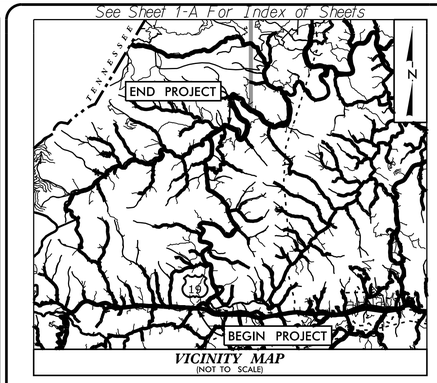
09/08/99

CONTRACT:

TIP PROJECT: M-0572F (WP-3)

See Sheet 1-A For Index of Sheets



VICINITY MAP
(NOT TO SCALE)



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

YANCEY COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	M-0572F	1	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
18313.1101		EM. REPAIR	

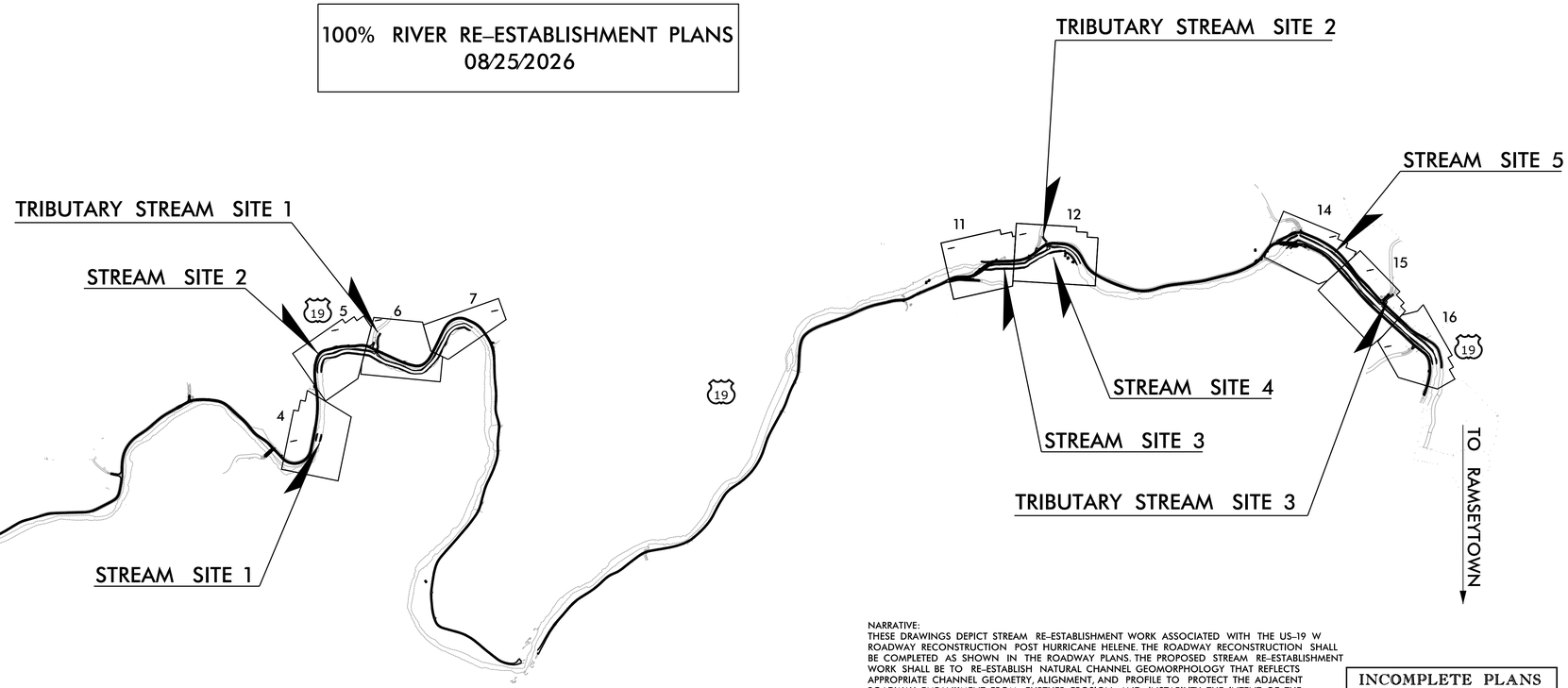
LOCATION: US 19 W FROM CANE RIVER SCHOOL ROAD (SR 1454) TO NORTH OF PINEY HILL ROAD (SR 1386)

TYPE OF WORK: GRADING, PAVING, DRAINAGE, AND STRUCTURES

NAD 83/2011

100% RIVER RE-ESTABLISHMENT PLANS
08/25/2026

SHEET	SHEET NO.
TITLE SHEET	1
CONVENTIONAL SYMBOLS	1B-1
ALIGNMENT DATA	2D-1 THRU 2D-2
TYPICAL SECTIONS	2D-3 THRU 2D-3a
STREAM DETAILS SHEET	2D-4 THRU 2D-5
PLAN & PROFILE SHEETS	4-19
CROSS SECTIONS	X-1 THRU X-180



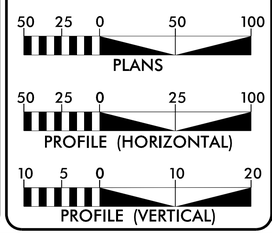
NARRATIVE:
THESE DRAWINGS DEPICT STREAM RE-ESTABLISHMENT WORK ASSOCIATED WITH THE US-19 W ROADWAY RECONSTRUCTION POST HURRICANE HELENE. THE ROADWAY RECONSTRUCTION SHALL BE COMPLETED AS SHOWN IN THE ROADWAY PLANS. THE PROPOSED STREAM RE-ESTABLISHMENT WORK SHALL BE TO RE-ESTABLISH NATURAL CHANNEL GEOMORPHOLOGY THAT REFLECTS APPROPRIATE CHANNEL GEOMETRY, ALIGNMENT, AND PROFILE TO PROTECT THE ADJACENT ROADWAY EMBANKMENT FROM FURTHER EROSION AND INSTABILITY. THE INTENT OF THE PROPOSED STREAM WORK IS TO UTILIZE AND RECONFIGURE EXISTING NATIVE MATERIAL ON-SITE TO ACHIEVE THE PROPOSED DESIGN AS CLOSELY AS PRACTICABLE. ADJUSTMENTS TO CHANNEL ALIGNMENT, PROFILE, AND GEOMETRY MAY BE MADE IN THE FIELD BY THE ENGINEER TO ACCOMODATE EXISTING SITE CONDITIONS AND ENSURE STABILITY AND FUNCTIONALITY OF THE STREAM SYSTEM. PRIORITY SHOULD BE PLACED ON ACHIEVING LONG-TERM CHANNEL AND ROADWAY STABILITY, UTILIZING NATIVE MATERIAL, AND MINIMIZING DISTURBANCE TO SURROUNDING AREAS DURING CONSTRUCTION.

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



DESIGN DATA

ADT EXISTING = 2,200
V = 50 MPH
FUNC CLASS =
MAJOR COLLECTOR
RURAL
REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY -L- (US 19W) = 9.473 MILES

LENGTH STRUCTURES -L- (US 19W) = 0.061 MILES

TOTAL LENGTH -L- (US 19W) M-0572F (WP-3) = 9.534 MILES

HDR Engineering, Inc. of the Carolinas
440 S Church St, Suite 1200 Charlotte, NC 28202
N.C.B.E.L.S. License Number: F-0116

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

LETTING DATE:

PAUL A. ROBBINS, P.E.
PROJECT ENGINEER

ALEXANDER D. SNIDER, P.E.
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

P.E.
SIGNATURE:

ROADWAY DESIGN ENGINEER

P.E.
SIGNATURE:

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_TSH.tbl
DATE: 8/24/2026
TIME: 12:50:25 PM

PROJECT REFERENCE NO.	SHEET NO.
M-0572F	1B-1

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

Note: Not to Scale

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin (EIP)
- Computed Property Corner
- Existing Concrete Monument (ECM)
- Parcel/Sequence Number
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary
- Proposed Wetland Boundary
- Existing Endangered Animal Boundary
- Existing Endangered Plant Boundary
- Existing Historic Property Boundary
- Known Contamination Area: Soil
- Potential Contamination Area: Soil
- Known Contamination Area: Water
- Potential Contamination Area: Water
- Contaminated Site: Known or Potential

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign
- Well
- Small Mine
- Foundation
- Area Outline
- Cemetery
- Building
- School
- Church
- Dam

HYDROLOGY:

- Stream or Body of Water
- Hydro, Pool or Reservoir
- Jurisdictional Stream
- Buffer Zone 1
- Buffer Zone 2
- Flow Arrow
- Disappearing Stream
- Spring
- Wetland
- Proposed Lateral, Tail, Head Ditch
- False Sump

RAILROADS:

- Standard Gauge — CSX TRANSPORTATION
- RR Signal Milepost — MILEPOST 35
- Switch — SWITCH
- RR Abandoned
- RR Dismantled

RIGHT OF WAY & PROJECT CONTROL:

- Primary Horiz Control Point
- Primary Horiz and Vert Control Point
- Secondary Horiz and Vert Control Point
- Vertical Benchmark
- Existing Right of Way Monument
- Proposed Right of Way Monument (Rebar and Cap)
- Proposed Right of Way Monument (Concrete)
- Existing Permanent Easement Monument
- Proposed Permanent Easement Monument (Rebar and Cap)
- Existing C/A Monument
- Proposed C/A Monument (Rebar and Cap)
- Proposed C/A Monument (Concrete)
- Existing Right of Way Line
- Proposed Right of Way Line
- Existing Control of Access Line
- Proposed Control of Access Line
- Proposed ROW and CA Line
- Existing Easement Line
- Proposed Temporary Construction Easement
- Proposed Temporary Drainage Easement — TDE
- Proposed Permanent Drainage Easement — PDE
- Proposed Permanent Drainage/Utility Easement — DUE
- Proposed Permanent Utility Easement — PUE
- Proposed Temporary Utility Easement — TUE
- Proposed Aerial Utility Easement — AUE

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut — C
- Proposed Slope Stakes Fill — F
- Proposed Curb Ramp — CR
- Existing Metal Guardrail
- Proposed Guardrail
- Existing Cable Guiderail
- Proposed Cable Guiderail
- Equality Symbol
- Pavement Removal

VEGETATION:

- Single Tree
- Single Shrub
- Hedge
- Woods Line
- Orchard
- Vineyard — Vineyard

EXISTING STRUCTURES:

MAJOR:

- Bridge, Tunnel or Box Culvert — CONC
- Bridge Wing Wall, Head Wall and End Wall — CONC WW

MINOR:

- Head and End Wall — CONC HW
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB — CB
- Paved Ditch Gutter
- Storm Sewer Manhole
- Storm Sewer — S

UTILITIES:

** SUE – Subsurface Utility Engineering*
LOS – Level of Service – A,B,C or D (Accuracy)

POWER:

- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole — P
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole — HH
- H–Frame Pole
- U/G Power Line Test Hole (SUE – LOS A)*
- U/G Power Line (SUE – LOS B)* — P
- U/G Power Line (SUE – LOS C)* — P
- U/G Power Line (SUE – LOS D)* — P

TELEPHONE:

- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole — T
- Telephone Pedestal — T
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole — HH
- U/G Telephone Test Hole (SUE – LOS A)*
- U/G Telephone Cable (SUE – LOS B)* — T
- U/G Telephone Cable (SUE – LOS C)* — T
- U/G Telephone Cable (SUE – LOS D)* — T
- U/G Telephone Conduit (SUE – LOS B)* — TC
- U/G Telephone Conduit (SUE – LOS C)* — TC
- U/G Telephone Conduit (SUE – LOS D)* — TC
- U/G Fiber Optics Cable (SUE – LOS B)* — T FO
- U/G Fiber Optics Cable (SUE – LOS C)* — T FO
- U/G Fiber Optics Cable (SUE – LOS D)* — T FO

WATER:

- Water Manhole — W
- Water Meter
- Water Valve
- Water Hydrant
- U/G Water Line Test Hole (SUE – LOS A)*
- U/G Water Line (SUE – LOS B)* — W
- U/G Water Line (SUE – LOS C)* — W
- U/G Water Line (SUE – LOS D)* — W
- Above Ground Water Line — A/G Water

TV:

- TV Pedestal — C
- TV Tower
- U/G TV Cable Hand Hole — HH
- U/G TV Test Hole (SUE – LOS A)*
- U/G TV Cable (SUE – LOS B)* — TV
- U/G TV Cable (SUE – LOS C)* — TV
- U/G TV Cable (SUE – LOS D)* — TV
- U/G Fiber Optic Cable (SUE – LOS B)* — TV FO
- U/G Fiber Optic Cable (SUE – LOS C)* — TV FO
- U/G Fiber Optic Cable (SUE – LOS D)* — TV FO

GAS:

- Gas Valve
- Gas Meter
- U/G Gas Line Test Hole (SUE – LOS A)*
- U/G Gas Line (SUE – LOS B)* — G
- U/G Gas Line (SUE – LOS C)* — G
- U/G Gas Line (SUE – LOS D)* — G
- Above Ground Gas Line — A/G Gas

SANITARY SEWER:

- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line — SS
- Above Ground Sanitary Sewer — A/G Sanitary Sewer
- SS Force Main Line Test Hole (SUE – LOS A)*
- SS Force Main Line (SUE – LOS B)* — FSS
- SS Force Main Line (SUE – LOS C)* — FSS
- SS Force Main Line (SUE – LOS D)* — FSS

MISCELLANEOUS:

- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box — S
- Utility Unknown U/G Line (SUE – LOS B)* — TUTL
- U/G Tank; Water, Gas, Oil
- Underground Storage Tank, Approx. Loc. — UST
- A/G Tank; Water, Gas, Oil
- Geoenvironmental Boring
- Abandoned According to Utility Records — AATUR
- End of Information — E.O.I.

9/10/2021
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FILE: \
PENTABLE: US_19W_South_STRM_TSH.tbl
DATE: 8/24/2026
TIME: 12:50:26 PM

STREAM SITE 1 ALIGNMENT DATA

Chain SS1 contains:
1000 1001 1002 1003 1004

Beginning chain SS1 description

Point 1000 N 815,728.590357 E 996,353.497819 Sta 0+00.000000

Course from 1000 to 1001 N 64° 22' 21.852549" W Dist 100.000000

Point 1001 N 815,771.841839 E 996,263.335137 Sta 1+00.000000

Course from 1001 to 1002 N 64° 22' 21.852561" W Dist 150.127309

Point 1002 N 815,836.774125 E 996,127.976329 Sta 2+50.127309

Course from 1002 to 1003 N 64° 51' 50.491010" W Dist 44.016179

Point 1003 N 815,855.470786 E 996,088.128382 Sta 2+94.143488

Course from 1003 to 1004 N 66° 17' 16.425314" W Dist 55.991431

Point 1004 N 815,877.987247 E 996,036.863879 Sta 3+50.134918

Ending chain SS1 description

STREAM SITE 2 ALIGNMENT DATA

Chain SS2 contains:
2000 2001 2002 2003 CUR SS2-1 CUR SS2-2 2004 2005 2006 CUR SS2-3 2007 2008 CUR-
SS2-4 CUR SS2-5 CUR SS2-6 CUR SS2-7 CUR SS2-8 CUR SS2-9 CUR SS2-10 CUR SS2-11 CUR SS2-12 2009 2010 CUR SS2-13 2011 2012 CUR SS2-14 2013 2014 2015

Beginning chain SS2 description

Point 2000 N 816,055.373118 E 995,149.269276 Sta 0+00.000000

Course from 2000 to 2001 N 84° 11' 55.173894" W Dist 100.000000

Point 2001 N 816,065.481076 E 995,049.781441 Sta 1+00.000000

Course from 2001 to 2002 N 85° 26' 48.283353" W Dist 42.927995

Point 2002 N 816,068.888943 E 995,006.988929 Sta 1+42.927995

Course from 2002 to 2003 N 74° 30' 08.407051" W Dist 75.081430

Point 2003 N 816,088.950634 E 994,934.637358 Sta 2+18.009425

Course from 2003 to PC SS2-1 N 68° 54' 31.888252" W Dist 23.122218

Curve Data

Curve SS2-1
P.I. Station 2+64.538203 N 816,105.694134 E 994,891.225582
Delta = 13° 07' 42.864388" (RT)
Degree = 28° 10' 04.789997"
Tangent = 23.406560
Length = 46.608118
Radius = 203.407360
External = 1.342295
Long Chord = 46.506223
Mid. Ord. = 1.333495
P.C. Station 2+41.131643 N 816,097.271223 E 994,913.064117
P.T. Station 2+87.739761 N 816,118.857233 E 994,871.870999
C.C. N 816,287.052157 E 994,986.260778
Back = N 68° 54' 31.888268" W
Ahead = N 55° 46' 49.023880" W
Chord Bear = N 62° 20' 40.456074" W

Course from PT SS2-1 to PC SS2-2 N 55° 46' 49.023902" W Dist 54.783951

Curve Data

Curve SS2-2
P.I. Station 4+12.984323 N 816,189.290760 E 994,768.307885
Delta = 63° 51' 31.455643" (RT)
Degree = 50° 40' 21.453897"
Tangent = 70.460612
Length = 126.022160
Radius = 113.070476
External = 20.157263
Long Chord = 119.599942
Mid. Ord. = 17.107483
P.C. Station 3+42.523712 N 816,149.665971 E 994,826.570856
P.T. Station 4+68.545871 N 816,259.052161 E 994,778.209638
C.C. N 816,243.162490 E 994,890.158067
Back = N 55° 46' 49.023879" W
Ahead = N 8° 04' 42.431764" E
Chord Bear = N 23° 51' 03.296058" W

Course from PT SS2-2 to 2004 N 6° 35' 58.323246" E Dist 61.409078

Point 2004 N 816,320.054324 E 994,785.267326 Sta 5+29.954949

Course from 2004 to 2005 N 0° 41' 42.019463" W Dist 94.391483

Point 2005 N 816,414.438862 E 994,784.122373 Sta 6+24.346432

Course from 2005 to 2006 N 10° 03' 30.265001" W Dist 42.126801

Point 2006 N 816,455.918184 E 994,776.764843 Sta 6+66.473233

Course from 2006 to PC SS2-3 N 13° 01' 22.074584" W Dist 72.718768

Curve Data

Curve SS2-3
P.I. Station 8+15.351922 N 816,601.699364 E 994,746.761459
Delta = 25° 03' 37.553820" (RT)
Degree = 16° 43' 11.688595"
Tangent = 76.159922
Length = 149.883740
Radius = 342.679880
External = 8.361192
Long Chord = 148.691849
Mid. Ord. = 8.162042
P.C. Station 7+39.192000 N 816,526.766659 E 994,760.378487
P.T. Station 8+89.075740 N 816,675.345838 E 994,766.165858
C.C. N 816,588.036176 E 995,097.536531
Back = N 10° 17' 58.528554" W
Ahead = N 14° 45' 39.025266" E
Chord Bear = N 2° 13' 50.248356" E

Course from PT SS2-3 to 2007 N 18° 22' 16.215611" E Dist 159.940479

Point 2007 N 816,827.134904 E 994,816.574548 Sta 10+49.016219

Course from 2007 to 2008 N 22° 09' 56.387372" E Dist 50.000000

Point 2008 N 816,873.439747 E 994,835.438841 Sta 10+99.016219

Course from 2008 to PC SS2-4 N 18° 09' 32.663978" E Dist 125.847610

Curve Data

Curve SS2-4
P.I. Station 12+68.695146 N 817,034.667800 E 994,888.320342
Delta = 24° 43' 21.483002" (RT)
Degree = 28° 38' 52.403124"
Tangent = 43.831317
Length = 86.298273
Radius = 200.000000
External = 4.746634
Long Chord = 85.630353
Mid. Ord. = 4.636593
P.C. Station 12+24.863829 N 816,993.019506 E 994,874.660038
P.T. Station 13+11.162102 N 817,066.785644 E 994,918.146982
C.C. N 816,930.688252 E 995,064.699020
Back = N 18° 09' 32.663982" E
Ahead = N 42° 52' 54.146983" E
Chord Bear = N 30° 31' 13.405483" E

Course from PT SS2-4 to PC SS2-5 N 42° 52' 54.146984" E Dist 256.407847

STREAM SITE 2 ALIGNMENT DATA (CONT'D)

Curve Data

Curve SS2-5
P.I. Station 15+92.945643 N 817,273.265405 E 995,109.897006
Delta = 3° 18' 03.004404" (RT)
Degree = 28° 38' 52.403124"
Tangent = 5,762637
Length = 11,522086
Radius = 200.000000
External = 0.083003
Long Chord = 11,520493
Mid. Ord. = 0.082968
P.C. Station 27+88.367224 N 818,275.602126 E 995,114,637379
P.T. Station 27+99.889310 N 818,282,763506 E 995,105,629071
C.C. N 818,435.515497 E 995,234,752798
Back = N 53° 05' 19.535733" W
Ahead = N 49° 47' 16.531329" W
Chord Bear = N 51° 26' 18.033531" W

Course from PT SS2-12 to 2009 N 49° 47' 16.531329" W Dist 174.470519

Point 2009 N 818,395,424918 E 994,972,392917 Sta 29+74,359829

Course from 2009 to 2010 N 49° 47' 16.531321" W Dist 50.000000

Point 2010 N 818,427,705850 E 994,934,209917 Sta 30+24,359829

Course from 2010 to PC SS2-13 N 54° 22' 17.229535" W Dist 46,133446

Curve Data

Curve SS2-13
P.I. Station 32+07,388142 N 818,532,912629 E 994,784,443803
Delta = 40° 19' 50.118280" (RT)
Degree = 15° 22' 13.59420"
Tangent = 136,894867
Length = 262,390547
Radius = 372.765970
External = 24,341916
Long Chord = 257,006974
Mid. Ord. = 22,849805
P.C. Station 30+70,493275 N 818,454,579875 E 994,896,712162
P.T. Station 33+32,883822 N 818,665,287211 E 994,749,555772
C.C. N 818,760,287639 E 995,110,012963
Back = N 55° 05' 43,611958" W
Ahead = N 14° 45' 39,936778" W
Chord Bear = N 34° 55' 48,552818" W

Course from PT SS2-13 to 2011 N 8° 21' 24,343883" W Dist 46,356804

Point 2011 N 818,711,151811 E 994,742,818439 Sta 33+79,240625

Course from 2011 to 2012 N 0° 21' 17.091597" E Dist 46,155819

Point 2012 N 818,757,306746 E 994,743,104211 Sta 34+25,396444

Course from 2012 to PC SS2-14 N 2° 41' 39,840345" E Dist 48,399752

Curve Data

Curve SS2-14
P.I. Station 35+01,965959 N 818,833,799570 E 994,746,607611
Delta = 43° 49' 53,411022" (RT)
Degree = 81° 49' 07,002232"
Tangent = 28,173363
Length = 53,571556
Radius = 70,027807
External = 5,454854
Long Chord = 52,274756
Mid. Ord. = 5,060652
P.C. Station 34+73,796196 N 818,805,652990 E 994,745,379427
P.T. Station 35+27,367752 N 818,853,253371 E 994,766,986228
C.C. N 818,802,600211 E 994,815,340661
Back = N 2° 29' 54,718729" E
Ahead = N 46° 19' 48,129789" E
Chord Bear = N 24° 24' 51,424278" E

Course from PT SS2-14 to 2013 N 44° 43' 59,897936" E Dist 115,705189

Point 2013 N 818,935,449236 E 994,848,420438 Sta 36+43,072940

Course from 2013 to 2014 N 46° 56' 49,074952" E Dist 50,000000

Point 2014 N 818,969,582988 E 994,884,956543 Sta 36+93,072940

Point 2015 N 818,969,582987 E 994,884,956543 Sta 36+93,072941

Ending chain SS2 description

STREAM SITE 3 ALIGNMENT DATA

Chain SS3 contains:
3000 3001 3002 3003 3004 CUR SS3-1 CUR SS3-2 3005 CUR SS3-3

Beginning chain SS3 descriptionn

Point 3000 N 828,045.384367 E 995,625.729162 Sta 0+00.000000

Course from 3000 to 3001 N 18° 31' 26.962050" E Dist 42.642917

Point 3001 N 828,085.817946 E 995,639.277006 Sta 0+42.642917

Course from 3001 to 3002 N 10° 55' 55.310454" E Dist 63.732581

Point 3002 N 828,148.393962 E 995,651.363531 Sta 1+06.375498

Course from 3002 to 3003 N 16° 12' 17.903912" E Dist 39.033502

Point 3003 N 828,185,876641 E 995,662,256785 Sta 1+45,408999

Course from 3003 to 3004 N 16° 12' 17.903924" E Dist 152,201277

Point 3004 N 828,332,030881 E 995,704,732274 Sta 2+97,610277

Course from 3004 to PC SS3-1 N 13° 00' 37.677363" E Dist 62,516067

Curve Data

Curve SS3-1
P.I. Station 3+90.221239 N 828,422,144087 E 995,726,082879
Delta = 21° 17' 36.700895" (LT)
Degree = 35° 47' 24,719836"
Tangent = 30,094895
Length = 59,495415
Radius = 160,087900
External = 2,804207
Long Chord = 59,153615
Mid. Ord. = 2,755932
P.C. Station 3+60.126344 N 828,392.942095 E 995,718,806456
P.T. Station 4+19.621759 N 828,451,994929 E 995,722,257970
C.C. N 828,431,648570 E 995,563,468294
Back = N 13° 59' 30,397528" E
Ahead = N 7° 18' 06,303367" W
Chord Bear = N 3° 20' 42,047081" E

Curve Data

Curve SS3-2
P.I. Station 4+42,840663 N 828,475,025541 E 995,719,306966
Delta = 19° 46' 25,894197" (RT)
Degree = 43° 00' 32,835728"
Tangent = 23,218904
Length = 45,975967
Radius = 133,217741
External = 2,008307
Long Chord = 45,748138
Mid. Ord. = 1,978481
P.C. Station 4+19,621759 N 828,451,994929 E 995,722,257970
P.T. Station 4+65,597727 N 828,497,696508 E 995,724,321421
C.C. N 828,468,926227 E 995,854,395390
Back = N 7° 18' 06,303367" W
Ahead = N 12° 28' 19,590831" E
Chord Bear = N 2° 35' 06,643732" E

Course from PT SS3-2 to 3005 N 11° 03' 05,954755" E Dist 95,581072

Point 3005 N 828,591,505006 E 995,742,643728 Sta 5+61,178798

Course from 3005 to PC SS3-3 N 11° 33' 35,518288" E Dist 190,944810

STREAM SITE 3 ALIGNMENT DATA (CONT'D)

Curve Data

Curve SS3-3
P.I. Station 7+96,396173 N 828,821,884444 E 995,790,099665
Delta = 6° 44' 51,814752" (LT)
Degree = 7° 37' 46,141216"
Tangent = 44,272565
Length = 88,442765
Radius = 750,978467
External = 1,303872
Long Chord = 88,391662
Mid. Ord. = 1,301612
P.C. Station 7+52,123608 N 828,778,576664 E 995,780,907485
P.T. Station 8+40,566373 N 828,865,972300 E 995,794,139594
C.C. N 828,434,500065 E 995,046,294287
Back = N 11° 58' 59,966996" E
Ahead = N 5° 14' 08,152244" E
Chord Bear = N 8° 36' 34,059620" E

Ending chain SS3 description

STREAM SITE 4 ALIGNMENT DATA

Chain SS4 contains:

4000 4001 CUR SS4-1 CUR SS4-2 4002 4003 4004 4005 CUR SS4-3 CUR SS4-4 CUR SS4-
5 4006 CUR SS4-6 CUR SS4-7 4007 4008

Beginning chain SS4 description

Point 4000 N 828,865,972300 E 995,794,139594 Sta 0+00,000000

Course from 4000 to 4001 N 5° 14' 08,152265" E Dist 87,268015

Point 4001 N 828,952,876224 E 995,802,102914 Sta 0+87,268015

Course from 4001 to PC SS4-1 N 6° 45' 40,789004" E Dist 36,469038

Curve Data

Curve SS4-1
P.I. Station 1+67,148263 N 829,031,896152 E 995,813,628824
Delta = 38° 40' 48,049530" (LT)
Degree = 46° 19' 24,839637"
Tangent = 43,411210
Length = 83,499645
Radius = 123,686028
External = 7,397025
Long Chord = 81,923026
Mid. Ord. = 6,979610
P.C. Station 1+23,737053 N 828,989,091627 E 995,806,396552
P.T. Station 2+07,236699 N 829,069,831395 E 995,792,523125
C.C. N 829,009,697618 E 995,684,439073
Back = N 9° 35' 24,528402" E
Ahead = N 29° 05' 23,521128" W
Chord Bear = N 9° 44' 59,496363" W

Curve Data

Curve SS4-2
P.I. Station 2+56,845517 N 829,112,568456 E 995,767,332285
Delta = 14° 05' 07,206578" (RT)
Degree = 14° 16' 06,003159"
Tangent = 49,608818
Length = 98,717446
Radius = 401,558995
External = 3,052746
Long Chord = 98,469051
Mid. Ord. = 3,029714
P.C. Station 2+07,236699 N 829,069,831395 E 995,792,523125
P.T. Station 3+05,954145 N 829,160,151212 E 995,753,299604
C.C. N 829,273,738865 E 996,138,458626
Back = N 30° 31' 00,141641" W
Ahead = N 16° 25' 52,935063" W
Chord Bear = N 23° 28' 26,538352" W

Course from PT SS4-2 to 4002 N 18° 37' 59,001645" W Dist 69,355152

Point 4002 N 829,225,871061 E 995,731,140213 Sta 3+75,309297

Course from 4002 to 4003 N 17° 58' 51,963423" W Dist 86,102373

Point 4003 N 829,307,768055 E 995,704,560129 Sta 4+61,411670

Course from 4003 to 4004 N 11° 34' 49,156142" W Dist 70,139919

Point 4004 N 829,376,480224 E 995,690,480139 Sta 5+31,551589

Course from 4004 to 4005 N 17° 49' 12,836517" W Dist 44,268355

Point 4005 N 829,418,624645 E 995,676,932628 Sta 5+75,819944

Course from 4005 to PC SS4-3 N 18° 58' 16,879614" W Dist 45,546121

Curve Data

Curve SS4-3
P.I. Station 6+92,503862 N 829,528,055354 E 995,636,491388
Delta = 26° 05' 37,542575" (RT)
Degree = 18° 39' 50,418175"
Tangent = 71,137797
Length = 139,807945
Radius = 306,985448
External = 8,134611
Long Chord = 138,602846
Mid. Ord. = 7,924621
P.C. Station 6+21,366065 N 829,461,696757 E 995,662,125793
P.T. Station 7+61,174010 N 829,598,925454 E 995,642,657015
C.C. N 829,572,318531 E 995,948,487257
Back = N 21° 07' 17,781329" W
Ahead = N 4° 58' 19,761246" E
Chord Bear = N 8° 04' 29,010041" W

Course from PT SS4-3 to PC SS4-4 N 4° 50' 44,921323" E Dist 65,281811

Curve Data

Curve SS4-4
P.I. Station 9+84,788457 N 829,821,812936 E 995,660,664471
Delta = 53° 14' 51,863802" (RT)
Degree = 18° 08' 23,797133"
Tangent = 158,332636
Length = 293,538618
Radius = 315,854231
External = 37,463075
Long Chord = 283,088500
Mid. Ord. = 33,490776
P.C. Station 8+26,455821 N 829,663,973924 E 995,648,171668
P.T. Station 11+19,994439 N 829,906,247277 E 995,794,605002
C.C. N 829,639,052311 E 995,963,041178
Back = N 4° 31' 31,693531" E
Ahead = N 57° 46' 23,557333" E
Chord Bear = N 31° 08' 57,625432" E

Course from PT SS4-4 to PC SS4-5 N 62° 00' 26,701120" E Dist 30,754771

Curve Data

Curve SS4-5
P.I. Station 12+41,552128 N 829,962,166445 E 995,902,534439
Delta = 18° 59' 57,454977" (RT)
Degree = 10° 33' 31,534278"
Tangent = 90,802919
Length = 179,938685
Radius = 542,637413
External = 7,544859
Long Chord = 179,115408
Mid. Ord. = 7,441393
P.C. Station 11+50,749209 N 829,920,682252 E 995,821,761721
P.T. Station 13+30,687895 N 829,975,094604 E 995,992,412316
C.C. N 829,437,985233 E 996,069,670878
Back = N 62° 48' 55,247215" E
Ahead = N 81° 48' 52,702212" E
Chord Bear = N 72° 18' 53,974713" E

Course from PT SS4-5 to 4006 N 79° 22' 09,981660" E Dist 10,114722

Point 4006 N 829,976,960524 E 996,002,353440 Sta 13+40,802617

Course from 4006 to PC SS4-6 N 81° 03' 49,483463" E Dist 105,094236

STREAM SITE 4 ALIGNMENT DATA (CONT'D)

Curve Data

Curve SS4-6
P.I. Station 14+69,324968 N 829,996,924608 E 996,129,315758
Delta = 10° 20' 37,829656" (LT)
Degree = 22° 08' 09,081762"
Tangent = 23,428115
Length = 46,729898
Radius = 258,836972
External = 1,058112
Long Chord = 46,665465
Mid. Ord. = 1,053804
P.C. Station 14+45,896853 N 829,993,285390 E 996,106,172018
P.T. Station 14+92,625751 N 830,004,660255 E 996,151,429924
C.C. N 830,248,980540 E 996,065,965448
Back = N 81° 03' 49,483459" E
Ahead = N 70° 43' 11,653804" E
Chord Bear = N 75° 53' 30,568632" E

Curve Data

Curve SS4-7
P.I. Station 15+05,631186 N 830,008,954474 E 996,163,705958
Delta = 5° 45' 10,406601" (LT)
Degree = 22° 08' 09,082570"
Tangent = 13,005435
Length = 25,989014
Radius = 258,836969
External = 0,326527
Long Chord = 25,978098
Mid. Ord. = 0,326116
P.C. Station 14+92,625751 N 830,004,660255 E 996,151,429924
P.T. Station 15+18,614764 N 830,014,457594 E 996,175,489719
C.C. N 830,248,980537 E 996,065,965449
Back = N 70° 43' 11,653804" E
Ahead = N 64° 58' 01,247202" E
Chord Bear = N 67° 50' 36,450503" E

Course from PT SS4-7 to 4007 N 65° 31' 51,753352" E Dist 50,385329

Point 4007 N 830,035,327206 E 996,221,349731 Sta 15+69,000093

Course from 4007 to 4008 N 65° 31' 32,902719" E Dist 53,245254

Point 4008 N 830,057,385828 E 996,269,810790 Sta 16+22,245347

Ending chain SS4 description

STREAM SITE 5 ALIGNMENT DATA

Chain SS5 contains:
5000 5001 5002 5003 CUR SS5-1 CUR SS5-2 CUR SS5-3 CUR SS5-4 5004 CUR SS5-5 500-
5 5006 CUR SS5-6 CUR SS5-7 CUR SS5-8 CUR SS5-9 5007 5008 5009 5010 5011 5012 50-
13 5014 5015 CUR SS5-10 5016 5017 5018

Beginning chain SS5 description

Point 5000 N 833,546,204655 E 996,597,383020 Sta 0+00.000000

Course from 5000 to 5001 N 23° 34' 44,749836" W Dist 38,420579

Point 5001 N 833,581,417450 E 996,582,014224 Sta 0+38,420579

Course from 5001 to 5002 N 44° 25' 49,973612" W Dist 107,323885

Point 5002 N 833,658,057387 E 996,506,882763 Sta 1+45,744464

Course from 5002 to 5003 N 32° 38' 32,723734" W Dist 53,013924

Point 5003 N 833,702,697934 E 996,478,287349 Sta 1+98,758388

Course from 5003 to PC SS5-1 N 33° 57' 43,936171" W Dist 39,394411

Curve Data

Curve SS5-1
P.I. Station 2+88,174449 N 833,777,201604 E 996,428,849149
Delta = 2° 18' 49,205379" (RT)
Degree = 2° 18' 46,731890"
Tangent = 50,021650
Length = 100,029705
Radius = 2,477,139999
External = 0,505000
Long Chord = 100,022909
Mid. Ord. = 0,504857
P.C. Station 2+38,152799 N 833,735,371906 E 996,456,279823
P.T. Station 3+38,182504 N 833,820,104582 E 996,403,129509
C.C. N 835,093,776084 E 998,527,743234
Back = N 33° 15' 20,420840" W
Ahead = N 30° 56' 31,215461" W
Chord Bear = N 32° 05' 55,816150" W

Curve Data

Curve SS5-2
P.I. Station 3+58,336816 N 833,837,539650 E 996,393,019381
Delta = 3° 46' 56,847745" (RT)
Degree = 9° 23' 13,749447"
Tangent = 20,154312
Length = 40,293383
Radius = 610,363779
External = 0,332659
Long Chord = 40,286667
Mid. Ord. = 0,332477
P.C. Station 3+38,182504 N 833,820,104582 E 996,403,129509
P.T. Station 3+78,476488 N 833,855,603689 E 996,384,081439
C.C. N 834,126,285014 E 996,931,142279
Back = N 30° 06' 29,860658" W
Ahead = N 26° 19' 33,012913" W
Chord Bear = N 28° 13' 01,436785" W

Curve Data

Curve SS5-3
P.I. Station 3+87,972421 N 833,864,114766 E 996,379,870226
Delta = 15° 20' 24,946899" (RT)
Degree = 81° 15' 31,645385"
Tangent = 9,495934
Length = 18,876281
Radius = 70,510254
External = 0,636557
Long Chord = 18,821946
Mid. Ord. = 0,630861
P.C. Station 3+78,476488 N 833,855,603689 E 996,384,081439
P.T. Station 3+97,354769 N 833,873,436689 E 996,378,060663
C.C. N 833,886,873252 E 996,447,278831
Back = N 26° 19' 33,012913" W
Ahead = N 10° 59' 08,066014" W
Chord Bear = N 18° 39' 20,539464" W

Course from PT SS5-3 to PC SS5-4 N 10° 59' 08,066012" W Dist 78,333869

Curve Data

Curve SS5-4
P.I. Station 5+06,886086 N 833,980,736099 E 996,356,128908
Delta = 46° 28' 50,167106" (RT)
Degree = 78° 52' 03,851056"
Tangent = 31,197448
Length = 58,934875
Radius = 72,647932
External = 6,415351
Long Chord = 57,332051
Mid. Ord. = 5,894797
P.C. Station 4+75,688638 N 833,950,335106 E 996,363,133218
P.T. Station 5+34,623513 N 834,006,749341 E 996,373,350755
C.C. N 833,966,645689 E 996,433,926486
Back = N 12° 58' 27,793472" W
Ahead = N 33° 30' 22,373634" W
Chord Bear = N 10° 15' 57,290081" E

STREAM SITE 5 ALIGNMENT DATA (CONT'D)

Course from PT SS5-4 to 5004 N 33° 30' 22,373620" E Dist 35,838143

Point 5004 N 834,036,632115 E 996,393,134394 Sta 5+70,461657

Course from 5004 to PC SS5-5 N 36° 01' 29,255259" E Dist 74,247457

Curve Data

Curve SS5-5
P.I. Station 6+84,468212 N 834,128,433882 E 996,460,729332
Delta = 4° 28' 31,389962" (LT)
Degree = 5° 37' 51,569712"
Tangent = 39,759098
Length = 79,477762
Radius = 1,017,507816
External = 0,776497
Long Chord = 79,457559
Mid. Ord. = 0,775905
P.C. Station 6+44,709114 N 834,096,680679 E 996,436,801942
P.T. Station 7+24,186876 N 834,161,957341 E 996,482,106038
C.C. N 834,709,026222 E 995,624,179588
Back = N 36° 59' 58,490668" E
Ahead = N 32° 31' 27,100706" E
Chord Bear = N 34° 45' 42,795687" E

Course from PT SS5-5 to 5005 N 32° 58' 14,128436" E Dist 69,532431

Point 5005 N 834,220,291574 E 996,519,946178 Sta 7+93,719307

Course from 5005 to 5006 N 32° 36' 12,373223" E Dist 113,314700

Point 5006 N 834,315,750153 E 996,581,002554 Sta 9+07,034007

Course from 5006 to PC SS5-6 N 38° 29' 29,390395" E Dist 92,442705

Curve Data

Curve SS5-6
P.I. Station 11+12,830472 N 834,476,827155 E 996,709,089963
Delta = 18° 11' 51,816546" (RT)
Degree = 8° 05' 42,458486"
Tangent = 113,353760
Length = 224,798524
Radius = 707,781076
External = 9,019542
Long Chord = 223,854847
Mid. Ord. = 8,906049
P.C. Station 9+99,476712 N 834,388,105107 E 996,638,538754
P.T. Station 12+24,275236 N 834,539,078773 E 996,803,820164
C.C. N 833,947,583233 E 997,192,519377
Back = N 38° 29' 29,390394" E
Ahead = N 56° 41' 21,206940" E
Chord Bear = N 47° 35' 25,298667" E

Course from PT SS5-6 to PC SS5-7 N 56° 41' 21,206940" E Dist 115,160855

Curve Data

Curve SS5-7
P.I. Station 14+23,105462 N 834,648,272357 E 996,969,983397
Delta = 4° 51' 34,355049" (RT)
Degree = 2° 54' 20,727527"
Tangent = 83,669371
Length = 167,238416
Radius = 1,971,801729
External = 1,774371
Long Chord = 167,188294
Mid. Ord. = 1,772776
P.C. Station 13+39,436091 N 834,602,322812 E 996,900,060562
P.T. Station 15+06,674507 N 834,688,133331 E 997,043,547427
C.C. N 832,954,480043 E 997,982,934639
Back = N 56° 41' 21,206940" E
Ahead = N 61° 32' 55,561969" E
Chord Bear = N 59° 07' 08,384464" E

Course from PT SS5-7 to PC SS5-8 N 61° 32' 55,561982" E Dist 66,197638

Curve Data

Curve SS5-8
P.I. Station 16+09,273460 N 834,737,012558 E 997,133,754778
Delta = 9° 39' 51,890877" (RT)
Degree = 13° 03' 10,046085"
Tangent = 36,401315
Length = 72,636428
Radius = 438,954254
External = 1,506746
Long Chord = 72,555383
Mid. Ord. = 1,501592
P.C. Station 15+72,872146 N 834,719,670586 E 997,101,749908
P.T. Station 16+45,508574 N 834,748,845735 E 997,168,179067
C.C. N 834,333,731942 E 997,310,872360
Back = N 61° 32' 55,561989" E
Ahead = N 71° 01' 47,452866" E
Chord Bear = N 66° 17' 21,507428" E

Course from PT SS5-8 to PC SS5-9 N 71° 01' 47,452792" E Dist 7,345725

Curve Data

Curve SS5-9
P.I. Station 17+17,164093 N 834,772,139192 E 997,235,942835
Delta = 8° 26' 53,438291" (LT)
Degree = 6° 34' 48,973330"
Tangent = 64,309794
Length = 128,386477
Radius = 870,720750
External = 2,371670
Long Chord = 128,270206
Mid. Ord. = 2,365228
P.C. Station 16+52,854299 N 834,751,233651 E 997,175,125831
P.T. Station 17+81,240776 N 834,801,752809 E 997,293,028589
C.C. N 835,574,663860 E 996,892,075808
Back = N 71° 01' 47,452864" E
Ahead = N 62° 34' 54,014574" E
Chord Bear = N 66° 48' 20,733719" E

Course from PT SS5-9 to 5007 N 62° 34' 54,014573" E Dist 198,314470

Point 5007 N 834,893,073406 E 997,469,066022 Sta 19+79,555246

Course from 5007 to 5008 N 58° 59' 44,280128" E Dist 134,158954

Point 5008 N 834,962,179140 E 997,584,057424 Sta 21+13,714200

Course from 5008 to 5009 N 56° 30' 46,307104" E Dist 206,502180

Point 5009 N 835,076,116669 E 997,756,282249 Sta 23+20,216381

Course from 5009 to 5010 N 57° 50' 10,363521" E Dist 188,468409

Point 5010 N 835,176,446197 E 997,915,826370 Sta 25+08,684789

Course from 5010 to 5011 N 56° 14' 27,577619" E Dist 94,376641

Point 5011 N 835,228,891384 E 997,994,289437 Sta 26+03,061431

Course from 5011 to 5012 N 53° 22' 54,352342" E Dist 413,923998

Point 5012 N 835,475,788560 E 998,326,515811 Sta 30+16,984829

BRANCH CIVIL

HDR Engineering, Inc. of the Carolinas
555 Fayetteville St. Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116

PROJECT REFERENCE NO.	SHEET NO.
	2D-1
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS

PLOT DRIVER: NCDOT_pdf_color_eng-50.plt PENTABLE: US_19W_South_STRM.tbl
USER: GJACOBSON DATE: 8/24/2026 TIME: 12:51:08 PM
FILE: \

STREAM SITE 5 ALIGNMENT DATA (CONT'D)

Course from 5012 to 5013 N 57° 42' 20.469966" E Dist 116.764618

Point 5013 N 835,538.172213 E 998,425.218678 Sta 31+33.749446

Course from 5013 to 5014 N 52° 00' 12.715289" E Dist 102.939522

Point 5014 N 835,601.543110 E 998,506.340034 Sta 32+36.688968

Course from 5014 to 5015 N 50° 00' 18.079056" E Dist 297.447285

Point 5015 N 835,792.718566 E 998,734.214631 Sta 35+34.136253

Course from 5015 to PC SS5-10 N 57° 02' 33.399159" E Dist 192.302801

Curve Data

Curve SS5-10
P.I. Station 37+95.423306 N 835,930.464296 E 998,956.079229
Delta = 30° 27' 25.373768" (RT)
Degree = 22° 36' 37.112153"
Tangent = 68.984253
Length = 134.704255
Radius = 253.405558
External = 9.221942
Long Chord = 133.123858
Mid. Ord. = 8.898122
P.C. Station 37+26.439054 N 835,897.334206 E 998,895.571178
P.T. Station 38+61.143309 N 835,928.351678 E 999,025.031125
C.C. N 835,675.064978 E 999,017.270673
Back = N 61° 17' 52.397947" E
Ahead = S 88° 14' 42.228285" E
Chord Bear = N 76° 31' 35.084831" E

Course from PT SS5-10 to 5016 S 88° 14' 42.228301" E Dist 38.026586

Point 5016 N 835,927.187128 E 999,063.039875 Sta 38+99.169895

Course from 5016 to 5017 S 86° 03' 24.528638" E Dist 67.089284

Point 5017 N 835,922.573581 E 999,129.970340 Sta 39+66.259179

Course from 5017 to 5018 S 74° 48' 11.037067" E Dist 126.960882

Point 5018 N 835,889.292367 E 999,252.491467 Sta 40+93.220061

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Ending chain SS5 description

TRIBUTARY STREAM SITE 1 ALIGNMENT DATA

Chain TSS1 contains:
900 901 902 903 904 905 CUR TSS1-1 906 907 CUR TSS1-2 CUR TSS1-3 908 909 910

Beginning chain TSS1 description

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Point 900 N 817,307,023862 E 994,523,130114 Sta 0+00.000000

Course from 900 to 901 S 37° 44' 37.350345" E Dist 49.999978

Point 901 N 817,267,486040 E 994,553,736623 Sta 0+49.999978

Course from 901 to 902 S 61° 12' 13.630583" E Dist 45.056744

Point 902 N 817,245,782397 E 994,593,221583 Sta 0+95.056721

Course from 902 to 903 S 61° 12' 23.443474" E Dist 41.492268

Point 903 N 817,225,797477 E 994,629,583806 Sta 1+36.548989

Course from 903 to 904 S 61° 45' 19.262171" E Dist 17.525051

Point 904 N 817,217,503968 E 994,645,022235 Sta 1+54.074040

Course from 904 to 905 S 64° 40' 20.100110" E Dist 5.574725

Point 905 N 817,215,119125 E 994,650,061093 Sta 1+59.648765

Course from 905 to PC TSS1-1 S 64° 08' 25.411264" E Dist 15.918386

Curve Data

Curve TSS1-1
P.I. Station 2+00.451613 N 817,197.322248 E 994,686.778168
Delta = 24° 28' 18.087525" (LT)
Degree = 49° 55' 55.238824"
Tangent = 24.884462
Length = 49.010025
Radius = 114.747591
External = 2.667255
Long Chord = 48.638348
Mid. Ord. = 2.606664
P.C. Station 1+75.567152 N 817,208.176041 E 994,664.385409
P.T. Station 2+24.577177 N 817,196.719512 E 994,711.655329
C.C. N 817,311.433439 E 994,714.434671
Back = S 64° 08' 25.411240" E
Ahead = S 88° 36' 43.498765" E
Chord Bear = S 76° 22' 34.455003" E

Course from PT TSS1-1 to 906 S 88° 36' 43.498726" E Dist 43.914558

Point 906 N 817,195.655842 E 994,755.557003 Sta 2+68.491734

Course from 906 to 907 S 89° 46' 40.441261" E Dist 16.393857

Point 907 N 817,195.592294 E 994,771.950737 Sta 2+84.885592

Course from 907 to PC TSS1-2 S 89° 55' 40.328075" E Dist 1.394764

Curve Data

Curve TSS1-2
P.I. Station 2+97.442852 N 817,195.576485 E 994,784.507988
Delta = 11° 29' 26.010483" (LT)
Degree = 51° 38' 33.668041"
Tangent = 11.162407
Length = 22.250118
Radius = 110.946553
External = 0.560124
Long Chord = 22.212850
Mid. Ord. = 0.557310
P.C. Station 2+86.280355 N 817,195.590538 E 994,773.345500
P.T. Station 3+08.530473 N 817,197.786354 E 994,795.449551
C.C. N 817,306.537003 E 994,773.485173
Back = S 89° 55' 40.327988" E
Ahead = N 78° 34' 53.661529" E
Chord Bear = N 84° 19' 36.666771" E

Course from PT TSS1-2 to PC TSS1-3 N 78° 01' 21.633566" E Dist 2.850320

Curve Data

Curve TSS1-3
P.I. Station 3+19.632032 N 817,200.090199 E 994,806.309427
Delta = 40° 42' 37.235206" (RT)
Degree = 257° 37' 23.162931"
Tangent = 8.251238
Length = 15.802288
Radius = 22.240156
External = 1.481300
Long Chord = 15.471970
Mid. Ord. = 1.388799
P.C. Station 3+11.380793 N 817,198.377865 E 994,798.237819
P.T. Station 3+27.183081 N 817,196.123591 E 994,813.544684
C.C. N 817,176.621881 E 994,802.853198
Back = N 78° 01' 21.635702" E
Ahead = S 61° 16' 01.129093" E
Chord Bear = S 81° 37' 19.746696" E

Course from PT TSS1-3 to 908 S 61° 16' 01.129140" E Dist 34.158137

Point 908 N 817,179,702786 E 994,843.496904 Sta 3+61.341218

Course from 908 to 909 S 61° 16' 01.129071" E Dist 45.982795

Point 909 N 817,157.597527 E 994,883.817803 Sta 4+07.324012

Course from 909 to 910 S 61° 16' 01.129081" E Dist 89.671576

Point 910 N 817,114.489807 E 994,962.448052 Sta 4+96.995589

==========

Ending chain TSS1 description

TRIBUTARY STREAM SITE 2 ALIGNMENT DATA

Chain TSS2 contains:
20000 20001 20002 20003 20004 20005 20006 20007 20008 20009 20010 20011 20012
20013 20014 20015 20016 20017 CUR TSS2-1 20018 20019 20020

Beginning chain TSS2 description

==========

Point 20000 N 829,449,067845 E 995,315,901181 Sta 0+00.000000

Course from 20000 to 20001 N 80° 57' 50.689303" E Dist 6.740371

Point 20001 N 829,450,126444 E 995,322,557905 Sta 0+06.740371

Course from 20001 to 20002 S 89° 02' 45.211802" E Dist 9.668817

Point 20002 N 829,449,965444 E 995,332,225382 Sta 0+16.409189

Course from 20002 to 20003 S 78° 43' 15.112647" E Dist 8.127554

Point 20003 N 829,448,375783 E 995,340,195960 Sta 0+24.536743

Course from 20003 to 20004 N 81° 21' 18.596699" E Dist 9.152079

Point 20004 N 829,449,751423 E 995,349,244063 Sta 0+33.688822

Course from 20004 to 20005 S 67° 55' 16.937915" E Dist 10.228550

Point 20005 N 829,445,906729 E 995,358,722543 Sta 0+43.917373

Course from 20005 to 20006 N 89° 22' 54.118876" E Dist 15.054707

Point 20006 N 829,446,069187 E 995,373,776373 Sta 0+58.972080

Course from 20006 to 20007 N 85° 55' 06.735296" E Dist 19.597373

Point 20007 N 829,447,464025 E 995,393,324044 Sta 0+78.569452

Course from 20007 to 20008 N 68° 00' 38.572362" E Dist 22.214833

Point 20008 N 829,455,781996 E 995,413,922834 Sta 1+00.784285

Course from 20008 to 20009 N 61° 29' 34.730911" E Dist 22.792019

Point 20009 N 829,466.659861 E 995,433.951518 Sta 1+23.576304

Course from 20009 to 20010 N 59° 22' 52.087254" E Dist 11.875019

Point 20010 N 829,472.708103 E 995,444.170856 Sta 1+35.451324

Course from 20010 to 20011 N 66° 16' 17.458308" E Dist 15.038537

Point 20011 N 829,478.759654 E 995,457.938075 Sta 1+50.489861

Course from 20011 to 20012 N 54° 19' 10.260087" E Dist 8.531230

Point 20012 N 829,483.735618 E 995,464,867842 Sta 1+59,021091

Course from 20012 to 20013 N 45° 51' 24.107391" E Dist 5.508246

Point 20013 N 829,487,571866 E 995,468,820560 Sta 1+64.529337

Course from 20013 to 20014 N 66° 04' 51.868051" E Dist 10.588293

Point 20014 N 829,491.864821 E 995,478.499531 Sta 1+75.117630

Course from 20014 to 20015 N 78° 01' 35.098037" E Dist 5.617589

Point 20015 N 829,493.030250 E 995,483.994900 Sta 1+80.735219

Course from 20015 to 20016 N 85° 34' 25.817811" E Dist 43.501538

Point 20016 N 829,496.387450 E 995,527.366700 Sta 2+24.236757

Course from 20016 to 20017 N 85° 34' 25.130615" E Dist 14.000929

Point 20017 N 829,497,468008 E 995,541.325869 Sta 2+38.237686

Course from 20017 to PC TSS2-1 N 83° 20' 30.684865" E Dist 10.000000

Curve Data

Curve TSS2-1
P.I. Station 2+58.284923 N 829,499.792388 E 995,561.237900
Delta = 46° 08' 32.210584" (LT)
Degree = 242° 53' 55.743261"
Tangent = 10.047236
Length = 18.996503
Radius = 23.588332
External = 2.050630
Long Chord = 18.487297
Mid. Ord. = 1.886618
P.C. Station 2+48.237686 N 829,498.627460 E 995,551.258426
P.T. Station 2+67.234189 N 829,507.795357 E 995,567.312391
C.C. N 829,522.056703 E 995,548.523473
Back = N 83° 20' 30.684797" E
Ahead = N 37° 11' 58.474213" E
Chord Bear = N 60° 16' 14.579504" E

Course from PT TSS2-1 to 20018 N 37° 11' 58.474209" E Dist 45.344881

Point 20018 N 829,543,914115 E 995,594.727598 Sta 3+12.579070

Course from 20018 to 20019 N 40° 19' 35.284933" E Dist 35.966875

Point 20019 N 829,571.334162 E 995,618.003275 Sta 3+48.545946

Course from 20019 to 20020 N 41° 46' 54.661447" E Dist 37.001166

Point 20020 N 829,598.925454 E 995,642.657015 Sta 3+85.547112

==========

Ending chain TSS2 description

TRIBUTARY STREAM SITE 3 ALIGNMENT DATA

Chain TSS3 contains:
30000 30001 30002 30003 30004 30005 30006 30007 30008 30009 30010 30011 30012
-
30013

Beginning chain TSS3 description

==========

Point 30000 N 835,492.205603 E 997,678,903225 Sta 0+00.000000

Course from 30000 to 30001 S 45° 52' 54.367382" E Dist 50,000000

Point 30001 N 835,457,398540 E 997,714,798467 Sta 0+50,000000

Course from 30001 to 30002 S 44° 40' 47.632157" E Dist 27,315954

Point 30002 N 835,437,975634 E 997,734,005551 Sta 0+77.315954

Course from 30002 to 30003 S 36° 22' 36.866379" E Dist 15.123864

Point 30003 N 835,425,798914 E 997,742,975430 Sta 0+92,439818

Course from 30003 to 30004 S 17° 27' 42.481459" E Dist 34.251137

Point 30004 N 835,393,126165 E 997,753,253164 Sta 1+26,690954

Course from 30004 to 30005 S 8° 14' 36.261817" E Dist 23.047990

Point 30005 N 835,370,316309 E 997,756,557756 Sta 1+49,738944

Course from 30005 to 30006 S 30° 54' 03.707277" E Dist 24.838557

Point 30006 N 835,349,003444 E 997,769,313763 Sta 1+74,577501

Course from 30006 to 30007 S 33° 20' 16.284737" E Dist 31.827652

Point 30007 N 835,322,413209 E 997,786,805443 Sta 2+06,405154

Course from 30007 to 30008 S 28° 12' 10.592473" E Dist 11.093692

Point 30008 N 835,312,636570 E 997,792,048277 Sta 2+17,498845

Course from 30008 to 30009 S 38° 53' 23.442279" E Dist 15,062479

Point 30009 N 835,300,912622 E 997,801,504880 Sta 2+32,561324

Course from 30009 to 30010 S 35° 44' 51.685037" E Dist 26,579572

Point 30010 N 835,279,340707 E 997,817,033116 Sta 2+59,140896

Course from 30010 to 30011 S 30° 32' 47.156554" E Dist 15.270116

Point 30011 N 835,266,189815 E 997,824,793946 Sta 2+74,411013

Course from 30011 to 30012 S 33° 07' 12.360059" E Dist 61,267372

Point 30012 N 835,214,876731 E 997,858,270181 Sta 3+35,678384

Course from 30012 to 30013 S 36° 55' 58.786825" E Dist 63,391613

Point 30013 N 835,164,205359 E 997,896,360976 Sta 3+99,069998

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Ending chain TSS3 description

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555 Fayetteville St, Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116

PROJECT REFERENCE NO.	SHEET NO.
	2D–2

R/W SHEET NO.

ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

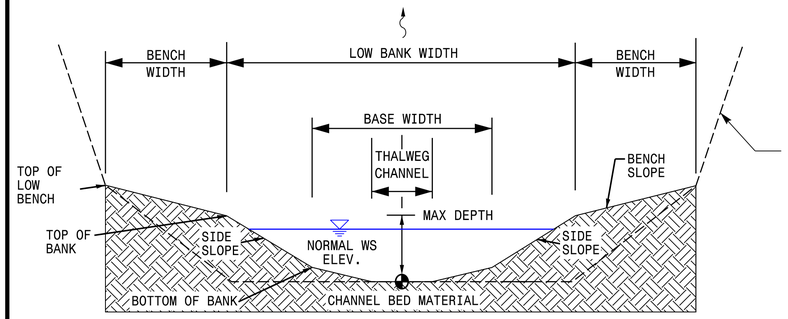
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REVISIONS

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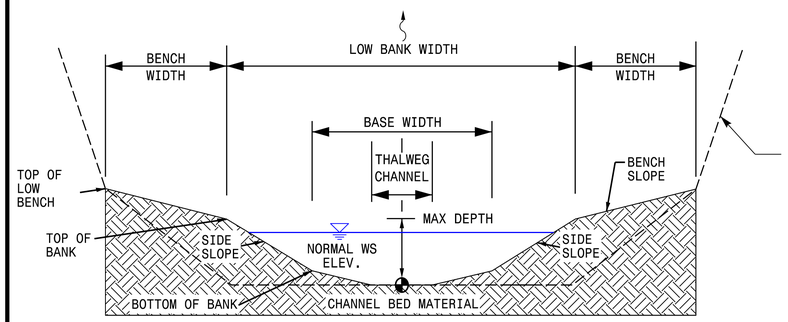
THALWEG (DEEPEST POINT IN CROSS SECTION)
IS LOCATED IN CENTER OF CHANNEL IN A POOL.

NOTES:
- ALL CROSS SECTIONS ARE SHOWN LOOKING IN THE (DOWNSTREAM) DIRECTION.
- ⊕ - GRADE POINT IS THE ELEVATION SHOWN ON PROFILE.
- ALL SHARP CORNERS SHOULD BE ROUNDED
- CONSTRUCT CHANNEL BED USING LOCAL MATERIAL CONSISTING OF GRAVEL, COBBLE, AND BOULDERS. LARGEST LOCAL MATERIAL SHOULD BE UTILIZED IN THE OVERBANK AREA.
- POOL TYPICAL CROSS SECTION SHALL BE APPLIED AT "MID POOL" AND "GLIDE" PROFILE FEATURES.

TYPICAL SECTION - POOL

SCALE: NTS
ALL UNITS ARE IN FEET

VARIABLE	STREAM SITE 1, 2, & 4	STREAM SITE 5
BENCH WIDTH (MAX.)	20	20
BENCH SLOPE	6:1	6:1
LOW BANK WIDTH	68	77
MAXIMUM DEPTH	5.0	5.6
SIDE SLOPE (H:V)	2.5:1	2.5:1
BASE WIDTH	49	56
THALWEG CHANNEL SIDE SLOPE (H:V)	12:1	12:1
THALWEG CHANNEL WIDTH	20	20



THALWEG (DEEPEST POINT IN CROSS SECTION)
IS LOCATED IN CENTER OF CHANNEL IN A RIFFLE.

NOTES:
- ALL CROSS SECTIONS ARE SHOWN LOOKING IN THE (DOWNSTREAM) DIRECTION.
- ⊕ - GRADE POINT IS THE ELEVATION SHOWN ON PROFILE.
- ALL SHARP CORNERS SHOULD BE ROUNDED
- CONSTRUCT CHANNEL BED USING LOCAL MATERIAL CONSISTING OF GRAVEL, COBBLE, AND BOULDERS. LARGEST LOCAL MATERIAL SHOULD BE UTILIZED IN THE OVERBANK AREA.
- RIFFLE TYPICAL CROSS SECTION SHALL BE APPLIED AT "RIFFLE" AND "RUN" PROFILE FEATURES.

TYPICAL SECTION - RIFFLE

SCALE: NTS
ALL UNITS ARE IN FEET

VARIABLE	STREAM SITE 1, 2, & 4	STREAM SITE 5
BENCH WIDTH (MAX.)	20	20
BENCH SLOPE	10:1	10:1
LOW BANK WIDTH	60	70
MAXIMUM DEPTH	3.0	3.5
SIDE SLOPE (H:V)	3:1	3:1
BASE WIDTH	48	58
THALWEG CHANNEL SIDE SLOPE (H:V)	12:1	12:1
THALWEG CHANNEL WIDTH	24	24

BRANCH CIVIL

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555 Fayetteville St, Suite 900 Raleigh, N.C. 27601
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PROJECT REFERENCE NO.	SHEET NO.
	2D–3
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
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DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

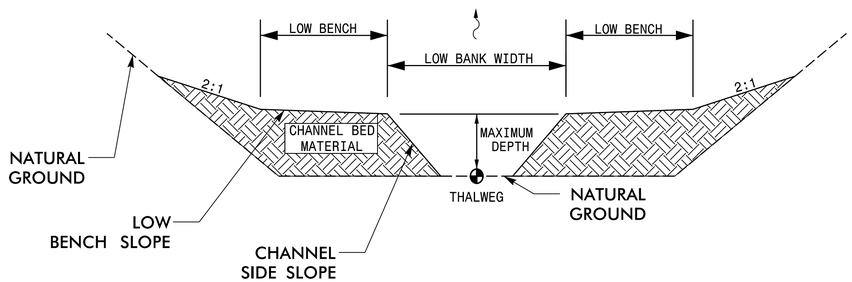
TYPICAL CHANNEL SECTION

VARIABLE	STATION - STATION
STREAM SITE 1	L1 Sta. 167+00.00 - 168+50.00
STREAM SITE 2	L2 Sta. 179+40.35 - 217+16.54
STREAM SITE 3	L3 Sta. 411+96.70 - 418+82.55
STREAM SITE 4	L3 Sta. 418+82.55 - 433+50.38
STREAM SITE 5	L4 Sta. 474+09.22 - 509+65.36

TYPICAL SECTION - CHANNEL MODIFICATION - LOW FLOW BENCH

SCALE: NTS
ALL UNITS ARE IN FEET

VARIABLE	STREAM SITE 3
LOW BANK WIDTH	60
MAXIMUM DEPTH	3
CHANNEL SIDE SLOPE (H:V)	MIN 2.5:1
LOW BENCH SLOPE	10:1
LOW BENCH WIDTH (MAX.)	20



		Stream Site									
		SS1		SS2		SS3		SS4		SS5	
Parameter	Unit	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Riffle Slope	%	-0.5	-1	-0.25	-1	N/A	N/A	-1.0	-2	-1	-3
Run Slope	%	-8	-10	-6	-10	N/A	N/A	-6	-10	-6	-12
Pool Slope	%	1	3	0.25	1	N/A	N/A	0.25	1	0.25	1
Glide Slope	%	5	7	3	8	N/A	N/A	4	8	5	10
Riffle Length	Ft	15	30	50	425	N/A	N/A	200	300	50	300
Pool Length	Ft	85	100	110	310	N/A	N/A	250	350	100	300

NOTES:

1. PROVIDED RANGES ARE ALLOWABLE ADJUSTMENTS FROM SPECIFIED DESIGN PARAMETERS DURING IN–FIELD ADJUSTMENTS AS APPROVED BY ENGINEER.

REVISIONS

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FILE: \
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N.C.B.E.L.S. License Number: F-0116

PROJECT REFERENCE NO.	SHEET NO.
	2D-3A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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ROCK STEP-POOL
SCALE:NTS

NOTES:
1. DIMENSIONS ARE APPROXIMATE AND MAY BE SUBJECT TO CHANGE BASED ON FIELD CONDITIONS AND THE DIRECTION OF THE ENGINEER AND/OR CLIENT REPRESENTATIVE.

2. CONSTRUCT STEP-POOL STRUCTURE BEGINNING AT THE DOWNSTREAM END AND MOVING IN THE UPSTREAM DIRECTION.

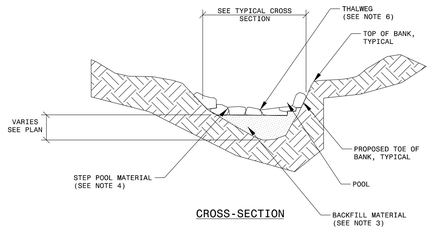
3. BACKFILL MATERIAL, IF NEEDED TO ESTABLISH A STEP-POOL SUBPAVEMENT AND/OR TO RAISE THE CHANNEL BED DUE TO SCOUR/INCISION, SHALL BE OF A TYPE, SIZE, AND GRADATION AS SPECIFIED BY THE DESIGNER. BACKFILL SHALL BE PLACED SUCH THAT THE ADDITION OF THE SPECIFIED THICKNESS OF STEP-POOL MATERIAL SHALL ACHIEVE THE DESIGNATED GRADES.

4. STEP-POOL MATERIAL SHALL BE NATIVE COBBLE/GRAVEL BED MATERIAL. STEP-POOL MATERIAL MAY BE EXCAVATED, STOCKPILED, AND RE-USED FROM MODIFIED CHANNEL SECTIONS. LOGS AND OTHER WOODY DEBRIS MAY BE INCORPORATED INTO THE STEP-POOL MATERIALS.

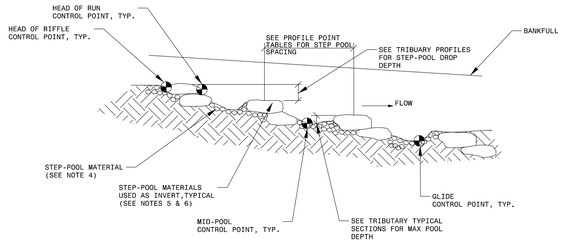
5. BOULDERS SHALL BE SOURCED ON SITE WITH SIZE DIMENSIONS MEETING THE MINIMUM RANGE OF 36"-48" (L) X 36"-48" (W) X 24" X 36" (D). NON-NATIVE CLASS VII AND LARGER RIPRAP AND BOULDERS CAN BE USED IN NON-EXPOSED LOWER LAYERS OF THE IN-STREAM CONSTRUCTION WHEN A SUFFICIENT AMOUNT OF ONSITE HARVESTED BOULDERS ARE NOT AVAILABLE.

6. STEP-POOL INVERTS SHALL BE SET AT A DROP/RISE FROM THE ADJACENT UPSTREAM/DOWNSTREAM INVERT TO ACCOMMODATE THE PASSAGE OF FISH. THE INVERTS SHALL FORM THE THALWEG OF THE STEP POOL STRUCTURE. POOLS SHALL BE FORMED BETWEEN THE INVERTS TO THE DIMENSIONS SPECIFIED BY THE DESIGNER.

7. SEE TRIBUTARY TYPICAL SECTIONS FOR DIMENSIONS



CROSS-SECTION



PROFILE

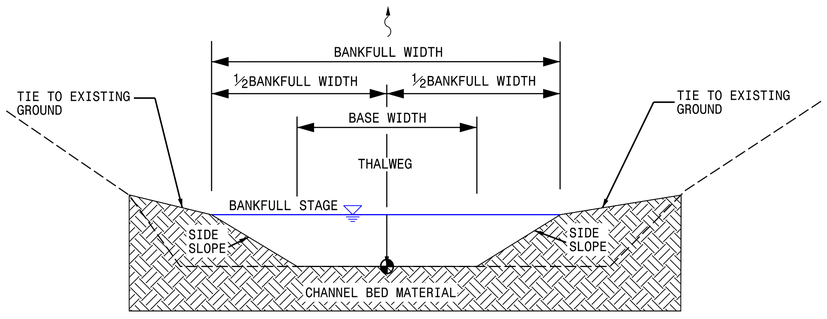
		Stream Site					
		TSS1		TSS2		TSS3	
Parameter	Unit	Min	Max	Min	Max	Min	Max
Riffle Slope	%	-8	-12	-8	-15	-4	-8
Run Slope	%	-24	-30	-25	-38	-20	-30
Pool Slope	%	1	5	1	5	2	5
Glide Slope	%	8	12	6	10	12	16
Riffle Length	Ft	8	12	5	10	14	20
Pool Length	Ft	10	20	8	14	15	25

NOTES:

1. PROVIDED RANGES ARE ALLOWABLE ADJUSTMENTS FROM SPECIFIED DESIGN PARAMETERS DURING IN-FIELD ADJUSTMENTS AS APPROVED BY ENGINEER.

TRIBUTARY TYPICAL SECTION - RIFFLE
SCALE: NTS
ALL UNITS ARE IN FEET

VARIABLE	TRIB. STREAM SITE 1	TRIB. STREAM SITE 2	TRIB. STREAM SITE 3
BANKFULL WIDTH	22	16	31
BASE WIDTH	10	8	16
BANKFULL STAGE DEPTH	2.0	1.4	2.5
SIDE SLOPE (H:V)	3:1	3:1	3:1

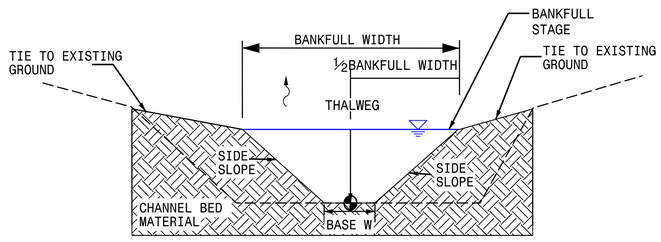


THALWEG (DEEPEST POINT IN CROSS SECTION)
IS LOCATED IN CENTER OF CHANNEL IN A RIFFLE.

