″ (RT)
Dc = 6° 00′ 00″
R = 954.93′
T = 68.78′
L = 137.33′
E = 2.47′

Ex. Co. Rd. 67A
P.I. Sta = 1654+22.51
Δ = 56° 40′ 49″ (RT)
Dc = 8° 00′ 00″
R = 716.20′
Ls = 150.00′
Theta = 6° 00′ 00″
LT = 100.06′
ST = 50.05′
x = 149.84′
y = 5.23′
k = 74.97′
p = 1.31′
Δc = 44° 40′ 50″ (RT)
Lc = 558.51′
TS = 461.96′
Es = 99.02′

FRAME GARAGE

FEED MILL

1 STORY FRAME HOUSE #9447

1 STORY FRAME HOUSE #9416

1½ STORY FRAME HOUSE #9390

BENCHMARKS

BM#1 SE CORNER OF CONC. PORCH, 1½STY. BRICK HOUSE (#9471 COLUMBUS ROAD) (CR 67 NORTH) ELEV.=1245.16 - PROPOSED ℄ STA. 570+44.77, SR 173, 593.18′ LT.
BM#2 CHISELED SQUARE ON S.E. CORNER OF CONCRETE HEADWALL, STA. 1643+33.34, 26.66′ LT., ℄ COLUMBUS ROAD (CR 67 SOUTH) ELEV.=1255.60
BM#3 RR SPIKE 1′ UP EAST SIDE OF TWIN 12″ CHERRIES STA. 557+26.78, 87.24′ RT. ℄ SR 173 ELEV.=1255.06
BM#4 TIMBER SPIKE 1′ UP NORTH SIDE OF 30″ MAPLE STA. 568+89.25, 30.80′ RT. ℄ SR 173 ELEV.=1243.08 - PROPOSED ℄ STA. 568+88.94, SR 173, 38.19′ RT.
BM#5 CHISELED SQUARE IN STONE AT EAST OF DRIVE STA. 584+09.53, 28.90′ RT. ℄ SR 173 ELEV.=1238.41
BM#6 COUNTY DISK FOUND IN CENTER OF CONCRETE HEADWALL, STA. 575+48.66, 17.35′ RT. ℄ SR 173 ELEV.=1225.71 - PROPOSED ℄ STA. 575+49.06, SR 173, 18.27′ RT.

HORIZONTAL SCALE IN FEET
0 50 100

SCHEMATIC PLAN

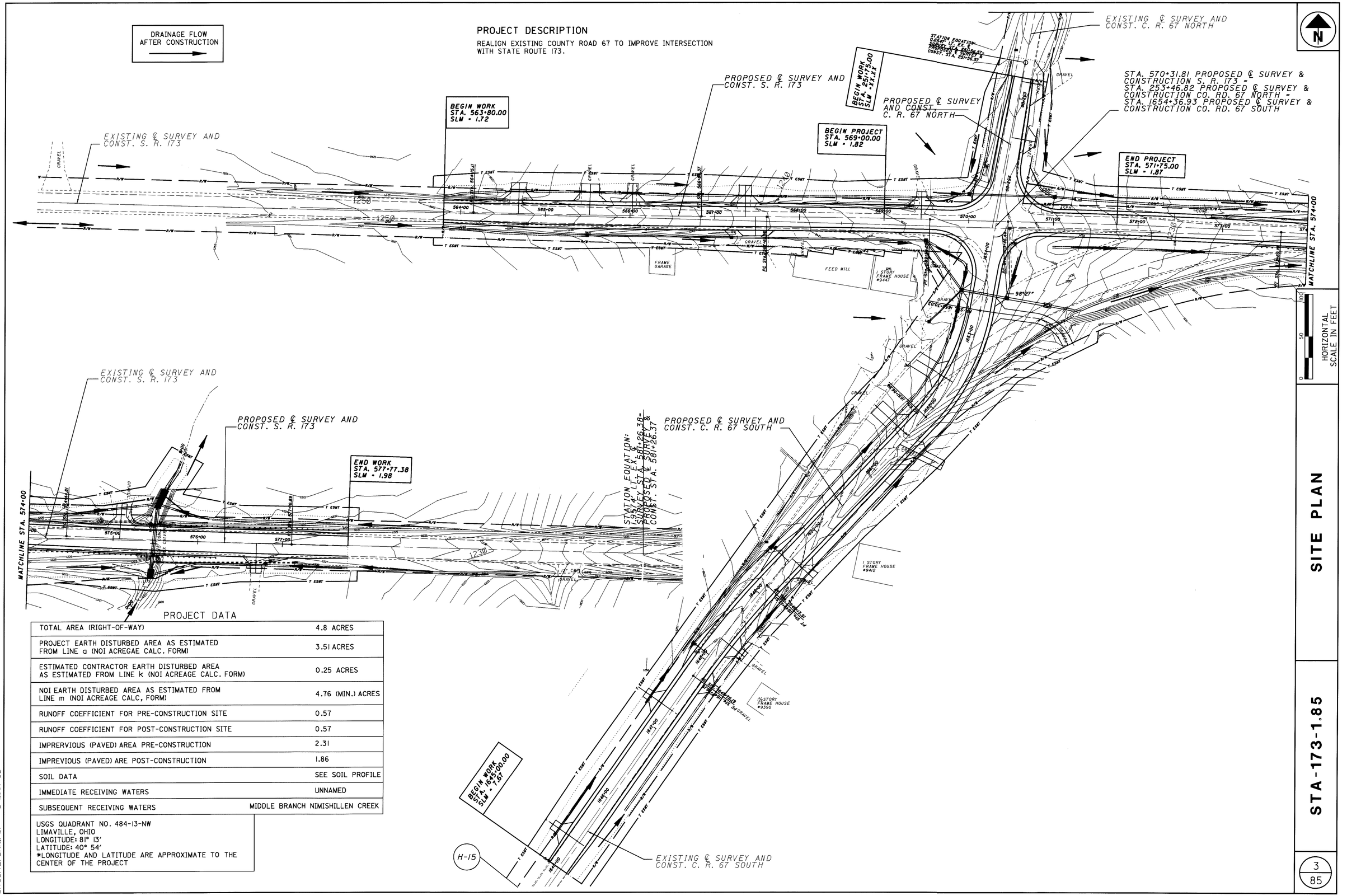
STA-173-1.85

SI73000LGSP 16 JAN 03

DRAINAGE FLOW AFTER CONSTRUCTION

PROJECT DESCRIPTION

REALIGN EXISTING COUNTY ROAD 67 TO IMPROVE INTERSECTION WITH STATE ROUTE 173.



PROJECT DATA

TOTAL AREA (RIGHT-OF-WAY)	4.8 ACRES
PROJECT EARTH DISTURBED AREA AS ESTIMATED FROM LINE a (NOI ACREGAE CALC. FORM)	3.51 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA AS ESTIMATED FROM LINE k (NOI ACREAGE CALC. FORM)	0.25 ACRES
NOI EARTH DISTURBED AREA AS ESTIMATED FROM LINE m (NOI ACREAGE CALC, FORM)	4.76 (MIN.) ACRES
RUNOFF COEFFICIENT FOR PRE-CONSTRUCTION SITE	0.57
RUNOFF COEFFICIENT FOR POST-CONSTRUCTION SITE	0.57
IMPRERVIOUS (PAVED) AREA PRE-CONSTRUCTION	2.31
IMPREVIOUS (PAVED) ARE POST-CONSTRUCTION	1.86
SOIL DATA	SEE SOIL PROFILE
IMMEDIATE RECEIVING WATERS	UNNAMED
SUBSEQUENT RECEIVING WATERS	MIDDLE BRANCH NIMISHILLEN CREEK

USGS QUADRANT NO. 484-13-NW
LIMAVILLE, OHIO
LONGITUDE: 81° 13'
LATITUDE: 40° 54'
*LONGITUDE AND LATITUDE ARE APPROXIMATE TO THE CENTER OF THE PROJECT

SI73SITEPLAN.PSP 5 MAR 03

SITE PLAN

STA-173-1.85

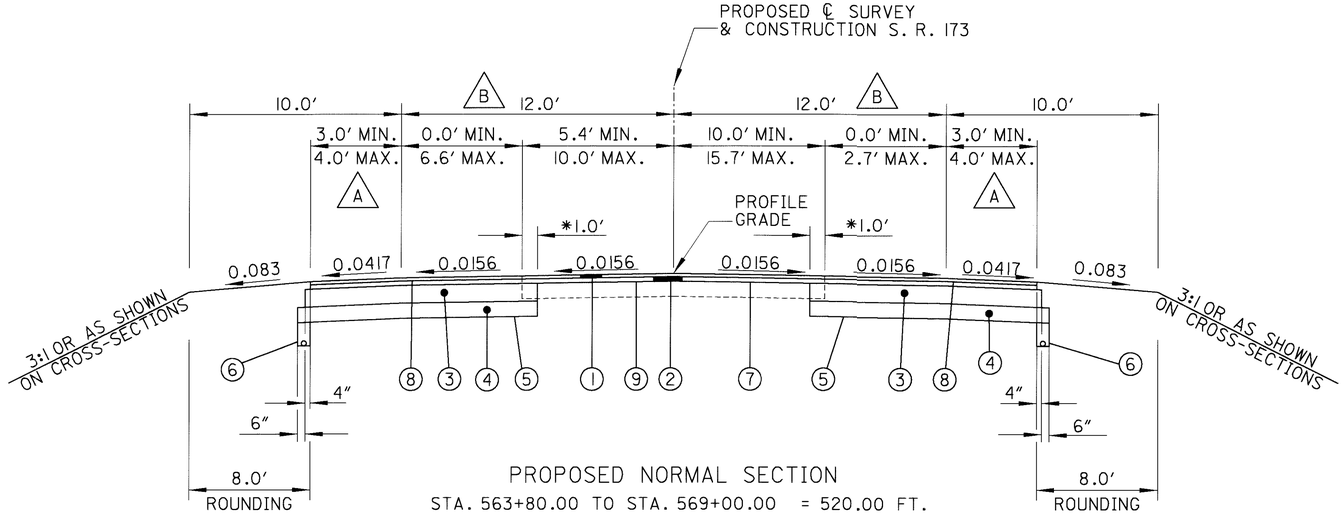
△A TAPERS FROM 3.0′ AT STA. 563+80.00
TO 4.0′ AT STA. 564+30.00

△B TAPERS FROM 10.0′ AT STA. 563+80.00
TO 12.0′ AT STA. 564+90.00

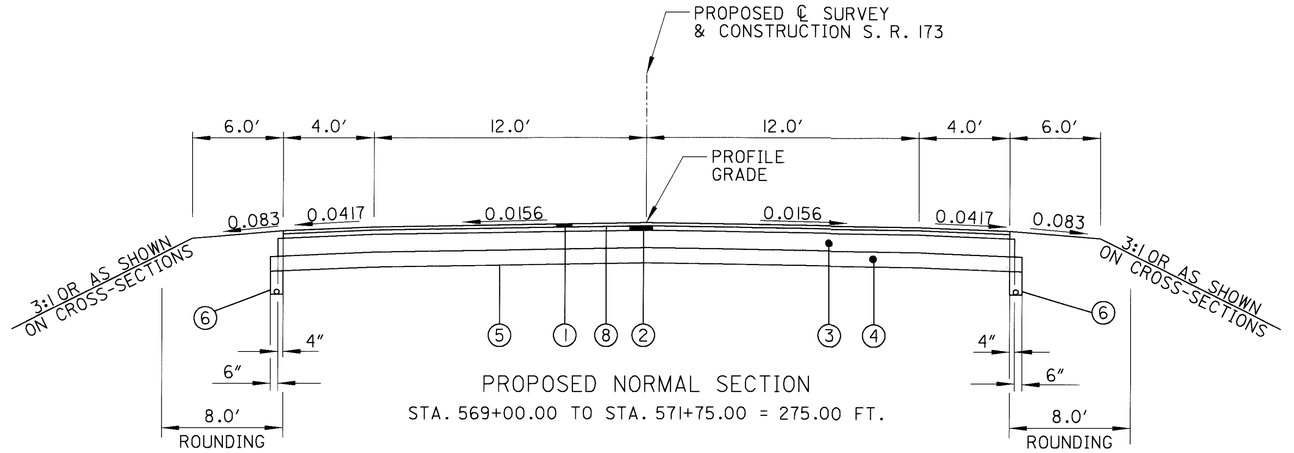
△C TAPERS FROM 4.0′ AT STA. 577+27.38
TO 2.0′ AT STA. 577+77.38

* SAW CUT AS PER 202.05. SAW CUT TO BE LOCATED 1.0′ IN FROM THE EXISTING EDGE OF PAVEMENT OR 1.0′ IN FROM THE PROPOSED EDGE OF PAVEMENT, WHERE THE EXISTING EDGE OF PAVEMENT IS LOCATED OUTSIDE OF THE PROPOSED EDGE OF PAVEMENT (STA. 566+74.00 RT. TO STA. 569+00.00 RT.).

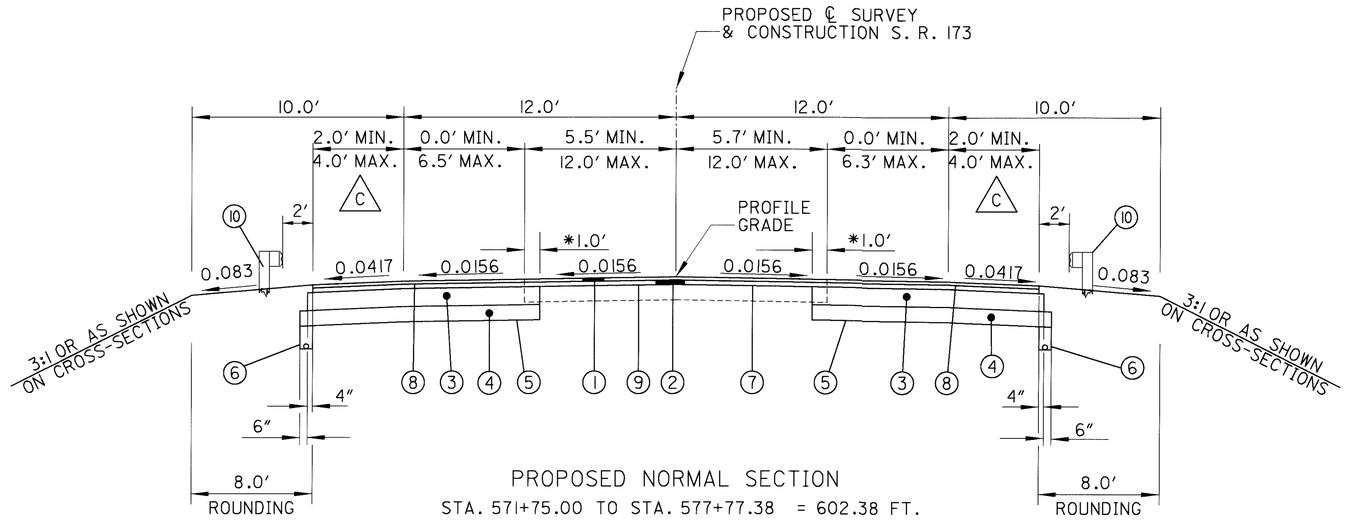
SAW CUT TAPERS FROM 4.5′ RT. STA. 572+26.86
TO 11.0′ AT STA 573+26.86.



PROPOSED NORMAL SECTION
STA. 563+80.00 TO STA. 569+00.00 = 520.00 FT.



PROPOSED NORMAL SECTION
STA. 569+00.00 TO STA. 571+75.00 = 275.00 FT.



PROPOSED NORMAL SECTION
STA. 571+75.00 TO STA. 577+77.38 = 602.38 FT.

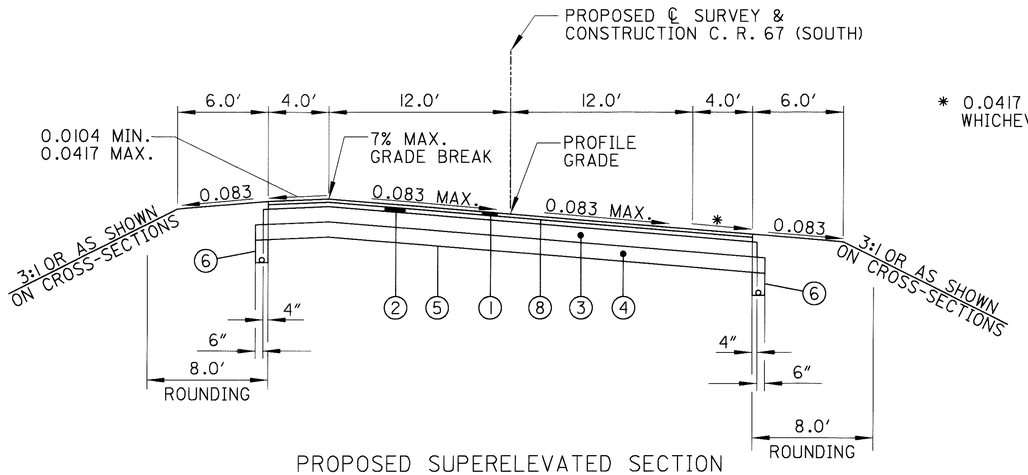
① ITEM 448 1¼″ ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
② ITEM 448 1¾″ ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
③ ITEM 301 4½″ ASPHALT CONCRETE BASE, PG64-22
④ ITEM 304 6″ AGGREGATE BASE
⑤ ITEM 204 SUBGRADE COMPACTION
⑥ ITEM 605 4″ SHALLOW PIPE UNDERDRAIN (18″ DEEP)
⑦ ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE
⑧ ITEM 407 TACK COAT FOR INTERMEDIATE COURSE
⑨ ITEM 407 TACK COAT
⑩ ITEM 606 GUARDRAIL, TYPE 5

FOR GUARDRAIL LOCATIONS SEE SHEET 25

SI73000I.PTS 09 JAN 03

TYPICAL SECTIONS S. R. 173

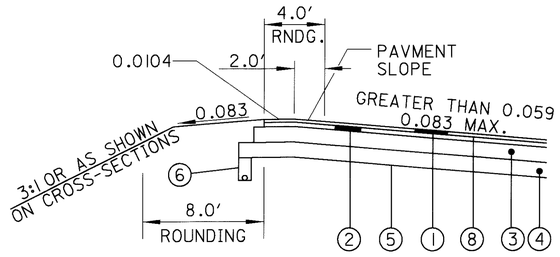
STA-173-1.85

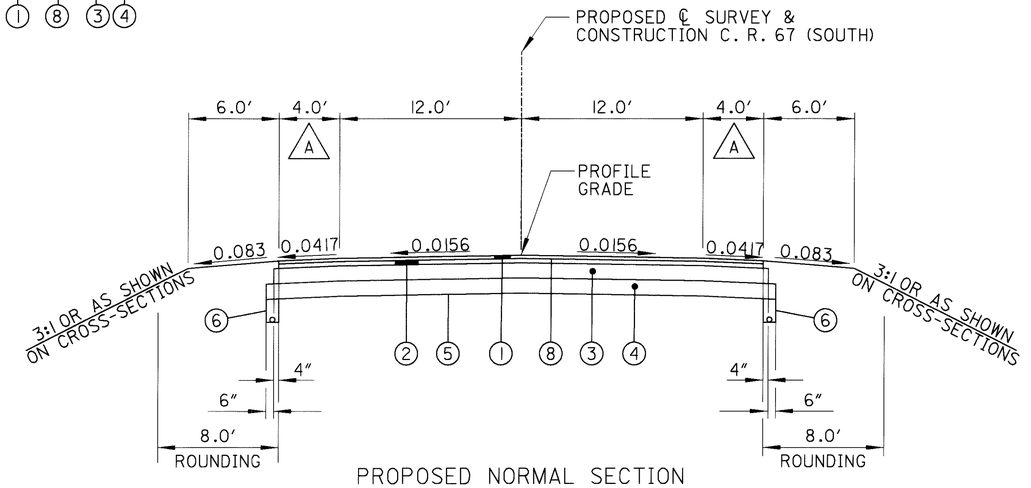


* 0.0417 OR RATE OF SUPER, WHICHEVER IS GREATER.

PROPOSED SUPERELEVATED SECTION

STA. 1645+73.49 TO STA. 1651+16.21 = 542.72 FT.





A TAPERS FROM 2.0′ AT STA. 1645+00.00 TO 4.0′ AT STA. 1645+50.00

PROPOSED NORMAL SECTION

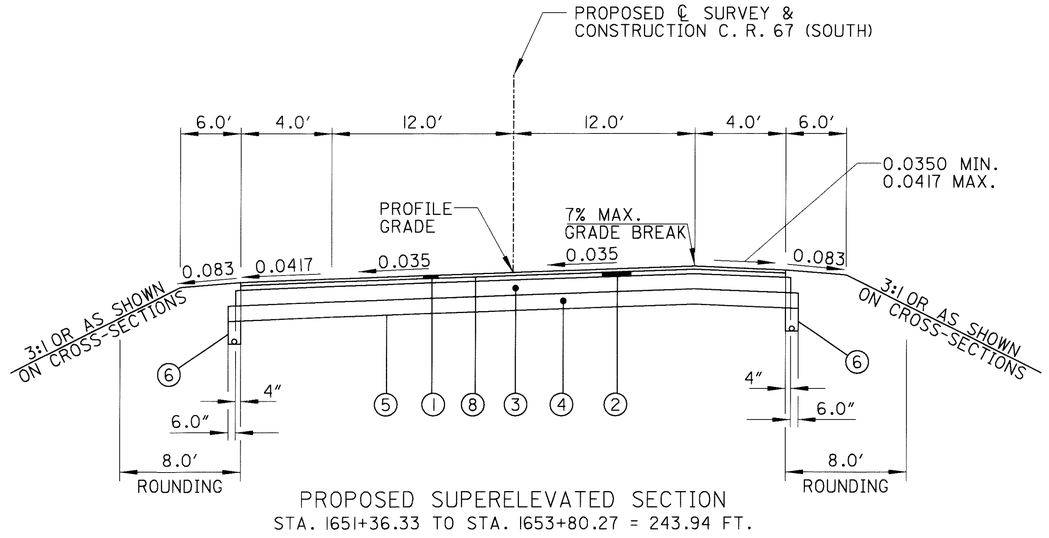
STA. 1645+00.00 TO STA. 1645+73.49 = 73.49 FT.
STA. 1651+16.21 TO STA. 1651+36.33 = 20.12 FT.
STA. 1653+80.27 TO STA. 1654+24.78 = 44.51 FT.

(1) ITEM 448 1¼″ ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(2) ITEM 448 1¾″ ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 301 4½″ ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 304 6″ AGGREGATE BASE
(5) ITEM 204 SUBGRADE COMPACTION
(6) ITEM 605 4″ SHALLOW PIPE UNDERDRAIN (18″ DEEP)
(7) ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE
(8) ITEM 407 TACK COAT FOR INTERMEDIATE COURSE
(9) ITEM 407 TACK COAT

SI730002.PTS 9 JAN 03

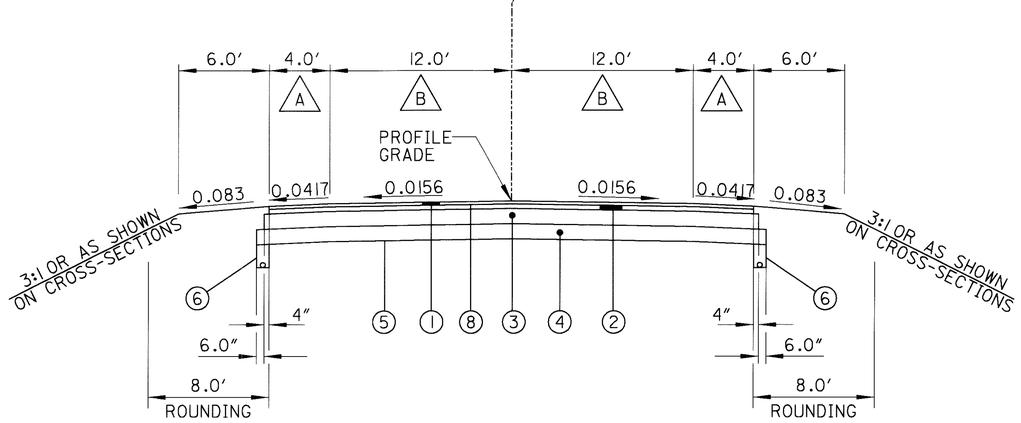
TYPICAL SECTIONS C. R. 67 SOUTH

STA-173-1.85



PROPOSED SUPERELEVATED SECTION

STA. 1651+36.33 TO STA. 1653+80.27 = 243.94 FT.



PROPOSED NORMAL SECTION

STA. 251+75.00 TO STA. 253+34.68 = 159.68 FT.

(A) TAPERS FROM 2.0′ AT STA. 251+75.00
TO 4.0′ AT STA. 252+25.00

(B) TAPERS FROM 10.0′ AT STA. 251+75.00
TO 12.0′ AT STA. 252+74.51 LT. &
TO 12.0′ AT STA. 252+85.00 RT.

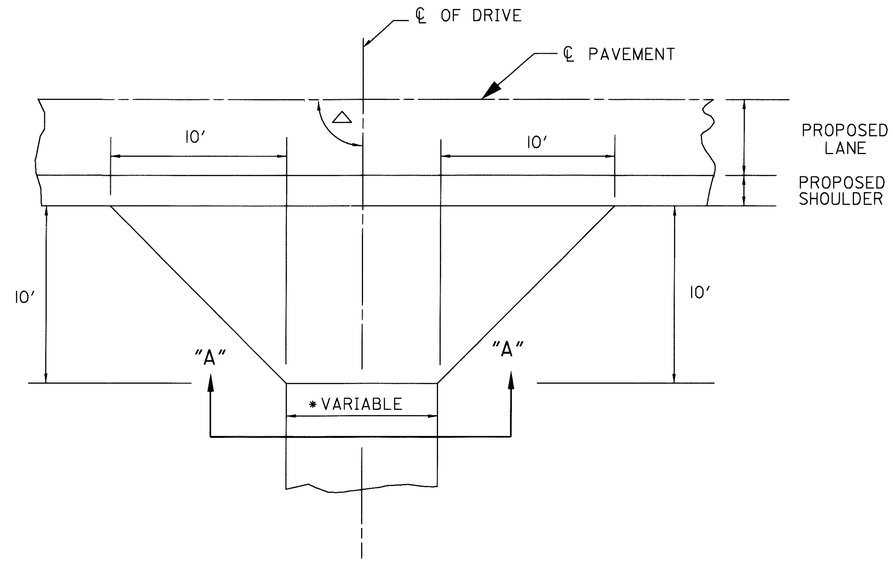
(1) ITEM 448 1¼″ ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(2) ITEM 448 1¾″ ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 301 4½″ ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 304 6″ AGGREGATE BASE
(5) ITEM 204 SUBGRADE COMPACTION
(6) ITEM 605 4″ SHALLOW PIPE UNDERDRAIN (18″ DEEP)
(7) ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE
(8) ITEM 407 TACK COAT FOR INTERMEDIATE COURSE
(9) ITEM 407 TACK COAT

SI730003.PTS 9 JAN 03

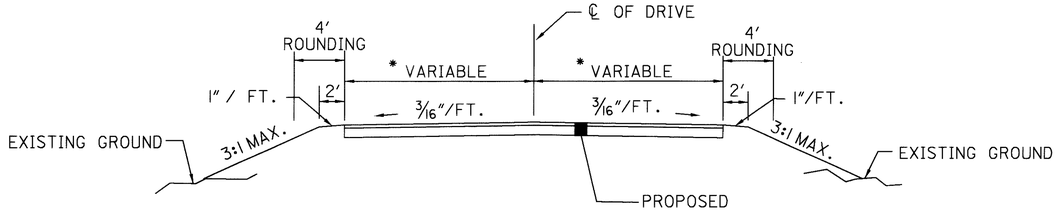
TYPICAL SECTIONS C. R. 67 NORTH & SOUTH

STA-173-1.85

TYPICAL SECTION
DRIVES



△ AS SHOWN IN THE PLANS



* SEE PLAN AND PROFILE SHEETS

SECTION A-A

(RESIDENCE DRIVES)

1 1/4″ ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE I, PG 64-22 (DRIVEWAYS)
ON 3 3/4″ ITEM 301 ASPHALT CONCRETE BASE, PG 64-22 (DRIVEWAYS)
OR
ITEM 304 6″ AGGREGATE BASE

(COMMERCIAL DRIVES)

1 1/4″ ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE I, PG 64-22 (DRIVEWAYS)
ON 4 3/4″ ITEM 301 ASPHALT CONCRETE BASE, PG 64-22 (DRIVEWAYS)
OR
ITEM 304 8″ AGGREGATE BASE

(FIELD DRIVES)

ITEM 304 6″ AGGREGATE BASE

RESIDENCE, COMMERCIAL & FIELD DRIVES

DRIVE.PTS

CALCULATED R.J.G.
CHECKED J.S.

PROPOSED DRIVE TYPICAL
(RESIDENCE, COMMERCIAL & FIELD DRIVES)

STA-173-1.85

7
85

MARK	SEE SHEET	℄ SURVEY AND CONSTRUCTION	SIDE	SPECIAL MAILBOX SUPPORT SYSTEM, SINGLE	SPECIAL
				EACH	
		C.R. 67			
1-MB	42	STA. 1648+07.5	LT.	1	
2-MB	42/43	STA. 1649+50.7	LT.	1	
		S.R. 173			
3-MB	29	STA. 576+86.7	RT.	1	
TOTALS (CARRIED TO GENERAL SUMMARY)				3	

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 LOCATIONS 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 4½" DIAMETER ROUND POST AND CONFORM TO 710.14. THE WOOD PLATE THAT IS ATTACHED TO THE TOP OF THE POST SHALL BE PRESSURE TREATED WOOD. STEEL POST SHALL BE A NOMINAL PIPE SIZE OF 2" I.D. AND CONFORM TO AASHTO M 181. HARDWARE (PLATES, SCREWS, BOLTS, ETC.) SHALL BE COMMERCIAL-GRADE GALVANIZED STEEL.

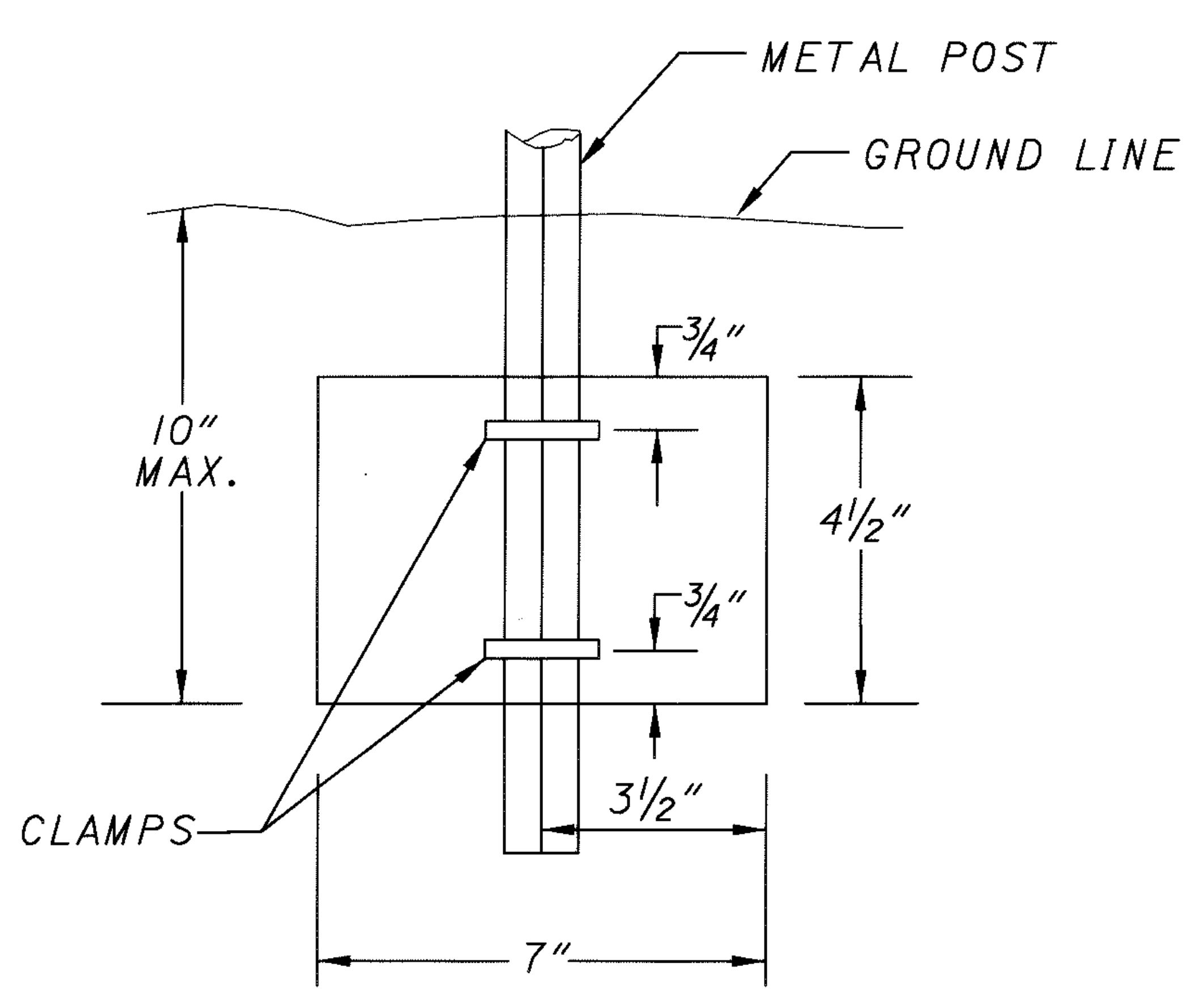
SETTING POSTS
POSTS SHALL BE SET PER THE FIRST PARAGRAPH OF 606.03 AMD SHALL, IN NO INSTANCE, BE ENCASED IN CONCRETE.

MOUNTING BOXES
SUPPORT HARDWARE SHALL ACCOMODATE EITHER A SINGLE OR DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO BOXES SHALL 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 ACCOMODATE THE COMPLETE INSTALLATION.

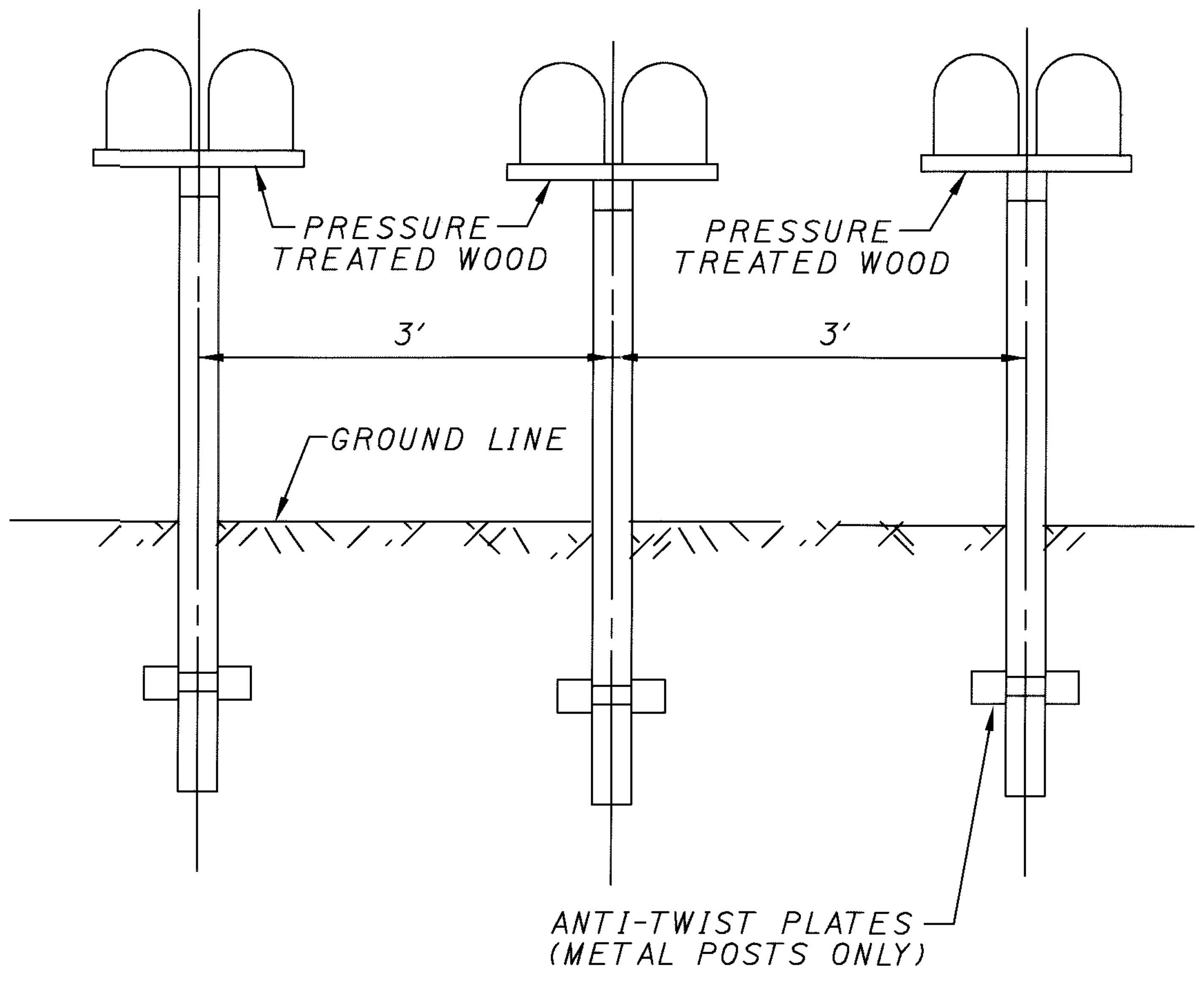
IN THE ABSENCE OF A NEW BOX SUPPLIED BY THE OWNER, THE CONTRACTOR SHALL SALVAGE THE EXISTING BOX AND PLACE IT ON THE NEW SUPPORT. DUE CARE SHALL BE EXERCISED IN SUCH AN OPERATION, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING ON HIS PART, AS JUDGED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

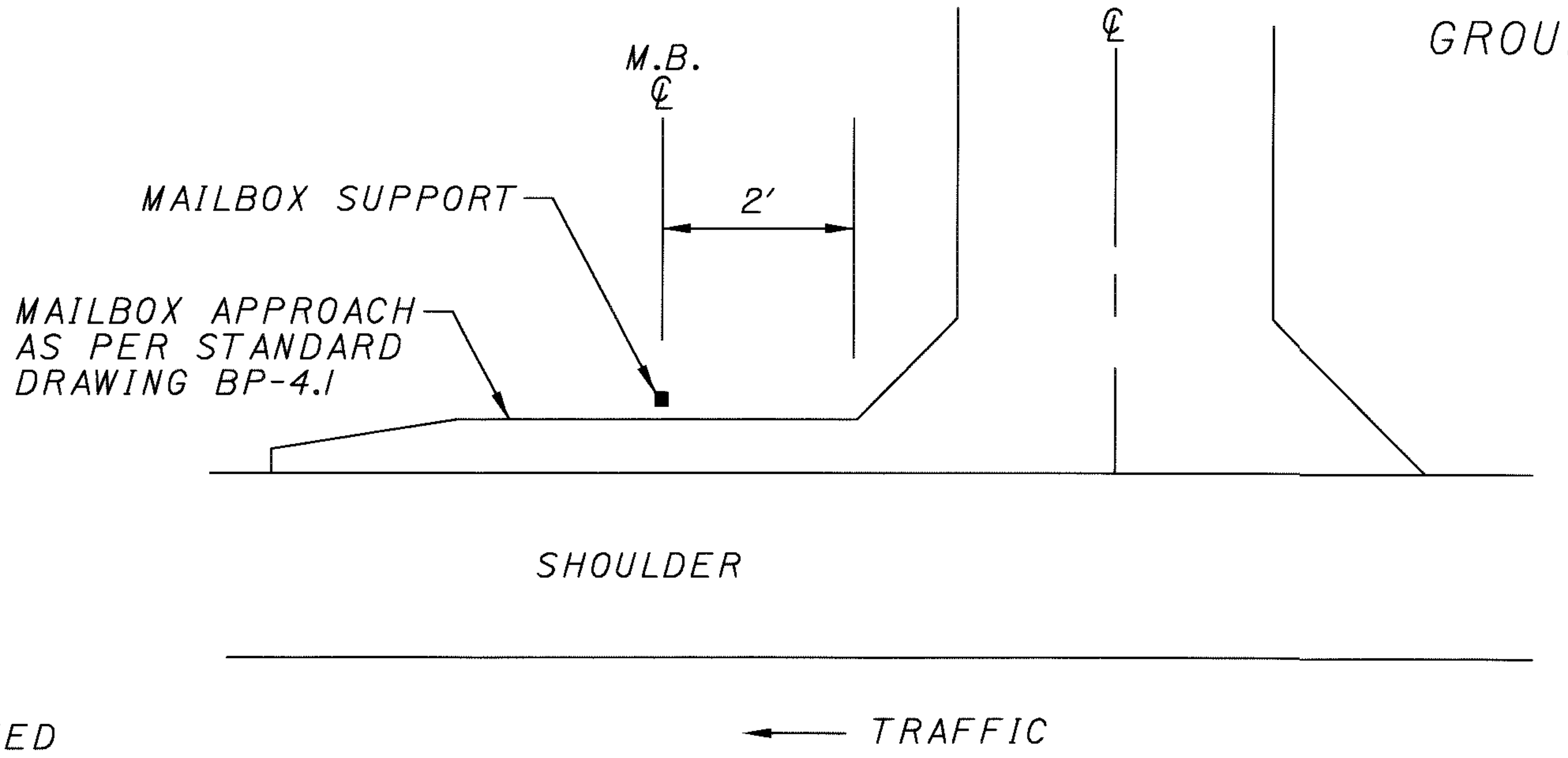
BASIS OF PAYMENT
PAYMENT UNDER THIS ITEM SHALL BE LIMITED TO FINAL PERMANENT INSTALLATIONS. TEMPOARY INSTALLATIONS SHALL BE IN ACCORDANCE WITH 107.12. HOWEVER, THE SAME MATERIAL AND SIZE LIMITATIONS AS FOR PERMANENT INSTALLATIONS SHALL APPLY. MAILBOX SUPPORTS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, FOR THE TYPE SPECIFIED, COMPLETE IN PLACE.

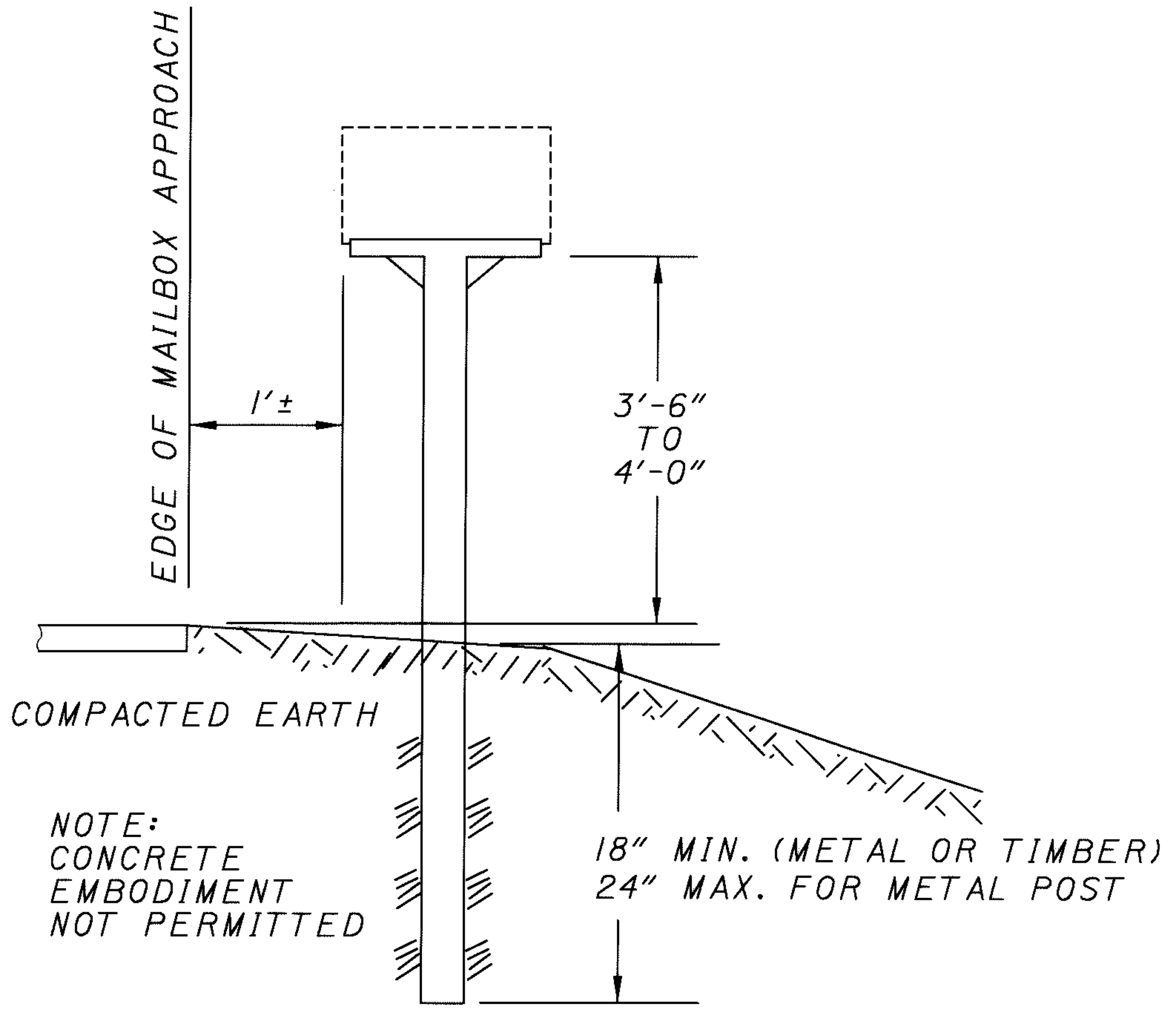


ANTI-TWIST PLATE



GROUP MAILBOX INSTALLATION





TYPICAL MAILBOX LOCATION AND MOUNTING HEIGHT

CALCULATED RJG
CHECKED CZ

MAILBOX DETAILS AND QUANTITIES

STA-173-1.85

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLY TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

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.

CONVERSION OF STANDARD CONSTRUCTION DRAWINGS

THE METRIC STANDARD DRAWINGS REFERENCED IN THIS PLAN SHALL BE CONVERTED TO ENGLISH UNITS USING THE SI (METRIC) TO ENGLISH CONVERSION FACTORS PROVIDED IN SECTION 109.02 OF THE 2002 CONSTRUCTION AND MATERIALS SPECIFICATIONS. CONVERSIONS SHALL BE APPROPRIATLEY PRECISE AND SHALL REFLECT STANDARD INDUSTRY ENGLISH VALUES WHERE SUITABLE.

MONUMENTS

MONUMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAILS AS SHOWN ON THE STANDARD CONSTRUCTION DRAWINGS AND AT THE LOCATIONS SHOWN ON SHEET 76. A TOTAL OF 5 REFERENCE MONUMENTS HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ELEVATION DATUM

ALL ELEVATIONS ARE BASED ON N.A.V.D. 1988.

