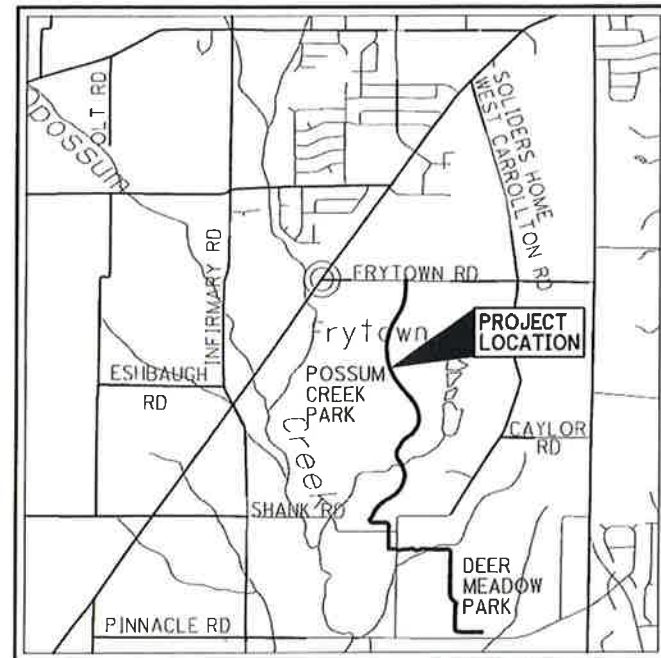
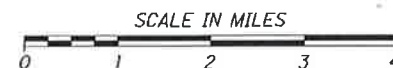




LOCATION MAP

LATITUDE: 39°41'56" LONGITUDE: 84°15'56"



DEER MEADOW / POSSUM CREEK CONNECTOR

FIVE RIVERS METROPARKS
CITY OF MORaine
STATE OF OHIO

INDEX OF SHEETS:

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PROJECT DESCRIPTION

CONSTRUCTION OF A NEW MULTI-PURPOSE TRAIL
CONNECTING DEER MEADOW PARK AND POSSUM CREEK
PARK. ASPHALT TRAIL NOMINALLY 10' WIDE.

PROJECT EARTH DISTURBED AREA: 3.07 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.125 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA: 4.9 ACRES

UNDERGROUND UTILITIES

CONTACT BOTH SERVICES TWO WORKING DAYS
BEFORE YOU DIG.



(Non-members must be called directly)

OIL & GAS PRODUCERS
UNDERGROUND PROTECTION SERVICE
1-800-925-0988



CRAWFORD, MURPHY & TILLY, INC.
84 REMICK BOULEVARD
SPRINGBORO, OHIO 45066
PH (937)701-2193
www.cmtengr.com

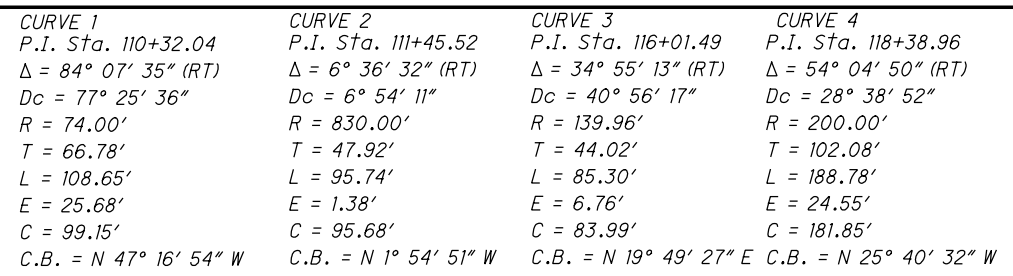


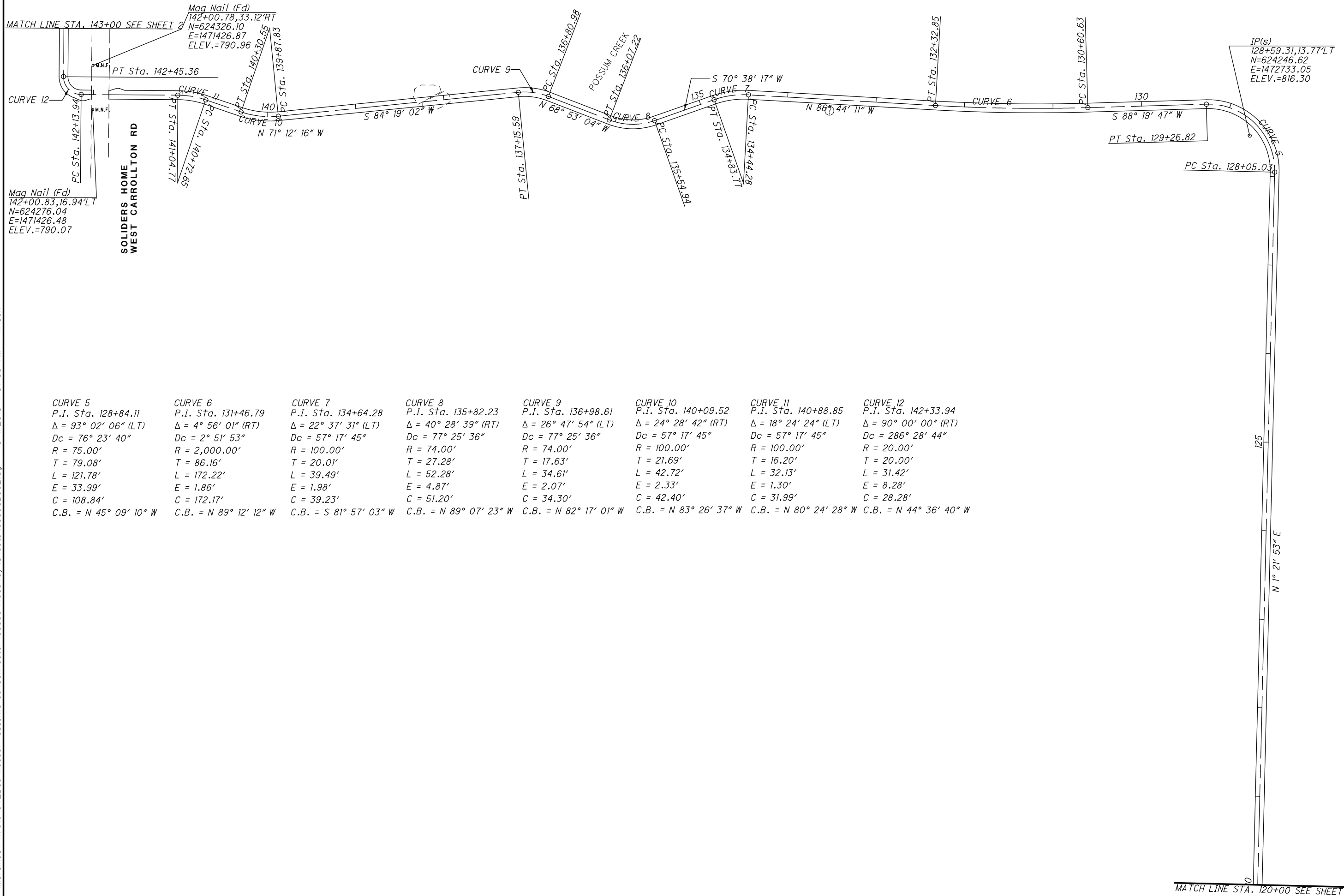
SIGNED: *Shelby R. Ingle*
DATE: 5/1/2018

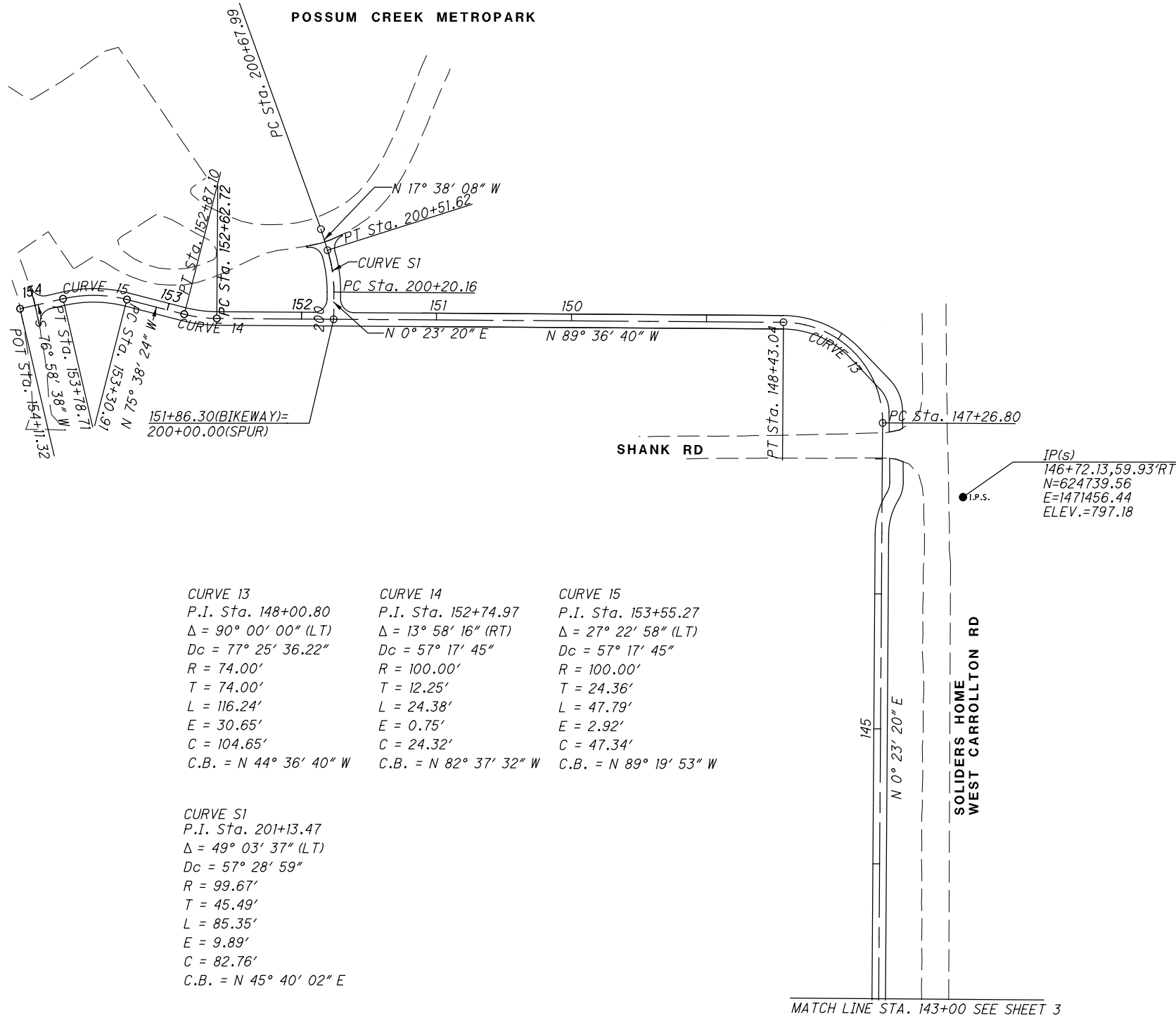
STANDARD CONSTRUCTION DRAWINGS					SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS	
BP-3.1	7/18/14				800	1/19/18		
BP-7.1	7/18/14				832	1/17/14		
CB-3.2	1/15/16							
HW-2.1	7/21/17							
HW-2.2	7/21/17							
DM-4.3	1/15/16							
DM-4.4	1/15/16							
RM-5.2	1/17/14							
MT-97.10	7/18/14							
MT-110.10	7/19/13							

APPROVED: *D. D. Dicks*
DATE: 5/1/2018 CITY OF MORaine CITY MANAGER

DEER MEADOW /
POSSUM CREEK
CONNECTOR







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

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

WORK LIMITS
THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

CLEARING AND GRUBBING
ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

ITEM 204 – PROOF ROLLING
THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING.

ITEM 204 PROOF ROLLING 2 HOUR.

PROFILE AND ALIGNMENT
FOR THE PATH RESURFACING SECTION, PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY WITH A UNIFORM THICKNESS OF ONE INCH.

PAVEMENT RESTORATION FOR PIPE INSTALLATIONS
THE FOLLOWING QUANTITY HAS BEEN PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION OF PIPES CROSSING SOLDIERS HOME-WEST CARROLLTON ROAD AND SHANK ROAD.

ITEM 301 – ASPHALT CONCRETE BASE, PG64-22 CU. YDS.
ITEM 441 – ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22

THE ABOVE QUANTITY IS BASED ON A 301 THICKNESS OF 6 INCHES, A 441 THICKNESS OF 3 INCHES (2 LIFTS @ 1.5” EACH) AND A PAVEMENT RESTORATION WIDTH THAT INCLUDES THE TRENCH WIDTH PLUS TWO FEET ON EACH SIDE OF THE TRENCH.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES
WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

FARM DRAINS
ALL FARM DRAINS, WHICH ARE ENCOUNTERED DURING CONSTRUCTION, SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS. EXISTING COLLECTORS WHICH ARE LOCATED BELOW THE ROADWAY/BIKEWAY DITCH ELEVATIONS, AND WHICH CROSS THE ROADWAY/BIKEWAY, SHALL BE REPLACED WITHIN THE CONSTRUCTION LIMITS BY ITEM 611 CONDUIT, TYPE B, ONE COMMERCIAL SIZE LARGER THAN THE EXISTING CONDUIT.

EXISTING COLLECTORS AND ISOLATED FARM DRAINS, WHICH ARE ENCOUNTERED ABOVE THE ELEVATION OF ROADWAY/BIKEWAY DITCHES, SHALL BE OUTLETTED INTO THE DITCH BY 611 TYPE F CONDUIT. THE OPTIMUM OUTLET ELEVATION SHALL BE ONE FOOT ABOVE THE FLOWLINE ELEVATION OF THE DITCH. LATERAL FIELD TILES WHICH CROSS THE ROADWAY SHALL BE INTERCEPTED BY 611, TYPE E CONDUIT, AND CARRIED IN A LONGITUDINAL DIRECTION TO AN ADEQUATE OUTLET OR ROADWAY/BIKEWAY CROSSING.

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

EROSION CONTROL PADS SHALL BE PROVIDED AT THE OUTLET END OF ALL FARM DRAINS AS PER STANDARD CONSTRUCTION DRAWING DM-1.1, EXCEPT WHEN THEY OUTLET INTO A DRAINAGE STRUCTURE.

PAYMENT FOR THE EROSION CONTROL PADS AND ANY NECESSARY BENDS OR BRANCHES SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEMS.

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

611 8” CONDUIT, TYPE B 20 FT
611 6” CONDUIT, TYPE E 10 FT
611 6” CONDUIT, TYPE F 10 FT
601 ROCK CHANNEL PROTECTION TYPE C WITH FILTER 5 CU. YD

ITEM SPECIAL – PIPE CLEANOUT
THIS WORK SHALL CONSIST OF REMOVING SEDIMENT AND DEBRIS FROM THE EXISTING DRAINAGE CONDUITS SPECIFIED IN THE PLANS. ALL MATERIAL REMOVED SHALL BE DISPOSED OF AS PER 105.16 AND 105.17. ALL SEWERS SHALL BE CLEANED OUT TO THE SATISFACTION OF THE ENGINEER. CLEANOUT OF CONNECTING STRUCTURES (E.G. CATCH BASINS) SHALL BE INCLUDED AND CONSIDERED INCIDENTAL TO THE COST OF PIPE CLEANOUT.

CLEANOUT OF THE PIPE SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM SPECIAL – PIPE CLEANOUT. THIS PRICE SHALL INCLUDE THE COST FOR MATERIAL, EQUIPMENT, LABOR, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE CLEANOUT.

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

SPECIAL, PIPE CLEANOUT, 24” AND UNDER 125 FT.

SEEDING AND MULCHING
THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659, TOPSOIL 263 CU. YD.
659, SEEDING AND MULCHING 10,479 SQ. YD.
659, COMMERCIAL FERTILIZER, CLASS 2 1.4 TON
659, WATER 57 M. GAL.

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

POST CONSTRUCTION STORM WATER TREATMENT
THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP’S) FOR POST CONSTRUCTION STORM WATER TREATMENT. IMPACTS TO STREAMS, WETLANDS AND OTHER WATER RESOURCES BE AVOIDED AND MINIMIZED TO THE FULLEST EXTENT POSSIBLE.

VEGETATED FILTER STRIP
THIS PLAN UTILIZES VEGETATED FILTER STRIPS FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE ITEM 659 SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AND ITEM 670, SLOPE EROSION PROTECTION TO ALL DISTURBED AREAS DESIGNATED AS VEGETATED FILTER STRIPS, THE EDGE OF SHOULDER, AND THE FORESLOPE AS SPECIFIED IN THE PLANS.

ROCK CHANNEL PROTECTION
PROVIDE FILTER WITH ROCK CHANNEL PROTECTION PER 601.09. AN AGGREGATE FILTER SHALL BE USED WHEN THE RCP IS UNDER WATER.

ITEM 614, MAINTAINING TRAFFIC
A MINIMUM OF 1 LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES ON PUBLIC STREETS BY USE OF THE EXISTING PAVEMENT. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ERECTING ADVANCE SIGNAGE TO ALERT MOTORISTS OF THE CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN SIGNS AND SIGN SUPPORTS, AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 4 CONSECUTIVE HOURS, WHEN THROUGH TRAFFIC MAY BE TEMPORARILY DETOURED ON SOLDIERS HOME-WEST CARROLLTON ROAD IN ORDER TO COMPLETE THE STORM SEWER CROSSING. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$100 PER MINUTE FOR EACH MINUTE THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT. THE CONTRACTOR SHALL NOTIFY THE CITY OF MORaine A MINIMUM OF 48 HOURS IN ADVANCE OF A CLOSURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING WAYFINDING TO MOTORISTS FOR THE DURATION OF THE CLOSURE.

EXISTING BICYCLE AND PEDESTRIAN FACILITIES SHALL REMAIN OPEN AT ALL TIMES EXCEPT FOR THE PERIOD OF TIME WHERE RESURFACING OF PAVEMENT IS IN PROGRESS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION SITE SECURITY AND SHALL MAKE REASONABLE EFFORTS TO PREVENT UNAUTHORIZED ACCESS TO THE NEW CONNECTOR TRAIL PRIOR TO COMPLETION OF CONSTRUCTION. BARRICADES SHALL BE ERECTED AT EACH LOGICAL ACCESS POINT.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

ITEM 410, TRAFFIC COMPACTED SURFACE, TYPE A OR B 20 CU. YD.
ITEM 410, TRAFFIC COMPACTED SURFACE, TYPE C 20 CU. YD.
ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 10 CU. YD.
ITEM 616, WATER 5 M. GAL.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

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

ITEM 616, WATER 5 M. GAL.

ENDANGERED BAT HABITAT REMOVAL
THIS PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS: A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

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ITEM 690 - THINLAY ASPHALT CONCRETE (ALTERNATE BID)
690.01 DESCRIPTION
690.02 COMPOSITION
690.03 MATERIALS
690.04 MIXING
690.05 WEATHER LIMITATIONS
690.06 SPREADING, COMPACTING AND FINISHING
690.07 SURFACE TOLERANCES
690.08 ACCEPTANCE
690.09 BASIS OF PAYMENT

690.01 DESCRIPTION.
THIS WORK CONSISTS OF CONSTRUCTING A SURFACE COURSE OF AGGREGATE AND ASPHALT BINDER MIXED IN A CENTRAL PLANT AND SPREAD AND COMPACTED ON A PREPARED SURFACE. THE REQUIREMENTS OF 401 APPLY, EXCEPT AS MODIFIED BY THIS SPECIFICATION.

690.02 COMPOSITION.
ESTABLISH A JOB MIX FORMULA (JMF) BY COMBINING COARSE AGGREGATE, FINE AGGREGATE, RECLAIMED ASPHALT PAVEMENT (RAP) AND ASPHALT BINDER IN PROPORTIONS THAT RESULT IN AN ASPHALT MIXTURE MEETING THE BLEND LIMITS IN TABLE 690.02-1 FOR THE MIX TYPES SHOWN.

TABLE 690.02-1 - MIXTURE COMPOSITION

Property	Type MED ^[2]	Type L T	Type UL T
Fine Aggregate (703.05A)	50% Mech. Crush / 50% Natural Sand ^[3]	≥ 50% Natural Sand	≥ 50% Natural Sand
RAP (max. %)	25	25	25
Total binder content min. (% by weight of mix)	6.4	6.6	6.6
Virgin binder min. (% by weight of mix)	5.2	5.2	5.2
Asphalt Binder Grade (PG)	64-22	58-28	52-28
F/A Ratio, max	1.2	1.2	1.2
Blows	50	50	50
Stability, min., pounds (N)	1200 (5338)	750 (3336)	750 (3336)
Flow, 0.25mm	8 to 16	8 to 18	8 to 18
Design Air Voids	3.5	3.5	3.5
VMA, min.	16	16	16
Sieve Size	Total Percent Passing ^[1]		
1/2 inch (12.5 mm)	100		
3/8 inch (9.5 mm)	95 to 100		
No. 4 (4.75 mm)	72		
No. 8 (2.36 mm)	42 to 60		
No. 16 (1.18 mm)	27 to 45		
No. 50 (300 µm)	10 to 22		
No. 200 (75 µm)	0 to 8		

[1] GRADATION INCLUDES ANY MINERAL FILLER AND IS SPECIFIED IN PERCENT PASSING.

[2] PROVIDE COARSE AGGREGATE WITH A MINIMUM OF 90 PERCENT FRACTURED (TWO OR MORE FACES) ACCORDING TO ASTM D5821

[3] PROVIDE FINE AGGREGATE AS A 50% CRUSHED/50% NAT. SAND BLEND. ENSURE CRUSHED FINE AGGREGATE MEETS FAA OF 44 OR IS CRUSHED CARBONATE STONE, TRAP ROCK OR AIR COOLED BLAST FURNACE SLAG.

690.03 MATERIALS.
FURNISH CLEAN, UNCOATED AGGREGATE CONFORMING TO THE APPLICABLE REQUIREMENTS OF TABLE 690.03-1 AND QUALITY REQUIREMENTS OF 703.05. PROVIDE MINERAL FILLER CONFORMING TO 703.07. PROVIDE BINDERS CONFORMING TO 702.01. FOR PG52-28 BINDER: COMPLY WITH AASHTO M320 EXCEPT THAT FLASH POINT IS 260°C MIN. AND MASS CHANGE IS 0.75% MAX. PROCESS RAP ACCORDING TO METHOD 2 (EXTENDED) RAP, TABLE 401.04-2. ONLY INCORPORATE RAP PASSING THE 9/16 INCH SIEVE INTO THE MIX.

690.04 MIXING.
ENSURE THE MIXING PLANT CONFORMS TO 402.

690.05 WEATHER LIMITATIONS.
DO NOT PLACE THE ASPHALT CONCRETE WHEN THE SURFACE OF THE EXISTING PAVEMENT IS LESS THAN 60 °F (15 °C) OR THE AIR TEMPERATURE IS LESS THAN 60 °F (15 °C).

690.06 SPREADING COMPACTING AND FINISHING.
ONLY USE STATIC (NON-VIBRATORY) COMPACTION METHODS. USE A MINIMUM OF TWO ROLLERS. COMPACT MIXES CONFORMING TO 401.13 AND 401.16. THREE WHEEL ROLLERS PER 401.16 WILL NOT BE REQUIRED. DOUBLE THE MAXIMUM CAPACITY SQUARE YARDS PER HOUR PROVIDED IN TABLE 401.13-1 FOR COURSE THICKNESS ONE INCH OR LESS.

