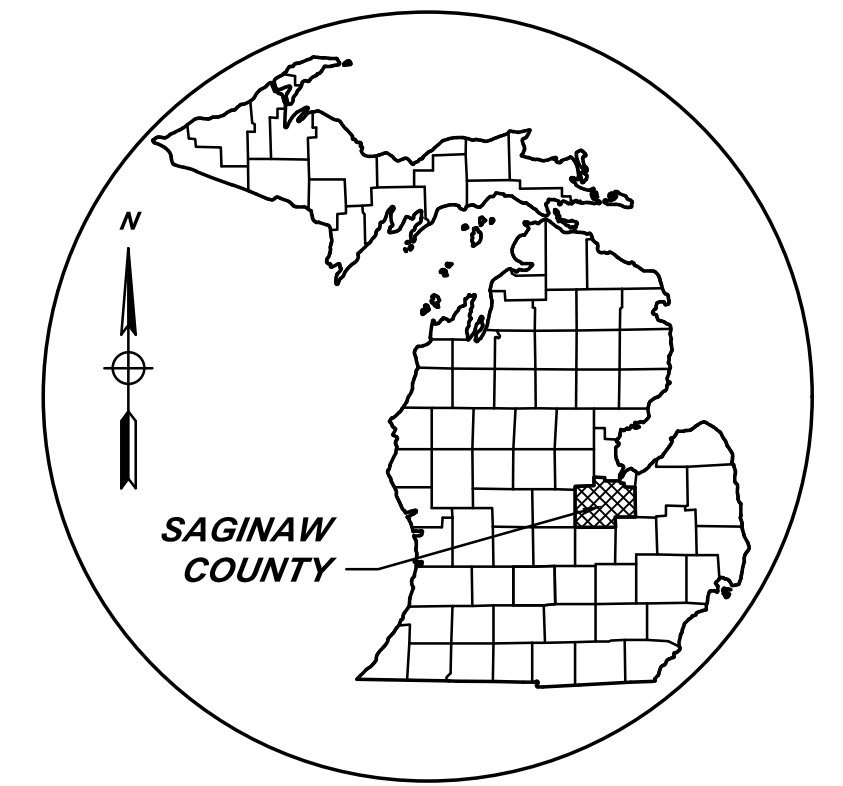
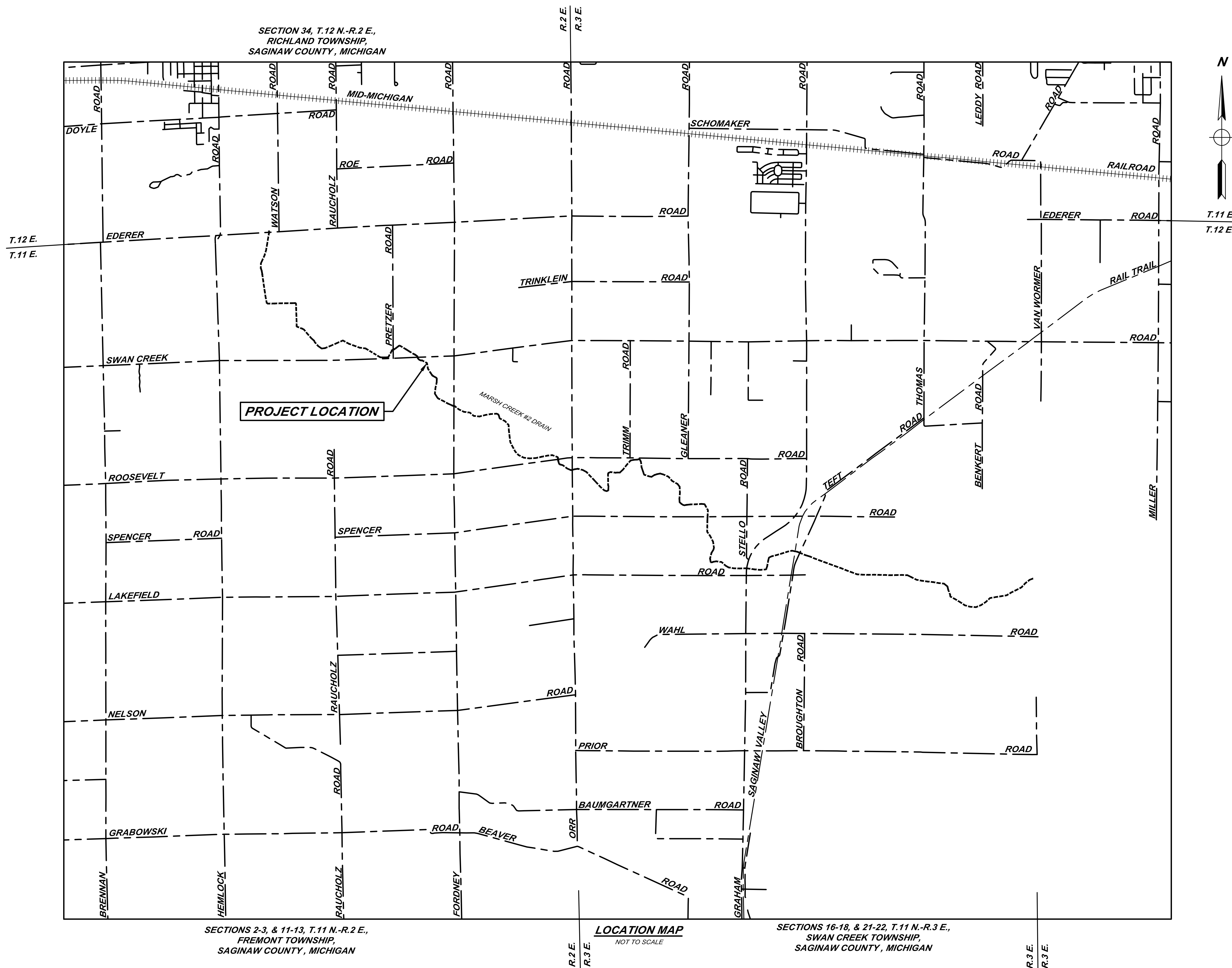


MARSH CREEK #2 DRAIN

SAGINAW COUNTY PUBLIC WORKS COMMISSIONER - BRIAN J. WENDLING

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AREA MAP
NOT TO SCALE

BY	MARK	REVISIONS	DATE
<small>THE WORK REPRESENTED BY THIS DRAWING WAS DESIGNED BY THE ENGINEER FOR THIS SPECIFIC APPLICATION AND SPECIFIC LOCATION DESCRIBED HEREON IN ACCORDANCE WITH THE CONDITIONS PREVALENT AT THE TIME THE DESIGN WAS DONE. THE ENGINEER DOES NOT GUARANTEE AND WILL NOT BE LIABLE FOR ANY OTHER LOCATION, CONDITION, DESIGN OR PURPOSE.</small>			
MARSH CREEK #2 DRAIN SAGINAW COUNTY, MICHIGAN			
COVER SHEET			
		<small>SAGINAW OFFICE 230 S. Washington Ave. Saginaw, MI 48607 Tel: 989-754-4717 Fax: 989-754-4440 www.SpicerGroup.com</small>	
DE. BY: POC/CDV	CH. BY: CDV	PROJECT NO. 135292SG2023	
DR. BY: MJC	APP. BY: NDC		
STDS.	SHEET 01 OF 23	DR	
DATE: DECEMBER, 2024	FILE NO. DR-4707-01	01	
SCALE: NOT TO SCALE			

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GENERAL NOTES

NO WORK SHALL BE PERFORMED BEFORE 7:00 AM OR AFTER 7:00 PM MONDAY THROUGH SATURDAY. NO WORK SHALL HAPPEN ON SUNDAYS OR HOLIDAYS, UNLESS AUTHORIZED BY THE OWNER.

CONTRACTOR SHALL NOTIFY ENGINEER 48 HOURS PRIOR TO START OF CONSTRUCTION, CONSTRUCTION STAKING AND INSPECTION.

CONTRACTOR SHALL MAINTAIN ACCESS FOR MAIL DELIVERY AND GARBAGE PICKUP AT ALL PARCELS. IF THESE SERVICES CANNOT BE PERFORMED, CONTRACTOR IS RESPONSIBLE FOR TAKING THE NECESSARY MEASURES TO CARRY THEM OUT.

COORDINATE DRIVE CLOSURES AND MAIL BOX RELOCATION WITH LANDOWNERS A MINIMUM OF ONE DAY IN ADVANCE.

CONTRACTOR TO PROVIDE DUST CONTROL AND SWEEP ROADS DAILY.

ALL EXCAVATED MATERIAL NOT TO BE REUSED OR DISPOSED OF ON SITE SHALL BE REMOVED FROM SITE. THE CONTRACTOR IS RESPONSIBLE FOR DISPOSING OF MATERIALS ACCORDING TO LOCAL AND STATE REQUIREMENTS.

UNDERGROUND UTILITIES/MISS DIG

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174, 2013, THE CONTRACTOR SHALL DIAL 1-800-482-7171 OR 811 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS, PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THIS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE EXISTING UTILITIES ON THESE DRAWINGS HAVE BEEN SHOWN ACCORDING TO THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION AND SHALL NOTIFY THE ENGINEER AS TO WHERE POSSIBLE CONFLICT EXISTS.

ALL CONSTRUCTION UNDER EXISTING UTILITIES, INCLUDING HOUSE SERVICES, SHALL BE COMPLETELY BACKFILLED WITH SAND, IN 12" LAYERS, AND COMPACTED TO NOT LESS THAN 95% OF THE MAXIMUM UNIT WEIGHT.

ANY UTILITIES ENCOUNTERED DURING CONSTRUCTION SHALL BE SUPPORTED, PER THE SPECIFICATIONS OF THE INDIVIDUAL UTILITY COMPANY CLAIMING OWNERSHIP OF THE UTILITY.

SOIL EROSION AND SEDIMENTATION CONTROL MEASURES

APPROPRIATE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO EARTH-DISTURBING ACTIVITIES. PLACE TURF ESTABLISHMENT ITEMS AS SOON AS POSSIBLE ON POTENTIAL ERODABLE SLOPES AS DIRECTED BY OWNER. CRITICAL DITCH GRADES SHALL BE PROTECTED WITH EITHER SOD, SEED/MULCH, OR SEED/MULCH BLANKET AS DIRECTED BY OWNER.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT SOIL EROSION AND SEDIMENTATION CONTROL MEASURES ARE IN PLACE AND MAINTAINED UNTIL THE CONTRACT HAS BEEN COMPLETED AND ACCEPTED. MEASURES SHALL ONLY BE PAID FOR ONCE.

ALL CATCHBASINS AND SEDIMENTATION TRAPS/BASINS SHALL BE CLEANED OUT UPON COMPLETION OF THE PROJECT.

CONTRACTOR SHALL CONFORM TO SOIL EROSION AND SEDIMENTATION CONTROL ACT, PART 91 OF ACT 451 OF 1994.

PROPERTY OWNERS

PROPERTY OWNERS' NAMES, WHERE SHOWN, ARE FOR INFORMATION ONLY, AND THEIR ACCURACY IS NOT GUARANTEED.

ADJUSTING MONUMENT BOXES

ALL GOVERNMENT CORNERS ON THIS PROJECT SHALL BE PRESERVED, WHETHER SHOWN OR NOT. IT MAY BE NECESSARY TO PLACE OR ADJUST MONUMENT BOXES, AS REQUIRED.

TRAFFIC

THE CONTRACTOR SHALL MAINTAIN LOCAL TRAFFIC AT ALL TIMES. SIGNAGE MUST BE IN ACCORDANCE WITH THE MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND SHALL BE COORDINATED WITH THE ENGINEER AND GOVERNING ROAD AGENCY. PERMITS MAY BE REQUIRED.

PERMITS

PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED BY THE APPROPRIATE AGENCIES.

CONSTRUCTION PROCEDURES SHALL CONFORM TO THE REQUIREMENTS OF THE APPROPRIATE AGENCIES.

CONTACTS

SAGINAW COUNTY PUBLIC WORKS COMMISSIONER OWNER
ATT: BRIAN J. WENGLING
111 S. MICHIGAN AVENUE
SAGINAW, MI 48602
PHONE: (989) 790-5258

SPICER GROUP ENGINEER
ATT: CHRISTIAN VALESANO, P.E.
230 S. WASHINGTON AVENUE
SAGINAW, MI 48607
PHONE: (906) 284-1862

DOW CHEMICAL BRINE
ATT: ROBERT BEAUVAIS
28550 CABOT DRIVE, SUITE 500
NOVI, MI 48377
PHONE: (248) 639-7093

CONSUMERS ENERGY GAS
ATT: BENJAMIN LEWIS
2400 WEISS STREET
SAGINAW, MI 48602
PHONE: (989) 791-5918

CONSUMERS ENERGY ELECTRICAL
ATT: VIRGIE DOWNS
2400 WEISS STREET
SAGINAW, MI 48602
PHONE: (989) 791-5353

AT&T TELEPHONE
ATT: MATTHEW FARNEY
54 N. MILL STREET
PONTIAC, MI 48342
PHONE: (734) 516-7930

CHARTER COMMUNICATIONS CABLE
ATT: DAN BIELACZYC
1480 S. VALLEY CENTER
BAY CITY, MI 48706
PHONE: (231) 941-3819

FRONTIER/VERIZON CABLE
ATT: HUNTER TAPHOUSE
EMAIL: HUNTER.TAPHOUSE@ATCOTELECOM.COM
PHONE: (517) 442-3643

GENERAL NOTES CONT.

ALL WORK SHALL BE CONFINED TO THE RIGHT-OF-WAY OR CONSTRUCTION LIMITS SHOWN ON THE PLANS. ANY WORK OUTSIDE OF THESE LIMITS SHALL BE AGREED TO BY THE CONTRACTOR AND THE LANDOWNER IN WRITING.

RESTORE ALL LAWN AREAS PER SPECIFICATIONS AND PLANS.

CONTRACTOR TO RESTORE INCIDENTAL DAMAGES ON THE PROJECT AS DIRECTED BY OWNER AND ENGINEER AT THE CONTRACTOR'S EXPENSE.

ALL DRAIN SIDE SLOPES SHALL BE 2H:1V OR FLATTER, UNLESS SPECIFIED OTHERWISE.

THE WORDS "RIGHT SIDE" OR "LEFT SIDE" IMPLY A REFERENCE TO THE DRAIN FACING UPSTREAM.

REMOVE EXISTING FENCES, LANDSCAPING, AND OTHER STRUCTURES IN RIGHT-OF-WAY OR CONSTRUCTION LIMITS AS-NEEDED FOR CONSTRUCTION. COST TO BE INCLUDED IN SITE CLEARING.

REINSTALLATION OF FENCES MUST BE COORDINATED WITH THE LANDOWNER AT THE LANDOWNER'S EXPENSE, UNLESS STATED OTHERWISE IN THE PLANS.

ALL SPRINKLER SYSTEMS DAMAGED SHALL BE REPAIRED BY CONTRACTOR. COST OF THE PAY ITEM BEING INSTALLED, UNLESS OTHERWISE NOTED.

CONTRACTOR TO CLEAR TREES WITHIN THE RIGHT-OF-WAY OR CONSTRUCTION LIMITS AS NECESSARY TO CONSTRUCT PROJECT AND LEVEL SPOILS AS SHOWN IN DETAILS. COORDINATE REMOVALS WITH THE ENGINEER/LANDOWNER.

ROADS, DRIVEWAYS AND SIDEWALKS

ALL JOINTS AT INTERSECTION APPROACHES AND DRIVEWAYS SHALL BE SAW-CUT WITH BUTT-JOINTS.

FOR OPEN CUT PAVEMENT REMOVAL, CONTRACTOR SHALL SAW CUT THE EXISTING PAVEMENT FULL DEPTH PRIOR TO REMOVAL.

ALL DRIVING SURFACES ARE TO BE RESTORED TO IN-KIND DEPTH AND MATERIAL, UNLESS OTHERWISE SPECIFIED ON THE PLANS.

PROTECT ALL ROADS NOT SPECIFIED TO BE REMOVED DURING CONSTRUCTION. REPAIR ANY UNAUTHORIZED DAMAGE AT CONTRACTOR'S EXPENSE.

BROKEN CONCRETE AND DEBRIS SHALL BE CONSIDERED WASTE AND SHALL BE DISPOSED OF BY THE CONTRACTOR OFF-SITE. COST SHALL BE INCLUDED IN THE OTHER PAY ITEMS OF THE PROJECT.

MATCH EXISTING TYPE FOR CONCRETE CURB AND GUTTER RESTORATION.

CONTRACTOR SHALL REMOVE AND REPLACE ALL STREET AND TRAFFIC SIGNAGE AS NECESSARY FOR CONSTRUCTION. ALL COST SHALL BE INCLUDED IN THE BID PRICE FOR SITE CLEARING.

CONTRACTOR SHALL COORDINATE LOCATION OF ANY ACCESS ROADS WITH THE LANDOWNER AND THE ENGINEER. ANY ACCESS ROAD SHALL BE REPAIRED TO THE OWNER'S SATISFACTION.

ALL WORK WITHIN THE ROAD RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND GENERAL SPECIFICATIONS OF THE AGENCY WITH JURISDICTION OVER THE ROAD.

MAIL BOXES

CONTRACTOR SHALL REMOVE AND TEMPORARILY RELOCATE ALL EXISTING MAIL BOXES AS NEEDED FOR CONSTRUCTION. COSTS TO BE INCLUDED IN THE UNIT PRICE BID FOR SITE CLEARING.

ALL TEMPORARILY RELOCATED MAIL BOXES, STREET AND TRAFFIC SIGNS TO BE REINSTALLED TO ORIGINAL LOCATIONS AS CONSTRUCTION ALLOWS. COSTS TO BE INCLUDED IN THE UNIT PRICE BID FOR CLEANUP AND RESTORATION.

UTILITIES

UTILITIES LOCATED IN THE ROAD AND DRAIN RIGHTS-OF-WAY WILL BE RELOCATED BY OTHERS, UNLESS OTHERWISE NOTED ON THE PLANS.

THE PUBLIC WORKS COMMISSIONER'S MINIMUM CLEARANCE STANDARDS SHALL BE MET WHENEVER RELOCATING EXISTING UTILITIES WITHIN THE DRAIN RIGHT-OF-WAY.

ALL WATER VALVE BOXES SHALL BE ADJUSTED TO FINISHED GRADE. COST SHALL BE INCLUDED IN THE PAY ITEM BEING INSTALLED.

ANY UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

ALL MANHOLE RIMS IN ROADWAYS AND DRIVES SHALL BE ADJUSTED PRIOR TO FINAL PAVING TO BE FLUSH WITH FINISHED GRADE.

GRADING AROUND MANHOLES/CATCHBASINS, FLARED END SECTIONS, AND OTHER INLETS SHALL BE SMOOTH AND SHAPED TO PROVIDE POSITIVE DRAINAGE INTO THE INLETS.

DEMOLISH EXISTING STRUCTURE(S) AND DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS. COST TO BE INCLUDED WITH THE ITEM BEING INSTALLED AS DIRECTED BY OWNER/ENGINEER.

CONTRACTOR SHALL CONNECT ANY AND ALL FIELD TILE OUTLETS AND OTHER STORM LEADS TO PROPOSED STORM SEWER WITH PREMANUFACTURED TEES, WYES, GASKETS, SEALS, COUPLERS, BOOTS, ETC. PER SPECIFICATIONS.

SOIL EROSION SEDIMENT CONTROL

ALL RIPRAP MATERIAL SHALL BE APPROVED BY THE ENGINEER. OWNER AND ENGINEER RESERVES THE RIGHT TO REJECT ANY AND ALL RIPRAP.

CONTRACTOR SHALL FINISH GRADE, SEED, FERTILIZE, AND MULCH DAILY ON ALL DISTURBED AREAS AS DESCRIBED IN THE SPECIFICATIONS.

PROJECT NOTES

- ALL MAINTENANCE ACCESS CULVERTS MATERIAL SHALL BE EITHER RCP(C-76, CL-III), ADS HP STORM, OR ALUMINIZED CORRUGATED METAL PIPE (12 GA).
- LOG JAM LOCATIONS SHOWN ARE APPROXIMATED BASED ON FIELD REVIEW IN DECEMBER 2023. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL LOG JAMS PRESENT AT THE TIME OF CONSTRUCTION, REGARDLESS OF CHANGE IN FIELD CONDITIONS SINCE INITIAL FIELD REVIEW.

ABBREVIATIONS

- BC = BACK OF CURB
- BM = BENCH MARK
- CB = CATCH BASIN
- CC = CENTER TO CENTER
- CJ = CONSTRUCTION JOINT
- CL = CENTERLINE
- CMP = CORRUGATED METAL PIPE
- CONC = CONCRETE
- COHR = CORRUGATED
- CSP = CORRUGATED STEEL PIPE
- DI = DUCTILE IRON PIPE
- EF = EACH FACE
- ELEC = ELECTRIC
- EL OR ELEV = ELEVATION
- EOM = EDGE OF METAL
- EOP = EDGE OF PAVEMENT
- EQ/SP = EQUALLY SPACED
- ESMT = EASEMENT
- EW = EACH WAY
- EX OR EXIST = EXISTING
- FES = FLARED END SECTION
- FF = FINISH FLOOR
- FG = FINISH GROUND
- FL = FLOW LINE
- FS = FINISH SURFACE
- FT = FEET
- GALV = GALVANIZED
- G = GUTTER
- GA = GAUGE
- HDO = HOT DIP GALVANIZED
- HDPE = HIGH DENSITY POLYETHYLENE
- HMA = HOT MIX ASPHALT
- HOR = HORIZONTAL
- HP = HIGH POINT
- HYD = HYDRANT
- INV = INVERT
- LP = LOW POINT
- OC = ON CENTER
- OH = OVERHEAD
- OH = MANHOLE
- MIN = MINIMUM
- MON = MONUMENT
- NFL = NOT FIELD LOCATED
- NTS = NOT TO SCALE
- PROP = PROPOSED
- PVC = POLYVINYL CHLORIDE
- RCP = REINFORCED CONCRETE PIPE
- ROW = RIGHT OF WAY
- SAN = SANITARY
- SB = SOIL BORING
- SS = STAINLESS STEEL
- STA = STATION
- STM = STORM
- SWR = SEWER
- TB = TOP AND BOTTOM
- TC = TOP OF CURB
- TOB = TOP OF BANK
- TOS = TOE OF SLOPE
- TELE = TELEPHONE
- TRW = TOP OF RETAINING WALL
- TW = TOP OF WALK
- UG = UNDERGROUND
- UNO = UNLESS NOTED OTHERWISE
- VERT = VERTICAL
- WM = WATERMAIN
- WSEL = WATER SURFACE ELEVATION

LINE TYPE LEGEND

- EXISTING ROAD CENTERLINE
- EXISTING WATERMAIN
- EXISTING SANITARY SEWER OR FORCEMAIN
- EXISTING STORM SEWER
- EXISTING TELEPHONE CABLE
- EXISTING GAS MAIN
- EXISTING ELECTRIC
- EXISTING DRAINS (OTHER)
- PROPOSED UTILITY
- EXISTING CURB & GUTTER
- PROPOSED CURB & GUTTER
- FENCE LINE
- OVERHEAD UTILITY
- RAILROAD TRACKS
- STATION LINE
- LIMITS OF RIGHT OF WAY
- EASEMENT
- SILT FENCE
- REVERSE PAN CURB & GUTTER
- TREE LINE
- EXISTING CONTOURS
- PROPOSED CONTOURS

**SYMBOL LEGEND
EXISTING SYMBOLS**

- MANHOLE
- CATCH BASIN
- CURB CATCH BASIN
- FIRE HYDRANT
- GAS VALVE
- WATER VALVE
- TELEPHONE PEDESTAL
- POWER POLE
- TELEPHONE POLE
- POWER AND TELEPHONE POLE
- LIGHT POLE
- GUY ANCHOR AND POLE
- MAIL BOX
- WATER METER
- TELEPHONE MANHOLE
- ELECTRIC MANHOLE
- MONITORING WELL
- HAND HOLE
- TRANSFORMER
- ELECTRICAL PEDESTAL
- BARRIER FREE PARKING
- SPRINKLER
- RAILROAD SIGNAL
- ANTENNA
- SATELLITE DISH
- AIR CONDITIONING UNIT
- SOIL BORING
- CONTROL POINT
- BENCH MARK
- FOUND SURVEY CORNER
- SET 1/2" IRON ROD
- 1/4 SECTION CORNER
- BREAK IN LINE
- EXISTING SIGN-1 POST
- EXISTING SIGN-2 POST
- STUMP
- WETLANDS
- PINE
- BUSH
- TREE

PROPOSED SYMBOLS

- MANHOLE
- CATCHBASIN
- FIRE HYDRANT
- WATER VALVE
- BARRIER FREE PARKING
- LIGHT POLES
- DRAINAGE FLOW
- SPOT ELEVATION LABELS
- G = GUTTER
- TW = WALK
- TC = TOP OF CURB
- FS = FINISH SURFACE

PROJECT DATUM			
HORIZONTAL:	STATE PLANE SOUTH MI 93 2113		
VERTICAL:	NORTH AMERICAN VERTICAL DATUM 88		
BY	MARK	REVISIONS	DATE
<small>THE WORK REPRESENTED BY THIS DRAWING WAS DESIGNED BY THE ENGINEER FOR THIS SPECIFIC APPLICATION AND SPECIFIC LOCATION DESCRIBED HEREON IN ACCORDANCE WITH THE CONDITIONS PREVALENT AT THE TIME THE DESIGN WAS DONE. THE ENGINEER DOES NOT GUARANTEE AND WILL NOT BE LIABLE FOR ANY OTHER LOCATION, CONDITION, DESIGN OR PURPOSE.</small>			
MARSH CREEK #2 DRAIN SAGINAW COUNTY, MICHIGAN			
CONTACTS, GENERAL NOTES, LINE TYPE LEGEND			
<small>SAGINAW OFFICE 230 S. Washington Ave. Saginaw, MI 48607 Tel: 989-754-4717 Fax: 989-754-4440 www.SpicerGroup.com</small>			
DE. BY: POC/CDV	CH. BY: CDV	PROJECT NO.	
DR. BY: MJC	APP. BY: NDC	135292SG2023	
STDS.	SHEET 02 OF 23	<div style="font-size: 2em; font-weight: bold; display: inline-block;">DR</div> <div style="font-size: 2em; font-weight: bold; display: inline-block;">02</div>	
DATE: DECEMBER, 2024	FILE NO. DR-4707-02		
SCALE: NOT TO SCALE			

EROSION CONTROL MEASURES

KEY	SESC MEASURE	SYMBOL	WHERE USED
1	Seeding		When bare soil is exposed, temporarily or permanently, to erosive forces from wind and/or water on flat areas, mild slopes, grassed waterways and spillways, diversion ditches and dikes, borrow and stockpile areas, and spoil piles.
2	Mulch		On flat areas, slopes, grassed waterways and spillways, diversion ditches and dikes, borrow and stockpile areas, and spoil piles when areas are subject to raindrop impact, and erosive forces from wind or water.
7	Storm Drain Inlet Protection		Around the entrance to a catch basin or an inlet that will capture runoff from an earth change activity.
15	Riprap		Along drain banks, shorelines, or where concentrated flows occur. Slows velocity, reduces erosion and sediment load.
16	Riprap Toe of Slope		Riprap toe of slope protection is used in areas where velocities are causing drain bank erosion and are too high to stabilize using other methods.
18	Reinforced Vegetated Spillway		When slope failure at eroded outfalls are observed or are likely to occur from concentrated runoff on very shallow slopes (where flow velocities will be low enough not to undermine the reinforced grass root structure).
19	Armored Spillway		When concentrated flow must be conveyed down a drain bank or slope or discharge into another drain. Where slope failure or channel scour is observed or is likely to occur, or when runoff must be redirected around work in the drain.
23	Outfall Stabilization		In the stream or drain bank usually above the ordinary high water mark where an enclosed drain or tile discharges to an open drain.
26	Dust Control		As a temporary measure on exposed and unstabilized areas that must be protected from wind or water erosion.
28	Stone Construction Access		At locations where construction equipment will enter and exit the drain easement and tracking of soil is anticipated.

ROUTINE MAINTENANCE ACTIVITIES

KEY	BEST MANAGEMENT PRACTICE	SESC PLAN
A	Debris Removal	NO
B	Sediment Removal	> 100 FEET
C	Stormwater Basin Maintenance	NO
D	Drain Crossing Maintenance	NO
E	Enclosed Drain Maintenance	NO

DETAILED DRAWINGS AND SPECIFICATIONS ARE LOCATED IN THE MICHIGAN ASSOCIATION OF COUNTY DRAIN COMMISSIONERS SOIL EROSION AND SEDIMENTATION CONTROL AUTHORIZED PUBLIC AGENCY PROCEDURES MANUAL.

SYMBOLGY FOR INSERTION INTO CONSTRUCTION DRAWINGS:

- = PERMANENT MEASURE
- = TEMPORARY MEASURE

GENERAL TIMING & SEQUENCE

ALL PROPOSED CHANNEL EXCAVATION ACTIVITIES FOR THIS PROJECT MUST ADHERE TO THE FOLLOWING SEQUENCE.

- CONTRACTOR MUST CLEAR THE DRAIN CHANNEL AND RIGHT-OF-WAY AS NOTED PLANS. THIS INCLUDES ALL DEBRIS AND STUMP REMOVAL AS NOTED ON PLANS. CONTRACTOR MUST VERIFY WITH ENGINEER THAT CLEARING REQUIREMENTS HAVE BEEN MET PRIOR TO MOVING FORWARD WITH EXCAVATION.
- DRAIN EXCAVATION STAKES WILL BE PLACED FOLLOWING APPROVAL OF SITE CLEARING.
- CONTRACTOR IS TO PERFORM PROPOSED EXCAVATION ACTIVITIES REQUIRED TO OBTAIN PROPOSED GRADES AND SIDE SLOPES AS DESIGNATED ON PLANS.
- CONTRACTOR MUST PERFORM DAILY RAKING, SEEDING, AND MULCHING OF DRAIN BANKS AND SPOILS.
- ENGINEER WILL STAKE ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES ALONG PORTIONS OF DRAIN THAT HAVE BEEN EXCAVATED DURING ROUTINE INSPECTIONS.
- CONTRACTOR IS RESPONSIBLE FOR INSTALLING AND MAINTAINING SOIL EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE ENTIRE PROJECT.
- FINAL PAYMENT WILL BE MADE ONCE ALL DRAIN BANKS, SPOILS, AND DISTURBED AREAS HAVE ESTABLISHED VEGETATION GROWING. ALL LAWN AREAS MUST BE RESTORED TO IN KIND CONDITIONS PRIOR TO FINAL PAYMENT.

SAGINAW COUNTY

SOIL CLASS	SOIL COMPOSITION
5A	Sumava sandy loam, 0 to 3 percent slopes
10C	Grattan sand, 4 to 12 percent slopes
12	Corunna sandy loam
13	Belleville fine sand
18	Lenawee silty clay loam, 0 to 1 percent slopes
22B	Parkhill-Selfridge complex, 0 to 2 percent slopes
24	Parkhill loam, 0 to 1 percent slopes
26A	Pipestone sand, loamy substratum, 0 to 3 percent slopes
29	Sloan silt loam, frequently flooded
31A	Pipestone sand, Erie-Huron Lake Plain, 0 to 3 percent slopes
33	Granby fine sand
44	Sloan-Ceresco complex, frequently flooded
58B	Covert sand, 1 to 6 percent slopes
60B	Arkona sand, 0 to 4 percent slopes
61A	Tappan-Poseyville complex, 0 to 3 percent slopes
70	Udipsamments, undulating
75B2	Strawn silt loam, 2 to 6 percent slopes, eroded
75C2	Strawn silt loam, 6 to 12 percent slopes, eroded
78	Fluvaquents, frequently flooded
82	Granby sand, loamy substratum
95	Sloan-Ceresco complex, rarely flooded
98A	98A—Poseyville loamy fine sand, 0 to 3 percent slopes
124A	Selfridge loamy sand, 0 to 3 percent slopes
CvrabA	Conover-Williamstown loams, 0 to 6 percent slopes
MtgaAA	Misteguay silty clay, 0 to 1 percent slopes, rarely flooded
ZwkaaA	Zilwaukee and Misteguay silty clays, 0 to 1 percent slopes, rarely flooded
ZwkabA	Zilwaukee and Misteguay silty clays, 0 to 1 percent slopes, frequently flooded

MAINTENANCE PROGRAM FOR SESC MEASURES

GENERAL MAINTENANCE

- CONTRACTOR SHALL MAINTAIN ALL PERMANENT SESC MEASURES FOR A PERIOD OF 1 YEAR FOLLOWING THEIR INSTALLATION.
- TEMPORARY SESC MEASURES MUST BE INSTALLED, MAINTAINED, AND REMOVED BY THE CONTRACTOR.
- TEMPORARY MEASURES MUST BE MAINTAINED AND IN PLACE UNTIL AREAS ARE PERMANENTLY STABILIZED.
- PERMANENT MEASURES MUST BE INSTALLED AND MAINTAINED BY THE CONTRACTOR UNTIL FINAL COMPLETION.
- DAILY MAINTENANCE IS THE CONTRACTOR'S RESPONSIBILITY.
- TEMPORARY SESC MEASURES MUST BE REMOVED AT THE END OF THE PROJECT ONCE PERMANENT MEASURES ARE ESTABLISHED.
- TEMPORARY SESC MEASURES MUST BE INSTALLED PRIOR TO OR AT THE TIME OF EARTH DISTURBANCE.
- INSPECT WEEKLY AND AFTER EACH RAIN EVENT UNTIL VEGETATION HAS BEEN ESTABLISHED.
- IF NECESSARY, REPAIR AND RE-SEED OR REPLANT ERODED AREAS IMMEDIATELY.

SEEDING AND MULCHING

- SEEDING PRACTICES INCLUDE TOPSOIL (AS DIRECTED BY ENGINEER), SEED, POLYMER, AND MULCH OR MULCH MATTING (AS DIRECTED BY ENGINEER OR WHERE SHOWN ON PLANS).
- WHERE NECESSARY, APPROPRIATE MULCH MUST BE APPLIED BASED ON SLOPE AND GROWING CONDITIONS AS APPROVED BY THE PROJECT MANAGER.
- ALL SLOPES AND HIGHLY ERODIBLE AREAS MUST BE SEEDED, POLYMER APPLIED, AND MULCHED AS NEEDED WHEN CONSTRUCTION ACTIVITY IS NOT TAKING PLACE.
- SEED AND MULCH IS TO BE INSPECTED DAILY FOLLOWING EACH RAIN EVENT TO DETERMINE IF CONCENTRATED FLOWS ARE PRESENT.
- IN THE EVENT THAT SEED AND MULCH ARE REMOVED BY ERODIBLE RUNOFF, REPAIRS ARE TO BE MADE IMMEDIATELY.
- ALL AREAS DURING CONSTRUCTION MUST BE PERMANENTLY STABILIZED WITHIN 72 HOURS OF FINAL GRADE (GRADE LISTED ON PLAN).

STORM DRAIN INLET PROTECTION

- INSPECT ROUTINELY AND FOLLOWING A PRECIPITATION EVENT THAT RESULTS IN RUNOFF UNTIL SEDIMENT FILTER IS REMOVED.
- ROUTINELY REMOVE SEDIMENT ACCUMULATION.
- REPAIR AND REPLACE CONTROL MEASURES AS NEEDED.

STABILIZED CONSTRUCTION ACCESS

- INSPECT WEEKLY AND AFTER EACH RAINFALL.
- WHEN CONSTRUCTION ACCESS IS NO LONGER EFFECTIVE, SCRAPE THE TOP LAYER AND ADD 2" OF AGGREGATE.

COMPLIANCE WITH PART 91 OF PA 451

- RESPOND IMMEDIATELY TO STORMWATER OPERATOR AND/OR SOIL EROSION AND SEDIMENTATION CONTROL INSPECTOR'S CONCERNS. MAKE CORRECTIVE MEASURES AS REQUIRED IMMEDIATELY AS DETAILED BY THE APPROVED APA MANUAL(S).

CONTINUED MAINTENANCE PROGRAM FOR PERMANENT SESC MEASURES

RESPONSIBLE PARTY:	SAGINAW COUNTY PUBLIC WORKS COMMISSIONER
PERMANENT SESC MEASURE:	MAINTENANCE PROCEDURE
SEEDING:	REPAIR BARE AREAS, APPLYING SUPPLEMENTAL SEED, MULCH, AND WATER AS NEEDED. MOWING CAN BE USED PERIODICALLY TO DISCOURAGE WEEDS.
RIPRAP:	REPAIR AREAS WHERE ROCK HAS BEEN DISPLACED. EXPAND RIPRAP AREA IF NEEDED.

SOIL EROSION AND SEDIMENTATION CONTROL NOTES

- INSTALL AND MAINTAIN ALL TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES IN ACCORDANCE WITH THE APPROVED PLAN PRIOR TO COMMENCEMENT OF CONSTRUCTION OR MASS GRADING. ALL SESC MEASURES MUST BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MARSH CREEK #2 DRAIN SESC PLAN AND PROJECT SPECIFICATIONS.
- SOIL EROSION CONTROL MEASURES MUST BE INSPECTED BY A STATE CERTIFIED INSPECTOR AFFILIATED WITH THE COUNTY PUBLIC WORKS / COUNTY DRAIN COMMISSIONER'S OFFICE PRIOR TO COMMENCEMENT OF CONSTRUCTION OR MASS GRADING.
- DAILY INSPECTION AND MAINTENANCE MUST BE MADE TO ENSURE ALL EROSION CONTROL MEASURES ARE FUNCTIONING PROPERLY AND INTACT. NECESSARY REPAIRS MUST BE PERFORMED WITHIN 24 HOURS.
- ADDITIONAL SOIL EROSION CONTROL MEASURES MUST BE PROVIDED THROUGHOUT CONSTRUCTION ACTIVITY AS NEEDED AND DETERMINED BY THE AP/ENGINEER. THE SOIL EROSION AND SEDIMENTATION CONTROL PLAN IS TO BE AMENDED TO INCLUDE ADDITIONAL EROSION CONTROL MEASURES IMPLEMENTED ON-SITE.
- SEDIMENT FROM WORK ON THIS SITE IS TO BE CONTAINED ON THE SITE AND IS NOT TO BE ALLOWED TO COLLECT ON ANY OFF-SITE AREAS OR IN WATERWAYS. WATERWAYS INCLUDE BOTH NATURAL AND MANMADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES, PONDS, AND WETLANDS.
- ALL VISUAL TRACKING INCLUDING MUD, DIRT, AND DEBRIS TRACKED ONTO EXISTING ROADWAYS MUST BE IMMEDIATELY REMOVED NO LESS THAN ON A DAILY BASIS BY SCRAPING AND SWEEPING AND/OR AS DIRECTED BY THE ENGINEER OR APA.
- DUST CONTROL MUST BE EXERCISED AT ALL TIMES DURING THE PROJECT AND AS DIRECTED BY THE ENGINEER OR APA. APPLY DUST SUPPRESSANT TO SURFACES USING A PRESSURE TYPE WATER DISTRIBUTOR TRUCK EQUIPPED WITH A SPRAY SYSTEM.
- ALL PERMANENT SOIL EROSION CONTROL MEASURES MUST BE IN PLACE WITHIN 24 HOURS OF FINAL GRADING (GRADE LISTED ON PLANS). THIS INCLUDES ALL VEGETATIVE STABILIZATION. VEGETATIVE STABILIZATION WILL BE ONGOING. TOPSOIL, FERTILIZER, SEED, POLYMER, SILT STOP (OR EQUAL), MULCH AND/OR RIPRAP MUST BE IN PLACE BEFORE PROCEEDING TO THE NEXT WORK AREA. ALL TEMPORARY MEASURES SUCH AS SILT FENCE AND INLET PROTECTION BAGS ARE TO BE REMOVED ONCE PERMANENT SESC MEASURES ARE IN PLACE AND VEGETATION IS ESTABLISHED. REMOVAL OF TEMPORARY MEASURES, FOLLOWING ACCEPTANCE OF THE PROJECT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- PRIOR TO WINTER CONSTRUCTION, ALL EXPOSED SOILS MUST BE STABILIZED WITH A COMBINATION OF SILT STOP 705 POLYMER BLEND, NORTH AMERICAN GREEN EROSION CONTROL BLANKETS, MULCH, OR OTHER APPROVED METHOD IF VEGETATION COULD NOT BE ESTABLISHED DURING THE GROWING SEASON AS DETERMINED BY THE APA OR ENGINEER.
- WORK AREAS MUST BE STABILIZED WITH TOPSOIL, SEED, FERTILIZER, AND MULCH WITHIN 24 HOURS FOLLOWING CONSTRUCTION. VEGETATIVE STABILIZATION IS ONGOING THROUGHOUT THE PROJECT.
- ALL SOIL EROSION CONTROL MEASURES MUST BE INSPECTED DAILY. THE STORM WATER OPERATOR IS TO MAKE A WEEKLY INSPECTION OR INSPECT AFTER EACH RAIN EVENT THAT RESULTED IN A DISCHARGE TO ENSURE PROPER MAINTENANCE OF THE SOIL EROSION CONTROL MEASURES. ANY DEFICIENCIES OR REPAIRS TO SOIL EROSION CONTROL MEASURES MUST BE CORRECTED IMMEDIATELY. INLET PROTECTION MEASURES, DANDY BAG II (OR EQUAL), FLEX STORM (OR EQUAL), MUST BE INSTALLED IN CATCHBASINS BEFORE ANY STORMWATER RUNOFF IS ALLOWED TO ENTER THE TOP OF THE STRUCTURES. THE SILT AND SEDIMENT MUST BE REMOVED FROM INLET PROTECTION MEASURES AS NEEDED TO ENSURE PROPER FUNCTION OF THE BAGS.
- THE NEED FOR TEMPORARY MEASURES SUCH AS SILT FENCE AND DANDY BAG II (OR EQUAL), FLEX STORM (OR EQUAL) FOR EXISTING OR NEW CATCHBASINS MUST BE ASSESSED ON A DAILY BASIS. PIPES ARE TO BE CAPPED AT THE END OF EACH WORKDAY. AT NO TIME SHOULD SEDIMENT COLLECT IN A CATCHBASIN OR AN OFF-SITE AREA. TEMPORARY MEASURES MUST BE REMOVED ONCE PERMANENT MEASURES ARE IN PLACE AND VEGETATION IS ESTABLISHED.
- IF DEWATERING IS NECESSARY, CONTRACTOR SHALL SUBMIT A DEWATERING PLAN TO THE ENGINEER OR APA FOR APPROVAL.
- THE NOTICE OF COVERAGE (IF REQUIRED), SOIL EROSION AND SEDIMENTATION CONTROL PLAN, AND STORMWATER OPERATOR LOGS MUST BE LOCATED ON SITE AT ALL TIMES.
- ALL RESTORATION TO OCCUR WITHIN 24 HOURS OF FINAL GRADING.

