

Madison, Wisconsin

CITY OF MADISON

CITY ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS

PLAN OF PROPOSED IMPROVEMENT

ICE AGE JUNCTION PATH AND JEFFY PATH
CITY PROJECT NO. 53W1348

JEFFY TRAIL SANITARY SEWER
ASSESSMENT DISTRICT
CITY PROJECT NO. 53W1620

CITY CONTRACT NO. 6886

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CONVENTIONAL SIGNS

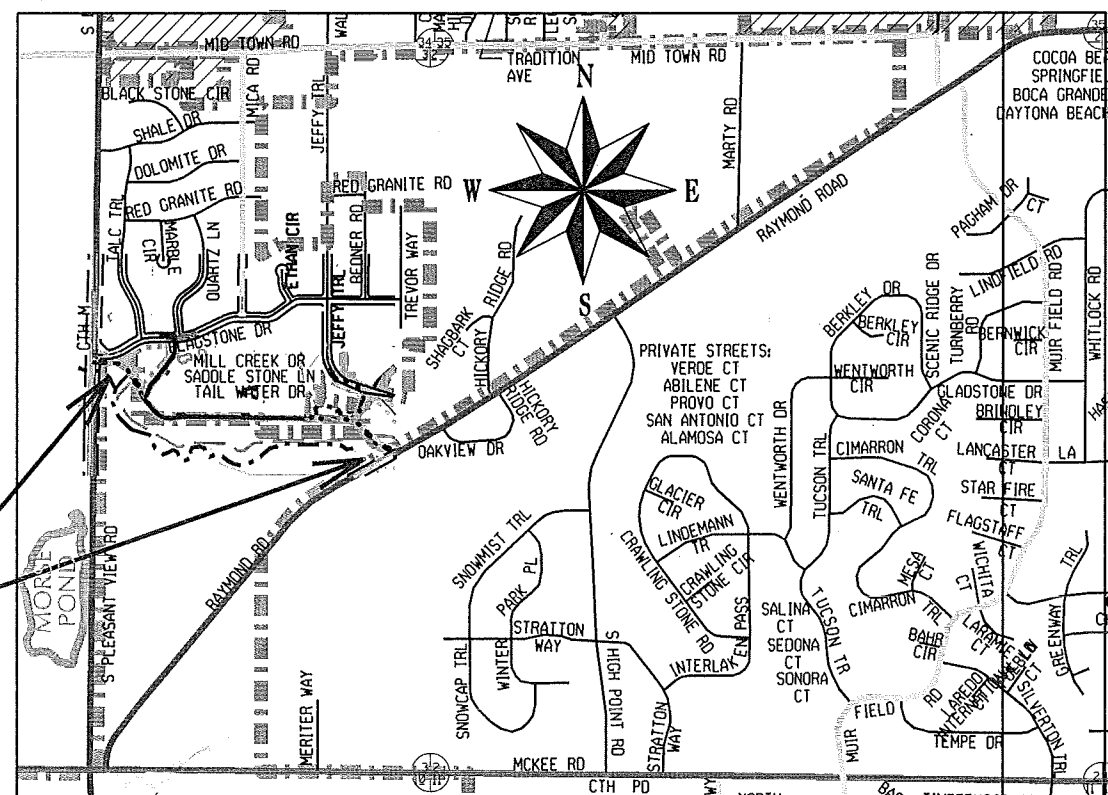
FIELD VERIFY ALL UTILITY LOCATIONS

GAS	— G —
STORM SEWER	— ST —
SANITARY SEWER	— SAN —
WATER	— W —
OVERHEAD ELECTRIC	— OH —
POWER POLE	⊕
ADA COMPLIANT RAMP W/ DETECTABLE WARNING FIELD	□
COMBUSTIBLE FLUIDS	⚡

CONSTRUCTION PROJECT LOCATION

NOTE:

SEE SHEET G-1 FOR GENERAL NOTES AND
EARTHWORK SUMMARY



PUBLIC IMPROVEMENT PROJECT
APPROVED

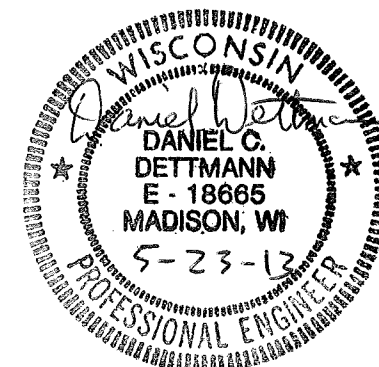
April 30, 2013

BY THE COMMON COUNCIL
OF MADISON, WISCONSIN

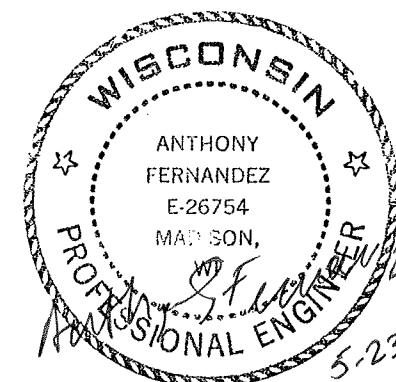
PUBLIC IMPROVEMENT DESIGN
APPROVED BY:

Michael R. Dailey 5/31/2013
For City Engineer Date

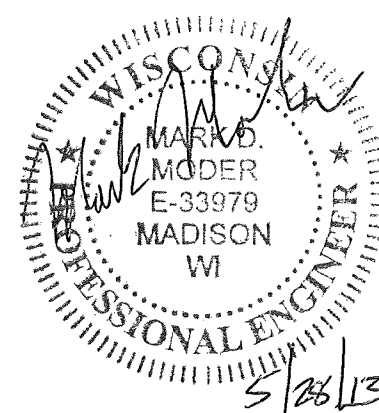
ELECTRICAL AND LIGHTING PLAN
DESIGNED BY:



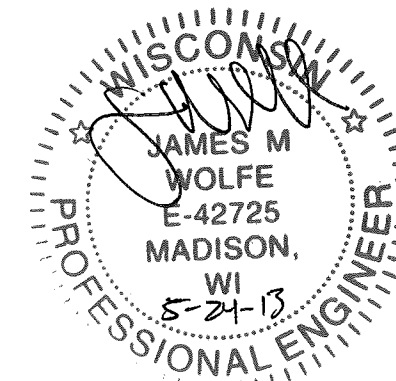
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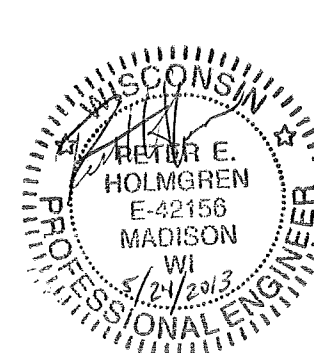
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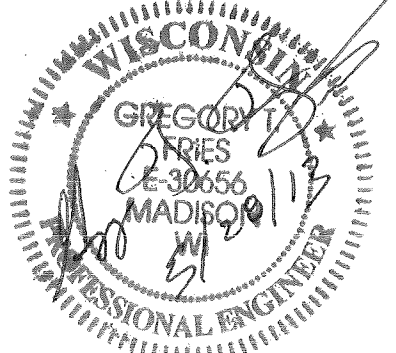
JEFFY PATH
DESIGNED BY:



WATER MAIN
DESIGNED BY:



STORM SEWER
DESIGNED BY:



PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

GENERAL NOTES

THE FOLLOWING SHEETS WERE PREPARED BY SRF/MSA AS CONSULTANTS TO THE CITY OF MADISON. IN THE CASE OF DISCREPANCIES BETWEEN INFORMATION ON THESE SHEETS AND THE REMAINING SHEETS PREPARED BY THE CITY OF MADISON, CITY PREPARED SHEETS SHALL BE ASSUMED TO SUPERCEDE THE SRF/MSA SHEETS.

D1 THRU D3
P1 THRU P5
S1 THRU S5
#X-1 THRU #X-15

THE CROSS SLOPE OF SIDEWALKS SHALL BE 2%. THE LONGITUDINAL GRADE OF CURB RAMP SHALL NOT EXCEED 8.33%.

LONGITUDINAL GRADE OF SIDEWALKS SHALL NOT EXCEED THE GRADE SHOWN ON PLANS NOR BE LESS THAN 0.5%. SIDE SLOPES WITHIN TEN FEET OF A PUBLIC SIDEWALK SHALL NOT EXCEED 3:1. ALL SIDEWALK AND SIDEWALK RAMP ELEVATIONS AND GRADES SHALL BE FIELD VERIFIED AND APPROVED BY THE ENGINEER PRIOR TO PLACING CONCRETE.

CURB STATION AND OFFSETS SHALL BE TO THE FACE OF CURB UNLESS OTHERWISE INDICATED. CURB ELEVATIONS SHALL BE TO THE TOP OF CURB (OR EXTENDED TOP OF CURB FOR DRIVEWAYS OR RAMP) UNLESS OTHERWISE INDICATED.

THERE MAY BE EXISTING UTILITIES OR OTHER FEATURES WHICH ARE EITHER NOT SHOWN OR SHOWN INCORRECTLY ON THIS PLAN. IT IS THE RESPONSIBILITY OF THE DEVELOPER TO LOCATE AND IDENTIFY ALL UTILITIES AND TOPOGRAPHY WHICH MAY AFFECT THE CONSTRUCTION OF THESE IMPROVEMENTS.

ALL PERMANENT SIGNING WILL BE DETERMINED AND PROVIDED BY THE TRAFFIC ENGINEERING DIVISION, FOLLOWING CONSTRUCTION OF THESE IMPROVEMENTS.

PAVEMENT SAWCUTS SHALL BE AS DIRECTED BY THE CITY CONSTRUCTION ENGINEER. SAWCUTS SHOWN ON THE PLAN ARE APPROXIMATE.

EROSION CONTROL NOTES

- FOR ICE AGE JUNCTION PATH AND FLAGSTONE PATH SEE SHEETS D1 AND EC-1 THRU EC-2 FOR EROSION CONTROL INFORMATION
- FOR JEFFY PATH AND STORM IMPROVEMENTS EAST OF JEFFY PATH SEE SHEET JG-1 FOR ADDITIONAL EROSION CONTROL INFORMATION.

CONVENTIONAL SYMBOLS
FIELD VERIFY ALL UTILITY LOCATIONS

GAS — G —
STORM SEWER — ST —
SANITARY SEWER — SAN —
WATER — W —
OVERHEAD ELECTRIC — OH —
UNDERGROUND ELECTRIC — E —
UNDERGROUND FIBER — FO —
POWER POLE 
COMBUSTIBLE FLUIDS 

EARTHWORK SUMMARY - ICE AGE JUNCTION AND FLAGSTONE PATHS

- UNCLASSIFIED EXCAVATION (PLAN QUANTITY)..... 517 CY
① ESTIMATED UNDISTRIBUTED UNDERCUT 810 CY
TOTAL EXCAVATION CUT (PAID QUANTITY) 1327 CY
③ ADJUSTED FILL (EXPANSION FACTOR 1.0) 1206 CY
②③ ESTIMATED FILL - BORROW..... 689 CY

EARTHWORK SUMMARY - JEFFY PATH, SIDEWALK & PED CONNECTION

- UNCLASSIFIED EXCAVATION (PLAN QUANTITY)..... 900 CY
① ESTIMATED UNDISTRIBUTED UNDERCUT 280 CY
TOTAL EXCAVATION CUT (PAID QUANTITY) 1180 CY
③ ADJUSTED FILL (EXPANSION FACTOR 1.0).....4195 CY
②③ ESTIMATED FILL, BORROW (PLAN QUANTITY) 3295 CY

EARTHWORK NOTES

- UNDERCUT NOT USED TO BALANCE EARTHWORK
- PAID FOR AS PLAN QUANTITY
- NO EXPANSION FACTOR WAS USED TO DETERMINE PLAN QUANTITY OF FILL- BORROW

NOTES FOR TYPICAL SECTION SHEETS:

1. HMA PAVEMENTS SHALL BE CONSTRUCTED AS FOLLOWS:

TYPE	LAYER	THICK.	NOM. SIZE
3 1/2" E-1	UPPER	1.75"	12.5 MM
	LOWER	1.75"	19.0 MM
3" E-0.3	ONE LIFT	3.00"	12.5 MM

2. SEE SHEET D1 FORTYPICAL SECTION FOR ICE AGE JUNCTION PATH AND FLAGSTONE PATH.

3. SEE CROSS SECTION SHEETS FOR CUT SLOPES.

4. ALL SEEDED AREAS SHALL BE MATTED WITH EROSION CONTROL MATTING CLASS I TYPE URBAN A EXCEPT WHERE OTHERWISE SHOWN ON EROSION CONTROL PLANS.

LEGEND

- 3 1/2" IN. HMA PAVEMENT (NOTE 1)
- 10-INCH CRUSHED AGGREGATE BASE (GRAD NO. 2)
- 8-INCH CRUSHED AGGREGATE BASE (GRAD NO. 2)
- 4 INCH TOPSOIL
- SEEDING AND MATTING (NOTE 4)
- 5 INCH CONCRETE SIDEWALK
- 3 INCH CRUSHED AGG. BASE (GRAD NO. 2), INCIDENTAL

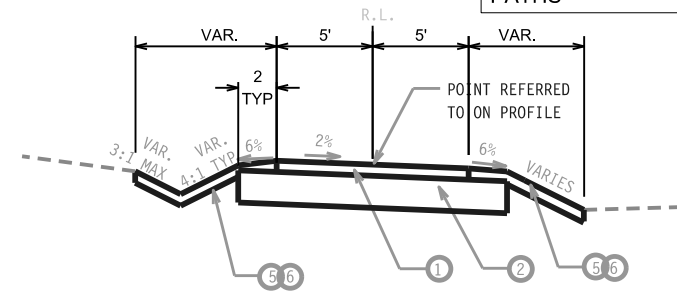
ICE AGE JUNCTION PATH & JEFFY PATH
PROJECT NO. 53W1348

SHEET NO.
G-1

GENERAL NOTES AND TYPICAL SECTIONS

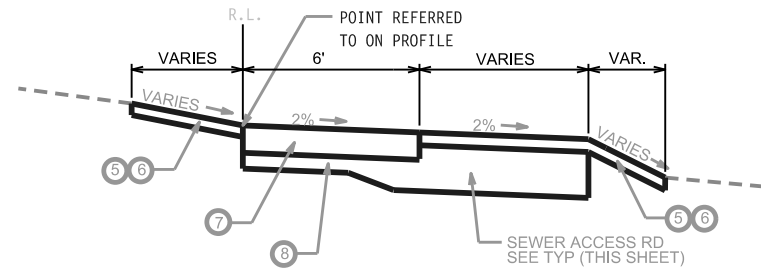
PATHS

CITY OF MADISON



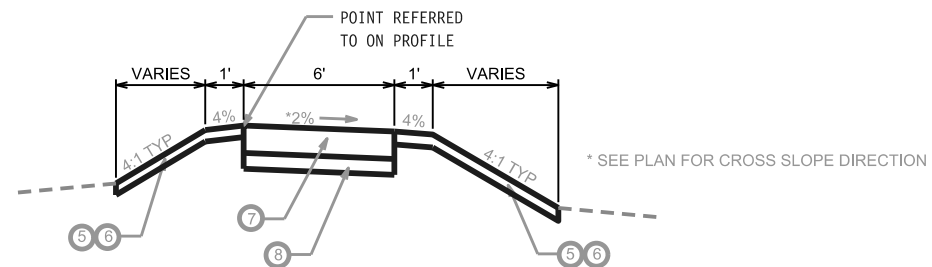
PROPOSED TYPICAL SECTION

JEFFY PATH STA 10+10 TO STA 15+10
ICE AGE PATH STA 42+44.43 TO 50+25
ICE AGE PATH STA 20+00 TO 25+18.68



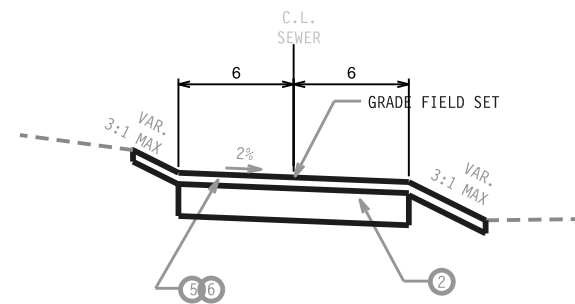
PROPOSED TYPICAL SECTION

JEFFY SIDEWALK STA 30+57 TO STA 31+48



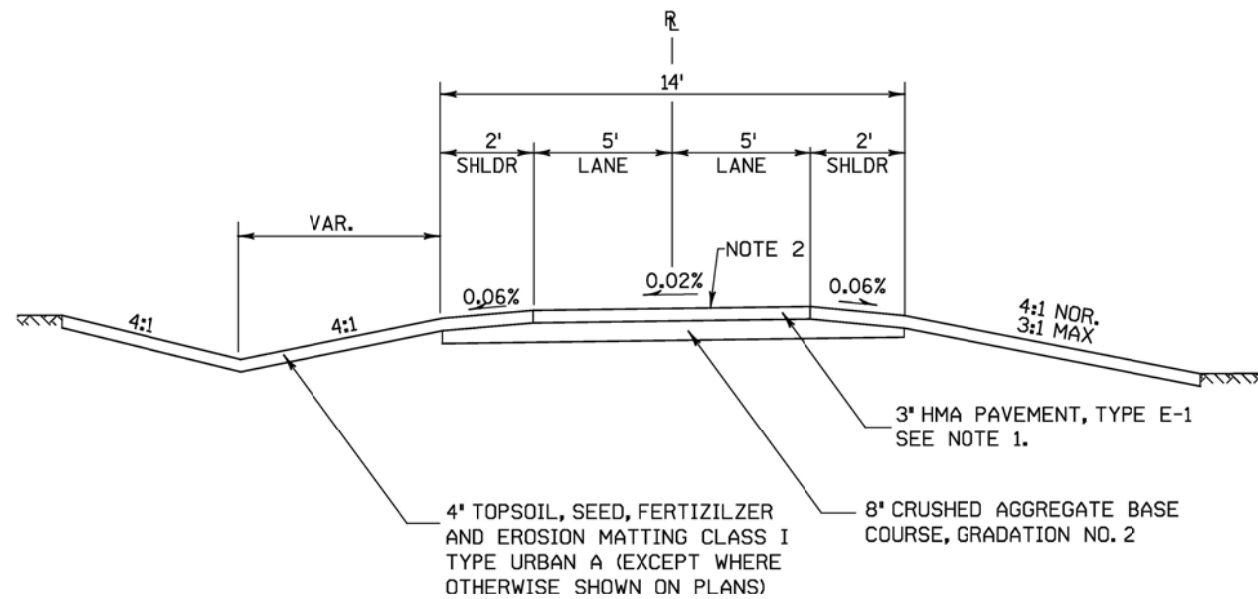
PROPOSED TYPICAL SECTION

PED CONNECTION STA 90+00 TO STA 91+69



PROPOSED TYPICAL SECTION

SEWER ACCESS ROAD



FINISHED TYPICAL SECTION
STA 50+25 to 64+00

NOTE 1. TYPE E-1 PAVEMENT CONSTRUCTED WITH SINGLE LIFT, NOM. AGG. SIZE 12.5 MM
NOTE 2. SEE TABLE FOR CROSS SLOPE DIRECTION
NOTE 3. CENTERLINE STRIPE SHALL BE 4' PAINT, 5' DASH, 15' GAP, PER CITY STANDARD.

DESIGN CONTACT

SRF CONSULTING GROUP, INC.
901 DEMING WAY, SUITE 302
MADISON, WI 53717
PHONE: (608) 829-0010
ATTN: JOSH WEISS
EMAIL: JWEISS@SRFCONSULTING.COM

CROSS SLOPE TABLE	
43+50	BEGIN TRANSITION
44+05	CROWNED
44+77	BEGIN TRANSITION
45+00	LEFT
54+00	BEGIN TRANSITION
54+50	RIGHT
57+00	BEGIN TRANSITION
57+50	LEFT

** NOT A MEMBER OF DIGGERS HOTLINE



Toll Free (800) 242-8511
Milwaukee Area (414) 259-1181
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www.DiggersHotline.com

STANDARD ABBREVIATIONS

ABUT	ABUTMENT	HYD	HYDRANT
AC	ACRE	ID	INSIDE DIAMETER
AGG	AGGREGATE	INV	INVERT
AECPRC	APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE	IP	IRON PIPE ON PIN
ASPH	ASPHALTIC	LHF	LEFT-HAND FORWARD
AVG	AVERAGE	L	LENGTH OF CURVE
ADT	AVERAGE DAILY TRAFFIC	LF	LINEAR FOOT
BF	BACK FACE	LC	LONG CHORD OF CURVE
BM	BENCH MARK	LS	LUMP SUM
BR	BRIDGE	MH	MANHOLE
CE	COMMERCIAL ENTRANCE	MOR	MID POINT OF RADIUS
CL OR C/L OR E	CENTER LINE	NC	NORMAL CROWN
Δ	CENTRAL ANGLE OR DELTA	NO	NUMBER
CONC	CONCRETE	OBLIT	OBLITERATE
CPRC	CULVERT PIPE REINFORCED CONCRETE	PAVT	PAVEMENT
CPRCHE	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL	PE	PRIVATE ENTRANCE
CR	CREEK	PVRC	POINT OF VERTICAL REVERSE CURVE
CY	CUBIC YARD	QOR	QUARTER POINT OF RADIUS
C & G	CURB AND GUTTER	R	RADIUS
D	DEGREE OF CURVE	REQ'D	REQUIRED
DHV	DESIGN HOUR VOLUME	RES	RESIDENCE OR RESIDENTIAL
DISCH	DISCHARGE	RHF	RIGHT-HAND FORWARD
DG	DITCH GRADE	R/W	RIGHT-OF-WAY
DWY	DRIVEWAY	R	RIVER
X	EAST GRID COORDINATE	RDWY	ROADWAY
EAT	STEEL PLATE BEAM GUARD	R/L OR R	REFERENCE LINE
EOR	ENERGY ABSORBING TERMINAL	SALV	SALVAGED
EL	END POINT OF RADIUS	SAN	SANITARY SEWER
ENT	ELEVATION	SF	SQUARE FEET
ESALS	ENTRANCE	SY	SQUARE YARD
EXC	EQUIVALENT SINGLE AXLE LOADS	SDD	STANDARD DETAIL DRAWINGS
EBS	EXCAVATION	STA	STATION
EXIST	EXCAVATION BELOW SUBGRADE	SS	STORM SEWER
FC	EXISTING	SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
FF	FACE OF CURB	SE	SUPERELEVATION RATE
FERT	FACE TO FACE	TC	TOP OF CURB
FE	FERTILIZE	T OR TN	TOWN
FL	FIELD ENTRANCE	T	TRUCKS (PERCENT OF)
FQ	FLOW LINE	TYP	TYPICAL
CWT	FIBER OPTIC	VAR	VARIABLE
	HUNDREDWEIGHT	VC	VERTICAL CURVE
		Y	NORTH GRID COORDINATE
		YD	YARD

GENERAL NOTES

THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS IS APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER. SEE SPECIAL PROVISIONS.

THE EXACT LOCATION OF THE EROSION CONTROL DEVICES SHALL BE DETERMINED IN THE FIELD.

EROSION CONTROL IS SHOWN ON PLAN AND PROFILE SHEETS.

ALL EROSION MATTING SHALL BE CLASS I, URBAN TYPE A IN ALL DISTURBED AREAS UNLESS OTHERWISE NOTED ON THE PLANS AND PROFILE SHEETS.

WITHIN STATION LIMITS SHOWN FOR CLEARING AND GRUBBING, INDIVIDUAL TREES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND WILL NOT BE MEASURED OR PAID FOR SEPARATELY UNLESS SPECIFICALLY NOTED. OUTSIDE THESE LIMITS, INDIVIDUAL TREES WILL BE MEASURED AND PAID FOR PER INCH-DIAMETER.

UTILITY COORDINATION

THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING UTILITIES PRIOR TO CONSTRUCTION AND PROTECTING UTILITIES DURING CONSTRUCTION

PROPOSED STORM STRUCTURES - ICE AGE JUNCTION PATH				
STRUCTURE NO.	STATION	LOCATION (OFFSET)	TYPE	EL.
S-1	43+35	RT 17.3'	12" RCP AE	999.12'
S-2	43+35	LT 15.7'	12" RCP AE	999.90'
S-3	49+90	RT 13.2'	12" RCP AE	1003.60'
S-4	49+90	LT 13.9'	12" RCP AE	1003.10'
S-5	61+60	RT 12.6'	12" RCP AE	1015.83'
S-6	61+60	LT 13.5'	12" RCP AE	1015.18'

PROPOSED STORM STRUCTURES - FLAGSTONE PATH							
STRUCTURE NO.	STATION	LOCATION (OFFSET)	TYPE	GRATE EL.	DISCHARGE EL.	DEPTH	NOTES
S-7	23+75	RT 12.0'	TYPE H INLET	1017.70'	1015.26'	2.44'	GRATE TYPE NEENAH R-1878-B7G
S-8	23+75	LT 33.11'	12" RCP AE	-	1013.12'	-	
S-9	24+50	RT 12.0'	TYPE H INLET	1017.94'	1014.51'	3.23'	GRATE TYPE NEENAH R-1878-B7G

PROPOSED STORM PIPES - 12" RCP - ICE AGE JUNCTION PATH						
PIPE NO.	FROM (DWSTM)	TO (UPSTM)	LENGTH (FT)	DISCHARGE EL.	INLET EL.	SLOPE %
P-1	S-1	S-2	21'	999.12'	999.90'	2.07%
P-2	S-3	S-4	15'	1003.10'	1003.60'	1.60%
P-3	S-5	S-6	14'	1015.18'	1015.83'	2.16%

PIPE LENGTHS DO NOT INCLUDE APRON END WALLS

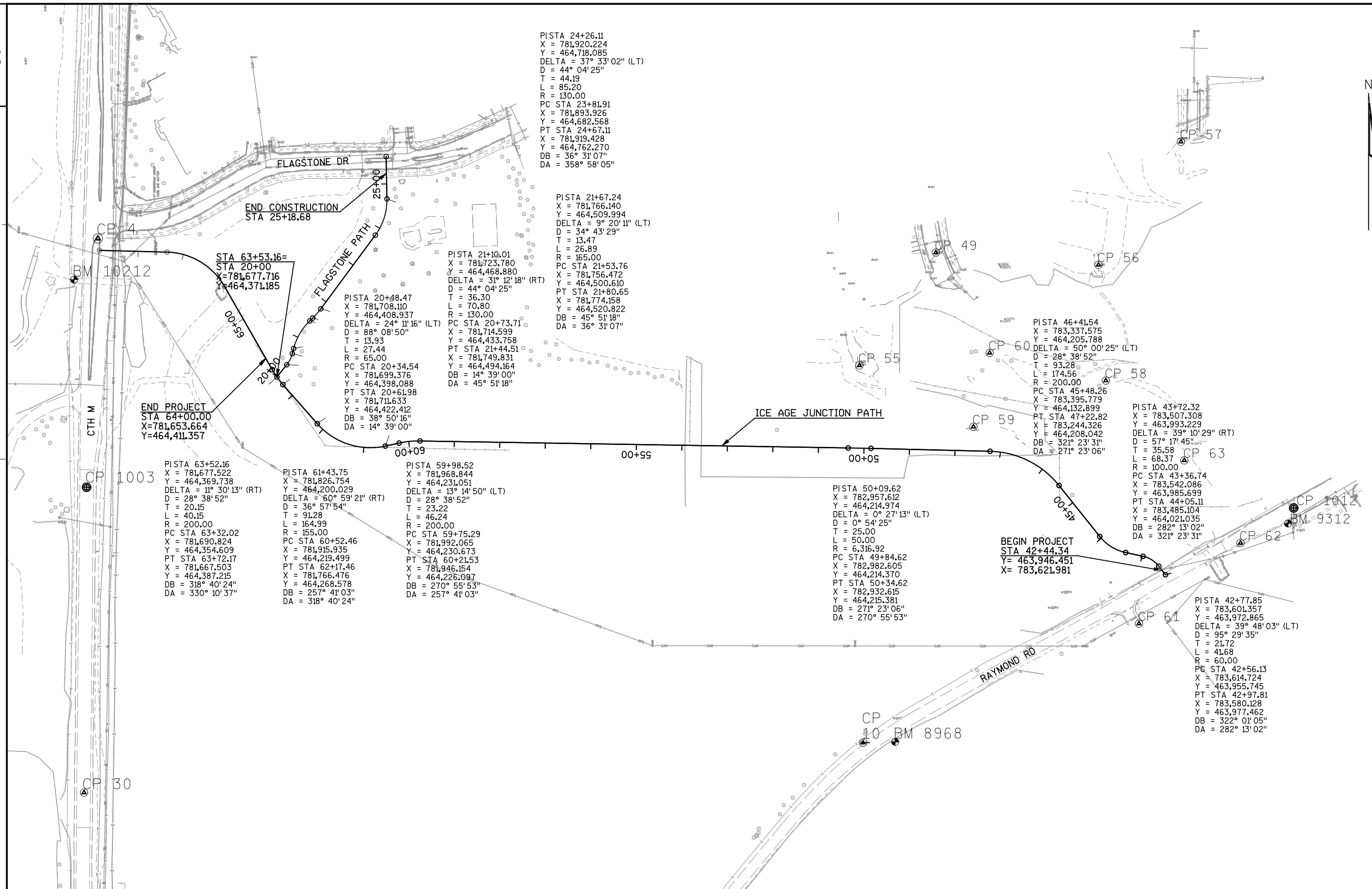
PROPOSED STORM PIPES - FLAGSTONE PATH						
PIPE NO.	FROM (DWSTM)	TO (UPSTM)	LENGTH (FT)	DISCHARGE EL.	INLET EL.	SLOPE %
P-4	S-7	S-9	79'	1014.51'	1015.26'	0.95%
P-5	S-8	S-9	35'	1014.05'	1014.51'	0.98%