NOTES: - ALL CROSS SECTIONS ARE SHOWN LOOKING IN THE (DOWNSTREAM) DIRECTION.
- ⊕ - GRADE POINT IS THE ELEVATION SHOWN ON PROFILE.
- ALL SHARP CORNERS SHOULD BE ROUNDED
- CONSTRUCT CHANNEL BED USING LOCAL MATERIAL CONSISTING OF GRAVEL, COBBLE, AND BOULDERS.
- TRIBUTARY RIFFLE TYPICAL CROSS SECTION SHALL BE APPLIED AT "RIFFLE" AND "STEP" PROFILE FEATURES.

TRIBUTARY TYPICAL SECTION - POOL
SCALE: NTS
ALL UNITS ARE IN FEET

VARIABLE	TRIB. STREAM SITE 1	TRIB. STREAM SITE 2	TRIB. STREAM SITE 3
BANKFULL WIDTH	24	18	34
BASE WIDTH	9	7	14
BANKFULL STAGE DEPTH	2.9	2.1	3.9
SIDE SLOPE (H:V)	2.5:1	2.5:1	2.5:1



THALWEG (DEEPEST POINT IN A CROSS SECTION)
IS LOCATED IN THE MIDDLE OF THE BASE WIDTH.

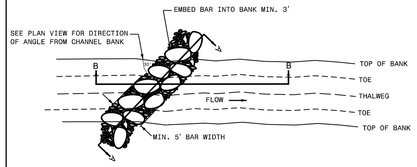
NOTES: - ALL CROSS SECTIONS ARE SHOWN LOOKING IN THE (DOWNSTREAM) DIRECTION.
- ⊕ - GRADE POINT IS THE ELEVATION SHOWN ON PROFILE.
- ALL SHARP CORNERS SHOULD BE ROUNDED
- CONSTRUCT CHANNEL BED USING LOCAL MATERIAL CONSISTING OF GRAVEL, COBBLE, AND BOULDERS.
- TRIBUTARY POOL TYPICAL CROSS SECTION SHALL BE APPLIED AT "MID POOL" AND "GLIDE" PROFILE FEATURES.

REVISIONS

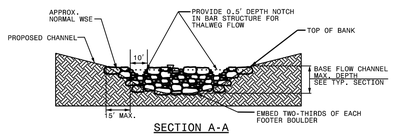
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DATE: 8/24/2026
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APPALACHIAN ELKTOE HABITAT TRANSVERSE BAR

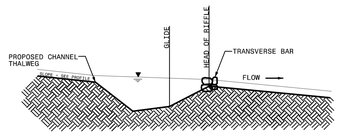
SCALE: NTS



PLAN VIEW



SECTION A-A



SECTION B-B

NOTES:

1. DIMENSIONS ARE APPROXIMATE AND MAY BE SUBJECT TO CHANGE BASED ON FIELD CONDITIONS AND THE DIRECTION OF THE ENGINEER AND/OR THE CLIENT REPRESENTATIVE.

2. PLACE BOULDERS SO THEY ARE TOUCHING AND ORIENTED WITH THEIR DOWNSTREAM END PITCHED UP INTO THE FLOW AS SHOWN.

3. BOULDERS SHALL BE SOURCED ON SITE WITH SIZE DIMENSIONS MEETING THE MINIMUM RANGE OF 36"-48"(L) X 36"-48"(W) X 24"-36"(D). NON-NATIVE CLASS VII AND LARGER RIPRAP AND BOULDERS CAN BE USED IN NON-EXPOSED LOWER LAYERS OF THE IN-STREAM CONSTRUCTION WHEN A SUFFICIENT AMOUNT OFONSITE HARVESTED BOULDERS ARE NOT AVAILABLE.

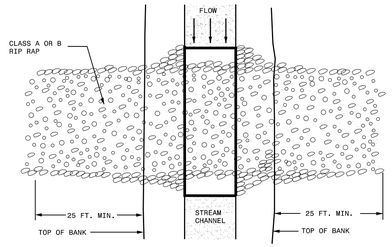
4. IF EXISTING BAR FORMATIONS ARE PRESENT, BUILD TO EXISTING ALIGNMENT TO THE EXTENT PRACTICABLE.

TEMPORARY STREAM CROSSING

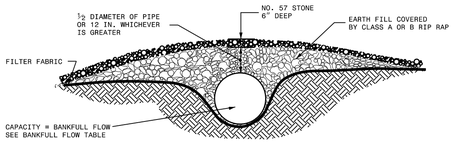
SCALE:NTS

NOTES:
1. FOR USE IN EXISTING TRIBUTARY CHANNEL ONLY,NOT FOR USE IN MODIFIED CHANNEL OR THE CANE RIVER.

2. LOG MAT BRIDGE MAY BE USED IN LIEU OF TEMPORARY PIPE CROSSING.



PLAN VIEW



PROFILE VIEW

	Estimated Bankfull Flow Based on Regional Curves	
Stream Site	cfs	gpm
TSS1	167	74800
TSS2	74	33400
TSS3	305	136900

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

SCALE:NTS

NOTES:

1. TURNING RADIUS SUFFICIENT TO ACCOMMODATE LARGE TRUCKS SHALL BE PROVIDED.

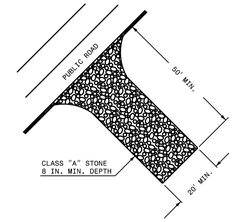
2. ENTRANCE(S) SHOULD BE LOCATED TO PROVIDE FOR UTILIZATION BY ALL CONSTRUCTION VEHICLES.

3. MUST BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR DIRECT FLOW OF MUD ONTO STREETS. PERIODIC TOP DRESSING WITH STONE WILL BE NECESSARY.

4. ANY MATERIAL TRACKED ONTO THE ROADWAY MUST BE CLEANED UP IMMEDIATELY.

5. GRAVEL CONSTRUCTION ENTRANCE SHALL BE LOCATED AT ALL POINTS OF INGRESS AND EGRESS UNTIL SITE IS STABILIZED. FREQUENT CHECKS OF THE DEVICE AND TIMELY MAINTENANCE MUST BE PROVIDED.

6. FILTER FABRIC TO BE PLACED BENEATH STONE.



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PROJECT REFERENCE NO.	SHEET NO.
	2D–4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

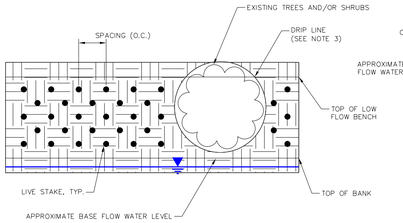
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

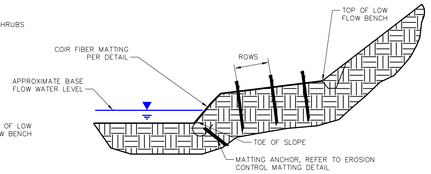
REVISIONS

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Live Stakes			
Botanical Name	**Common Name**	**Stratum**	**Percent of Total Livestakes by Stream Site**
Cornus amomum	Silky Dogwood	Shrub	25
Salix nigra	Black Willow	Shrub	30
Salix sericea	Silky Willow	Shrub	30
Sambucus canadensis	Elderberry	Shrub	15



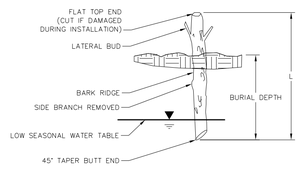
PLAN VIEW



TYPICAL SECTION

NOTES:

1. LIVE STAKES SHALL BE INSTALLED ON FINISHED STREAM BANKS. "FINISHED" GENERALLY REFERS TO ANY AND/OR ALL OF THE FOLLOWING AS SPECIFIED BY THE DESIGNER:
   A. GRADED
   B. PREPARED (ROTO-TILLED, RAKED, AND AMENDED),
   C. SEEDED,
   D. MULCHED, AND
   E. COVERED WITH EROSION CONTROL MATTING.
2. LIVE STAKES SHALL BE FASHIONED FROM DORMANT CUTTINGS OF WOODY PLANT SPECIES (TREES AND SHRUBS) IN ACCORDANCE WITH THE PLANTING TABLE THIS SHEET OR APPROVED EQUAL.
3. LIVE STAKES SHALL NOT BE PLACED WITHIN THE DRIP LINE OF ANY EXISTING TREES AND/OR SHRUBS THAT REMAIN ON THE BANKS.
4. LIVE STAKES SHALL NOT BE PLANTED WITHIN 5 FEET OF HEADWALL, WINGWALL, OR OTHER INFRASTRUCTURE.
5. DETAILED HANDLING, PREPARATION, AND INSTALLATION GUIDELINES FOR LIVE STAKES SHALL BE SPECIFIED BY THE DESIGNER, INCLUDING:
   A. LIVE STAKES MAY BE STORED UP TO 10 DAYS IN WATER.
   B. ALL LATERAL BRANCHES SHALL BE CAREFULLY REMOVED FROM THE WOODY CUTTINGS PRIOR TO INSTALLATION.
   C. LIVE STAKES SHALL BE DRIVEN INTO THE GROUND USING A "DEAD BLOW" PLASTIC HAMMER, BY CREATING A PILOT HOLE AND SLIPPING THE STAKE INTO IT, OR WITH THE USE OF A HYDRAULIC INJECTION SYSTEM. SOIL SHALL BE FIRMLY PACKED AROUND THE HOLE AFTER INSTALLATION.
   D. SPLIT OR OTHERWISE DAMAGED LIVE STAKES SHALL NOT BE USED.



LIVE STAKE DETAIL

DESIGN VARIABLES	
DIAMETER	1/2"–2"
LENGTH	2' – 3'
BURIAL DEPTH	4/5L
SPACING (O.C.)	5'
ROWS [1]	SEE PLANS
PLACEMENT OF 1ST ROW FROM TOP OF BANK	0.5'

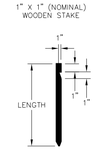
[1] ROWS SHOULD BE EQUALLY SPACED BETWEEN APPROXIMATE BASEFLOW WATER LEVEL AND TOP OF LOW FLOW BENCH.

NOT TO SCALE

LIVE STAKING

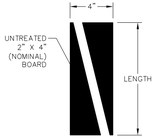


MATTING ANCHOR DETAIL



*GALVANIZED NAIL MAY BE USED IN LIEU OF THE NOTCH.

STAKE - OPTION 1



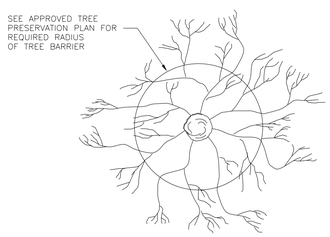
DEAD STOUT STAKE - OPTION 2

NOT TO SCALE

NOTES:

1. THE SLOPE AND/OR STREAM BANK SHALL BE PREPARED (GRADED, TILLED, SMOOTHED, ETC.) AND SEEDED AND MULCHED AS SPECIFIED BY THE DESIGNER PRIOR TO THE PLACEMENT OF THE MATTING.
2. THE MATTING SHALL BE INSTALLED SO AS TO NOT BE IN TENSION, BUT BE PLACED NEATLY, FLUSH AGAINST THE SOIL, AND WITH NO GAPS OR WRINKLES.
3. MATTING SHALL BE NEATLY SECURED AROUND ANY PROJECT STRUCTURES, STRUCTURE ARMS, AND/OR SILLS TO PREVENT ANY LOOSE OR FRAYED EDGES.
4. THERE SHALL BE NO LOOSE ENDS OR UNSECURED MATTING ON THE COMPLETED WORK.

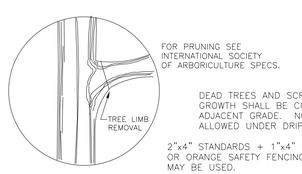
COIR MATTING BANK STABILIZATION

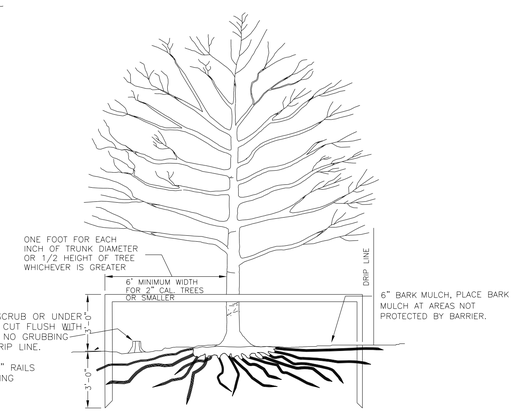


PLAN VIEW OF ROOT ZONE

NOTES:

1. REMOVE ALL BARRIERS UPON COMPLETION OF PROJECT.





TREE PROTECTION

Permanent Riparian Seed Mix (20 lbs/acre w/ cover crop*)			
Botanical Name	**Common Name**	**Percentage of Mix**	**Seed (lbs./acre)**
Sorghastrum nutans	Indiangrass	24	4.8
Panicum virgatum	Switchgrass	23	4.6
Andropogon gerardii	Big Bluestem	20.8	4.2
Elymus virginicus	Virginia Wild Rye	20	4
Heliopsis helianthoides	Oxeye Sunflower	3	0.6
Rudbeckia hirta	Black-eyed Susan	3	0.6
Asclepias incarnata	Swamp Milkweed	2	0.4
Monarda fistulosa	Wild Bergamot	1.2	0.2
Helianthus angustifolius	Narrowleaf Sunflower	1	0.2
Aster umbellatus	Flat Topped White Aster	0.5	0.1
Eupatorium perfoliatum	Boneset	0.5	0.1
Solidago nemoralis	Gray Goldenrod	0.5	0.1
Vernonia noveboracensis	New York Ironweed	0.5	0.1

*For a cover crop, use either grain rye (30lbs/acre; 1 Sep to 31 Apr) or Japanese Millet (10 lbs/acre; 1 May to 31 Aug).

NOTES:

1. CONTRACTOR MAY USE ERNST NC MOUNTAINS RIPARIAN (ERNMX-304) SEED MIX SHOWN IN THE TABLE OR APPROVED EQUAL.
2. WHERE NATIVE MATERIAL OR OVERBUDEN EXISTS FOR PLANT GROWTH, BENCH SLOPES AND HIGHER ELEVATION SLOPES SHALL BE SEEDED WITH RIPARIAN BUFFER SEED MIX. BIOENGINEERING LIVESTAKING SHALL BE PROVIDED AS SHOWN ON PLANS AND IN ALL AREAS WHERE EXISTING TREES ARE REMOVED.

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PROJECT REFERENCE NO.	SHEET NO.
	2D-5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
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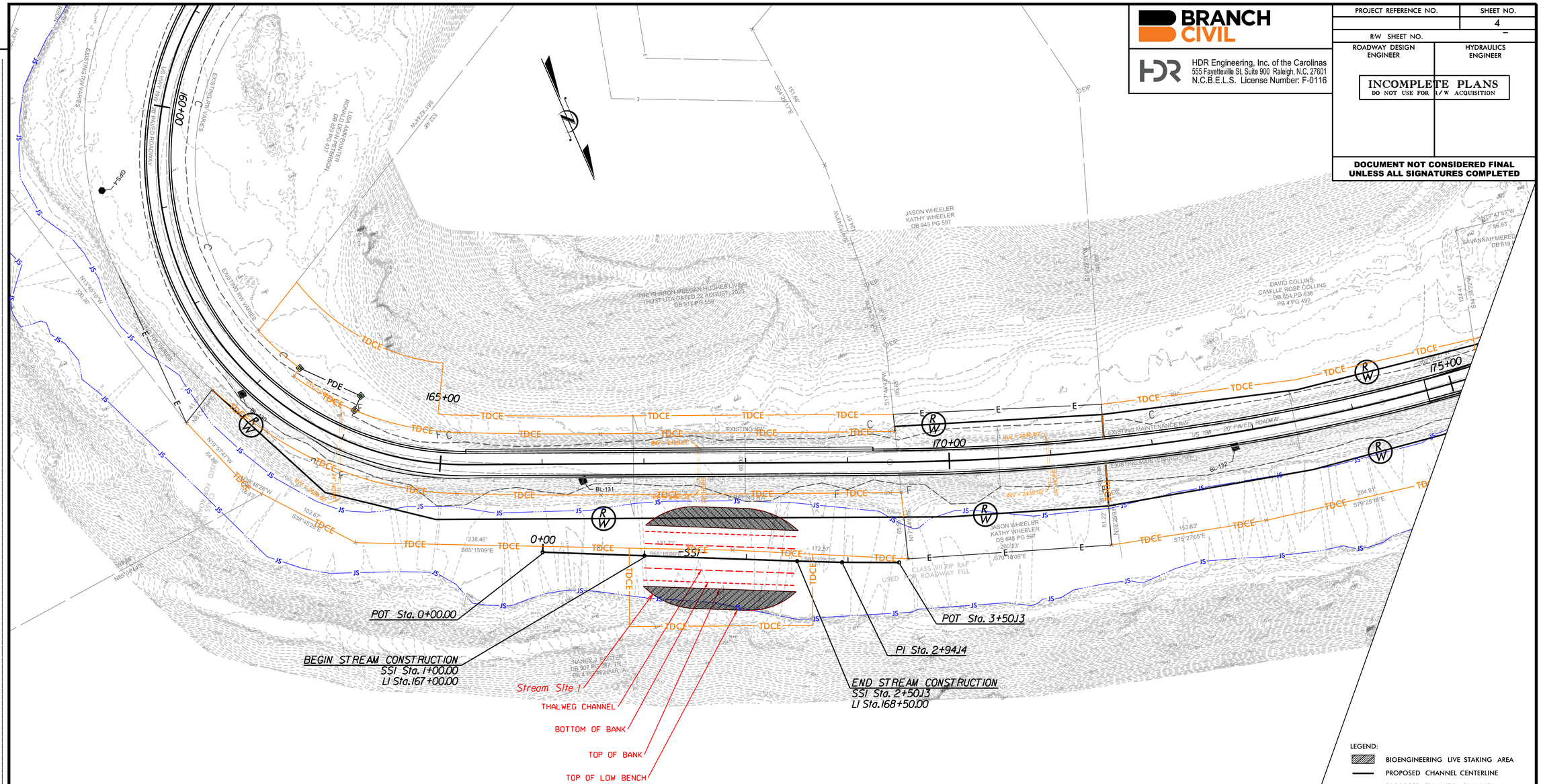
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R/W SHEET NO.	–
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

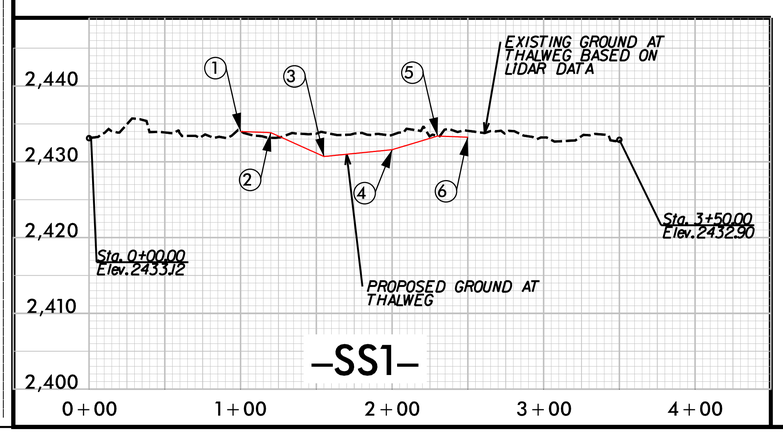
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STREAM SITE 1

POINT ID	FEATURE	STATION	CHANNEL CL ELEV	CHANNEL SLOPE	LOW BANK WIDTH (FT.)	LOW FLOW (LFLW) ELEV	LFLW DEPTH (FT.)
1	Head of Riffle	1+00.00	2434.00	-0.75%	60	2437.00	3
2	Head of Run	1+20.00	2433.85	-9.00%	60		
3	Mid Pool	1+55.00	2430.70	2.00%	68	2435.70	5
4	Glide	2+00.00	2431.60	6.00%	68		
5	Head of Riffle	2+30.00	2433.40	-0.75%	60	2436.40	3
6	Tie-In	2+50.00	2433.25		60		

LEGEND:
- BIOENGINEERING LIVE STAKING AREA
- PROPOSED CHANNEL CENTERLINE
- PROPOSED THALWEG CHANNEL
- PROPOSED BOTTOM OF BANK
- PROPOSED LOW BENCH
- PROPOSED RIPRAP (SEE ROADWAY AND REDLINE DRAINAGE PLANS)
- PROPOSED PGR (SEE ROADWAY AND REDLINE DRAINAGE PLANS)
- PROPOSED ROADWAY SLOPE STAKE (SEE ROADWAY AND REDLINE DRAINAGE PLANS)

NOTES:
1. ENGINEER MAY MAKE CHANNEL ALIGNMENT AND PROFILE ADJUSTMENTS BASED ON FIELD SITE CONDITIONS INCLUDING EXISTING BEDROCK OUTCROPPINGS.

2. SEE ROADWAY PLANSET FOR ALL ROADWAY DESIGN WORK

3. ROADWAY SLOPE STAKES SHOWN FOR REFERENCE ONLY

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PROJECT REFERENCE NO.	SHEET NO.
	5
R/W SHEET NO.	–
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
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PROPOSED ELKTOE HABITAT TRANSVERSE BAR

PT Sta. 4+68.55

PC Sta. 3+42.52

PT Sta. 2+87.74

THALWEG CHANNEL

BOTTOM OF BANK

TOP OF BANK

TOP OF LOW BENCH

PC Sta. 2+41J3

PI Sta. 2+18.01

PI Sta. 1+42.93

BEGIN STREAM CONSTRUCTION
SS2 Sta. 1+00.00
LI Sta. 179+40.35

POT Sta. 0+00.00

Stream Site 2

PI Sta. 5+29.95

PI Sta. 6+24.35

PI Sta. 6+66.47

PC Sta. 7+39.19

PT Sta. 8+89.08

PI Sta. 10+49.02

PI Sta. 10+99.02

MATCHLINE SS2 11+75.14, LI 191+88.06, SEE SHEET 6

DAVID COLLINS
CAMILLE ROSE COLLINS
DB 854 PG 538
PB 4 PG 492

CHARLIE EUGENE BRIGGS
JOHNNIE L. BRIGGS
DB 207 PG 67

NANCY J. FOSTER
DB 907 PG 387, TR. 1
PB 4 PG 492, PAR. A

TIMOTHY K. PENLAND
DAWN MICHELLE PENLAND
DB 500 PG 613

CHARLIE B. BRIGGS
JOHNNIE L. BRIGGS
DB 300 PG 28

SUSAN W.
DB 87

TONY HOOVER
2 PG 493
PG 492

CANE RIVER

LEGEND:

- BIOENGINEERING LIVE STAKING AREA
- PROPOSED CHANNEL CENTERLINE
- PROPOSED THALWEG CHANNEL
- PROPOSED BOTTOM OF BANK
- PROPOSED LOW BENCH
- PROPOSED RIPRAP (SEE ROADWAY AND REDLINE DRAINAGE PLANS)
- PROPOSED PGR (SEE ROADWAY AND REDLINE DRAINAGE PLANS)
- PROPOSED ROADWAY SLOPE STAKE (SEE ROADWAY AND REDLINE DRAINAGE PLANS)

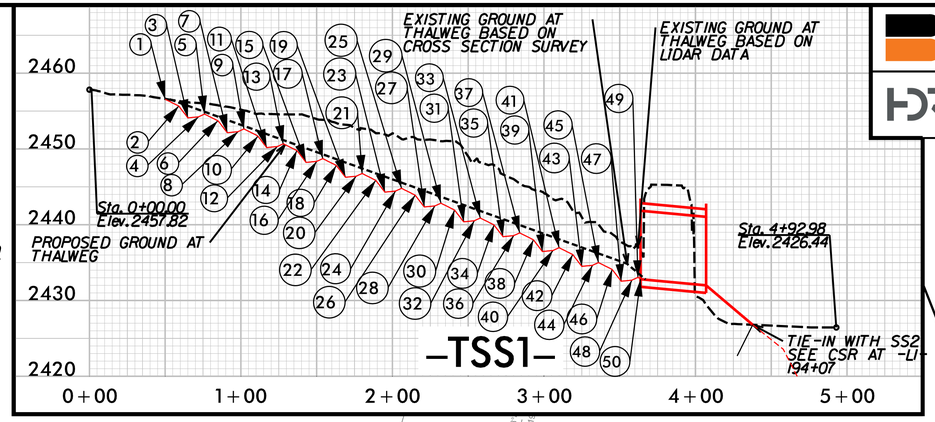
NOTES:

1. ENGINEER MAY MAKE CHANNEL ALIGNMENT AND PROFILE ADJUSTMENTS BASED ON FIELD SITE CONDITIONS INCLUDING EXISTING BEDROCK OUTCROPPINGS.

2. SEE ROADWAY PLANSET FOR ALL ROADWAY DESIGN WORK

3. ROADWAY SLOPE STAKES SHOWN FOR REFERENCE ONLY

SEE SHEET 9–10 FOR –SS2– PROFILE VIEW
SEE SHEET 10 FOR –SS2– PROFILE POINT TABLES



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PROJECT REFERENCE NO.	SHEET NO.
	6
R/W SHEET NO.	–
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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NOTES:
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- PROPOSED PGR (SEE ROADWAY AND REDLINE DRAINAGE PLANS)
- PROPOSED ROADWAY SLOPE STAKE (SEE ROADWAY AND REDLINE DRAINAGE PLANS)

MATCHLINE SS2 11+75.14, L1 191+88.06, SEE SHEET 5

MATCHLINE SS2 27+24.42, L1 205+88.57, SEE SHEET 7

POT Sta. 0+00.00
BEGIN TRIBUTARY CONSTRUCTION Sta. 0+50.00
PC Sta. 0+78.88
PT Sta. 1+11.27
PC Sta. 1+16.29
PT Sta. 1+53.54
PI Sta. 1+73.08
PI Sta. 2+11.58
PI Sta. 2+35.34
PC Sta. 2+64.45
PT Sta. 2+77.13
PC Sta. 2+86.15
POT Sta. 3+23.17
END TRIBUTARY CONSTRUCTION
POT Sta. 3+63.73
POT Sta. 4+07.06
SS2 Sta. 13+76.26
TSS1 Sta. 4+92.98
PT Sta. 13+11.16
PC Sta. 12+24.86
PC Sta. 15+67.57
PT Sta. 16+18.05
PC Sta. 18+62.55
PT Sta. 18+87.43
PC Sta. 20+82.51
PT Sta. 21+70.37
PC Sta. 22+60.59
PT Sta. 23+30.24
PC Sta. 23+87.28
PT Sta. 23+94.51
PC Sta. 25+57.42
PT Sta. 25+81.38
PC Sta. 26+47.27
PT Sta. 26+91.07

SEE STEP-POOL DETAIL
Tributary Stream Site 1
BOTTOM OF BANK
TOP OF BANK
THALWEG CHANNEL
BOTTOM OF BANK
TOP OF BANK
TOP OF LOW BENCH
Stream Site 2
SEE CSR FOR PROPOSED DOUBLE 7' X 10' RCBC PROFILE AT -L1- STA. 194+07

SEE SHEET 9–10 FOR –SS2– PROFILE VIEW
SEE SHEET 10 FOR –SS2– PROFILE POINT TABLE
SEE SHEET 8 FOR –TSS1– PROFILE POINT TABLE

REVISIONS

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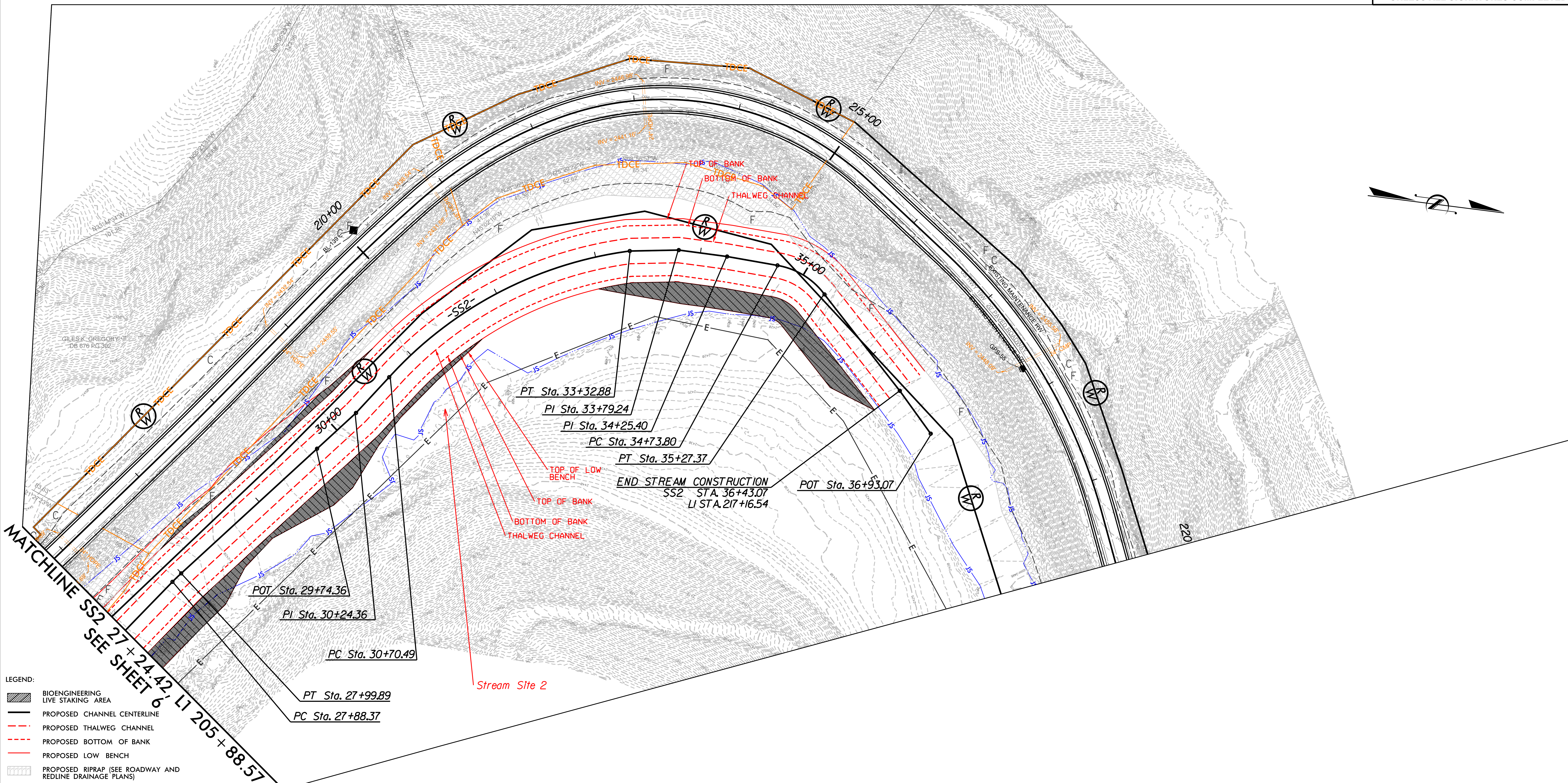
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	7
R/W SHEET NO.	–

ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
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REVISIONS



LEGEND:

- BIOENGINEERING LIVE STAKING AREA
- PROPOSED CHANNEL CENTERLINE
- PROPOSED THALWEG CHANNEL
- PROPOSED BOTTOM OF BANK
- PROPOSED LOW BENCH
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- PROPOSED ROADWAY SLOPE STAKE (SEE ROADWAY AND REDLINE DRAINAGE PLANS)

NOTES:

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2. SEE ROADWAY PLANSET FOR ALL ROADWAY DESIGN WORK

3. ROADWAY SLOPE STAKES SHOWN FOR REFERENCE ONLY

SEE SHEET 9–10 FOR –SS2– PROFILE VIEW
SEE SHEET 10 FOR –SS2– PROFILE POINT TABLES

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PROJECT REFERENCE NO.	SHEET NO.
	8
R/W SHEET NO.	–
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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NOTES:
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TRIBUTARY STREAM SITE 1

POINT ID	FEATURE	STATION	CHANNEL CL ELEV	CHANNEL SLOPE	BKFL WIDTH	BKFL ELEV	BKFL DEPTH
1	Head of Riffle	0+50.00	2456.56	-10.00%	22	2458.56	2
2	Head of Step	0+59.00	2455.66	-26.00%	22		
3	Mid Pool	0+65.00	2454.10	2.00%	24	2457.00	2.9
4	Glide	0+72.00	2454.24	9.00%	24		
5	Head of Riffle	0+76.00	2454.60	-10.00%	22	2456.60	2
6	Head of Step	0+85.00	2453.70	-26.00%	22		
7	Mid Pool	0+91.00	2452.14	2.00%	24	2455.04	2.9
8	Glide	0+98.00	2452.28	9.00%	24		
9	Head of Riffle	1+02.00	2452.64	-10.00%	22	2454.64	2
10	Head of Step	1+11.00	2451.74	-26.00%	22		
11	Mid Pool	1+17.00	2450.18	2.00%	24	2453.08	2.9
12	Glide	1+24.00	2450.32	9.00%	24		
13	Head of Riffle	1+28.00	2450.68	-10.00%	22	2452.68	2
14	Head of Step	1+37.00	2449.78	-26.00%	22		
15	Mid Pool	1+43.00	2448.22	2.00%	24	2451.12	2.9
16	Glide	1+50.00	2448.36	9.00%	24		
17	Head of Riffle	1+54.00	2448.72	-10.00%	22	2450.72	2
18	Head of Step	1+63.00	2447.82	-26.00%	22		
19	Mid Pool	1+69.00	2446.26	2.00%	24	2449.16	2.9
20	Glide	1+76.00	2446.40	9.00%	24		
21	Head of Riffle	1+80.00	2446.76	-10.00%	22	2448.76	2
22	Head of Step	1+89.00	2445.86	-26.00%	22		
23	Mid Pool	1+95.00	2444.30	2.00%	24	2447.20	2.9
24	Glide	2+02.00	2444.44	9.00%	24		
25	Head of Riffle	2+06.00	2444.80	-10.00%	22	2446.80	2
26	Head of Step	2+15.00	2443.90	-26.00%	22		
27	Mid Pool	2+21.00	2442.34	2.00%	24	2445.24	2.9
28	Glide	2+28.00	2442.48	9.00%	24		
29	Head of Riffle	2+32.00	2442.84	-10.00%	22	2444.84	2
30	Head of Step	2+41.00	2441.94	-26.00%	22		
31	Mid Pool	2+47.00	2440.38	2.00%	24	2443.28	2.9
32	Glide	2+54.00	2440.52	9.00%	24		
33	Head of Riffle	2+58.00	2440.88	-10.00%	22	2442.88	2
34	Head of Step	2+67.00	2439.98	-26.00%	22		
35	Mid Pool	2+73.00	2438.42	2.00%	24	2441.32	2.9
36	Glide	2+80.00	2438.56	9.00%	24		
37	Head of Riffle	2+84.00	2438.92	-10.00%	22	2440.92	2
38	Head of Step	2+93.00	2438.02	-26.00%	22		
39	Mid Pool	2+99.00	2436.46	2.00%	24	2439.36	2.9
40	Glide	3+06.00	2436.60	9.00%	24		
41	Head of Riffle	3+10.00	2436.96	-10.00%	22	2438.96	2
42	Head of Step	3+19.00	2436.06	-26.00%	22		
43	Mid Pool	3+25.00	2434.50	2.00%	24	2437.40	2.9
44	Glide	3+32.00	2434.64	9.00%	24		
45	Head of Riffle	3+36.00	2435.00	-10.00%	22	2437.00	2
46	Head of Step	3+45.00	2434.10	-26.00%	22		
47	Mid Pool	3+51.00	2432.54	2.00%	24	2435.44	2.9
48	Glide	3+58.00	2432.68	9.00%	24		
49	Head of Riffle	3+62.00	2433.04	-10.00%	22	2435.04	2
50	Tie-In	3+63.73	2432.87		22		

SEE SHEET 6 FOR –TSS1– PLAN VIEW
SEE SHEET 6 FOR –TSS1– PROFILE VIEW

REVISIONS

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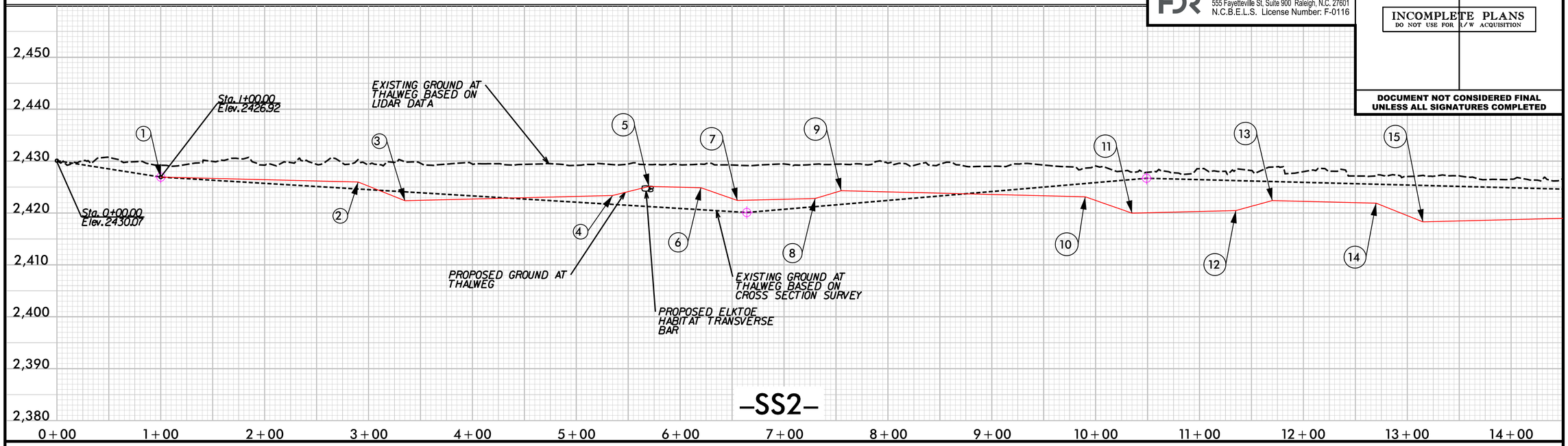
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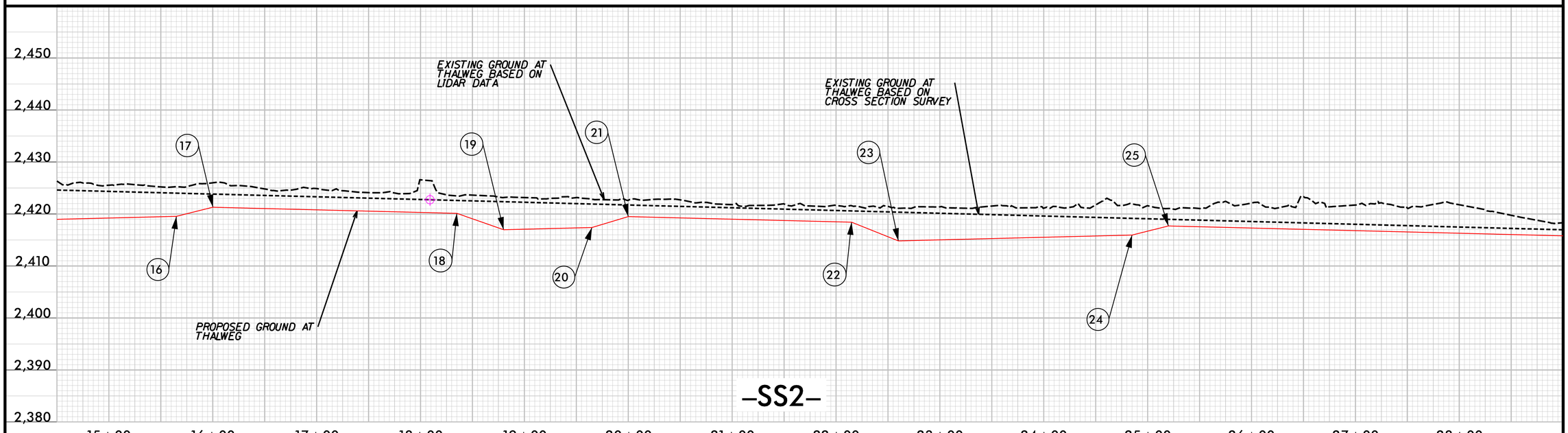
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	9
R/W SHEET NO.	–
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



NOTES:
1. ENGINEER MAY MAKE CHANNEL ALIGNMENT AND PROFILE ADJUSTMENTS BASED ON FIELD SITE CONDITIONS INCLUDING EXISTING BEDROCK OUTCROPPINGS.



SEE SHEET 10 FOR –SS2– PROFILE POINT TABLES

REVISIONS

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PROJECT REFERENCE NO.	SHEET NO.
	10
R/W SHEET NO.	–
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



STREAM SITE 2

POINT ID	FEATURE	STATION	CHANNEL CL ELEV	CHANNEL SLOPE	LOW BANK WIDTH (FT.)	LOW FLOW (LFLW) ELEV	LFLW DEPTH (FT.)
1	Head of Riffle	1+00.00	2426.92	-0.50%	60	2429.92	3
2	Head of Run	2+90.00	2425.97	-8.00%	60		
3	Mid Pool	3+35.00	2422.37	0.50%	68	2427.37	5
4	Glide	5+35.00	2423.37	5.00%	68		
5	Head of Riffle	5+70.00	2425.12	-0.50%	60	2428.12	3
6	Head of Run	6+20.00	2424.87	-7.00%	60		
7	Mid Pool	6+55.00	2422.42	0.50%	68	2427.42	5
8	Glide	7+30.00	2422.80	6.00%	68		
9	Head of Riffle	7+55.00	2424.30	-0.50%	60	2427.30	3
10	Head of Run	9+90.00	2423.12	-7.00%	60		
11	Mid Pool	10+35.00	2419.97	0.50%	68	2424.97	5
12	Glide	11+35.00	2420.47	5.50%	68		
13	Head of Riffle	11+70.00	2422.40	-0.50%	60	2425.40	3
14	Head of Run	12+70.00	2421.90	-8.00%	60		
15	Mid Pool	13+15.00	2418.30	0.50%	68	2423.30	5
16	Glide	15+65.00	2419.55	5.00%	68		
17	Head of Riffle	16+00.00	2421.30	-0.50%	60	2424.30	3
18	Head of Run	18+35.00	2420.12	-7.00%	60		
19	Mid Pool	18+80.00	2416.97	0.50%	68	2421.97	5
20	Glide	19+65.00	2417.40	6.00%	68		
21	Head of Riffle	20+00.00	2419.50	-0.50%	60	2422.50	3
22	Head of Run	22+15.00	2418.42	-8.00%	60		
23	Mid Pool	22+60.00	2414.82	0.50%	68	2419.82	5
24	Glide	24+85.00	2415.95	5.00%	68		
25	Head of Riffle	25+20.00	2417.70	-0.50%	60	2420.70	3
26	Head of Run	29+30.00	2415.65	-8.00%	60		
27	Mid Pool	29+75.00	2412.05	0.50%	68	2417.05	5
28	Glide	31+50.00	2412.92	6.00%	68		
29	Head of Riffle	31+85.00	2415.02	-1.00%	60	2418.02	3
30	Head of Run	33+65.00	2413.22	-8.00%	60		
31	Mid Pool	34+10.00	2409.62	0.50%	68	2414.62	5
32	Glide	35+85.00	2410.50	6.00%	68		
33	Head of Riffle	36+20.00	2412.60	-1.00%	60	2415.60	3
34	Tie-In	36+43.07	2412.36		60		

NOTES:
1. ENGINEER MAY MAKE CHANNEL ALIGNMENT AND PROFILE ADJUSTMENTS BASED ON FIELD SITE CONDITIONS INCLUDING EXISTING BEDROCK OUTCROPPINGS.

REVISIONS

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PROJECT REFERENCE NO.	SHEET NO.
	11
R/W SHEET NO.	–
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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BEGIN STREAM CONSTRUCTION
SS3 Sta. 1+45.41
L3 Sta.411+96.70

PI Sta. 1+06.38

PI Sta. 0+42.64

POT Sta. 0+00.00

MATCHLINE SS3 7+86.98, L3 418+45.83, SEE SHEET 12

PI Sta. 2+97.61

PC Sta. 3+60.13

PRC Sta. 4+19.62

PT Sta. 4+65.60

PI Sta. 5+61.18

PC Sta. 7+52.12

TOP OF BANK

TOP OF LOW BENCH

Stream Site 3

LEGEND:

- BIOENGINEERING LIVE STAKING AREA
- PROPOSED CHANNEL CENTERLINE
- PROPOSED THALWEG CHANNEL
- PROPOSED BOTTOM OF BANK
- PROPOSED LOW BENCH
- PROPOSED RIPRAP (SEE ROADWAY AND REDLINE DRAINAGE PLANS)
- PROPOSED PGR (SEE ROADWAY AND REDLINE DRAINAGE PLANS)
- PROPOSED ROADWAY SLOPE STAKE (SEE ROADWAY AND REDLINE DRAINAGE PLANS)

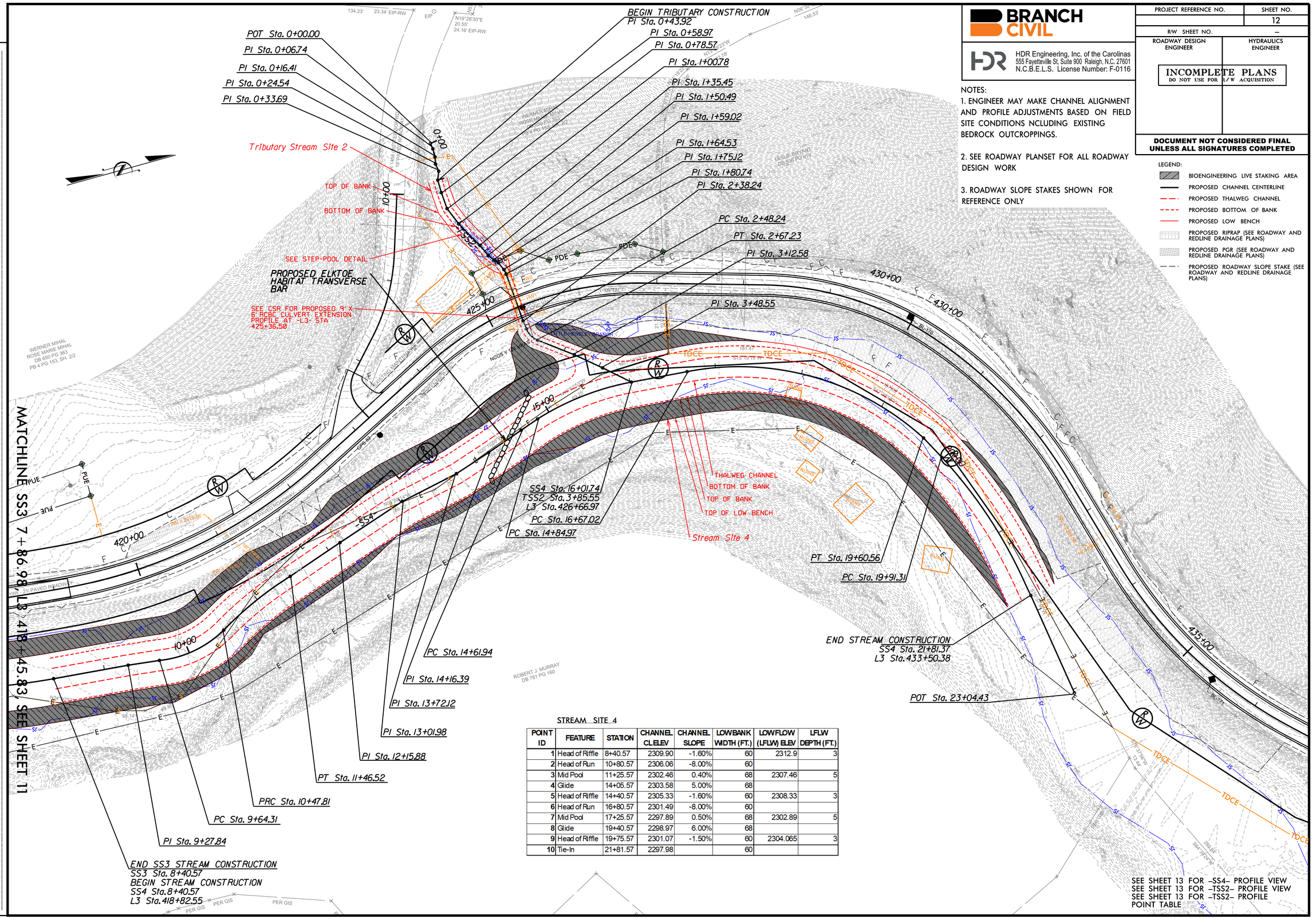
NOTES:

1. ENGINEER MAY MAKE CHANNEL ALIGNMENT AND PROFILE ADJUSTMENTS BASED ON FIELD SITE CONDITIONS INCLUDING EXISTING BEDROCK OUTCROPPINGS.

2. SEE ROADWAY PLANSET FOR ALL ROADWAY DESIGN WORK

3. ROADWAY SLOPE STAKES SHOWN FOR REFERENCE ONLY

SEE SHEET 13 FOR –SS3– PROFILE VIEW



STREAM SITE 4

POINT ID	FEATURE	STATION	CHANNEL CL ELEV	CHANNEL SLOPE	LOWBANK WIDTH (FT.)	LOWFLOW (LFLW) ELEV	LFLW DEPTH (FT.)
1	Head of Riffle	8+40.57	2309.90	-1.60%	60	2312.9	3
2	Head of Run	10+80.57	2306.06	-8.00%	60		
3	Mid Pool	11+25.57	2302.46	0.40%	68	2307.46	5
4	Glide	14+05.57	2303.58	5.00%	68		
5	Head of Riffle	14+40.57	2305.33	-1.60%	60	2308.33	3
6	Head of Run	16+80.57	2301.49	-8.00%	60		
7	Mid Pool	17+25.57	2297.89	0.50%	68	2302.89	5
8	Glide	19+40.57	2298.97	6.00%	68		
9	Head of Riffle	19+75.57	2301.07	-1.50%	60	2304.065	3
10	Tie-In	21+81.57	2297.98		60		

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NOTES:
1. ENGINEER MAY MAKE CHANNEL ALIGNMENT AND PROFILE ADJUSTMENTS BASED ON FIELD SITE CONDITIONS NCLUDING EXISTING BEDROCK OUTCROPPINGS.

2. SEE ROADWAY PLANSET FOR ALL ROADWAY DESIGN WORK

3. ROADWAY SLOPE STAKES SHOWN FOR REFERENCE ONLY

PROJECT REFERENCE NO.	SHEET NO.
	12
R/W SHEET NO.	–
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

LEGEND:
- BIOENGINEERING LIVE STAKING AREA
- PROPOSED CHANNEL CENTERLINE
- PROPOSED THALWEG CHANNEL
- PROPOSED BOTTOM OF BANK
- PROPOSED LOW BENCH
- PROPOSED RIPRAP (SEE ROADWAY AND REDLINE DRAINAGE PLANS)
- PROPOSED PGR (SEE ROADWAY AND REDLINE DRAINAGE PLANS)
- PROPOSED ROADWAY SLOPE STAKE (SEE ROADWAY AND REDLINE DRAINAGE PLANS)

REVISIONS

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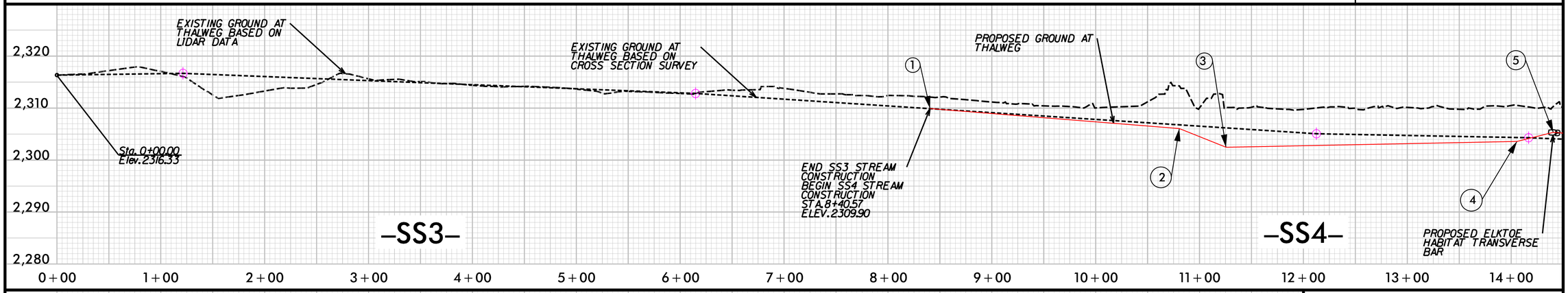
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R/W SHEET NO.	–

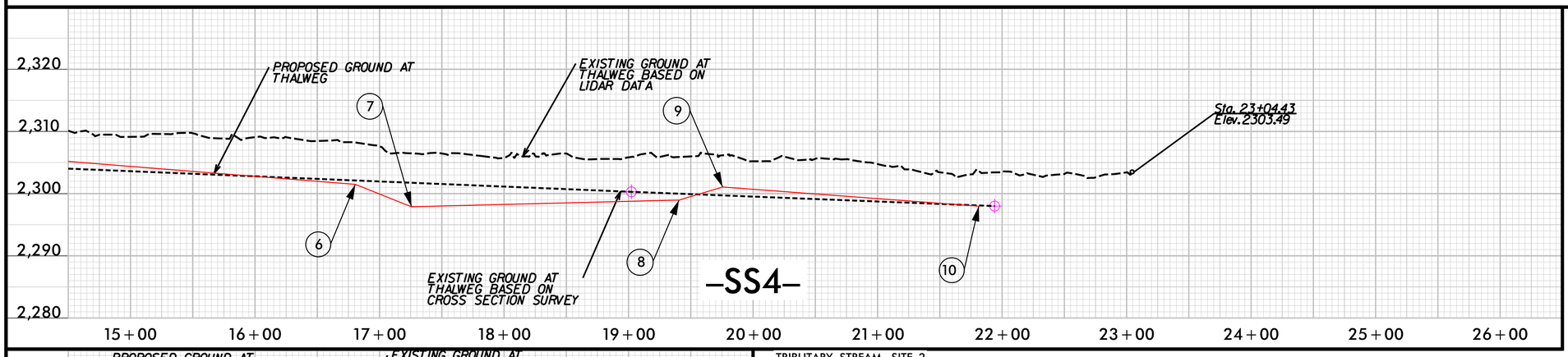
ROADWAY DESIGN ENGINEER

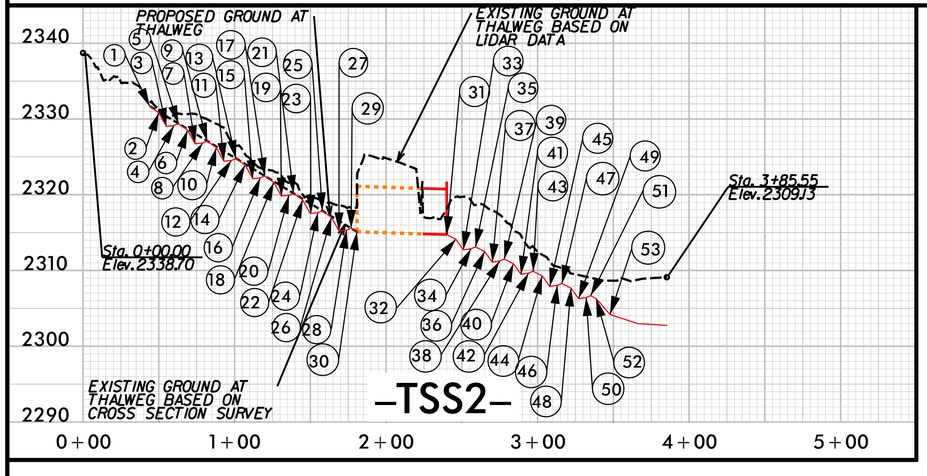
HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED







TRIBUTARY STREAM SITE 2

POINT ID	FEATURE	STATION	CHANNEL CL ELEV	CHANNEL SLOPE	BKFL WIDTH	BKFL ELEV	BKFL DEPTH
1	Head of Riffle	0+43.92	2331.67	-14.00%	16	2333.07	1.4
2	Head of Step	0+49.92	2330.83	-36.00%	16		
3	Mid Pool	0+54.92	2329.03	2.00%	18	2331.13	2.1
4	Glide	0+59.92	2329.13	8.00%	18		
5	Head of Riffle	0+62.92	2329.37	-14.00%	16	2330.77	1.4
6	Head of Step	0+68.92	2328.53	-36.00%	16		
7	Mid Pool	0+73.92	2326.73	2.00%	18	2328.83	2.1
8	Glide	0+78.92	2326.83	8.00%	18		
9	Head of Riffle	0+81.92	2327.07	-14.00%	16	2328.47	1.4
10	Head of Step	0+87.92	2326.23	-36.00%	16		
11	Mid Pool	0+92.92	2324.43	2.00%	18	2326.53	2.1
12	Glide	0+97.92	2324.53	8.00%	18		
13	Head of Riffle	1+00.92	2324.77	-14.00%	16	2326.17	1.4
14	Head of Step	1+06.92	2323.93	-36.00%	16		
15	Mid Pool	1+11.92	2322.13	2.00%	18	2324.23	2.1
16	Glide	1+16.92	2322.23	8.00%	18		
17	Head of Riffle	1+19.92	2322.47	-14.00%	16	2323.87	1.4
18	Head of Step	1+25.92	2321.63	-36.00%	16		
19	Mid Pool	1+30.92	2319.83	2.00%	18	2321.93	2.1
20	Glide	1+35.92	2319.93	8.00%	18		
21	Head of Riffle	1+38.92	2320.17	-14.00%	16	2321.57	1.4
22	Head of Step	1+44.92	2319.33	-36.00%	16		
23	Mid Pool	1+49.92	2317.53	2.00%	18	2319.63	2.1
24	Glide	1+54.92	2317.63	8.00%	18		
25	Head of Riffle	1+57.92	2317.87	-14.00%	16	2319.27	1.4
26	Head of Step	1+63.92	2317.03	-36.00%	16		
27	Mid Pool	1+68.92	2315.23	2.00%	18	2317.33	2.1
28	Glide	1+73.92	2315.33	8.00%	18		

POINT ID	FEATURE	STATION	CHANNEL CL ELEV	CHANNEL SLOPE	BKFL WIDTH	BKFL ELEV	BKFL DEPTH
29	Head of Riffle	1+76.92	2315.57	-15.00%	16	2316.97	1.4
30	Culvert Invert	1+80.74	2315.00	-0.46%	16		
31	Head of Riffle	2+40.04	2314.73	-10.00%	18	2316.125	1.4
32	Head of Step	2+46.04	2314.13	-28.00%	18		
33	Mid Pool	2+51.04	2312.73	3.00%	16	2314.825	2.1
34	Glide	2+56.04	2312.88	8.00%	16		
35	Head of Riffle	2+59.04	2313.12	-10.00%	18	2314.515	1.4
36	Head of Step	2+65.04	2312.52	-28.00%	18		
37	Mid Pool	2+70.04	2311.12	3.00%	16	2313.215	2.1
38	Glide	2+75.04	2311.27	8.00%	16		
39	Head of Riffle	2+78.04	2311.51	-10.00%	18	2312.905	1.4
40	Head of Step	2+84.04	2310.91	-28.00%	18		
41	Mid Pool	2+89.04	2309.51	3.00%	16	2311.605	2.1
42	Glide	2+94.04	2309.66	8.00%	16		
43	Head of Riffle	2+97.04	2309.90	-10.00%	18	2311.295	1.4
44	Head of Step	3+03.04	2309.30	-28.00%	18		
45	Mid Pool	3+08.04	2307.90	3.00%	16	2309.995	2.1
46	Glide	3+13.04	2308.05	8.00%	16		
47	Head of Riffle	3+16.04	2308.29	-10.00%	18	2309.685	1.4
48	Head of Step	3+22.04	2307.69	-28.00%	18		
49	Mid Pool	3+27.04	2306.29	3.00%	16	2308.385	2.1
50	Glide	3+32.04	2306.44	8.00%	16		
51	Head of Riffle	3+35.04	2306.68	-10.00%	18	2308.075	1.4
52	Tie-In	3+38.71	2306.31		18		
53	Tie-In to SS4 Thalweg Channel	3+47.78	2304.20				

NOTES:
1. ENGINEER MAY MAKE CHANNEL ALIGNMENT AND PROFILE ADJUSTMENTS BASED ON FIELD SITE CONDITIONS INCLUDING EXISTING BEDROCK OUTCROPPINGS.

SEE SHEET 11–12 FOR –SS3– PLAN VIEW
SEE SHEET 12 FOR –SS4 PLAN VIEW
SEE SHEET 12 FOR –TSS2– PLAN VIEW
SEE SHEET 12 FOR –SS4– PROFILE POINT TABLE

REVISIONS

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PROJECT REFERENCE NO.	SHEET NO.
	14
R/W SHEET NO.	–
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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PROPOSED ELKTOE HABITAT TRANSVERSE BAR

MAINTAIN EXISTING CONFLUENCE ELEVATION AND GEOMETRY TO THE EXTENT PRACTICABLE.

PROPOSED ELKTOE HABITAT TRANSVERSE BAR

PT Sta. 5+34.62

PC Sta. 4+75.69

PT Sta. 3+97.35

PI Sta. 5+70.46

PI Sta. 6+91.04

PI Sta. 7+92.73

PI Sta. 9+06.00

PC Sta. 09+99.55

PT Sta. 12+16.75

PI Sta. 13+32.28

PCC Sta. 3+78.48

PCC Sta. 3+38.18

PC Sta. 2+38.15

BEGIN STREAM CONSTRUCTION
SS5 Sta. 1+98.76
L4 Sta. 474+09.22

PI Sta. 1+45.74

PI Sta. 0+38.42

POT Sta. 0+00.00

Stream Site 5

TOP OF LOW BENCH
TOP OF BANK
BOTTOM OF BANK
THALWEG CHANNEL

WATCHLINE SS5 14+90.40, L4 485+51.62, Y16
See Sheet 15

SALVAGE NATIVE RIVER MATERIAL FROM DESIGNATED ROADWAY EMBANKMENT AREAS FOR USE IN RIVER WORK WHERE APPROVED BY THE ENGINEER. SALVAGE OPERATIONS SHALL NOT ALTER THE FINAL EMBANKMENT LINES AND GRADES SHOWN ON THE PLANS OR REDUCE ROADWAY EMBANKMENT STABILITY, EROSION PROTECTION, OR DRAINAGE FUNCTION. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY AND PERMANENT MEASURES NECESSARY TO MAINTAIN EMBANKMENT STABILITY.

LEGEND:
- BIOENGINEERING LIVE STAKING AREA
- PROPOSED CHANNEL CENTERLINE
- PROPOSED THALWEG CHANNEL
- PROPOSED BOTTOM OF BANK
- PROPOSED LOW BENCH
- PROPOSED RIPRAP (SEE ROADWAY AND REDLINE DRAINAGE PLANS)
- PROPOSED PGR (SEE ROADWAY AND REDLINE DRAINAGE PLANS)
- PROPOSED ROADWAY SLOPE STAKE (SEE ROADWAY AND REDLINE DRAINAGE PLANS)

NOTES:
1. ENGINEER MAY MAKE CHANNEL ALIGNMENT AND PROFILE ADJUSTMENTS BASED ON FIELD SITE CONDITIONS INCLUDING EXISTING BEDROCK OUTCROPPINGS.
2. SEE ROADWAY PLANSET FOR ALL ROADWAY DESIGN WORK
3. ROADWAY SLOPE STAKES SHOWN FOR REFERENCE ONLY

SEE SHEETS 18–19 FOR –SS5– PROFILE VIEW
SEE SHEET 17 FOR –SS5– PROFILE POINT TABLE

REVISIONS

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555 Fayetteville St, Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116

PROJECT REFERENCE NO.	SHEET NO.
	15
R/W SHEET NO.	–
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

MATCHLINE SS5 14+90.40, L4 485+51.62, Y16 25+35.12, SEE SHEET 14

MATCHLINE SS5 28+83.24, L4 499+51.03, Y16 34+84.09, SEE SHEET 16

POT Sta. 0+00.00

Tributary Stream Site 3

TOP OF BANK

BOTTOM OF BANK

SEE STEP-POOL DETAIL

BEGIN TRIBUTARY CONSTRUCTION
PI Sta. 0+50.00

PI Sta. 0+77.32

PI Sta. 0+92.44

PI Sta. 1+26.69

PI Sta. 1+49.74

PI Sta. 1+74.58

PI Sta. 2+06.41

PI Sta. 2+17.50

PI Sta. 2+32.56

PI Sta. 2+59.14

END TRIBUTARY CONSTRUCTION
PI Sta. 2+88.33

SEE CSR FOR PROPOSED TRIPLE 10' X 9' RCBC CULVERT PROFILE AT -Y19- STA 10+60

PI Sta. 15+49.73

PI Sta. 16+36.04

PI Sta. 19+70.36

PI Sta. 21+04.52

PI Sta. 23+11.02

PI Sta. 3+23.02

PI Sta. 25+93.86

PI Sta. 24+99.49

SS5 Sta.24+76.49
TSS3 Sta. 3+99.07
L4 Sta.495+53.36

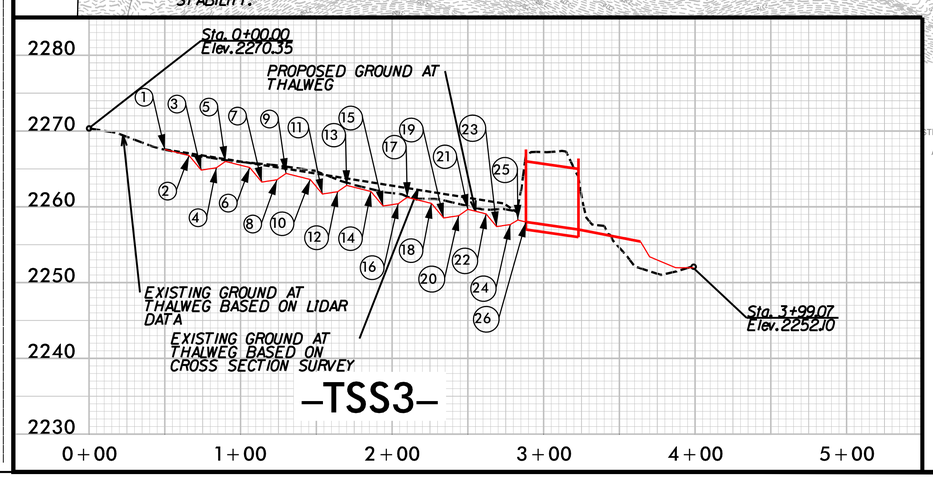
Stream Site 5

TOP OF LOW BENCH

THALWEG CHANNEL

-SS5-

SALVAGE NATIVE RIVER MATERIAL FROM DESIGNATED ROADWAY EMBANKMENT AREAS FOR USE IN RIVER WORK WHERE APPROVED BY THE ENGINEER. SALVAGE OPERATIONS SHALL NOT ALTER THE FINAL EMBANKMENT LINES AND GRADES SHOWN ON THE PLANS OR REDUCE ROADWAY EMBANKMENT STABILITY, EROSION PROTECTION, OR DRAINAGE FUNCTION. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY AND PERMANENT MEASURES NECESSARY TO MAINTAIN EMBANKMENT STABILITY.



LEGEND:
- BIOENGINEERING LIVE STAKING AREA
- PROPOSED CHANNEL CENTERLINE
- PROPOSED THALWEG CHANNEL
- PROPOSED BOTTOM OF BANK
- PROPOSED LOW BENCH
- PROPOSED RIPRAP (SEE ROADWAY AND REDLINE DRAINAGE PLANS)
- PROPOSED PGR (SEE ROADWAY AND REDLINE DRAINAGE PLANS)
- PROPOSED ROADWAY SLOPE STAKE (SEE ROADWAY AND REDLINE DRAINAGE PLANS)

NOTES:
1. ENGINEER MAY MAKE CHANNEL ALIGNMENT AND PROFILE ADJUSTMENTS BASED ON FIELD SITE CONDITIONS INCLUDING EXISTING BEDROCK OUTCROPPINGS.
2. SEE ROADWAY PLANSET FOR ALL ROADWAY DESIGN WORK
3. ROADWAY SLOPE STAKES SHOWN FOR REFERENCE ONLY

SEE SHEETS 18–19 FOR –SS5– PROFILE VIEW
SEE SHEET 17 FOR –TSS3– PROFILE POINT TABLE
SEE SHEET 17 FOR –SS5– PROFILE POINT TABLE

REVISIONS

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
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PROJECT REFERENCE NO.	SHEET NO.
	16
R/W SHEET NO.	–
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS

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TIME: 12:53:07 PM
PENTABLE: US_19W_South_STRM.tbl

MATCHLINE SS5 28+83.24, L4 499+51.03, SHEET 15
Y16 34+84.09, SEE

Stream Site 5

PC Sta. 37+17.24
PI Sta. 38+89.97
END STREAM CONSTRUCTION
SS5 Sta. 39+57.06
L Sta. 509+65.36
PI Sta. 35+24.94
PI Sta. 32+27.49
PI Sta. 31+24.55
PI Sta. 30+07.79
POT Sta. 40+84.02
POT Sta. 41+70.71
POT Sta. 43+52.79
PT Sta. 38+51.95

15+00 20+00 25+00 30+00 35+00 40+00 500+00 505+00 510+00

SS5

THALWEG CHANNEL
BOTTOM OF BANK
TOP OF BANK
TOP OF LOW BENCH

SALVAGE NATIVE RIVER MATERIAL FROM DESIGNATED ROADWAY EMBANKMENT AREAS FOR USE IN RIVER WORK WHERE APPROVED BY THE ENGINEER. SALVAGE OPERATIONS SHALL NOT ALTER THE FINAL EMBANKMENT LINES AND GRADES SHOWN ON THE PLANS OR REDUCE ROADWAY EMBANKMENT STABILITY, EROSION PROTECTION, OR DRAINAGE FUNCTION. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY AND PERMANENT MEASURES NECESSARY TO MAINTAIN EMBANKMENT STABILITY.

TRUSTEES OF THE JAMES JOSEPH PIRKLE, SR. AND MARTHA EUGENIA ASBELL PIRKLE JOINT REVOCABLE TRUST
DB 898 PG 111, TR. 4
PB 3 PG 232

TRUSTEES OF THE JAMES JOSEPH PIRKLE, SR. AND MARTHA EUGENIA ASBELL PIRKLE JOINT REVOCABLE TRUST
DB 898 PG 111, TR. 4
PB 3 PG 232

TRUSTEES OF THE JAMES JOSEPH PIRKLE, SR. AND MARTHA EUGENIA ASBELL PIRKLE JOINT REVOCABLE TRUST
DB 898 PG 111, TR. 4
PB 3 PG 232

TRUSTEE EDWARD KRISTIN HOFFMAN EDWARDS TELLY BROOKS ANDREA BROOKS
DB 858 PG 170

ROCKY WILLIAMS
DB 888 PG 383

LARRY ZANE MORRIS
LISA CHRISTINE BREAZEALE
DB 928 PG 62

TERESA GAIL OWENSBY
BILLY DWAYNE OWENSBY
DB 802 PG 363
PB 1 PG 193B

LEGEND:

- BIOENGINEERING LIVE STAKING AREA
- PROPOSED CHANNEL CENTERLINE
- PROPOSED THALWEG CHANNEL
- PROPOSED BOTTOM OF BANK
- PROPOSED LOW BENCH
- PROPOSED RIPRAP (SEE ROADWAY AND REDLINE DRAINAGE PLANS)
- PROPOSED PGR (SEE ROADWAY AND REDLINE DRAINAGE PLANS)
- PROPOSED ROADWAY SLOPE STAKE (SEE ROADWAY AND REDLINE DRAINAGE PLANS)

NOTES:

1. ENGINEER MAY MAKE CHANNEL ALIGNMENT AND PROFILE ADJUSTMENTS BASED ON FIELD SITE CONDITIONS INCLUDING EXISTING BEDROCK OUTCROPPINGS.