BY	MARK	REVISIONS	DATE

THE WORK REPRESENTED BY THIS DRAWING WAS DESIGNED BY THE ENGINEER FOR THIS SPECIFIC APPLICATION AND SPECIFIC LOCATION DESCRIBED HEREON IN ACCORDANCE WITH THE CONDITIONS PRESENT AT THE TIME THE DESIGN WAS DONE. THE ENGINEER DOES NOT GUARANTEE AND WILL NOT BE LIABLE FOR ANY OTHER LOCATION, CONDITION, DESIGN OR PURPOSE.

**MARSH CREEK #2 DRAIN
SAGINAW COUNTY, MICHIGAN**

**SOIL EROSION AND
SEDIMENTATION CONTROL PLAN**

Spicer group
SAGINAW OFFICE
230 S. Washington Ave.
Saginaw, MI 48607
Tel: 989-754-4717
Fax: 989-754-4440
www.SpicerGroup.com

DE. BY: POC/CDV	CH. BY: CDV	PROJECT NO.
DR. BY: MJC	APP. BY: NDC	135292SG2023
STDS.	SHEET 03 OF 23	DR
DATE: DECEMBER, 2024	FILE NO.	03
SCALE: NOT TO SCALE	DR-4707-03	

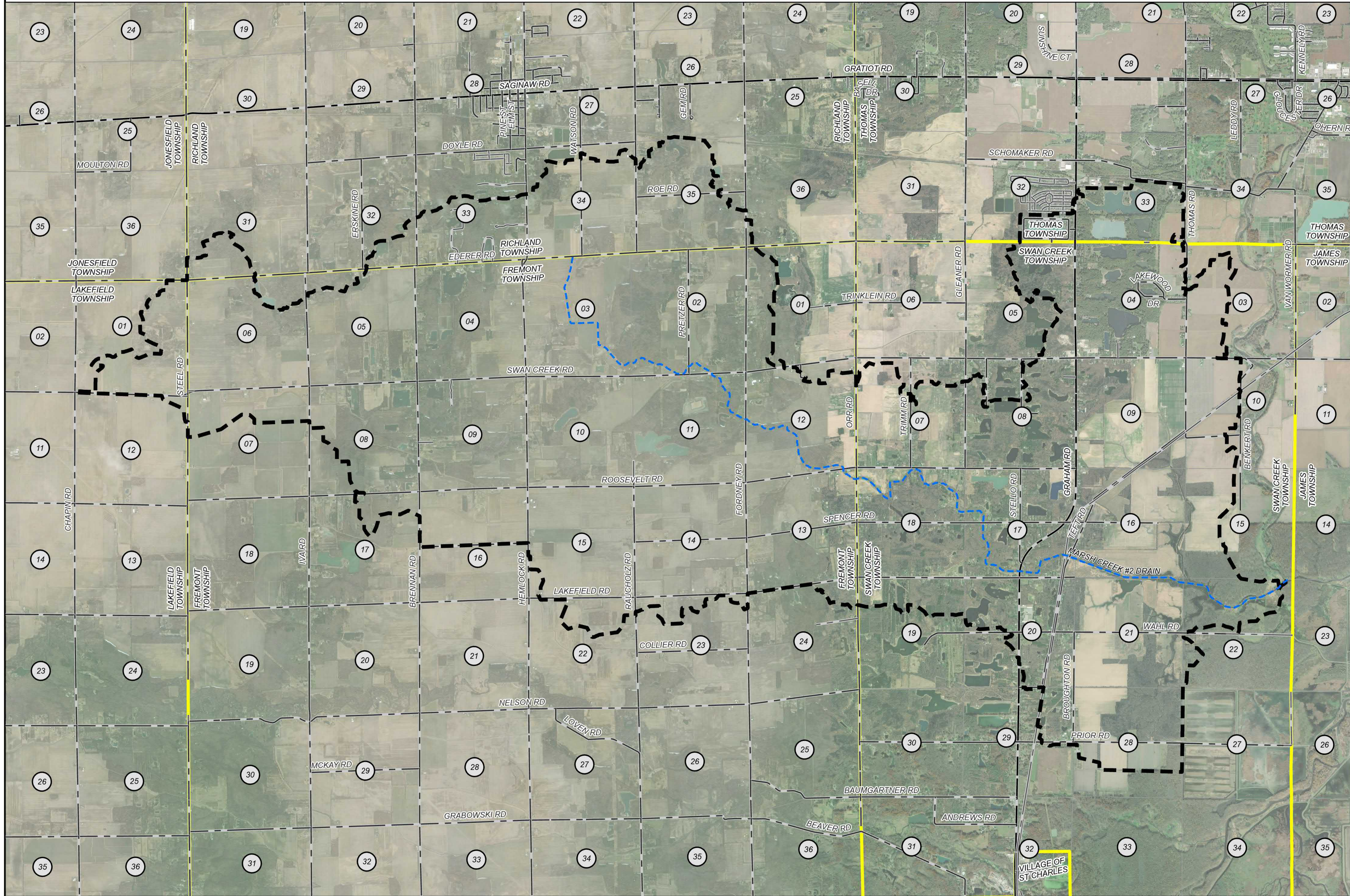
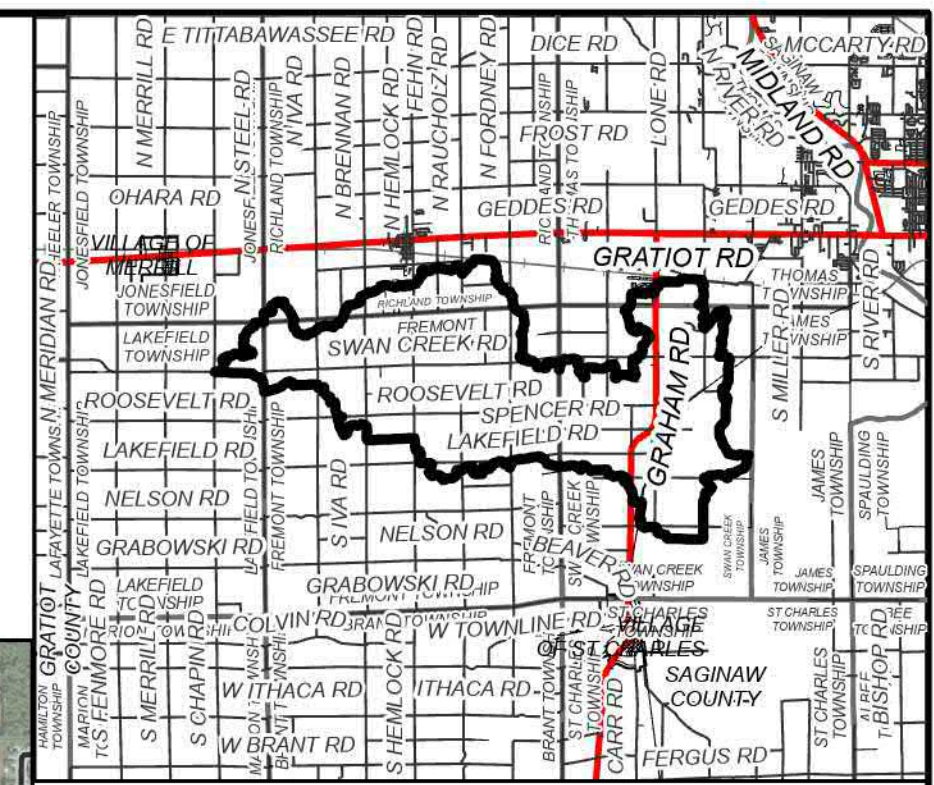
IN COMPLIANCE WITH SECTION 323.1703 OF PART 91, SOIL EROSION AND SEDIMENTATION CONTROL, OF THE NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT, 1994 PA 451, AS AMENDED.



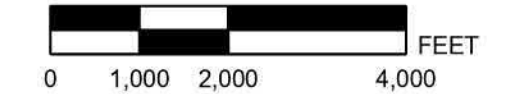
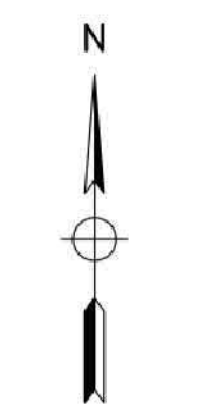
MARSH CREEK #2 DRAIN

SAGINAW COUNTY, MICHIGAN

SAGINAW COUNTY DRAIN COMMISSIONER - BRIAN WENDLING



AREA MAP
NOT TO SCALE



LEGEND

- DRAINAGE DISTRICT BOUNDARY
- APPROXIMATE DRAIN LOCATION
- MUNICIPALITY BOUNDARIES
- STATE ROADS
- COUNTY ROADS
- LOCAL ROADS
- RAILROAD

BY	MARK	REVISIONS	DATE

THE WORK REPRESENTED BY THIS DRAWING WAS DESIGNED BY THE ENGINEER FOR THIS SPECIFIC APPLICATION AND SPECIFIC LOCATION DESCRIBED HEREON IN ACCORDANCE WITH THE CONDITIONS PREVALENT AT THE TIME THE DESIGN WAS DONE. THE ENGINEER DOES NOT GUARANTEE AND WILL NOT BE LIABLE FOR ANY OTHER LOCATION, CONDITION, DESIGN OR PURPOSE.

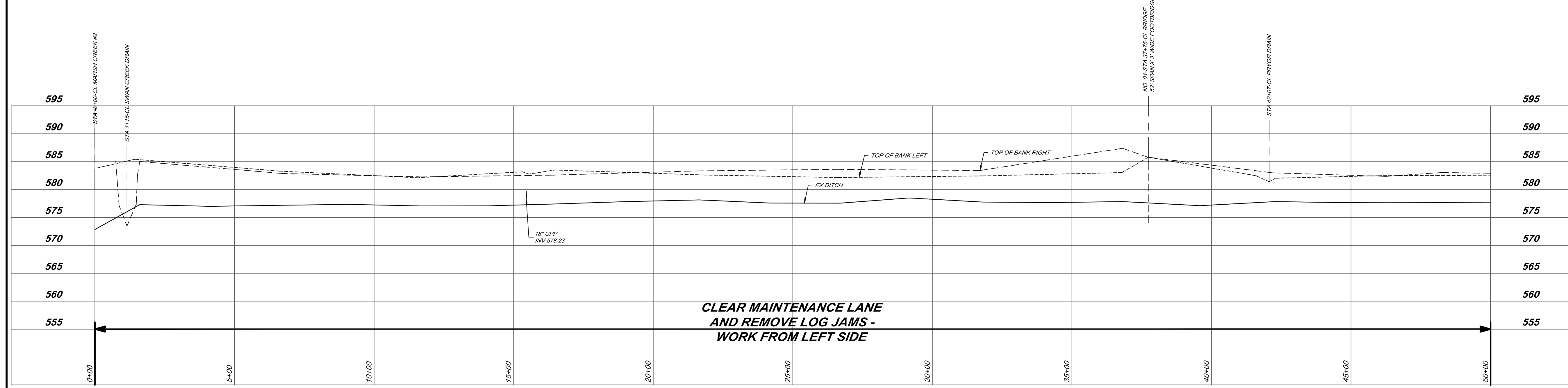
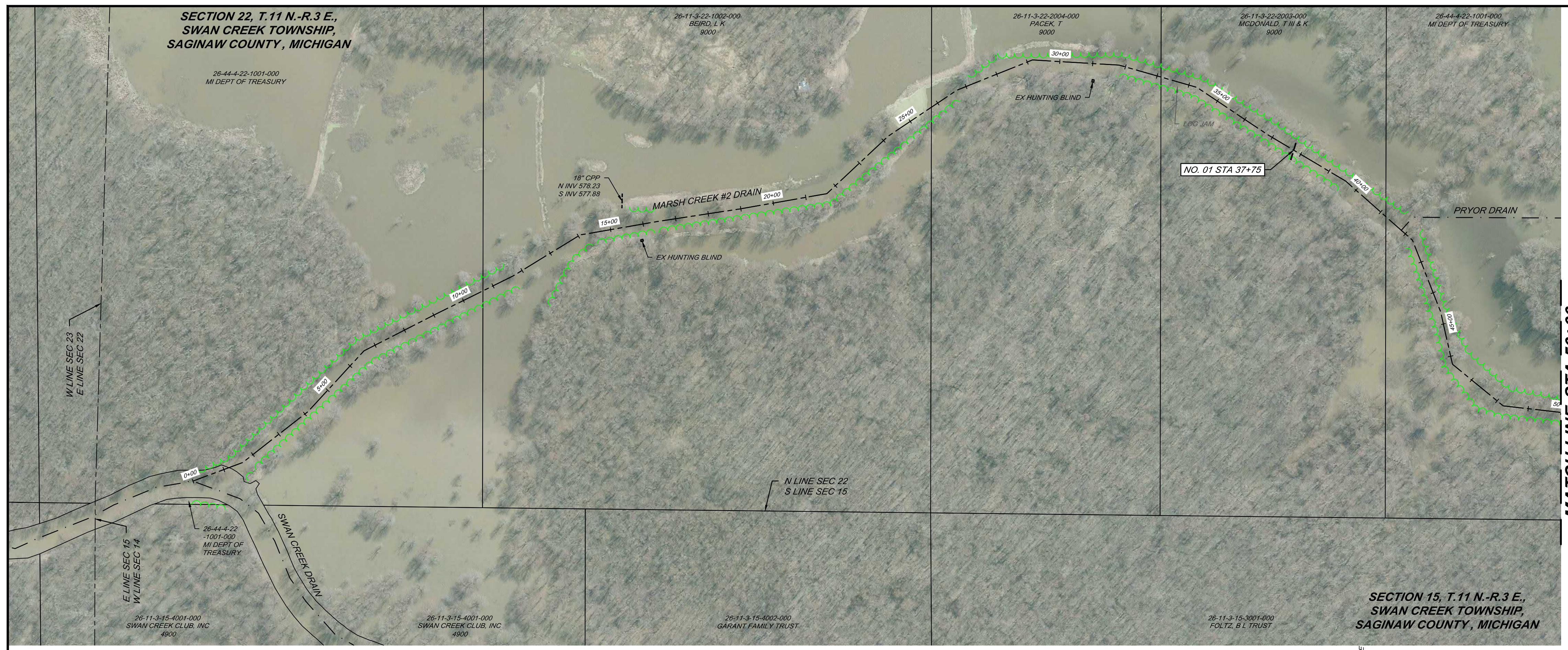
MARSH CREEK #2 DRAIN
SAGINAW COUNTY, MICHIGAN

DRAINAGE DISTRICT MAP

SAGINAW'S OFFICE
230 S Washington Ave
Saginaw, MI 48607
Tel: 989-754-4747
www.SpicerGroup.com

DE. BY: LRC	CH. BY: CDV	PROJECT NO.
DR. BY: LRC	APP. BY: NDC	135292SG2023
STDS.	SHEET 4 OF 23	DR 04
DATE: AUGUST 2024	FILE NO.	DR-4707-04
SCALE: 1"=2,000'		

PATH: D:\ARC/INFO\BASEMAP\MARSH_CREEK_DISTRICT\MAP\MARSH_CREEK_DISTRICT.MXD, PRINTED ON: 8/15/2024, BY: LUKE DODD



NO. 01 - STA 37+75 - MCDONALD, T III & K
NO WORK

EROSION CONTROL TABLE					
KEY*	FROM STATION	TO STATION	SIDE	DESCRIPTION	QTY
(1) D	0+00	50+00	BOTH	SEEDING OF ALL DISTURBED	LUMP SUM
(2) T	0+00	50+00	BOTH	MULCH OF ALL DISTURBED AREAS	LUMP SUM
(23) P	ALL EX FIELD TILE OUTLETS AND S.O.T.			OUTFALL STABILIZATION	1 EA

NOTE: COORDINATE INSTALLATION OF EROSION CONTROL STRUCTURES WITH ENGINEER PRIOR TO CONSTRUCTION. LOCATIONS, QUANTITIES, OR TYPES MAY VARY BASED ON FIELD DECISIONS.

MAINTENANCE ACCESS			
STATION	SIDE	SIZE/TYPE	LENGTH
9+50	LEFT	24" CULVERT	40 LIN FT
27+60	LEFT	30" CULVERT	40 LIN FT
40+00	LEFT	15" CULVERT	40 LIN FT

COORDINATE INSTALLATION OF ACCESS CULVERTS WITH ENGINEER PRIOR TO CONSTRUCTION.

CONSTRUCTION NOTES

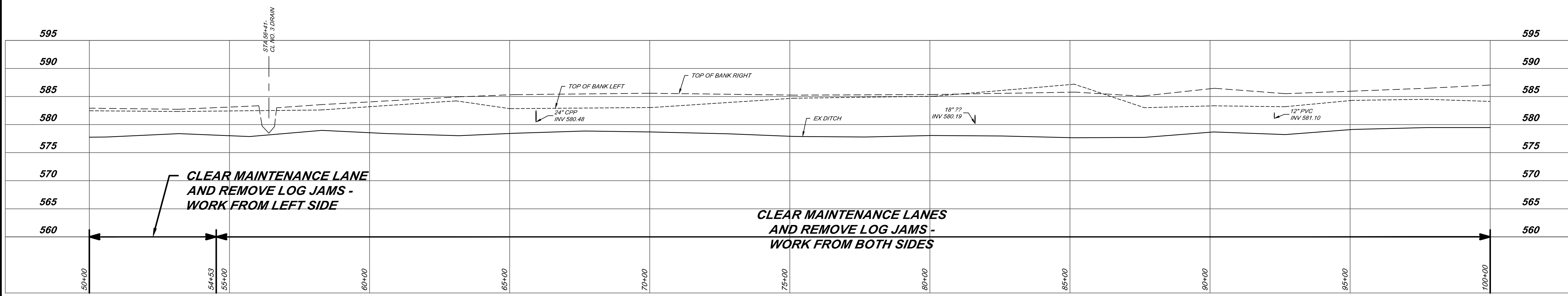
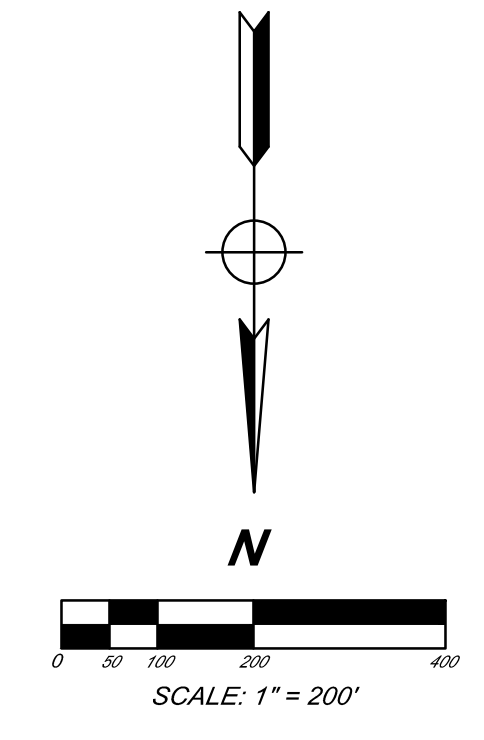
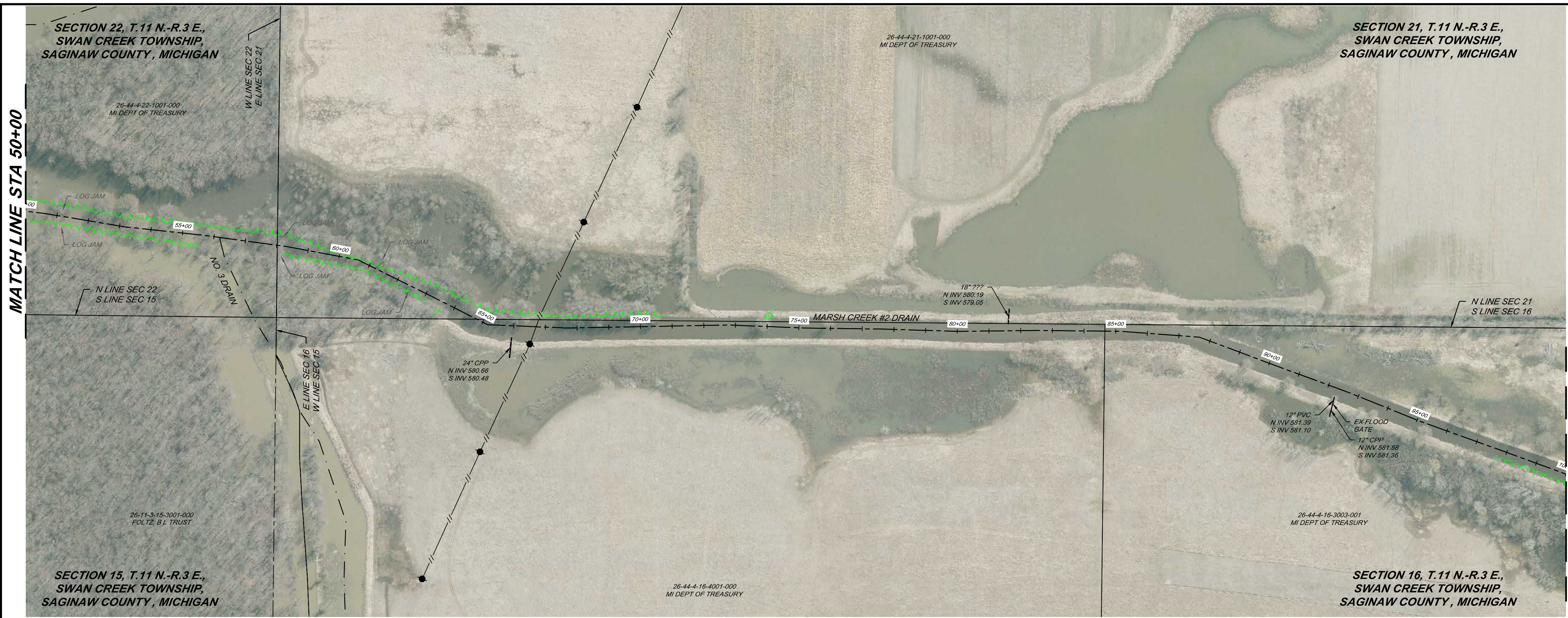
- STA 41+90 - CONTRACTOR TO CLEAR MAINTENANCE LANE ALONG BOTH SIDES OF PRYOR DRAIN TO WAHL ROAD IN ORDER TO ACCESS DOWNSTREAM OF STA 41+90.

RIGHT OF WAY

MARSH CREEK #2 DRAIN - DRAIN RIGHT-OF-WAY IS 75' WIDE ON EACH SIDE OF CENTERLINE OF DRAIN.

MARSH CREEK #2 DRAIN SAGINAW COUNTY, MICHIGAN			
PLAN AND PROFILE STA 0+00 TO STA 50+00			
		SAGINAW OFFICE 230 S. Washington Ave. Saginaw, MI 48607 Tel: 989-754-4717 Fax: 989-754-4440 www.SpicerGroup.com	
DE. BY: POC/CDV	CH. BY: CDV	PROJECT NO. 135292SG2023	
DR. BY: MJC	APP. BY: NDC		
STDS.		SHEET 05 OF 23	DR 05
DATE: DECEMBER, 2024 SCALE: H: 1"=200' V: 1"=10'		FILE NO. DR-4707-05	

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EROSION CONTROL TABLE					
KEY*	FROM STATION	TO STATION	SIDE	DESCRIPTION	QTY
(1) B	50+00	100+00	BOTH	SEEDING OF ALL DISTURBED	LUMP SUM
(2) T	50+00	100+00	BOTH	MULCH OF ALL DISTURBED AREAS	LUMP SUM
(23) P	ALL EX FIELD TILE OUTLETS AND S.O.T.		BOTH	OUTFALL STABILIZATION	4 EA


NOTE: COORDINATE INSTALLATION OF EROSION CONTROL STRUCTURES WITH ENGINEER PRIOR TO CONSTRUCTION. LOCATIONS, QUANTITIES, OR TYPES MAY VARY BASED ON FIELD DECISIONS.

CONSTRUCTION NOTES

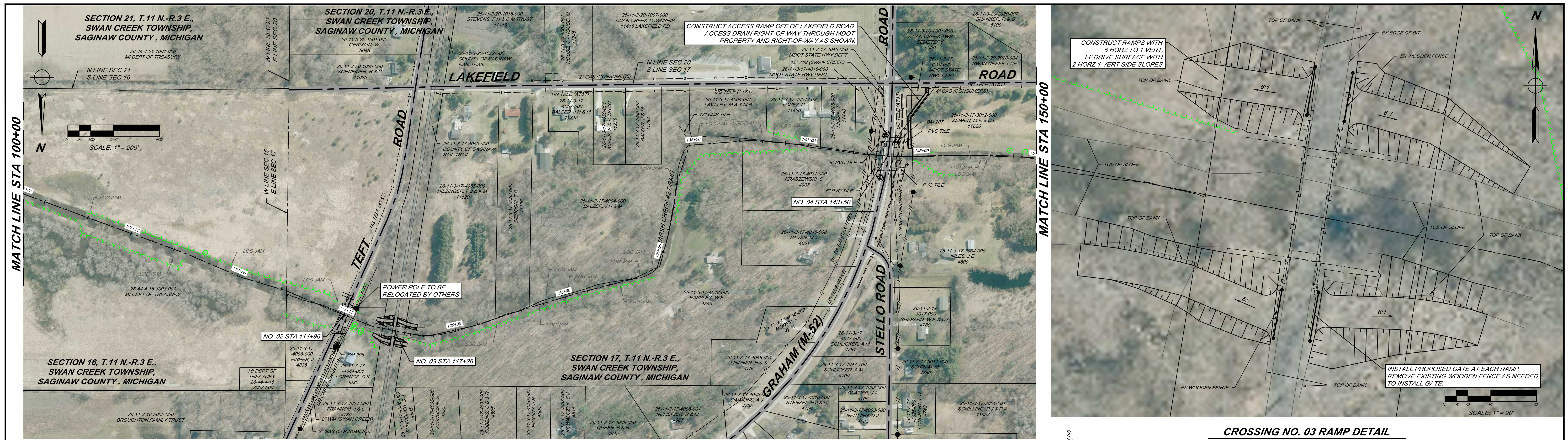
- STA 58+00 CONSTRUCT TURNAROUND ON RIGHT SIDE PER DETAIL SHOWN ON SHEET 22.
- STA 92+00 TO STA 100+00, RIGHT SIDE - CONTRACTOR TO WIND ROW ALL TREES AND BRUSH OUTSIDE DRAIN RIGHT-OF-WAY.

RIGHT OF WAY

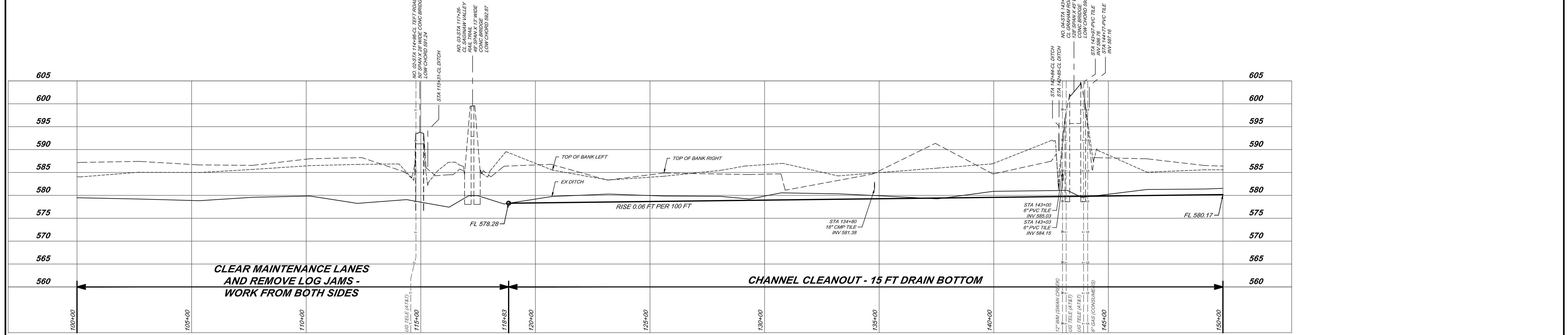
MARSH CREEK #2 DRAIN - DRAIN RIGHT-OF-WAY IS 75' WIDE ON EACH SIDE OF CENTERLINE OF DRAIN.

BY: MARK				REVISIONS		DATE	
<small>THE WORK REPRESENTED BY THIS DRAWING WAS DESIGNED BY THE ENGINEER FOR THIS SPECIFIC APPLICATION AND SPECIFIC LOCATION DESCRIBED HEREON IN ACCORDANCE WITH THE CONDITIONS PREVALENT AT THE TIME THE DESIGN WAS DONE. THE ENGINEER DOES NOT GUARANTEE AND WILL NOT BE LIABLE FOR ANY OTHER LOCATION, CONDITION, DESIGN OR PURPOSE.</small>							
MARSH CREEK #2 DRAIN SAGINAW COUNTY, MICHIGAN							
PLAN AND PROFILE STA 50+00 TO STA 100+00							
				SAGINAW OFFICE 230 S. Washington Ave. Saginaw, MI 48607 Tel: 989-754-4717 Fax: 989-754-4440 www.SpicerGroup.com			
DE. BY: POC/CDV		CH. BY: CDV		PROJECT NO.		135292SG2023	
DR. BY: MJC		APP. BY: NDC					
STDS.				SHEET 06 OF 23		DR 06	
DATE: DECEMBER, 2024				FILE NO.			
SCALE: H: 1"=200' V: 1"=10'				DR-4707-06			

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 CHAD SPICER/BAUGH



CROSSING NO. 03 RAMP DETAIL
SCALE: 1" = 20'



NO. 02 - STA 114+96 - TEFT ROAD
NO WORK

NO. 03 - STA 117+26 - SAGINAW VALLEY RAIL TRAIL
CONSTRUCT ACCESS RAMPS IN EACH QUADRANT
(SEE DETAIL, THIS SHEET)

NO. 04 - STA 143+50 - GRAHAM ROAD (M-52)
NO WORK

EROSION CONTROL TABLE

KEY*	FROM STATION	TO STATION	SIDE	DESCRIPTION	QTY
(1) (P)	100+00	150+00	BOTH	SEEDING OF ALL DISTURBED	LUMP SUM
(2) (T)	100+00	150+00	BOTH	MULCH OF ALL DISTURBED AREAS	LUMP SUM
(16) (P)	AS STAKED BY ENGINEER	-	-	RIPRAP TOE OF SLOPE PROTECTION	400 LIN FT
(19) (P)	AS STAKED BY ENGINEER	-	-	RIPRAP SPILLWAY	70 LIN FT
(23) (P)	ALL EX FIELD TILE OUTLETS AND S.O.T.	-	BOTH	OUTFALL STABILIZATION	5 EA

SPOIL LEVELING TABLE

STATION FROM	STATION TO	DETAIL	SIDE TO EXCAVATE FROM
118+50	129+00	B	BOTH
129+00	132+50	HAUL	RIGHT
132+50	138+00	B	LEFT
138+00	143+50	HAUL	LEFT
143+50	150+00	A	RIGHT
		B	LEFT
		B	RIGHT

MAINTENANCE ACCESS

STATION	SIDE	SIZE/TYPE	LENGTH
116+91	LEFT	15" CULVERT	40 LIN FT
116+91	RIGHT	15" CULVERT	40 LIN FT
117+61	LEFT	15" CULVERT	40 LIN FT
117+61	RIGHT	15" CULVERT	40 LIN FT

COORDINATE INSTALLATION OF ACCESS CULVERTS WITH ENGINEER PRIOR TO CONSTRUCTION.

- CONSTRUCTION NOTES**
- STA 142+00 - CONSTRUCT TURNAROUND ON RIGHT SIDE PER DETAIL ON SHEET 22.
 - STA 117+26 - ACCESS RAMPS TO BE CONSTRUCTED USING SUITABLE MATERIAL FROM OFFSITE, EXISTING SPOIL PILES, OR MATERIAL FROM EXCAVATION ON THIS PROJECT. ALL FILL MATERIAL MUST BE APPROVED BY ENGINEER PRIOR TO CONSTRUCTION OF RAMPS. COORDINATE WITH ENGINEER FOR STAKING AND LAYOUT OF RAMPS, GATES, AND ACCESS CULVERTS.
 - STA 100+00 TO STA 114+96, RIGHT SIDE - CONTRACTOR TO WIND ROW ALL TREES AND BRUSH OUTSIDE DRAIN RIGHT-OF-WAY.

- BENCHMARKS**
- BM 207 - SET MAG NAIL IN NORTHWEST CORNER OF WING WALL AND SOUTHWEST WING WALL BRIDGE AT M-52 AND MARSH CREEK. EL 604.77
 - BM 208 - SET ON ARROW OF RED HYDRANT, NORTH SIDE BEING ±20' WEST OF THE CL OF TEFT ROAD AND ±10' NORTHEAST OF POWER POLE STRAIGHT EAST BEING ±30' OF BLUE BARN. EL 597.62

RIGHT OF WAY
MARSH CREEK #2 DRAIN - DRAIN RIGHT-OF-WAY IS 75' WIDE ON EACH SIDE OF CENTERLINE OF DRAIN.

BY	MARK	REVISIONS	DATE

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MARSH CREEK #2 DRAIN
SAGINAW COUNTY, MICHIGAN

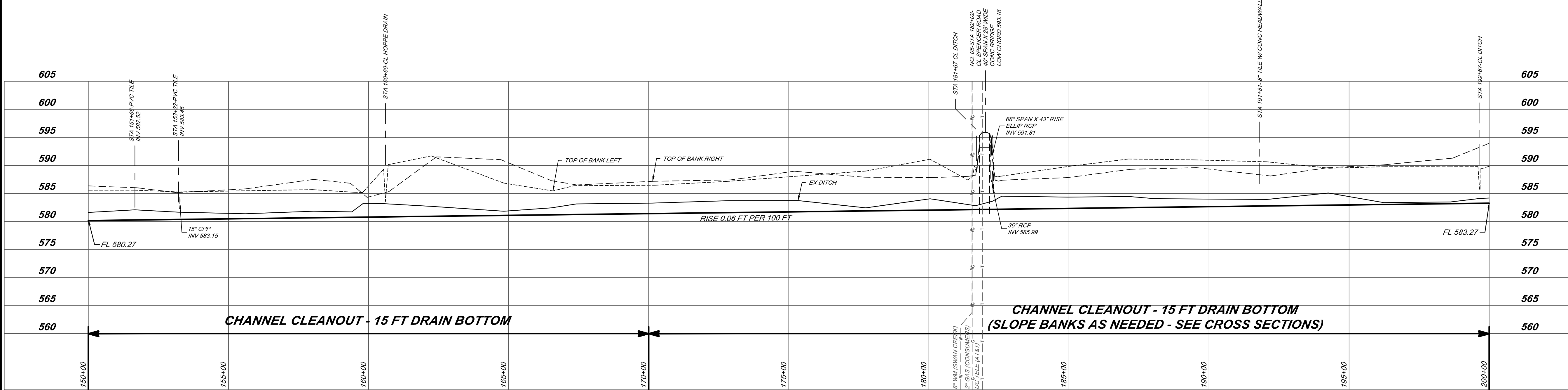
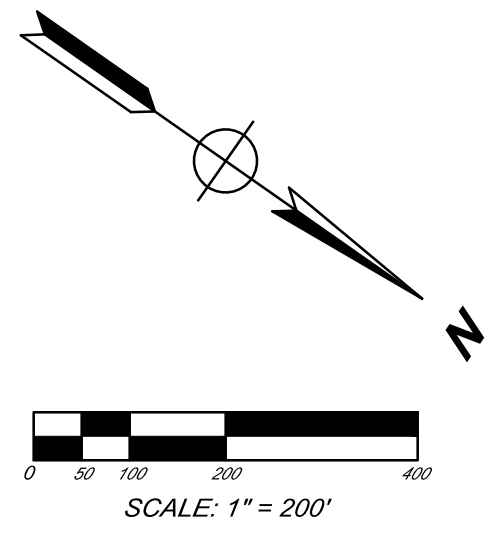
PLAN AND PROFILE
STA 100+00 TO STA 150+00

Spicer Group

SAGINAW OFFICE
230 S. Washington Ave.
Saginaw, MI 48607
Tel: 989-754-4717
Fax: 989-754-4440
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DE. BY: POC/CDV CH. BY: CDV PROJECT NO. 135292SG2023
DR. BY: MJC APP. BY: NDC

STDS. SHEET 07 OF 23 DR 07
DATE: DECEMBER, 2024 FILE NO. DR-4707-07
SCALE: H: 1"=200' V: 1"=10'



NO. 05 - STA 182+02 - SPENCER ROAD
CLEANOUT EXISTING CROSSING

EROSION CONTROL TABLE					
KEY*	FROM STATION	TO STATION	SIDE	DESCRIPTION	QTY
(1) D	150+00	200+00	BOTH	SEEDING OF ALL DISTURBED	LUMP SUM
(2) T	150+00	200+00	BOTH	MULCH OF ALL DISTURBED AREAS	LUMP SUM
(16) P	AS STAKED BY ENGINEER	-	-	RIPRAP TOE OF SLOPE PROTECTION	400 LIN FT
(19) P	AS STAKED BY ENGINEER	-	-	RIPRAP SPILLWAY	130 LIN FT
(23) P	ALL EX FIELD TILE OUTLETS AND S.O.T.	-	BOTH	OUTFALL STABILIZATION	3 EA

NOTE: COORDINATE INSTALLATION OF EROSION CONTROL STRUCTURES WITH ENGINEER PRIOR TO CONSTRUCTION. LOCATIONS, QUANTITIES, OR TYPES MAY VARY BASED ON FIELD DECISIONS.

SPOIL LEVELING TABLE			
STATION FROM	STATION TO	DETAIL	SIDE TO EXCAVATE FROM
150+00	188+00	B	BOTH
188+00	198+00	B	RIGHT
198+00	200+00	B	BOTH

NOTE: USE SPOIL LEVELING DETAIL "A" THROUGH FIELD AREA. USE SPOIL LEVELING DETAIL "B" THROUGH WOODED AREA. SPOILS TO BE HAULED IN LAWN AREAS.

MAINTENANCE ACCESS			
STATION	SIDE	SIZE/TYPE	LENGTH
181+82	LEFT	15" CULVERT	40 LIN FT
182+12	LEFT	36" RCP	24 LIN FT

COORDINATE INSTALLATION OF ACCESS CULVERTS WITH ENGINEER PRIOR TO CONSTRUCTION.
STA 182+12 SEE CONSTRUCTION NOTE 2 THIS SHEET

CONSTRUCTION NOTES

- STA 160+00 AND STA 161+00 - LEFT SIDE: CONSTRUCT TURNAROUND AS NEEDED PER DETAIL ON SHEET 22.
- STA 182+16 - LEFT SIDE: INSTALL 24 LIN FT OF 36" RCP EXTENSION ON UPSTREAM END OF EXISTING ACCESS CULVERT. INSTALL CONCRETE COLLAR AT CONNECTION TO EXISTING CULVERT.
- STA 182+16 - RIGHT SIDE: INSTALL ACCESS RAMP OFF OF SPENCER ROAD PER DETAIL ON SHEET 23. FILL MATERIAL MUST BE APPROVED BY ENGINEER PRIOR TO INSTALLATION.

BENCHMARKS

BM 208 - SET GEAR SPIKE IN NORTHWEST FACE OF POWER POLE BEING 40' SOUTHEAST OF SPENCER ROAD AND 150' EAST OF CL OF MARSH CREEK BEING 180' WEST OF CL OF HOUSE DRIVEWAY #11890.