LOCATION OF UTILITIES

THE HORIZONTAL AND VERTICAL LOCATIONS OF THE UNDERGROUND UTILITIES WITHIN THE PROJECT LIMITS WERE LOCATED BY SO-DEEP, AN SUBSURFACE UTILITY ENGINEERING COMPANY. IF THERE ARE ANY DISCREPANCIES BETWEEN FIELD MARKINGS AND WHAT THE PLAN INDICATES, PLEASE CONTACT STEVE JONES, ODOT DISTRICT 4 UTILITIES COORDINATOR AT 330-297-0801 EXT. 298 PRIOR TO ANY SUBSURFACE WORK BEING INITIATED.

UNDERGROUND UTILITIES

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

ENDANGERED SPECIES HABITAT

THIS PROJECT IS WITHIN THE RANGE OF THE FEDERALLY ENDANGERED INDIANA BAT (MYOTIS SODALIS) AND MAY IMPACT SUMMER ROOSTING HABITAT FOR THIS SPECIES. THE SUMMER ROOSTING HABITAT FOR THE INDIANA BAT CONSISTS OF LIVING OR DEAD TREES OR SNAGS WITH EXFOLIATING, PEELING OR LOOSE BARK, SPLIT TRUNKS AND/OR BRANCHES OR CAVITIES. THEREFORE, ANY UNAVOIDABLE CUTTING OF SUCH TREES WILL BE PERFORMED ONLY AFTER SEPTEMBER 15 AND BEFORE APRIL 15. ALL TREES THAT ARE DETERMINED TO BE HABITATS OF THE INDIANA BAT WILL BE REMOVED BY ODOT FORCES PRIOR TO APRIL 15, 2004.

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

CABLE TELEVISION:

TIME WARNER CABLE
5520 WHIPPLE AVENUE, N.W.
NORTH CANTON, OHIO 44720
PH. 330-494-9200
ATTN: STEVE WEAVER

ELECTRIC:

OHIO EDISON
1910 WEST MARKET ST.
AKRON, OHIO 44313
PH. 330-384-4720
ATTN. DAVE MILLER

OHIO POWER
301 CLEVELAND AVE.
P.O. BOX 24630
CANTON, OHIO 44701-4630
PH. 330-438-7823
ATTN. MIKE BUSCH

GAS:

BELDON AND BLAKE
1748 SALTWELL ROAD
DOVER, OHIO 44622
ATTN. KEITH KERSTETTER
PH. 330-602-5551

COLUMBIA GAS OF OHIO
8462 STATE ROUTE 179
P.O. BOX 85
LAKEVILLE, OHIO 44638
PH. 419-827-1209
ATTN. JACK ROHRBAUGH

DOMINION EAST OHIO
4725 SOUTHWAY STREET, S.W.
CANTON, OHIO 44706
PH. 330-478-3136
ATTN. STEVE CROWL

GREAT LAKES ENERGY PARTNERS
P.O. BOX 550
HARTVILLE, OHIO 44632-0550
PH. 330-877-6747
ATTN. SUE BARCLAY

TELEPHONE:

AMERITECH
50 WEST BOWERY STREET, 4TH FLOOR
AKRON, OHIO 44308
PH. 330-384-8057
ATTN. RICK DeLAGRANGE

OIL:

LAKE REGION OIL
P.O. BOX 499
DALTON, OHIO 44618
PH. 330-828-8420
ATTN. BOB DERVINE

SANITARY:

STARK COUNTY SANITARY ENGINEER
1701 MAHONING ROAD, N.E.
P.O. BOX 7906
CANTO, OHIO 44705-7906
PH. 330-451-2314
ATTN. JIM JONES

ITEM 254 PATCHING PLANED SURFACE

A QUANTITY OF SURFACE PATCHING HAS BEEN INCLUDED IN THE PLAN TO REPLACE UNSOUND PAVEMENT RESULTING FROM PLANING. THE QUANTITY OF ITEM 254 PATCHING PLANED SURFACE SHALL BE DONE AS DIRECTED BY THE PROJECT ENGINEER. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY.

ITEM 254 PATCHING PLANED SURFACE	500 SQ. YD.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

CLEARING AND GRUBBING

A LUMP SUM QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES

ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS SPECIFIED IN THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE IN PLACE PRIOR TO ANY EXCAVATION, GRADING OR FILLING OPERATIONS AND INSTALLATION OF PROPOSED STRUCTURES OR UTILITIES. THESE SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE AND THE AREA IS STABILIZED AS ACCEPTED BY THE ENGINEER.

STREAM CHANNEL EXCAVATION

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT ANY INCIDENTAL DISCHARGES ASSOCIATED WITH THE EXCAVATION AND HAULING OF MATERIAL FROM THE STREAM CHANNEL. THIS PERTAINS TO ANN EXCAVATION OPERATION SUCH AS, FOUNDATIONAL PIER OR ABUTMENT EXCAVATION, CHANNEL CLEAN OUT, EXCAVATION FOR ROCK CHANNEL PROTECTION AND REMOVAL OF ANY TEMPORARY FILL ASSOCIATED WITH CONSTRUCTION OPERATIONS.

CALCULATED RJG
CHECKED CZ

GENERAL NOTES

STA-173-1.85

9
85

ITEM 606 - ANCHOR ASSEMBLY, TYPE E-98

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING EITHER OF THE FOLLOWING GUARDRAIL END TERMINALS.

1) THE ET-2000 (1997) MANUFACTURED BY TRINITY INDUSTRY, 1170 N. STATE STREET, GIRARD, OHIO 44420 (TELEPHONE: 330-545-4373).

THE LENGTH OF THE ET-2000 (1997) SYSTEM IS CONSIDERED TO BE 50'-0", INCLUSIVE OF TWO 25'-0" LONG RAIL ELEMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DWG. NO.	DRAWING NAME	DWG./ REV. DATE	ODOT APPROVAL DATE
SSS265M	ET-2000 (1997) PLAN, ELEVATION AND SECTIONS	6/20/97	3/6/98
SS142	ET2000 PLUS 50'-0" PLAN, ELEVATION AND SECTION 25'-0" RAIL, SLEEVE W/PL POSTS 1-4	4/12/00	7/31/00
SS141	ET2000 PLUS PLAN, ELEVATION AND SECTION 25'-0" RAIL, HBA POSTS 1-4	2/29/00	7/31/00
SS158	ET2000 PLUS 50'-0" WITH 12'-6" PANELS AND HBA POSTS 1-4 PLAN, ELEVATION AND SECTION	5/22/00	7/31/00

2) THE SKT-350 MANUFACTURED BY ROAD SYSTEMS, INC., 2516 MALLORY LANE, STOW, OHIO, 44224, (TELEPHONE: 330-346-0721).

THE LENGTH OF THE SKT-350 SYSTEM IS CONSIDERED TO BE 50'-0", INCLUSIVE OF FOUR 12'-6" LONG RAIL ELEMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DWG. NO.	DRAWING NAME	DWG./ REV. DATE	ODOT APPROVAL DATE
SKT-4M	SEQUENTIAL KINKING TERMINAL (SKT-350) ASSEMBLY WITH 4 FOUNDATION TUBES	12/11/97	3/6/98

THE FACE OF THE TYPE E-98 IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19, APPROXIMATELY 18" X 18".

REFER TO THE MANUFACTURER'S INSTRUCTION REGARDING THE INSTALLATION OF, AND THE GRADING AROUND, THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4-INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 27-3/4-INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4-INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, TYPE E-98, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS.

ITEM 659 SEEDING AND MULCHING
14,258 SQ. YDS. FROM CROSS SECTION SHEET 41

ITEM 659 COMMERCIAL FERTILIZER 2 TON
1 TON PER 7,410 SQ. YD. OF THE PERMANENT SEEDED AREA
14,258 SQ. YDS. ÷ 7,410 = 1.92

ITEM 659 LIME 3.00 ACRE
PERMANENT SEEDED AREA x 0.000207
14,258 SQ. YDS. X 0.000207 = 2.95 ACRES

ITEM 659 INTER-SEEDING 718 SQ.YDS.
5% OF THE PERMANENT SEEDING AND MULCHING AREA
14,258 SQ. YDS. X 0.05 = 712.9

ITEM 659 WATER 77 M. GAL.
0.0054 M. GAL PER SQ. YD. OF THE PERMANENT SEEDED AREA
14,258 SQ. YDS. x 0.0054 = 77.0

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS. FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT, QUANTITY CALCULATIONS FOR SEEDING AND MULCHING, ARE BASED ON THESE LIMITS.

WATERWAY PERMIT DETERMINATION (404/401) - ODOT PROJECTS

ALL PROJECTS INVOLVING JURISDICTIONAL WATERS OF THE UNITED STATES (STREAMS, RIVERS, NON-ISOLATED WETLANDS) AND/OR ISOLATED WETLANDS ARE SUBJECT TO REGULATION UNDER SECTIONS 404 AND 401 OF THE CLEAN WATER ACT, AND POSSIBLY OHIO EPA ISOLATED WETLAND LAW. THE OHIO DEPARTMENT OF TRANSPORTATION - OFFICE OF ENVIRONMENTAL SERVICES (OES) AND/OR THE UNITED STATES ARMY CORPS OF ENGINEERS (USACE) HAS DETERMINED THAT THE PROJECT MEETS THE CRITERIA OF NATIONWIDE PERMIT (NWP) 3 - MAINTENANCE; BASED UPON THE ANTICIPATED IMPACTS TO STREAM(S) AND/OR WETLAND(S). HOWEVER, THIS PERMIT DETERMINATION DID NOT INCLUDE THE USE OF TEMPORARY CONSTRUCTION ACCESS FILLS THAT MAY BE REQUIRED FOR CONSTRUCTION (I.E. CAUSEWAY STREAM CROSSINGS, CONSTRUCTION ACCESS PADS, COFFERDAMS, ECT.). INFORMATION REGARDING THE USE OF TEMPORARY CONSTRUCTION ACCESS FILLS MAY NOT HAVE BEEN KNOWN AT THE TIME OF THE PERMIT DETERMINATION. THE CONTRACTOR SHOULD BE AWARE THAT THE USE OF TEMPORARY FILL BELOW THE ORDINARY HIGH WATER MARK (OHWM), WHICH IS THE USACE'S JURISDICTIONAL LIMITS, WILL REQUIRE A PRE-CONSTRUCTION NOTIFICATION (PCN) AND AUTHORIZATION BY THE USACE UNDER NWP 33 - TEMPORARY CONSTRUCTION ACCESS DEWATERING. SHOULD TEMPORARY CONSTRUCTION ACCESS FILL BE REQUIRED, THE CONTRACTOR SHALL COORDINATE SUCH ACTIVITIES, INCLUDING THE PCN, THROUGH OES AND ALLOW 60 DAYS MINIMUM FOR PROCESSING THE USACE. THE CONTRACTOR SHALL NOT COORDINATE THESE ACTIVITIES DIRECTLY WITH THE USACE. THE CONTRACTOR SHALL NOT UTILIZE TEMPORARY FILL BELOW OHWM UNTIL SUCH ACTIVITY AUTHORIZED BY THE USACE. SHOULD A PNC BE REQUIRED, THE PCN SHALL INCLUDE PERTINENT INFORMATION (I.E. VOLUME AND SURFACE AREA OF TEMPORARY FILLS) AND DRAWINGS (PLAN AND PROFILE VIEW) OF TEMPORARY FILLS BELOW OHWM. ONLY CLEAN, NON ERODIBLE MATERIALS SHALL BE USED FOR TEMPORARY CONSTRUCTION ACCESS FILLS. ANY TEMPORARY FILLS BELOW OHWM SHALL BE REMOVED FOLLOWING COMPLETION OF THE AUTHORIZED ACTIVITY AND THE AREA OF STREAM WHERE TEMPORARY FILL WAS LOCATED SHALL BE RESORTED TO ITS PRE-CONSTRUCTION CONDITIONAL. PLEASE NOTE THAT FORDING OF WATERWAYS IS NOT ALLOWED PER ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS 2002, ITEM 207.03.

REGULATED UNDERGROUND STORAGE TANKS

BASED ON ANOMALIES CONSISTENT WITH UNDERGROUND STORAGE TANKS IDENTIFIED BY A GROUND PENETRATING RADAR, TWO (2) PETROLEUM UNDERGROUND STORAGE TANKS WERE IDENTIFIED PARTIALLY WITHIN THE RIGHT-OF-WAY LIMITS AT THE MARLBORO COUNTY AUCTION PROPERTY, 9456 COLUMBUS ROAD, PARCEL NO. 3104722, STA. 251+56.57 - STA. 253+34.68. IF THE UNDERGROUND STORAGE TANKS NEED TO BE REMOVED FOR CONSTRUCTION PURPOSES, THEN THE CONTRACTOR SHALL REMOVE THE UNDERGROUND STORAGE TANKS IN ACCORDANCE WITH ODOT CMS 202.062. THE ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THIS WORK.

ITEM 202- REGULATED UNDERGROUND STORAGE TANK REMOVED 2 EACH

ENVIRONMENTAL WORK

ENVIRONMENTAL STUDIES HAVE SHOWN THAT THERE IS A POTENTIAL OF ENCOUNTERING TWO UNDERGROUND STORAGE TANKS AND PETROLEUM CONTAMINATED MATERIALS DURING THE EXCAVATION WITHIN THE PROPOSED RIGHT-OF-WAY A THE MARLBORO COUNTY AUCTION PROPERTY, 9456 COLUMBUS ROAD, PARCEL NO. 3104722 (STA. 251+56.57 - STA. 253+34.68 AND STA. 570+32.81 - 574+44.81) LOCATED IN THE NORTHEAST QUADRANT OF THE SR 173/COLUMBUS ROAD INTERSECTION.

THE CONTRACTOR SHALL MANAGE MATERIAL EXCAVATED FROM THE VICINITY OF MARLBORO COUNTY AUCTION PROPERTY AT 9456 COLUMBUS ROAD ACCORDING TO THE FOLLOWING NOTES. THE ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THIS WORK. ALL EXCAVATIONS WITHIN THE AFOREMENTIONED LIMITS SHALL BE PAID FOR UNDER THE ORIGINAL PLAN BID ITEMS. ALL MATERIAL EXCAVATED BY THE CONTRACTOR WITHIN THESE LIMITS SHALL BE SUBJECT TO TESTING BY AN INSPECTOR PROVIDED BY THE ENGINEER.

ALL MATERIAL EXCAVATED BY THE CONTRACTOR BETWEEN AT THIS LOCATION MAY BE STOCKPILED IN AN AREA PROVIDED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. THE ENGINEER MAY PERMIT TEMPORARY STORAGE OF THE EXCAVATED MATERIAL IN A LINED AND COVERED ROLL-OFF BOX. THE ENGINEER MAY PERMIT TEMPORARY STORAGE OF THE EXCAVATED MATERIAL ON AN IMPERMEABLE MEMBRANE. THE MEMEBRANE SHALL BE SURROUNDED BY BALES OF STRAW TO PREVENT THE SUSPECTED SOILS FROM COMING IN CONTACT WITH THE ORIGINAL SOILS. THE ENGINEER MAY PERMIT THE CONTRACTOR TO DIRECT LOAD THE EXCAVATED CONTAMINATED MATERIAL INTO TRUCKS.

THE MATERIAL SHALL BE PROPERLY TESTED, TRANSPORTED, AND DISPOSED OF IN A LICENSED (BY THE LOCAL HEALTH DEPARTMENT) AND PERMITTED (BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY) SOLID WASTE FACILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS AND TO TRANSPORT THE MATERIAL TO A LICENCED AND PERMITTED SOLID WASTE DISPOSAL FACILITY. THE CONTRACTOR SHALL CONTACT THE FACILITY TO DETERMINE IF ANY ADDITIONAL TESTING IS REQUIRED FOR DISPOSAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONDUCTION ANY ADDITIONAL SAMPLING AND ANALYSIS OF THIS MATERIAL.

THE CONTRACTOR SHAL FURNISH ALL THE LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO PROPERLY HANDLE, STORE, TEST (FOR DISPOSAL), TRANSPORT, AND DISPOSE OF REGULATED MATERIALS, INCLUDING ANY REQUIRED PERMITS, APPROVALS, OR FEES WITHIN THE LIMITS IDENTIFIED ABOVE. PAYMENT FOR THIS WORK SHALL BE MADE AT THE CONTRACT PRICE BID PER TON. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM SPECIAL - WORK INVOLVING SOLID WASTE 75 TON

CALCULATED RJG CHECKED CZ

GENERAL NOTES

STA-173 1.85

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 CONDUIT ITEMS.

SPRING DRAINS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR DRAINING ANY SPRINGS SHOWN IN THE PLAN OR ENCOUNTERED DURING CONSTRUCTION. THE FOLLOWING TYPES OF PIPES MAY BE USED: 707.33, 707.41, 707.42 or 707.45 PERFORATED PER 707.31.

SPRING DRAINS SHALL BE CONSTRUCTED AS SHOWN ON STANDARD CONSTRUCTION DRAWING DM-1.1 AND PAID FOR AT THE CONTRACT PRICE FOR:

ITEM 605 6" UNCLASSIFIED PIPE UNDERDRAINS, FOR SPRINGS 200 FT.

ITEM 605 AGGREGATE DRAIN, FOR SPRINGS 200 FT.

ITEM 604 PRECAST REINFORCED CONCRETE OUTLET 4 EACH

UNTREATED SEPTIC CONNECTIONS

THIS PLAN MAKES NO PROVISION FOR CONNECTING, NOR SHALL THE ENGINEER OR CONTRACTOR CONNECT, ANY UNTREATED SEPTIC DRAINAGE INTO THE HIGHWAY DRAINAGE SYSTEM. ANY PIPE CARRYING UNTREATED SEPTIC FLOW SHALL BE PLUGGED WITH CLASS C CONCRETE AT THE RIGHT OF WAY LINE. PAYMENT FOR PLUGGING SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 202 OR 203 ITEM.

TREATED SEPTIC CONNECTIONS

TREATED SEPTIC FLOW MAY BE DISCHARGED INTO THE HIGHWAY DRAINAGE SYSTEM PROVIDED THE OWNER HAS ACQUIRED AN OFFICIAL PERMIT FROM THE (OHIO DEPARTMENT OF TRANSPORTATION) (COUNTY) (OR) (LOCAL AUTHORITY).

IN EACH CASE WHERE A PERMIT HAS BEEN ISSUED FOR MAKING A TREATED SEPTIC CONNECTION INTO A HIGHWAY DRAINAGE CONDUIT, AN INSPECTION WELL SHALL BE PROVIDED IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING DM-3.1.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER IN MAKING THE ABOVE CONNECTIONS:

ITEM 603 4" CONDUIT, TYPE C 200 FT.

ITEM 604 INSPECTION WELL 2 EACH

RESIDENTIAL AND COMMERCIAL DRAINAGE CONNECTIONS

EXISTING ROOF DRAINS, FOOTER DRAINS, OR YARD DRAINS, DISTURBED BY THE WORK, SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS BY CONNECTING A CONDUIT THROUGH THE CURB OR INTO A DRAINAGE STRUCTURE. THE LOCATION, TYPE, SIZE AND GRADE OF THE NEW CONDUIT REQUIRED TO REPLACE OR EXTEND THE EXISTING DRAIN WILL BE DETERMINED BY THE ENGINEER.

THE FOLLOWING CONDUIT TYPES MAY BE USED: 707.33, 707.41 NON-PERFORATED, 707.42, 707.43, 707.46, 707.47, 707.51, 707.52 SDR35.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE WORK NOTED ABOVE:

ITEM 603 4" CONDUIT, TYPE B, FOR DRAINAGE CONNECTION 100 FT.

ITEM 603 4" CONDUIT, TYPE C, FOR DRAINAGE CONNECTION 100 FT.

ITEM 603 4" CONDUIT, TYPE E, FOR DRAINAGE CONNECTION 100 FT.

ITEM 603 4" CONDUIT, TYPE F, FOR DRAINAGE CONNECTION 100 FT.

FARM DRAINS

ALL FARM DRAINS, WHICH ARE ENCOUNTERED DURING CONSTRUCTION, SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS. EXISTING COLLECTORS WHICH ARE LOCATED BELOW THE ROADWAY DITCH ELEVATIONS, AND WHICH CROSS THE ROADWAY, SHALL BE REPLACED WITHIN THE RIGHT OF WAY BY ITEM 603 CONDUIT, TYPE B, ONE COMMERCIAL SIZE LARGER THAN THE EXISTING CONDUIT.

EXISTING COLLECTORS AND ISOLATED FARM DRAINS, WHICH ARE ENCOUNTERED ABOVE THE ELEVATION OF ROADWAY DITCHES, SHALL BE OUTLETTED INTO THE ROADWAY DITCH BY ITEM 603 TYPE F CONDUIT. THE OPTIMUM OUTLET ELEVATION SHALL BE 1 FOOT ABOVE THE FLOWLINE ELEVATION OF THE DITCH. LATERAL FIELD TILES WHICH CROSS THE ROADWAY SHALL BE INTERCEPTED BY ITEM 603 TYPE E CONDUIT, AND CARRIED IN A LONGITUDINAL DIRECTION TO AN ADEQUATE OUTLET OR ROADWAY CROSSING.

THE LOCATION, TYPE, SIZE AND GRADE OF REPLACEMENTS SHALL BE DETERMINED BY THE ENGINEER AND PAYMENT SHALL BE MADE ON FINAL MEASUREMENTS.

EROSION CONTROL PADS AND ANIMAL GUARDS SHALL BE PROVIDED AT THE OUTLET END OF ALL FARM DRAINS AS PER STANDARD CONSTRUCTION DRAWING DM-1.1, EXCEPT WHEN THEY OUTLET INTO A DRAINAGE STRUCTURE. PAYMENT FOR THE EROSION CONTROL PADS AND ANIMAL GUARDS AND ANY NECESSARY BENDS OR BRANCHES SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEMS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 603 6" CONDUIT, TYPE B 50 FT.

ITEM 603 12" CONDUIT, TYPE B 50 FT.

ITEM 603 4" CONDUIT, TYPE E 50 FT.

ITEM 603 6" CONDUIT, TYPE E 50 FT.

ITEM 603 12" CONDUIT, TYPE E 50 FT.

ITEM 601 ROCK CHANNEL PROTECTION, TYPE C, FILTER 10 CU. YD.

UNRECORDED SANITARY CONNECTIONS

ANY UNRECORDED ACTIVE CONNECTION TO A SANITARY SEWER ENCOUNTERED DURING CONSTRUCTION SHALL BE RECONNECTED TO THE EXISTING SANITARY SEWER TO THE SATISFACTION OF THE ENGINEER.

THE FOLLOWING CONDUIT TYPES MAY BE USED: 707.42, 707.43, 707.44, 707.45, 707.46, 707.47, 707.51, 707.52 SDR35, 706.01, 706.02, OR 706.08 WITH JOINTS AS PER 706.11 OR 706.12.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE WORK NOTED ABOVE:

603, 4 " CONDUIT, TYPE B, FOR SANITARY 50 FT.

603, 4 " CONDUIT, TYPE C, FOR SANITARY 50 FT.

CALCULATED RJG CHECKED CZ

GENERAL NOTES

STA-173-1.85

SI730003.GGN 23 JAN 03

SEQUENCE OF OPERATIONS

PHASE 1

INSTALL ALL NECESSARY TRAFFIC CONTROL DEVICES NEEDED TO DETOUR TRAFFIC AS SHOWN ON SHEETS 16-17.

S.R. 173, C.R. 67 (NORTH & SOUTH)

CONSTRUCT S.R 173 PAVEMENT WIDENING, FULL DEPTH PAVEMENT REPLACEMENT (STA. 569+00 TO STA. 571+75), CULVERT REPLACEMENT STA. 575+49.03, FULL DEPTH REPLACEMENT OF C.R. 67 (NORTH) AND FULL DEPTH REPLACEMENT OF C.R. 67 (SOUTH) TO THE RADIUS POINTS, AND ALL RELATED WORK AS PER TYPICAL SECTIONS AND DETAIL SHEETS.

ALL CONSTRUCTION SHALL BE COMPLETED UP TO AND INCLUDING ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22.

INSTALL WORK ZONE CENTER LINES AND WORK ZONE STOP LINES AS SHOWN BELOW TO OPEN SR 173 AND CR 67 (NORTH) TO TRAFFIC.

CLOSURE OF S.R. 173 AND C.R. 67 (NORTH) NOT TO EXCEED 35 CONSECUTIVE CALENDAR DAYS

ALL DRIVES SHALL BE MAINTAINED AT ALL TIMES

PHASE 2

C.R. 67 (SOUTH)

INSTALL ALL NECESSARY TRAFFIC CONTROL DEVICES NEEDED TO MAINTAIN TRAFFIC AS SHOWN ON SHEETS 16-17.

OPEN S.R. 173 AND C.R. 67 (NORTH) TO TRAFFIC.

CONSTRUCT THE REALIGNMENT AND FULL DEPTH PAVEMENT REPLACEMENT OF C.R. 67 (SOUTH) UP TO AND INCLUDING ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22 AND ALL RELATED WORK AS PER TYPICAL SECTIONS AND DETAIL SHEETS.

INSTALL WORK ZONE CENTER LINES AND WORK ZONE STOP LINES AS LISTED BELOW AS NEEDED TO OPEN CR 67 (SOUTH) TO TRAFFIC.

CLOSURE OF C.R. 67 (SOUTH) DURING PHASE 2 NOT TO EXCEED 25 CONSECUTIVE CALENDAR DAYS.

ALL DRIVES SHALL BE MAINTAINED AT ALL TIMES

PHASE 3

OPEN C.R. 67 (SOUTH) TO TRAFFIC.

S.R. 173, C.R. 67 (NORTH) AND C.R. 67 (SOUTH)

MAINTAIN TRAFFIC UNDER FLAGGING CONDITIONS AS PER STANDARD CONSTRUCTION DRAWING MT-97.11

PLACE ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 2, PG64-22.

PLACE ALL PERMANENT TRAFFIC CONTROL DEVICES AS PER DETAIL SHEETS.

ITEM 614 - TEMPORARY PAVEMENT MARKINGS

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY:

WORK ZONE CENTER LINE, CLASS I, 642 PAINT SR 173 STA. 562+00 - STA.569+60.34, STA. 571+04.96 - STA.579+00	0.30 MILE
WORK ZONE CENTER LINE, CLASS I, 642 PAINT CR 67 NORTH STA. 251+00.00 - STA. 253+21.82	0.04 MILE
WORK ZONE CENTER LINE, CLASS I, 642 PAINT CR 67 SOUTH STA. 1644+00.00 - STA. 1654+11.93	0.19 MILE
TOTAL CARRIED TO GENERAL SUMMARY	0.53 MILE

WORK ZONE STOP LINE, CLASS I, 642 PAINT CR 67 SOUTH STA. 1654+11.93 = 21 FEET

WORK ZONE STOP LINE, CLASS I, 642 PAINT CR 67 NORTH STA. 253+21.82 = 21 FEET

TOTAL CARRIED TO GENERAL SUMMARY 42 FEET

DETOUR NOTIFICATIONS - (DETOUR SIGNING SR 173)

THE CONTRACTOR SHALL ADVISE THE ODOT DISTRICT OFFICE (330-297-0801 EXT. 339) EIGHTEEN (18) DAYS IN ADVANCE OF WHEN THE STATE DETOUR ROUTE SHOULD BE IN EFFECT. ODOT SHALL THEN PROVIDE AND INSTALL ALL DEVICES NECESSARY TO DEFINE THE ROUTE OF THE DETOUR AND SHALL MAINTAIN THE SAME THROUGHOUT THE DETOUR LIMITATION DATES. ALL TRAFFIC CONTROL DEVICES REQUIRED OTHER THAN FOR THE DETOUR SHALL BE FURNISHED, ERECTED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR.

DETOUR NOTIFICATIONS - (CR 67)

THE CONTRACTOR SHALL ADVISE THE ODOT DISTRICT OFFICE (330-297-0801 EXT. 339) AND OR COUNTY/CITY EIGHTEEN (18) DAYS IN ADVANCE OF WHEN THE COUNTY ROAD DETOUR ROUTE SHOULD BE IN EFFECT. THE CONTRACTOR SHALL THEN PROVIDE TO THE PROJECT OFFICE, ALL SIGNS, SUPPORTS AND HARDWARE REQUIRED FOR THE DETOUR ROUTE. COUNTY OR CITY FORCES SHALL THEN INSTALL, MAINTAIN, REMOVE AND SALVAGE THE SAME THROUGHOUT THE DETOUR LIMITATION DATES. ALL TRAFFIC CONTROL DEVICES REQUIRED OTHER THAN FOR THE DETOUR, SHALL BE FURNISHED, ERECTED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. THIS WORK SHALL BE PAID FOR UNDER ITEM 614 DETOUR SIGNING - LUMP SUM.

DETOUR DURATION

THE MAXIMUM LENGTH OF TIME FOR THE DETOUR ROUTE TO BE IN EFFECT SHALL BE THRITY FIVE (35) CONSECUTIVE DAYS FOR PHASE I AND TWENTY FIVE (25) CONSECUTIVE DAYS FOR PHASE 2. CONSTRUCTION WORK MAY BE PERFORMED BEFORE AND AFTER DETOUR LIMITATION DATES, BUT THERE SHALL BE NO RESTRICTIONS (LANE WIDTH REDUCTIONS, TEMPORARY ROADWAYS, OR ONE LANE TRAFFIC) TO THROUGH OR LOCAL TRAFFIC. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SCHEDULE AND PERFORM THE CONSTRICTION WORK WITHIN THE DETOUR LIMITATION TIME. THE FAILURE OF THE CONTRACTOR TO MEET THE DETOUR LIMITATION DATES WILL CAUSE SEPARATE LIQUIDATED DAMAGES OF $ 700.00 PER CALENDAR DAY OF OVERRUN OF DETOUR LIMITATION TIME TO BE ASSESSED. THE CONTRACTOR WILL COMPLY WITH ALL PROVISIONS OF 108.07 OF THE DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS.
THE DETOURS, IF THE CONTRACTOR CHOOSES, MAY RUN CONCURRENT. HOWEVER, THE TIME FOR CLOSURE OF SR 173 AND CR 67 WILL NOT EXCEED THE TIMES LISTED ABOVE.

MAINTENANCE OF TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS AND RAMPS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREET ANDHIGHWAYS, CURRENT EDITION, LATEST VERSION, THE SPECIFICATIONS AND THE FOLLOWING:

1. A MINIMUM OF ONE ELEVEN FOOT LANE IN EACH DIRECTION SHALL BE MAINTAINED ON THE EXISTING PAVEMENT (COMPLETED PAVEMENT AND TEMPORARY PAVEMENT) DURING CONSTRUCTION OF THE WORK.

2. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 297-0801 EXT. 209, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK

ITEM 614 - WORK ZONE MARKING SIGN

A QUANTITY OF ITEM 614 WORK ZONE MARKING SIGN HAS BEEN INCLUDED IN THE PLAN. THIS QUANTITY SHALL INCLUDE, BUT NOT LIMITED TO THE FOLLOWING SIGNS:

OW-167 (NO EDGE LINES)
THESE QUANTITIES SHALL BE AS PER 614.04.

THE FOLLOWING QUANTITY SHALL BE USED FOR THE MAINTENANCE OF TRAFFIC ON THIS PROJECT:

ITEM 614 WORK ZONE MARKING SIGN 4 EACH

CALCULATED RJG CHECKED CZ

MAINTENANCE OF TRAFFIC GENERAL NOTES

STA-173-1.85

12/84

SI730001.MWS 7 FEB 03

TEMPORARY ACCESS TO DRIVES AND APPROACHES

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC TO DRIVES AND APPROACHES. ALL DRIVES SHALL BE PROVIDED ACCESS AS PER 614.02(A).

ITEM 410 TRAFFIC COMPACTED SURFACE, TYPE A OR B 10 CU. YD.

ITEM 410 TRAFFIC COMPACTED SURFACE, TYPE C 10 CU. YD.

ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 25 CU. YD.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616 WATER 22 M. GAL.
0.003 M. GAL. OF WATER PER CU. YD. OF THE TOTAL FOR EARTHWORK
6,518 (EXC.) + 688 (EMB.) = 7,206 CU. YD. TOTAL
7,206 X 0.003 = 21.6 M. GAL.

BASIS OF PAYMENT

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

TEMPORARY CONSTRUCTION DRIVES - 1-TDR AND 2-TDR

TEMPORAY CONSTRUCTION DRIVES SHALL BE LOCATED AT THE FOLLOWING LOCATIONS - CR 67 SOUTH - STA. 1645+38.4 LT. AND STA. 1647+28.4. LT.

THE FOLLOWING QUANTITIES ARE TO BE USED FOR THE CONSTRUCTION OF THESE DRIVES AND ARE CARRIED WITH ITEM 614 MAINTAINING TRAFFIC:

15" CONDUIT TYPE D	44.0 FT.
ITEM 304 AGGREGATE BASE (6")	13.0 CU. YDS.

CALCULATED RJG CHECKED CZ

MAINTENANCE OF TRAFFIC GENERAL NOTES

STA-173-1.85

SI730004.MNS 23 JAN 03

GENERAL NOTES

1. 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 herein, they shall be included for payment in the lump sum bid for Item 614 - Maintaining Traffic.

2. While the need for certain advisory signing is noted herein, it is not intended that this be indicative of all signing that may be required to advise or warn motorist, and all requirements of the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) must be fulfilled.

3. 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 herein may be required.

4. The drop-off treatment selected for use at any given location shall be appropriate for the prevailing conditions at the site.

5. Where concrete barrier is specified, it shall be in accordance with Standard Construction Drawing MC - 9.2 and Item 622.

6. When drums are specified for a drop-off condition, a minimum number of four drums shall be used. Spacing shall be as indicated in the plans or as specified in the OMUTCD.

7. When OW-15l (Low Shoulder) signs or OW-17l (Uneven Lanes symbol), OWP-17l (uneven lane plaque), and OC-53 (Maintain Present Lane) 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 drop-off condition extends more than one-half mile, additional signs shall be erected at intervals of a maximum of one mile.

8. For locations, such as at ramps, lane shifts, lane closures, etc., where traffic is required to negotiate any difference in elevation between pavements, the Optional Wedge Treatment shall be provided.

9. 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 drop-off depth does not exceed 5″ and approval is granted by the Project Engineer.

10. Pavement Repairs (or similar work):

   a. Lengths greater than 60 feet - utilize appropriate treatment from Condition I.

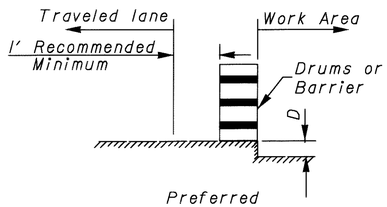
   b. Lengths of 60 feet or less - repairs shall be affected in accordance with Item 255.08. Drums may be used as a separator adjacent to the traveled lane.

CONDITION I

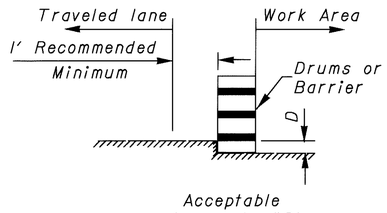
1. These treatments are to be used for resurfacing, pavement planing excavation, etc., between, beside or within traveled lanes.

Distance From Traveled Lane	D (in)	Treatment
1FT-12FT	< 1½	Erect OW-17l, AND OWP-17l.
1FT-12FT	1½-3	1. Lane closure utilizing drums* as shown below. (use only on 3 or more lanes) - or - 2. Optional Wedge Treatment.
1FT-12FT	3 - 5	Lane closure utilizing drums as shown below
1FT-12FT	5 - 12	Lane closure utilizing portable concrete barrier as shown below.
>12FT-20FT	12 - 24	Lane closure utilizing drums as shown below
>12FT-20FT	>24	Lane closure utilizing portable concrete barrier as shown below.

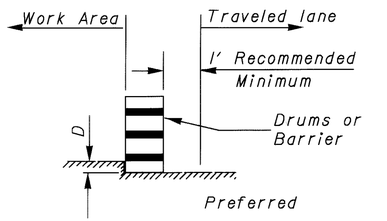
*Cones may be used for daytime only conditions.



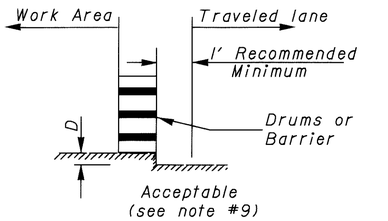
Preferred



Acceptable (see note #9)



Preferred



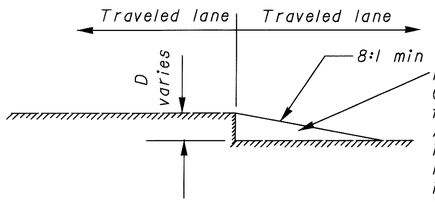
Acceptable (see note #9)

OPTIONAL WEDGE TREATMENT

(MILLING OR RESURFACING)

1. This treatment may be used when permitted for Condition I only.

2. OW-17l, OWP-17l, and OC-53 signs required.



Firm and unyielding material (to be removed prior to placing the abutting pavement course) All labor, equipment, materials, and incidentals to provide and subsequently remove the pavement wedge shall be included and paid under the lump sum bid for Item 614- Maintaining Traffic

DROPOFFS IN WORK ZONES

STA-173-1.85

REVISED 4/27/99
DROPOFF.GGN 28 JAN 03

S.R. 173
(STATE DETOUR)

1. ROAD CLOSED — R-75-48

2. ROAD CLOSED TO THRU TRAFFIC — R-76C-60
   DETOUR — OC-14R-48

3. ROAD CLOSED TO THRU TRAFFIC — R-76C-60
   DETOUR — OC-14L-48

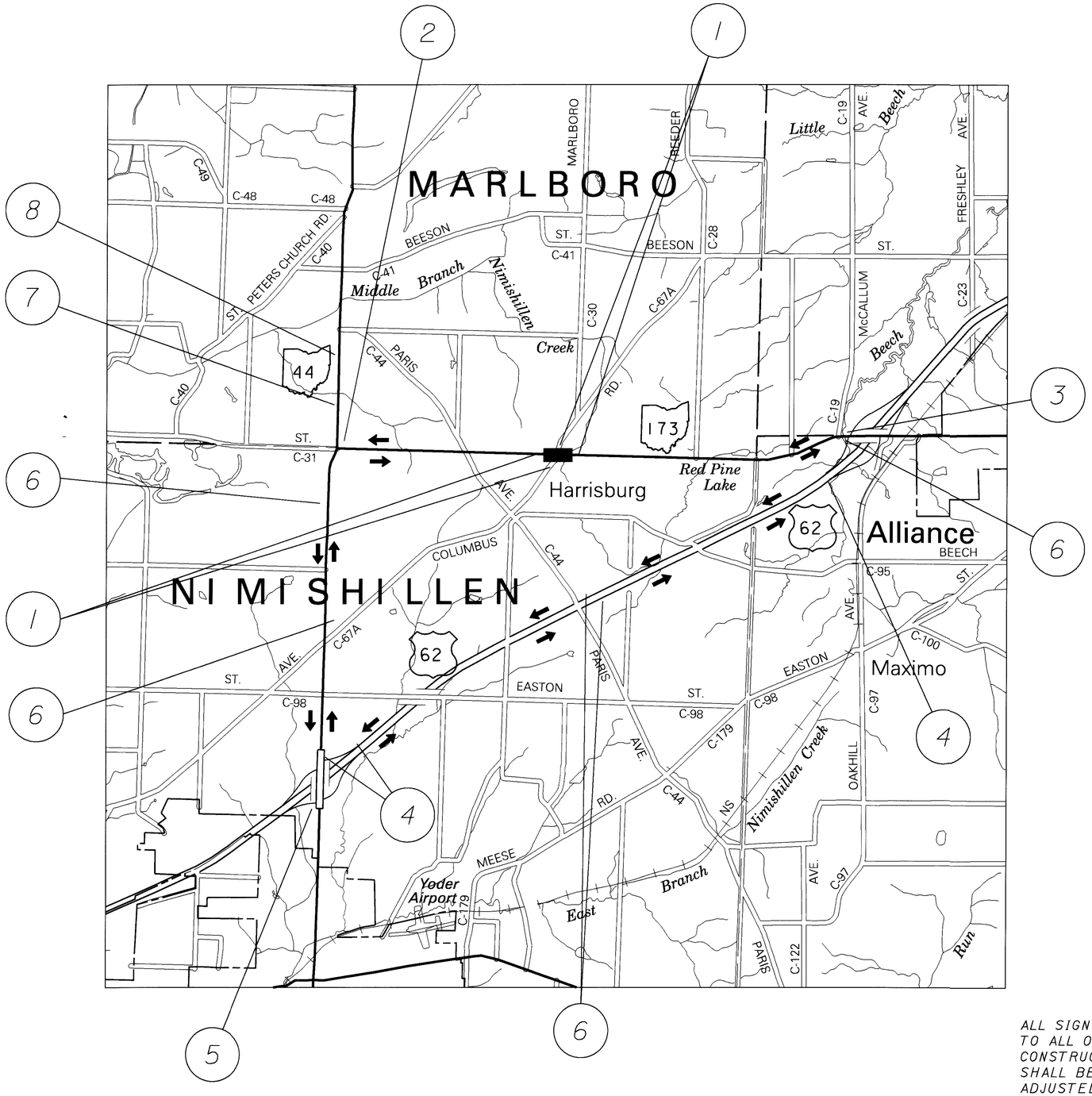
4. DETOUR — OM-23-24
   173 — M-2C-36-3
   → IM-24R-30

5. DETOUR — OM-23-24
   173 — M-2C-36-3
   ← IM-24L-30

6. DETOUR — OM-23-24
   173 — M-2C-36-3
   ↑ IM-26-30

7. DETOUR AHEAD — OW-127-36

8. ROAD CLOSED AHEAD — OW-120-36



0 1 2
SCALE IN MILES

PROJECT LOCATION

DETOUR ROUTE

ALL SIGNS SHOWN ON THIS SHEET, IN addition TO ALL OTHER SIGNS AS PER STANDARD CONSTRUCTION DRAWINGS AND THE O.M.U.T.C.D., SHALL BE FURNISHED, INSTALLED, MAINTAINED, ADJUSTED AND REMOVED BY STATE FORCES.