2. SEE ROADWAY PLANSET FOR ALL ROADWAY DESIGN WORK

3. ROADWAY SLOPE STAKES SHOWN FOR REFERENCE ONLY

SEE SHEETS 18–19 FOR –SS5– PROFILE VIEW
SEE SHEET 17 FOR –SS5– PROFILE POINT TABLE

BRANCH CIVIL

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PROJECT REFERENCE NO.	SHEET NO.
	17
R/W SHEET NO.	–

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TRIBUTARY STREAM SITE 3

POINT ID	FEATURE	STATION	CHANNEL CL ELEV	CHANNEL SLOPE	BKFL WIDTH	BKFL ELEV	BKFL DEPTH
1	Head of Riffle	0+50.00	2267.57	-5.00%	31	2270.07	2.5
2	Head of Step	0+66.00	2266.77	-24.00%	31		
3	Mid Pool	0+74.00	2264.85	3.00%	34	2268.75	3.9
4	Glide	0+84.00	2265.15	14.00%	34		
5	Head of Riffle	0+90.00	2265.99	-5.00%	31	2268.49	2.5
6	Head of Step	1+06.00	2265.19	-24.00%	31		
7	Mid Pool	1+14.00	2263.27	3.00%	34	2267.17	3.9
8	Glide	1+24.00	2263.57	14.00%	34		
9	Head of Riffle	1+30.00	2264.41	-5.00%	31	2266.91	2.5
10	Head of Step	1+46.00	2263.61	-24.00%	31		
11	Mid Pool	1+54.00	2261.69	3.00%	34	2265.59	3.9
12	Glide	1+64.00	2261.99	14.00%	34		
13	Head of Riffle	1+70.00	2262.83	-5.00%	31	2265.33	2.5
14	Head of Step	1+86.00	2262.03	-24.00%	31		
15	Mid Pool	1+94.00	2260.11	3.00%	34	2264.01	3.9
16	Glide	2+04.00	2260.41	14.00%	34		
17	Head of Riffle	2+10.00	2261.25	-5.00%	31	2263.75	2.5
18	Head of Step	2+26.00	2260.45	-24.00%	31		
19	Mid Pool	2+34.00	2258.53	3.00%	34	2262.43	3.9
20	Glide	2+44.00	2258.83	14.00%	34		
21	Head of Riffle	2+50.00	2259.67	-5.00%	31	2262.17	2.5
22	Head of Step	2+62.00	2259.07	-24.00%	31		
23	Mid Pool	2+69.00	2257.39	3.00%	34	2261.29	3.9
24	Glide	2+78.00	2257.66	12.00%	34		
25	Head of Riffle	2+83.00	2258.26	-5.00%	31	2260.76	2.5
26	Tie-In	2+88.30	2258.00		31		

STREAM SITE 5

POINT ID	FEATURE	STATION	CHANNEL CL ELEV	CHANNEL SLOPE	LOW BANK WIDTH (FT.)	LOW FLOW (LFLW) ELEV	LFLW DEPTH (FT.)
1	Head of Riffle	1+98.76	2270.12	-2.50%	70	2273.62	3.5
2	Head of Run	2+58.76	2268.62	-9.00%	70		
3	Mid Pool	2+93.76	2265.47	0.50%	77	2271.07	5.6
4	Glide	3+63.76	2265.82	8.00%	77		
5	Head of Riffle	3+88.76	2267.82	-2.50%	70	2271.32	3.5
6	Head of Run	4+43.76	2266.45	-9.00%	70		
7	Mid Pool	4+88.76	2262.40	0.50%	77	2267.995	5.6
8	Glide	6+98.76	2263.45	7.00%	77		
9	Head of Riffle	7+33.76	2265.90	-1.50%	70	2269.395	3.5
10	Head of Run	9+58.76	2262.52	-9.00%	70		
11	Mid Pool	10+03.76	2258.47	0.50%	77	2264.07	5.6
12	Glide	11+93.76	2259.42	8.00%	77		
13	Head of Riffle	12+28.76	2262.22	-1.00%	70	2265.72	3.5
14	Head of Run	14+78.76	2259.72	-9.00%	70		
15	Mid Pool	15+23.76	2255.67	0.50%	77	2261.27	5.6
16	Glide	17+23.76	2256.67	7.00%	77		
17	Head of Riffle	17+58.76	2259.12	-1.50%	70	2262.62	3.5
18	Head of Run	20+08.76	2255.37	-9.00%	70		
19	Mid Pool	20+53.76	2251.32	0.50%	77	2256.92	5.6
20	Glide	22+53.76	2252.32	7.00%	77		
21	Head of Riffle	22+88.76	2254.77	-1.50%	70	2258.27	3.5
22	Head of Run	25+38.76	2251.02	-9.00%	70		
23	Mid Pool	25+83.76	2246.97	0.50%	77	2252.57	5.6
24	Glide	27+83.76	2247.97	7.00%	77		
25	Head of Riffle	28+18.76	2250.42	-1.50%	70	2253.92	3.5
26	Head of Run	29+68.76	2248.17	-9.00%	70		
27	Mid Pool	30+13.76	2244.12	0.50%	77	2249.72	5.6
28	Glide	31+13.76	2244.62	8.00%	77		
29	Head of Riffle	31+48.76	2247.42	-1.00%	70	2250.92	3.5
30	Head of Run	32+98.76	2245.92	-8.00%	70		
31	Mid Pool	33+43.76	2242.32	0.50%	77	2247.92	5.6
32	Glide	34+43.76	2242.82	8.00%	77		
33	Head of Riffle	34+78.76	2245.62	-1.00%	70	2249.12	3.5
34	Head of Run	36+78.76	2243.62	-9.00%	70		
35	Mid Pool	37+23.76	2239.57	0.50%	77	2245.17	5.6
36	Glide	38+73.76	2240.32	8.00%	77		
37	Head of Riffle	39+08.76	2243.12	-1.00%	70	2246.62	3.5
38	Tie-In	39+57.16	2242.64		70		

NOTES:
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SEE SHEETS 14–16 FOR –SS5– PLAN VIEW
SEE SHEETS 18–19 FOR –SS5– PROFILE VIEW
SEE SHEET 15 FOR –TSS3– PLAN VIEW
SEE SHEET 15 FOR –TSS3– PROFILE VIEW

REVISIONS

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NOTES:
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SEE SHEETS 14–16 FOR –SS5– PLAN VIEW

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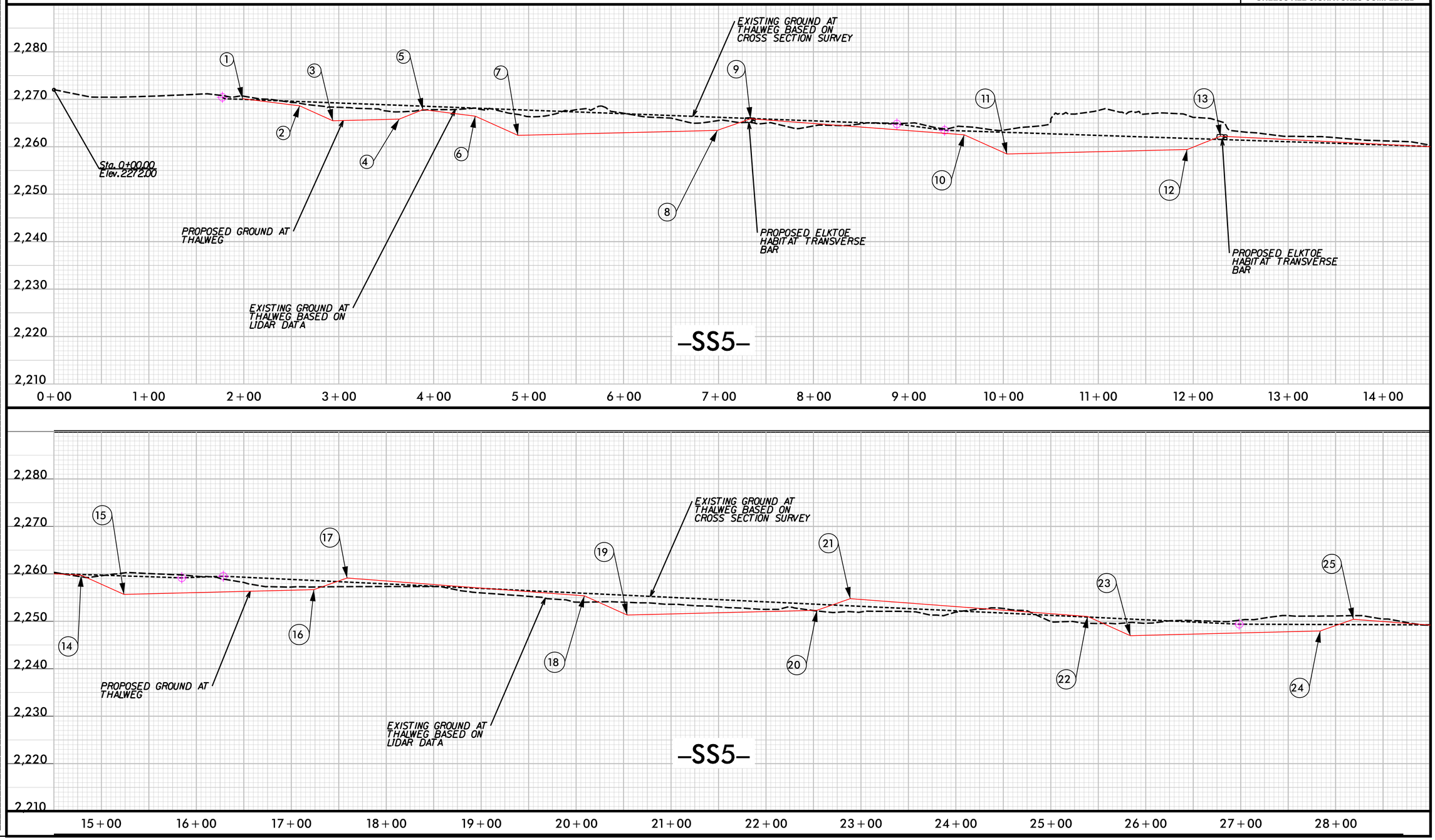
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PROJECT REFERENCE NO.	SHEET NO.
	18
R/W SHEET NO.	–
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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REVISIONS



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NOTES:
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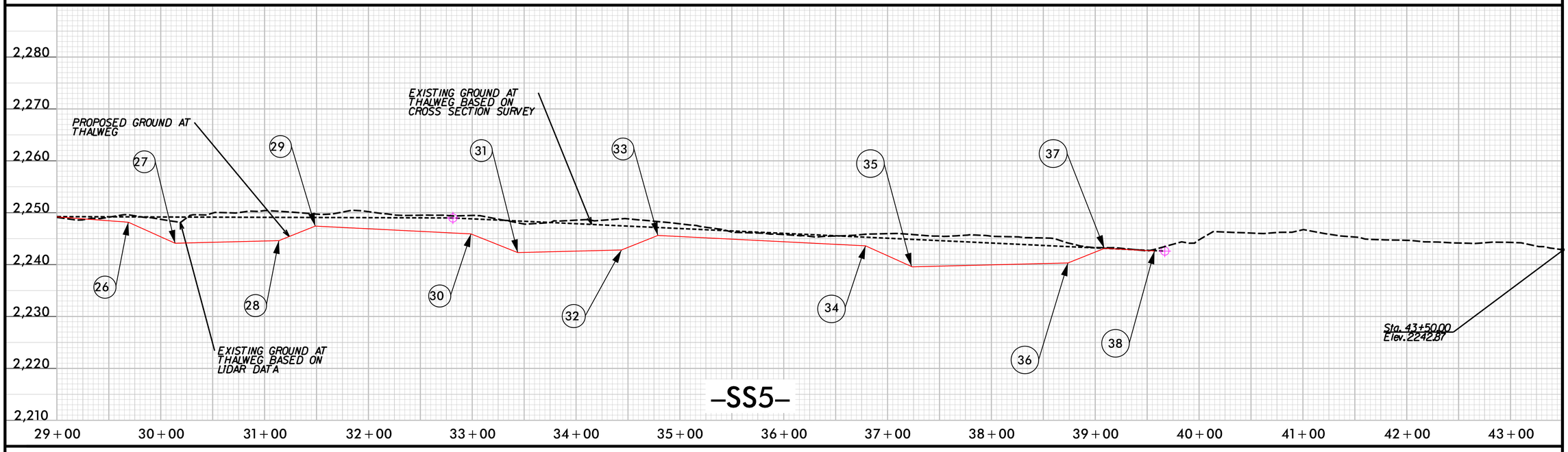
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PROJECT REFERENCE NO.	SHEET NO.
	19
R/W SHEET NO.	–
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
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SEE SHEET 14–16 FOR –SS5– PLAN VIEW



REVISIONS

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2460 2455 2450 2445 2440 2435 2430

0+50.000000

0+25.000000

0+00.000000

-SSI-

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2460 2455 2450 2445 2440 2435 2430

2433.40

1+25.000000

2434.00

1+00.000000

0+75.000000

-SSI-

8/23/99

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	M-0572F	X-3

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2460 2455 2450 2445 2440 2435 2430

2431.60

2+00.000000

2431.10

1+75.000000

2431.15

1+50.000000

-SS/-

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8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-4

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2+75.000000

2433.25

2+50.000000

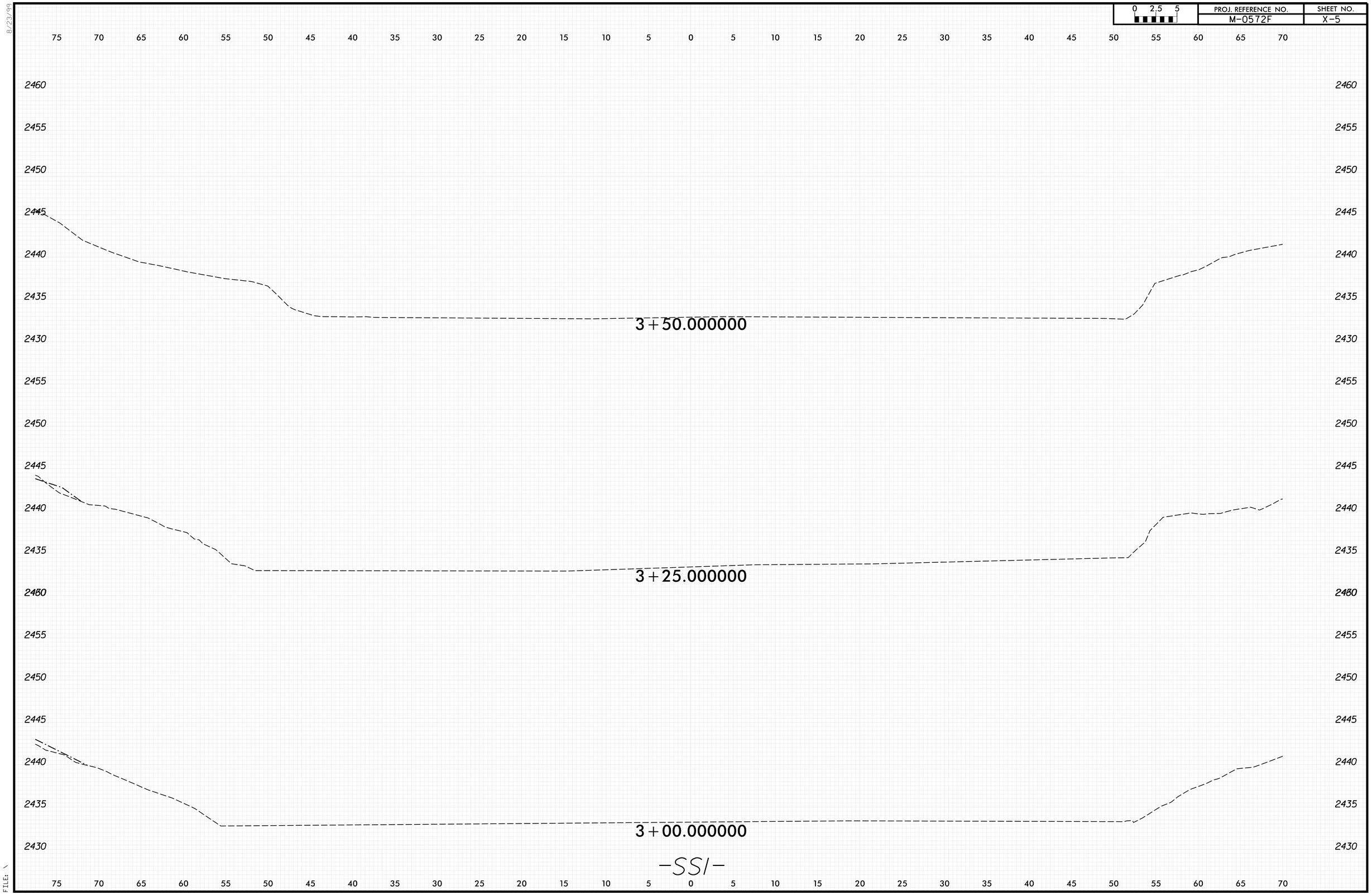
2433.10

2+25.000000

-SSI-

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	M-0572F	X-5



-SSI-

8/23/99

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0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-6

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2455
2450
2445
2440
2435
2430

0+50.000000

2455
2450
2445
2440
2435
2430

0+25.000000

2425
2450
2445
2440
2435
2430

0+00.000000

2425

-SS2-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-7

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2455 2450 2445 2440 2435 2430 2425

2426.79

1+25.000000

2426.92

1+00.000000

0+75.000000

-SS2-

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	M-0572F	X-8

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2450
2445
2440
2435
2430
2425

2426.42

2+00.000000

2426.54

1+75.000000

2426.67

1+50.000000

-SS2-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
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	M-0572F	X-9

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2455 2450 2445 2440 2435 2430 2425

2426.04

2 + 75.000000

2450 2445 2440 2435 2430 2425

2426.17

2 + 50.000000

2450 2445 2440 2435 2430 2425

2426.30

2 + 25.000000

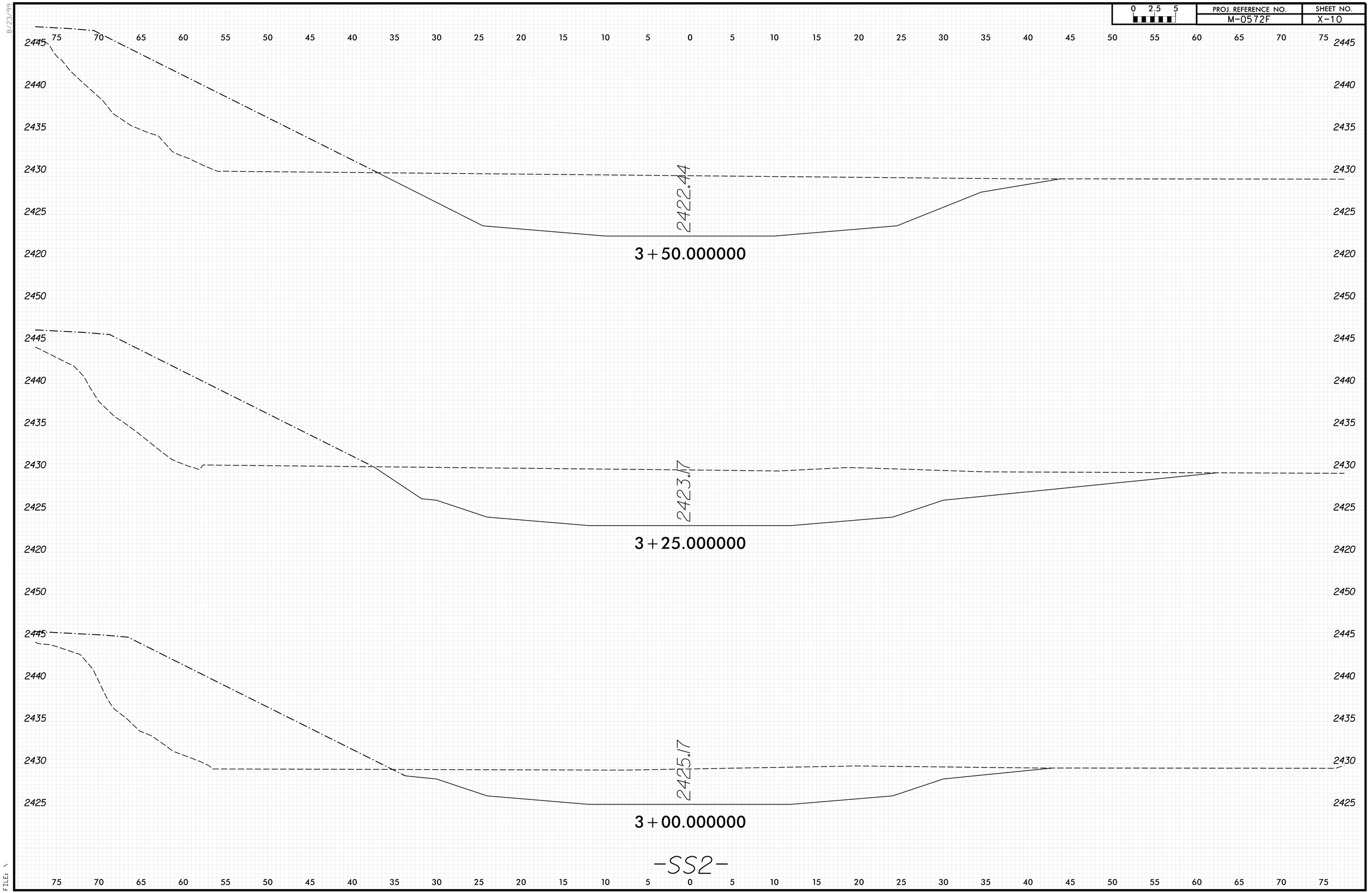
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8/23/99

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FILE: \

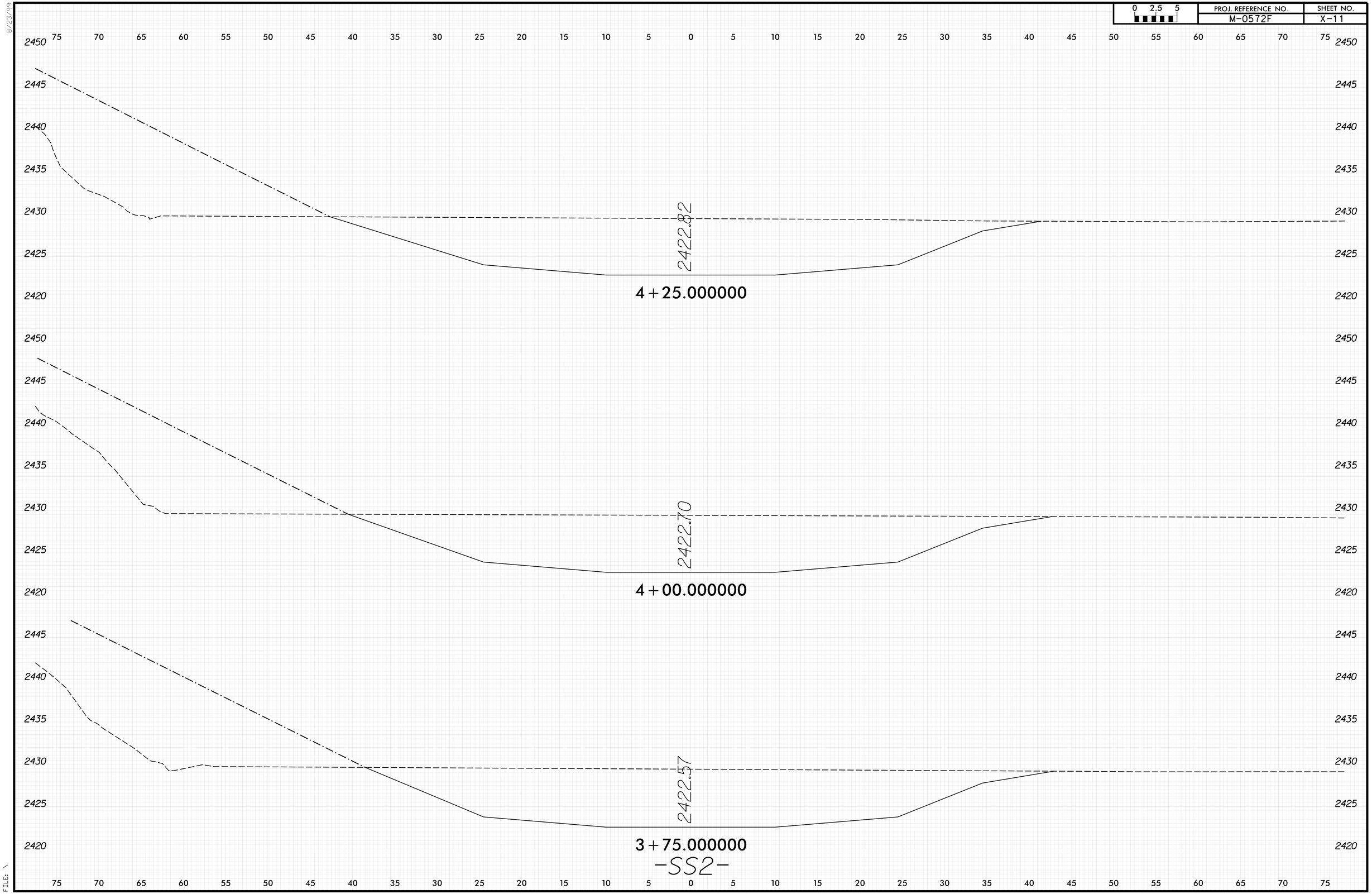
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-10



8/23/99

PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:12:43 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-11

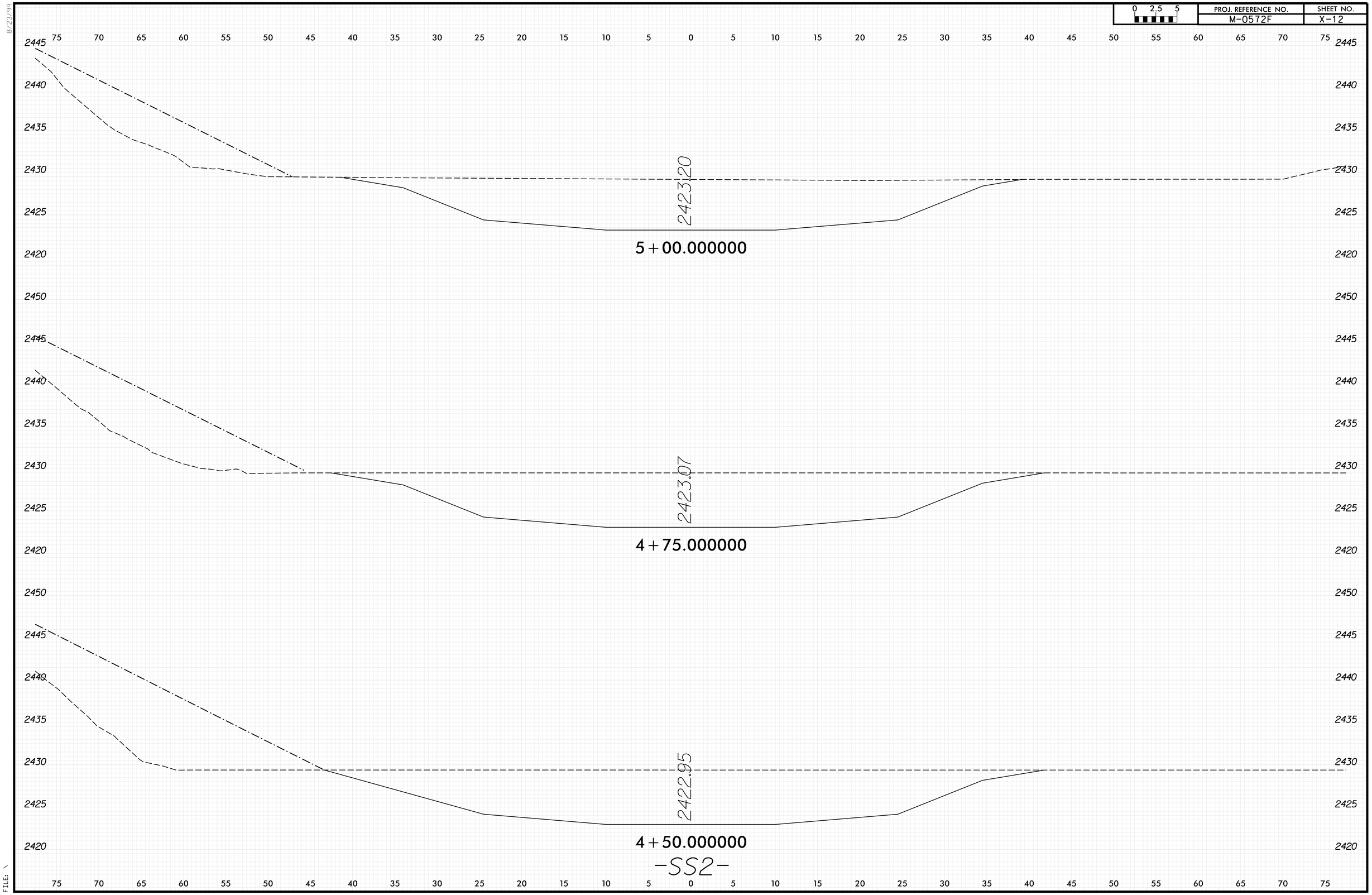


8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:12:44 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-12



PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:12:45 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-13

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2450 2445 2440 2435 2430 2425 2420

2425.09

5+75.000000

2424.12

5+50.000000

2423.32

5+25.000000

-SS2-

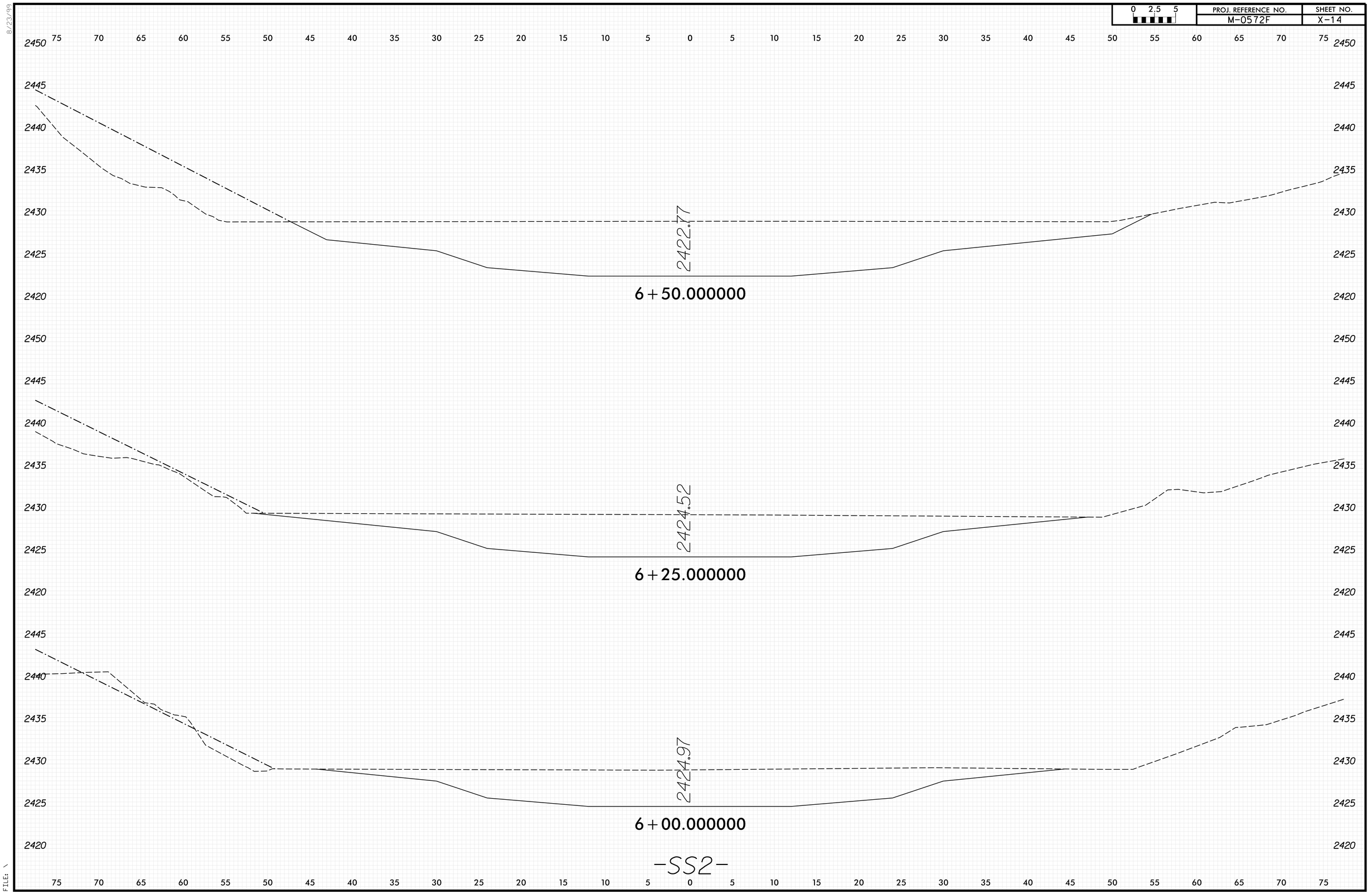
75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:12:46 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-14

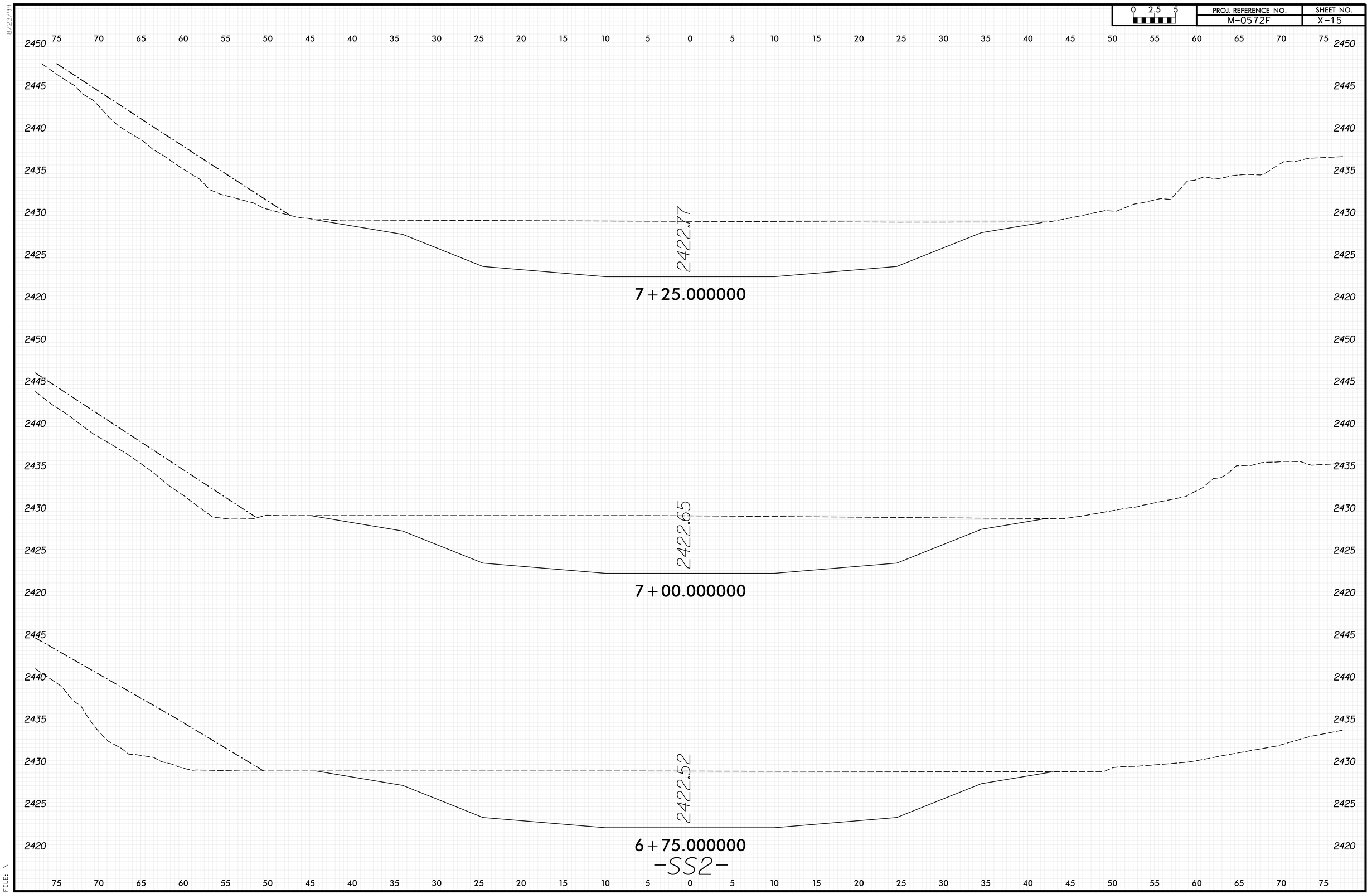


8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:12:48 PM
DATE: 8/24/2026

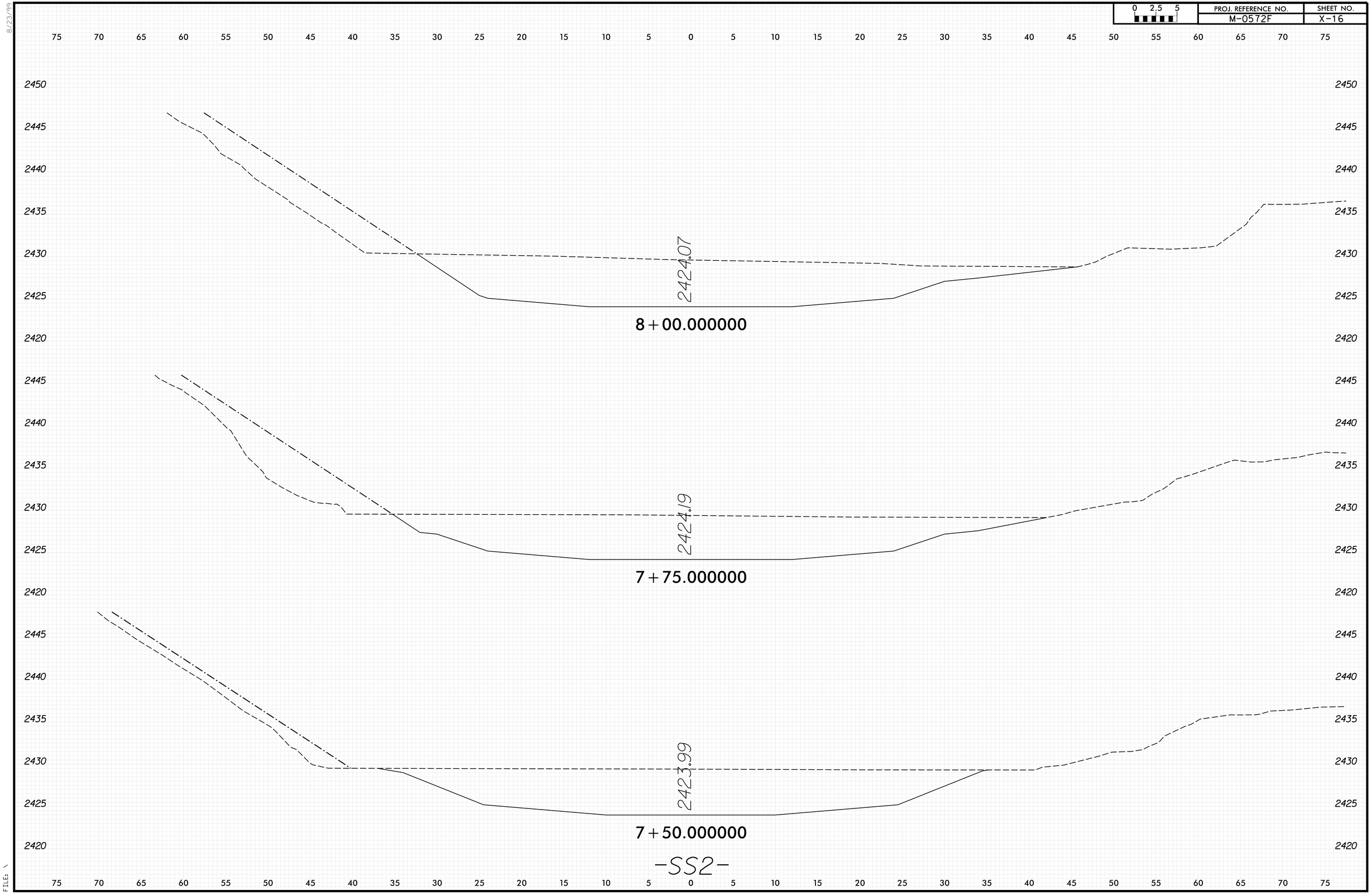
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-15



8/23/99

PLOT DRIVER: NCDOT.pdf.color_eng.50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:12:49 PM
DATE: 8/24/2026

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-16



PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:12:50 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-17

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2450 2445 2440 2435 2430 2425 2420

2423.70

8+75.000000

2445 2440 2435 2430 2425 2420

2423.82

8+50.000000

2445 2440 2435 2430 2425 2420

2423.95

8+25.000000

-SS2-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

DATE: 8/24/2026
PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:12:51 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-18

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2450 2445 2440 2435 2430 2425 2420

2423.32

9+50.000000

2445 2440 2435 2430 2425 2420

2423.45

9+25.000000

2445 2440 2435 2430 2425 2420

2423.57

9+00.000000

-SS2-

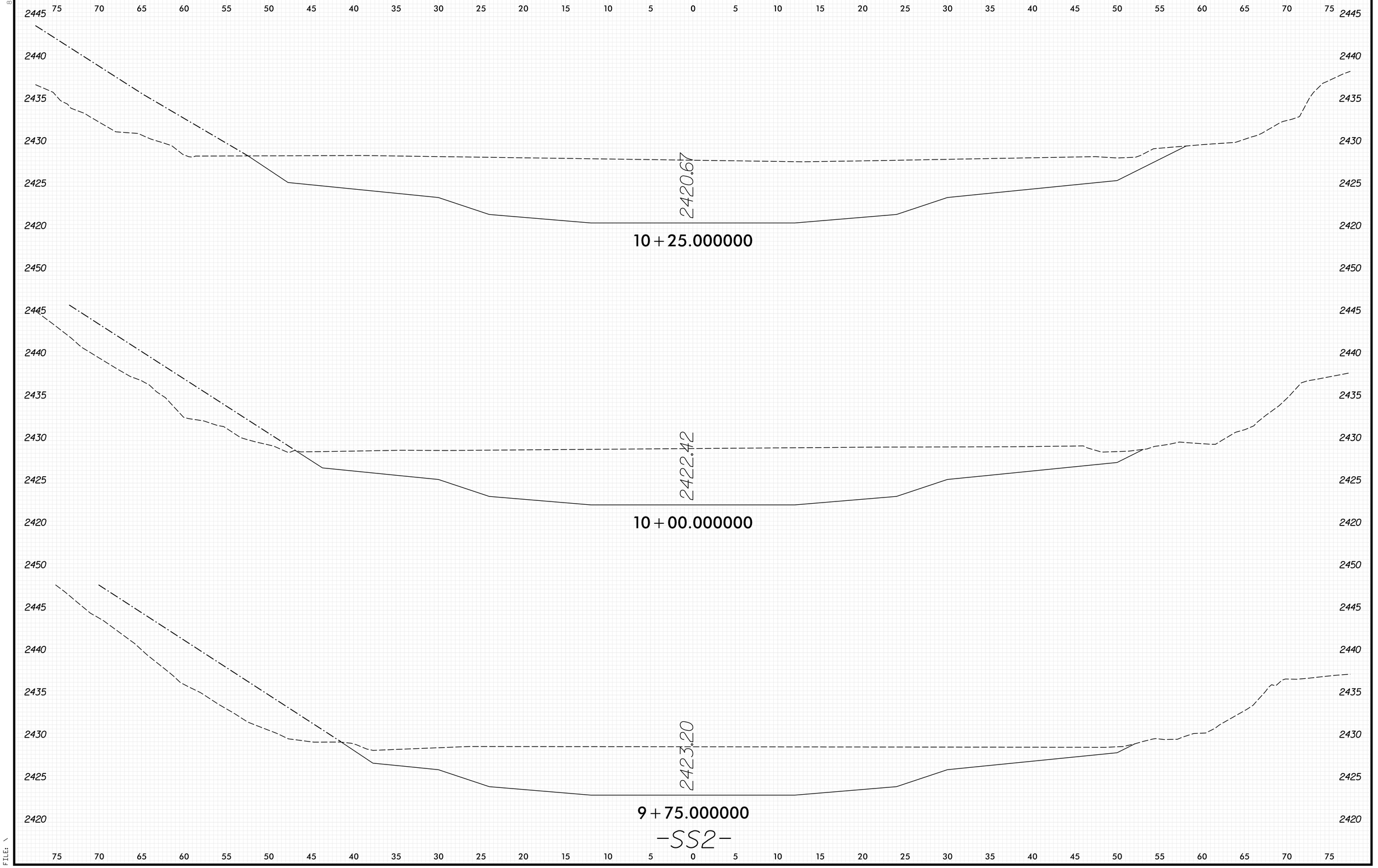
75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT.pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:12:53 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-19



8/23/99

PLOT DRIVER: NCDOT_pdf-color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:12:54 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-20

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2450
2445
2440
2435
2430
2425
2420

2420.17

10+75.000000

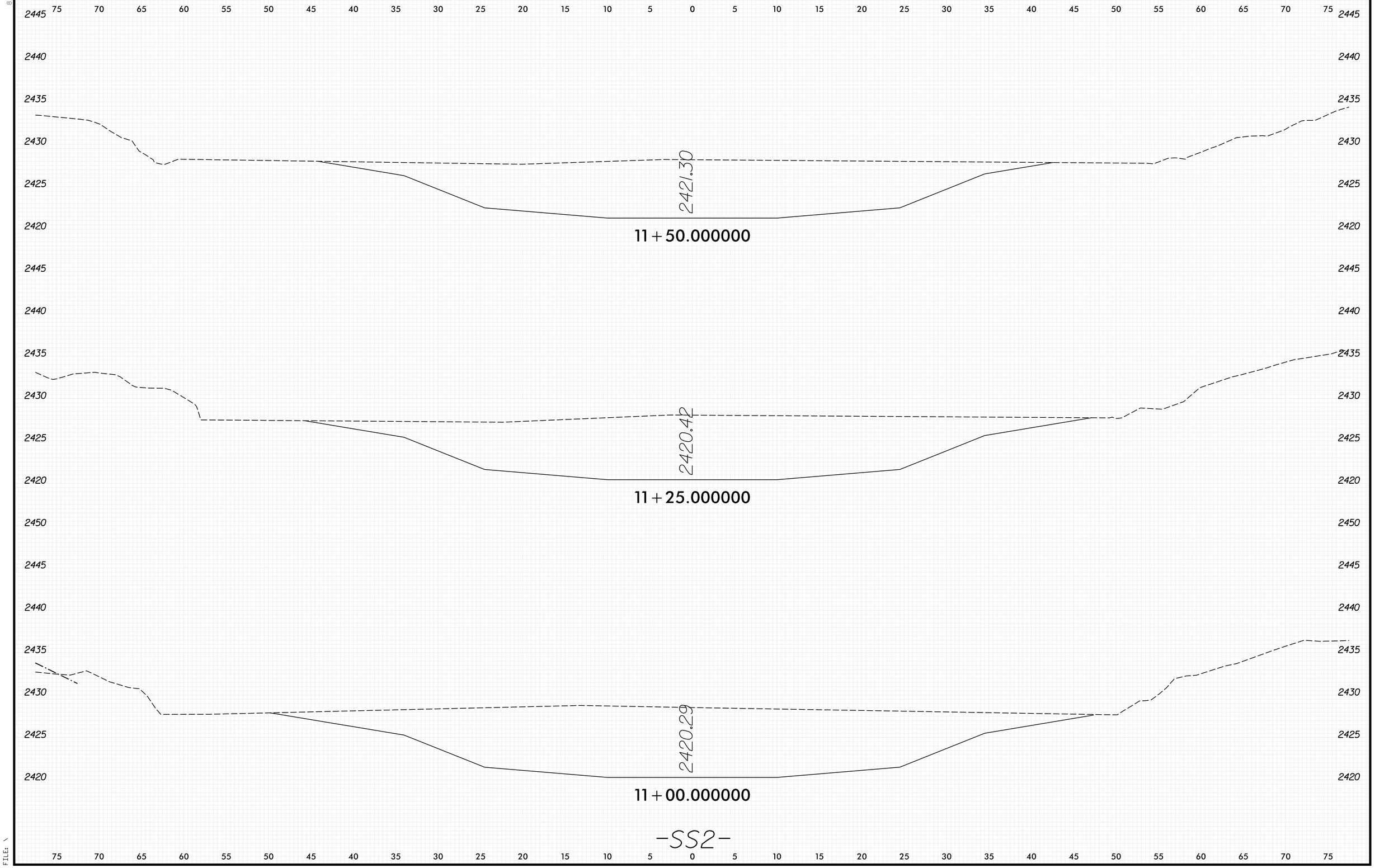
2420.05

10+50.000000

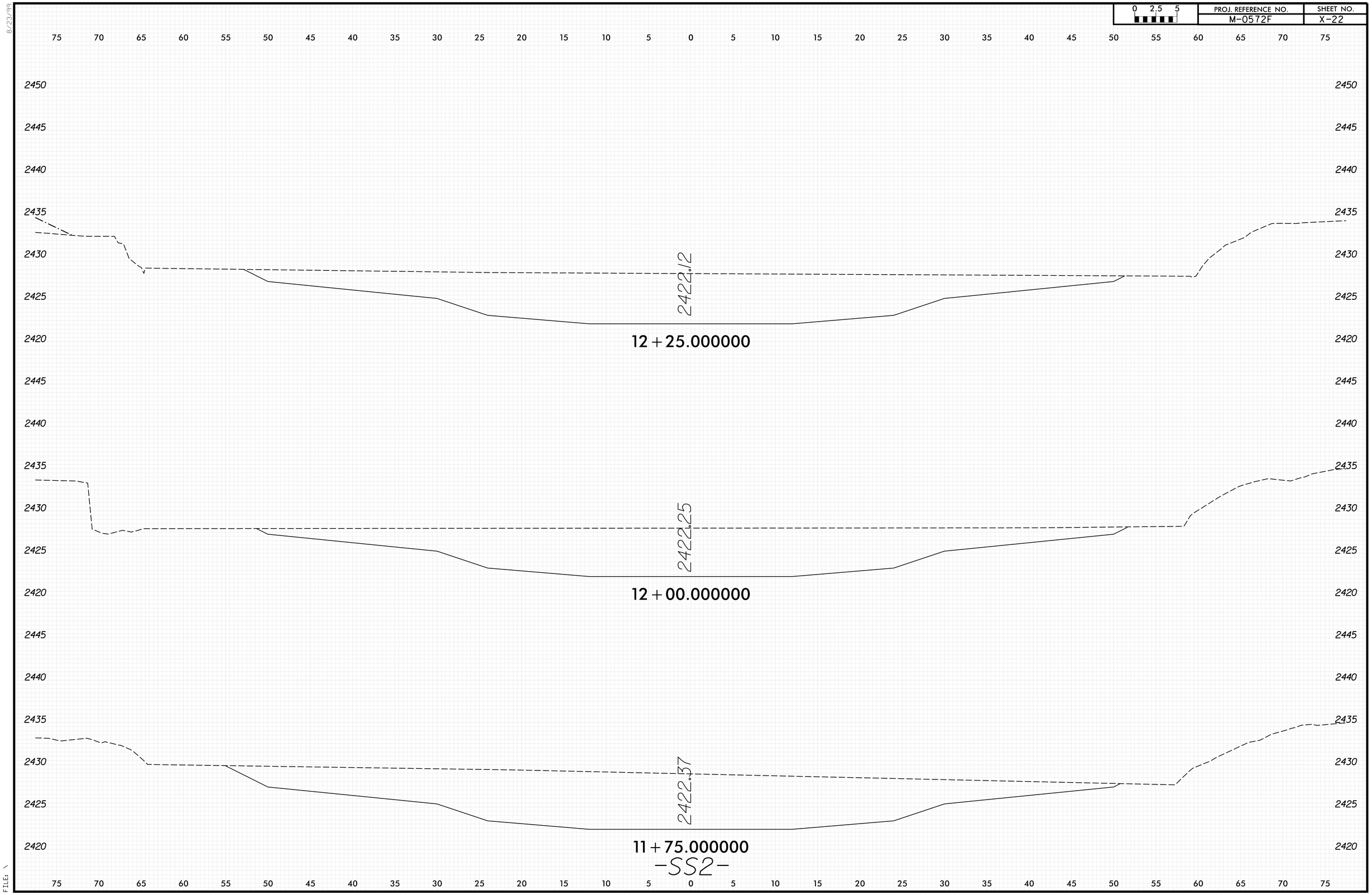
-SS2-

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:12:55 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-21



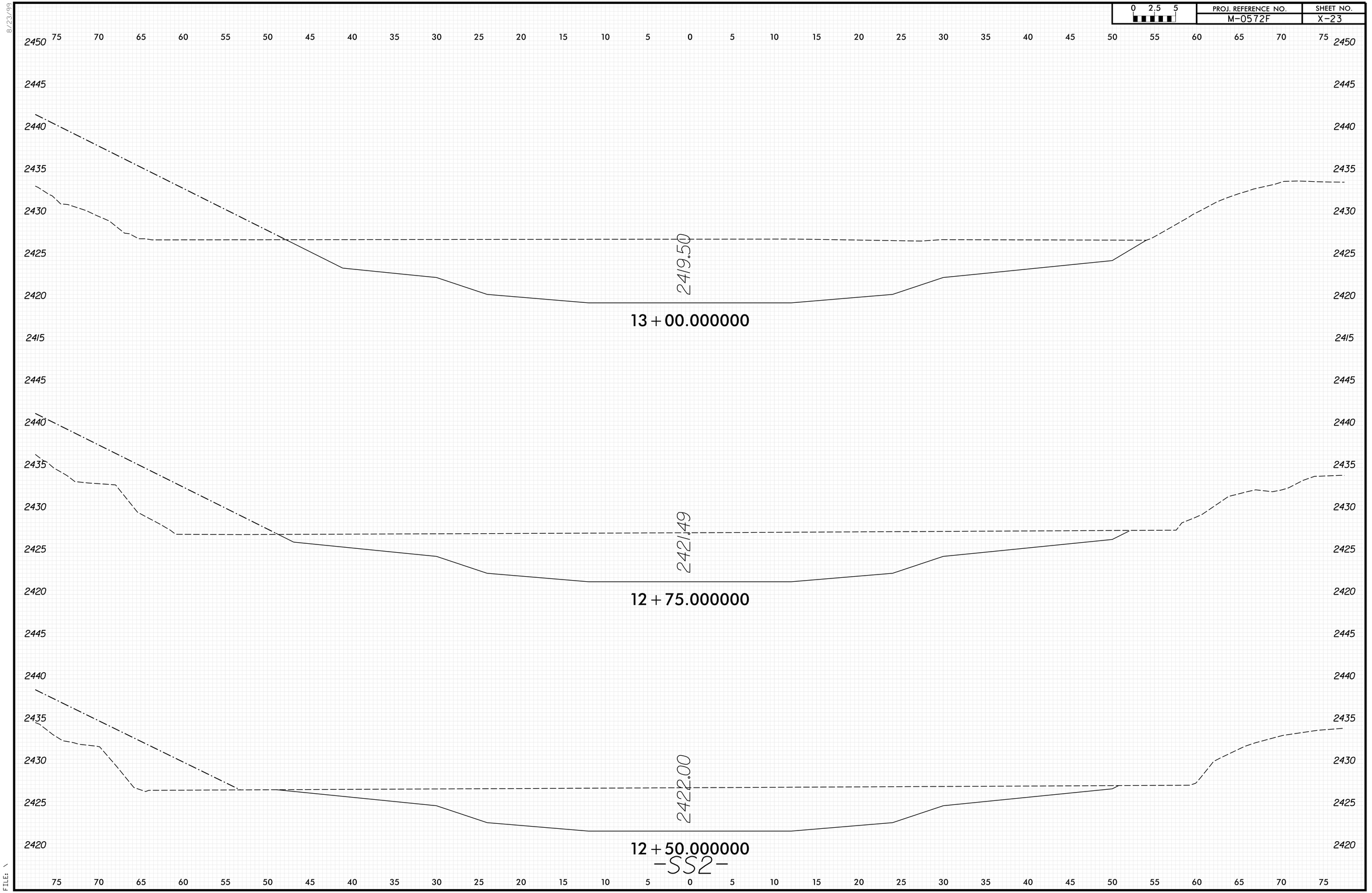
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-22



8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:12:58 PM
DATE: 8/24/2026

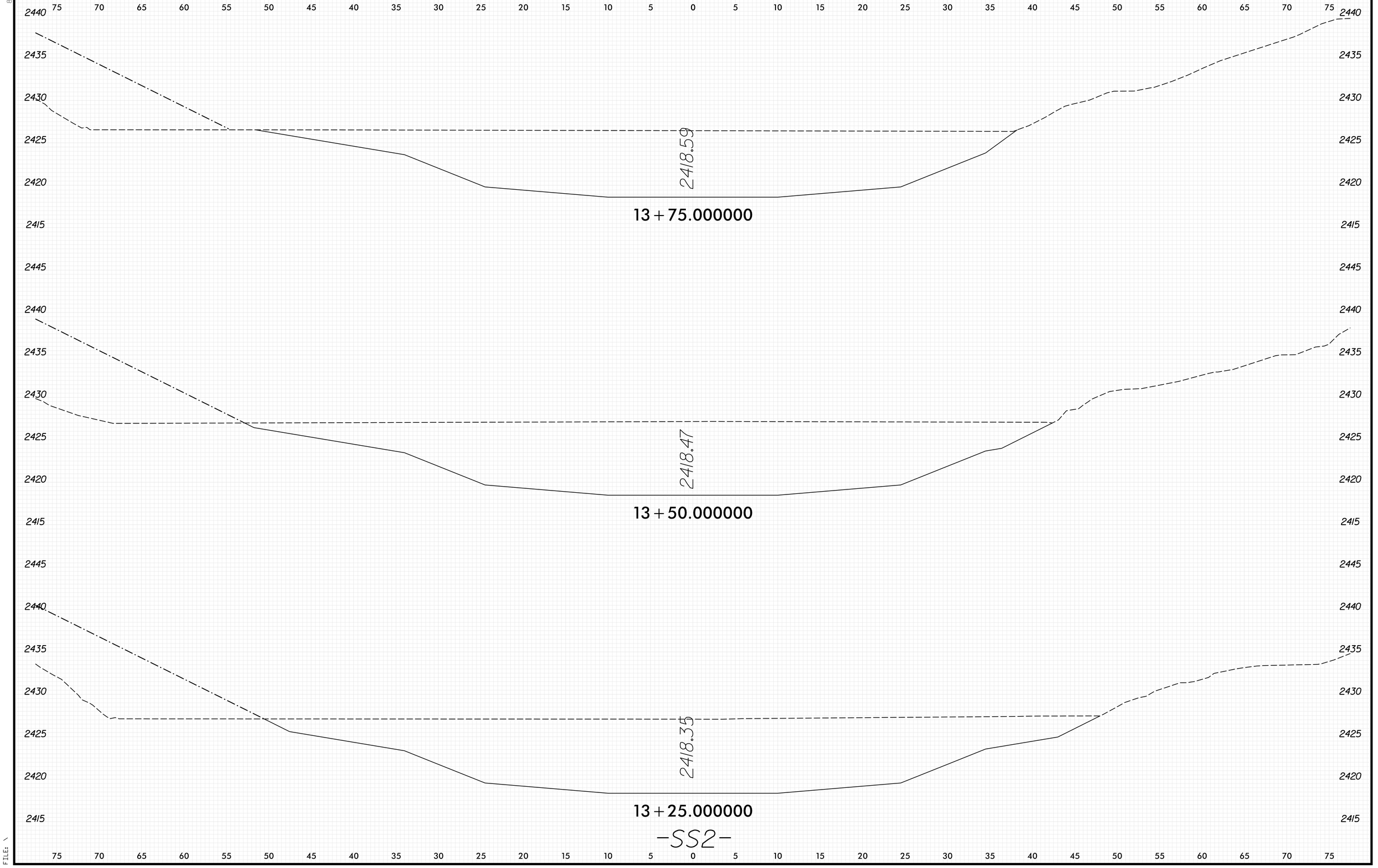
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-23



8/23/99

PLOT DRIVER: NCDOT_pdf_color-eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:12:59 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-24



8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE:
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:13:00 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-25

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2450 2445 2440 2435 2430 2425 2420 2415

2418.85

14+25.000000

2450 2445 2440 2435 2430 2425 2420 2415

2418.72

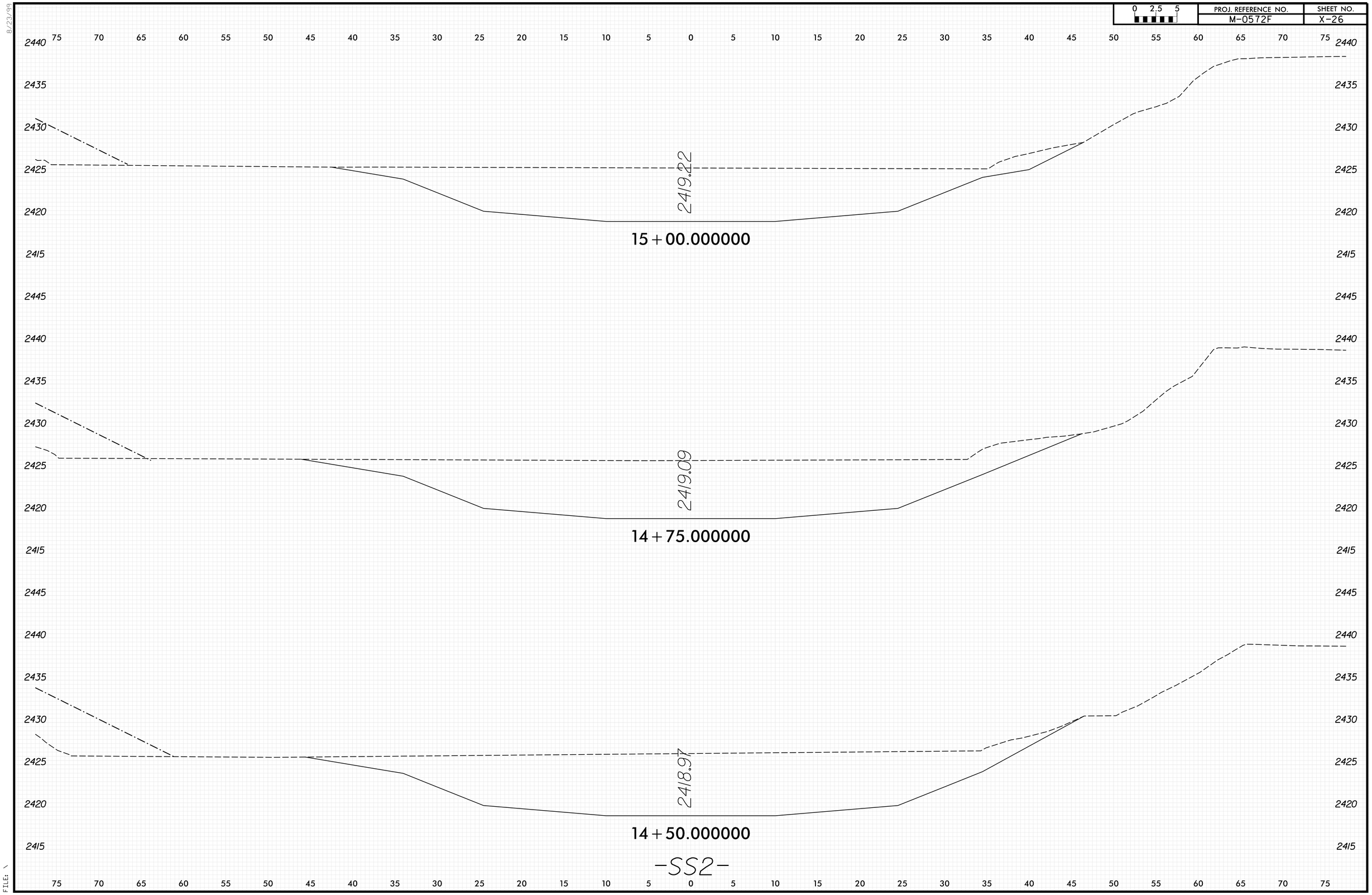
14+00.000000

-SS2-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:13:02 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-26



PLOT DRIVER: NCDOT.pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:03:03 PM

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2450 2445 2440 2435 2430 2425 2420 2415

2419.47

15+50.000000

2419.34

15+25.000000

-SS2-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:13:04 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-28

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2445 2440 2435 2430 2425 2420

2421.17

16+25.000000

2445 2440 2435 2430 2425 2420

2421.29

16+00.000000

2445 2440 2435 2430 2425 2420

2420.04

15+75.000000

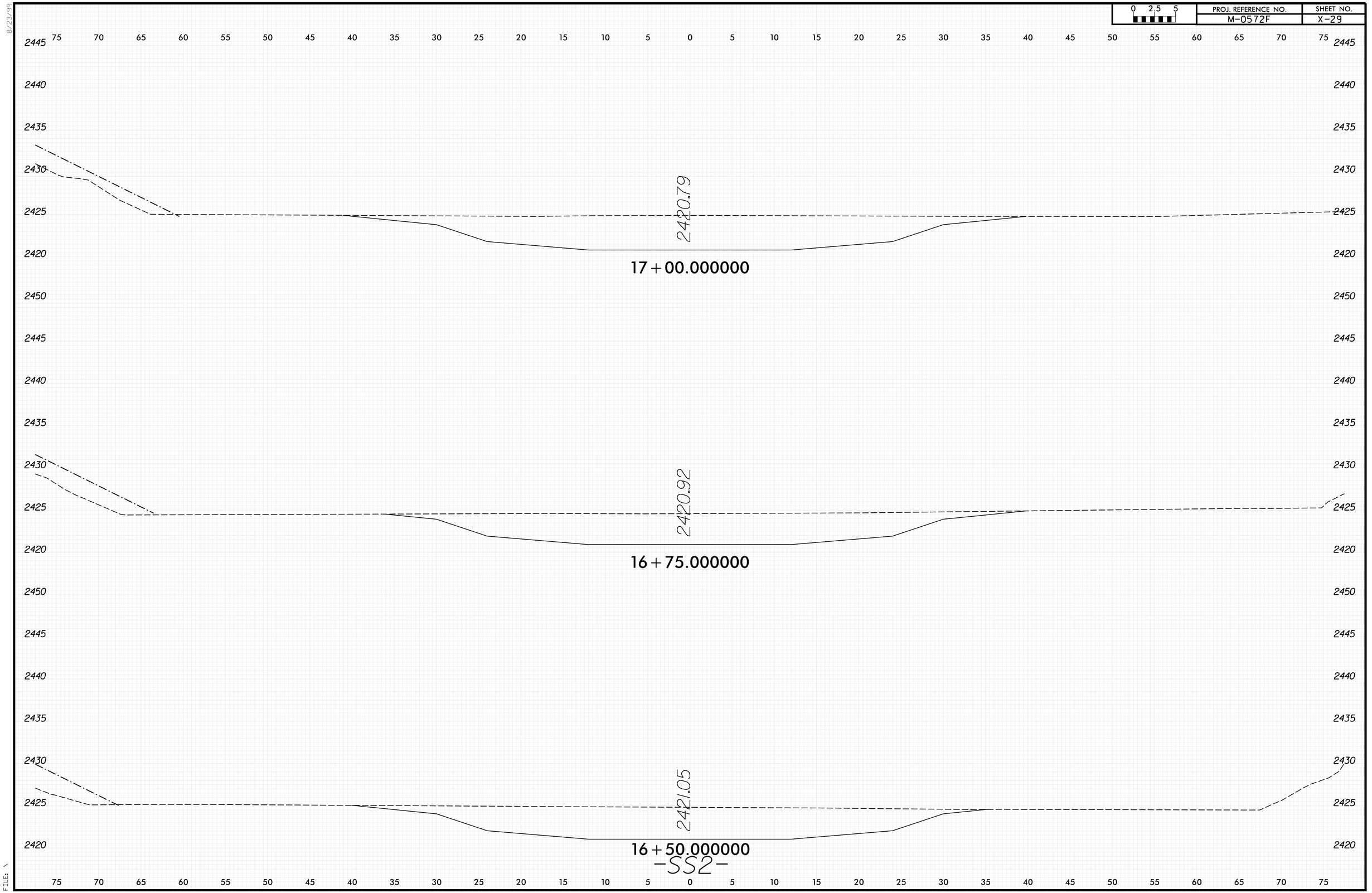
-SS2-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT.pdf.color_eng.50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:13:06 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-29

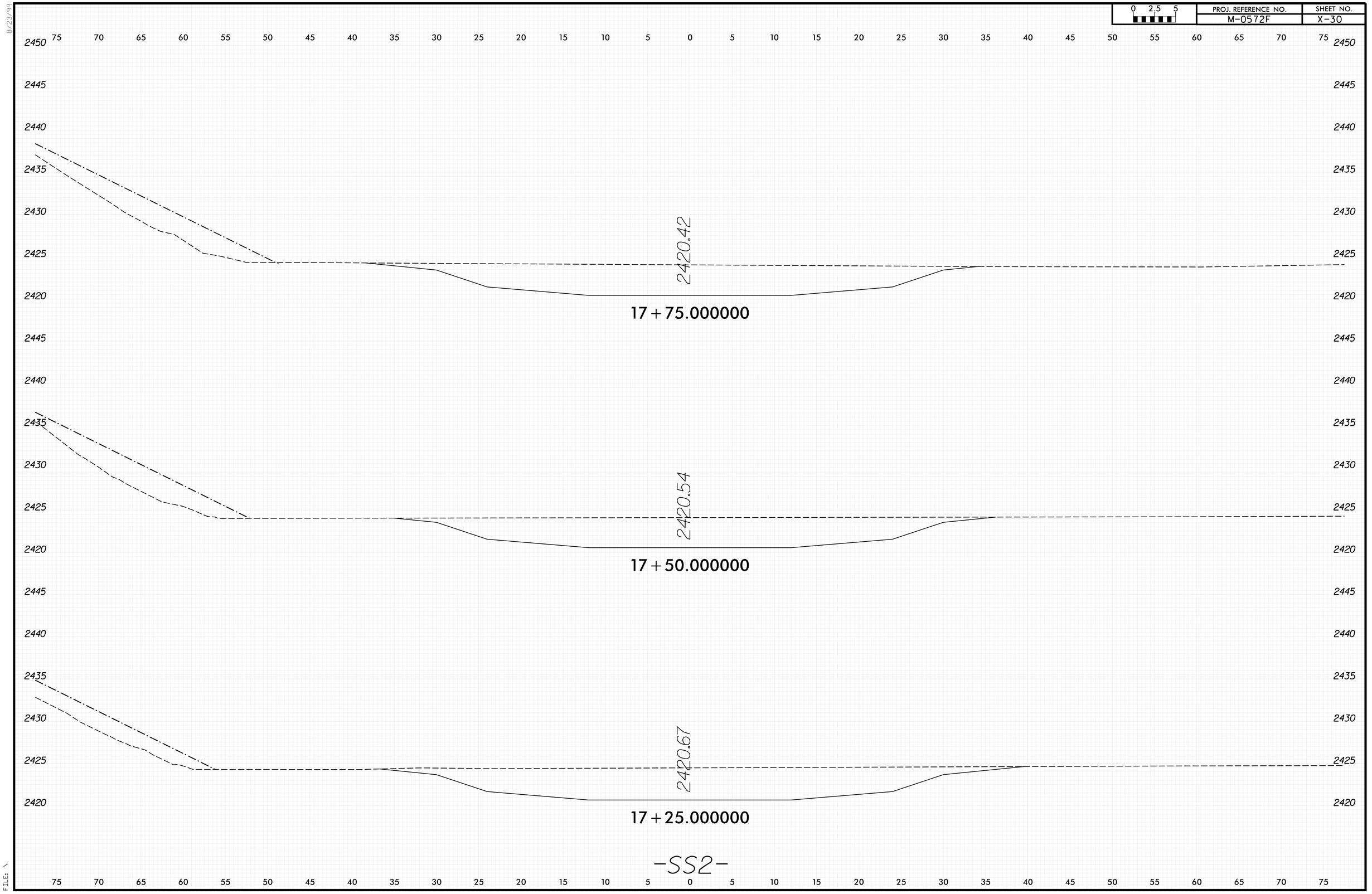


8/23/99

PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:13:07 PM
DATE: 8/24/2026
PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