RIGHT OF WAY

MARSH CREEK #2 DRAIN - DRAIN RIGHT-OF-WAY IS 75' WIDE ON EACH SIDE OF CENTERLINE OF DRAIN.

BY	MARK	REVISIONS	DATE

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**MARSH CREEK #2 DRAIN
SAGINAW COUNTY, MICHIGAN**

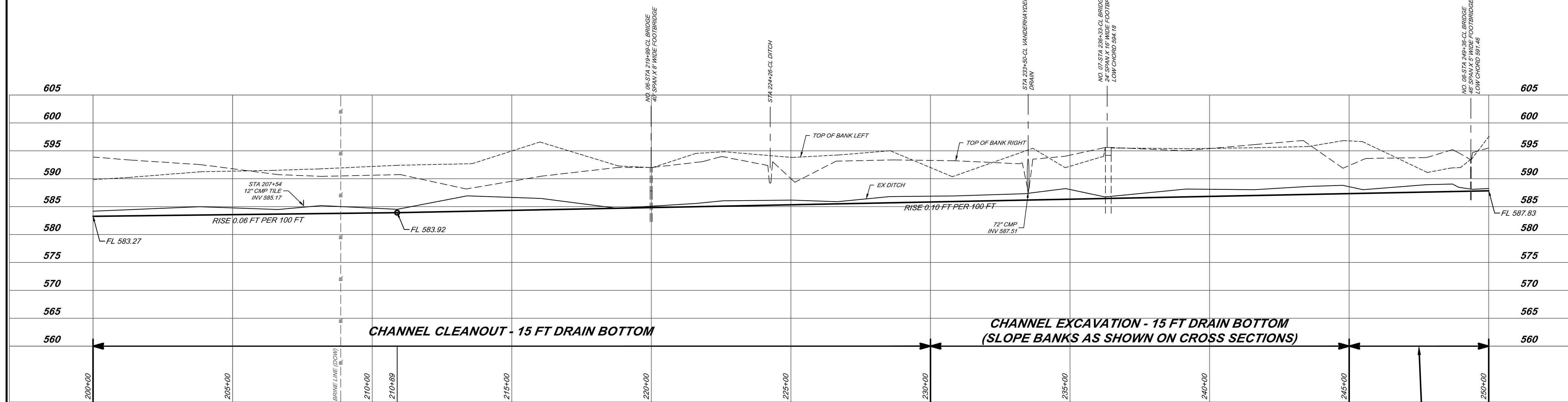
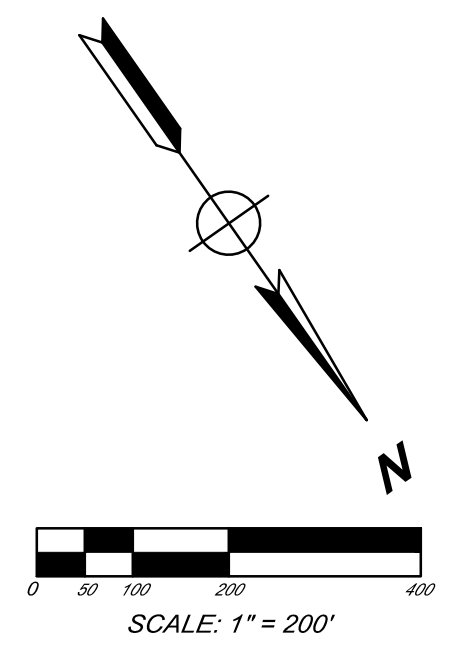
**PLAN AND PROFILE
STA 150+00 TO STA 200+00**

Spicer Group

SAGINAW OFFICE
230 S. Washington Ave.
Saginaw, MI 48607
Tel: 989-754-4717
Fax: 989-754-4440
www.SpicerGroup.com

DE. BY: POC/CDV CH. BY: CDV PROJECT NO. 135292SG2023
DR. BY: MJC APP. BY: NDC

STDS. SHEET 08 OF 23 DR-4707-08
DATE: DECEMBER, 2024 FILE NO. DR-4707-08
SCALE: H: 1"=200' V: 1"=10'



- NO. 06 - STA 219+99 - LESHNER, D & D
CLEANOUT EXISTING CROSSING
- NO. 07 - STA 236+36 - VISNAW, D & C
CLEANOUT EXISTING CROSSING
- NO. 08 - STA 249+36 - MCKEAGE, R & MCKEAGE, M
CLEANOUT EXISTING CROSSING

EROSION CONTROL TABLE					
KEY*	FROM STATION	TO STATION	SIDE	DESCRIPTION	QTY
(1) D	200+00	250+00	BOTH	SEEDING OF ALL DISTURBED	LUMP SUM
(2) T	200+00	250+00	BOTH	MULCH OF ALL DISTURBED AREAS	LUMP SUM
(16) P	AS STAKED BY ENGINEER	-	-	RIPRAP TOE OF SLOPE PROTECTION	800 LIN FT
(19) P	AS STAKED BY ENGINEER	-	-	RIPRAP SPILLWAY	130 LIN FT
(23) P	ALL EX FIELD TILE OUTLETS AND S.O.T.	-	BOTH	OUTFALL STABILIZATION	2 EA

NOTE: COORDINATE INSTALLATION OF EROSION CONTROL STRUCTURES WITH ENGINEER PRIOR TO CONSTRUCTION. LOCATIONS, QUANTITIES, OR TYPES MAY VARY BASED ON FIELD DECISIONS.

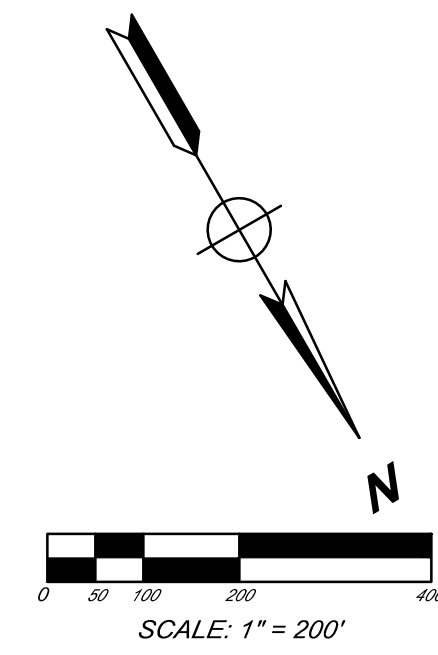
SPOIL LEVELING TABLE			
STATION FROM	STATION TO	DETAIL	SIDE TO EXCAVATE FROM
200+00	218+00	A	LEFT
218+00	234+90	B	BOTH
234+90	236+61	HAUL	BOTH
236+61	250+00	A	RIGHT
236+61	250+00	B	LEFT

NOTE: USE SPOIL LEVELING DETAIL "A" THROUGH FIELD AREA. USE SPOIL LEVELING DETAIL "B" THROUGH WOODED AREA. SPOILS TO BE HAULED IN LAWN AREAS.

CHANNEL EXCAVATION - 12 FT DRAIN BOTTOM
(SLOPE BANKS AS SHOWN ON CROSS SECTIONS)

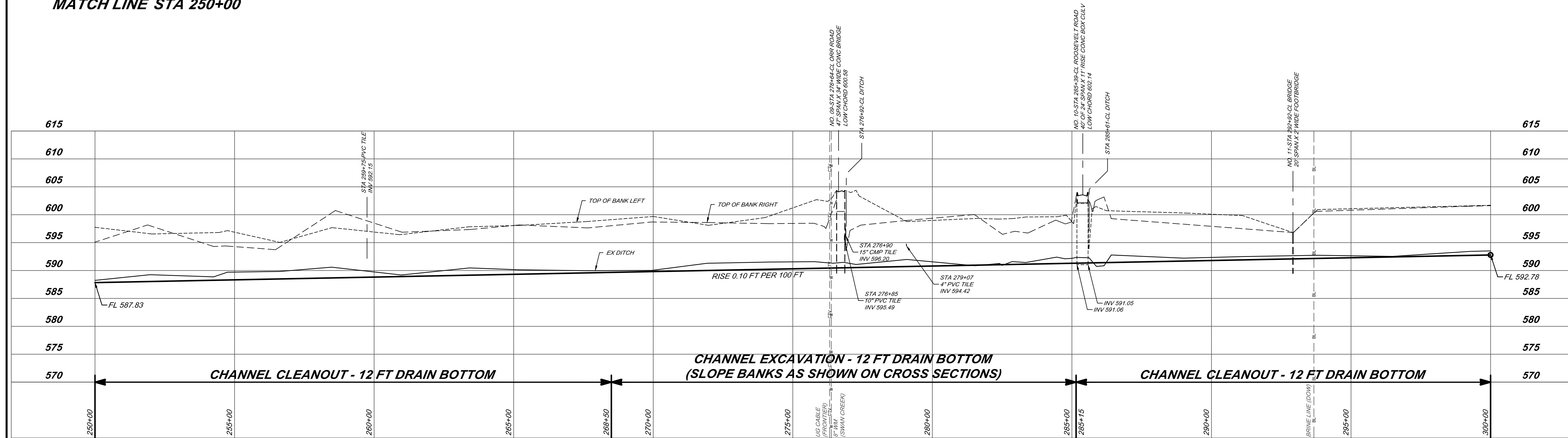
BY	MARK	REVISIONS	DATE
<p>THE WORK REPRESENTED BY THIS DRAWING WAS DESIGNED BY THE ENGINEER FOR THIS SPECIFIC APPLICATION AND SPECIFIC LOCATION DESCRIBED HEREON IN ACCORDANCE WITH THE CONDITIONS PREVALENT AT THE TIME THE DESIGN WAS DONE. THE ENGINEER DOES NOT GUARANTEE AND WILL NOT BE LIABLE FOR ANY OTHER LOCATION, CONDITION, DESIGN OR PURPOSE.</p>			
<p>MARSH CREEK #2 DRAIN SAGINAW COUNTY, MICHIGAN</p>			
<p>PLAN AND PROFILE STA 200+00 TO STA 250+00</p>			
<p>DE. BY: POC/CDV DR. BY: MJC</p>		<p>CH. BY: CDV APP. BY: NDC</p>	
<p>PROJECT NO. 135292SG2023</p>		<p>DATE: DECEMBER, 2024 SCALE: H: 1"=200' V: 1"=10'</p>	
<p>SHEET 09 OF 23</p>		<p>DR 09</p>	

RIGHT OF WAY
MARSH CREEK #2 DRAIN - DRAIN RIGHT-OF-WAY IS 75' WIDE ON EACH SIDE OF CENTERLINE OF DRAIN.



MATCH LINE STA 250+00

MATCH LINE STA 300+00



NO. 09 - STA 276+64 - ORR ROAD
CLEANOUT EXISTING CROSSING

NO. 10 - STA 285+89 - ROOSEVELT ROAD
CLEANOUT EXISTING CROSSING

NO. 11 - STA 292+92 - ZELINKO FARMS REALTY LLC
REMOVE EXISTING CROSSING

EROSION CONTROL TABLE					
KEY*	FROM STATION	TO STATION	SIDE	DESCRIPTION	QTY
(1) D	250+00	300+00	BOTH	SEEDING OF ALL DISTURBED	LUMP SUM
(2) T	250+00	300+00	BOTH	MULCH OF ALL DISTURBED AREAS	LUMP SUM
(16) P	AS STAKED BY ENGINEER	-	-	RIPRAP TOE OF SLOPE PROTECTION	600 LIN FT
(19) P	AS STAKED BY ENGINEER	-	-	RIPRAP SPILLWAY	50 LIN FT
(23) P	ALL EX FIELD TILE OUTLETS AND S.O.T.	-	BOTH	OUTFALL STABILIZATION	4 EA

NOTE: COORDINATE INSTALLATION OF EROSION CONTROL STRUCTURES WITH ENGINEER PRIOR TO CONSTRUCTION. LOCATIONS, QUANTITIES, OR TYPES MAY VARY BASED ON FIELD DECISIONS.

SPOIL LEVELING TABLE			
STATION FROM	STATION TO	DETAIL	SIDE TO EXCAVATE FROM
250+00	261+00	B	BOTH
261+00	281+98	A	BOTH
281+98	285+39	A	LEFT
285+39	300+00	HAUL	RIGHT
285+39	300+00	B	BOTH

NOTE: USE SPOIL LEVELING DETAIL "A" THROUGH FIELD AREA. USE SPOIL LEVELING DETAIL "B" THROUGH WOODED AREA. SPOILS TO BE HAULED IN LAWN AREAS.

MAINTENANCE ACCESS			
STATION	SIDE	SIZE/TYPE	LENGTH
277+04	RIGHT	15" CULVERT	40 LIN FT
287+14	RIGHT	30" CULVERT	40 LIN FT

COORDINATE INSTALLATION OF ACCESS CULVERTS WITH ENGINEER PRIOR TO CONSTRUCTION.

BENCHMARKS

BM 204 - SET GEAR SPIKE IN SOUTHEAST FACE OF POWER POLE BEING ±40' NORTH OF CL OF ROOSEVELT ROAD BEING ±30' WEST OF CL OF MARSH CREEK. EL 600.65

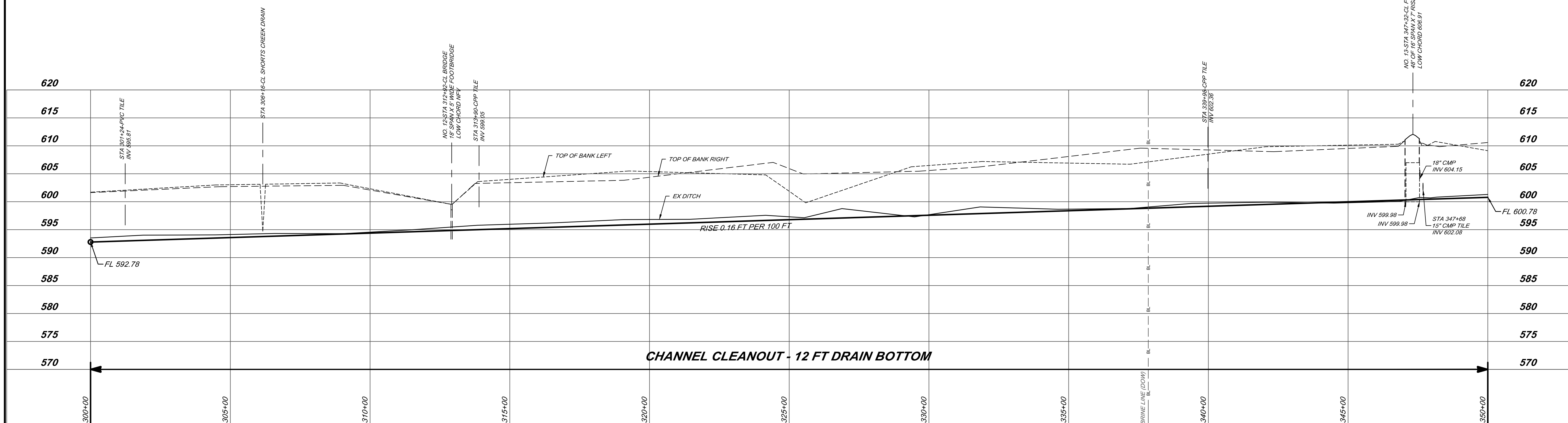
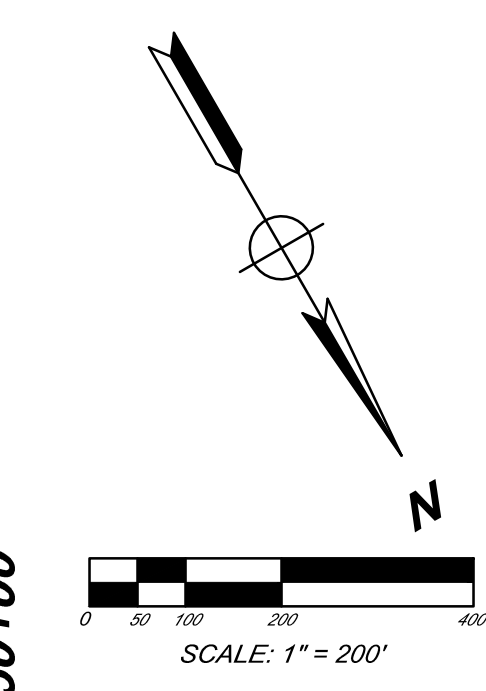
BM 205 - SET ON EAST FLANGE BOLT OF RED HYDRANT BEING ±40' SOUTH OF CL OF MARSH CREEK AND ±25' EAST OF CL OF ORR ROAD BEING ±30' NORTHEAST OF THE SOUTH END OF GUARD RAIL. EL 605.56

RIGHT OF WAY

MARSH CREEK #2 DRAIN - DRAIN RIGHT-OF-WAY FROM STA 250+00 TO STA 276+64 IS 75' WIDE ON EACH SIDE OF CENTERLINE OF DRAIN.

DRAIN RIGHT-OF-WAY FROM STA 276+64 TO STA 300+00 IS 66' WIDE ON EACH SIDE OF CENTERLINE OF DRAIN.

BY	MARK	REVISIONS	DATE
<p>THE WORK REPRESENTED BY THIS DRAWING WAS DESIGNED BY THE ENGINEER FOR THIS SPECIFIC APPLICATION AND SPECIFIC LOCATION DESCRIBED HEREON IN ACCORDANCE WITH THE CONDITIONS PREVALENT AT THE TIME THE DESIGN WAS DONE. THE ENGINEER DOES NOT GUARANTEE AND WILL NOT BE LIABLE FOR ANY OTHER LOCATION, CONDITION, DESIGN OR PURPOSE.</p>			
<p>MARSH CREEK #2 DRAIN SAGINAW COUNTY, MICHIGAN</p>			
<p>PLAN AND PROFILE STA 250+00 TO STA 300+00</p>			
<p>DE. BY: PCC/CDV DR. BY: MJC</p>		<p>CH. BY: CDV APP. BY: NDC</p>	
<p>STDS.</p>		<p>PROJECT NO. 135292SG2023</p>	
<p>DATE: DECEMBER, 2024 SCALE: H: 1"=200' V: 1"=10'</p>		<p>SHEET 10 OF 23 FILE NO. DR-4707-10</p>	
<p>SPICER GROUP</p>		<p>SAGINAW OFFICE 230 S. Washington Ave. Saginaw, MI 48607 Tel: 989-754-4717 Fax: 989-754-4440 www.SpicerGroup.com</p>	



NO. 12 - STA 312+92 - ZELINKO FARMS REALTY LLC
CLEANOUT EXISTING CROSSING

NO. 13 - STA 347+32 - FORDNEY ROAD
CLEANOUT EXISTING CROSSING

EROSION CONTROL TABLE

KEY*	FROM STATION	TO STATION	SIDE	DESCRIPTION	QTY
(1) D	300+00	350+00	BOTH	SEEDING OF ALL DISTURBED	LUMP SUM
(2) T	300+00	350+00	BOTH	MULCH OF ALL DISTURBED AREAS	LUMP SUM
(16) P	AS STAKED BY ENGINEER	-	-	RIPRAP TOE OF SLOPE PROTECTION	200 LIN FT
(19) P	AS STAKED BY ENGINEER	-	-	RIPRAP SPILLWAY	100 LIN FT
(23) P	ALL EX FIELD TILE OUTLETS AND S.O.T.	-	BOTH	OUTFALL STABILIZATION	8 EA

NOTE: COORDINATE INSTALLATION OF EROSION CONTROL STRUCTURES WITH ENGINEER PRIOR TO CONSTRUCTION. LOCATIONS, QUANTITIES, OR TYPES MAY VARY BASED ON FIELD DECISIONS.

SPOIL LEVELING TABLE

STATION FROM	STATION TO	DETAIL	SIDE TO EXCAVATE FROM
300+00	308+50	B	BOTH
308+50	313+00	A	LEFT
		B	RIGHT
313+00	342+00	B	BOTH
342+00	347+32	HAUL	LEFT
		A	RIGHT
347+32	350+00	B	LEFT
		HAUL	RIGHT

NOTE: USE SPOIL LEVELING DETAIL "A" THROUGH FIELD AREA. USE SPOIL LEVELING DETAIL "B" THROUGH WOODED AREA. SPOILS TO BE HAULED IN LAWN AREAS.

MAINTENANCE ACCESS

STATION	SIDE	SIZE/TYPE	LENGTH
328+77	RIGHT	42" CULVERT	40 LIN FT

COORDINATE INSTALLATION OF ACCESS CULVERTS WITH ENGINEER PRIOR TO CONSTRUCTION.

CONSTRUCTION NOTES

- STA 306+00 - CONTRACTOR TO USE SHORTS CREEK DRAIN RIGHT-OF-WAY OUT TO ROOSEVELT ROAD FOR ACCESS AROUND SHORTS CREEK DRAIN.

BENCHMARKS

BM 203 - SET GEAR SPIKE IN NORTH FACE OF POWER POLE 35' EAST OF CL OF FORDNEY ROAD AND SOUTHEAST OF CL OF HOUSE DRIVEWAY #3430.

EL 611.17

RIGHT OF WAY

MARSH CREEK #2 DRAIN - DRAIN RIGHT-OF-WAY IS 66' WIDE ON EACH SIDE OF CENTERLINE OF DRAIN.

BY	MARK	REVISIONS	DATE

THE WORK REPRESENTED BY THIS DRAWING WAS DESIGNED BY THE ENGINEER FOR THIS SPECIFIC APPLICATION AND SPECIFIC LOCATION DESCRIBED HEREON IN ACCORDANCE WITH THE CONDITIONS PREVALENT AT THE TIME THE DESIGN WAS DONE. THE ENGINEER DOES NOT GUARANTEE AND WILL NOT BE LIABLE FOR ANY OTHER LOCATION, CONDITION, DESIGN OR PURPOSE.

**MARSH CREEK #2 DRAIN
SAGINAW COUNTY, MICHIGAN**

**PLAN AND PROFILE
STA 300+00 TO STA 350+00**

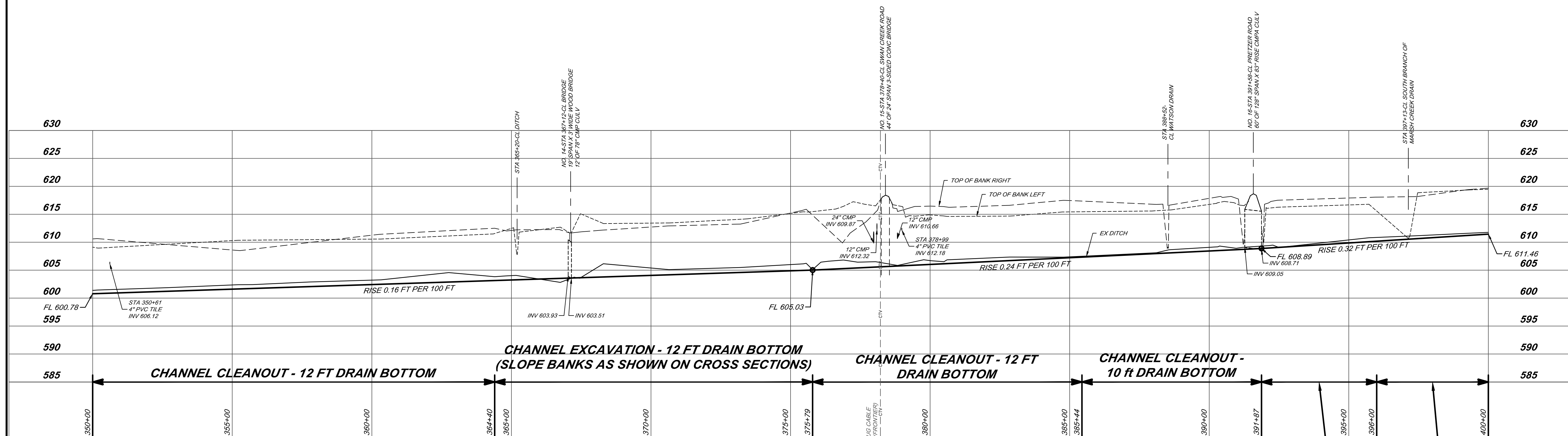
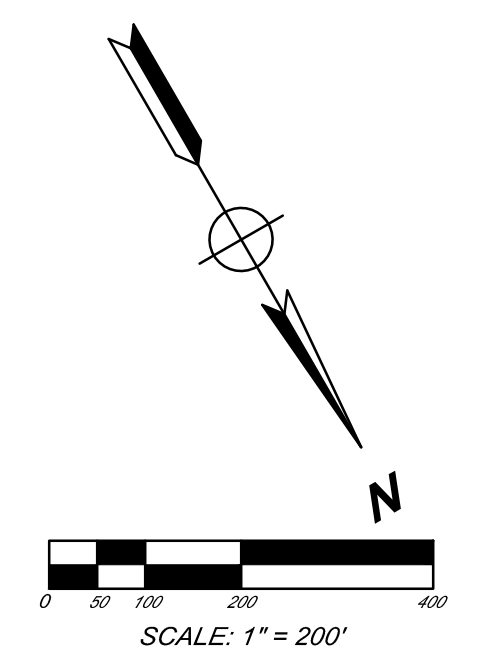
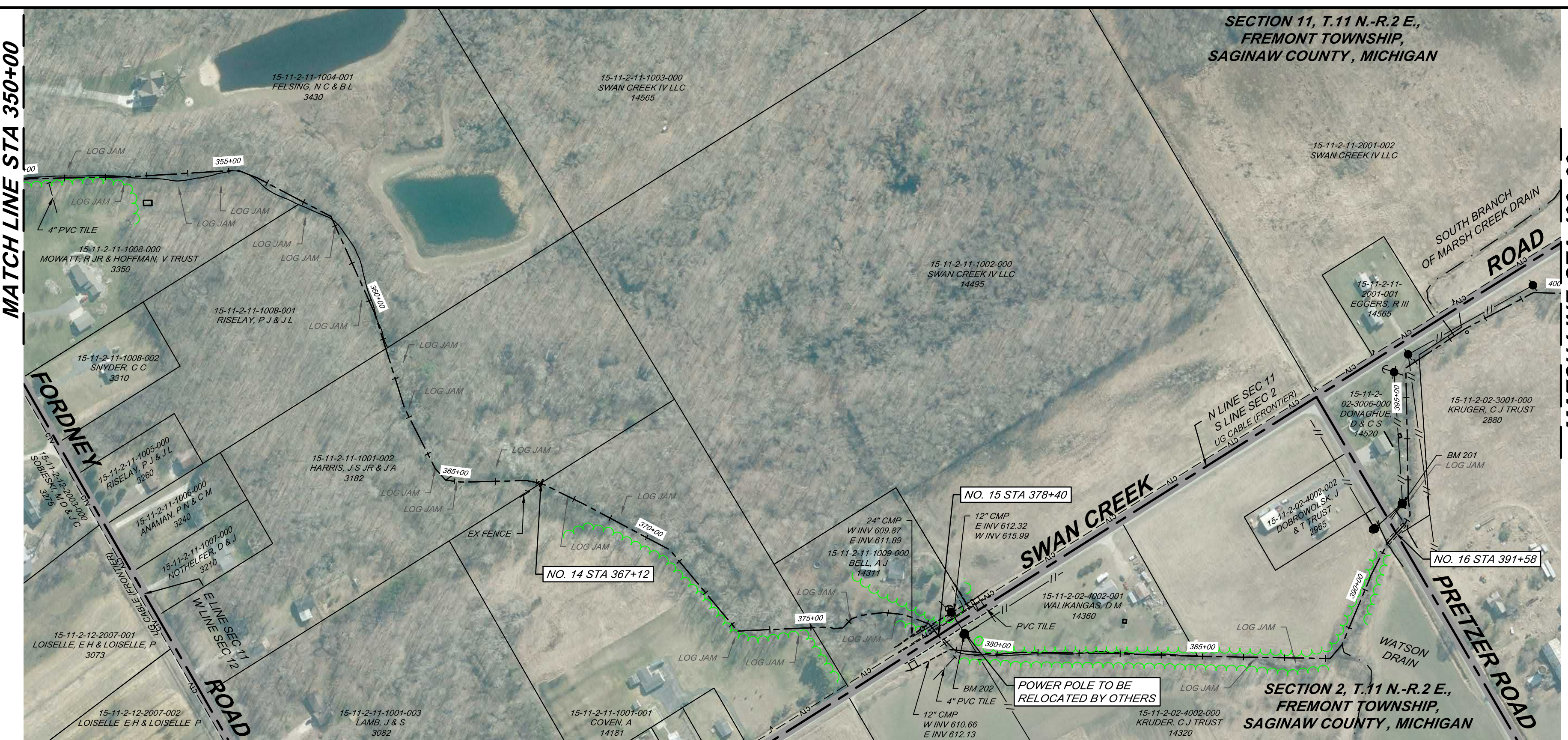
Spicer Group

SAGINAW OFFICE
230 S. Washington Ave.
Saginaw, MI 48607
Tel: 989-754-4717
Fax: 989-754-4440
www.SpicerGroup.com

DE. BY: POC/CDV CH. BY: CDV PROJECT NO. 135292SG2023
DR. BY: MJC APP. BY: NDC

STDS. SHEET 11 OF 23 DR-4707-11
DATE: DECEMBER, 2024 FILE NO. DR-4707-11
SCALE: H: 1"=200' V: 1"=10'

**DR
11**



- CONSTRUCTION NOTES**
- STA 388+00 AND STA 389+00 - RIGHT SIDE: CONSTRUCT TURNAROUND AS NEEDED PER DETAIL ON SHEET 22.
- BENCHMARKS**
- BM 201 - SET GEAR SPIKE IN EAST FACE OF POWER POLE BEING ±30' SOUTH OF CL OF PRETZER ROAD AND ±50' NORTH OF HOUSE #14520. EL 617.71
 - BM 202 - SET GEAR SPIKE IN SOUTHEAST FACE OF POWER POLE BEING ±35' NORTH OF CL OF SWAN CREEK ROAD AND ±20' WEST OF CL OF MARSH CREEK AND NORTH OF HOUSE #14311. EL 616.92
- RIGHT OF WAY**
- MARSH CREEK #2 DRAIN - DRAIN RIGHT-OF-WAY IS 66' WIDE ON EACH SIDE OF CENTERLINE OF DRAIN.

NO. 14 - STA 367+12 - HARRIS, J JR & S / COVEN, A REMOVE EXISTING CROSSING

NO. 15 - STA 378+00 - SWAN CREEK ROAD CLEANOUT EXISTING CROSSING

NO. 16 - STA 391+58 - PRETZER ROAD CLEANOUT EXISTING CROSSING

MAINTENANCE ACCESS

STATION	SIDE	SIZE/TYPE	LENGTH
391+33	LEFT	15" CULVERT	40 LIN FT
391+33	RIGHT	42" CULVERT	40 LIN FT
391+83	RIGHT	15" CULVERT	40 LIN FT

COORDINATE INSTALLATION OF ACCESS CULVERTS WITH ENGINEER PRIOR TO CONSTRUCTION.

EROSION CONTROL TABLE

KEY*	FROM STATION	TO STATION	SIDE	DESCRIPTION	QTY
(1) (D)	350+00	400+00	BOTH	SEEDING OF ALL DISTURBED	LUMP SUM
(2) (T)	350+00	400+00	BOTH	MULCH OF ALL DISTURBED AREAS	LUMP SUM
(16) (P)	AS STAKED BY ENGINEER	-	-	RIPRAP TOE OF SLOPE PROTECTION	400 LIN FT
(19) (P)	AS STAKED BY ENGINEER	-	-	RIPRAP SPILLWAY	120 LIN FT
(23) (P)	ALL EX FIELD TILE OUTLETS AND S.O.T.	-	BOTH	OUTFALL STABILIZATION	9 EA

NOTE: COORDINATE INSTALLATION OF EROSION CONTROL STRUCTURES WITH ENGINEER PRIOR TO CONSTRUCTION. LOCATIONS, QUANTITIES, OR TYPES MAY VARY BASED ON FIELD DECISIONS.

SPOIL LEVELING TABLE

STATION FROM	STATION TO	DETAIL	SIDE TO EXCAVATE FROM
350+00	354+93	B	LEFT
354+93	371+98	B	BOTH
371+98	375+00	B	LEFT
375+00	376+00	B	RIGHT
376+00	378+40	B	BOTH
378+40	385+00	B	LEFT
385+00	391+58	A	RIGHT
391+58	400+00	A	BOTH

NOTE: USE SPOIL LEVELING DETAIL "A" THROUGH FIELD AREA. USE SPOIL LEVELING DETAIL "B" THROUGH WOODED AREA. SPOILS TO BE HAULED IN LAWN AREAS.

CHANNEL EXCAVATION - 8 FT DRAIN BOTTOM (SLOPE BANKS AS SHOWN ON CROSS SECTION)

CHANNEL EXCAVATION - 10 FT DRAIN BOTTOM (SLOPE BANKS AS SHOWN ON CROSS SECTION)

BY	MARK	REVISIONS	DATE

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MARSH CREEK #2 DRAIN
SAGINAW COUNTY, MICHIGAN

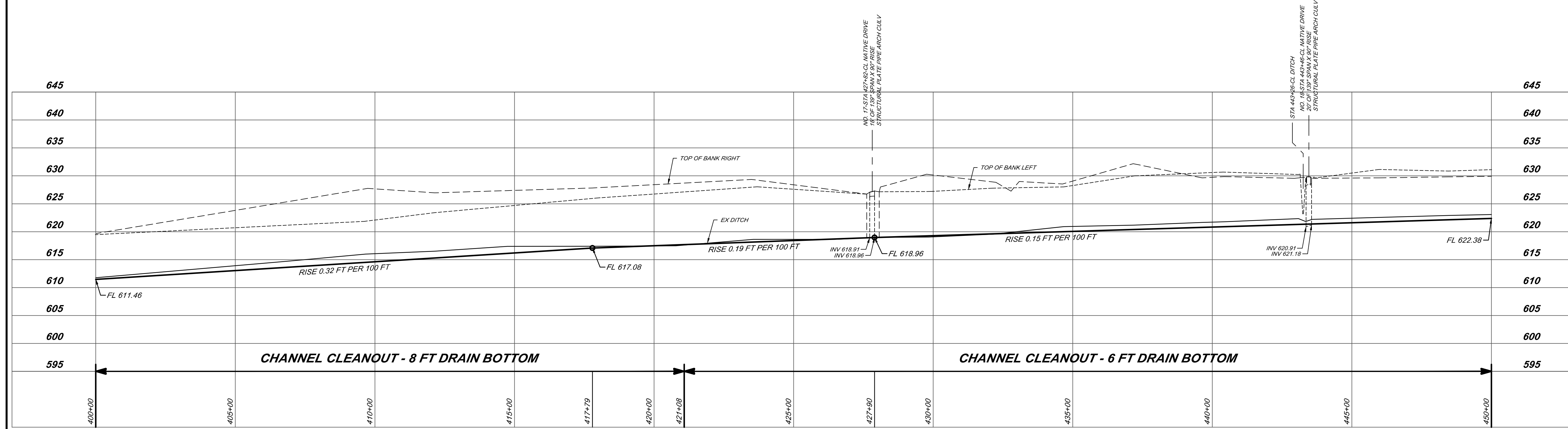
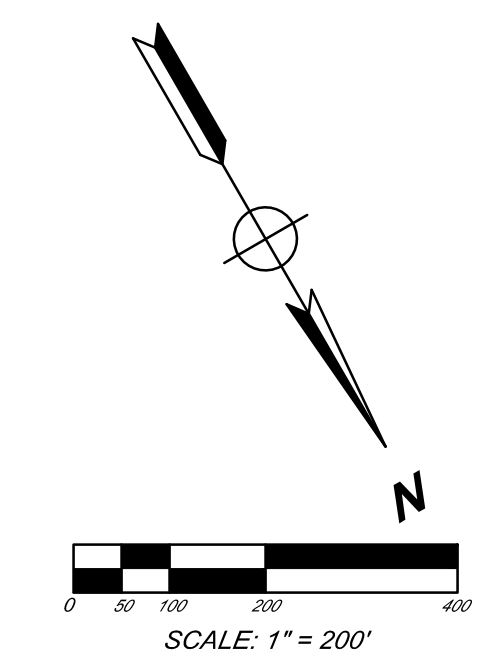
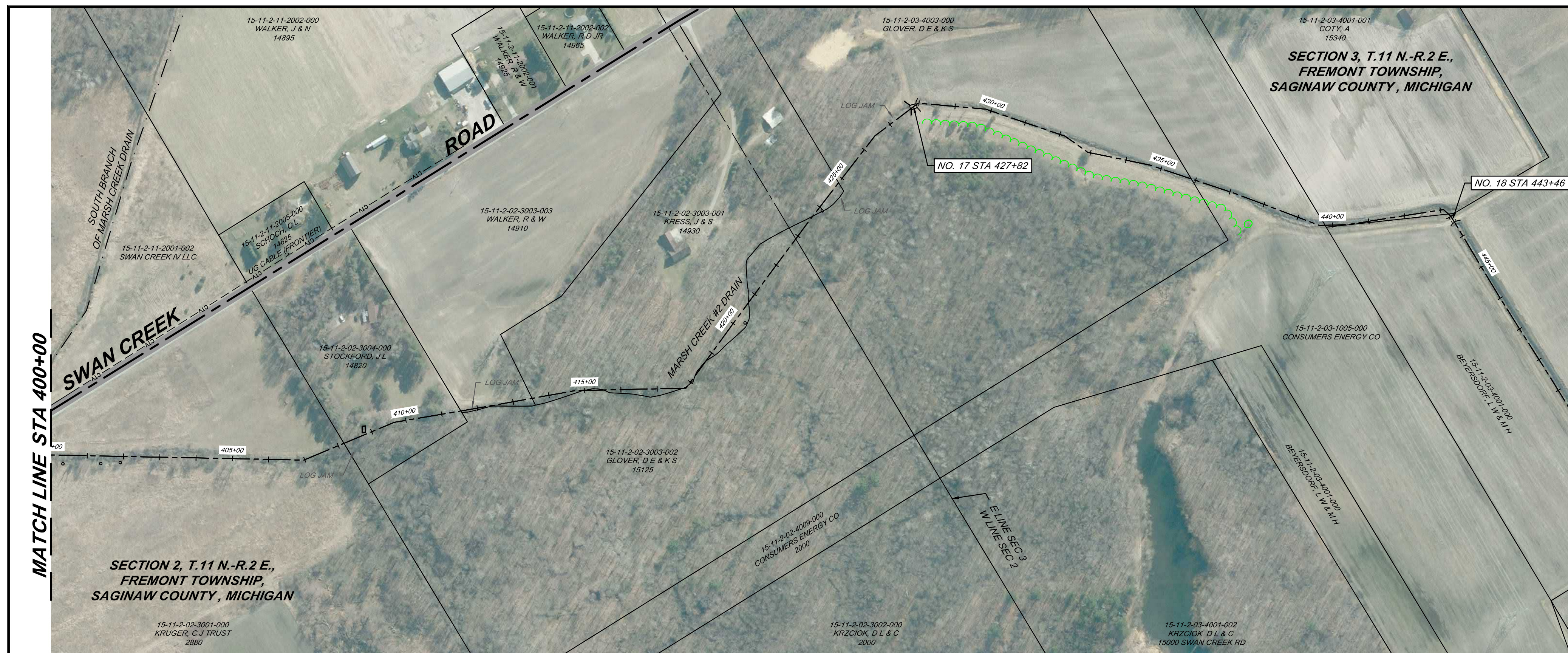
PLAN AND PROFILE
STA 350+00 TO STA 400+00

Spicer Group

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DE. BY: PCC/CDV CH. BY: CDV PROJECT NO. 135292SG2023
DR. BY: MJC APP. BY: NDC

STDS. SHEET 12 OF 23 DR 12
DATE: DECEMBER, 2024 FILE NO. DR-4707-12
SCALE: H: 1"=200' V: 1"=10'



NO. 17 - STA 427+82 - GLOVER, D & K
CLEANOUT EXISTING CROSSING

NO. 18 - STA 443+46 - BEYERSDORF, L & M
CLEANOUT EXISTING CROSSING

EROSION CONTROL TABLE					
KEY*	FROM STATION	TO STATION	SIDE	DESCRIPTION	QTY
(1) B	400+00	450+00	BOTH	SEEDING OF ALL DISTURBED	LUMP SUM
(2) T	400+00	450+00	BOTH	MULCH OF ALL DISTURBED AREAS	LUMP SUM
(16) P	AS STAKED BY ENGINEER	-	-	RIPRAP TOE OF SLOPE PROTECTION	100 LIN FT
(19) P	AS STAKED BY ENGINEER	-	-	RIPRAP SPILLWAY	20 LIN FT
(23) P	ALL EX FIELD TILE OUTLETS AND S.O.T.	-	BOTH	OUTFALL STABILIZATION	7 EA
(15) P	CROSSINGS 17-18	-	BOTH	INSTALL RIPRAP PROTECTION AT INLET & OUTLET OF CROSSING	30 SQ YDS TOTAL

NOTE: COORDINATE INSTALLATION OF EROSION CONTROL STRUCTURES WITH ENGINEER PRIOR TO CONSTRUCTION. LOCATIONS, QUANTITIES, OR TYPES MAY VARY BASED ON FIELD DECISIONS.