N

HORIZONTAL SCALE IN FEET
0

MAINTENANCE OF TRAFFIC DETOURS

STA-173-1.85

16
85

SI73DET1.MDS 6 FEB 03

COLUMBUS ROAD (LOCAL DETOUR)

1. ROAD CLOSED
   R-75-48

2. R-76C-60
   ROAD CLOSED TO THRU TRAFFIC
   DETOUR
   OC-14R-48

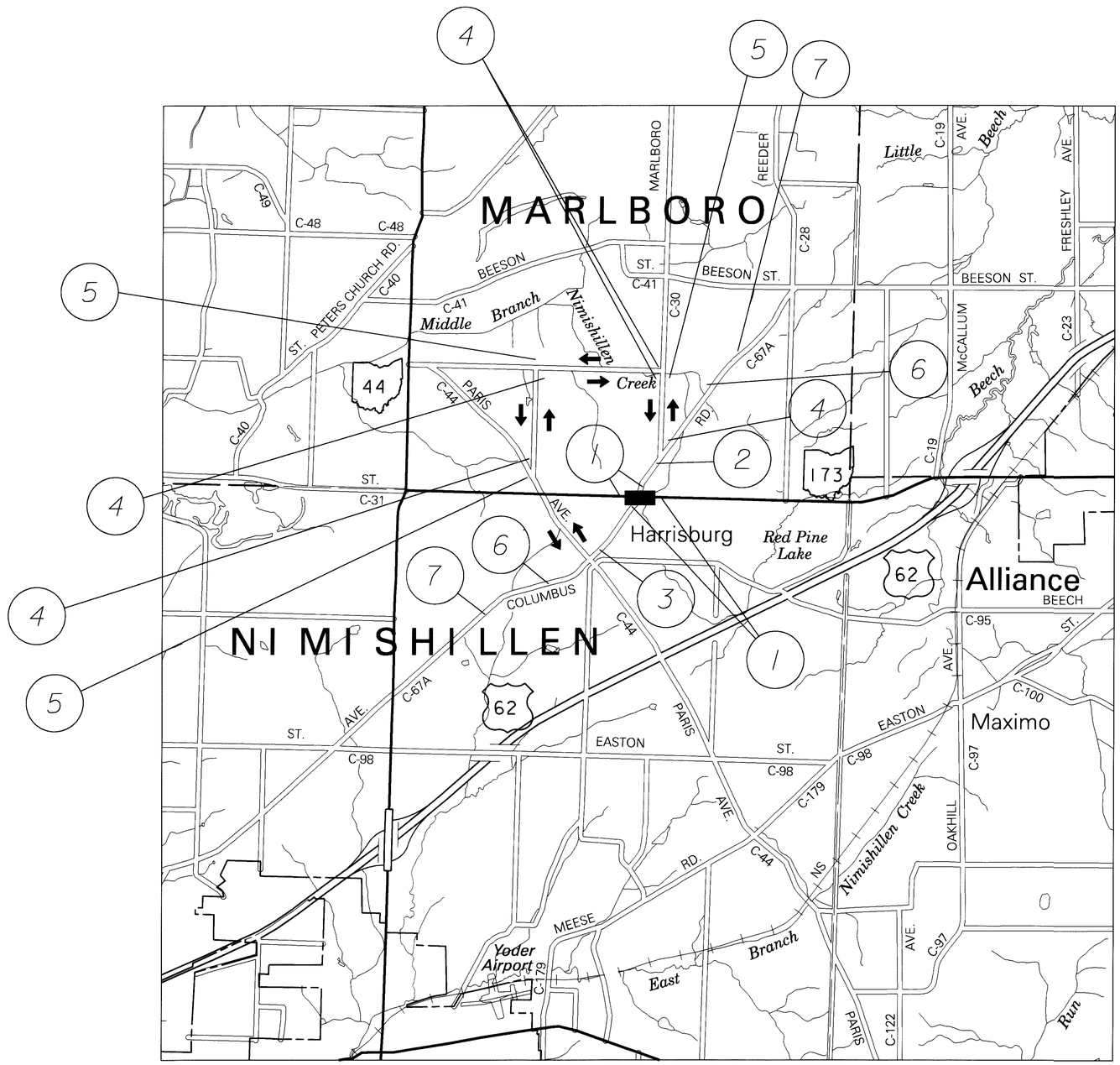
3. R-76C-60
   ROAD CLOSED TO THRU TRAFFIC
   DETOUR
   OC-14L-48

4. D-14-48
   COLUMBUS ROAD
   DETOUR
   OC-29R-30

5. D-14-48
   COLUMBUS ROAD
   DETOUR
   OC-29L-30

6. DETOUR AHEAD
   OW-127-36

7. ROAD CLOSED AHEAD
   OW-120-36



0 1 2
SCALE IN MILES

PROJECT LOCATION

DETOUR ROUTE

HORIZONTAL SCALE IN FEET

MAINTENANCE OF TRAFFIC DETOURS

STA-173-1.85

17
85

SI73DET2.MDS 6 FEB 03

CURVE 1 PI STA. 1648+44.97 Dc = 6°00'00" emax = 0.083		C. R. 67 SOUTH																	CURVE 2 PI STA. 1652+60.34 Dc = 23°00'00" emax = 0.035
LT. EDGE OF SHOULDER	OFFSET SLOPE	SHOULDER OFFSET	SHOULDER WIDTH	SHOULDER SLOPE	LANE 1 (LT.) EDGE OF PAVT.	TRANSITION RATE	ELEVATION CORRECTION	OFFSET FROM CENTERLINE	PAVEMENT SLOPE	CENTERLINE STATION	CENTERLINE ELEVATION	PAVEMENT SLOPE	OFFSET FROM CENTERLINE	ELEVATION CORRECTION	TRANSITION RATE	LANE 1 (RT.) EDGE OF PAVT.	SHOULDER SLOPE	SHOULDER WIDTH	RT. EDGE OF SHOULDER	COMMENTS
1255.00			4.00	-0.0417	1255.16		-0.19	12.00	-0.0156	1645+00	1255.35	-0.0156	12.00	-0.19		1255.16	-0.0417	4.00	1254.95	
1254.77			4.00	-0.0417	1254.94		-0.19	12.00	-0.0156	1645+25	1255.13	-0.0156	12.00	-0.19		1254.94	-0.0417	4.00	1254.73	
1254.55			4.00	-0.0417	1254.72		-0.19	12.00	-0.0156	1645+50	1254.90	-0.0156	12.00	-0.19		1254.72	-0.0417	4.00	1254.51	
1254.34			4.00	-0.0417	1254.51		-0.19	12.00	-0.0156	1645+73.49	1254.69	-0.0156	12.00	-0.19		1254.51	-0.0417	4.00	1254.30	BEGIN LEFT SIDE TRANSITION
1254.33			4.00	-0.0417	1254.50		-0.18	12.00	-0.0150	1645+75.	1254.68	-0.0156	12.00	-0.19		1254.49	-0.0417	4.00	1254.28	
1254.23			4.00	-0.0417	1254.39		-0.06	12.00	-0.0051	1646+00	1254.46	-0.0156	12.00	-0.19		1254.27	-0.0417	4.00	1254.06	VPC
1254.29			4.00	-0.0417	1254.46		-0.00	12.00	-0.0000	1646+12.80	1254.46	-0.0156	12.00	-0.19		1254.27	-0.0417	4.00	1254.06	LEFT SIDE HALF FLAT
1254.10			4.00	-0.0417	1254.27		0.06	12.00	0.0048	1646+25	1254.21	-0.0156	12.00	-0.19		1254.03	-0.0417	4.00	1253.82	
1253.94			4.00	-0.0417	1254.11		0.18	12.00	0.0148	1646+50	1253.93	-0.0156	12.00	-0.19		1253.75	-0.0417	4.00	1253.54	
1253.93			4.00	-0.0417	1254.10		0.19	12.00	0.0156	1646+52.11	1253.91	-0.0156	12.00	-0.19		1253.72	-0.0417	4.00	1253.51	BEGIN RIGHT SIDE TRANSITION
1253.75			4.00	-0.0417	1253.91		0.30	12.00	0.0247	1646+75	1253.62	-0.0247	12.00	-0.30		1253.32	-0.0417	4.00	1253.11	
1253.54			4.00	-0.0354	1253.68	210:1	0.42	12.00	0.0346	1647+00	1253.26	-0.0346	12.00	-0.42		1252.85	-0.0417	4.00	1252.64	
1253.30			4.00	-0.0255	1253.41		0.53	12.00	0.0445	1647+25	1252.87	-0.0445	12.00	-0.53		1252.34	-0.0445	4.00	1252.11	
1253.03			4.00	-0.0156	1253.10		0.65	12.00	0.0544	1647+50	1252.44	-0.0544	12.00	-0.65	210:1	1251.79	-0.0544	4.00	1251.52	
1252.86	-0.0104	2.00	2.00	0.0644	1252.75		0.77	12.00	0.0644	1647+75	1251.98	-0.0644	12.00	-0.77		1251.21	-0.0644	4.00	1250.88	
1252.84	-0.0104	2.00	2.00	0.0648	1252.73		0.78	12.00	0.0648	1647+76.19	1251.95	-0.0648	12.00	-0.78		1251.18	-0.0648	4.00	1250.85	PC CURVE 1
1252.49	-0.0104	2.00	2.00	0.0743	1252.37		0.89	12.00	0.0743	1648+00	1251.47	-0.0743	12.00	-0.89		1250.58	-0.0743	4.00	1250.21	
1252.14	-0.0104	2.00	2.00	0.0830	1252.00		1.00	12.00	0.0830	1648+21.96	1251.00	-0.0830	12.00	-1.00		1250.01	-0.0830	4.00	1249.59	BEGIN FULL SUPER
1252.08	-0.0104	2.00	2.00	0.0830	1251.93		1.00	12.00	0.0830	1648+25	1250.93	-0.0830	12.00	-1.00		1249.94	-0.0830	4.00	1249.52	
1251.50	-0.0104	2.00	2.00	0.0830	1251.35		1.00	12.00	0.0830	1648+50	1250.36	-0.0830	12.00	-1.00		1249.36	-0.0830	4.00	1248.95	
1251.07	-0.0104	2.00	2.00	0.0830	1250.92		1.00	12.00	0.0830	1648+67.74	1249.92	-0.0830	12.00	-1.00		1248.93	-0.0830	4.00	1248.51	END FULL SUPER
1250.84	-0.0104	2.00	2.00	0.0801	1250.70		0.96	12.00	0.0801	1648+75	1249.74	-0.0801	12.00	-0.96		1248.78	-0.0801	4.00	1248.38	
1250.05	-0.0104	2.00	2.00	0.0702	1249.93		0.84	12.00	0.0702	1649+00	1249.09	-0.0702	12.00	-0.84		1248.25	-0.0702	4.00	1247.90	
1249.61	-0.0104	2.00	2.00	0.0648	1249.50		0.78	12.00	0.0648	1649+13.51	1248.72	-0.0648	12.00	-0.78		1247.94	-0.0648	4.00	1247.62	PT CURVE 1
1249.22	-0.0104	2.00	2.00	0.0603	1249.12		0.72	12.00	0.0603	1649+25	1248.40	-0.0603	12.00	-0.72		1247.68	-0.0603	4.00	1247.38	
1248.20			4.00	-0.0196	1248.28		0.60	12.00	0.0504	1649+50	1247.67	-0.0504	12.00	-0.60	210:1	1247.07	-0.0504	4.00	1246.82	
1247.28			4.00	-0.0296	1247.40		0.49	12.00	0.0404	1649+75	1246.91	-0.0404	12.00	-0.49		1246.42	-0.0417	4.00	1246.22	
1246.32			4.00	-0.0395	1246.48	210:1	0.37	12.00	0.0305	1650+00	1246.11	-0.0305	12.00	-0.37		1245.74	-0.0417	4.00	1245.54	VPT
1245.37			4.00	-0.0417	1245.54		0.25	12.00	0.0206	1650+25	1245.29	-0.0206	12.00	-0.25		1245.04	-0.0417	4.00	1244.83	
1244.90			4.00	-0.0417	1245.06		0.19	12.00	0.0156	1650+37.59	1244.88	-0.0156	12.00	-0.19		1244.69	-0.0417	4.00	1244.48	RIGHT SIDE NORMAL
1244.43			4.00	-0.0417	1244.60		0.13	12.00	0.0107	1650+50	1244.47	-0.0156	12.00	-0.19		1244.28	-0.0417	4.00	1244.07	
1243.49			4.00	-0.0417	1243.66		0.01	12.00	0.0008	1650+75	1243.65	-0.0156	12.00	-0.19		1243.46	-0.0417	4.00	1243.26	
1243.42			4.00	-0.0417	1243.59		-0.00	12.00	-0.0000	1650+76.90	1243.59	-0.0156	12.00	-0.19		1243.40	-0.0417	4.00	1243.19	LEFT SIDE HALF FLAT
1242.55			4.00	-0.0417	1242.72		-0.11	12.00	-0.0092	1651+00	1242.83	-0.0156	12.00	-0.19		1242.64	-0.0417	4.00	1242.44	
1241.95			4.00	-0.0417	1242.11		-0.19	12.00	-0.0156	1651+16.21	1242.30	-0.0156	12.00	-0.19		1242.11	-0.0417	4.00	1241.90	LEFT SIDE NORMAL
1241.66			4.00	-0.0417	1241.82		-0.19	12.00	-0.0156	1651+25	1242.01	-0.0156	12.00	-0.19		1241.82	-0.0417	4.00	1241.62	
1241.29			4.00	-0.0417	1241.45		-0.19	12.00	-0.0156	1651+36.33	1241.64	-0.0156	12.00	-0.19		1241.45	-0.0417	4.00	1241.24	BEGIN RIGHT SIDE TRANSITION
1240.84			4.00	-0.0417	1241.00		-0.19	12.00	-0.0156	1651+50	1241.19	-0.0085	12.00	-0.10		1241.09	-0.0417	4.00	1240.88	
1240.29			4.00	-0.0417	1240.46		-0.19	12.00	-0.0156	1651+66.57	1240.65	0.0000	12.00	0.00		1240.65	-0.0417	4.00	1240.44	RIGHT SIDE HALF FLAT
1240.02			4.00	-0.0417	1240.18		-0.19	12.00	-0.0156	1651+75	1240.37	0.0044	12.00	0.05		1240.42	-0.0417	4.00	1240.22	
1239.64			4.00	-0.0417	1239.81		-0.19	12.00	-0.0156	1651+86.56	1239.99	0.0103	12.00	0.12	160:1	1240.12	-0.0417	4.00	1239.91	PC CURVE 2
1239.30			4.00	-0.0417	1239.47		-0.19	12.00	-0.0156	1651+96.80	1239.66	0.0156	12.00	0.19		1239.84	-0.0417	4.00	1239.64	BEGIN LEFT SIDE TRANSITION
1239.18			4.00	-0.0417	1239.34		-0.21	12.00	-0.0173	1652+00	1239.55	0.0173	12.00	0.21		1239.76	-0.0417	4.00	1239.55	
1238.20			4.00	-0.0417	1238.37	160:1	-0.36	12.00	-0.0302	1652+25	1238.73	0.0302	12.00	0.36		1239.09	-0.0398	4.00	1238.89	
1237.84			4.00	-0.0417	1238.00		-0.42	12.00	-0.0350	1652+34.39	1238.42	0.0350	12.00	0.42		1238.84	-0.0350	4.00	1238.67	BEGIN FULL SUPER
1237.33			4.00	-0.0417	1237.49		-0.42	12.00	-0.0350	1652+50	1237.91	0.0350	12.00	0.42		1238.33	-0.0350	4.00	1238.16	
1236.51			4.00	-0.0417	1236.67		-0.42	12.00	-0.0350	1652+75	1237.09	0.0350	12.00	0.42		1237.51	-0.0350	4.00	1237.34	
1236.27			4.00	-0.0417	1236.44		-0.42	12.00	-0.0350	1652+82.21	1236.86	0.0350	12.00	0.42		1237.28	-0.0350	4.00	1237.10	END FULL SUPER
1235.80			4.00	-0.0417	1235.96	160:1	-0.31	12.00	-0.0258	1653+00	1236.27	0.0258	12.00	0.31		1236.58	-0.0417	4.00	1236.37	VPC
1235.36			4.00	-0.0417	1235.53		-0.19	12.00	-0.0156	1653+19.80	1235.72	0.0156	12.00	0.19		1235.91	-0.0417	4.00	1235.70	LEFT SIDE NORMAL
1235.25			4.00	-0.0417	1235.42		-0.19	12.00	-0.0156	1653+25	1235.60	0.0129	12.00	0.16		1235.76	-0.0417	4.00	1235.55	
1235.15			4.00	-0.0417	1235.32		-0.19	12.00	-0.0156	1653+30.03	1235.51	0.0103	12.00	0.12	160:1	1235.63	-0.0417	4.00	1235.42	PT CURVE 2
1234.88			4.00	-0.0417	1235.05		-0.19	12.00	-0.0156	1653+50	1235.24	0.0000	12.00	0.00		1235.24	-0.0417	4.00	1235.03	RIGHT SIDE HALF FLAT
1234.80			4.00	-0.0417	1234.97		-0.20	13.12	-0.0156	1653+75	1235.17	-0.0129	12.00	-0.15		1235.02	-0.0417	4.00	1234.81	
1234.81			4.00	-0.0417	1234.97		-0.23	14.57	-0.0156	1653+80.27	1235.20	-0.0156	12.00	-0.19		1235.01	-0.0417	4.00	1234.80	RIGHT SIDE NORMAL
1234.83			4.00	-0.0417	1234.99		-0.42	26.84	-0.0156	1654+00	1235.41	-0.0156	14.69	-0.23		1235.18	-0.0417	4.00	1234.98	VPT
			4.00	-0.0417					-0.0156	1654+12.60	1235.61	-0.0156					-0.0417	4.00	-0.21	END APPROACH WORK

CALCULATED

CHECKED

SUPERELEVATION TABLE CR 67 (SOUTH)

STA-173-1.85

\\\\ SUPER.DGN 24 JAN 03

SHEET NUMBER														ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
	8	9	10	11	22	23	25	41			69	70	73						
																		ROADWAY	
		LUMP												201	11000	LUMP		CLEARING AND GRUBBING	
							LUMP							202	11000	LUMP		STRUCTURE REMOVED	
							1,521							202	35100	1,521	FT.	PIPE REMOVED, 24" AND UNDER	
													42	202	54101	42	EACH	RAISED PAVEMENT MARKER REMOVED FOR STORAGE, AS PER PLAN	73
							1							202	58000	1	EACH	MANHOLE REMOVED	
							5							202	58100	5	EACH	CATCH BASIN REMOVED	
			2											202	67000	2	EACH	REGULATED UNDERGROUND STORAGE TANK REMOVED	10
							42							202	75000	42	FT.	FENCE REMOVED	
							1							202	75250	1	EACH	GATE REMOVED	
							LUMP							202	98000	LUMP		REMOVAL MISC.: SIGN	
							LUMP							202	98000	LUMP		REMOVAL MISC.: CONCRETE PAD	
								6,504						203	10000	6,504	CU. YD.	EXCAVATION	
								688						203	20000	688	CU. YD.	EMBANKMENT	
					4,574	2,915								204	10000	7,489	SQ. YD.	SUBGRADE COMPACTION	
					1.54	0.69								204	45000	2.3	HOUR	PROOF ROLLING	
		5												604	40500	5	EACH	REFERENCE MONUMENT	
							400.0							606	13000	400.0	FT.	GUARDRAIL, TYPE 5	
							50.0							606	13020	50.0	FT.	GUARDRAIL, TYPE 5, WITH DOUBLE RAILS	
							3							606	22010	3	EACH	ANCHOR ASSEMBLY, TYPE E-98	
							1							606	26500	1	EACH	ANCHOR ASSEMBLY, TYPE T	
	3													SPECIAL	69050100	3	EACH	MAILBOX SUPPORT SYSTEM, SINGLE	8
			75											SPECIAL	69065010	75	TON	WORK INVOLVING SOLID WASTE	10
																		EROSION CONTROL	
												11.4		601	11000	11.4	SQ. YD.	RIPRAP USING 6" REINFORCED CONCRETE SLAB	
												13.2		601	32000	13.2	CU. YD.	ROCK CHANNEL PROTECTION, TYPE A WITH FILTER	
				10							3.8			601	32200	13.8	CU. YD.	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
											136.6			601	32300	136.6	CU. YD.	ROCK CHANNEL PROTECTION, TYPE D WITH FILTER	
								14,258						659	10000	14,258	SQ. YD.	SEEDING AND MULCHING	
			718											659	15000	718	SQ. YD.	INTER-SEEDING	
			2											659	20000	2	TON	COMMERCIAL FERTILIZER	
			3											659	31000	3	ACRE	LIME	
			77											659	35000	77	M. GAL.	WATER	
											2429			670	00700	2,429	SQ. YD.	DITCH EROSION PROTECTION	
														832	10000	1	EACH	STORM WATER POLLUTION PREVENTION PLAN	
														832	20000	LUMP		EROSION CONTROL	
											125			836	10000	125	SQ. YD.	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE I	

CALCULATED RJG
CHECKED CZ

GENERAL SUMMARY

STA-173-1.85

S173000I.GGS 23 JAN 03

SHEET NUMBER											ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
9		11		22	23		24	69		70						
															DRAINAGE	
								0.87		1.68	602	20000	2.6	CU. YD.	CONCRETE MASONRY	
		150									603	00100	150	FT.	4" CONDUIT, TYPE B	
		350									603	00200	350	FT.	4" CONDUIT, TYPE C	
		150									603	00400	150	FT.	4" CONDUIT, TYPE E	
		100						113			603	00406	213	FT.	4" CONDUIT, TYPE F	
		50									603	00900	50	FT.	6" CONDUIT, TYPE B	
		50									603	01400	50	FT.	6" CONDUIT, TYPE E	
		50									603	04400	50	FT.	12" CONDUIT, TYPE B	
								54			603	04600	54	FT.	12" CONDUIT, TYPE C	
										124	603	04900	124	FT.	12" CONDUIT, TYPE D	
		50									603	05100	50	FT.	12" CONDUIT, TYPE E	
								305			603	06100	305	FT.	15" CONDUIT, TYPE C	
										159	603	06400	159	FT.	15" CONDUIT, TYPE D	
								100			603	07400	100	FT.	18" CONDUIT, TYPE B	
								255			603	07600	255	FT.	18" CONDUIT, TYPE C	
										97	603	07900	97	FT.	18" CONDUIT, TYPE D	
								72			603	09100	72	FT.	21" CONDUIT, TYPE C	
								55			603	10400	55	FT.	24" CONDUIT, TYPE B	
								45			603	13600	45	FT.	30" CONDUIT, TYPE C	
										75	603	19200	75	FT.	42" CONDUIT, TYPE A	
								4			604	01600	4	EACH	CATCH BASIN, NO. 5	
								3			604	04500	3	EACH	CATCH BASIN, NO. 2-2B	
		4						4			604	36600	8	EACH	PRECAST REINFORCED CONCRETE OUTLET	
		2									604	37000	2	EACH	INSPECTION WELL	
								4,761			605	05100	4,761	FT.	4" SHALLOW PIPE UNDERDRAINS	
		200									605	13402	200	FT.	6" UNCLASSIFIED PIPE UNDERDRAINS FOR SPRINGS	
		200									605	32200	200	FT.	AGGREGATE DRAINS FOR SPRINGS	
															PAVEMENT	
				2,258							254	01000	2,258	SQ. YD.	PAVEMENT PLANING, ASPHALT CONCRETE	
500											254	01600	500	SQ. YD.	PATCHING PLANED SURFACE	
				854	286						301	46000	1,140	CU. YD.	ASPHALT CONCRETE BASE, PG64-22	
							41				301	48000	41	CU. YD.	ASPHALT CONCRETE BASE, PG64-22 (DRIVEWAYS)	
				1,139	426		113				304	20000	1,678	CU. YD.	AGGREGATE BASE	
				170							407	10000	170	GALLON	TACK COAT	
				273	85						407	14000	358	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
				332	103						448	46050	435	CU. YD.	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22	
				237	74						448	47020	311	CU. YD.	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22	
							14				448	48020	14	CU. YD.	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)	

CALCULATED RJG
CHECKED CZ

GENERAL SUMMARY

STA-173-1.85

SI730003.GGS 23 JAN 03

SHEET NUMBER									PARTICIPATION		ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
12	13			72	73	75										
															TRAFFIC CONTROL	
					20						621	00200	20	EACH	RPM, INSTALLATION ONLY	
						195					630	02100	195	FT.	GROUND MOUNTED SUPPORT, NO. 2 POST	
						80					630	80100	80	SQ. FT.	SIGN, FLAT SHEET	
						27					630	84900	27	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
						16					630	86002	16	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
				0.91							642	00100	0.91	MILE	EDGE LINE, TYPE I	
				0.53							642	00300	0.53	MILE	CENTER LINE, TYPE I	
				42.2							642	00500	42.2	FT.	STOP LINE, TYPE I	
															MAINTENANCE OF TRAFFIC	
	10										410	12000	10	CU. YD.	TRAFFIC COMPACTED SURFACE, TYPE A OR B	
	10										410	13000	10	CU. YD.	TRAFFIC COMPACTED SURFACE, TYPE C	
											614	12420	LUMP		DETOUR SIGNING	
4											614	12460	4	EACH	WORK ZONE MARKING SIGN	
	25										614	13000	25	CU. YD.	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	13
0.53											614	21100	0.53	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
42											614	26200	42	FOOT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
	22										616	10000	22	M. GAL.	WATER	
											614	11000	LUMP		MAINTAINING TRAFFIC	
											619	16010	4	MONTH	FIELD OFFICE, TYPE B	
											623	10000	LUMP		CONSTRUCTION LAYOUT STAKES	
											624	10000	LUMP		MOBILIZATION	

CALCULATED RJG
CHECKED CZ

GENERAL SUMMARY

STA-173-1.85

S173005.GGS 23 JAN 03

℄ SURVEY AND CONSTRUCTION (STATION TO STATION)	LENGTH	PAVEMENT WIDTH	PAVEMENT AREA (A) AREA BY COMPUTER		204 PROOF ROLLING	204 SUBGRADE COMPACTION	254 PAVEMENT PLANING, ASPHALT CONCRETE 1½"	301 4½" ASPHALT CONCRETE BASE, PG 64-22		304 6" AGGREGATE BASE	407 TACK COAT @ 0.075 GAL./SQ. YD.	407 TACK COAT FOR INTERMEDIATE COURSE @ 0.040 GAL./ SQ. YD.	448 1¾" ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG 64-22	448 1¼" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, PG64-22
	LIN. FT.	FEET	SQ. YD.		HOUR	SQ. YD.	SQ. YD.	CU. YD.		CU. YD.	GAL.	GAL.	CU. YD.	CU. YD.
STATE ROUTE 173														
RESURFACING														
563+80.00 - 569+00.00	520.0	17.3 (AVG)	998.7				998.7	124.8		166.5	74.9	39.9	48.5	34.7
FULL DEPTH (RIGHT)														
563+80.00 - 569+00.00	520.00	1.5 (AVG)	(A) 87.7		0.03	87.7		11.0		14.6		3.5	4.3	3.0
FULL DEPTH (LEFT)														
563+80.00 - 569+00.00	520.00	4.9 (AVG)	(A) 281.6		0.09	281.6		35.2		46.9		11.3	13.7	9.8
FULL DEPTH														
569+00.00 - 571+75.00	275.0	24.0	733.3		0.24	733.3		91.7		122.2		29.3	35.6	25.5
FULL DEPTH (RIGHT)														
571+75.00 - 572+27.00	52.0	7.5	43.3		0.01	43.3		5.4		7.2		1.7	2.1	1.5
572+27.00 - 576+43.7	416.7	1.0	46.3		0.02	46.3		5.8		7.7		1.9	2.3	1.6
576+43.7 - 577+77.38	133.68	1.0	14.9		0.01	14.9		1.9		2.5		0.6	0.7	0.5
FULL DEPTH (LEFT)														
571+75.00 - 576+22.41	447.41	4.6 (AVG)	(A)228.7		0.08	228.7		28.6		38.1		9.2	11.1	7.9
576+22.41 - 577+77.38	155.0	1.0	17.2		0.01	17.2		2.2		2.9		0.7	0.8	0.6
RESURFACING														
571+75.00 - 572+27.0	52.0	12.0 (AVG)	69.3				69.3	8.7		11.6	5.2	2.8	3.4	2.4
572+27.0 - 573+27.0	100.0	16.3 (AVG)	181.4				181.4	22.7		30.2	13.6	7.3	8.8	6.3
573+27.0 - 576+22.41	295.41	19.2 (AVG)	629.9				629.9	78.7		105.0	47.2	25.2	30.6	21.9
576+22.41 - 577+77.38	154.97	22.0	378.8				378.8	47.4		63.1	28.4	15.2	18.4	13.2
COUNTY ROAD 67 (NORTH)														
251+75.00 - 252+74.51	99.51	21.8 (AVG)	(A) 241.5		0.08	241.5		30.2		40.3		9.7	11.7	8.4
252+74.51 - 252+85.00	10.49	24.3 (AVG)	(A) 28.3		0.01	28.3		3.6		4.7		1.1	1.4	1.0
252+85.00 - 253+34.68	49.68	VAR.	(A) 258.0		0.09	258.0		32.3		43.1		10.3	12.6	9.0
COUNTY ROAD 67 (SOUTH)														
1645+00.00 - 1653+64.45	864.45	24.0'	2305.2		0.77	2305.2		288.2		384.2		92.2	112.1	80.1
1653+64.45 - 1654+24.78	60.3	VAR.	(A) 287.2		0.10	287.2		35.9		48.0		11.5	14.0	10.0
TOTALS CARRIED TO GENERAL SUMMARY					1.54	4573.2	2258.1	854.3		1138.8	169.3	273.4	332.1	237.4

CALCULATED RJG
CHECKED CZ

PAVEMENT CALCULATIONS

STA-173-1.85

22
85

STA173011.PCS 08 JAN 03

℄ SURVEY AND CONSTRUCTION (STATION TO STATION)	SIDE	LENGTH *= LENGTH X 2	SHOULDER WIDTH	SHOULDER AREA		204 PROOF ROLLING	204 SUBGRADE COMPACTION L(S.W. + 1.5')/9 S.W. = SHOULDER WIDTH	301 4½" ASPHALT CONCRETE BASE, PG 64-22 L(S.W. + 0.333' X 0.375') ÷ 27 S.W. = SHOULDER WIDTH		304 6" AGGREGATE BASE L(S.W. + 0.833' X 0.5') ÷ 27 S.W. = SHOULDER WIDTH		407 TACK COAT FOR INTERMEDIATE COURSE @ 0.040 GAL./ SQ. YD.	448 1¾" ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG 64-22	448 1¼" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, PG64-22	
		LIN. FT.	FEET	SQ. YD.		HOUR	SQ. YD.	CU. YD.		CU. YD.		GAL.	CU. YD.	CU. YD.	
STATE ROUTE 173															
563+80.00-564+30.00	LT./RT.	* 100	3.5 (AVG)	38.9		0.01	55.6	5.3		8.0		1.6	1.9	1.4	
564+30.00 - 569+60.34	RT.	530.34	4.0	235.7		0.08	324.1	31.9		47.5		9.4	11.5	8.2	
564+30.00 - 569+79.78	LT.	549.78	4.0	244.4		0.08	336.0	33.1		49.2		9.8	11.9	8.5	
570+86.06 - 577+27.38	RT.	641.32	4.0	285.0		0.10	391.9	38.6		57.4		11.4	13.9	9.9	
571+04.95 - 577+27.38	LT.	622.43	4.0	276.6		0.09	380.4	37.5		55.7		11.1	13.4	9.6	
577+27.38 - 577+77.38	LT./RT.	* 100	3.5 (AVG)	38.9		0.01	55.6	5.3		8.0		1.6	1.9	1.4	
COUNTY ROAD 67 (NORTH)															
251+75.00 - 252+25.00	LT./RT.	* 100	3.0 (AVG)	33.3		0.01	50.0	4.6		7.1		1.3	1.6	1.2	
252+25.00 - 252+93.78	RT.	68.78	4.0	30.5		0.01	42.0	4.1		6.1		1.2	1.5	1.1	
252+93.78 - 253+43.18	RT.	70.77(RAD.)	4.0	31.5		0.01	43.2	4.3		6.3		1.3	1.5	1.1	
252+25.00 - 252+74.51	LT.	49.51	4.0	22.0		0.01	30.2	3.0		4.4		0.9	1.1	0.8	
252+74.51 - 253+23.94	LT.	86.11(RAD.)	4.0	38.3		0.01	52.6	5.2		7.7		1.5	1.9	1.3	
COUNTY ROAD 67 (SOUTH)															
1645+00.00 - 1645+50.00	LT./RT.	* 100	3.0 (AVG)	33.3		0.01	50.0	4.6		7.1		1.3	1.6	1.2	
1645+50.00 - 1653+83.82	RT.	833.82	4.0	370.6		0.12	509.6	50.2		74.6		14.8	18.0	12.9	
1653+83.82 - 1654+33.24	RT.	70.94(RAD.)	4.0	31.5		0.01	43.4	4.3		6.3		1.3	1.5	1.1	
1645+50.00 - 1653+64.45	LT.	814.45	4.0	362.0		0.12	497.7	49.0		72.9		14.5	17.6	12.6	
1653+64.45 - 1654+13.85	LT.	86.31(RAD.)	4.0	38.4		0.01	52.7	5.2		7.7		1.5	1.9	1.3	
TOTALS CARRIED TO GENERAL SUMMARY						0.69	2915.0	286.2		426.0		84.5	102.7	73.6	

CALCULATED R.J.G. CHECKED C.Z

SHOULDER CALCULATIONS

STA-173-1.85

STA1730Z.PCS 8 JAN 03

MARK	SEE SHEET	℄ SURVEY AND CONSTRUCTION (STATION)	SIDE	DESCRIPTION	EXISTING SURFACE	AREA (TAKEN BY COMPUTER)	301 3¾" ASPHALT CONCRETE BASE, PG 64-22 (DRIVEWAYS)		304 6" AGGREGATE BASE		448 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE I, PG 64-22 (DRIVEWAYS)			
						SQ. YD.	CU. YD.		CU. YD.		CU. YD.			
		SR 173												
1-DR	26	STA. 564+68.1	LT.	FIELD	GRAVEL	51.9			8.7					
2-DR	26	STA. 565+52.1	LT.	FIELD	GRAVEL	59.5			9.9					
3-DR	27	STA. 566+02.5	LT.	FIELD	GRAVEL	40.3			6.7					
4-DR	27	STA. 567+36.0	LT.	FIELD	GRAVEL	45.5			7.6					
5-DR	27	STA. 569+43.6	LT.	FIELD	GRAVEL	33.3			5.6					
6-DR	27	STA. 567+48.3	RT.	FIELD	GRAVEL	45.2			7.5					
7-DR	28	STA. 575+07.6	LT.	RESIDENTIAL	GRAVEL	38.1	4.0				1.3			
8-DR	29	STA. 576+69.4	RT.	RESIDENTIAL	GRAVEL	26.3	2.7				0.9			
		COLUMBUS ROAD COUNTY ROAD 67 (SOUTH)												
9-DR	42	STA. 1647+76.2	RT.	RESIDENTIAL	GRAVEL	33.8	3.5				1.2			
10-DR	42	STA. 1648+31.3	RT.	RESIDENTIAL	GRAVEL	36.2	3.8				1.3			
11-DR	42/43	STA. 1649+57.0	RT.	RESIDENTIAL	GRAVEL	43.1	4.5				1.5			
12-DR	43	STA. 1651+41.9	RT.	FIELD	GRAVEL	45.6			7.6					
13-DR	43	STA. 1651+55.9	LT.	FIELD	GRAVEL	127.0			21.2					
14-DR	43	STA. 1653+30.0	RT.	FIELD	GRAVEL	190.0			31.7					
17-DR	43	STA. 1652+39.0	LT.	RESIDENTIAL	GRAVEL	93.7	9.8				3.3			
		COLUMBUS ROAD COUNTY ROAD 67 (NORTH)												
15-DR	54	STA. 251+79.4	LT.	RESIDENTIAL	ASPHALT	57.9	6.0				2.0			
16-DR	54	STA. 252+46.5	LT.	FIELD	GRAVEL	33.3			5.6					
		COLUMBUS ROAD COUNTY ROAD 67 (SOUTH)												
1-MB	42	STA. 1648+07.0	LT.	MAILBOX APPROACH		30.8	3.2				1.1			
2-MB	42/43	STA. 1649+51.1	LT.	MAILBOX APPROACH		30.8	3.2				1.1			
TOTALS CARRIED TO GENERAL SUMMARY							40.7		112.1		13.7			

CALCULATED RJG CHECKED CZ

DRIVE CALCULATIONS

STA-173-1.85

STA173O3.PCS 9 JAN 03

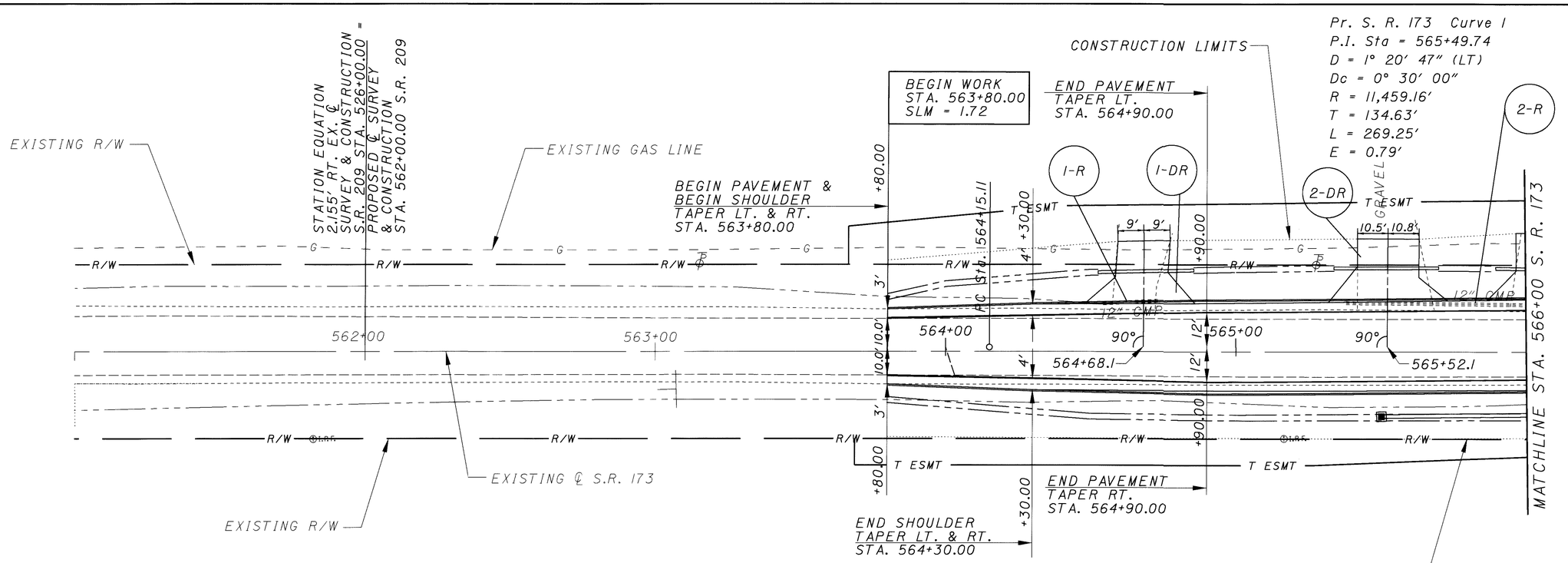
MARK	SEE SHEET	℄ SURVEY AND CONSTRUCTION (STATION TO STATION)	SIDE	202										606									
					CATCH BASIN REMOVED		PIPE REMOVED, 24" AND UNDER	FENCE REMOVED	MANHOLE REMOVED	GATE REMOVED	STRUCTURE REMOVED 3' X 5' BOX	REMOVAL MISC: SIGN	REMOVAL MISC: CONCRETE PAD		GUARDRAIL, TYPE 5	GUARDRAIL, TYPE 5 WITH DOUBLE RAILS	ANCHOR ASSEMBLY, TYPE E-98		ANCHOR ASSEMBLY, TYPE T					
					EACH		FOOT	FOOT	EACH	EACH	LUMP	LUMP	LUMP		FOOT	FOOT	EACH		EACH					
		SR 173																					
1-R	26	564+54.3 - 564+74.0	LT.				20																
2-R	26/27	565+38.1 - 566+10.0	LT.				72																
3-R	27	567+26.0 - 567+48.0	LT.				22																
4-R	27	567+26.5 - 570+76.7	RT./LT.		1		360																
5-R	27	569+33.0 - 572+86.4	LT.		2		355																
6-R	27	252+96 CR 67 (N) - 570+08.7 SR 173	RT./LT.				41																
7-R	27	570+78.1 - 571+03.0	LT.										LUMP										
8-R	28	571+05.7 - 571+76.2	RT.		1		90																
9-R	28	573+18.4 - 573+44.1	RT.		1		39																
10-R	28	572+27.4	LT.										LUMP										
11-R	28	572+66.4	LT.										LUMP										
12-R	28	574+84.6 - 575+24.8	LT.				40																
13-R	28	575+49.2	LT./RT.								LUMP												
14-R	28	575+53.7 - 577+14.7	RT.				161																
19-R	27	566+27.2	RT.									LUMP											
		CR 67 SOUTH																					
15-R	42	1647+66.3 - 1648+67.3	RT.				100																
16-R	42/43	1649+28.7 - 1650+14.1	RT.				86																
17-R	43	1651+32.8 - 1651+52.5	RT.				20																
18-R	43	1652+98.8 - 1653+03.6	LT./RT.				115		1														
20-R	43	1651+20.8± - 1651+69.1±	RT.					42															
21-R	43	1651+50±	RT.							1													
		S.R.173																					
1-GR	28/29	575+19.7 - 577+65.6	LT												212.5	25.0	1		1				
2-GR	28/29	573+34.6 - 576+22.1	RT												187.5	25.0	2						
TOTALS CARRIED TO GENERAL SUMMARY					5		1521	42	1	1	LUMP	LUMP	LUMP		400.0	50.0	3		1				

CALCULATED RJC CHECKED CZ

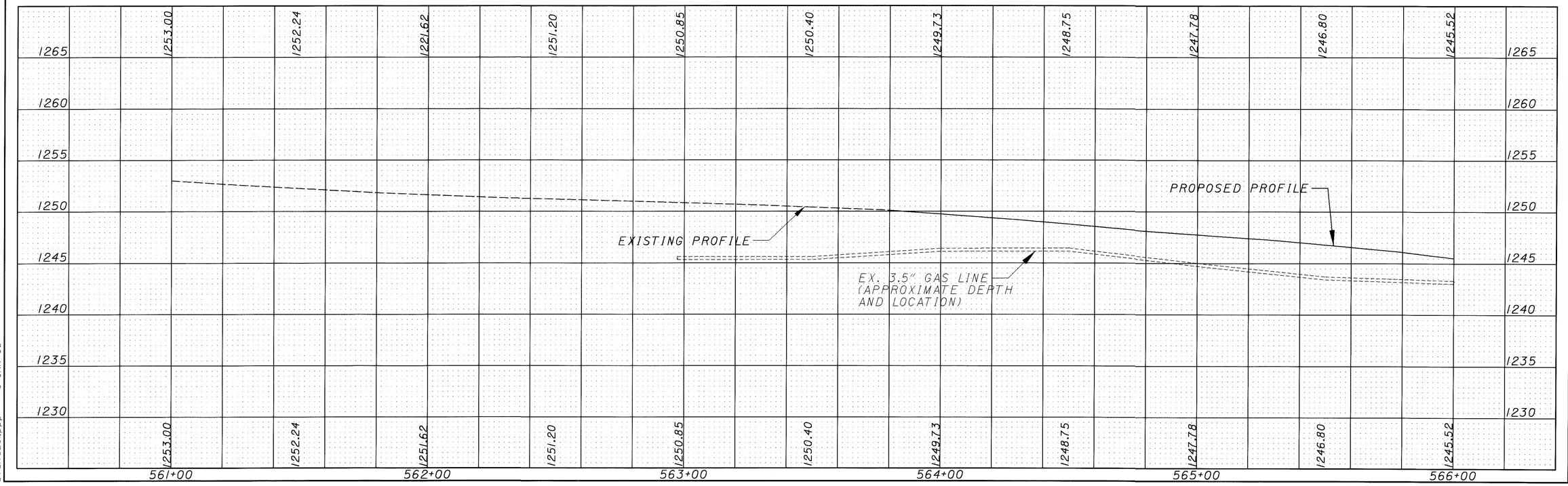
REMOVAL & GUARDRAIL QUANTITIES

STA-173-1.85

SI73REMI.GSS 21 JAN 03



FOR PAVEMENT AND SHOULDER CALCULATIONS SEE SHEETS 22 - 23
FOR REMOVAL QUANTITIES SEE SHEET 25
FOR DRIVE PROFILES SEE SHEETS 59-62
FOR DRAINAGE DETAILS AND QUANTITIES SEE SHEETS 63-70
FOR TRAFFIC CONTROL QUANTITIES SEE SHEETS 71-75



HORIZONTAL SCALE IN FEET
0 10 20 40
CALCULATED RJG
CHECKED CZ

PLAN AND PROFILE SR 173
STA. 561+00 TO STA 566+00

STA-173-1.85

26
85

stdl7320l.ppp 9 JAN 03

Pr. S. R. 173 Curve 2
P.I. Sta = 568+57.83
D = 0° 57′ 46″ (RT)
Dc = 0° 30′ 00″
R = 11,459.16′
T = 96.27′
L = 192.53′
E = 0.40′

BEGIN PROJECT
STA. 569+00.00
SLM = 1.82

RADIUS POINT
STA. 569+79.78, 62.0′ LT.
℄ SURVEY & CONST.
SR 173

RADIUS POINT
STA. 571+04.95,
62.0′ LT.
℄ SURVEY & CONST.
SR 173

RADIUS POINT
STA. 569+60.34, 62.0′ RT.
℄ SURVEY & CONST.
SR 173

RADIUS POINT
STA. 570+86.06,
62.0′ RT.
℄ SURVEY & CONST.
SR 173

MATCHLINE STA. 566+00 S. R. 173

MATCHLINE STA. 571+00 S. R. 173

CONSTRUCTION LIMITS

EXISTING GAS LINE

℄ SURVEY & CONSTRUCTION S.R. 173

EXISTING R/W

PROPOSED R/W

T ESMT

GRAVEL

E-JUNCTION BOX ON VENT PIPE

12″ PINE

2″ PINE

12″ VCP

12″ CMP

15″ VCP

18″ CPP

24″ ELM

30″ MAPLE

CONC.

FRAME GARAGE

1 STORY FRAME HOUSE #9447

FEED MILL

℄ EXISTING S.R. 173

EXISITNG ELECTRIC LINE

G(DAFFIXAATED) E.O.I.

2″ CONC.

T.V.F.O.

I.P.S.

PT Sta. 566+81.37

PC Sta. 567+61.56

PT Sta. 569+54.09

PC Sta. 570+46.44

PT Sta. 1655+30.03

PC Sta. 1654+00

566+02.5

567+00

567+36.0

567+48.3

568+00

569+00

569+43.6

570+00

571+00

90°

50′ R

253+00

+74.50

+93.78

+79.78

+04.95

+86.06

+83.82

+64.45

+60.34

6′

4′

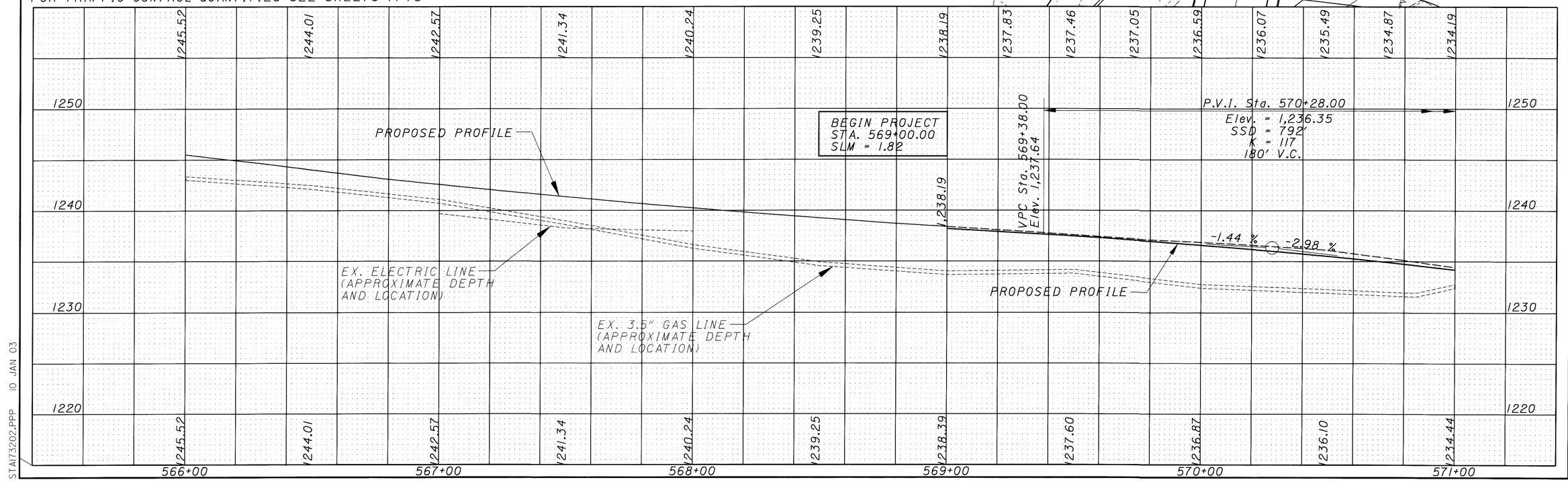
12′

15′

STA. 570+32.81 PROPOSED ℄ SURVEY & CONSTRUCTION S.R. 173 = STA. 253+46.82 ℄ SURVEY & CONSTRUCTION C.R. 67 NORTH = STA. 1654+36.93 PROPOSED ℄ SURVEY & CONSTRUCTION C.R. 67 SOUTH

FOR PAVEMENT AND SHOULDER CALCULATIONS SEE SHEETS 22 - 23
FOR REMOVAL QUANTITIES SEE SHEET 25
FOR DRIVE PROFILES SEE SHEETS 59-62
FOR DRAINAGE DETAILS AND QUANTITIES SEE SHEETS 63-70
FOR TRAFFIC CONTROL QUANTITIES SEE SHEETS 71-75

2-R, 3-DR, 4-DR, 3-R, 5-DR, 5-R, 6-R, 7-R, 19-R, 6-DR, 4-R, 4+R



HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED RJG
CHECKED CZ

PLAN AND PROFILE SR 173
STA. 566+00 TO STA. 571+00

STA-173-1.85

27
85

STAI73202.PPP 10 JAN 03

Pr. S. R. 173 Curve 3
P.I. Sta = 572+07.82
D = 1° 36′ 49″ (RT)
Dc = 0° 30′ 00″
R = 11,459.16′
T = 161.38′
L = 322.74′
E = 1.14′

Pr. S. R. 173 Curve 4
P.I. Sta = 575+77.86
D = 1° 19′ 49″ (LT)
Dc = 0° 30′ 00″
R = 11,459.16′
T = 133.05′
L = 266.08′
E = 0.77′

END PROJECT
STA. 571+75
S.L.M. = 1.87

ANCHOR ASSEMBLY
TYPE E-98, AS PER
STAND. DWG. GR-5.3M

ANCHOR ASSEMBLY
TYPE T, AS PER
STAND. DWG. GR-4.2M

GUARDRAIL
RADIUS POINT
33.0′ LT.
STA. 575+34.5

MATCHLINE STA. 571+00 S. R. 173

MATCHLINE STA. 576+00 S. R. 173

EXISTING R/W

EXISTING GAS LINE

CONSTRUCTION LIMITS

PROPOSED R/W

T ESMT

R/W

CONC.

ASPH.

15" VCP

PC Sta. 574+44.81

PT Sta. 573+69.18

CS Sta. 1656+69.06

SE Sta. 1658+19.06

GRAVEL
41.2′ LT.
19.7′
6.6′

4′
12′
12′
4′

572+00
573+00
574+00
S 87° 00′ 25″ E
575+00
90°
575+07.6
1655+00
1656+00
1657+00
1658+00
+34.6′

℄ EXISTING S.R. 173

℄ EXISTING
CR 67 SOUTH

℄ SURVEY & CONSTRUCTION S.R. 173

EXISTING R/W

CONSTRUCTION LIMITS

5-R
10-R
11-R
12-R
7-DR
1-GR
13-R
9-R
8-R
2-GR
14-R

BM#6

F.F.