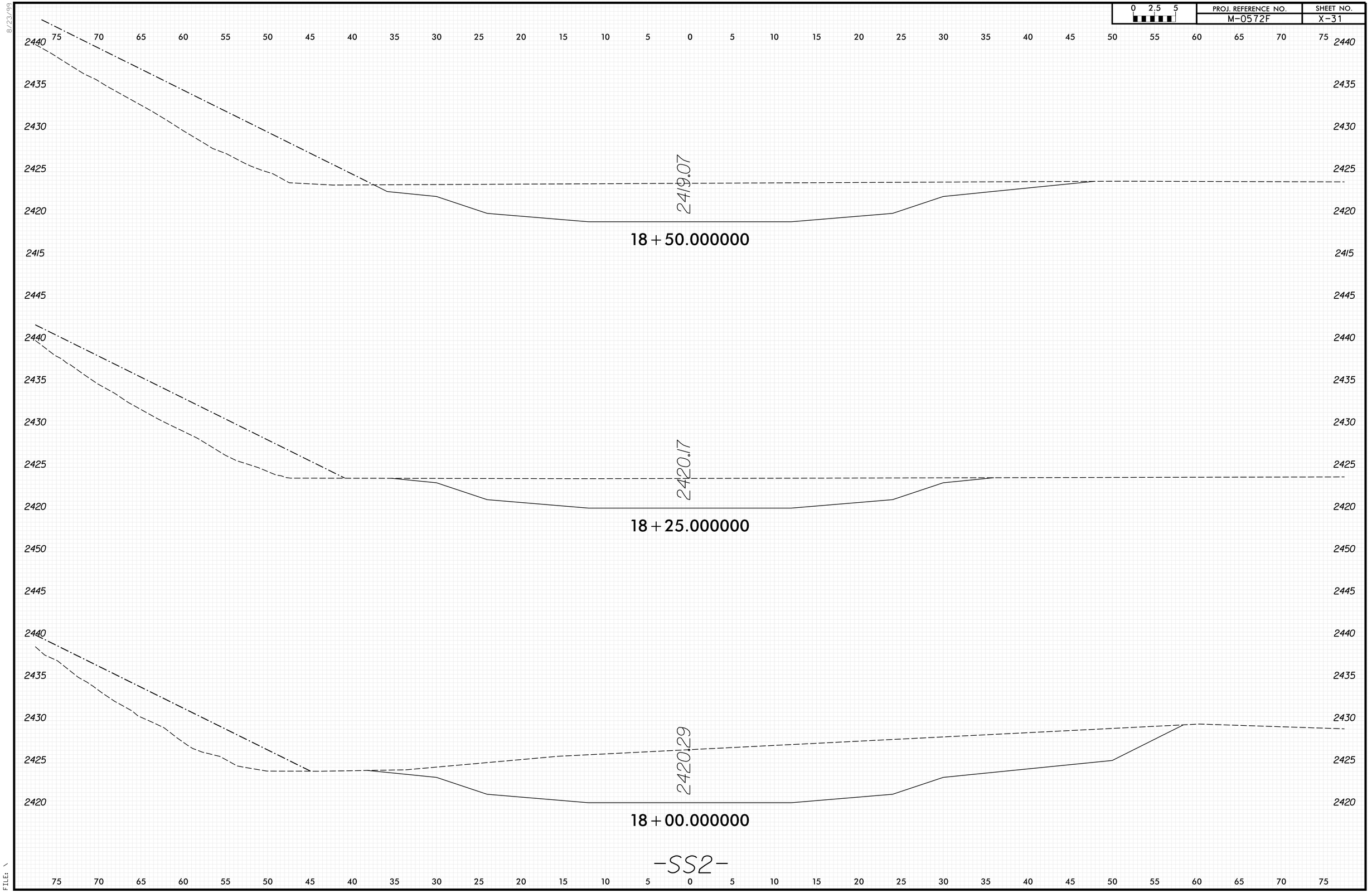
8/23/99

0 2,5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-30



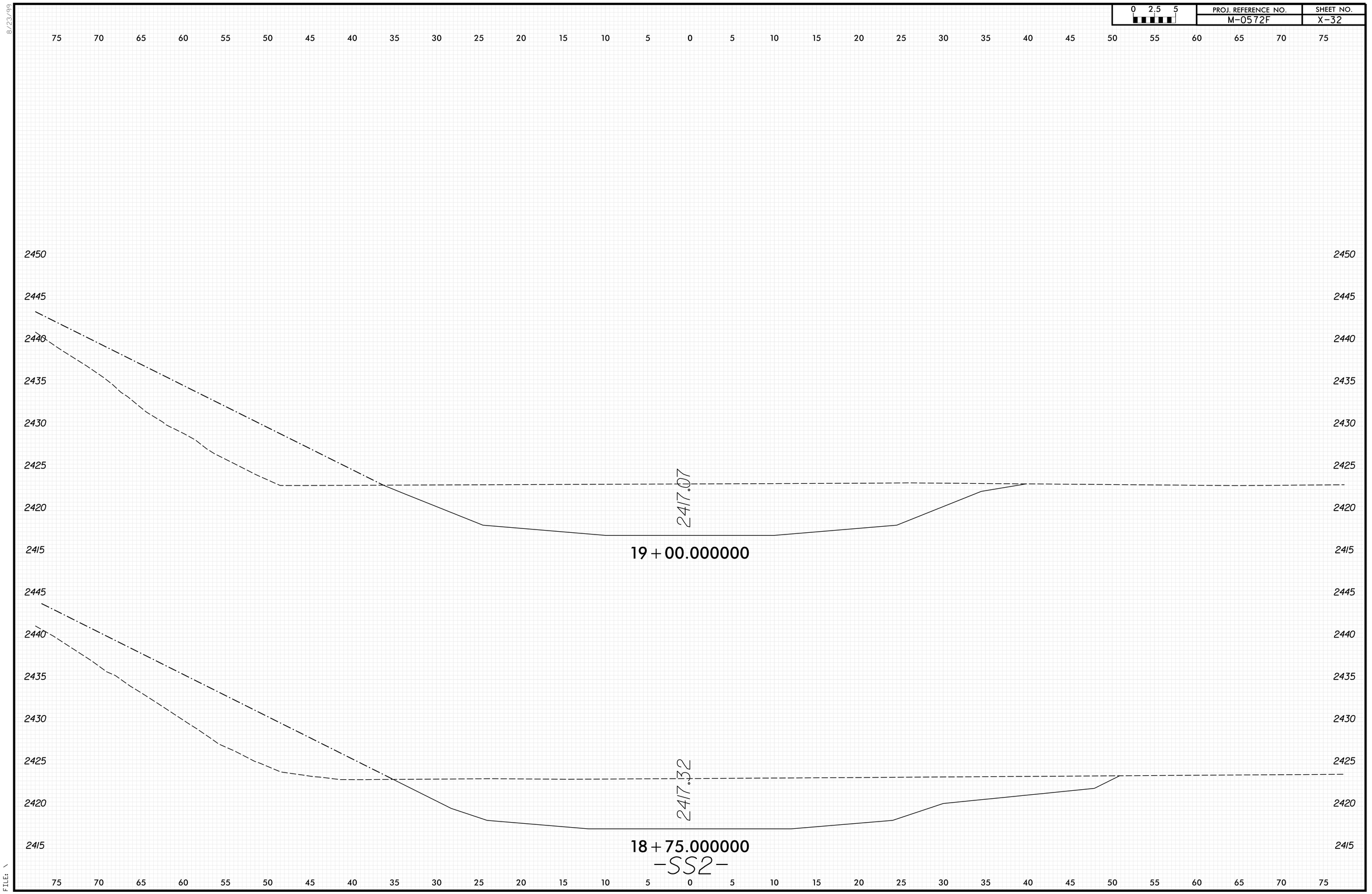
PLOT DRIVER: NCDOT_pdf_color-eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:13:08 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-31



PLOT DRIVER: NCDOT.pdf.color-eng_50.plt
USER: GJACOBSON
FILE: \
DATE: 8/24/2026
PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:13:10 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-32

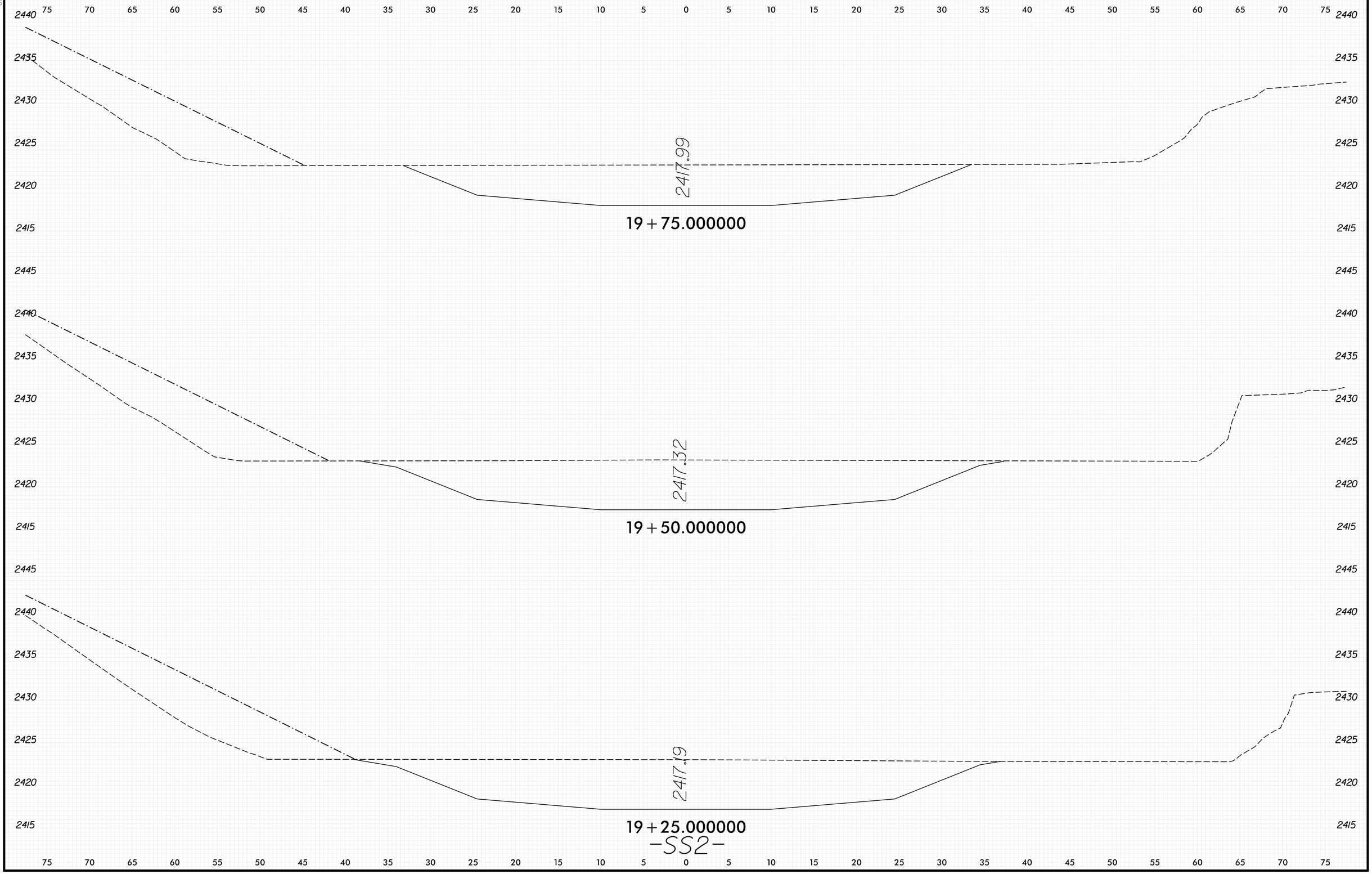


8/23/99

PLOT DRIVER: NCDOT.pdf-color_eng-50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:13:11 PM

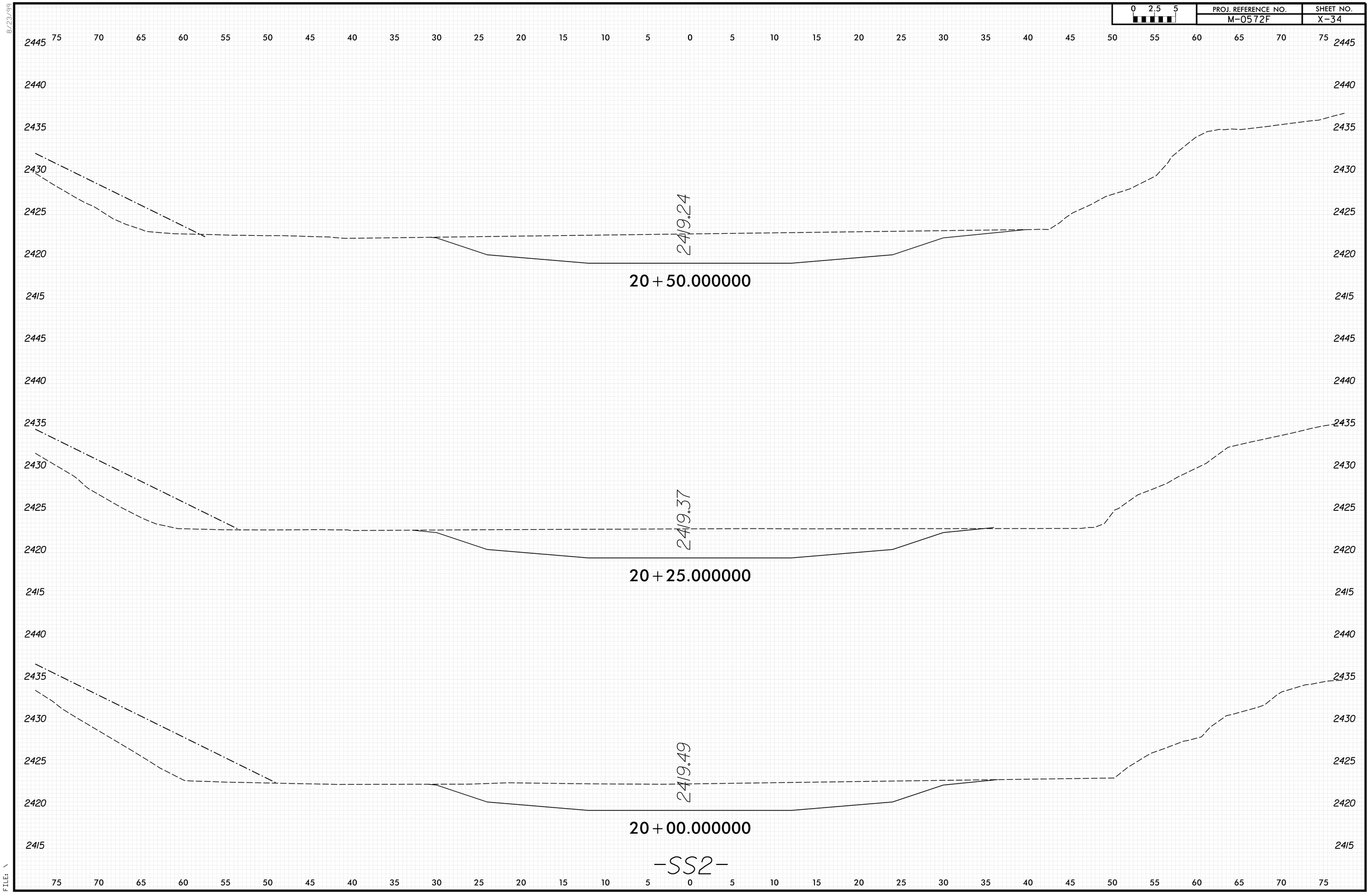
8/23/99

0 2,5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-33



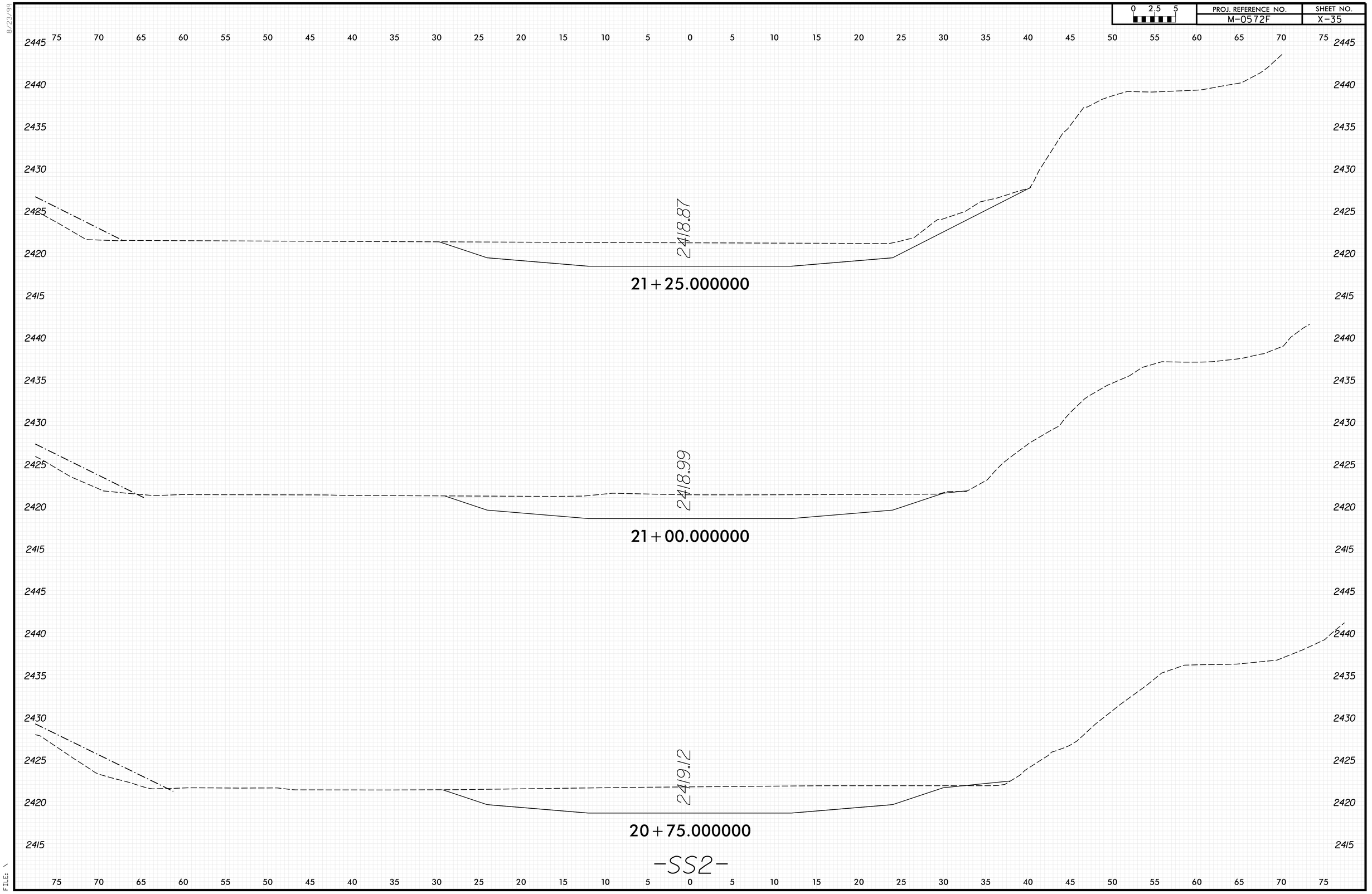
PLOT DRIVER: NCDOT_pdf_color-eng_50.plt
USER: GJACOBSON
FILE: \
DATE: 8/24/2026
PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:13:12 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-34



8/23/99

PLOT DRIVER: NCDOT_pdf_color-eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:13:14 PM

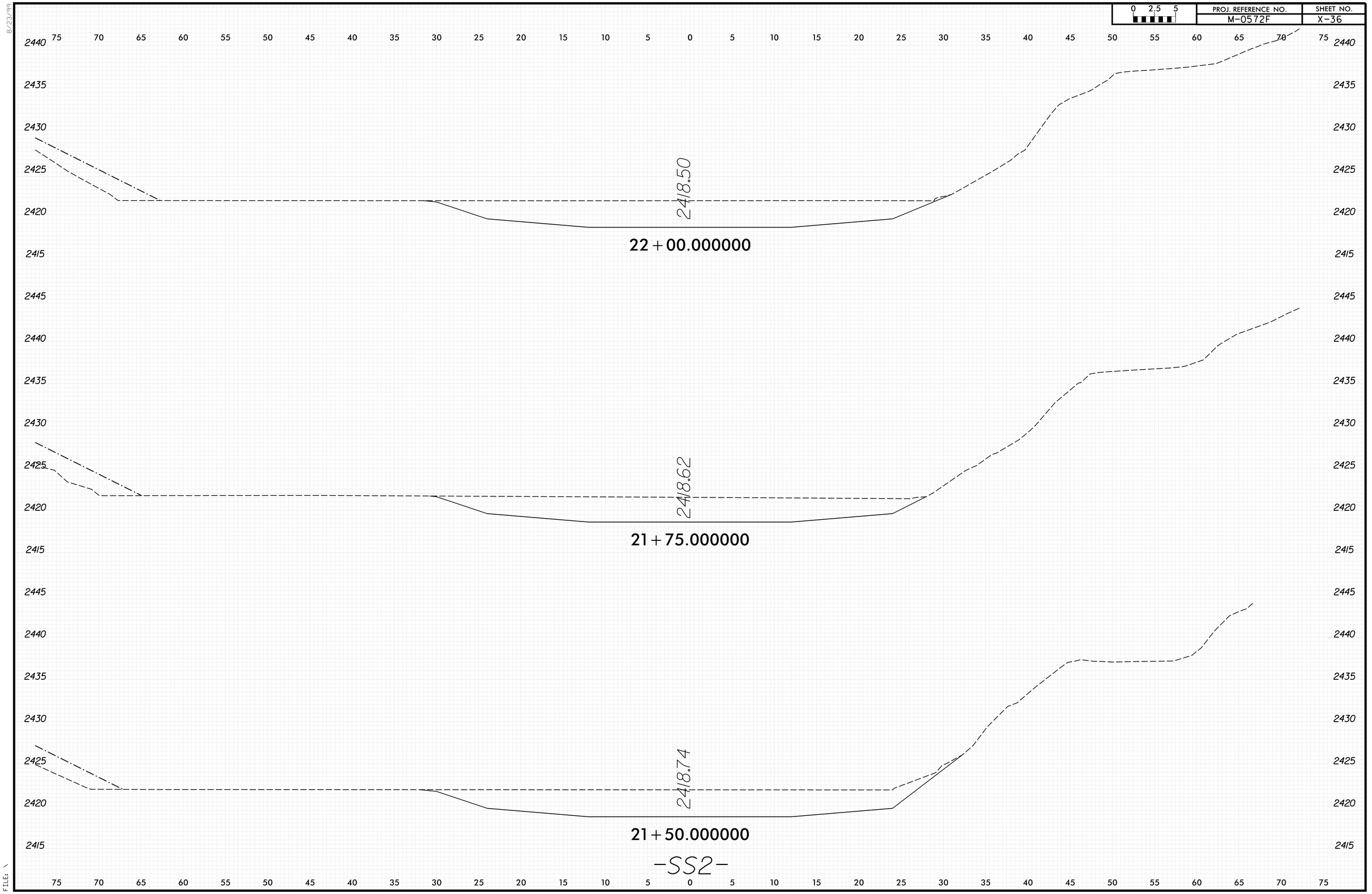


8/23/99

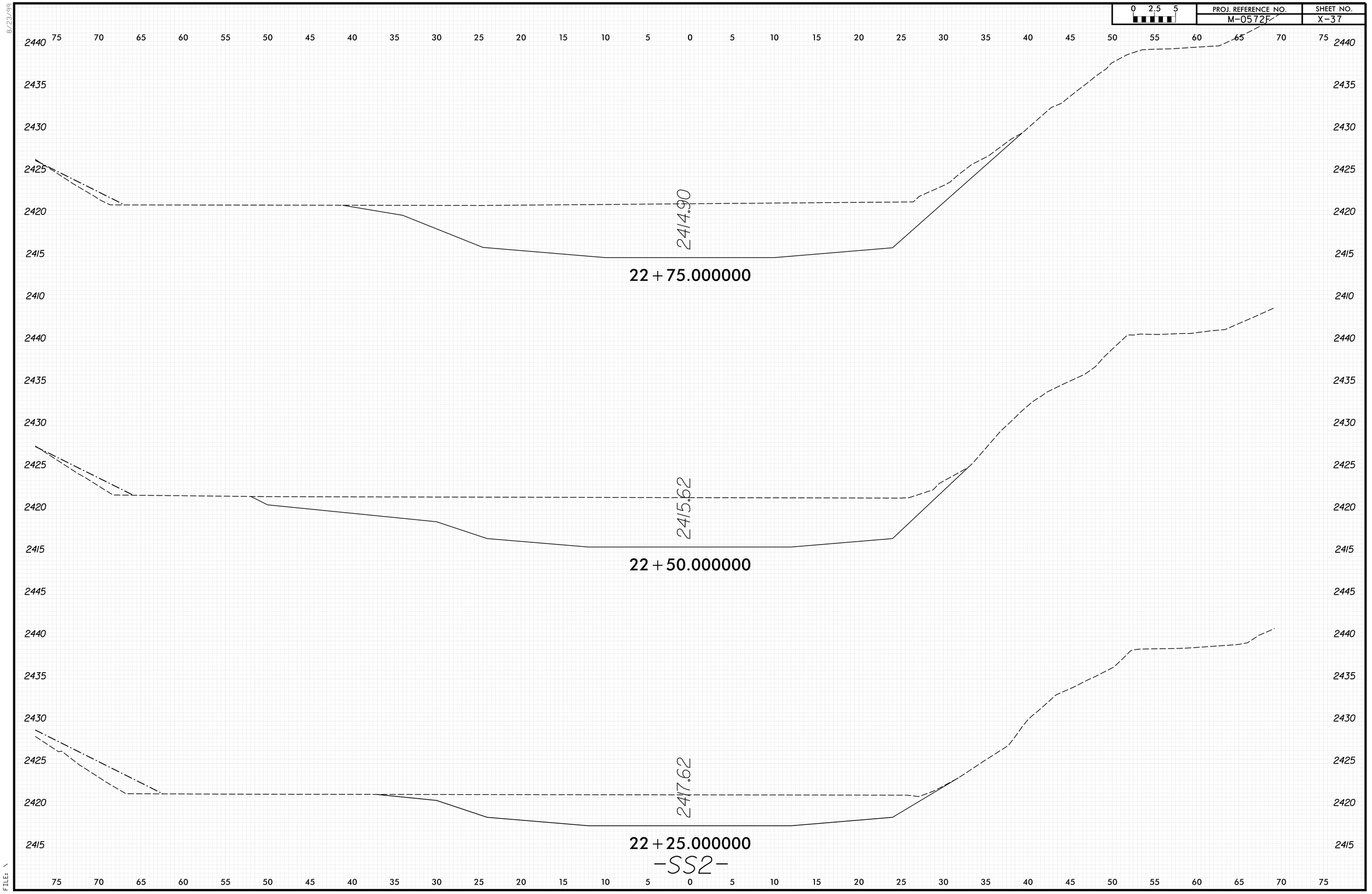
PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:13:15 PM

8/23/99

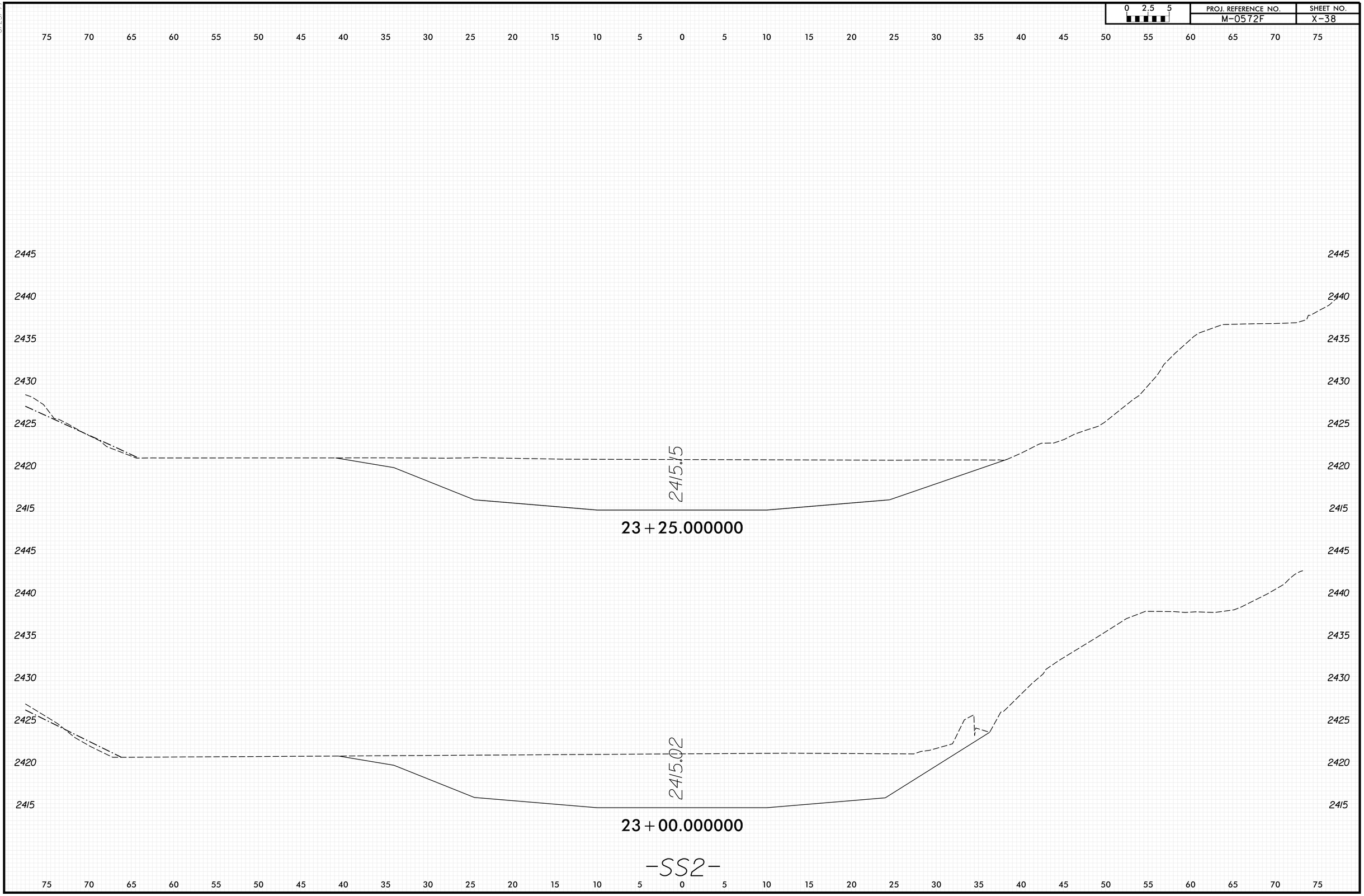
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-36



PLOT DRIVER: NCDOT_pdf_color-eng_50.plt
USER: GJACOBSON
FILE:
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:13:16 PM



PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
DATE: 8/24/2026
PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 11:18 PM
8/23/99



8/23/99
PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:13:19 PM

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2445
2440
2435
2430
2425
2420
2415

2415.40

23+75.000000

2445
2440
2435
2430
2425
2420
2415

2415.27

23+50.000000

-SS2-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

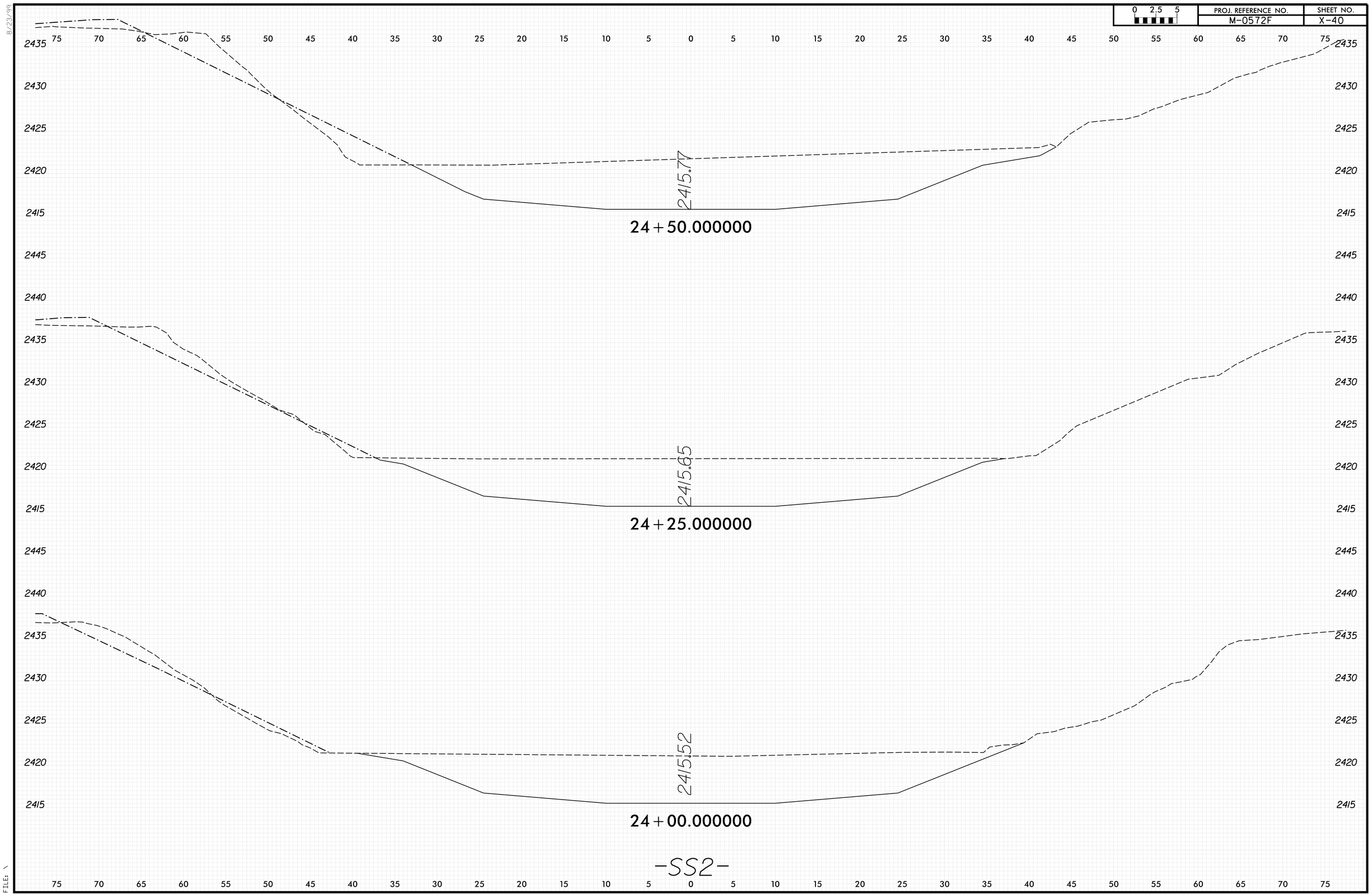
8/23/99

PLOT DRIVER: NCDOT.pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:13:20 PM

8/23/99

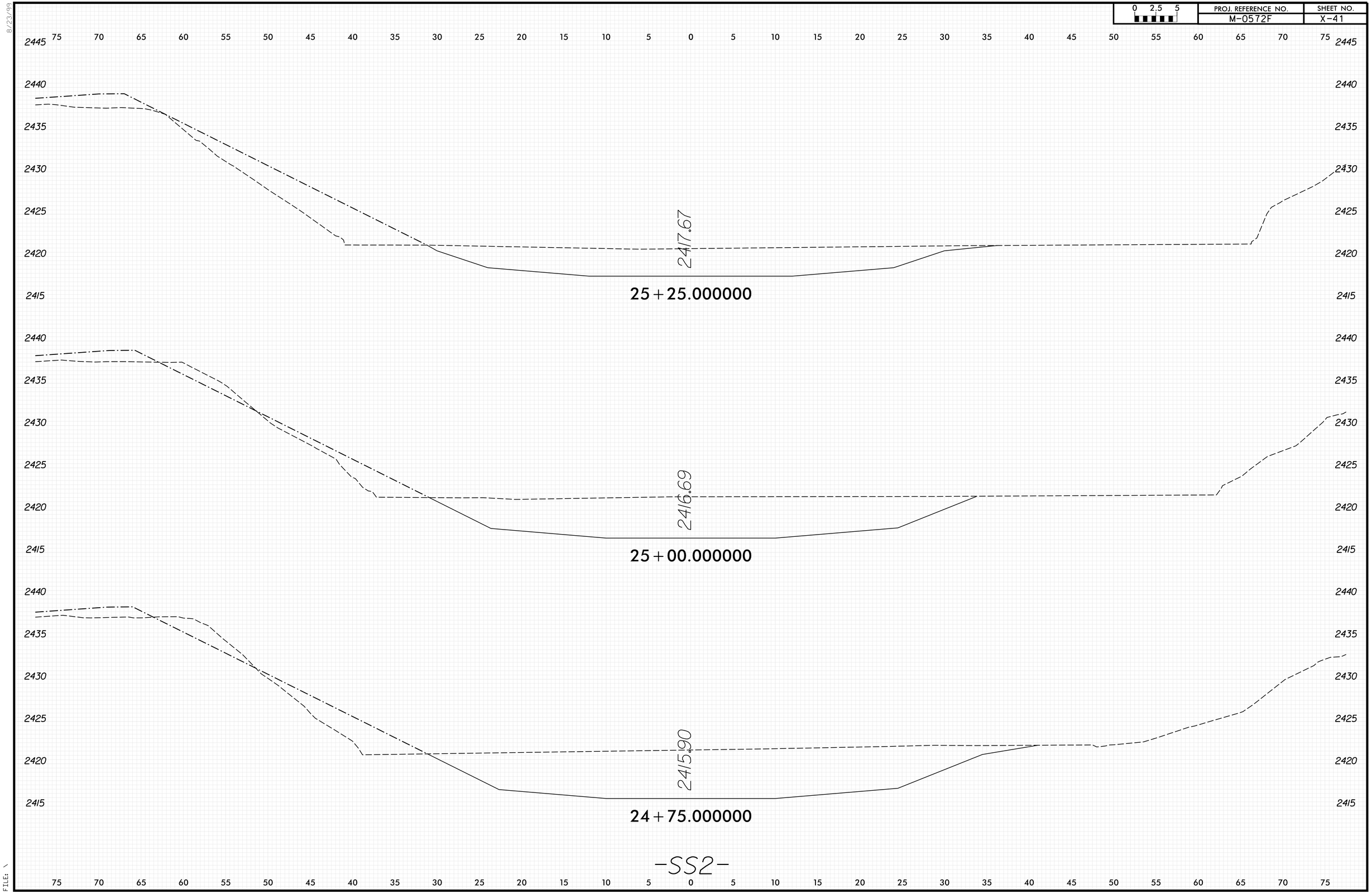
0 2,5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-40



PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE:
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:13:22 PM

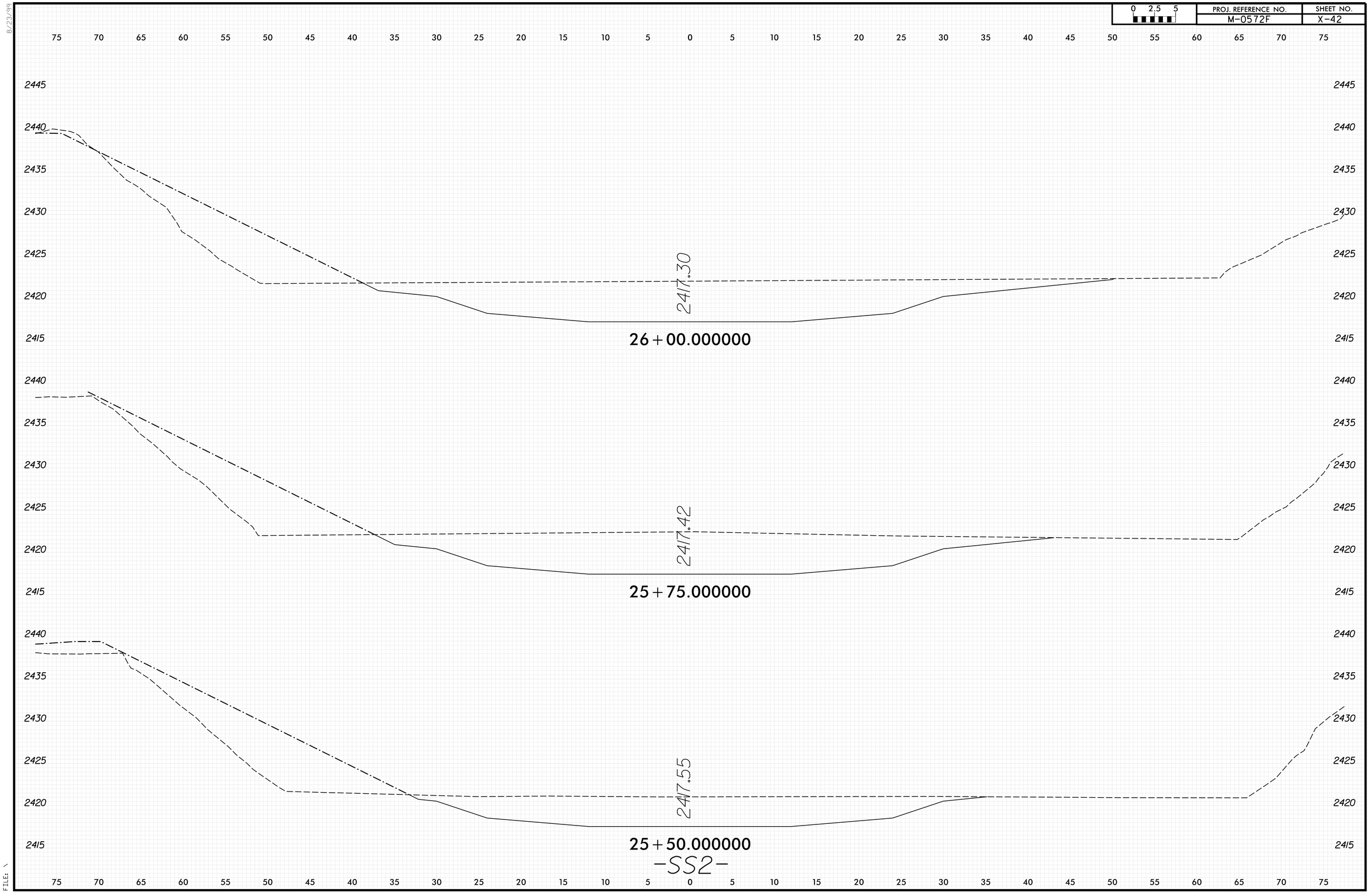
8/23/99

0 2,5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-41



PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:13:23 PM

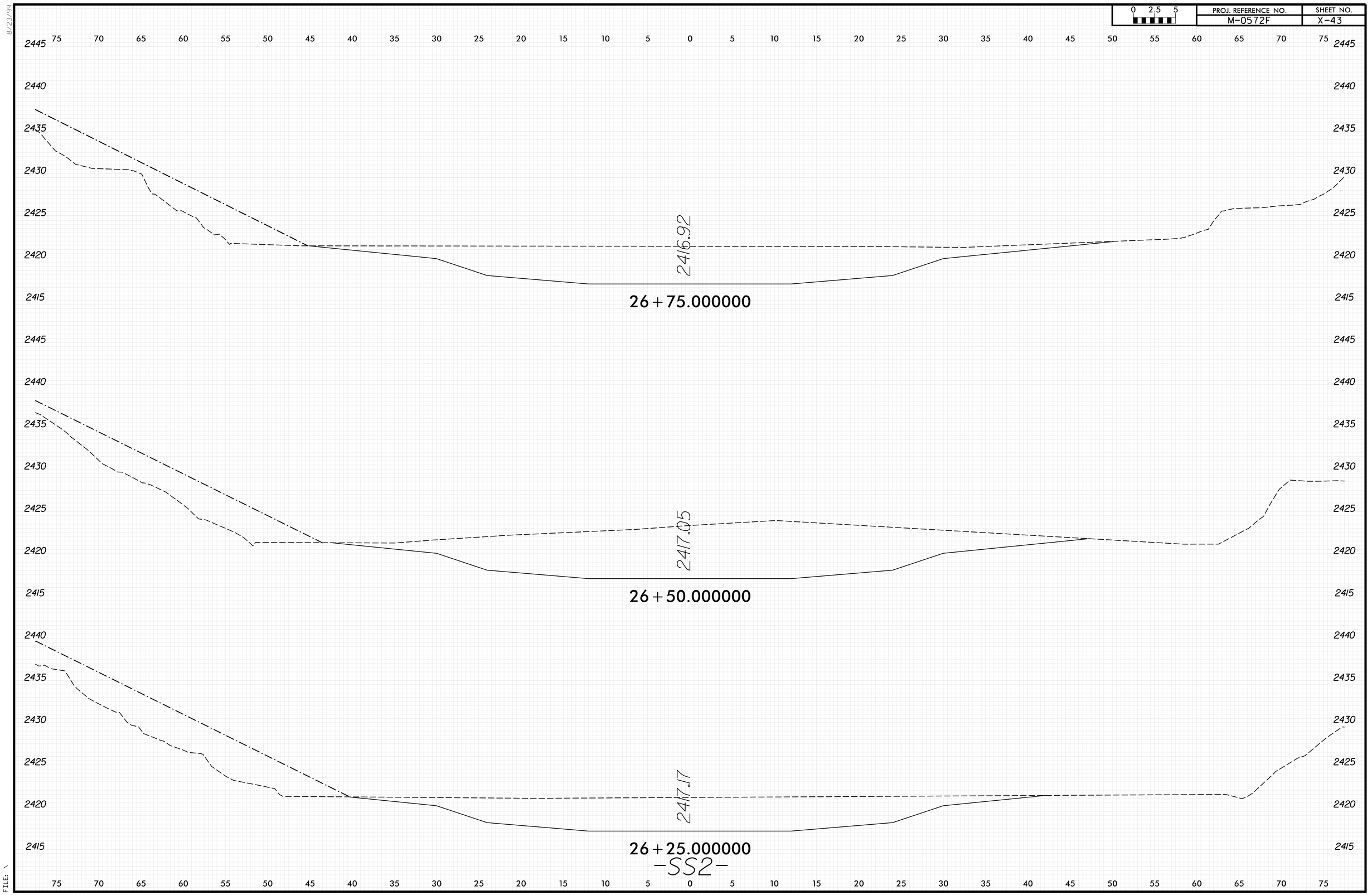
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-42



8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:13:24 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-43



8/23/99

PLOT DRIVER: NCDOT_pdf-color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:13:26 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-44

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2445 2440 2435 2430 2425 2420 2415

2416.54

27+50.000000

2440 2435 2430 2425 2420 2415

2416.67

27+25.000000

2440 2435 2430 2425 2420 2415

2416.80

27+00.000000

-SS2-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:13:27 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-45

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2440 2435 2430 2425 2420 2415

2416.17

28+25.000000

2440 2435 2430 2425 2420 2415

2416.29

28+00.000000

2440 2435 2430 2425 2420 2415

2416.42

27+75.000000

-SS2-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

PLOT DRIVER: NCDOT.pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:28 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-46

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2445 2440 2435 2430 2425 2420 2415

2415.79

29+00.000000

2440 2435 2430 2425 2420 2415

2415.92

28+75.000000

2440 2435 2430 2425 2420 2415

2416.04

28+50.000000

-SS2-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

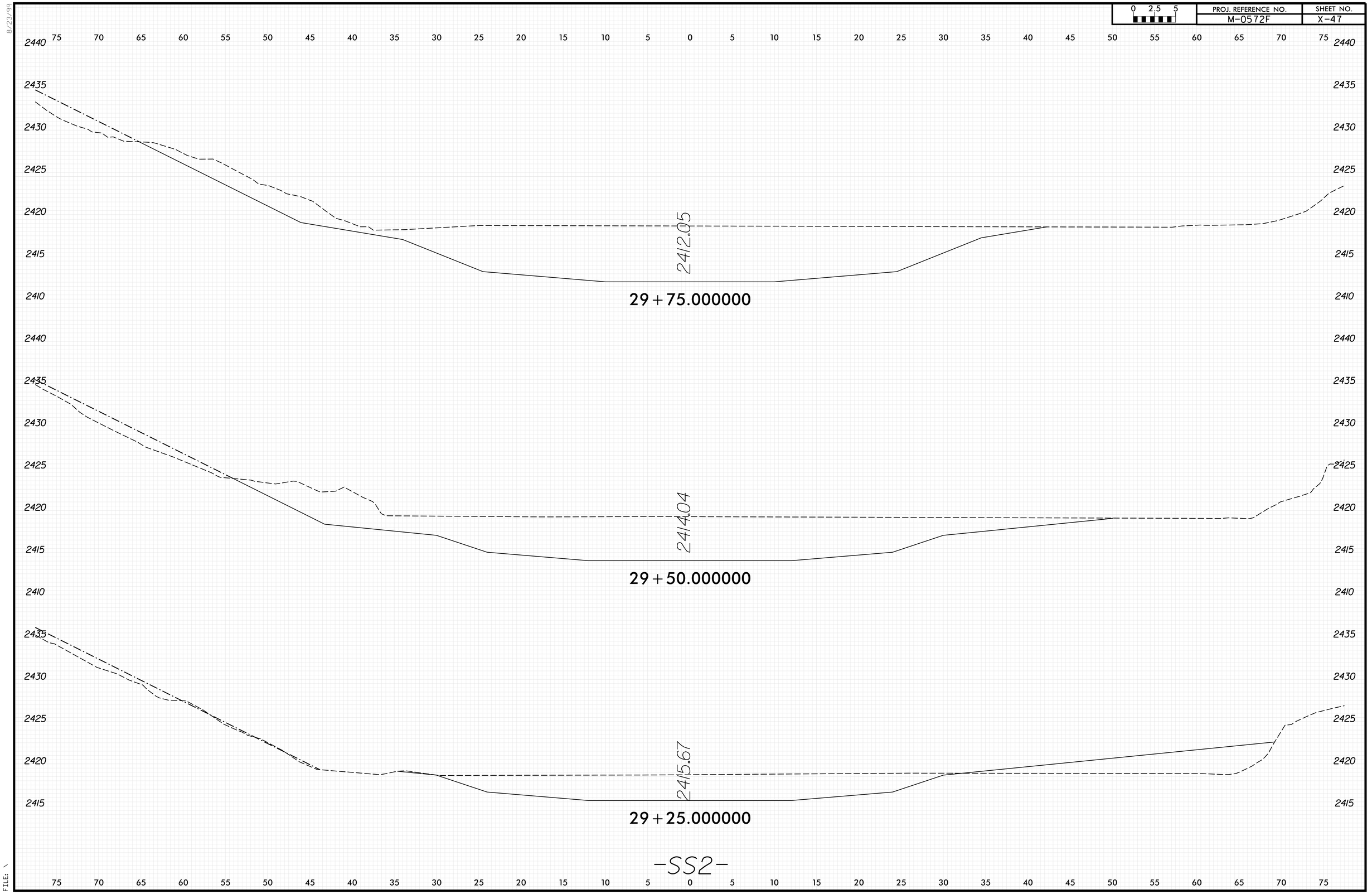
8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:13:30 PM

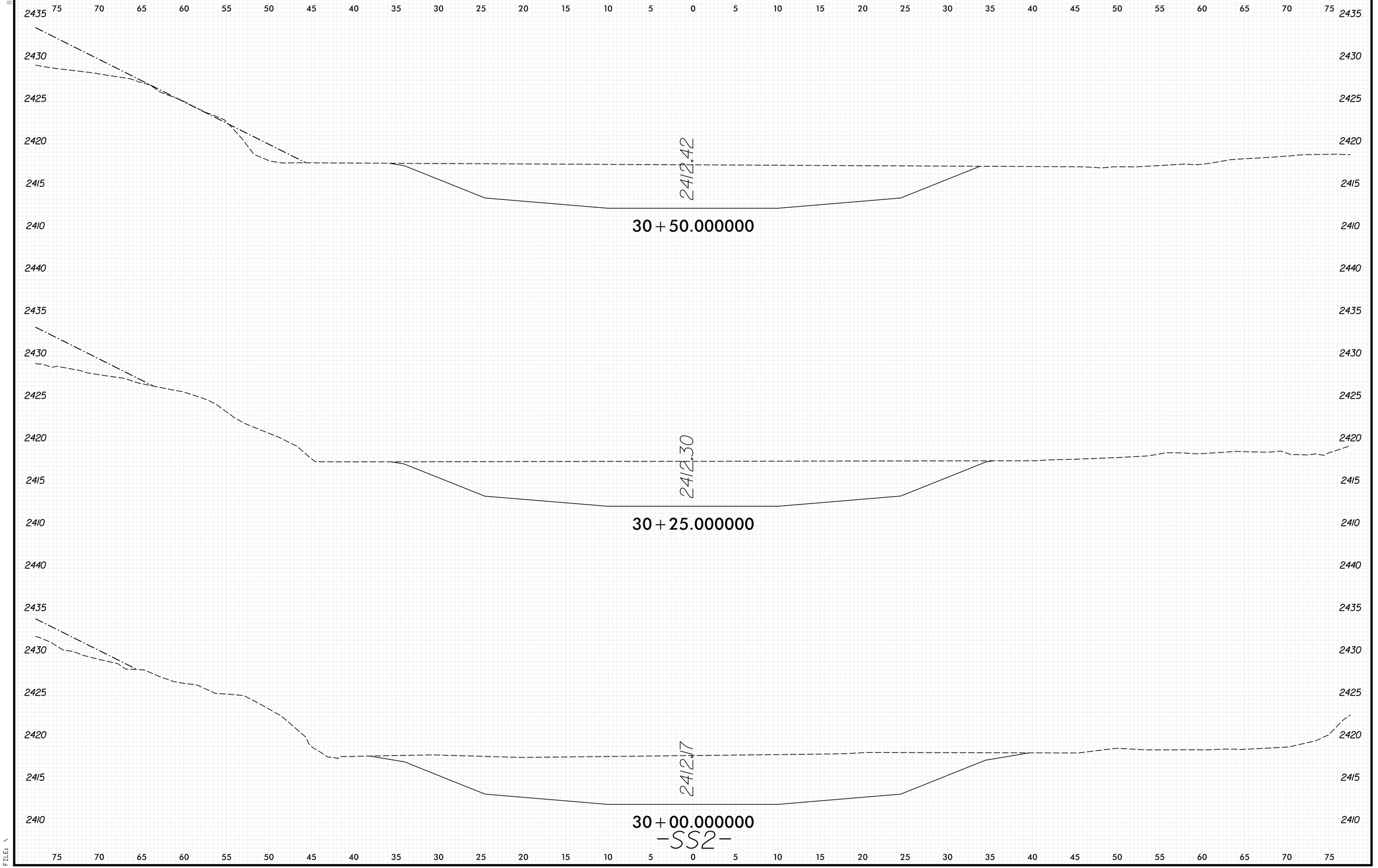
8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-47



PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:13:31 PM



PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE:
DATE: 8/24/2026
TIME: 11:13:32 PM
PENTABLE: US_19W_South_STRM_XSC.tbl
8/23/99

0 2,5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-49

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2440 2435 2430 2425 2420 2415 2410

2412.79

31+25.000000

2440 2435 2430 2425 2420 2415 2410

2412.67

31+00.000000

2440 2435 2430 2425 2420 2415 2410

2412.55

30+75.000000

-SS2-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:13:34 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-50

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2440 2435 2430 2425 2420 2415 2410

2414.87

32+00.000000

2435 2430 2425 2420 2415 2410

2414.42

31+75.000000

2435 2430 2425 2420 2415 2410

2412.92

31+50.000000

-SS2-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:13:35 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-51

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2440 2435 2430 2425 2420 2415 2410

2414.12

32+75.000000

2425 2420 2415 2410

2414.37

32+50.000000

2435 2430 2425 2420 2415 2410

2414.62

32+25.000000

-SS2-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:13:37 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-52

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2440 2435 2430 2425 2420 2415 2410

2413.37

33+50.000000

2425 2420 2415 2410

2413.62

33+25.000000

2425 2420 2415 2410

2413.87

33+00.000000

-SS2-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:13:38 PM
DATE: 8/24/2026
PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

8/23/99

0 2,5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-53

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2435 2430 2425 2420 2415 2410 2405

2409.69

34+25.000000

2435 2430 2425 2420 2415 2410

2410.42

34+00.000000

2440 2435 2430 2425 2420 2415 2410

2412.42

33+75.000000

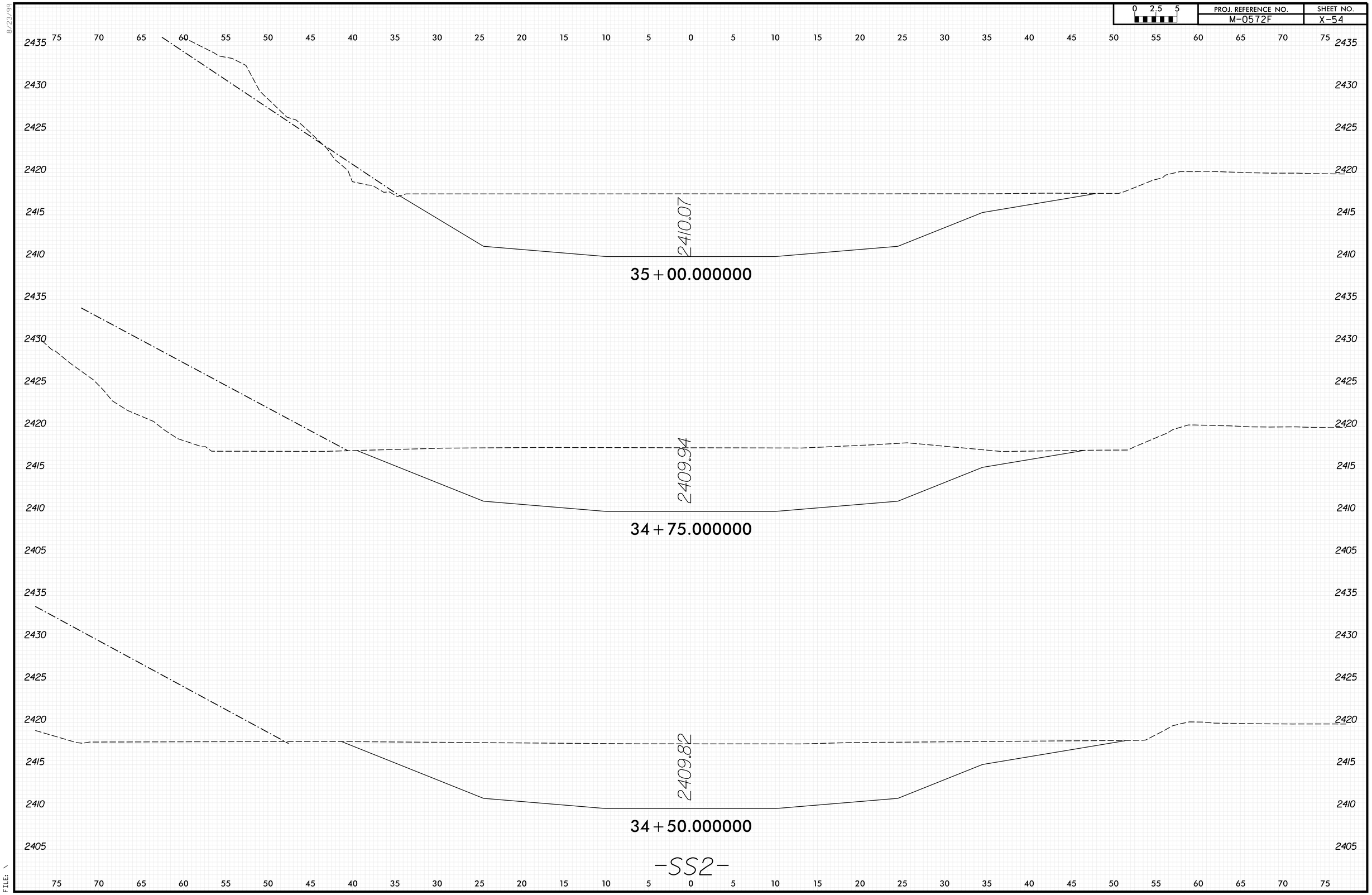
-SS2-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:13:39 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-54



PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
DATE: 8/24/2026
TIME: 1:13:41 PM
PENTABLE: US_19W_South_STRM_XSC.tbl

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-55

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2440 2435 2430 2425 2420 2415 2410

2410.32

35+50.000000

2440 2435 2430 2425 2420 2415 2410

2410.19

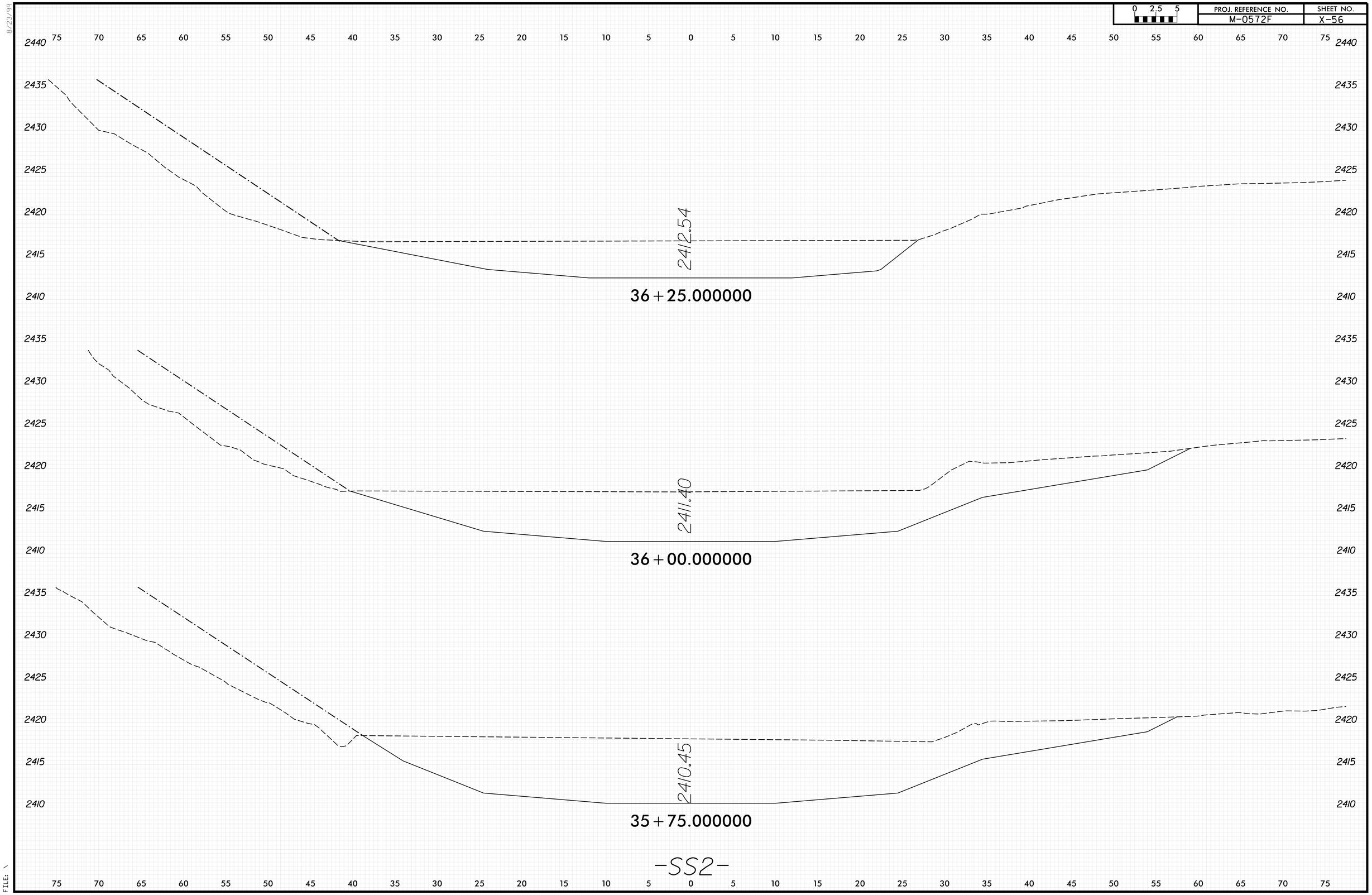
35+25.000000

-SS2-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:13:42 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-56



8/23/99
PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:13:43 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-57

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2445
2440
2435
2430
2425
2420
2415

36+75.000000

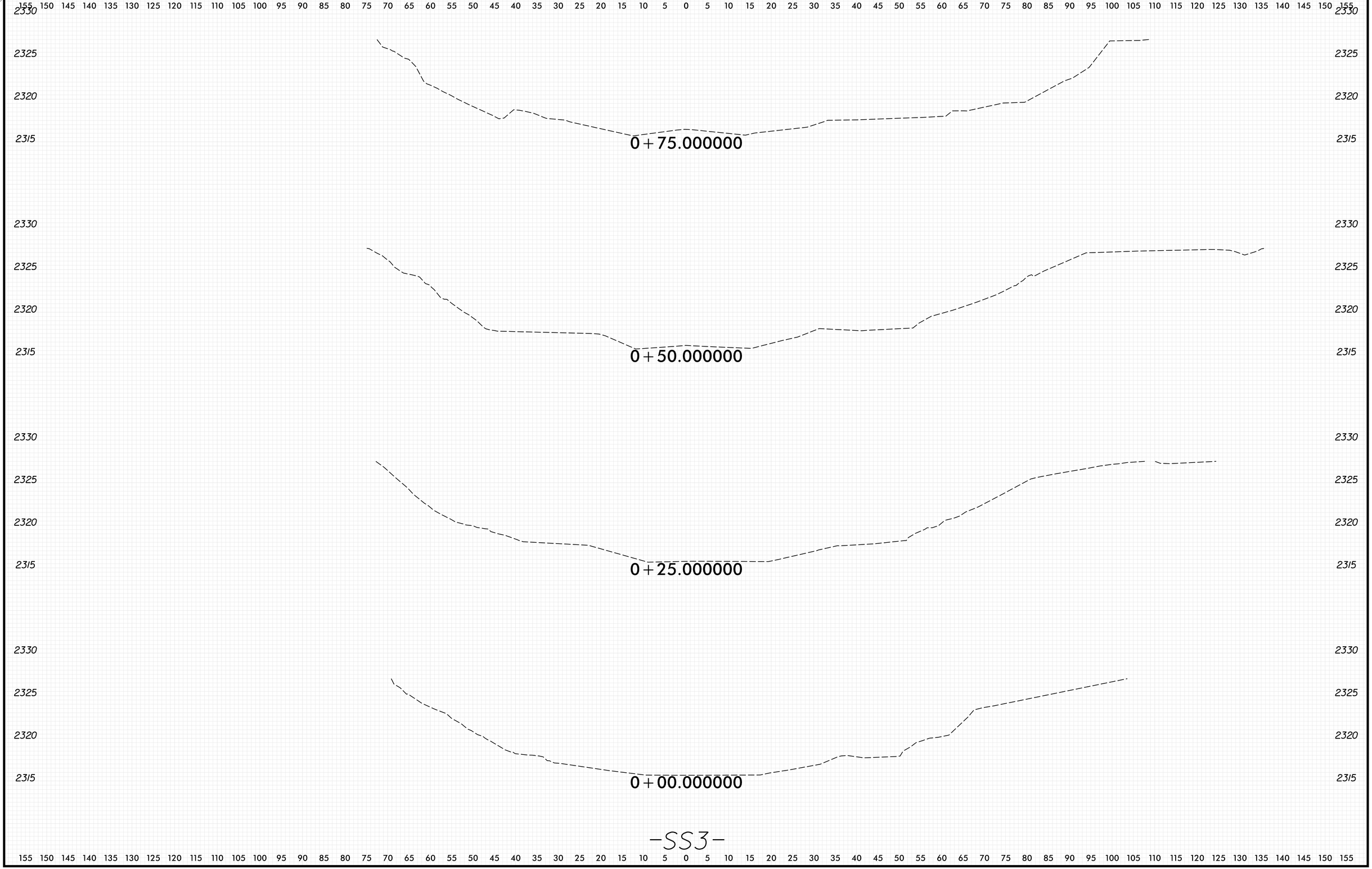
36+50.000000

-SS2-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:13:45 PM

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-58



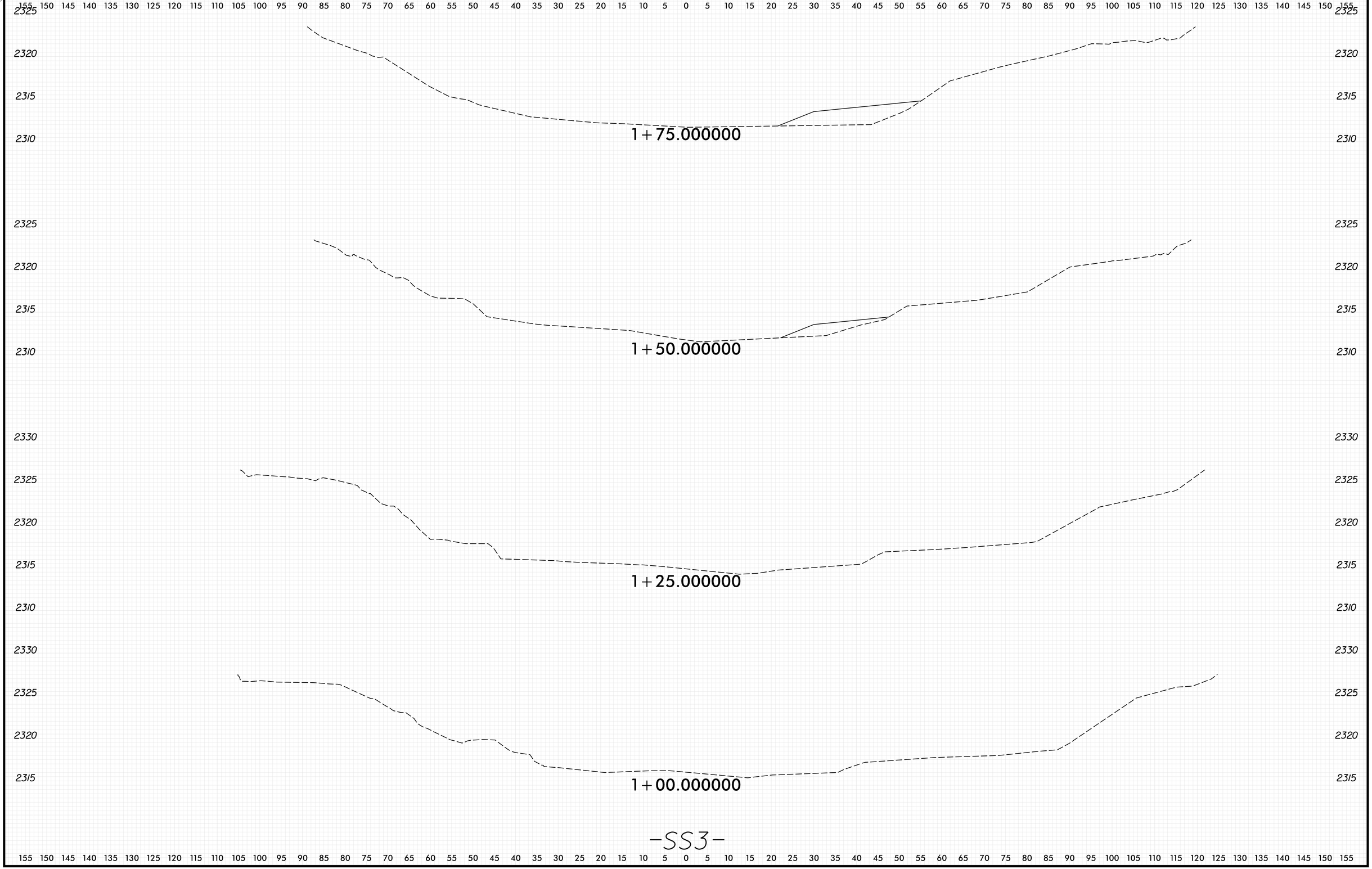
-SS3-

8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: CJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:14:20 PM
DATE: 8/24/2026