SPOIL LEVELING TABLE			
STATION FROM	STATION TO	DETAIL	SIDE TO EXCAVATE FROM
400+00	407+00	A	BOTH
407+00	411+00	B	BOTH
411+00	413+00	A	LEFT
413+00	427+82	B	RIGHT
427+82	450+00	A	RIGHT

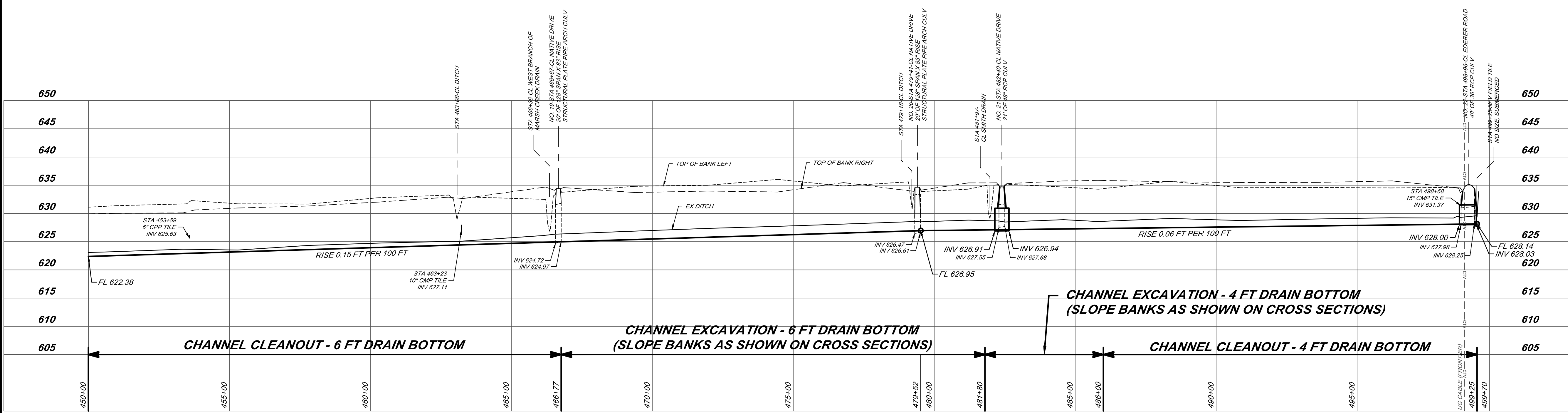
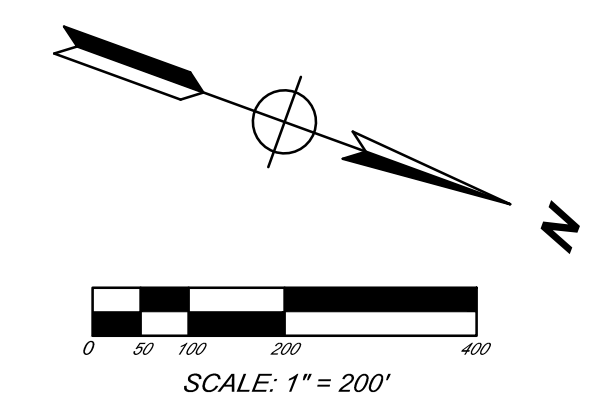
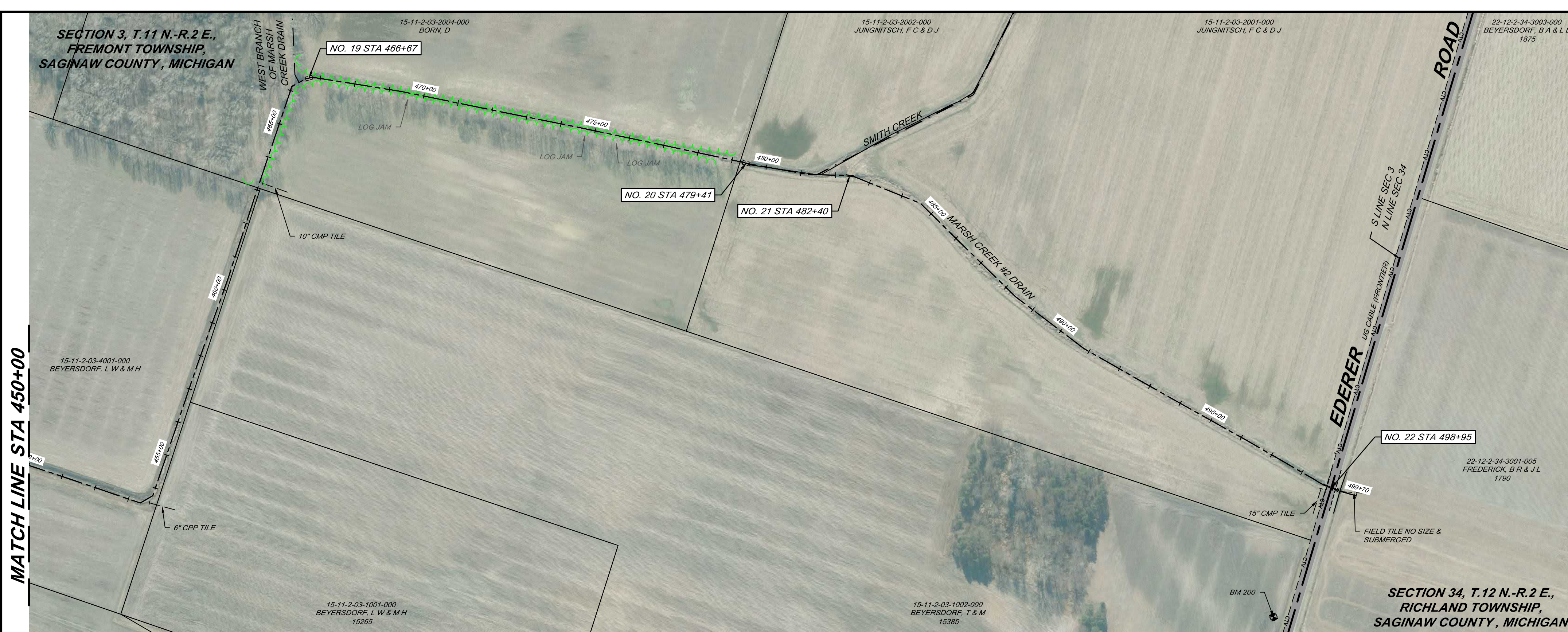
NOTE: USE SPOIL LEVELING DETAIL "A" THROUGH FIELD AREA. USE SPOIL LEVELING DETAIL "B" THROUGH WOODED AREA. SPOILS TO BE HAULED IN LAWN AREAS.

MAINTENANCE ACCESS			
STATION	SIDE	SIZE/TYPE	LENGTH
412+20	LEFT	24" CULVERT	40 LIN FT

COORDINATE INSTALLATION OF ACCESS CULVERTS WITH ENGINEER PRIOR TO CONSTRUCTION.

BY	MARK	REVISIONS	DATE
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<p>MARSH CREEK #2 DRAIN SAGINAW COUNTY, MICHIGAN</p>			
<p>PLAN AND PROFILE STA 400+00 TO STA 450+00</p>			
		<p>SAGINAW OFFICE 230 S. Washington Ave. Saginaw, MI 48607 Tel: 989-754-4717 Fax: 989-754-4440 www.SpicerGroup.com</p>	
DE. BY:	PCC/CDV	CH. BY:	CDV
DR. BY:	MJC	APP. BY:	NDC
		PROJECT NO. 135292SG2023	
STDS.	SHEET 13 OF 23		<p>DR 13</p>
DATE	DECEMBER, 2024		
SCALE	H: 1"=200' V: 1"=10'	FILE NO.	DR-4707-13

RIGHT OF WAY
MARSH CREEK #2 DRAIN - DRAIN RIGHT-OF-WAY IS 66' WIDE ON EACH SIDE OF CENTERLINE OF DRAIN.



NO. 19 - STA 466+67 - BORN, D
CLEANOUT EXISTING CROSSING

NO. 20 - STA 479+41 - JUNGNITSCH, F & D
CLEANOUT EXISTING CROSSING

NO. 21 - STA 482+40 - JUNGNITSCH, F & D
REMOVE EXISTING CROSSING, INSTALL 50 LIN FT OF
48\"/>

NO. 22 - STA 498+96 - EDERER ROAD
REMOVE EXISTING CROSSING, INSTALL 60 LIN FT OF
42\"/>

EROSION CONTROL TABLE					
KEY*	FROM STATION	TO STATION	SIDE	DESCRIPTION	QTY
(1) D	450+00	499+70	BOTH	SEEDING OF ALL DISTURBED	LUMP SUM
(2) T	450+00	499+70	BOTH	MULCH OF ALL DISTURBED AREAS	LUMP SUM
(16) P	AS STAKED BY ENGINEER		-	RIPRAP TOE OF SLOPE PROTECTION	200 LIN FT
(23) P	ALL EX FIELD TILE OUTLETS AND S.O.T.		BOTH	OUTFALL STABILIZATION	6 EA
(15) P	CROSSINGS 21 & 22		BOTH	INSTALL RIPRAP PROTECTION AT INLET & OUTLET OF CROSSING	60 SQ YDS TOTAL

NOTE: COORDINATE INSTALLATION OF EROSION CONTROL STRUCTURES WITH ENGINEER PRIOR TO CONSTRUCTION. LOCATIONS, QUANTITIES, OR TYPES MAY VARY BASED ON FIELD DECISIONS.

SPOIL LEVELING TABLE			
STATION FROM	STATION TO	DETAIL	SIDE TO EXCAVATE FROM
450+00	498+72	A	RIGHT

NOTE: USE SPOIL LEVELING DETAIL "A" THROUGH FIELD AREA. USE SPOIL LEVELING DETAIL "B" THROUGH WOODED AREA. SPOILS TO BE HAULED IN LAWN AREAS.

- CONSTRUCTION NOTES**
- VERIFY DEPTHS AND LOCATIONS OF ALL UTILITIES ALONG ROAD PRIOR TO REMOVING EXISTING CROSSING IF CROSSING IS REPLACED. ALL COST ARE TO BE INCLUDED IN ALTERNATE BID ITEM FOR CULVERT REPLACEMENT.
 - STA 498+68 - DIRECT 15" CMP TILE TO DOWNSTREAM END OF PROPOSED CROSSING USING 45" BEND AS NEEDED. TO BE PAID AS FIELD TILE OUTLET.

BENCHMARKS

BM 200 - SET GEAR SPIKE IN N FACE OF POWER POLE BEING ±30' SOUTH OF CL OF EDERER ROAD AND SOUTHWEST QUADRANT OF EDERER ROAD AND WATSON DRIVE BEING ±125' E OF CL OF MARSH CREEK.

EL 635.65

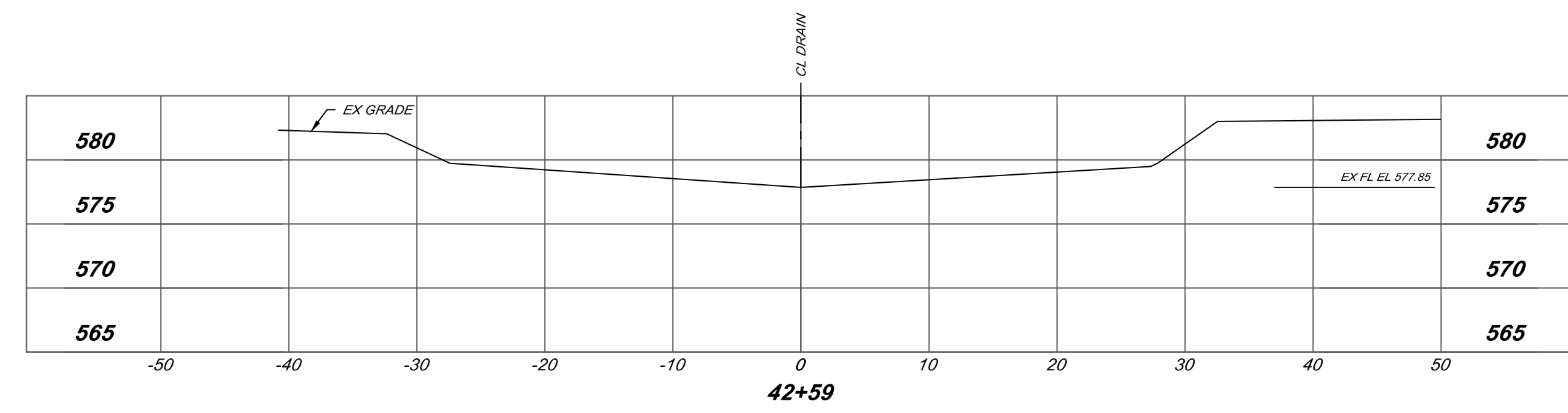
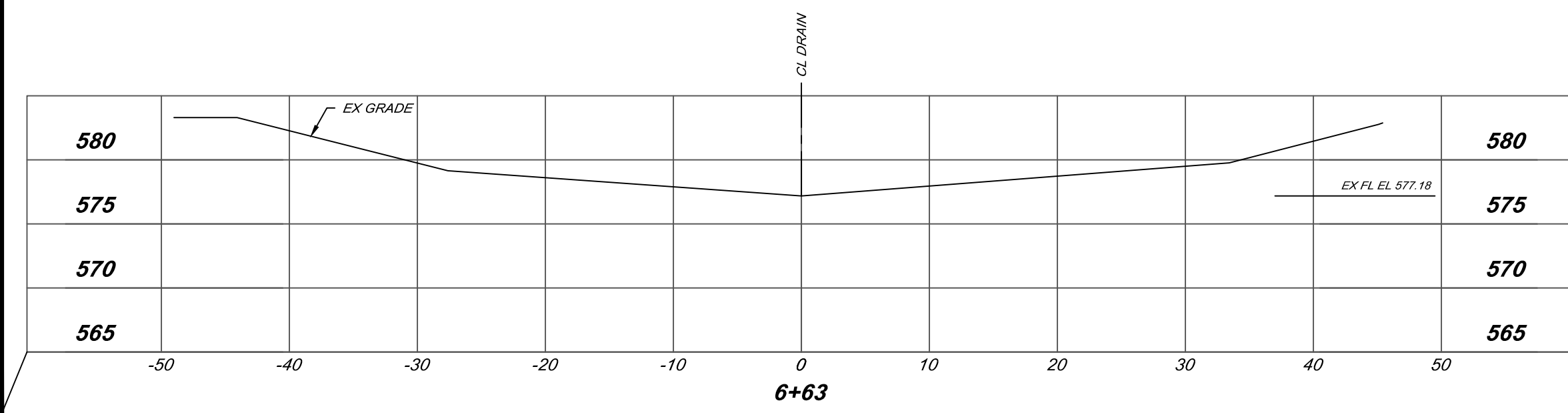
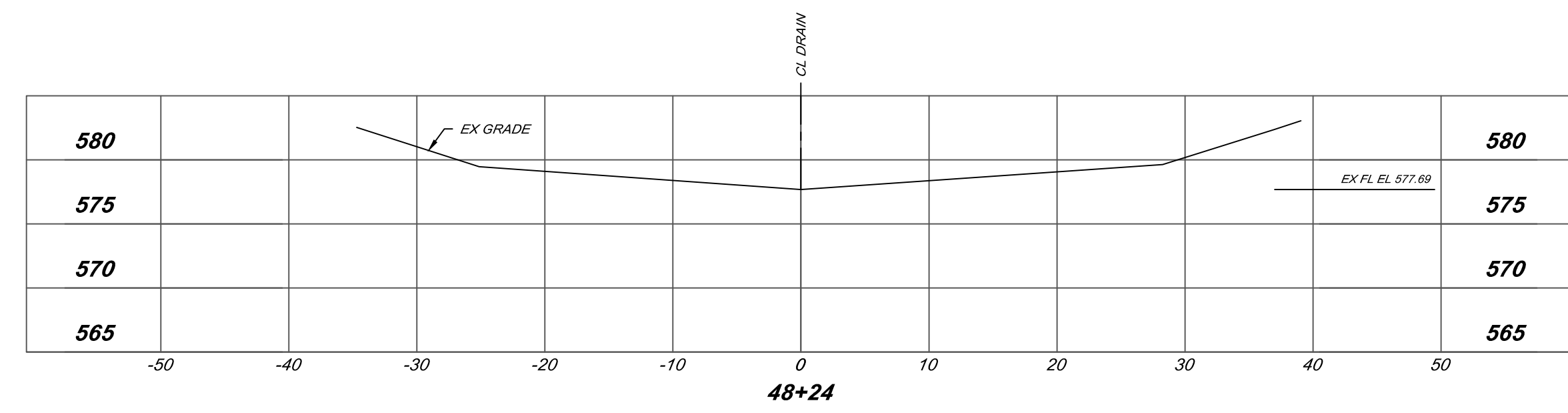
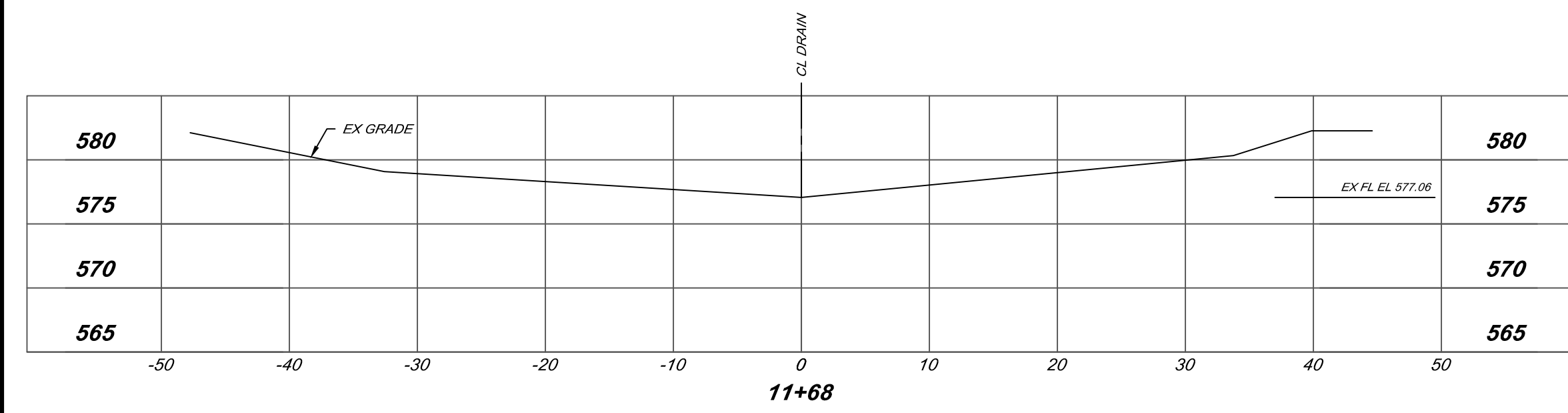
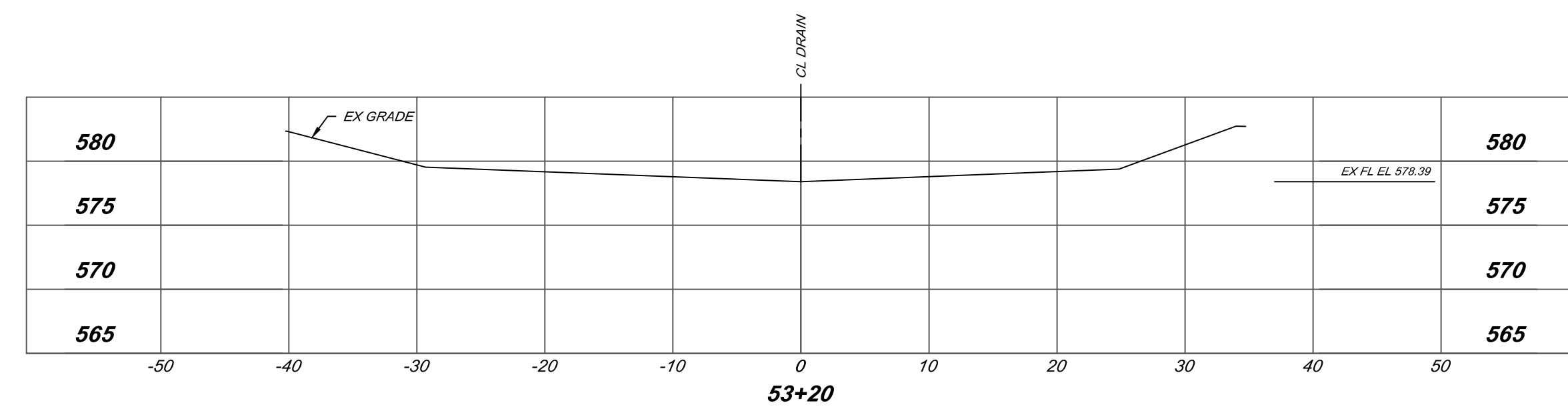
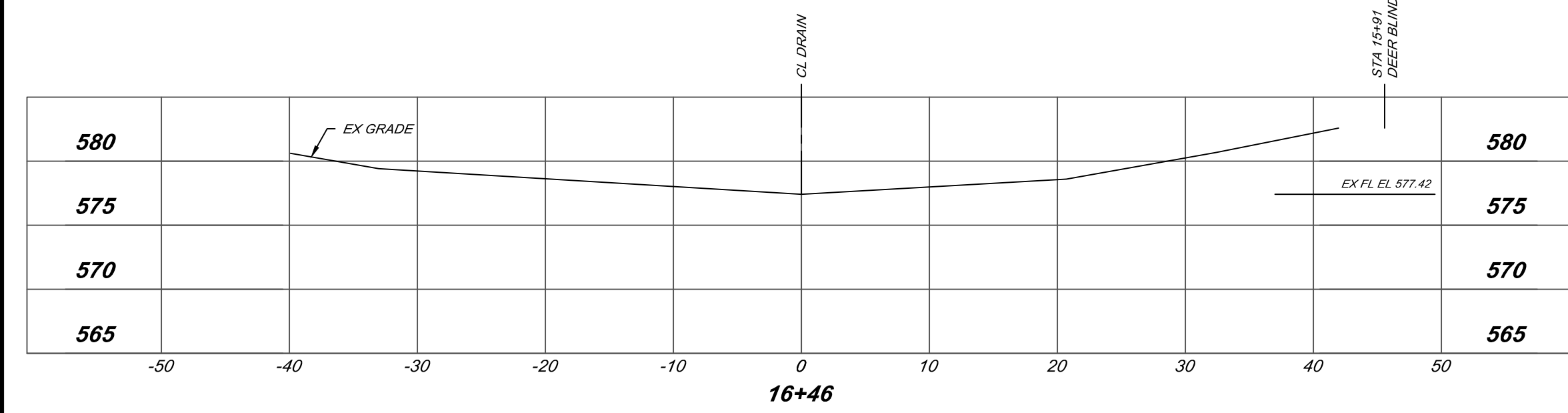
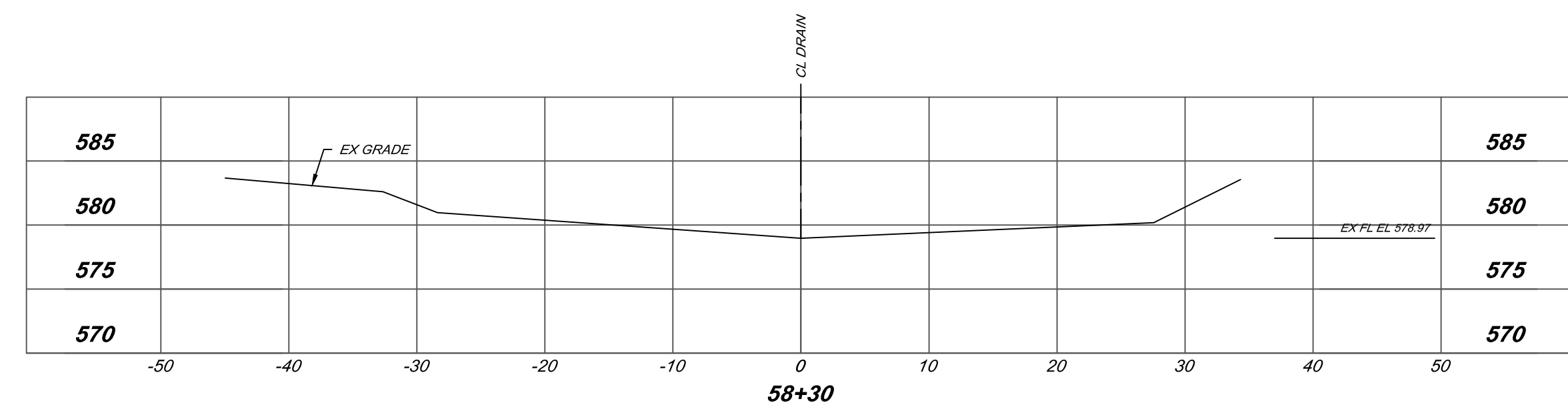
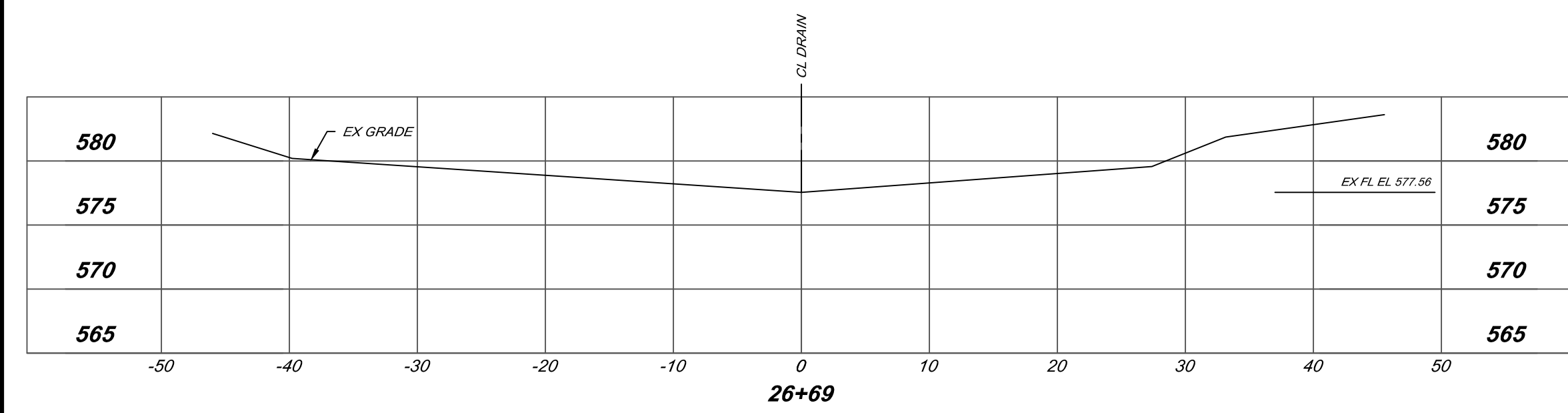
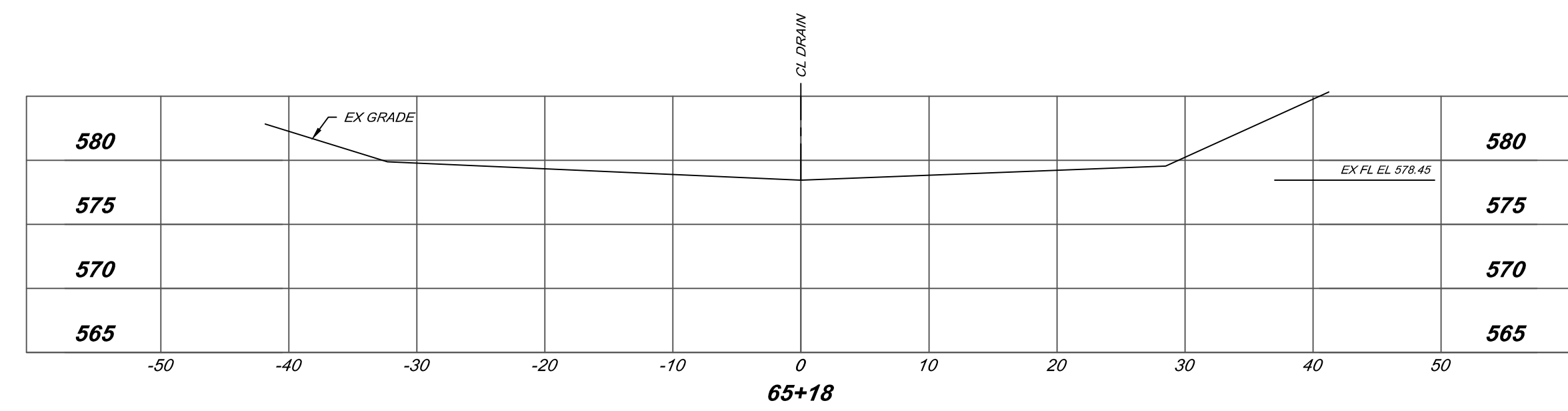
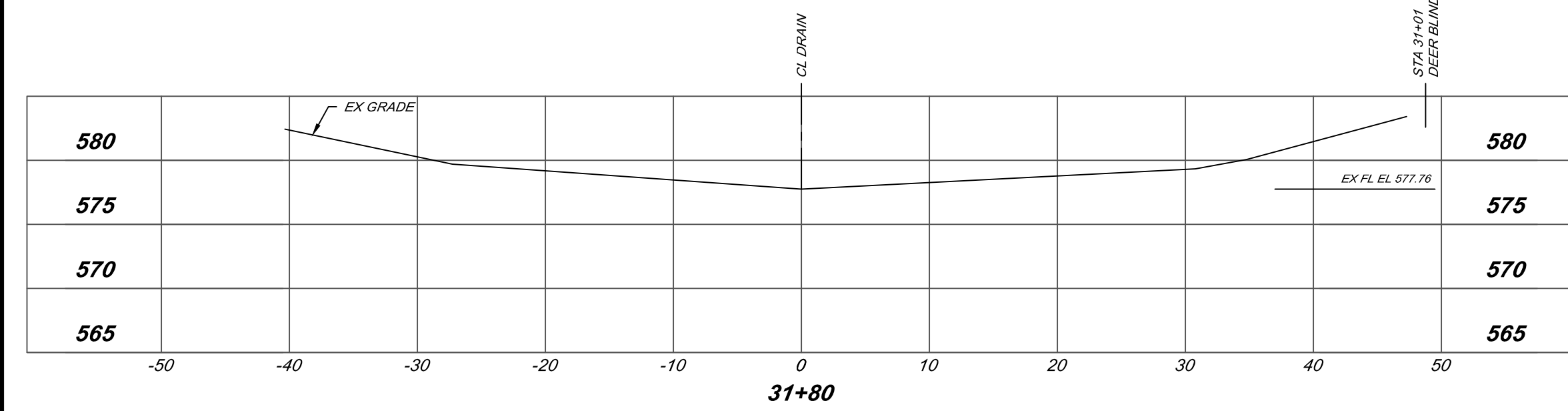
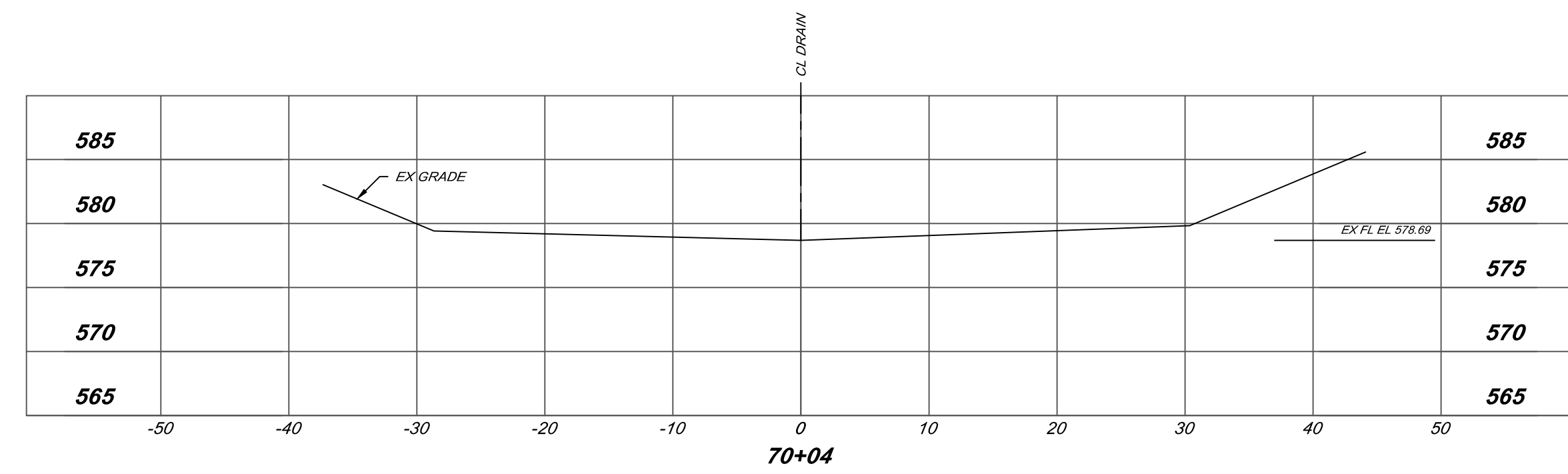
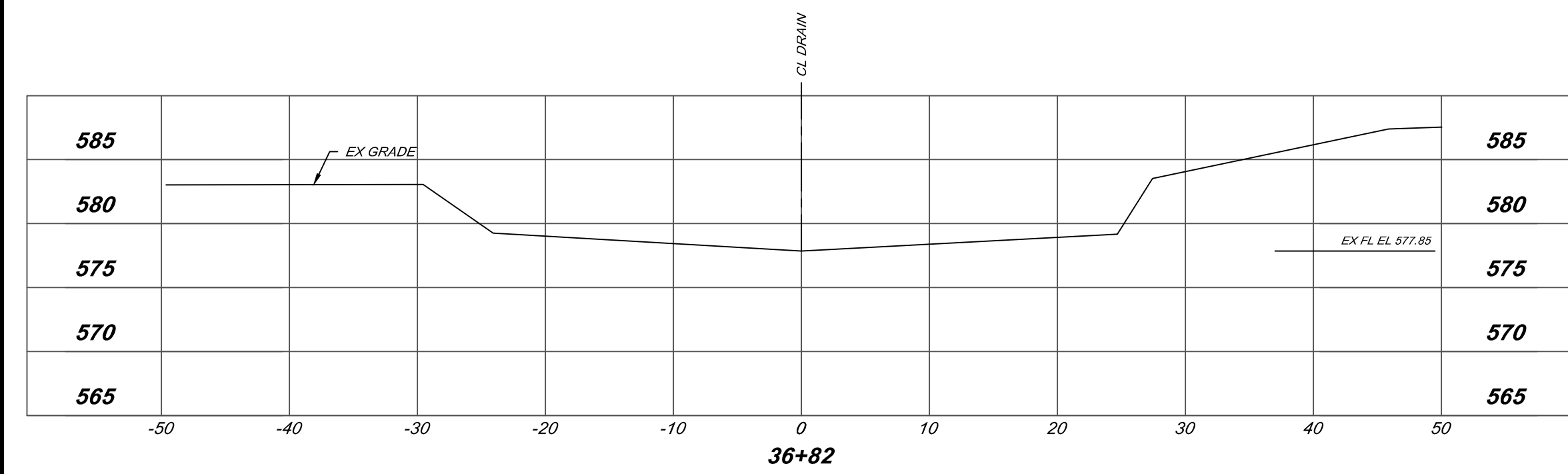
RIGHT OF WAY


MARSH CREEK #2 DRAIN - DRAIN RIGHT-OF-WAY IS 66' WIDE ON EACH SIDE OF CENTERLINE OF DRAIN.