FOR PAVEMENT AND SHOULDER CALCULATIONS SEE SHEETS 22 - 23
FOR REMOVAL QUANTITIES SEE SHEET 25
FOR DRIVE PROFILES SEE SHEETS 59-62
FOR DRAINAGE DETAILS AND QUANTITIES SEE SHEETS 63-70
FOR TRAFFIC CONTROL QUANTITIES SEE SHEETS 71-75

1234.19 1233.46 1232.71 1231.97 1231.38 1229.84 1228.82 1227.95 1227.27 1226.69 1226.41 1226.34 1226.44

PROPOSED PROFILE

END PROJECT
STA. 571+75
S.L.M. = 1.87

VPT, STA. 571+18
Elev. 1,233.67

1,231.97

PROPOSED PROFILE

EX. 3.5" GAS LINE
(APPROXIMATE DEPTH
AND LOCATION)

1240
1230
1220

1234.44 1232.80 1231.38 1229.84 1228.82 1227.95 1227.27 1226.69 1226.41 1226.34 1226.44

571+00 572+00 573+00 574+00 575+00 576+00

st-qf73203.ppp 21 JAN 03

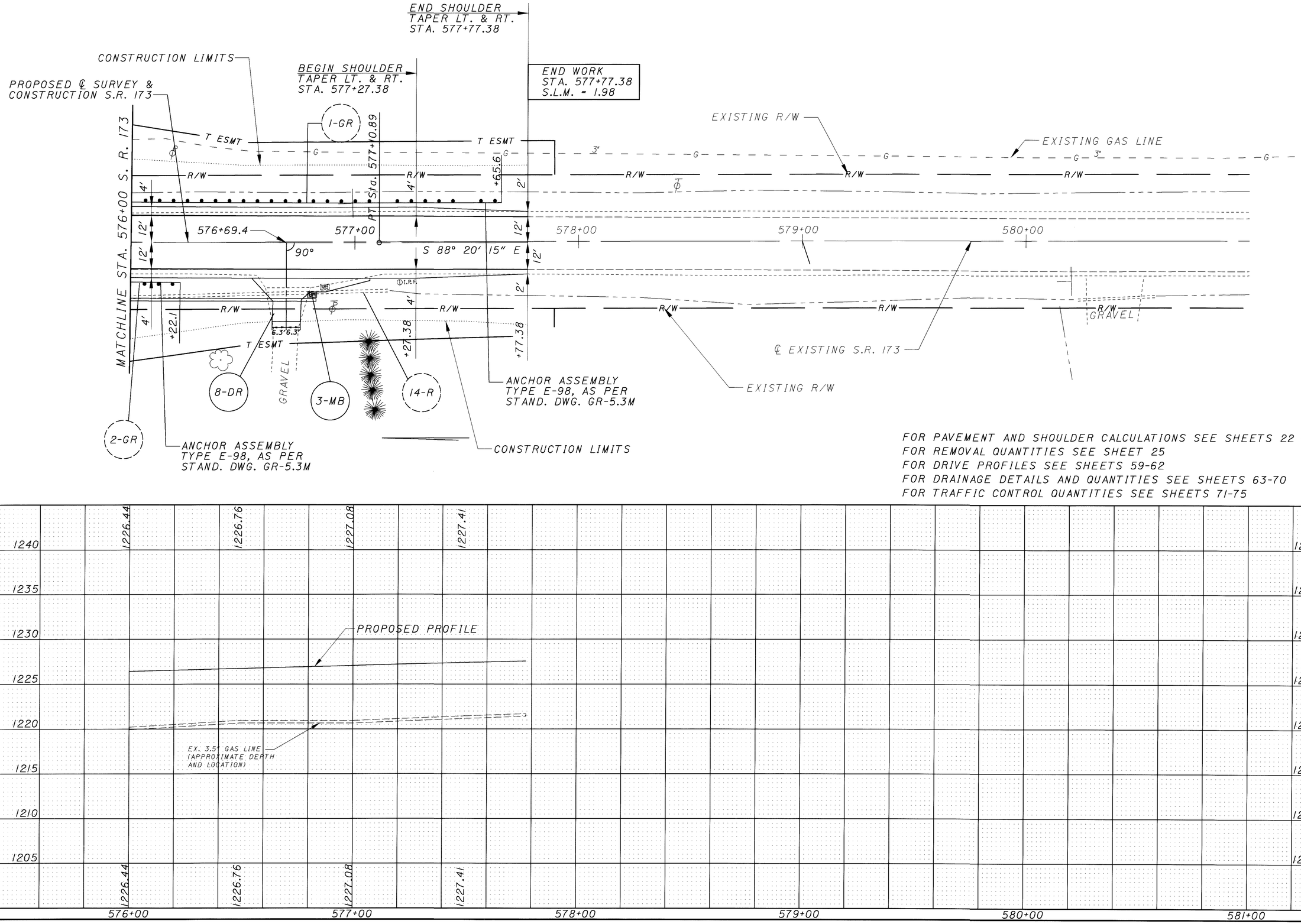
HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED RJG
CHECKED CZ

PLAN AND PROFILE SR 173
STA. 571+00 TO STA. 576+00

STA-173-1.85

28
85



FOR PAVEMENT AND SHOULDER CALCULATIONS SEE SHEETS 22 - 23
FOR REMOVAL QUANTITIES SEE SHEET 25
FOR DRIVE PROFILES SEE SHEETS 59-62
FOR DRAINAGE DETAILS AND QUANTITIES SEE SHEETS 63-70
FOR TRAFFIC CONTROL QUANTITIES SEE SHEETS 71-75

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED RJG
CHECKED CZ

PLAN AND PROFILE SR 173
STA. 576+00 TO STA. 581+00

STA-173-1.85

STAI73204.PPP 21 JAN 03

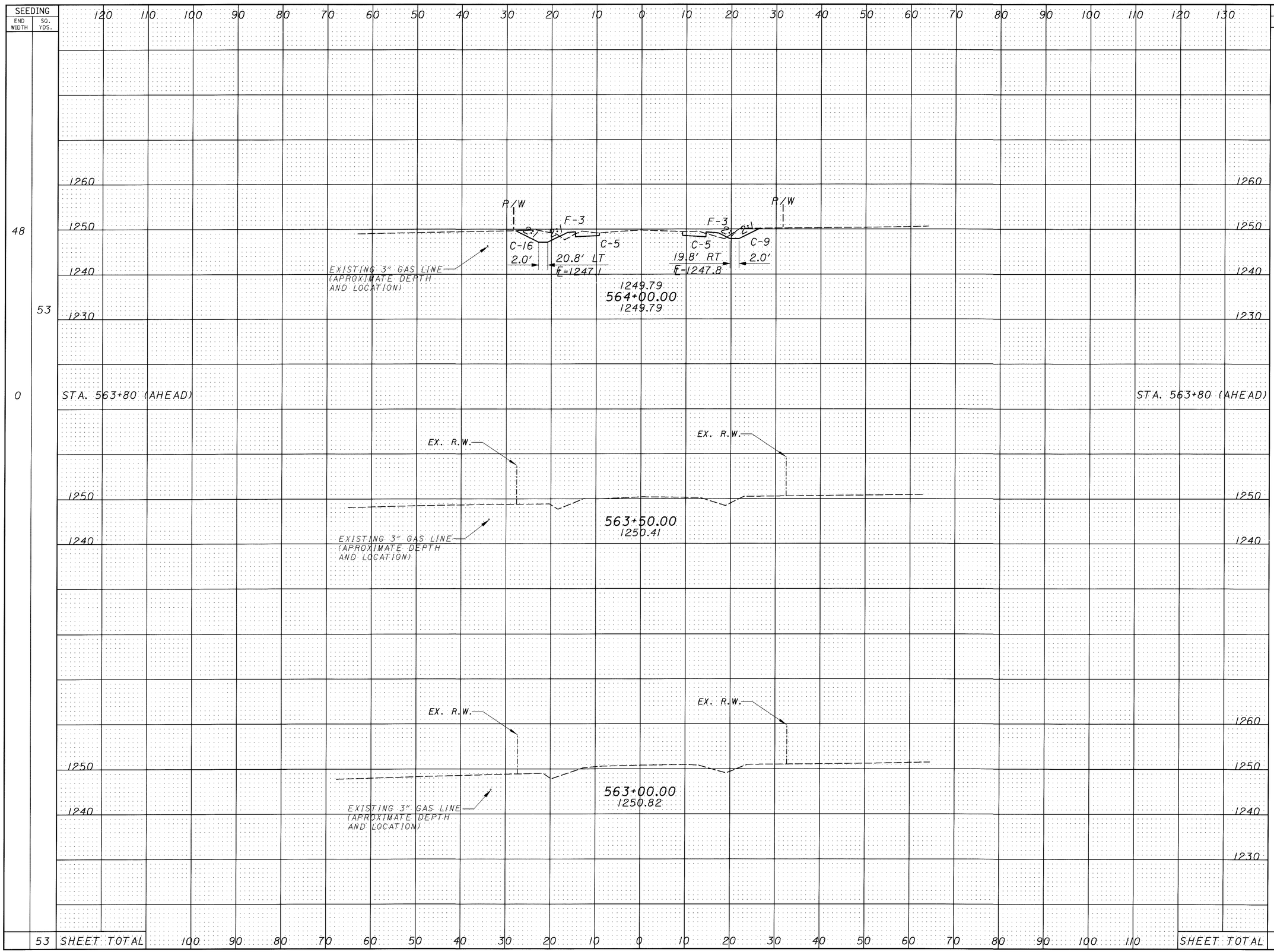
SEEDING	
END WIDTH	SQ. YDS.
48	
	53
0	
	53

END AREA		VOLUME	
CUT	FILL	CUT	FILL
35	6		
0	0	13	2
SHEET TOTAL		13	2

CALCULATED RJG
CHECKED CZ

CROSS SECTIONS-SR 173
STA. 563+00 - STA. 564+00

STA-173-1.85



SHT173SXS.PXS PID 22417

SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
24	214		35	4	85	11
53	297		57	8	105	11
54	283		56	4	84	9
	794	SHEET TOTAL			274	31

CALCULATED RJG CHECKED CZ

EX. 12" (TO BE REMOVED)
R/W
EXISTING 3" GAS LINE (APROXIMATE DEPTH AND LOCATION)
12", TYPE D
C-20
F-4
C-7
R/W
2:1
CB 2-2B
STA. 565+50, 24.1' RT.
GRATE EL. 1245.64
E EL. 15" (E) 1241.88
C-8
1246.80
565+50.00
1246.80

R/W
2:1
C-36
2:1
2.0'
25.8' LT
E=1245.0
EXISTING 3" GAS LINE (APROXIMATE DEPTH AND LOCATION)
F-8
R/W
2:1
C-8
23.3' RT
E=1246.2
2.0'
C-13
1247.77
565+00.00
1247.77

R/W
F-1
2:1
2:1
C-29
2.0'
25.4' LT
E=1245.8
EXISTING 3" GAS LINE (APROXIMATE DEPTH AND LOCATION)
C-6
F-3
R/W
2:1
C-7
22.7' RT
E=1247.0
2.0'
C-14
1248.77
564+50.00
1248.77

1260
1250
1240
1230

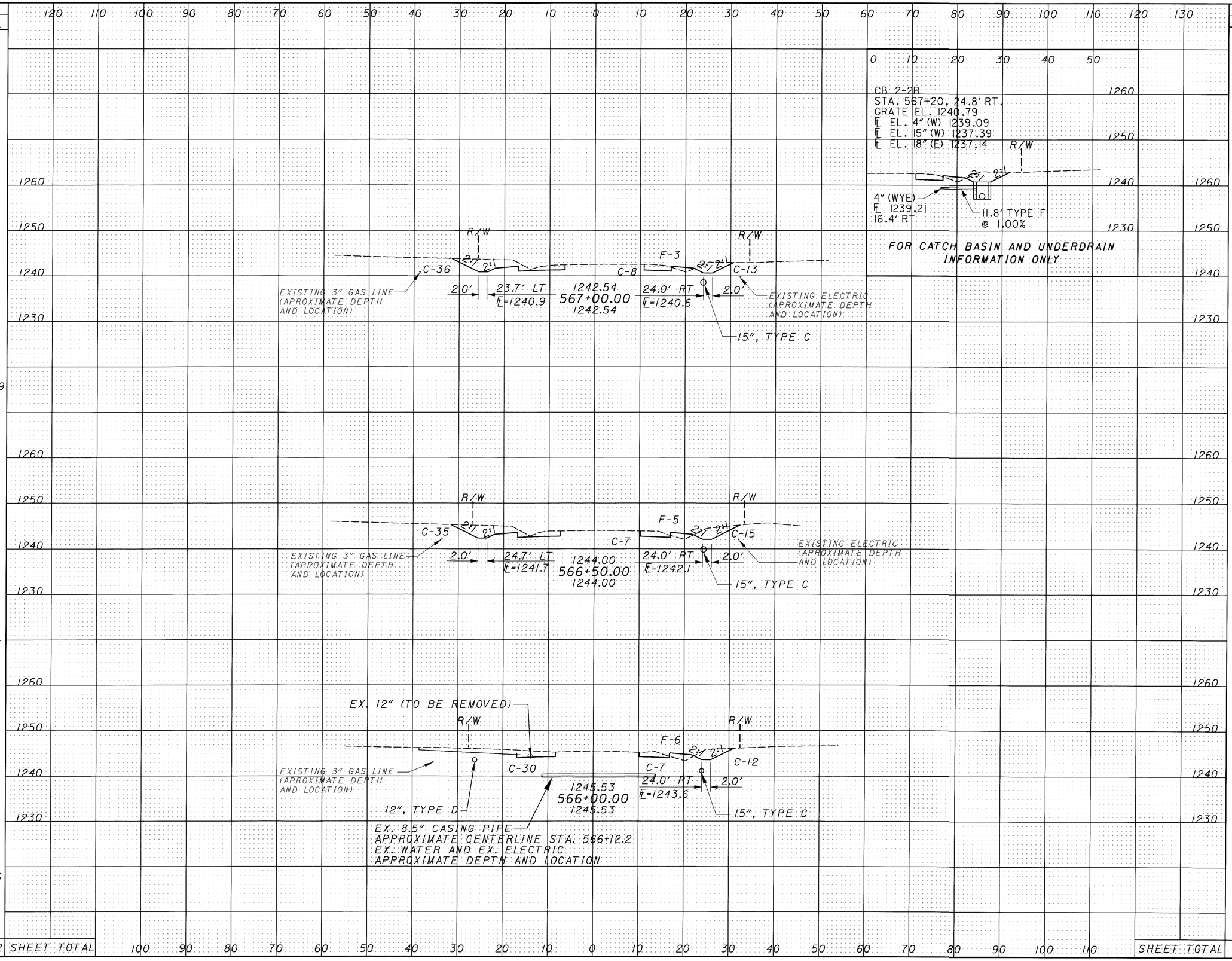
SHT173SXS.PXS PID 22417

CROSS SECTIONS-SR 173 STA. 564+50 - STA. 565+50

STA-173-1.85

31
85

SEEDING	
END WIDTH	SQ. YDS.
51	269
46	197
25	136
	602



END AREA		VOLUME	
CUT	FILL	CUT	FILL
57	3	106	7
57	5	98	10
49	6	78	9
		282	26

SHEET TOTAL

CALCULATED RJG
CHECKED CZ

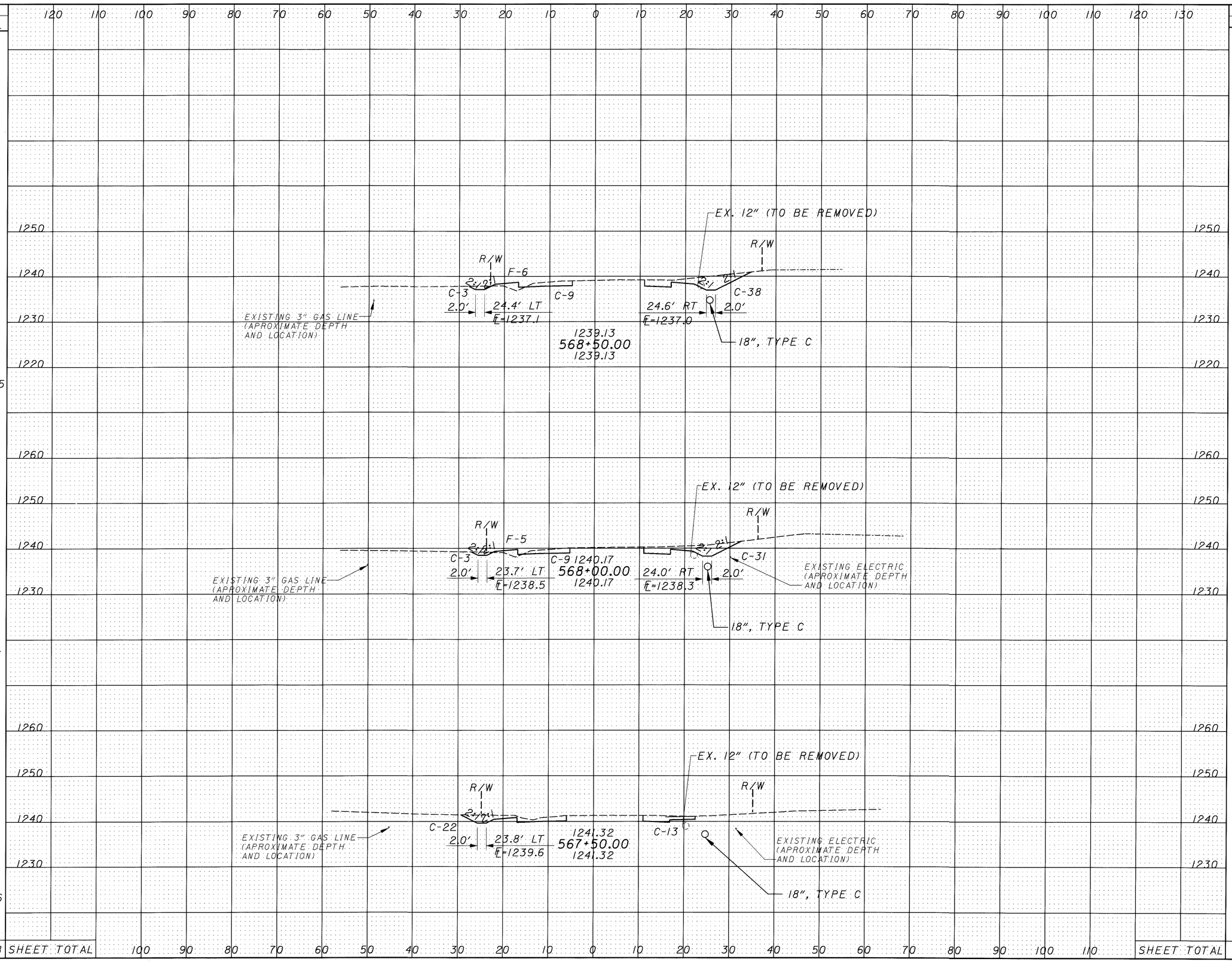
CROSS SECTIONS-SR 173
STA. 566+00 - STA. 567+00

STA-173-1.85

SHT173SXS.PXS PID 22417

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
51	275	50	6	86	10
48	197	43	5	72	5
23	206	35	0	85	3
	678 SHEET TOTAL			243	18 SHEET TOTAL

CALCULATED RJG
CHECKED CZ

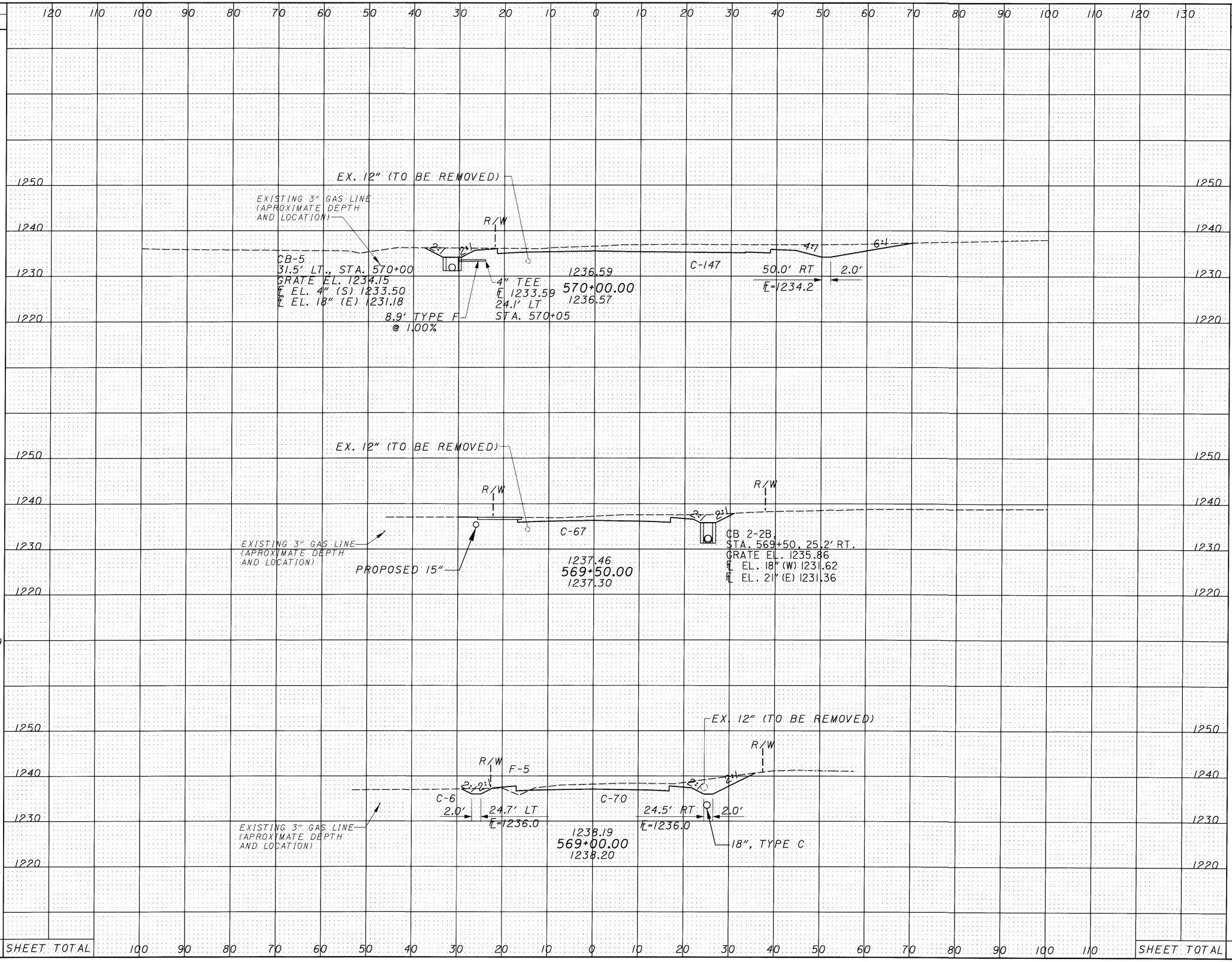


CROSS SECTIONS-SR 173 STA. 567+50 - STA. 568+50

STA-173-1.85

SHT173SXS.PXS PID 22417

SEEDING	
END WIDTH	SQ. YDS.
69	331
50	289
54	292
	912



END AREA		VOLUME	
CUT	FILL	CUT	FILL
147	0		
		198	0
67	0		
		132	5
76	5		
		117	10
		447	15

SHEET TOTAL

CALCULATED R.J.G.
CHECKED C.Z.

CROSS SECTIONS-SR 173
STA. 569+00 - STA. 570+00

STA-173-1.85

34
85

SHT173SXS.PXS PID 22417

SEEDING	
END WIDTH	SQ. YDS.
43	119
0	192
	311

EX. 12" (TO BE REMOVED)

EXISTING 3" GAS LINE (APROXIMATE DEPTH AND LOCATION)

R/W

2%

C-55

CB-5
30.3' LT., STA. 571+00
GRATE EL. 1233.29
F EL. 4" (S) 1231.01
E EL. 18" (W & E) 1230.31

13.5'-4" TYPE F
@ 1.00%

1234.19
571+00.00
1234.30

4" X 4" TEE
4" U.D.
16.9' LT.
STA. 570+98.6
E EL. 1231.14

EX. 4.5" CATV APPROXIMATE DEPTH AND LOCATION

EX. 12" (TO BE REMOVED)

MATCH LINE CR 67 (NORTH)

MATCH LINE CR 67 (SOUTH)

C-40

570+50.00

SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL
55	0	88	0
40	0	173	0
		261	0

CALCULATED RJG
CHECKED CZ

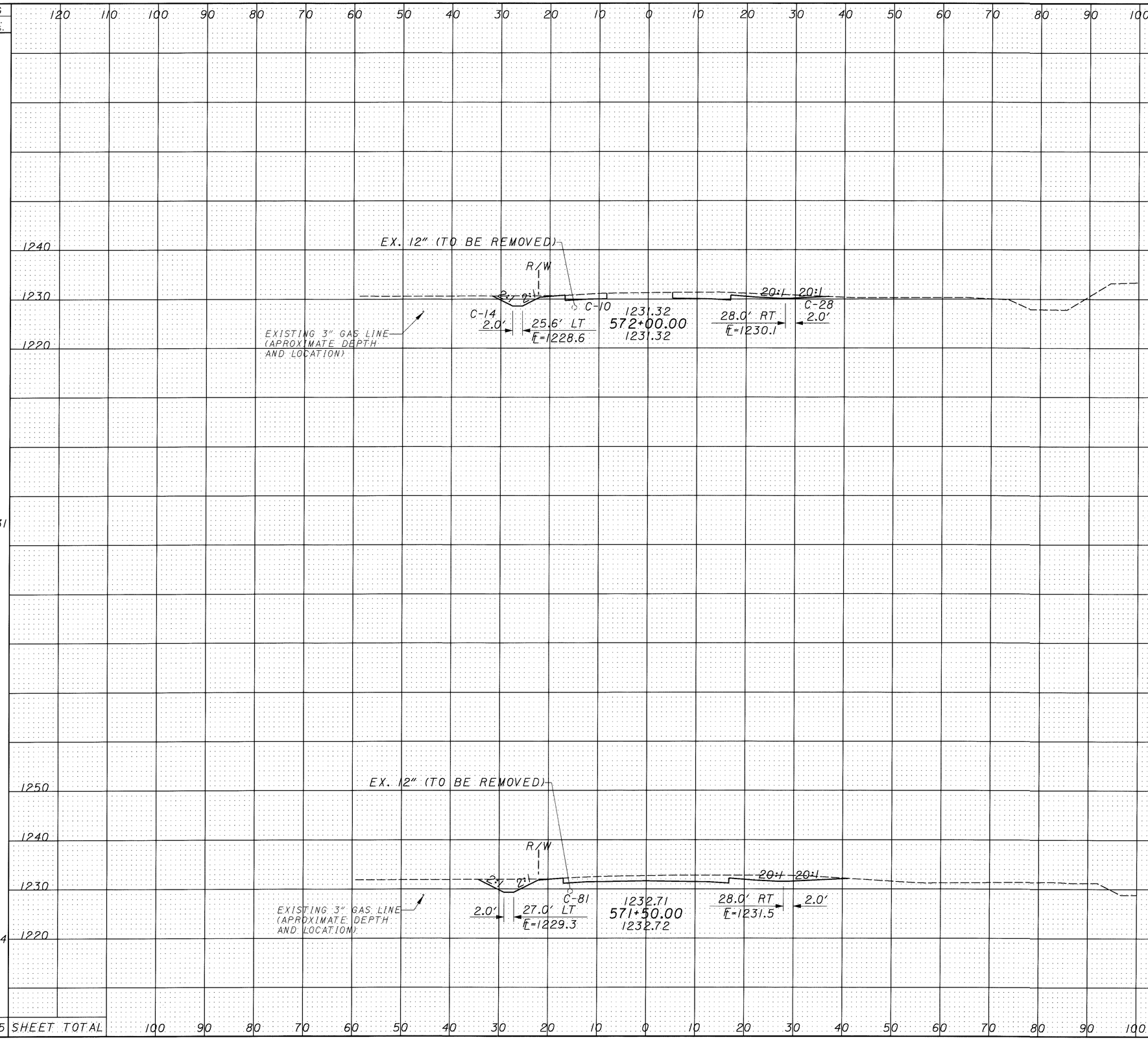
CROSS SECTIONS-SR 173 STA. 570+50 - 571+00

STA-173-1.85

35
85

SHT173SXS.PXS PID 22417

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
56	331	52	0	123	0
63	294	81	0	126	0
	625 SHEET TOTAL			249	0



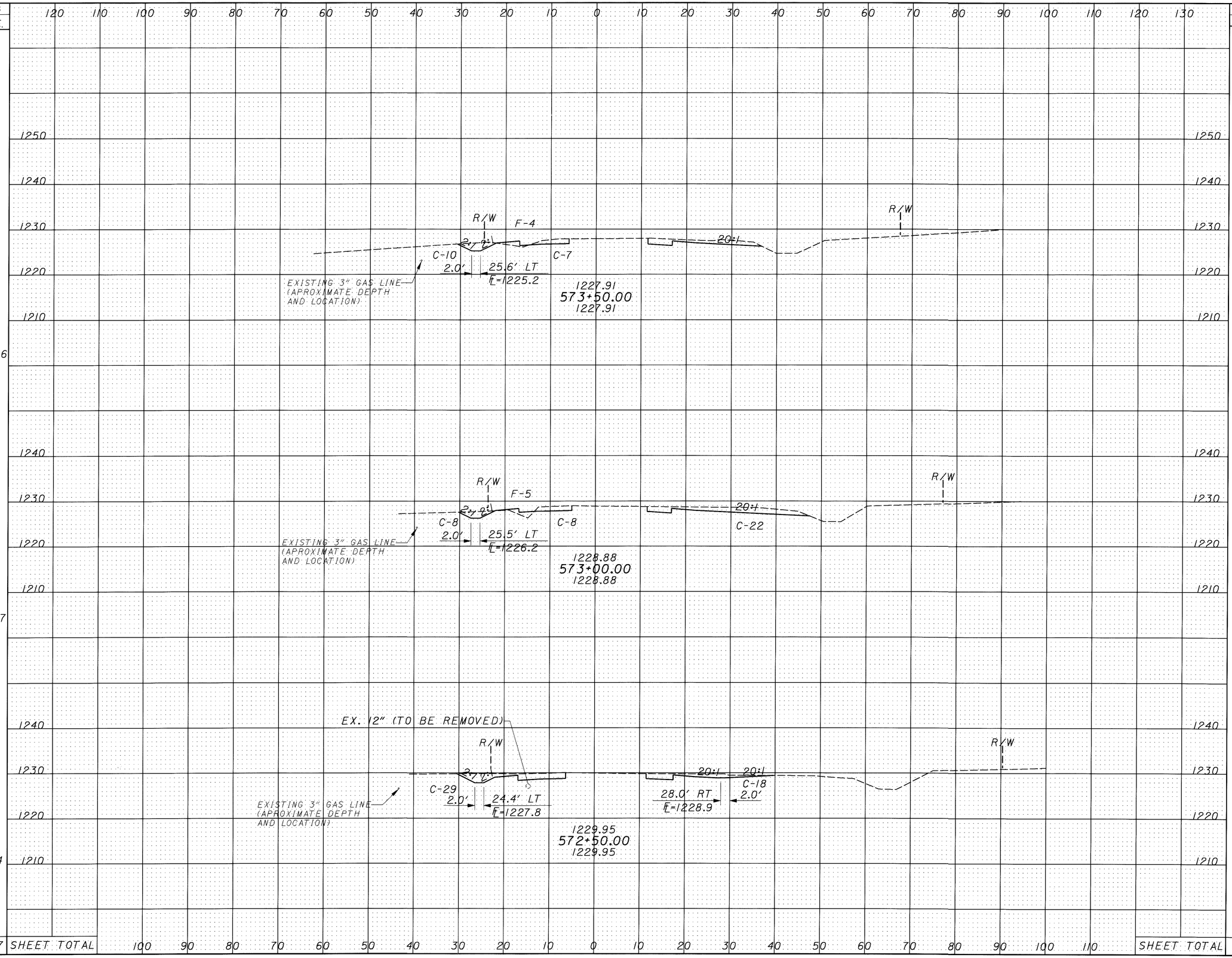
CALCULATED RJG
CHECKED CZ

CROSS SECTIONS-SR 173
STA. 571+50 - STA. 572+00

STA-173-1.85

SHT173SXS.PXS PID 22417

SEEDING END WIDTH	SEEDING SQ. YDS.
53	306
57	317
57	314
	937



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
35	4	68	8
38	5	79	5
47	0	92	0
		239	13

CALCULATED RJG
CHECKED CZ

CROSS SECTIONS-SR 173
STA. 572+50 - STA. 573+50

STA-173-1.85

37
85

SHT173SXS.PXS PID 22417

SEEDING	
END WIDTH	SQ. YDS.
50	256
42	242
45	272
	770

P.R.C.O. - PRECAST REINFORCED CONCRETE OUTLET

FOR UNDERDRAIN INFORMATION ONLY

575+45

4" OUTLET
℄ 1223.28
24.9' LT.
P.R.C.O.

EXISTING 3" GAS LINE (APROXIMATE DEPTH AND LOCATION)

8.5' TYPE F @ 1.00%

4"x90° BEND
℄ 1223.36
16.4' LT.

FOR UNDERDRAIN INFORMATION ONLY

575+40

4" OUTLET
℄ 1223.44
24.7' RT.
P.R.C.O.

4"x90° BEND
℄ 1223.54
16.4' RT.

8.3' TYPE F @ 1.00%

24", TYPE D

R/W

F-4

C-27

C-7

C-9

EXISTING 3" GAS LINE (APROXIMATE DEPTH AND LOCATION)

2.0'

30.8' LT
℄=1221.0

1226.36
575+00.00
1226.36

F-12

C-4

C-7

C-11

25.2' LT
℄=1224.1

1226.62
574+50.00
1226.62

F-7

C-6

C-7

C-14

24.6' LT
℄=1225.0

1227.23
574+00.00
1227.23

END AREA		VOLUME	
CUT	FILL	CUT	FILL
43	4	60	15
22	12	45	18
27	7	57	10
SHEET TOTAL		162	43

CALCULATED RJG
CHECKED CZ

CROSS SECTIONS-SR 173
STA. 574+00 - STA. 575+00

STA-173-1.85

38
85

SHT173SXS.PXS PID 22417

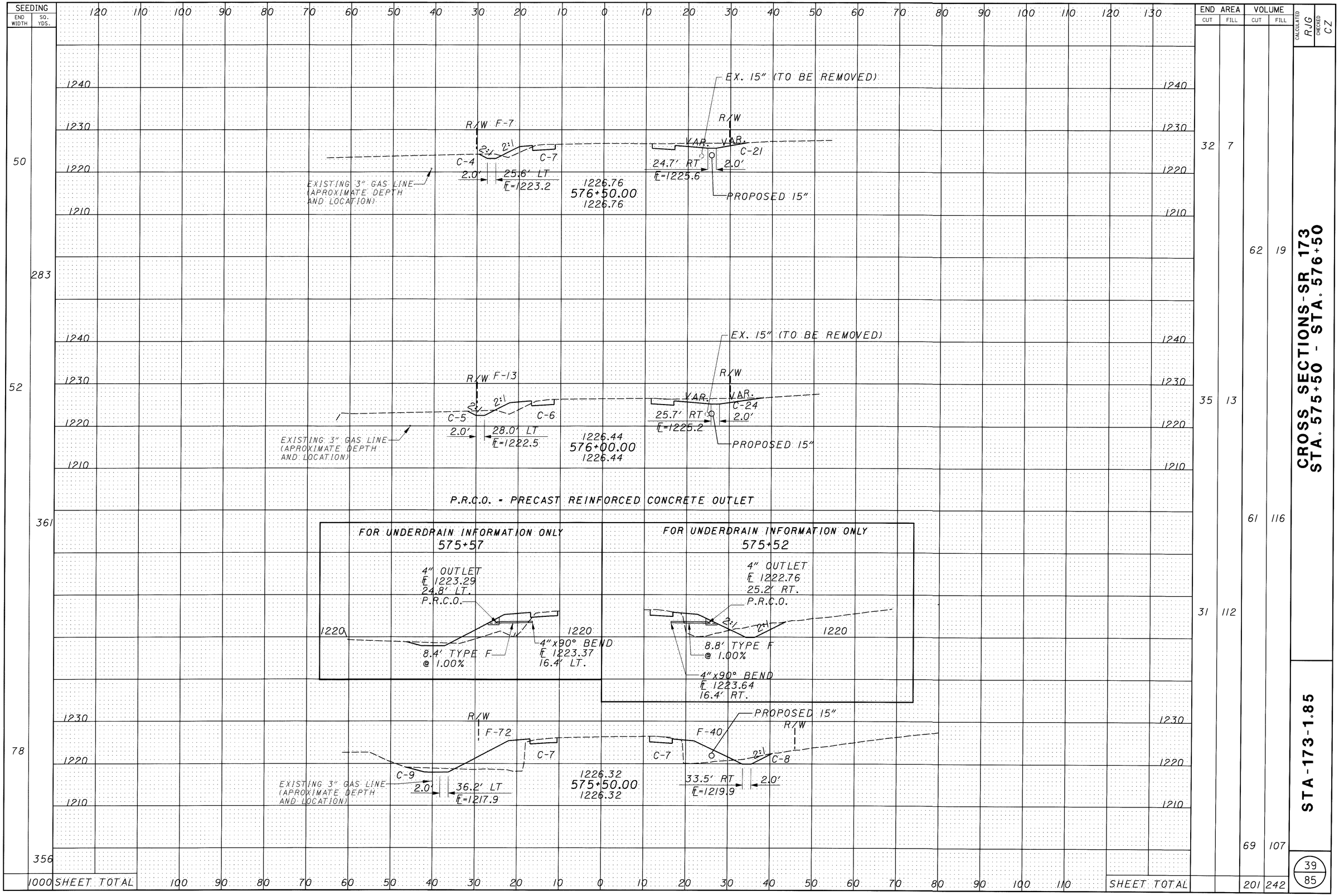
SEEDING	
END WIDTH	SQ. YDS.
50	283
52	
78	
	361
	356
	1000

END AREA		VOLUME	
CUT	FILL	CUT	FILL
32	7	62	19
35	13		
31	112	61	116
		69	107
SHEET TOTAL		201	242

CALCULATED RJG
CHECKED CZ

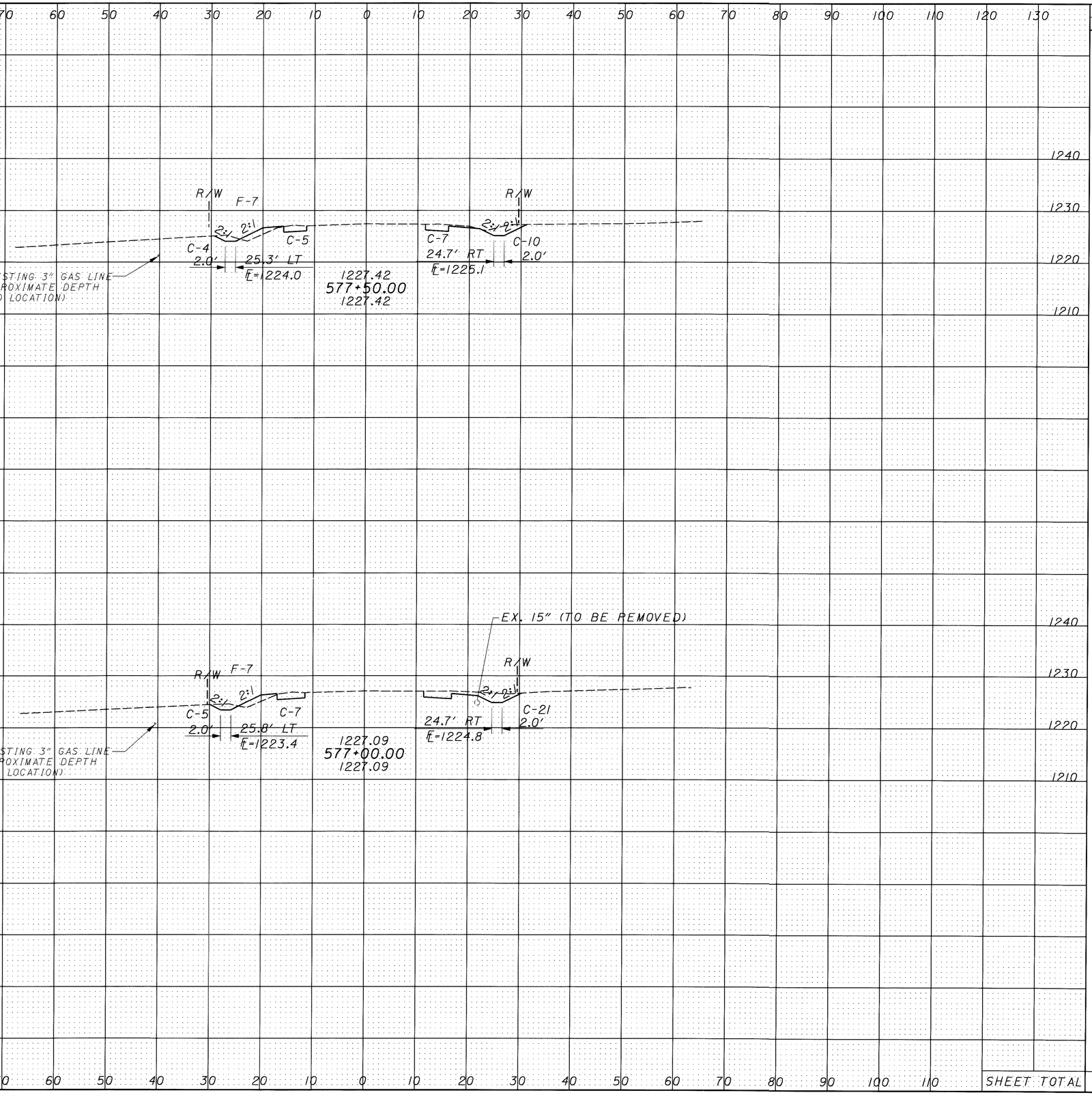
CROSS SECTIONS-SR 173
STA. 575+50 - STA. 576+50

STA-173-1.85



SHT173SXS.PXS PID 22417

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
51	275	26	7	55	13
48	272	33	7	60	13
	547 SHEET TOTAL			120	26



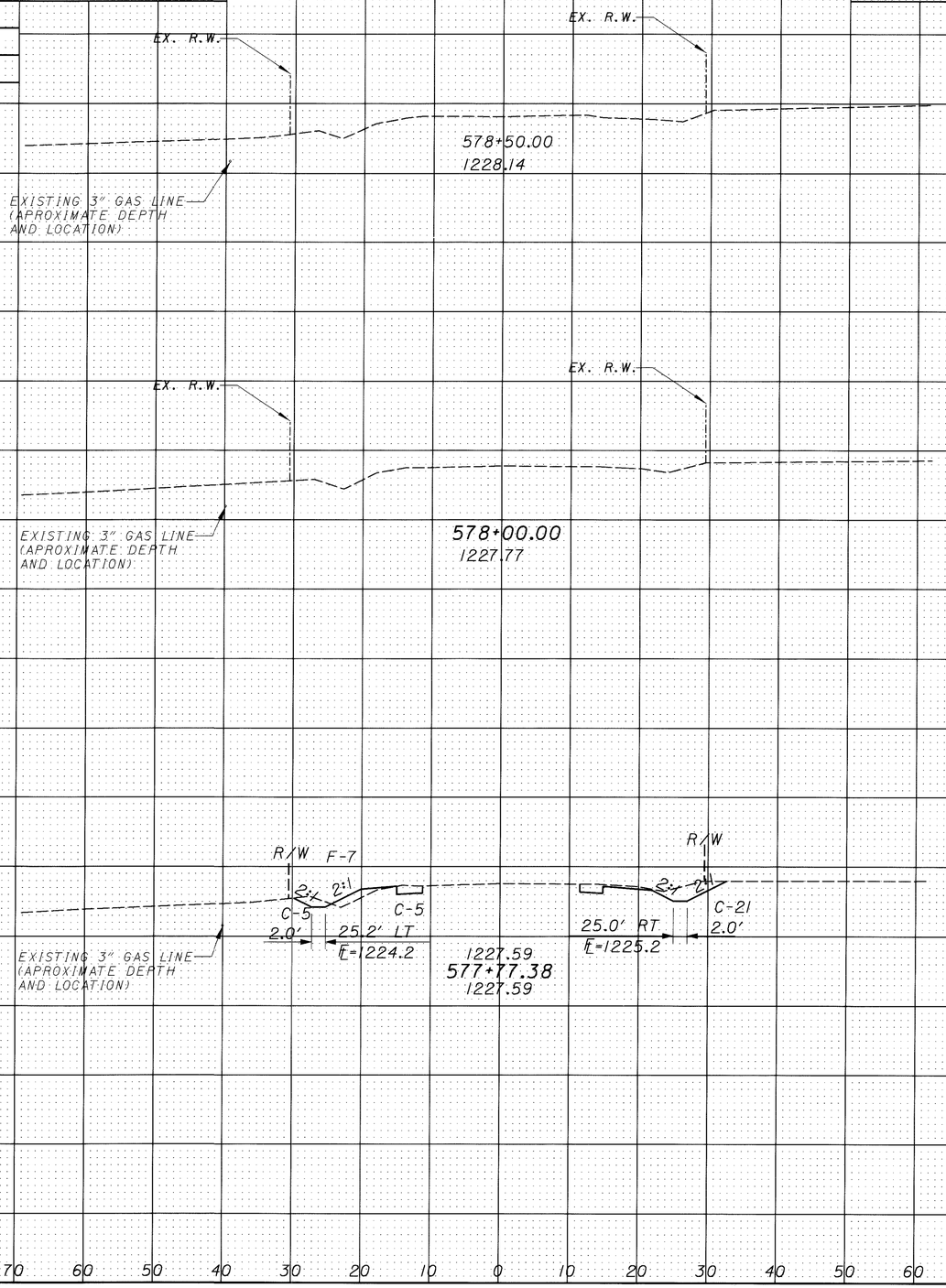
CALCULATED RJG
CHECKED CZ

CROSS SECTIONS-SR 173
STA. 577+00 - STA. 577+50

STA-173-1.85

SHT173SXS.PXS PID 22417

SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
	14,258	TOTALS CARRIED TO GENERAL SUMMARY			6504	688
	628	TOTALS CARRIED FROM SHEET 68			108	23
	-856	TOTALS CARRIED FROM SHEET 62 (DEDUCTIONS FOR DRIVES)			-289	0
	650	TOTALS CARRIED FROM SHEET 56			376	23
	6377	TOTALS CARRIED FROM SHEET 53			3790	216
	7459	TOTALS SHEETS 30-41			2519	426
0	69		0	0	13	3
55			31	7		
	161				29	7
	230	SHEET TOTAL			42	10



CALCULATED RJG
CHECKED CZ

CROSS SECTIONS-SR 173
STA. 577+77.38 TO STA. 578+50

STA-173-1.85

41
85

SHT173SXS.PXS PID 22417

BEGIN WORK
STA. 1645+00

END SHOULDER
TAPER LT,
STA. 1645+50

END SHOULDER
TAPER RT,
STA. 1645+50

PROPOSED ℄ SURVEY &
CONSTRUCTION CR 67 SOUTH

EXISTING ℄ CR 67 SOUTH

EXISTING R/W

CONSTRUCTION LIMITS

Pr. Co. Rd. 67A Curve 1
P.I. Sta = 1648+44.97
Δ = 8° 14′ 22″ (RT)
Dc = 6° 00′ 00″
R = 954.93′
T = 68.78′
L = 137.33′
E = 2.47′

1-TDR
2-TDR
1-MB
2-MB
9-DR
10-DR
11-DR
15-R
16-R

T ESMT
R/W
O.L.P.E.
B.E.
GRAVEL
TV(FO)

1644+00
1645+00
1646+00
1647+00
1648+00
1649+00

N 35° 02′ 43″ E

STA.1647+76.2
STA. 1648+07.5
STA. 1648+31.3
STA. 1649+50.7

90°

12′
2′
4′
+50
+00

6′ 6″

PC Sta. 1647+76.19
PT Sta. 1649+13.51

1½ STORY FRAME HOUSE #9390

MATCHLINE 1649+55 CR 67 SOUTH

STATION EQUATION:
4.04′ LT. STATION 1643+95.42
EXISTING ℄ SURVEY CO. RD. 67 =
STA. 1643+95.42 PROPOSED
℄ SURVEY AND CONSTRUCTION
CO. RD. 67

FOR PAVEMENT AND SHOULDER CALCULATIONS SEE SHEETS 22 - 23
FOR REMOVAL QUANTITIES SEE SHEET 25
FOR DRIVE PROFILES SEE SHEETS 59-62
FOR DRAINAGE DETAILS AND QUANTITIES SEE SHEETS 63-70
FOR TRAFFIC CONTROL QUANTITIES SEE SHEETS 71-75
FOR TEMPOARAY CONSTRUCTION DRIVES - 1-TDR AND 2-TDR INFORMATION SEE SHEET 12 & 61.