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-59

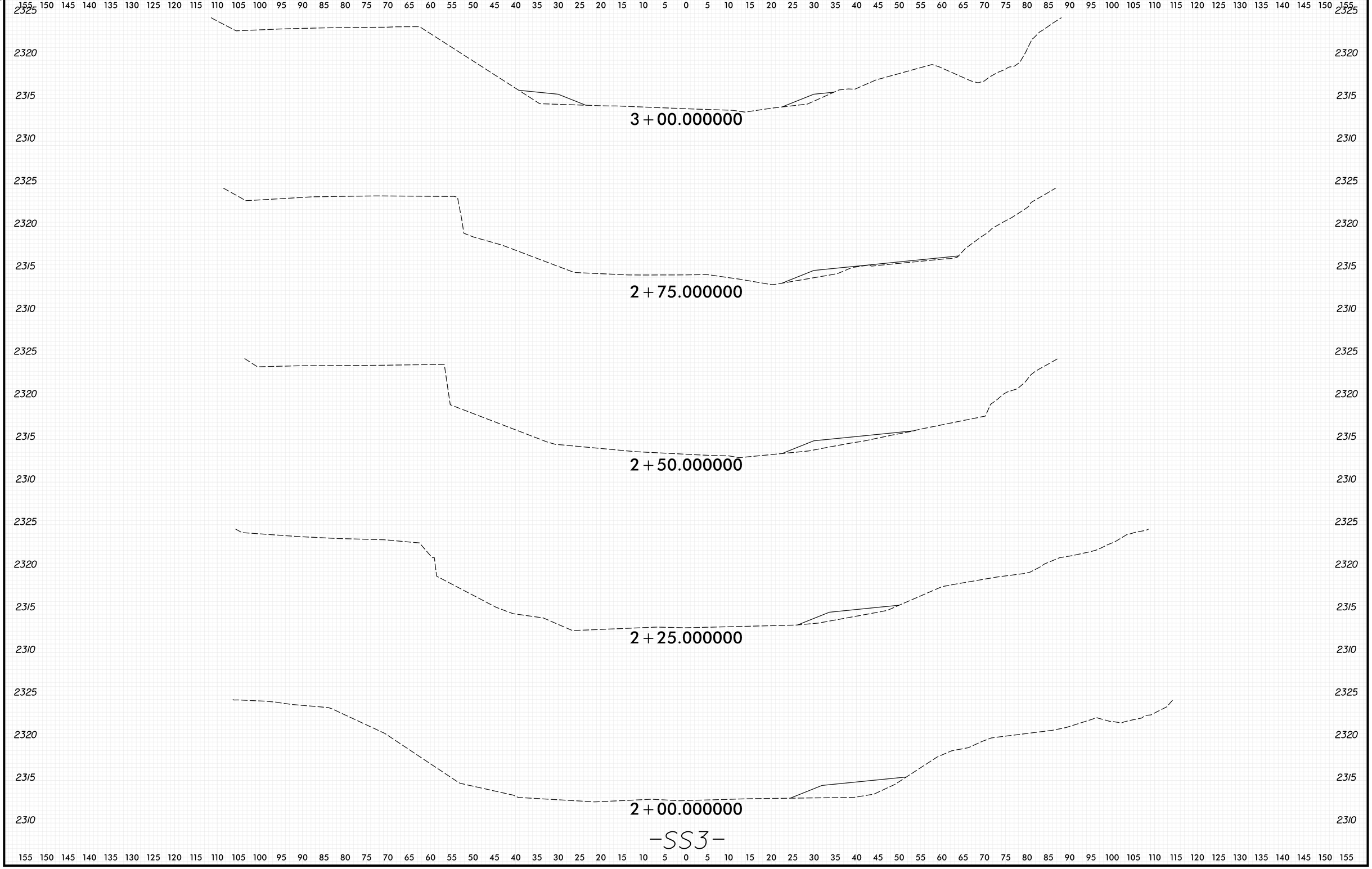


-SS3-

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:14:21 PM

8/23/99

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-60



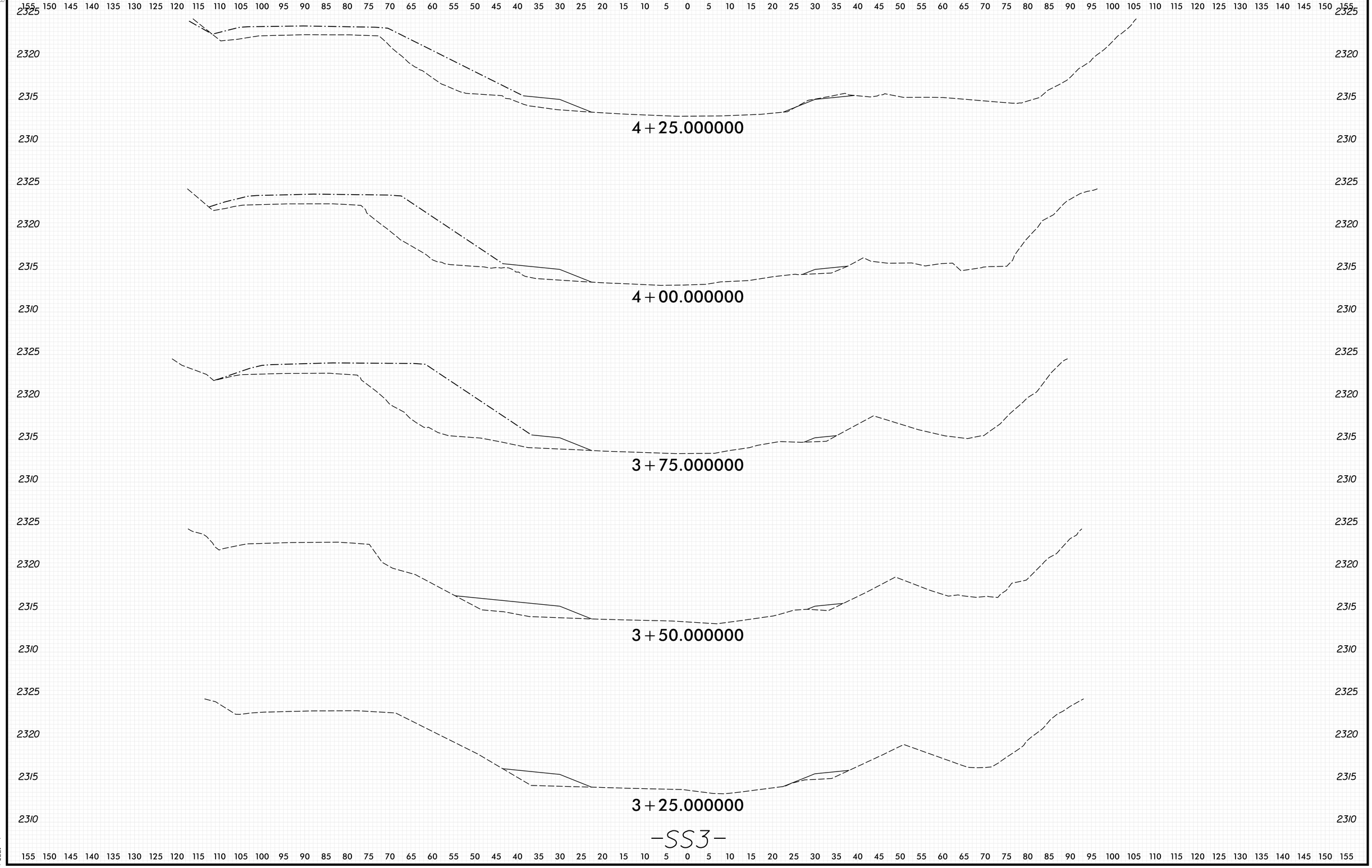
-SS3-

8/23/99

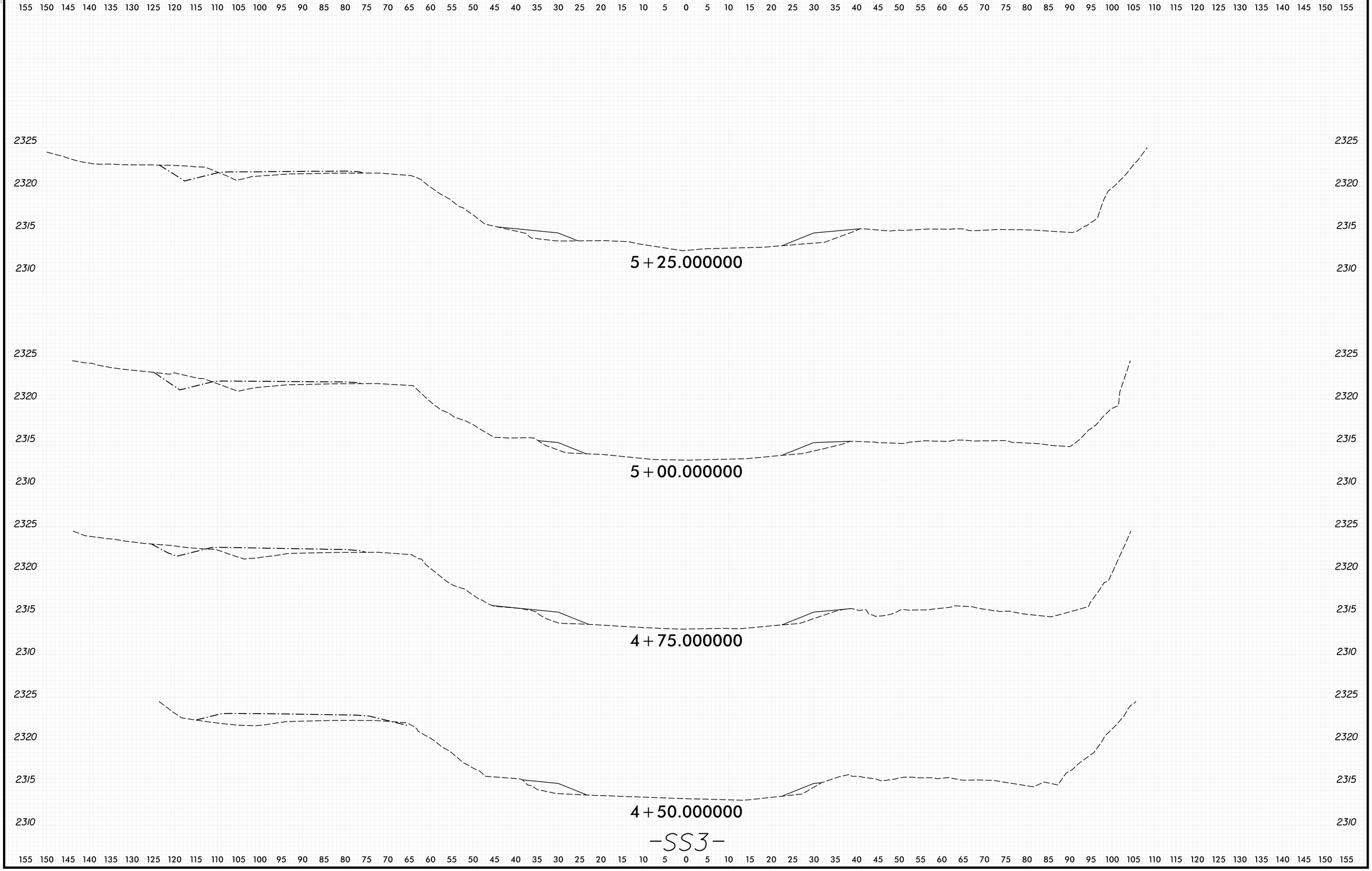
PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:14:22 PM

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-61



8/23/99
PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:14:24 PM

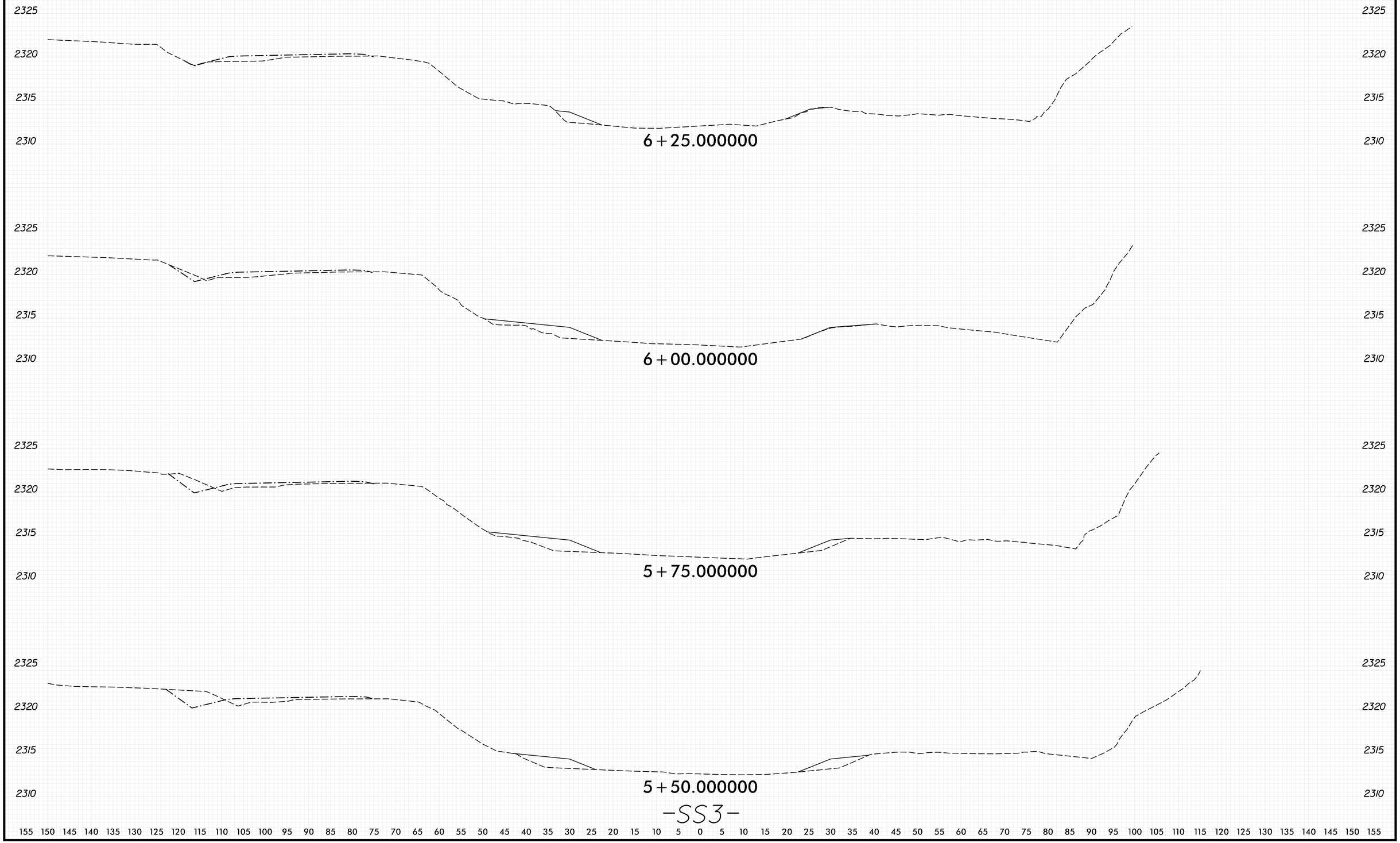


8/23/99
PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:14:25 PM

8/23/99

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-63

155 150 145 140 135 130 125 120 115 110 105 100 95 90 85 80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 125 130 135 140 145 150 155



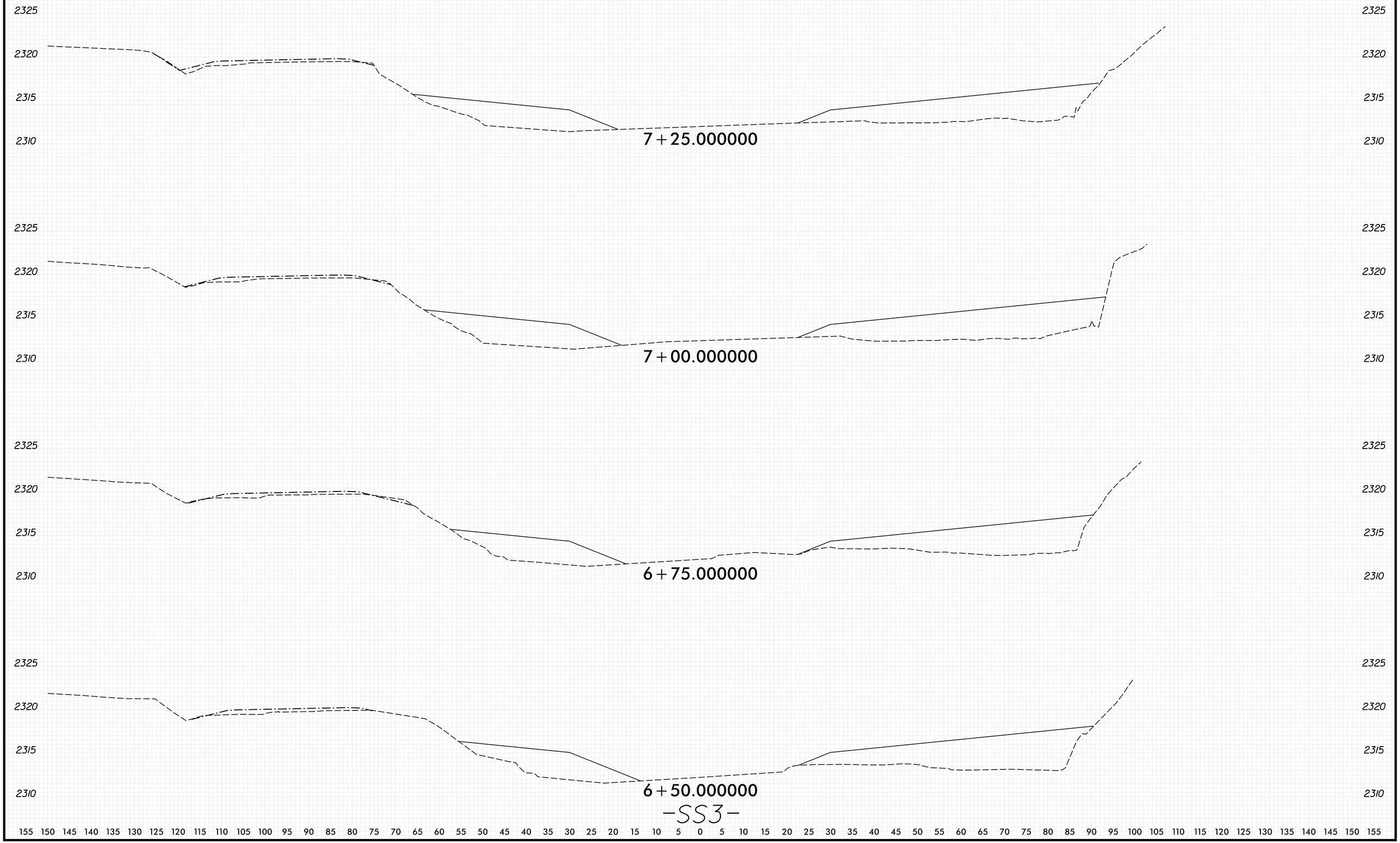
-SS3-

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: CJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:14:26 PM

8/23/99

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-64

155 150 145 140 135 130 125 120 115 110 105 100 95 90 85 80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 125 130 135 140 145 150 155

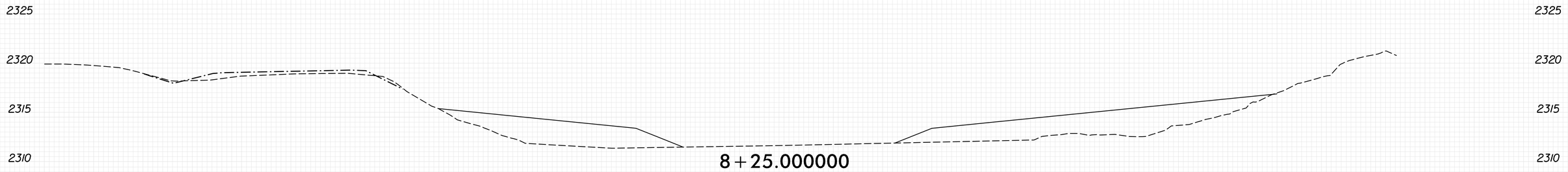


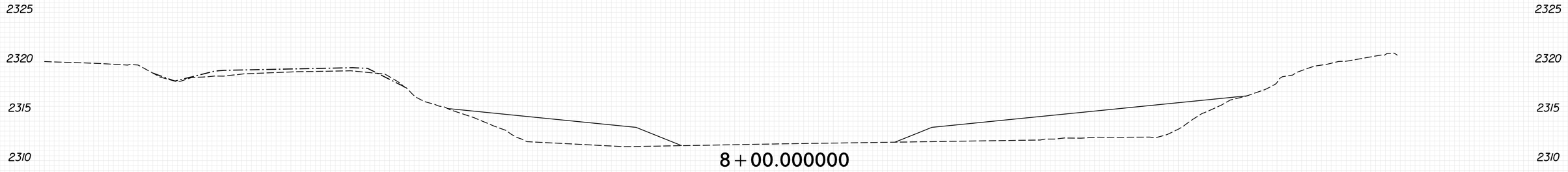
-SS3-

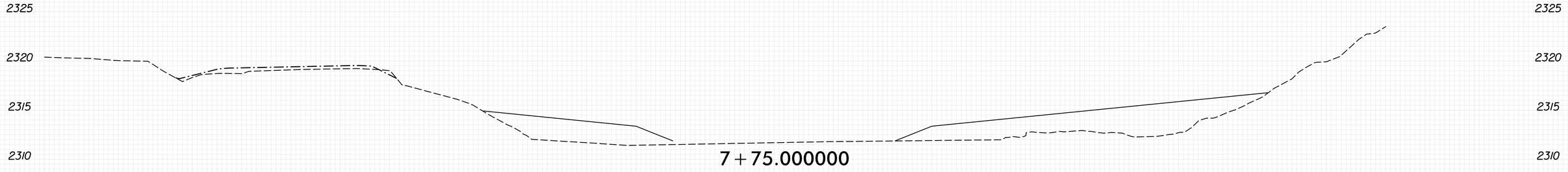
PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:14:27 PM

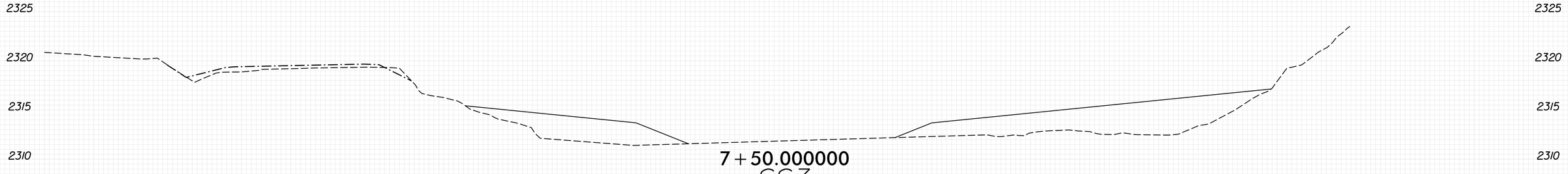
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-65

155 150 145 140 135 130 125 120 115 110 105 100 95 90 85 80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 125 130 135 140 145 150 155









-SS3-

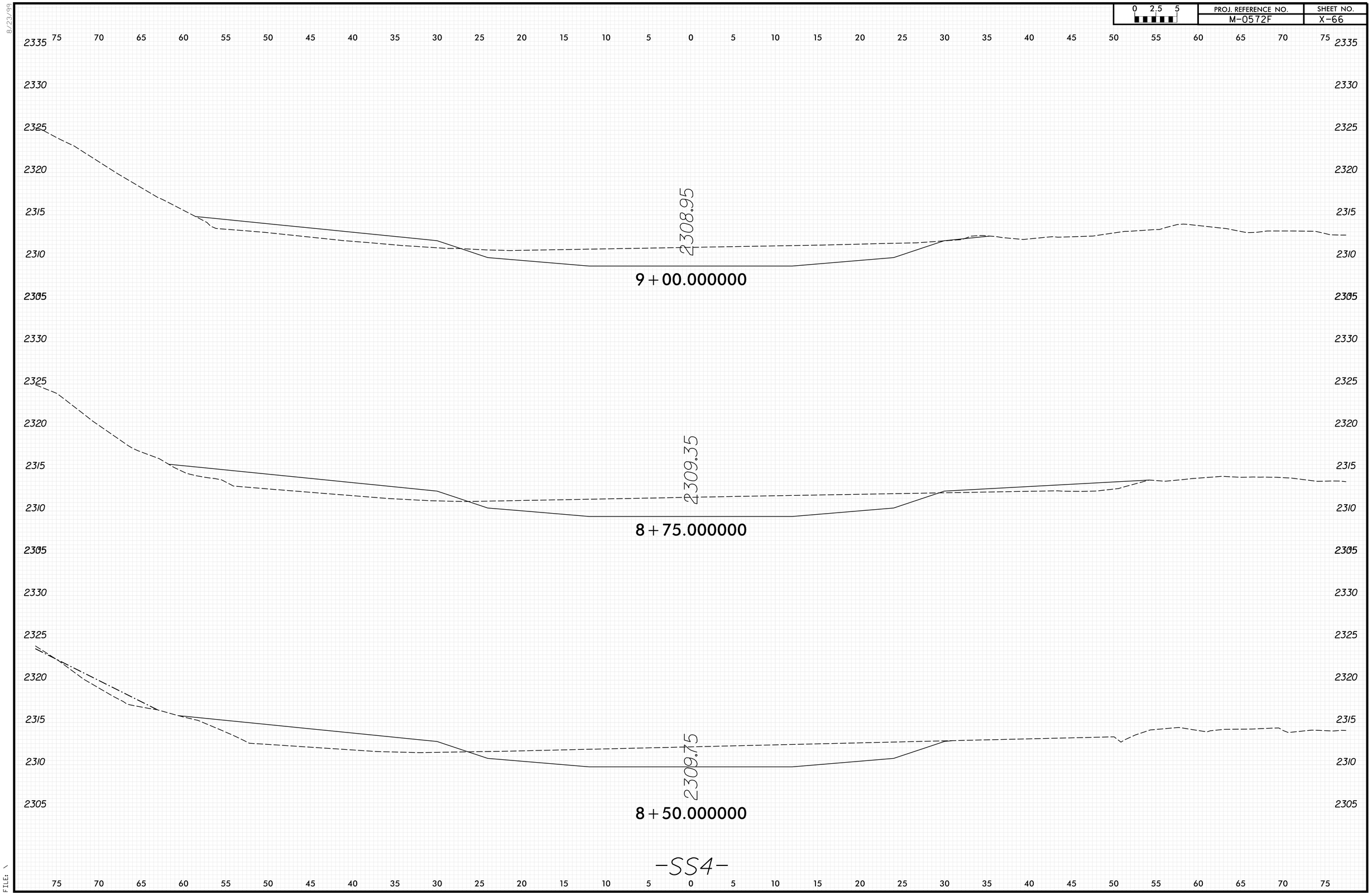
155 150 145 140 135 130 125 120 115 110 105 100 95 90 85 80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 125 130 135 140 145 150 155

8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:14:28 PM
DATE: 8/24/2026

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-66



-SS4-

8/23/99
PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:15:04 PM
PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
DATE: 8/24/2026
USER: GJACOBSON
FILE: \

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-67

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2335 2330 2325 2320 2315 2310 2305

2307.75

9+75.000000

2308.15

9+50.000000

2308.55

9+25.000000

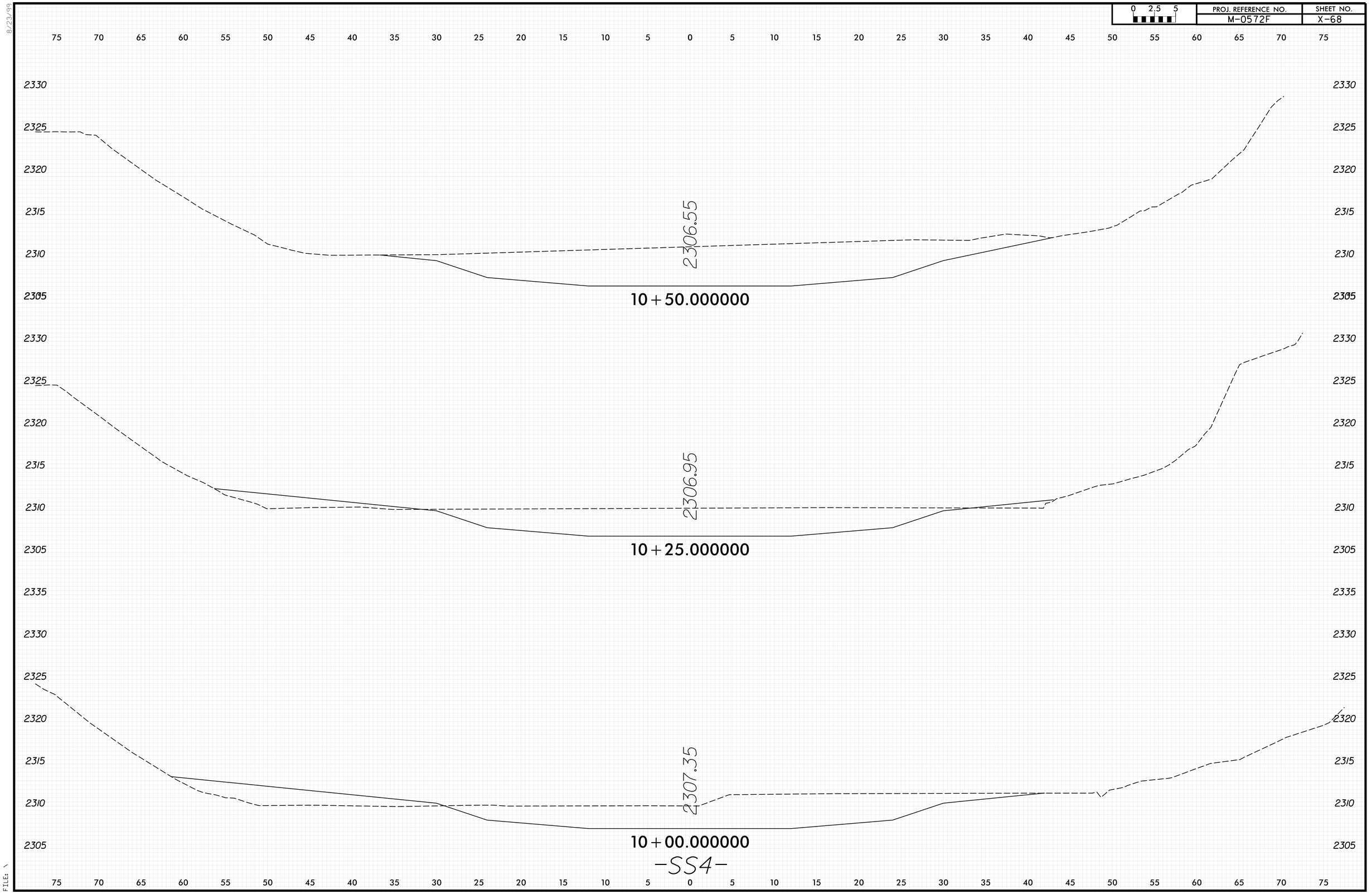
-SS4-

8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:15:05 PM
DATE: 8/24/2026

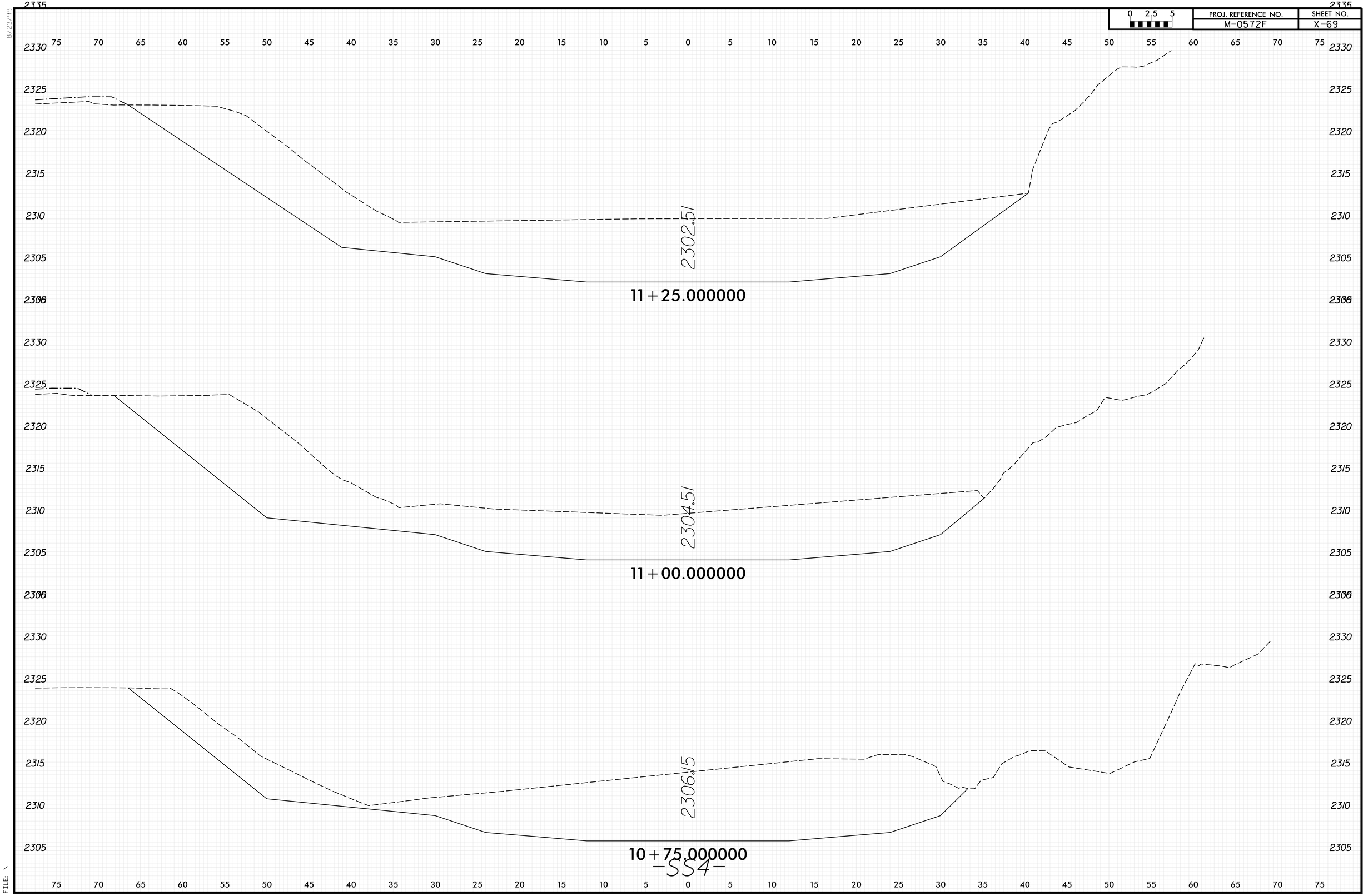
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-68



8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE:
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:15:06 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-69

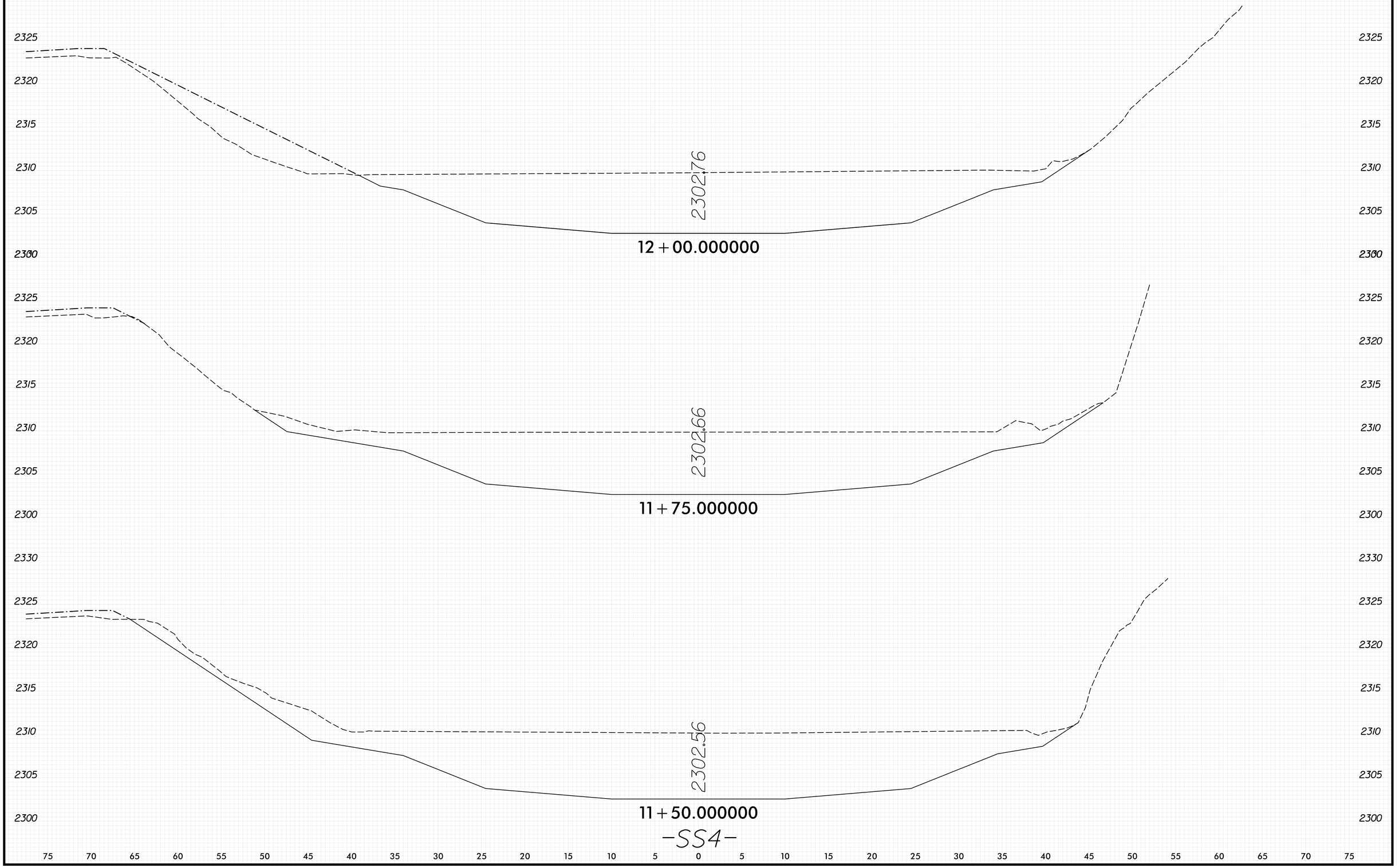


8/23/99

PLOT DRIVER: NCDOT.pdf_color-eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:15:07 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-70



PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:15:09 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-71

2330
2325
2320
2315
2310
2305
2300

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2303.06

12 + 75.000000

2302.96

12 + 50.000000

2302.86

12 + 25.000000

-SS4-

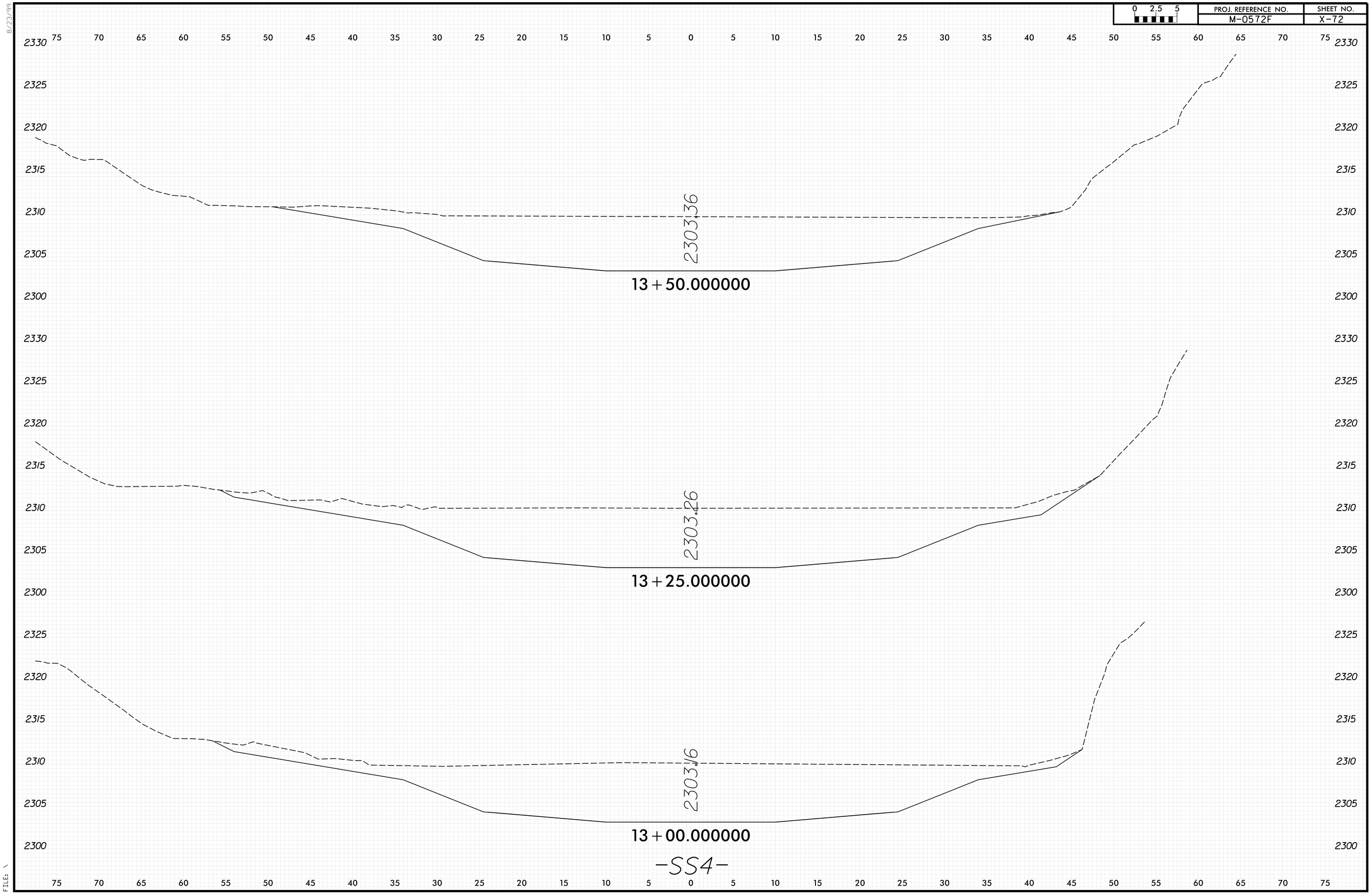
8/23/99

PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:15:10 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-72



PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:15:11 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-73

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2330 2325 2320 2315 2310 2305 2300

2304.55

14+25.000000

2325 2320 2315 2310 2305 2300

2303.56

14+00.000000

2325 2320 2315 2310 2305 2300

2303.46

13+75.000000

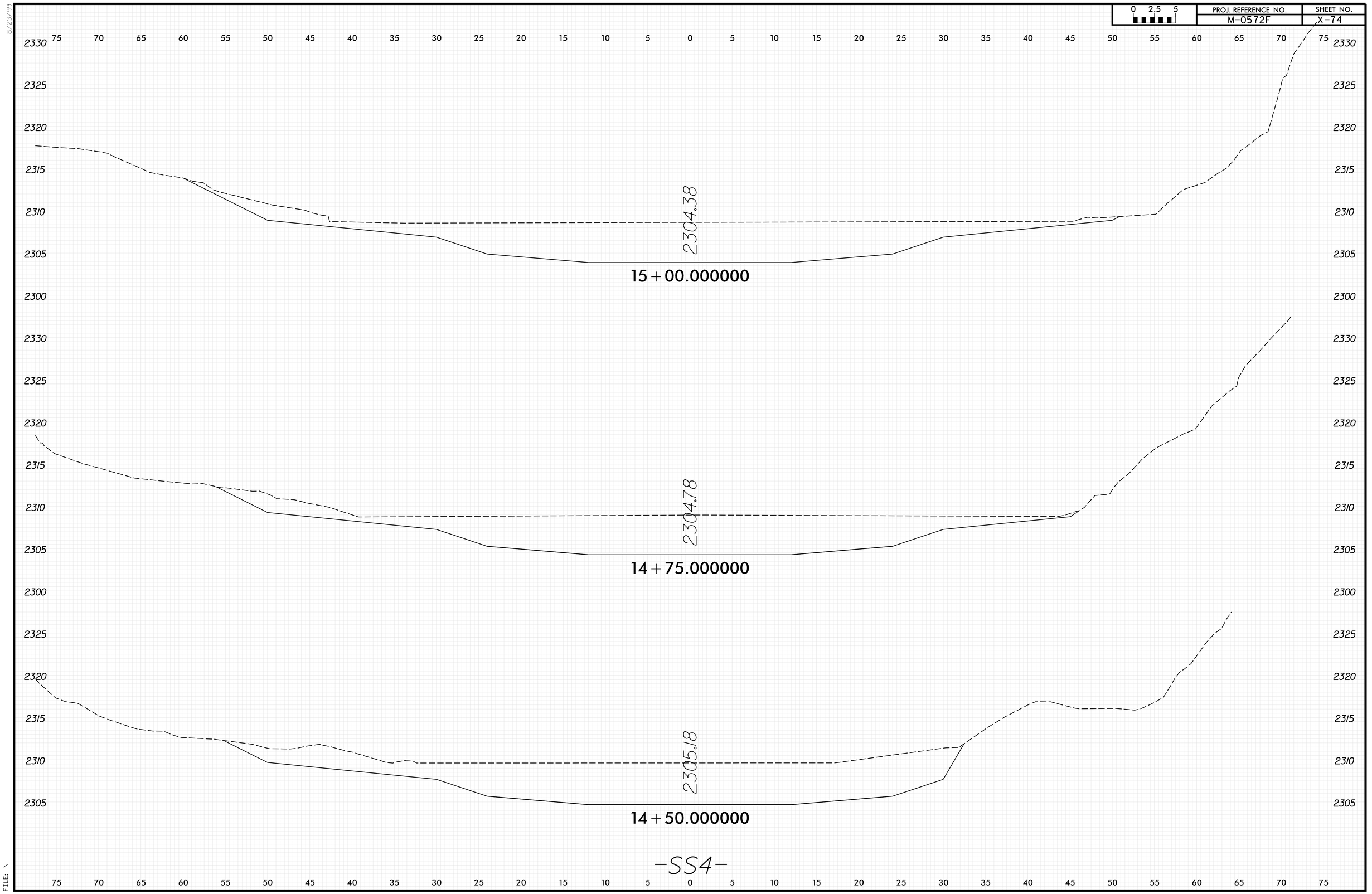
-SS4-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:51:12 PM

0 2,5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-74



8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:15:13 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-75

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2335
2330
2325
2320
2315
2310
2305
2300

2303.58

15+50.000000

2335
2330
2325
2320
2315
2310
2305
2300

2303.98

15+25.000000

-SS4-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:15:14 PM
DATE: 8/24/2026
PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-76

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2335 2330 2325 2320 2315 2310 2305 2300

2302.78

16+00.000000

2330 2325 2320 2315 2310 2305 2300

2303.18

15+75.000000

-SS4-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:15:15 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-77

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2335
2330
2325
2320
2315
2310
2305
2300

2301.98

16+50.000000

2302.38

16+25.000000

-SS4-

PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:15:17 PM
DATE: 8/24/2026
PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-78

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2335
2330
2325
2320
2315
2310
2305
2300
2295

2299.94

17+00.000000

2330
2325
2320
2315
2310
2305
2300

2301.58

16+75.000000

-SS4-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:15:18 PM

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
M-0572F	X-79

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2335
2330
2325
2320
2315
2310
2305
2300
2295

2298.0

17+50.000000

2330
2325
2320
2315
2310
2305
2300
2295

2297.94

17+25.000000

-SS4-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:15:19 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-80

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2335
2330
2325
2320
2315
2310
2305
2300
2295

2298.26

18+00.000000

2298.14

17+75.000000

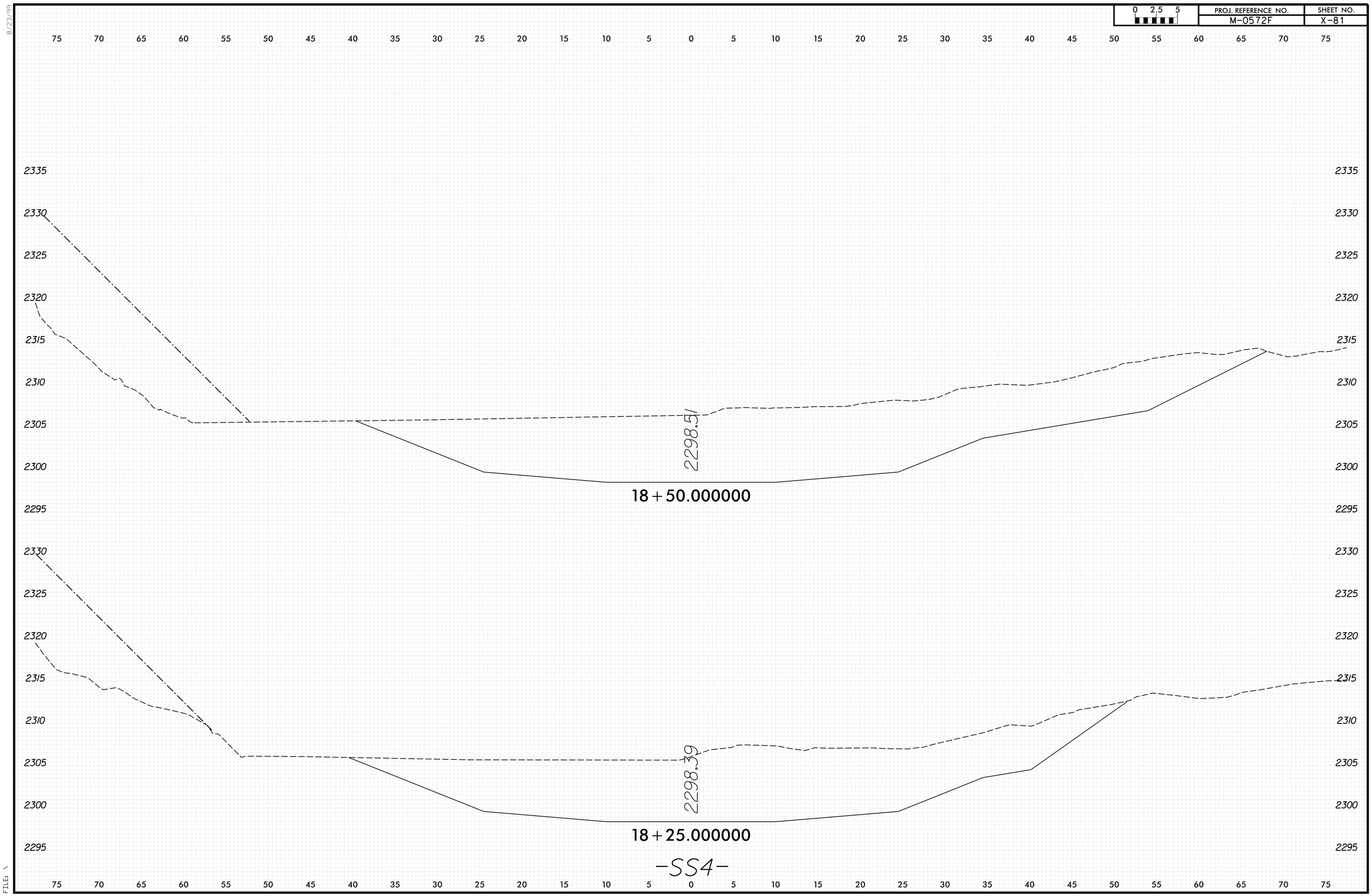
-SS4-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2335
2330
2325
2320
2315
2310
2305
2300
2295

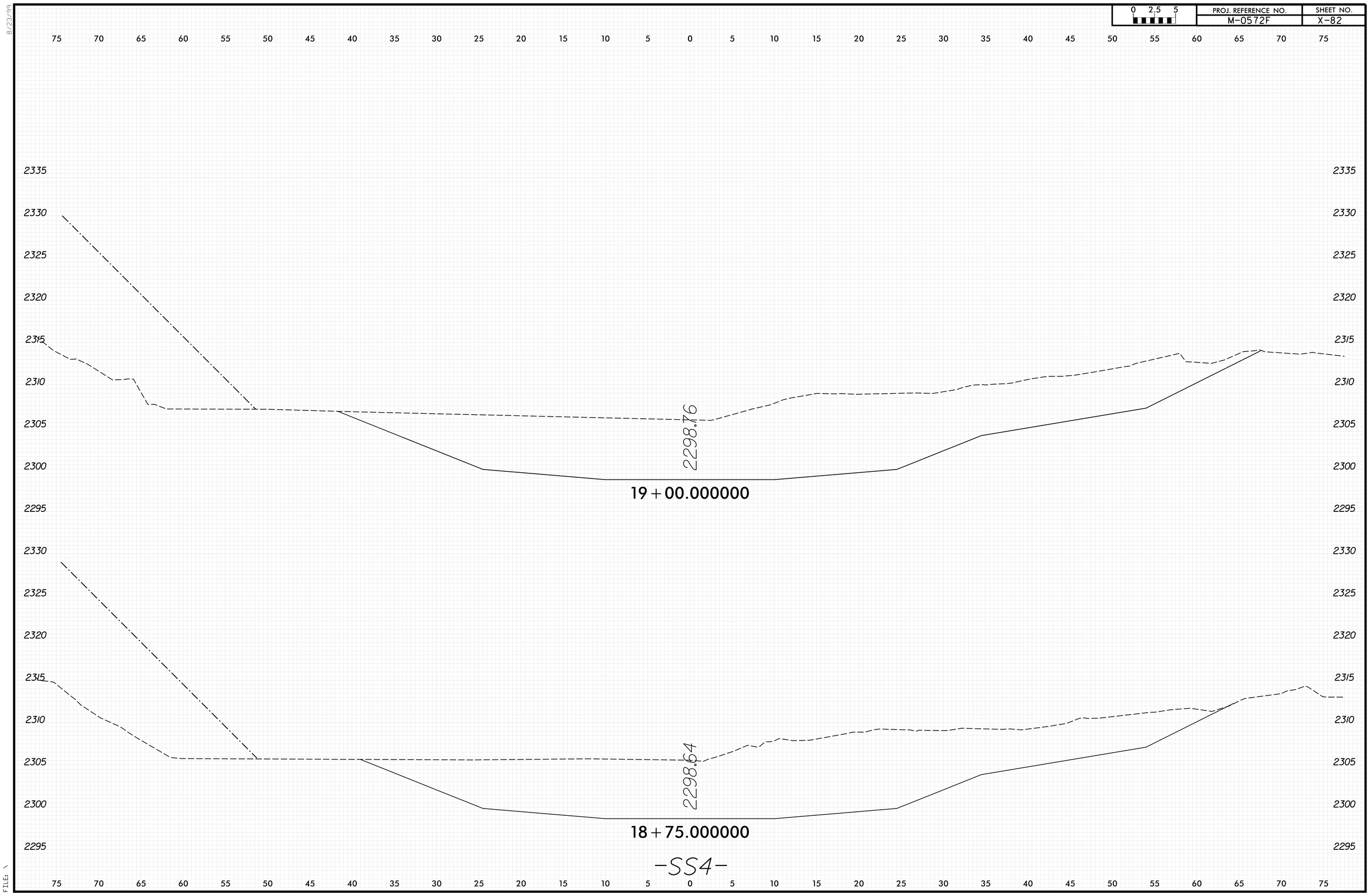
PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:52:20 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-81



PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:15:21 PM
8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-82



8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:15:22 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-83

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2335 2330 2325 2320 2315 2310 2305 2300 2295

2299.53

19+50.000000

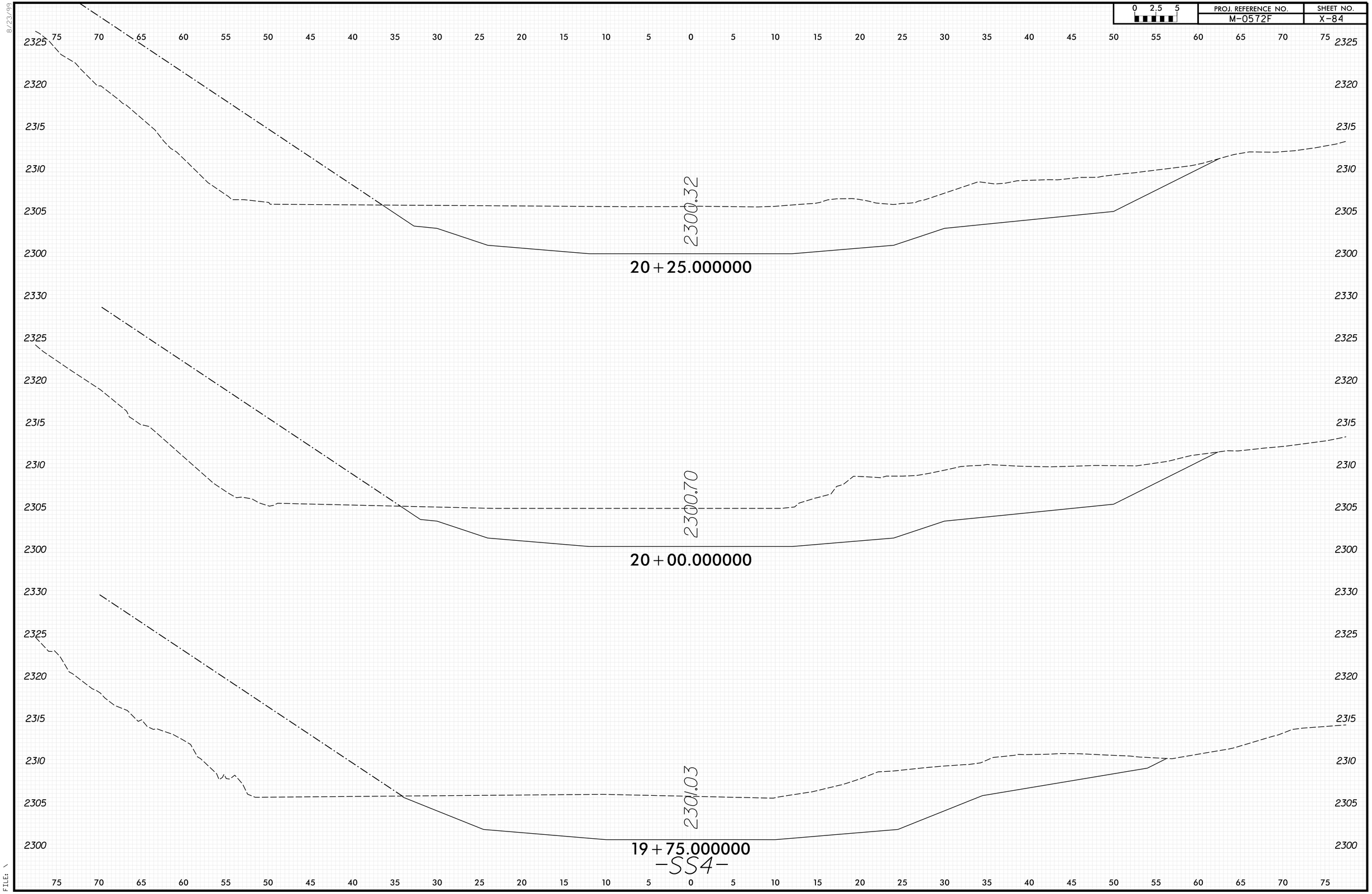
2298.89

19+25.000000

-SS4-

PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:15:24 PM
DATE: 8/24/2026
PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

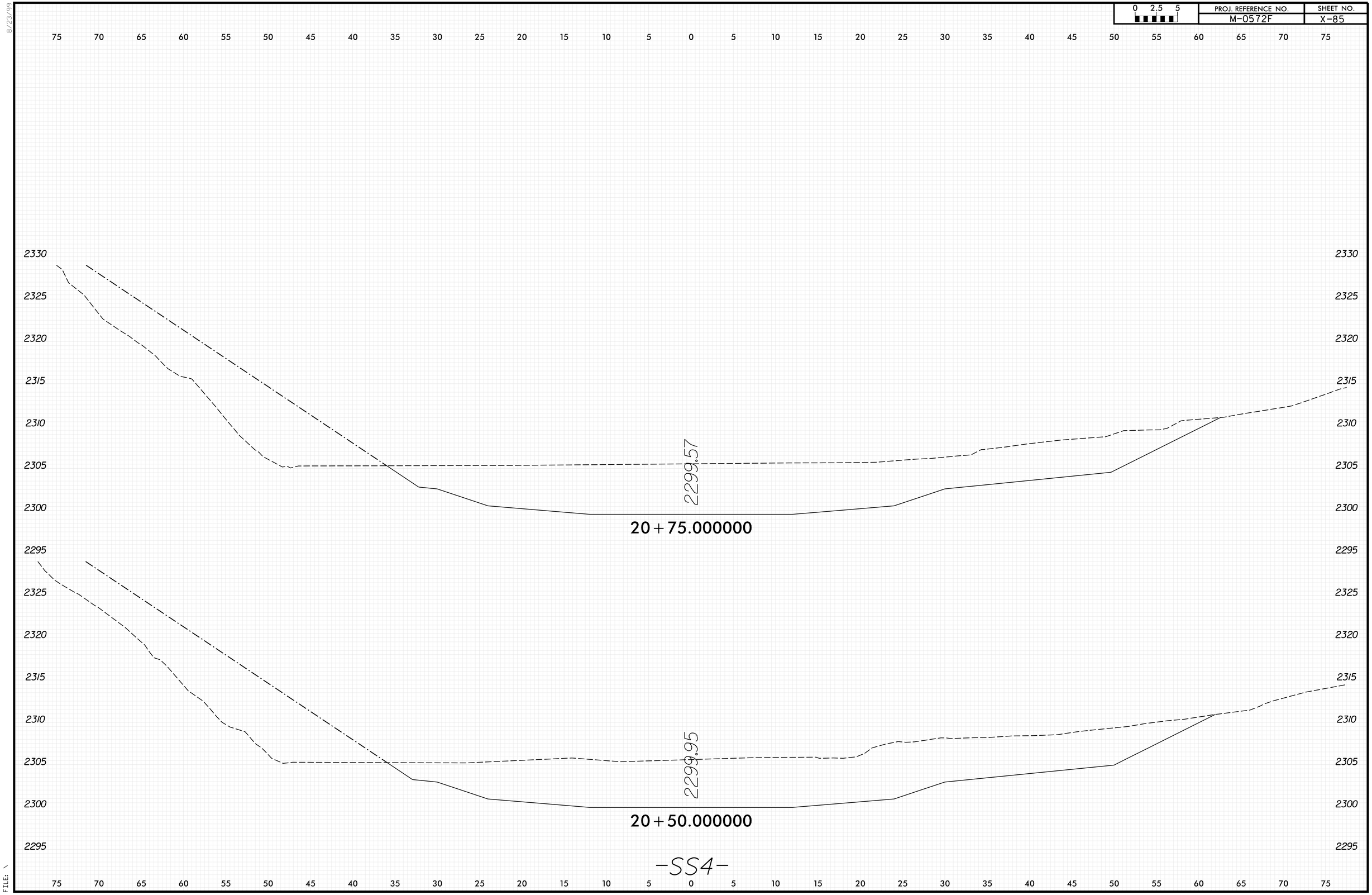
0 2,5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-84



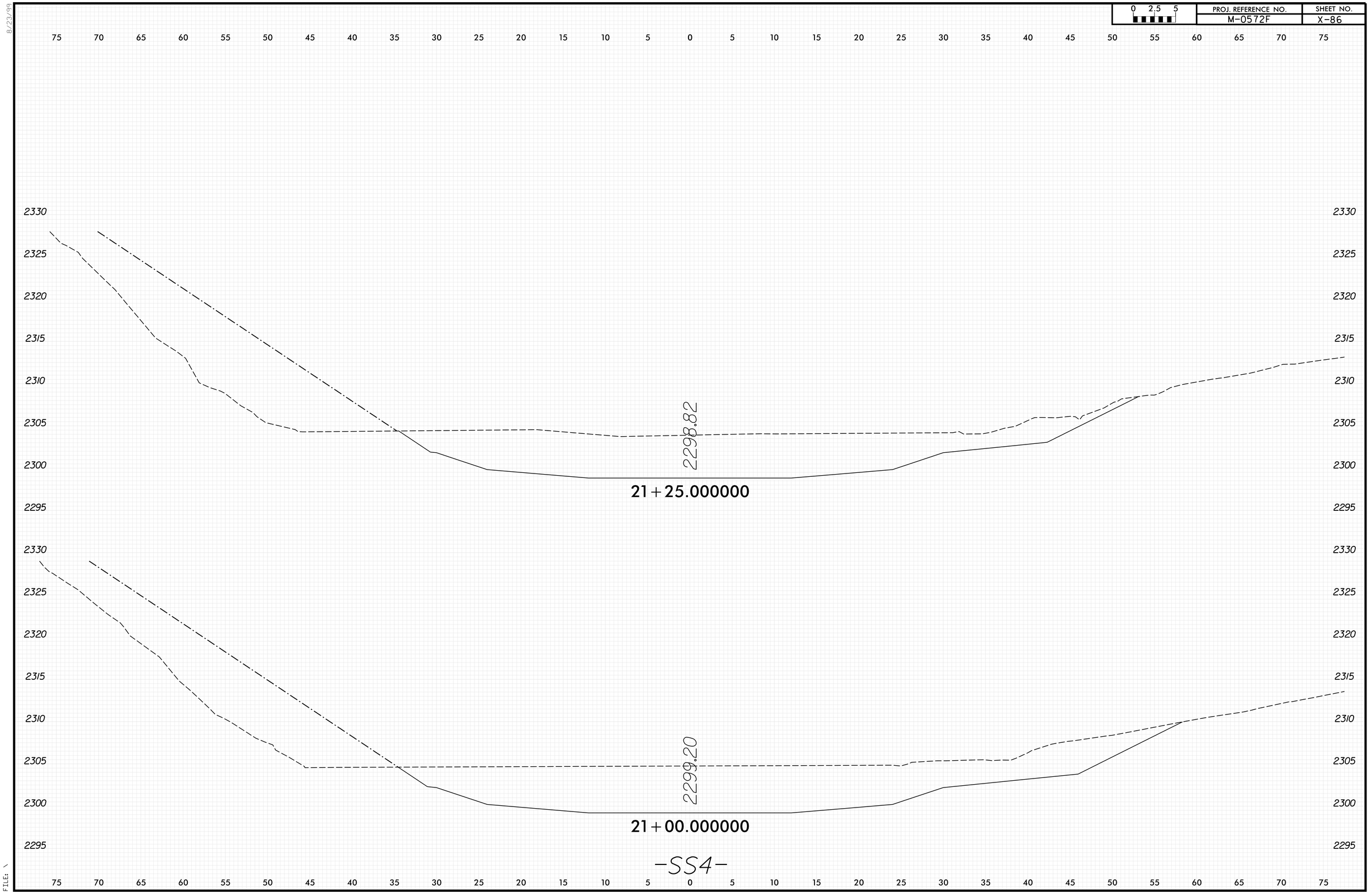
8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:15:25 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-85



8/23/99
PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:15:26 PM
DATE: 8/24/2026



8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:15:27 PM

8/23/99

0 2,5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-87

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2325 2320 2315 2310 2305 2300 2295

22+00.000000

2325 2320 2315 2310 2305 2300 2295

2298.07

21+75.000000

2325 2320 2315 2310 2305 2300 2295

2298.45

21+50.000000

-SS4-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE:
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:15:28 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-88

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2330 2325 2320 2315 2310 2305 2300

22 + 75.000000

2325 2320 2315 2310 2305 2300

22 + 50.000000

2325 2320 2315 2310 2305 2300

22 + 25.000000

-SS4-

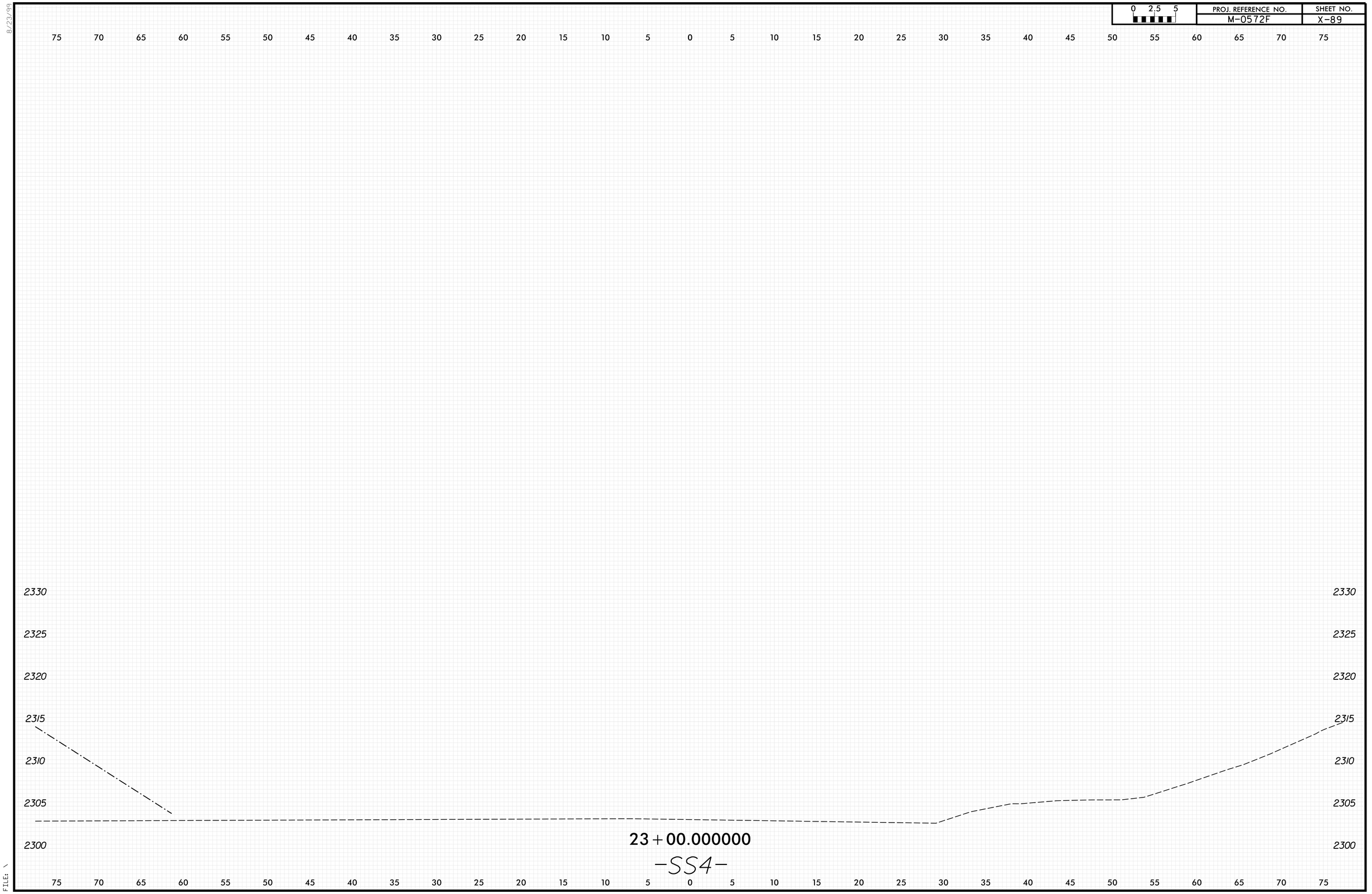
75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:15:29 PM
DATE: 8/24/2026