BY	MARK	REVISIONS	DATE
<p>THE WORK REPRESENTED BY THIS DRAWING WAS DESIGNED BY THE ENGINEER FOR THIS SPECIFIC APPLICATION AND SPECIFIC LOCATION DESCRIBED HEREON IN ACCORDANCE WITH THE CONDITIONS PREVALENT AT THE TIME THE DESIGN WAS DONE. THE ENGINEER DOES NOT GUARANTEE AND WILL NOT BE LIABLE FOR ANY OTHER LOCATION, CONDITION, DESIGN OR PURPOSE.</p>			
<p>MARSH CREEK #2 DRAIN SAGINAW COUNTY, MICHIGAN</p>			
<p>PLAN AND PROFILE STA 450+00 TO STA 499+70</p>			
<p>DE. BY: POC/CDV DR. BY: MJC</p>		<p>CH. BY: CDV APP. BY: NDC</p>	
<p>PROJECT NO. 135292SG2023</p>		<p>DATE: DECEMBER, 2024 SCALE: H: 1"=200' V: 1"=10'</p>	
<p>STDS.</p>		<p>SHEET 14 OF 23</p>	
<p>FILE NO. DR-4707-14</p>		<p>DR 14</p>	

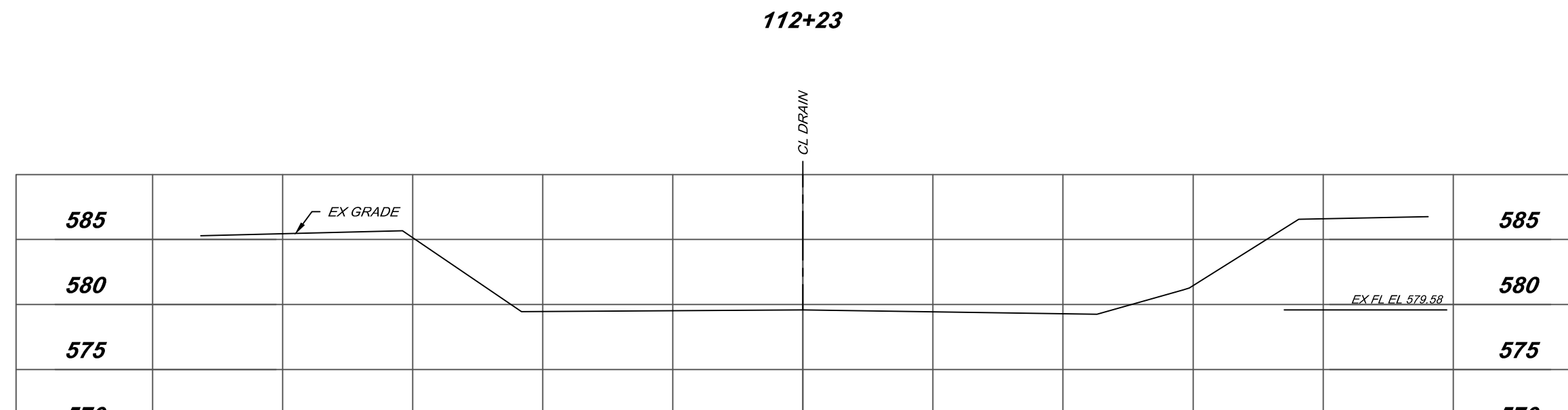
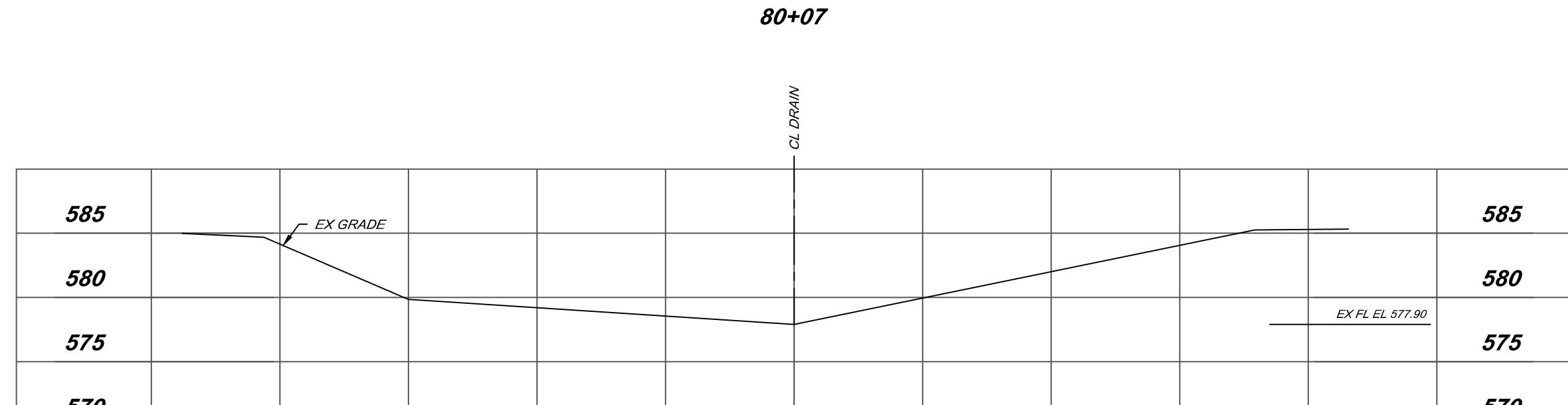
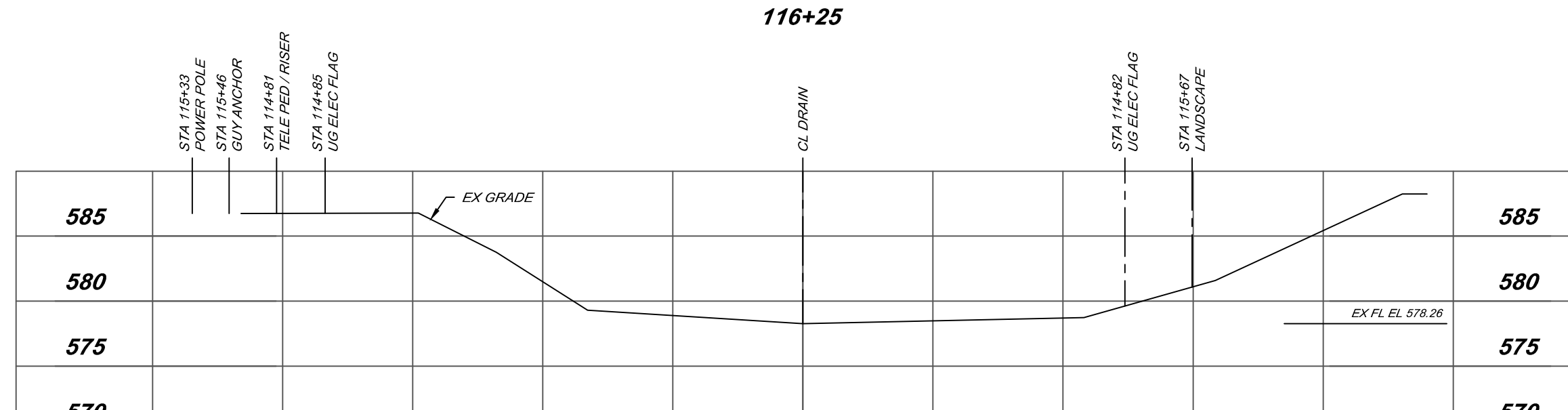
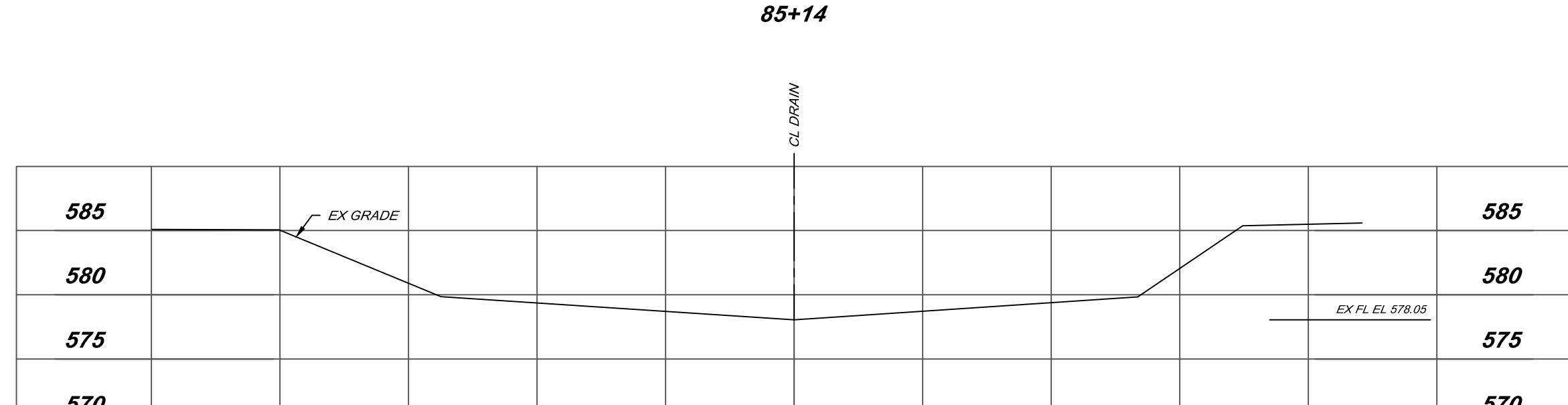
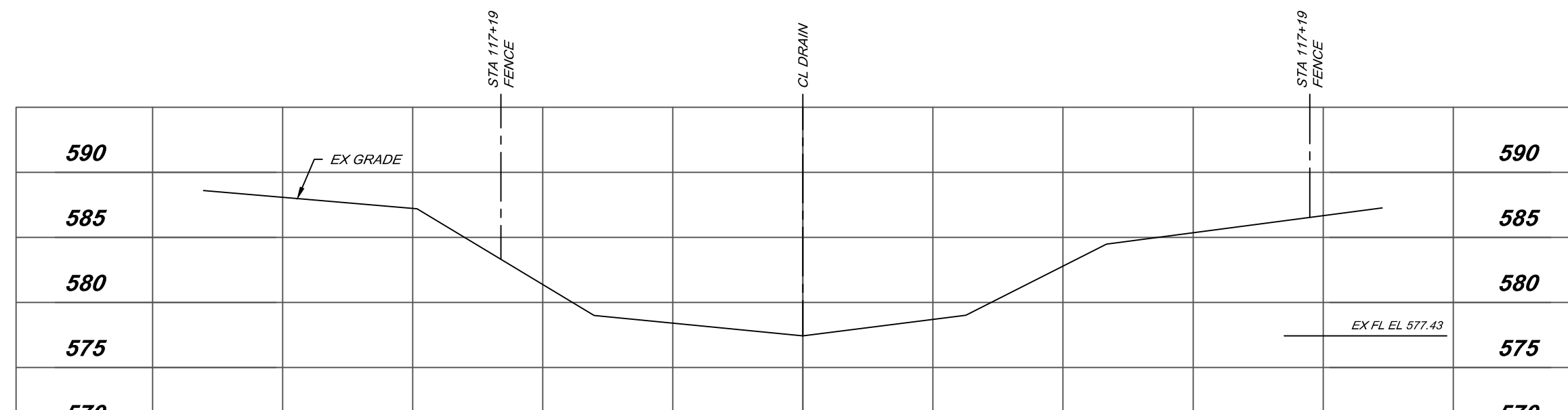
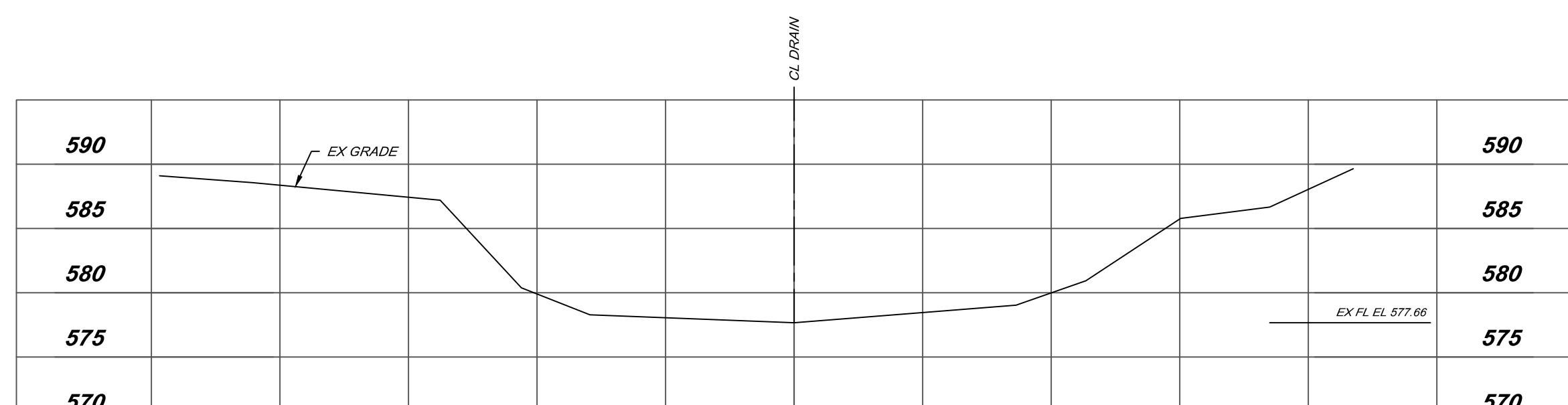
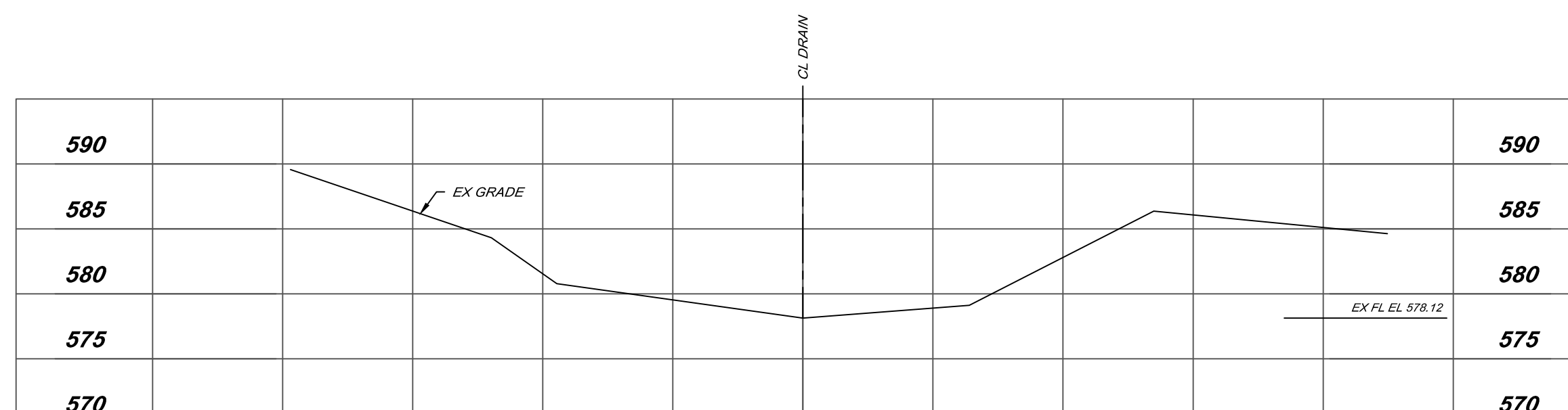
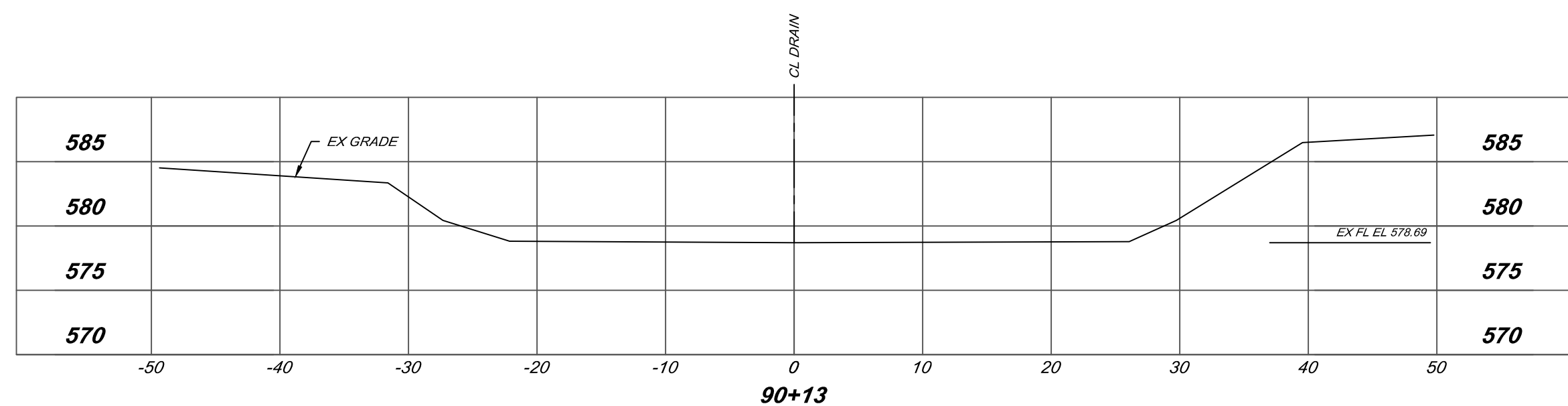
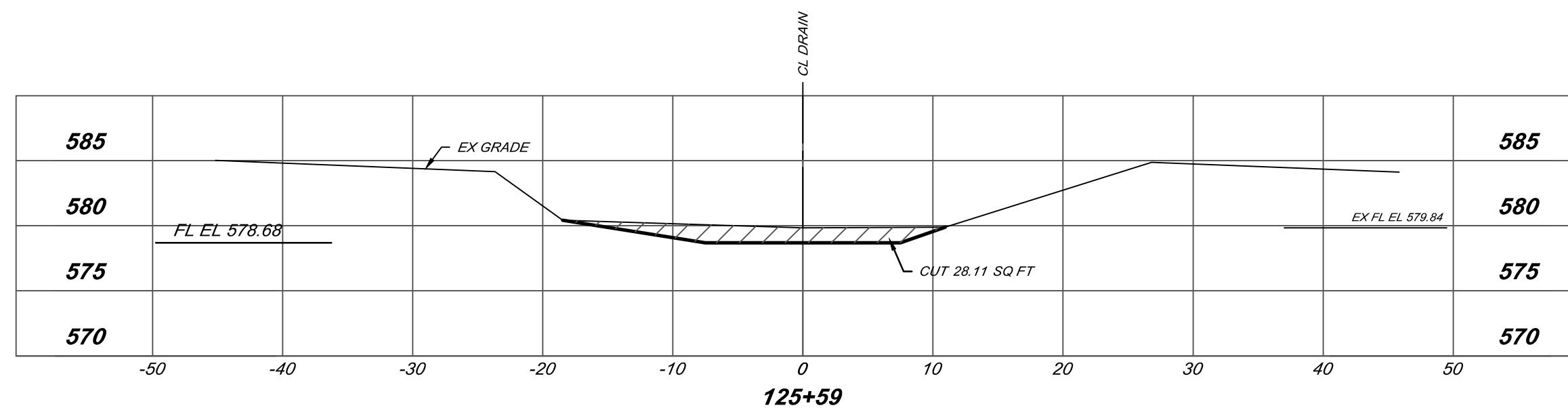
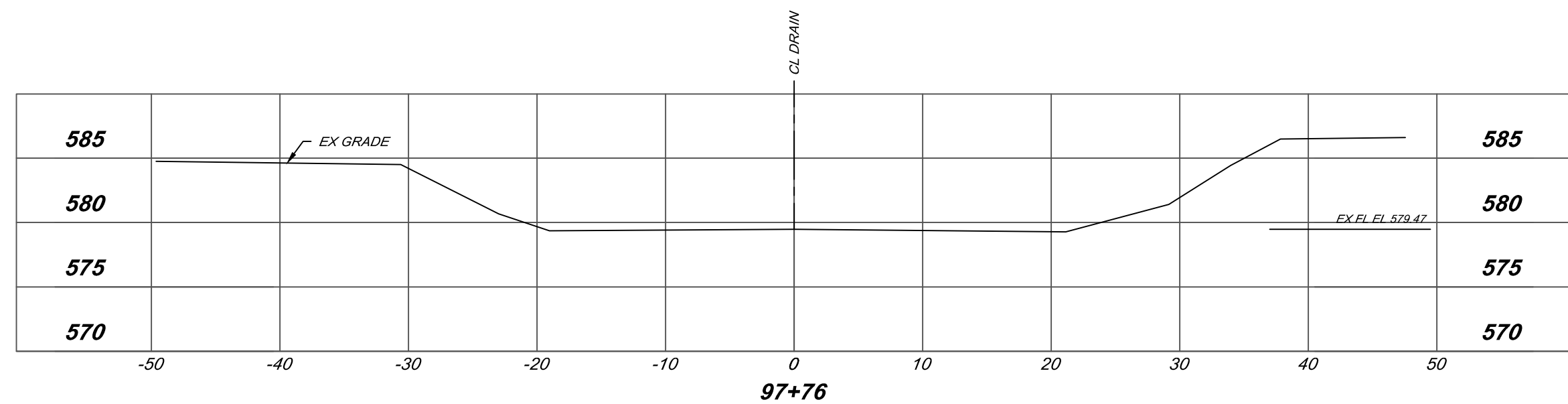
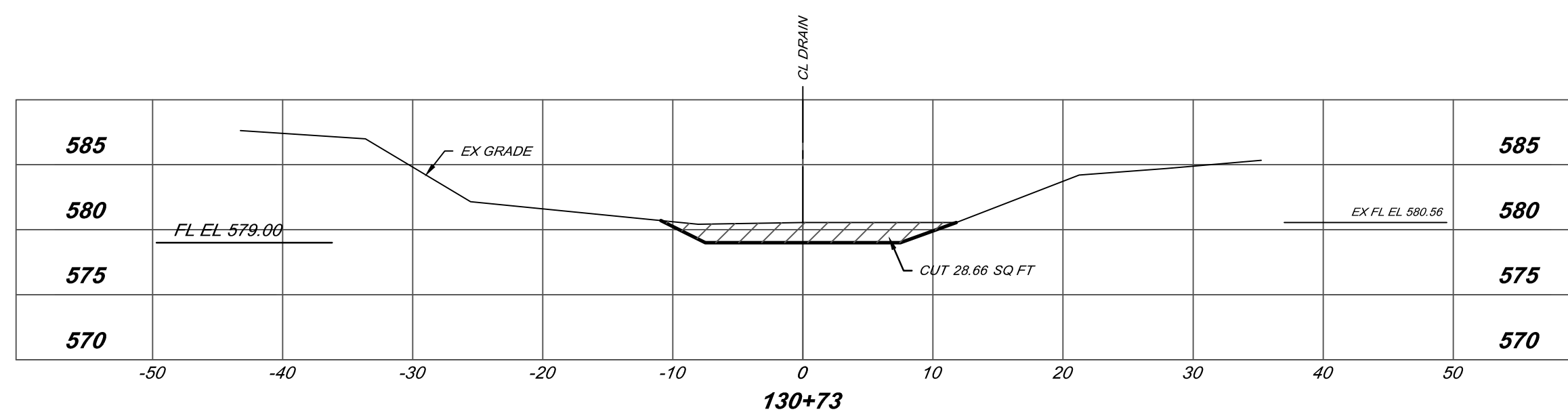
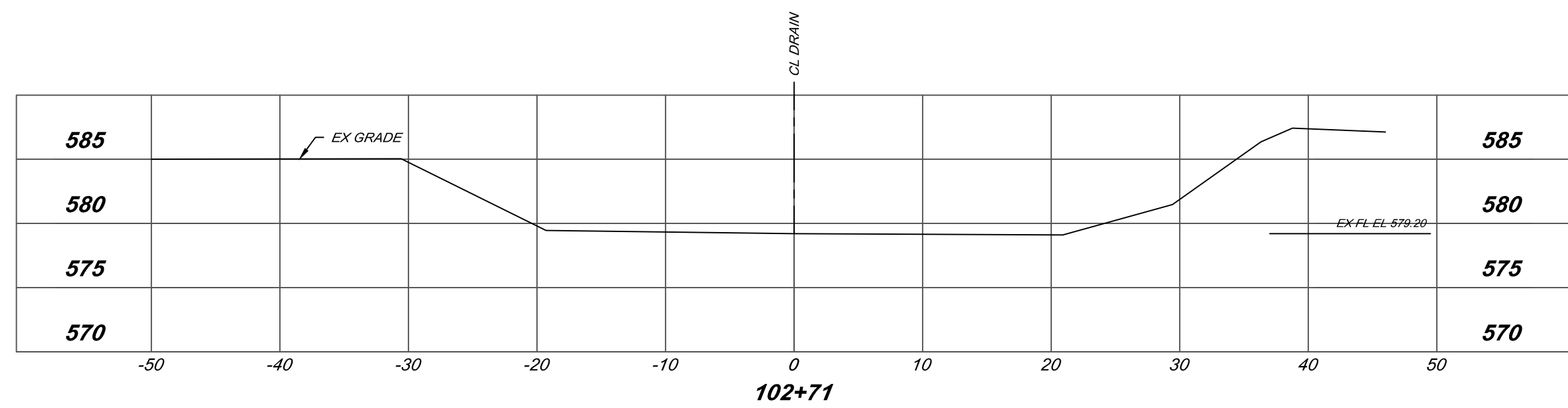


P:\proj\2023\135292SG2023 - Marsh Creek #2 Drain - AutoCAD_GIS.dwg (DR-4707-14.dwg) 12/20/2024 11:05:31 AM, chad.arnold@spicergroup.com
 CHAD SPICER/BAUGH



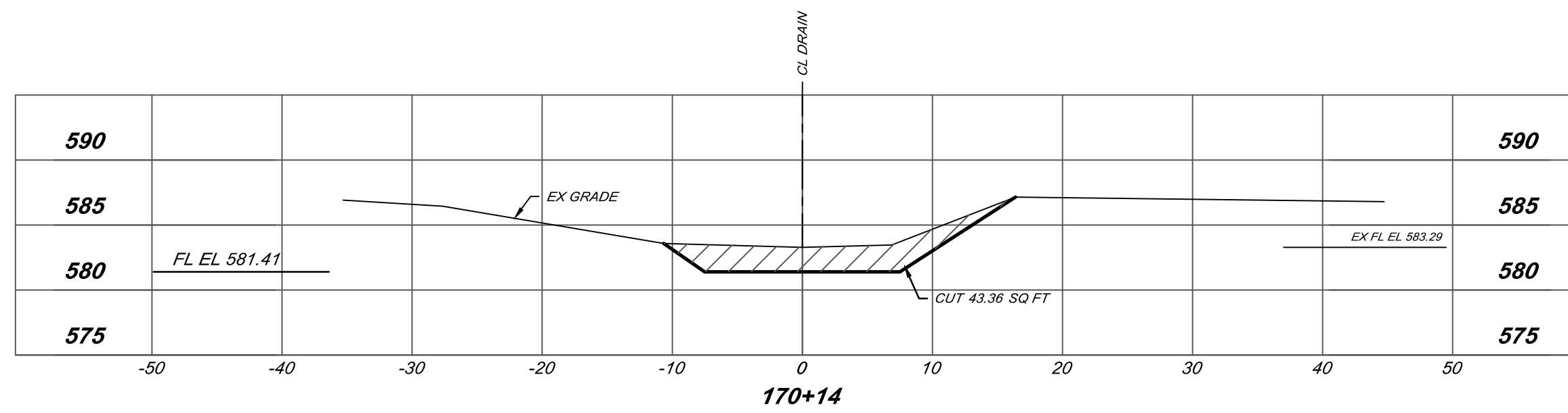
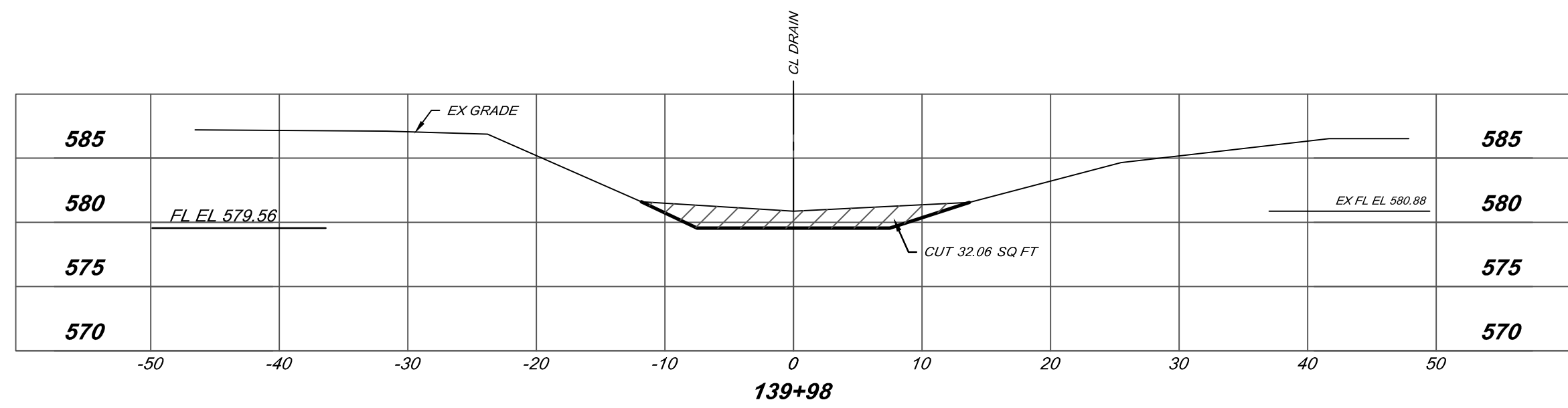
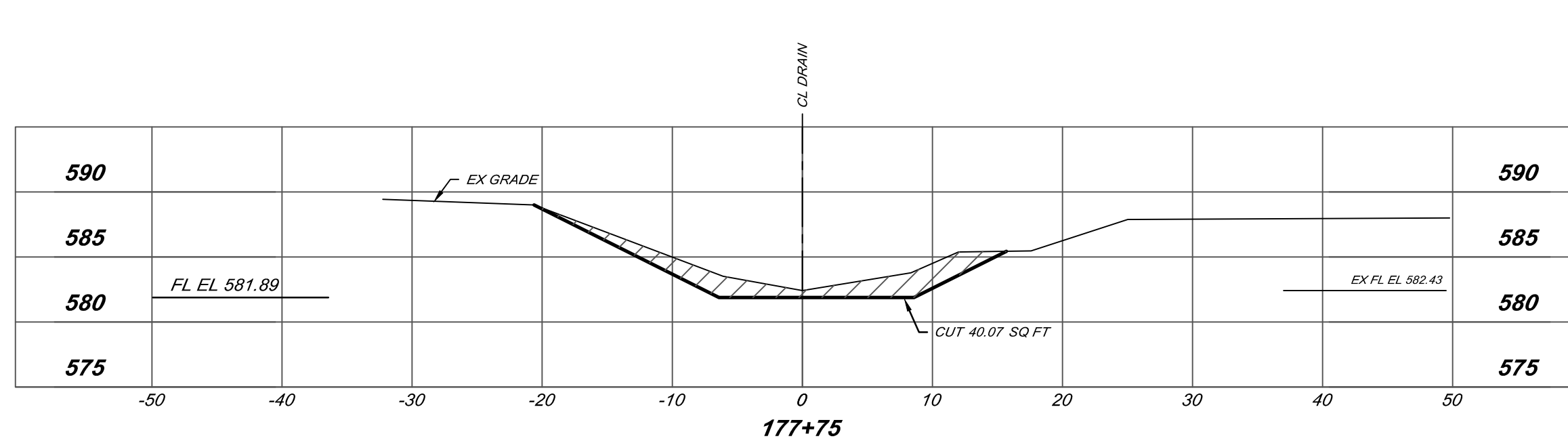
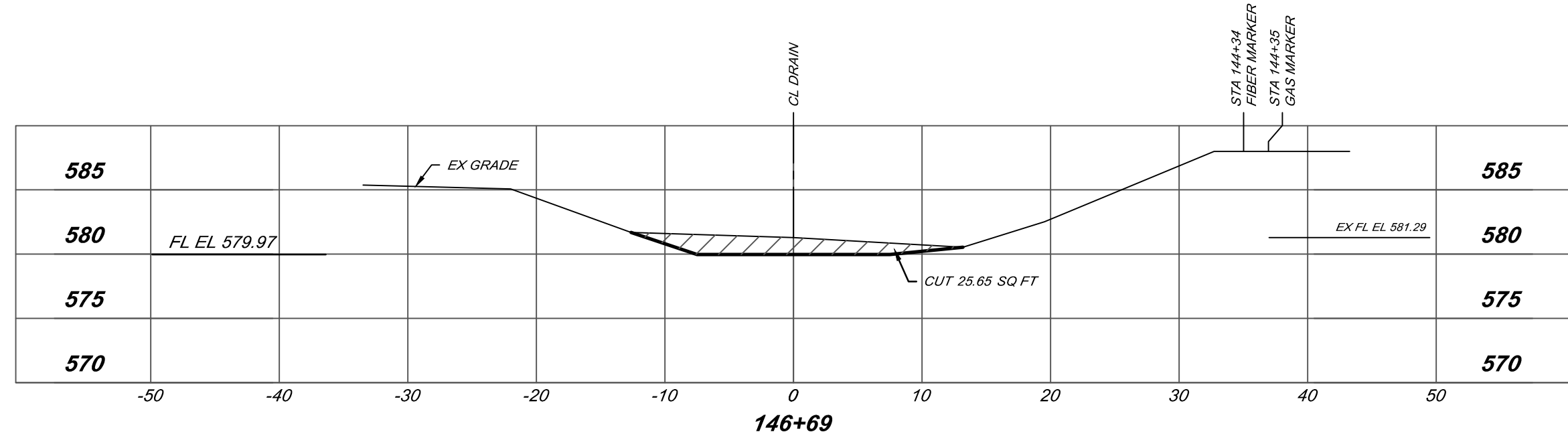
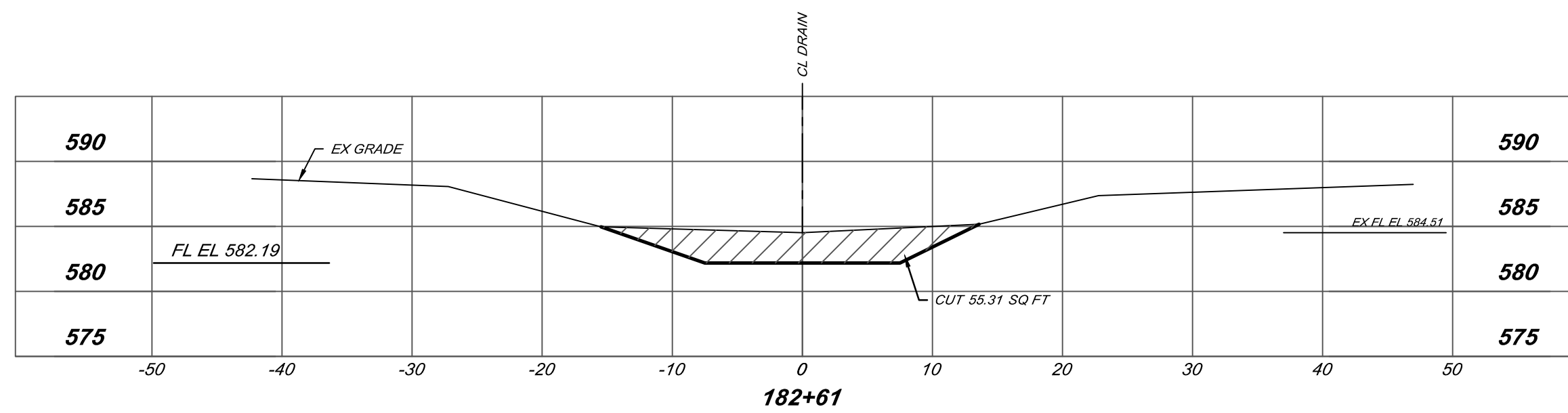
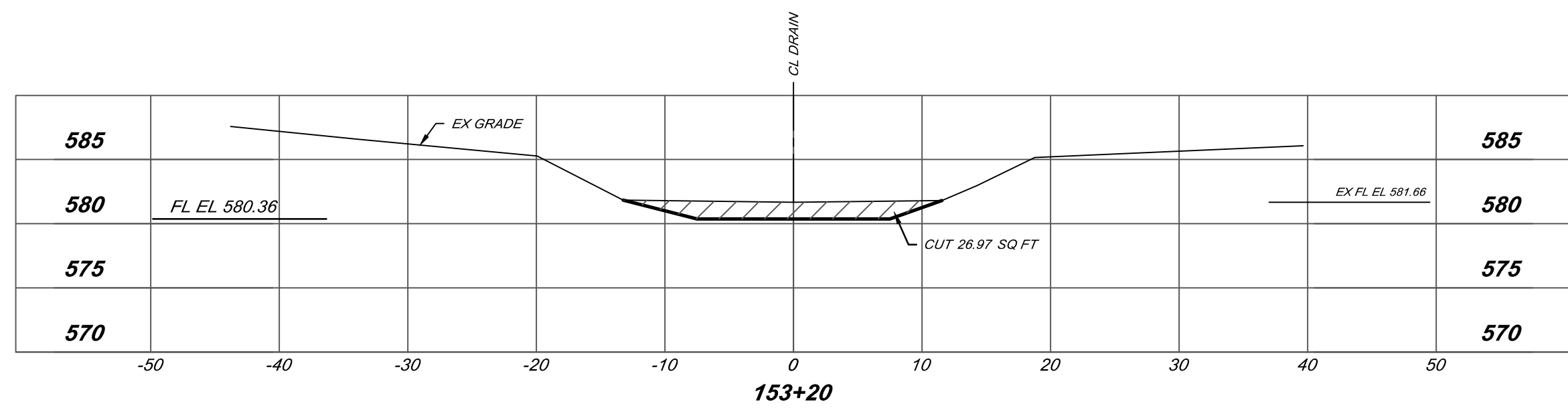
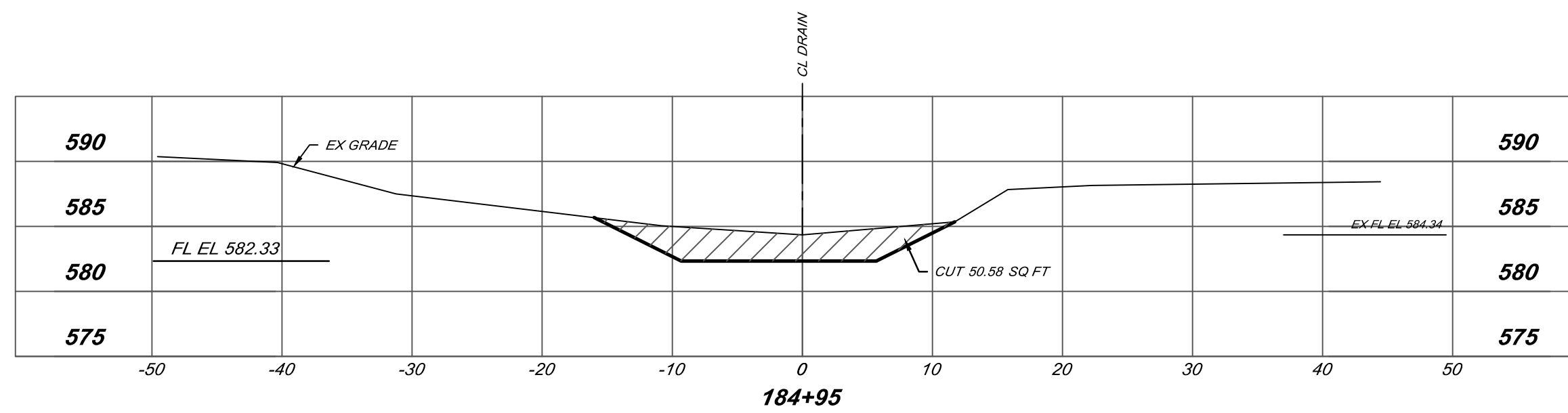
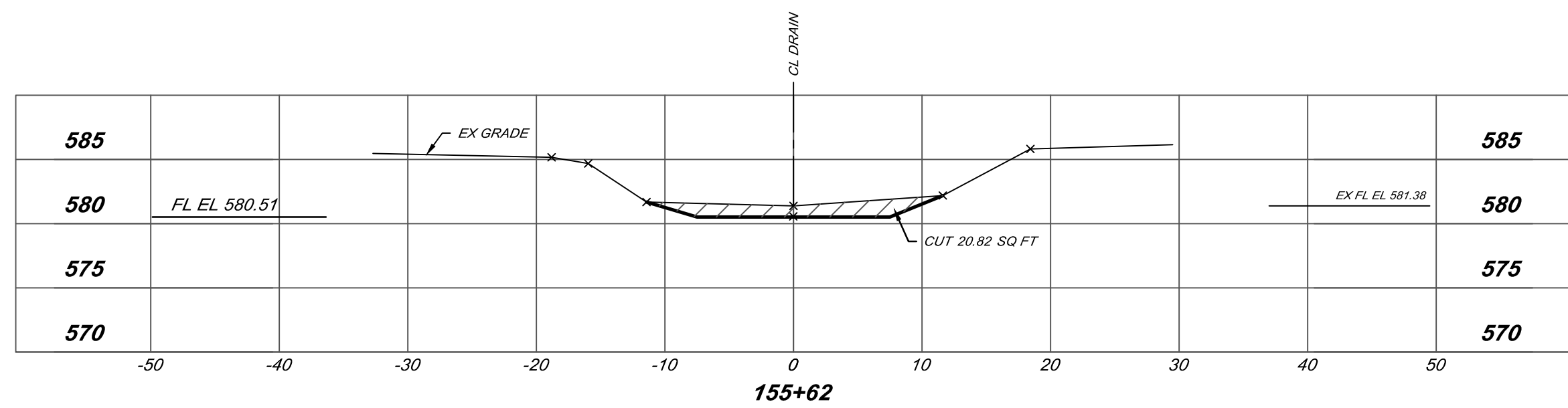
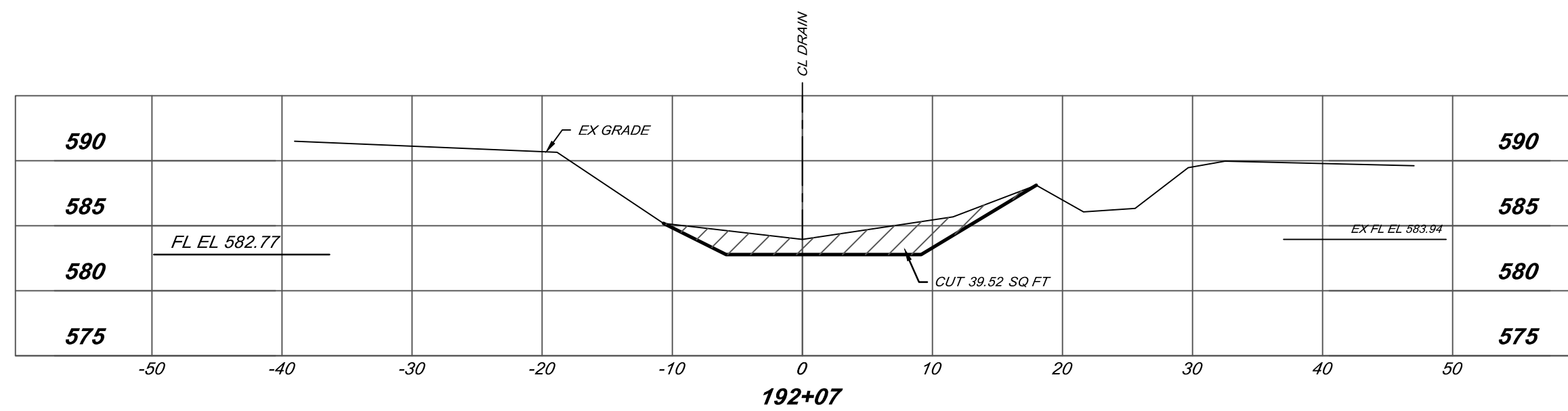
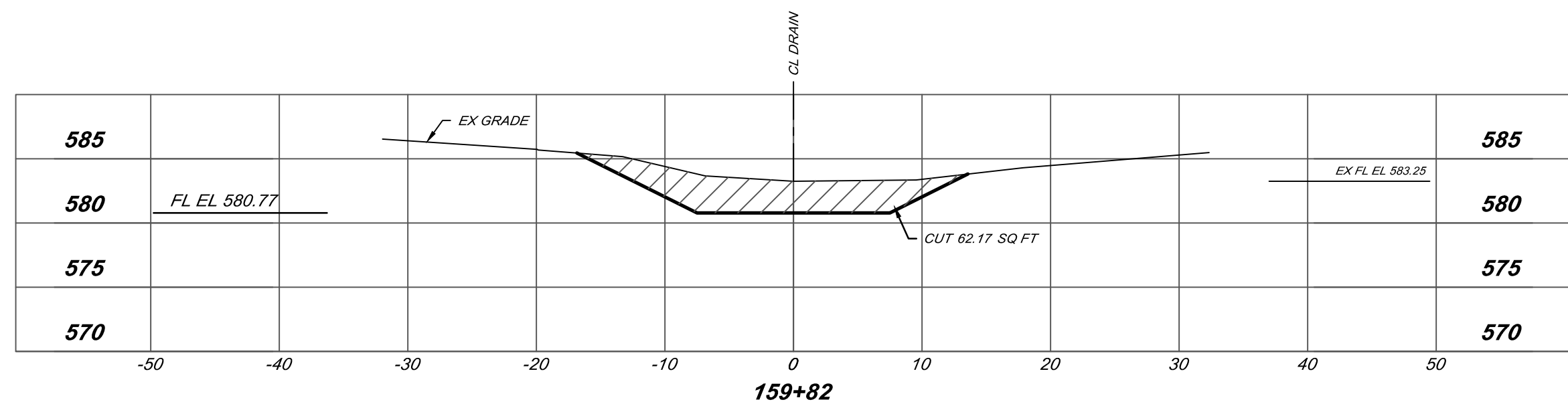
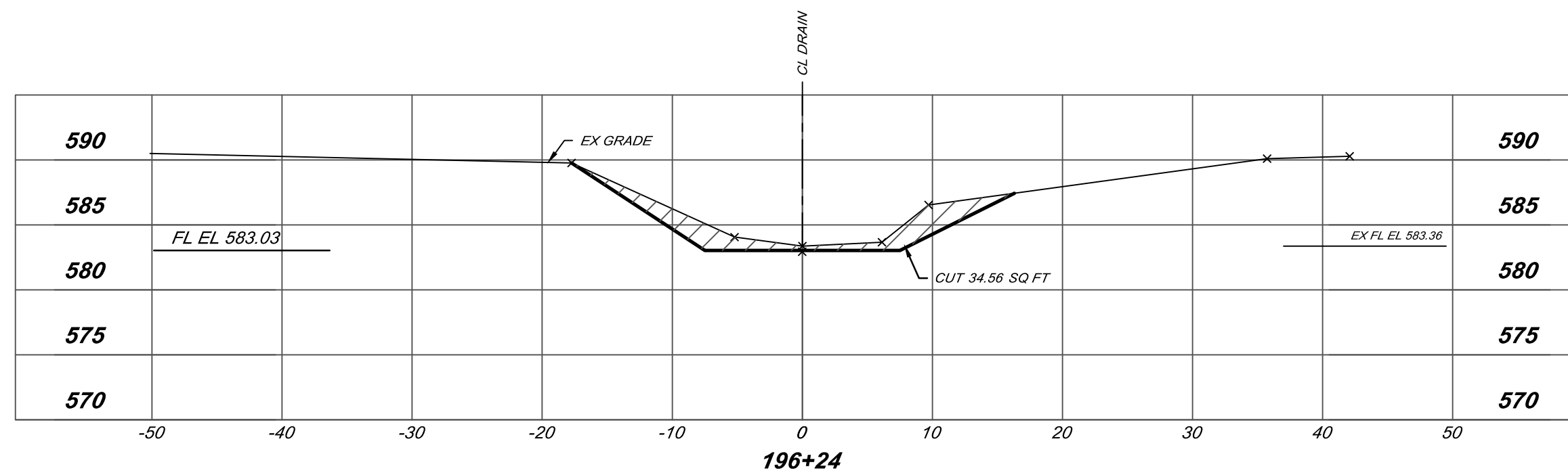
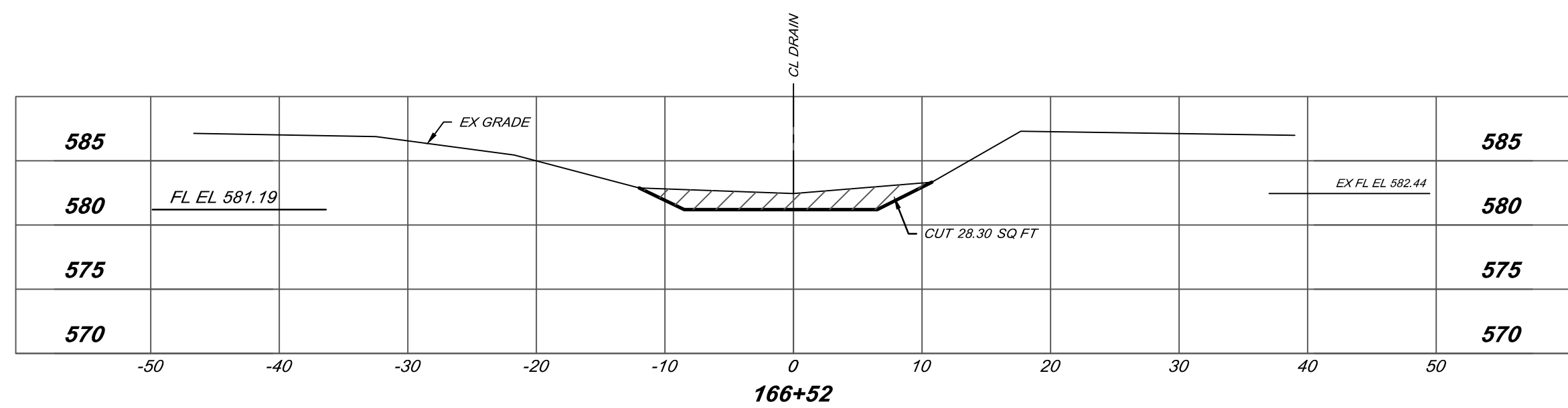
BY	MARK	REVISIONS	DATE
<small>THE WORK REPRESENTED BY THIS DRAWING WAS DESIGNED BY THE ENGINEER FOR THIS SPECIFIC APPLICATION AND SPECIFIC LOCATION DESCRIBED HEREON IN ACCORDANCE WITH THE CONDITIONS PREVALENT AT THE TIME THE DESIGN WAS DONE. THE ENGINEER DOES NOT GUARANTEE AND WILL NOT BE LIABLE FOR ANY OTHER LOCATION, CONDITION, DESIGN OR PURPOSE.</small>			
MARSH CREEK #2 DRAIN SAGINAW COUNTY, MICHIGAN			
CROSS SECTIONS STA 6+63 TO STA 70+04			
		<small>SAGINAW OFFICE 230 S. Washington Ave. Saginaw, MI 48607 Tel: 989-754-4717 Fax: 989-754-4440 www.SpicerGroup.com</small>	
DE. BY:	PCC/CDV	CH. BY:	CDV
DR. BY:	MJC	APP. BY:	NDC
		PROJECT NO. 135292SG2023	
STDS.	SHEET 15 OF 23		DR 15
DATE	DECEMBER, 2024		
SCALE	1"=10'		