1,256.23 1,256.01 1,255.79 1,255.57 1,255.35 1,255.16 1,254.95 1,254.71 1,254.46 1,254.16 1,253.86 1,253.55 1,253.23 1,252.86 1,252.47 1,252.00 1,251.53 1,251.06 1,250.53 1,249.89 1,249.29

1,255.35 1,255.13 1,254.90 1,254.68 1,254.46 1,254.21 1,253.93 1,253.62 1,253.26 1,252.87 1,252.44 1,251.98 1,251.47 1,250.93 1,250.36 1,249.74 1,249.09

Sta. 1646+00.00
Elev. 1,254.46

EXISTING PROFILE

P.V.I. Sta. 1648+00.00 Elev. = 1,252.67
400′ V.C.

-0.89 %
-3.28 %

PROPOSED PROFILE

EX. TELEPHONE
(APPROXIMATE DEPTH
AND LOCATION)

EX. 4.5″ CATV (FIBER OPTIC)
(APPROXIMATE DEPTH
AND LOCATION)

1260
1250
1240

1644+00 1645+00 1646+00 1647+00 1648+00

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED RJG
CHECKED CZ

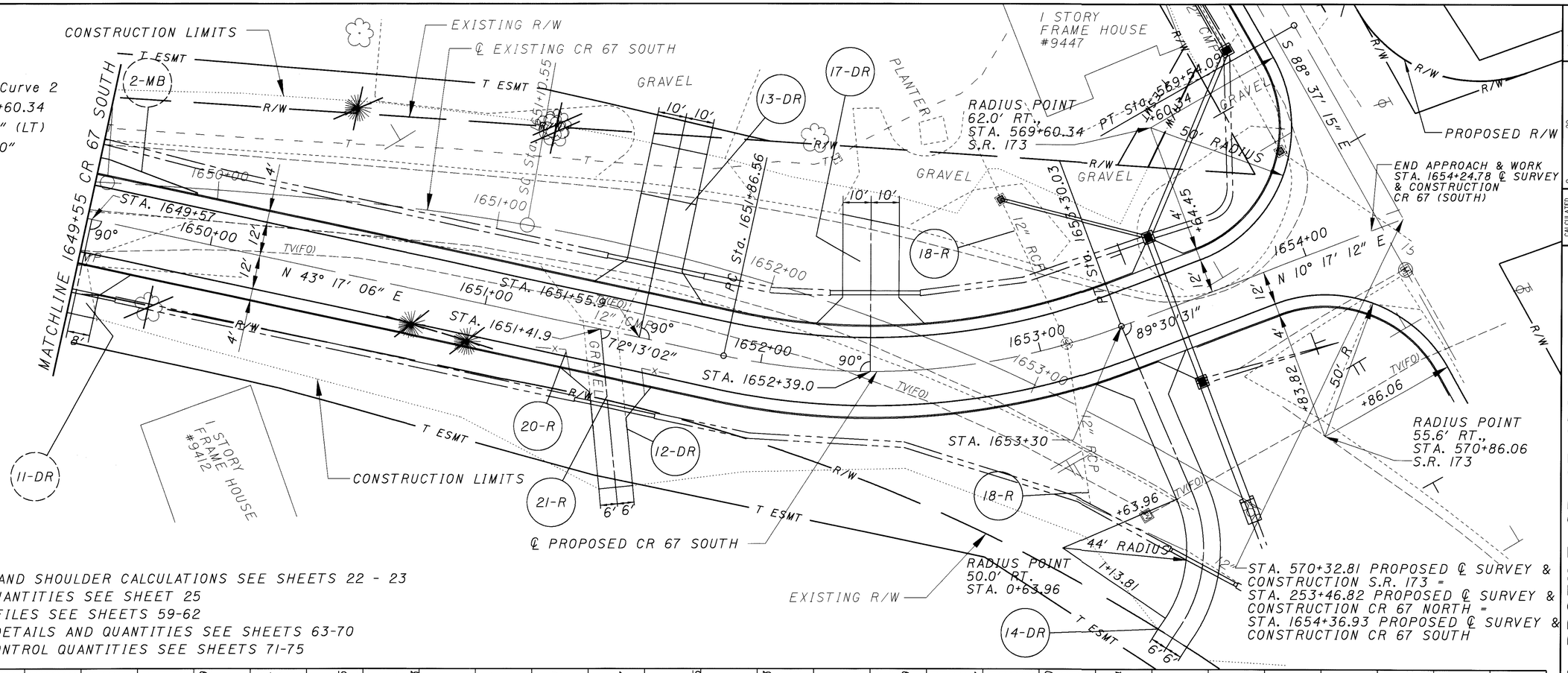
PLAN AND PROFILE CR 67 (SOUTH)
STA 1643+95 TO STA. 1649+55

STA-173-1.85

42
85

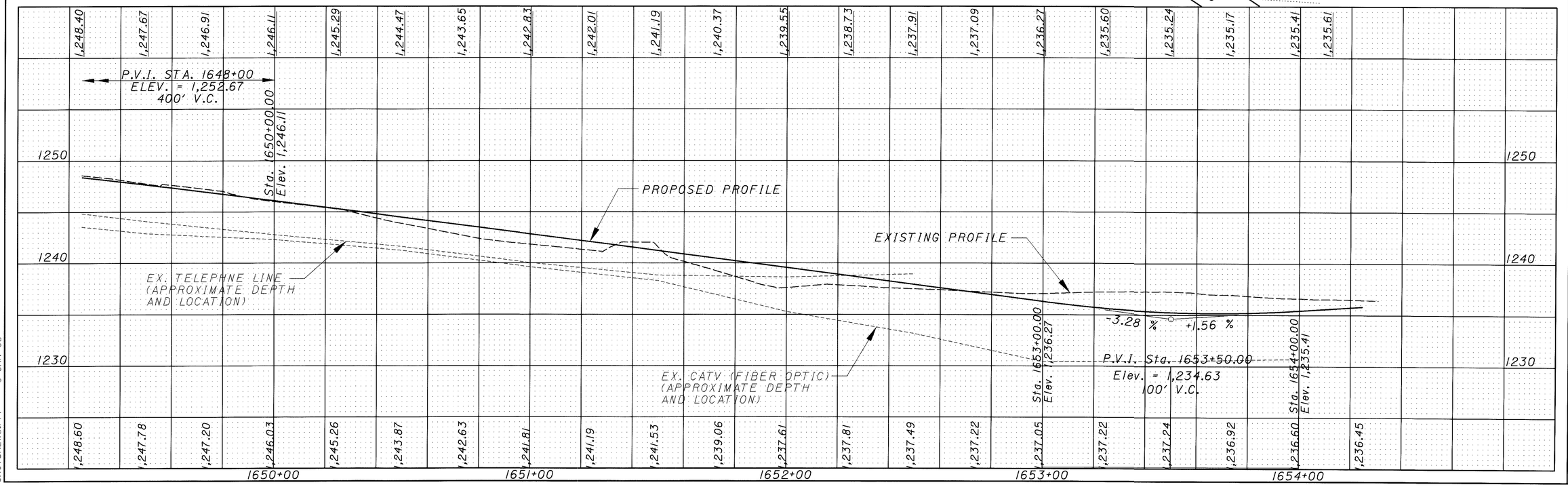
CR67SNEW2.PPP 9 JAN 03

Pr. Co. Rd. 67 Curve 2
P.I. Sta = 1652+60.34
Δ = 32° 59′ 53″ (LT)
Dc = 23° 00′ 00″
R = 249.11′
T = 73.79′
L = 143.47′
E = 10.70′



FOR PAVEMENT AND SHOULDER CALCULATIONS SEE SHEETS 22 - 23
FOR REMOVAL QUANTITIES SEE SHEET 25
FOR DRIVE PROFILES SEE SHEETS 59-62
FOR DRAINAGE DETAILS AND QUANTITIES SEE SHEETS 63-70
FOR TRAFFIC CONTROL QUANTITIES SEE SHEETS 71-75

STA. 570+32.81 PROPOSED ℄ SURVEY & CONSTRUCTION S.R. 173 =
STA. 253+46.82 PROPOSED ℄ SURVEY & CONSTRUCTION CR 67 NORTH =
STA. 1654+36.93 PROPOSED ℄ SURVEY & CONSTRUCTION CR 67 SOUTH



CR67SNEW3.PPP 9 JAN 03

HORIZONTAL SCALE IN FEET
0 10 20 40
CALCULATED RJG
CHECKED CZ

PLAN AND PROFILE CR 67 (SOUTH)
STA. 1649+55 TO STA. 1654+24.78

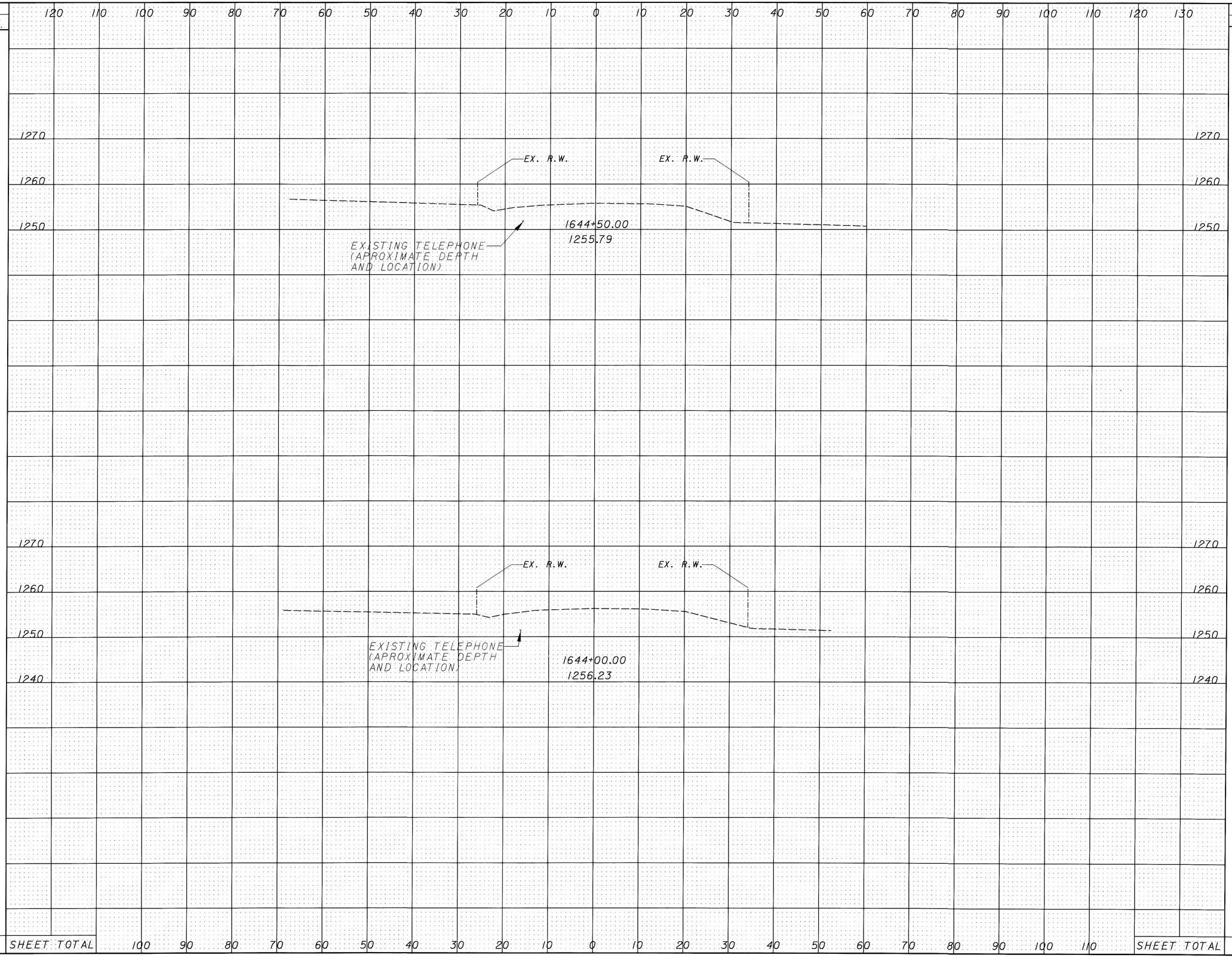
STA-173-1.85

SEEDING	
END WIDTH	SQ. YDS.
0	
0	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	0		
		0	0

CALCULATED RJG

CHECKED CZ



SHEET TOTAL

SHEET TOTAL

CROSS SECTIONS-CR 67 (SOUTH)
STA. 1644+00-1644+50

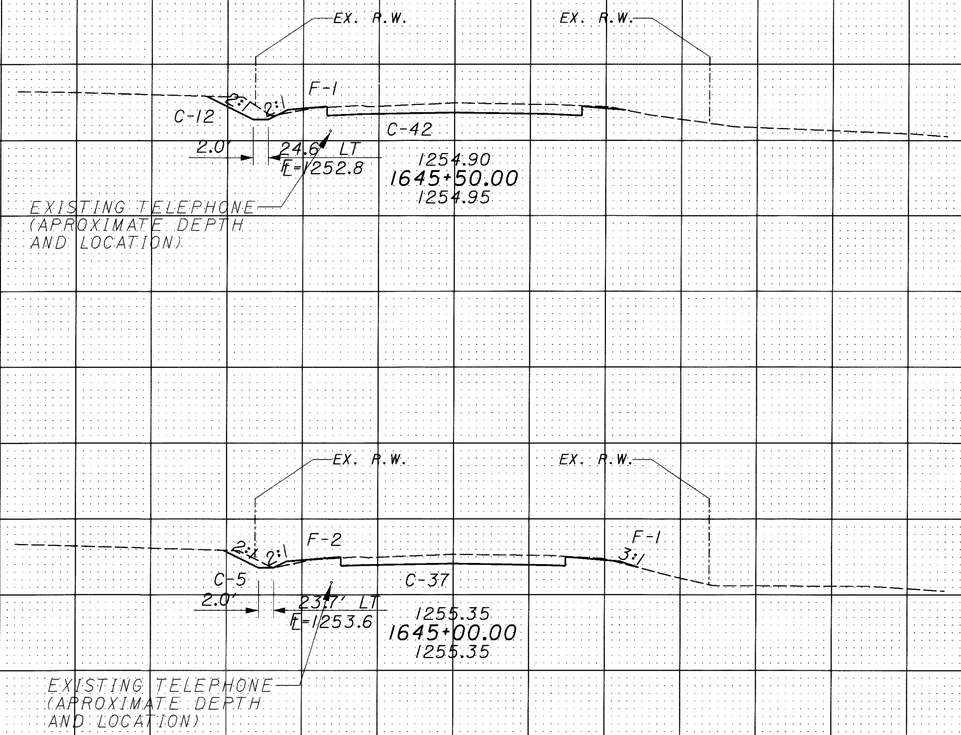
STA-173-1.85

SHT67SXS.PXS PID 22417

SEEDING	
END WIDTH	SQ. YDS.
43	
47	250
	131
	381

120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130

1270 1260 1250 1240 1280



END AREA		VOLUME	
CUT	FILL	CUT	FILL
54	1		
42	3	89	4
		39	3
		128	7

CALCULATED RJG
CHECKED CZ

CROSS SECTIONS-CR 67 (SOUTH)
STA. 1645+00-1645+50

STA-173-1.85

45
85

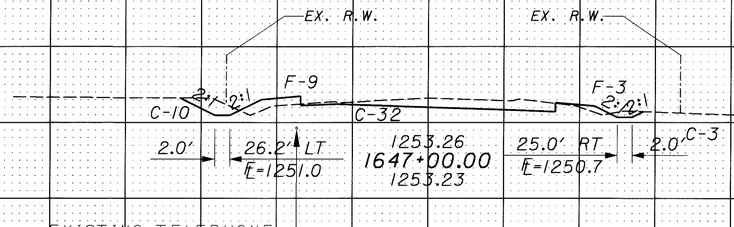
SHT67SXS.PXS PID 22417

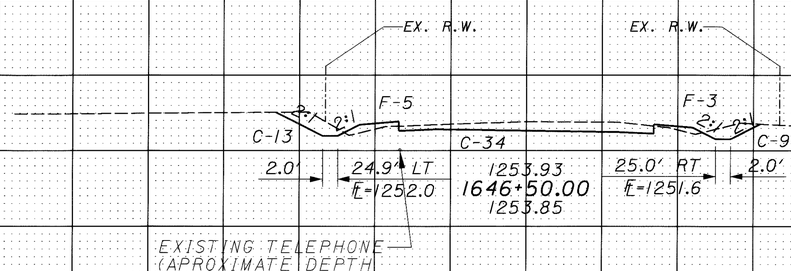
SEEDING	
END WIDTH	SQ. YDS.
49	278
51	294
55	272
	844

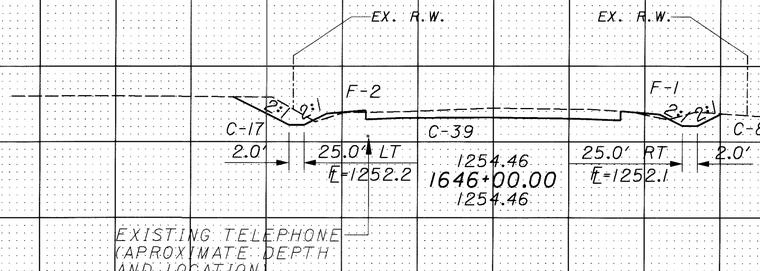
END AREA	
CUT	FILL
45	12
56	8
64	3

VOLUME	
CUT	FILL
94	19
111	10
109	4
314	33

CALCULATED RJG
CHECKED CZ







SHEET TOTAL

SHEET TOTAL

SHT67SXS.PXS PID 22417

CROSS SECTIONS-CR 67 (SOUTH)
STA. 1646+00-1647+00

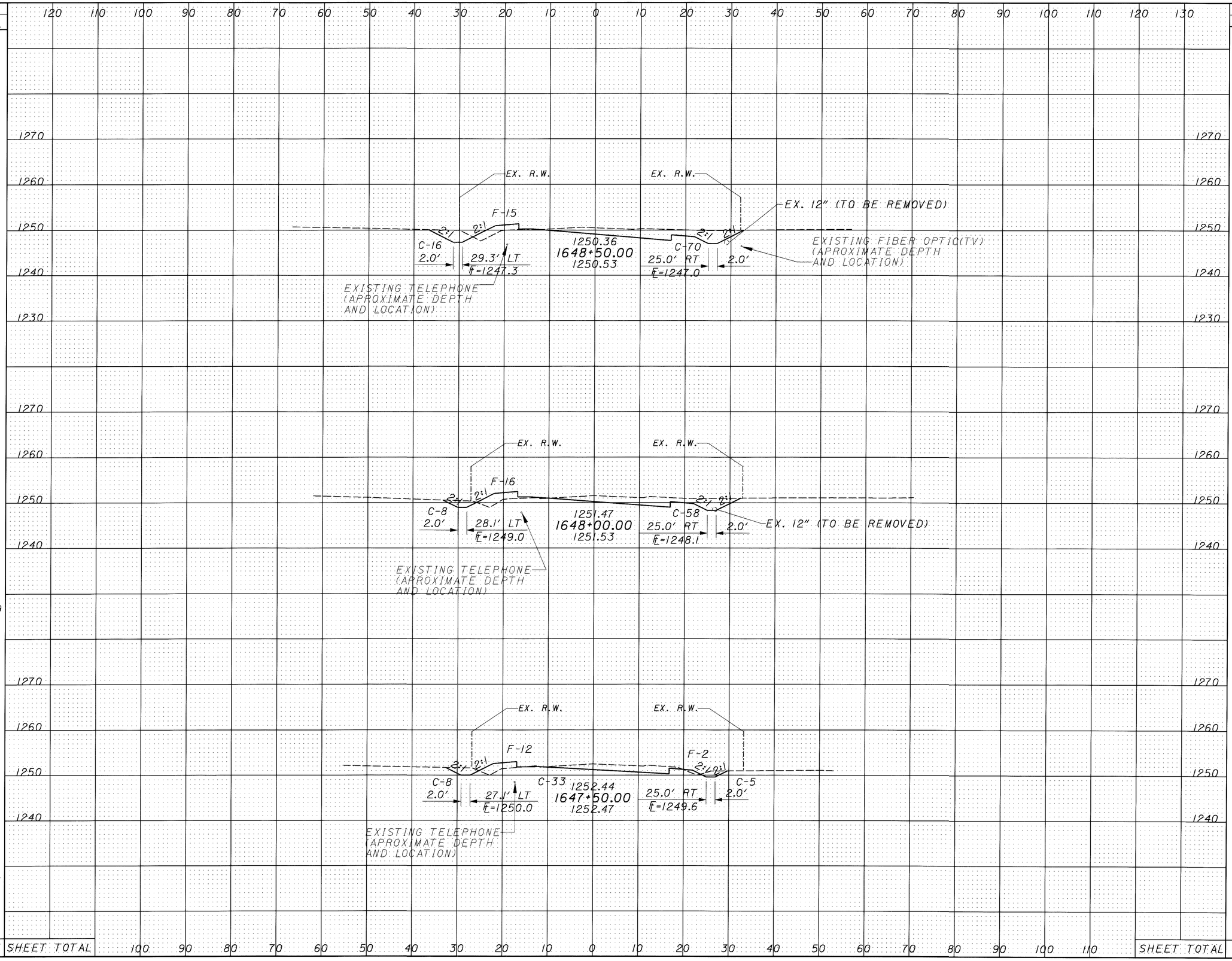
STA-173-1.85

SEEDING	
END WIDTH	SQ. YDS.
58	311
54	289
50	275
	875

END AREA		VOLUME	
CUT	FILL	CUT	FILL
86	15	141	29
66	16	104	28
46	14	84	24
		329	81

CALCULATED RJG

CHECKED CZ



SHEET TOTAL

SHEET TOTAL

SHT67SXS.PXS PID 22417

CROSS SECTIONS-CR 67 (SOUTH)
STA. 1647+50-1648+50

STA-173-1.85

SEEDING	
END WIDTH	SQ. YDS.
63	339
59	325
664	SHEET TOTAL

END AREA	
CUT	FILL
78	0
61	4
SHEET TOTAL	

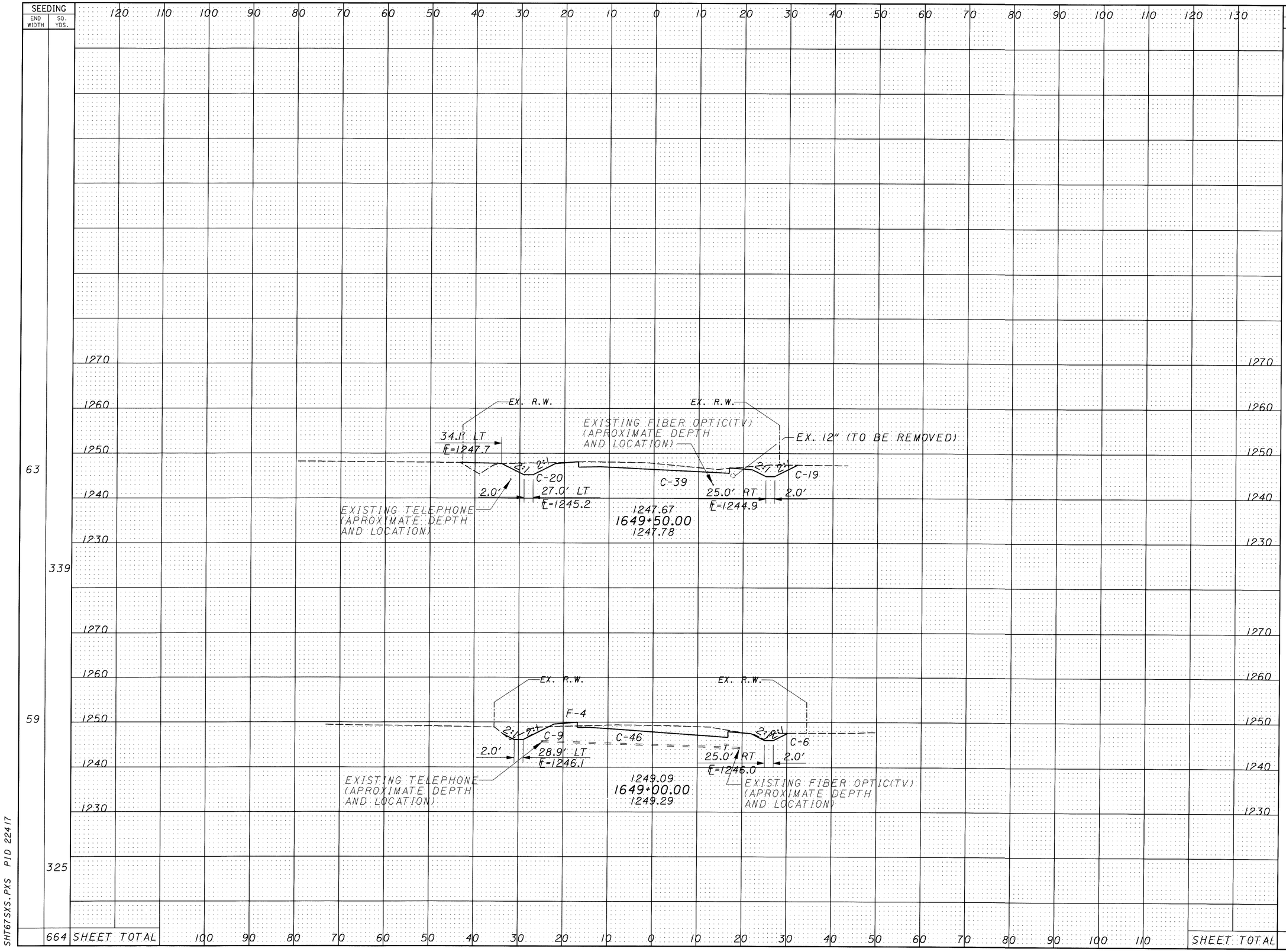
VOLUME	
CUT	FILL
129	4
136	18
265	22

CALCULATED RJG
CHECKED CZ

CROSS SECTIONS-CR 67 (SOUTH)
STA. 1649+00-1649+50

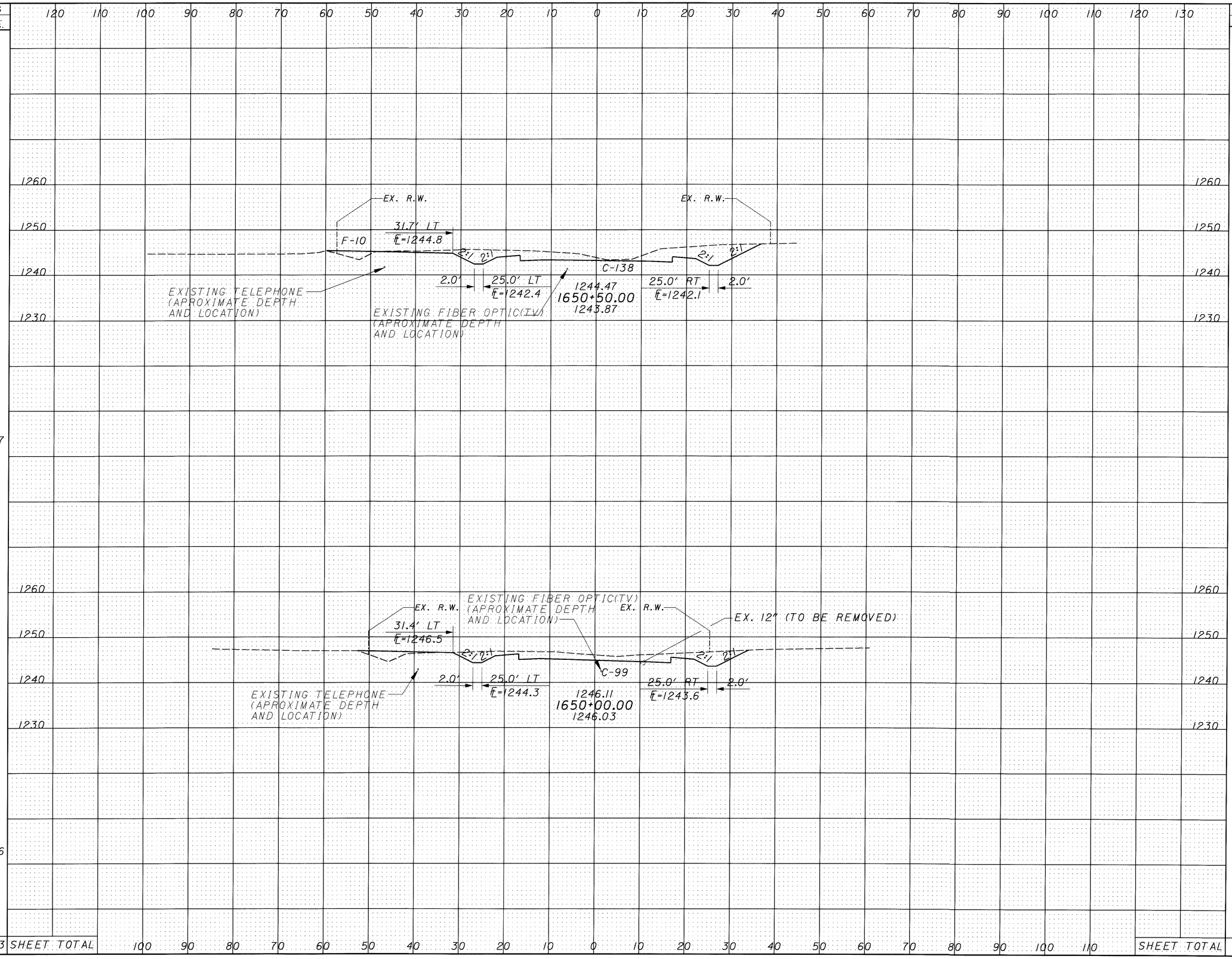
STA-173-1.85

48
85



SHT67SXS.PXS PID 22417

SEEDING	
END WIDTH	SQ. YDS.
85	447
76	386
	833



END AREA		VOLUME	
CUT	FILL	CUT	FILL
138	10	220	9
99	0	164	0
		384	9

CALCULATED RJG
CHECKED CZ

CROSS SECTIONS-CR 67 (SOUTH) STA. 1650+00 - STA. 1650+50

STA-173-1.85

SHT67SXS.PXS PID 22417

SEEDING	
END WIDTH	SQ. YDS.
45	378
91	489
	867

END AREA		VOLUME	
CUT	FILL	CUT	FILL
225	0	391	6
197	6	310	15
		701	21

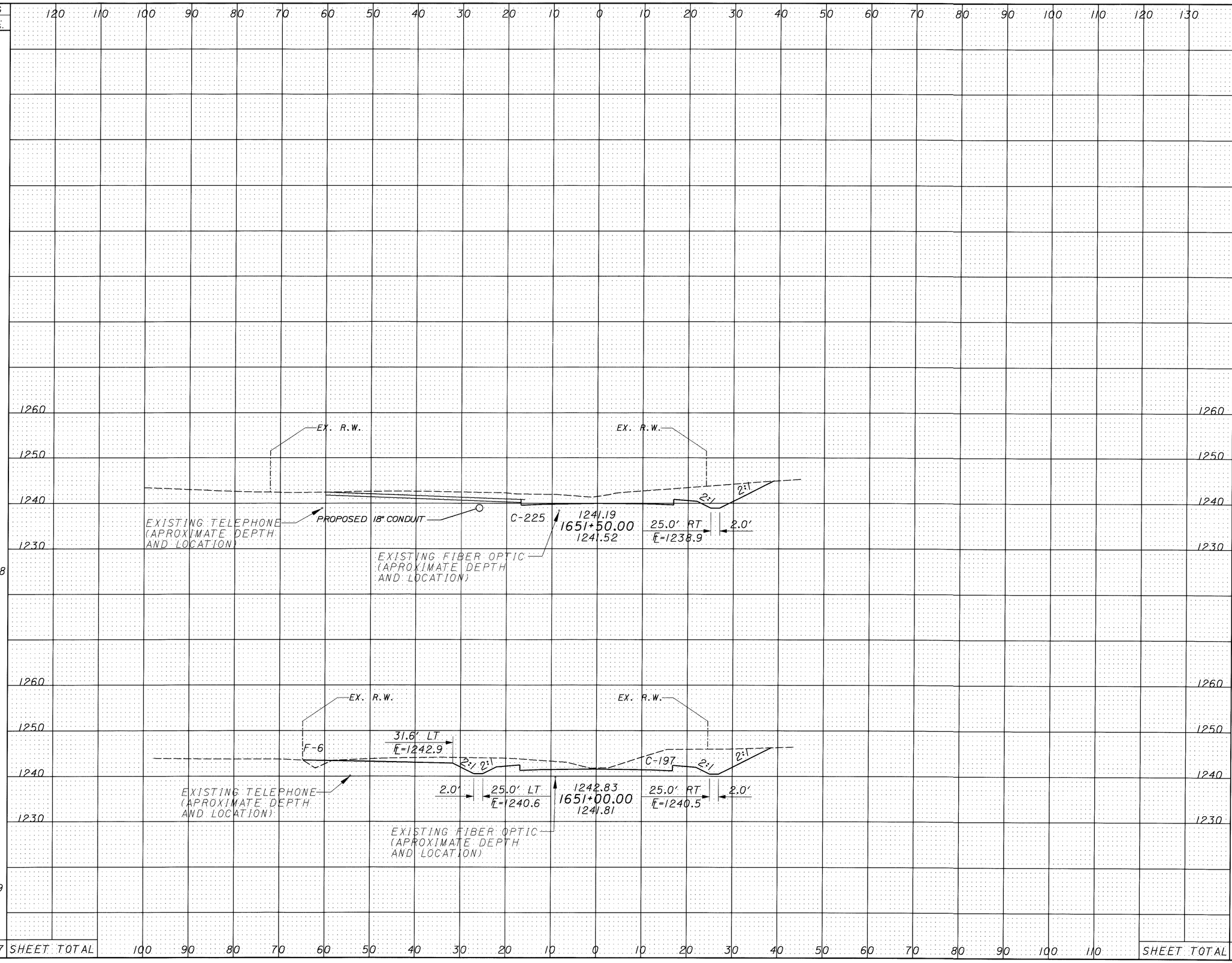
CALCULATED RJG
CHECKED CZ

CROSS SECTIONS-CR 67 (SOUTH)
STA. 1651+00-1651+50

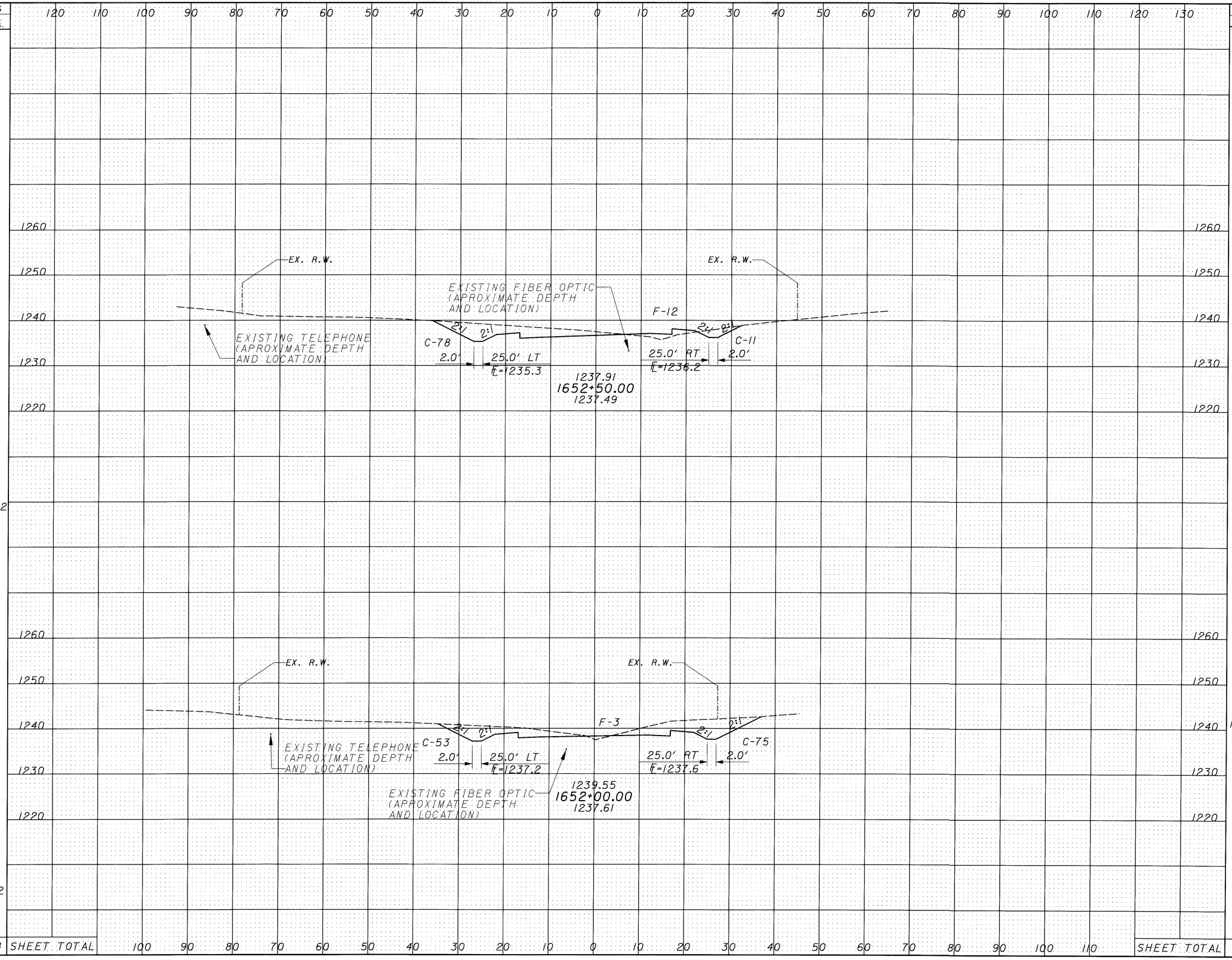
STA-173-1.85

50
85

SHT67SXS.PXS PID 22417



SEEDING	
END WIDTH	SQ. YDS.
56	
	322
60	
	292
	614



END AREA		VOLUME	
CUT	FILL	CUT	FILL
89	12		
128	3		
		201	14
		327	3
		528	17

CALCULATED RJG
CHECKED CZ

CROSS SECTIONS-CR 67 (SOUTH) STA. 1652+00-1652+50

STA-173-1.85

51/85

SHT67SXS.PXS PID 22417

SEEDING	
END WIDTH	SQ. YDS.
	86
	469
	83
	386
	855

END AREA	
CUT	FILL
339	0
438	7
134	8
206	19
644	26

VOLUME	
CUT	FILL

CALCULATED RJG
CHECKED CZ

SHEET TOTAL

EX. R.W.
4" 45° BEND
℄ 1232.13
16.4' LT.
STA. 1653+59.6
2:1
2:1
1230
OUTLET TO CATCH BASIN STA. 1653+50
13.6' TYPE F @ 1.00 %
FOR UNDERDRAIN INFORMATION ONLY

EX. R.W.
CB-5, 26.0' LT.
STA. 1653+50
℄ EL. GRATE 1233.46
℄ EL. 4" (NE) 1231.99
℄ EL. 4" (SE) 1232.23
℄ EL. 12" (SW) 1231.74
℄ EL. 21" (NW) 1230.99
℄ EL. 24" (E) 1230.74
2:1
2:1
C-207
55'-24" CONDUIT, TYPE B @ 1.16%
1235.24
1653+50.00
1237.24

CB-5, 28.5' RT.
STA. 1653+50
℄ EL. GRATE 1233.40
℄ EL. 4" (SW) 1232.55
℄ EL. 24" (W) 1230.10
℄ EL. 30" (E) 1229.60
3:1
3:1
45'-30" CONDUIT, TYPE C @ 0.49%
EXISTING FIBER OPTIC (APROXIMATE DEPTH AND LOCATION)

116.2' RT.
EL. 1228.99
OUTLET 30"
73.5' RT.
STA. 1653+50
℄ EL. 1229.38
C-132
ROCK CHANNEL PROTECTION TYPE C W/FILTER
8' X 5' X 1.5' ÷ 27 = 2.2 CU. YDS.
HW-2.1 OR HW-2.2

EX. R.W.
4" 45° BEND
℄ 1232.37
16.4' LT.
STA. 1653+40.4
2:1
2:1
1230
OUTLET TO CATCH BASIN STA. 1653+50
13.6' TYPE F @ 1.00 %
FOR UNDERDRAIN INFORMATION ONLY

3:1
4" OUTLET INTO CATCH BASIN STA. 1653+50
4"X45° BEND
℄ 1232.72
16.4' RT.
STA. 1653+38
17.0' TYPE F @ 1.00 %
FOR UNDERDRAIN INFORMATION ONLY

EX. R.W.
2:1
2:1
2.0'
25.0' LT
℄=1233.8
C-134
1236.27
1653+00.00
1237.05

EXISTING FIBER OPTIC (APROXIMATE DEPTH AND LOCATION)
F-4
F-5
7.4:1
52.8' RT
℄=1233.3
2.0'
EX. R.W.