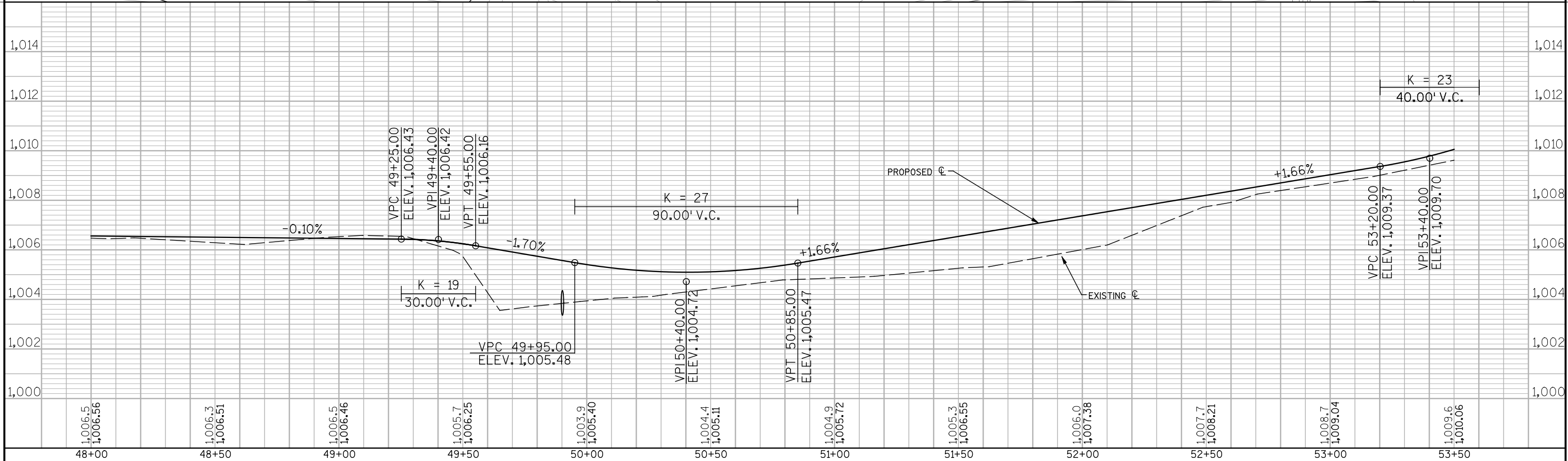
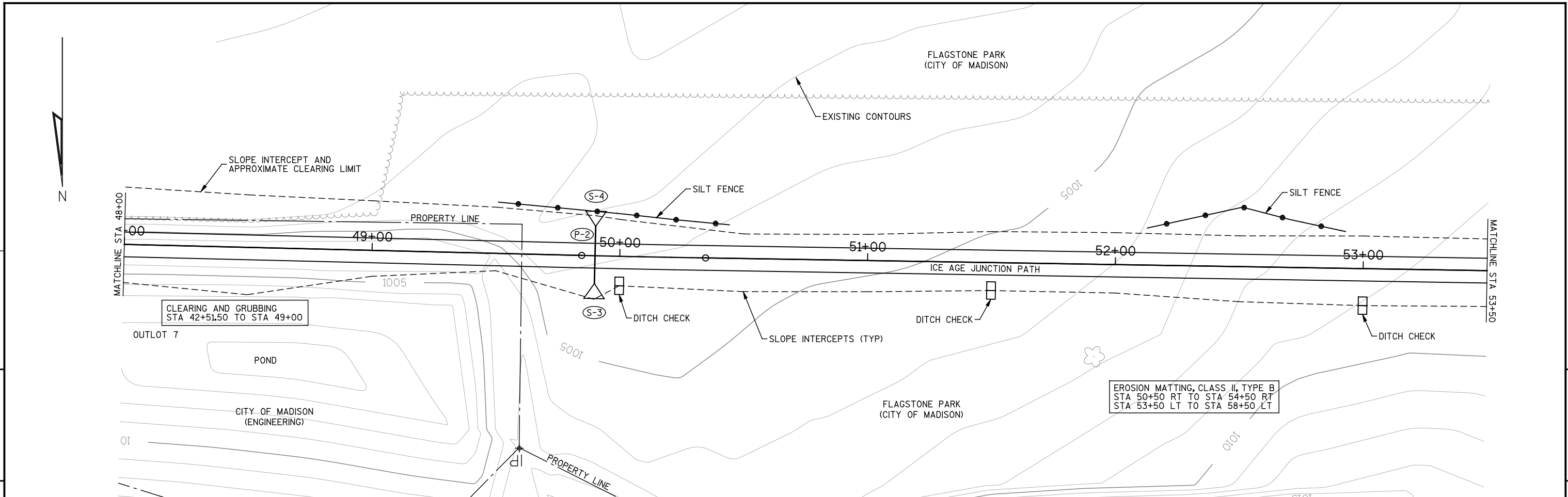
PIPE LENGTHS DO NOT INCLUDE APRON END WALLS

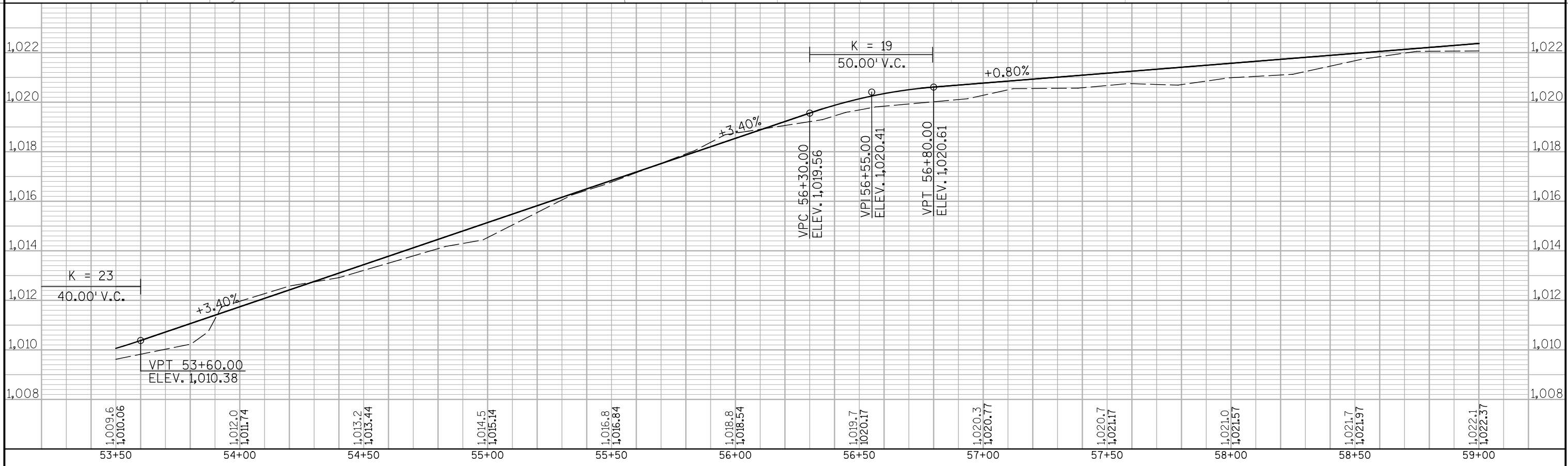
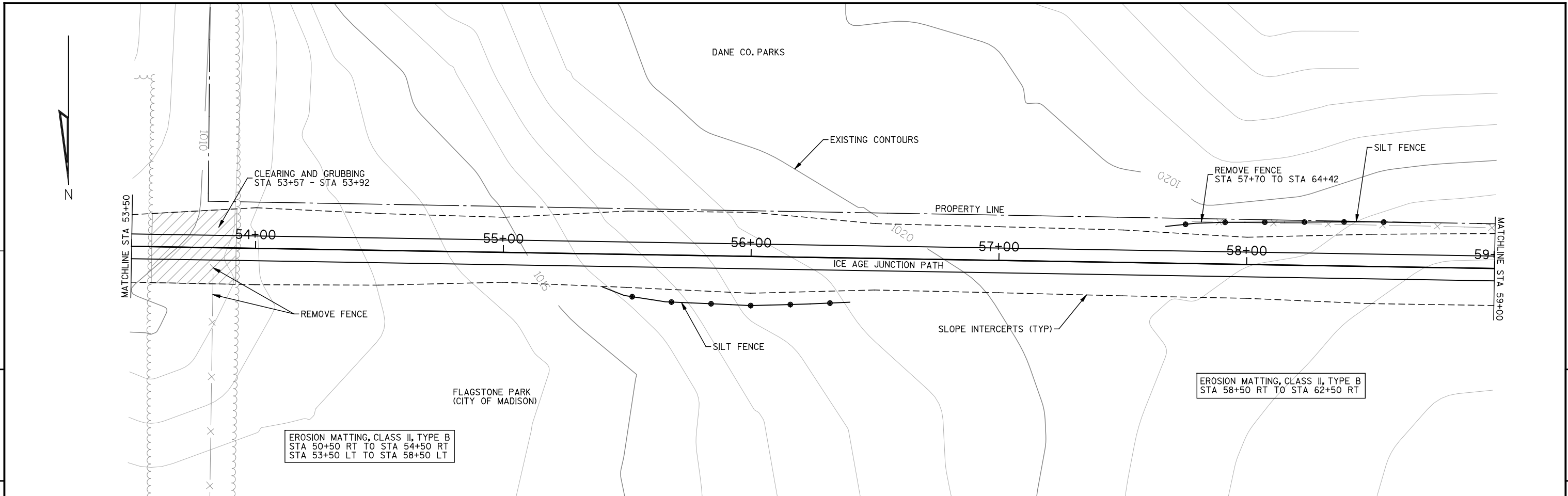
ICE AGE JUNCTION PATH CONTROL POINT INFORMATION			
NUMBER	DESCRIPTION	NORTHING	EASTING
CP 4	CHISLED CROSS ON ISLAND NOSE	464675.391	781284.532
CP 10	REBAR 3' NORTH OF EDGE OF PAVEMENT	463568.131	782965.394
CP 30	PK NAIL	463455.829	781253.195
CP 49	PK NAIL	464644.440	783125.100
CP 55	PK NAIL	464396.450	782957.220
CP 56	NAIL	464617.613	783482.339
CP 57	NAIL	464887.775	783663.476
CP 58		464363.220	783498.567
CP 59	NAIL	464261.829	783207.801
CP 60	RR SPIKE	464424.136	783243.231
CP 61	PK NAIL	463829.519	783571.363
CP 62	PK NAIL	464006.578	783794.249
CP 63		464188.075	783670.825
CP 1003	SECTION CORNER MONUMENT	464129.118	781259.772
CP 1012	SECTION CORNER MONUMENT	464082.963	783911.910

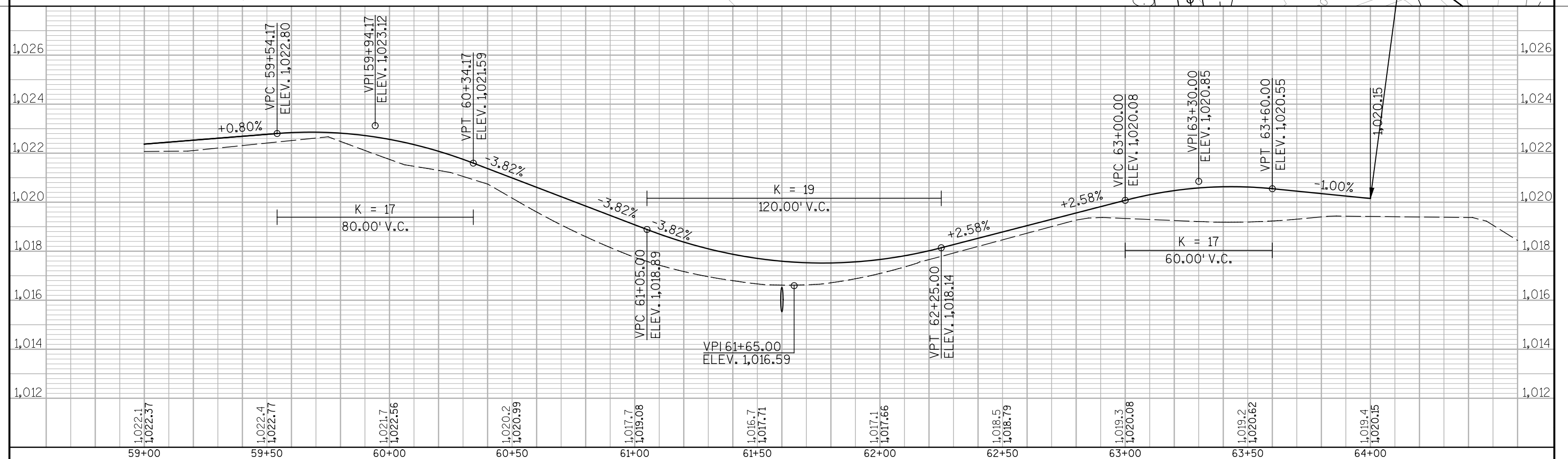
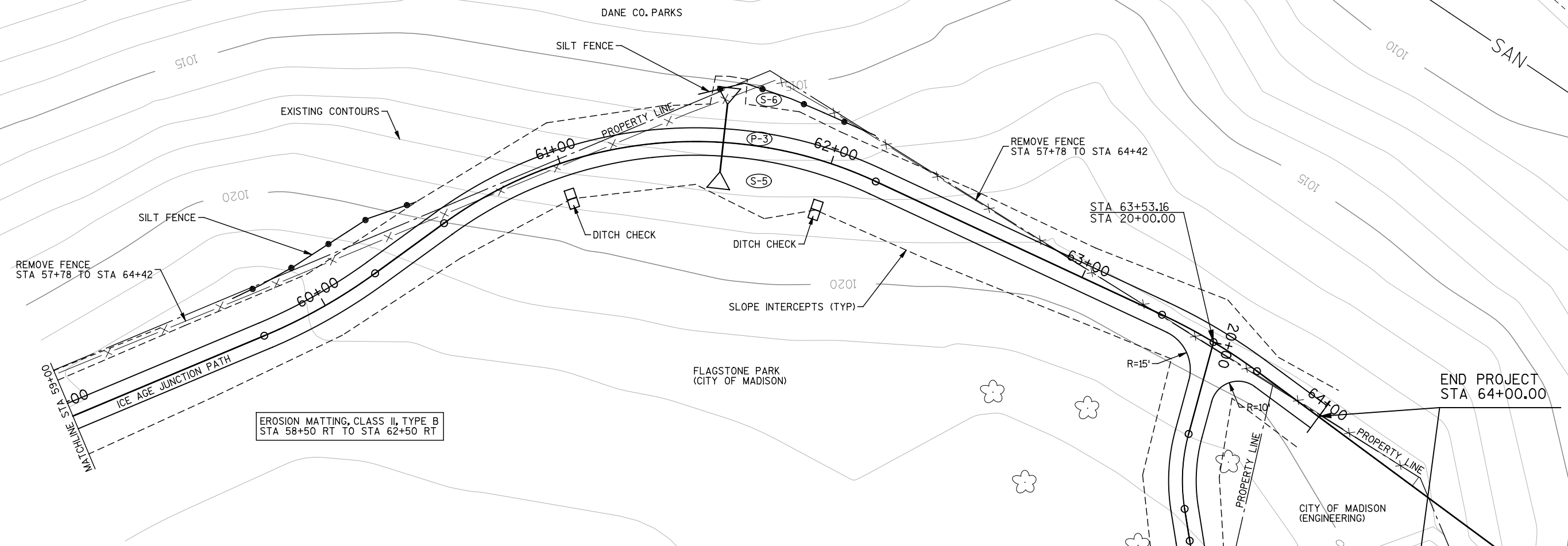
ICE AGE JUNCTION PATH BENCHMARK INFORMATION				
NUMBER	DESCRIPTION	NORTHING	EASTING	ELEVATION
BM 8968	NAIL IN 60" DIAMETER TREE	463569.952	783035.693	1001.91
BM 9312	TOP NUT FIRE HYDRANT	464048.867	783898.701	1011.01
BM 10212	PAINTED NUT ON CULVERT PIPE	464584.886	781232.309	1013.51

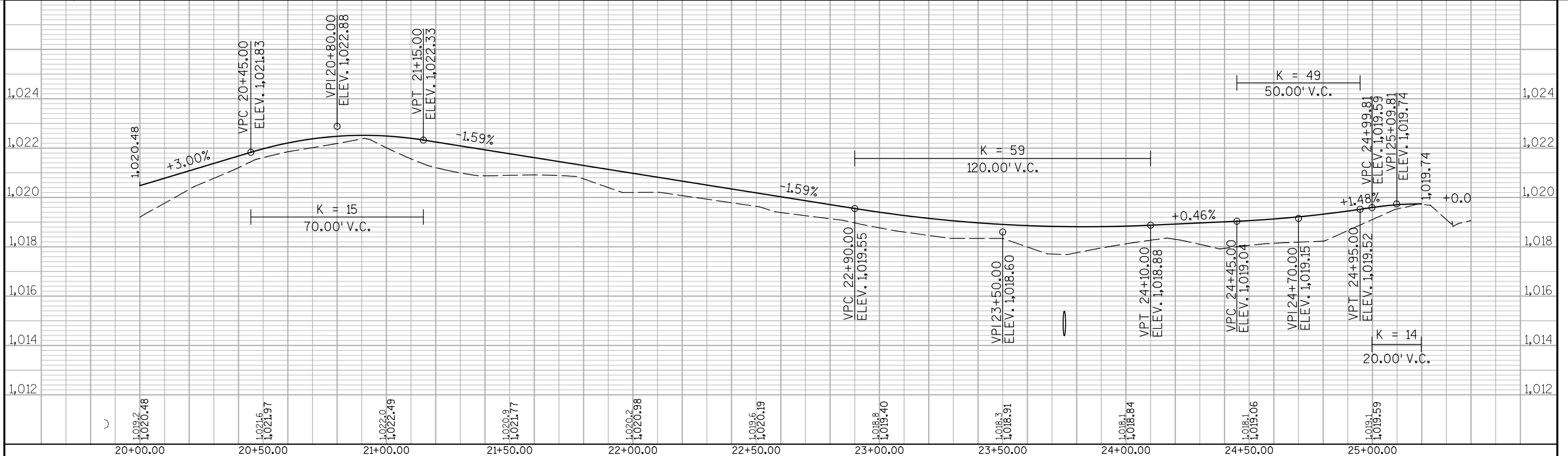
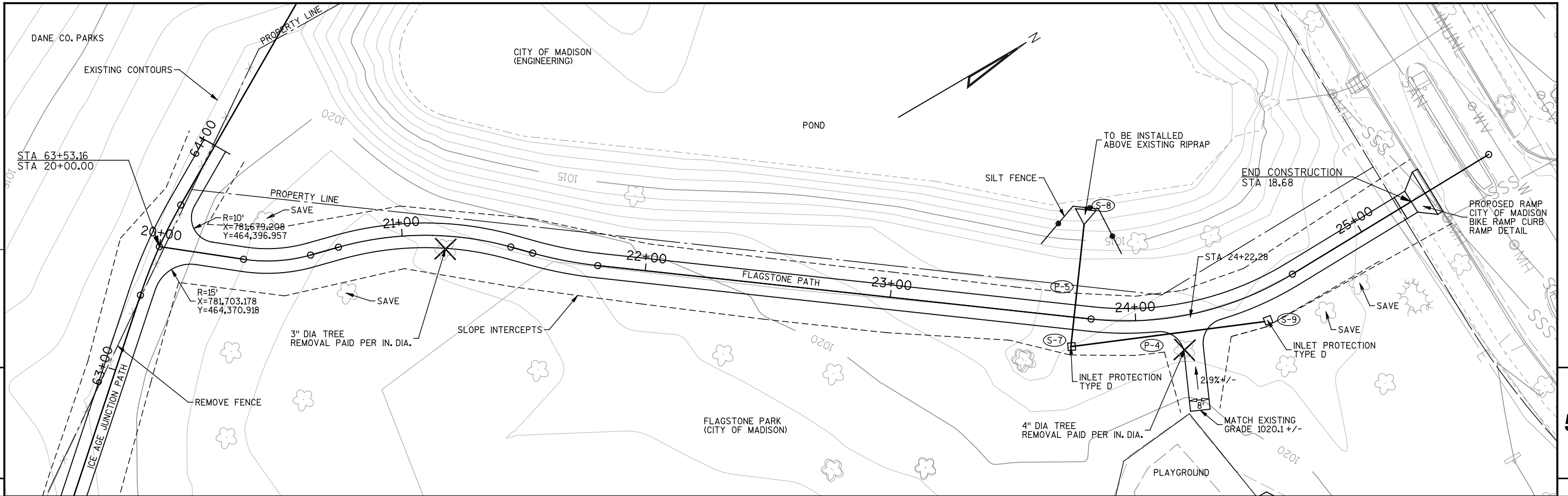
SEEDING TABLE	
JUNCTION PATH	
STA 42+44.34 - STA 44+50 LT	TALL GRASS SEEDING
STA 44+50 - STA 49+50 LT	TERRACE SEEDING
STA 49+50 - STA 64+00 LT	TALL GRASS SEEDING
STA 42+44.34 - STA 46+50 RT	TERRACE SEEDING
STA 46+50 - STA 64+00 RT	TALL GRASS SEEDING
FLAGSTONE PATH	
STA 20+00 - STA 20+50 LT	TERRACE SEEDING
STA 20+50 - STA 25+23.54 LT	TALL GRASS SEEDING
STA 20+00 - STA 23+50 RT	TALL GRASS SEEDING
STA 23+50 - STA 25+23.54 RT	TERRACE SEEDING









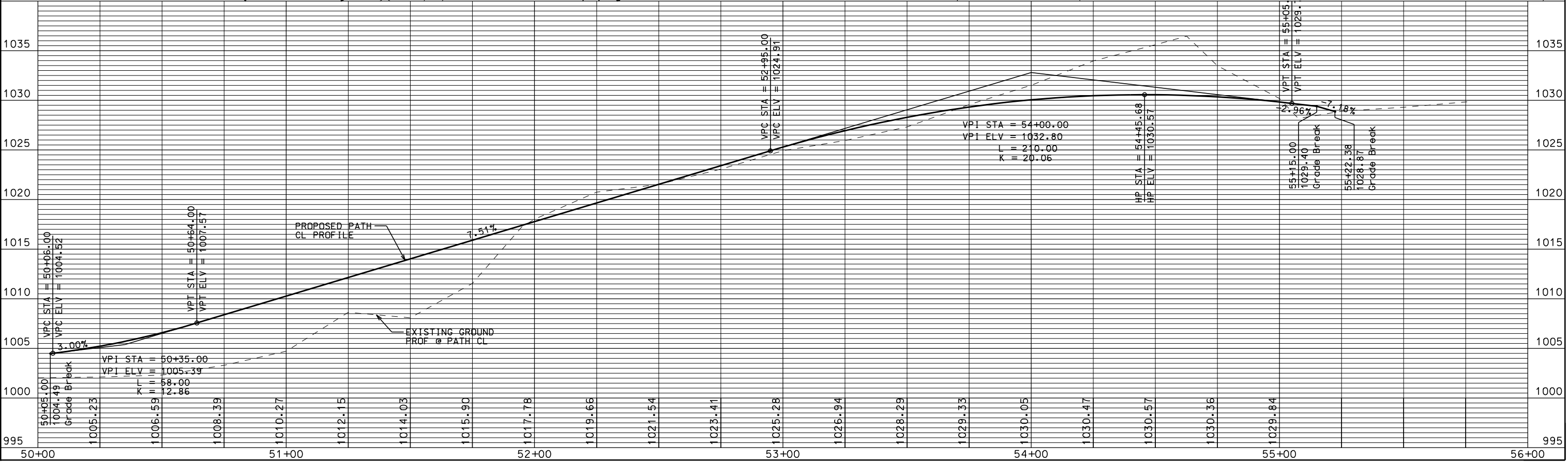
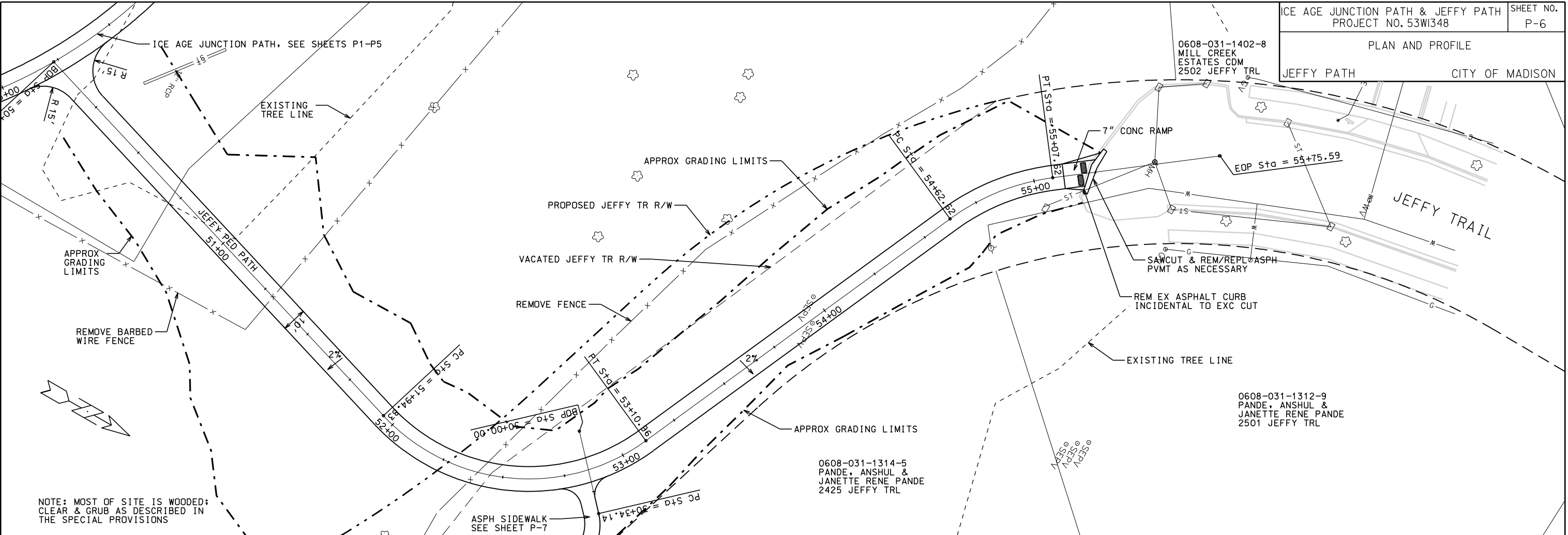


ORIGINATOR: CITY_OF_MADISON_STREETS_DIVISION

PLOT SCALE: 1"=40'