P:\proj\2023\135292SG2023 - Marsh Creek #2 Drain - AutoCAD_GIS.dwg (DR-4707-15-21_XS.dwg) 12/26/2024 11:24:11 AM chad.arnabough
 CHAD SPICER/BAUGH



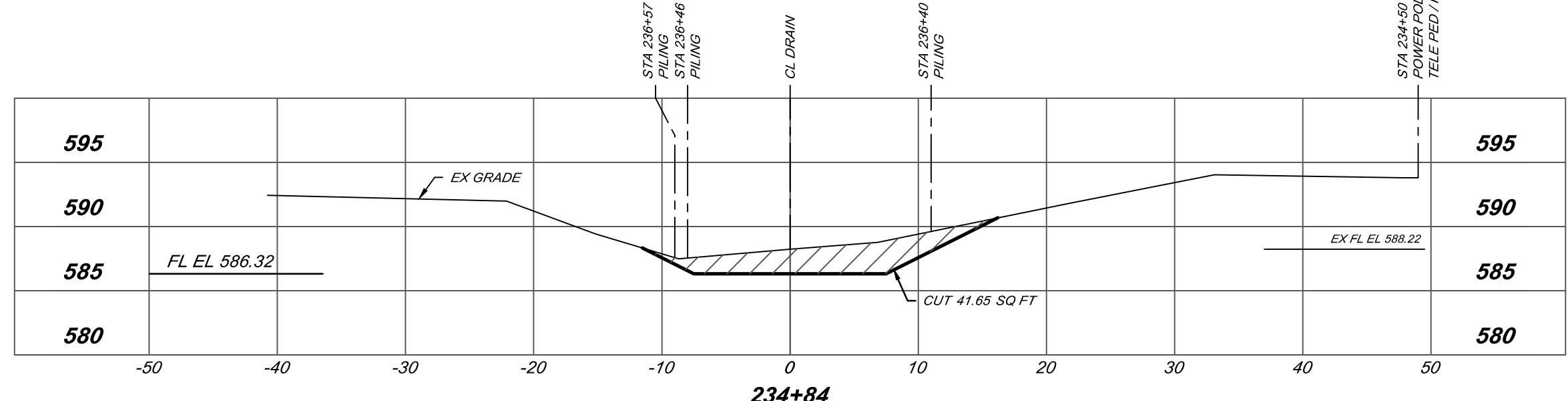
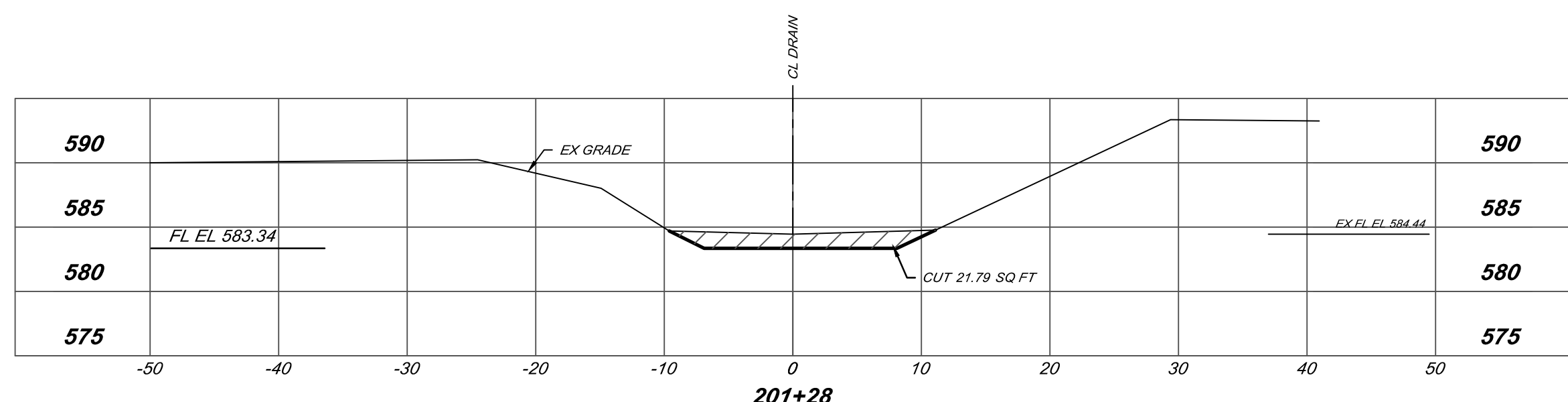
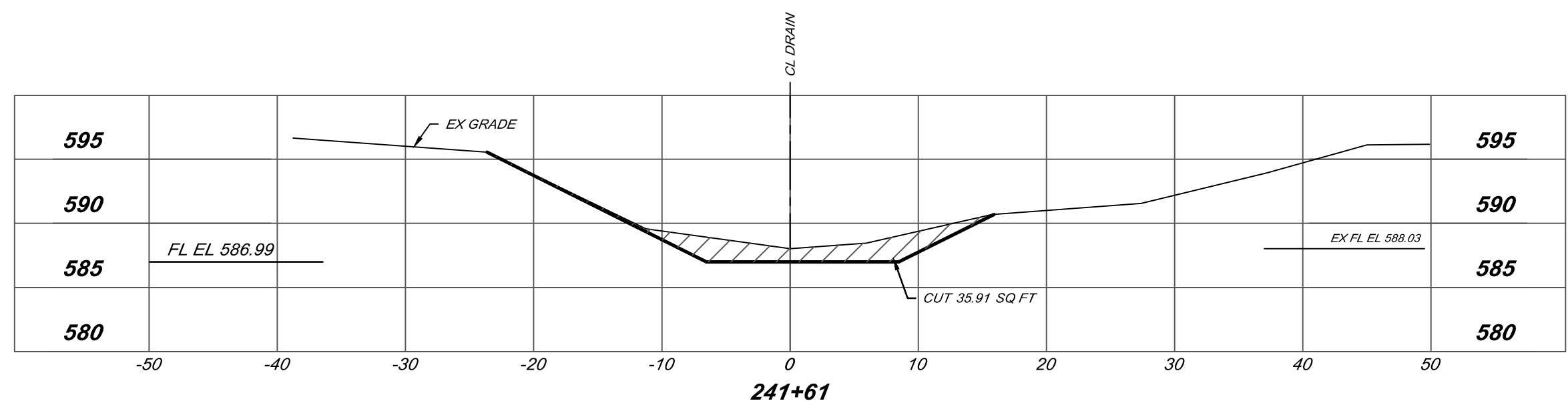
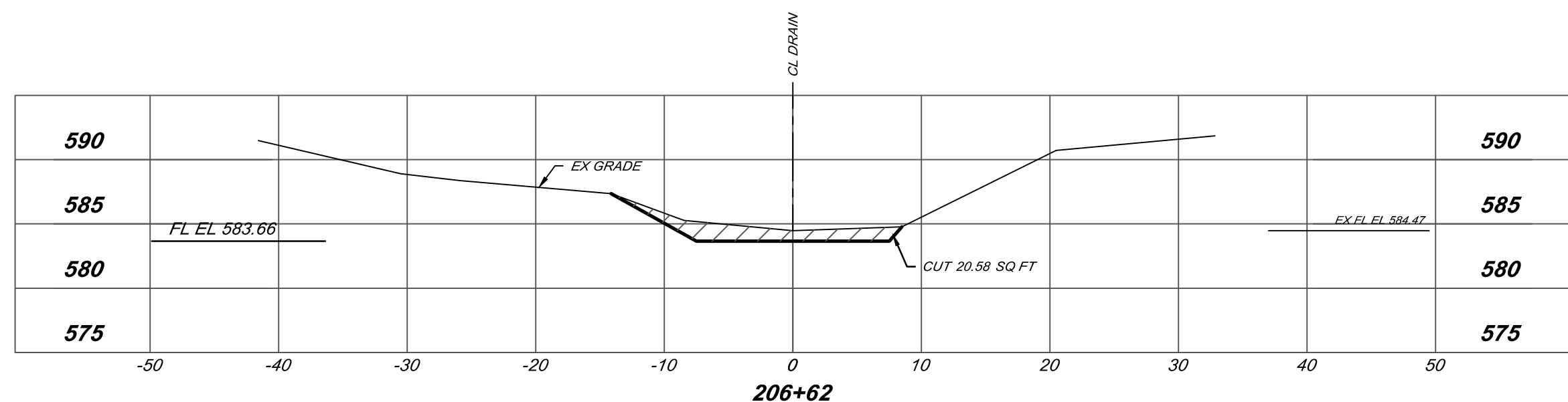
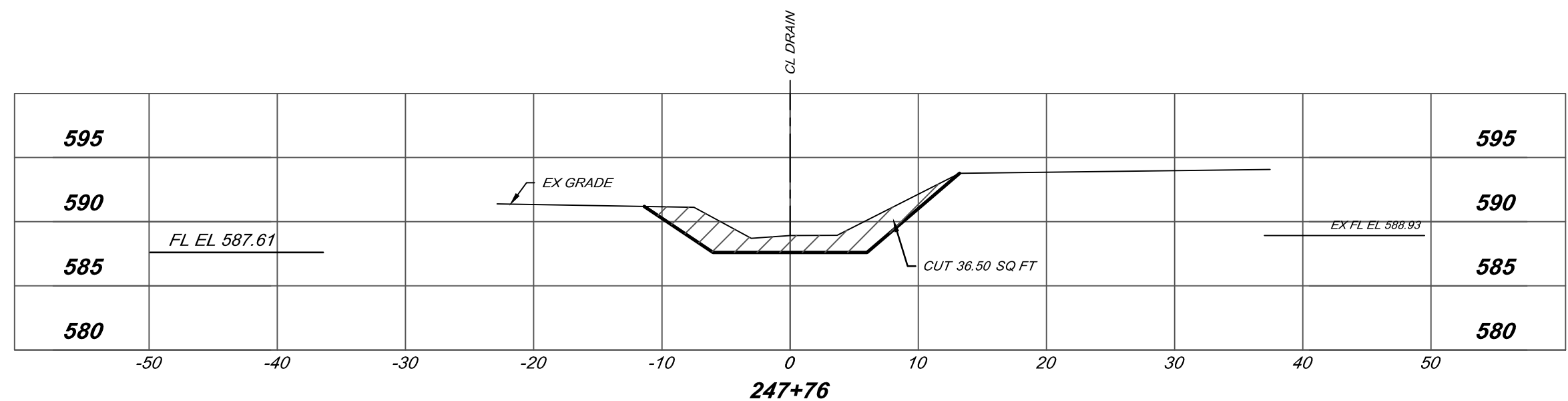
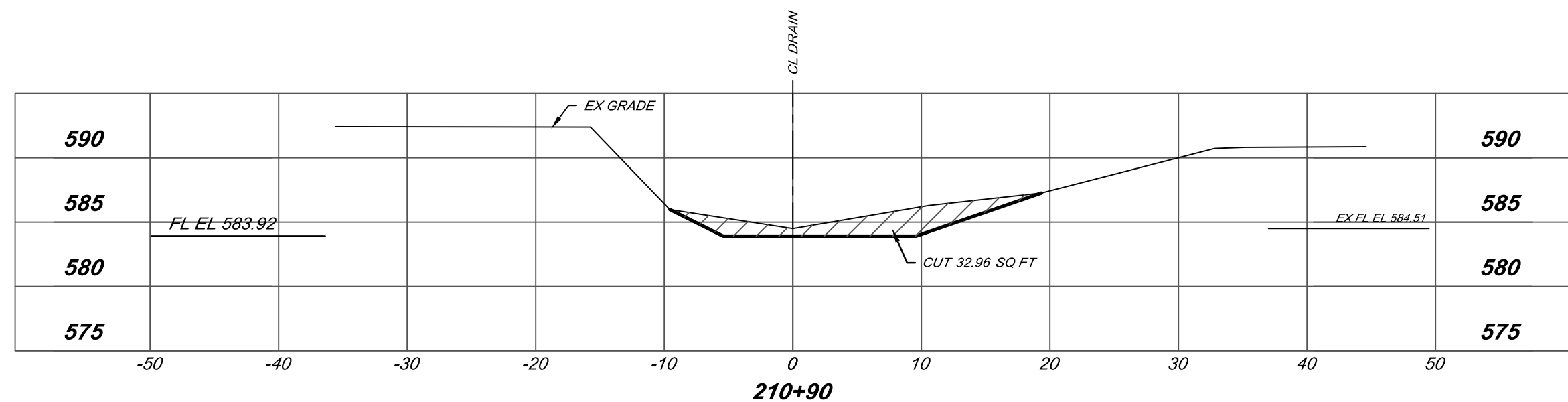
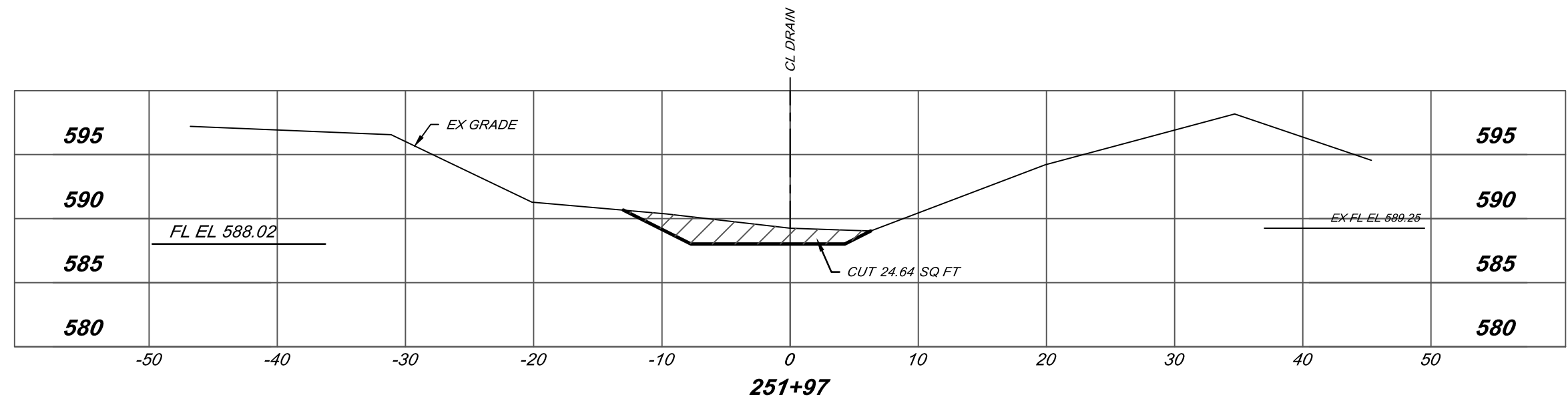
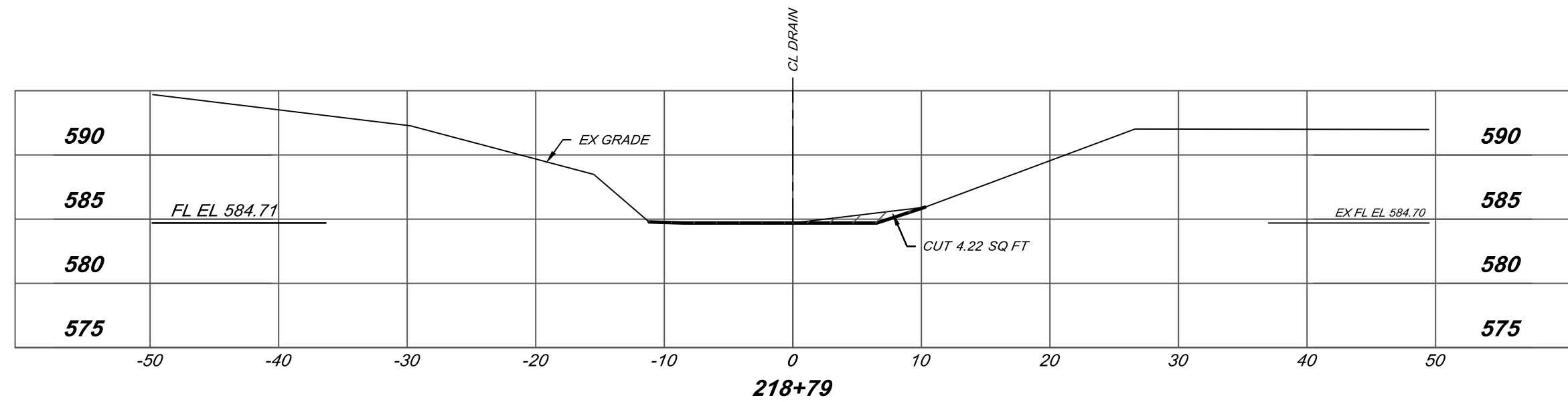
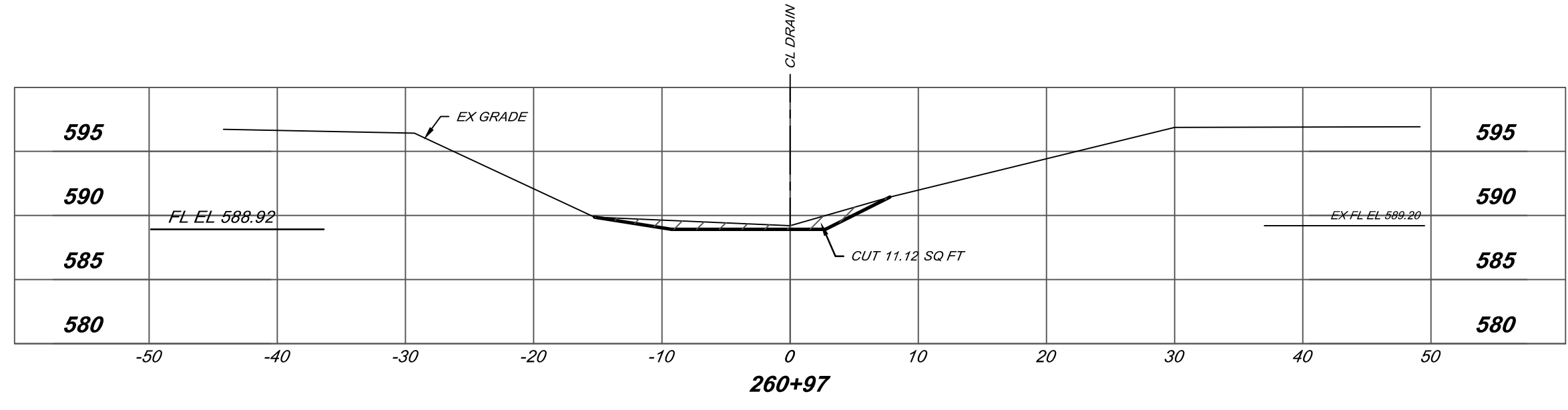
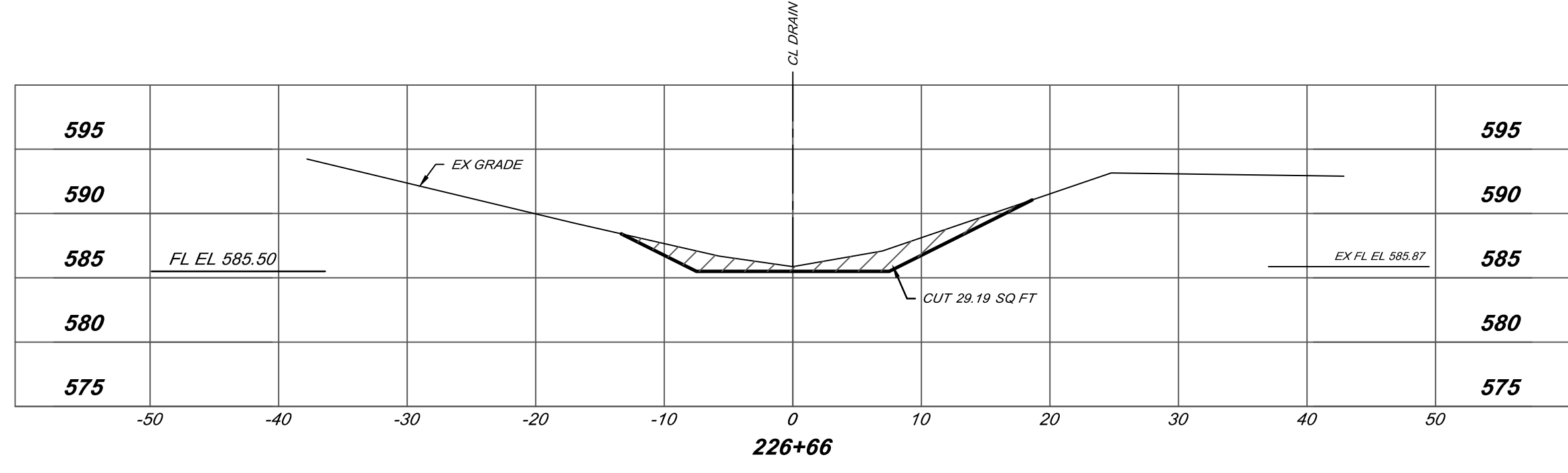
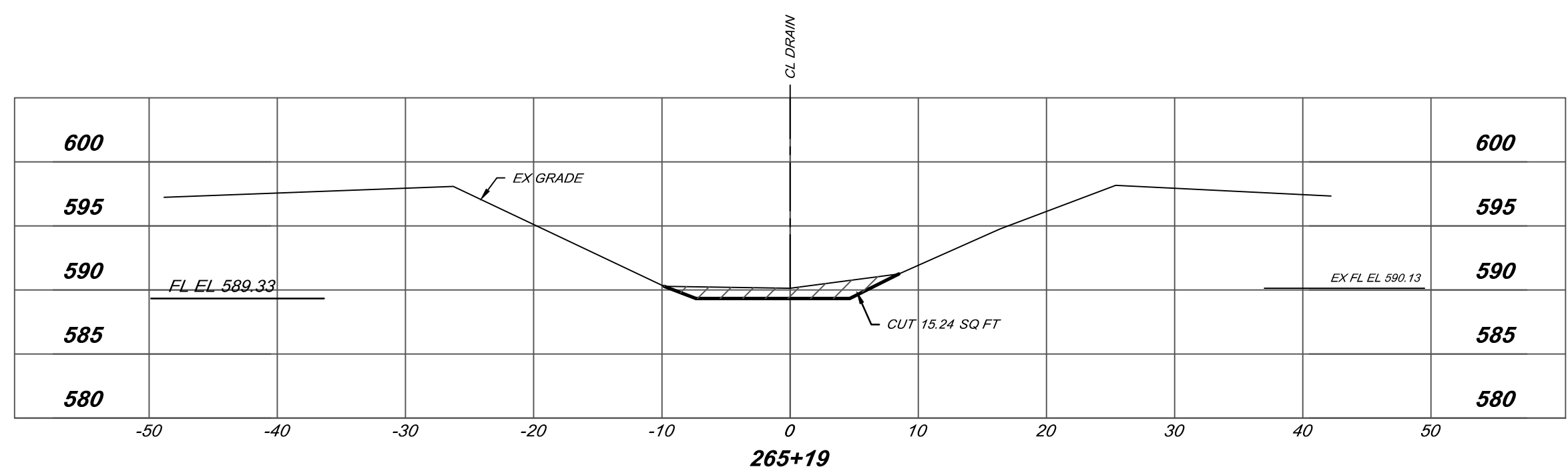
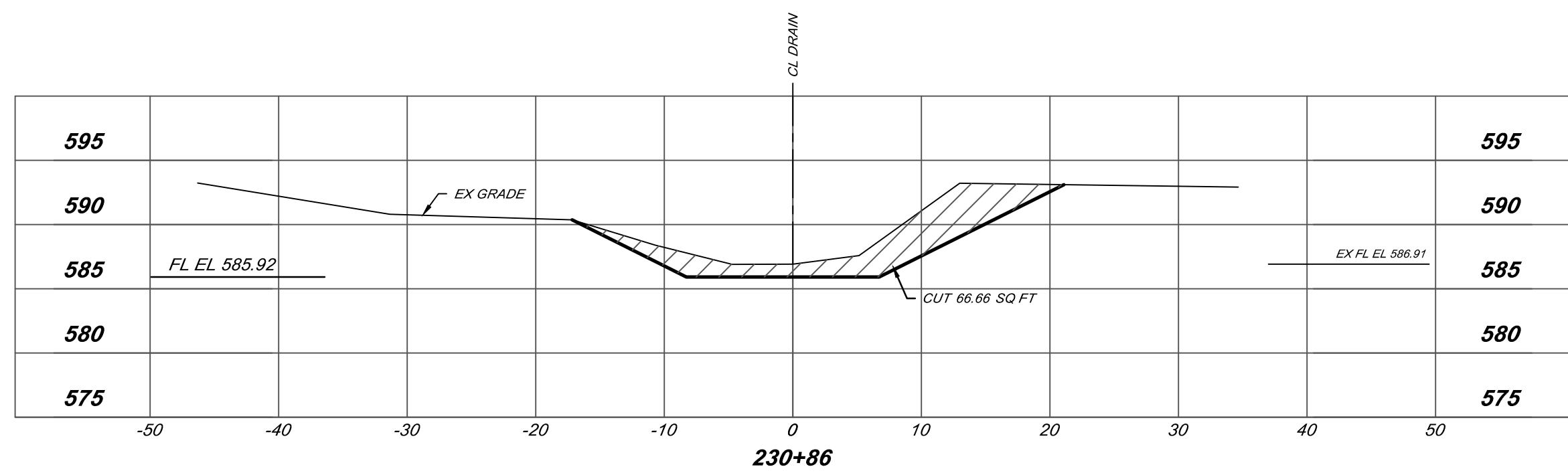
BY	MARK	REVISIONS	DATE
<small>THE WORK REPRESENTED BY THIS DRAWING WAS DESIGNED BY THE ENGINEER FOR THIS SPECIFIC APPLICATION AND SPECIFIC LOCATION DESCRIBED HEREON IN ACCORDANCE WITH THE CONDITIONS PREVALENT AT THE TIME THE DESIGN WAS DONE. THE ENGINEER DOES NOT GUARANTEE AND WILL NOT BE LIABLE FOR ANY OTHER LOCATION, CONDITION, DESIGN OR PURPOSE.</small>			
MARSH CREEK #2 DRAIN SAGINAW COUNTY, MICHIGAN			
CROSS SECTIONS STA 75+15 TO STA 130+73			
		<small>SAGINAW OFFICE 230 S. Washington Ave. Saginaw, MI 48607 Tel: 989-754-4717 Fax: 989-754-4440 www.SpicerGroup.com</small>	
DE. BY:	PCC/CDV	CH. BY:	CDV
DR. BY:	MJC	APP. BY:	NDC
PROJECT NO.		135292SG2023	
STDS.	SHEET 16 OF 23	DR 16	
DATE	DECEMBER, 2024		
SCALE	1"=10'		


P:\proj\2023\135292SG2023 - Marsh Creek #2 Drain - AutoCAD - Crossings\DR-4707-15-21_XS.dwg, 12/26/2024 11:25:50 AM, chad.arnabough
 CHAD SPICER/BAUGH