1260
1250
1240
1230
1220

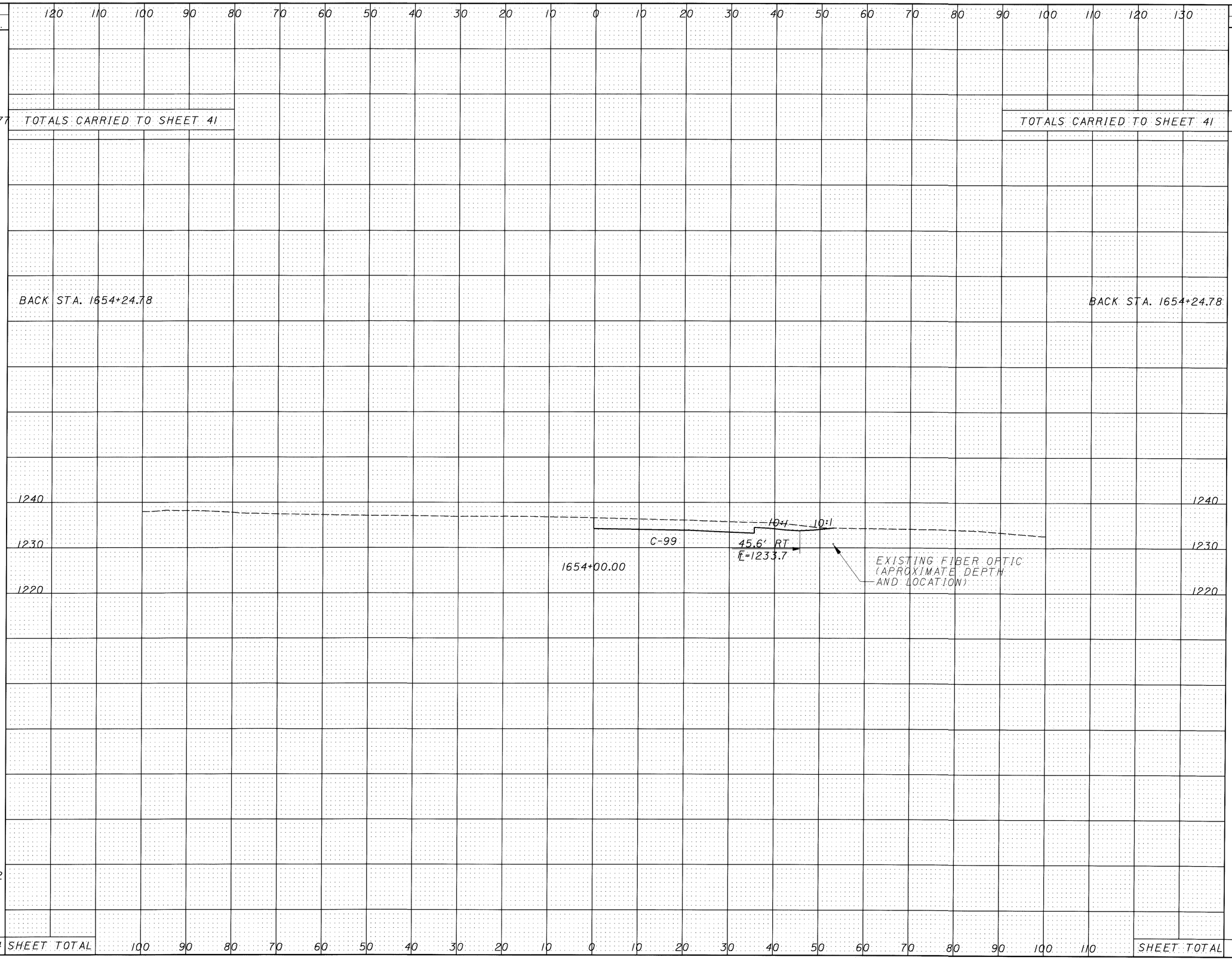
100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130

CROSS SECTIONS-CR 67 (SOUTH)
STA. 1653+00-1653+50

STA-173-1.85

SHT67SXS.PXS PID 22417

SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
	6377	TOTALS CARRIED TO SHEET 41			3790	216
37		BACK STA. 1654+24.78	99	0		
	102				91	0
37		1654+00.00 C-99 45.6' RT E=1233.7	99	0		
					406	0
	342					
	444	SHEET TOTAL			497	0

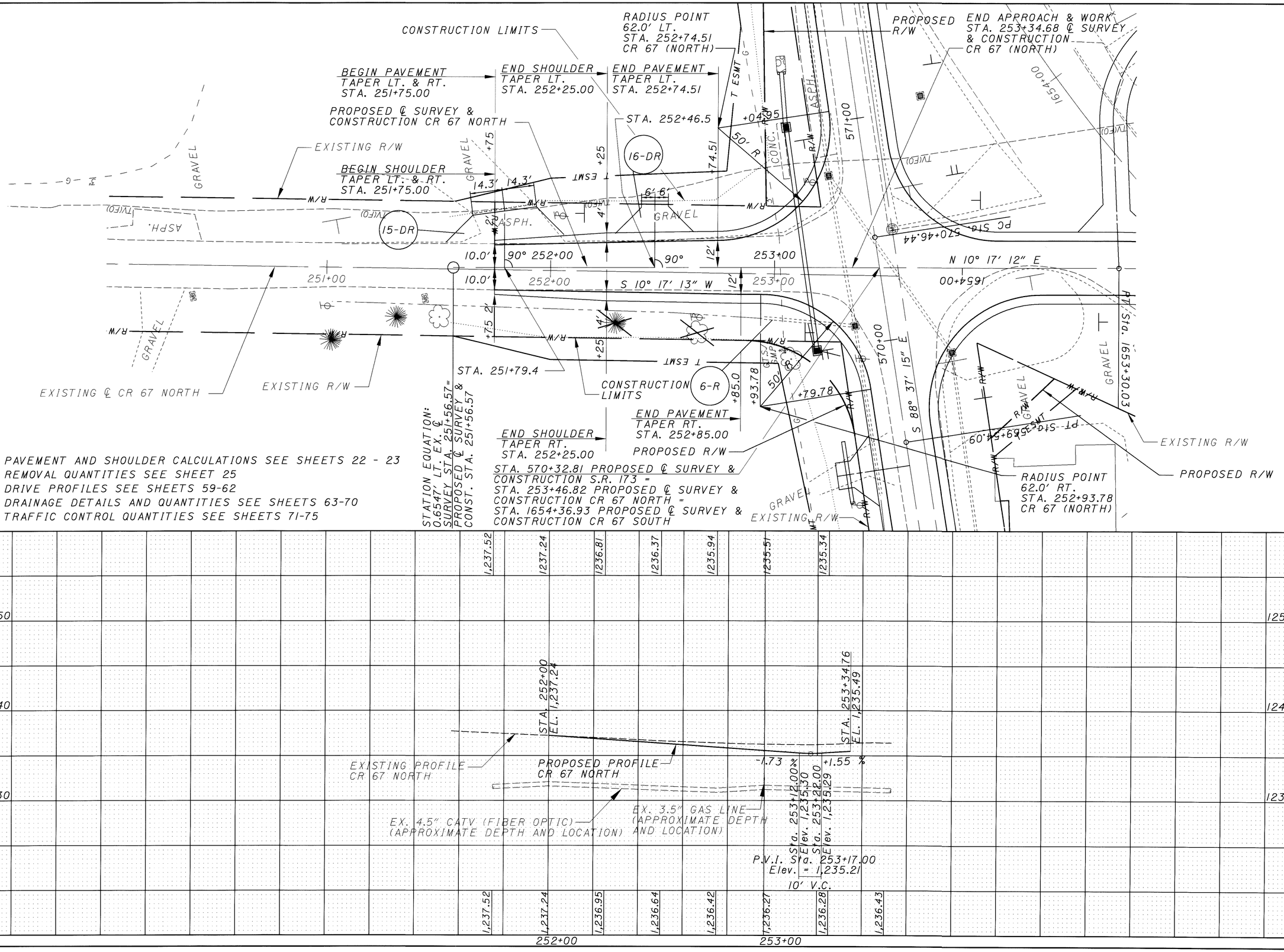


CALCULATED RJG
CHECKED CZ

CROSS SECTIONS-CR 67 (SOUTH)
STA. 1654+00

STA-173-1.85

SHT67SXS.PXS PID 22417



FOR PAVEMENT AND SHOULDER CALCULATIONS SEE SHEETS 22 - 23
FOR REMOVAL QUANTITIES SEE SHEET 25
FOR DRIVE PROFILES SEE SHEETS 59-62
FOR DRAINAGE DETAILS AND QUANTITIES SEE SHEETS 63-70
FOR TRAFFIC CONTROL QUANTITIES SEE SHEETS 71-75

CALCULATED RJG
CHECKED CZ

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE CR 67 (NORTH)
STA. 251+56.57 TO STA. 253+46.82

STA-173-1.85

54
85

CR67NNEWI.PPP 9 JAN 03

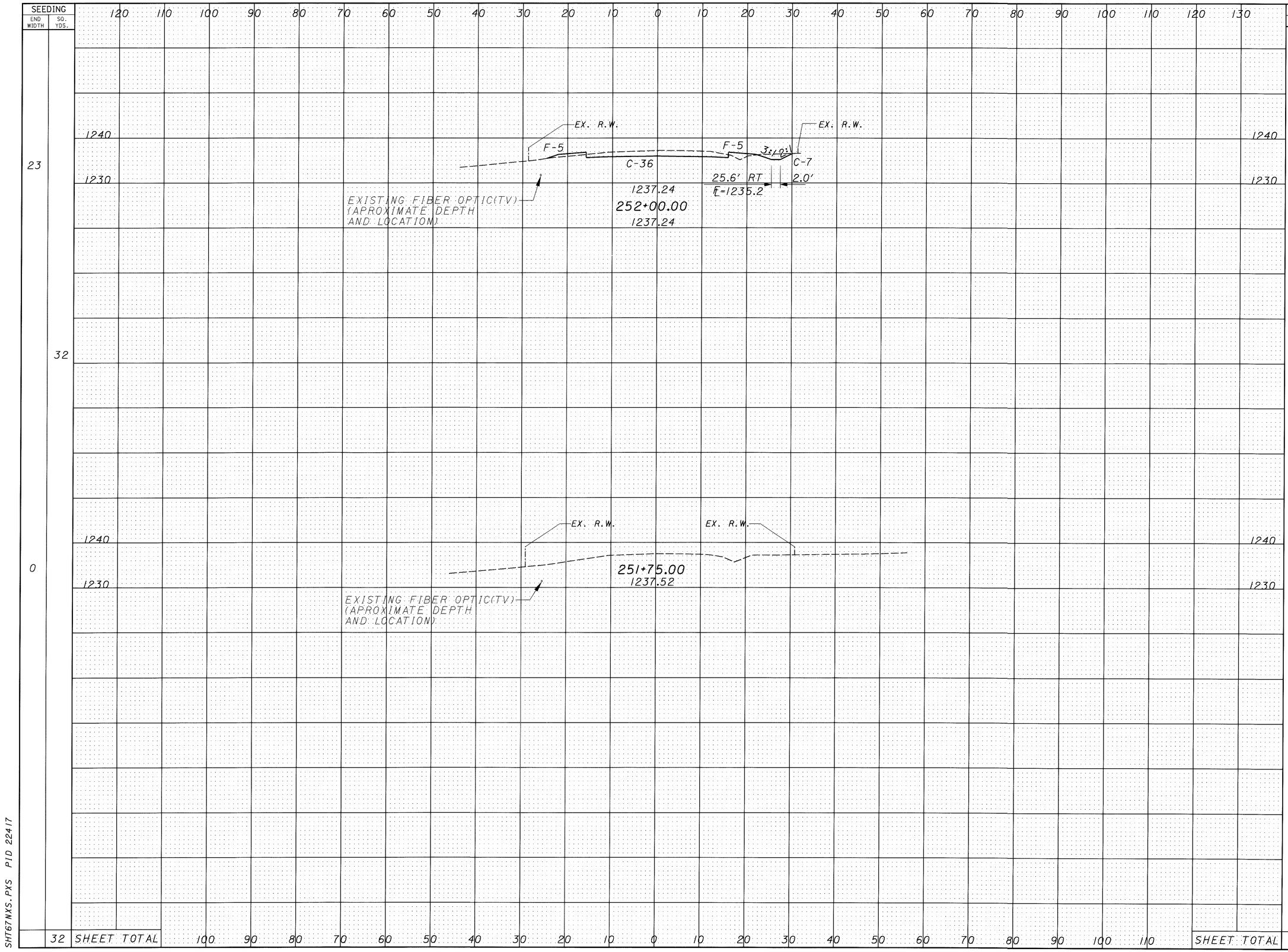
SEEDING	
END WIDTH	SQ. YDS.
23	
	32
0	
32	SHEET TOTAL

END AREA	
CUT	FILL
43	10
0	0
SHEET TOTAL	

VOLUME	
CUT	FILL
20	5
20	5

CALCULATED RJG
CHECKED CZ

CROSS SECTIONS-CR 67 (NORTH)
STA. 251+75-252+00



STA-173-1.85

SHT67NXS.PXS PID 22417

CROSS SECTIONS-CR 67 (NORTH)
STA. 252+50-253+00

CALCULATED RJG | CHECKED CZ

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
	650			376	23
54	209	100	1	129	1
54		100	1		
	143			78	2
49		68	3		
	113			57	3
32		56	3		
	153			92	12
	618			356	18

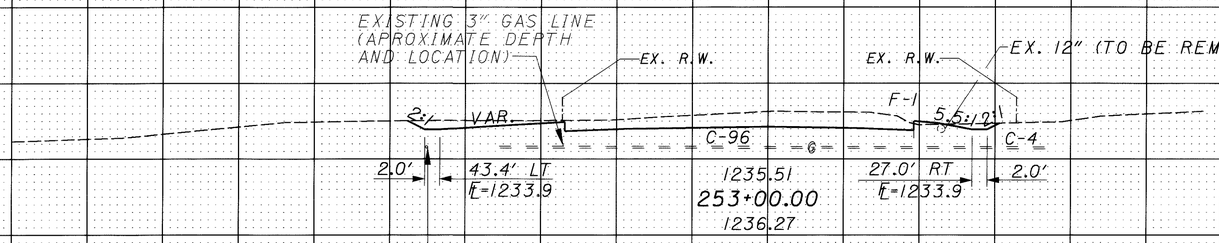
120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130

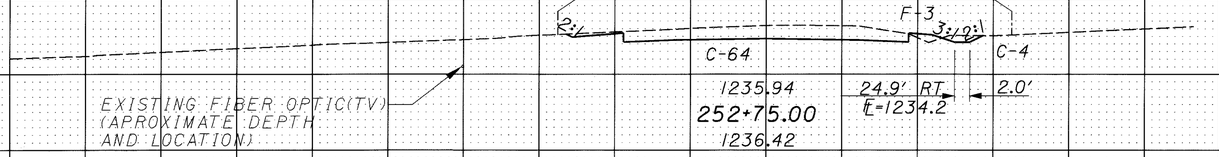
TOTALS CARRIED TO SHEET 41

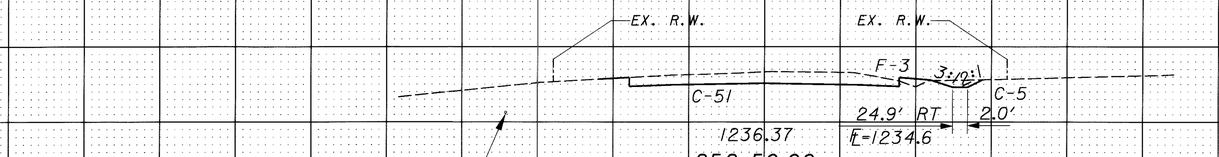
TOTALS CARRIED TO SHEET 41

STA. 253+34.76 BACK

STA. 253+34.76 BACK







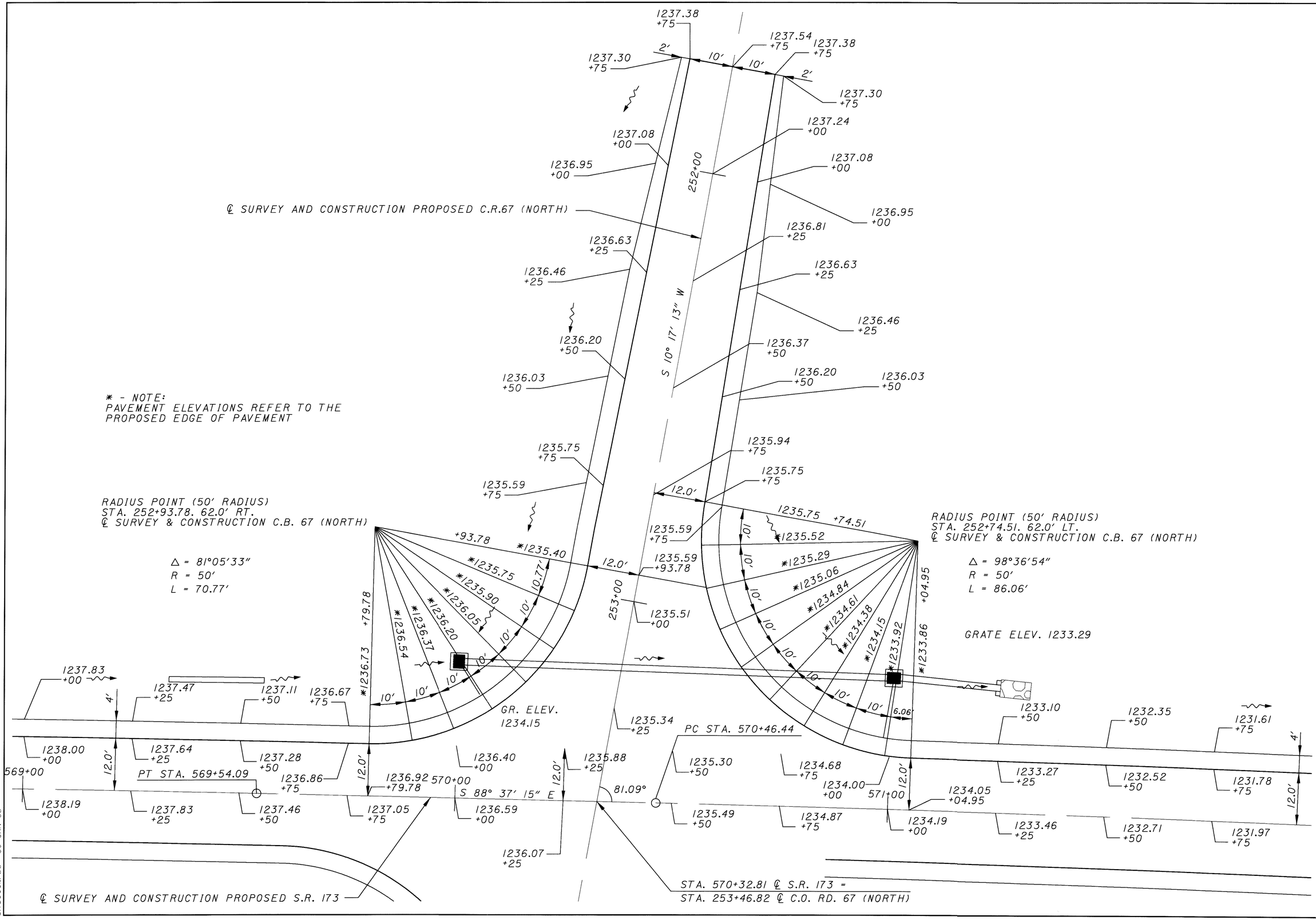
SHEET TOTAL

SHEET TOTAL

STA-173-1.85

56/85

SHT67NXS.PXS PID 22417



* - NOTE:
PAVEMENT ELEVATIONS REFER TO THE PROPOSED EDGE OF PAVEMENT

HORIZONTAL SCALE IN FEET
0

CALCULATED RJG
CHECKED CZ

INTERSECTION DETAIL SHEET SR 173 AND CR 67 (NORTH)

STA-173-1.85

57
85

SI73000I.PDS 30 JAN 03

℄ SURVEY & CONSTRUCTION CR 67 (NORTH)

253+00

STA. 570+32.81 ℄ S.R. 173 =
STA. 1654+36.93 ℄ C.O. RD. 67 (SOUTH)

GR. ELEV. 1234.15

GR. ELEV. 1233.29

℄ SURVEY AND CONSTRUCTION
PROPOSED S.R. 173

PC STA. 570+46.44

81.09°

S 87° 00′ 25″ E

N 10° 17′ 12″ E

569+00 1238.19
1238.00 +00
1237.64 +25
1237.46 +50
1237.28 +50
1237.83 +25
PT STA. 569+54.09
1237.83 +00
1237.47 +25
1237.11 +50

570+00 1236.59 +00
1237.05 +75
1236.86 +75
1236.40 +00
1236.07 +25
1235.88 +25

571+00
1235.49 +50
1234.87 +75
1234.68 +75
1234.19 +00
1235.30 +50
1235.28
1234.91
1235.41 1654+00
1235.22 1654+00
1235.22 1654+00
1233.46 +25
1233.27 +25
1234.00 +00
1233.75 +00
1233.10 +00
1232.71 +50
1232.52 +50
1232.35 +50
1231.97 +75
1231.78 +75
1231.61 +75

12.0′
4′
10′
8.97′

*1236.73
*1236.49
*1236.06
*1235.67
*1235.42
*1235.13
*1234.97
*1234.88
*1234.85
+54.09
+64.45
6.31′

*1234.33
*1234.62
*1234.87
*1235.05
*1235.15
*1235.18
*1235.15
*1235.04
*1235.04
+86.06
+83.82

1234.98 +75
1234.88 +50
1235.24 +50
1235.03 +50
1235.05 +50
1235.24 +50
1235.02 +75
1235.17 +75
1234.81 +75

GR. ELEV. 1235.86

GR. ELEV. 1233.46

△ = 98°54′27″
R = 50′
L = 86.31′

RADIUS POINT (50′ RADIUS)
STA. 569+60.34, 62.0′ RT.
℄ SURVEY & CONSTRUCTION SR 173

△ = 81°17′26″
R = 50′
L = 70.94′

RADIUS POINT (50′ RADIUS)
STA. 570+86.06, 62.0′ RT.
℄ SURVEY & CONSTRUCTION SR 173

* - NOTE:
PAVEMENT ELEVATIONS REFER TO THE
PROPOSED EDGE OF PAVEMENT

℄ SURVEY & CONSTRUCTION CR 67 (SOUTH)

HORIZONTAL SCALE IN FEET
0

CALCULATED RJG
CHECKED CZ

INTERSECTION DETAIL SHEET
SR 173 AND CR 67 (SOUTH)

STA-173-1.85

58
85

SIT30002.PDS 30 JAN 03

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
45					11
40					15
60					18
52					20
197	SHEET TOTAL				64

CALCULATED RJG
CHECKED CZ

70 60 50 40 30 20 10 0

1,250
1,245
1,240

END DRIVE
EL. 1242.33, 37.2' LT.
BEGIN DRIVE
EL. 1241.32, 16.0' LT.
+3.88%
+4.76%
PROPOSED 12"

4-DR

℄ DRIVE LT.
STA. 567+36.0
1,243.66
1239.37
+22.3
30'-12" CONDUIT,
TYPE D @ 0.73%
1239.15
+50.3
567+00
567+50

1,245
1,240
1,235
1,230

1,250
1,245
1,240

END DRIVE
EL. 1246.27, 38.5' LT.
BEGIN DRIVE
EL. 1245.01, 16.0' LT.
+2.0%
+5.60%
PROPOSED 12"

3-DR

℄ DRIVE LT.
STA. 566+02.5
1243.20
+89.6
566+00
27'-12" CONDUIT,
TYPE D @ 1.00%
1242.93
+17.0

1,255
1,250
1,245
1,240

1,250
1,245
1,240

END DRIVE
EL. 1246.57, 37.0' LT.
BEGIN DRIVE
EL. 1246.32, 16.0' LT.
+1.25%
+1.19
PROPOSED 12"

2-DR

℄ DRIVE LT.
STA. 565+52.1
1244.09
+33.9
565+50
36'-12" CONDUIT,
TYPE D @ 0.75%
1243.73
+70.0

1,255
1,250
1,245
1,240

1,250
1,245
1,240

END DRIVE
EL. 1248.68, 36.6' LT.
BEGIN DRIVE
EL. 1248.03, 15.6' LT.
+1.50
+3.10
PROPOSED 12"

1-DR

℄ DRIVE LT.
STA. 564+68.1
1245.70
+52.5
564+50
34'-12" CONDUIT,
TYPE D @ 0.91%
1245.39
+85.6
565+00

1,255
1,250
1,245
1,240
1,235
1,230

1,247.61

70 60 50 40 30 20 10 0

SHEET TOTAL

DRIVE CROSS SECTIONS AND PROFILES SR 173

STA-173-1.85

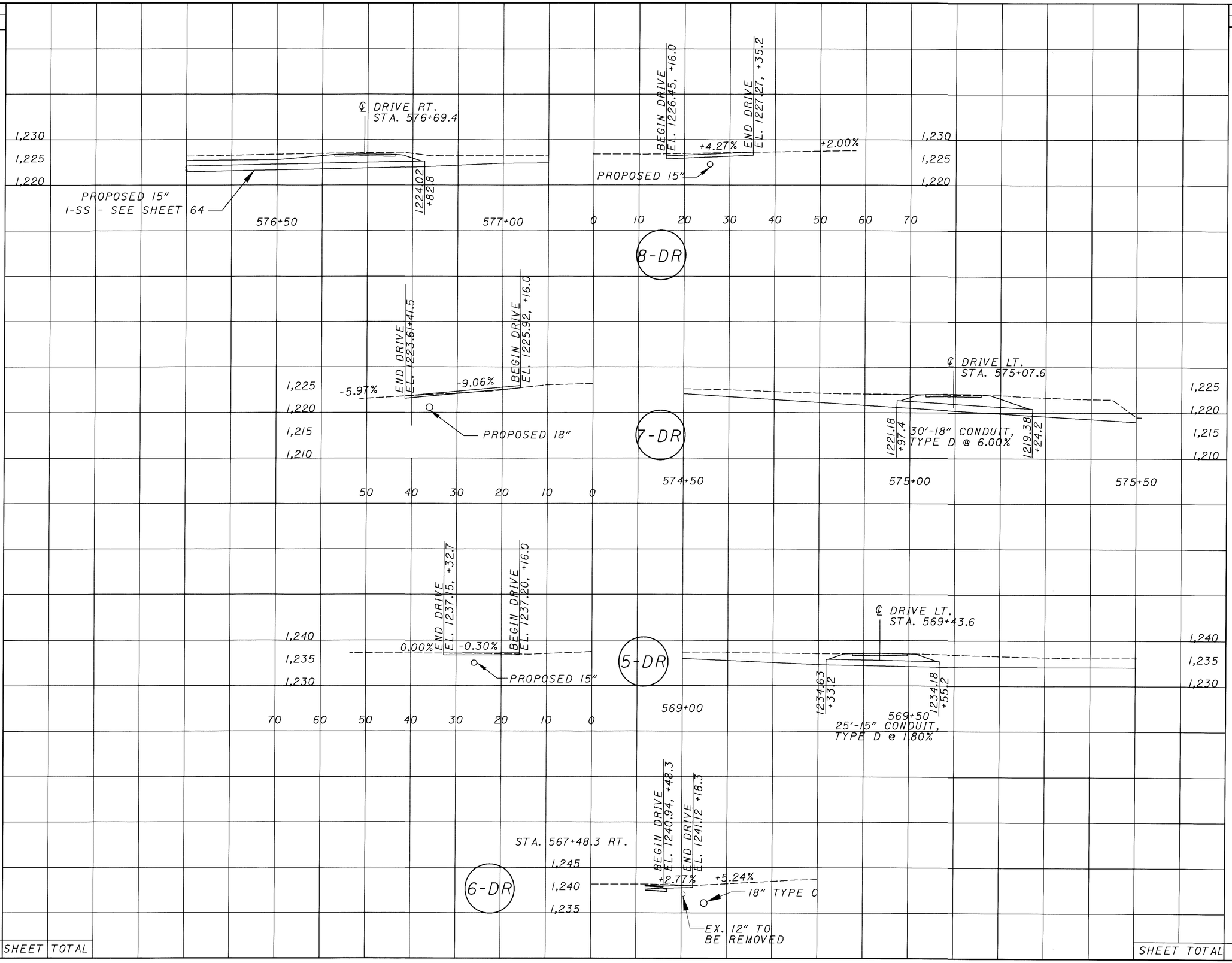
59/85

DRIVEXS.PXS 9 OCT 02

SEEDING	
END WIDTH	SQ. YDS.
	45
	45
	33
	26
	149

END AREA		VOLUME	
CUT	FILL	CUT	FILL
			13
			44
			9
			10
			76

CALCULATED RJG
CHECKED CZ



DRIVE CROSS SECTIONS AND PROFILES SR 173

STA-173-1.85

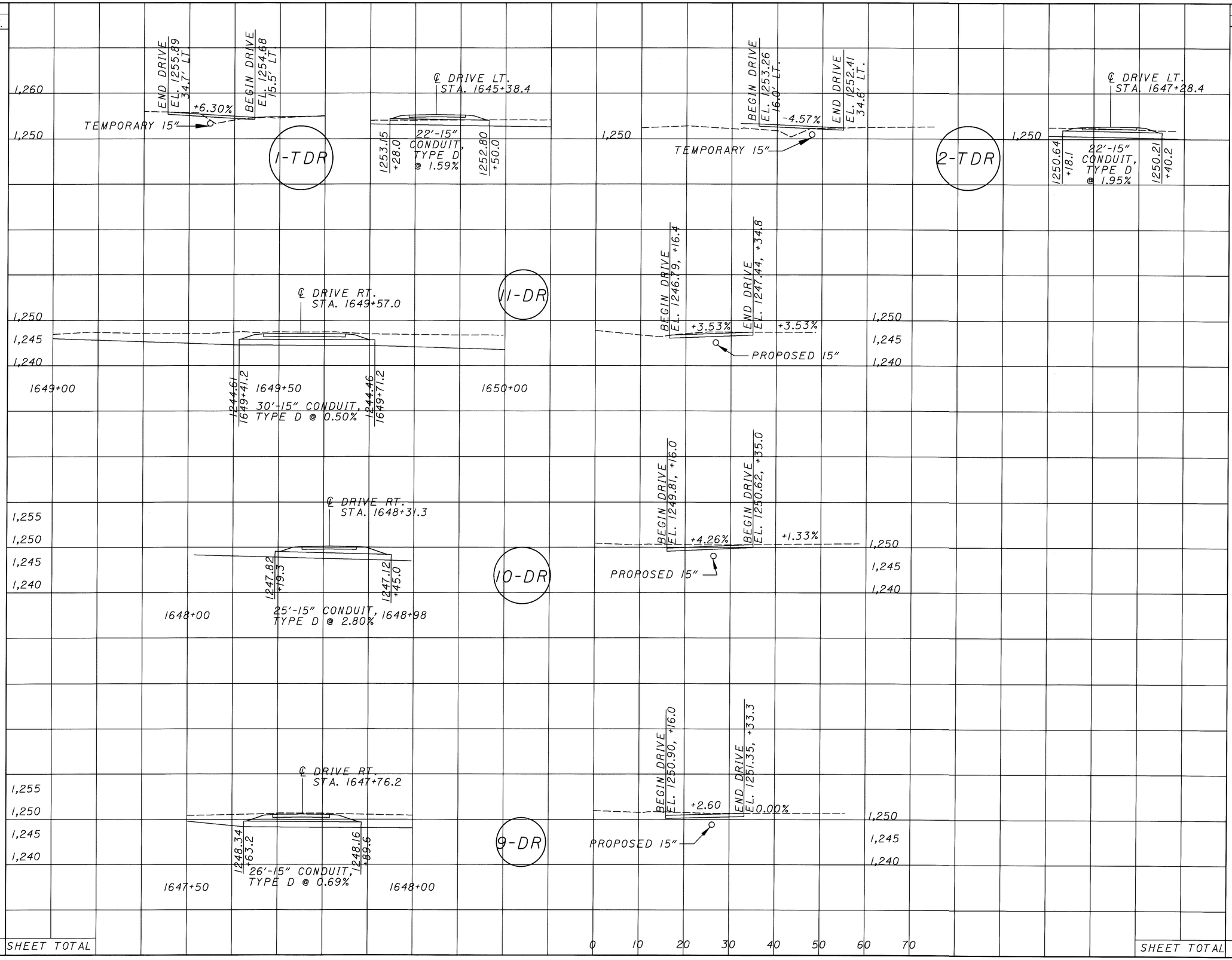
SHEET TOTAL

DRIVEXS.PXS 9 OCTP 02

SEEDING	
END WIDTH	SQ. YDS.
	44
	37
	34
	115

END AREA		VOLUME	
CUT	FILL	CUT	FILL
			12
			13
			11
			36

CALCULATED RJG
CHECKED CZ



SECTIONS AND PROFILES CR 67 (SOUTH)

DRIVE SECTIONS

STA-173-1.85

DRIVEXS.PXS 9 OCT 02

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
	-856 DEDUCTIONS FOR DRIVES CARRIED TO SHEET 41				-289 DEDUCTIONS FOR DRIVES CARRIED TO SHEET 41
	152				23
	92				31
	87				28
	64				31
	395 SHEET TOTAL				113 SHEET TOTAL

CALCULATED RJG
CHECKED CZ

DRIVE SECTIONS AND PROFILES CR 67 (SOUTH)

STA-173-1.85

62
85

℄ DRIVE RT.
STA. 1653+30.0

CB-5, 28.5' RT.
STA. 1653+50, CR 67 (SOUTH)
℄ EL. GRATE 1233.40
℄ EL. 4" (SW) 1232.23
℄ EL. 24" (W) 1230.10
℄ EL. 27" (E) 1229.85

14-DR

BEGIN DRIVE
EL. 1235.54, 0+17.1

-4.47%

PROPOSED 15"

+6.35%

END DRIVE
EL. 1234.03, 1+18.3

+15.9%

1232.74
0+79.7

1232.55
0+90.5

1232.95
1+01.3

℄ DRIVE
STA. 1651+41.93

80.0' RT.
STA. 1652+21.2
EL. 1229.77

27'-15" CONDUIT,
TYPE D @ 1.00%

14-DR

100.2' RT.
STA. 1653+36.2
EL. 1229.50

1229.07
0+76.0

END DR.
EL. 1240.86
+53.5

+8.40%

PROPOSED 18"

BEGIN DR.
EL. 1237.71
+16.0

17-DR

℄ DRIVE LT.
STA. 1652+39.0

1236.22
+22.8

32'-18" CONDUIT,
TYPE D @ 3.56%

1235.08
+58.8

END DR.
EL. 1242.39
+50.0

1.00%

+5.41%

PROPOSED 18"

BEGIN DR.
EL. 1240.55
+16.0

13-DR

℄ DRIVE LT.
STA. 1651+55.94

1238.11
+38.8

35-18" CONDUIT,
TYPE D @ 1.29%

1237.66
+73.8

℄ DRIVE RT.
STA. 1651+41.9

1239.28
0+38.2

29'-15" CONDUIT,
TYPE D @ 2.86%

1238.45
0+67.2

12-DR

BEGIN DRIVE
EL. 1241.01
16' RT., STA.1654+47.

1243.85
41' RT.
STA. 1651+55.1

END DRIVE
EL. 1245.62
50.8' RT.
STA. 1651+58.2

+17.03%

+2.16%

+19.05%

PROPOSED 15"

P.V.I. STA. 0+29.58
ELEV. = 1240.79
K = 1.553
26.23' V.C.

DRIVEXS.PXS 9 OCT 02

FOR STORM SEWER QUANTITIES SEE SHEET 69
FOR EROSION PROTECTION QUANTITIES SEE SHEET 69
FOR UNDERDRAIN QUANTITIES SEE SHEET 69.
FOR CULVERT DETAILS AND QUANTITIES SEE SHEETS 67 & 70
FOR ADDITIONAL DRAINAGE DETAILS SEE CROSS SECTIONS

UNDERDRAIN OUTLETS

STA. 570+05.0, SR 173	STA. 570+98.6, SR 173
24.0' LT., 4" x 4" TEE	16.9' LT., 4" x 4" TEE
℄ EL. 1233.59	℄ EL. 1231.14
8.9' TYPE F	13.5' TYPE F
OUTLET INTO C.B.	OUTLET INTO C.B.

UNDERDRAIN OUTLETS

STA. 567+11.6, SR 173	STA. 1653+40.4, CR 67	STA. 1653+59.6 CR 67,	STA. 1653+38 CR 67,
16.4' RT., 4" X 45° WYE	16.4' LT., 45° BEND	16.4' LT., 45° BEND	16.4' RT., 45° BEND
℄ EL. 1239.21	℄ EL. 1232.37	℄ EL. 1232.13	℄ EL. 1232.72
11.8' TYPE F	13.6' TYPE F	13.6' TYPE F	17.0' TYPE F
OUTLET INTO C.B.	OUTLET INTO C.B.	OUTLET INTO C.B.	OUTLET 28.5' RT.
			℄ EL. 1232.55
			PRECAST REINFORCED
			CONCRTET OUTLET

CONSTRUCTION LIMITS
EXISTING R/W
℄ SURVEY & CONSTRUCTION SR 173
STATION EQUATION:
0.9640' RT. EX. ℄
SURVEY STA. 559+78.95=
PROPOSED ℄ SURVEY &
CONST. STA. 559+78.95
S 88° 45' 06" E
S 88° 06' 28" E
S 88° 30' 52" E
2-EP, 2-UD, 1-DP, 3-EP, 2-DP, 4-EP, 3-DP, 5-EP, 4-DP, 6-EP, 2-UD, 5-DP, 1-UD, 1-EP, 8-EP, 9-EP, 10-EP, 1-UD, 4-UD, 11-EP, 3-UD, 12-EP, 8-UD, 7-UD
+80, +52.5, +85.5, +33.9, +69.9, +89.7, +16.7, +22.3, +50.3, +33.2, +55.2, +93.6, +48.3, +51.6, +18.3, +61.6, +57, +32
CB 2-2B
FRAME GARAGE
171'-15" CONDUIT, TYPE C
230'-18" CONDUIT, TYPE C
72'-21" CONDUIT, TYPE C
54'-12" CONDUIT, TYPE C
100'-18" CONDUIT, TYPE B
25'-18" CONDUIT, TYPE C
CB-5
2-SS, 1-SS
EX. CB (TO REMAIN IN SERVICE)
PLANTER
+TEL
*** ITEM 836 TURF REINFORCEING MAT, TYPE I
STA. 572+00 - STA. 573+00
STATION EQUATION:
0.6547' LT. EX. ℄
SURVEY STA. 251+56.57=
PROPOSED ℄ SURVEY &
CONST. STA. 251+56.57
℄ SURVEY & CONSTRUCTION CR 67 NORTH
PROPOSED R/W
RCP TYPE C W/FILTER
7' X 4' X 1.5' ÷ 27 = 1.6 CU.YDS.
S 10° 17' 13" W
N 10° 17' 12" E
MATCHLINE 572+50.00 S.R. 173
PROPOSED R/W
ROCK CHANNEL PROTECTION
TYPE C W/ FILTER
8' X 5' X 1.5' ÷ 27 = 2.2 CU. YDS.
℄ SURVEY & CONSTRUCTION CR 67 SOUTH

BEGIN PROJECT STA. 569+00.00
℄ SURVEY & CONST. S. R. 173
END PROJECT STA. 571+75.00
℄ SURVEY & CONST. S. R. 173

CB 2-2B
24.8' RT., STA. 567+20
GRATE EL. 1240.79
℄ EL. 4" (W) 1239.09
℄ EL. 15" (W) 1237.39
℄ EL. 18" 1237.14

CB-5,
31.5' LT., STA. 570+00
GRATE EL. 1234.15
℄ EL. 4" (S) 1233.50
℄ EL. 18" (E) 1231.18

CB 2-2B
24.1' RT., STA. 565+50
GRATE EL. 1245.64
℄ EL. 15" (E) 1241.88

CB 2-2B
25.2' RT., STA. 569+50
GRATE EL. 1235.86
℄ EL. 18" (W) 1231.62
℄ EL. 21" (E) 1231.36

CB-5
30.3' LT., STA. 571+00
GRATE EL. 1233.29
℄ EL. 4" (S) 1231.01
℄ EL. 18" (W & E) 1230.31

EX. 3.5" GAS LINE (APPROXIMATE DEPTH AND LOCATION)
EX. ELECTRIC LINE (APPROXIMATE DEPTH AND LOCATION)
171'-15" CONDUIT, TYPE C @ 2.64%
230'-18" CONDUIT, TYPE C @ 2.40%
72'-21" CONDUIT, TYPE C @ 0.51%
25'-18" CONDUIT, TYPE C @ 1.48%
100'-18" CONDUIT, TYPE B @ 0.87%
-1.44 %, -2.88 %, 2.45 %
1231.97
OUTLET 18"
℄ EL. 1229.94
28.8' LT
R.C.P. TYPE C W/FILTER
HW-2.1 OR 2.2

1280, 1270, 1260, 1250, 1240, 1230, 1220
253.00, 252.24, 251.62, 251.20, 250.85, 250.40, 249.73, 248.75, 247.78, 246.80, 245.52, 244.01, 242.57, 241.34, 240.24, 239.25, 238.19, 237.46, 236.59, 235.49, 234.19, 232.71, 231.38, 229.84
238.39, 237.60, 236.87, 236.10, 234.44, 232.80, 231.38, 229.84
560+00, 561+00, 562+00, 563+00, 564+00, 565+00, 566+00, 567+00, 568+00, 569+00, 570+00, 571+00, 572+00

HORIZONTAL SCALE IN FEET
0, 50, 100
CALCULATED RJG
CHECKED CZ

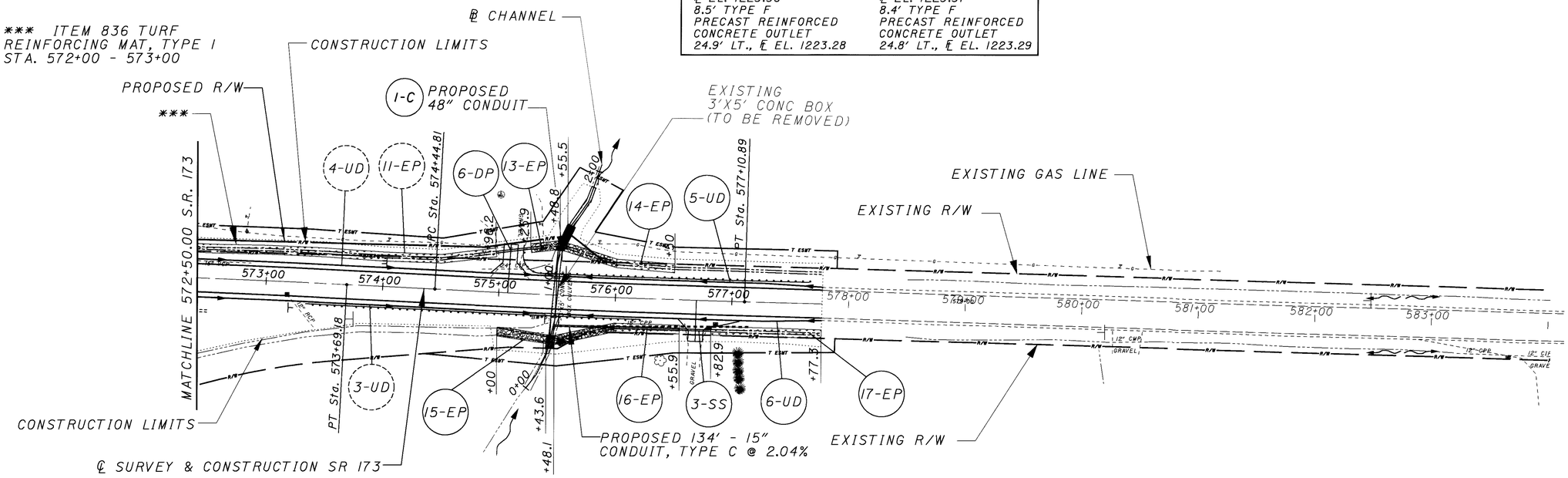
DRAINAGE DETAILS S.R. 173
STA. 559+78.95 TO STA. 572+50.00

STA-173-1.85

63
85

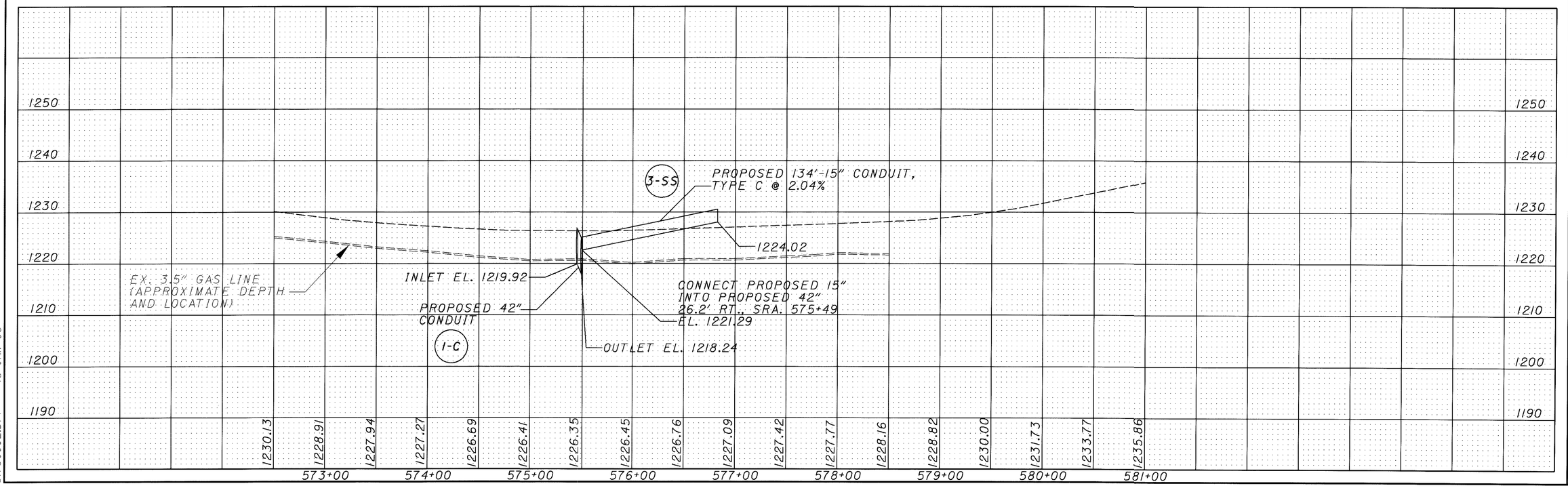
S173000I.DPP 15 JAN 03

UNDERDRAIN OUTLETS	
STA. 575+45, SR 173	STA. 575+57, SR 173
16.4' LT., 90° BEND	16.4' LT., 90° BEND
℄ EL. 1223.36	℄ EL. 1223.37
8.5' TYPE F	8.4' TYPE F
PRECAST REINFORCED	PRECAST REINFORCED
CONCRETE OUTLET	CONCRETE OUTLET
24.9' LT., ℄ EL. 1223.28	24.8' LT., ℄ EL. 1223.29



UNDERDRAIN OUTLETS	
STA. 575+40, SR 173	STA. 575+52, SR 173
16.4' RT., 90° BEND	16.4' RT., 90° BEND
℄ EL. 1223.54	℄ EL. 1223.64
8.3' TYPE F	8.8' TYPE F
PRECAST REINFORCED	PRECAST REINFORCED
CONCRETE OUTLET	CONCRETE OUTLET
24.7' RT., ℄ EL. 1223.44	25.2' RT. ℄ EL. 1222.76

FOR STORM SEWER QUANTITIES SEE SHEET 69
FOR EROSION PROTECTION QUANTITIES SEE SHEET 69
FOR UNDERDRAIN QUANTITIES SEE SHEET 69.
FOR CULVERT DETAILS AND QUANTITIES SEE SHEETS 67 & 70
FOR ADDITIONAL DRAINAGE DETAILS SEE CROSS SECTIONS



SI730002.DPP 15 JAN 03

HORIZONTAL SCALE IN FEET
0 50 100
CALCULATED RJG
CHECKED CZ

DRAINAGE DETAILS S.R. 173 STA. 572+50.00 TO STA. 581+00.00

STA-173-1.85

STATION EQUATION:
4104' LT., STATION 1643+95.42
EQUALS
EXISTING ℄ SURVEY CO. RD. 67 -
STA. 1643+95.42 PROPOSED
℄ SURVEY, AND CONSTRUCTION
CO. RD. 67

℄ SURVEY & CONSTRUCTION CR 67 SOUTH

EXISTING R/W

CONSTRUCTION LIMITS

8-UD, 18-EP, 7-UD, 19-EP, 8-DP, 9-DP, 20-EP, 21-EP, 10-DP, 22-EP, 11-DP, 7-UD, 23-EP

54'-12" CONDUIT, TYPE C
55'-24" CONDUIT, TYPE B
45'-30" CONDUIT, TYPE C

EXISTING R/W

CONSTRUCTION LIMITS

8-UD, 2-SS, 12-DP, 14-DP, 24-EP, 25-EP, CB-5, 2-SS, 12-EP, 13-DP, 3-UD

PROPOSED R/W

℄ SURVEY & CONSTRUCTION SR 173

STATION EQUATION:
6554.7' LT. EX. ℄ SURVEY &
PROPOSED ℄ SURVEY &
CONST. ST. A. 251+56.57
EQUALS
EX. ℄ SURVEY & CONST. ST. A. 251+56.57

EXISTING R/W

℄ SURVEY & CONSTRUCTION CR 67 NORTH

CONSTRUCTION LIMITS

STA. 570+31.85 PROPOSED ℄ SURVEY & CONSTRUCTION S. R. 173 =
STA. 253+52.96 PROPOSED ℄ SURVEY & CONSTRUCTION CO. RD. 67 NORTH =
STA. 1654+30.79 PROPOSED ℄ SURVEY & CONSTRUCTION CO. RD. 67 SOUTH

PROPOSED R/W

CONSTRUCTION LIMITS

℄ SURVEY & CONSTRUCTION SR 173

EXISTING R/W

FOR STORM SEWER QUANTITIES SEE SHEET 69
FOR EROSION PROTECTION QUANTITIES SEE SHEET 69
FOR UNDERDRAIN QUANTITIES SEE SHEET 69.
FOR CULVERT DETAILS AND QUANTITIES SEE SHEETS 67 & 70
FOR ADDITIONAL DRAINAGE DETAILS SEE CROSS SECTIONS

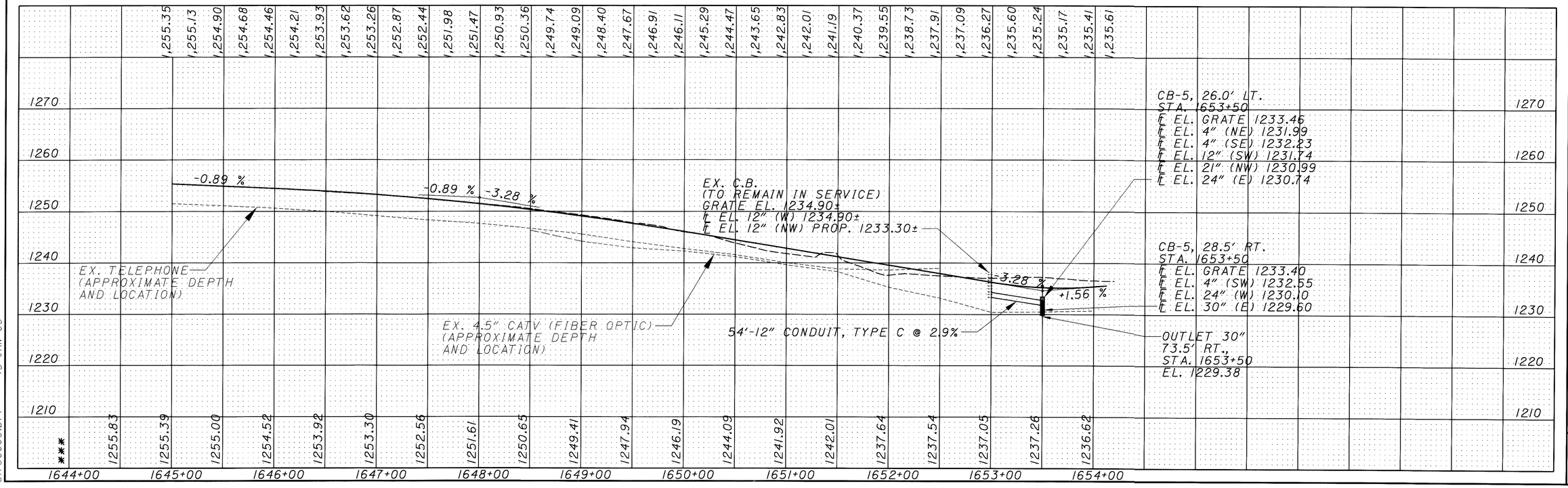
*** - ITEM 836 TURF
REINFORCING MAT, TYPE I
STA. 1652+50 - STA. 1653+00 RT.