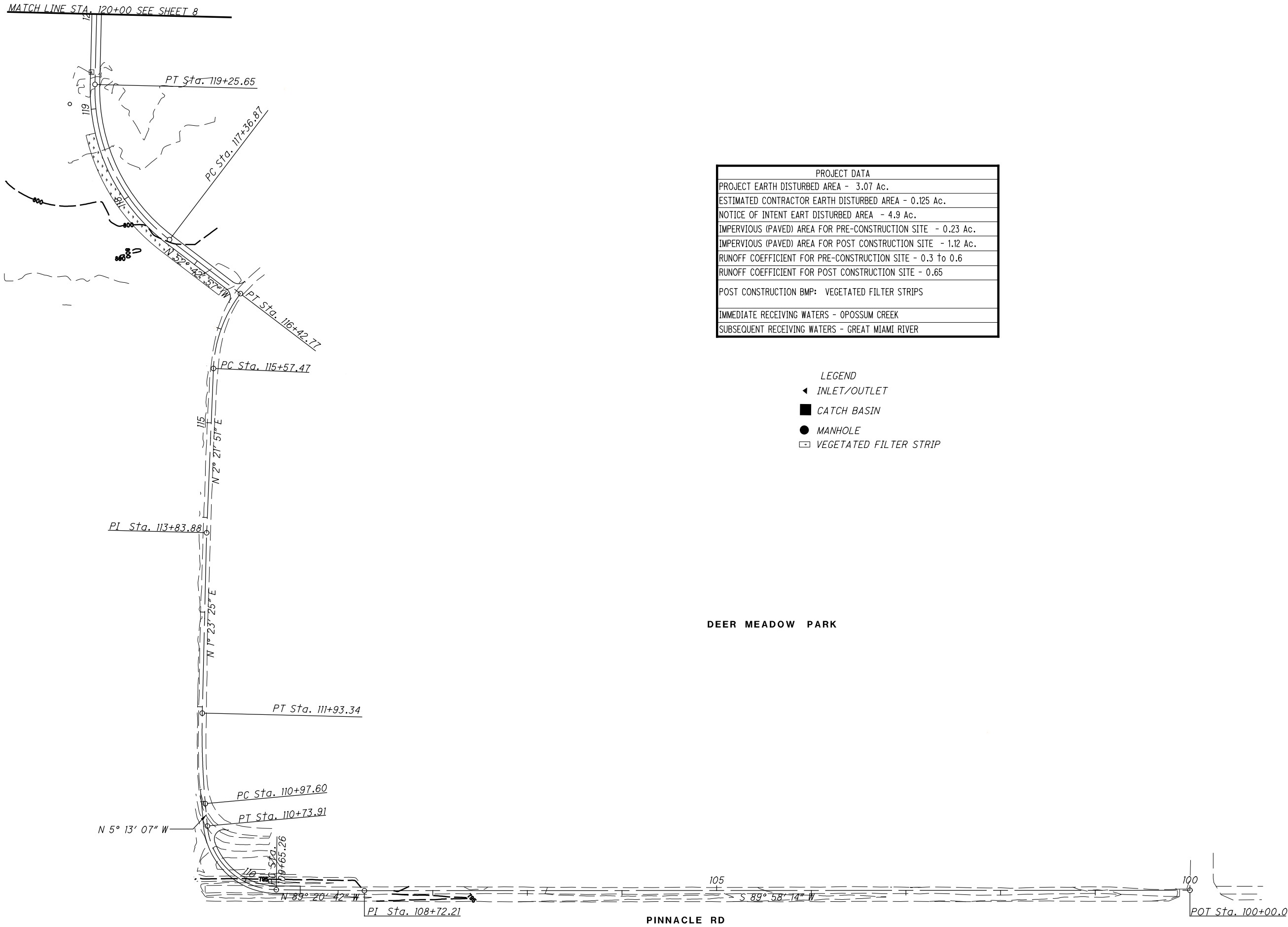
ENSURE THAT THE MIX TEMPERATURE IMMEDIATELY BEFORE ROLLING IS NOT LESS THAN 260 °F (127 °C). COMPLETE ROLLING, WITH FULL COVERAGE OF THE ROLLER TRAIN, BEFORE THE MIX TEMPERATURE REACHES 175 °F (80 °C). PROVIDE AN ANALYSIS TO THE ENGINEER USING PAVECOOL SOFTWARE TO MODEL ASPHALT COOLING UNDER ACTUAL PLACEMENT CONDITIONS AT THE START OF EACH PAVING DAY. ENSURE THE PLACEMENT RATE AND ROLLER COVERAGE ARE COORDINATED TO ALLOW FULL ROLLER TRAIN COVERAGE IN THE RECOMMENDED ROLLING TIMES. DO NOT ALLOW TRAFFIC ON THE COMPACTED MIXTURE UNTIL IT HAS COOLED SUFFICIENTLY TO PREVENT DAMAGE.

690.07 SURFACE TOLERANCES.
ENSURE THE COMPLETED SURFACE COURSE CONFORMS TO 401.19. PRIOR TO PLACING ASPHALT CONCRETE, PRE-FILL THE DEPRESSION CAUSED BY THE REMOVAL OF THE CASTING WITH MATERIAL MEETING THIS SPECIFICATION.

690.08 ACCEPTANCE.
COMPLY WITH ALL REQUIREMENTS OF 448 EXCEPT 448.02 DENSITY. DO NOT CONDUCT DENSITY GAUGE QUALITY CONTROL TESTING PER SUPPLEMENT 1055.

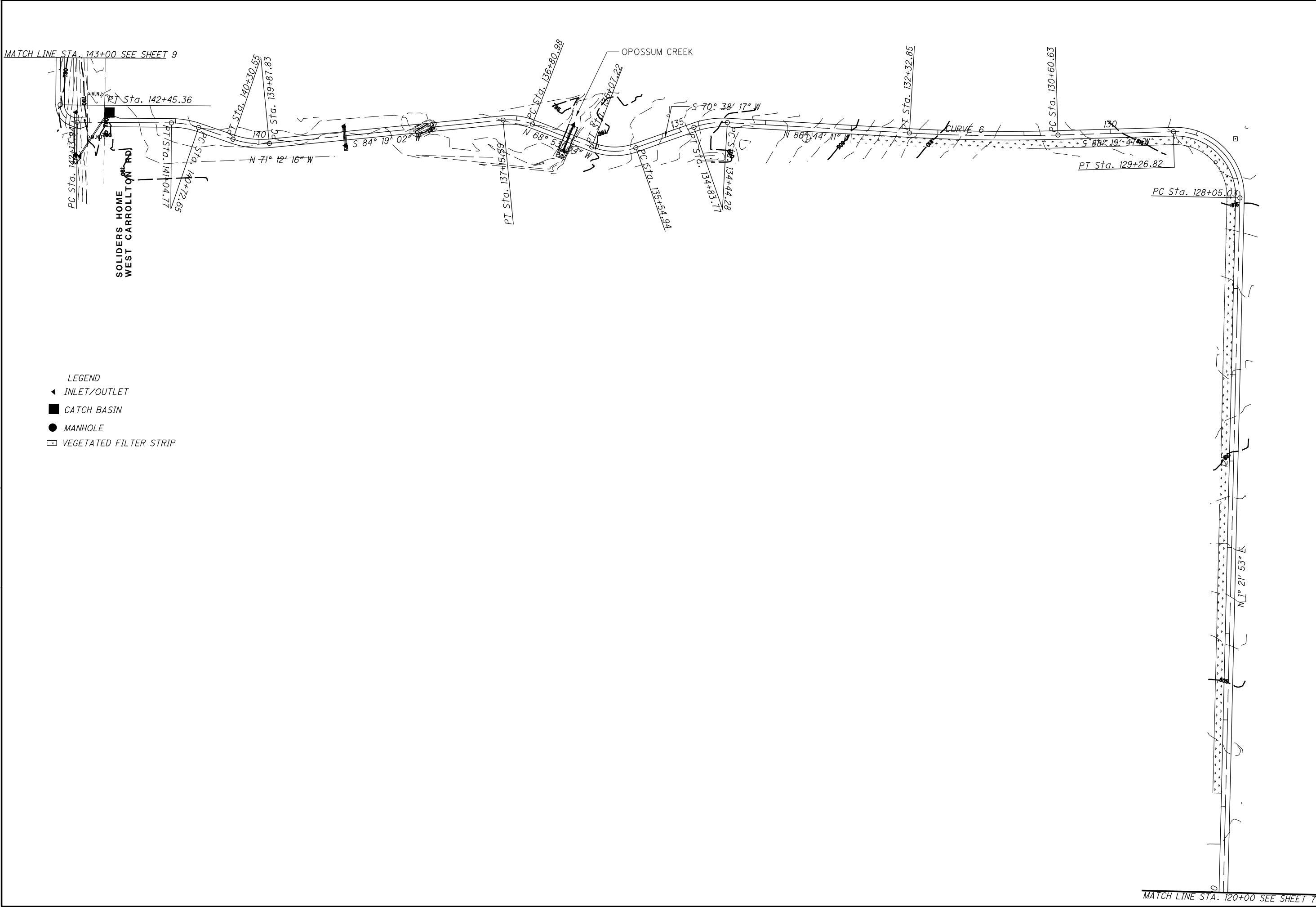
690.09 BASIS OF PAYMENT.
THE DEPARTMENT WILL PAY FOR REMOVAL OF EXISTING RAISED PAVEMENT MARKERS ACCORDING TO ITEM 621 RAISED PAVEMENT MARKERS REMOVED. THE DEPARTMENT WILL MAKE PAYMENT FOR ACCEPTED QUANTITIES, COMPLETED IN PLACE, AT THE CONTRACT PRICE AS FOLLOWS:

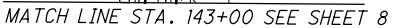
ITEM	UNIT	DESCRIPTION
690	CUBIC YARD (CUBIC METER)	THINLAY ASPHALT CONCRETE, TYPE MED
690	CUBIC YARD (CUBIC METER)	THINLAY ASPHALT CONCRETE, TYPE LT
690	CUBIC YARD (CUBIC METER)	THINLAY ASPHALT CONCRETE, TYPE ULT



PROJECT DATA	
PROJECT EARTH DISTURBED AREA -	3.07 Ac.
ESTIMATED CONTRACTOR EARTH DISTURBED AREA -	0.125 Ac.
NOTICE OF INTENT EART DISTURBED AREA -	4.9 Ac.
IMPERVIOUS (PAVED) AREA FOR PRE-CONSTRUCTION SITE -	0.23 Ac.
IMPERVIOUS (PAVED) AREA FOR POST CONSTRUCTION SITE -	1.12 Ac.
RUNOFF COEFFICIENT FOR PRE-CONSTRUCTION SITE -	0.3 to 0.6
RUNOFF COEFFICIENT FOR POST CONSTRUCTION SITE -	0.65
POST CONSTRUCTION BMP: VEGETATED FILTER STRIPS	
IMMEDIATE RECEIVING WATERS - OPOSSUM CREEK	
SUBSEQUENT RECEIVING WATERS - GREAT MIAMI RIVER	

- LEGEND
- ◀ INLET/OUTLET
 - CATCH BASIN
 - MANHOLE
 - ▨ VEGETATED FILTER STRIP





LEGEND

◀ INLET/OUTLET

■ *CATCH BASIN*

● *MANHOLE*

 VEGETATED FILTER STRIP



CULATED

MD7

MD7

MD7

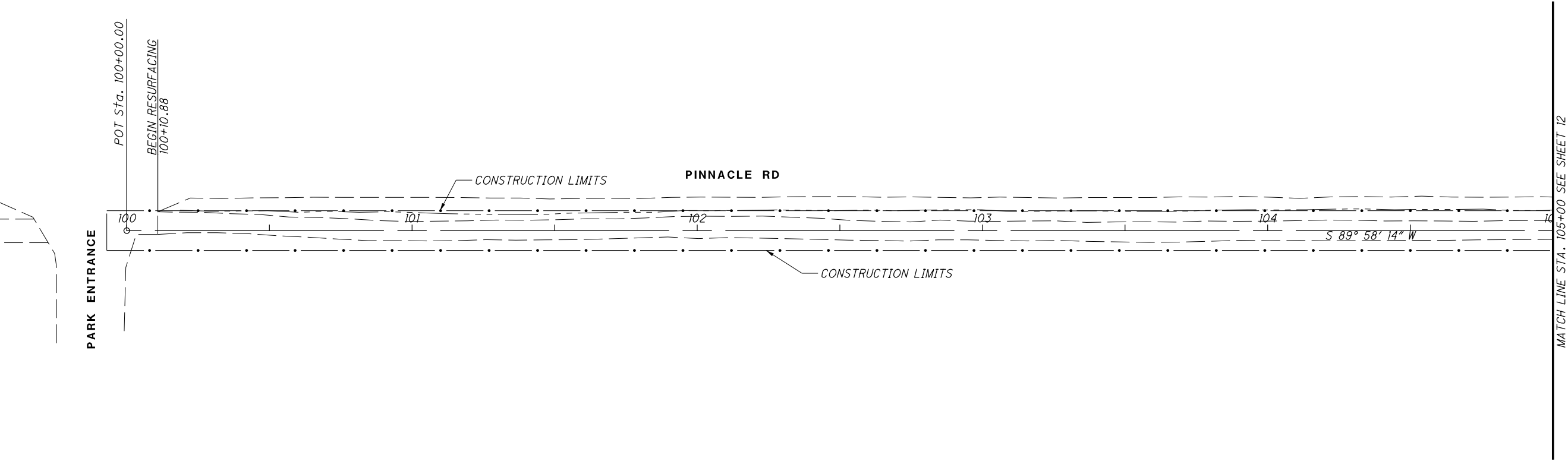
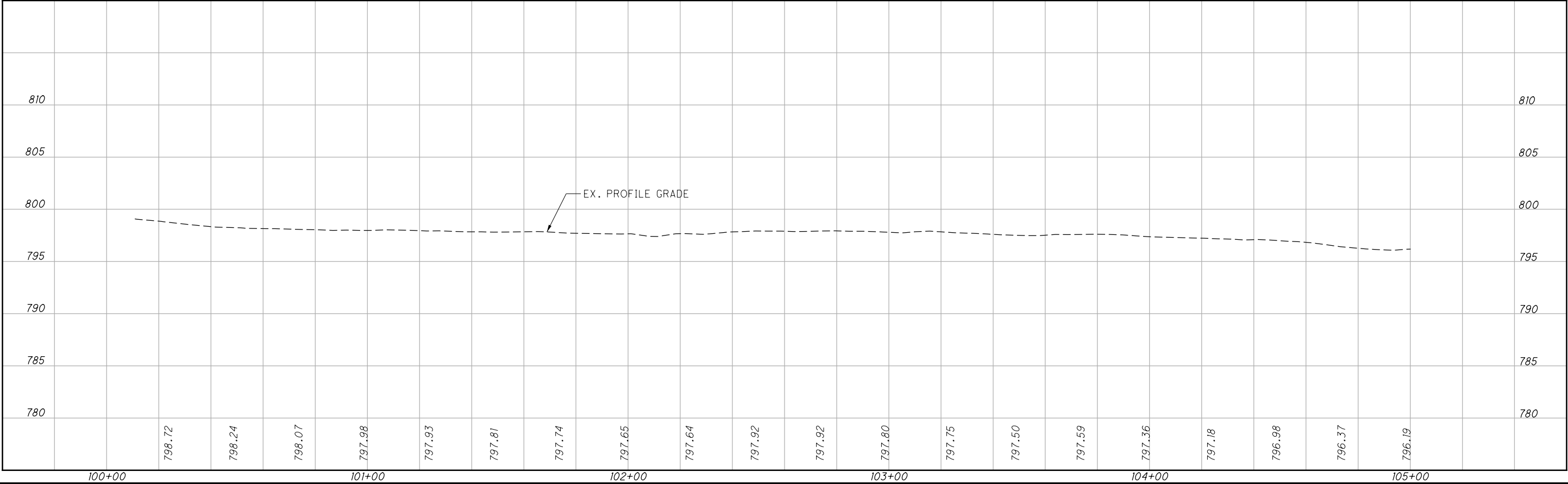
SITE PLAN
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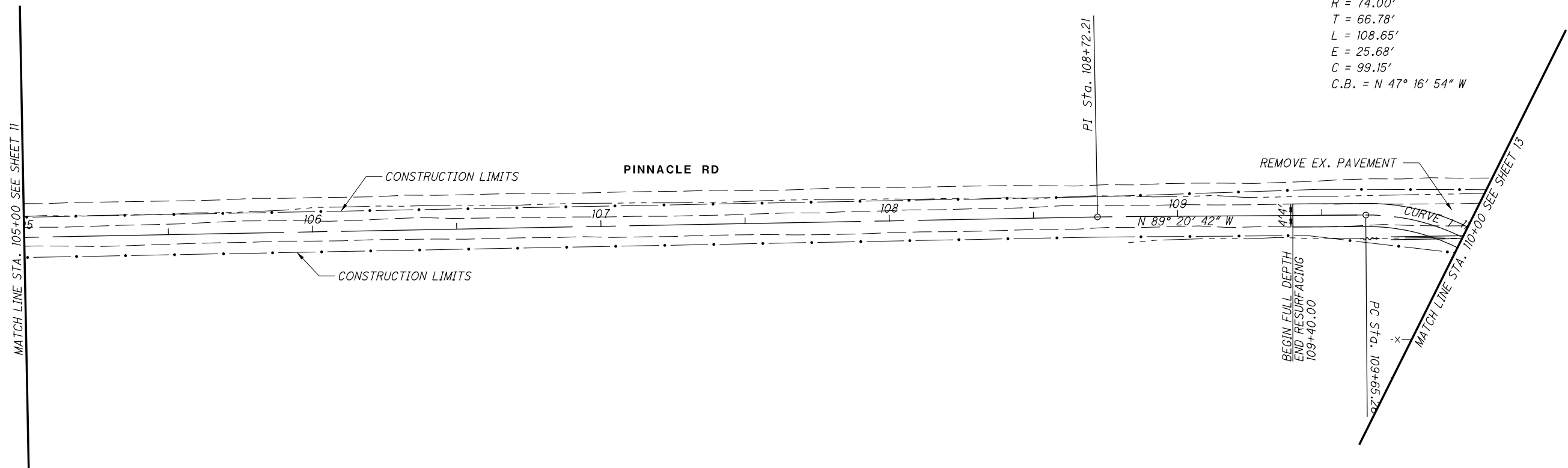
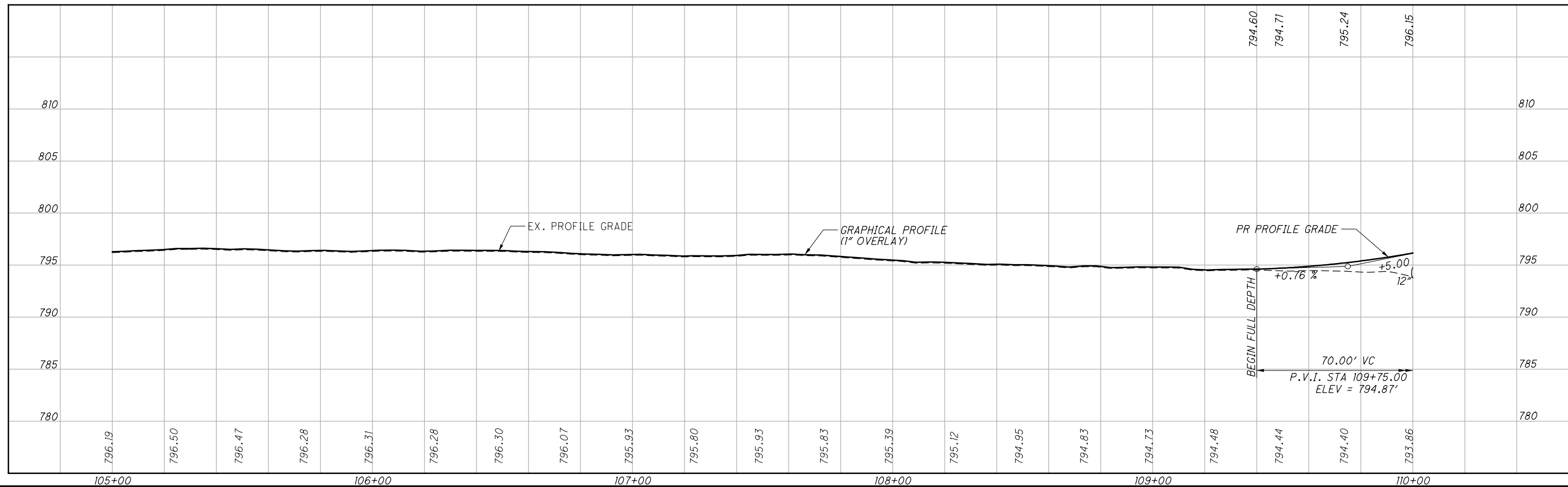
**DEER MEADOW /
POSSUM CREEK
CONNECTOR**

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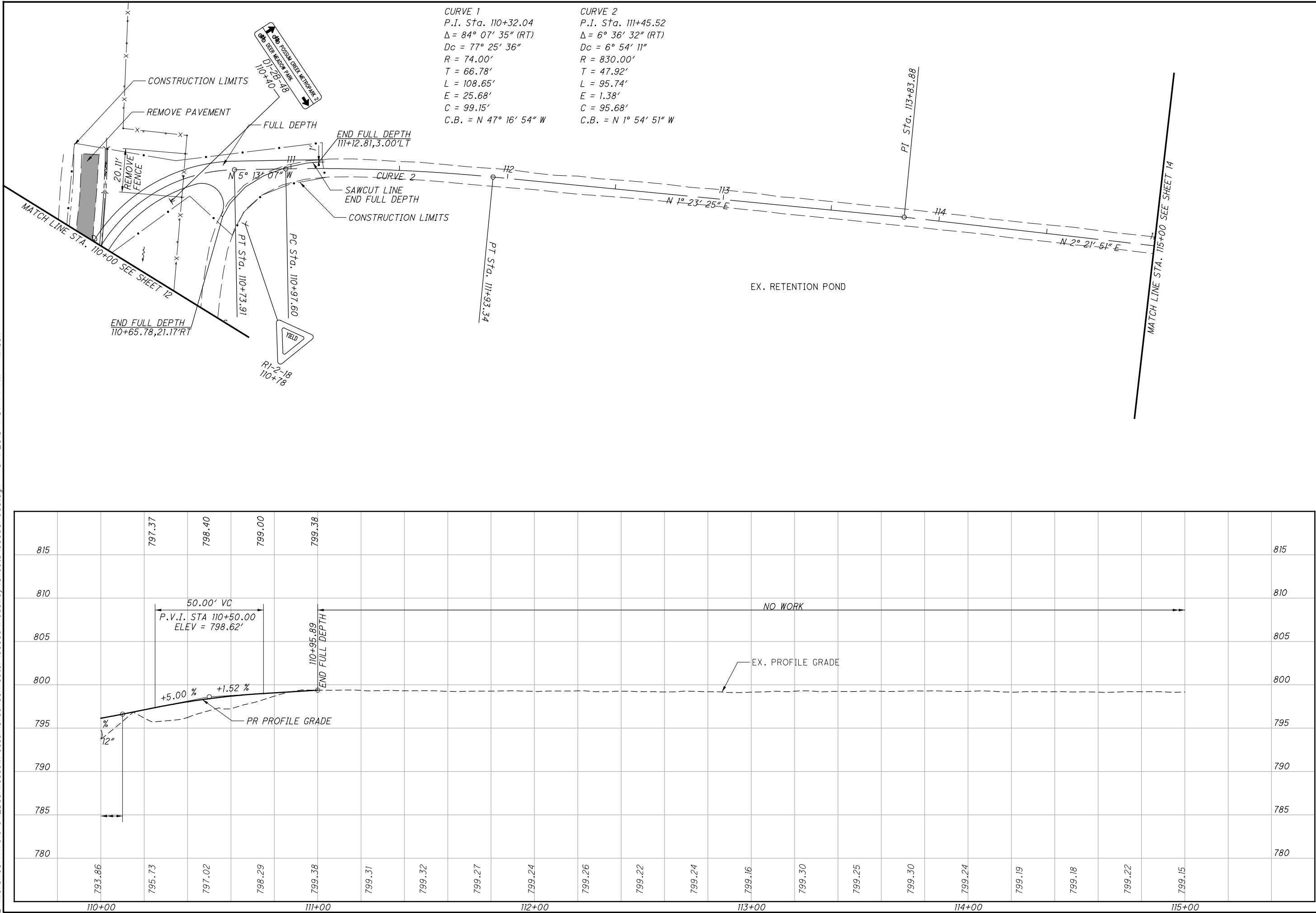
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CURVE 1
P.I. Sta. 110+32.04
 $\Delta = 84^{\circ} 07' 35''$ (RT)
 $Dc = 77^{\circ} 25' 36''$
 $R = 74.00'$
 $T = 66.78'$
 $L = 108.65'$
 $E = 25.68'$
 $C = 99.15'$
C.B. = N $47^{\circ} 16' 54''$ W

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DEER MEADOW /
POSSUM CREEK
CONNECTOR

13
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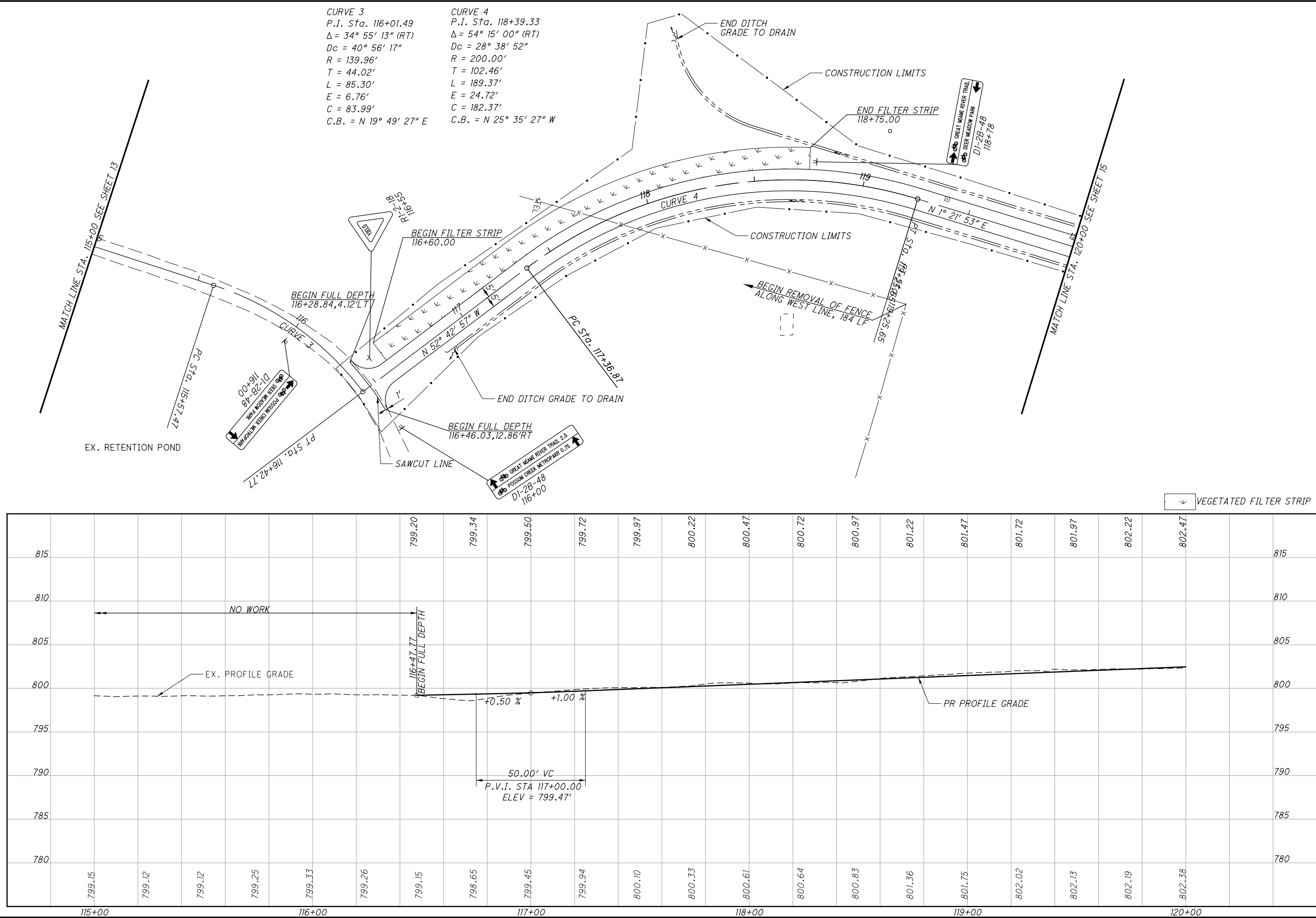
PLAN AND PROFILE
STA. 110+00 TO STA. 115+00