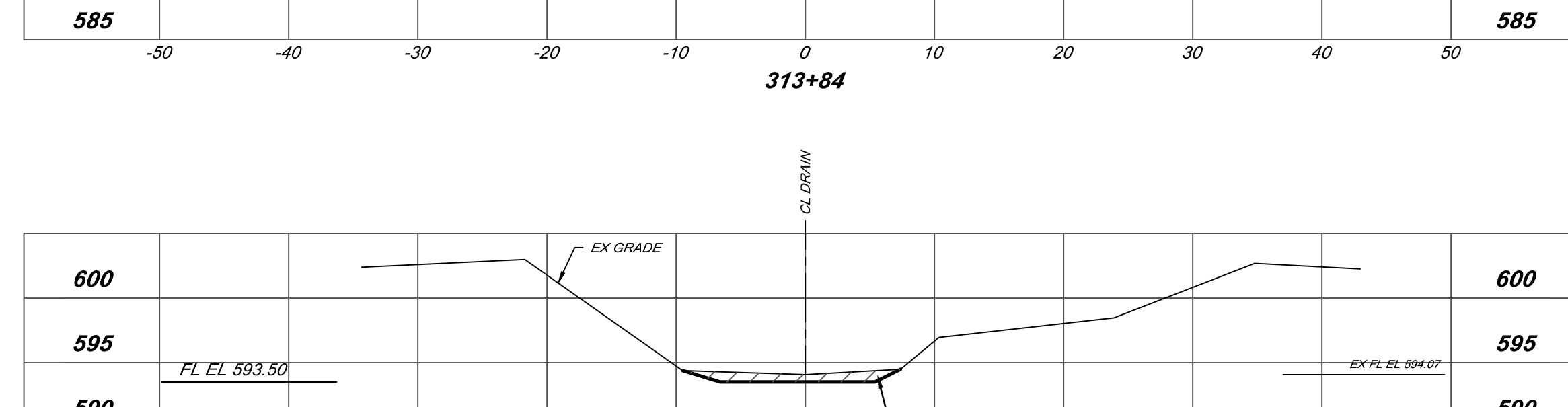
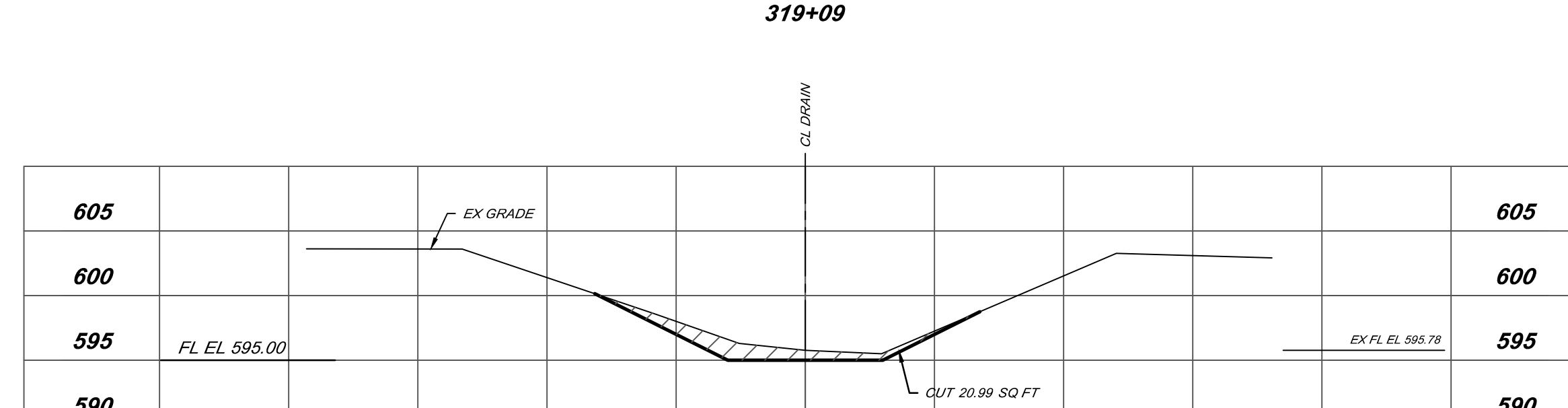
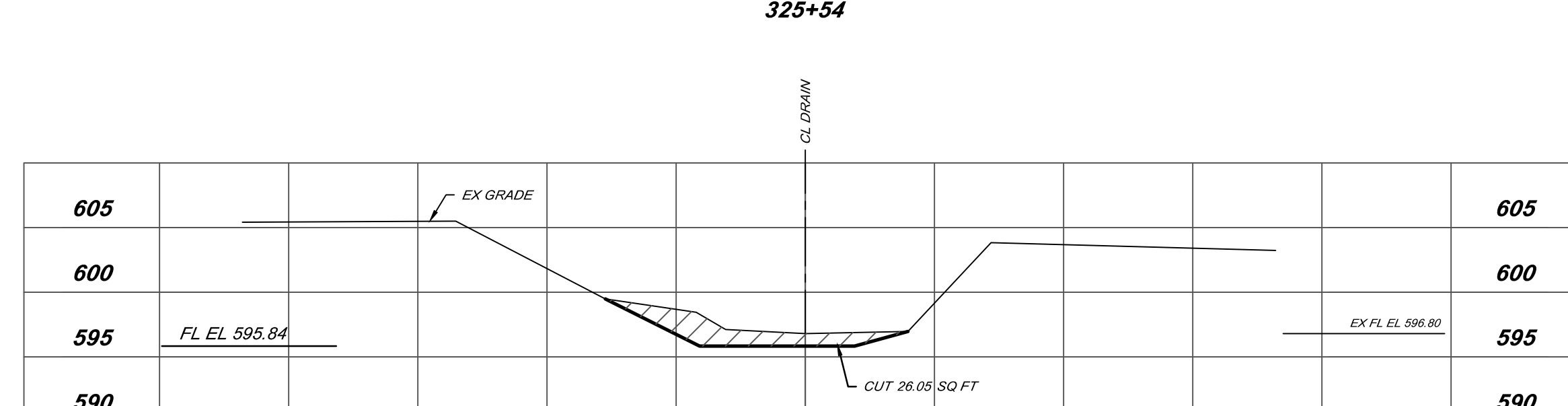
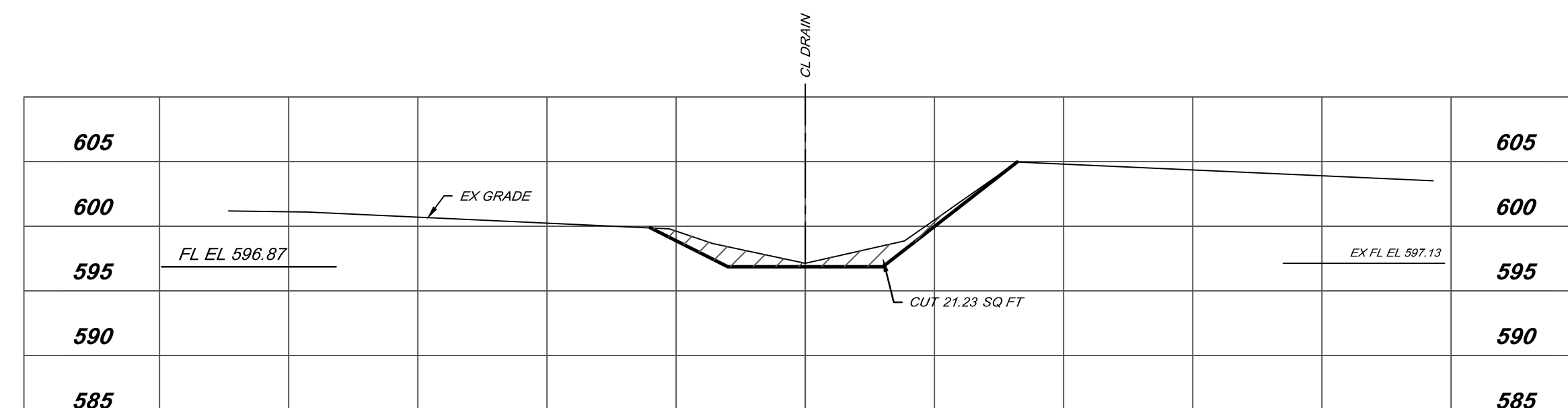
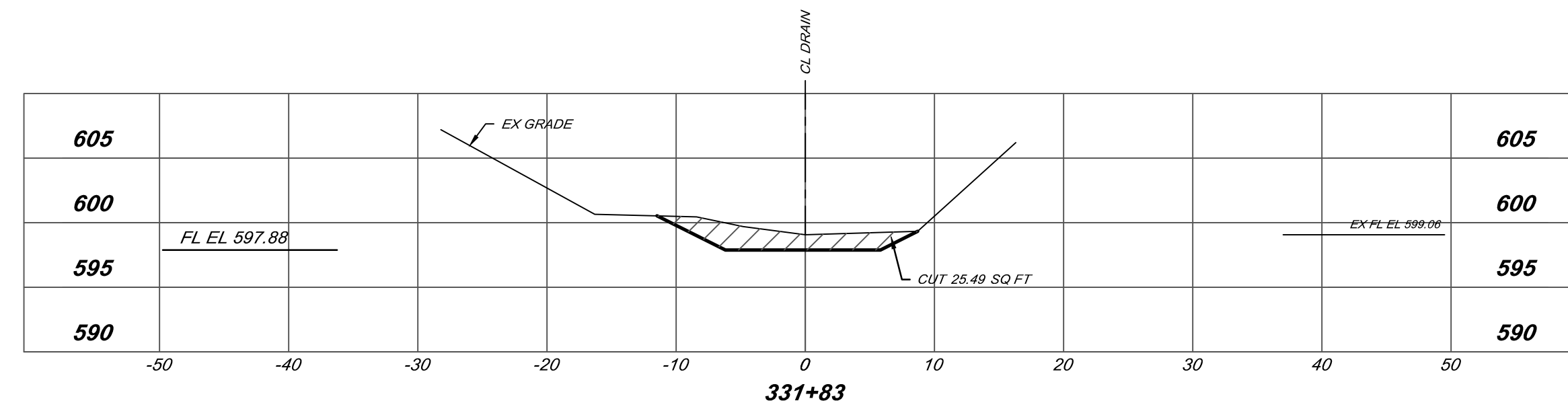
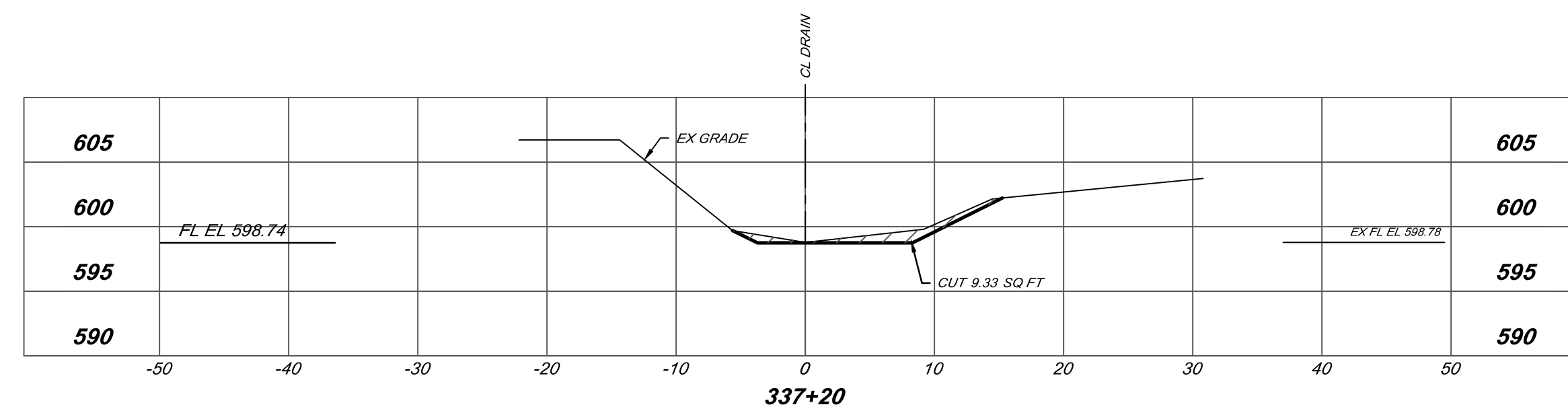
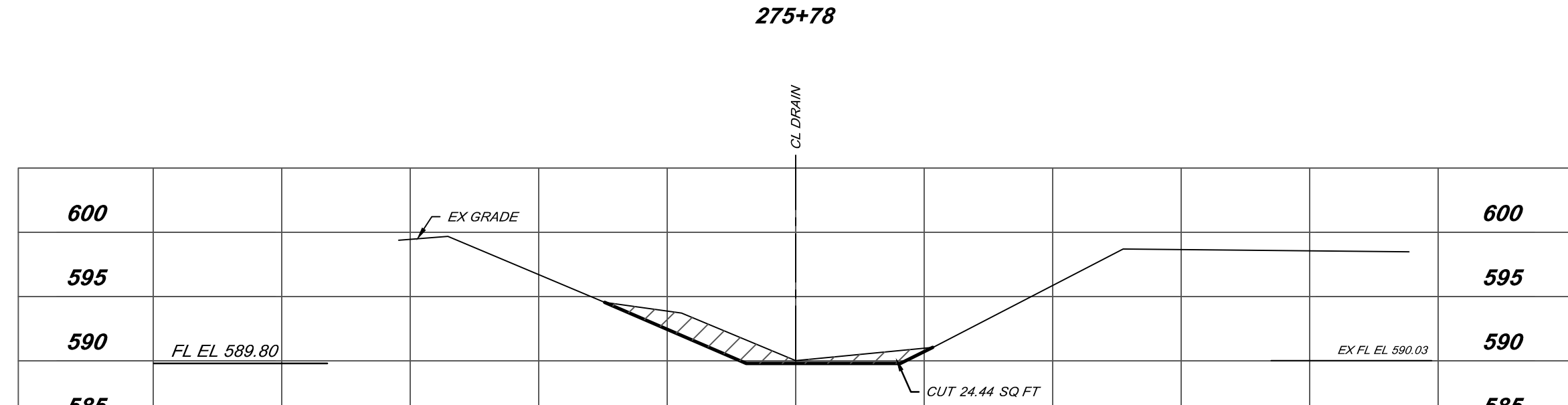
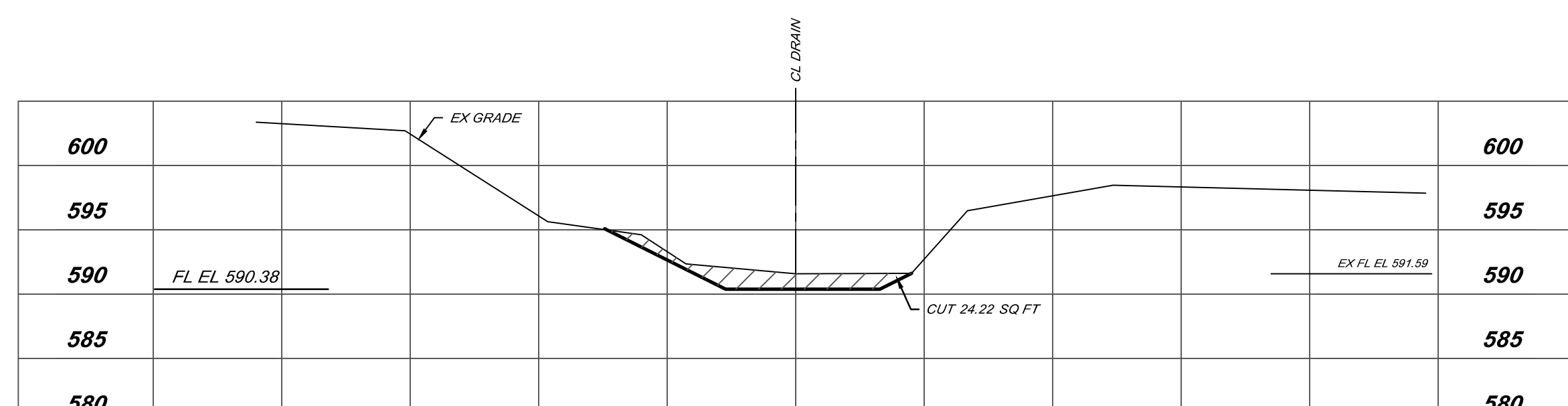
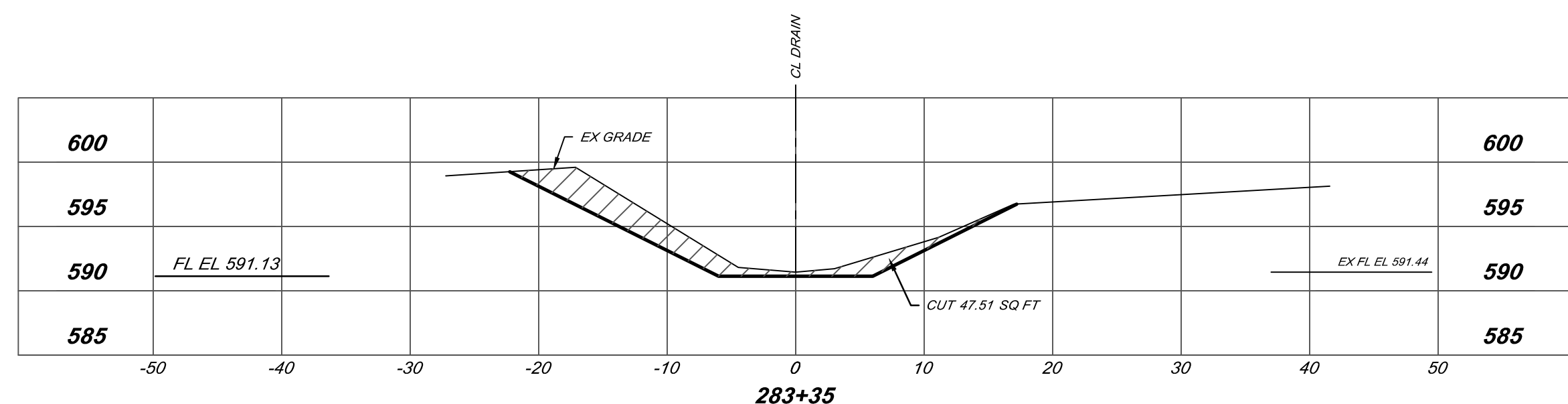
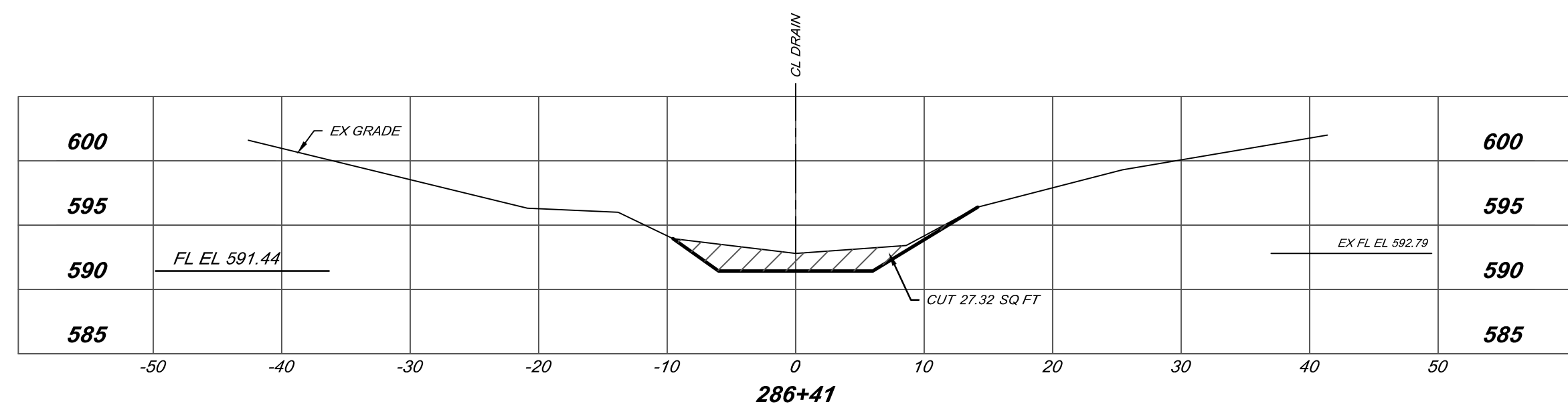
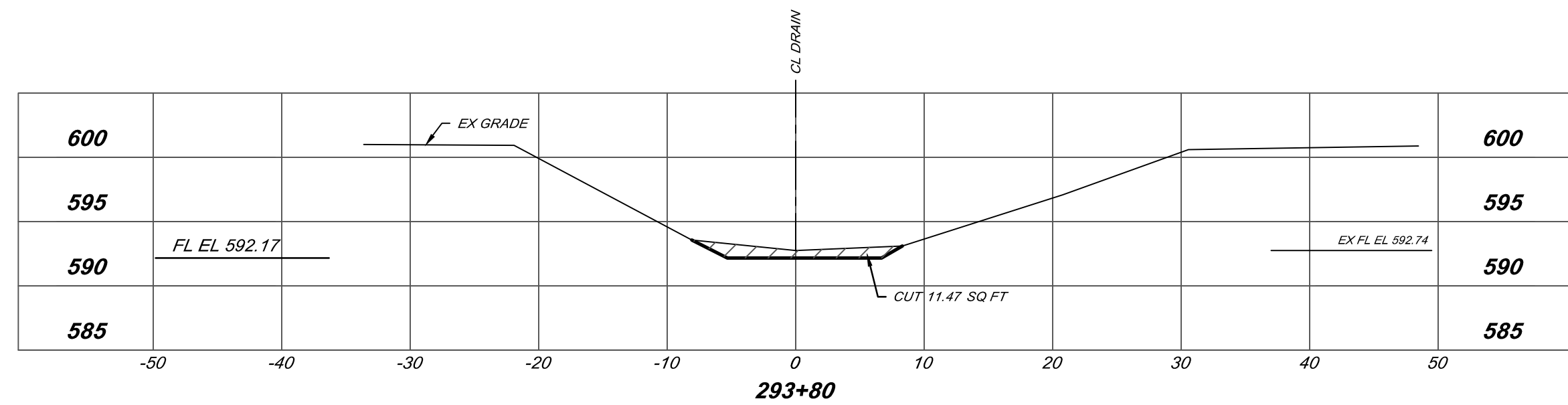
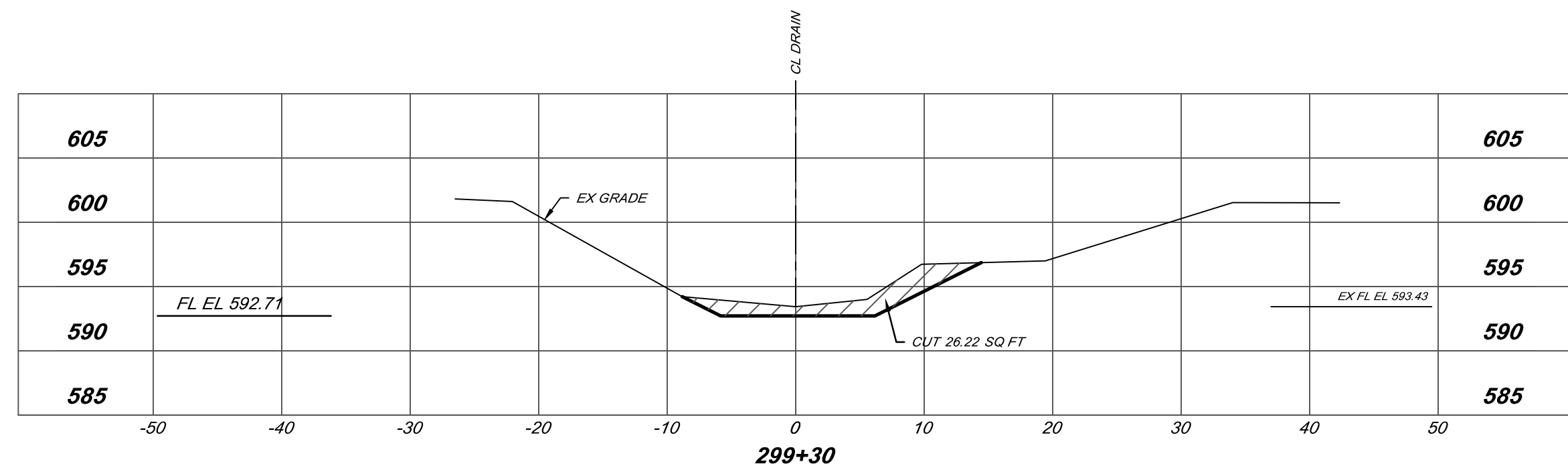
BY	MARK	REVISIONS	DATE
<small>THE WORK REPRESENTED BY THIS DRAWING WAS DESIGNED BY THE ENGINEER FOR THIS SPECIFIC APPLICATION AND SPECIFIC LOCATION DESCRIBED HEREON IN ACCORDANCE WITH THE CONDITIONS PREVALENT AT THE TIME THE DESIGN WAS DONE. THE ENGINEER DOES NOT GUARANTEE AND WILL NOT BE LIABLE FOR ANY OTHER LOCATION, CONDITION, DESIGN OR PURPOSE.</small>			
MARSH CREEK #2 DRAIN SAGINAW COUNTY, MICHIGAN			
CROSS SECTIONS STA 139+98 TO STA 196+24			
		<small>SAGINAW OFFICE 230 S. Washington Ave. Saginaw, MI 48607 Tel: 989-754-4717 Fax: 989-754-4440 www.SpicerGroup.com</small>	
DE. BY:	PCC/CDV	CH. BY:	CDV
DR. BY:	MJC	APP. BY:	NDC
			PROJECT NO. 135292SG2023
STDS.	SHEET 17 OF 23		DR 17
DATE	DECEMBER, 2024		
SCALE	1"=10'		FILE NO. DR-4707-17


P:\proj\2023\135292SG2023 - Marsh Creek #2 Drain - AutoCAD_GIS.dwg DR-4707-17-21_XS.dwg 12/26/2024 11:28:40 AM chad.arnabough
CHAD SPICER/BAUGH



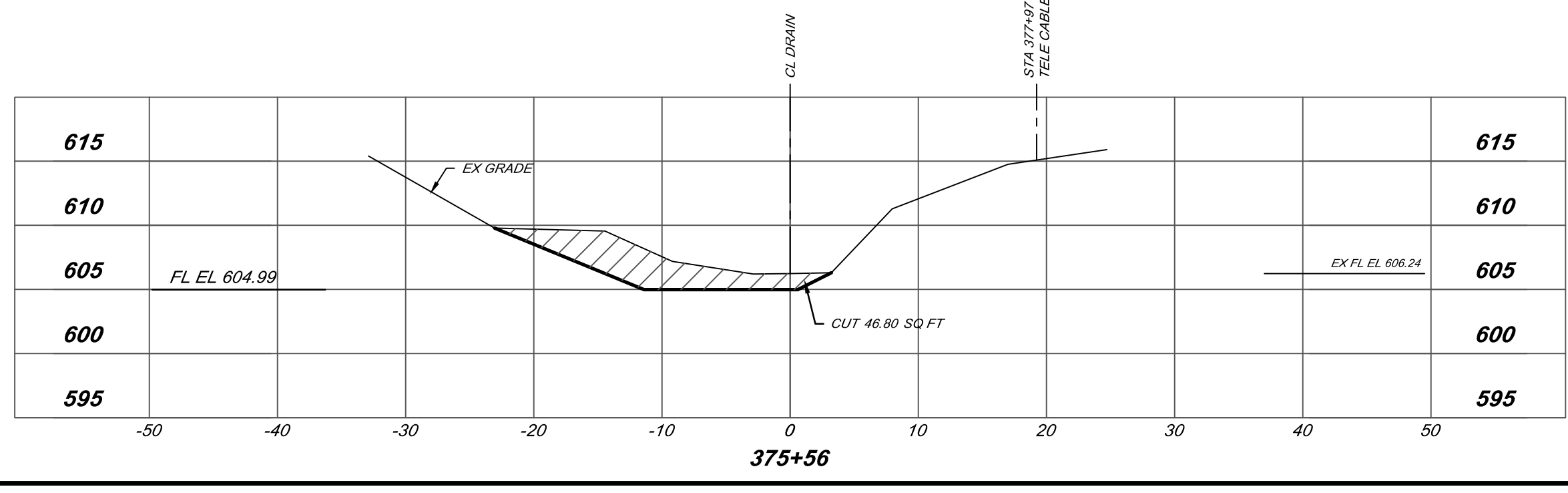
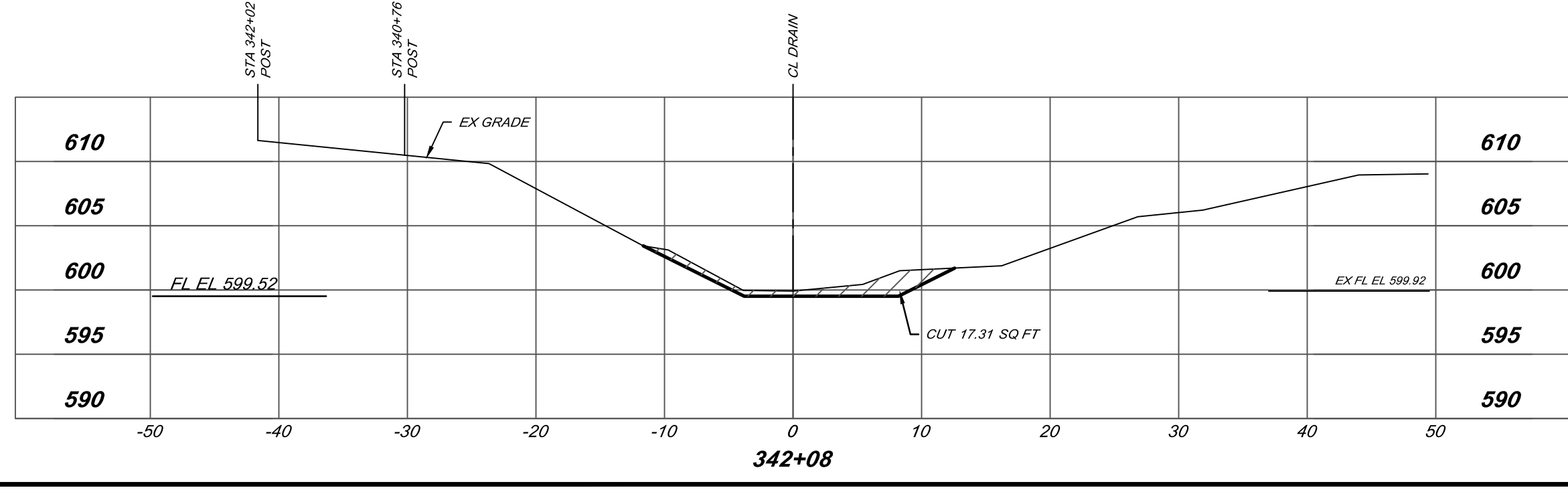
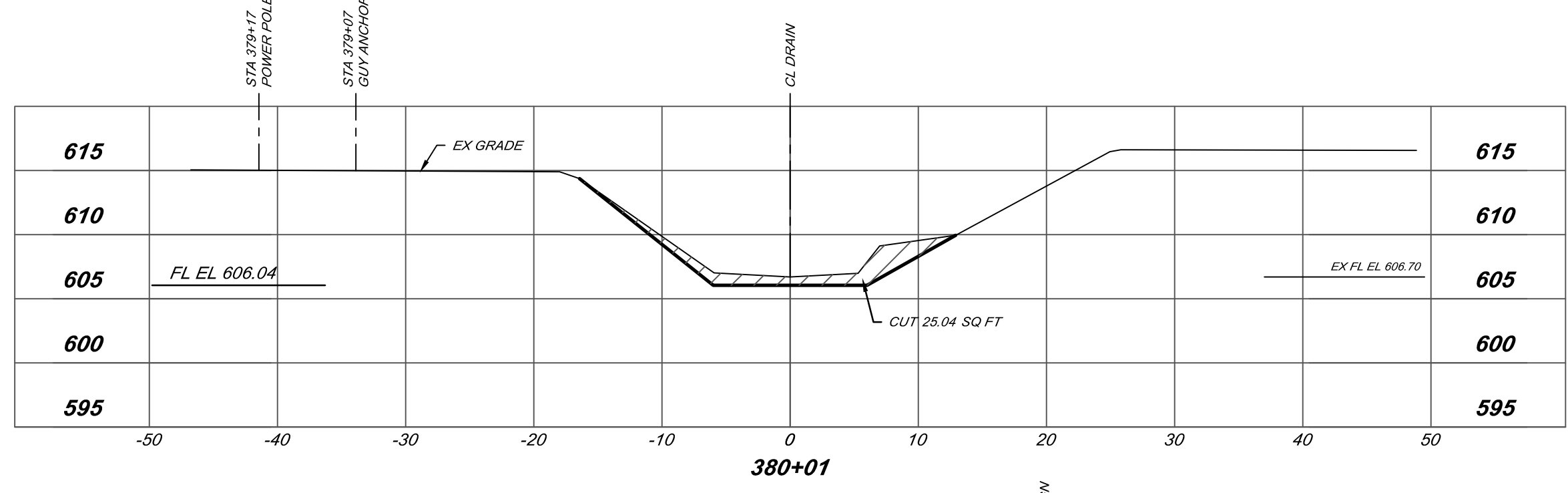
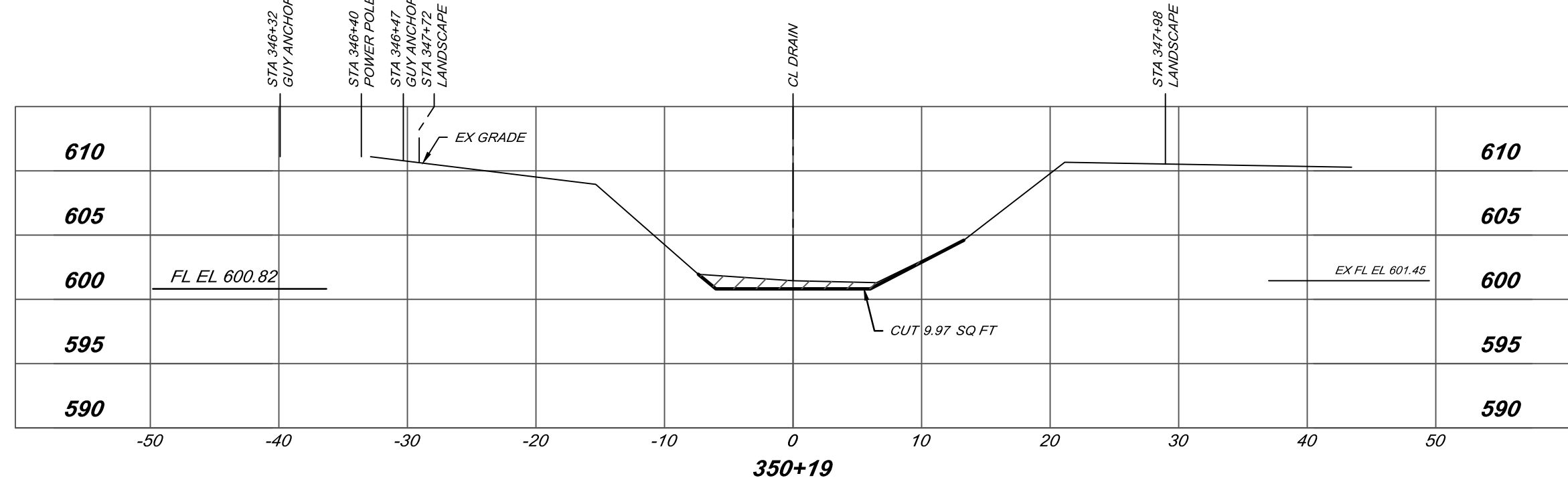
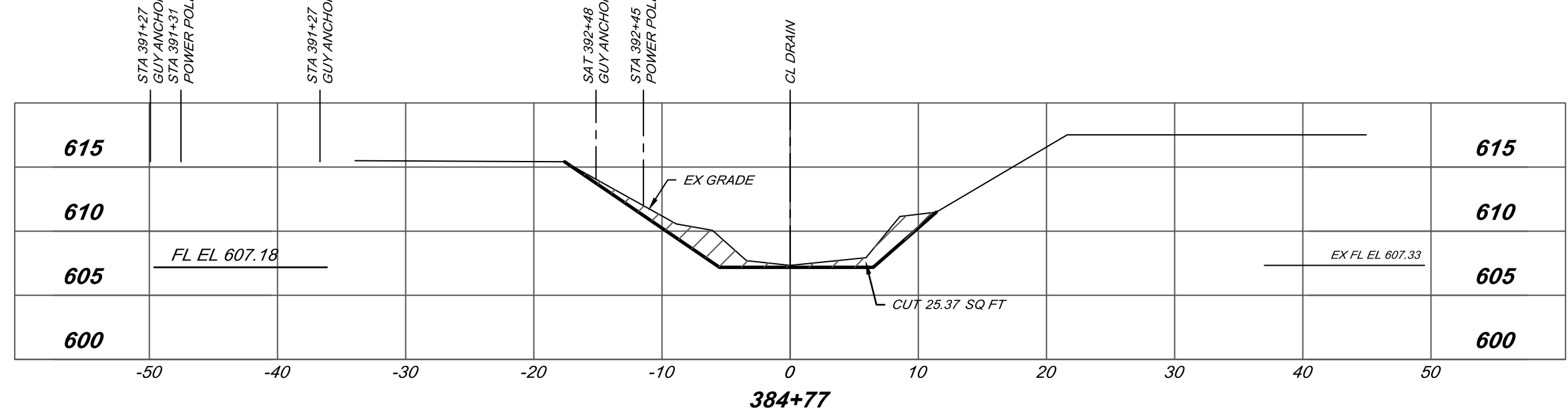
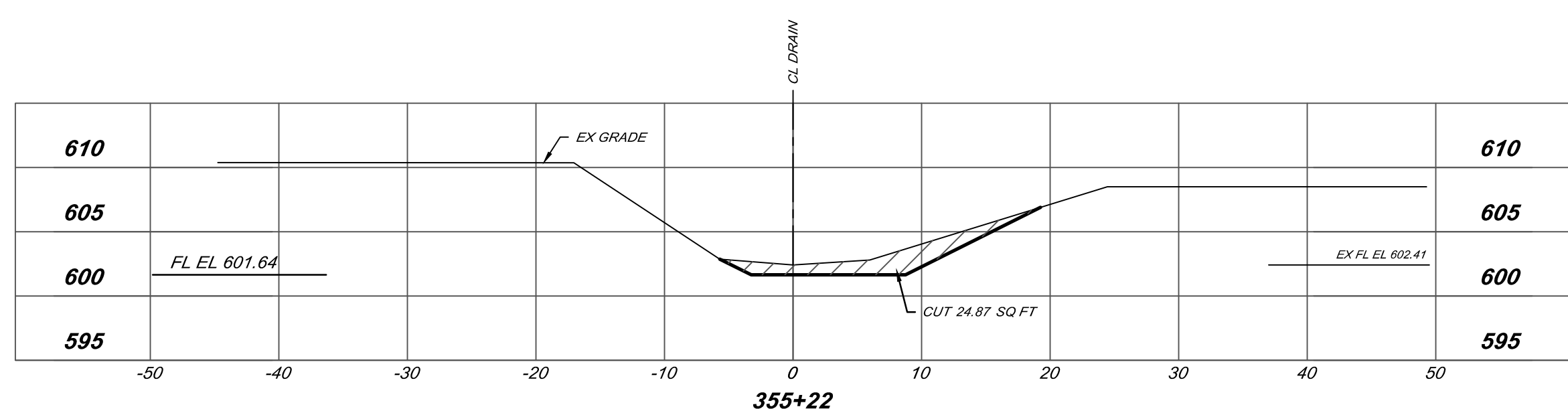
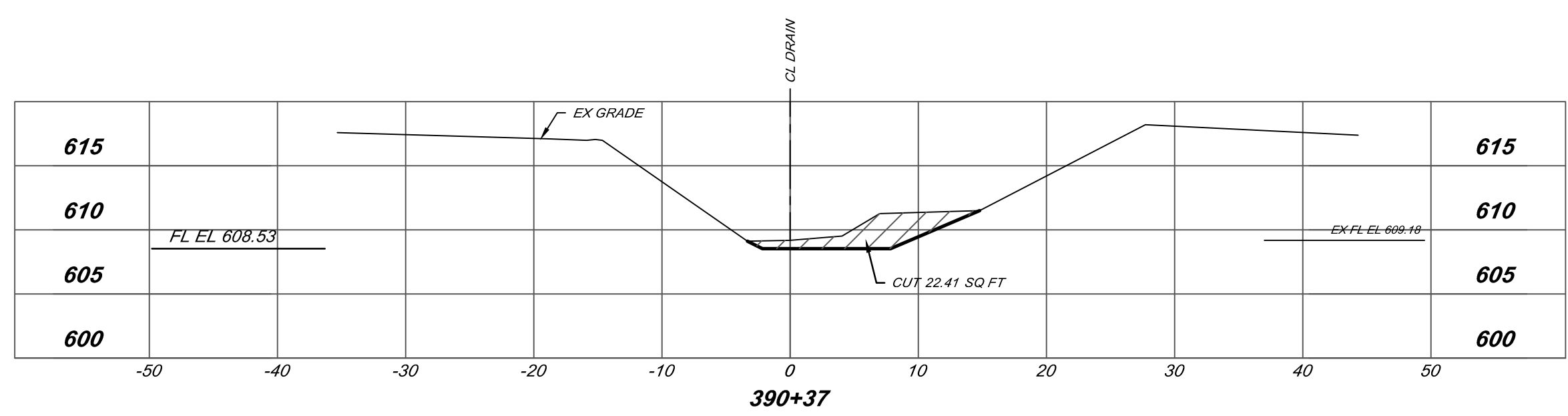
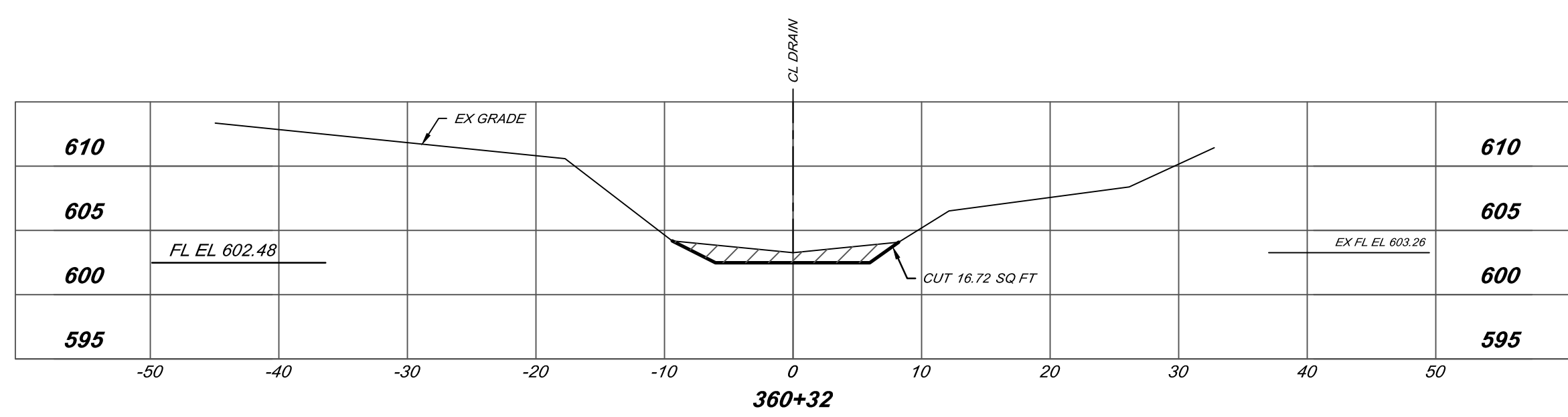
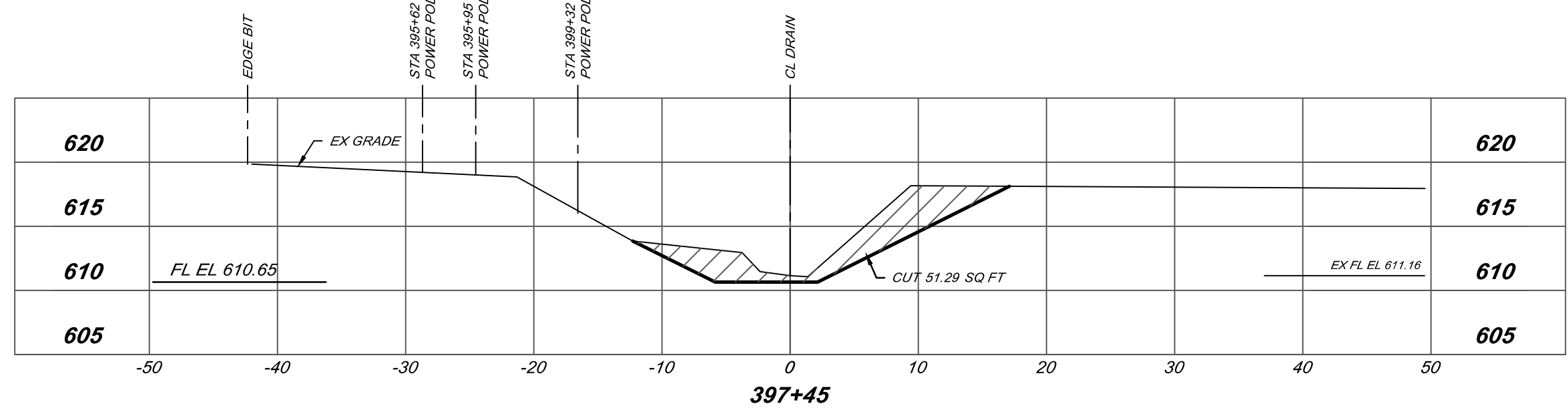
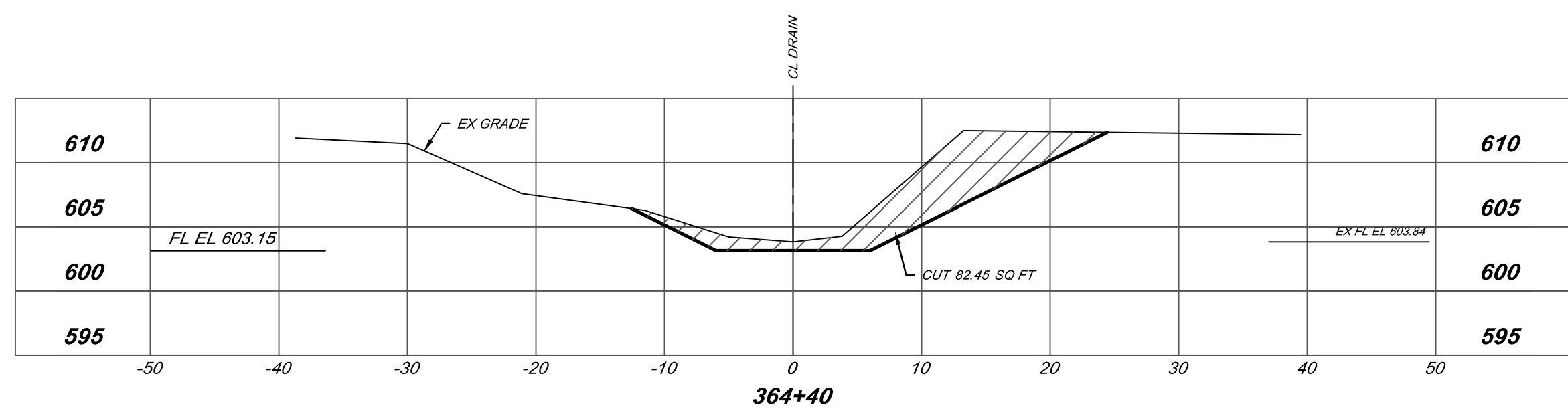
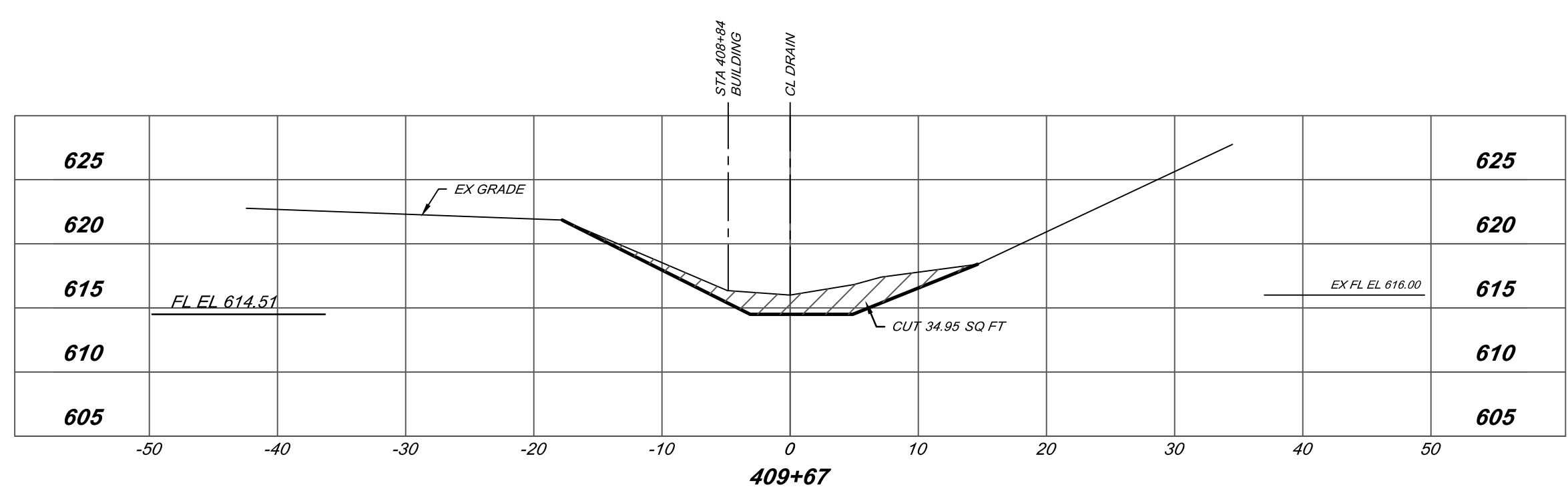
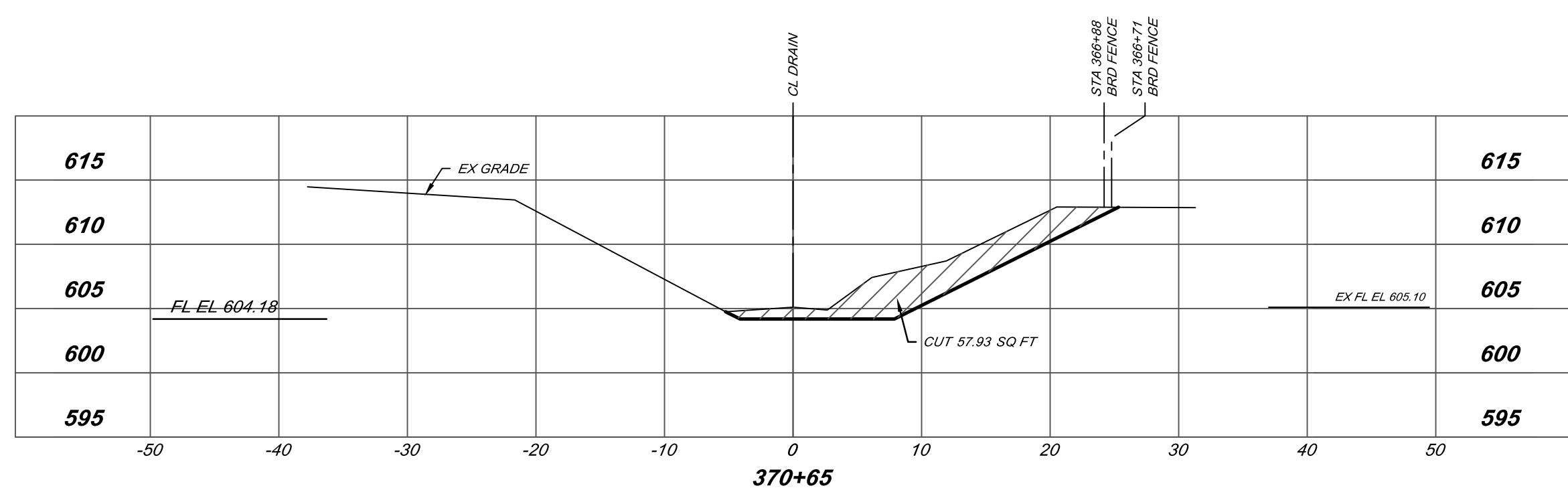
BY	MARK	REVISIONS	DATE
<p>THE WORK REPRESENTED BY THIS DRAWING WAS DESIGNED BY THE ENGINEER FOR THIS SPECIFIC APPLICATION AND SPECIFIC LOCATION DESCRIBED HEREON IN ACCORDANCE WITH THE CONDITIONS PREVALENT AT THE TIME THE DESIGN WAS DONE. THE ENGINEER DOES NOT GUARANTEE AND WILL NOT BE LIABLE FOR ANY OTHER LOCATION, CONDITION, DESIGN OR PURPOSE.</p>			
<p>MARSH CREEK #2 DRAIN SAGINAW COUNTY, MICHIGAN</p>			
<p>CROSS SECTIONS STA 201+28 TO STA 265+19</p>			
		<p>SAGINAW OFFICE 230 S. Washington Ave. Saginaw, MI 48607 Tel: 989-754-4717 Fax: 989-754-4440 www.SpicerGroup.com</p>	
DE. BY:	PCC/CDV	CH. BY:	CDV
DR. BY:	MJC	APP. BY:	NDC
			PROJECT NO. 135292SG2023
STDS.		SHEET 18 OF 23	
DATE		FILE NO.	
DECEMBER, 2024		DR-4707-18	
SCALE		1"=10'	
			DR 18