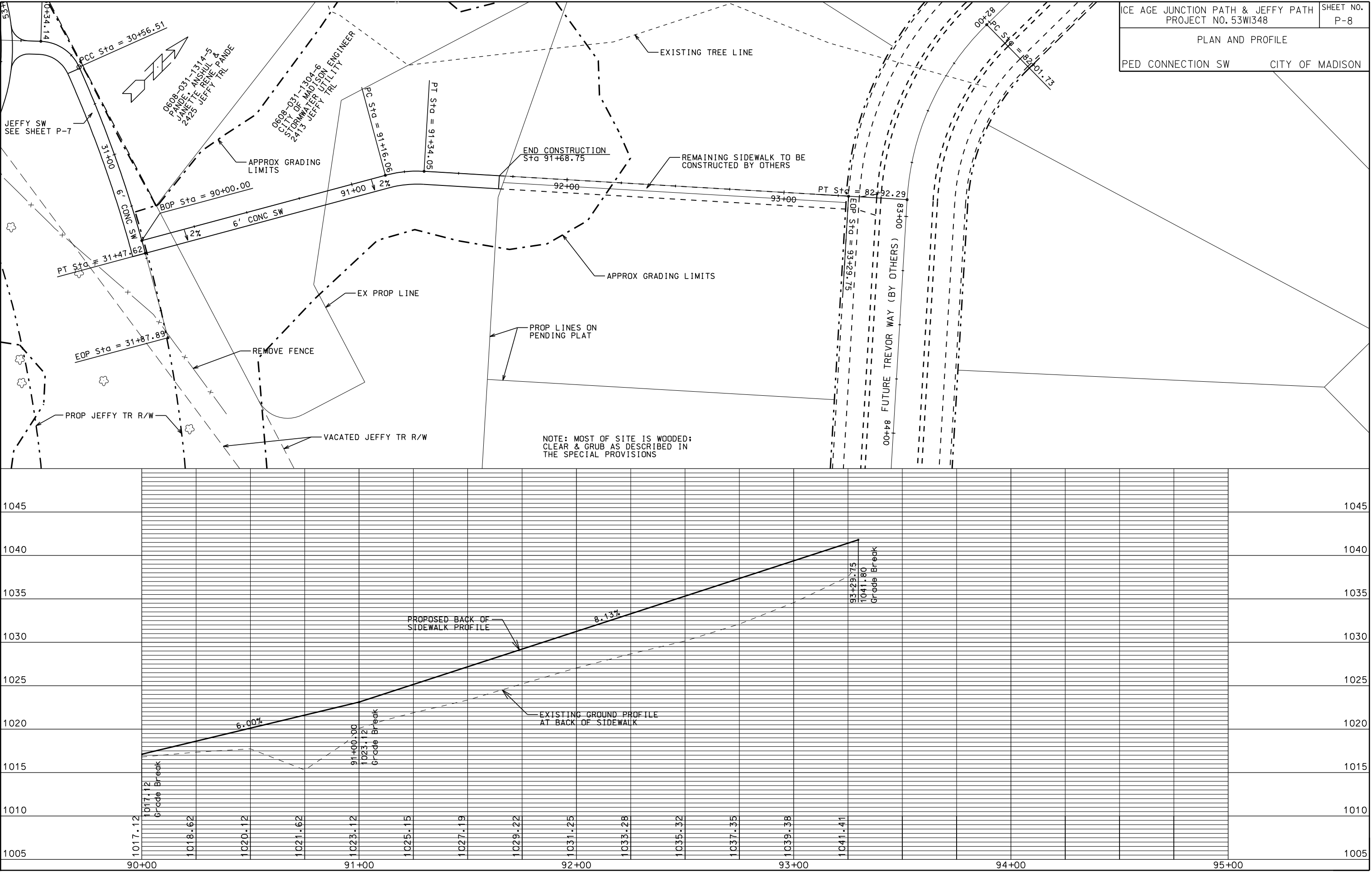
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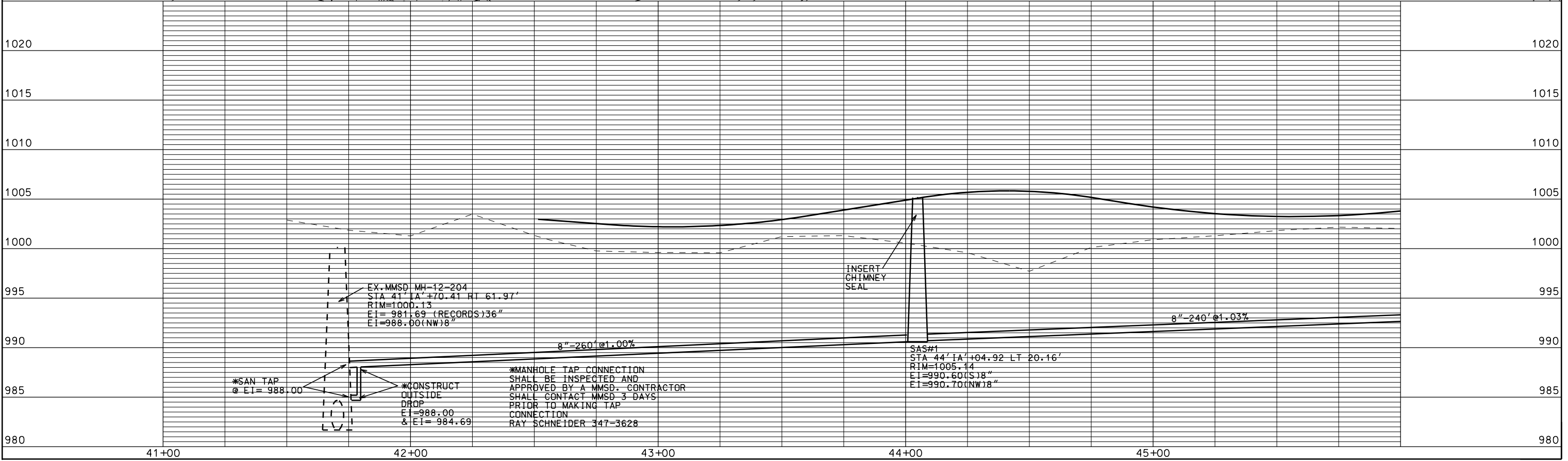
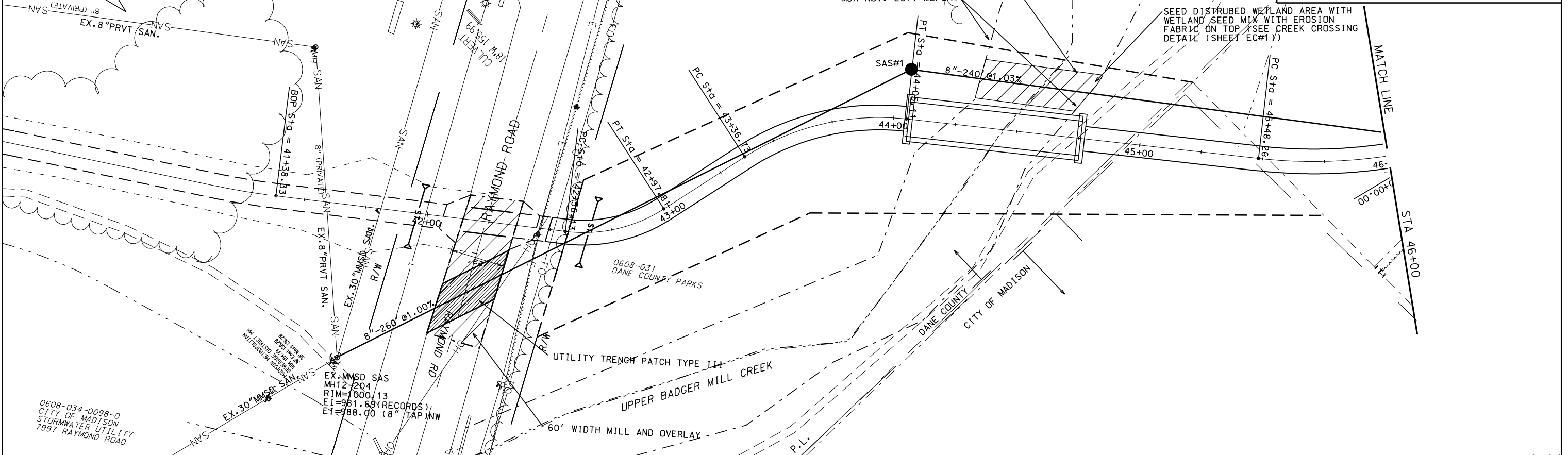
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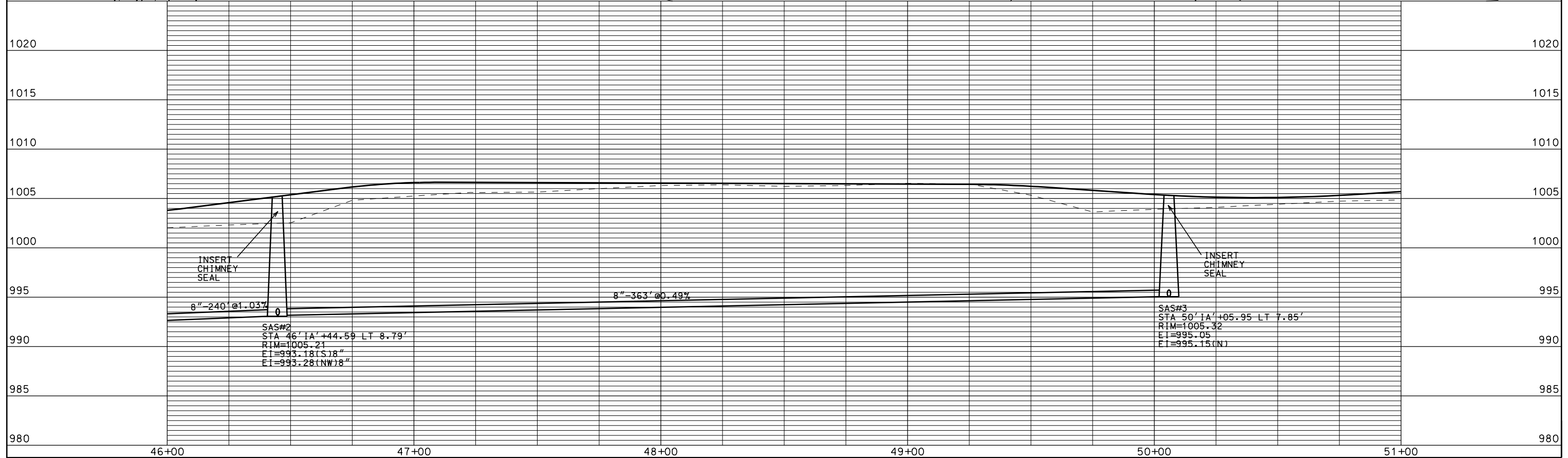
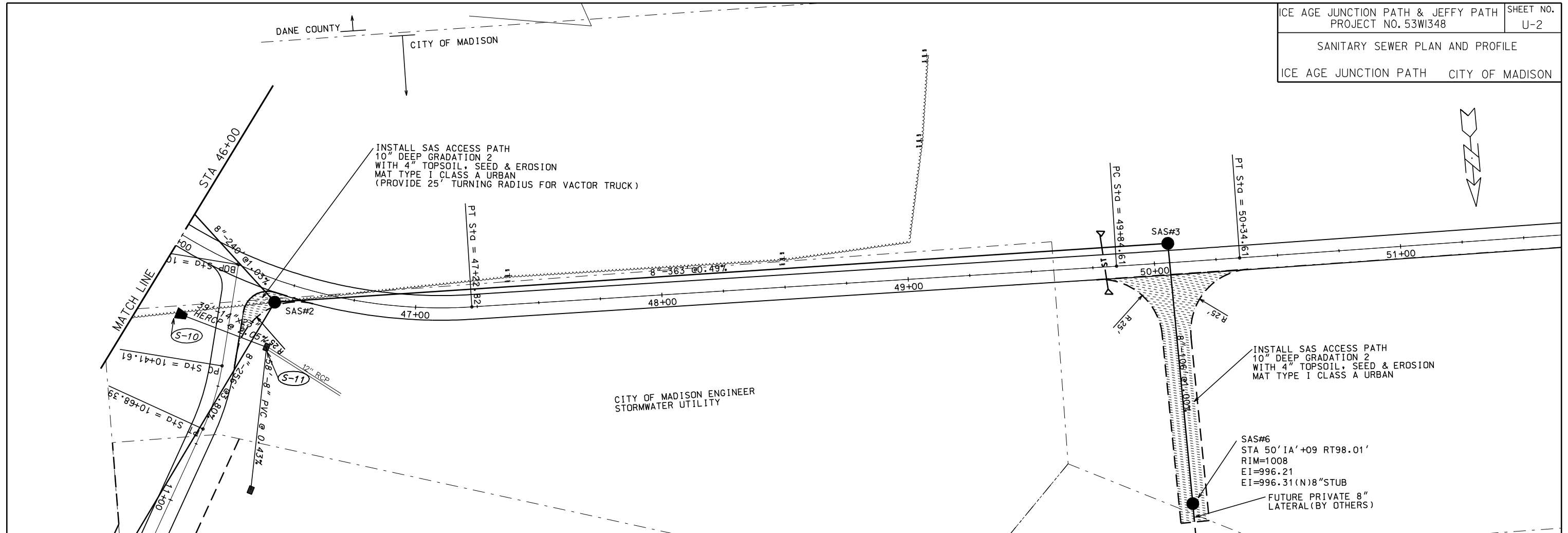


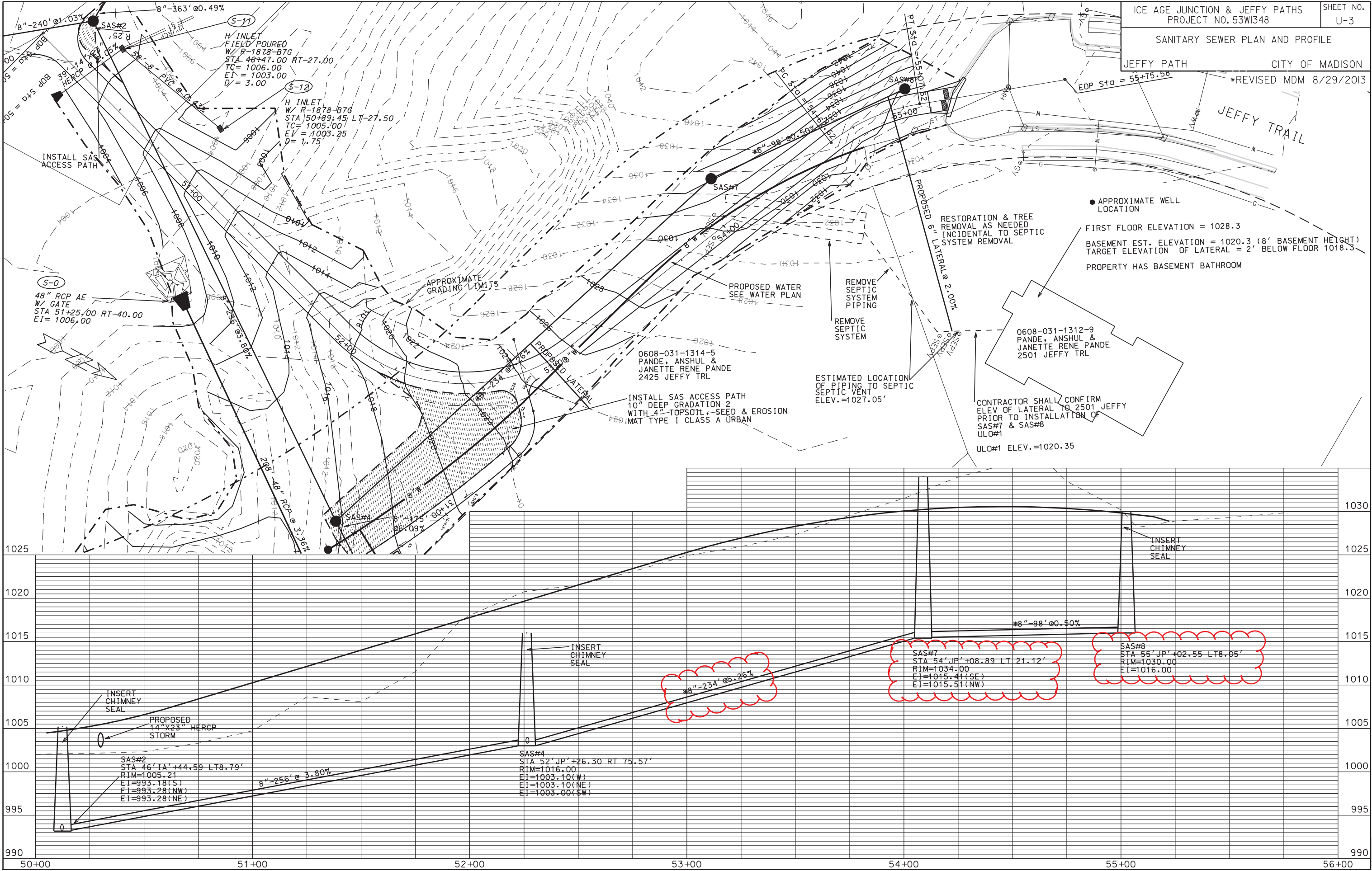
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PLOT NAME: PLOT SCALE: REV. DATE:



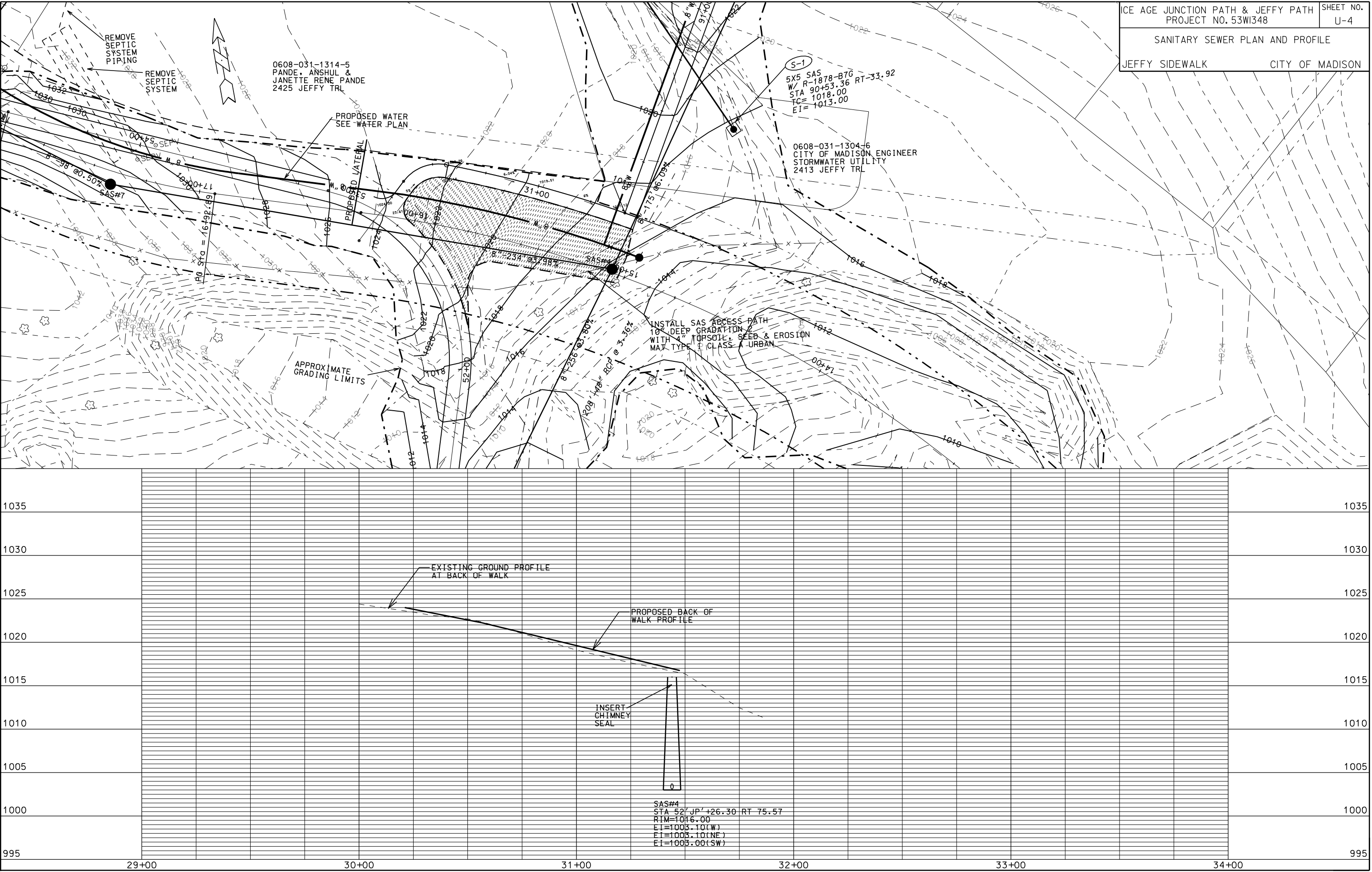


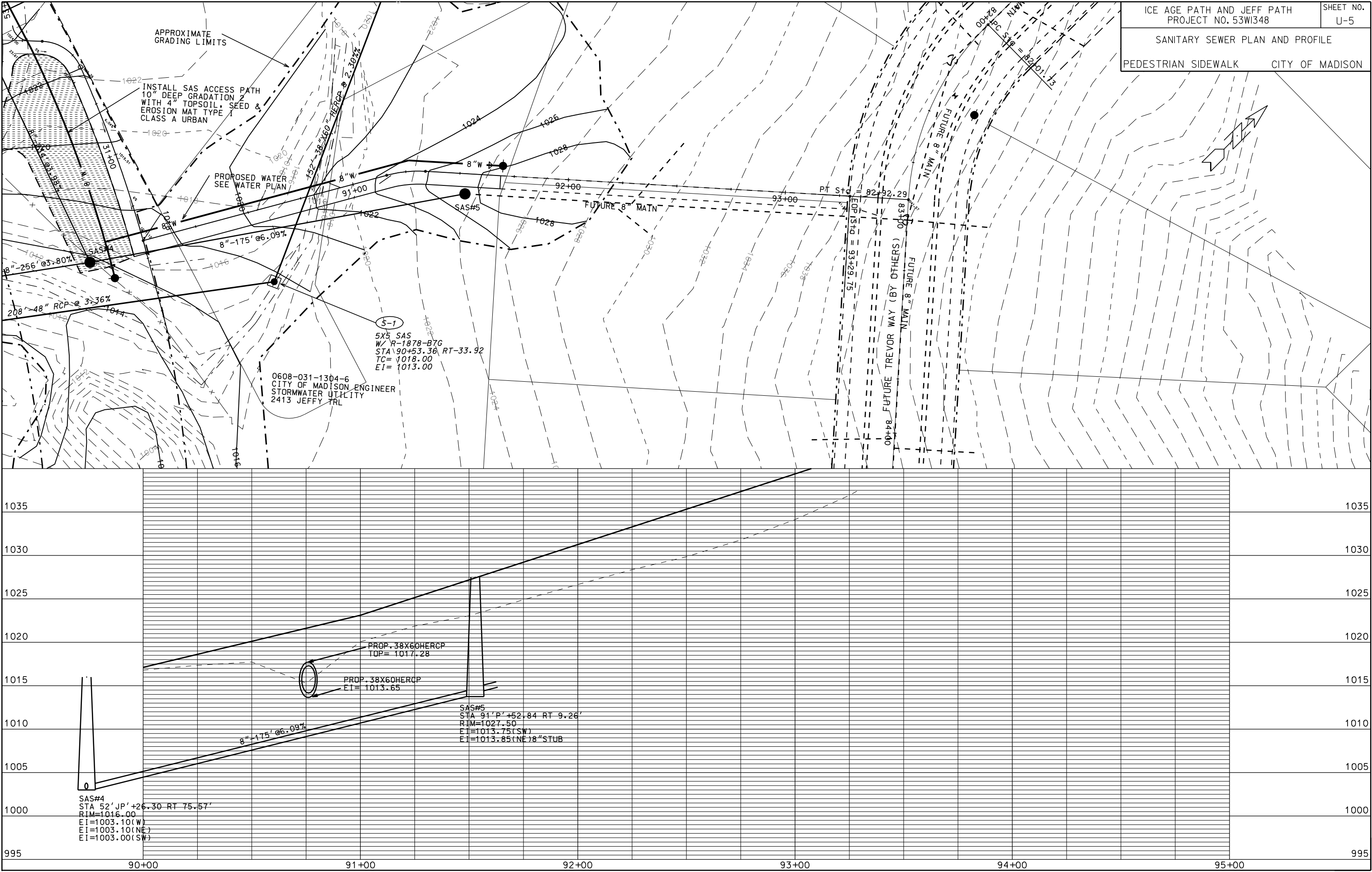




ORIGINATOR: CITY OF MADISON, STREETS DIVISION

REV. DATE: PLOT NAME: PLOT SCALE:



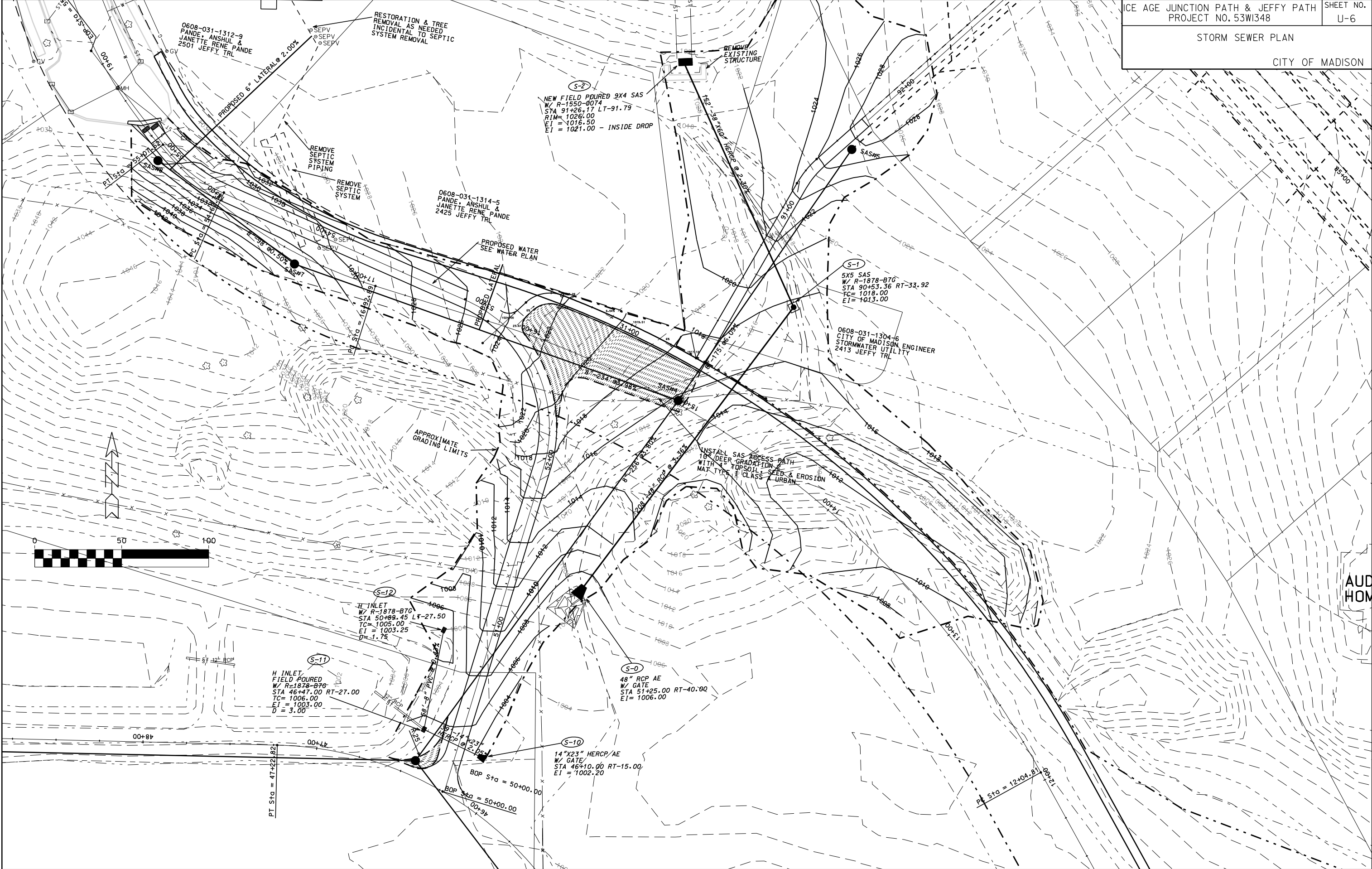


PLOT SCALE: 1"=40'