CALCULATED
LDW

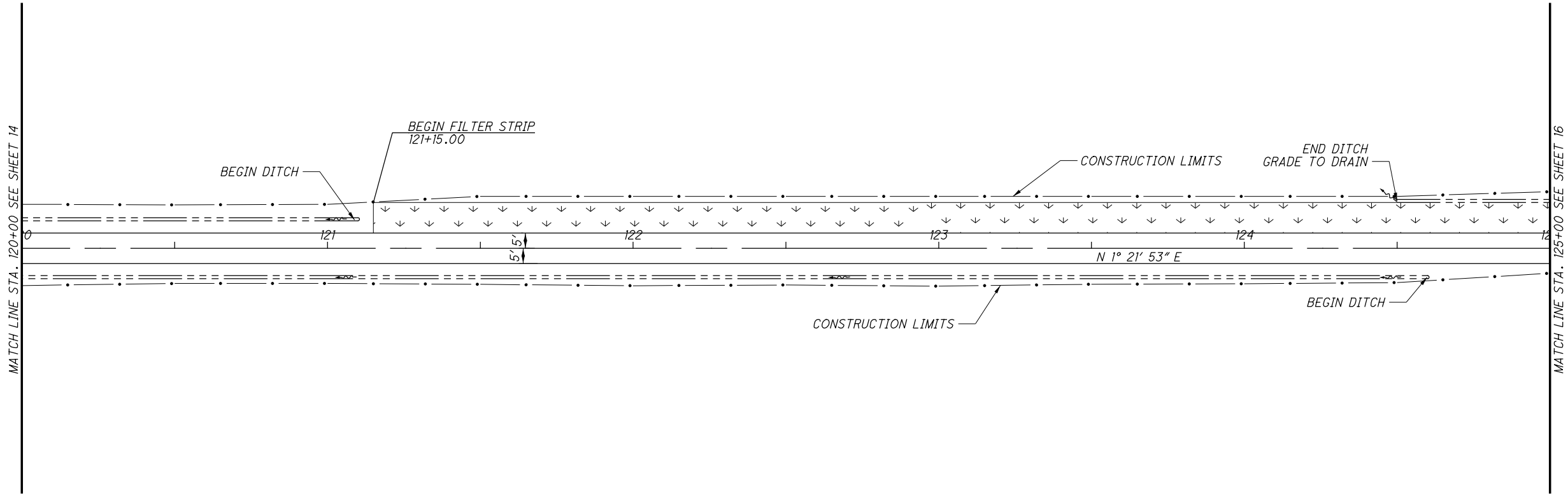
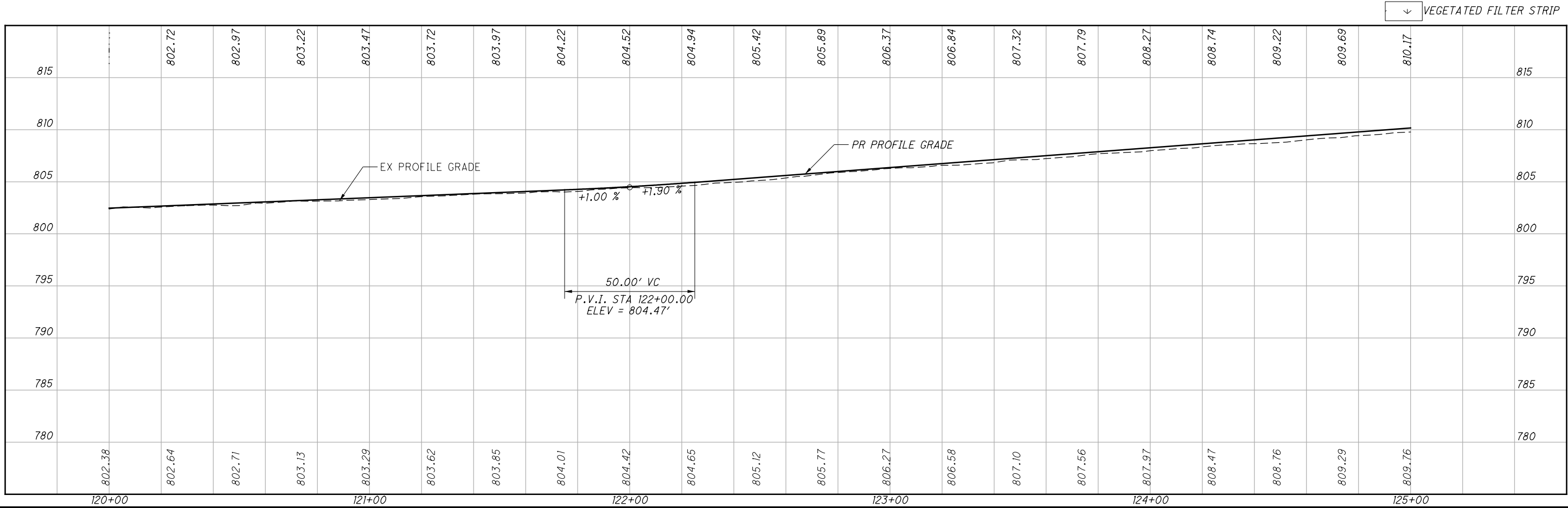
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0 20 40
HORIZONTAL
SCALE IN FEET

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DEER MEADOW /
POSSUM CREEK
CONNECTOR

PLAN AND PROFILE
STA. 120+00 TO STA. 125+00

CALCULATED
LDW

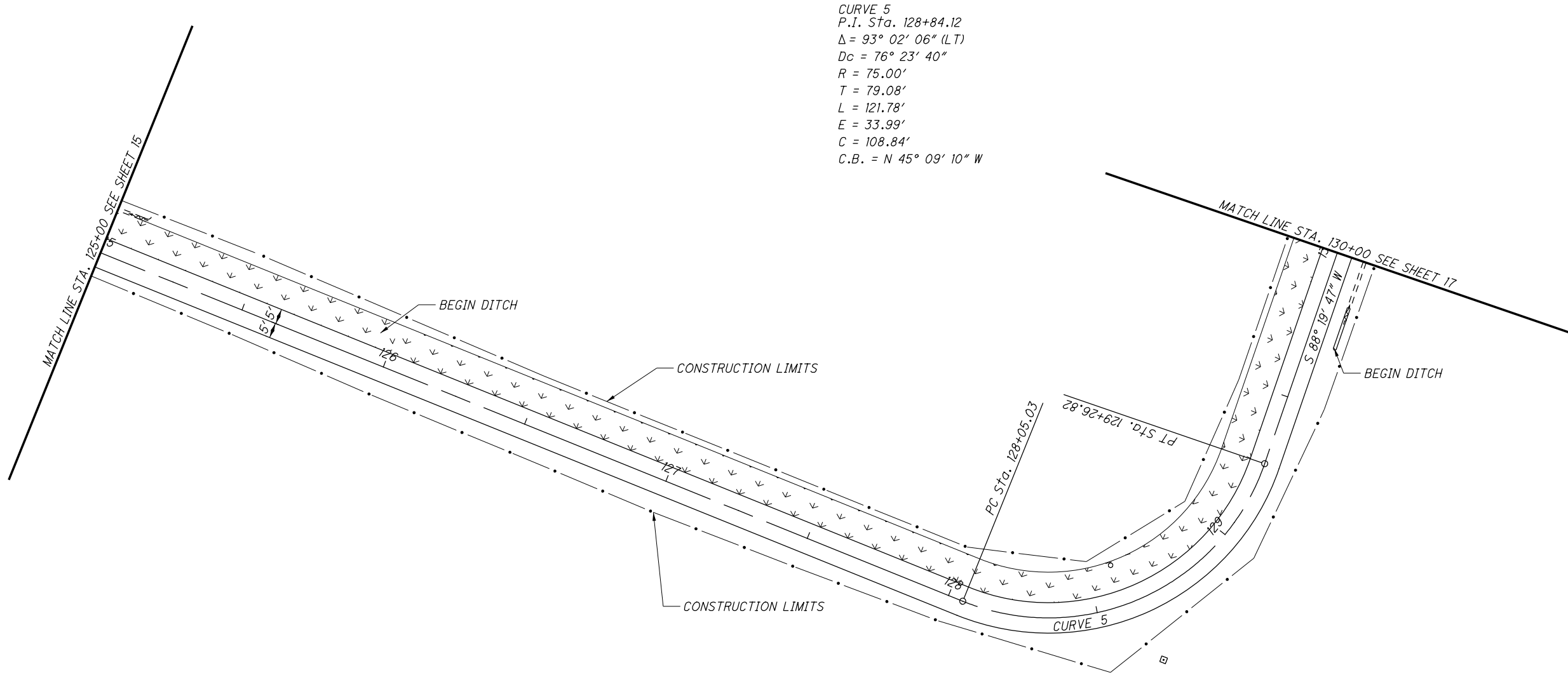
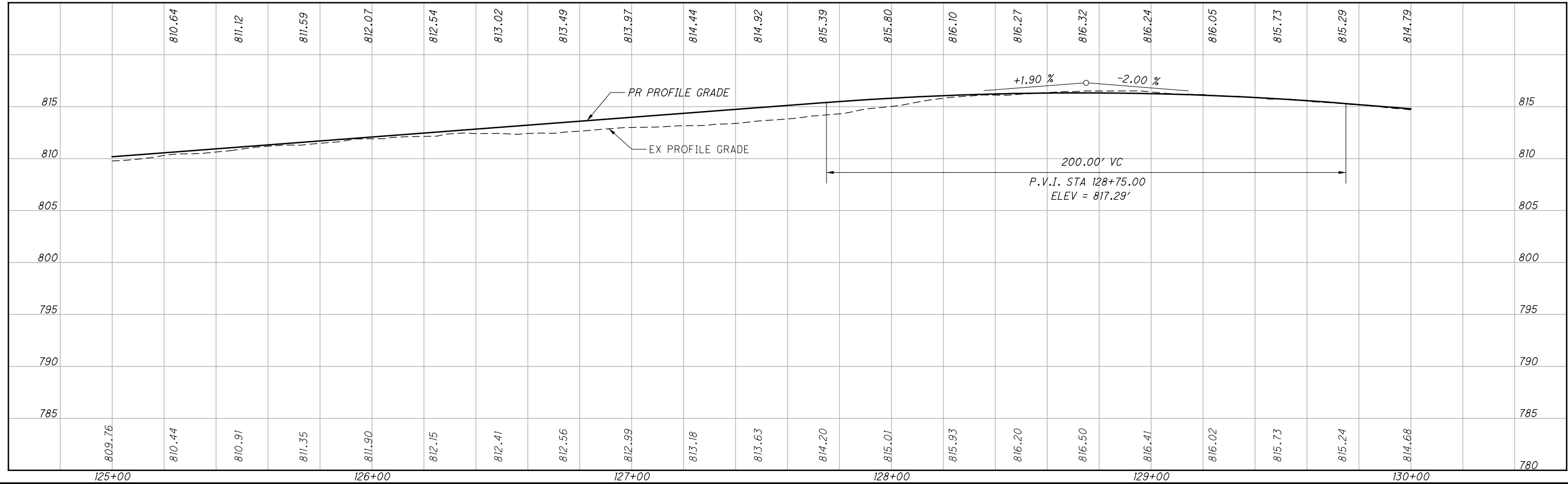
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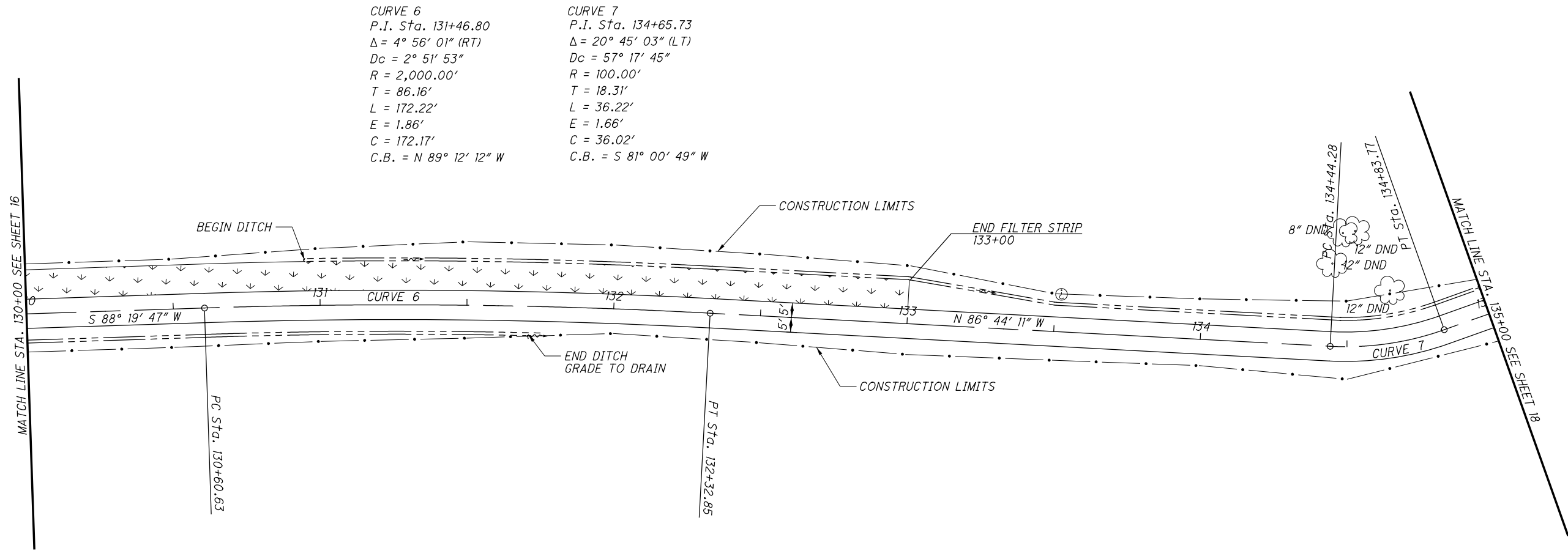
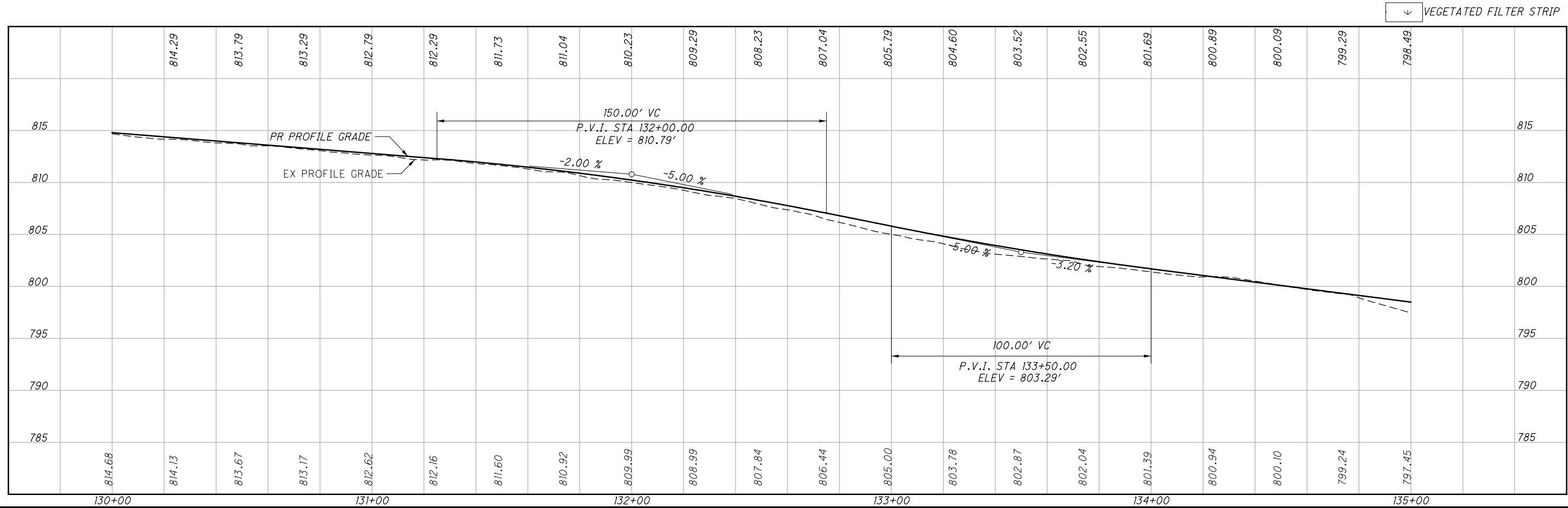
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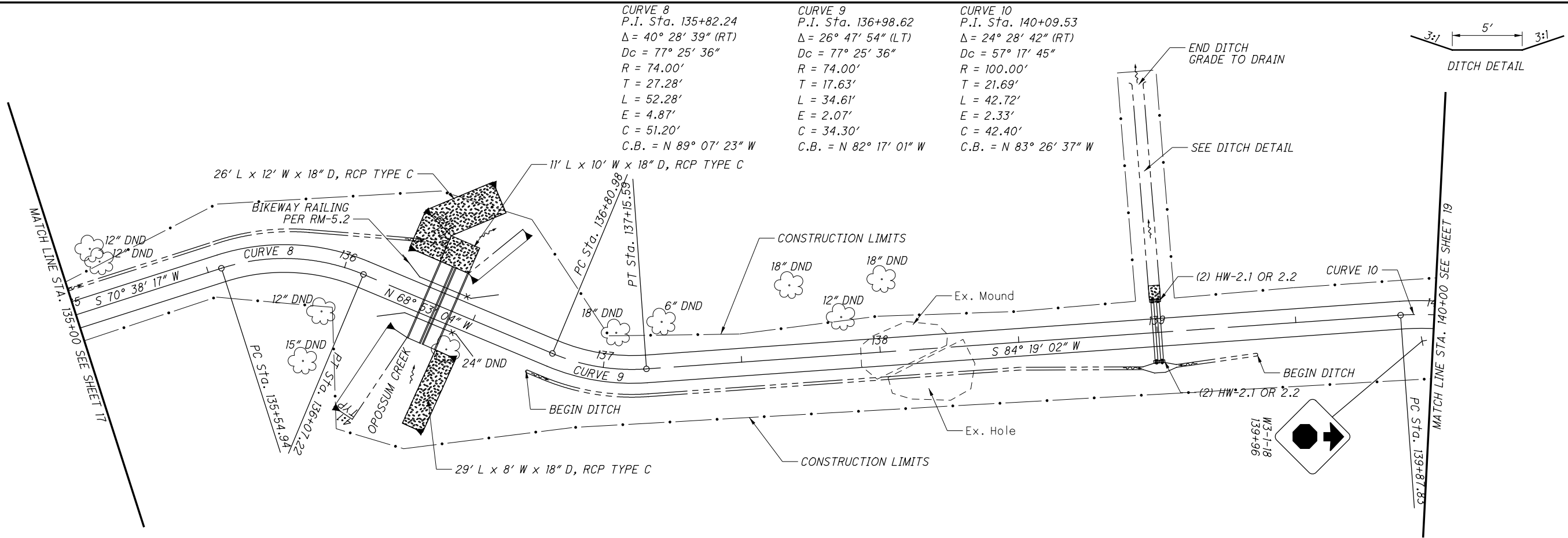
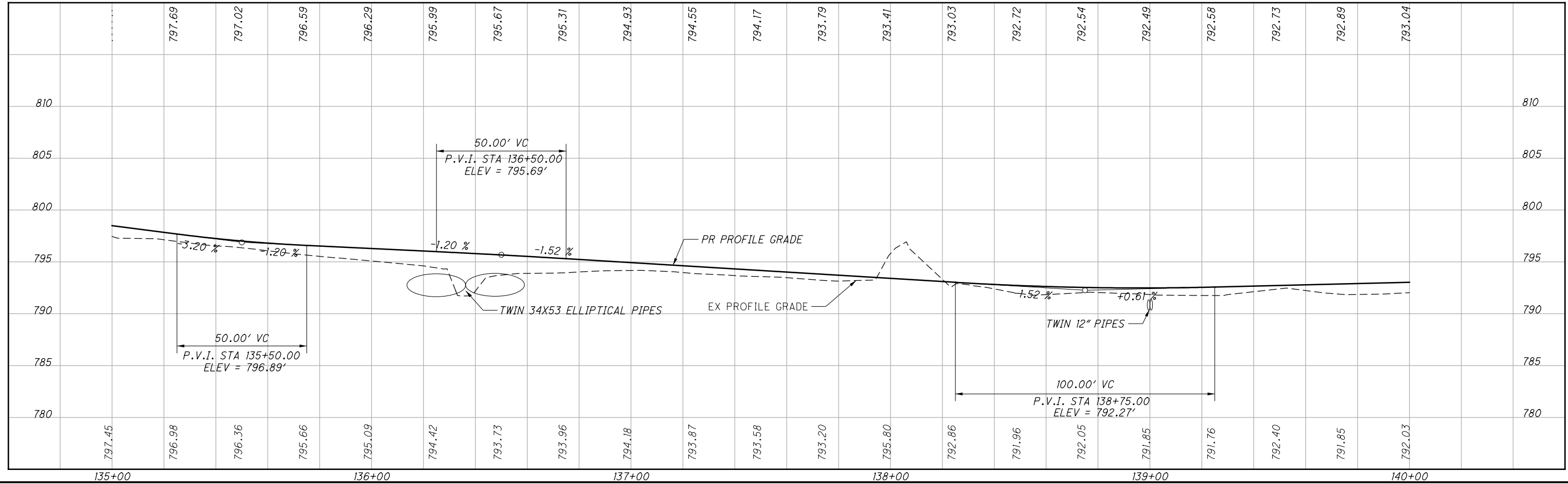
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SCALE IN FEET

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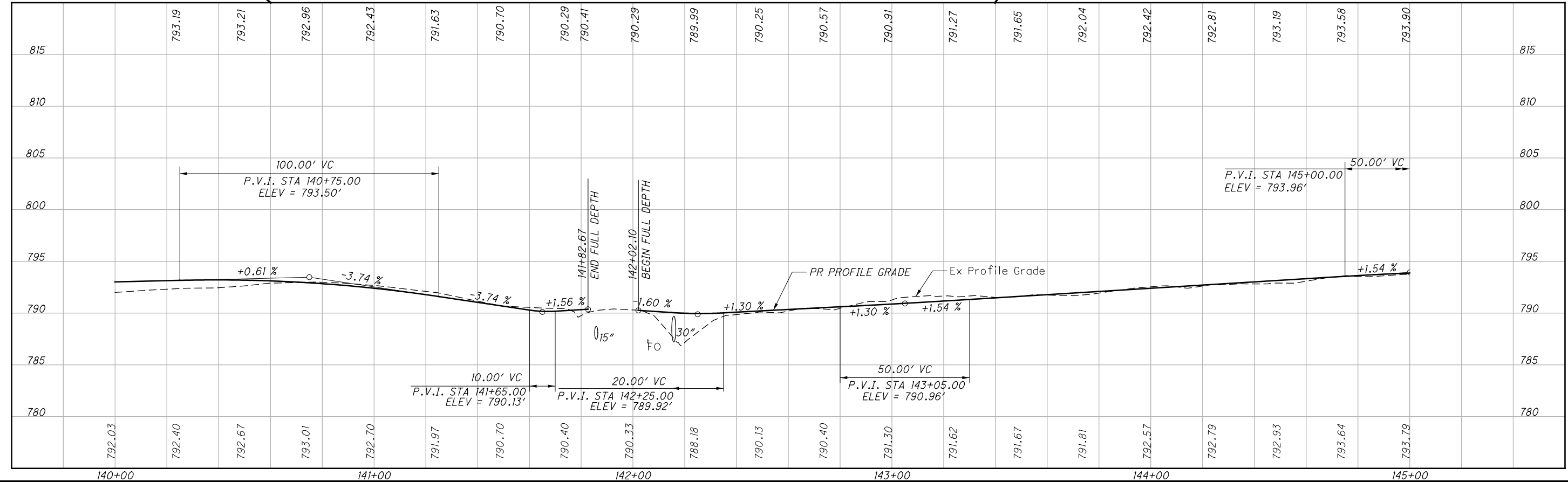
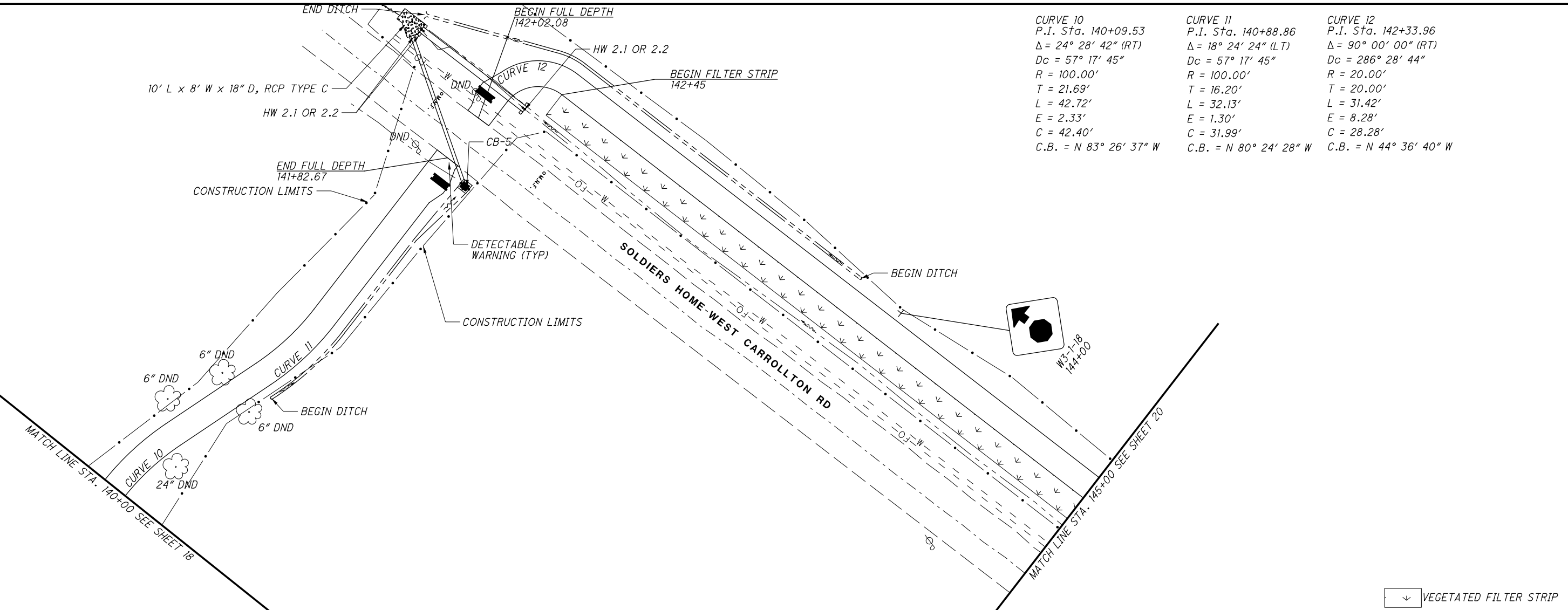
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HORIZONTAL
SCALE IN FEET