HORIZONTAL SCALE IN FEET
0 50 100

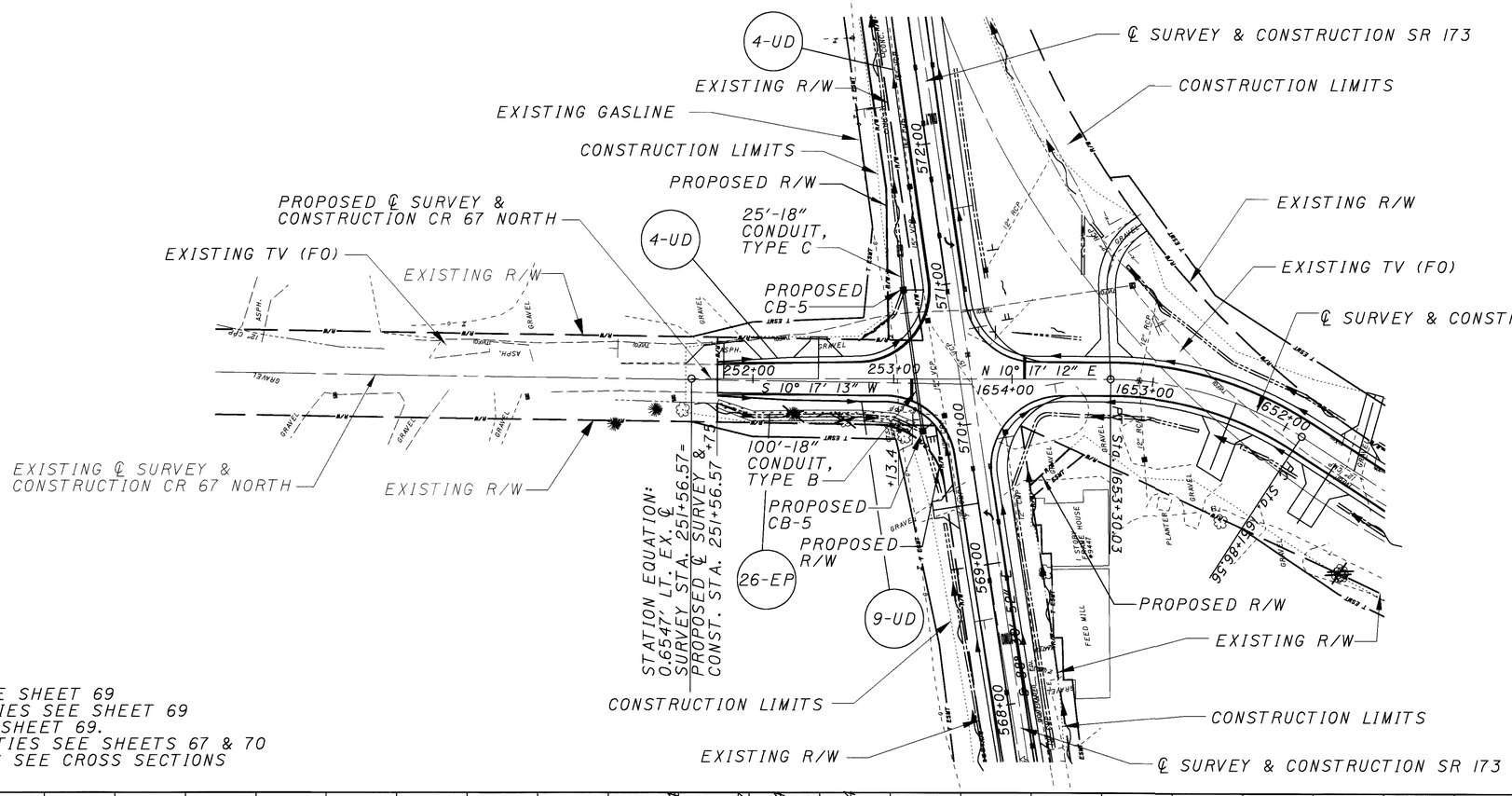
CALCULATED RJG
CHECKED CZ

DRAINAGE DETAILS CO. RD. 67 SOUTH STA. 1645+00.00 TO STA. 1654+30.79

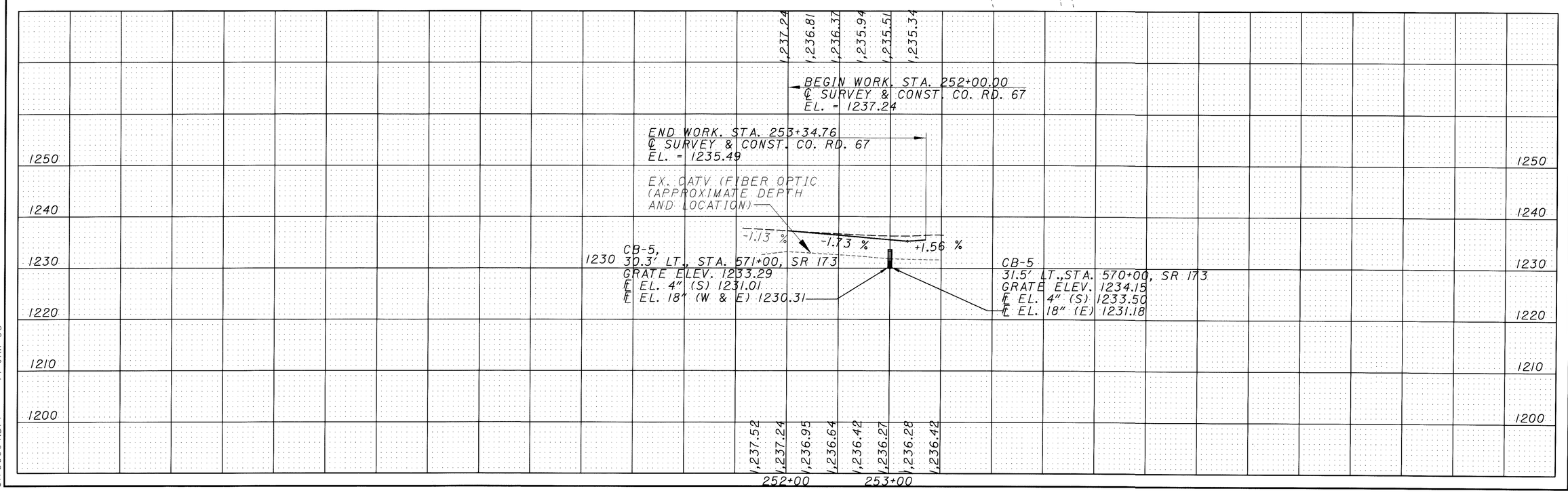
STA-173-1.85



S173003.DPP 15 JAN 03



FOR STORM SEWER QUANTITIES SEE SHEET 69
FOR EROSION PROTECTION QUANTITIES SEE SHEET 69
FOR UNDERDRAIN QUANTITIES SEE SHEET 69.
FOR CULVERT DETAILS AND QUANTITIES SEE SHEETS 67 & 70
FOR ADDITIONAL DRAINAGE DETAILS SEE CROSS SECTIONS



HORIZONTAL SCALE IN FEET
0 50 100

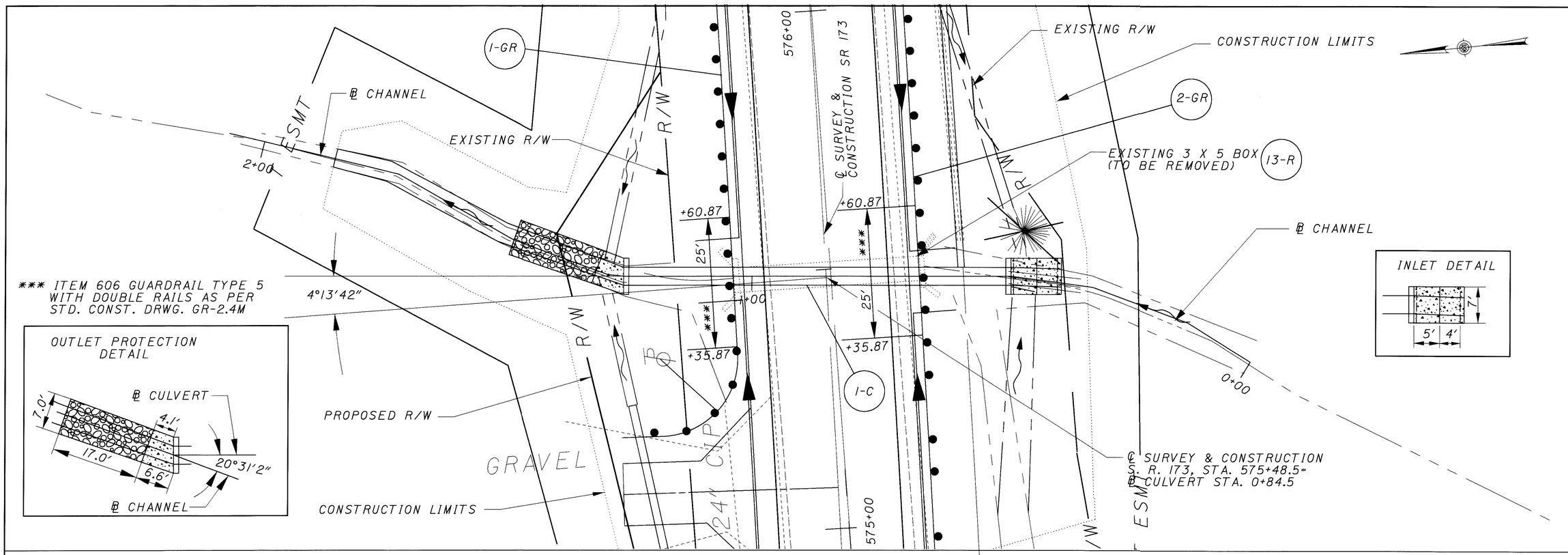
CALCULATED RJG
CHECKED CZ

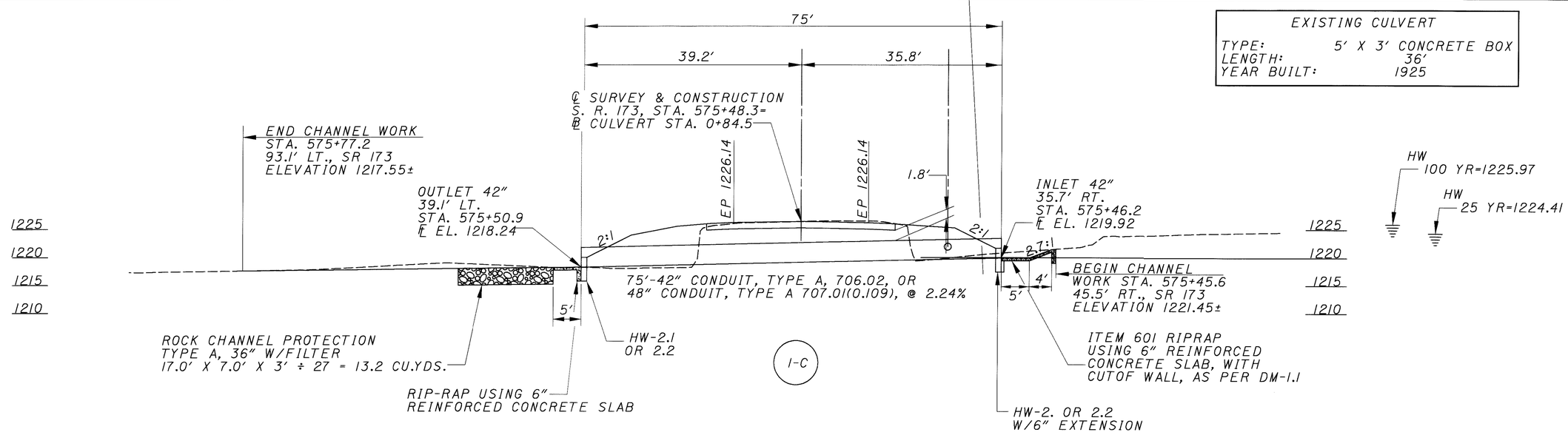
DRAINAGE DETAILS CO. RD. 67 NORTH
STA. 251+56.57 TO STA. 253+52.96

STA-173-1.85

66
85

SI730004.DPP 14 JAN 03





EXISTING CULVERT

TYPE:	5' X 3' CONCRETE BOX
LENGTH:	36'
YEAR BUILT:	1925

S.R. 173
DRAINAGE AREA = 126 ACRES

Q_{25} = 78 CFS V_{25} = 17.57 FPS

Q_{100} = 104 CFS V_{100} = 18.78 FPS

ITEM 601 RIP-RAP USING 6" REINFORCED CONCRETE SLAB
9' X 7' ÷ 9 = 7.0 SQ. YDS.
40.1 SQ.FT.* ÷ 9 = 4.4 SQ. YDS.
TOTAL = 11.4 SQ. YDS.
* AREA BY COMPUTER

QUANTITIES TOTALS CARRIED TO SHEETS 69 & 70

ITEM 601 ROCK CHANNEL PROTECTION, TYPE A, 36" W/FILTER	13.2 CU. YDS.
ITEM 601 RIP-RAP USING 6" REINFORCED CONCRETE SLAB	11.4 SQ. YDS.
ITEM 602 CONCRETE MASONRY	1.68 CU. YDS.
ITEM 603 42" CONDUIT, TYPE A, 706.02 OR 48" CONDUIT, TYPE A 707.01(0.109)	75 LIN.FT.

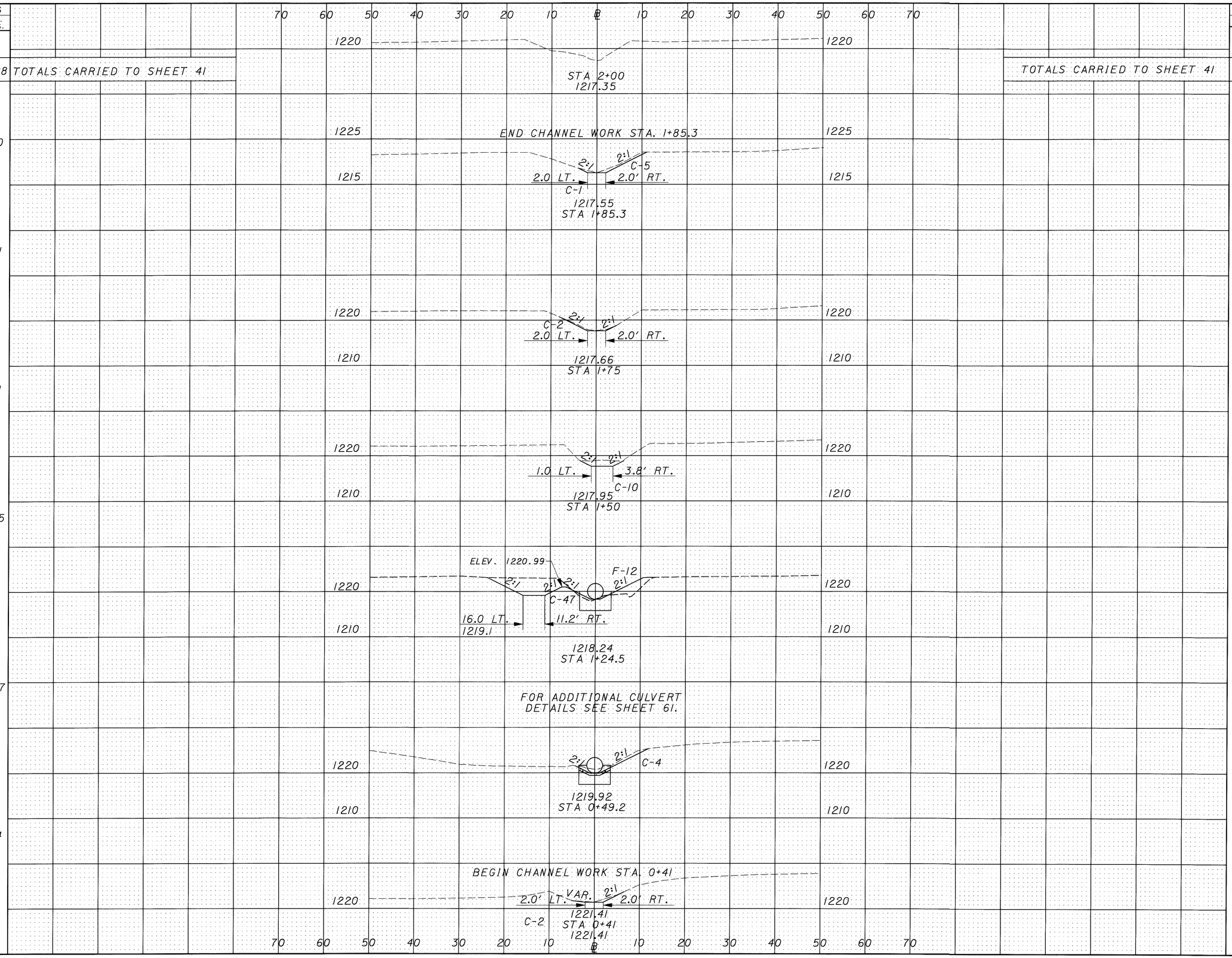
CALCULATED RJG
CHECKED CZ

CULVERT DETAIL STA. 575+48.5 SR 173

STA-173-1.85

SIT3CULL.DGD 21JAN 03 10 SCALE

SEEDING END WIDTH	SEEDING SQ. YDS.	
	628	TOTALS CARRIED TO SHEET 41
0		
	30	
37		
	41	
34		
	91	
31		
	105	
43		
	327	
36		
	34	
32		



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
	TOTALS CARRIED TO SHEET 41	108	23
0	0		
		2	0
6	0		
		2	0
2	0		
		6	0
10	0		
		27	6
47	12		
		70	17
4	0		
		1	0
2	0		

CALCULATED RJG
CHECKED CZ

CHANNEL CROSS SECTIONS CULVERT STA. 575+48.5

STA-173-1.85

CHANNEL.PXS 21JAN 03

DRAINAGE QUANTITIES

SHEET NO.	MARK	STATION FROM	STATION TO	SIDE	603 4" CONDUIT TYPE F LIN.FT.	604 PRECAST REINFORCED CONCRETE OUTLET EACH	605 4" SHALLOW PIPE UNDERDRAIN (18" DEEP) LIN.FT.	601 ROCK CHANNEL PROTECTION TYPE C WITH FILTER CU.YD.	601 ROCK CHANNEL PROTECTION TYPE D WITH FILTER CU.YD.	602 CONCRETE MASONRY CU.YD.	603 18" CONDUIT, TYPE B LIN.FT.	603 24" CONDUIT, TYPE B LIN.FT.	603 12" CONDUIT, TYPE C LIN.FT.	603 15" CONDUIT, TYPE C LIN.FT.	603 18" CONDUIT, TYPE C LIN.FT.	603 21" CONDUIT, TYPE C LIN.FT.	603 30" CONDUIT, TYPE C LIN.FT.	604 CATCH BASIN NO. 5 EACH	604 CATCH BASIN NO. 2-2B EACH	670 WIDTH	670 DITCH EROSION PRTECTION (* AREA BY COMPUTER) SQ. YD.	836 SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE I SQ. YD.	BENDS (FOR INFO. ONLY) 4" X 90° BEND EACH	4" X 45° BEND EACH		4" X 4" TEE EACH
		UNDERDRAINS S.R. 173																								
63	1-UD	563+80	1653+59.6	RT/LT	25.4		665																	2		
63	2-UD	563+80	570+05	LT	8.9		627																			1
63-64	3-UD	1653+53	575+40	RT	8.3	1	553																	1		
63-64	4-UD	251+75	575+45	LT	22	1	622																	1		1
64	5-UD	575+57	577+77.38	LT	8.4	1	222																	1		
64	6-UD	575+52	577+77.38	RT	8.8	1	229																	1		
		CR 67 (SOUTH)																								
65	7-UD	1645+00	1653+38	RT	17		848																		1	
65	8-UD	1645+00	1653+40.4	LT	13.6		837																		1	
		CR 67 (NORTH)																								
66	9-UD	251+75	575+05	RT			158																			
		STORM SEWERS																								
63	1-SS	570+00	571+25	LT				1.6		0.31	100					25		2								
52,63,65	2-SS	565+50	1653+50	RT/LT				2.2		0.56		55	54	171	230	72	45	2	3							
64	3-SS	575+48.8	576+82.8	RT										134												
		EROSION PROTECTION S.R. 173																								
63	1-EP	563+80	565+48.3	RT																7.5	140.3					
63	2-EP	563+80	564+52.5	LT																7.5	60.4					
63	3-EP	564+85.5	565+33.9	LT																7.5	40.3					
63	4-EP	565+69.9	565+89.7	LT																7.5	16.5					
63	5-EP	566+16.7	567+22.3	LT																7.5	88.0					
63	6-EP	567+50.3	569+33.2	LT																7.5	152.4					
63	7-EP	569+55.2	569+93.0	LT																7.5	31.5					
63	8-EP	565+51.6	567+18.3	RT																7.5	138.9					
63	9-EP	567+61.6	569+43.0	RT																7.5	151.2					
63	10-EP	569+57.0	1653+56.7	RT																7.5	*47.4					
63-64	11-EP	571+32.0	574+96.2	LT																7.5	220.2	83.3				
64	12-EP	571+00	570+39.5	RT																7.5	*49.0					
64	13-EP	575+25.9	575+48.8	LT					19.1																	
64	14-EP	575+55.5	576+50	LT					37.5											7.5	41.6					
64	15-EP	575+00.0	575+43.6	RT					36.3																	
64	16-EP	575+48.1	576+55.9	RT					43.7											7.5	46.6					
64																										
64	17-EP	576+82.9	577+77.3	RT																7.5	78.6					
		C.R. 67 (SOUTH)																								
65	18-EP	1646+50	1651+38.8	LT																7.5	407.3					
65	19-EP	1646+50	1647+63.2	RT																7.5	94.3					
65	20-EP	1647+89.6	1648+19.3	RT																7.5	24.8					
65	21-EP	1648+45.0	1649+41.2	RT																7.5	80.2					
65	22-EP	1649+71.2	1651+38.2	RT																7.5	139.2					
65	23-EP	1651+67.2	1653+21.2	RT																7.5	153.3	41.7				
65	24-EP	1651+73.8	1652+22.8	LT																7.5	40.8					
65	25-EP	1652+58.8	1653+43	LT																7.5	70.2					
		C.R. 67 (NORTH)																								
65	26-EP	251+75.0	253+13.4	RT																7.5	115.3					
TOTALS CARRIED TO GENERAL SUMMARY					112.4	4	4761	3.8	136.6	0.87	100	55	54	305	255	72	45	4	3		2428.3	125	4	4		2

CALCULATED RJG
CHECKED CZ

DRAINAGE QUANTITIES

STA-173-1.85

S0173001.DUD 16 JAN 03

DRAINAGE QUANTITIES

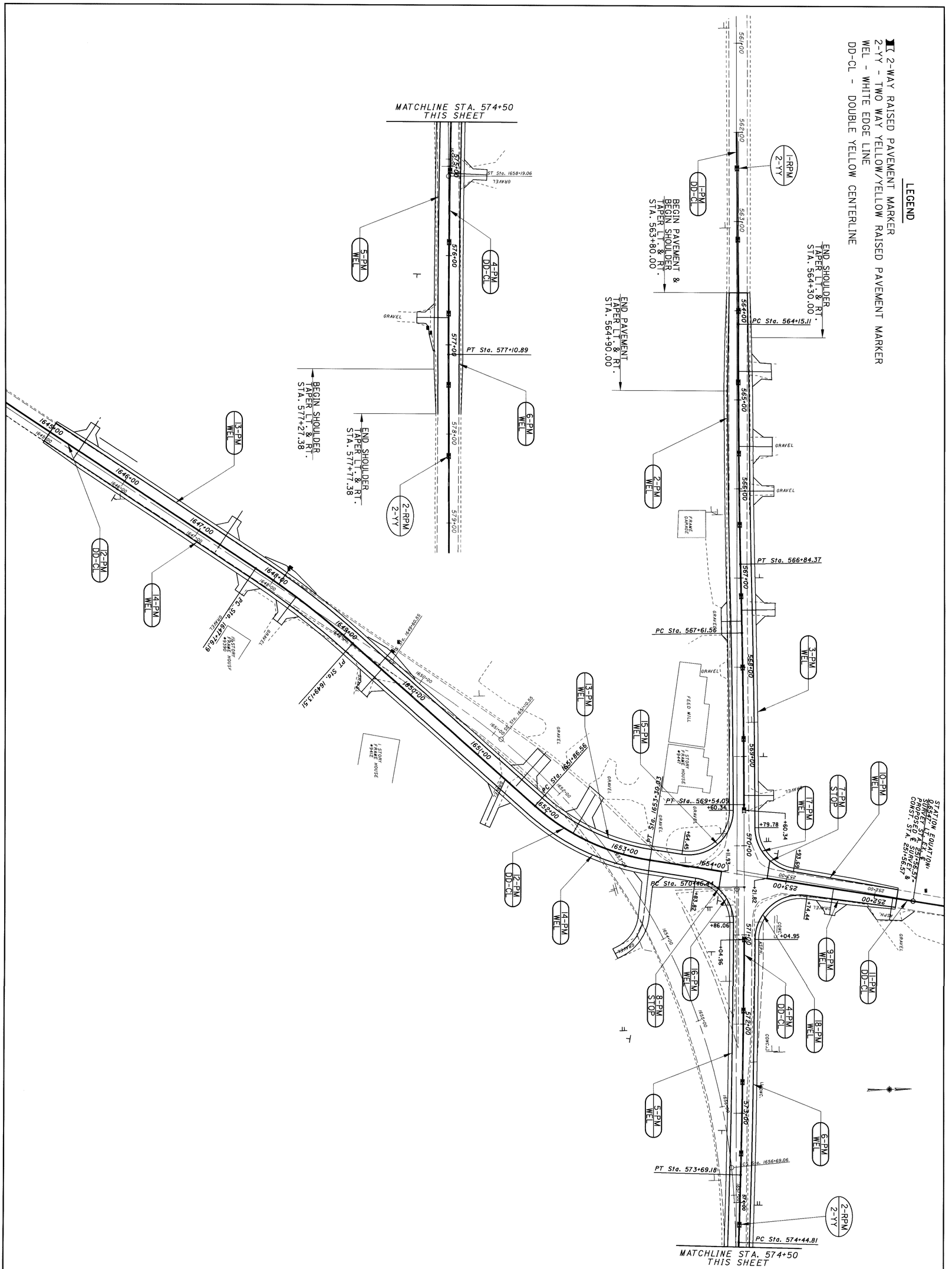
SHEET NO.	MARK	STATION FROM	STATION TO	SIDE	601 RIP RAP USING 6" REINFORCED CONCRETE SLAB SQ.YD.	601 ROCK CHANNEL PROTECTION TYPE A WITH FILTER CU.YD.	602 CONCRETE MASONRY CU.YD.	603 12" CONDUIT, TYPE D FT.	603 15" CONDUIT, TYPE D FT.	603 18" CONDUIT, TYPE D FT.	603 42" CONDUIT, TYPE A, 706.02 OR 48" CONDUIT, TYPE A, 707.01(0.109) LIN.FT.
		CULVERTS									
67	I-C	575+48.5			11.4	13.2	1.68				75
		DRIVE PIPES S.R. 173									
63	I-DP	564+52.5	564+85.5	LT				33			
63	2-DP	565+33.9	565+69.9	LT				36			
63	3-DP	565+89.7	566+16.7	LT				27			
63	4-DP	567+22.3	567+50.3	LT				28			
63	5-DP	569+33.2	569+55.2	LT					22		
64	6-DP	574+96.2	575+25.9	LT						30	
	7-DP	NOT USED									
		C.R. 67 SOUTH									
65	8-DP	1647+63.2	1647+89.6	RT					26		
65	9-DP	1648+19.3	1648+45.0	RT					25		
65	10-DP	1649+41.2	1649+71.2	RT					30		
65	11-DP	1651+38.2	1651+67.2	RT					29		
65	12-DP	1651+38.8	1651+73.8	LT						35	
65	13-DP	1653+21.2	1653+36.2	RT					27		
65	14-DP	1652+22.8	1652+58.8	LT						32	
TOTALS CARRIED TO GENERAL SUMMARY					11.4	13.2	1.68	124	159	97	75

CALCULATED RJG
CHECKED CZ

DRAINAGE QUANTITIES

STA-173-1.85

S0173002.DUD 21.JAN 03



71/85	STA-173-1.85	TRAFFIC CONTROL S.R. 173 & C.R. 67 (NORTH & SOUTH) S.R. 173 STA. 562+00.00 TO STA. 579+00.00 PAVEMENT MARKING C.R. 67 STA. 1644+00.00 TO STA. 1654+11.93 PAVEMENT MARKING C.R. 67 STA. 253+34.90 TO STA. 251+00.00 PAVEMENT MARKING	CALCULATED RJG CHECKED CZ

			ITEM 642													
LOCATION	MARK	STATION TO STATION ℄ SURVEY AND CONSTRUCTION	EDGE LINE (WHITE) TYPE I MILE		CENTER LINE (DOUBLE SOLID) TYPE I MILE		STOP LINE 24" TYPE I FT.									
SR 173	1-PM	562+00.00 - 569+60.34			0.15											
SR 173	2-PM	563+80.00 - 569+60.34	0.11													
SR 173	3-PM	563+80.00 - 569+79.78	0.11													
SR 173	4-PM	571+04.96 - 579+00.00			0.15											
SR 173	5-PM	571+04.96 - 577+77.38	0.13													
SR 173	6-PM	571+04.95 - 577+77.38	0.13													
CR 67 NORTH	7-PM	253+21.82					21.1									
CR 67 SOUTH	8-PM	1654+11.93					21.1									
CR 67 NORTH	9-PM	251+75.00 - 252+74.44	0.02													
CR 67 NORTH	10-PM	251+75.00 - 252+93.69	0.02													
CR 67 NORTH	11-PM	251+00.00 - 253+21.82			0.04											
CR 67 SOUTH	12-PM	1644+00.00 - 1654+11.93			0.19											
CR 67 SOUTH	13-PM	1645+00.00 - 1653+64.45	0.16													
CR 67 SOUTH	14-PM	1645+00.00 - 1653+83.82	0.17													
SR 173	15-PM	569+60.34 - 1653+64.45	0.02													
CR 67 SOUTH	16-PM	1653+83.82 - 571+04.96	0.01													
SR 173	17-PM	569+79.78 - 252+93.69	0.01													
CR 67 NORTH	18-PM	252+74.44 - 571+04.95	0.02													
TOTALS CARRIED TO GENERAL SUMMARY			0.91		0.53		42.2									

CALCULATED RJG
CHECKED CZ

PAVEMENT MARKING QUANTITIES

STA-173-1.85

STA173PMQ.TPS 22 JAN 03

CALCULATED RJG CHECKED CZ

RAISED PAVEMENT MARKER, INSTALLATION ONLY

The Department will supply the RPM castings with the yellow/yellow, one-way white, white/red and yellow/red retro-reflectors installed in the castings for Item 621, Raised Pavement Marker, Installation Only. The Contractor shall furnish all other material required to complete this item.

The Contractor will be informed at the pre-construction conference as to the location in Columbus of the Department supplied RPM materials. When specified, additional RPM materials will be stored within the District for use on this project. The Contractor shall pick up Department supplied materials at the specified location(s) for transport to the work site or to the Contractor's storage facility. An authorization for pick-up form is given in Supplemental Specification 1082 dated January 6, 1998. The Contractor shall notify the District and/or the parties listed on the authorization form in writing at least 5 working days prior to pick-up of Department supplied materials. The materials shall be stored 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 or were not returned to the Department.

Loading of material supplied by the Department at the recycler's warehouse shall be done in accordance with supplemental specification 1082.

All castings shall be placed the same working day that the RPM slots are cut into the pavement.

RPM REMOVED FOR STORAGE, AS PER PLAN

In addition to the requirements of 202.10, the contractor shall deliver the removed markers to the ODOT District office at 705 Oakwood St, Ravenna, OH 44266. The Contractor shall contact the District [Luke Nagle, 330-297-0801 ext 329] two working days prior to the delivery.

NOTE:
Raised Pavement Markers supplied by the Department shall be the Low Profile Type.

RPM REPLACEMENT / REMOVAL

STANDARD CONSTRUCTION DWG.	
TC-65.10 10-19-01	TC-65.12 10-19-01
TC-65.11 10-19-01	

LOCATION				ITEM 202	ITEM 621				REMARKS
					INSTALLATION ONLY				
COUNTY	ROUTE	CENTER LINE STATIONING		RPM REMOVED FOR STORAGE, AS PER PLAN	RPM WITH YELLOW/ YELLOW REFLECTOR	RPM WITH WHITE/ RED REFLECTOR	RPM WITH ONE-WAY WHITE REFLECTOR	RPM WITH YELLOW/ RED REFLECTOR	
		FROM	TO						
STA	173	562+40.34	569+60.34		10				80' SPACING
STA	173	571+04.96	578+24.96		10				80' SPACING
TOTAL				42	20				**TOTALS CARRIED TO GENERAL SUMMARY**

STA173RPM.TPS 3/9/03

RAISED PAVEMENT MARKER SUB-SUMMARY

STA-173-1.85

EXISTING ℄ SURVEY AND CONST. S. R. 173

PROPOSED ℄ SURVEY AND CONST. S. R. 173

560+00 561+00 562+00 563+00 564+00 565+00 566+00 567+00 568+00 569+00 570+00 571+00 572+00 573+00

MATCHLINE STA. 574+00

1-S W-45A-36 36" X 36" STA. 560+83±

2-S M-19-21

3-S M-2-24-3 30" X 24" STA. 563+08±

4-S SPEED LIMIT 55 R-10-24 24" X 30" STA. 567+00

5-S M-40-24 24" X 12" WEST 173 M-2-24-3 30" X 24" STA. 568+62±

6-S

7-S M-40-24 24" X 12" WEST

8-S 173 M-2-24-3 30" X 24" STA. 569+00

9-S STARK COUNTY COLUMBUS ROAD D-7-48 48" X 10" STA. 569+95

40-S STOP R-1-30 30" X 30" STA. 253+12

252+00

253+00

EXISTING ℄ SURVEY AND CONST. C. R. 67 NORTH

PROPOSED ℄ SURVEY AND CONST. C. R. 67 NORTH

W-1-30 18" X 18" STA. 251+04±

15-S R-1-30 30" X 30" STA. 570+80±

44-S D-1-72 72" X 12" STA. 568+46 SHARKSBURG

10-S R-1-30 30" X 30" STA. 569+87±

FRAME GARAGE

FEED MILL

1 STORY FRAME HOUSE #944F

1654+00

1653+00

16-S

17-S

D-1-56 72" X 12" STA. 571+52±

18-S R-10-24 24" X 30" STA. 573+19

37-S STOP R-1-30 30" X 30" STA. 1653+92

1652+00

R-1-30 30" X 30" STA. 1653+70±

38-S

M-2-24-3 30" X 24" STA. 571+38

173 EAST M-39-24 24" X 12"

42-S 43-S

36-S STARK COUNTY COLUMBUS ROAD D-7-48 48" X 10" STA. 1654+07

R-4-1B-30 30" X 30" CON 173 R-1-30 30" X 30" STA. 570+79±

13-S 14-S

11-S STARK COUNTY COLUMBUS RD D-1-56 72" X 12" STA. 570+64±

SR 173 D-1-36 STA. 570+67±

12-S

R-1-30 30" X 30" STA. 1653+00±

35-S

M-24L-21 21" X 15"

M-2C-24-3 30" X 24" STA. 1653+00±

32-S

33-S

34-S

M-39-24 24" X 12"

M-1-24-2 24" X 24" STA. 573+76±

79 T0 M-6-24 24" X 12" M-2-24-3 30" X 24" 173 EAST M-39-24 24" X 12"

20-S 21-S 22-S 23-S

PROPOSED ℄ SURVEY AND CONST. C. R. 67 SOUTH

1651+00 1650+00 1649+00 1648+00 1647+00 1646+00 1645+00

PC Sta. 574+44.81

PT Sta. 577+10.89

MATCHLINE STA. 574+00

575+00 576+00 577+00 578+00 579+00 580+00 581+00

T ESMT GRAVEL 164' CL 18" CPP 12" CMP

PROPOSED ℄ SURVEY AND CONST. S. R. 173

EXISTING ℄ SURVEY AND CONST. S. R. 173

19-S D-1-72 72" X 12" STA. 574+02 HARRISBURG

26-S M-40-24 24" X 12" 173 M-2-24-3 30" X 24" STA. 577+00± M-26-21

25-S

27-S

45-S W-45A-36 36" X 36" STA. 582+48±

N-45-12 12" X 12" STA. 580+20±

46-S W-45A-36 36" X 36" STA. 1649+00

1½ STORY FRAME HOUSE #941E

1½ STORY FRAME HOUSE #939D

47-S W-2-30 30" X 30"

48-S 35 MPH W-143-18 18" X 18" STA. 1647+57.5

M-17-21

31-S

30-S

M-2-24-3 30" X 24" STA. 1646+07±

M-17-21 24" X 12" JCT 173 M-2-24-3 30" X 24" STA. 1646+00

29-S

28-S

EXISTING ℄ SURVEY AND CONST. C. R. 67 SOUTH

LEGEND

- ⊥ SINGLE POST SIGN
- ⊥⊥ SINGLE POST SIGN, BACK TO BACK
- ⊥⊥ DOUBLE POST SIGN
- ⊥ ONE WAY SUPPORT
- □ PROPOSED SIGN
- ☒ EXISTING SIGN TO BE REMOVED
- ⬚ EXISTING SIGN TO REMAIN

SI730003.TPS 06/14/02

STA-173-1.85

0 50 100 HORIZONTAL SCALE IN FEET

N

TRAFFIC CONTROL S.R. 173 & C.R. 67 SIGNING

74/85

SIGNING SUB-SUMMARY

LOCATION	MARK	SIDE	STATION	SHEET NO.	SIGN REFERENCE NUMBER	SIZE		ITEM 630 SIGN, FLAT SHEET			ITEM 630 GROUND MOUNTED SUPPORT, NO. 2 POST			ITEM 630 REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	ITEM 630 REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL
						INCHES		SQ.FT.			FEET			EACH	EACH
SR 173	1-S	RT.	560+83	74	W-45A-36									1	1
SR 173	2-S	RT.	563+08	74	M-19-21									1	1
SR 173	3-S	RT.	563+08	74	M-2-24-3									1	
SR 173	4-S	LT.	567+00	74	R-10-24	24 X 30		5.0			12				
SR 173	5-S	LT.	568+62	74	M-40-24									1	1
SR 173	6-S	LT.	568+62	74	M-2-24-3									1	
SR 173	7-S	LT.	569+00	74	M-40-24	24 X 12		2.0			12				
SR 173	8-S	LT.	569+00	74	M-2-24-3	30 X 24		5.0							
SR 173	9-S	LT.	569+95	74	D-7-48	48 X 10		3.33			10-10				
SR 173	10-S	RT.	569+87	74	R-1-30									1	1
SR 173	11-S	RT.	570+67	74	D-14-36									1	1
SR 173	12-S	RT.	570+67	74	D-14-36									1	
SR 173	13-S	RT.	570+79	74	R-41B-30									1	1
SR 173	14-S	RT.	570+798	74	R-1-30									1	
SR 173	15-S	LT.	570+80	74	R-1-30									1	1
SR 173	16-S	RT.	571+52	74	D-1-56									1	2
SR 173	17-S	RT.	571+52	74	D-1-56									1	
SR 173	18-S	LT.	573+19	74	R-10-24	24 X 30		5.0			11				
SR 173	19-S	LT.	574+02	74	D-1-72	72 X 12		6.0			11-11				
SR 173	20-S	RT.	573+76	74	M-1-24-2									1	1
SR 173	21-S	RT.	573+76	74	M-8-24									1	
SR 173	22-S	RT.	573+76	74	M-2-24-3									1	
SR 173	23-S	RT.	573+76	74	M-39-24									1	
	24-S		NOT USED												
SR 173	25-S	LT.	577+00	74	M-26-21										
SR 173	26-S	LT.	577+00	74	M-40-24									1	1
SR 173	27-S	LT.	577+00	74	M-2-24-3									1	
CR 67 (S)	28-S	RT.	1646+00	74	M-2-24-3	30 X 24		5.0			12				
CR 67 (S)	29-S	RT.	1646+00	74	M-17-21	24 X 12		2.0							
CR 67 (S)	30-S	RT.	1646+07	74	M-1-24-3									1	1
CR 67 (S)	31-S	RT.	1646+07	74	M-17-21									1	
CR 67 (S)	32-S	RT.	1653+00	74	M-24L-21									1	
CR 67 (S)	33-S	RT.	1653+00	74	M-2C-24-3									1	
CR 67 (S)	34-S	RT.	1653+00	74	M-39-24									1	1
CR 67 (S)	35-S	RT.	1653+00	74	R-1-30									1	1
CR 67 (S)	36-S	RT.	1654+07	74	D-7-48	48 X 10		3.33			11-11				
CR 67 (S)	37-S	RT.	1653+92	74	R-1-30	30 X 30		6.25			12				
CR 67 (S)	38-S	LT.	1653+70	74	R-1-30									1	1
	39-S		NOT USED												
CR 67 (N)	40-S	RT.	253+12	74	R-1-30	30 X 30		6.25			12				
	41-S		NOT USED												
SR 173	42-S	RT.	571+38	74	M-2-24-3	30 X 24		5.0							
SR 173	43-S	RT.	571+38	74	M-39-24	24 X 12		2.0			12				
SR 173	44-S	RT.	568+46	74	D-1-72	72 X 12		6.0			11-11				
SR 173	45-S	LT.	582+48	74	W-45A-36									1	1
SR 173	46-S	RT.	1649+00	74	W-45A-36	36 X 36		9.0			13				
CR 67 (S)	47-S	RT.	1647+57.5	74	W-2-30	30 X 30		6.25			13				
CR 67 (S)	48-S	RT.	1647+57.5	74	W-143-18	18 X 18		2.25							
TOTALS CARRIED TO GENERAL SUMMARY								79.66			195			27	16

CALCULATED RJG CHECKED SAB

SIGNING SUB-SUMMARY

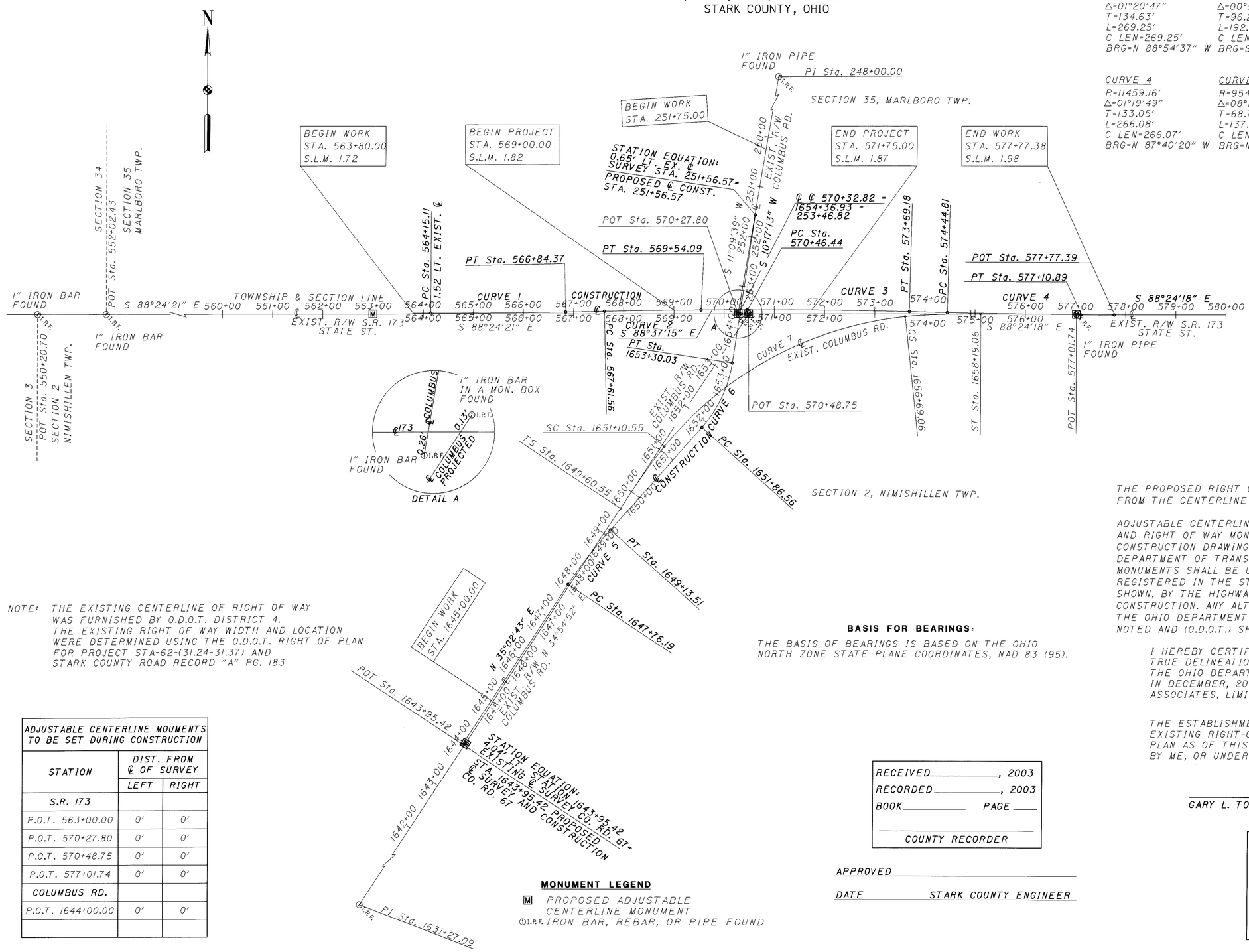
STA-173-1.85

75/85

STA173SSS.TPS 23 JAN 03

STA-173-1.85

SECTION 35, T-20N, R-7W, MARLBORO TOWNSHIP
SECTION 2, T-19N, R-7W, NIMISHILLEN TOWNSHIP
STARK COUNTY, OHIO



CURVE 1	CURVE 2	CURVE 3
R=11459.16′	R=11459.16′	R=11459.16′
Δ=01°20′47″	Δ=00°57′46″	Δ=01°36′49″
T=134.63′	T=96.27′	T=161.38′
L=269.25′	L=192.53′	L=322.74′
C LEN=269.25′	C LEN=192.53′	C LEN=322.73′
BRG=N 88°54′37″ W	BRG=S 89°06′08″ E	BRG=S 87°48′50″ E

CURVE 4	CURVE 5	CURVE 6
R=11459.16′	R=954.93′	R=249.11′
Δ=01°19′49″	Δ=08°14′22″	Δ=32°59′53″
T=133.05′	T=68.78′	T=73.79′
L=266.08′	L=137.33′	L=143.47′
C LEN=266.07′	C LEN=137.21′	C LEN=141.50′
BRG=N 87°40′20″ W	BRG=N 39°09′55″ E	BRG=S 26°47′09″ W

CURVE 7
R=716.20′
Δ=56°40′49″
THETA=6°00′00″
LS=150.00′
LT=100.06′
ST=50.05′
ΔC=44°40′50″
LC=558.51′
TS=461.96′
ES=99.02′

NOTE: THE EXISTING CENTERLINE OF RIGHT OF WAY WAS FURNISHED BY O.D.O.T. DISTRICT 4. THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING THE O.D.O.T. RIGHT OF PLAN FOR PROJECT STA-62-(31.24-31.37) AND STARK COUNTY ROAD RECORD "A" PG. 183

ADJUSTABLE CENTERLINE MOUMENTS TO BE SET DURING CONSTRUCTION		
STATION	DIST. FROM ℄ OF SURVEY	
	LEFT	RIGHT
S.R. 173		
P.O.T. 563+00.00	0′	0′
P.O.T. 570+27.80	0′	0′
P.O.T. 570+48.75	0′	0′
P.O.T. 577+01.74	0′	0′
COLUMBUS RD.		
P.O.T. 1644+00.00	0′	0′

MONUMENT LEGEND

Ⓜ PROPOSED ADJUSTABLE CENTERLINE MONUMENT
Ⓘ.R.F. IRON BAR, REBAR, OR PIPE FOUND

BASIS FOR BEARINGS:

THE BASIS OF BEARINGS IS BASED ON THE OHIO NORTH ZONE STATE PLANE COORDINATES, NAD 83 (95).