PLOT NAME: 53WI348

REV. DATE: 5/30/2013

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



SANITARY SCHEDULE

ALIGNMENT CODES:

'IA'- Ice Age Path
'P'- Connector Path To Trevor Way
'JP'- Jeffy Path

ICE AGE & JEFFY PATHS
PROJECT NO. 53W1348

SHEET NO.
U-7

SANITARY SEWER SCHEDULE CITY OF MADISON
*REVISED MDM 8/29/13

PROPOSED SANITARY STRUCTURES

SAS NO.	STATION	LOCATION (OFFSET)	TOP OF CASTING	E.I.	DEPTH	NOTES
SAS#1	44'IA'+04.92	LT-20.16	1005.14	990.60	14.54	INSERT CHIMNEYSEAL
SAS#2	46'IA'+44.59	LT-8.79	1005.21	993.18	12.03	INSERT CHIMNEYSEAL
* SAS#3	50'IA'+05.95	LT-7.85	1005.32	995.05	10.27	INSERT CHIMNEYSEAL
SAS#4	52'JP'+26.30	RT-75.57	1016.00	1003.00	13.00	INSERT CHIMNEYSEAL
SAS#5	91'P'+52.84	RT-9.26	1027.50	1013.75	13.75	
SAS#6	50'IA'+09.00	RT-98.01	1008.00	996.21	11.79	INSERT CHIMNEYSEAL
* SAS#7	54'JP'+08.89	LT-21.12	1034.00	1015.41	18.59	
* SAS#8	55'JP'+02.55	LT-8.05	1030.00	1016.00	14.00	INSERT CHIMNEYSEAL

PROPOSED SANITARY PIPES

FROM SAS (DWNSTRM)	TO SAS (UPSTREAM)	EI # (DWNSTRM)	EI # (UPSTRM)	LENGTH (FT)	SLOPE (%)	SIZE (DIA)	PVC TYPE	NOTES
MMSD MH12-204	SAS#1	988.00	990.60	260	1.00%	8"	SDR-26	
SAS#1	SAS#2	990.70	993.18	240	1.03%	8"	SDR-26	
SAS#2	SAS#3	993.28	995.05	363	0.49%	8"	SDR-26	
SAS#3	SAS#6	995.15	996.21	106	1.00%	8"	SDR-26	
* SAS#4	SAS#7	1003.10	1015.41	234	5.26%	8"	SDR-26	
* SAS#7	SAS#8	1015.51	1016.00	98	0.50%	8"	SDR-26	
SAS#4	SAS#5	1003.10	1013.75	175	6.09%	8"	SDR-26	
* SAS#2	SAS#4	993.28	1003.00	256	3.80%	8"	SDR-26	

OUTSIDE DROP

INSIDE DROP

SAS NO.	STATION	LOCATION (OFFSET)	TOP OF CASTING	E.I.(upper)	E.I.(lower)	OUTSIDE DROP (V.F.)
* MMSD MH12-204	41'IA'+70.41	RT-61.97	1000.13	988.00	984.69	3.31

UTILITY LINE OPENING

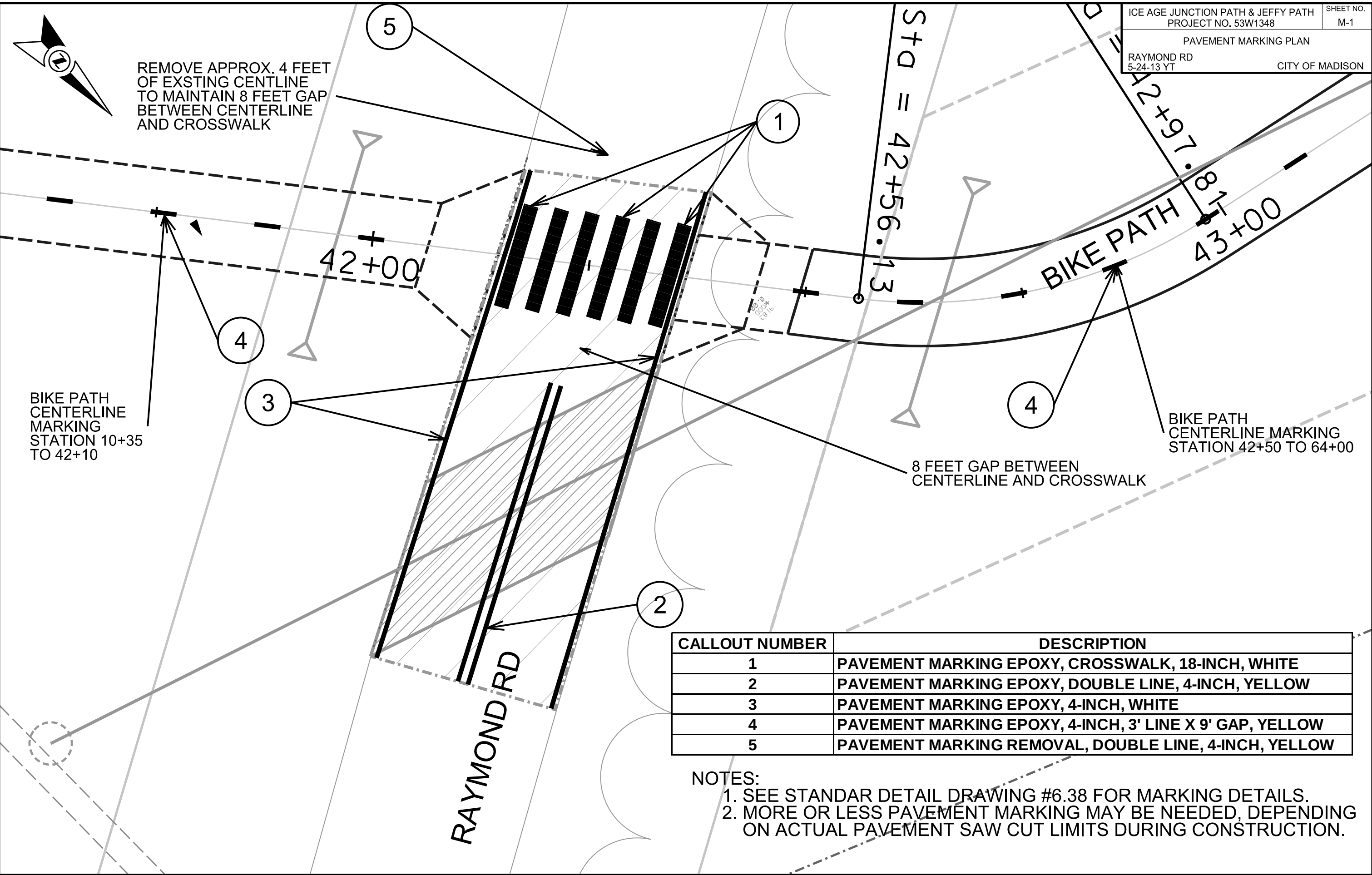
	STATION	LOCATION	DESCRIPTION
ULO #1	55'JP'+16.95	RT-106.38	CONFIRM 2501 JEFFY TRAIL LATERAL ELEVATION PRIOR TO INSTALL SAS #7 & #8

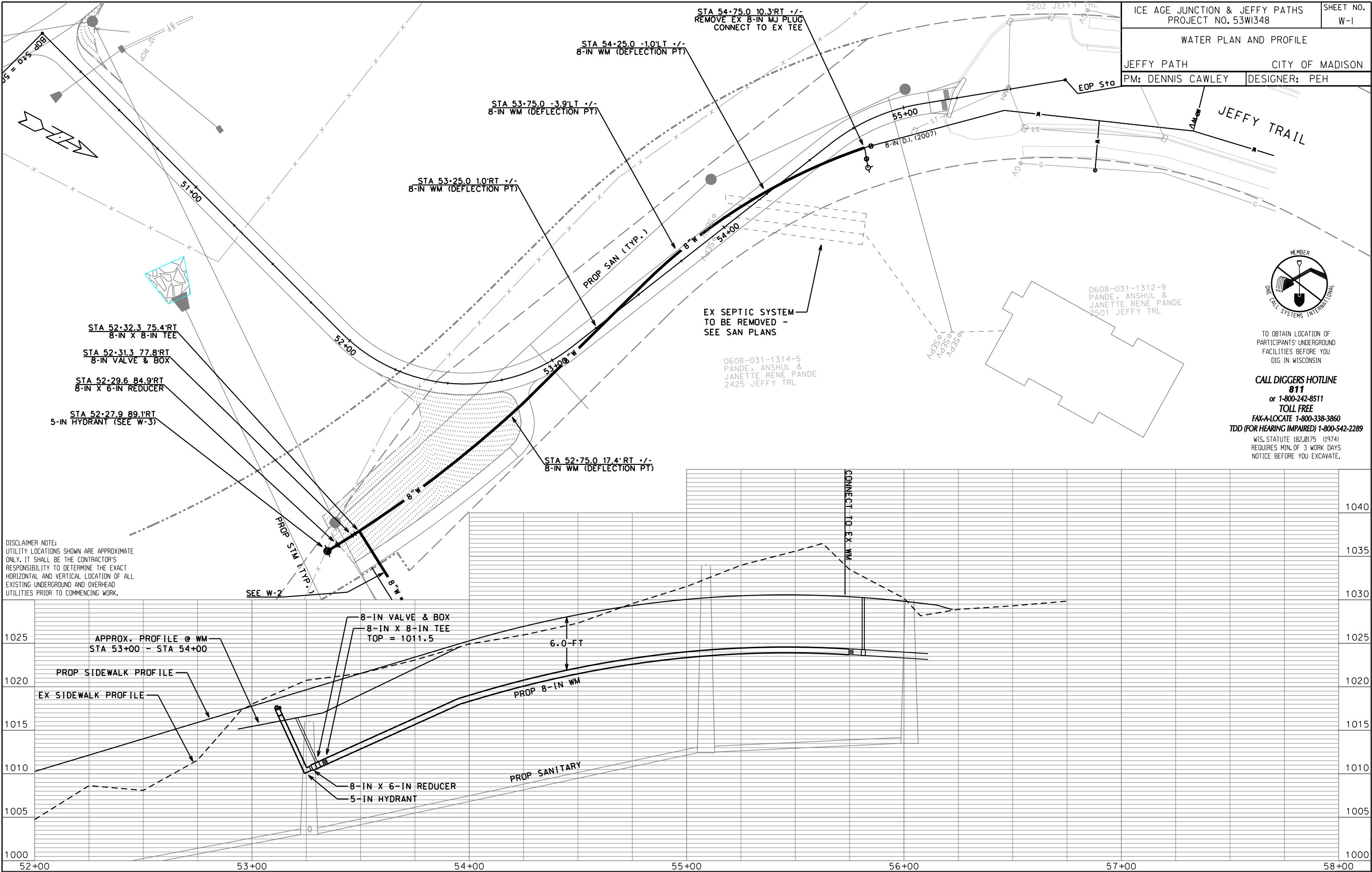
PLOT SCALE:

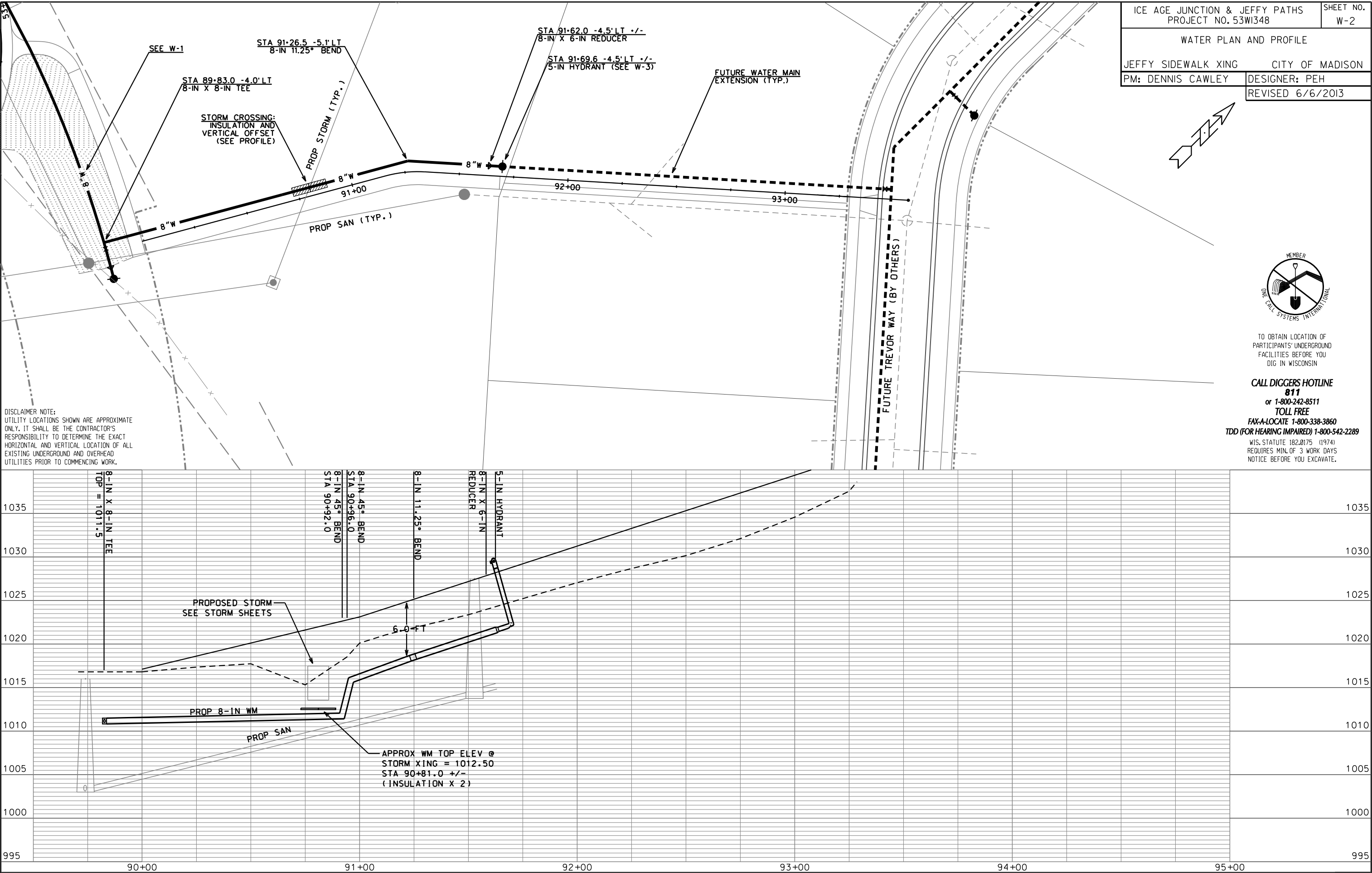
PLOT NAME:

REV. DATE:

ORIGINATOR: CITY OF MADISON, TRAFFIC ENG. DIV.

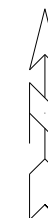






JEFFY TRAIL CITY OF MADISON

DESIGNER: PEH



FLAGSTONE DR

V-9

V-22

JEFFY TRL

- CONNECT TO EX 8-IN WM:
 - TURN VALVE "V-22"
 - NO NOTIFICATIONS

GENERAL ELECTRIC NOTES:

1. ALL LOCATIONS ARE APPROXIMATE. THE TRAFFIC ENGINEER SHALL APPROVE FINAL LOCATIONS, INCLUDING SETBACK, IN THE FIELD AFTER CONTRACTOR SURVEYS STAKING. THE CONTRACTOR SHALL NOTIFY DAN DETTMANN (266-6536) CITY TRAFFIC ENGINEERING, AT LEAST 24-HOURS IN ADVANCE OF NEEDING CONDUIT OR BASE LOCATIONS MARKED.

2. THE CONTRACTOR SHALL DO ALL WORK IN ACCORDANCE WITH "CITY OF MADISON STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2013 EDITION" AND ALL ADDENDUMS THERETO.

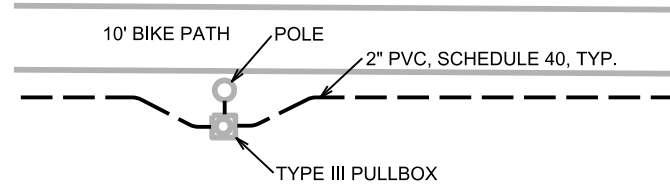
3. THE CONTRACTOR SHALL CALL MIKE CHRISTOPH (266-9031) AT THE TRAFFIC ENGINEERING SHOP AT LEAST 24-HOURS IN ADVANCE OF POURING BASES OR BURYING CONDUIT TO ARRANGE FOR INSPECTION. ANY WORK COMPLETED WITHOUT INSPECTION IS SUBJECT TO REJECTION.

4. CONTRACTOR SHALL INSTALL STREETLIGHTING WIRE IN ALL CONDUIT, EXCEPT DEAD END CONDUIT FROM L646A TO THE WEST, 3#6 & 1#8, PER STANDARD SPEC 602.2(A). SPLICING SHALL ONLY OCCUR IN POLE, NOT IN PULLBOX.

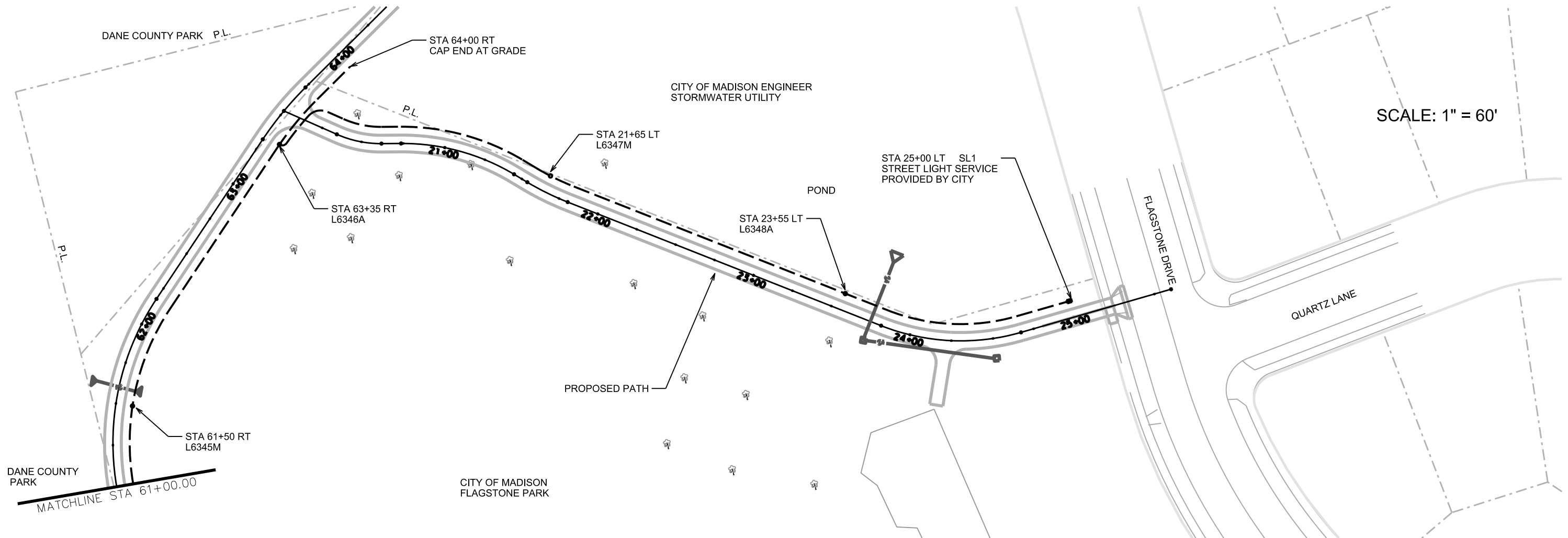
5. CONTRACTOR SHALL INSTALL CITY-FURNISHED STREETLIGHT UNITS AS FOLLOWS: 29-FOOT DIRECT BURIED CONCRETE POLE, 6' ARM, AND 50-WATT LED FIXTURE

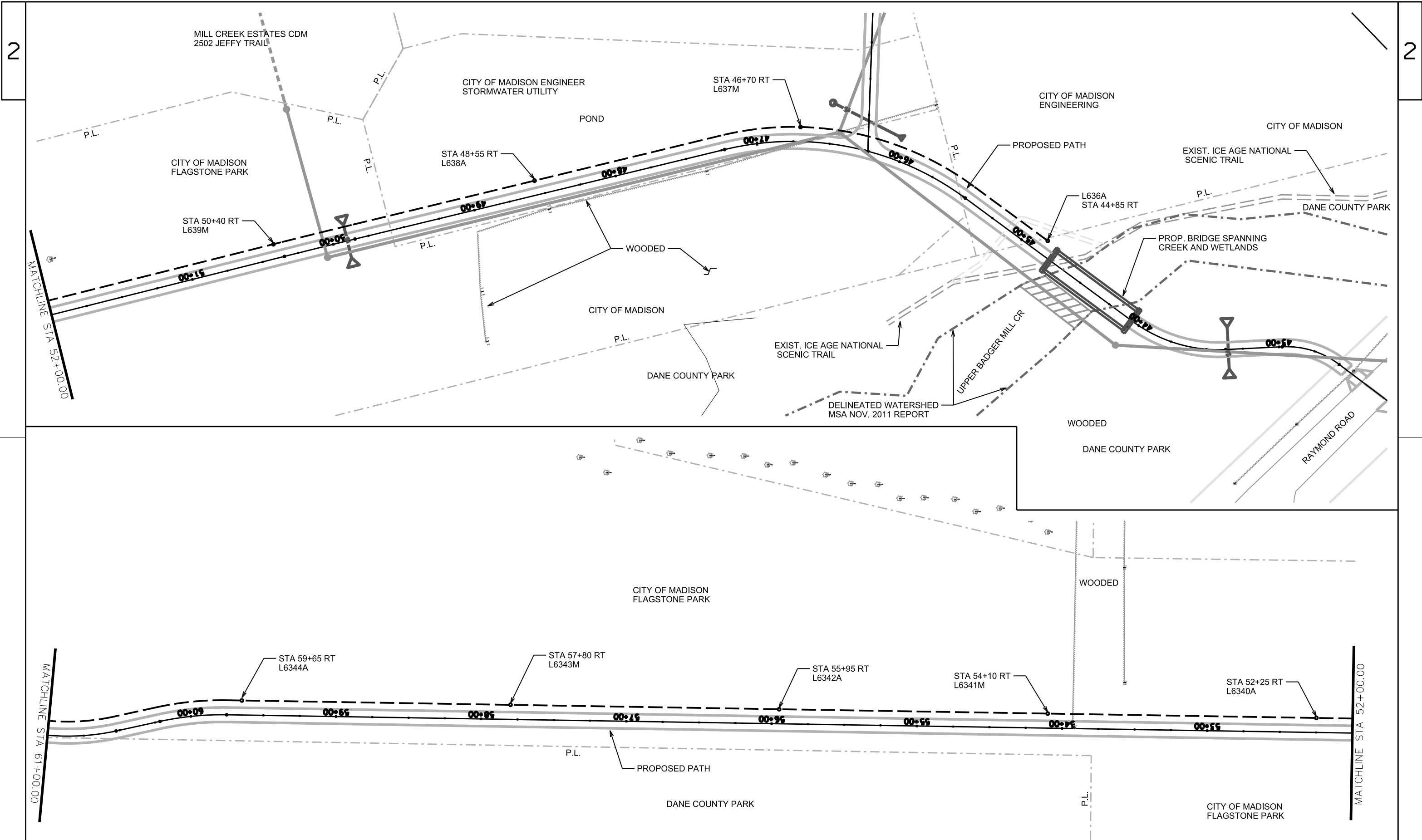
6. LOCATION OF CONDUIT AND POLES SHALL BE FIVE FEET FROM EDGE OF PATH, SUBJECT TO NOTE 1 ABOVE.

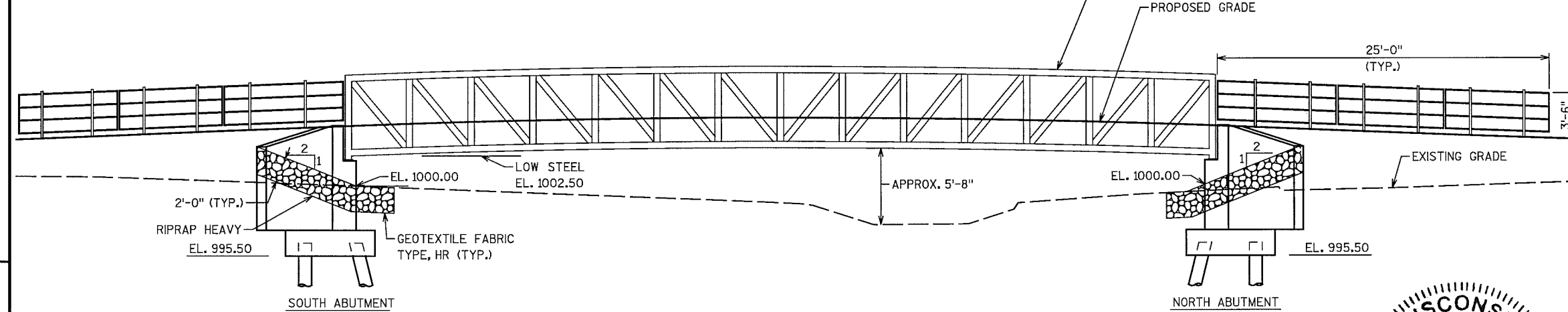
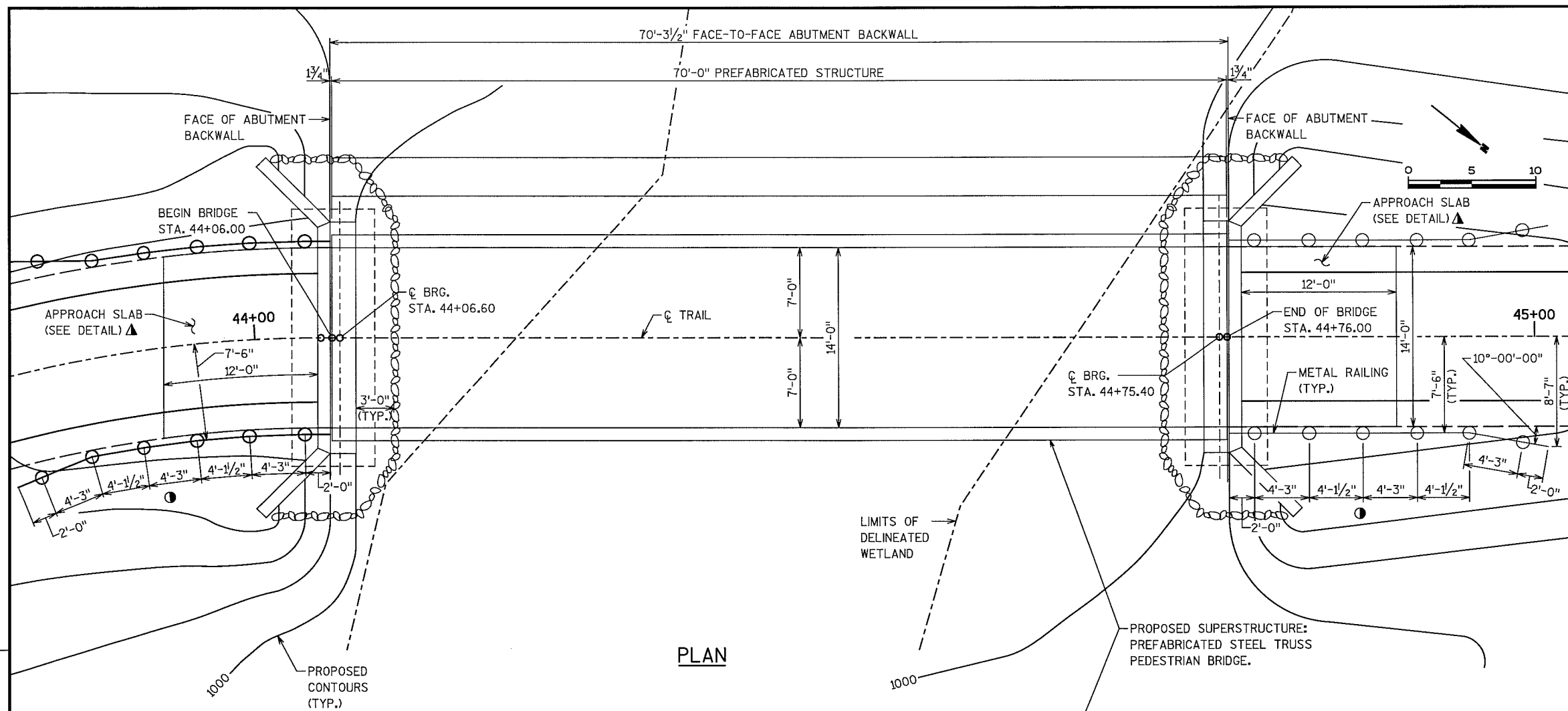
TYPICAL AT EACH LIGHT LOCATION:



CONNECTION FROM POLE TO PULLBOX: TWO (2) THIN WALL FLEXIBLE 1" (ONE-INCH) CONDUITS.