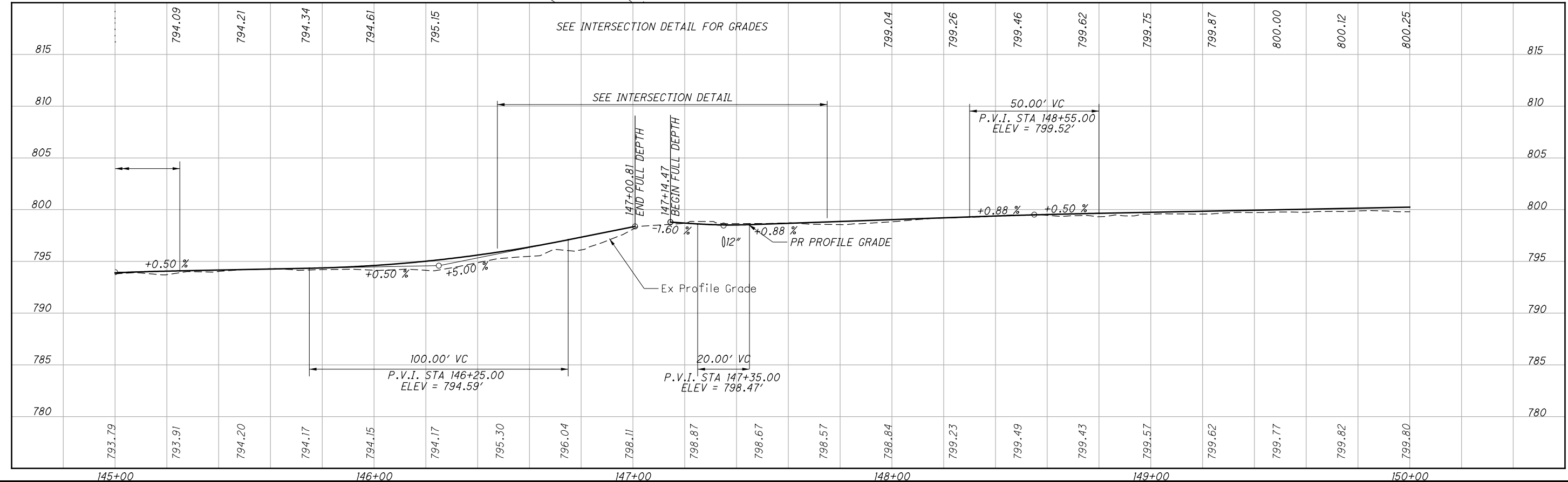
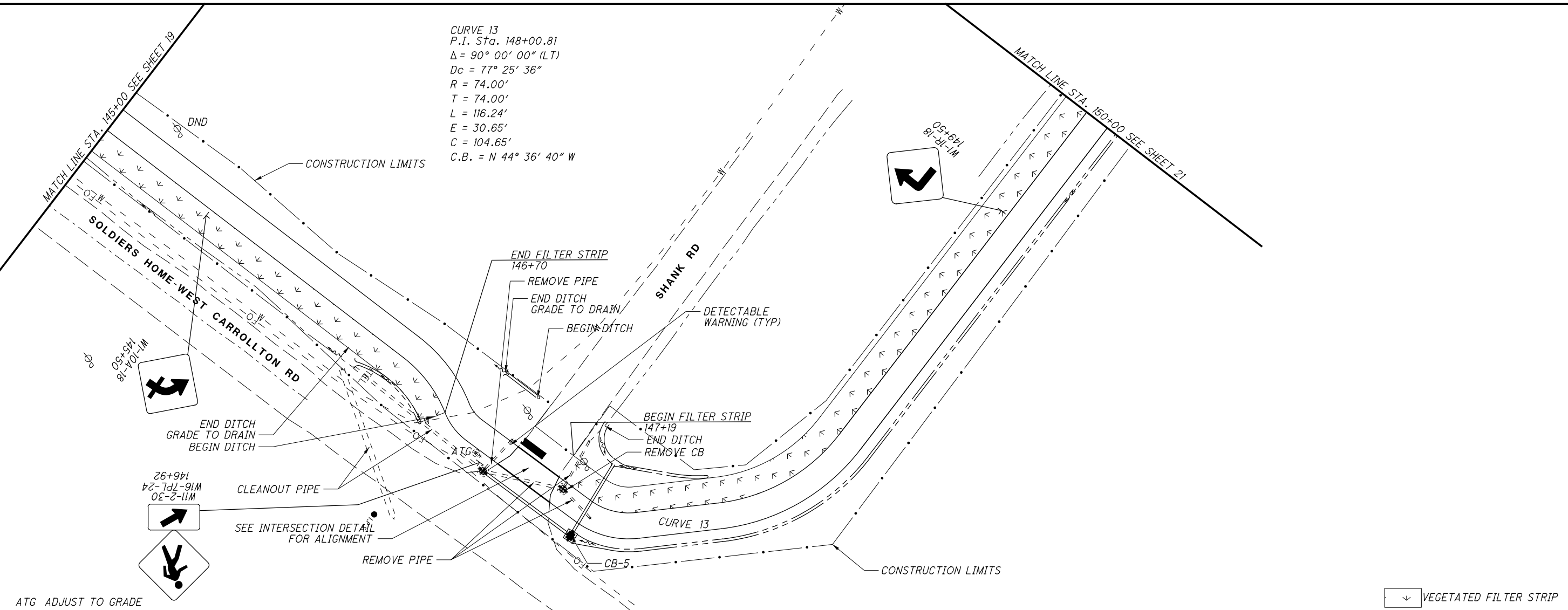
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PLAN AND PROFILE
STA. 140+00 TO STA. 145+00

**DEER MEADOW /
POSSUM CREEK
CONNECTOR**

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HORIZONTAL
SCALE IN FEET

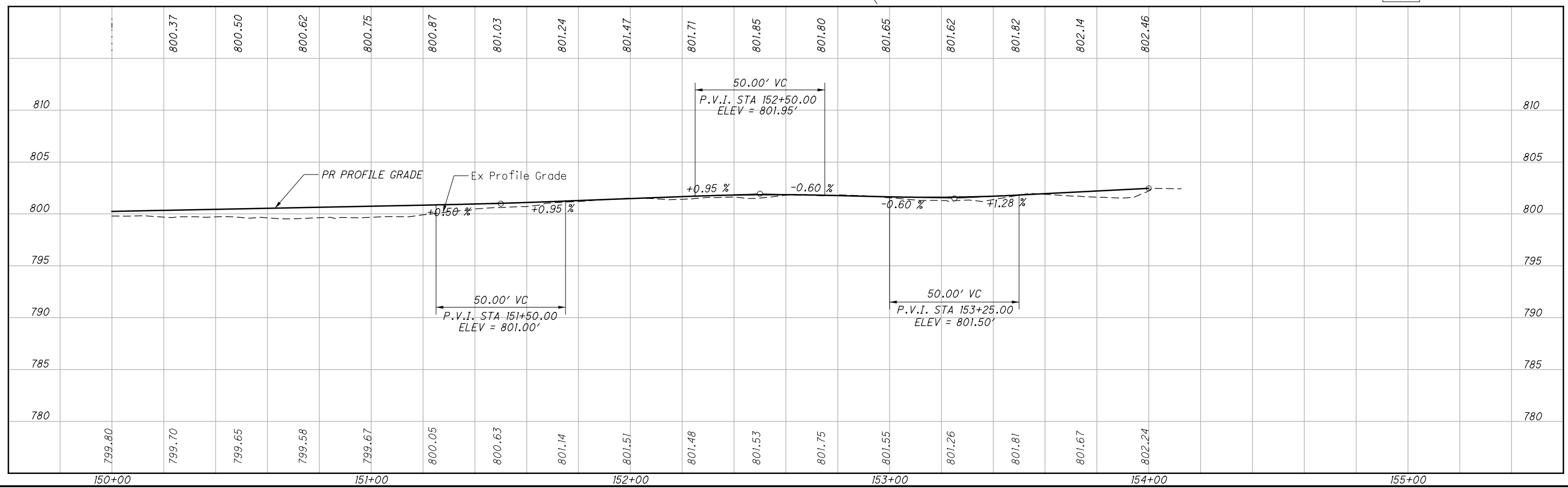
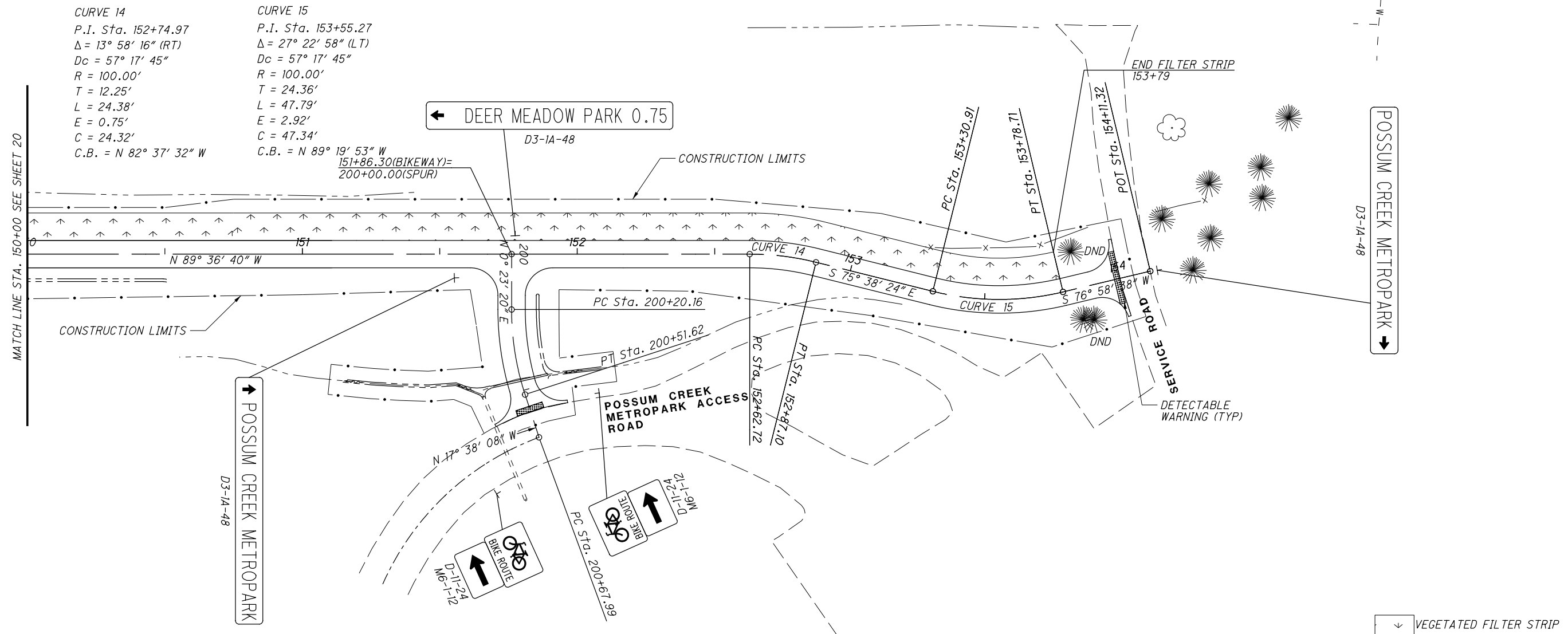
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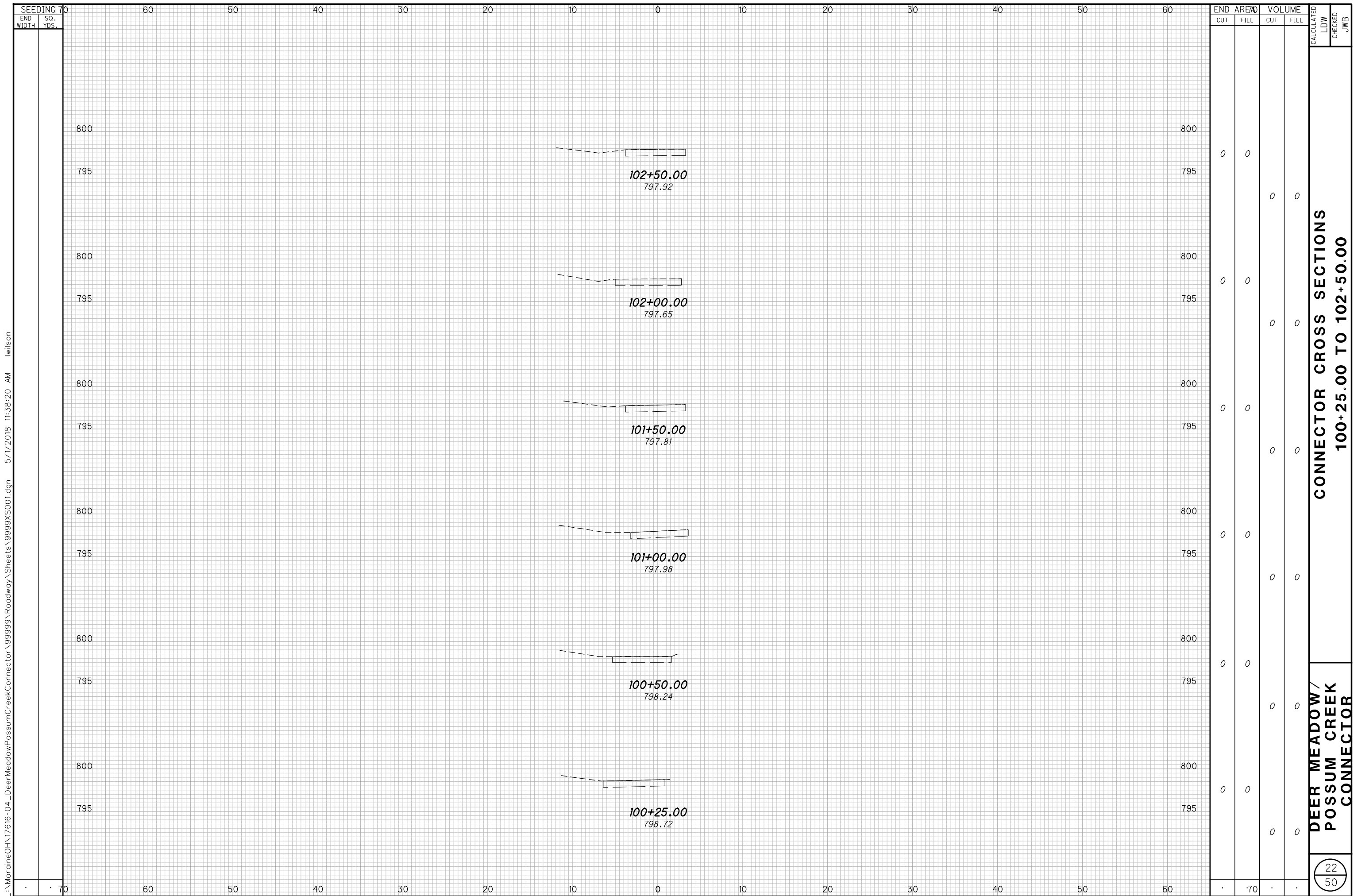
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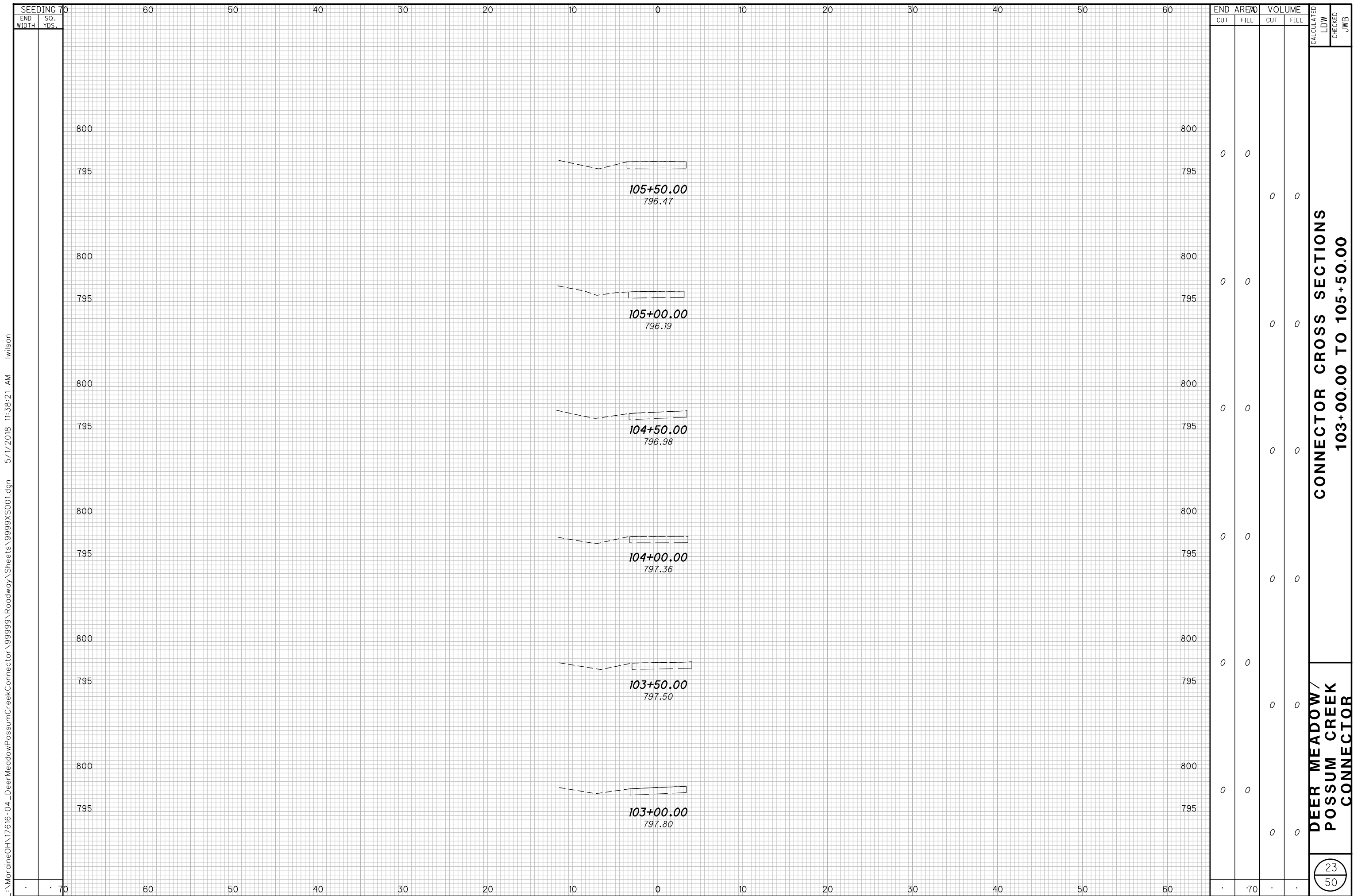
DEER MEADOW /
POSSUM CREEK
CONNECTOR

PLAN AND PROFILE
STA. 145+00 TO STA. 150+00

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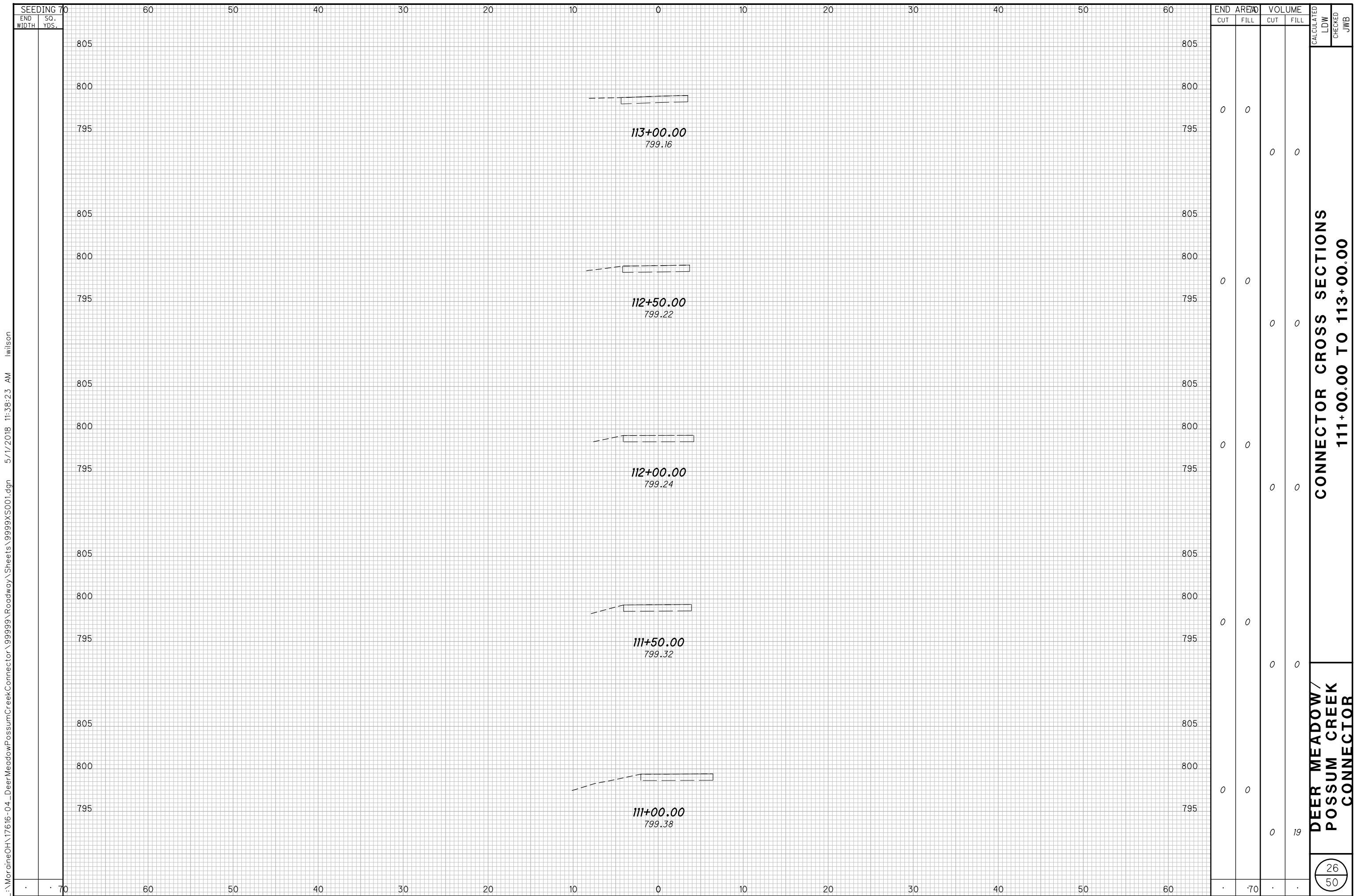