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-89



PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
DATE: 8/24/2026
PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:15:31 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-90

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2295
2290
2285
2280
2275
2270

0+50.000000

2295
2290
2285
2280
2275
2270

0+25.000000

2295
2290
2285
2280
2275
2270

0+00.000000

-SS5-

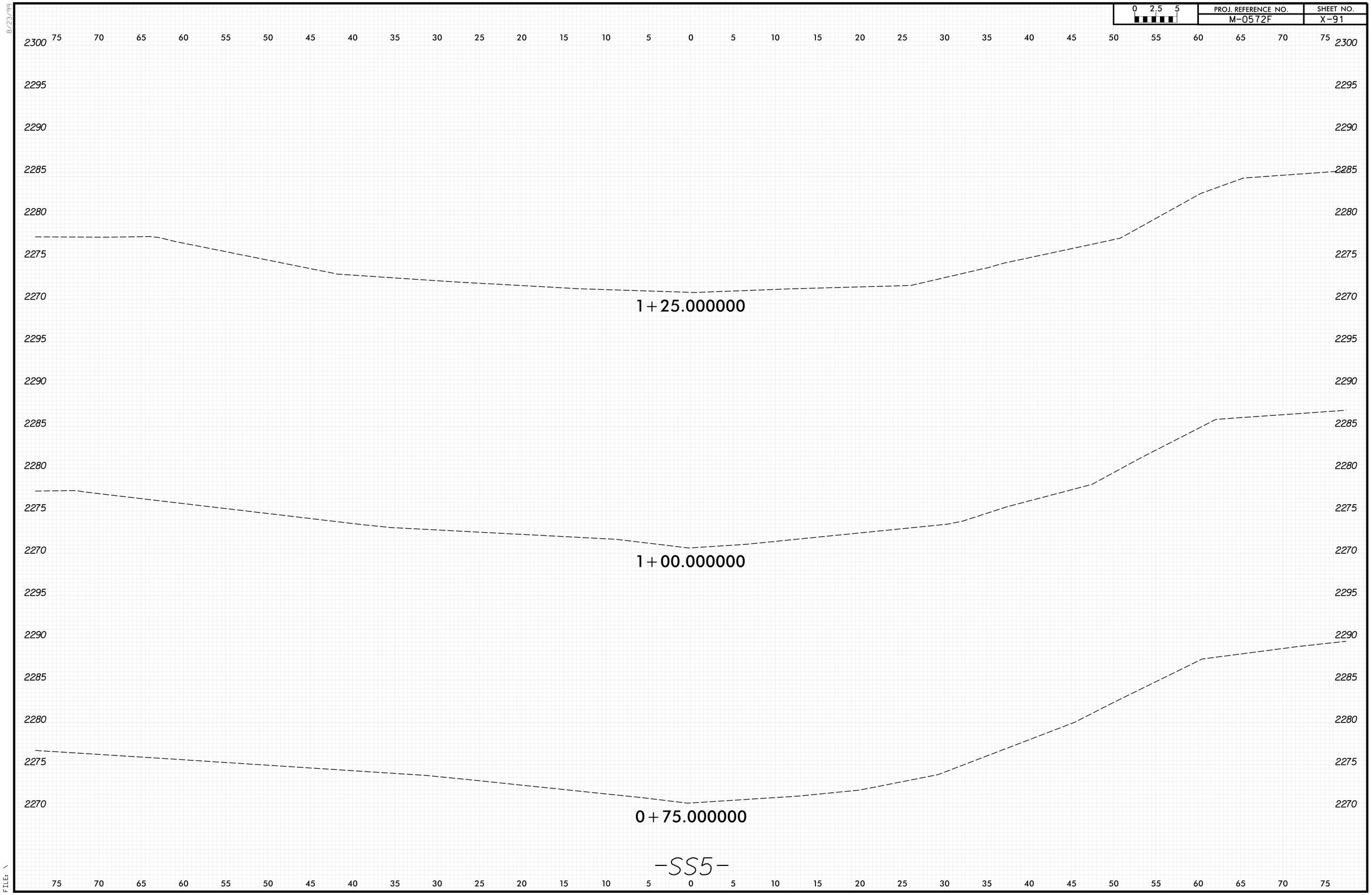
75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:16:07 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-91



PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
DATE: 8/24/2026
PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:16:08 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-92

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2295
2290
2285
2280
2275
2270
2265

2270.09

2+00.000000

2290
2285
2280
2275
2270

1+75.000000

2295
2290
2285
2280
2275
2270

1+50.000000

-SS5-

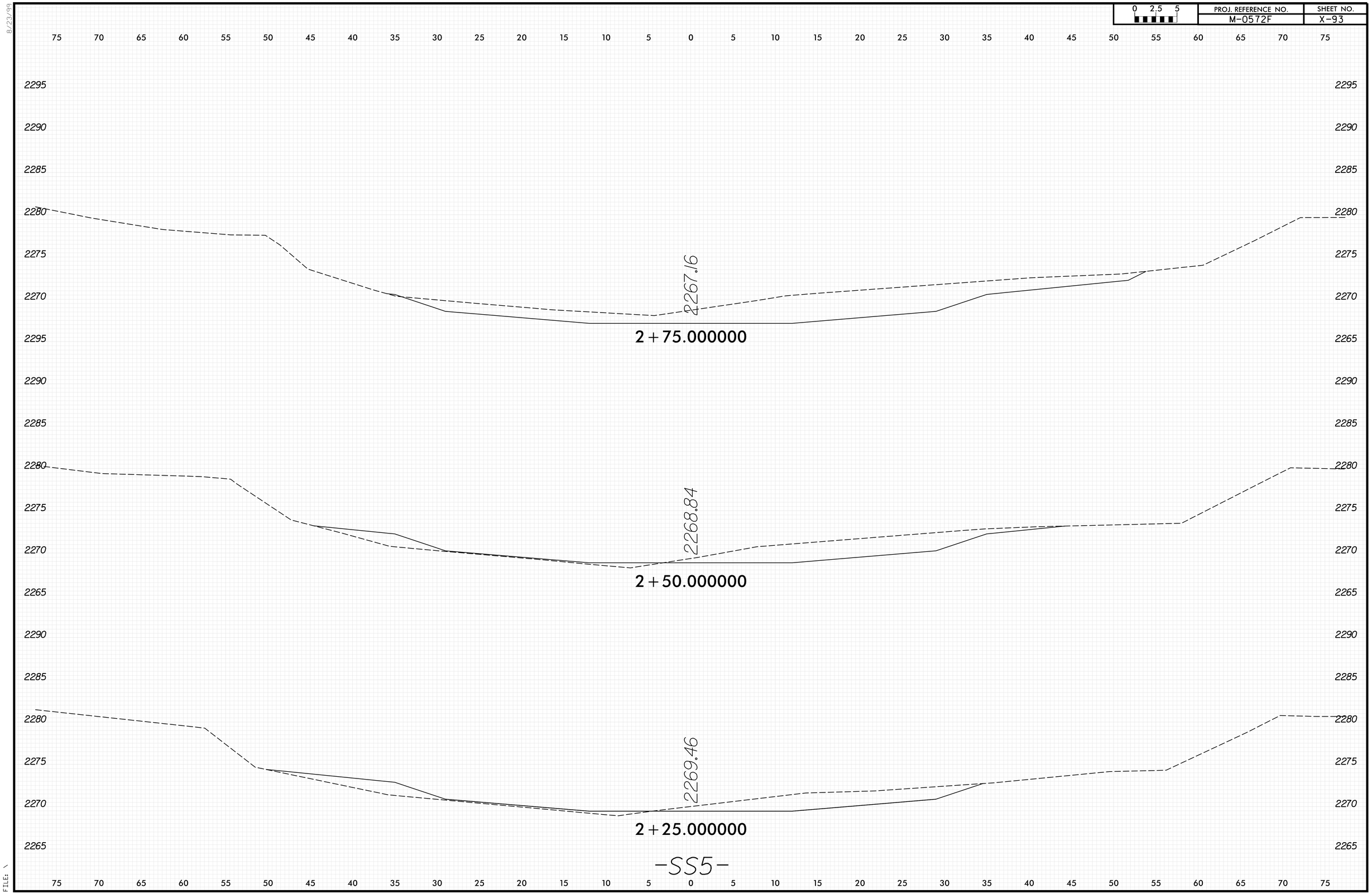
75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

DATE: 8/24/2026
PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:16:09 PM

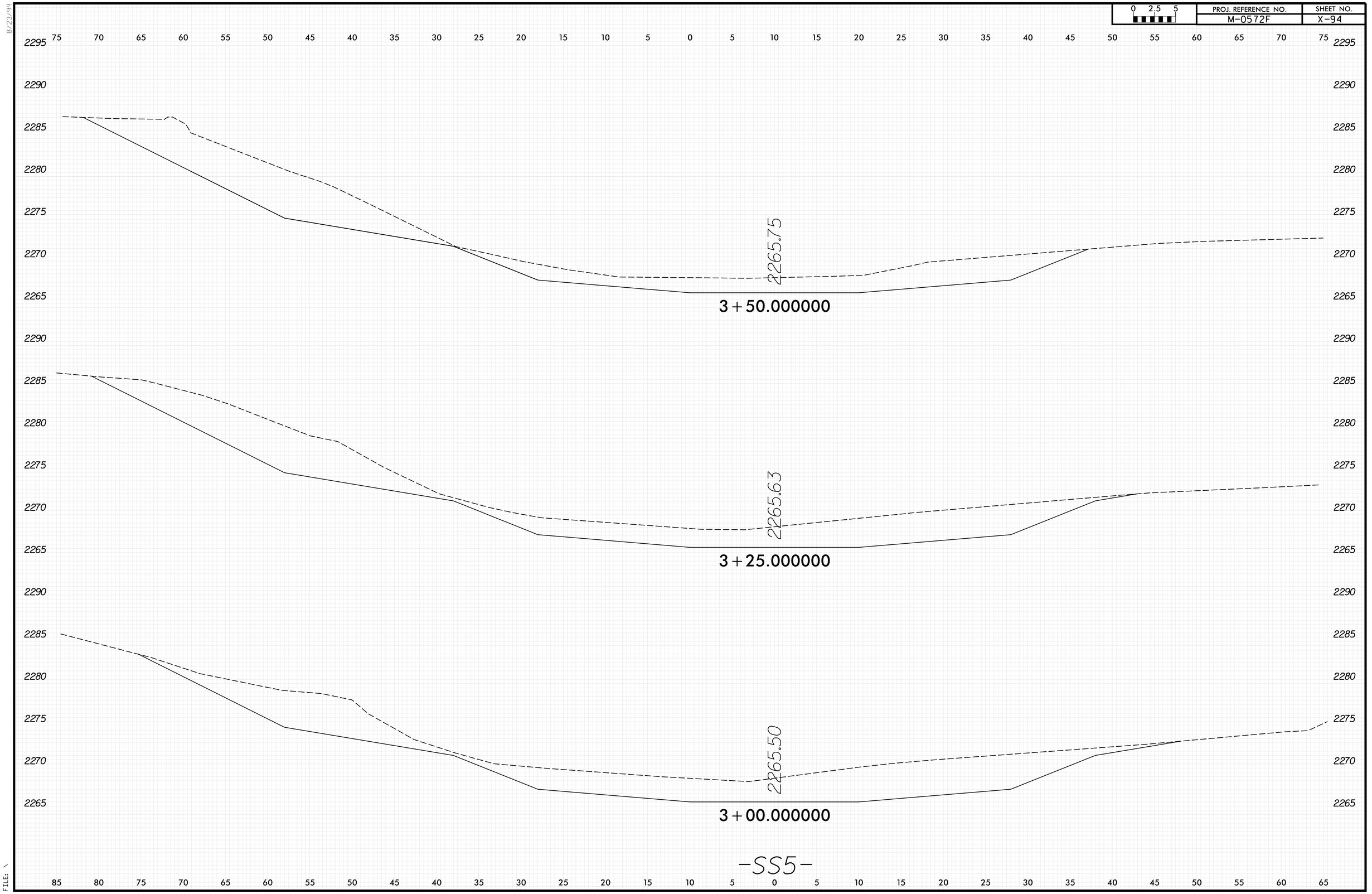
8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-93



PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:16:11 PM

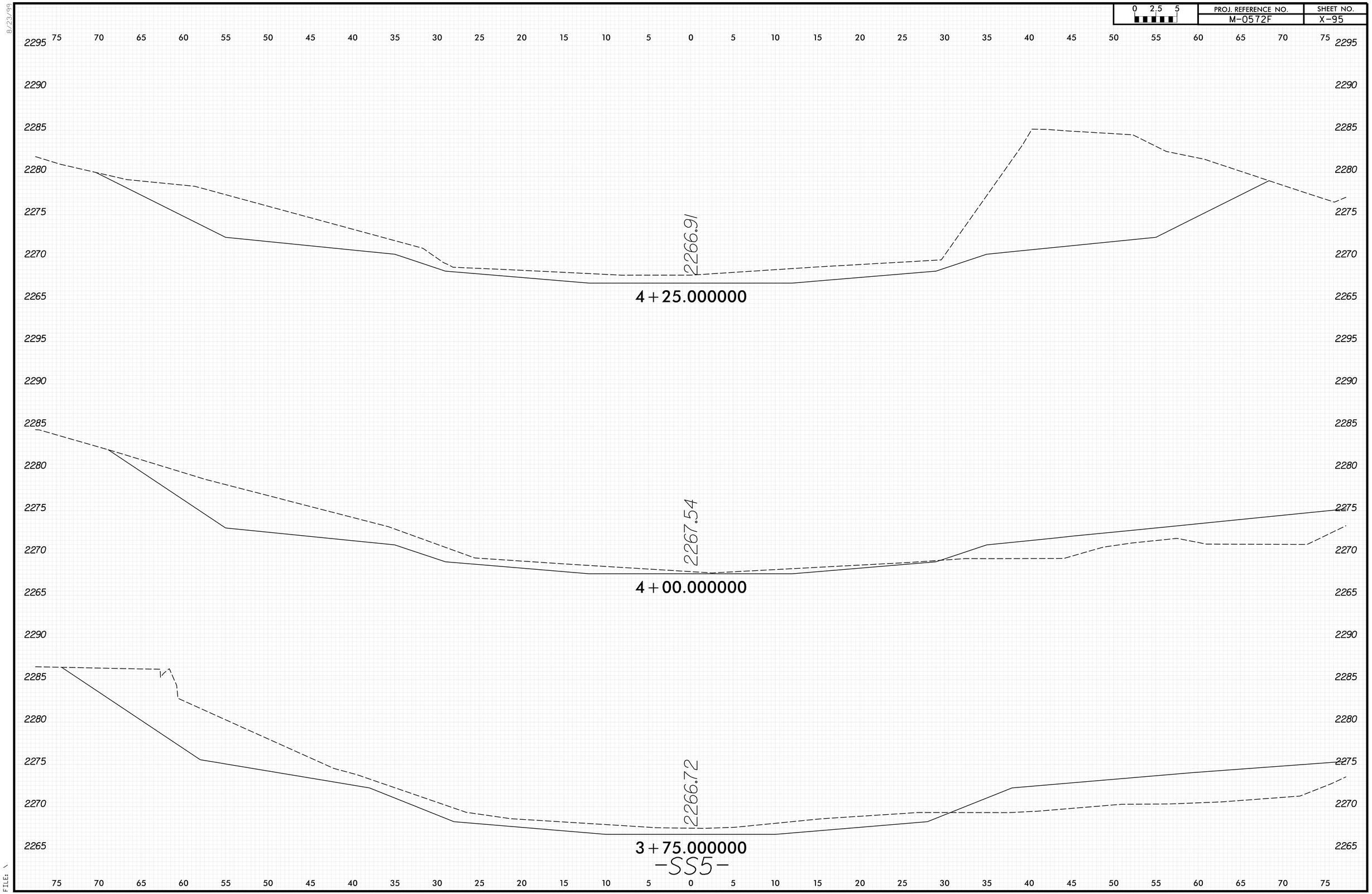
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-94



8/23/99

PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:16:12 PM

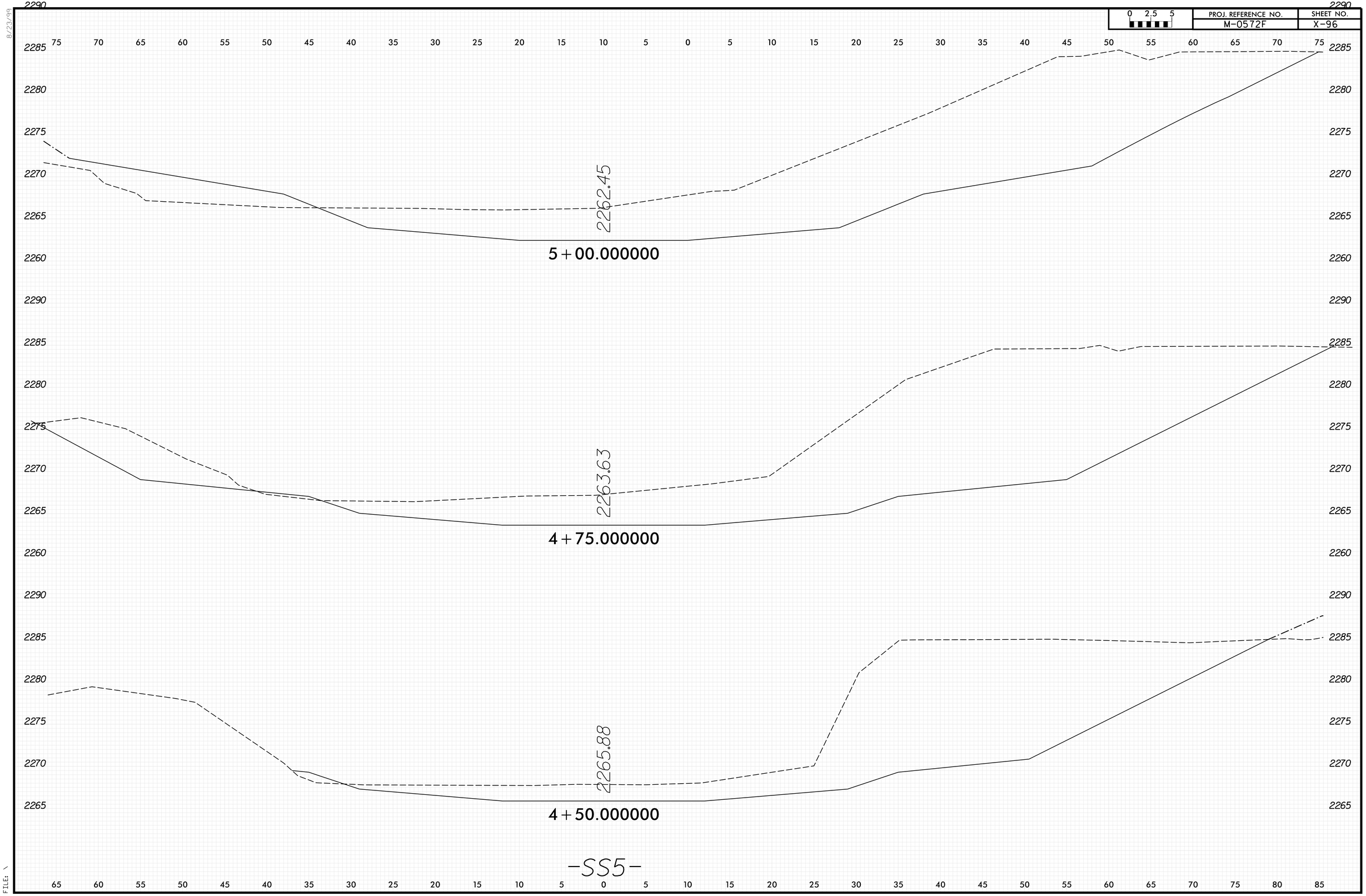
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-95



8/23/99

PLOT DRIVER: NCDOT.pdf_color-eng_50.plt
USER: GJACOBSON
FILE: \
DATE: 8/24/2026
TIME: 1:16:13 PM
PENTABLE: US_19W_South_STRM_XSC.tbl

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-96



8/23/99

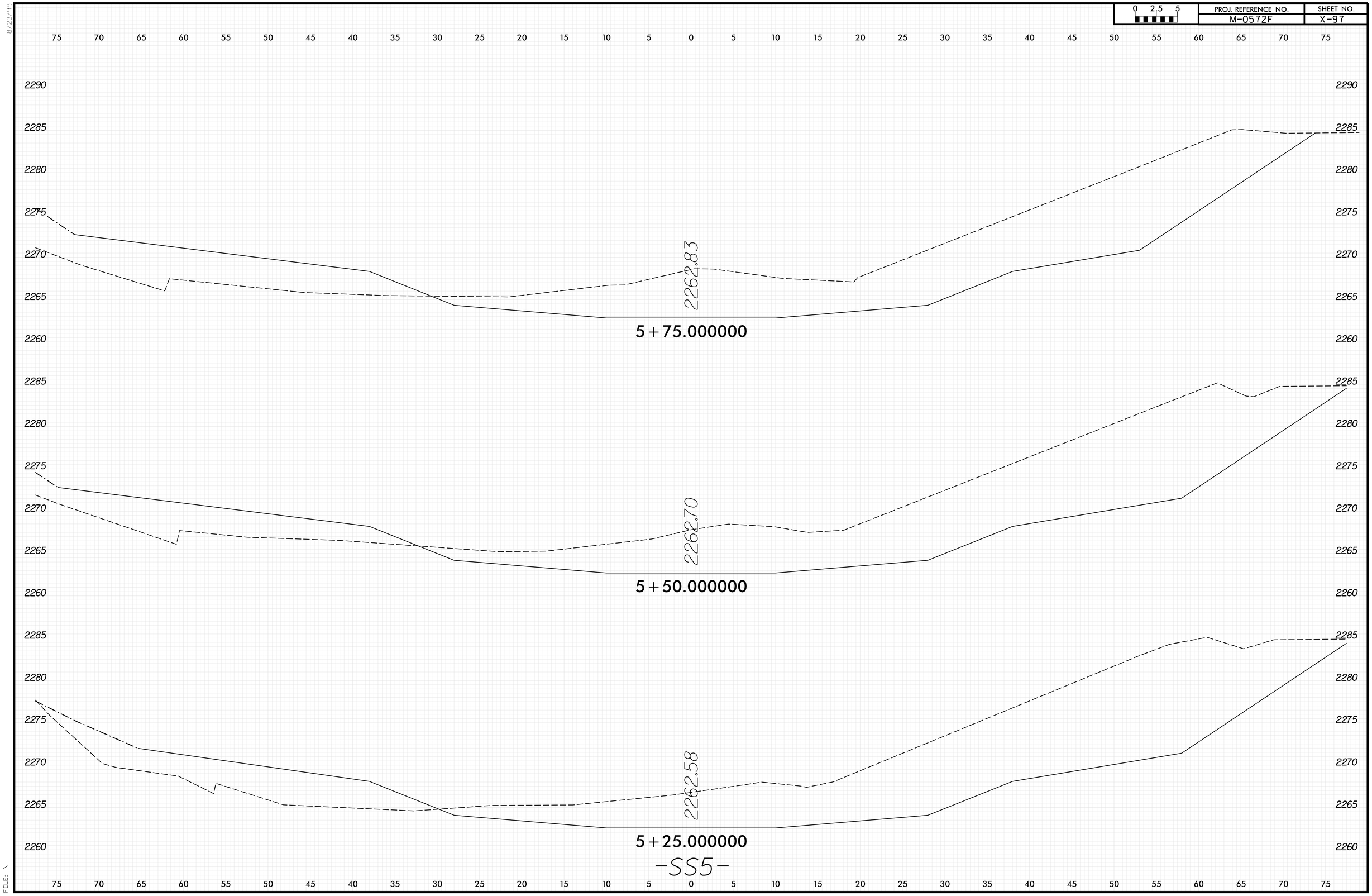
PENTABLE: US_19W_South_STRM_XSC.tbl TIME: 1:16:14 PM

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt DATE: 8/24/2026

USER: GJACOBSON

FILE: \

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-97



8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
DATE: 8/24/2026
PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:16:16 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-98

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2290 2285 2280 2275 2270 2265 2260

2263.20

6+50.000000

2263.08

6+25.000000

2262.95

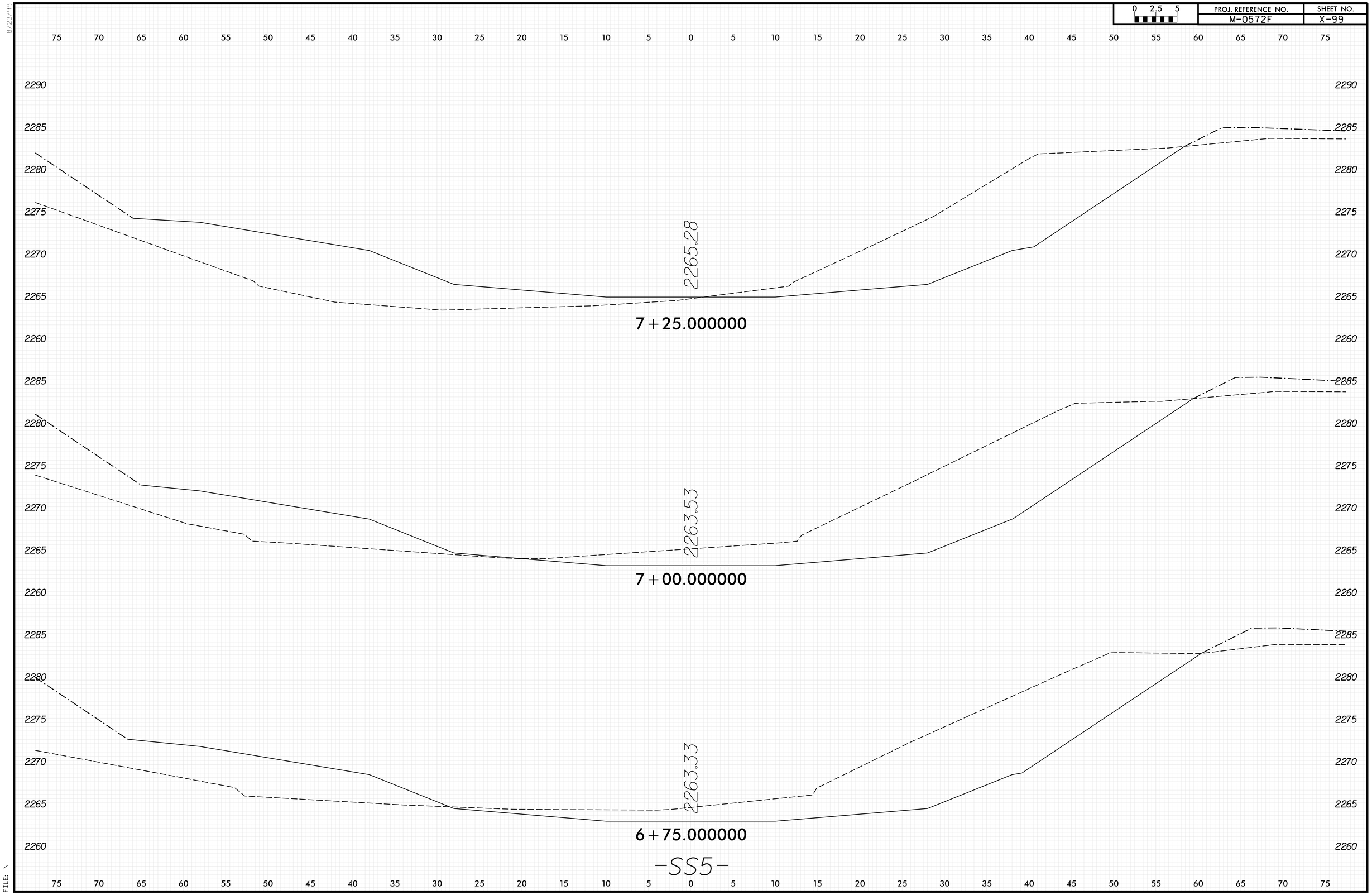
6+00.000000

-SS5-

8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE:
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:16:17 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-99

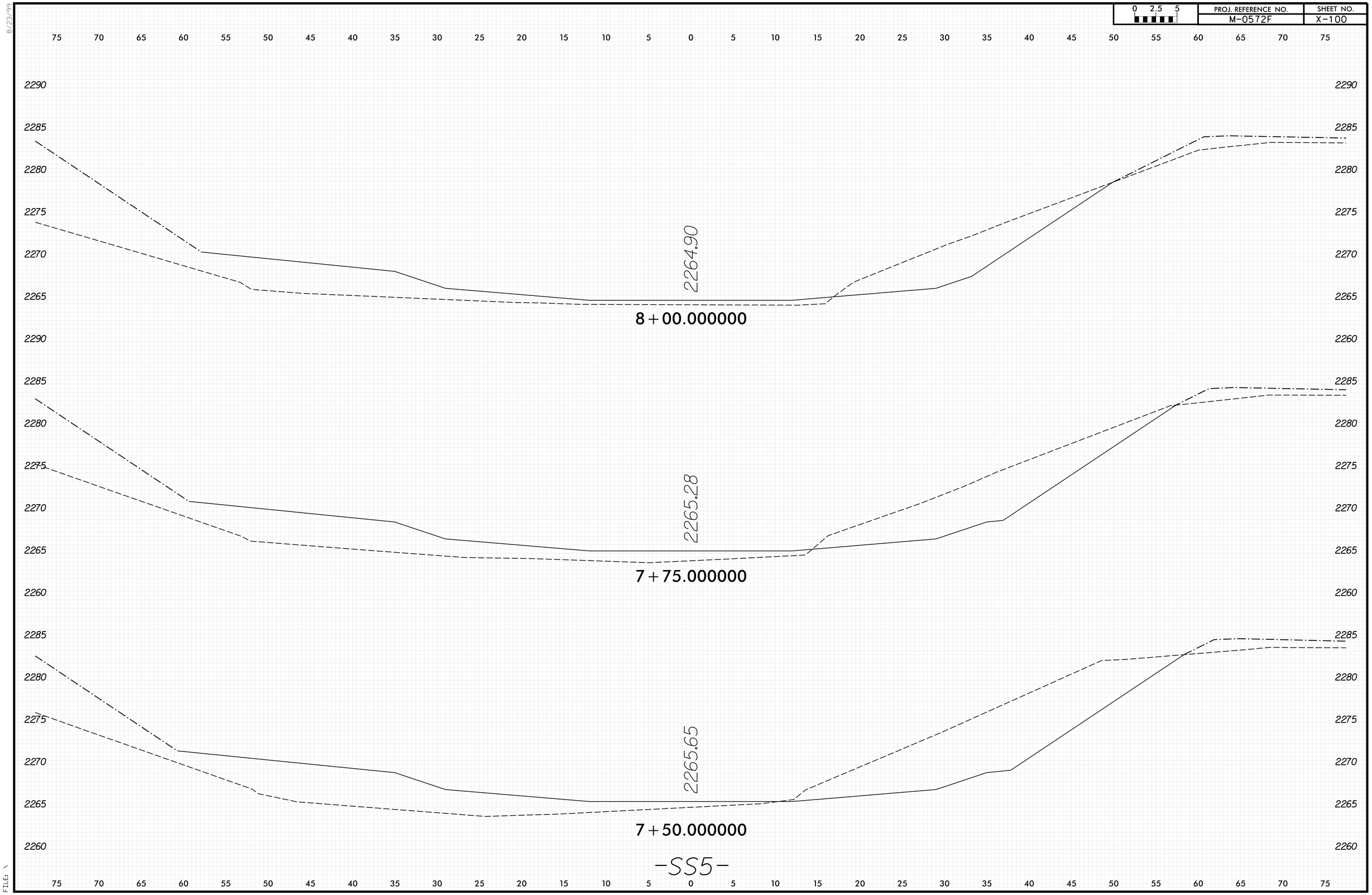


8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:16:18 PM

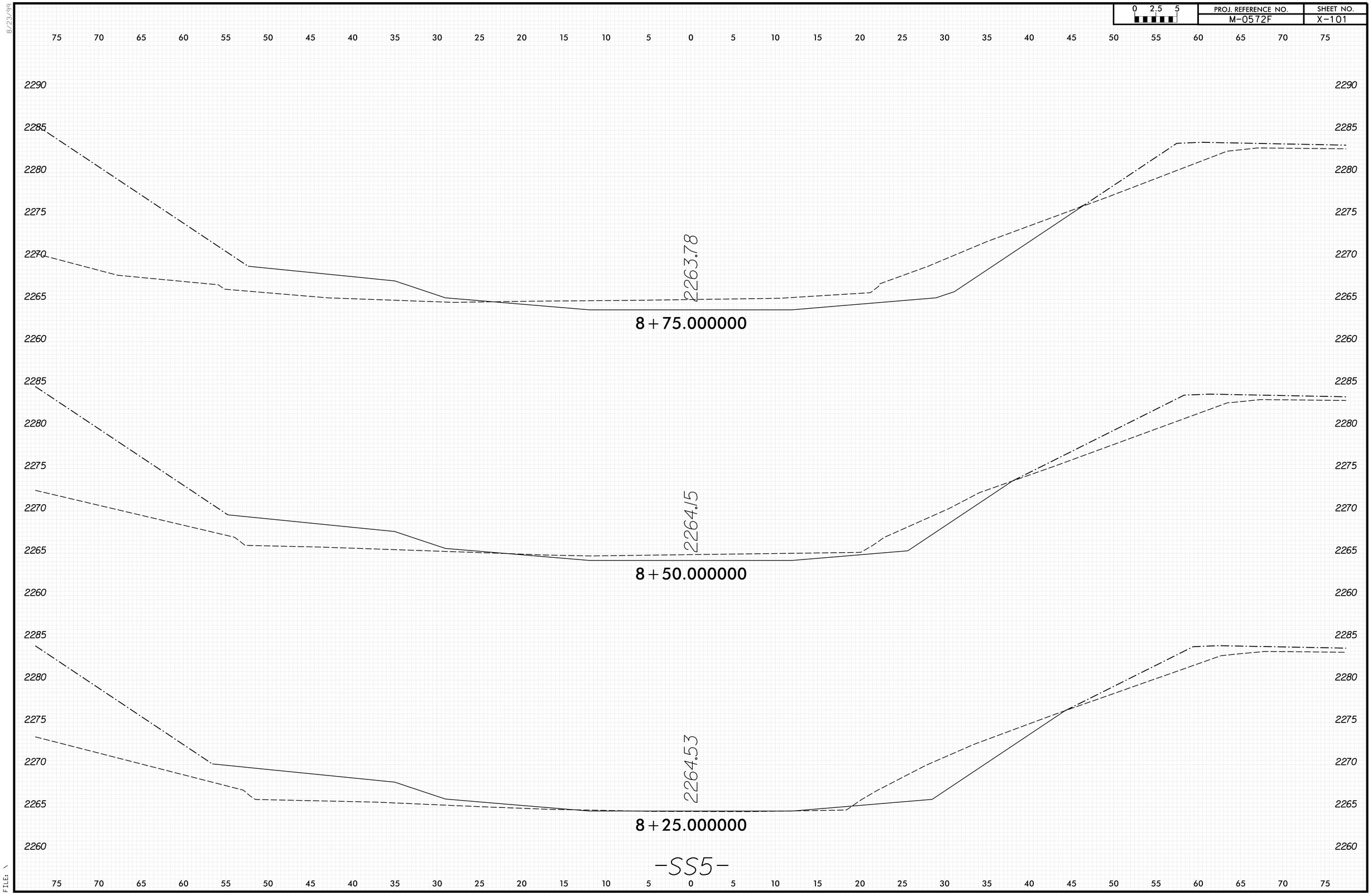
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-100



8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE:
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:16:19 PM

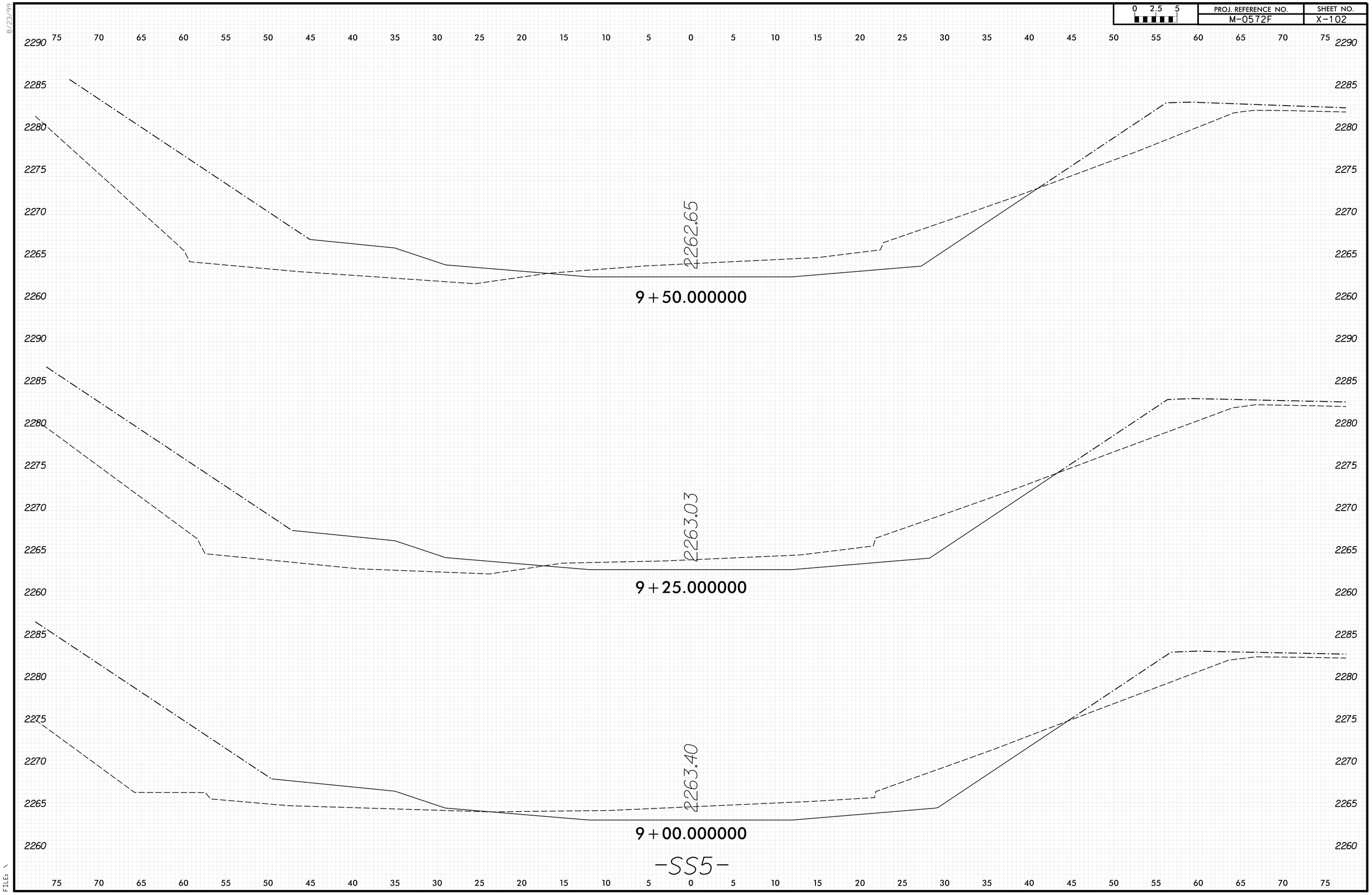
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-101



8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:17:32 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-102



8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:17:34 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-103

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2285 2280 2275 2270 2265 2260 2255

2258.58

10+25.000000

2285 2280 2275 2270 2265 2260 2255

2258.81

10+00.000000

2285 2280 2275 2270 2265 2260 2255

2261.06

9+75.000000

-SS5-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

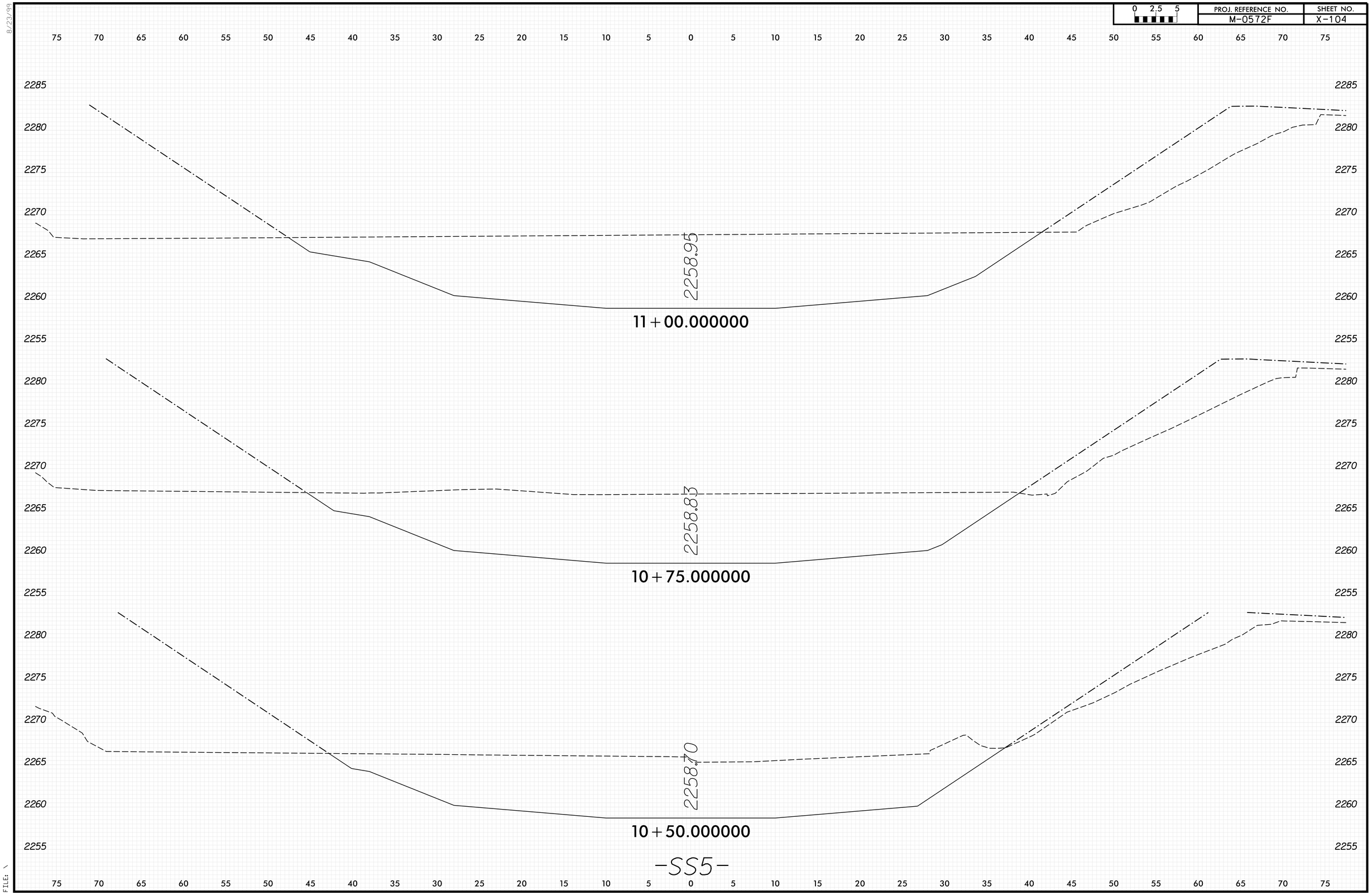
8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:17:35 PM

8/23/99

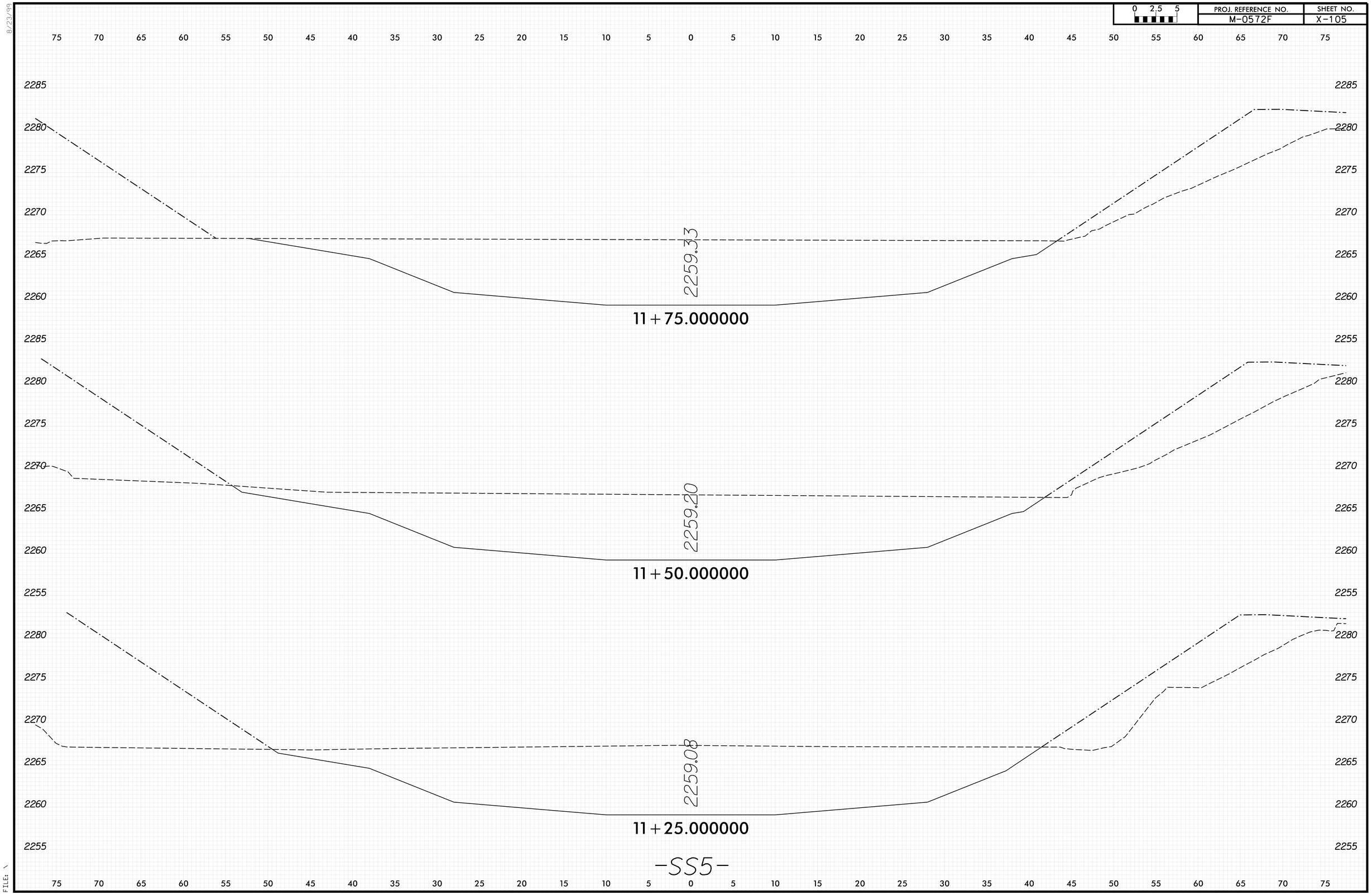
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-104



PLOT DRIVER: NCDOT.pdf_color-eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:17:36 PM

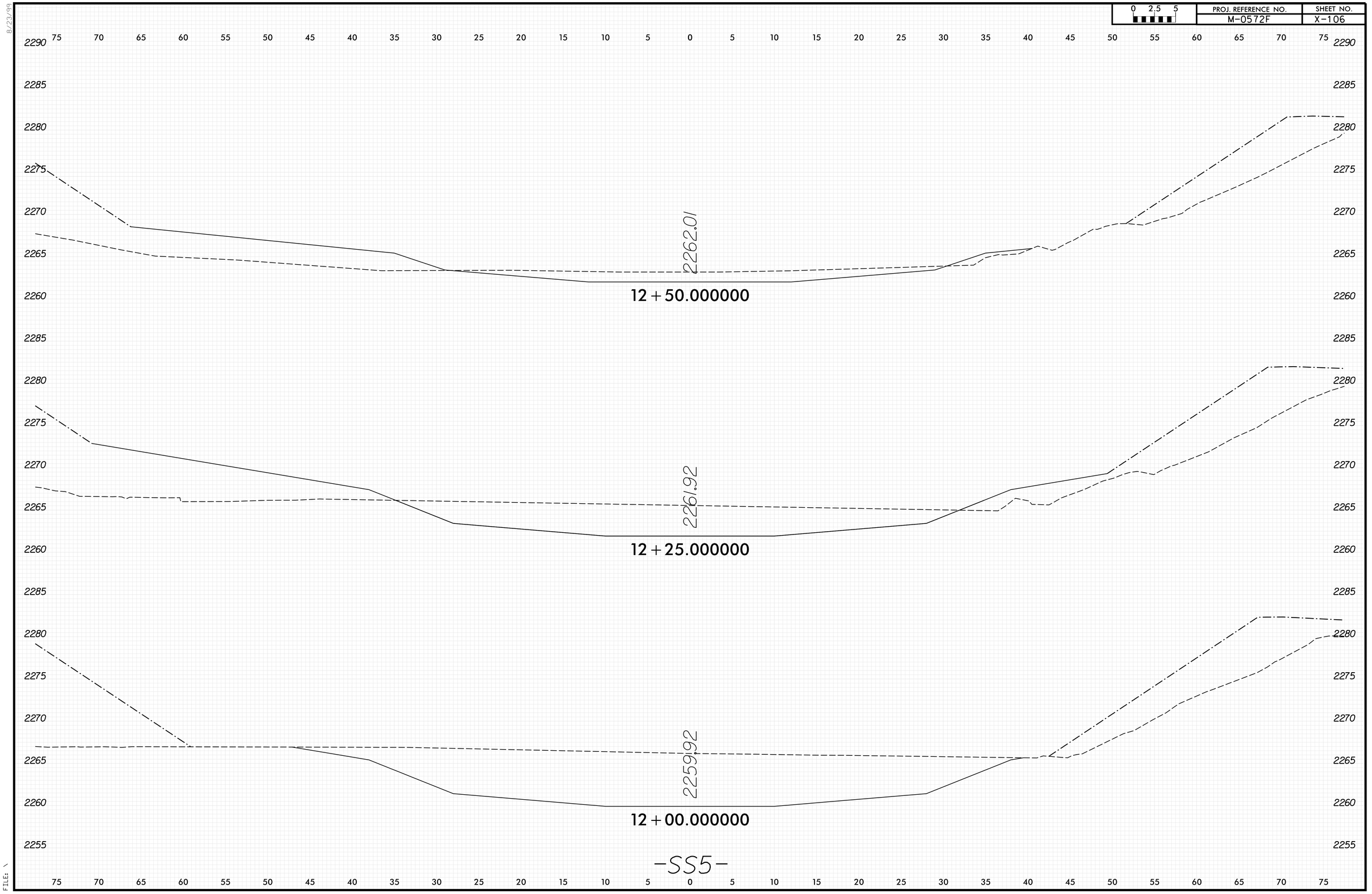
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-105



8/23/99

PLOT DRIVER: NCDOT.pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:17:37 PM

0 2,5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-106



8/23/99

PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:17:39 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-107

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2290 2285 2280 2275 2270 2265 2260

2261.26

13+25.000000

2261.51

13+00.000000

2261.76

12+75.000000

-SS5-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:17:40 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-108

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2290 2285 2280 2275 2270 2265 2260

2260.51

14+00.000000

2260.76

13+75.000000

2261.01

13+50.000000

-SS5-

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:17:41 PM

8/23/99

0 2,5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-109

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2285 2280 2275 2270 2265 2260

2259.76

14+75.000000

2260.01

14+50.000000

2260.26

14+25.000000

-SS5-

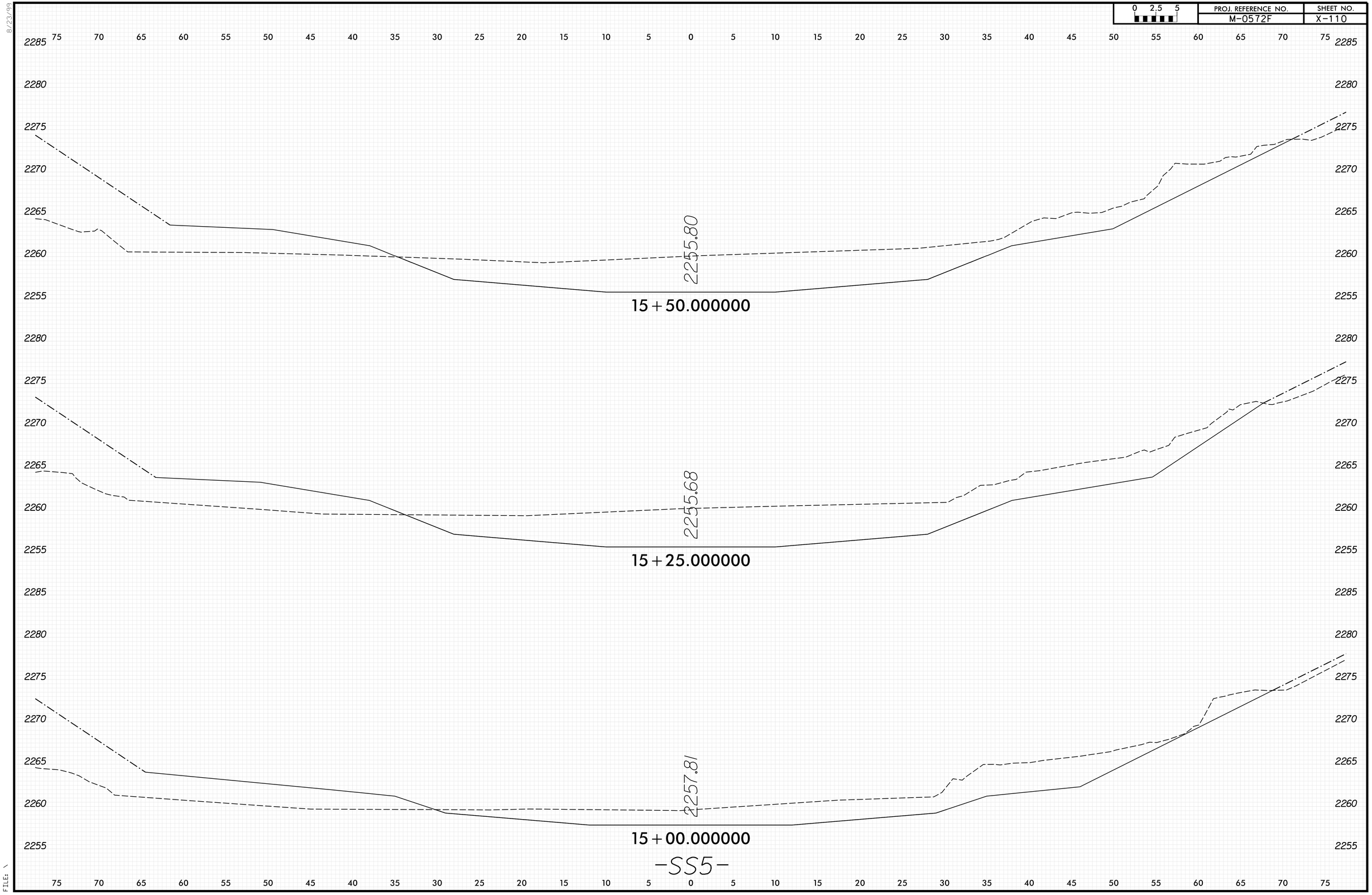
70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80

PLOT DRIVER: NCDOT.pdf.color.eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:17:42 PM

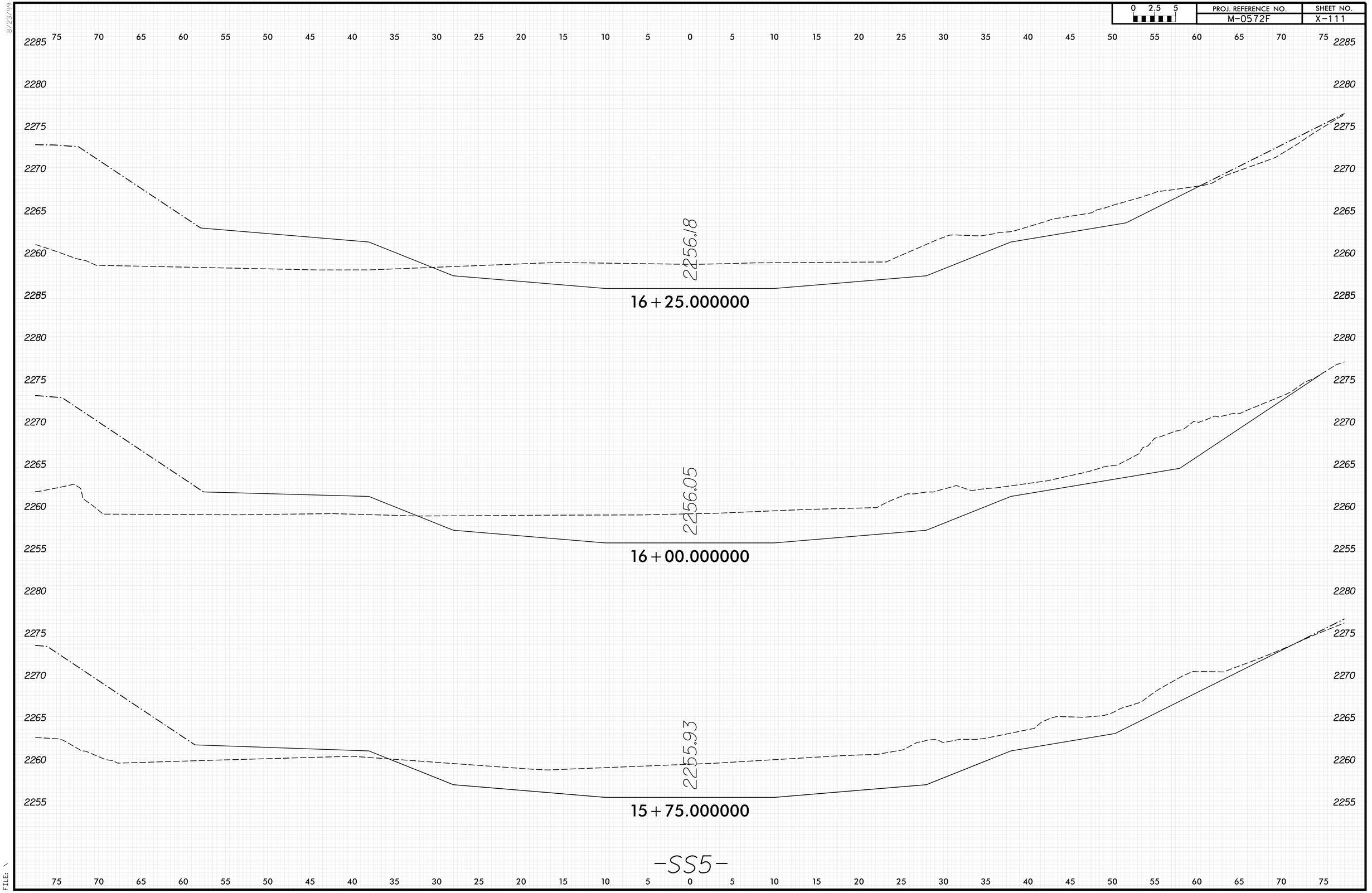
0 2,5 5

PROJ. REFERENCE NO.	SHEET NO.
M-0572F	X-110



PLOT DRIVER: NCDOT_pdf_color-eng_50.plt
USER: GJACOBSON
FILE: \
DATE: 8/24/2026
PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:17:44 PM

0 2,5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-111



8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: /
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:17:45 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-112

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2285 2280 2275 2270 2265 2260 2255

2256.55

17+00.000000

2280 2275 2270 2265 2260 2255

2256.43

16+75.000000

2280 2275 2270 2265 2260 2255

2256.30

16+50.000000

-SS5-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT.pdf_color_eng_50.plt
USER: GJACOBSON
FILE:
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:17:46 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-113

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2285 2280 2275 2270 2265 2260 2255

2258.88

17 + 75.000000

2280 2275 2270 2265 2260 2255

2258.51

17 + 50.000000

2280 2275 2270 2265 2260 2255

2256.76

17 + 25.000000

-SS5-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:17:48 PM
DATE: 8/24/2026
PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-114

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2285 2280 2275 2270 2265 2260 2255

2257.75

18+50.000000

2258.13

18+25.000000

2258.50

18+00.000000

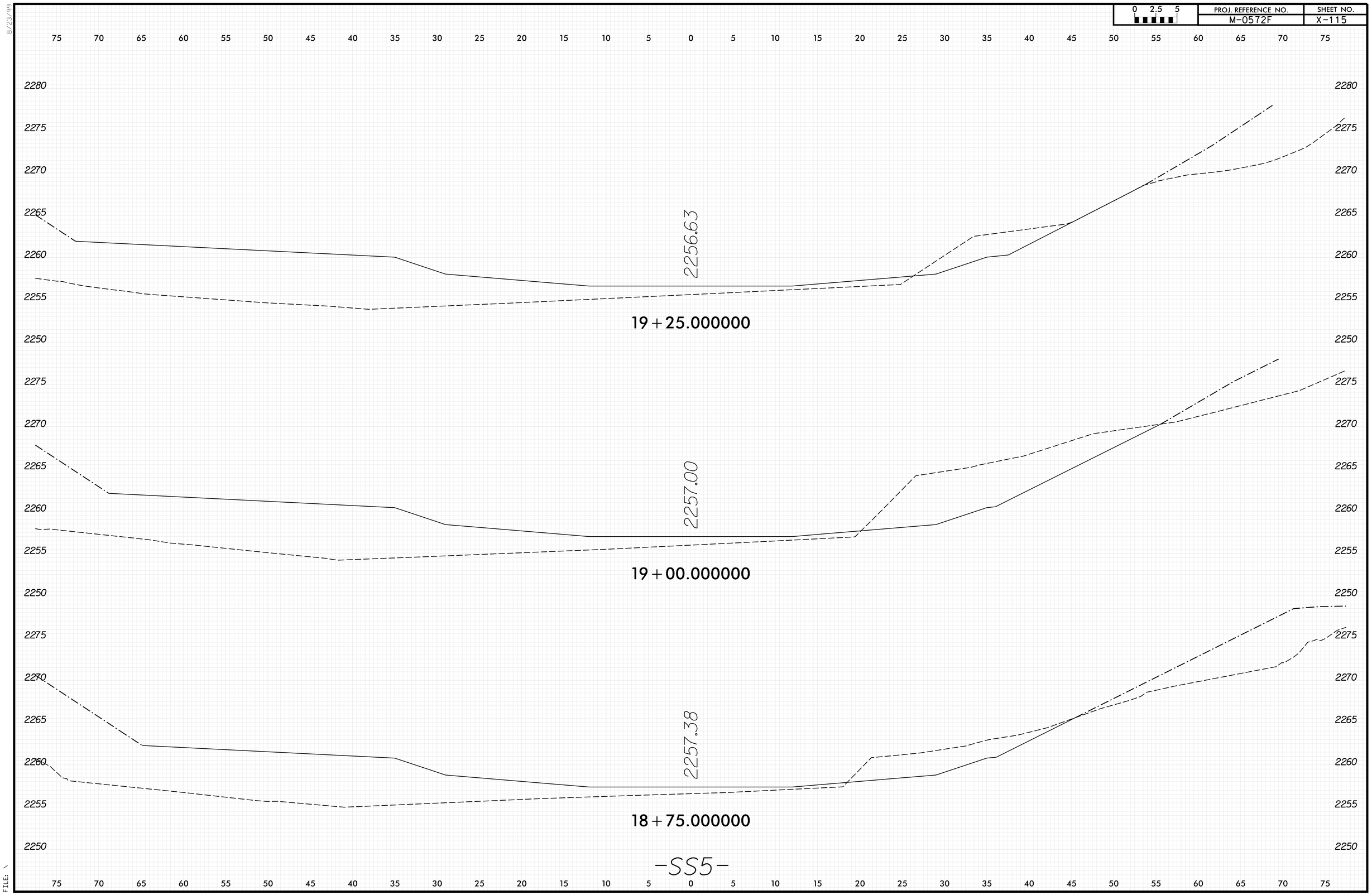
-SS5-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:17:49 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-115



8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:17:50 PM

0 2,5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-116

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2280 2275 2270 2265 2260 2255 2250

2255.50

20+00.000000

2255.88

19+75.000000

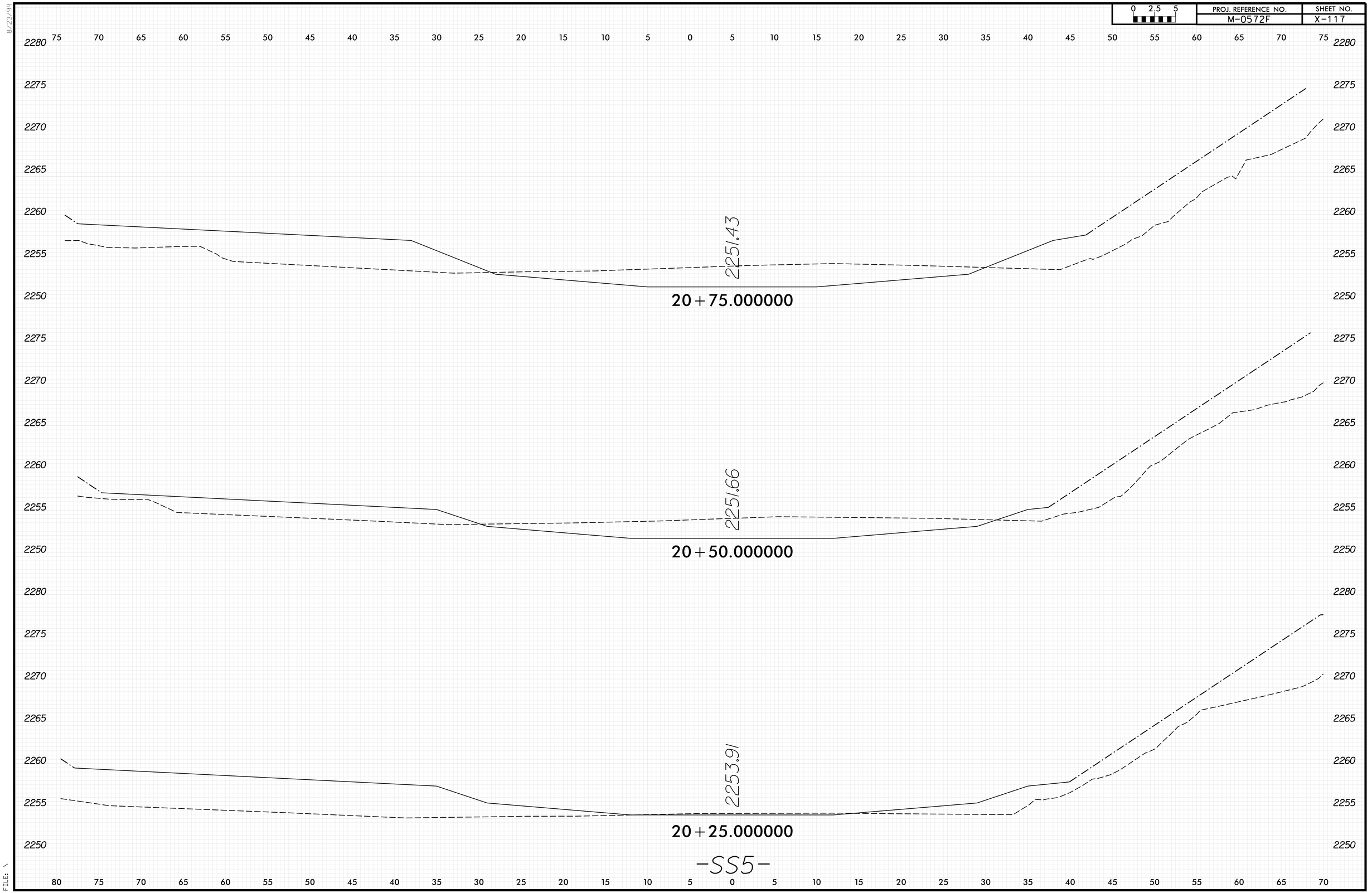
2256.25

19+50.000000

-SS5-

8/23/99

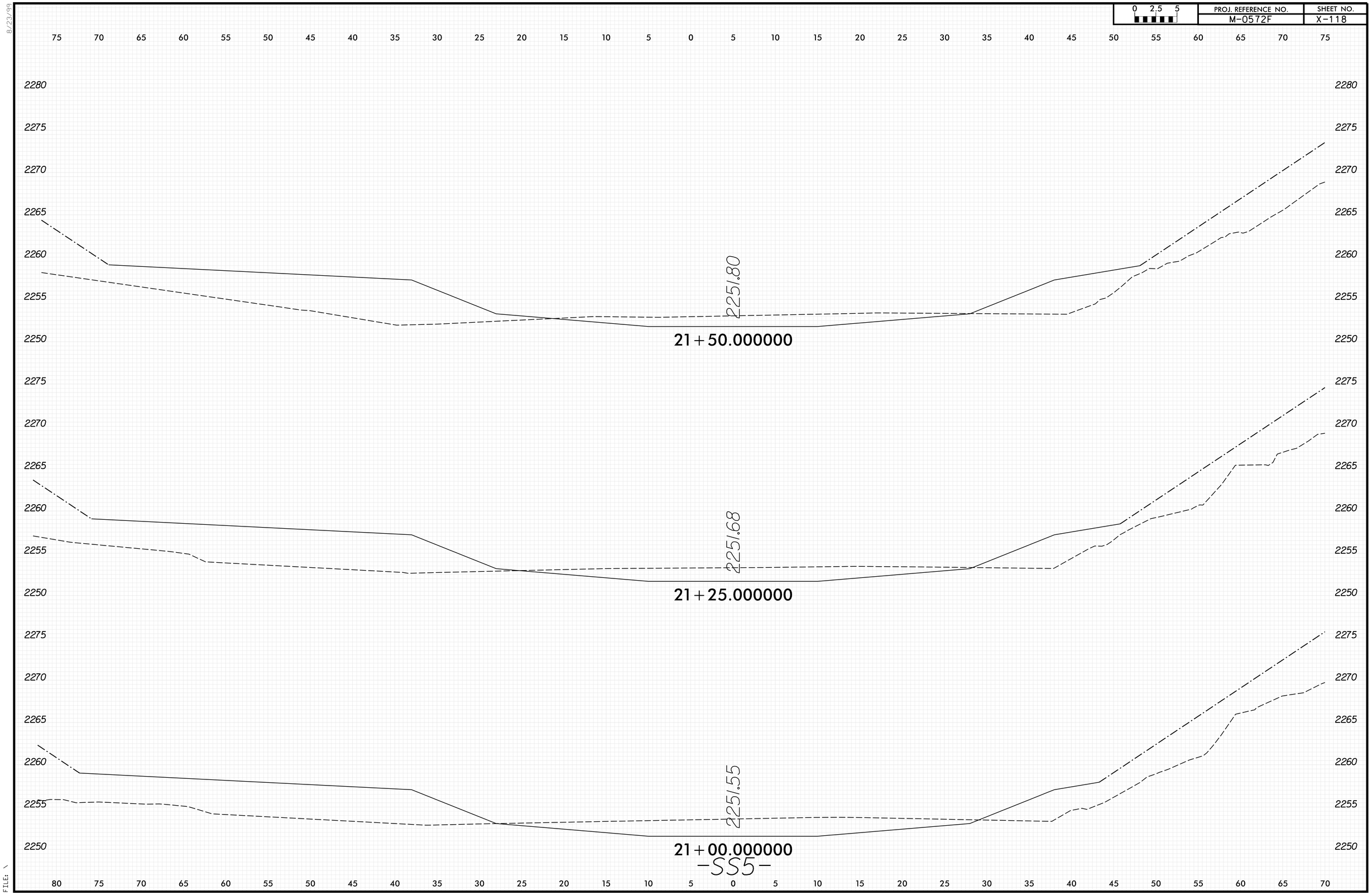
PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:17:51 PM