DESIGN DATA

LIVE LOAD:
GREATER OF 90 PSF OR H-10 VEHICLE

ULTIMATE DESIGN STRESSES:
CONCRETE MASONRY $f'_c = 3,500$ P.S.I.

HIGH STRENGTH BAR STEEL
REINFORCEMENT GRADE 60 $f_y = 60,000$ P.S.I.

STRUCTURAL STEEL $f_y = 50,000$ P.S.I.
(WEATHERING STEEL)

ABUTMENT DESIGN IS BASED ON THE FOLLOWING UNFACTORED
REACTION LOADS PER BASE PLATE (4 PER BRIDGE):

ASSUMED TRUSS BEARING LOADS

TYPE	LOADING	NOTES
DEAD LOAD (DC)	25.5 KIPS PER BEARING DOWNWARD	INCLUDES TRUSS, DECK AND ALL OTHER TRUSS DEAD LOADS COMPLETE IN PLACE.
PEDESTRIAN LOAD (PL)	22 KIPS PER BEARING DOWNWARD	90 PSF PED. LOADING. H10 VEHICLE DETERMINED NOT TO CONTROL ABUTMENT DESIGN. CONTRACTOR SHALL DETERMINE THE NECESSITY OF USING VEHICLE LOADING FOR THE TRUSS DESIGN. NO LIVE LOAD REDUCTION ALLOWED.

CONTRACTOR TO VERIFY SUPPLIED BRIDGE LOADS.

HYDRAULIC DATA

NONE AVAILABLE

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON $10\frac{3}{4}$ " DIA. CAST-IN-PLACE CONCRETE PILING (WITH 0.365" WALL THICKNESS) DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 48 $\frac{1}{2}$ TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 15 FEET LONG AT BOTH ABUTMENTS.

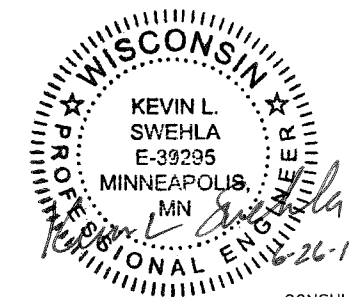
*THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY THE RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

INDEX OF SHEETS

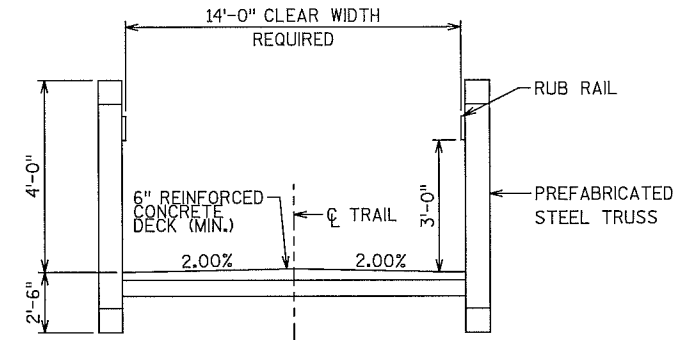
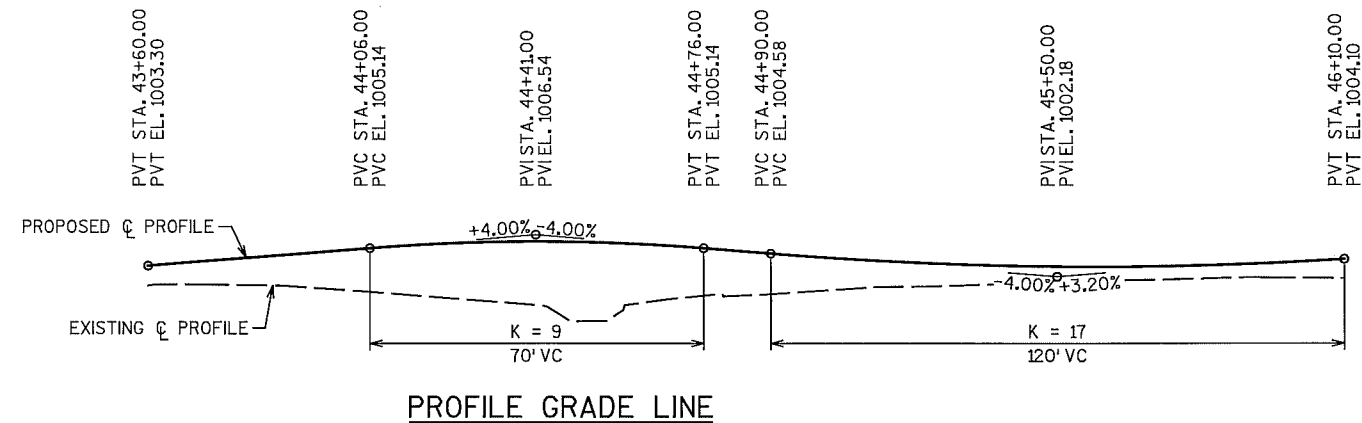
- S1 GENERAL PLAN
- S2 PROFILE, NOTES AND QUANTITIES
- S3 ABUTMENT DETAILS (1 OF 2)
- S4 ABUTMENT DETAILS (2 OF 2)
- S5 RAILING AND APPROACH SLAB DETAILS

NOTES:

- METAL RAILING POST SPACING. RAILING DIMENSIONS TYPICAL EACH SIDE.
- ▲ BLOCK OUT APPROACH SLAB AS NEEDED TO ACCOMMODATE RAIL POST FOOTING.



CONSULTANT CONTACT:
KEVIN SWEHLA
(608) 829-0010



TYPICAL SECTION THRU BRIDGE

GENERAL NOTES

BID ITEM " PREFABRICATED PEDESTRIAN BRIDGE" SHALL INCLUDE ALL MATERIALS, LABOR AND DESIGN FOR THE PREFABRICATED SUPERSTRUCTURE. BID ITEM SHALL INCLUDE BUT NOT LIMITED TO: STEEL TRUSS, BEARINGS, STEEL COVER PLATE, CONCRETE DECK AND REINFORCEMENT COMPLETE IN PLACE.

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

AT THE BACK FACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE IN PLACE BEFORE ABUTMENT CONSTRUCTION AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACK FILLED WITH STRUCTURAL BACK FILL.

THE STRUCTURE DESIGN SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" AND "LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES" BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIAL (AASHTO).

THE SUPERSTRUCTURE SHALL BE ANCHORED TO THE FOUNDATIONS IN A MANOR TO:

- ALLOW THERMAL MOVEMENTS OF THE SUPERSTRUCTURE
- PREVENT HORIZONTAL TRANSLATION OF THE SUPERSTRUCTURE PERPENDICULAR TO THE CL OF THE BIKE PATH.

MATERIALS FABRICATION AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STATE OF WISCONSIN STANDARD SPECIFICATION FOR HIGHWAY AND STRUCTURAL CONSTRUCTION.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH RIPRAP HEAVY AND GEOTEXTILE FABRIC TO THE EXTENT SHOWN ON THE GENERAL PLAN SHEET.

PREFABRICATED BRIDGE SHALL BE MANUFACTURED WITH WEATHERING STEEL.

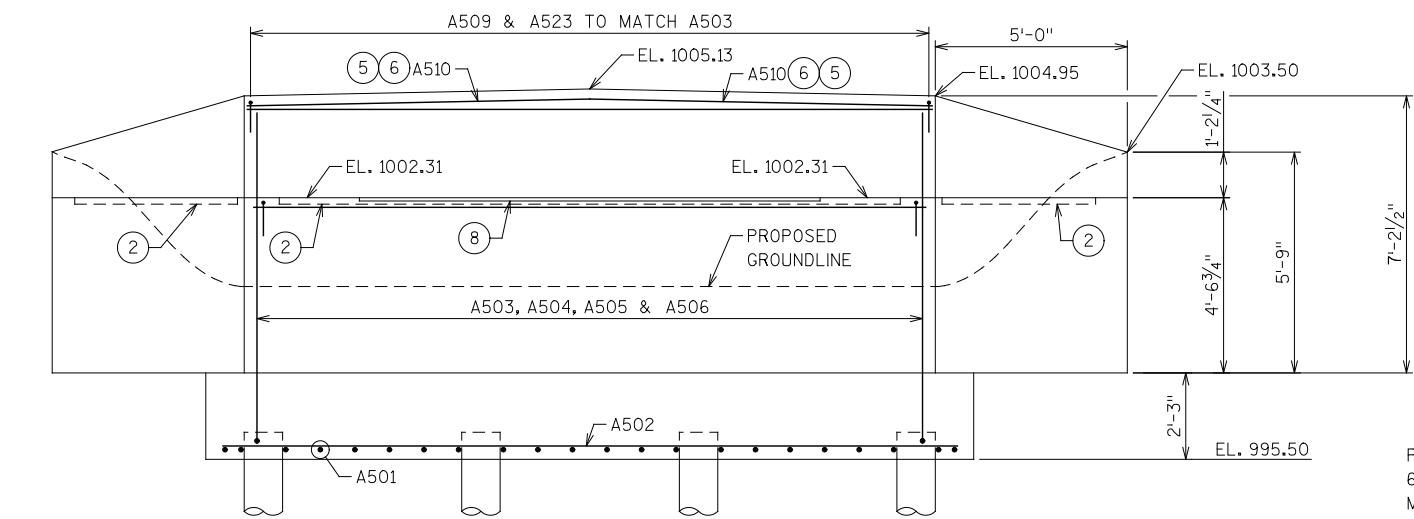
PILE SPLICES SHALL NOT BE PERMITTED.

CONTRACTOR TO VERIFY ALL DIMENSIONS AND ELEVATIONS OF ABUTMENTS WITH PREFABRICATED BRIDGE MANUFACTURER PRIOR TO CONSTRUCTION OF THE ABUTMENTS. ADJUSTMENTS REQUIRED TO FIT ABUTMENTS TO PREFABRICATED BRIDGE SHALL BE MADE IN THE FIELD.

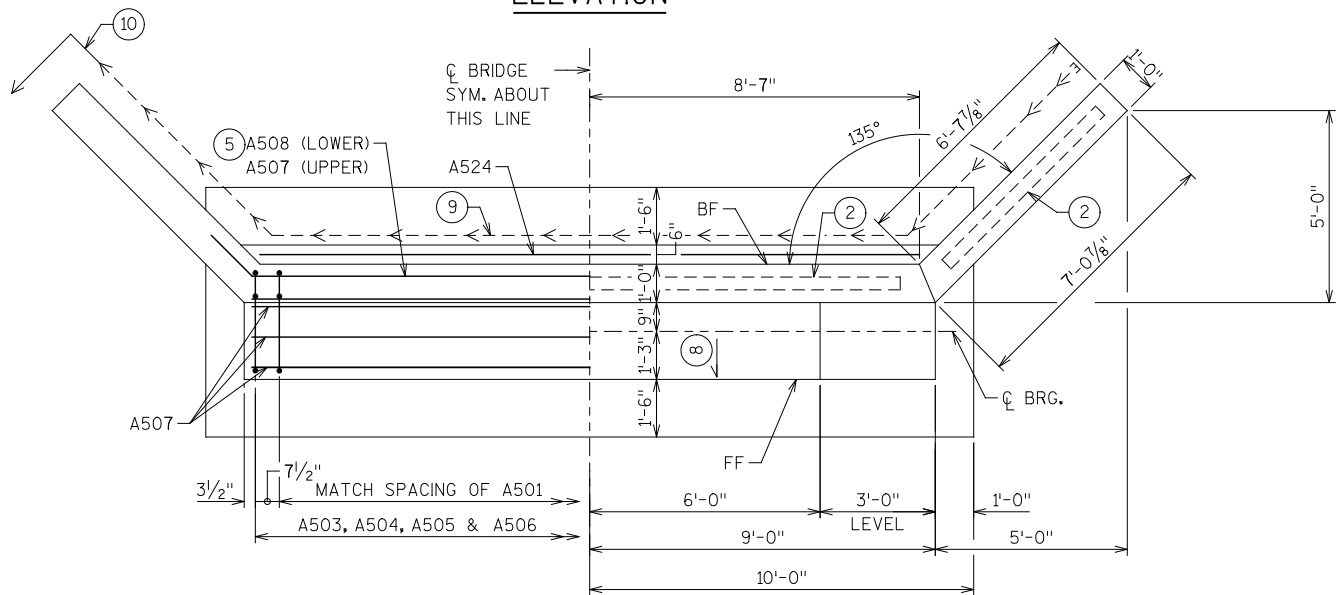
PREFABRICATED BRIDGE TO HAVE HORIZONTAL SAFETY RAILS WITH A MAXIMUM OPENING OF 4" FOR PEDESTRIANS AND BICYCLISTS.

TOTAL ESTIMATED QUANTITIES

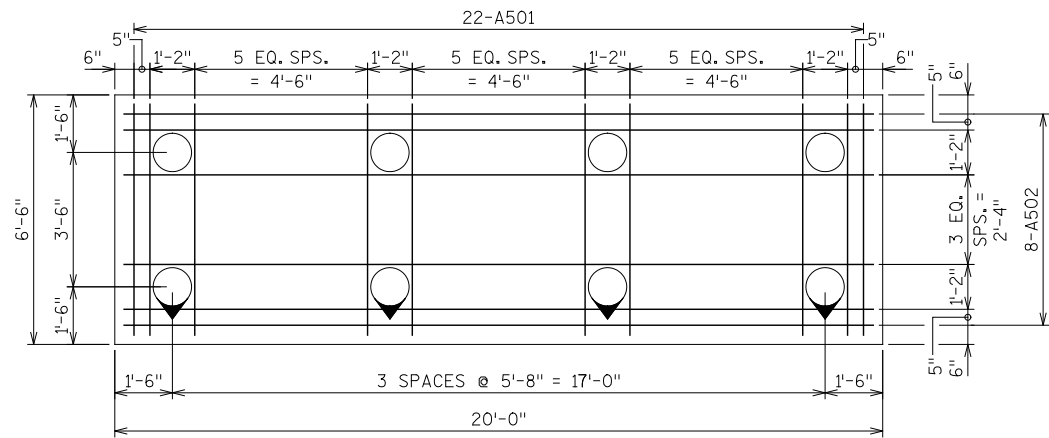
ITEM NO.	BID ITEMS	UNIT	SOUTH ABUT.	NORTH ABUT.	TOTALS
90001	BIKE RAILING TYPE 1	LF	50	50	100
90002	PREFABRICATED PEDESTRIAN BRIDGE	LS	-	-	1
90003	EXCAVATION FOR STRUCTURES BRIDGES	LS	-	-	1
90004	BACKFILL STRUCTURE	CY	60	60	120
90005	CONCRETE MASONRY BRIDGES	CY	26	26	52
90006	PROTECTIVE SURFACE TREATMENT	SY	-	-	113
90007	BAR STEEL REINFORCEMENT HS BRIDGES	LB	310	310	620
90008	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	1930	1930	3860
90009	PILING CIP CONCRETE DELIVERED AND DRIVEN 10 3/4 INCH X 0.365-INCH	LF	120	120	240
90010	RUBBERIZED MEMBRANE WATERPROOFING	SY	6	6	12
90011	RIPRAP HEAVY	CY	10	10	20
90012	PIPE UNDERDRAIN 6-INCH	LF	31	31	62
90013	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	9	11	20
90014	GEOTEXTILE FABRIC TYPE HR	SY	14	14	28
90015	CONCRETE PAVEMENT APPROACH SLAB	SY	19	19	38



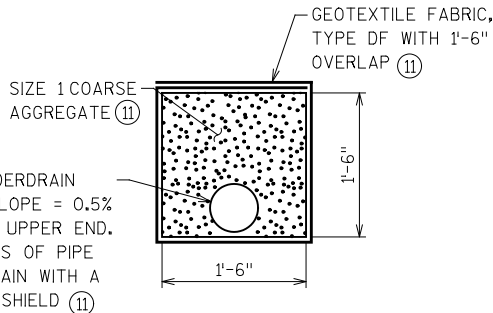
ELEVATION



PLAN



PILE PLAN

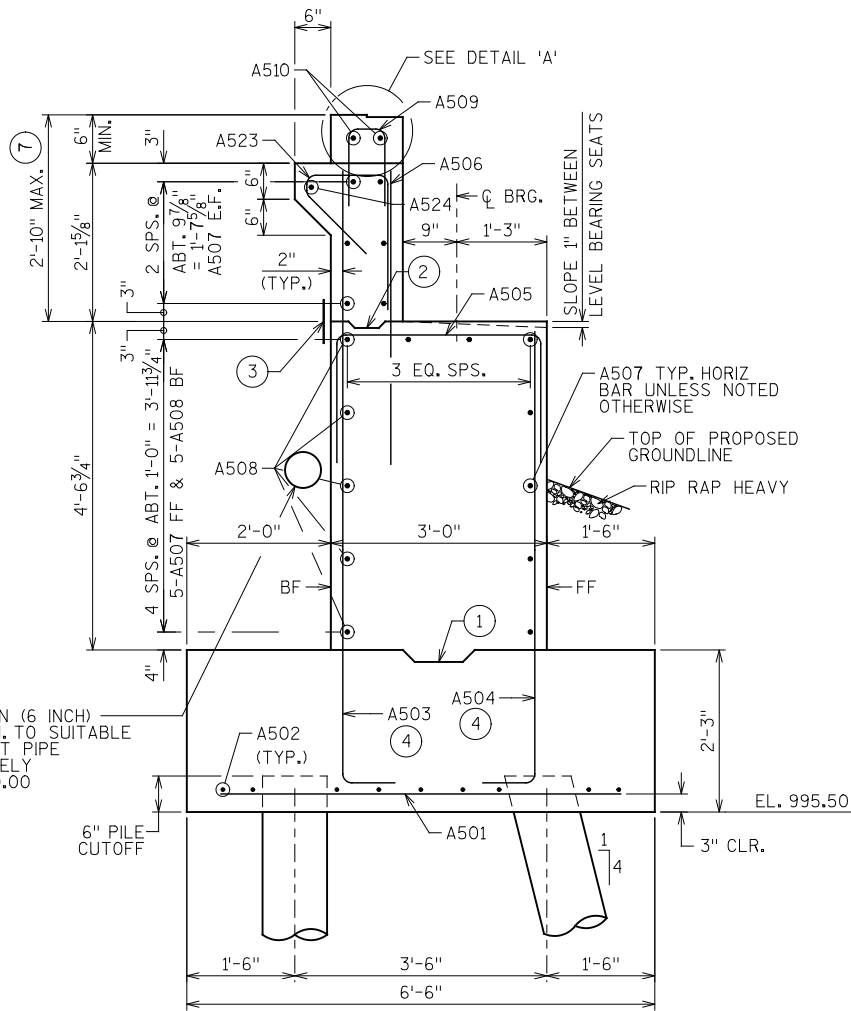


PIPE UNDERDRAIN DETAIL

PIPE UNDERDRAIN (6 INCH)
SLOPE 0.5% MIN. TO SUITABLE
DRAINAGE. INVERT PIPE
AT APPROXIMATELY
ELEVATION 1000.00

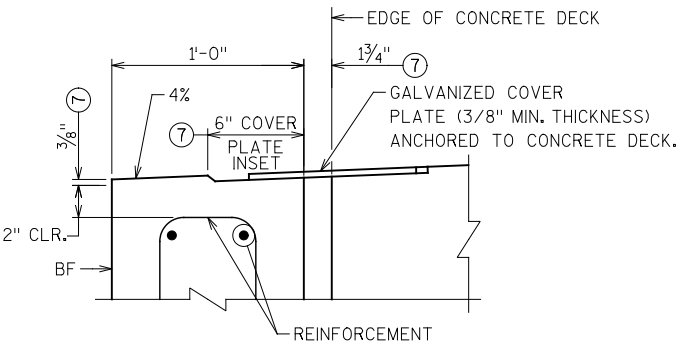
NOTES:

- FF = FRONT FACE
BF = BACK FACE
EF = EACH FACE
- INDICATES BATTERED PILE. BATTER 3" PER FOOT BY DIRECTION SHOWN.
- OPTIONAL CONSTRUCTION JOINT WITH 2" X 6" KEY.
- OPTIONAL CONSTRUCTION JOINT WITH 2" X 4" KEY.
- 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- PLACE DOWELS ON TOP OF FOOTING MAT.
- PROVIDE 2'-11" MIN. LAP.
- FIELD BEND AS NEEDED.
- VERIFY DIMENSION WITH BRIDGE SUPPLIER.
- SLOPE ABUTMENT TOP 1" BETWEEN BRIDGE SEATS.
- PIPE UNDERDRAIN 6-INCH. SLOPE 0.5% MIN. BEHIND ABUTMENT BODY AND WINGWALL.
- PIPE UNDERDRAIN UNPERFORATED 6-INCH. SLOPE 0.5% TO SUITABLE DRAINAGE.
- GEOTEXTILE FABRIC TYPE DF, COARSE AGGREGATE, PIPE BENDS, PIPE CAP AND RODENT SHIELD INCIDENTAL TO BID ITEM "PIPE UNDERDRAIN 6-INCH".

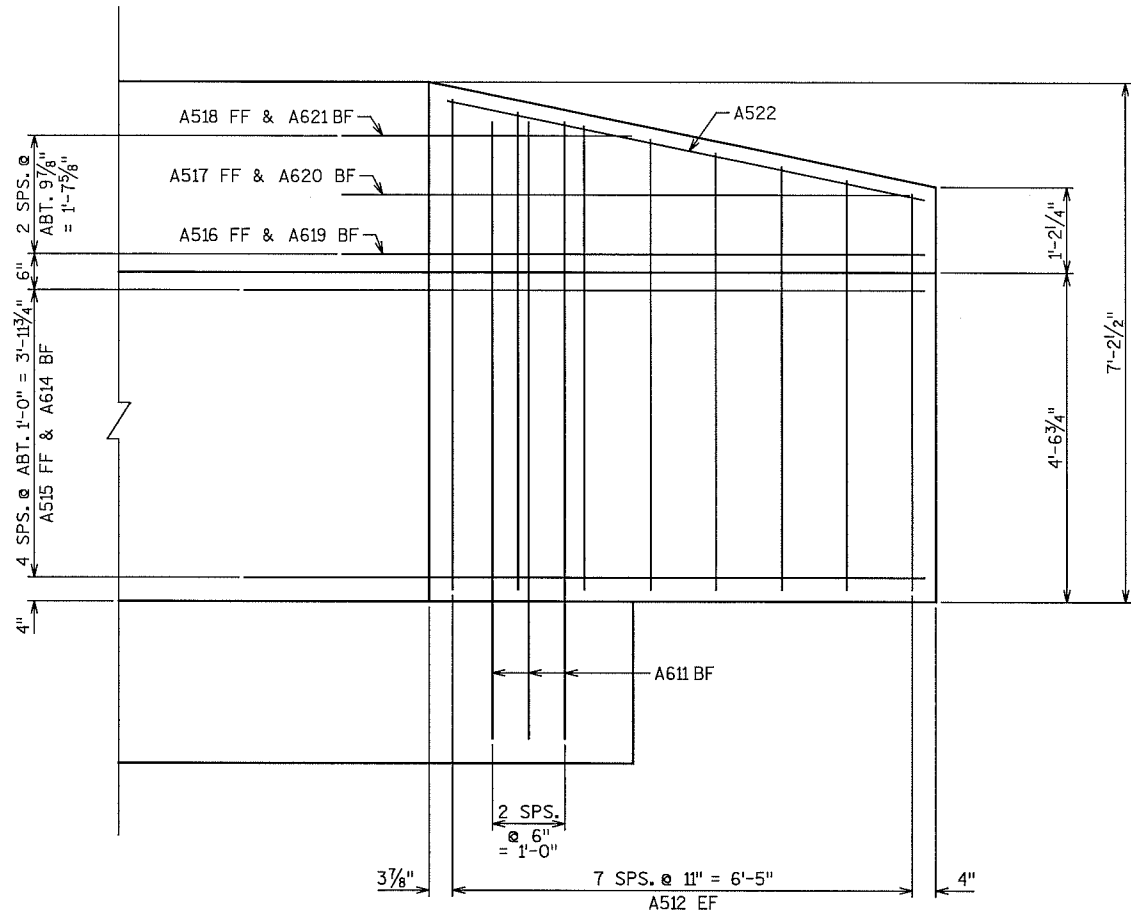


SECTION THRU ABUTMENT

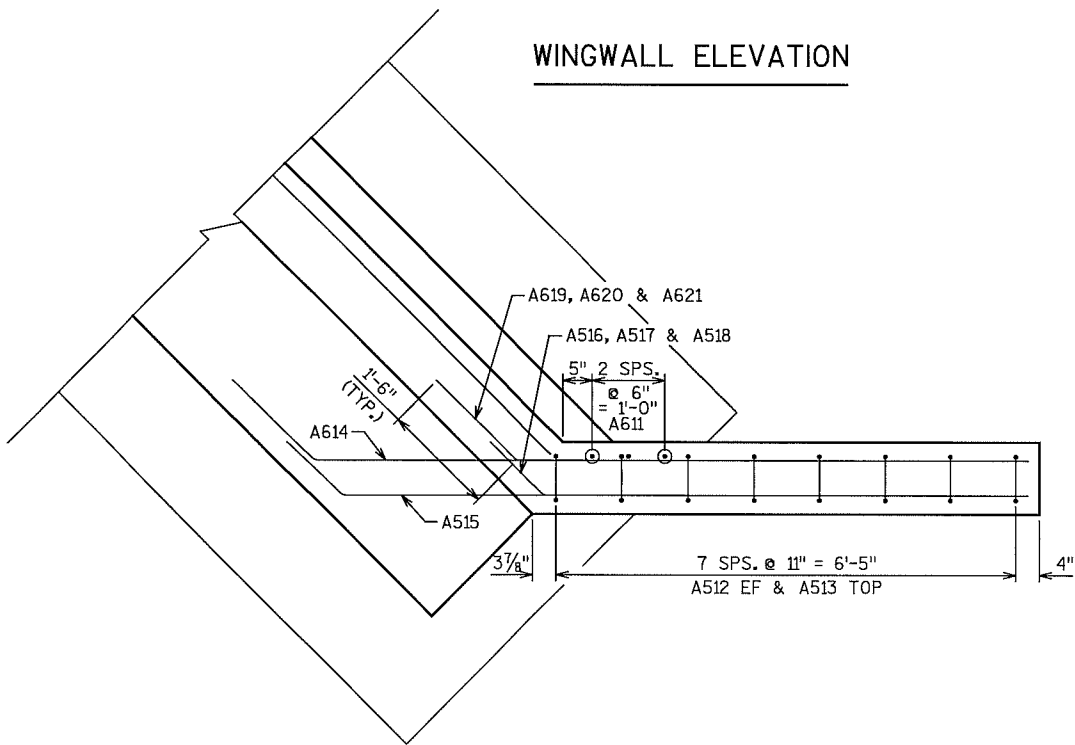
ABUTMENTS ARE TO BE SUPPORTED ON 10 3/4" C-I-P CONCRETE PILES (WITH 0.365" WALL THICKNESS) WITH A REQUIRED DRIVING RESISTANCE OF 48 TONS PER PILE. ESTIMATED 15 FT PILE AT BOTH ABUTMENTS.