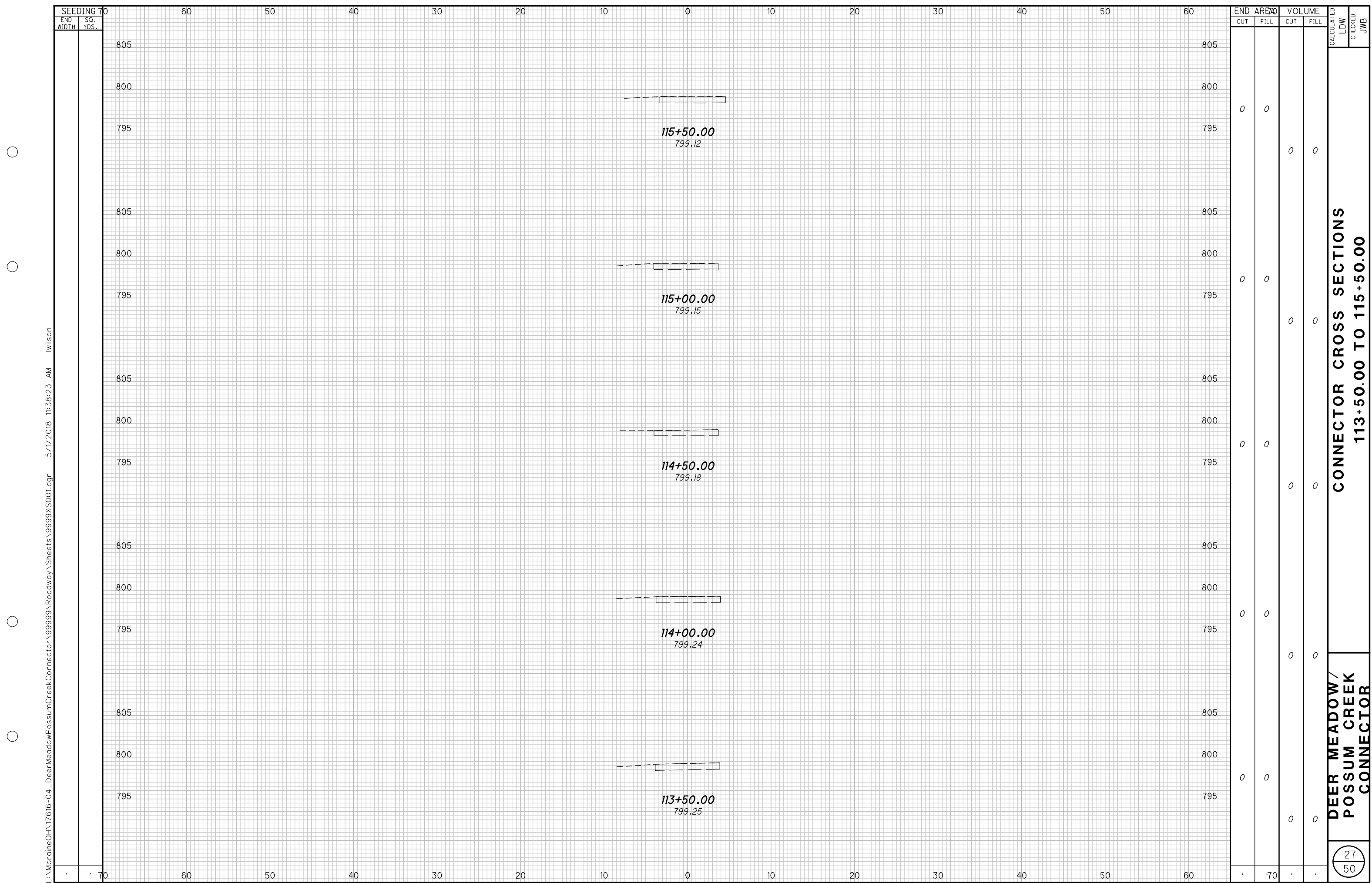


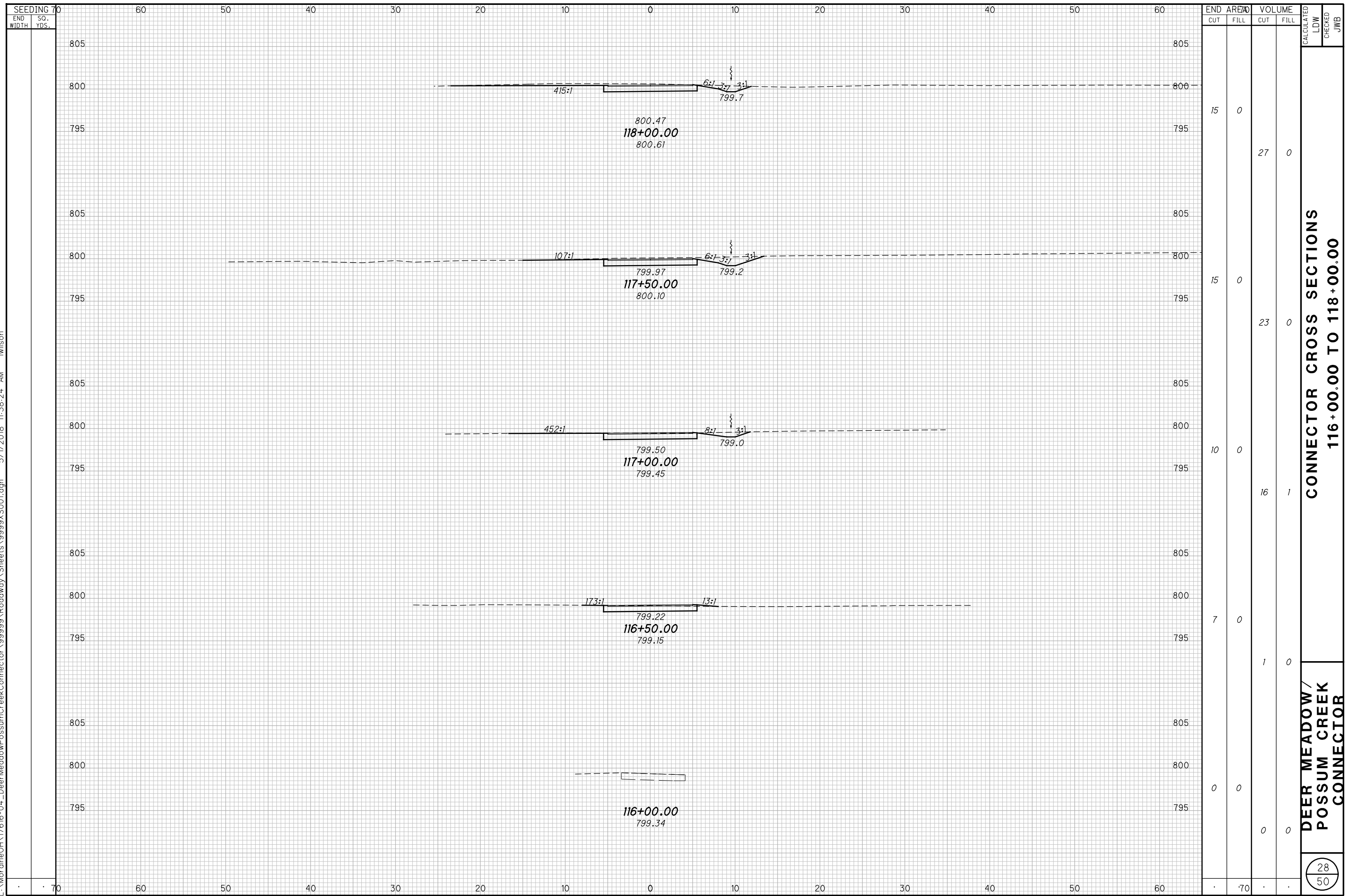


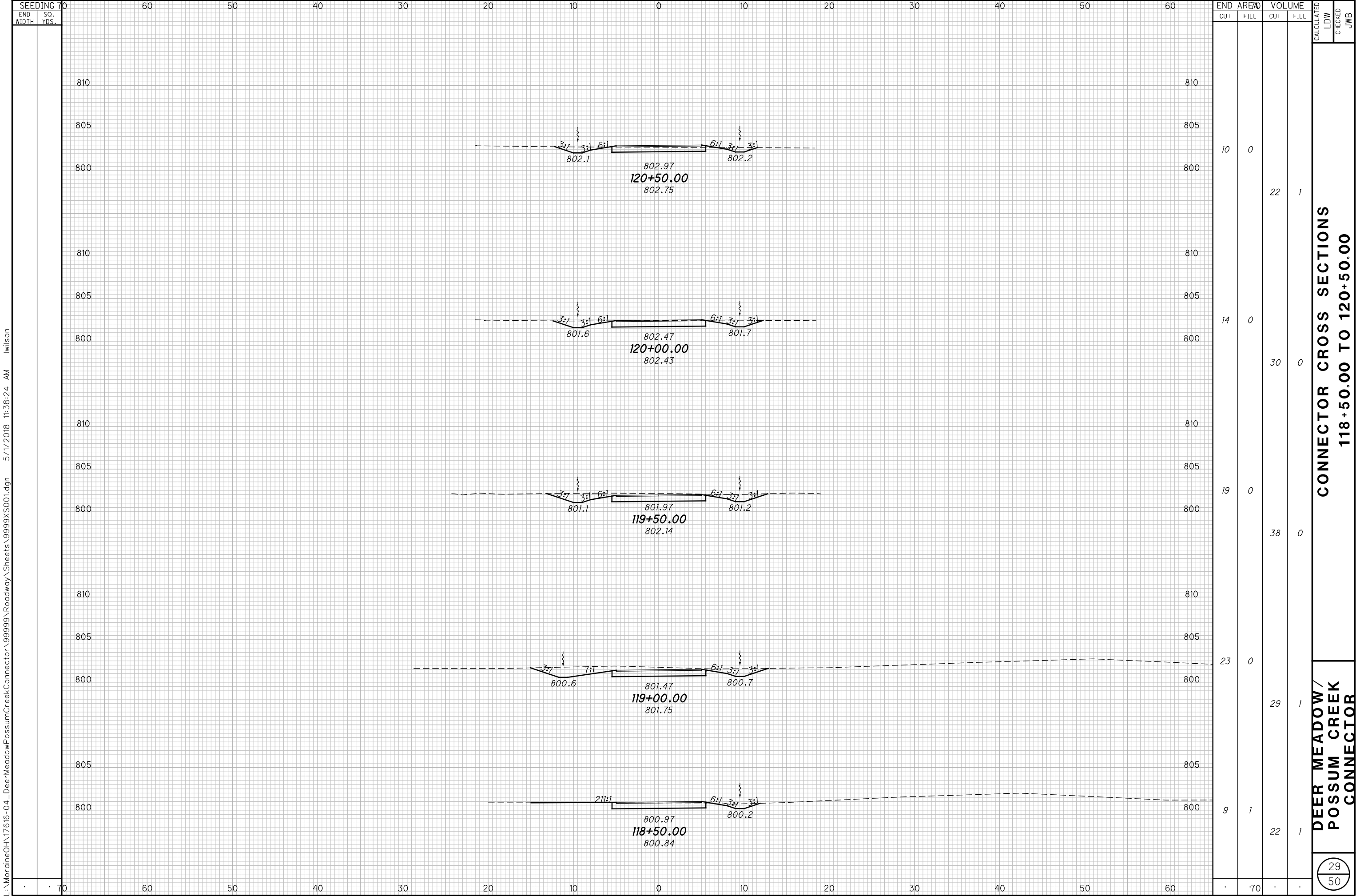


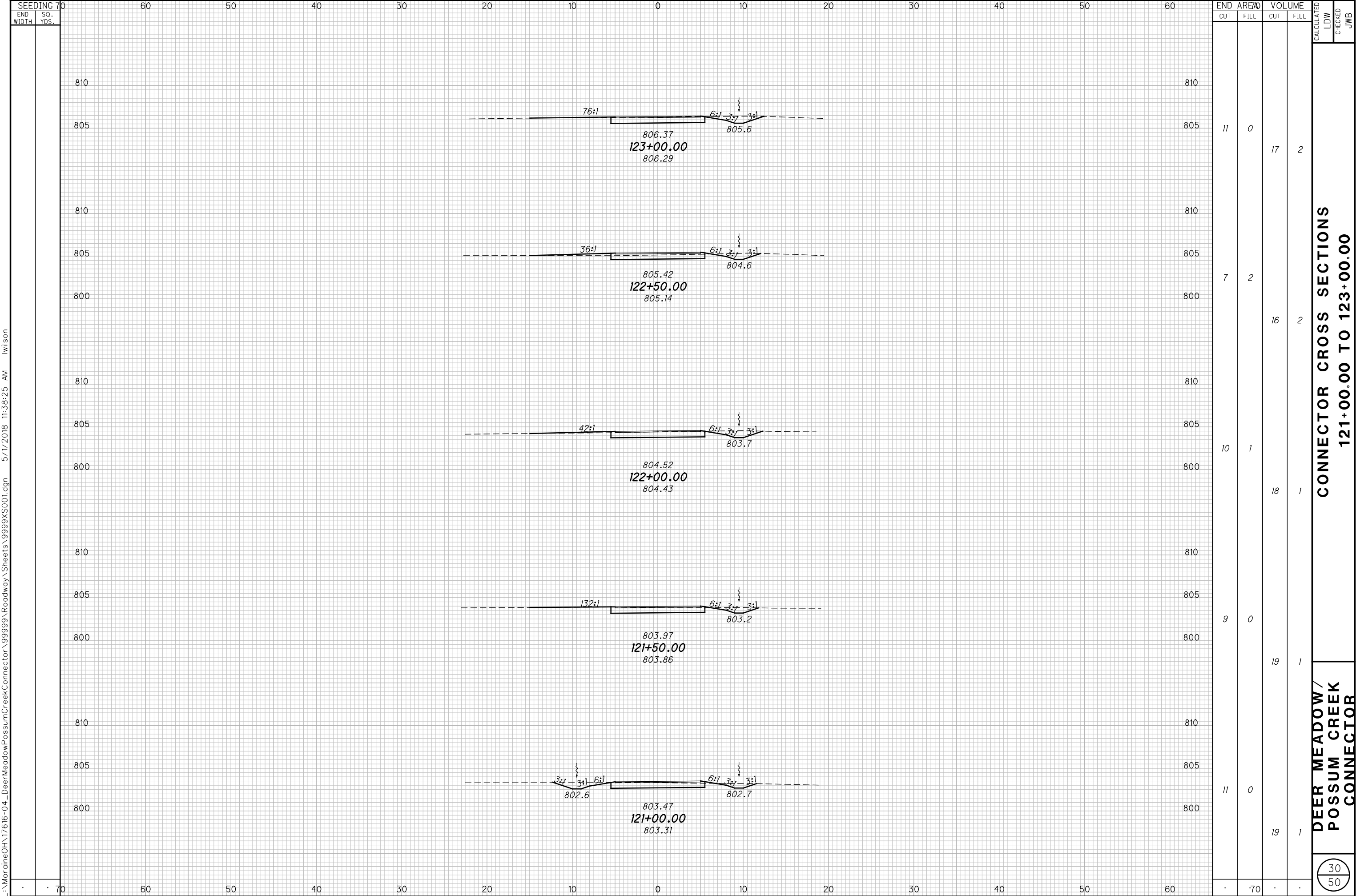
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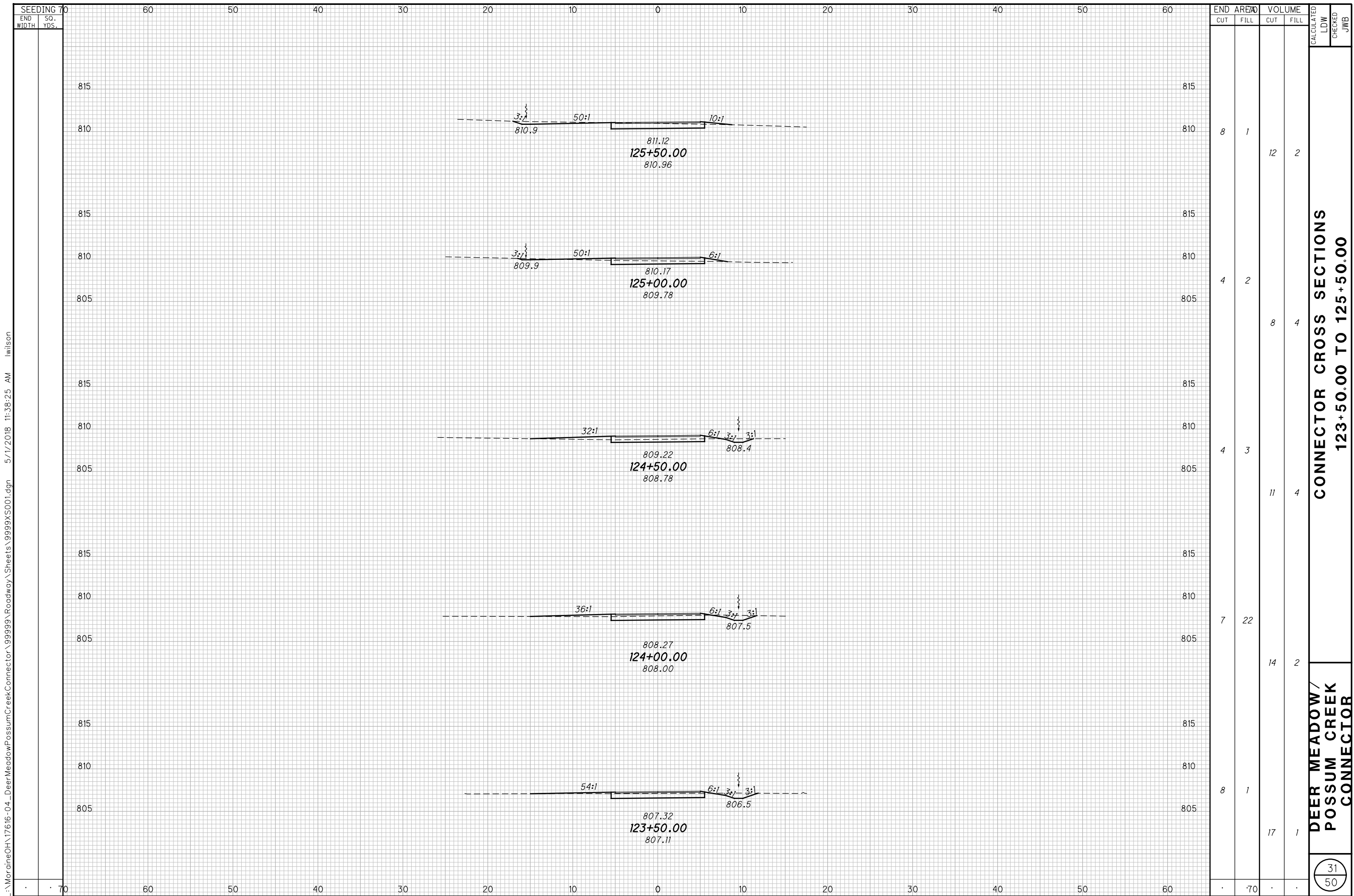