8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE:
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:17:53 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-118



8/23/99

PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: /

PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:17:54 PM
DATE: 8/24/2026

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-119

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2280 2275 2270 2265 2260 2255 2250

2252.18

22+25.000000

2252.05

22+00.000000

2251.93

21+75.000000

-SS5-

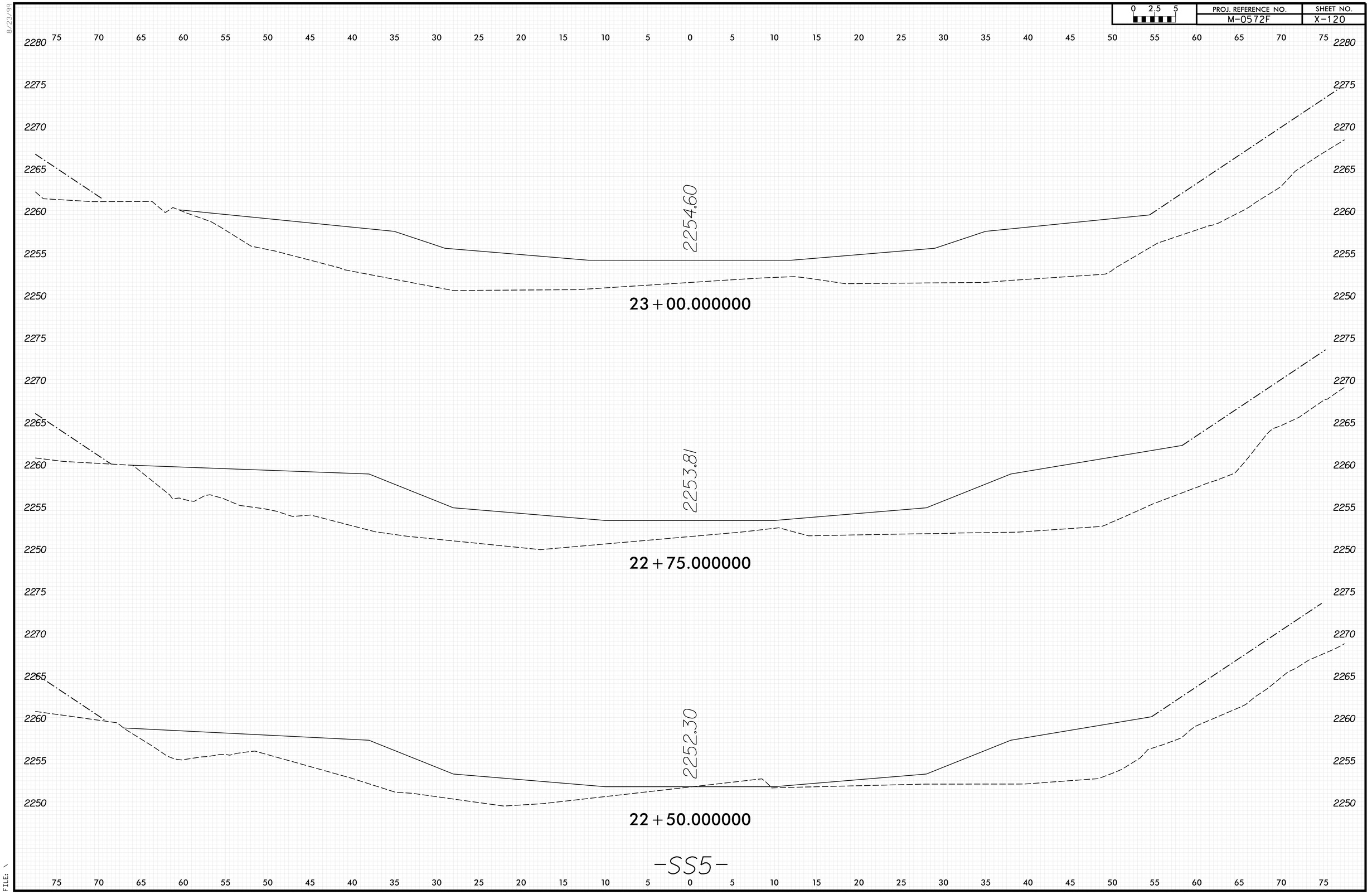
75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:17:55 PM

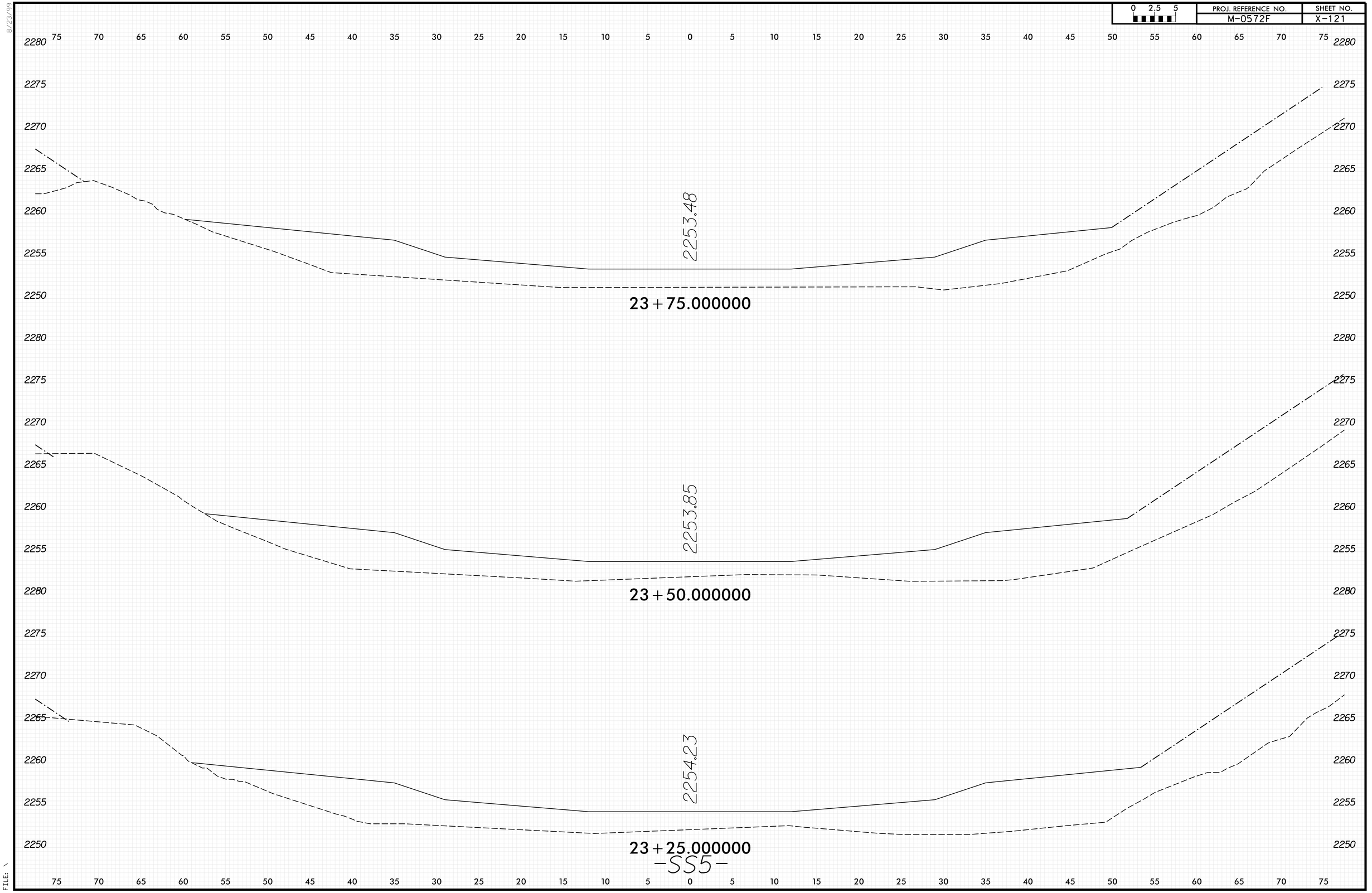
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-120



8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE:
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:17:56 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-121

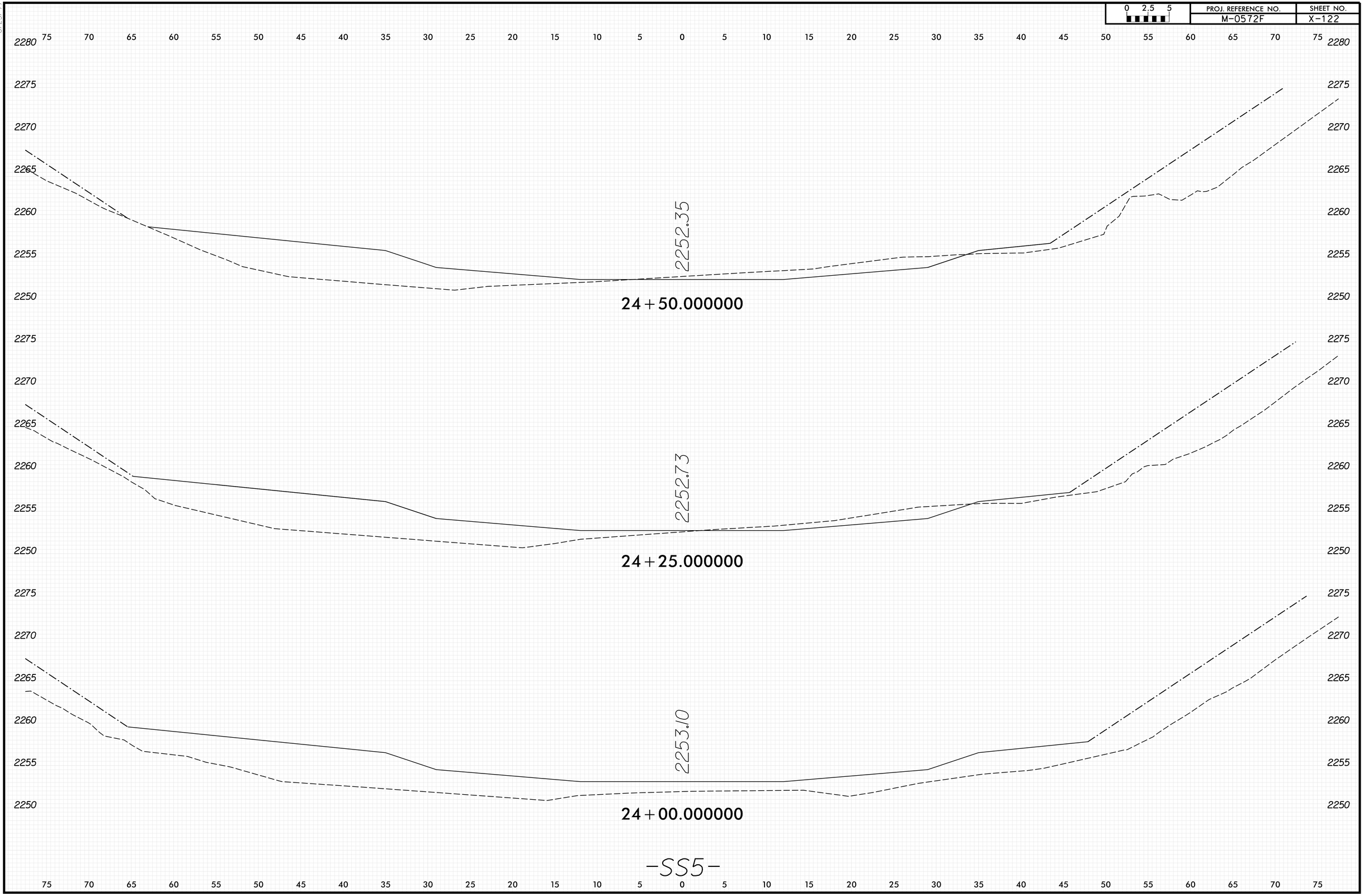


8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:17:58 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-122



PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:17:59 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-123

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2275 2270 2265 2260 2255 2250 2245

225I.23

25+25.000000

2270 2265 2260 2255 2250 2245

225I.60

25+00.000000

2275 2270 2265 2260 2255 2250

225I.98

24+75.000000

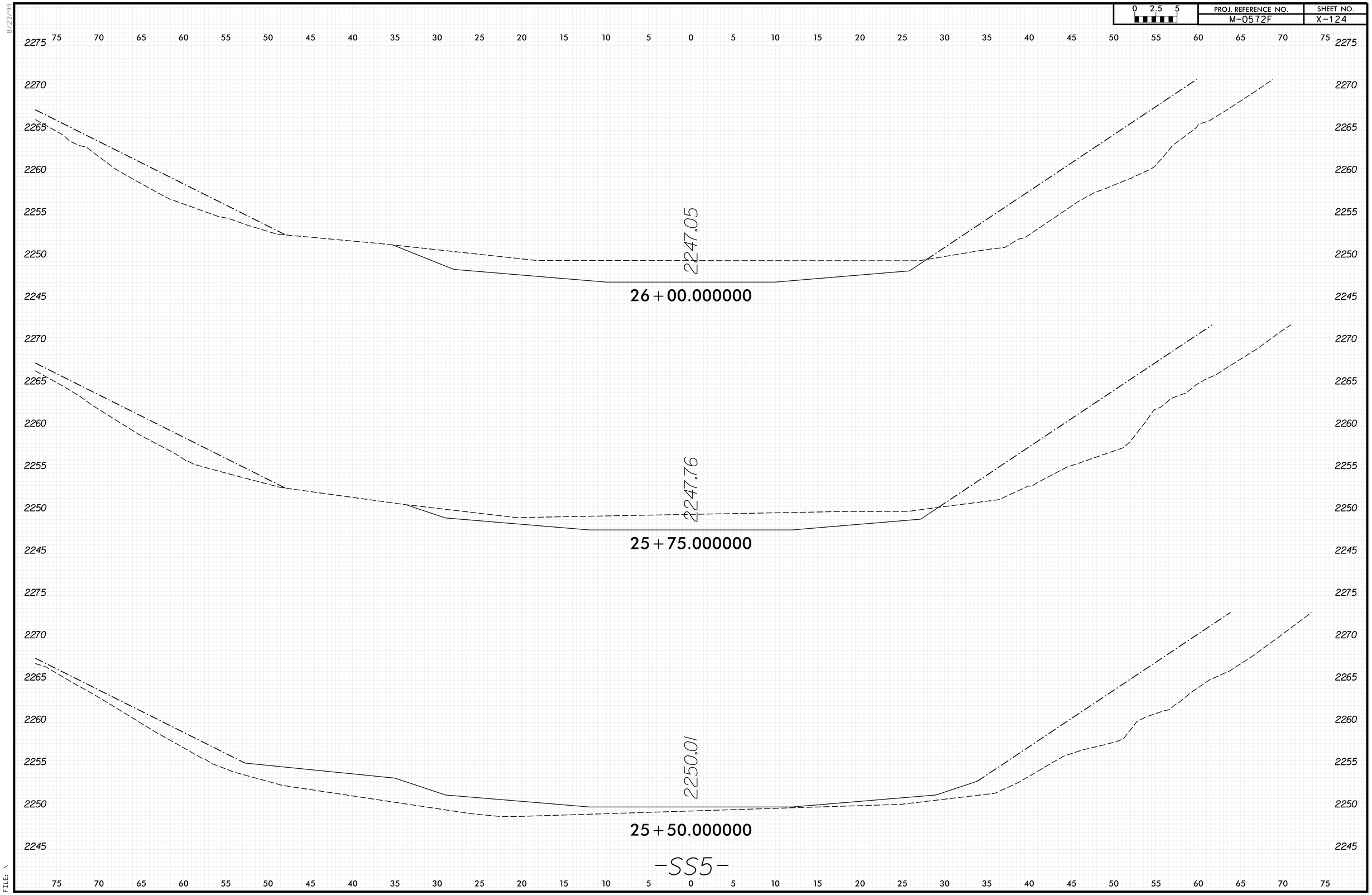
—SS5—

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:18:00 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-124



8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:18:01 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-125

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2275 2270 2265 2260 2255 2250 2245

2247.43

26+75.000000

2247.30

26+50.000000

2247.18

26+25.000000

-SS5-

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:18:03 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-126

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2275 2270 2265 2260 2255 2250 2245

2247.80

27+50.000000

2247.68

27+25.000000

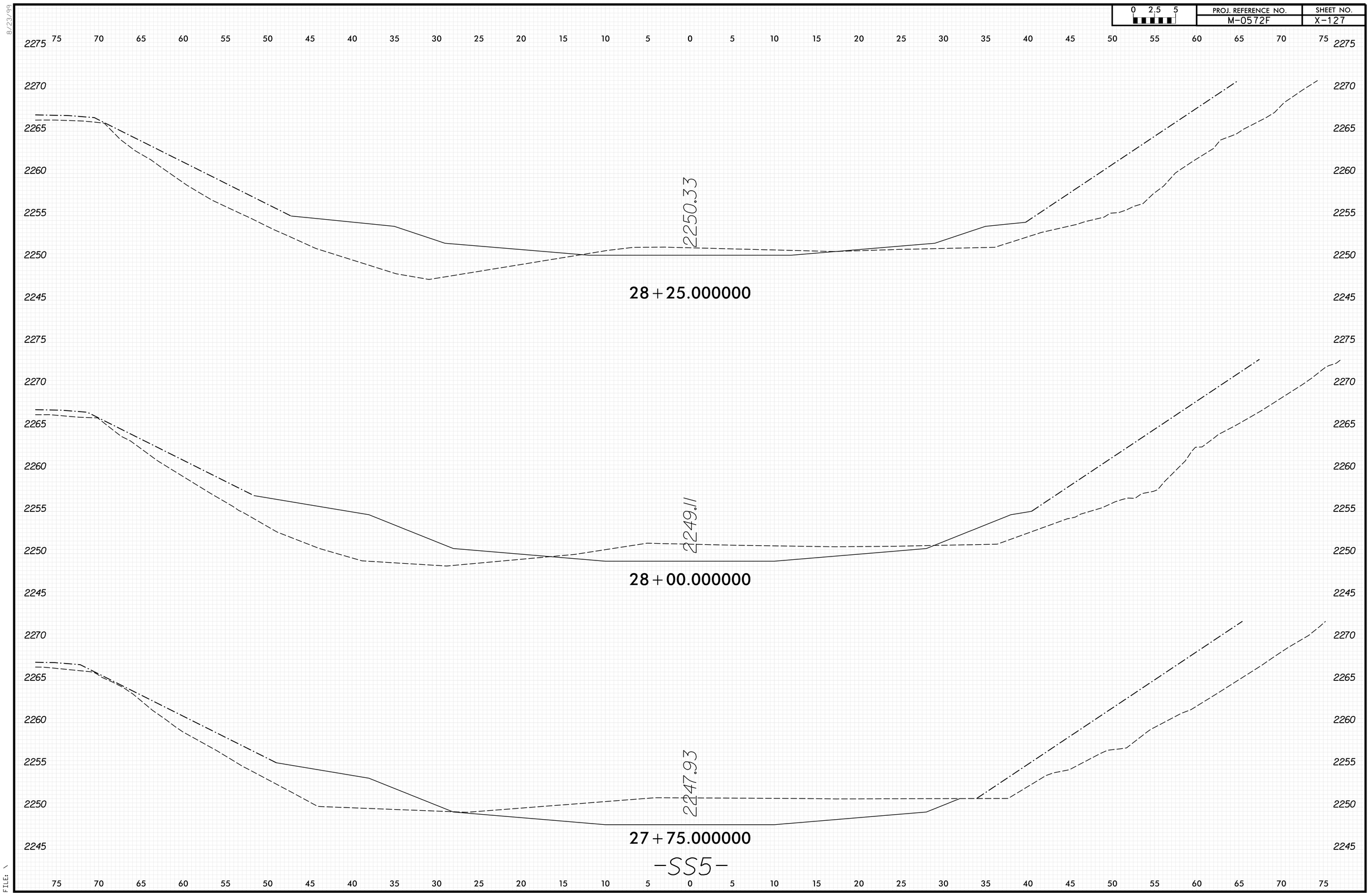
2247.55

27+00.000000

-SS5-

PLOT DRIVER: NCDOT.pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:18:04 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-127

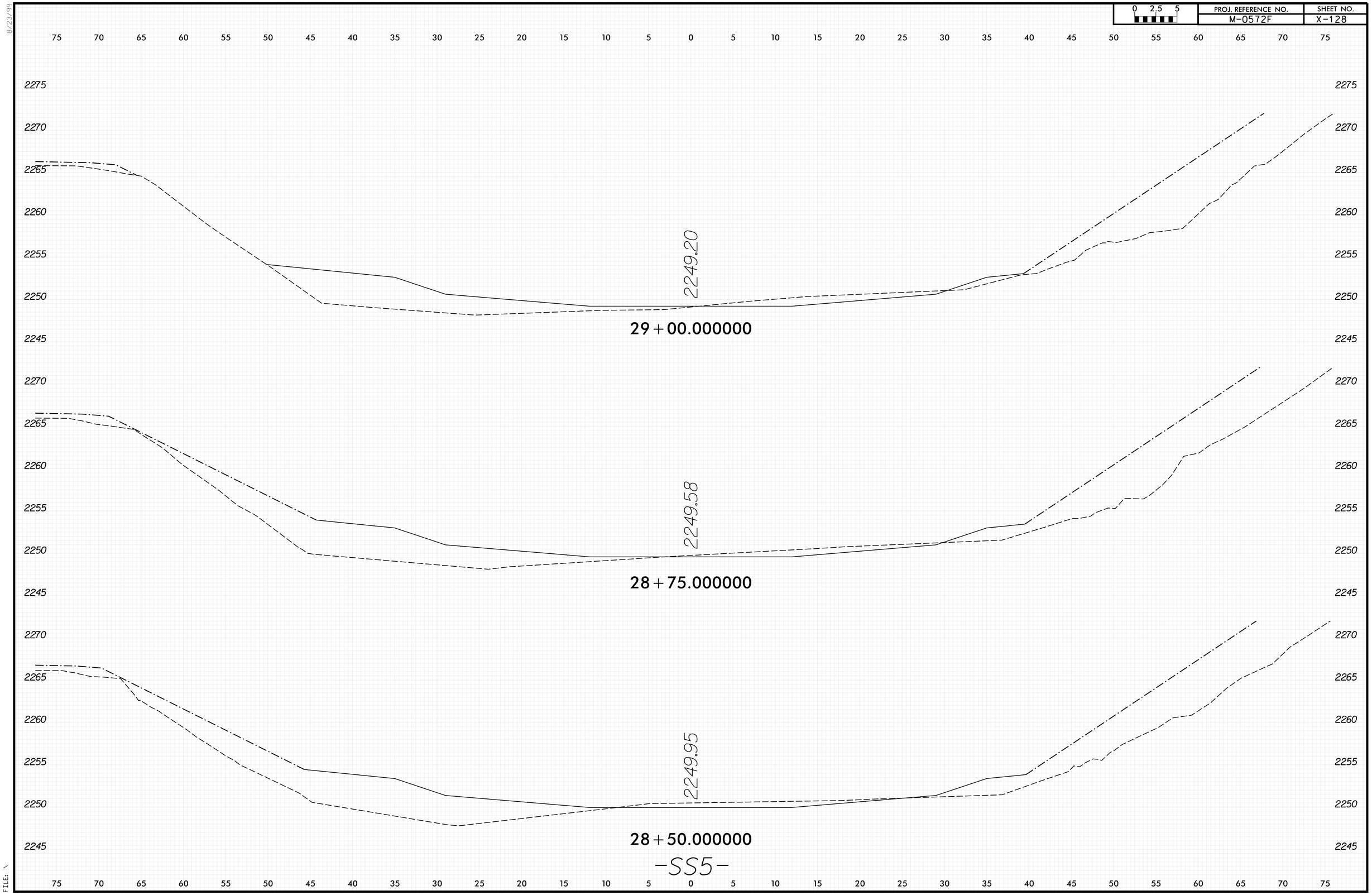


8/23/99

PLOT DRIVER: NCDOT_pdf_color-eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:18:05 PM

0 2,5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-128



8/23/99

PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: \
DATE: 8/24/2026
PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:18:07 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-129

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2275 2270 2265 2260 2255 2250 2245

2247.61

29+75.000000

2248.45

29+50.000000

2248.83

29+25.000000

-SS5-

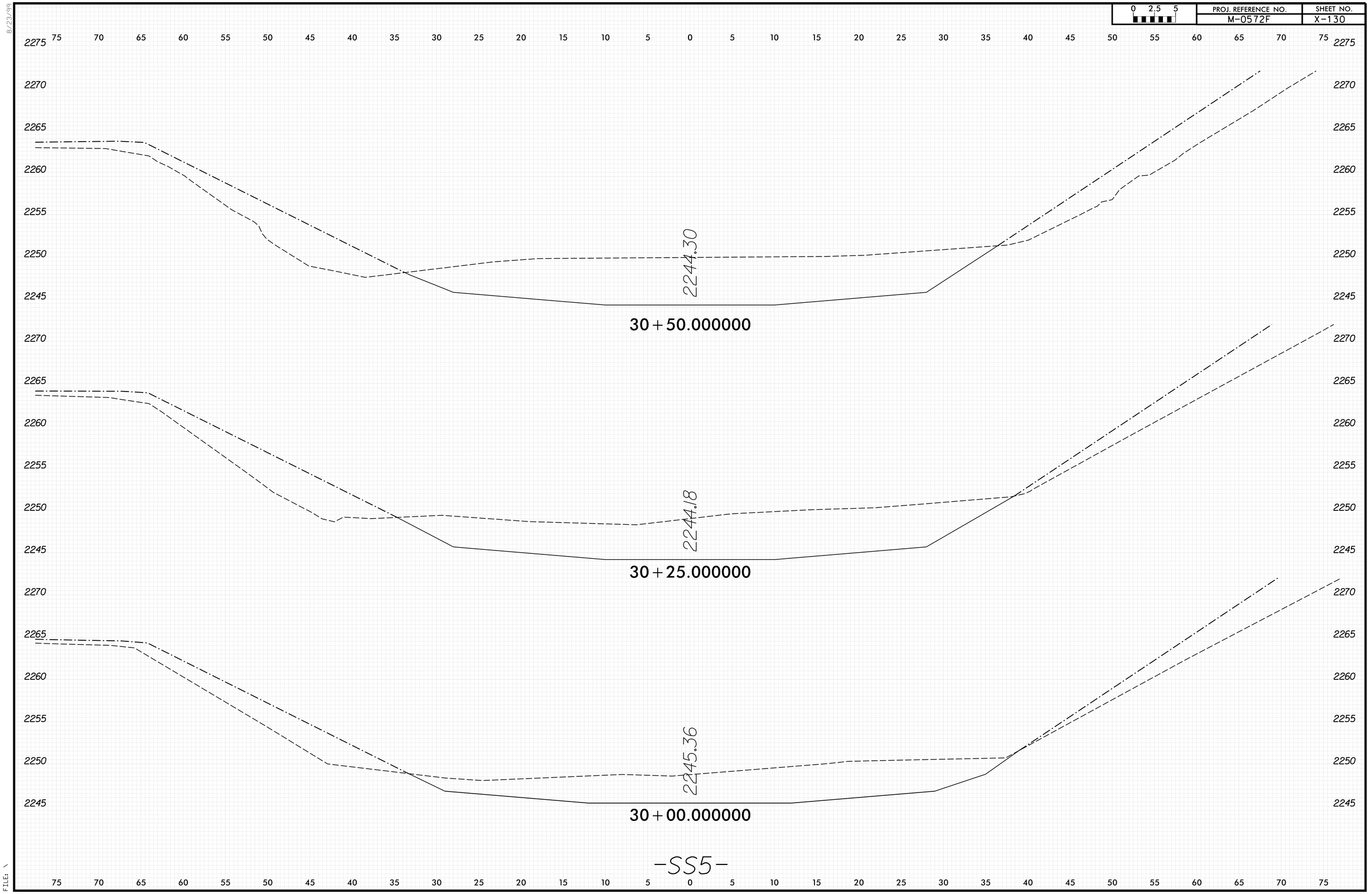
75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:18:08 PM
DATE: 8/24/2026
PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

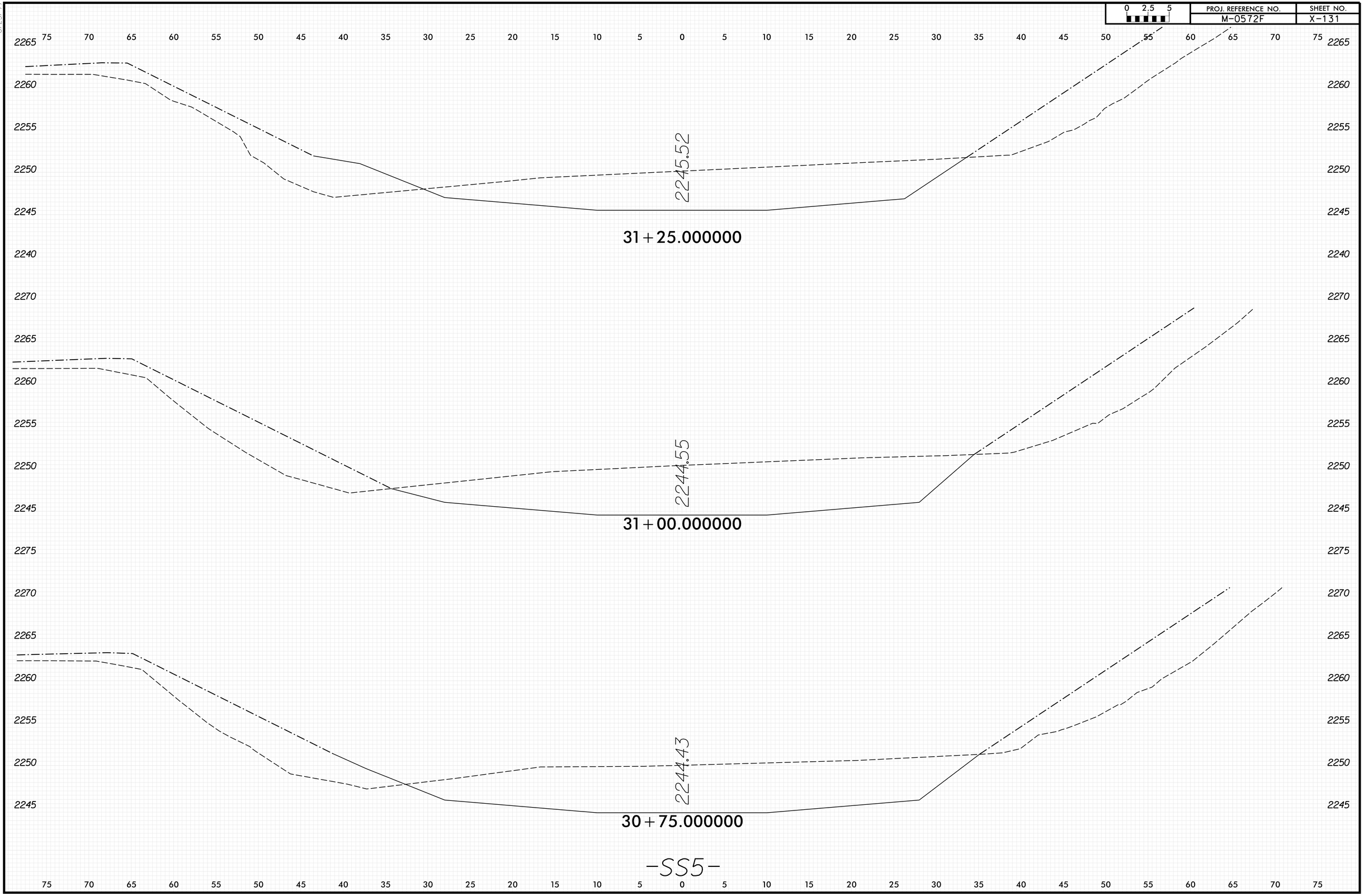
0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
M-0572F	X-130



PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:18:09 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-131



8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:18:10 PM
DATE: 8/24/2026

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-132

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2270 2265 2260 2255 2250 2245 2240

2246.91

32+00.000000

2265 2260 2255 2250 2245 2240

2247.16

31+75.000000

2265 2260 2255 2250 2245 2240

2247.41

31+50.000000

-SS5-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT.pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:11:12 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-133

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2270 2265 2260 2255 2250 2245 2240

2246.16

32+75.000000

2265 2260 2255 2250 2245 2240

2246.41

32+50.000000

2265 2260 2255 2250 2245 2240

2246.66

32+25.000000

-SS5-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:18:13 PM

8/23/99

0 2,5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-134

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2275 2270 2265 2260 2255 2250 2245 2240

2242.35

33+50.000000

2243.82

33+25.000000

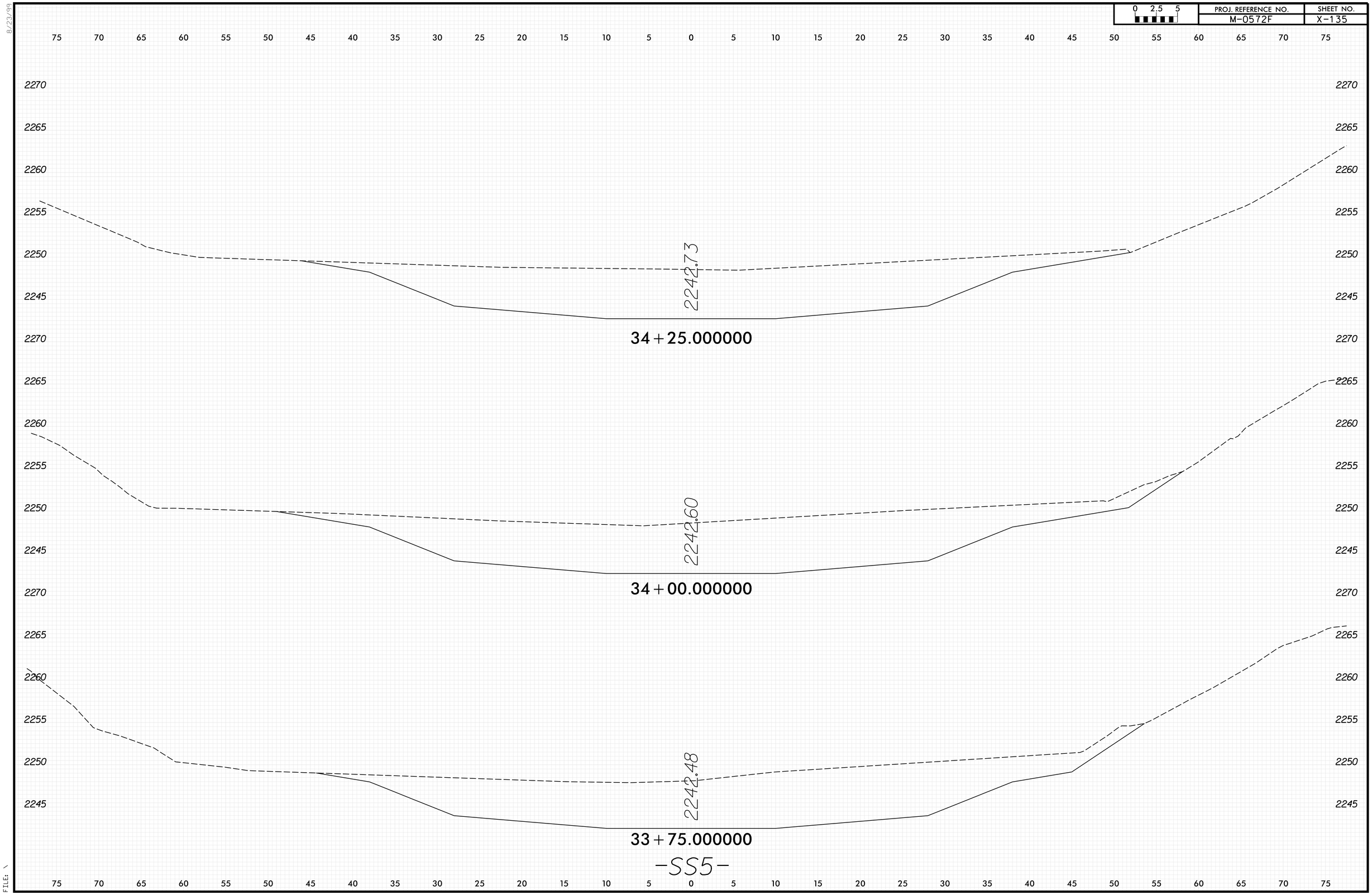
2245.82

33+00.000000

-SS5-

PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:18:14 PM
DATE: 8/24/2026
PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-135



8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE:
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:18:15 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-136

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2270 2265 2260 2255 2250 2245

2245.41

35+00.000000

2245.32

34+75.000000

2243.32

34+50.000000

-SS5-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:18:17 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-137

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2270 2265 2260 2255 2250 2245 2240

2244.66

35+75.000000

2244.91

35+50.000000

2245.16

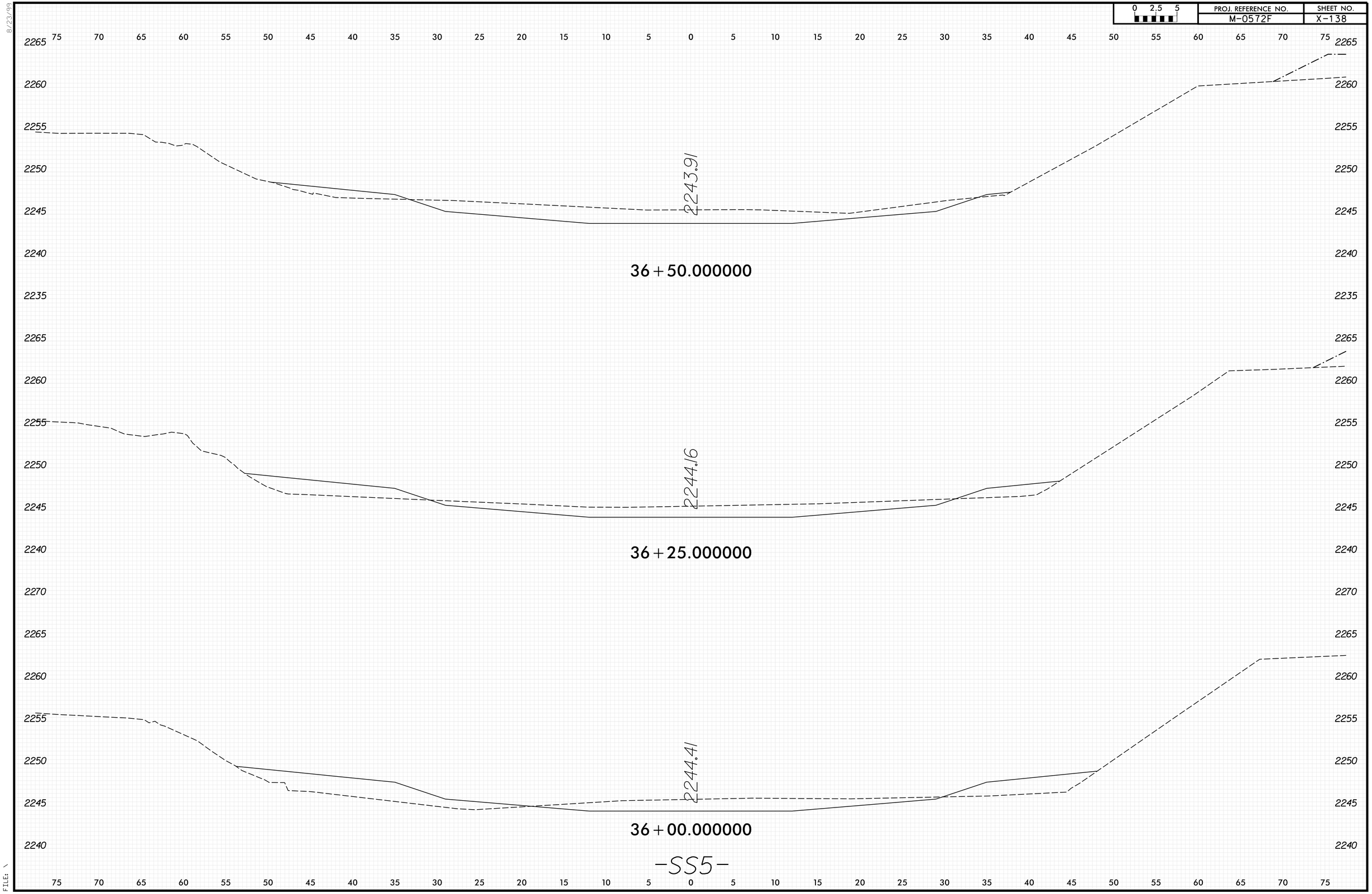
35+25.000000

-SS5-

8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE:
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:18:18 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-138



8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE:
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:18:19 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-139

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2265 2260 2255 2250 2245 2240

2239.58

37+25.000000

2241.71

37+00.000000

2243.66

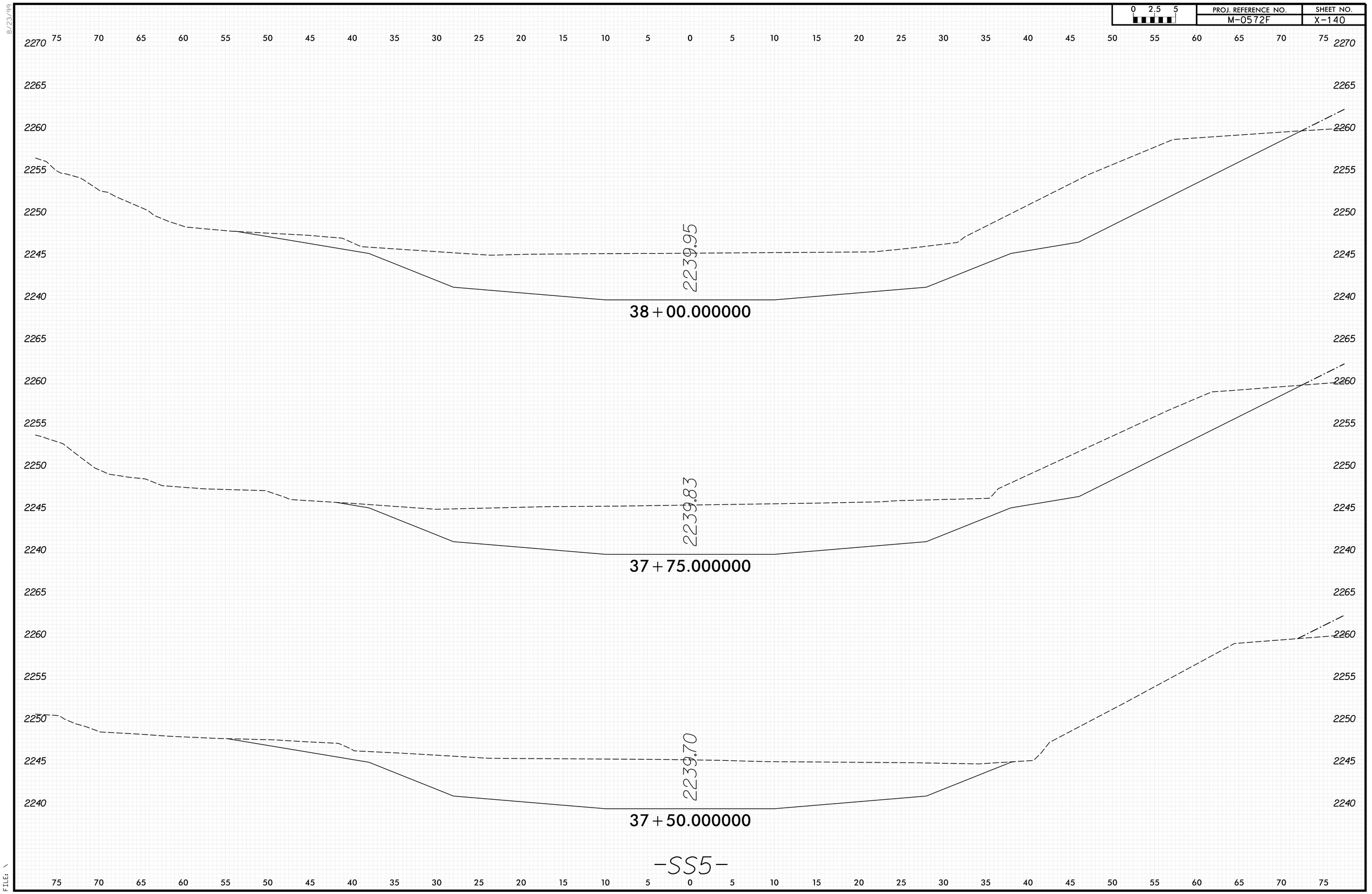
36+75.000000

-SS5-

8/23/99

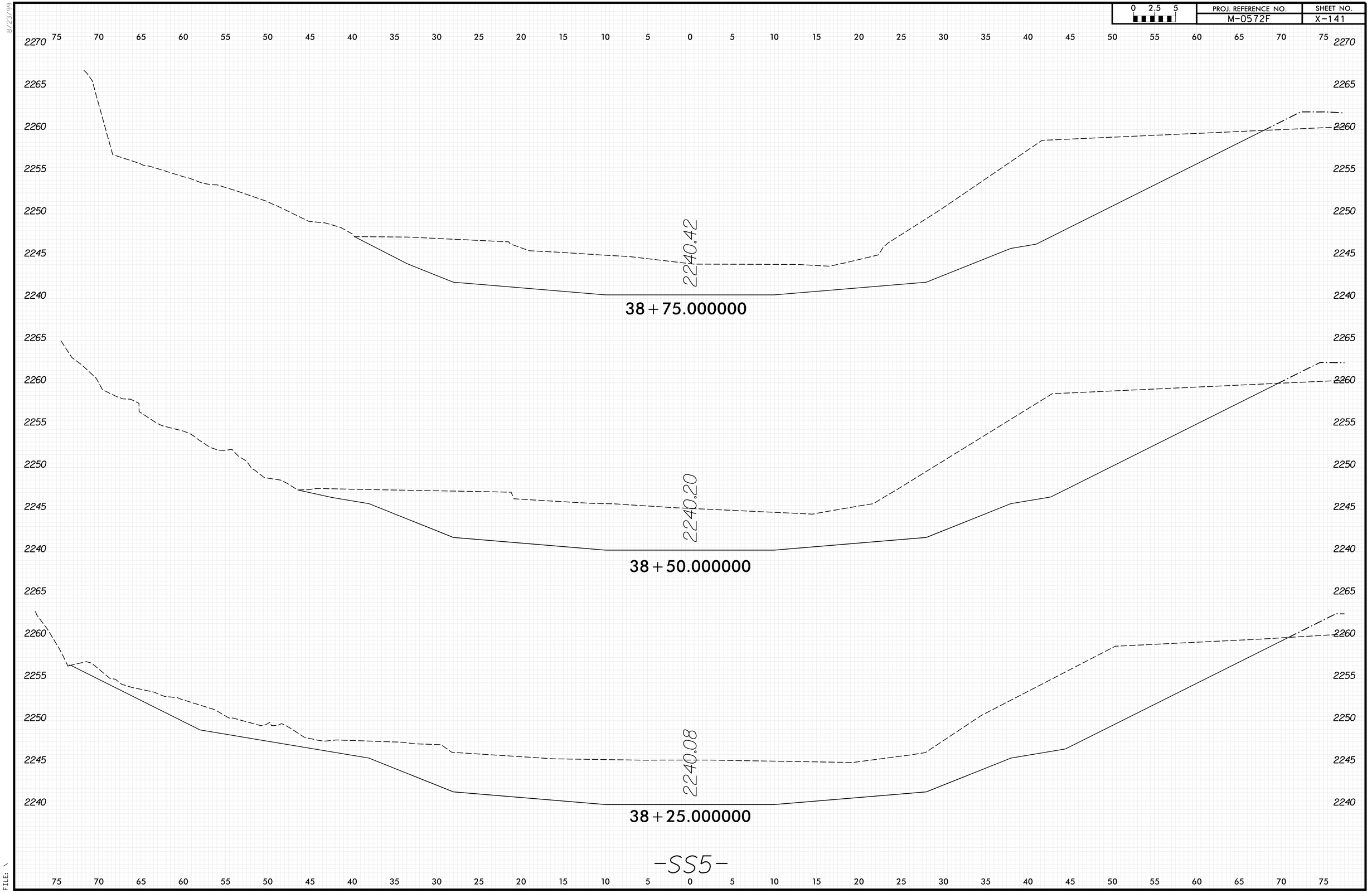
PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 11:18:21 PM
DATE: 8/24/2026
PLOT DRIVER: NCDOT.pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-140



8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
DATE: 8/24/2026
PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:18:22 PM



8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE:
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:18:23 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-142

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2270 2265 2260 2255 2250 2245 2240

2242.71

39+50.000000

2265 2260 2255 2250 2245 2240

2242.96

39+25.000000

2265 2260 2255 2250 2245 2240

2242.42

39+00.000000

-SS5-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:18:24 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-143

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2270 2265 2260 2255 2250 2245 2240

40+00.000000

2270 2265 2260 2255 2250 2245 2240

39+75.000000

-SS5-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

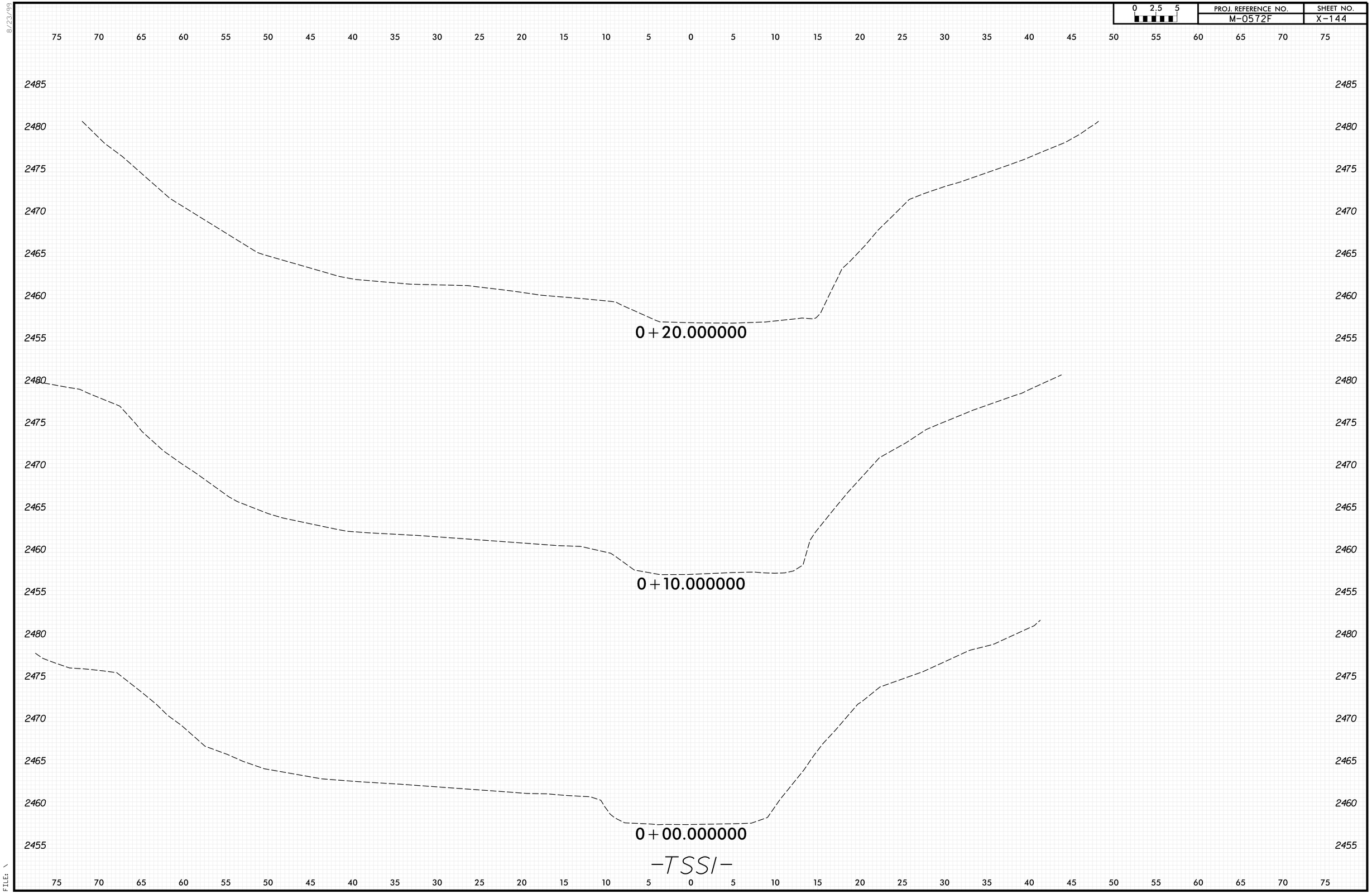
8/23/99

PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:18:26 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-144



PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:19:01 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-145

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2485 2480 2475 2470 2465 2460 2455

2456.56

0+50.000000

2480 2475 2470 2465 2460 2455

0+40.000000

2480 2475 2470 2465 2460 2455

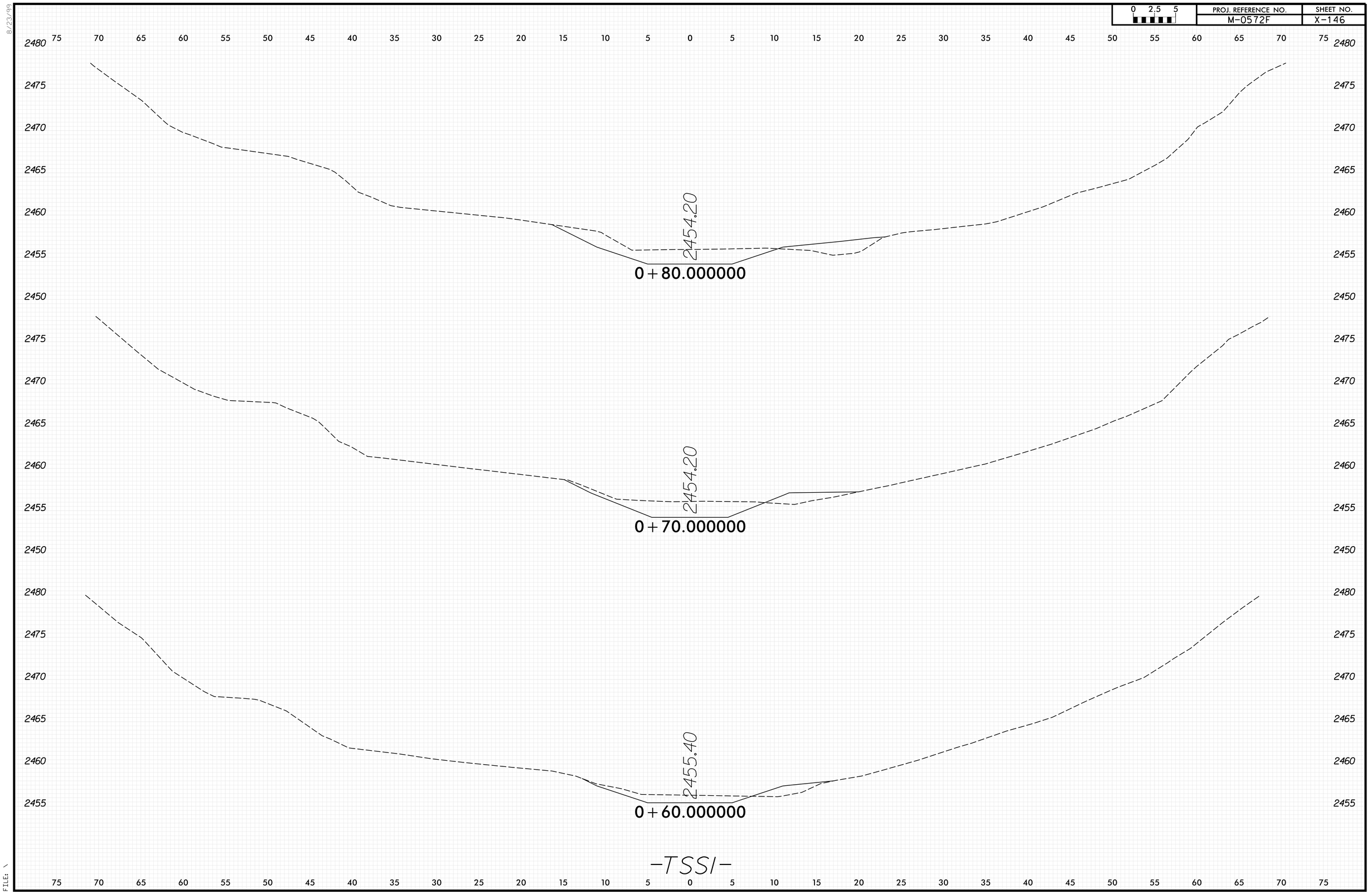
0+30.000000

-TSSI-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt DATE: 8/24/2026
USER: GJACOBSON TIME: 1:19:02 PM
FILE: \ PENTABLE: US_19W_South_STRM_XSC.tbl

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-146

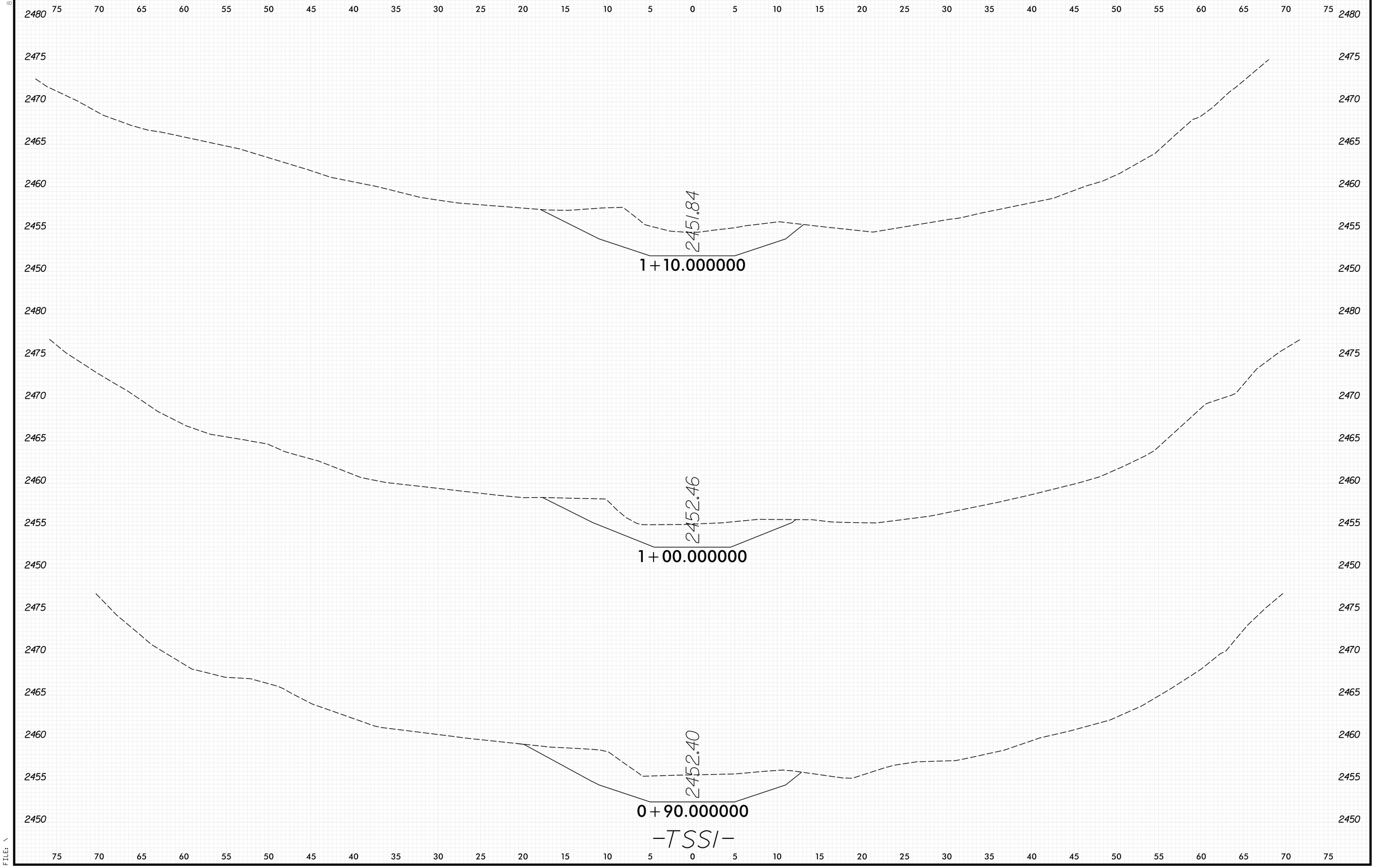


-TSSI-

8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: CJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:19:03 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-147



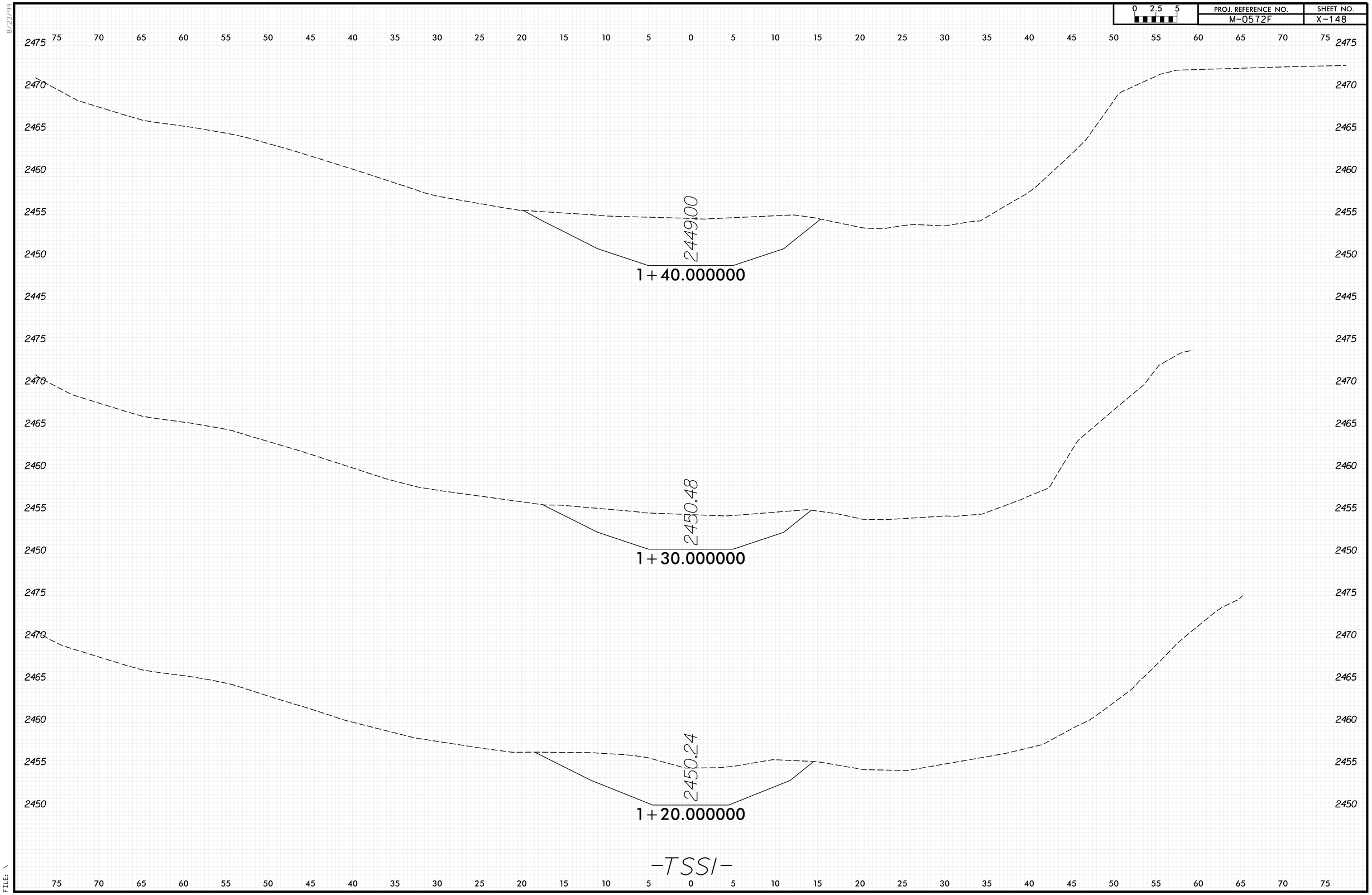
8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:19:04 PM
DATE: 8/24/2026

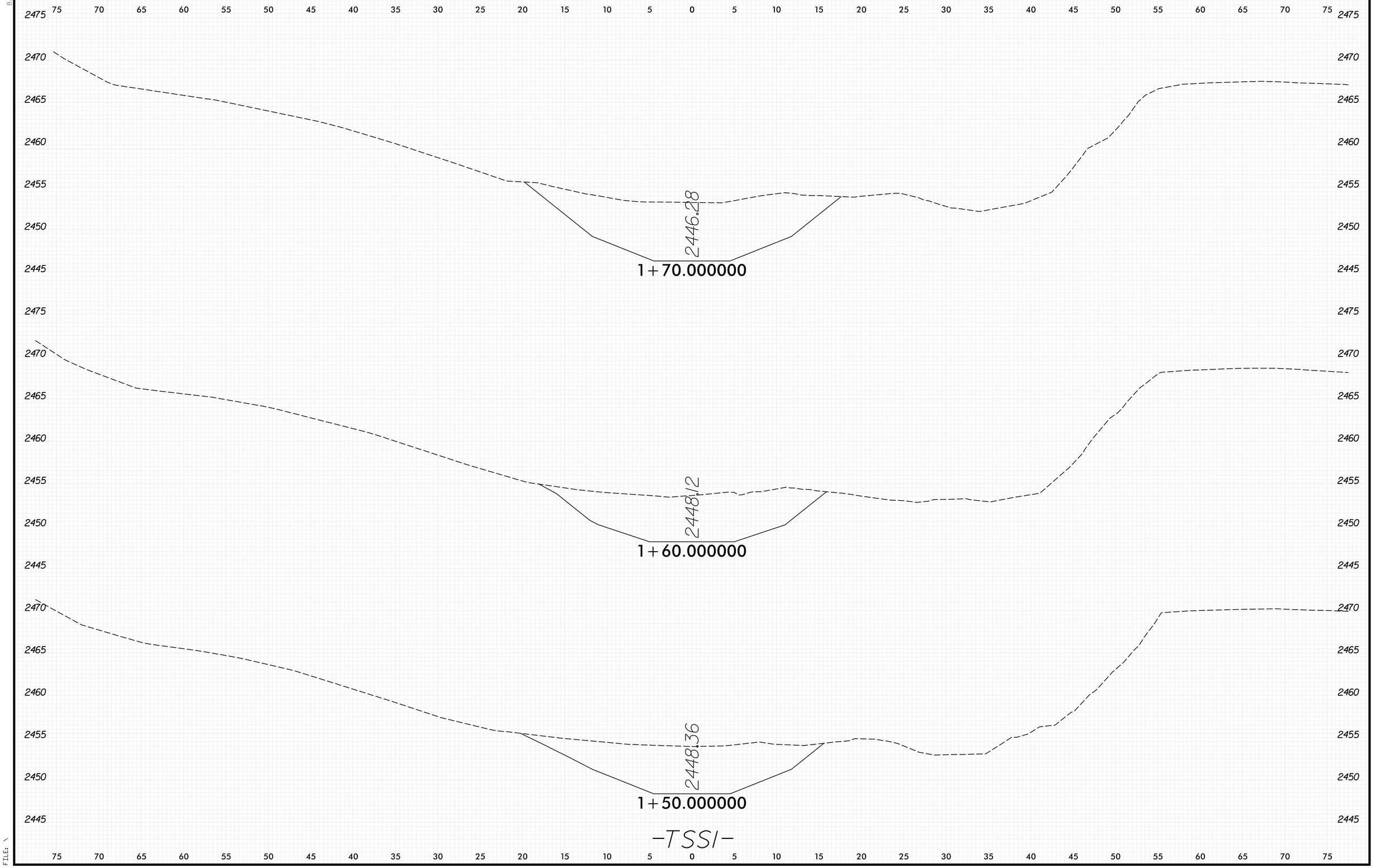
8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-148



PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:19:05 PM

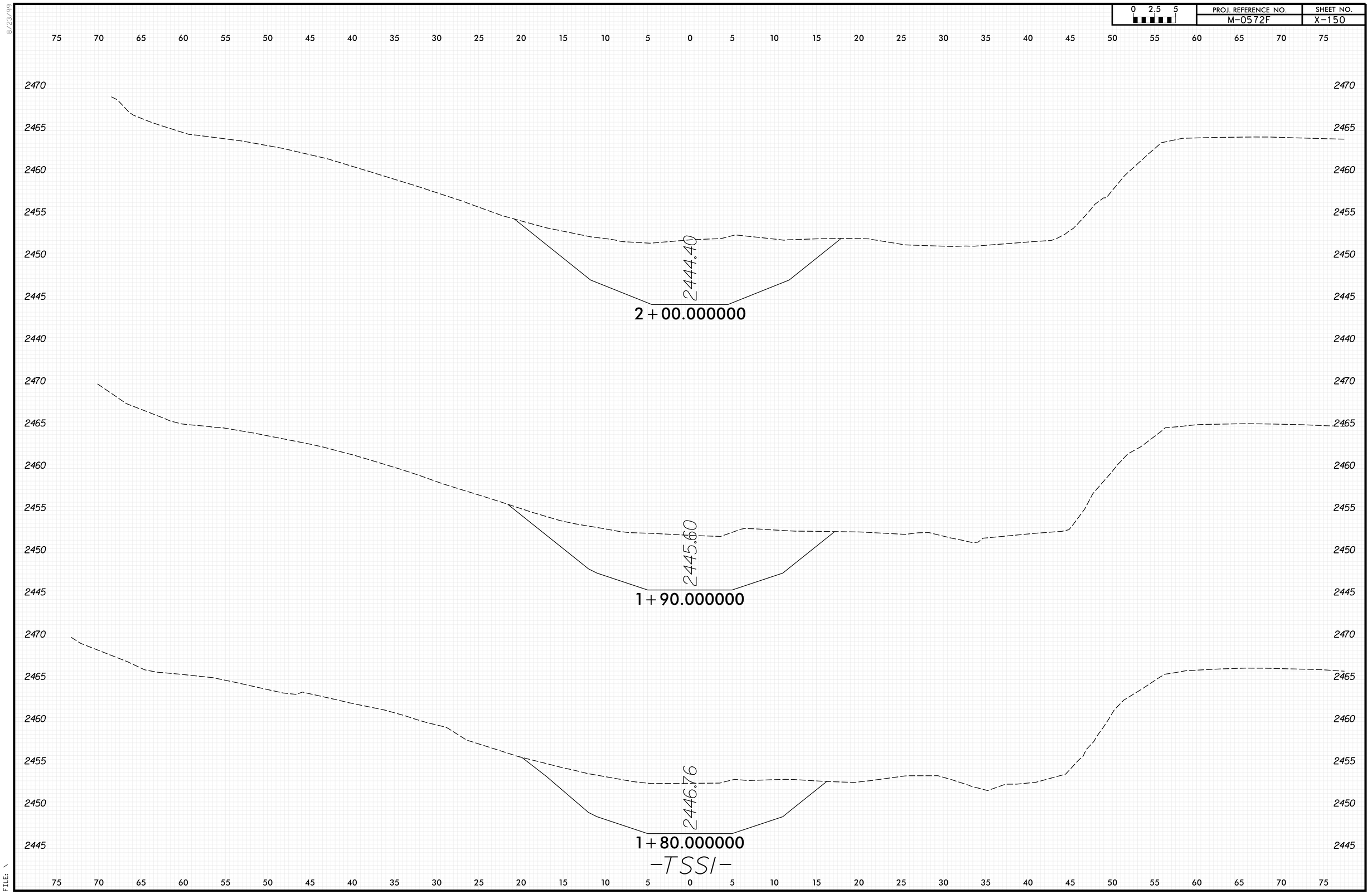
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-149



8/23/99

PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:19:07 PM
DATE: 8/24/2026
PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-150



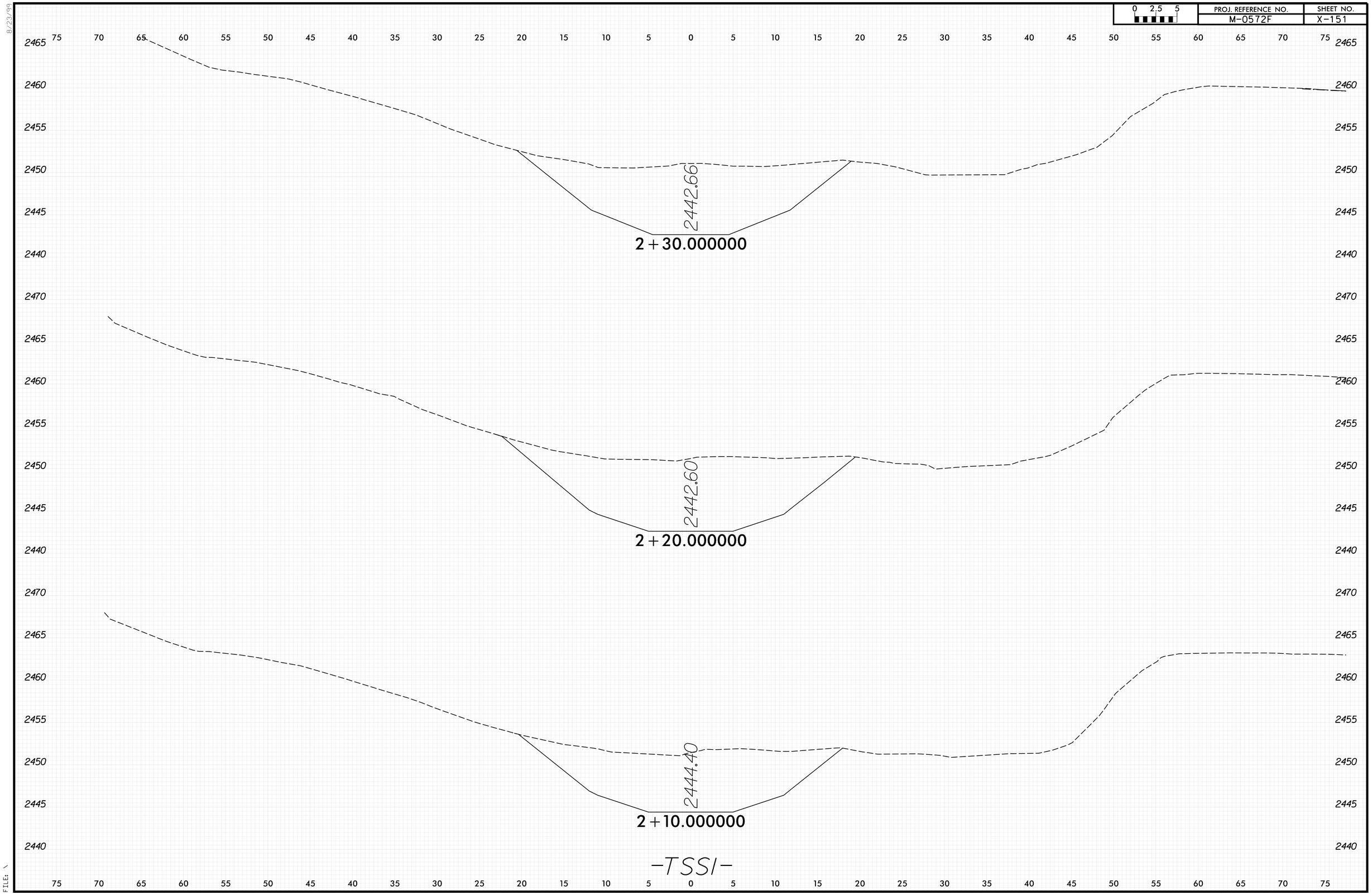
8/23/99

PLOT DRIVER: NCDOT.pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:19:08 PM

8/23/99

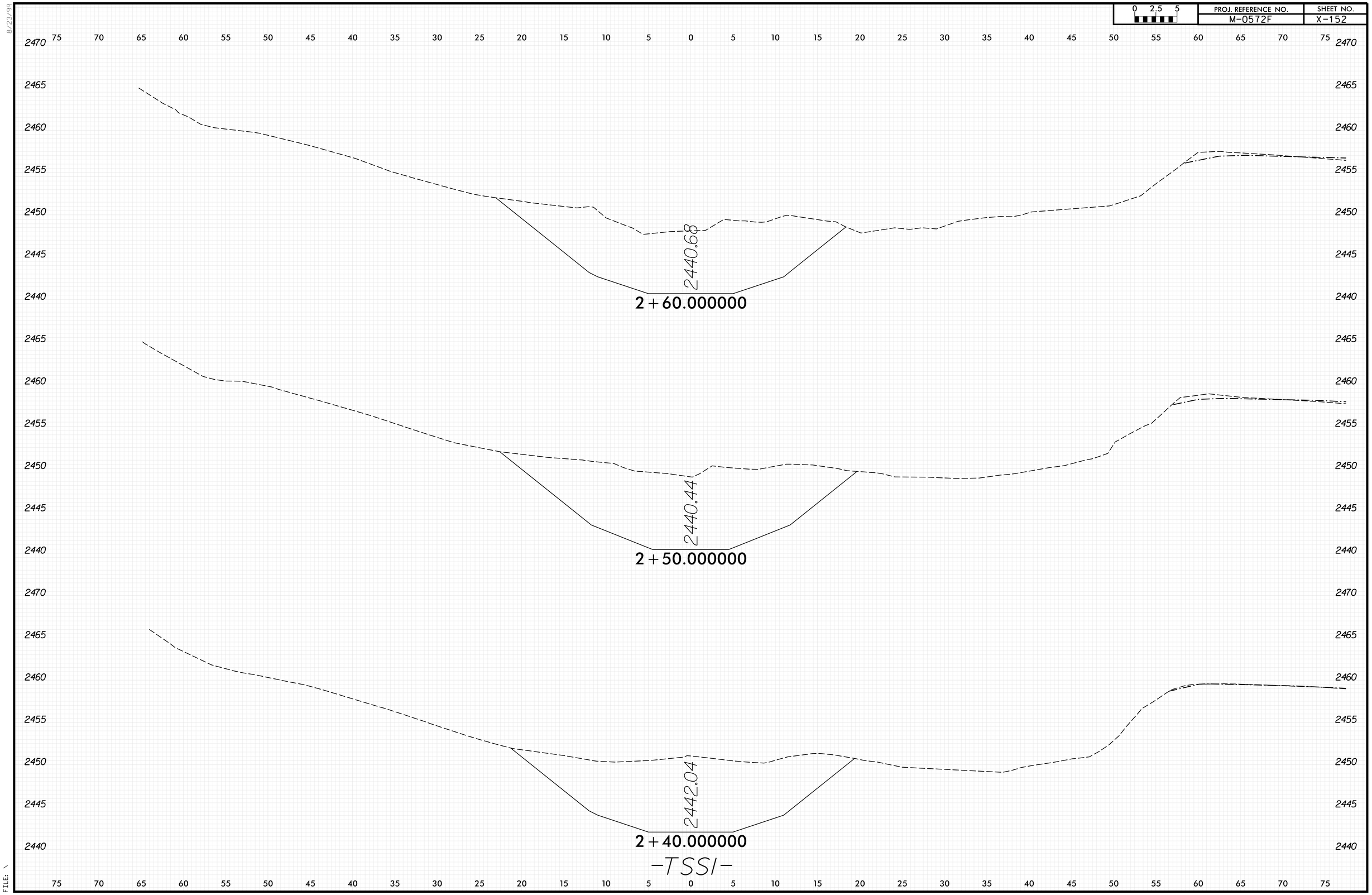
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-151



PLOT DRIVER: NCDOT_pdf-color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:19:09 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-152



PLOT DRIVER: NCDOT_pdf_color-eng_50.plt
USER: GJACOBSON
FILE: \
DATE: 8/24/2026
PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:19:10 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-153

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2465 2460 2455 2450 2445 2440 2435

2438.32

2+90.000000

2438.56

2+80.000000

2439.20

2+70.000000

-TSSI-

PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:19:11 PM
DATE: 8/24/2026
PLOT DRIVER: NCDOT_pdf-color_eng_50.plt
USER: GJACOBSON
FILE: \

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-154

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2460 2455 2450 2445 2440 2435 2465

2435.80

3+20.000000

2436.96

3+10.000000

2436.48

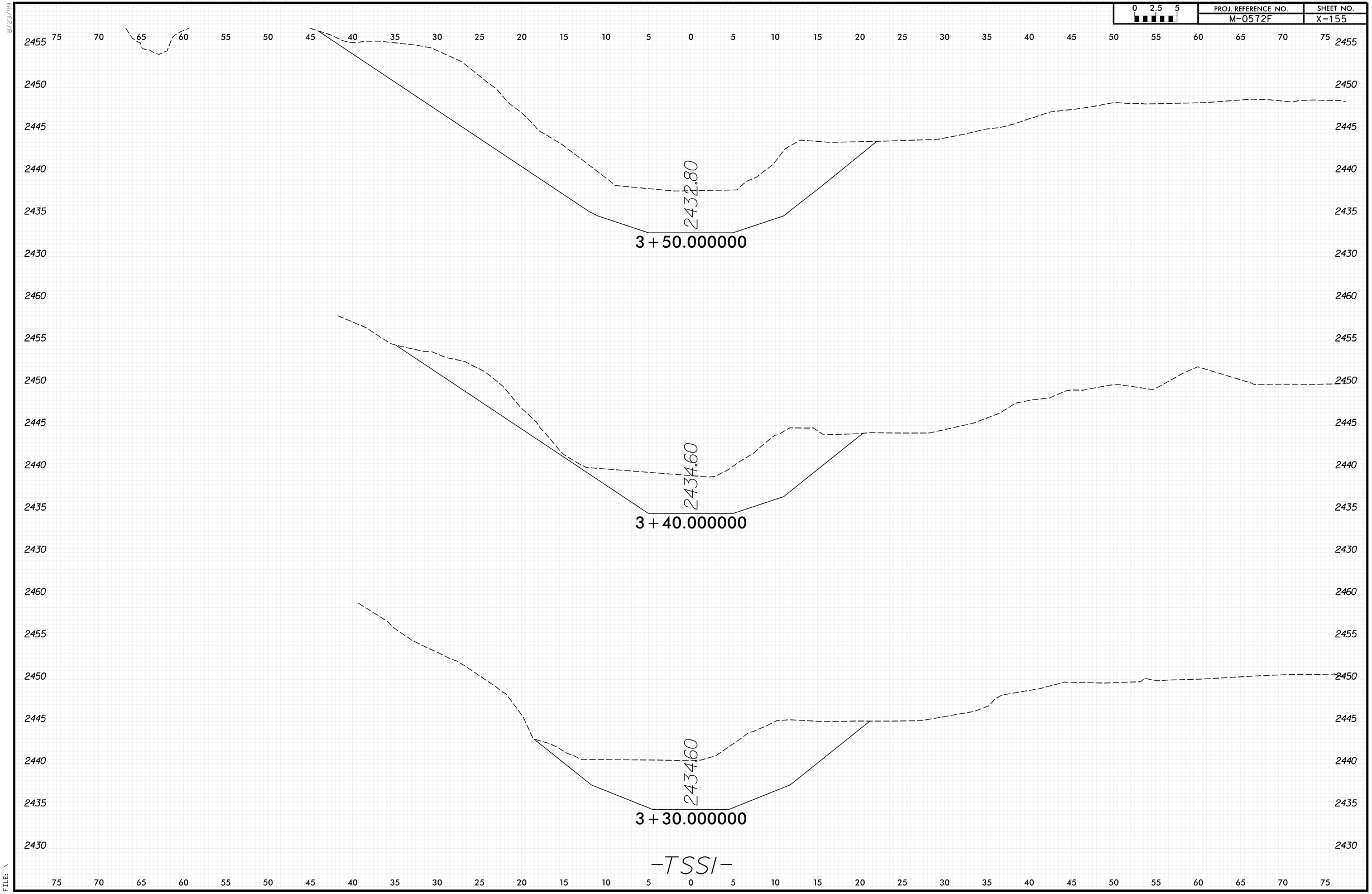
3+00.000000

-TSSI-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE:
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:19:12 PM



8/23/99

PLOT DRIVER: NCDOT.pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:19:13 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-156

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2445
2440
2435

3+90.000000

2445
2440
2435

2450
2445
2440
2435

3+80.000000

2455
2450
2445
2440
2435

3+70.000000

2455
2450
2445
2440
2435

2432.86

3+60.000000

2430

-TSSI-

2455
2450
2445
2440
2435

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:19:14 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-157

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2440
2435
2430
2425

4+30.000000

2445
2440
2435
2430
2425

4+20.000000

2445
2440
2435
2430
2425

4+10.000000

2445
2440
2435
2430

4+00.000000

-TSSI-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

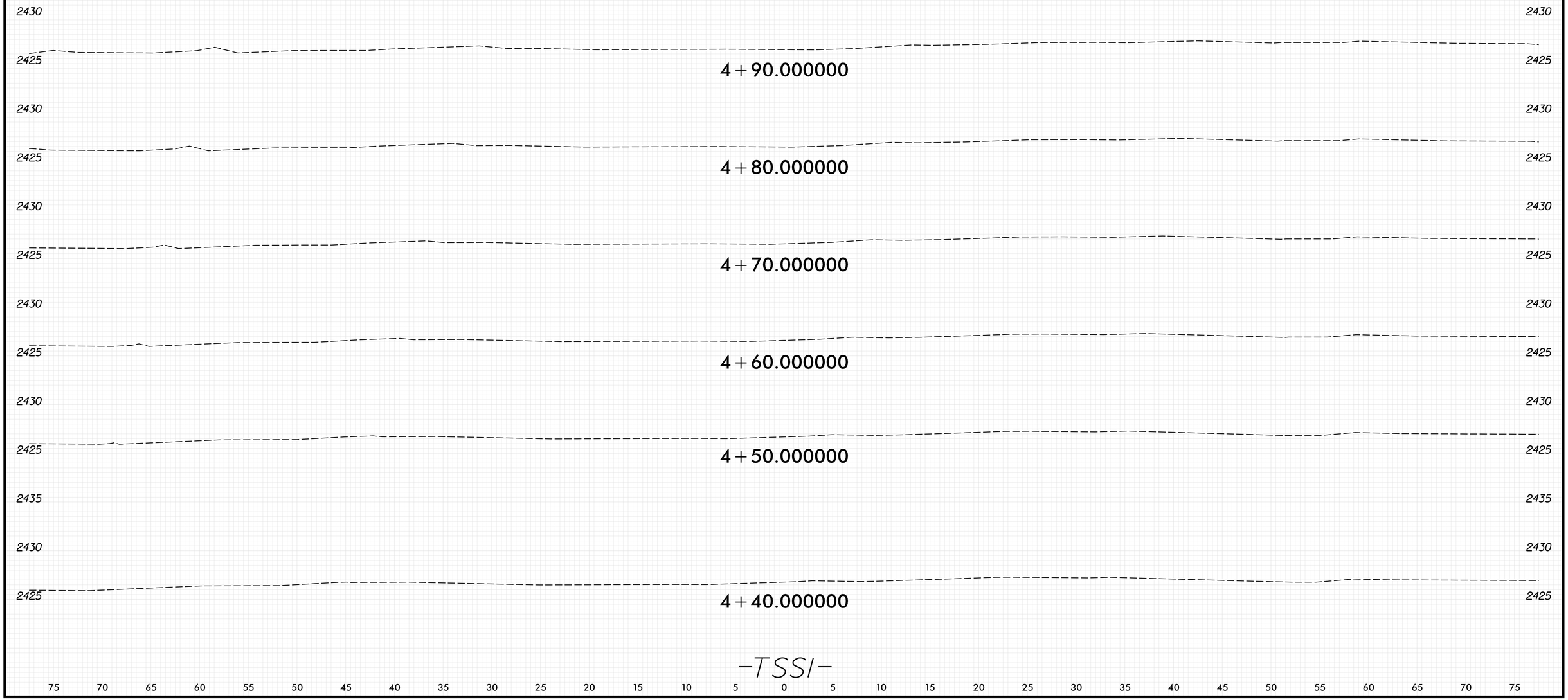
8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: CJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:19:15 PM
DATE: 8/24/2026

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-158

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75



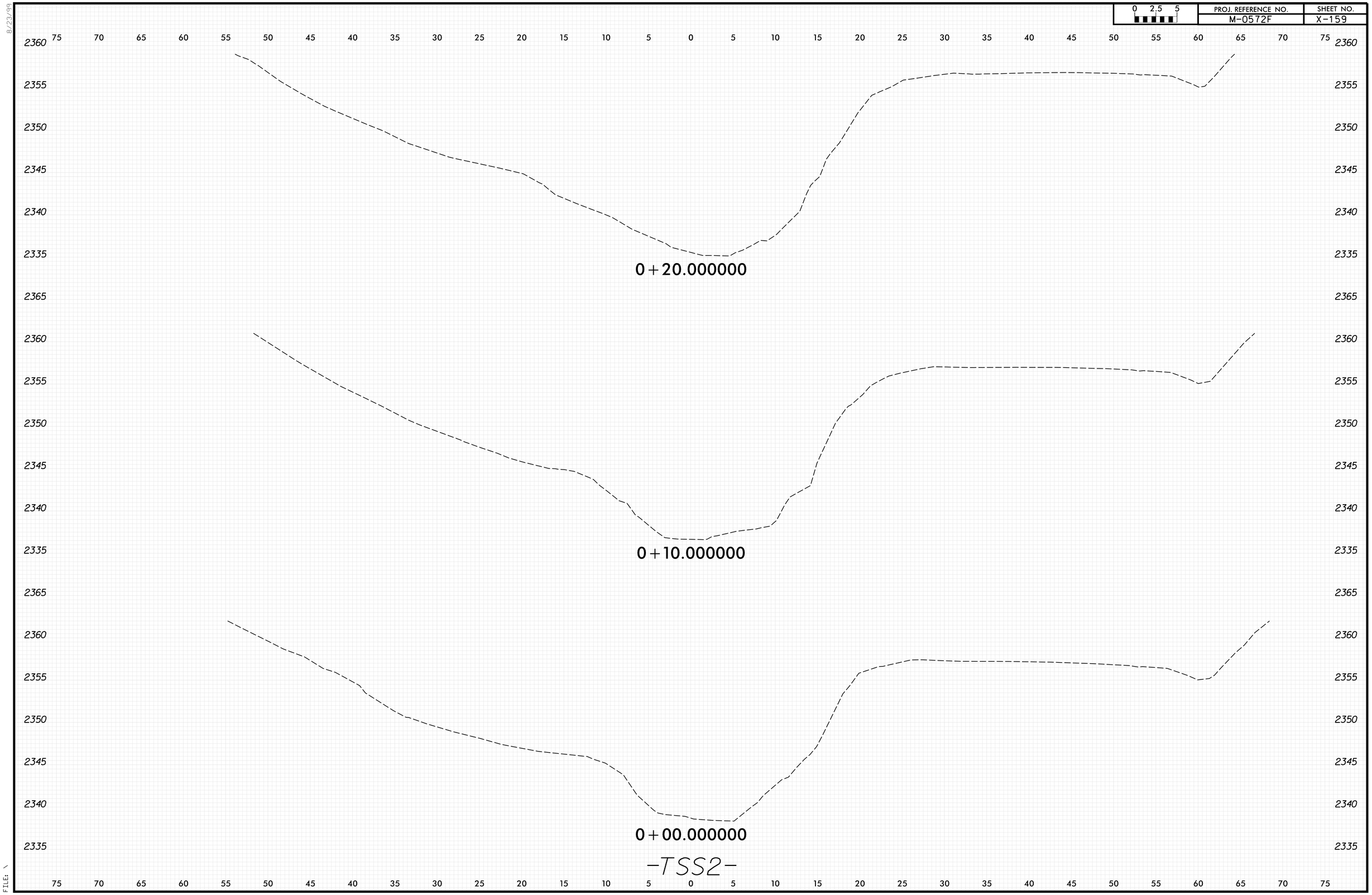
-TSSI-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:19:17 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-159



8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 11:19:52 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-160

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2355 2350 2345 2340 2335 2330 2360 2355 2350 2345 2340 2335 2330

2330.80

0+50.000000

2355 2350 2345 2340 2335 2330 2360 2355 2350 2345 2340 2335 2330

0+40.000000

2360 2355 2350 2345 2340 2335 2330

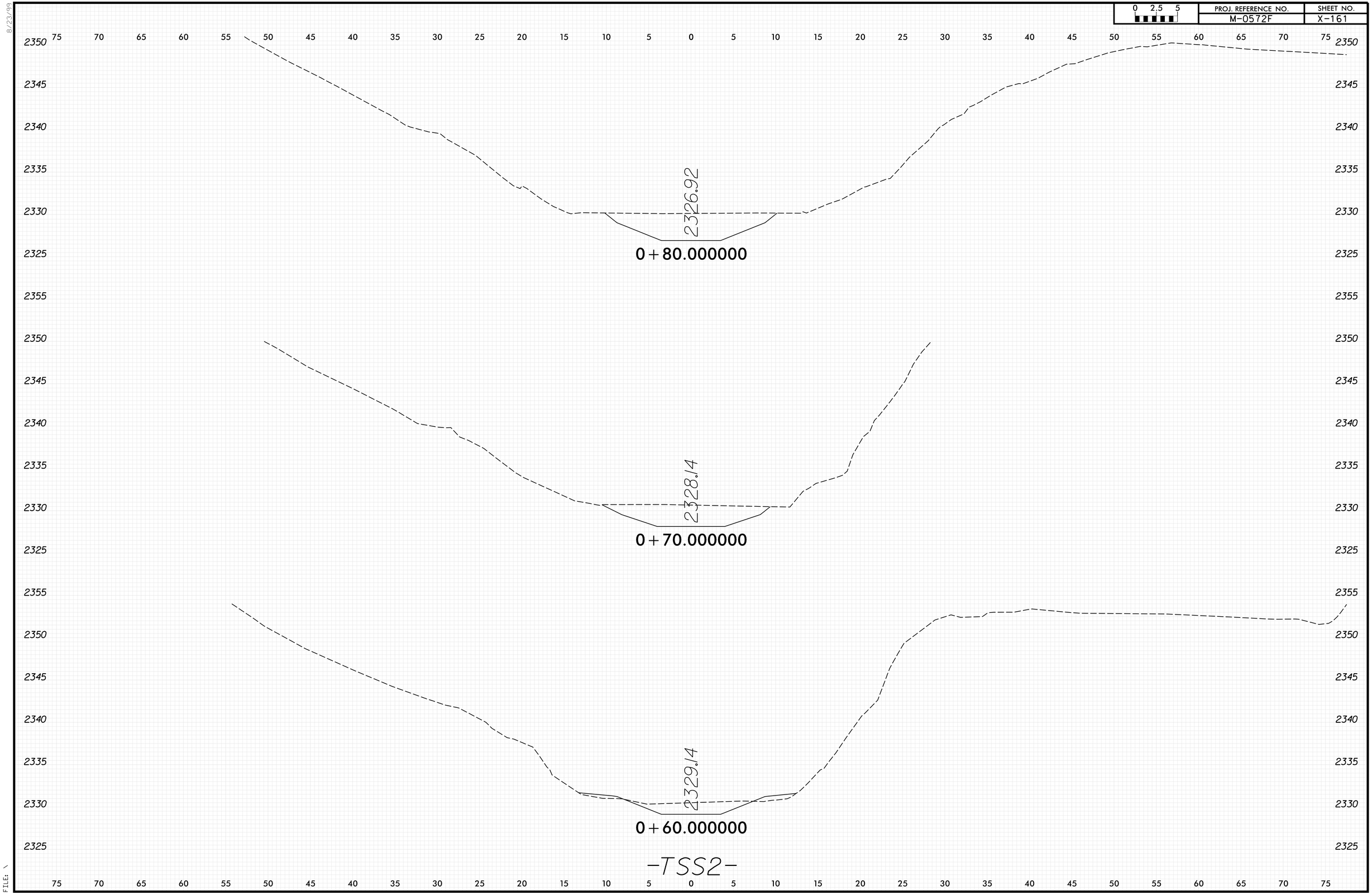
0+30.000000

-TSS2-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

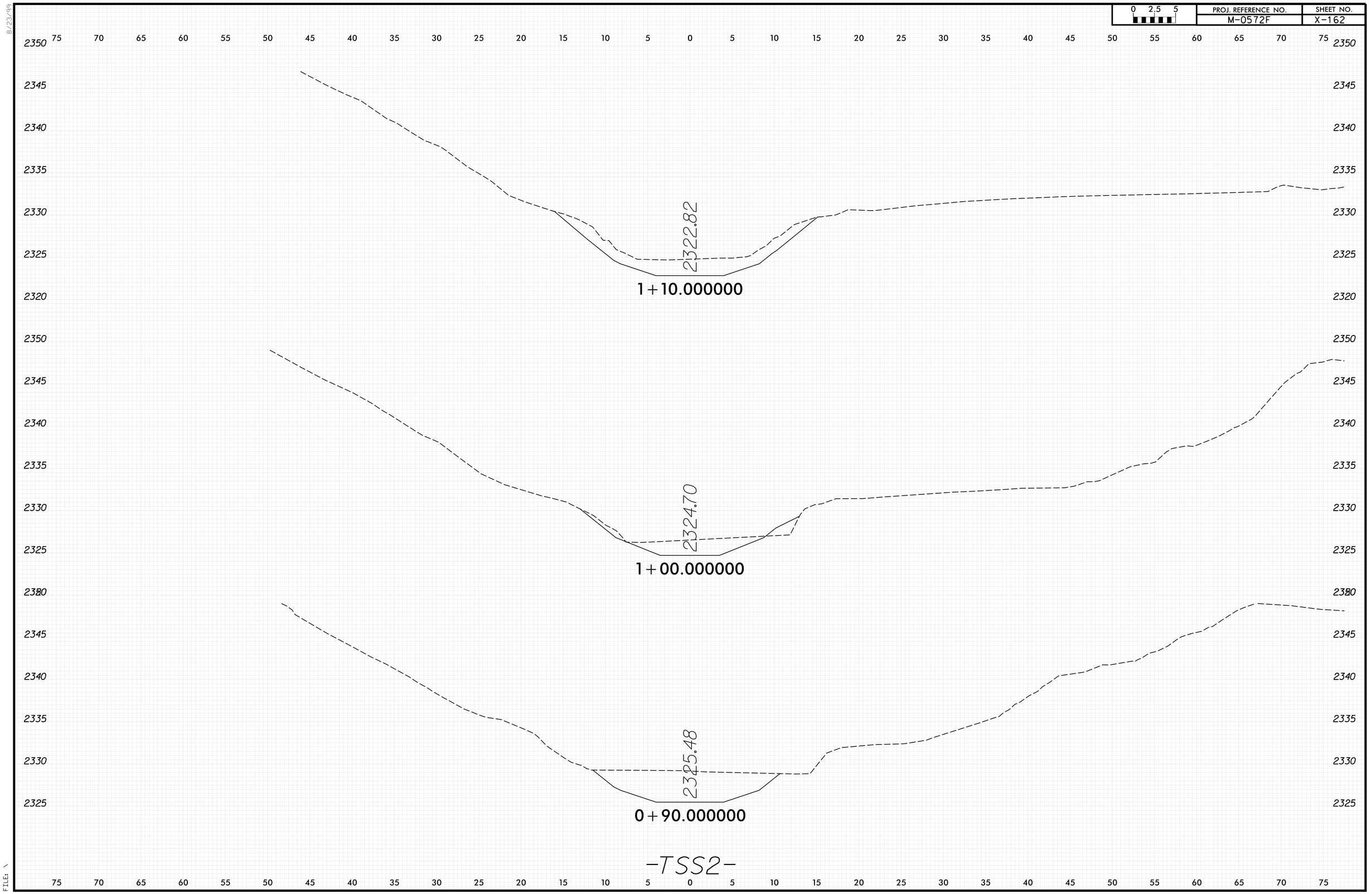
PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:19:53 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-161



PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:19:54 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-162



8/23/99

PLOT DRIVER: NCDOT.pdf.color-eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:19:55 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-163

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2345 2340 2335 2330 2325 2320 2350 2345 2340 2335 2330 2325 2320

2320.02

1+40.000000

2320.16

1+30.000000

2322.46

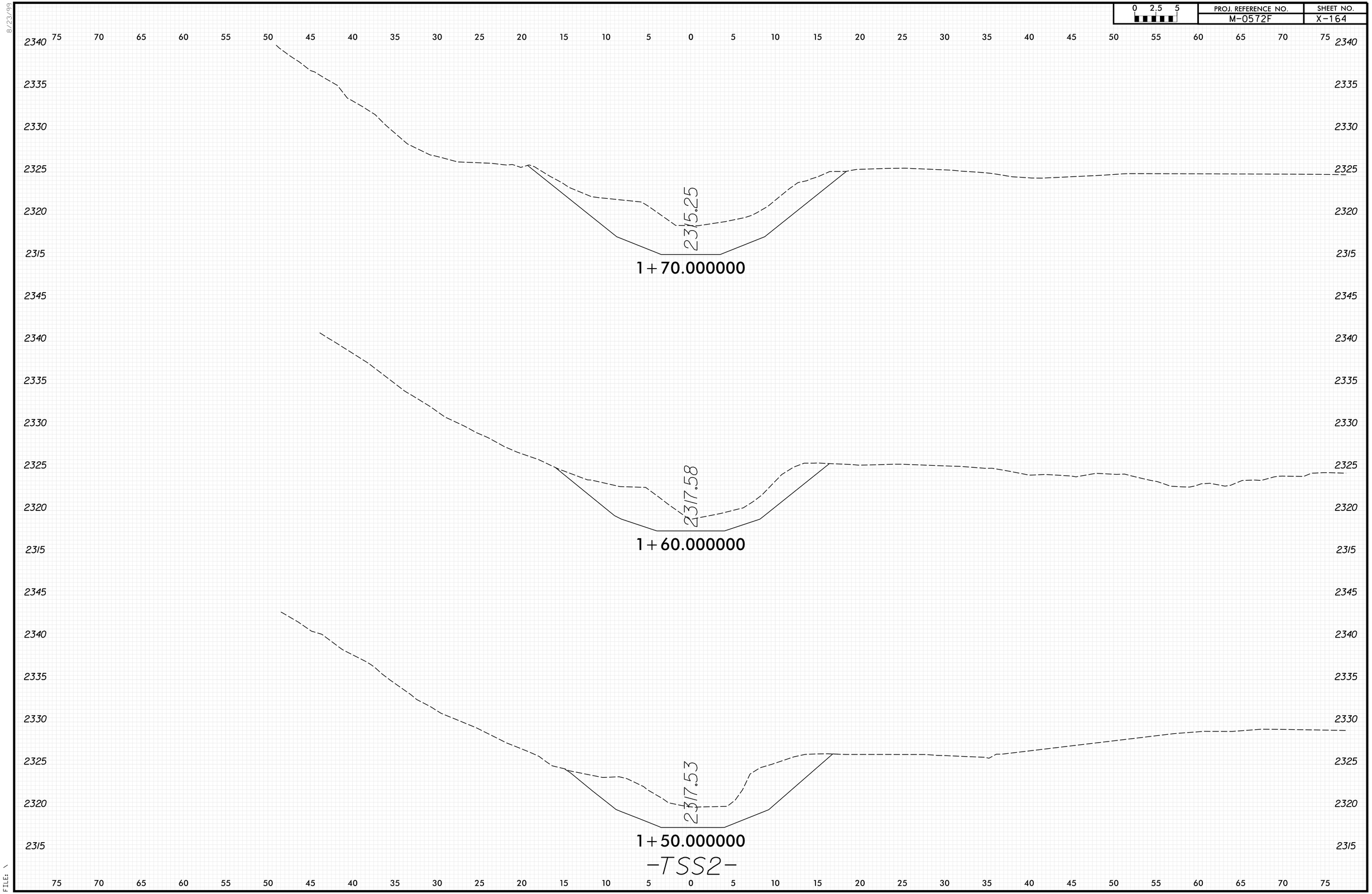
1+20.000000

-TSS2-

8/23/99

PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:19:56 PM
DATE: 8/24/2026
PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

0 2,5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-164



8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-165

2345 2340 2335 2330 2325 2320 2350 2345 2340 2335

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2 + 00.000000

2330 2325 2320 2340 2335 2330 2325 2320 2315

1 + 90.000000

2315.11

1 + 80.000000

-TSS2-

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:19:59 PM
DATE: 8/24/2026

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-166

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2330
2325
2320
2315
2310

2 + 50.000000

2325
2320
2315

2 + 40.000000

2325
2320
2315

2 + 30.000000

2330
2325
2320

2 + 20.000000

2340
2335
2330
2325
2320

2 + 10.000000

-TSS2-

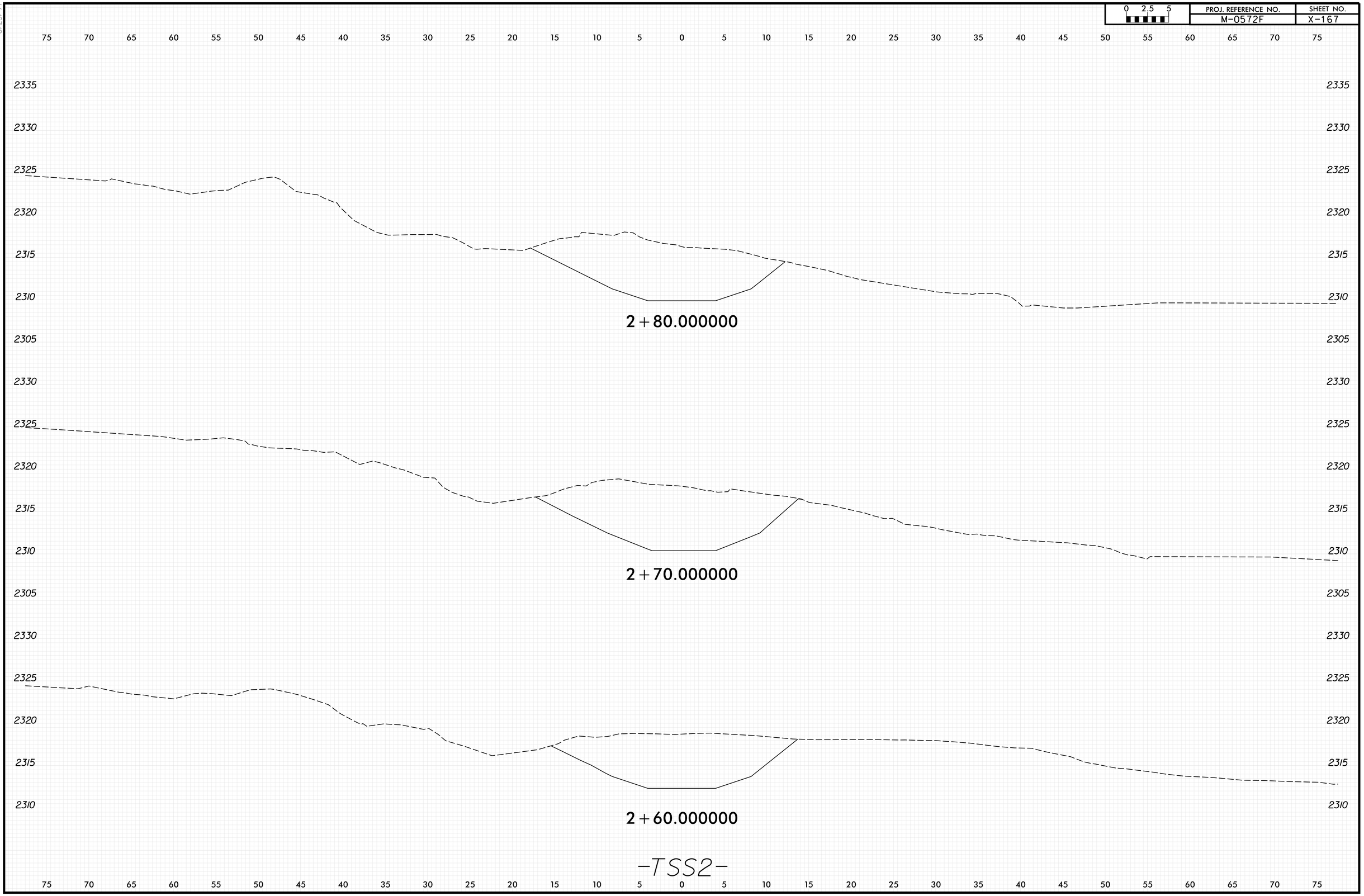
75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \

PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 12:00:00 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-167



8/23/99

PLOT DRIVER: NCDOT_pdf_color-eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:20:01 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-168

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2335
2330
2325
2320
2315
2310
2305

3+10.000000

3+00.000000

2+90.000000

-TSS2-

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: /
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 12:02 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-169

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2335 2330 2325 2320 2315 2310 2305

3+40.000000

2330 2325 2320 2315 2310 2305

3+30.000000

2320 2315 2310 2305

3+20.000000

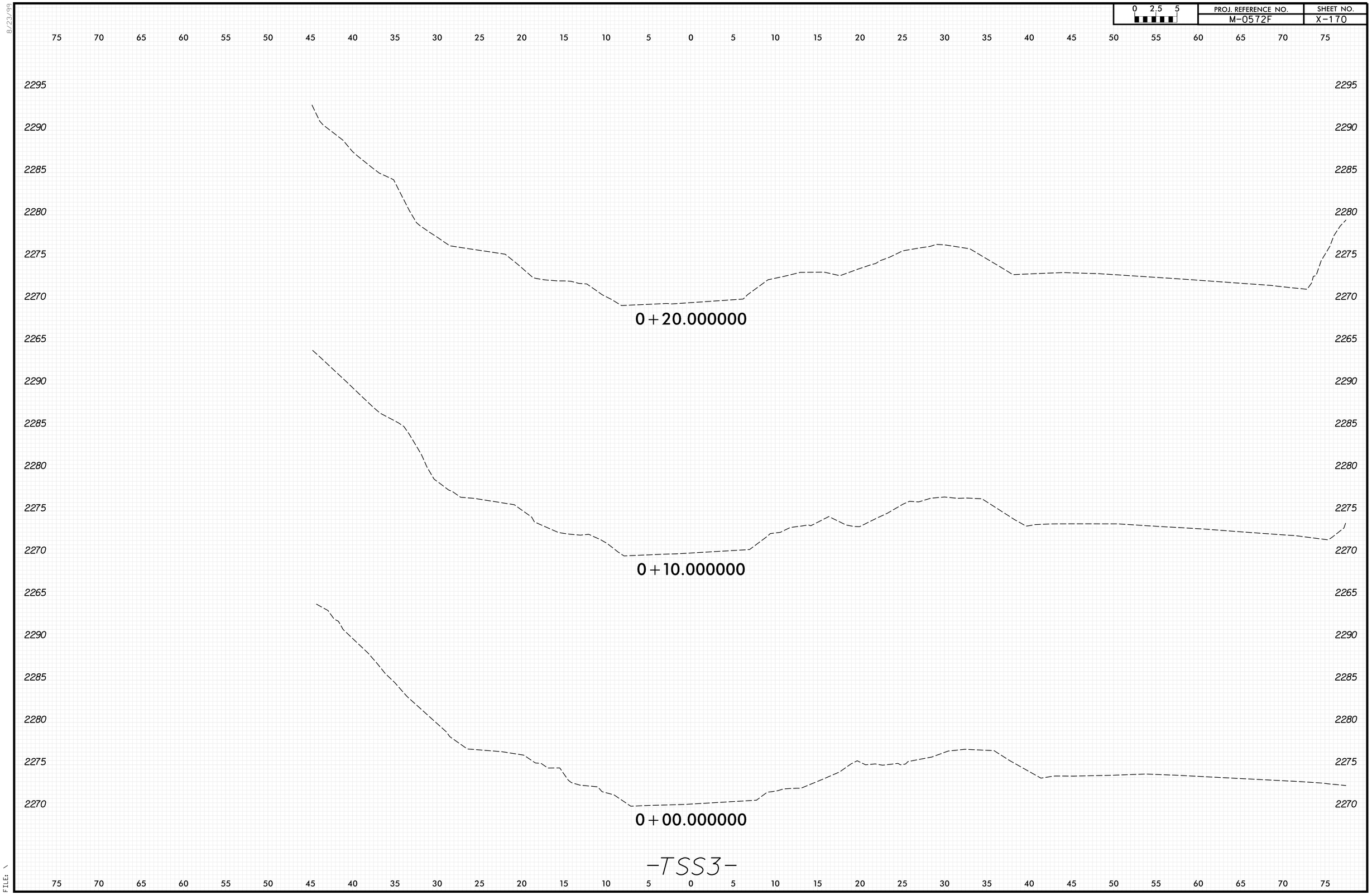
-TSS2-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:20:03 PM
DATE: 8/24/2026
PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: CJACOBSON
FILE: \

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-170



PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE:
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:20:39 PM

8/23/99

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-171

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2295 2290 2285 2280 2275 2270 2265

2267.57

0+50.000000

2290 2285 2280 2275 2270 2265

0+40.000000

2290 2285 2280 2275 2270 2265

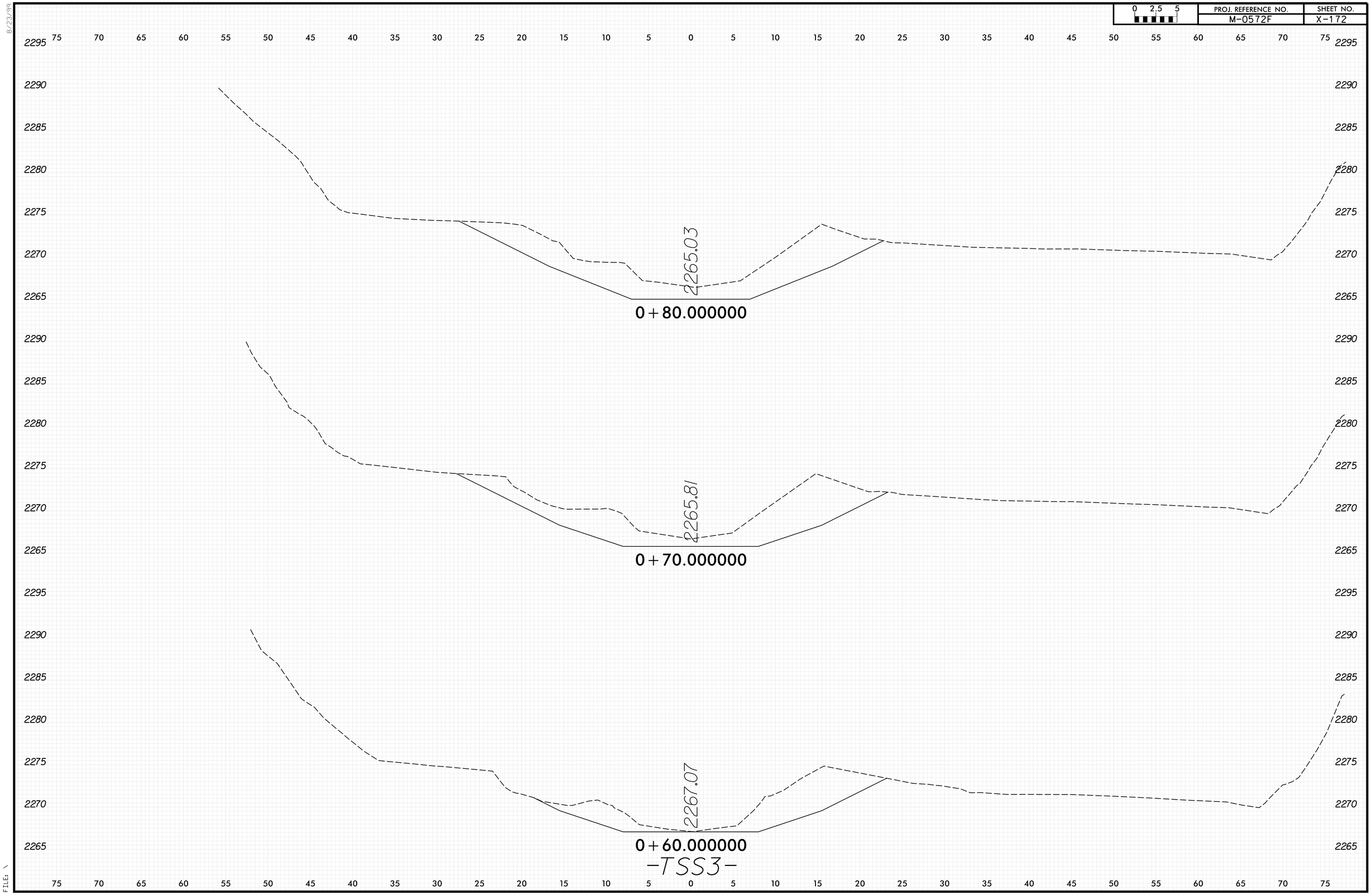
0+30.000000

-TSS3-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

PLOT DRIVER: NCDOT.pdf.color-eng-50.plt
USER: GJACOBSON
FILE: \
DATE: 8/24/2026
PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:20:40 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-172



8/23/99

PLOT DRIVER: NCDOT_pdf_color-eng_50.plt
USER: GJACOBSON
FILE: \
DATE: 8/24/2026
PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:20:41 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-173

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2290 2285 2280 2275 2270 2265 2260

2264.23

1+10.000000

2285 2280 2275 2270 2265

2265.49

1+00.000000

2290 2285 2280 2275 2270 2265

2265.99

0+90.000000

-TSS3-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

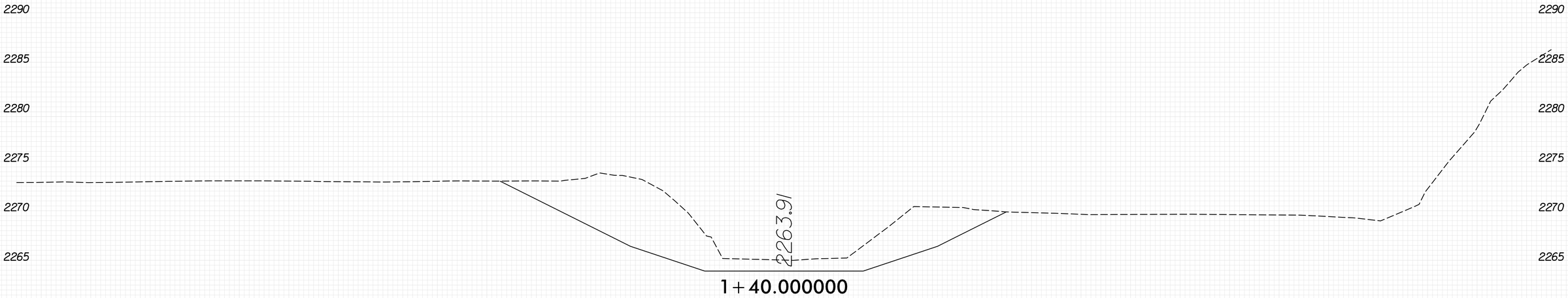
PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE:
DATE: 8/24/2026
PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 12:042 PM

8/23/99

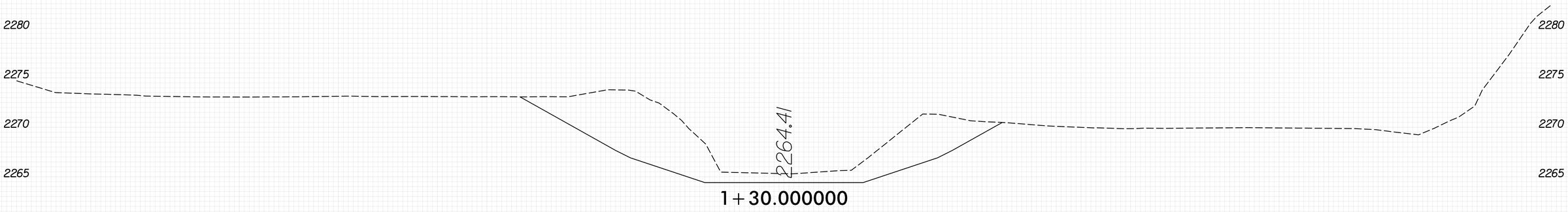
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-174

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

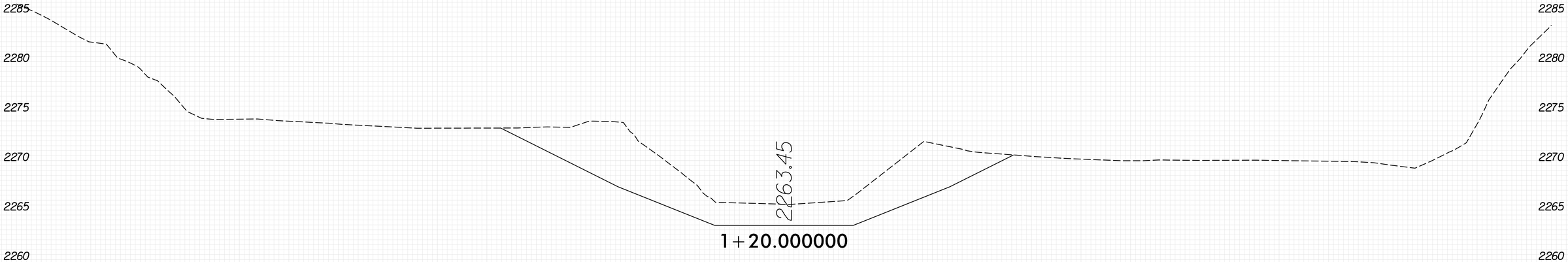
2290 2285 2280 2275 2270 2265 2260



2285 2280 2275 2270 2265 2260



2285 2280 2275 2270 2265 2260



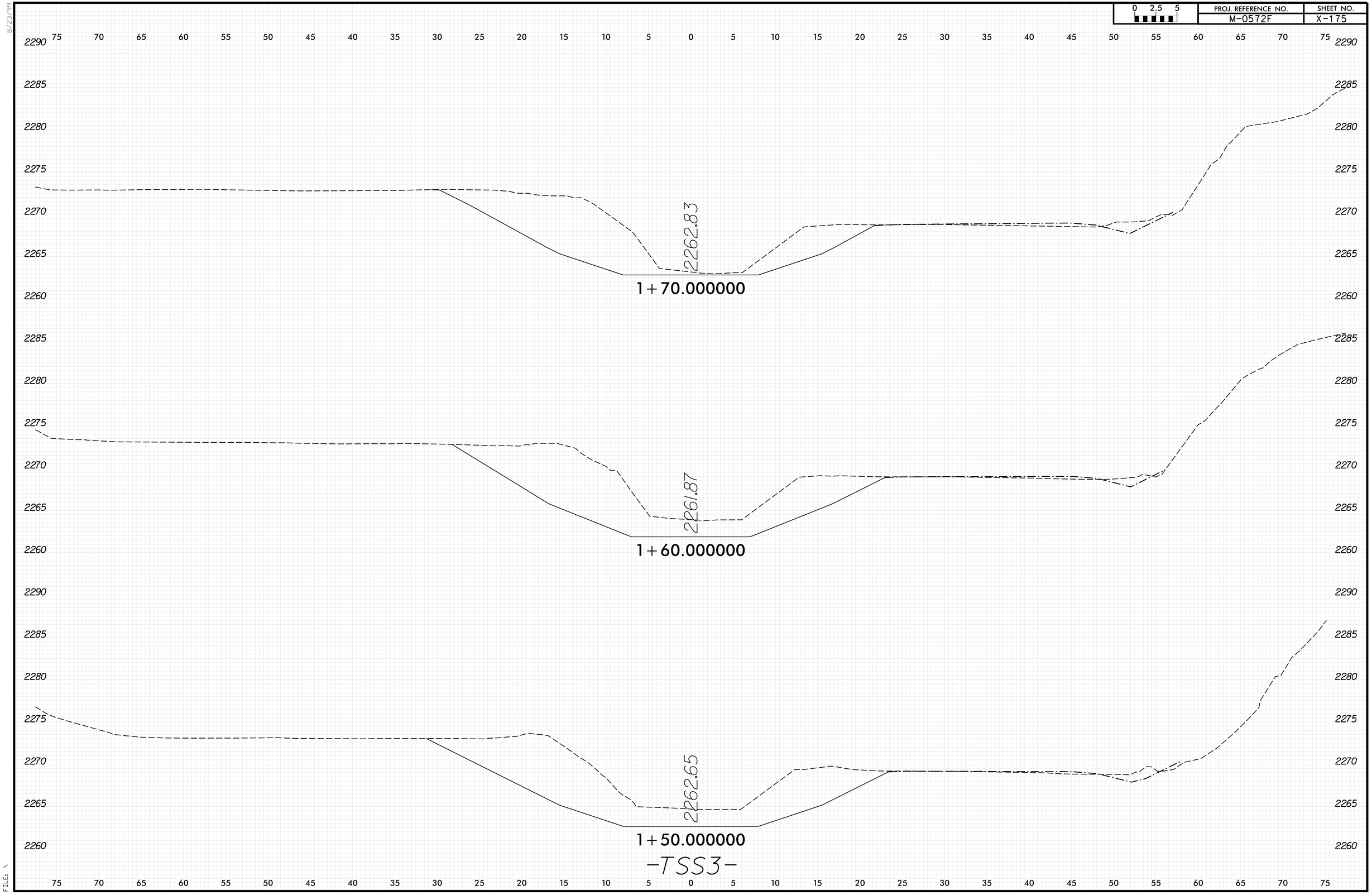
-TSS3-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
DATE: 8/24/2026
PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:20:43 PM

8/23/99

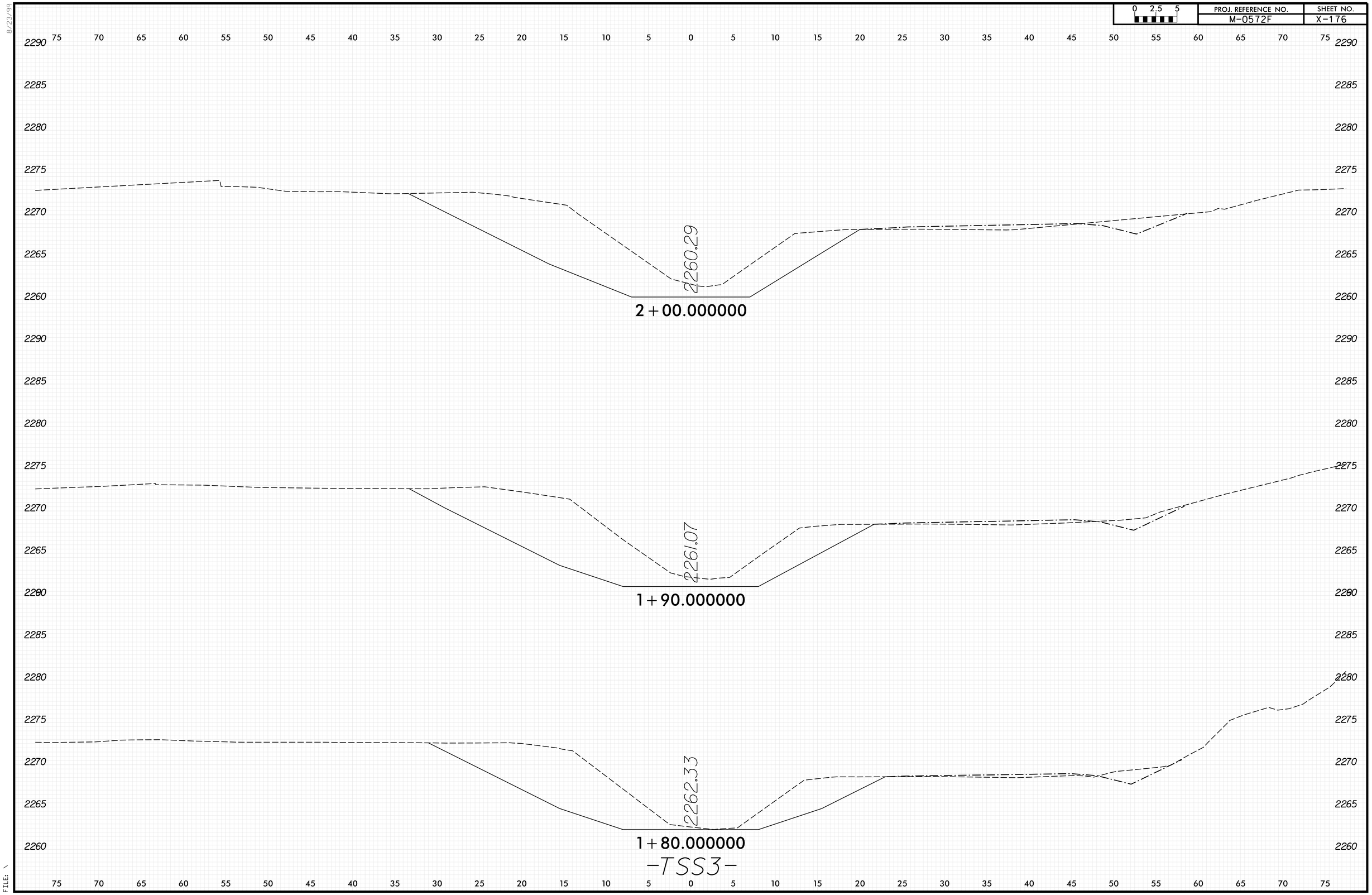
0 2,5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-175



PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:20:44 PM

8/23/99

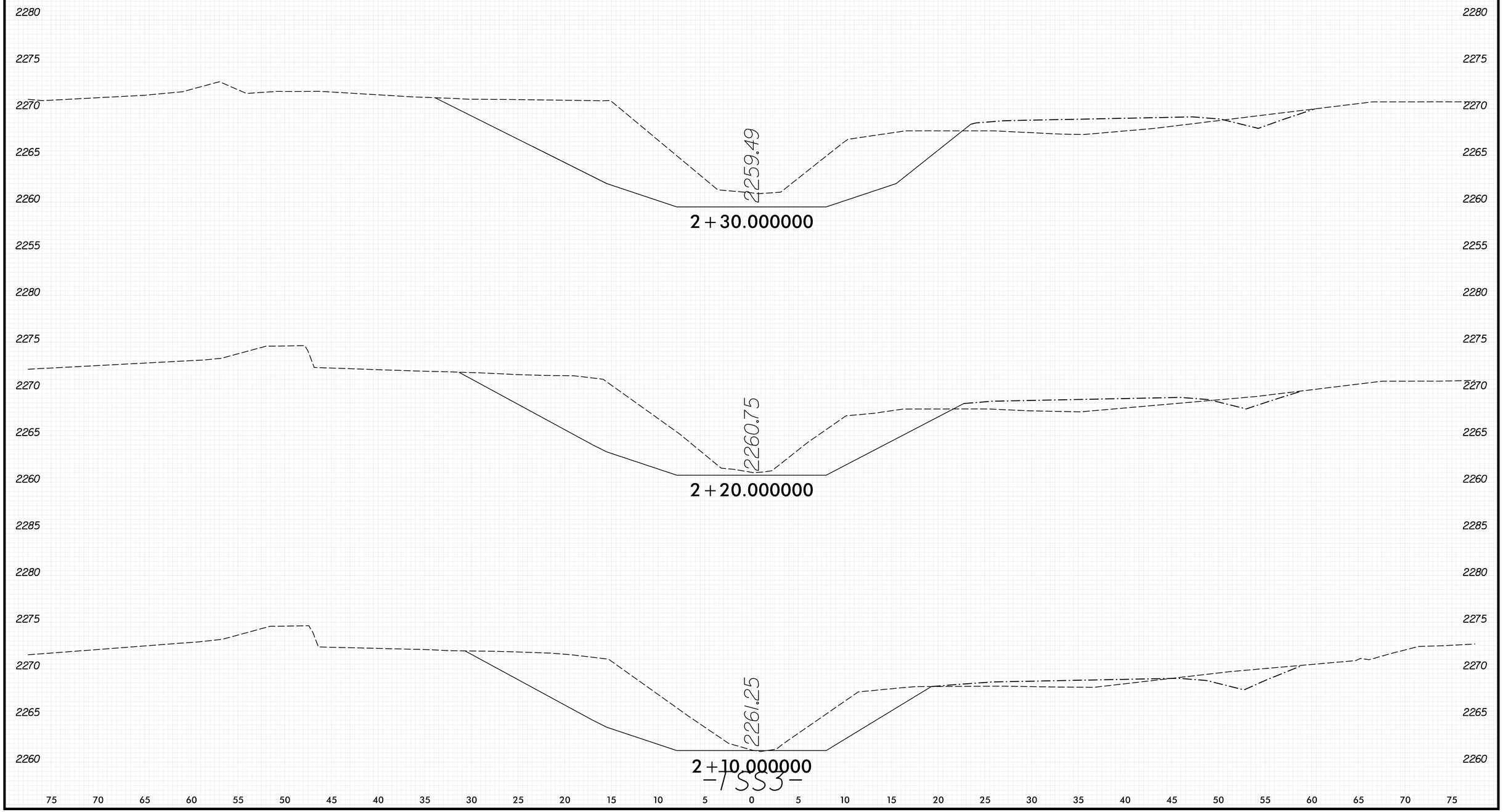
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-176



PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:20:45 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-177

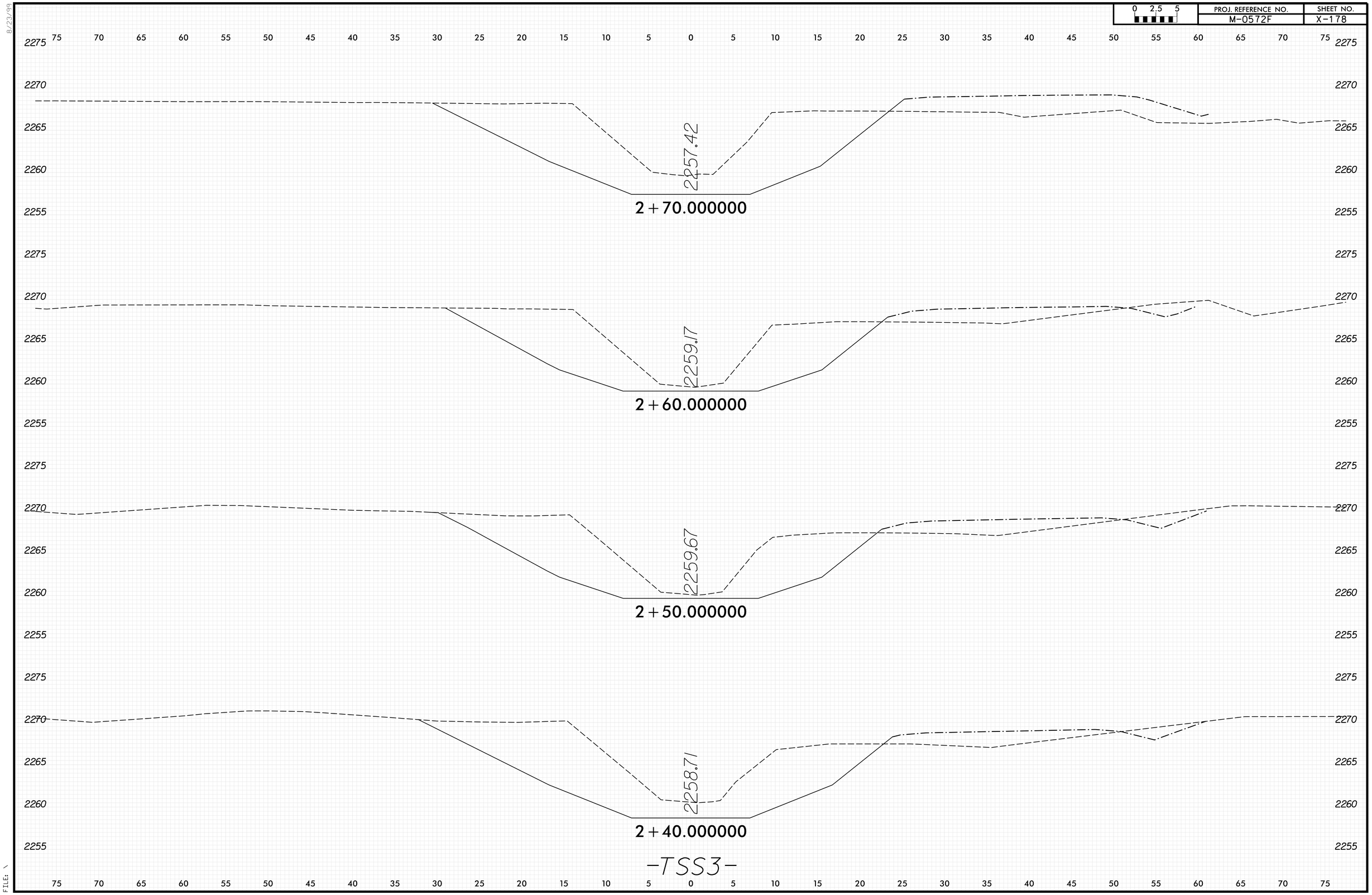
75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75



75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: CJACOBSON
FILE: \
DATE: 8/24/2026
PENTABLE: US_19W_South_STRM_XSC.tbl
TIME: 1:20:46 PM
8/23/99

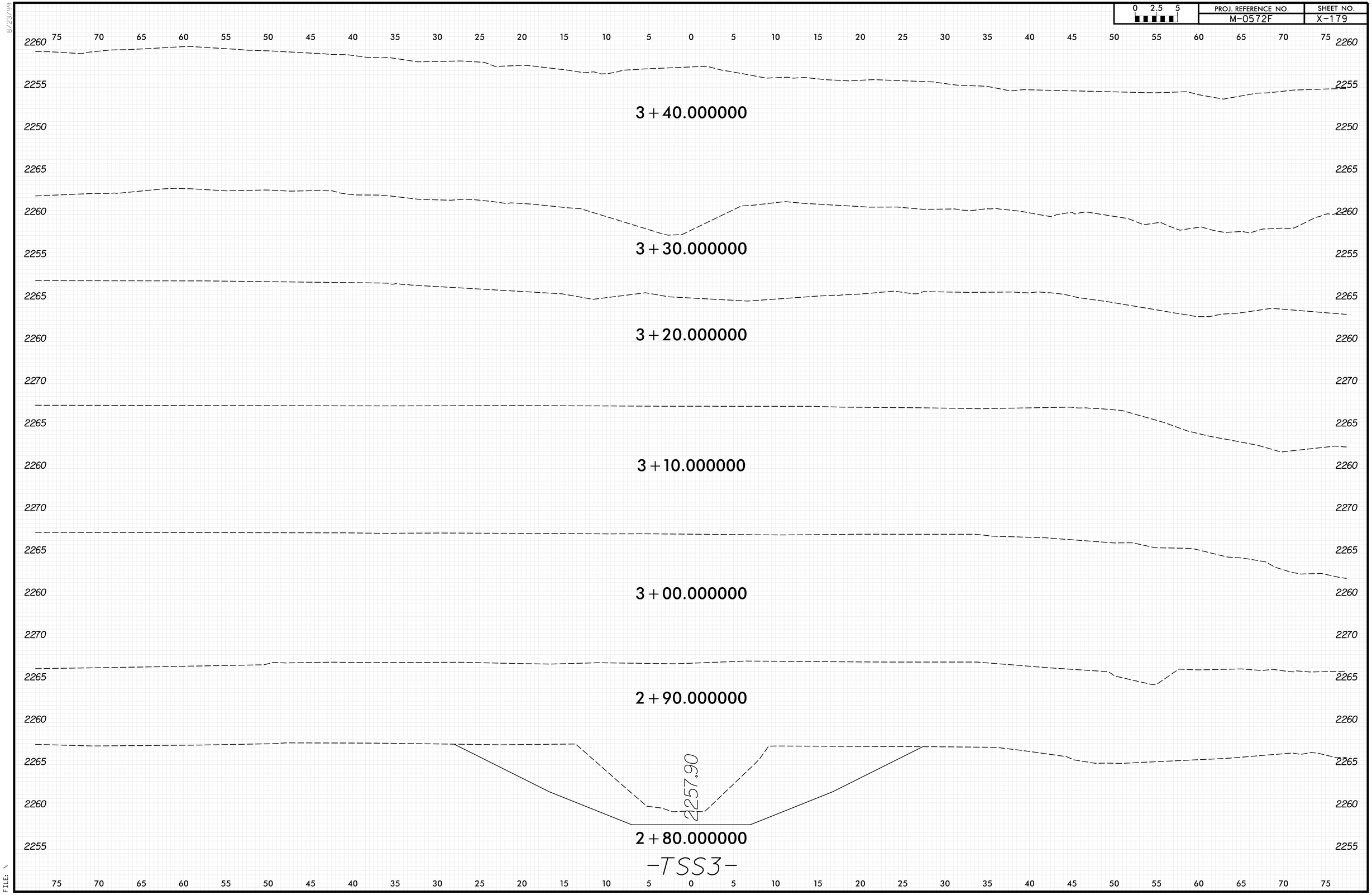
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-178



8/23/99

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:20:47 PM

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-179



PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:20:48 PM

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	M-0572F	X-180

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2255
2250
2245
2250
2235
2250
2255
2250
2255
2250

3+90.000000

3+80.000000

3+70.000000

3+60.000000

3+50.000000

-TSS3-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

PLOT DRIVER: NCDOT.pdf.color_eng_50.plt
USER: GJACOBSON
FILE: \
PENTABLE: US_19W_South_STRM_XSC.tbl
DATE: 8/24/2026
TIME: 1:20:50 PM