DETAIL A

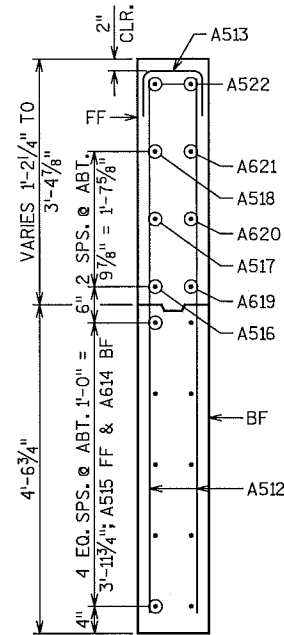


WINGWALL ELEVATION

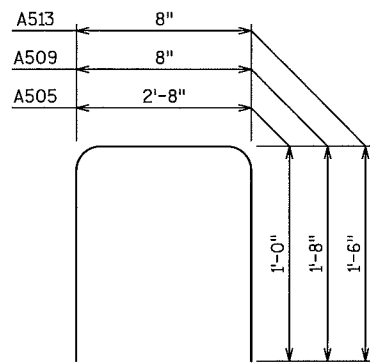


WINGWALL PLAN

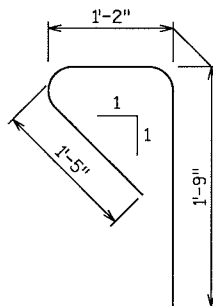
(TYP. ALL WINGWALLS)



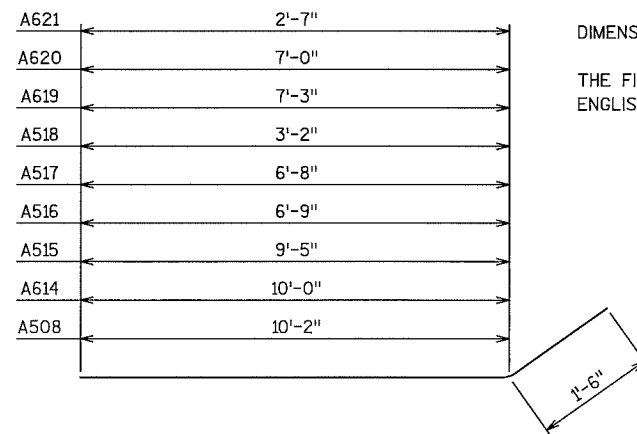
SECTION THRU WINGWALL



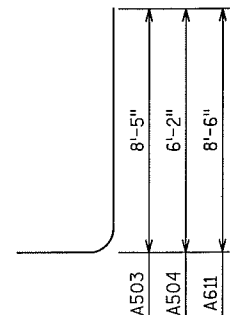
A505, A509 & A513



A523



A508, A614, A515, A516, A517
A518, A619, A620 & A621



A503, A504 & A611

BILL OF BARS: BOTH ABUTMENTS

BAR MARK	COAT	NO. REQ'D	LENGTH [FT - IN]	BENT	BAR SERIES	LOCATION
A501		44	6 - 0			FOOTING TRANS.
A502		16	19 - 6			FOOTING LONG.
A503	X	44	9 - 2	X		BF FOOT DOWEL
A504	X	44	6 - 11	X		FF FOOT DOWEL
A505	X	44	4 - 5	X		ABUT STEM TOP
A506	X	44	3 - 0			BW VERT
A507	X	26	17 - 6			FF ABUT HORIZ
A508	X	20	11 - 8	X		BF ABUT HORIZ
A509	X	44	3 - 9	X		BW TOP
A510	X	8	10 - 3			BW ABUT HORIZ
A611	X	12	9 - 4	X		WW BF DOWEL
A512	X	72	6 - 1		Δ	WW FF VERT
A513	X	32	3 - 5	X		WW TOP
A614	X	20	11 - 6	X		WW BF HORIZ STEM
A515	X	20	10 - 11	X		WW FF HORIZ STEM
A516	X	4	8 - 3	X		WW FF HORIZ BW
A517	X	4	8 - 2	X		WW FF HORIZ BW
A518	X	4	4 - 8	X		WW FF HORIZ BW
A619	X	4	8 - 9	X		WW BF HORIZ BW
A620	X	4	8 - 6	X		WW BF HORIZ BW
A621	X	4	4 - 1	X		WW BF HORIZ BW
A522	X	8	6 - 6			WW TOP HORIZ
A523	X	44	4 - 1	X		ABUT BW BENT
A524	X	2	17 - 3			ABUT BW HORIZ

BAR SERIES TABLE BOTH ABUTMENTS

BAR MARK	BENT	NO. REQ'D	LENGTH
A512		8 SERIES OF 9	5'-5" TO 6'-9"

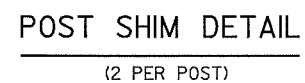
NOTES:

FF = FRONT FACE
BF = BACK FACE
EF = EACH FACE

Δ LENGTH SHOWN FOR BAR IS AVERAGE LENGTH AND SHOULD BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR AVERAGE LENGTHS.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE ENGLISH BAR DIAMETER SIZE.



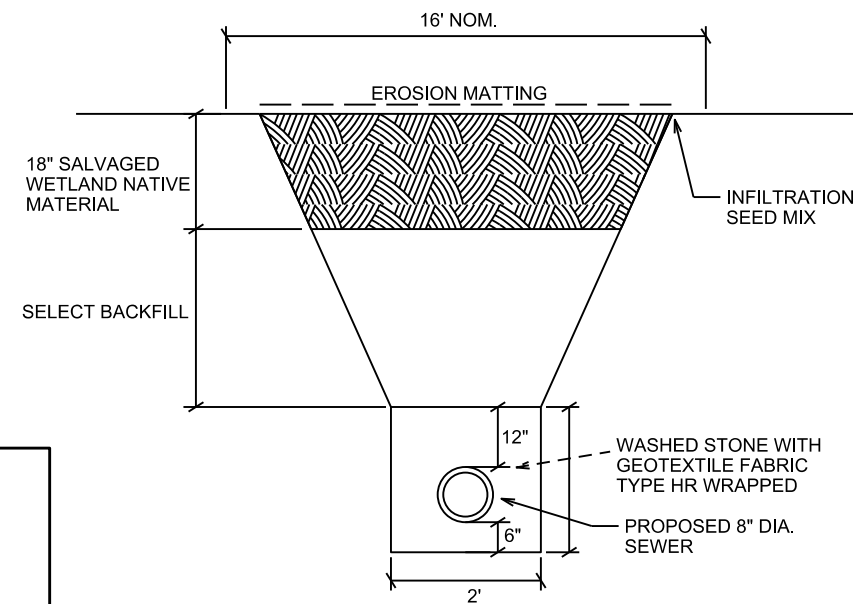
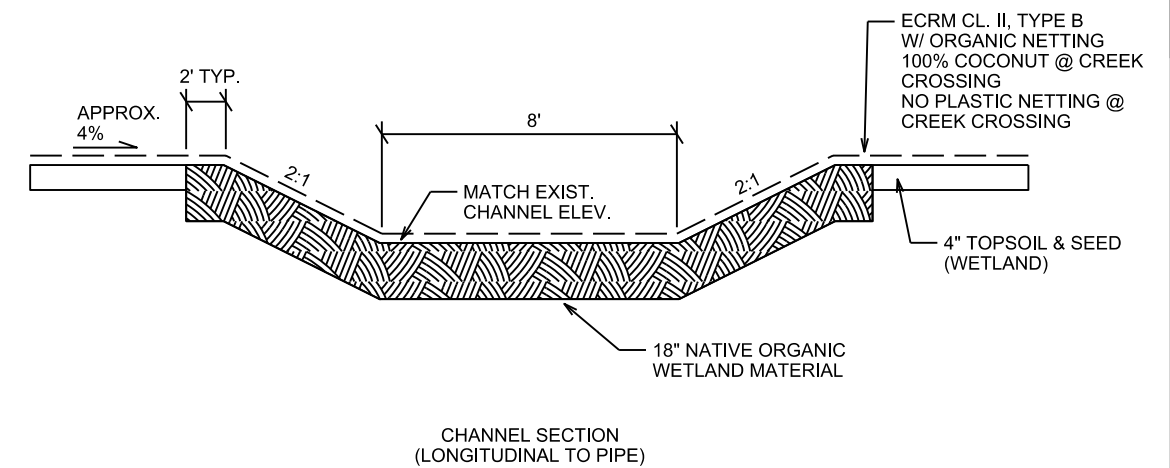
- STELL POST SHIMS MAY BE USED UNDER POSTS WHERE REQUIRED FOR ALIGNMENT.

LEGEND

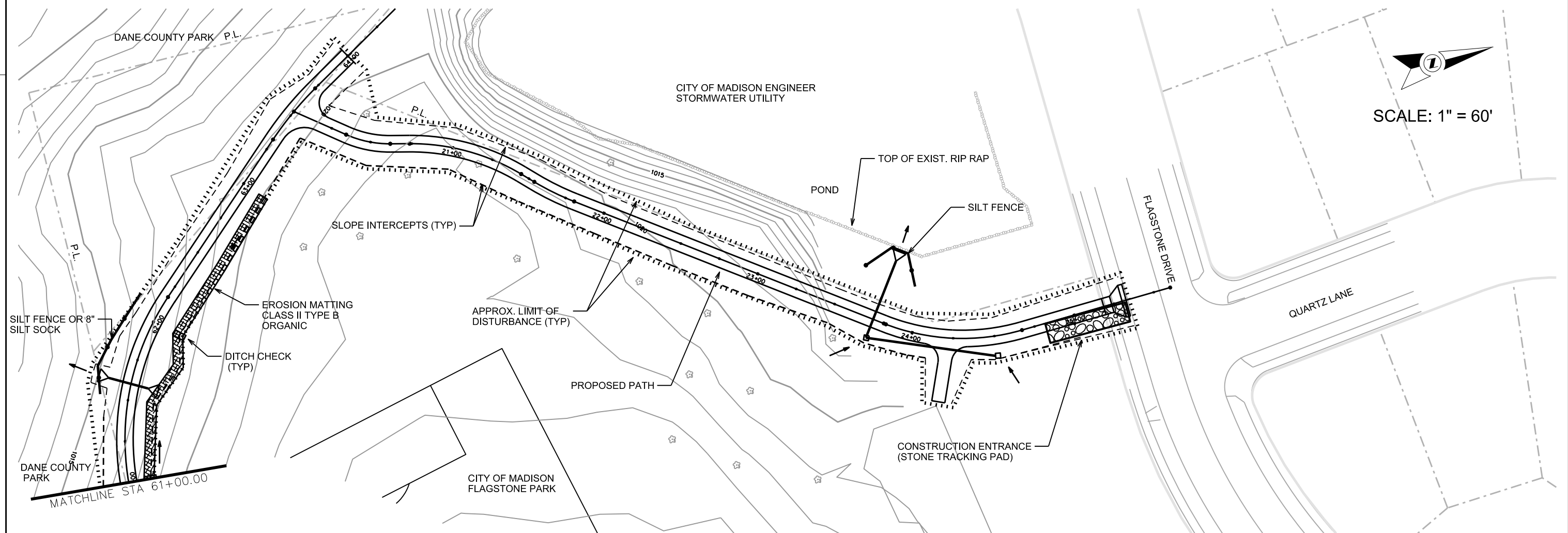
- SILT FENCE OF SILK SOCK
-  CONSTRUCTION ENTRANCE
-  EROSION MATTING CLASS II, TYPE B ORGANIC(100% COCONUT AT CREEK CROSSING)
-  DITCH CHECK (EROSION BALES)

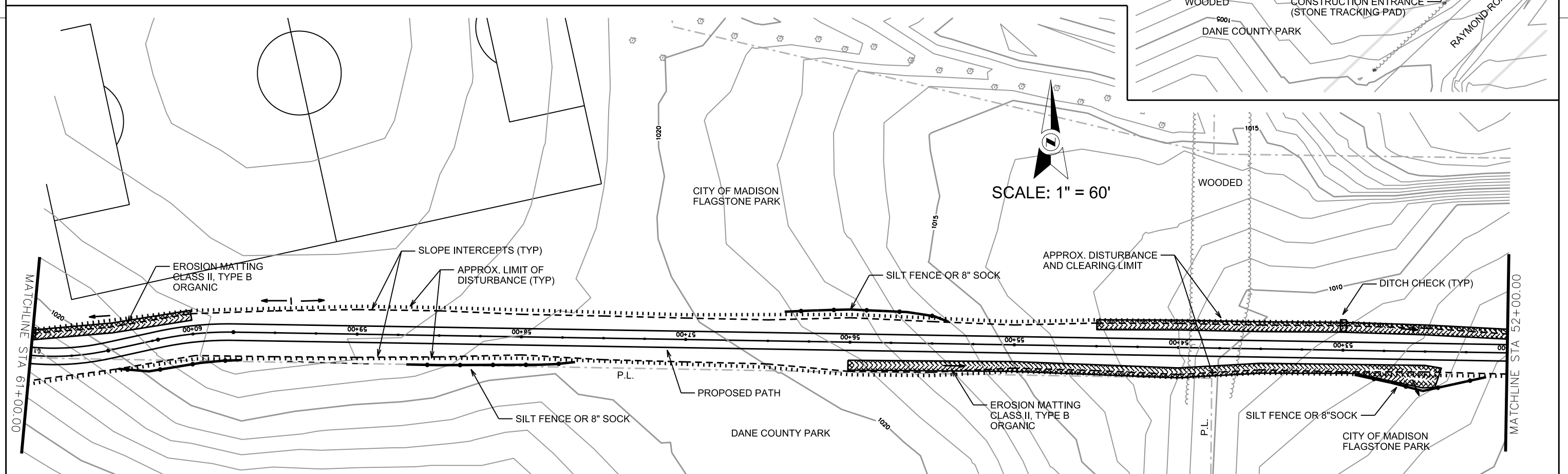
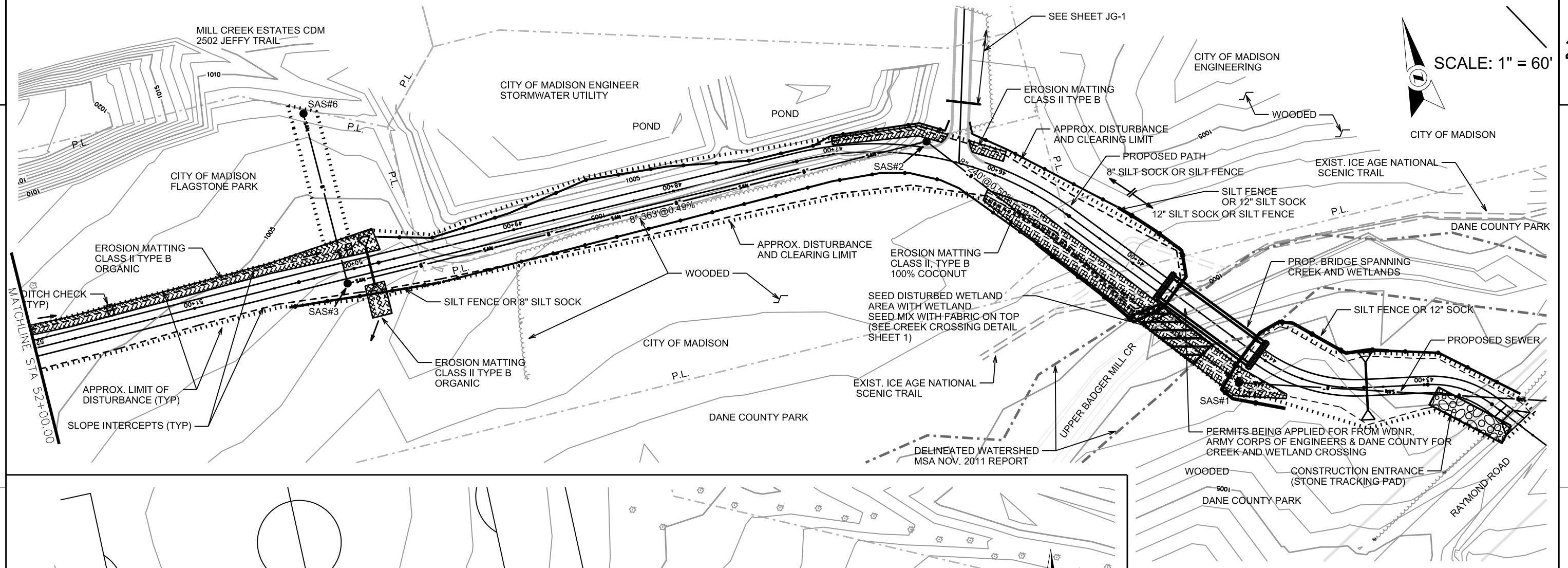
NOTES:

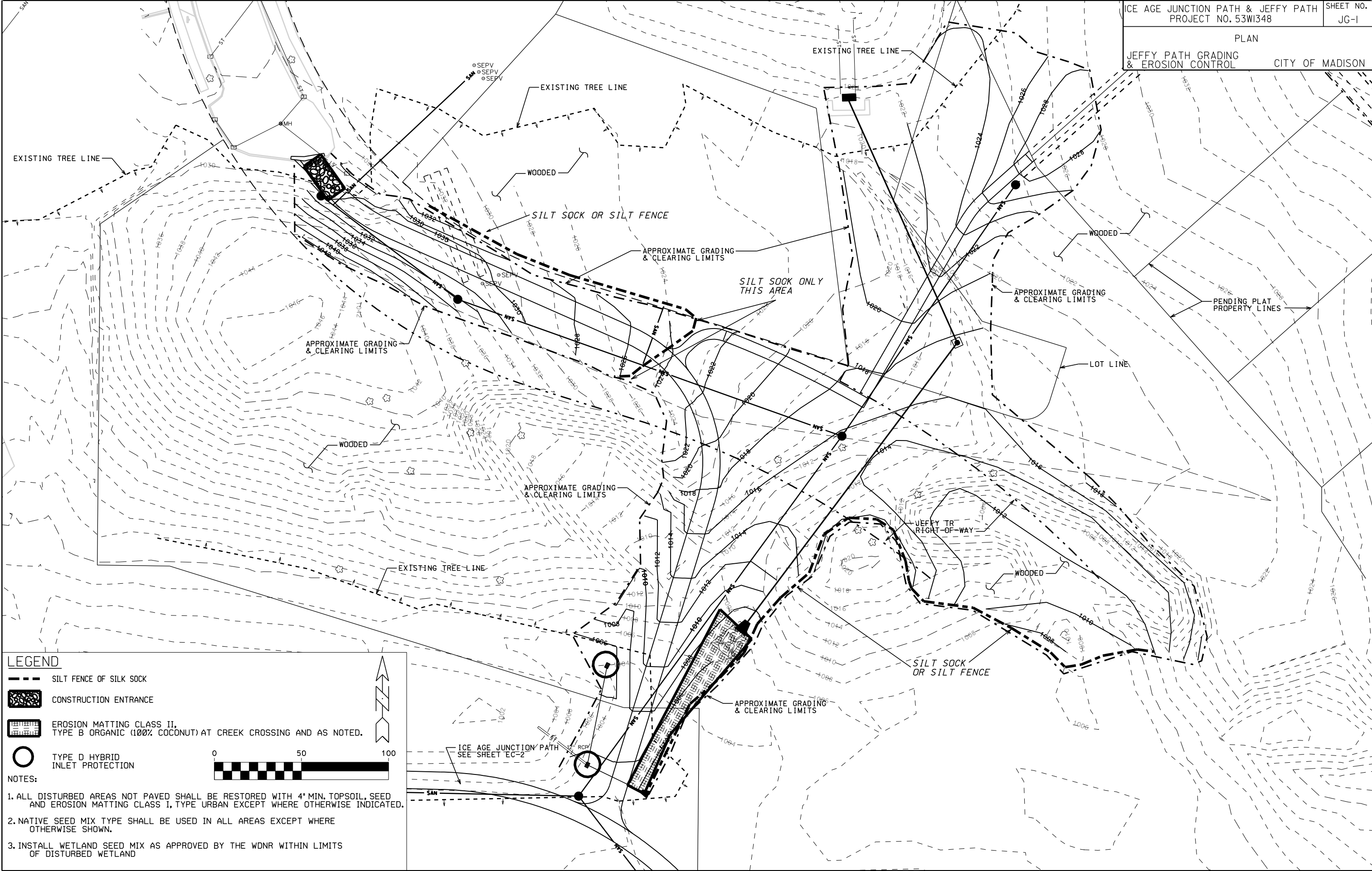
1. CONTOURS SHOWN ARE AT 1-FOOT INTERVALS
2. ALL DISTURBED AREAS NOT PAVED SHALL BE RESTORED WITH 4" MIN. TOPSOIL, SEED AND EROSION MATTING CLASS I, TYPE URBAN EXCEPT WHERE OTHERWISE INDICATED.
3. NATIVE SEED MIX TYPE SHALL BE USED IN ALL AREAS EXCEPT WHERE OTHERWISE SHOWN.
4. INSTALL WETLAND SEED MIX AS APPROVED BY THE WDNR WITHIN LIMITS OF DISTURBED WETLAND
5. APPROXIMATE TREE CLEARING LIMITS UNDER ITEM 90004 ARE SHOWN ON SHEETS EC-2 AND JG-1

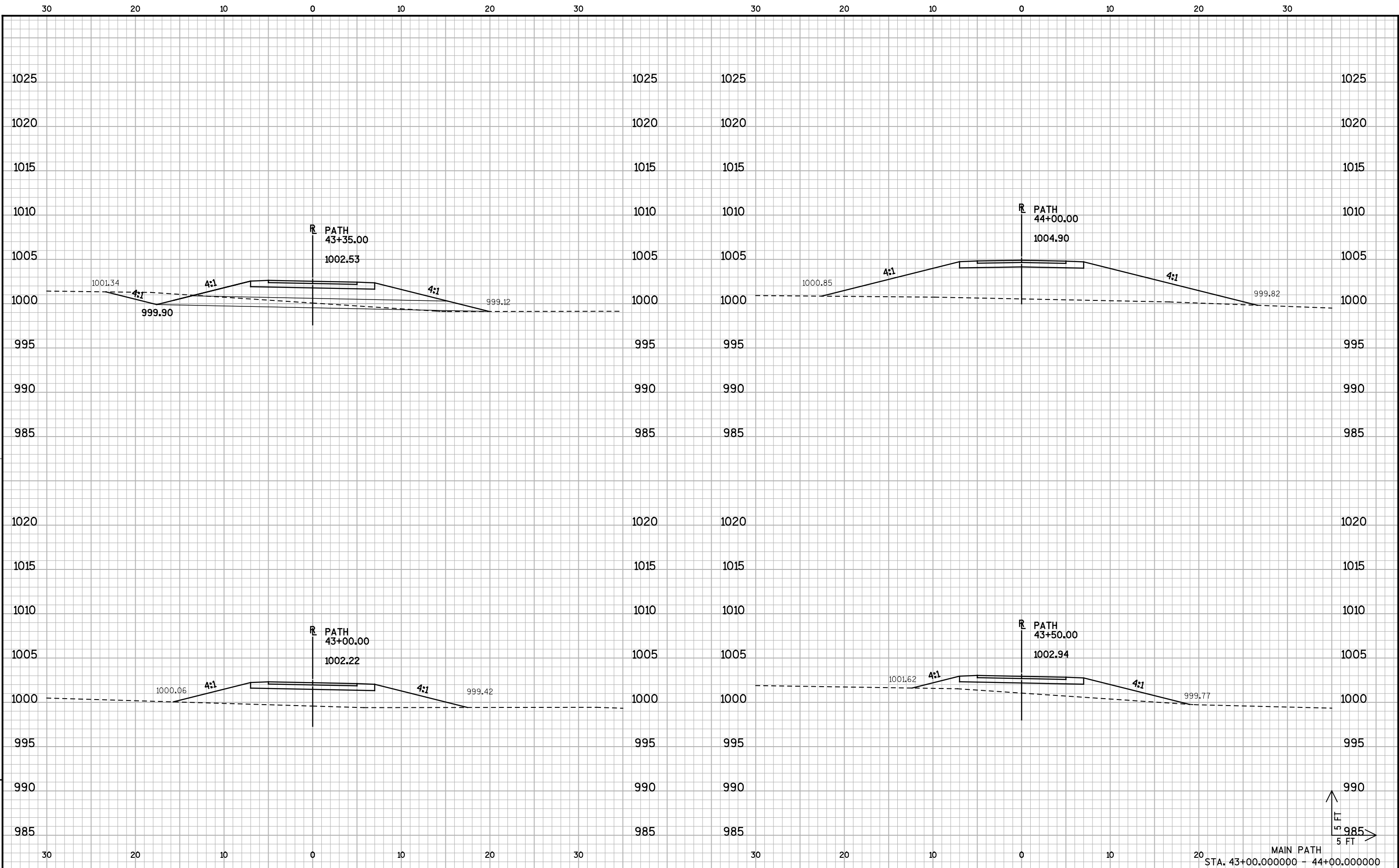
TYPICAL TRENCH SECTION
THROUGH CREEK & WETLANDS