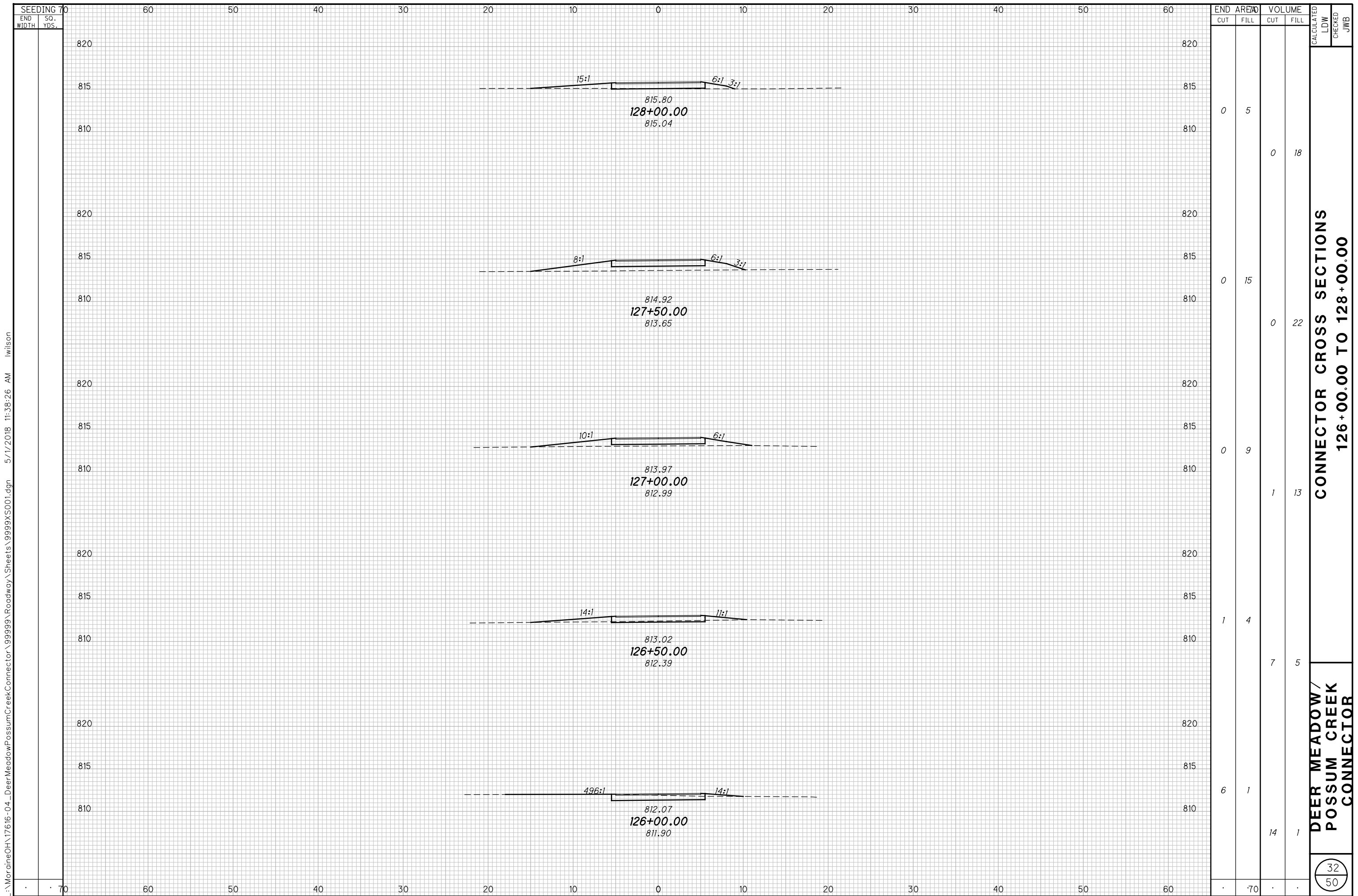


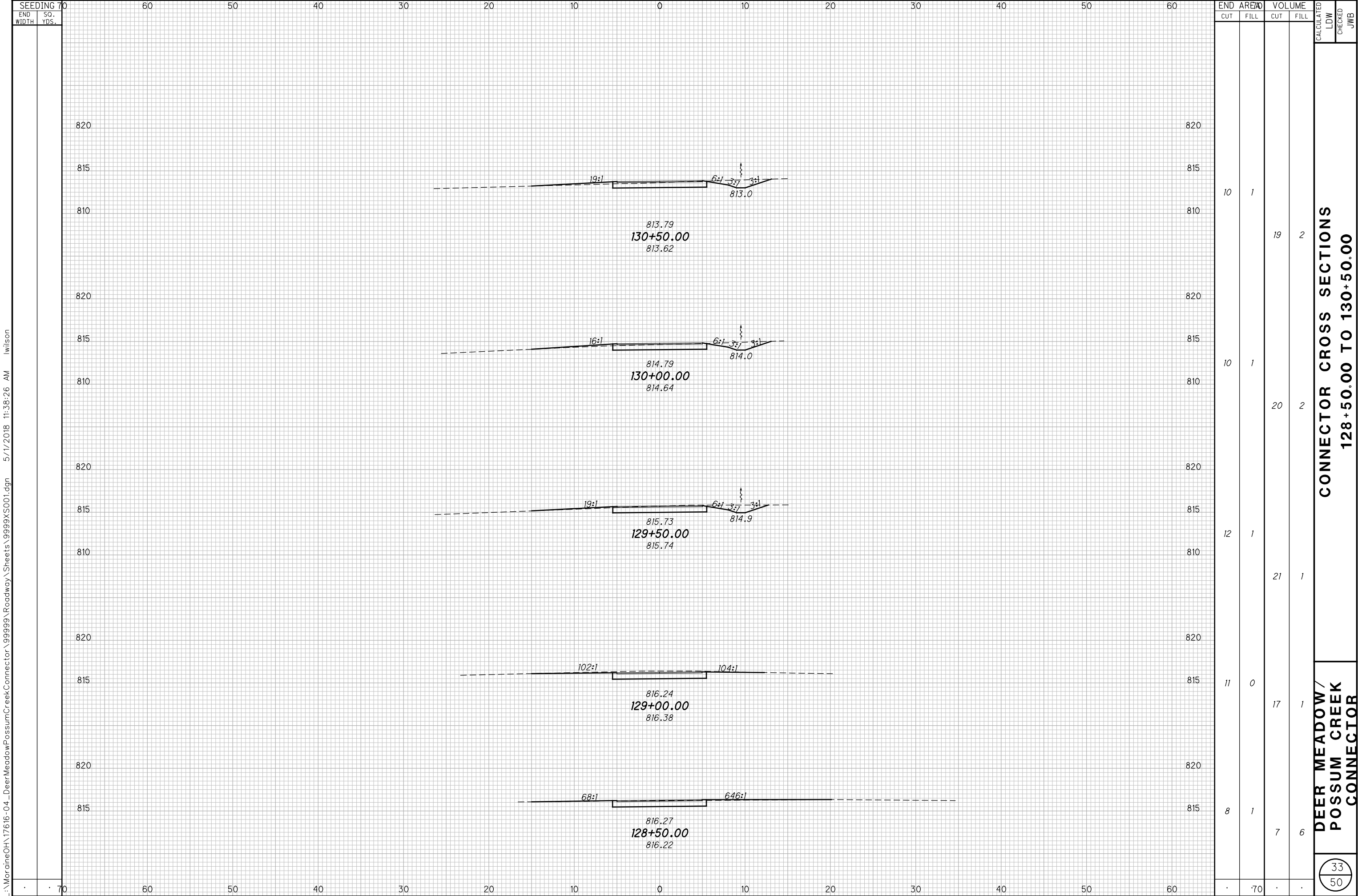


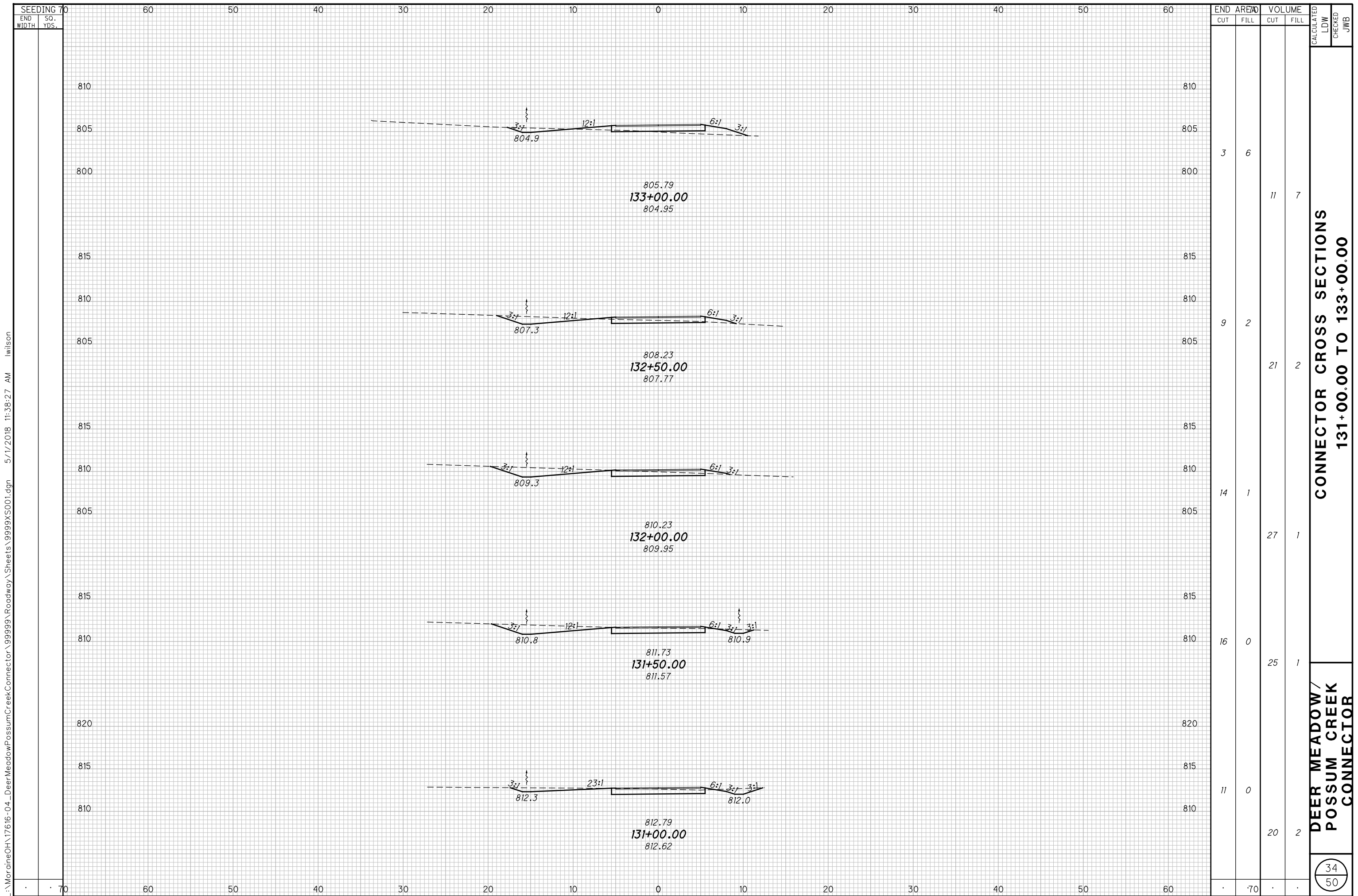


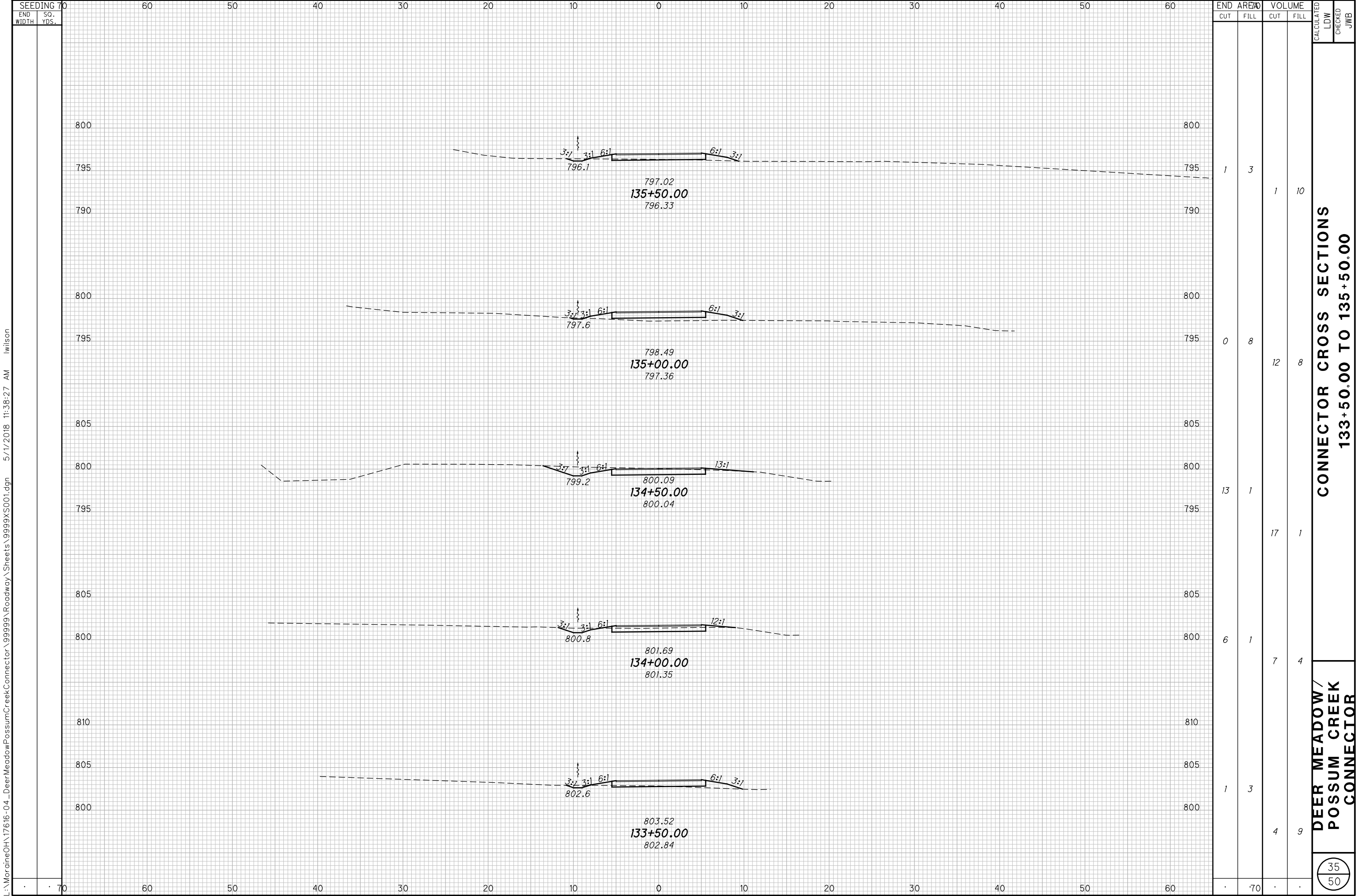
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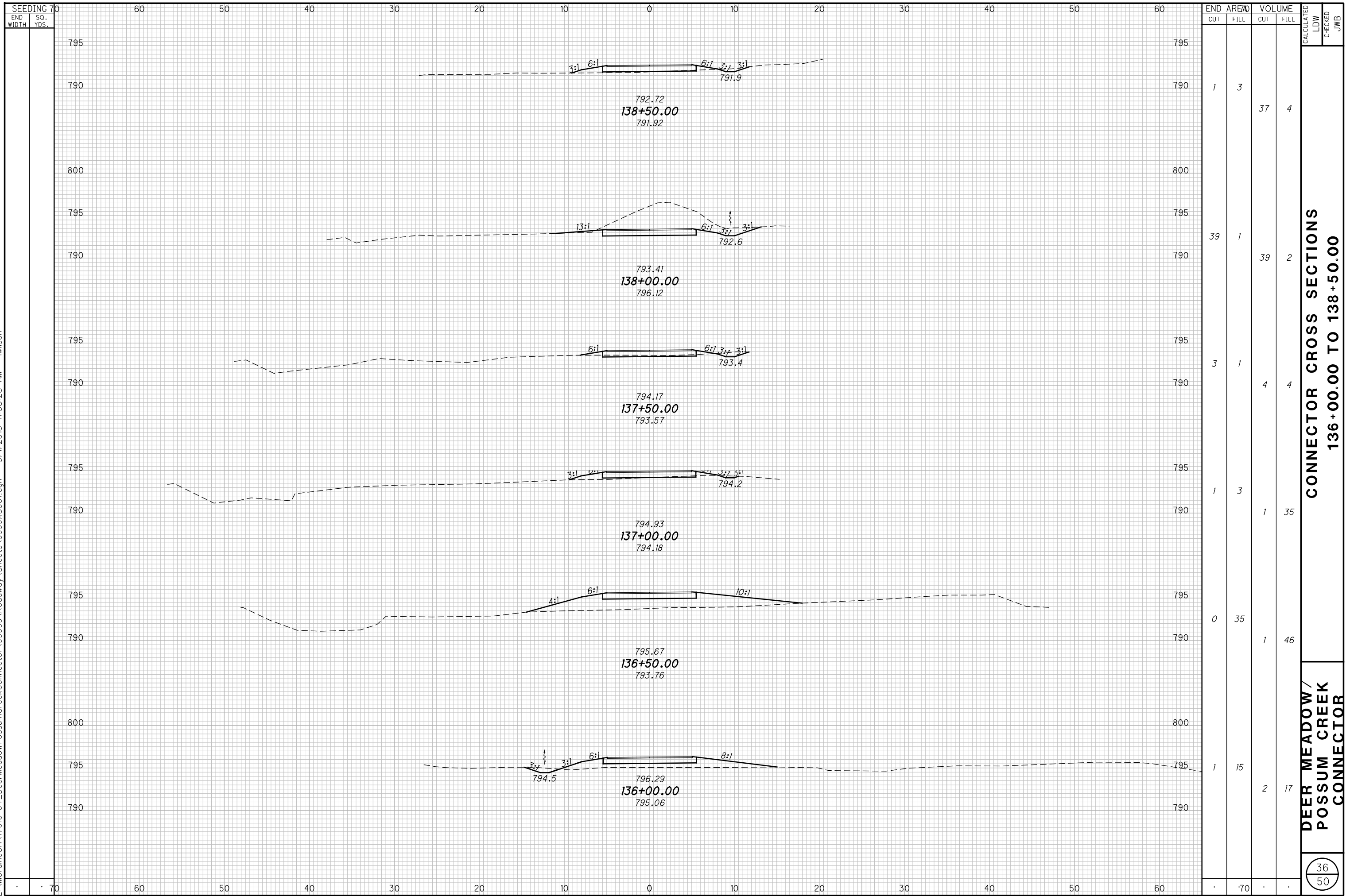