RECEIVED _____, 2003
RECORDED _____, 2003
BOOK _____ PAGE ____
_____
COUNTY RECORDER

APPROVED _____
DATE _____ STARK COUNTY ENGINEER

THE PROPOSED RIGHT OF WAY SHALL BE REFERENCED FROM THE CENTERLINE OF RIGHT OF WAY.

ADJUSTABLE CENTERLINE MONUMENTS, REFERENCE MONUMENTS AND RIGHT OF WAY MONUMENTS ARE SHOWN ON STANDARD CONSTRUCTION DRAWING RM-1.1 (REV. 4-29-99) OF THE OHIO DEPARTMENT OF TRANSPORTATION. THE PLACEMENT OF THE MONUMENTS SHALL BE UNDER THE DIRECTION OF A SURVEYOR REGISTERED IN THE STATE OF OHIO AND ARE TO BE SET, AS SHOWN, BY THE HIGHWAY CONTRACTOR AT THE TIME OF CONSTRUCTION. ANY ALTERATIONS, WITH THE APPROVAL OF THE OHIO DEPARTMENT OF TRANSPORTATION (O.D.O.T.) SHALL BE NOTED AND (O.D.O.T.) SHALL BE NOTIFIED OF THE NEW LOCATIONS.

I HEREBY CERTIFY THAT THIS PLAT IS A TRUE DELINEATION OF A SURVEY MADE FOR THE OHIO DEPARTMENT OF TRANSPORTATION IN DECEMBER, 2001, BY HAMMONTREE & ASSOCIATES, LIMITED.

THE ESTABLISHMENT OF PROPERTY LINES AND EXISTING RIGHT-OF-WAY LINES SHOWN ON THIS PLAN AS OF THIS DATE WERE PERFORMED BY ME, OR UNDER MY DIRECT SUPERVISION.

_____ DATE _____
GARY L. TOUSSANT P.S. #6332

SURVEYOR'S SEAL

N

0 100 200 SCALE IN FEET

PID NO. 22417

R/W DESIGNER GLT
R/W REVIEWER JDY

CENTERLINE PLAT

STA-173-1.85

1 / 10

76 / 85

rcl.dgn

STA-173-1.85

SECTION 35, T-20N, R-7W, MARLBORO TOWNSHIP
SECTION 2, T-19N, R-7W, NIMISHILLEN TOWNSHIP
STARK COUNTY, OHIO

CONVENTIONAL SIGNS

County Line
Township Line
Section Line
Corporation Line ____ or
Fence Line (existing) -x-x-x- (proposed) -x-x-x-
Center Line
Trees ,Stumps (to be removed)
Utility Poles: Telephone, Power, Light
Right of Way (only) R/W
Standard Highway Ease. SH
Temp. Right of Way T
Exist. Right of Way Ex R/W
Exist. Stand. High. Ease. Ex SH
Exist. Channel Ease. Ex CH
Exist. Utility Ease. Ex U
Property Line (in existing fence)
Railroad or
Guardrail (existing) (proposed)
Construction Limits Construction Limits

UTILITIES

AMERITECH . . . . . 50 WEST BOWERY STREET
AKRON, OHIO 44308
330-384-8057
ATTN: RICK DELAGRANGE

OHIO EDISON . . . . . 1910 WEST MARKET STREET
AKRON, OHIO 44313
330-384-4720
ATTN: DAVE MILLER

OHIO POWER . . . . . 301 CLEVELAND AVENUE PO BOX 24630
(AEP) CANTON, OHIO 44701-4630
330-438-7823
ATTN: MIKE BUSCH

COLUMBIA GAS . . . . 8462 STATE ROUTE 179 PO BOX 85
OF OHIO LAKEVILLE, OHIO 44638
419-827-1209
ATTN: JACK ROHRBAUGH

DOMINION EAST . . . . 4725 SOUTHWAY STREET, S.W.
OHIO CANTON, OHIO 44706
330-478-3136
ATTN: STEVE CROWL

TIME WARNER CABLE .5520 WHIPPLE AVENUE, N.W.
NORTH CANTON, OHIO 44720
330-494-9200
ATTN: STEVE WEAVER

STARK COUNTY . . . . 1701 MAHONING ROAD, N.E. PO BOX 7906
SANITARY ENGINEER CANTON, OHIO 44705-7906
330-451-2314
ATTN: JIM JONES

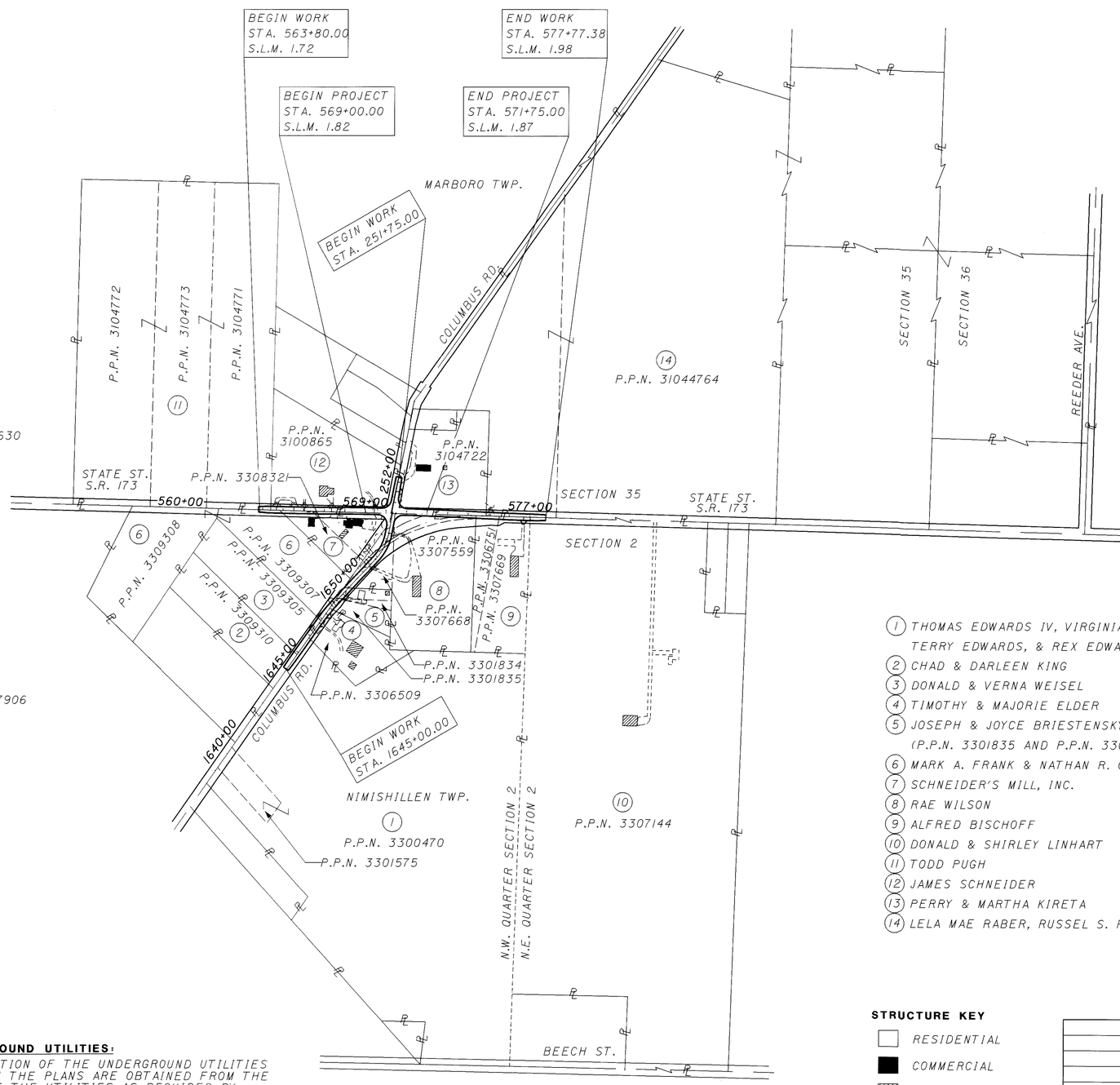
BELDON AND BLAKE . 1748 SALTWELL ROAD
DOVER, OHIO 44622
330-602-5551
ATTN: KEITH KERSTETTER

GREAT LAKES . . . . PO BOX 550
ENERGY PARTNERS HARTVILLE, OHIO 44632-0550
330-877-6747
ATTN: SUE BARCLAY

GREAT LAKES . . . . 6905 MINERVA ROAD
ENERGY PARTNERS WAYNESBURG, OHIO 44688
330-866-3301
ATTN: JULIE KNECHT

LAKE REGION . . . . PO BOX 499
OIL, INC. DALTON, OHIO 44618
330-828-8420
ATTN: BOB DERVINE

UNDERGROUND UTILITIES:
THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE OBTAINED FROM THE OWNER OF THE UTILITIES AS REQUIRED BY SECTION 153.64 O.R.C.



(1) THOMAS EDWARDS IV, VIRGINIA HARSH, JAMES EDWARDS, TERRY EDWARDS, & REX EDWARDS
(2) CHAD & DARLEEN KING
(3) DONALD & VERNA WEISEL
(4) TIMOTHY & MAJORIE ELDER
(5) JOSEPH & JOYCE BRIESTENSKY (P.P.N. 3301835 AND P.P.N. 3301834)
(6) MARK A. FRANK & NATHAN R. GLICK
(7) SCHNEIDER'S MILL, INC.
(8) RAE WILSON
(9) ALFRED BISCHOFF
(10) DONALD & SHIRLEY LINHART
(11) TODD PUGH
(12) JAMES SCHNEIDER
(13) PERRY & MARTHA KIRETA
(14) LELA MAE RABER, RUSSEL S. RABER, & SHIRLEY A. HEIM

STRUCTURE KEY
RESIDENTIAL
COMMERCIAL
OUT-BUILDING

REV. BY	DATE	DESCRIPTION

DATE COMPLETED: FEBRUARY 2003

SCALE IN FEET 0 300 600

PID NO. 22417

R/W DESIGNER GLT
R/W REVIEWER JDY

PROPERTY MAP

STA-173-1.85

2 / 10

77 / 85

RM1.DGN

TOTAL NUMBER OF :

14 OWNERSHIPS
21 PARCELS
0 TOTAL TAKES

0 OWNERSHIPS WITH STRUCTURES INVOLVED
0 OWNERSHIPS WITH "P" ITEMS

NET RESIDUE = RECORD AREA - TOTAL PRO - NET TAKE

ALL AREAS IN ACRES.

NOTE: UNDER NO CIRCUMSTANCES ARE TEMPORARY EASEMENTS TO BE USED FOR STORAGE OF MATERIAL OR EQUIPMENT BY THE CONTRACTOR UNLESS NOTED OTHERWISE.

NOTE: ALL TEMPORARY PARCELS TO BE OF 18 MONTHs DURATION.

PARCEL NO.	OWNER	SHEET NO.	OWNERS RECORD BOOK	OWNERS RECORD PAGE	AUDITOR'S PARCEL	RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	TYPE FUND	REMARKS AND PERSONALTY	AS ACQUIRED BOOK	AS ACQUIRED PAGE
1 T	THOMAS W. EDWARDS IV,	9	198204050006001		3300470	49.65	0.810	0.055	0.000	0.055	NO			STATE	TO GRADE AND SEED		
	VIRGINIA I. HARSH,		198802020003025		3301575	0.974	0.083										
	JAMES R. EDWARDS,				TOTAL:	50.624	0.893										
	TERRY R. EDWARDS, AND																
	REX R. EDWARDS																
2 T	CHAD E. KING AND	9	200109140066255		3309310	3.231	0.139	0.065	0.000	0.065	NO			STATE	TO GRADE AND SEED		
	DARLENE E. KING																
3 T	DONALD E. WEISEL AND	9	200109120065555		3309305	3.231	0.139	0.088	0.000	0.088	NO			STATE	TO GRADE AND SEED		
	VERNA K. WEISEL																
4 T	TIMOTHY W. ELDER AND	9	3439	640	3306509	2.075	0.125	0.046	0.000	0.046	NO			STATE	TO BUILD TWO DRIVES AND GRADE AND SEED		
	MARJORIE J. ELDER																
5 T	JOSEPH S. BRIESTENSKY, JR. AND	9-10	4111	362	3301835	0.610	0.056	0.052	0.000	0.052	NO			STATE	TO BUILD A DRIVE AND GRADE AND SEED		
	JOYCE L. BRIESTENSKY				3301834	0.3304	0.066				NO						
					TOTAL:	0.9404	0.122										
6 T	MARK A. FRANK AND	5, 9-10	200109130065924		3309307	3.471	0.388	0.092	0.000	0.092	NO			STATE	TO GRADE AND SEED		
	NATHAN R. GLICK				3309308	5.022	0.293				NO						
					TOTAL:	8.493	0.681										
6 T-1								0.032	0.000	0.032	NO			STATE	TO GRADE AND SEED		
7 WD	SCHNEIDER'S MILL, INC.	5-6, 10	2965	660	3308321	2.00	0.604	0.619	0.604	0.015	NO		1.381	STATE	*1 STORY FRAME RESIDENCE		
7 T								0.035	0.000	0.035	NO				TO BUILD A DRIVE AND GRADE AND SEED		
7 T-1								0.008	0.000	0.008	NO				TO GRADE AND SEED		
7 T-2								0.057	0.000	0.057	NO				TO GRADE AND SEED		
7 RUP															REVOCABLE USE PERMIT # _____		
															1 STORY FRAME RESIDENCE		

* = DENOTES RIGHT OF WAY ENCROACHMENT.

REV. BY	DATE	DESCRIPTION

FIELD REVIEW BY DATE:
OWNERSHIP VERIFIED BY DATE:
DATE COMPLETED: FEBRUARY 2003

FEDERAL PROJECT NO.

PID NO. 22417

STATE JOB NO. 44760

R/W DESIGNER GLT
R/W REVIEWER JDY

SUMMARY OF ADDITIONAL RIGHT OF WAY

STA-173-1.85

RSI.DGN

TOTAL NUMBER OF :

14 OWNERSHIPS 0 OWNERSHIPS WITH STRUCTURES INVOLVED
21 PARCELS 0 OWNERSHIPS WITH "P" ITEMS
0 TOTAL TAKES

NET RESIDUE = RECORD AREA - TOTAL PRO - NET TAKE

ALL AREAS IN ACRES.

NOTE: UNDER NO CIRCUMSTANCES ARE TEMPORARY EASEMENTS TO BE USED FOR STORAGE OF MATERIAL OR EQUIPMENT BY THE CONTRACTOR UNLESS NOTED OTHERWISE.

NOTE: ALL TEMPORARY PARCELS TO BE OF 18 MONTHs DURATION.

PARCEL NO.	OWNER	SHEET NO.	OWNERS RECORD BOOK	OWNERS RECORD PAGE	AUDITOR'S PARCEL	RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	TYPE FUND	REMARKS AND PERSONALTY	AS ACQUIRED BOOK	AS ACQUIRED PAGE
8 T	RAE S. WILSON	7-10	199302010005037		3307559	0.95	0.566	0.158	0.000	0.158	NO			STATE	TO BUILD TWO DRIVES AND GRADE AND SEED		
					3307668	6.00	0.879										
					TOTAL:	6.95	1.455										
9 T	ALFRED O. BISCOFF	7-8	199903260022745		3307669	3.00	0.111	0.089	0.000	0.089	NO			STATE	TO BUILD A DRIVE AND GRADE AND SEED		
					3306751	1.00	0.124										
						4.00	0.235										
10 T	DONALD E. LINHART AND	8	3400	370	3307144	105.00	1.970	0.027	0.000	0.027	NO			STATE	TO GRADE AND SEED		
	SHIRLEY F. LINHART																
11 T	TODD PUGH	5	199708050042773		3104771	11.363	0.215	0.028	0.000	0.028	NO			STATE	TO GRADE AND SEED		
					3104772	13.636	0.258										
					3104773	10.00	0.189										
12 WD	JAMES E. SCHNEIDER	5-6	199705160026584		3100865	5.61	0.543	0.551	0.543	0.008	NO	5.059		STATE			
12 T								0.313	0.000	0.313	NO			STATE	TO BUILD FIVE DRIVES AND GRADE AND SEED		
13 WD	PERRY KIRETA AND	6-7	198607160022368		3104722	4.3815	0.593	0.555	0.351	0.204	NO	3.585		STATE			
	MARTHA J. KIRETA																
13 T								0.142	0.000	0.142	NO			STATE	TO BUILD TWO DRIVES AND GRADE AND SEED		
14 WD	SHIRLEY A. HEIM, TRUSTEE,	7-8	4353	833	3104764	326.743	5.417	0.106	0.071	0.035	NO	321.291		STATE			
	RUSSELL S. RABER, AND																
	LELA MAE RABER																
14 T								0.155	0.000	0.155	NO			STATE	TO BUILD A DRIVE AND GRADE AND SEED		

REV. BY	DATE	DESCRIPTION

FIELD REVIEW BY DATE:
OWNERSHIP VERIFIED BY DATE:
DATE COMPLETED: FEBRUARY 2003

FEDERAL PROJECT NO.

PID NO. 22417

STATE JOB NO. 444760

R/W DESIGNER GLT
R/W REVIEWER JOY

SUMMARY OF ADDITIONAL RIGHT OF WAY

STA-173-1.85

RS2.DGN

STA-173-1.85

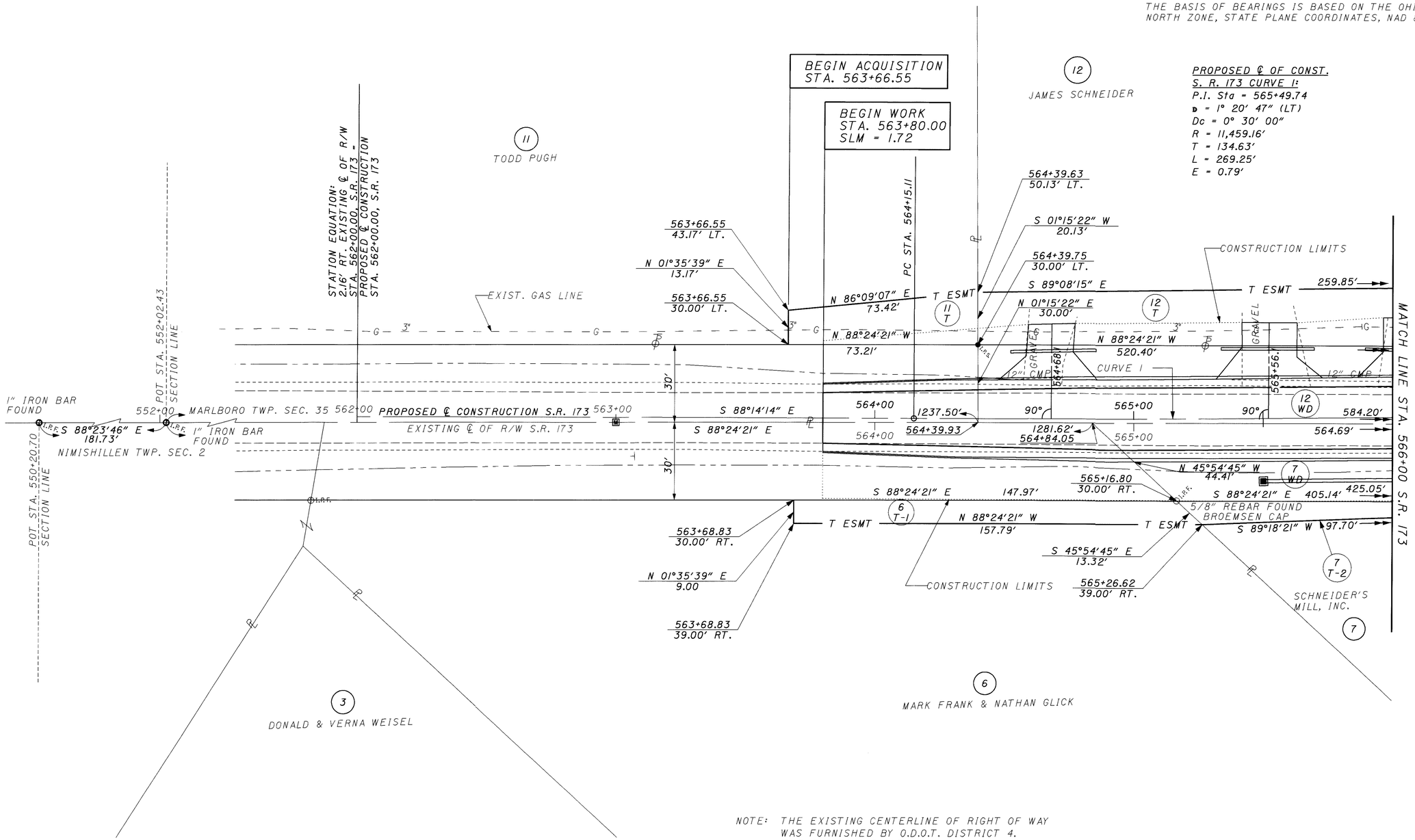
SECTION 35, T-20N, R-7W, MARLBORO TOWNSHIP
SECTION 2, T-19N, R-7W, NIMISHILLEN TOWNSHIP
STARK COUNTY, OHIO

MONUMENT LEGEND

- ▣ PROPOSED ADJUSTABLE CENTERLINE MONUMENT
- ⊙I.R.F. IRON BAR, REBAR, OR PIPE FOUND
- ●I.R.S. 3/4 " X 30" IRON REBAR WITH 1-1/2" DIA. ALUMINUM O.D.O.T. R/W CAP, TO BE SET

BASIS FOR BEARINGS:

THE BASIS OF BEARINGS IS BASED ON THE OHIO NORTH ZONE, STATE PLANE COORDINATES, NAD 83 (95).



NOTE: THE EXISTING CENTERLINE OF RIGHT OF WAY WAS FURNISHED BY O.D.O.T. DISTRICT 4. THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING THE O.D.O.T. RIGHT OF PLAN FOR PROJECT STA-62-(31.24-31.37) AND STARK COUNTY ROAD RECORD "A" PG. 183

REV. BY	DATE	DESCRIPTION

DATE COMPLETED: FEBRUARY 2003

SCALE IN FEET: 0, 10, 20, 40

PID NO. 22417

R/W DESIGNER GLT
R/W REVIEWER JDY

RIGHT OF WAY DETAIL SHEET
STA. 562+00 TO STA. 566+00

STA-173-1.85

5 / 10

80 / 85

RP100SR173.DGN

STA-173-1.85

SECTION 35, T-20N, R-7W, MARLBORO TOWNSHIP
SECTION 2, T-19N, R-7W, NIMISHILLEN TOWNSHIP
STARK COUNTY, OHIO

BASIS FOR BEARINGS:

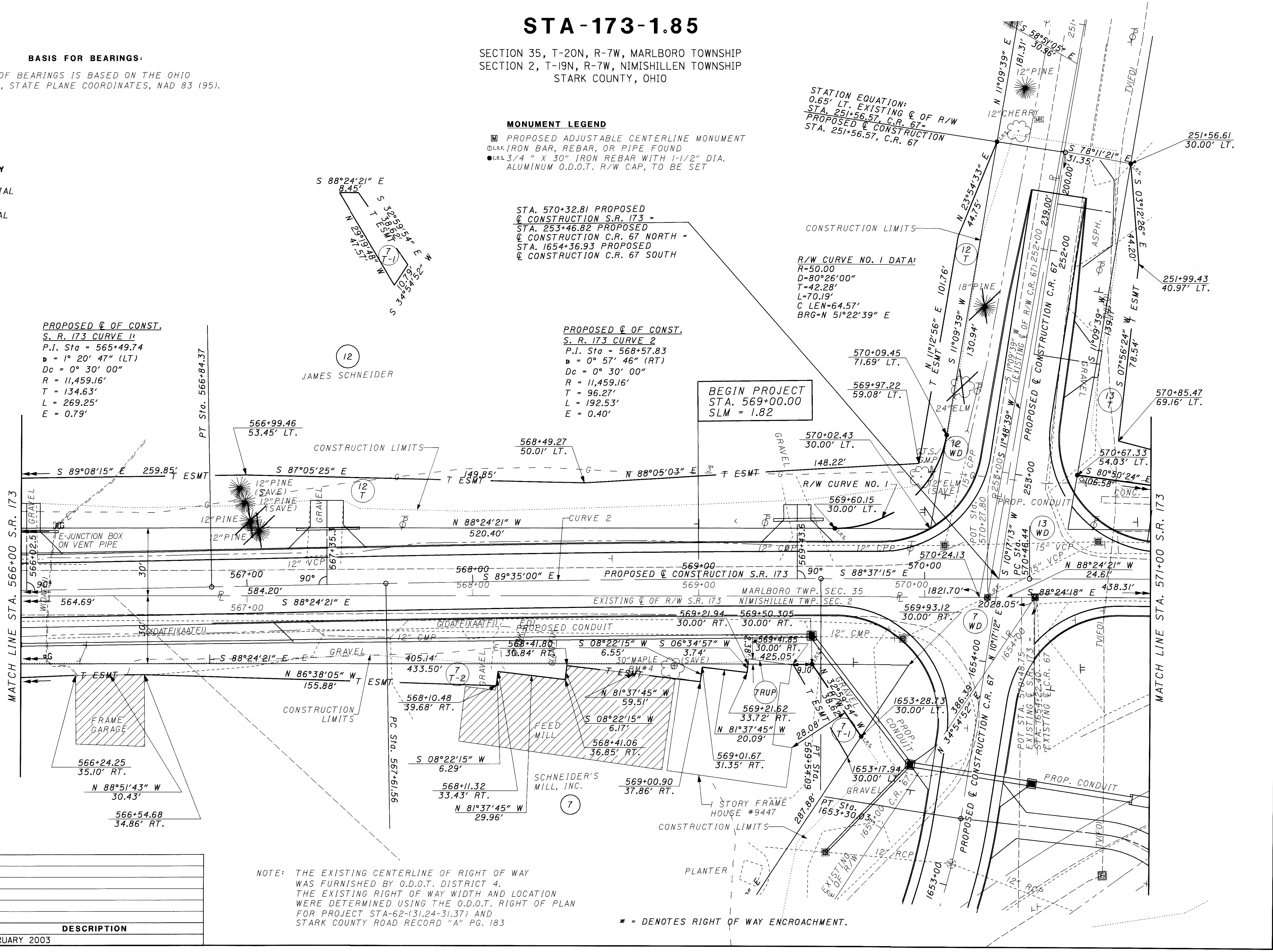
THE BASIS OF BEARINGS IS BASED ON THE OHIO NORTH ZONE, STATE PLANE COORDINATES, NAD 83 (95).

STRUCTURE KEY

☐	RESIDENTIAL
▨	COMMERCIAL

MONUMENT LEGEND

- Ⓜ PROPOSED ADJUSTABLE CENTERLINE MONUMENT
- ⦶ I.R.F. IRON BAR, REBAR, OR PIPE FOUND
- ● I.R.S. 3/4" X 30" IRON REBAR WITH 1-1/2" DIA. ALUMINUM O.D.O.T. R/W CAP, TO BE SET



NOTE: THE EXISTING CENTERLINE OF RIGHT OF WAY WAS FURNISHED BY O.D.O.T. DISTRICT 4. THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING THE O.D.O.T. RIGHT OF PLAN FOR PROJECT STA-62-(31.24-31.37) AND STARK COUNTY ROAD RECORD "A" PG. 183

* = DENOTES RIGHT OF WAY ENCROACHMENT.

REV. BY	DATE	DESCRIPTION

DATE COMPLETED: FEBRUARY 2003

RP1OISRT3.DGN

SCALE IN FEET 0 10 20 40

PID NO. **22417**

R/W DESIGNER GLT
R/W REVIEWER JDY

RIGHT OF WAY DETAIL SHEET
STA. 566+00 TO STA. 571+00

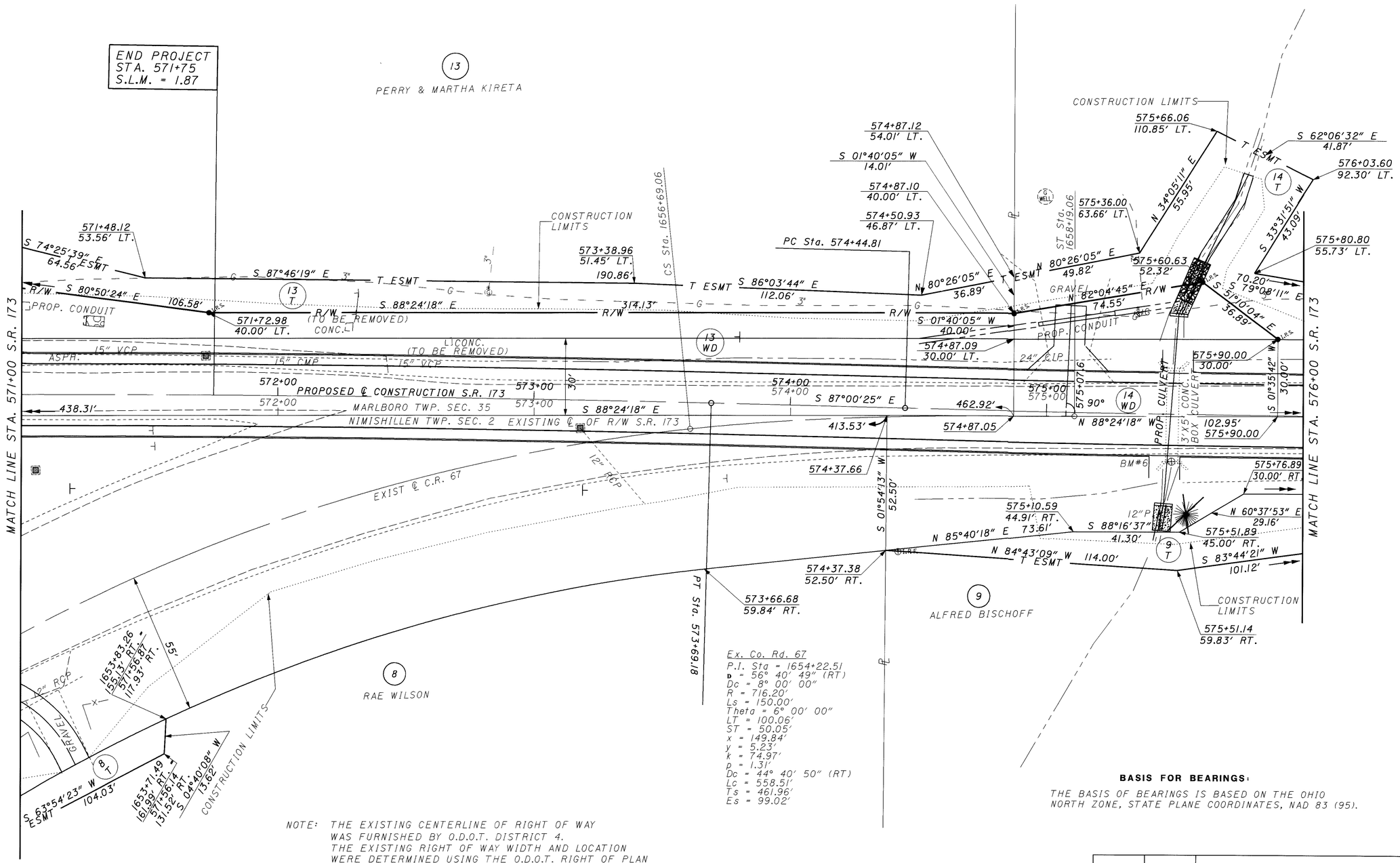
STA-173-1.85

STA-173-1.85

SECTION 35, T-20N, R-7W, MARLBORO TOWNSHIP
SECTION 2, T-19N, R-7W, NIMISHILLEN TOWNSHIP
STARK COUNTY, OHIO

MONUMENT LEGEND

- PROPOSED ADJUSTABLE CENTERLINE MONUMENT
- I.R.F. IRON BAR, REBAR, OR PIPE FOUND
- I.R.S. 3/4 " X 30" IRON REBAR WITH 1-1/2" DIA. ALUMINUM O.D.O.T. R/W CAP, TO BE SET



Ex. Co. Rd. 67
P.I. Sta = 1654+22.51
Δ = 56° 40' 49" (RT)
Dc = 8° 00' 00"
R = 716.20'
Ls = 150.00'
Theta = 6° 00' 00"
LT = 100.06'
ST = 50.05'
x = 149.84'
y = 5.23'
k = 74.97'
p = 1.31'
Dc = 44° 40' 50" (RT)
Lc = 558.51'
Ts = 461.96'
Es = 99.02'

NOTE: THE EXISTING CENTERLINE OF RIGHT OF WAY WAS FURNISHED BY O.D.O.T. DISTRICT 4. THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING THE O.D.O.T. RIGHT OF PLAN FOR PROJECT STA-62-(31.24-31.37) AND STARK COUNTY ROAD RECORD "A" PG. 183

BASIS FOR BEARINGS:

THE BASIS OF BEARINGS IS BASED ON THE OHIO NORTH ZONE, STATE PLANE COORDINATES, NAD 83 (95).

REV. BY	DATE	DESCRIPTION

DATE COMPLETED: FEBRUARY 2003

SCALE IN FEET: 0, 10, 20, 40

PID NO. 22417

R/W DESIGNER GLT
R/W REVIEWER JDY

RIGHT OF WAY DETAIL SHEET
STA. 571+00 TO STA. 576+00

STA-173-1.85

7 / 10

82
85

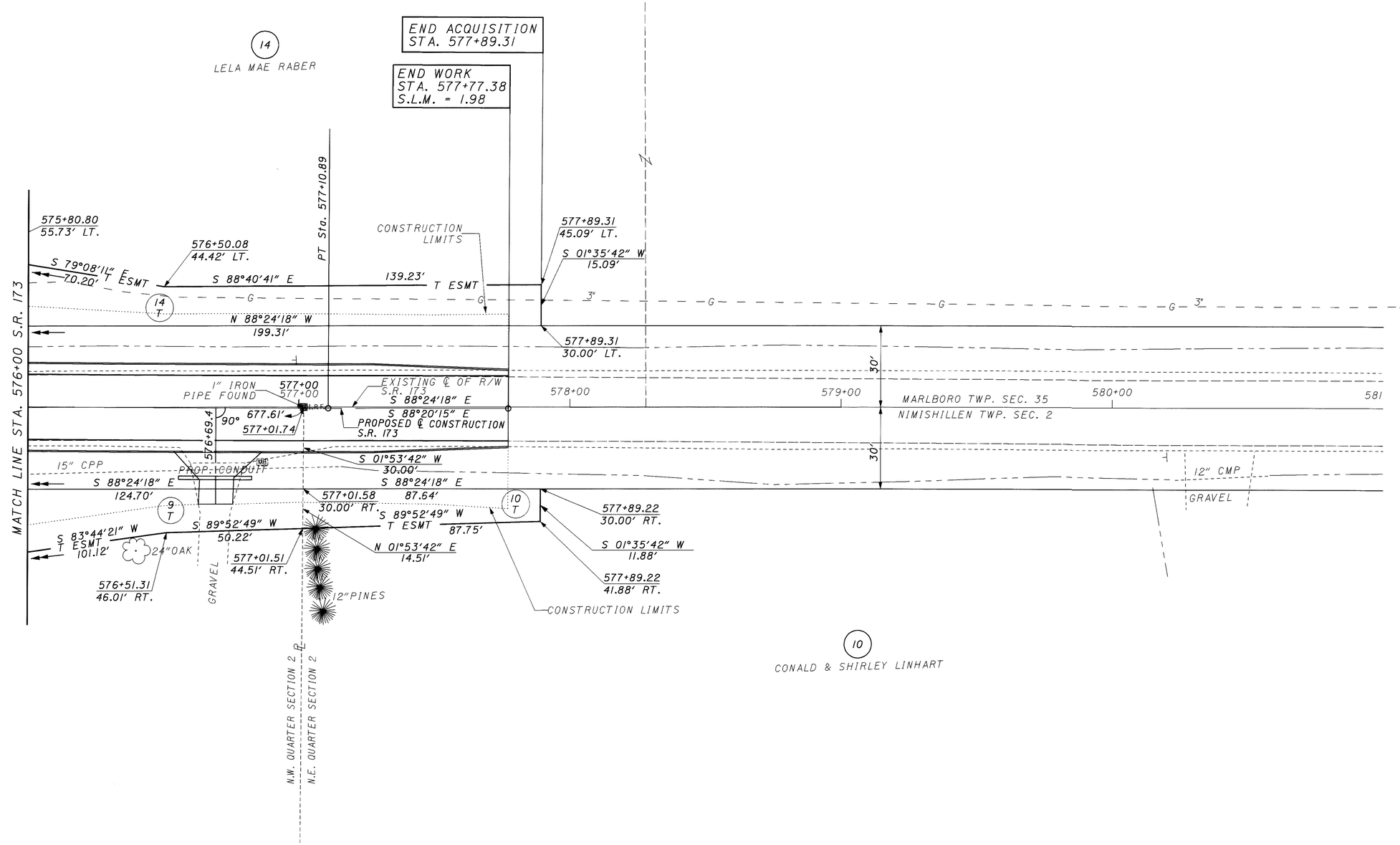
RPI02SRI73.DGN

STA-173-1.85

SECTION 35, T-20N, R-7W, MARLBORO TOWNSHIP
SECTION 2, T-19N, R-7W, NIMISHILLEN TOWNSHIP
STARK COUNTY, OHIO

MONUMENT LEGEND

- ▣ PROPOSED ADJUSTABLE CENTERLINE MONUMENT
- ⊙I.R.F. IRON BAR, REBAR, OR PIPE FOUND
- ●I.P.S. 3/4 " X 30" IRON REBAR WITH 1-1/2" DIA. ALUMINUM O.D.O.T. R/W CAP, TO BE SET



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REV. BY	DATE	DESCRIPTION

DATE COMPLETED: FEBRUARY 2003

SCALE IN FEET: 0, 10, 20, 40

PID NO. 22417

R/W DESIGNER GLT
R/W REVIEWER JDY

RIGHT OF WAY DETAIL SHEET
STA. 576+00 TO STA. 577+89.31

STA-173-1.85

8 / 10

83
85

RPIO3SR173.DGN

STA-173-1.85

SECTION 35, T-20N, R-7W, MARLBORO TOWNSHIP
SECTION 2, T-19N, R-7W, NIMISHILLEN TOWNSHIP
STARK COUNTY, OHIO

MONUMENT LEGEND

- M — PROPOSED ADJUSTABLE CENTERLINE MONUMENT
- ⊙ I.R.F. — IRON BAR, REBAR, OR PIPE FOUND
- ● I.P.S. — 3/4 " X 30" IRON REBAR WITH 1-1/2" DIA. ALUMINUM O.D.O.T. R/W CAP, TO BE SET

STRUCTURE KEY

- RESIDENTIAL
- COMMERCIAL

MICHAEL & KELLY HEID

(2) CHAD & DARLENE KING

(3) DONALD & VERNA WEISEL

MARK FRANK & NATHAN GLICK

(1) THOMAS EDWARDS IV, VIRGINIA HARSH, JAMES EDWARDS, TERRY EDWARDS, & REX EDWARDS

(4) TIMOTHY & MARJORIE ELDER

(5) JOSEPH & JOYCE BRIESTENSKY

CONSTRUCTION LIMITS

PROPOSED ℄ CONSTRUCTION C.R. 67

EXISTING ℄ OF R/W C.R. 67

TS Sta. 1649+60.55

MATCH LINE STA. 1649+55 C.R. 67

MATCH LINE SHEET 7

MATCH LINE SHEET 6

PC Sta. 1647+76.19

PT Sta. 1649+13.51

1644+39.05 46.35' LT.
N 55°05'08" W 16.35'
1644+39.05 30.00' LT.
N 33°36'06" E 157.03'
1645+96.04 49.95' LT.
S 45°41'31" E 20.22'
1645+92.74 30.00' LT.
153.69'
N 45°41'31" W 30.41'
1645+87.78
N 35°02'43" E 834.62'
N 34°54'52" E
1646+88.22
1646+82.26 30.00' RT.
S 43°51'18" E 30.59
N 34°54'52" E 242.36'
S 34°54'52" W 240.38'
1644+39.90 30.00' RT.
1644+39.90 40.00' RT.
N 55°05'08" W 10.00'
S 34°54'52" W 10.20'
1646+80.28 40.00' RT.
N 35°25'42" E 200.97'
20.26'
1647+97.01 48.14' LT.
S 45°41'16" E 18.39'
1647+94.01 30.00' LT.
N 45°41'16" W 30.41'
1647+89.04
1647+76.09 40.00' RT.
N 35°48'01" E 246.19'
246.85'
1648+62.22
CURVE
633.36'
N 43°39'39" E 33.41'
560.18'
1649+00.00 40.00' RT.
S 64°28'18" E 35.56'
1648+68.02 35.08' RT.
N 43°39'39" E 32.36'
1648+35.00 30.00' RT.
93.69'
N 43°26'13" E
1648+69.65 44.95' RT.
S 64°28'18" E 10.00'
60.55'
158.89'
152.74'
95.81'
S 37°56'26" W
15" CPP
8" PINE
12" MAPLE
12" PINE
12" APPLE
12" CMP
GRAVEL
1½ STORY FRAME HOUSE #9390

STATION EQUATION:
4.04' LT., STA. 1643+95.42
EXISTING ℄ R/W C.R. 67 =
PROPOSED ℄ CONSTRUCTION C.R. 67
STA. 1643+95.42

NOTE: THE EXISTING CENTERLINE OF RIGHT OF WAY WAS FURNISHED BY O.D.O.T. DISTRICT 4. THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING THE O.D.O.T. RIGHT OF PLAN FOR PROJECT STA-62-(31.24-31.37) AND STARK COUNTY ROAD RECORD "A" PG. 183

PROP ℄ CONSTRUCTION
C.R. 67 CURVE 1:
P.I. Sta = 1648+44.97
D = 8°14'22" (RT)
Dc = 6°00'00"
R = 954.93'
T = 68.78'
L = 137.33'
E = 2.47'

REV. BY	DATE	DESCRIPTION

DATE COMPLETED: FEBRUARY 2003

SCALE IN FEET: 0, 10, 20, 40

PID NO. 22417

R/W DESIGNER GLT
R/W REVIEWER JOY

RIGHT OF WAY DETAIL SHEET
STA. 1643+95.42 TO STA. 1649+55

STA-173-1.85

9 / 10

84 / 85

RP400CR67.DGN

STA-173-1.85

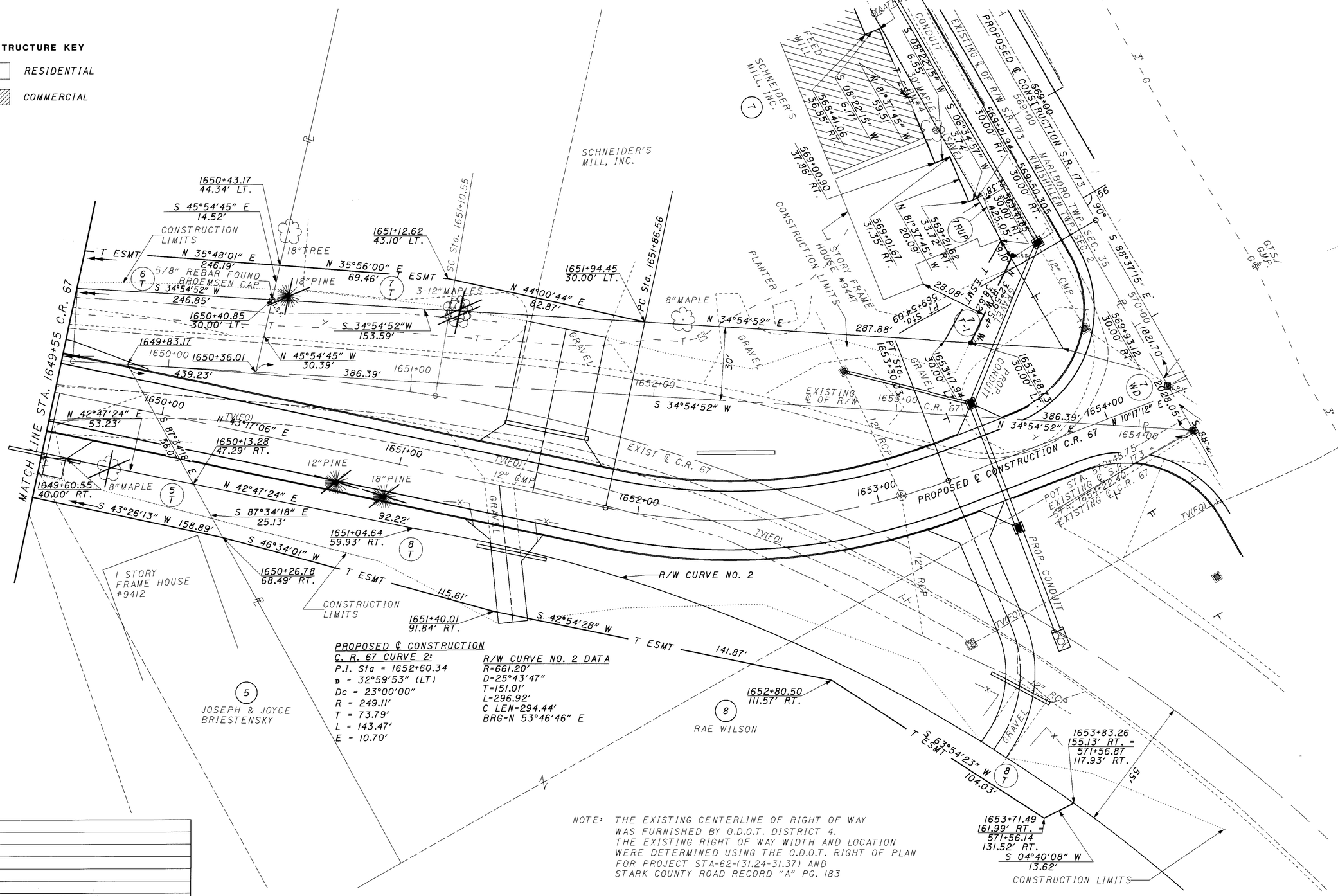
SECTION 35, T-20N, R-7W, MARLBORO TOWNSHIP
SECTION 2, T-19N, R-7W, NIMISHILLEN TOWNSHIP
STARK COUNTY, OHIO

MONUMENT LEGEND

- PROPOSED ADJUSTABLE CENTERLINE MONUMENT
- I.R.F. IRON BAR, REBAR, OR PIPE FOUND
- I.R.S. 3/4 " X 30" IRON REBAR WITH 1-1/2" DIA. ALUMINUM O.D.O.T. R/W CAP, TO BE SET

STRUCTURE KEY

- RESIDENTIAL
- COMMERCIAL



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REV. BY	DATE	DESCRIPTION

DATE COMPLETED: FEBRUARY 2003

RP401CR67.DGN

SCALE IN FEET: 0, 10, 20, 40

PID NO. 22417

R/W DESIGNER GLT
R/W REVIEWER JDY

RIGHT OF WAY DETAIL SHEET
STA. 1649+55 TO STA. 1654+36.93

STA-173-1.85

10 / 10

85 / 85