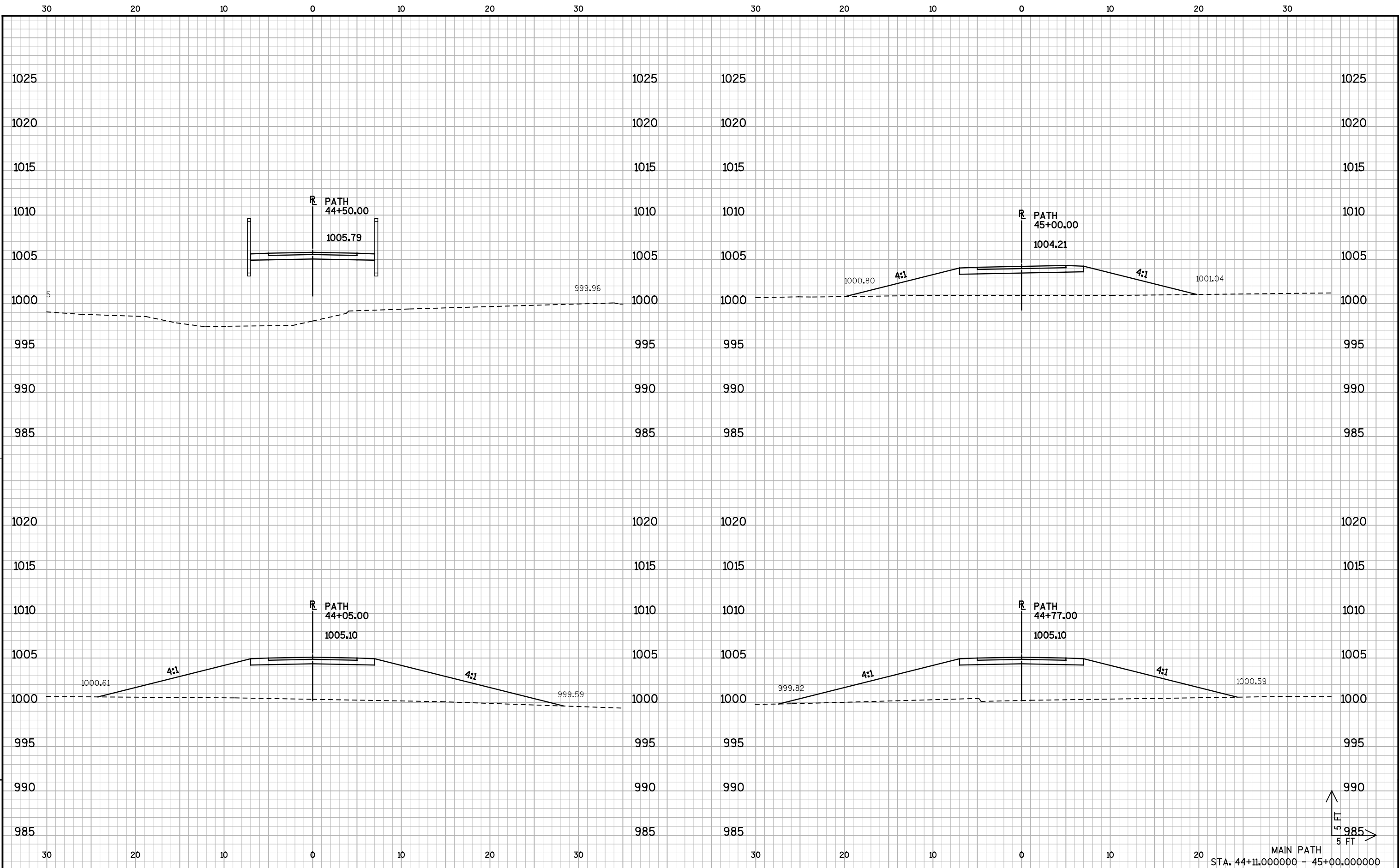
CREEK CROSSING DETAILS

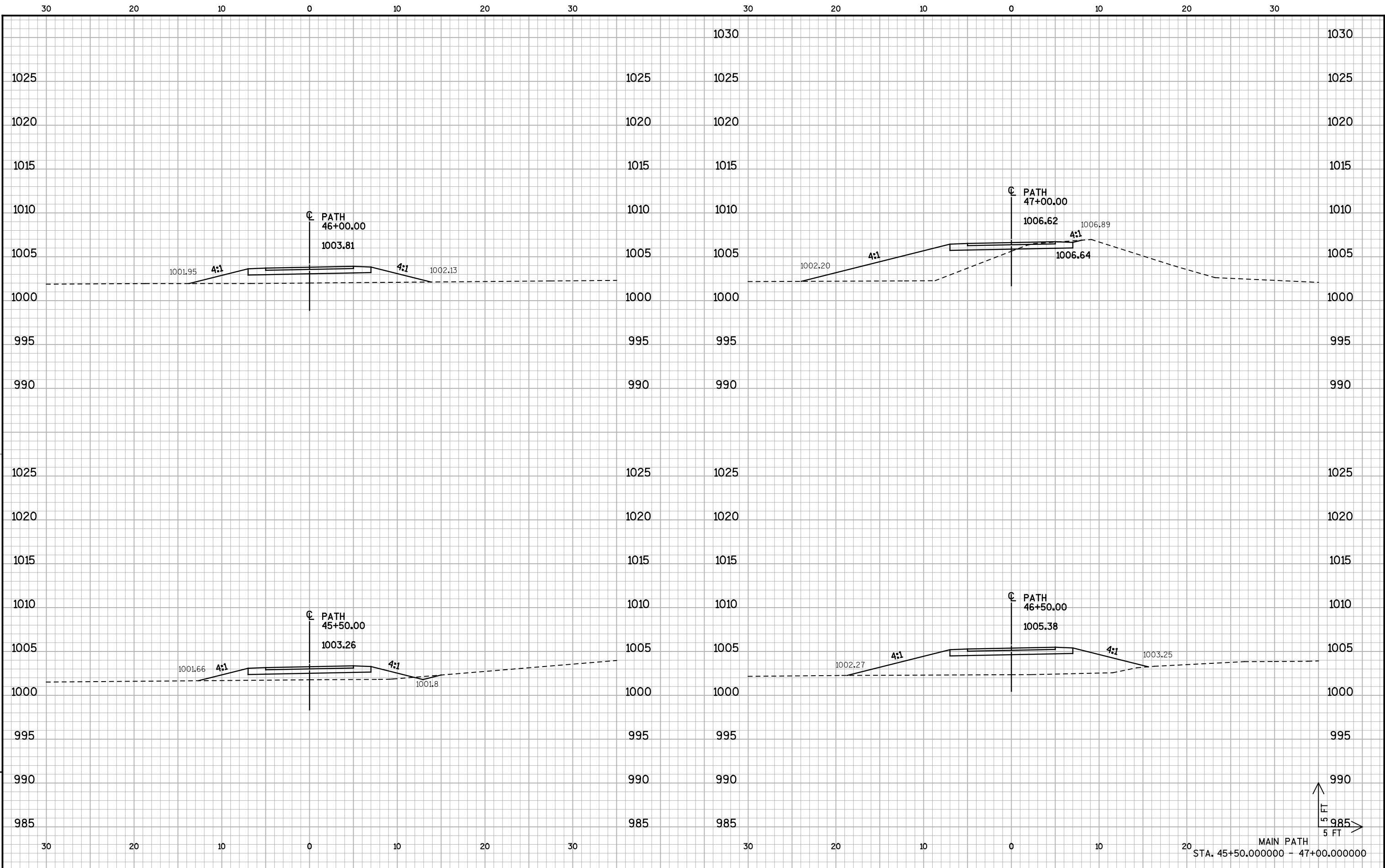


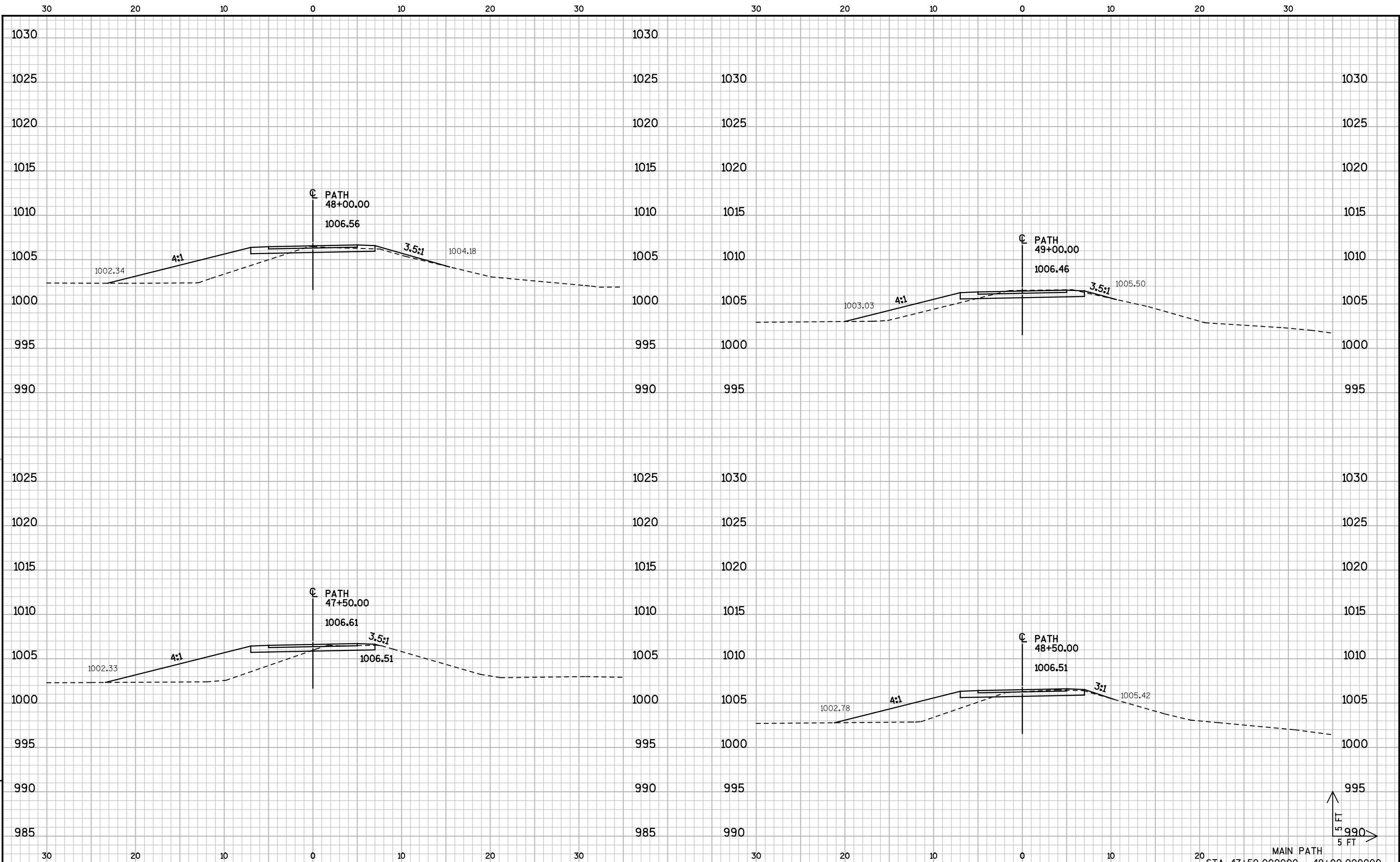


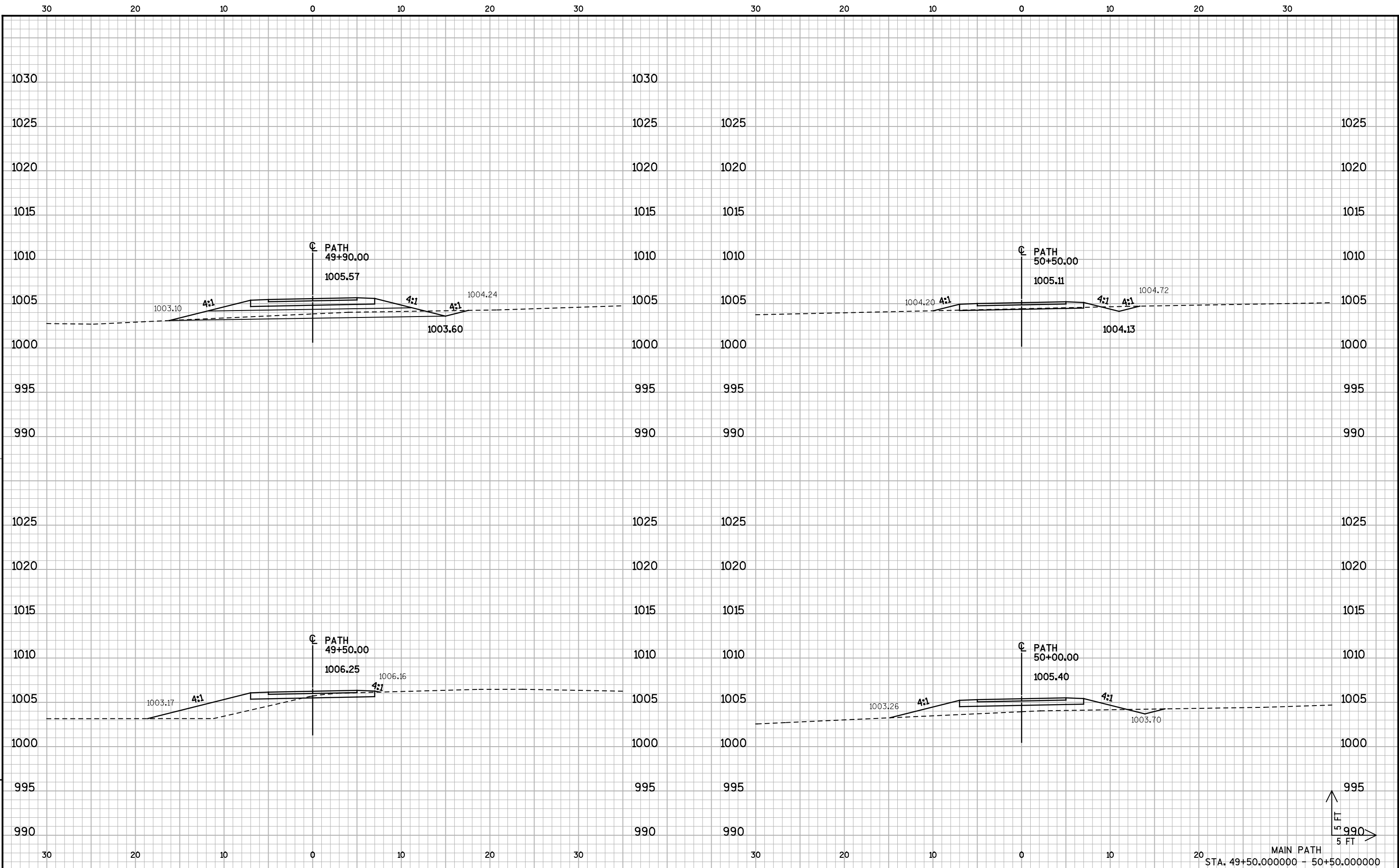


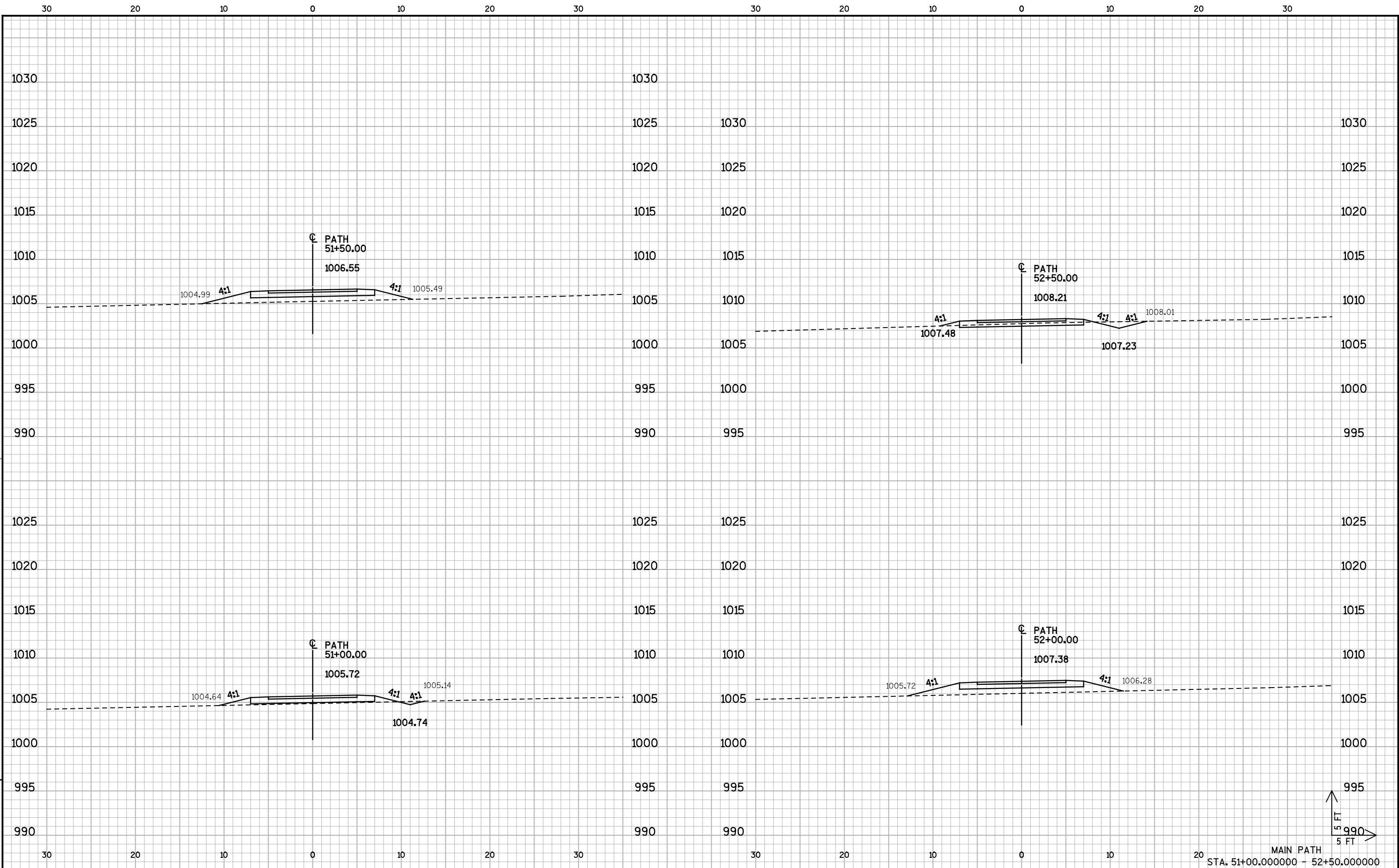


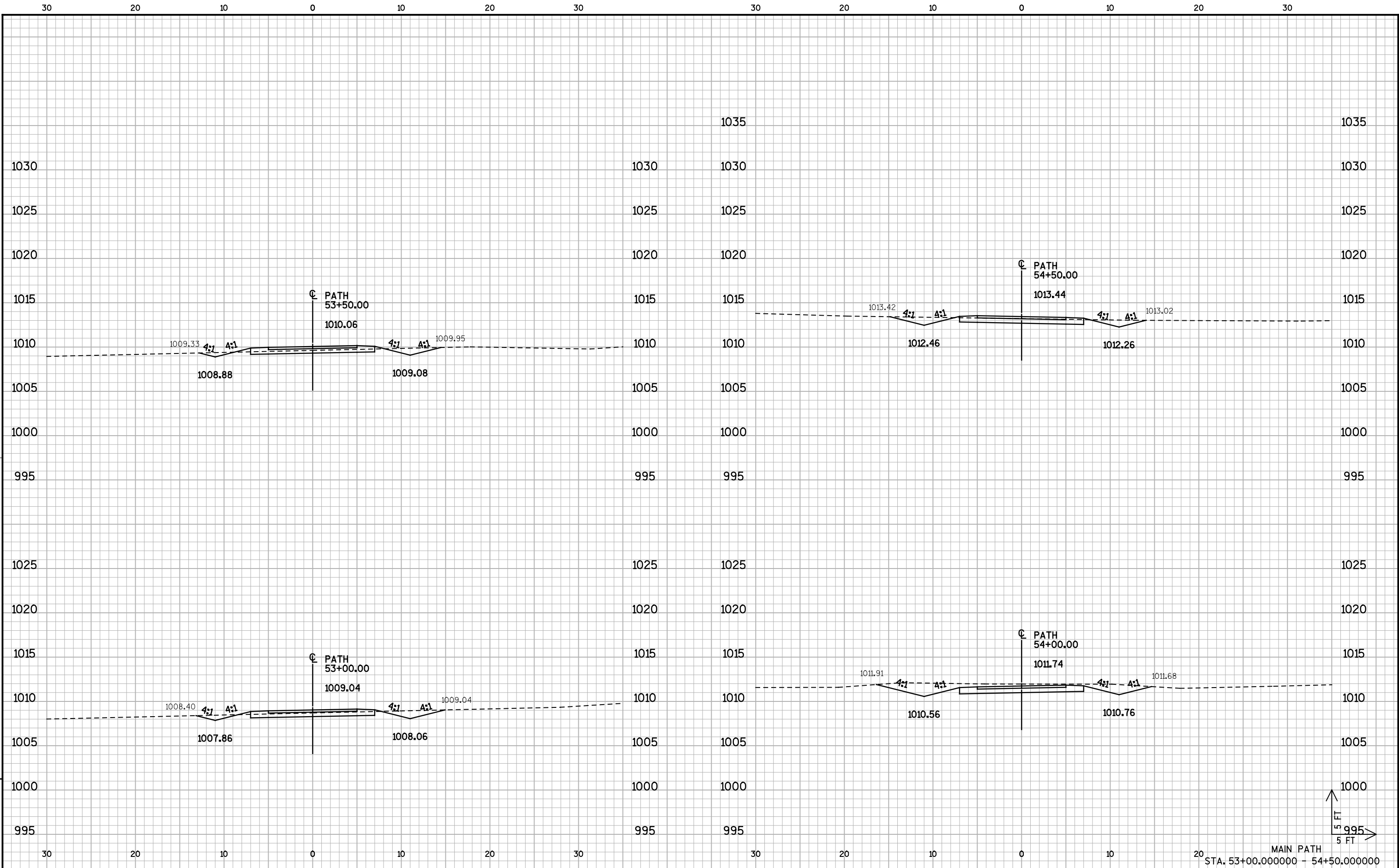


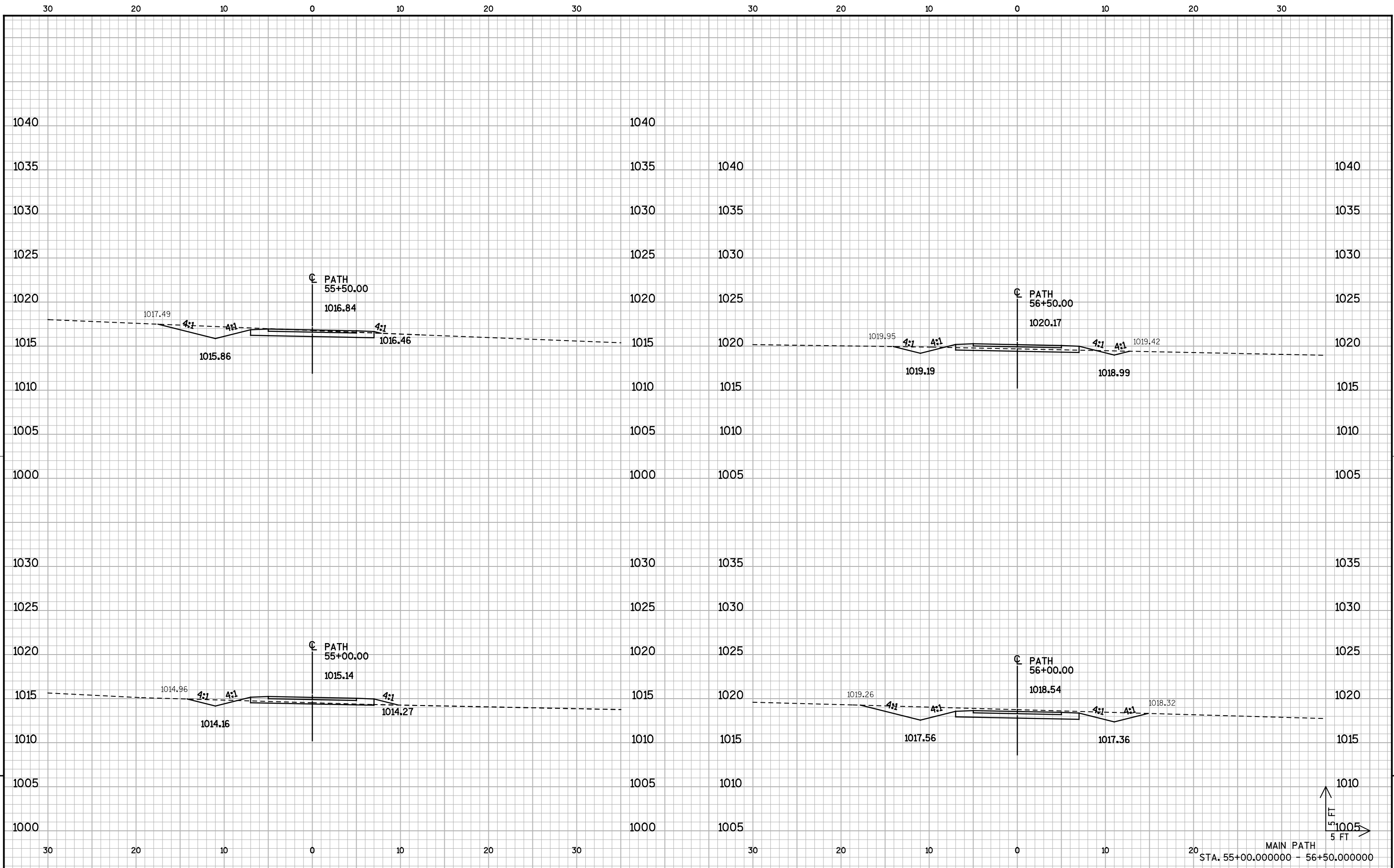


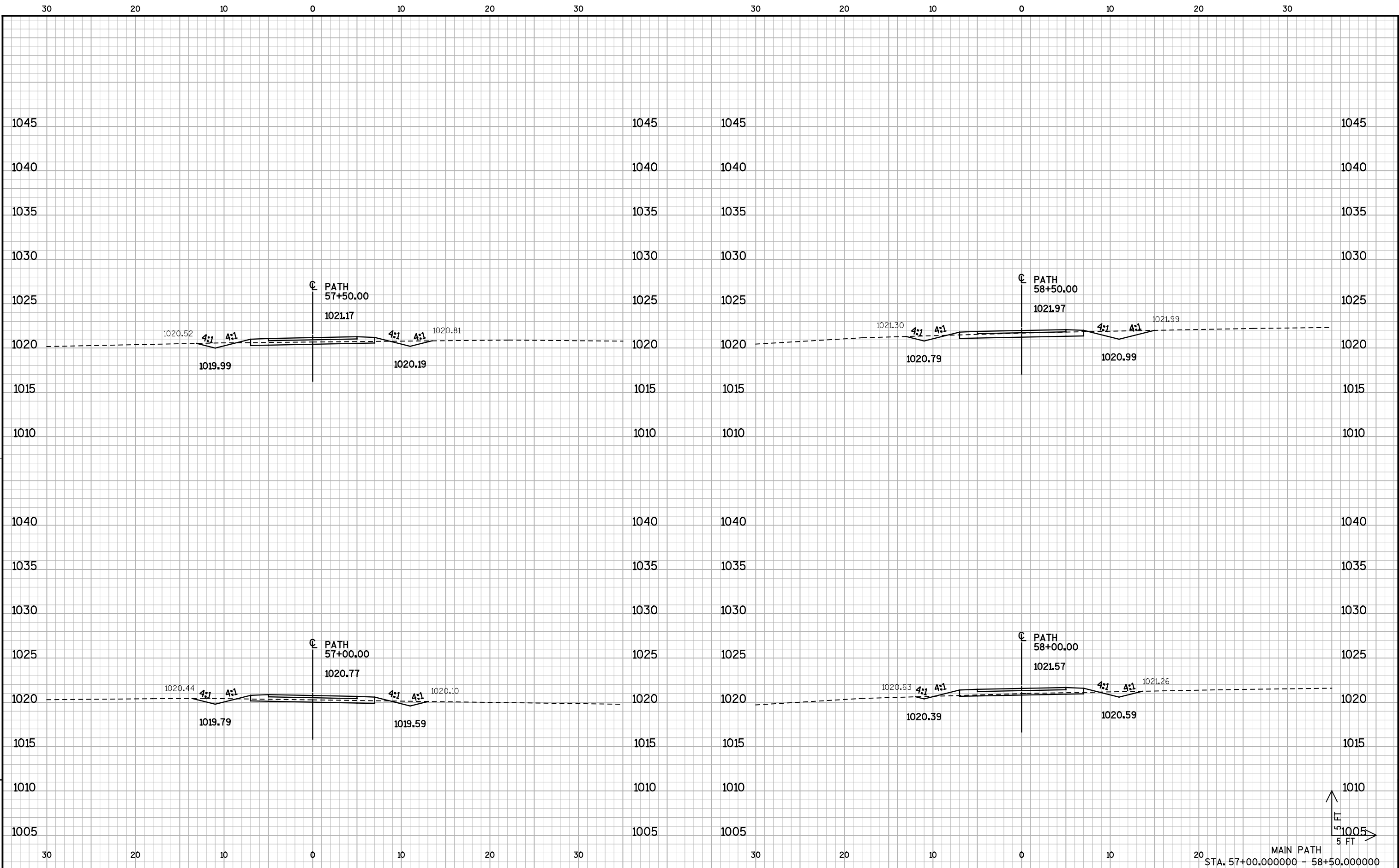


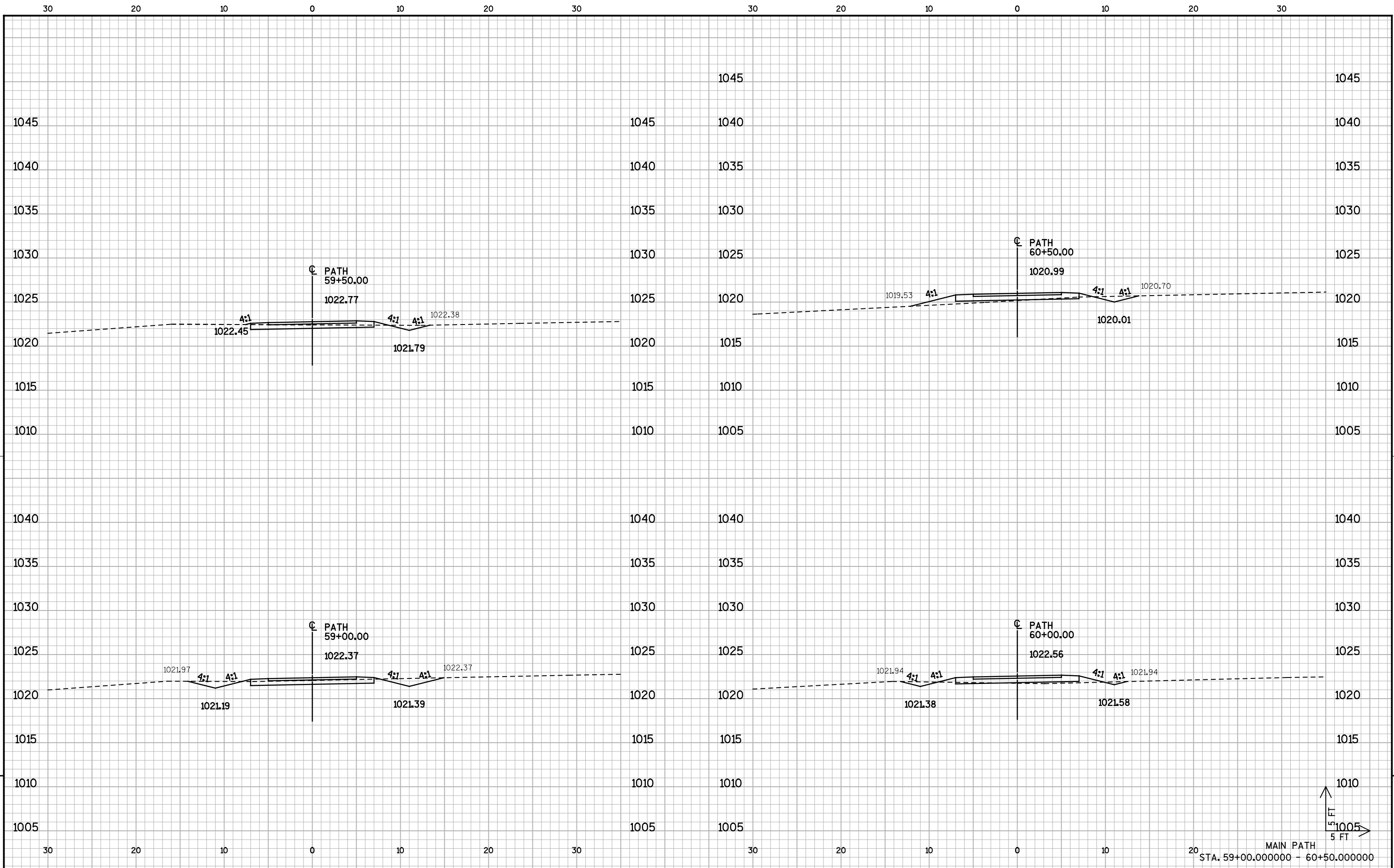






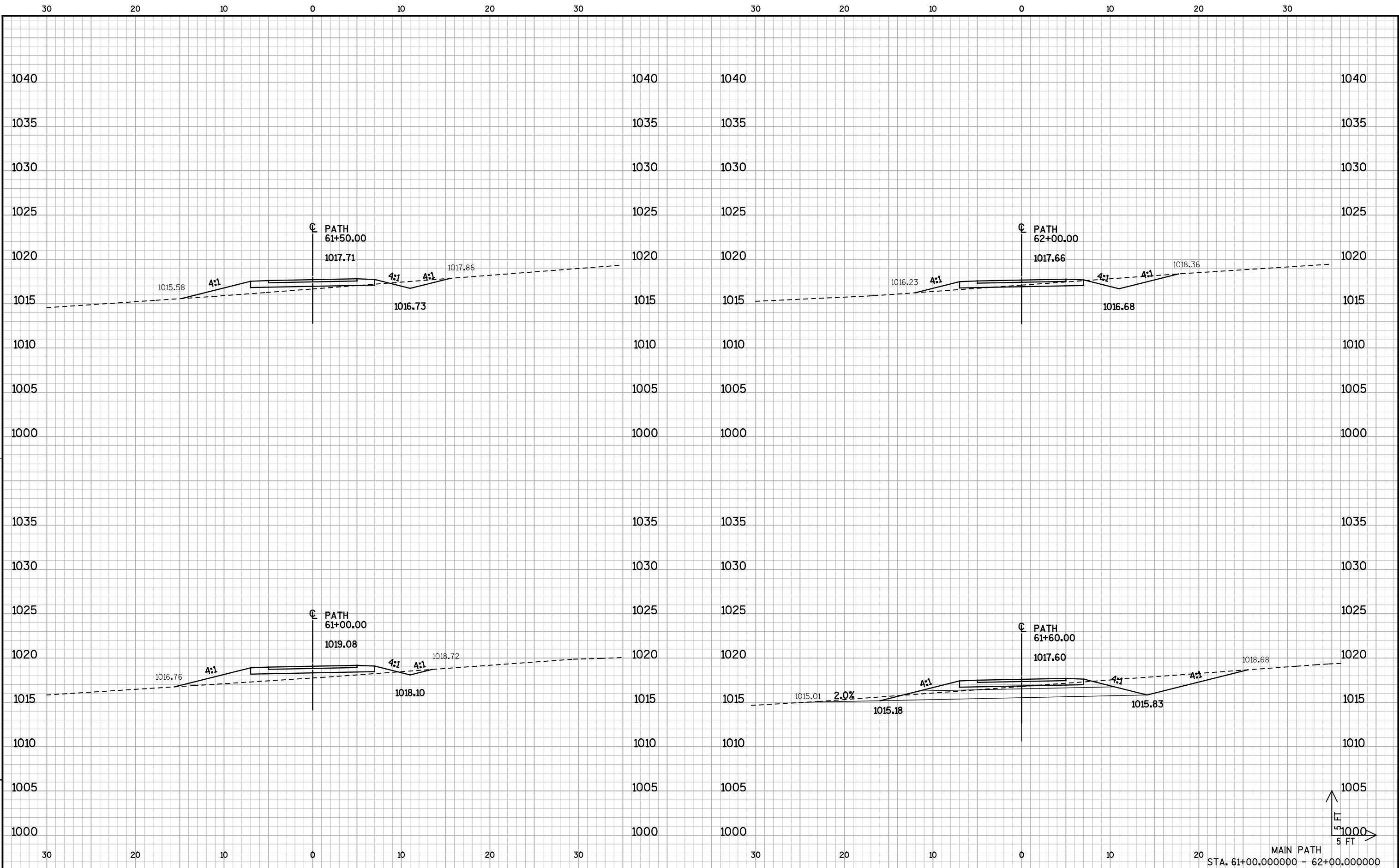


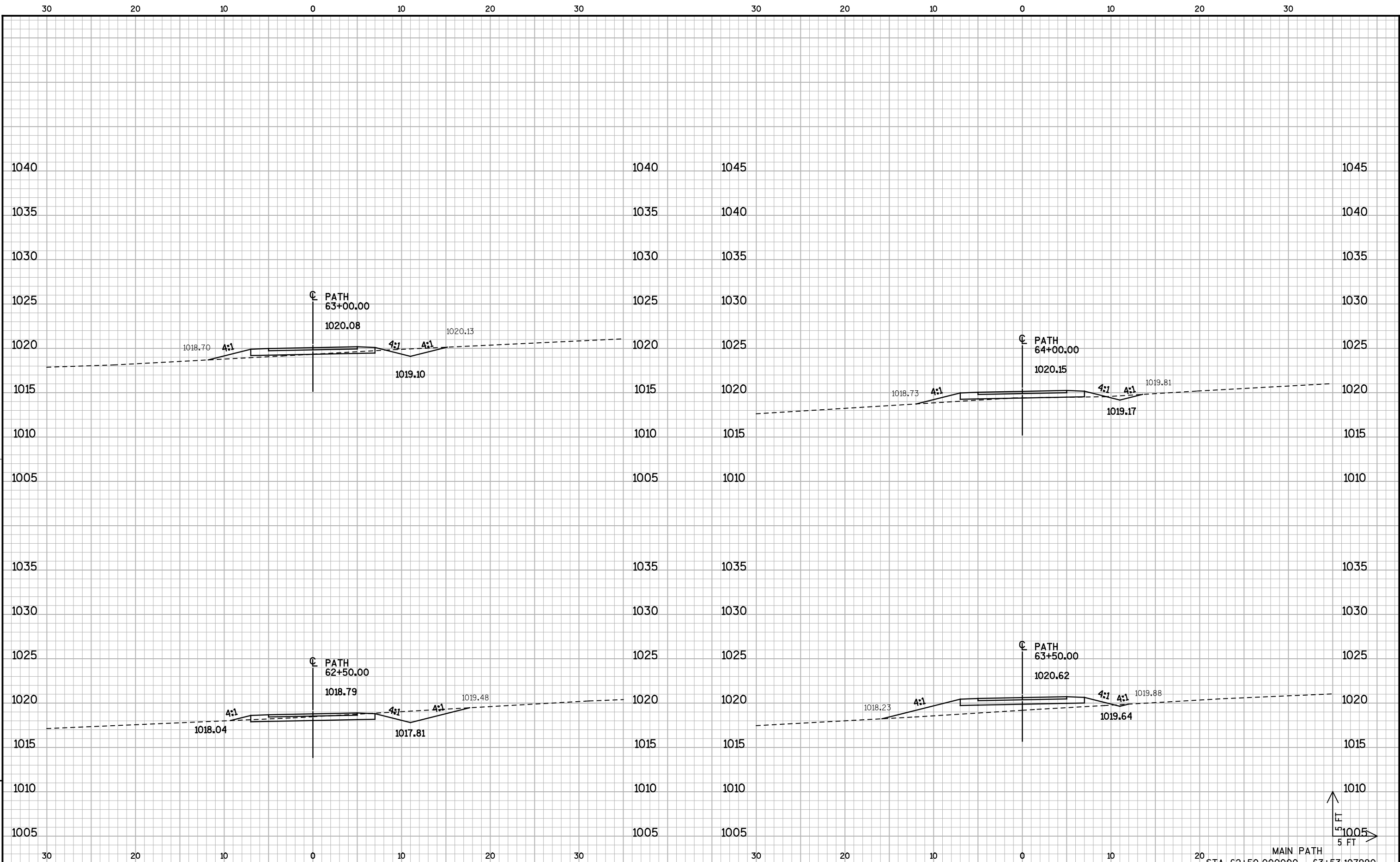


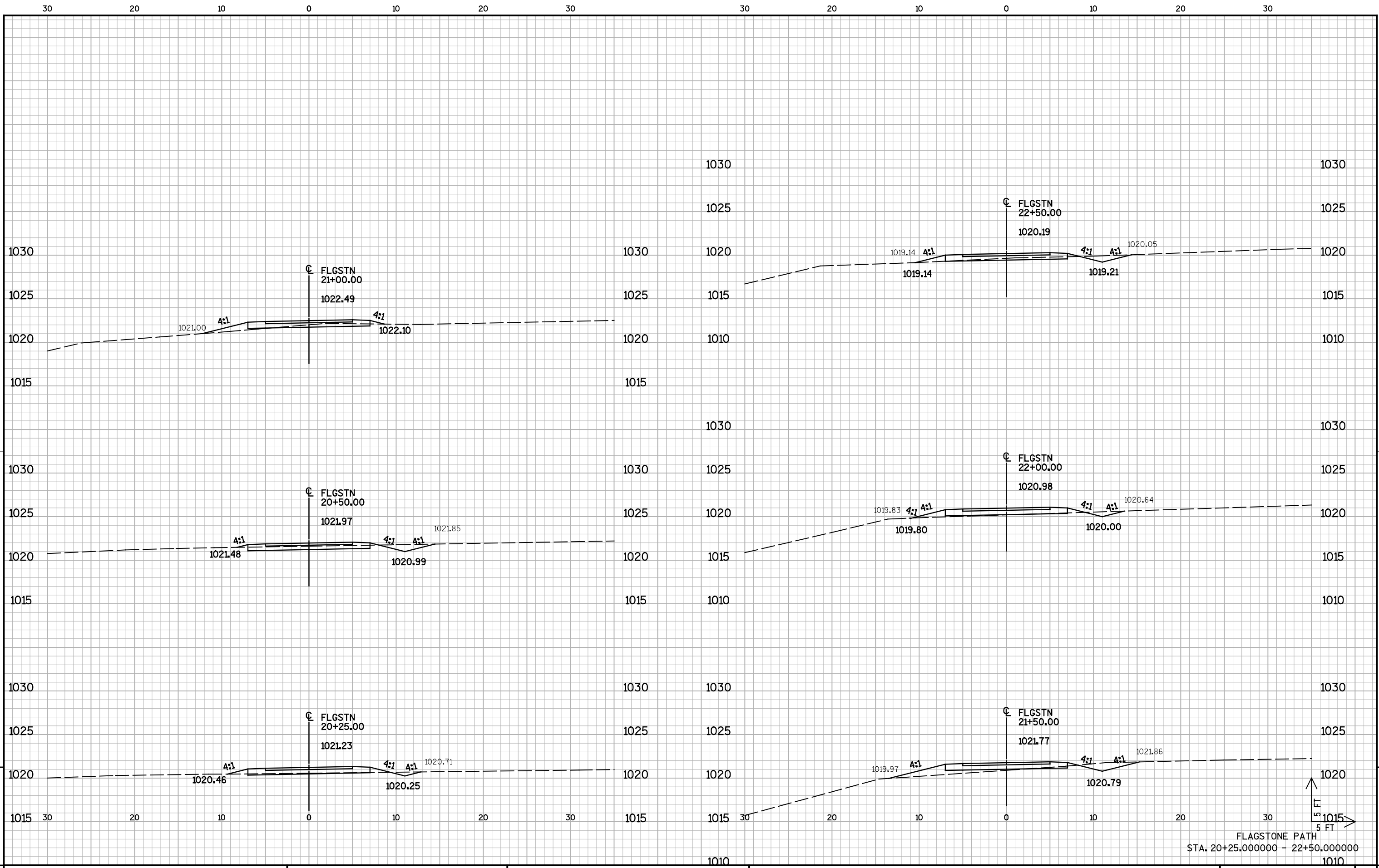


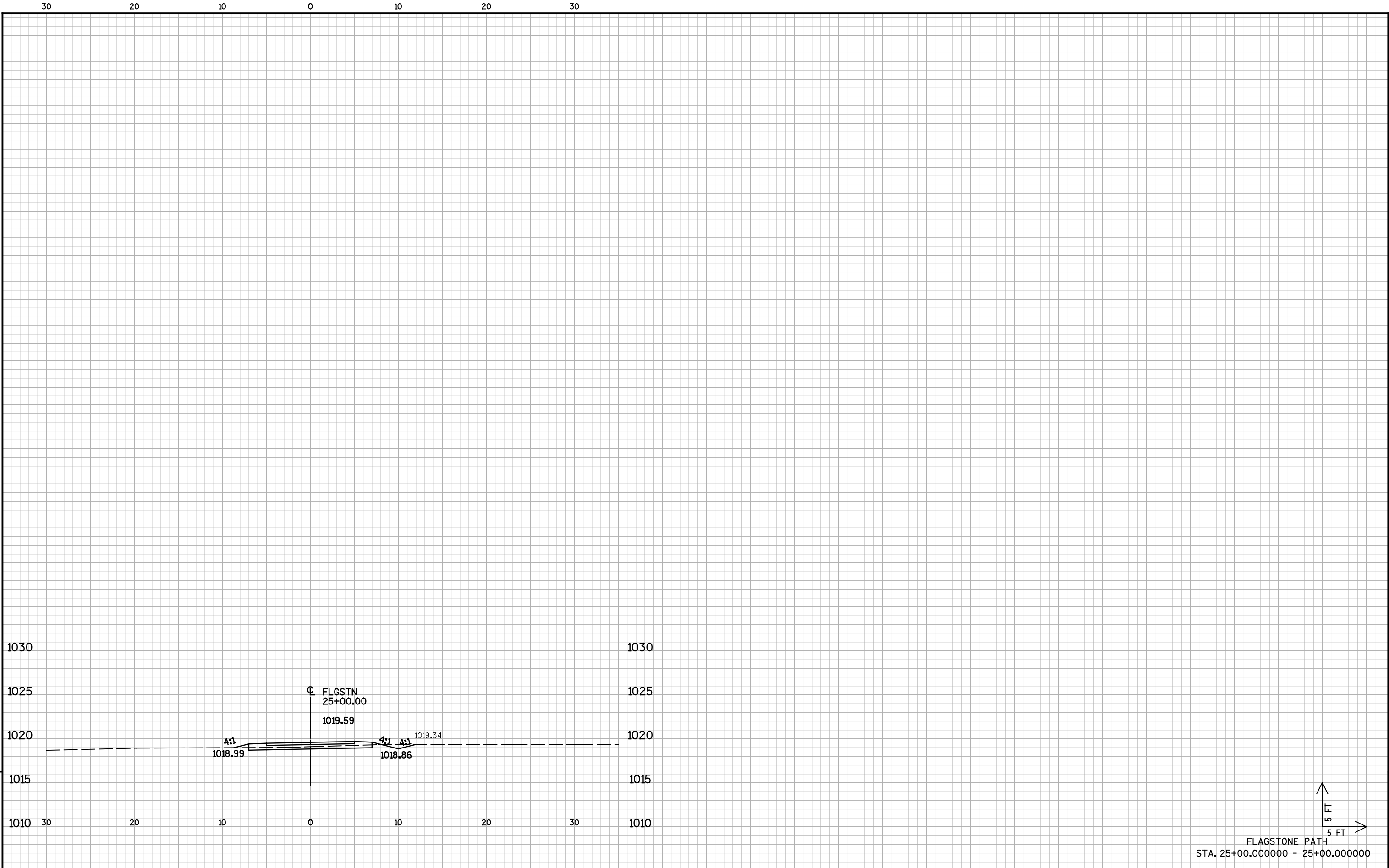