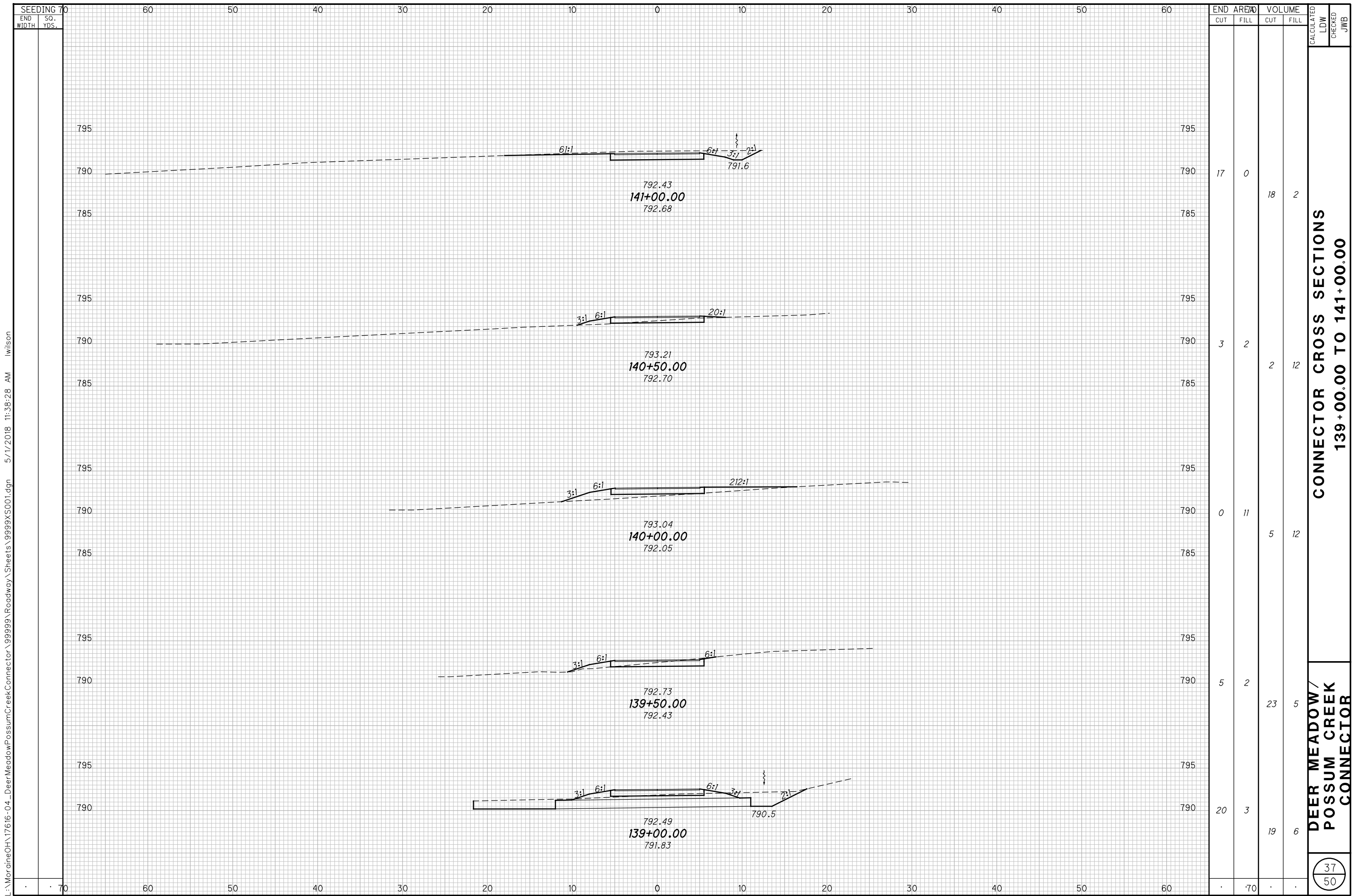


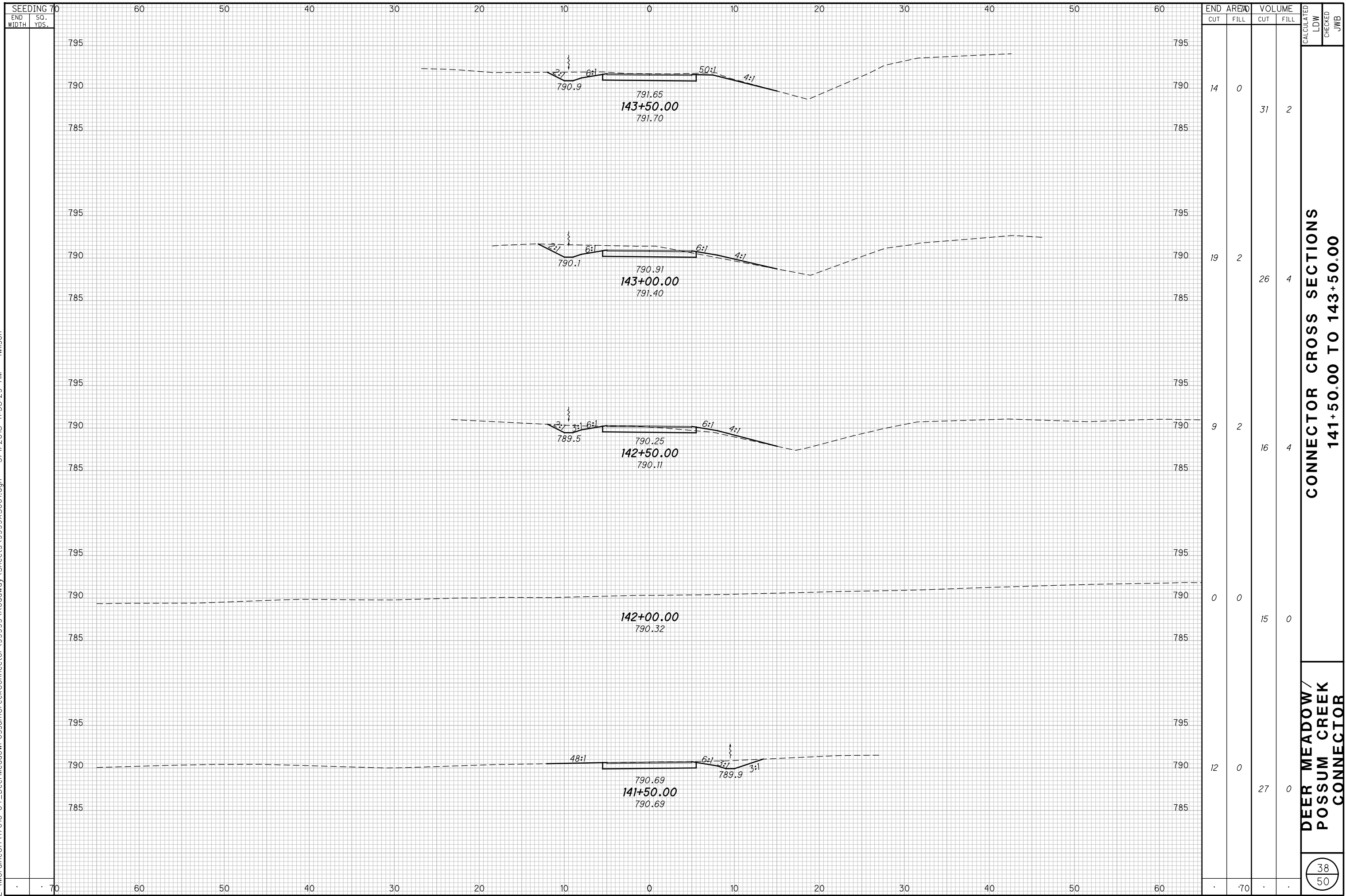


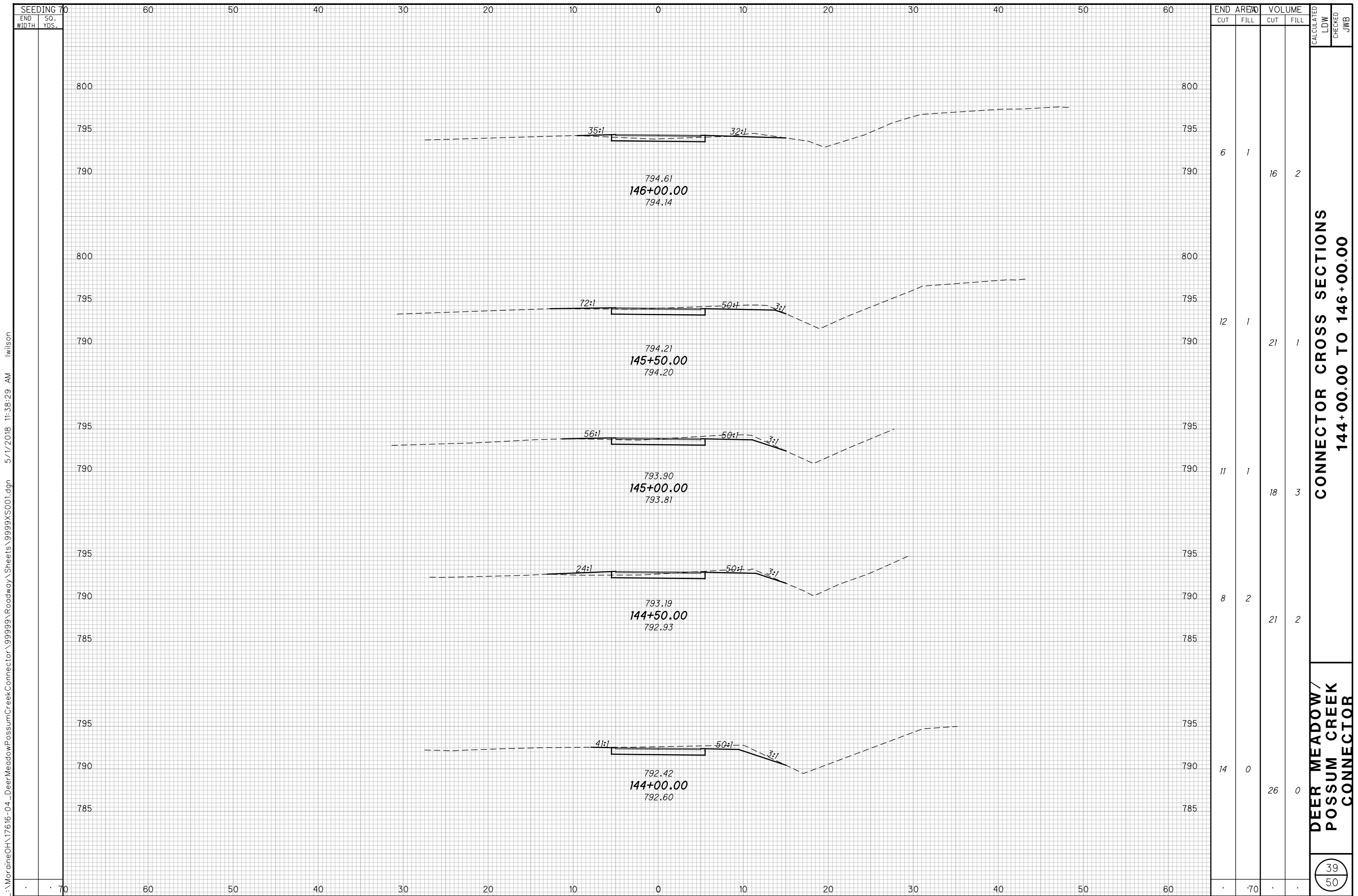


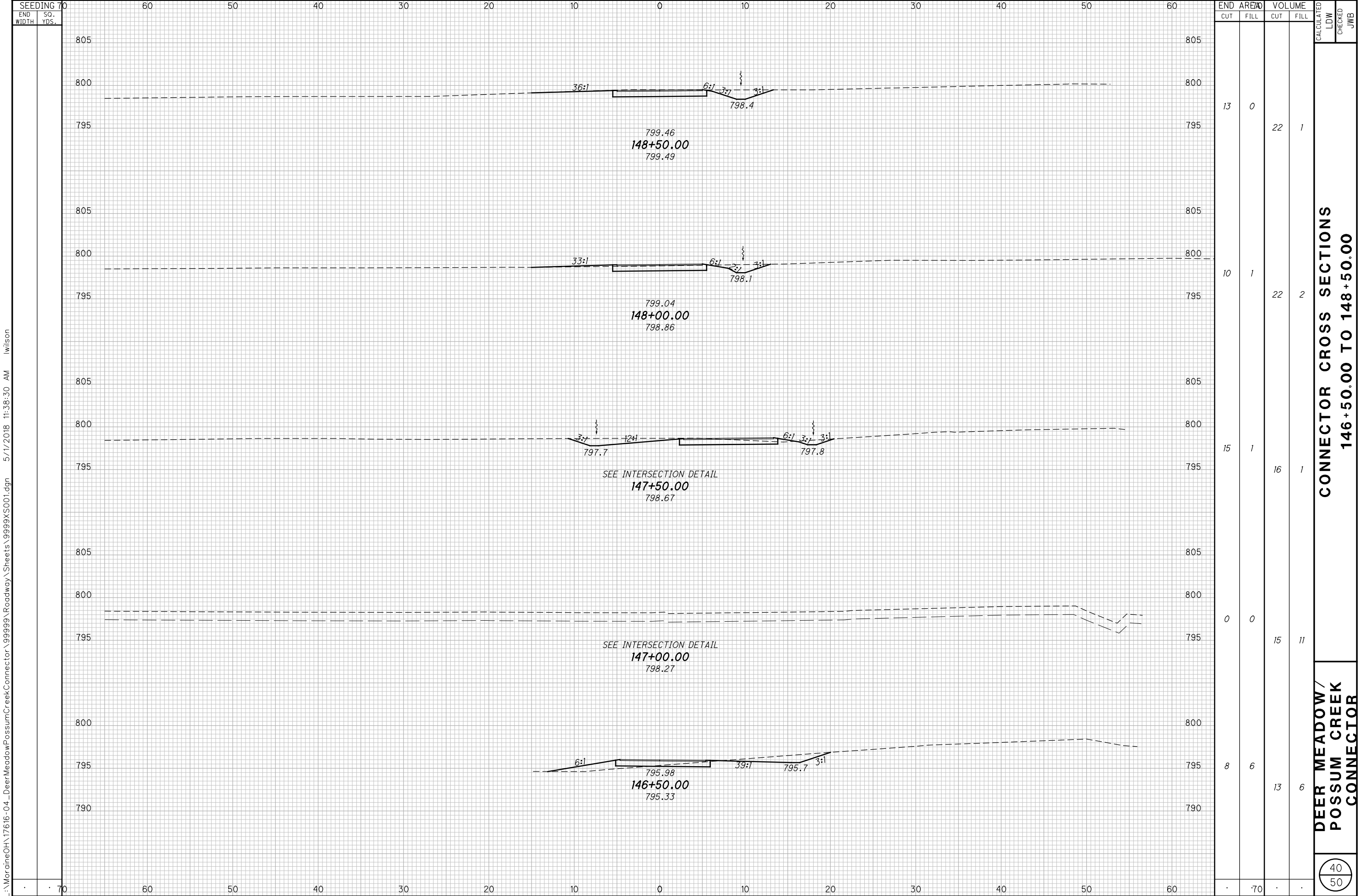




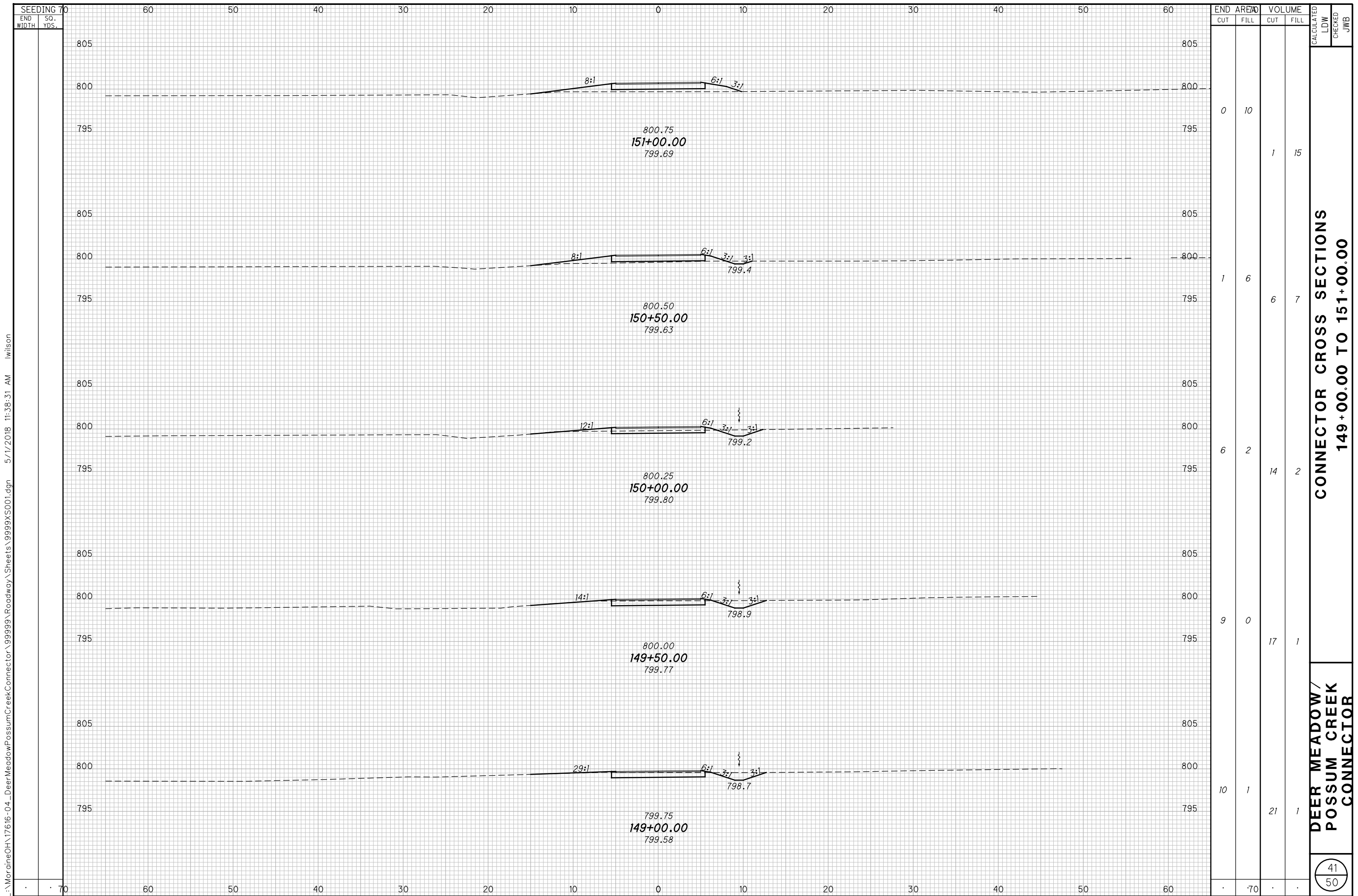


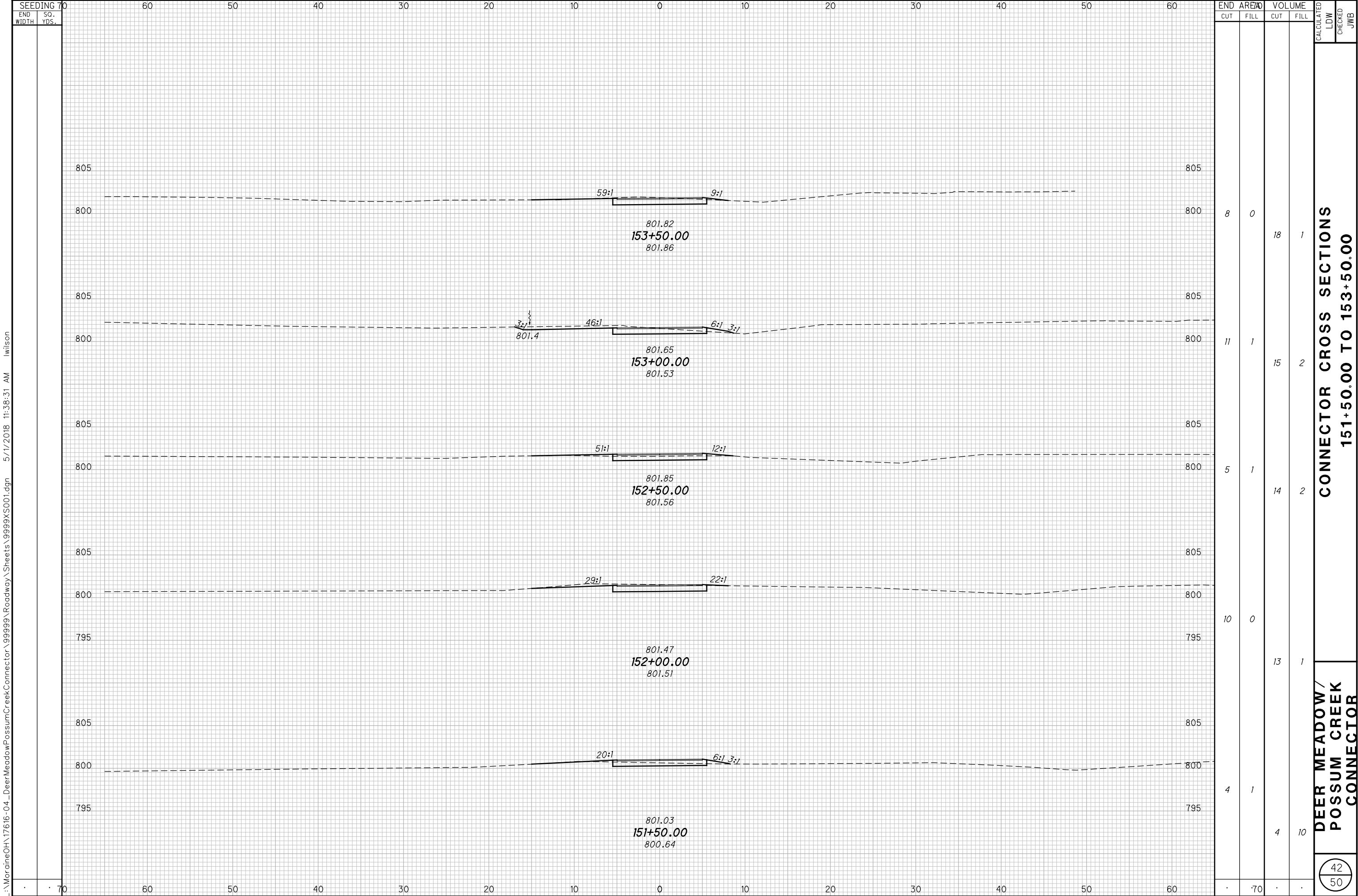


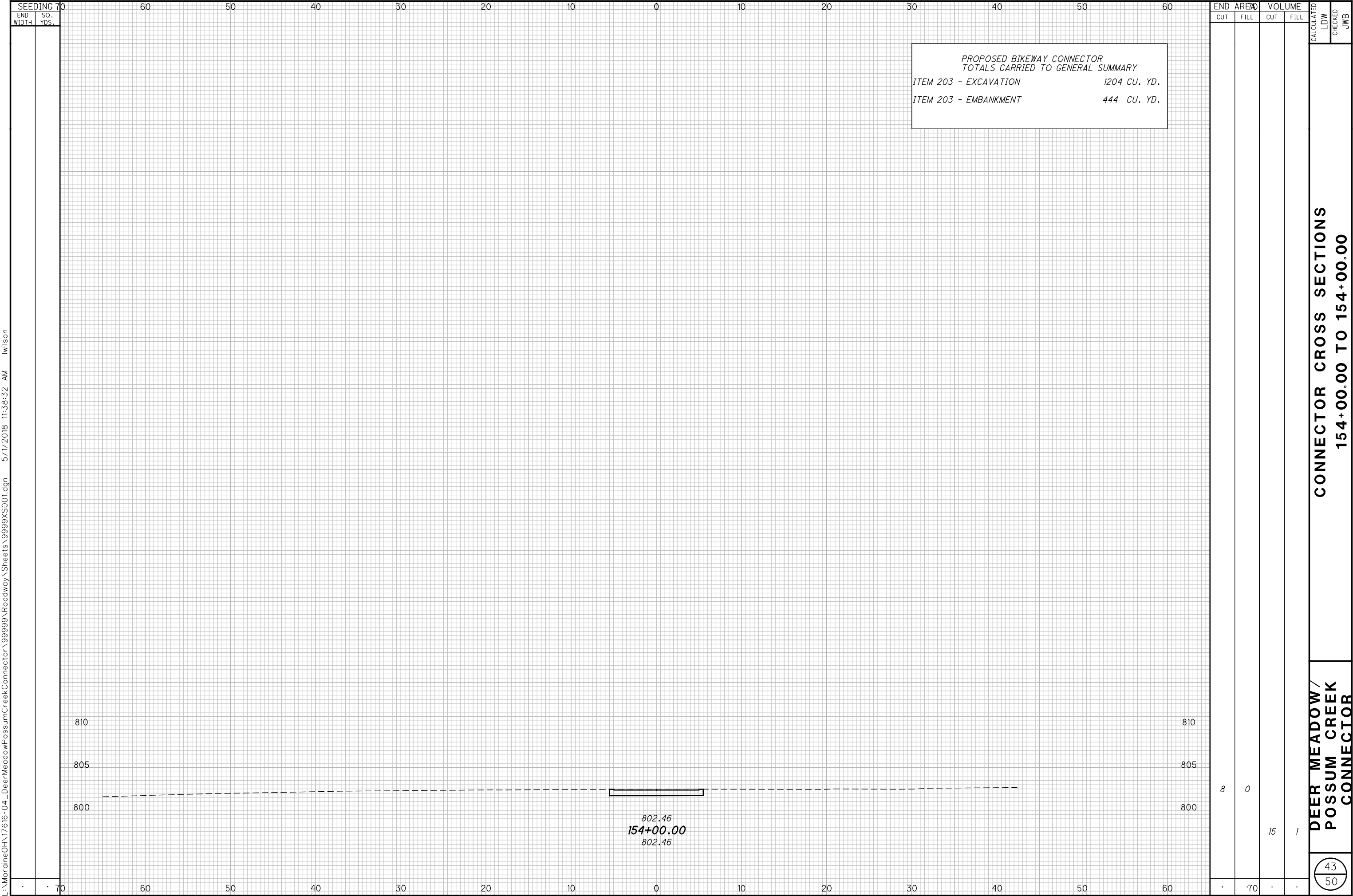




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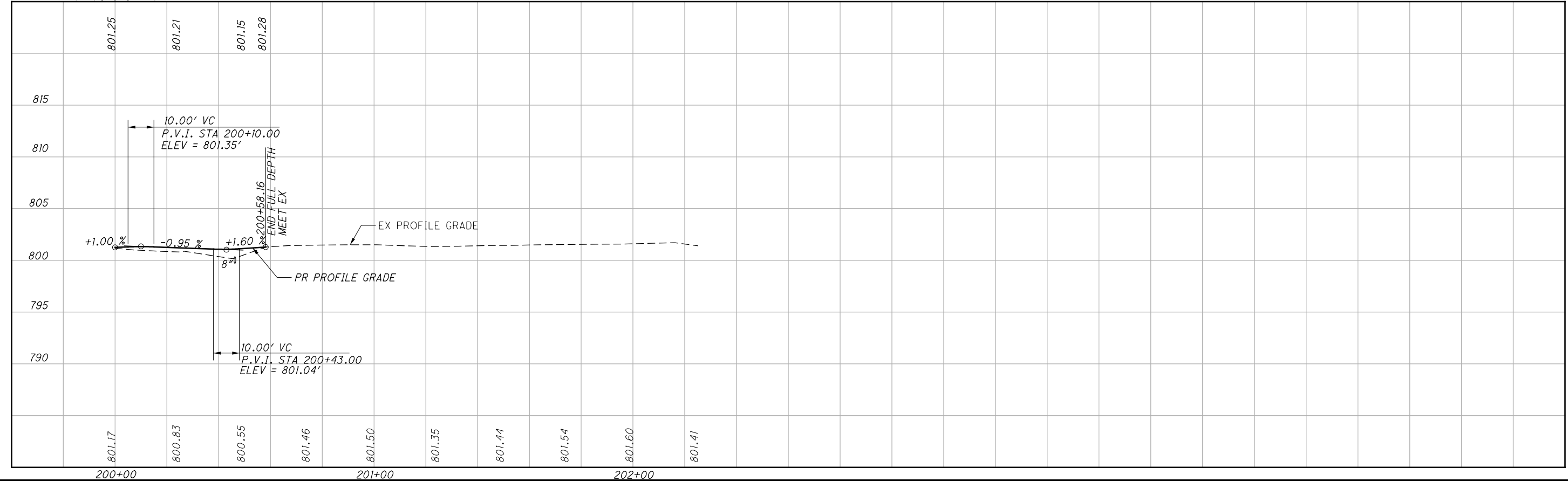
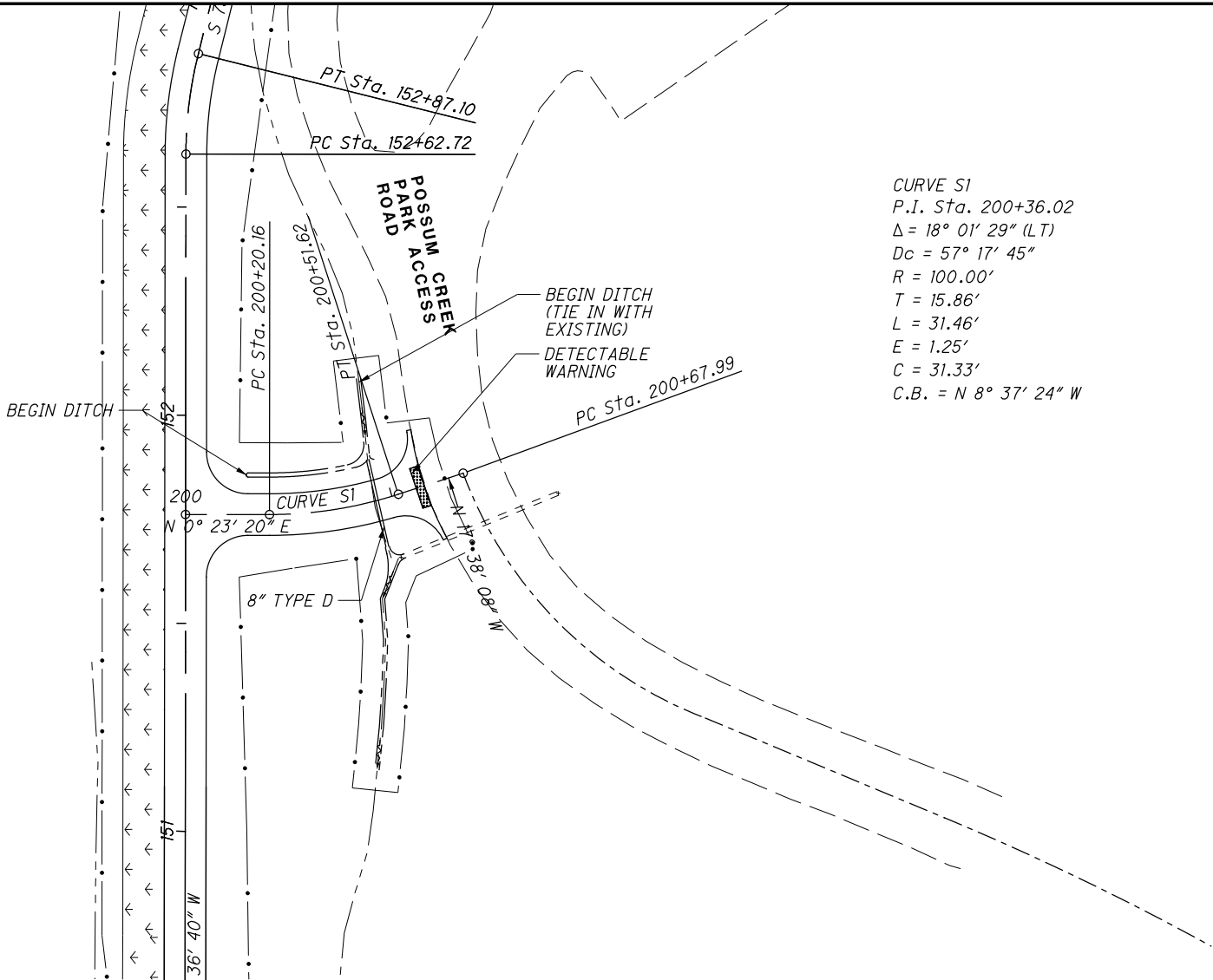






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DEER MEADOW /
POSSUM CREEK
CONNECTOR

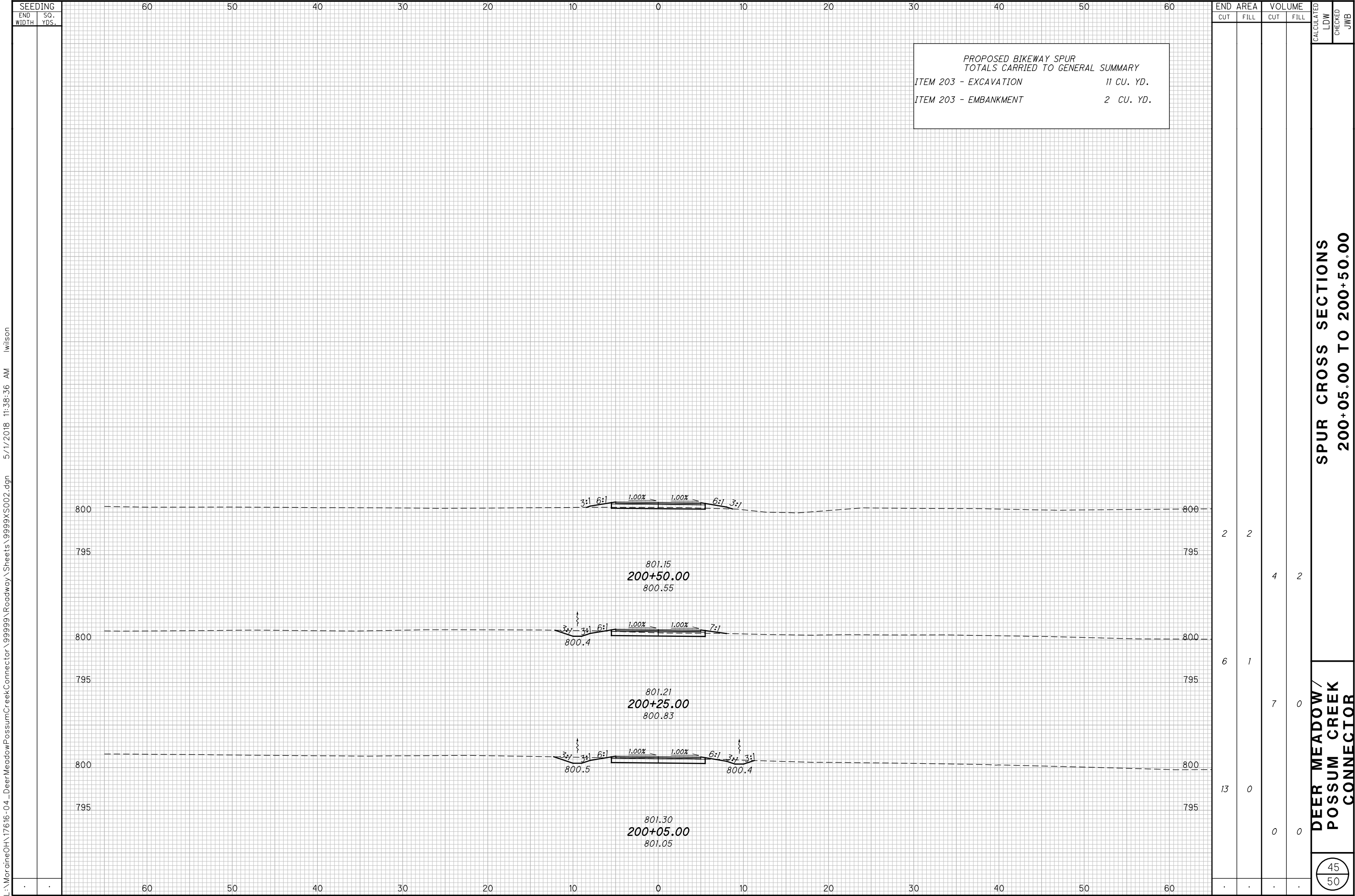
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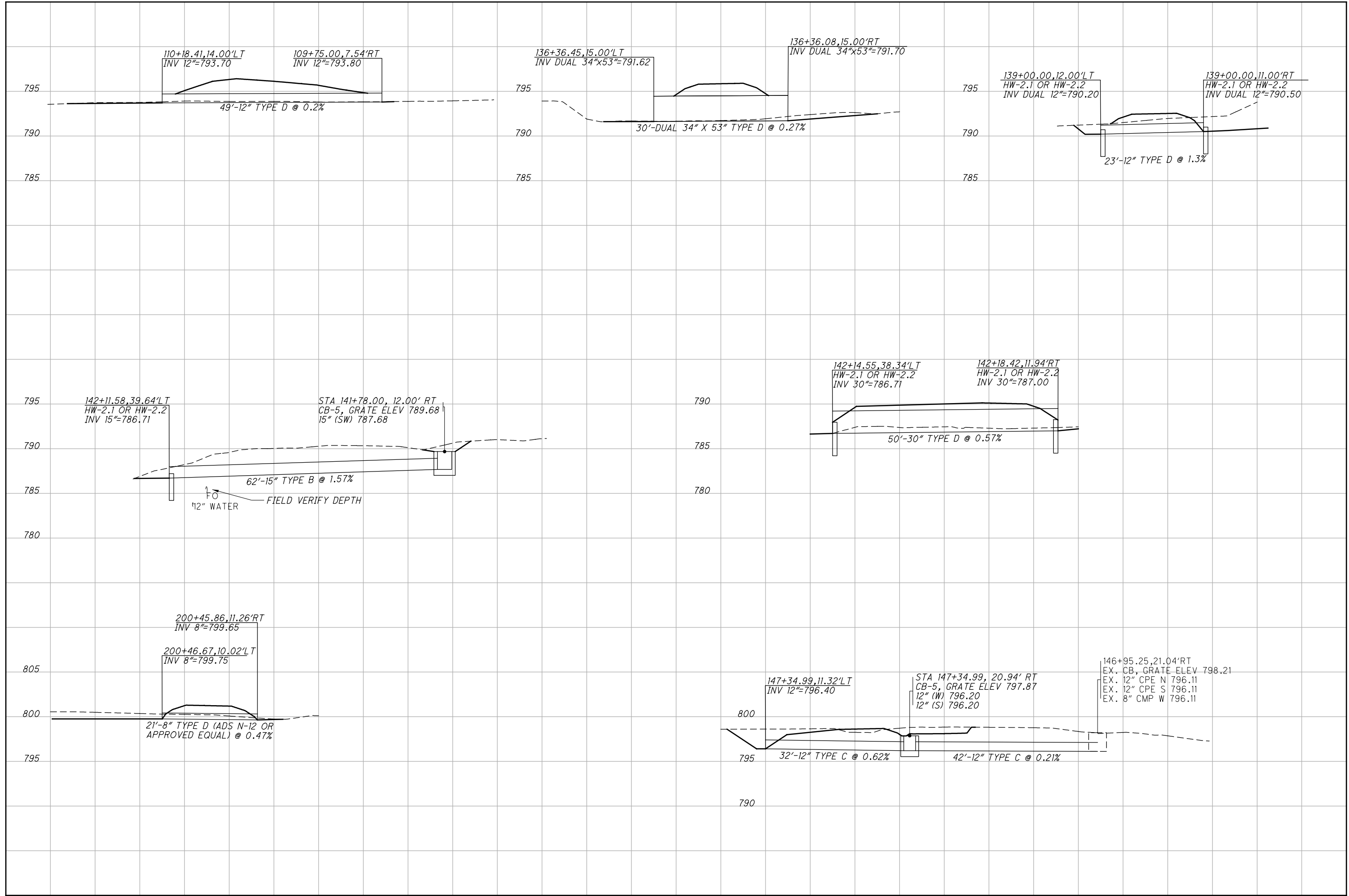
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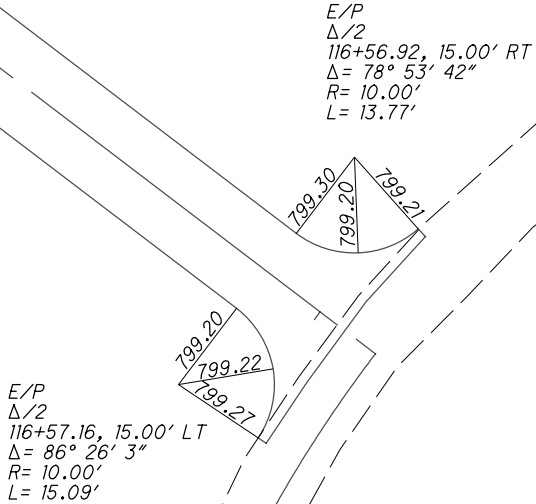
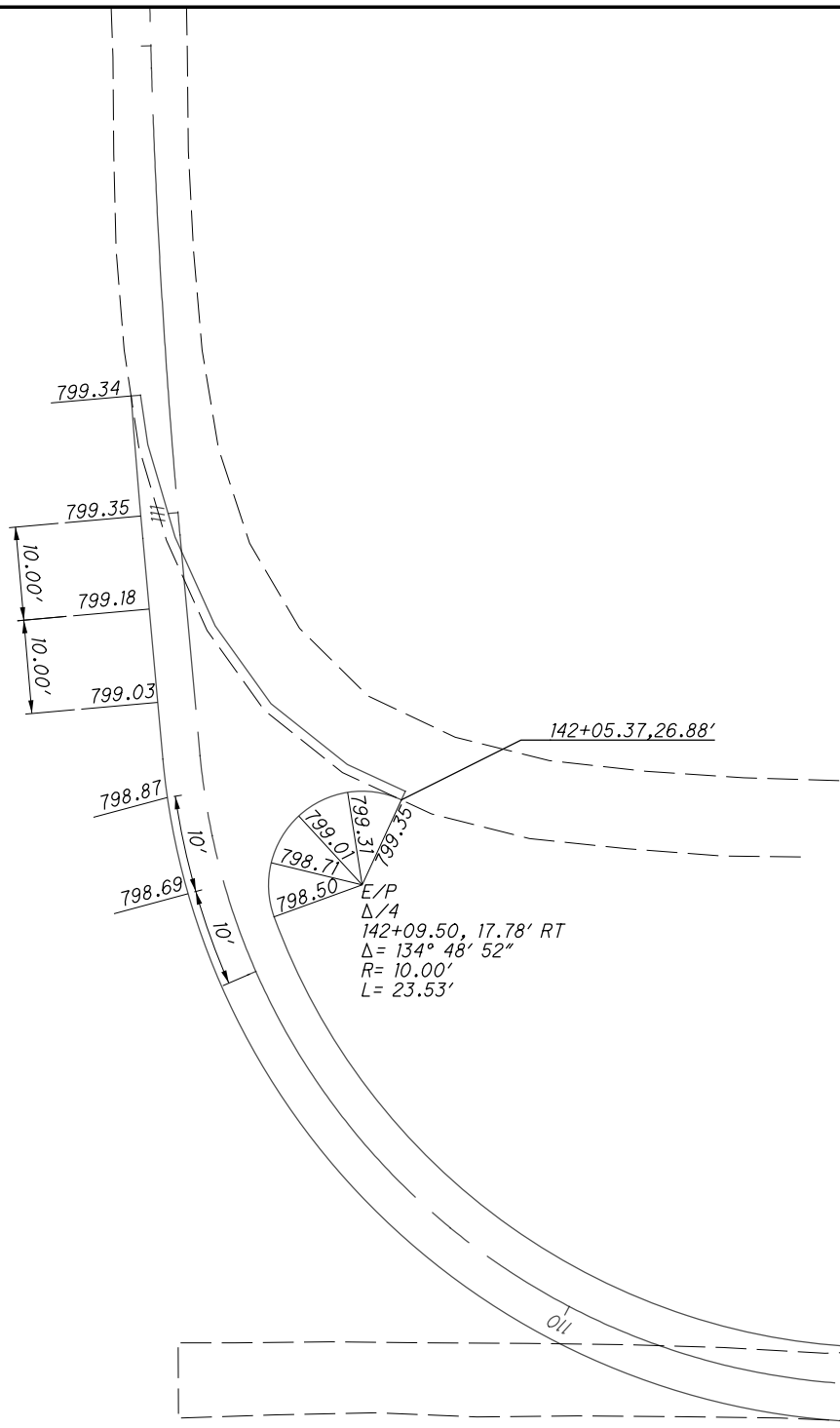
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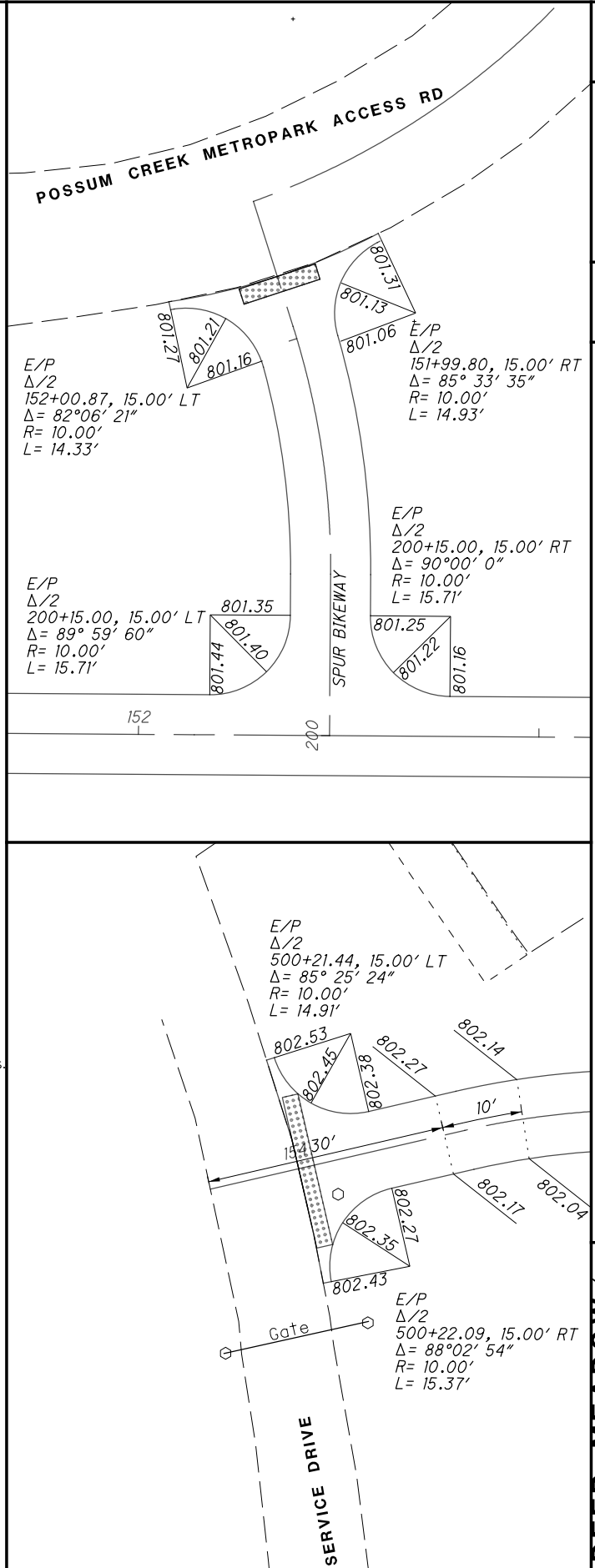
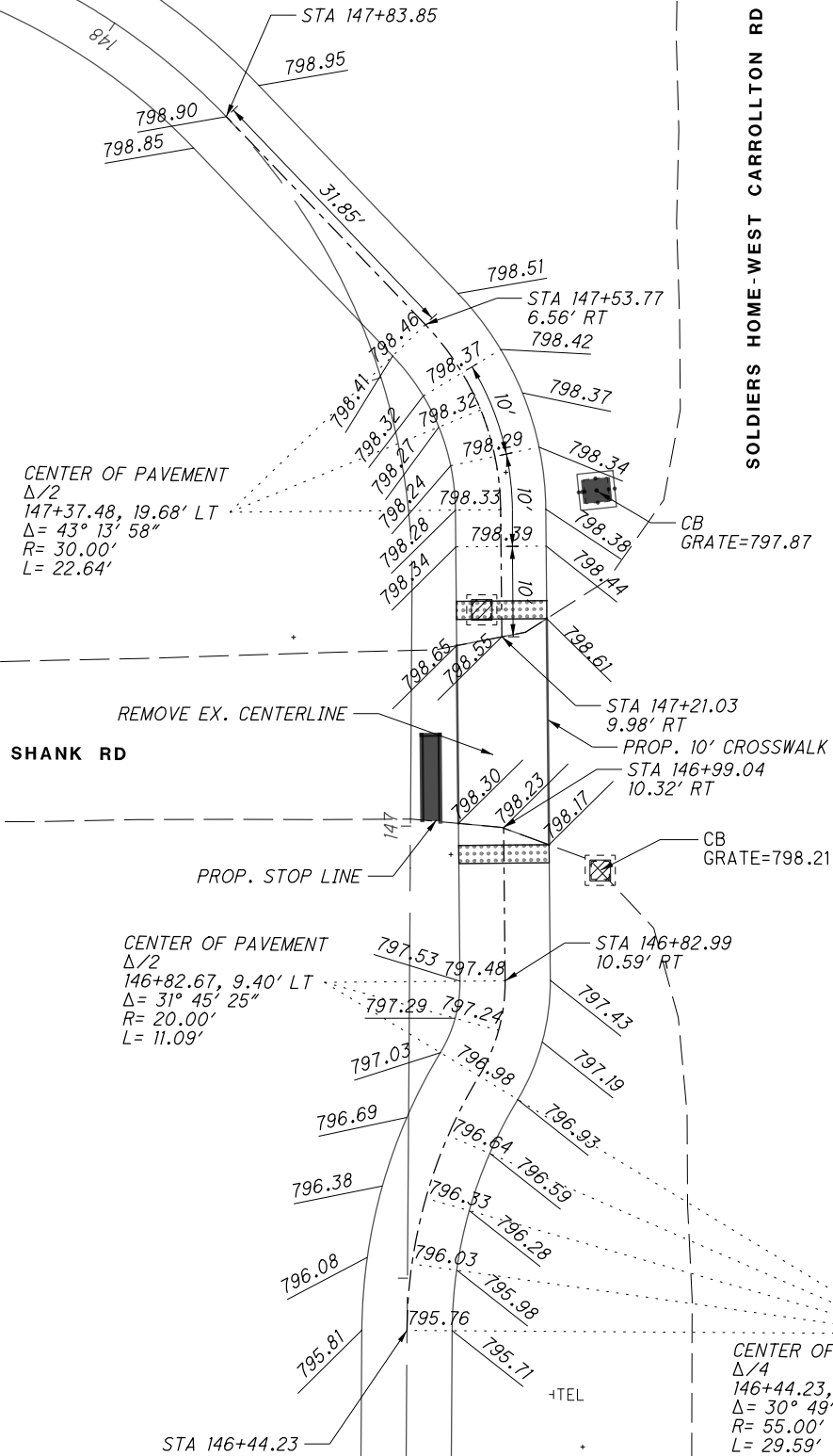
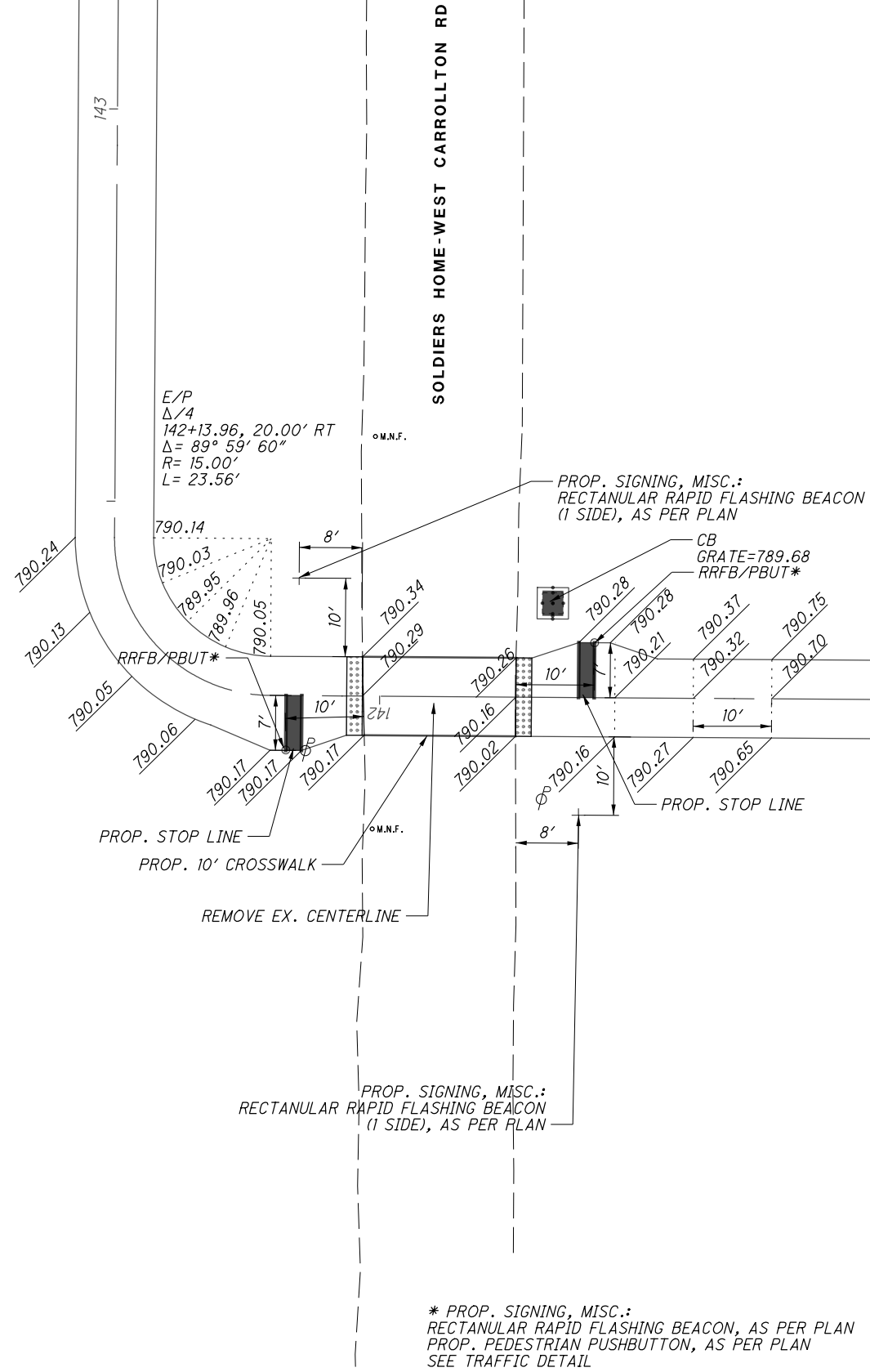


DRAINAGE PROFILES

DEER MEADOW /
POSSUM CREEK
CONNECTOR

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INTERSECTION DETAILS

DEER MEADOW/
POSSUM CREEK
CONNECTOR





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PEDESTRIAN CROSSING SYSTEM ACTIVATION

PRIOR TO ACTIVATING THE NEW PEDESTRIAN CROSSING FLASHING SIGNS, ALL ITEMS IN THE PROPOSED TRAFFIC CONTROL PLAN SHALL BE FULLY COMPLETED, (SIGNS, LIGHTS, PUSHBUTTONS). IF THERE ARE CONSTRUCTABILITY ISSUES (THAT PREVENT THE SYSTEM FROM BEING COMPLETED PRIOR TO ACTIVATION, IT SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT ENGINEER. THE PROJECT ENGINEER WILL THEN REVIEW, APPROVE OR REJECT PROPOSALS TO ACTIVATE THE PEDESTRIAN CROSSING SYSTEMS PRIOR TO COMPLETION.

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AT LEAST 10 WORKING DAYS PRIOR TO SCHEDULING THE FINAL INSPECTION OF THE PEDESTRIAN CROSSING INSTALLATIONS. FINAL INSPECTION IS NOT CONSIDERED COMPLETE UNTIL DESIGNATED TRAFFIC PERSONNEL INSPECT THE SYSTEM AND ISSUE WRITTEN APPROVAL. IF ISSUES ARE FOUND DURING THE FINAL INSPECTION THAT EFFECT THE SAFETY OF THE TRAVELING PUBLIC AND/OR THE EFFICIENCY OF THE CROSSING, THE EQUIPMENT SHALL NOT BE ACTIVATED ON THE PROPOSED DATE. ANY PUNCH LIST ITEMS THAT ARE FOUND SHALL BE CORRECTED AND REINSPECTED BY THE ENGINEER PRIOR TO FINAL ACCEPTANCE. CITY FORCES SHALL ONLY ASSUME DAY TO DAY MAINTENANCE OF THE SYSTEM AFTER FINAL WRITTEN ACCEPTANCE HAS BEEN ISSUED.

PEDESTRIAN CROSSING INSTALLATION

THE CONTRACTOR SHALL INSTALL ONE PEDESTRIAN CROSSING DETECTION AND WARNING SYSTEMS ON THE PROJECT. THE LOCATION IS DESIGNATED ON THE PLANS.

THE INSTALLATION SHALL BE A STANDALONE SYSTEM AND SHALL INCLUDE THE FOLLOWING EQUIPMENT, FULLY INSTALLED AND FUNCTIONAL:

TWO WARNING SIGNS WITH FLASHING LED BORDERS (YELLOW FLASH) AS NOTED ON THE PLANS. THESE SIGNS SHALL BE SOLAR POWERED AND MEET THE REQUIREMENTS OF THE ODOTCD. SUPPLEMENTAL ARROW PANEL SIGNS SHALL ALSO BE INCLUDED.

TWO PEDESTAL SUPPORTS, INCLUDING FOUNDATIONS AND CLAM SHELL DECORATIVE BASES. THE PEDESTALS SHALL BE GALVANIZED PER ODOT CMS 711.02 AND POWDER COATED FEDERAL BLACK. THE PEDESTAL SHALL PROVIDE WEATHERTIGHT ACCESS TO THE SIGNS, CONTROL SYSTEM, SOLAR PANELS AND PUSHBUTTONS.

TWO PUSHBUTTONS (ONE PER EACH PEDESTAL) THAT MEET ADA AND ODOT CMS 632 REQUIREMENTS, INCLUDING THE ASSOCIATED SIGN. THE PUSHBUTTONS SHALL BE MOUNTED ON THE PEDESTAL TO FACE THE ASSOCIATED CROSSWALK.

TWO SOLAR PANELS FOR POWERING SYSTEM.

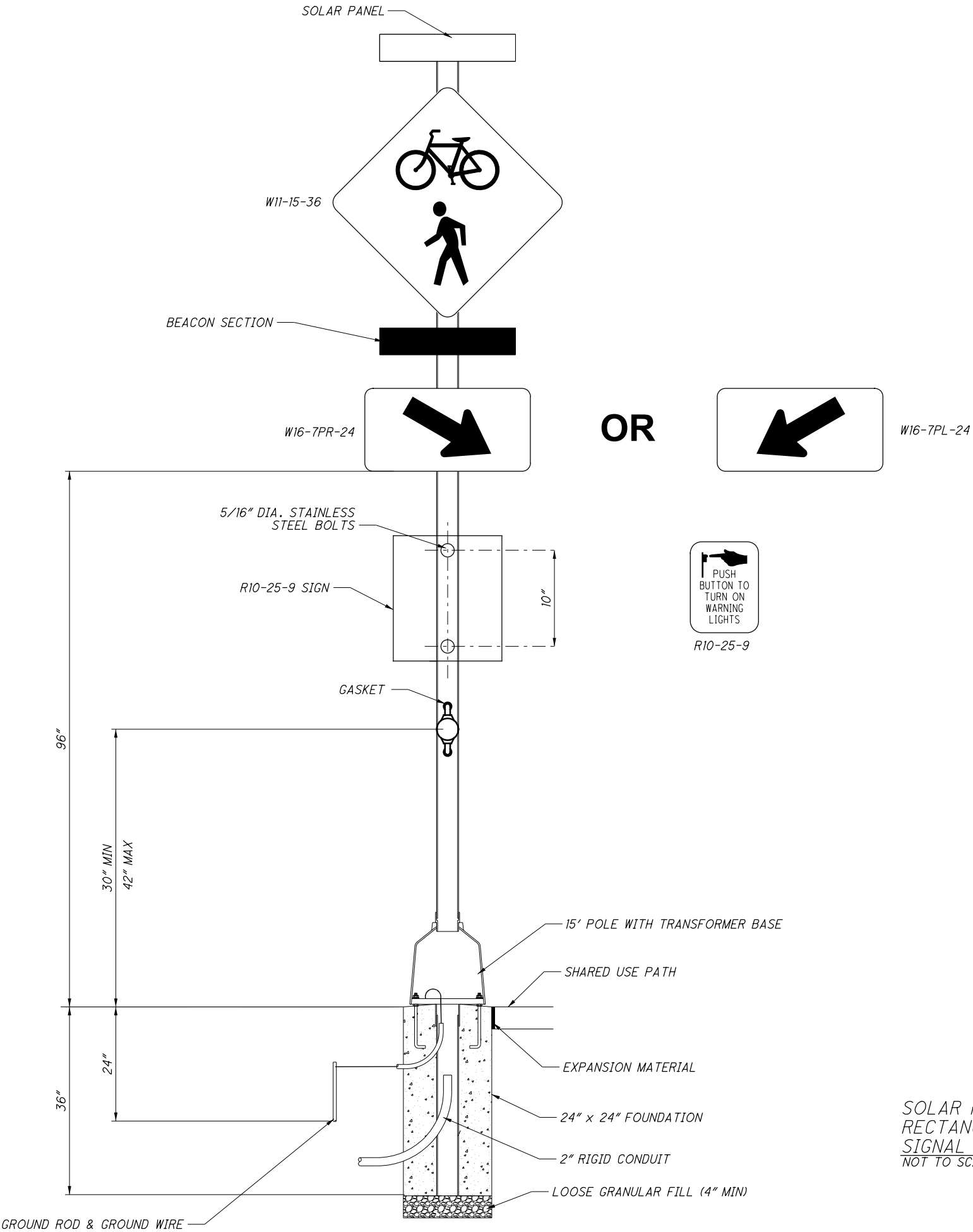
CONTROL SYSTEM MOUNTED NEAR THE TOP OF THE PEDESTAL THAT RECEIVES THE ACTIVATION OF EITHER OF THE TWO PUSHBUTTONS AND CAUSES THE FLASHING SIGNS AND TO BEGIN FLASHING FOR A SET PERIOD OF TIME.

RADIO COMMUNICATION SYSTEM TO PROVIDE WIRELESS SIMULTANEOUS ACTIVATION OF ALL SIGNS.

THE WARNING SIGNS SHALL FLASH FOR A PERIOD OF 18 SECONDS AFTER PUSHBUTTON ACTIVATION.

PRIOR TO INSTALLING THE SYSTEMS, THE CONTRACTOR SHALL PROVIDE SPECIFICATIONS AND EQUIPMENT CUT SHEETS TO THE ENGINEER FOR REVIEW AND APPROVAL. ALL EQUIPMENT SHALL MEET FEDERAL REQUIREMENTS FOR PEDESTRIAN WARNING SYSTEM INSTALLATIONS.

PAYMENT SHALL INCLUDE ALL LABOR, MATERIAL, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL A FULLY FUNCTIONAL SYSTEM. PAYMENT SHALL BE MADE AT THE PER EACH UNIT PRICE BID FOR ITEM 630 SIGNING, MISC.: SOLAR POWERED & WIRELESS RECTANGULAR RAPID FLASHING BEACONS (RRFB) SIGNAL ON BREAKAWAY PEDESTAL.



SOLAR POWERED & WIRELESS
RECTANGULAR RAPID FLASHING BEACONS (RRFB)
SIGNAL ON BREAKAWAY PEDESTAL
NOT TO SCALE