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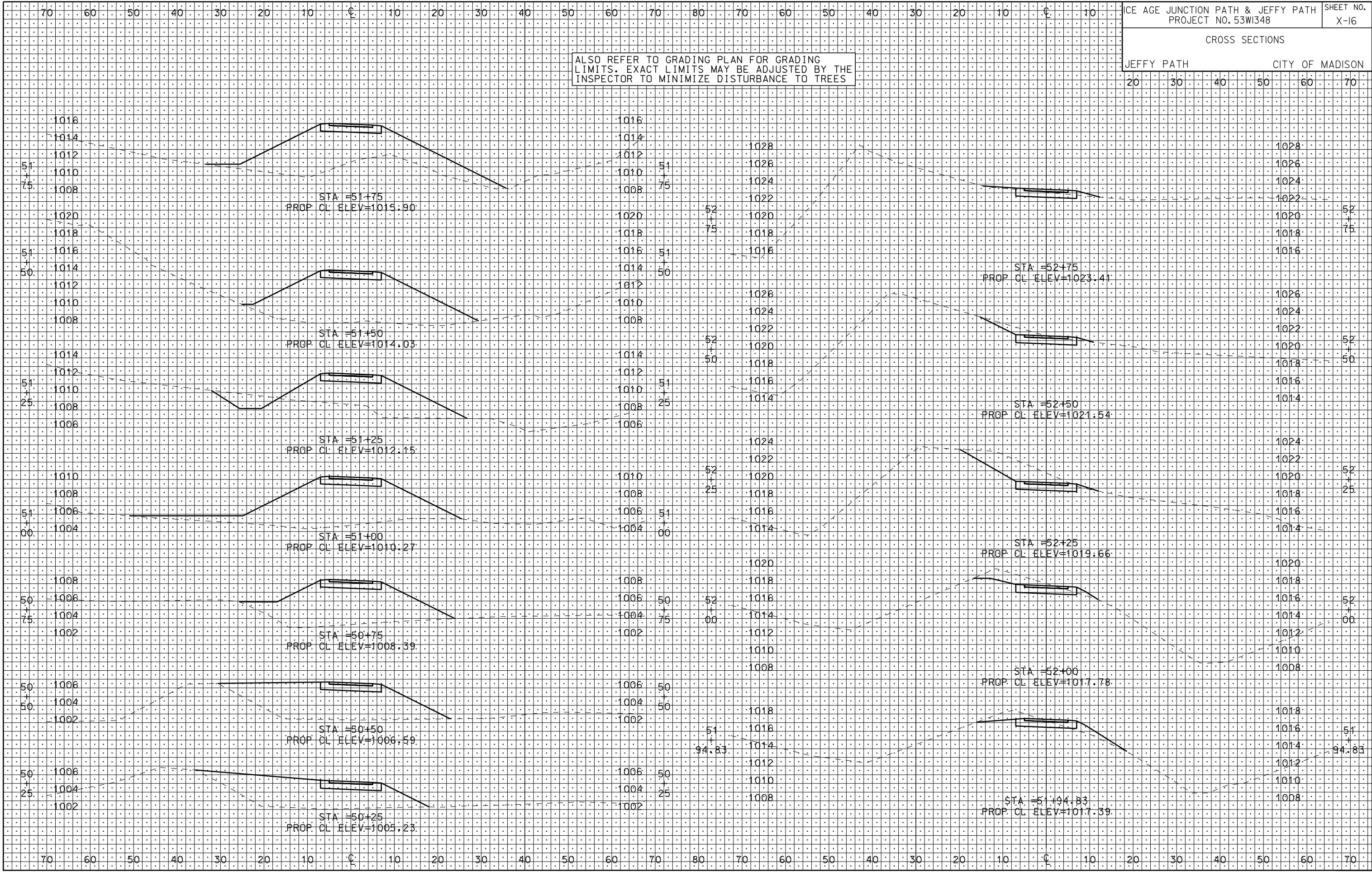


ORIGINATOR: CITY OF MADISON, STREETS DIVISION

PLOT SCALE: 1"=40'

PLOT NAME: 53WI552

REV. DATE: 5/24/2013

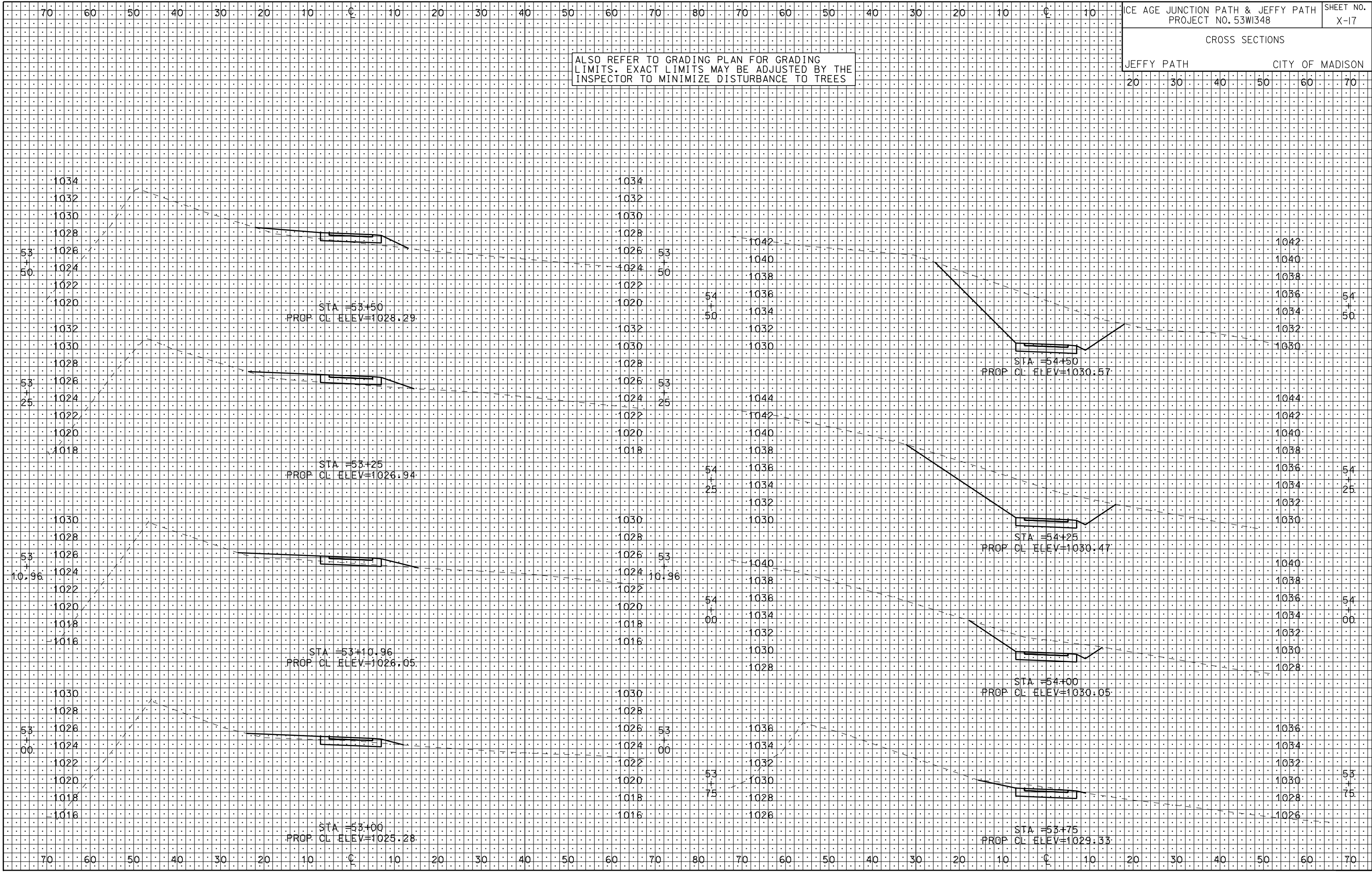


ORIGINATOR: CITY OF MADISON, STREETS DIVISION

PLOT SCALE: 1"=40'

PLOT NAME: 53WI348

REV. DATE: 5/24/2013

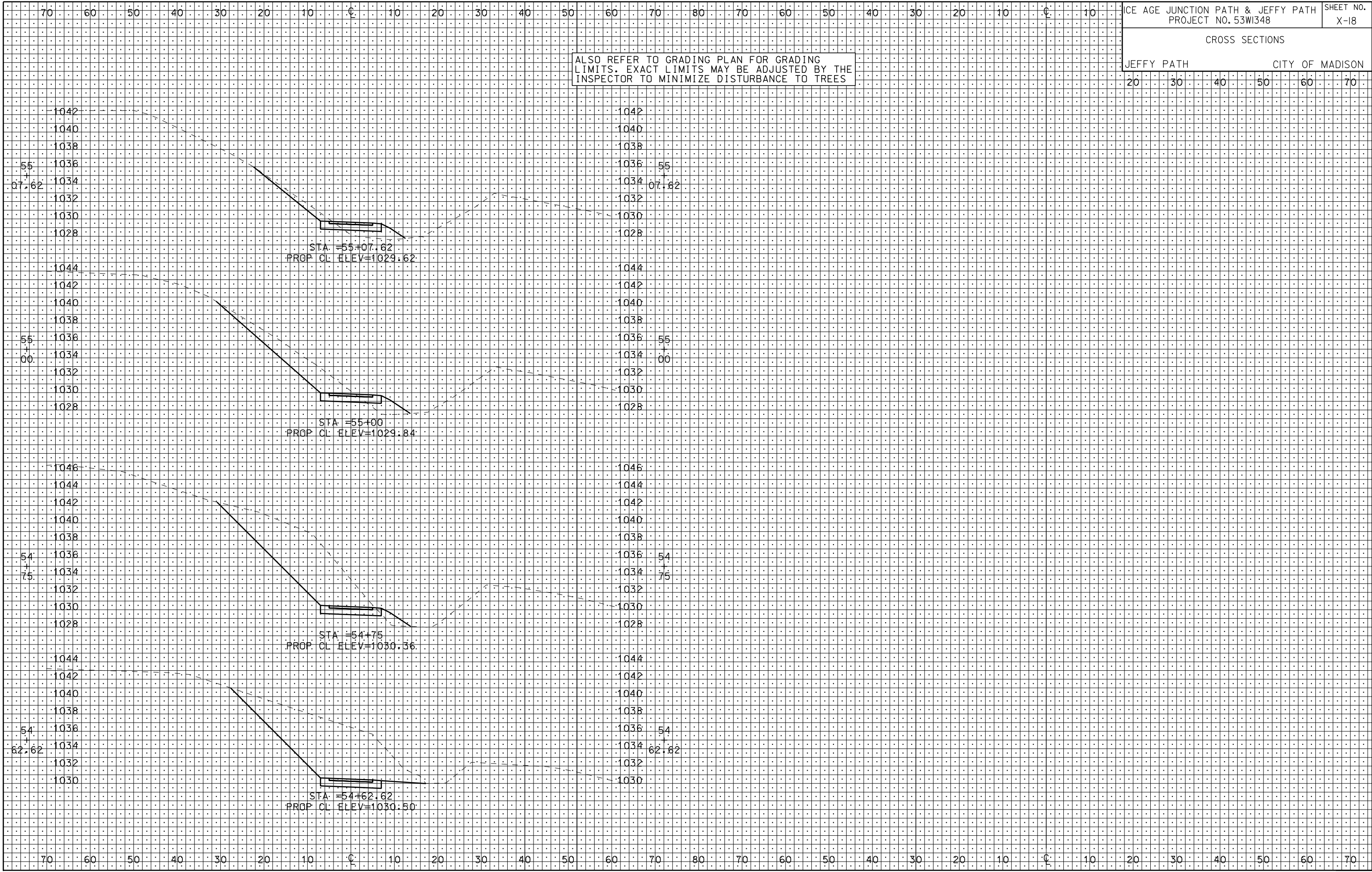


ORIGINATOR: CITY OF MADISON-STREETS DIVISION

PLOT SCALE: 1"=40'

PLOT NAME: 53WI552

REV. DATE: 5/24/2013



ORIGINATOR: CITY OF MADISON, STREETS DIVISION

PLOT SCALE: 1"=40'

PLOT NAME: 53WI348

REV. DATE: 5/24/2013