P:\proj\2023\135292SG2023 - Marsh Creek #2 Drain - AutoCAD_GIS.dwg (DR-4707-18-21_XS.dwg) 12/20/2024 11:27:09 AM chad.arnold@spicergroup.com
 CHAD SPICER/BAUGH



BY	MARK	REVISIONS	DATE
<small>THE WORK REPRESENTED BY THIS DRAWING WAS DESIGNED BY THE ENGINEER FOR THIS SPECIFIC APPLICATION AND SPECIFIC LOCATION DESCRIBED HEREON IN ACCORDANCE WITH THE CONDITIONS PREVALENT AT THE TIME THE DESIGN WAS DONE. THE ENGINEER DOES NOT GUARANTEE AND WILL NOT BE LIABLE FOR ANY OTHER LOCATION, CONDITION, DESIGN OR PURPOSE.</small>			
MARSH CREEK #2 DRAIN SAGINAW COUNTY, MICHIGAN			
CROSS SECTIONS STA 269+94 TO STA 337+20			
		<small>SAGINAW OFFICE 230 S. Washington Ave. Saginaw, MI 48607 Tel: 989-754-4717 Fax: 989-754-4440 www.SpicerGroup.com</small>	
DE. BY:	PCC/CDV	CH. BY:	CDV
DR. BY:	MJC	APP. BY:	NDC
			PROJECT NO. 135292SG2023
STDS.	SHEET 19 OF 23		DR 19
DATE	DECEMBER, 2024		
SCALE	1"=10'		FILE NO. DR-4707-19

P:\proj\2023\135292SG2023 - Marsh Creek #2 Drain - AutoCAD_GIS.dwg (R:47071915-21_XS.dwg) 12/20/2024 11:27:39 AM chad.arnold@spicergroup.com
 CHAD SPICER/BAUGH

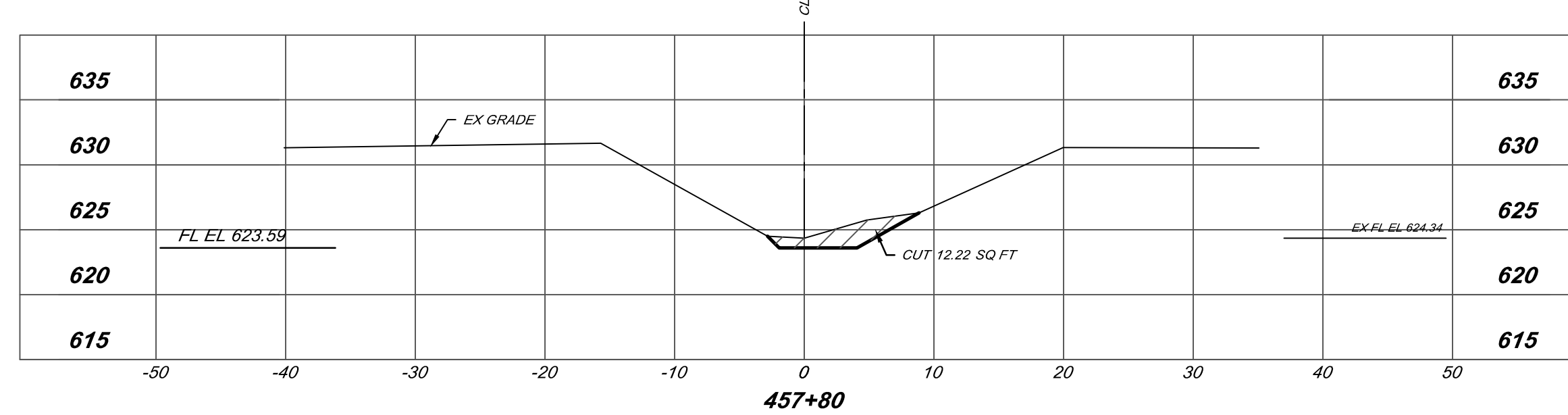
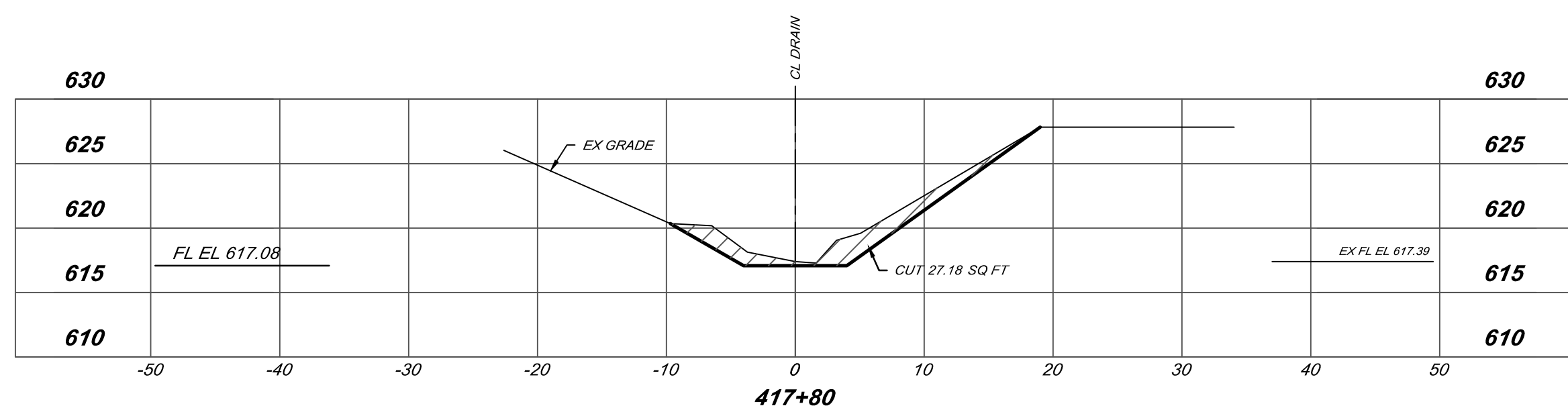
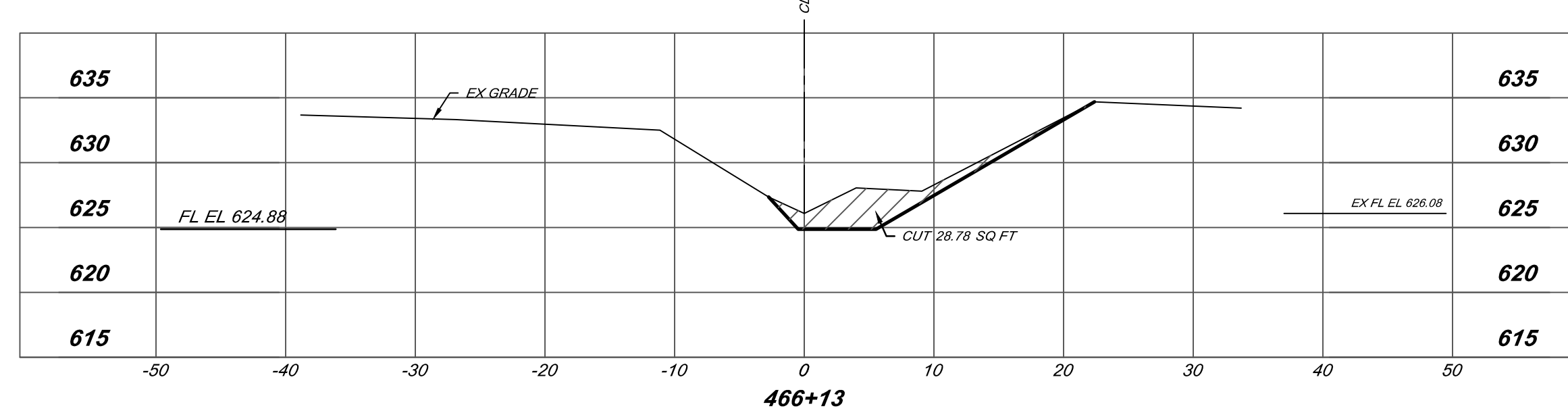
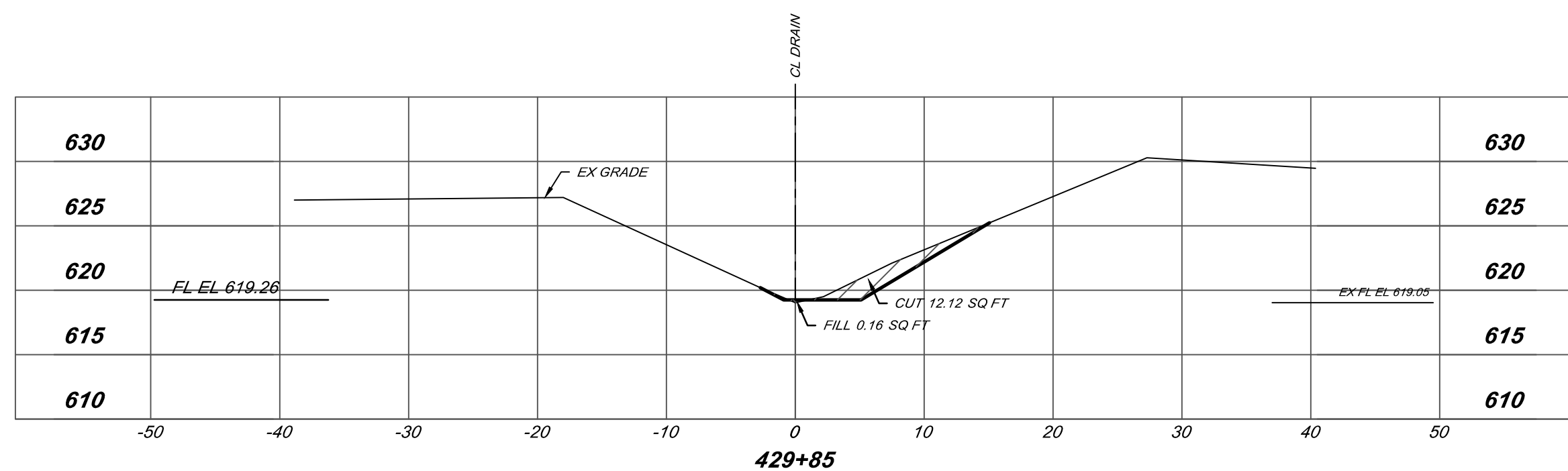
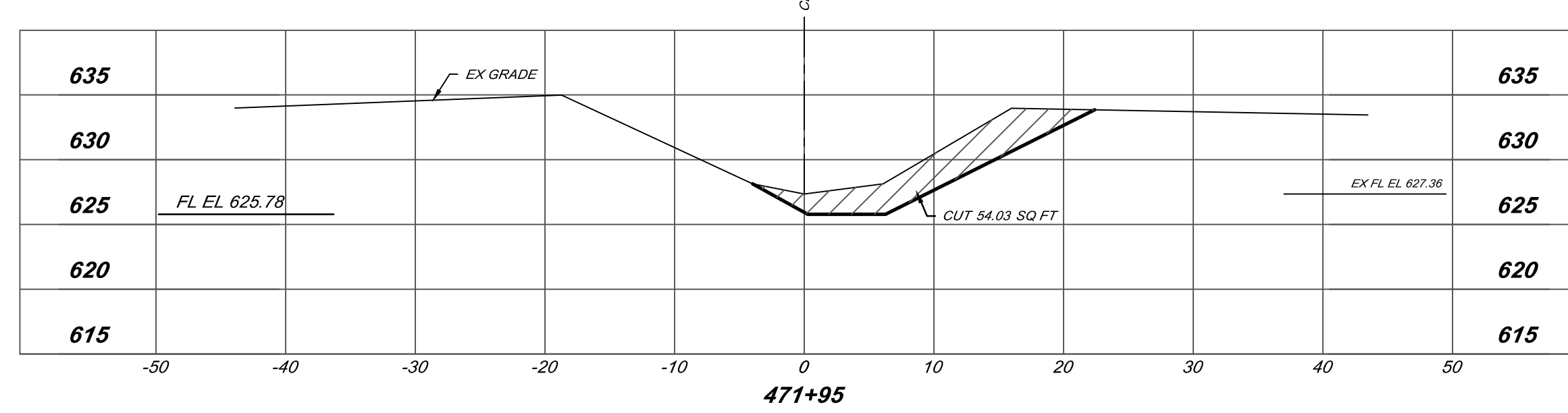
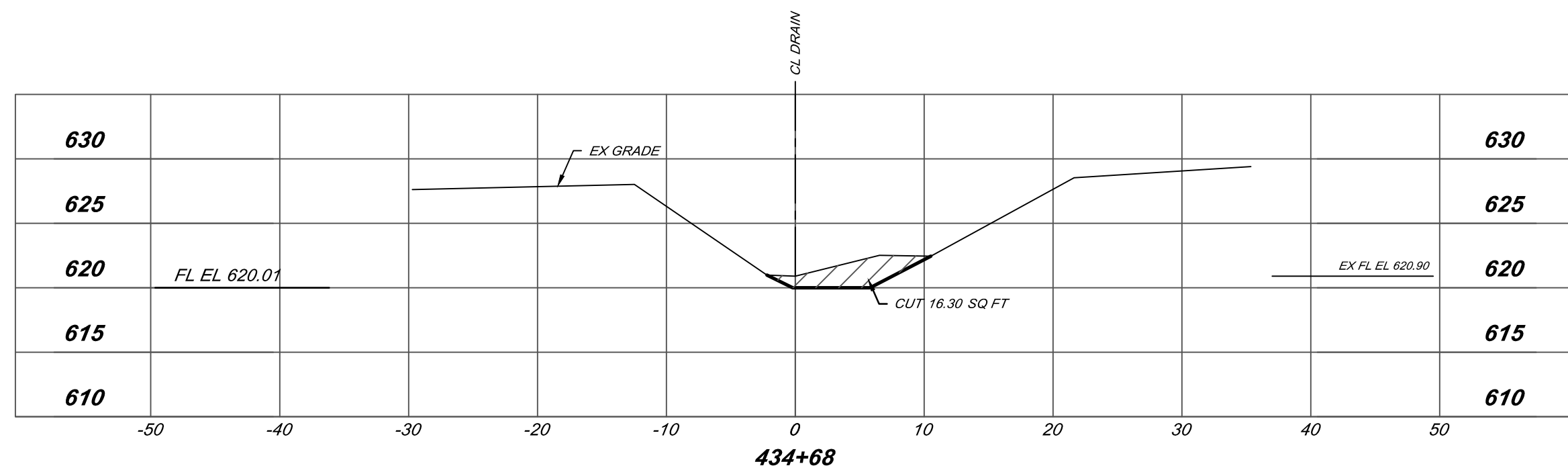
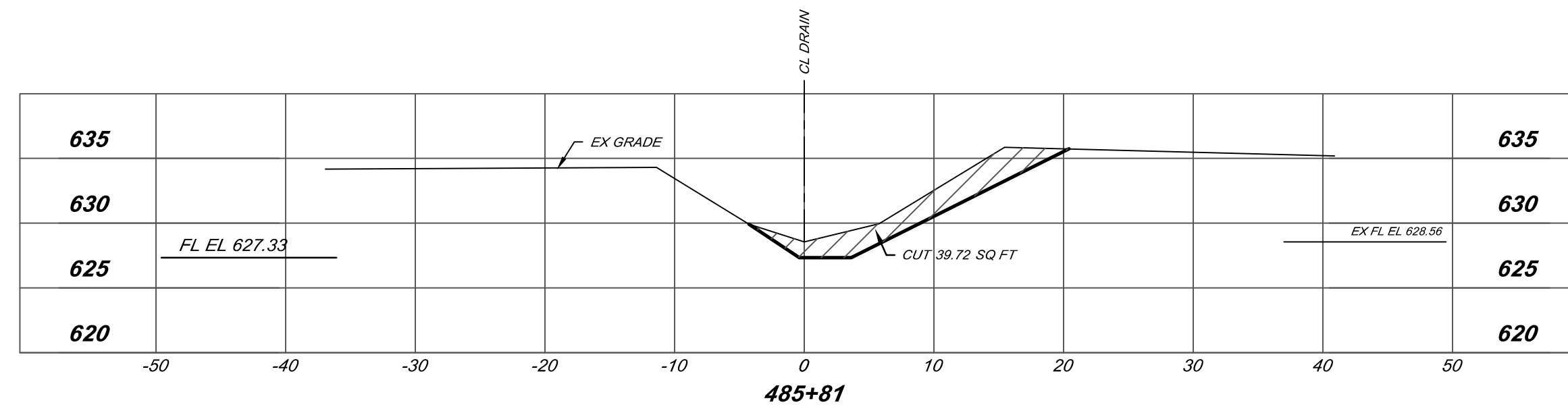
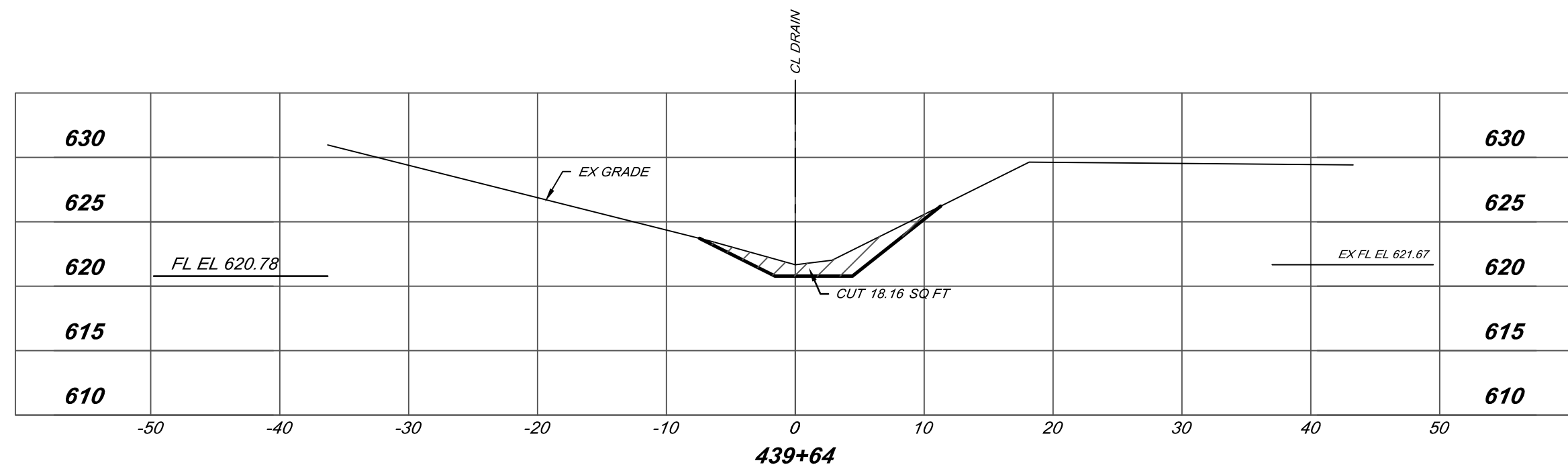
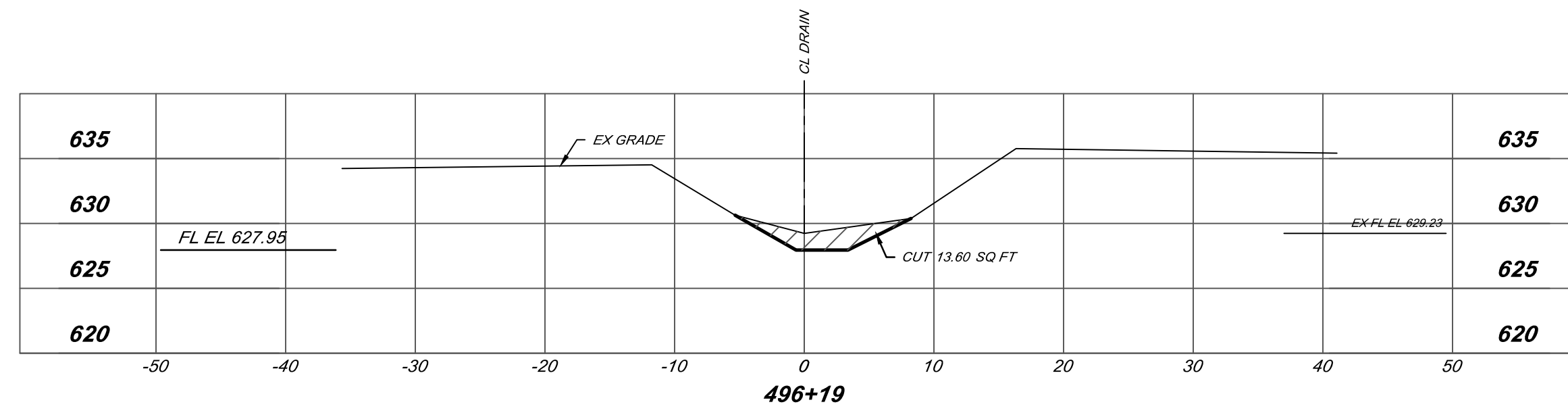
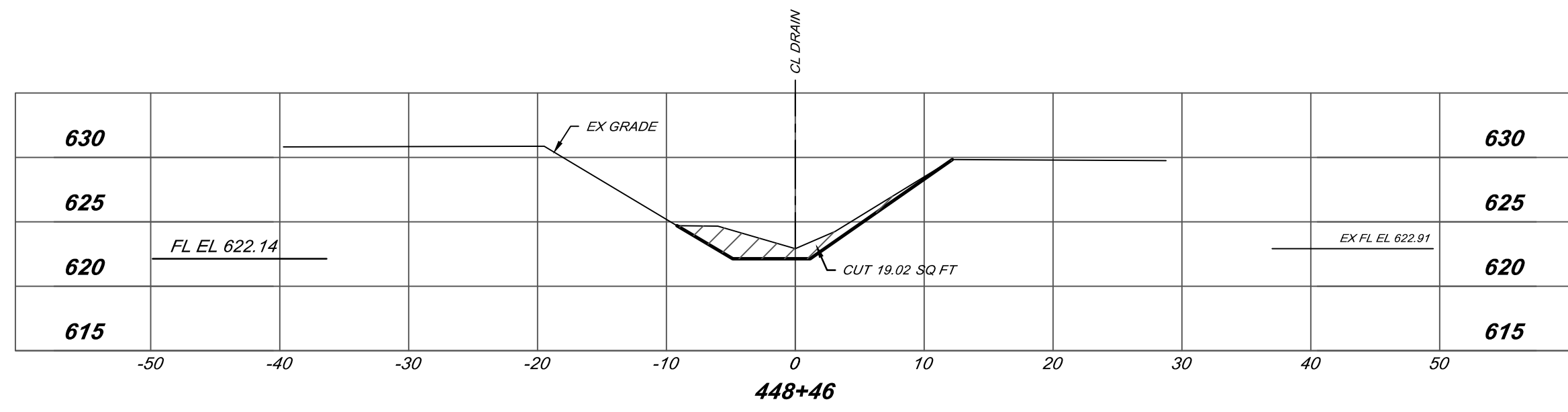


BY	MARK	REVISIONS	DATE
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<p>MARSH CREEK #2 DRAIN SAGINAW COUNTY, MICHIGAN</p>			
<p>CROSS SECTIONS STA 342+08 TO STA 409+67</p>			
<p>DE. BY: POC/CDV DR. BY: MJC</p>		<p>CH. BY: CDV APP. BY: NDC</p>	
<p>STDS.</p>		<p>PROJECT NO. 135292SG2023</p>	
<p>DATE: DECEMBER, 2024 SCALE: 1"=10'</p>		<p>SHEET 20 OF 23 FILE NO. DR-4707-20</p>	
		<p>DR 20</p>	



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Saginaw, MI 48607
Tel: 989-754-4717
Fax: 989-754-4440
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P:\proj\2023\135292SG2023 - Marsh Creek #2 Drain - AutoCAD_GIS.dwg (DR-4707-15-21_XS.dwg, 12/20/2024 11:27:48 AM, chad.arnabough)



BY	MARK	REVISIONS	DATE
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MARSH CREEK #2 DRAIN SAGINAW COUNTY, MICHIGAN			
CROSS SECTIONS STA 417+80 TO STA 496+19			
		<small>SAGINAW OFFICE 230 S. Washington Ave. Saginaw, MI 48607 Tel: 989-754-4717 Fax: 989-754-4440 www.SpicerGroup.com</small>	
DE. BY:	PCC/CDV	CH. BY:	CDV
DR. BY:	MJC	APP. BY:	NDC
		PROJECT NO. 135292SG2023	
STDS.		SHEET 21 OF 23	
DATE: DECEMBER, 2024		FILE NO. DR-4707-21	
SCALE: 1"=10'		DR 21	

P:\proj\2023\135292SG2023 - Marsh Creek #2 Drain - AutoCAD_GIS.dwg (DR-4707-21) - 12/28/2024 11:28:07 AM - chad.arnabough

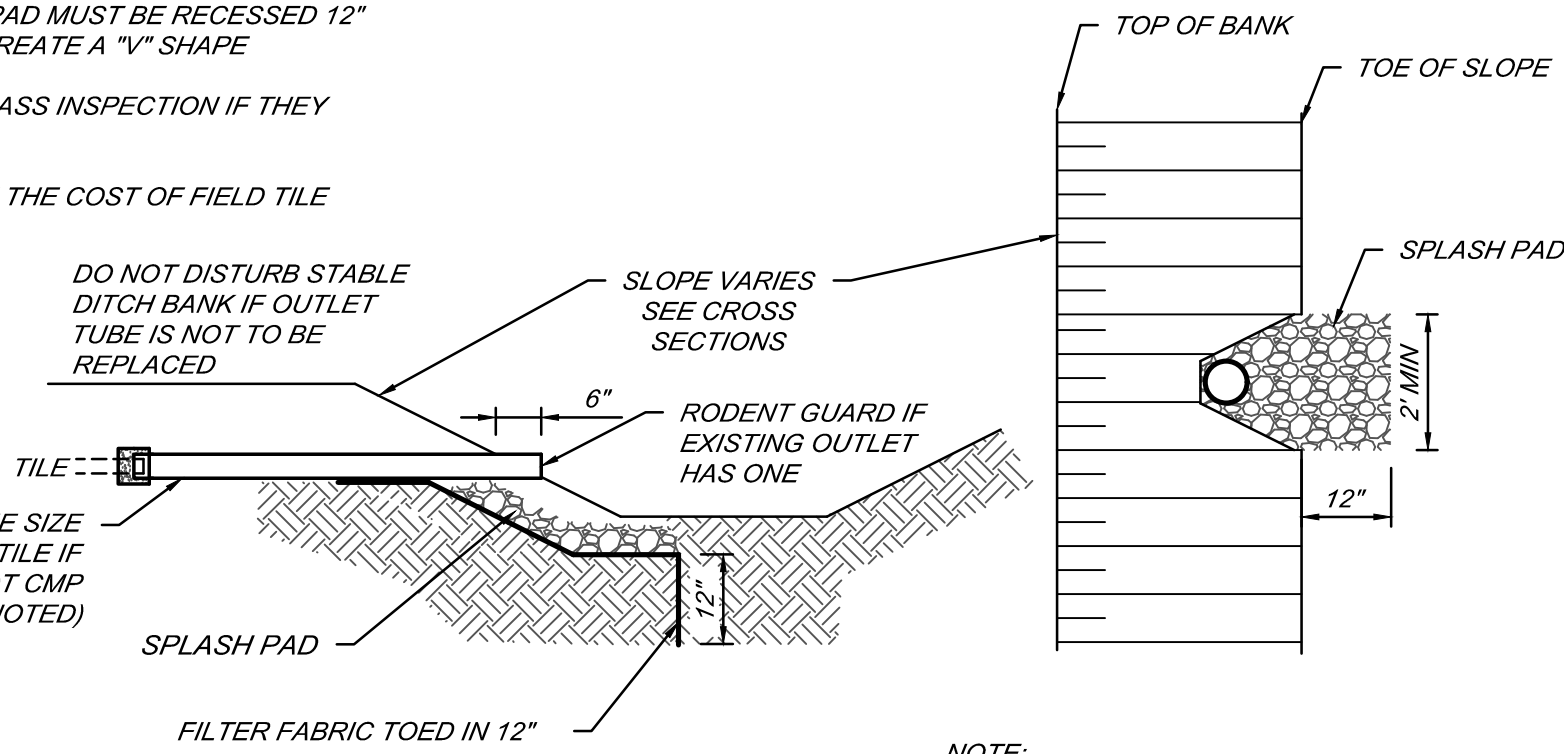
NOTE:
CENTERLINE OF SPLASH PAD MUST BE RECESSED 12" DEEPER THAN BANK TO CREATE A "V" SHAPE

SPLASH PADS WILL NOT PASS INSPECTION IF THEY ARE NOT "V" SHAPED

SPLASH PAD INCLUDED IN THE COST OF FIELD TILE OUTLET

DO NOT DISTURB STABLE DITCH BANK IF OUTLET TUBE IS NOT TO BE REPLACED

10' OF CMP OR PVC ONE SIZE LARGER THAN FIELD TILE IF NOT CMP (UNLESS OTHERWISE NOTED)

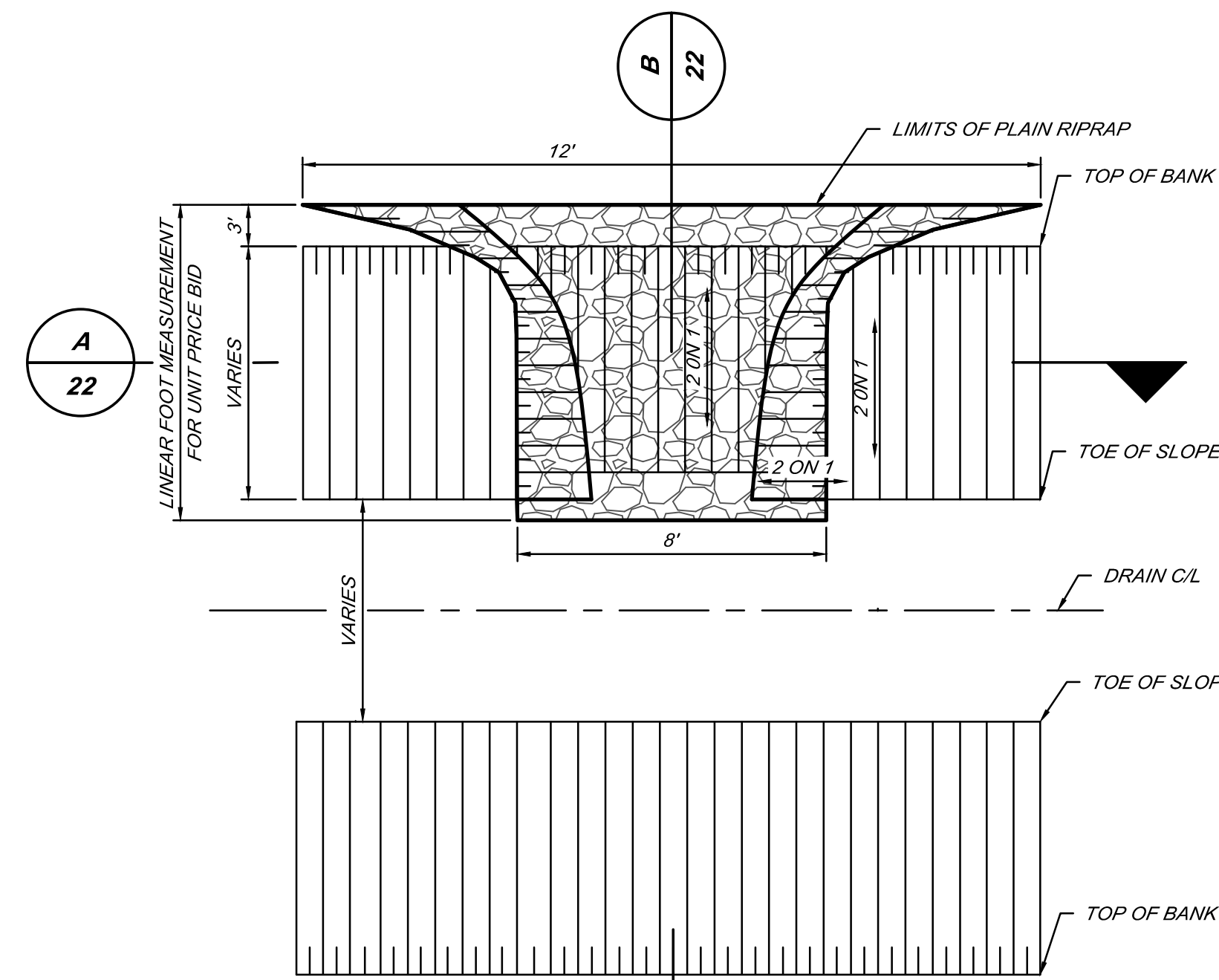


FIELD TILE OUTLET DETAIL
NOT TO SCALE

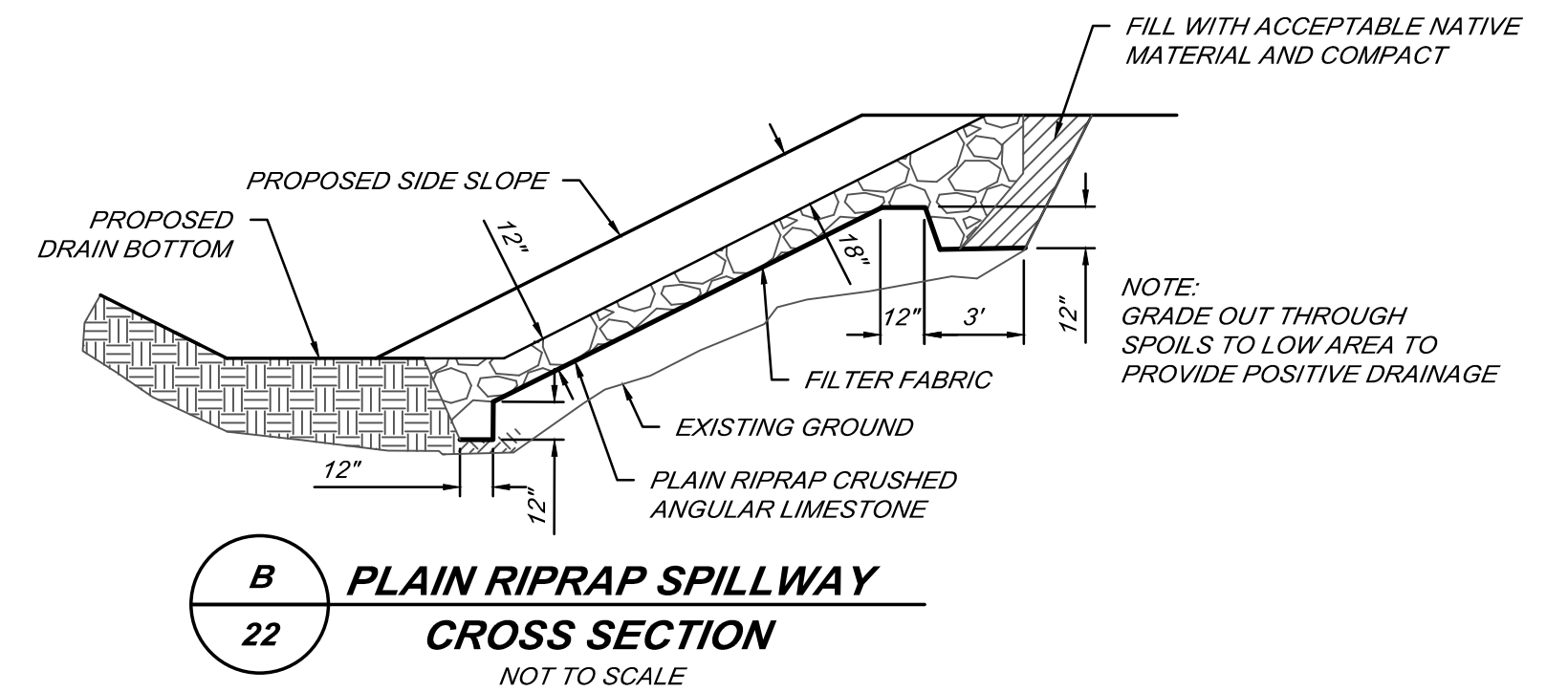
NOTE:
IF EXISTING TILE IS PLASTIC:
CONTRACTOR SHALL SLIDE CMP OR PVC TILE OUTLET APPROX 18" OVER EXISTING TILE AND WRAP JOINT WITH 2" WIDE BAND OF FILTER FABRIC

IF EXISTING TILE IS CLAY OR CONCRETE:
CONTRACTOR SHALL PROVIDE 12" WIDE x 3" THICK CONCRETE COLLAR AT JOINT

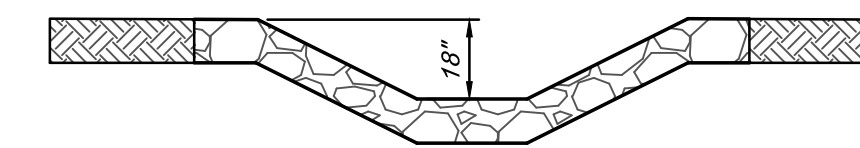
IF EXISTING TILE IS CMP:
CONTRACTOR SHALL ATTACH NEW FIELD TILE OUTLET WITH MANUFACTURER SUPPLIED COLLAR



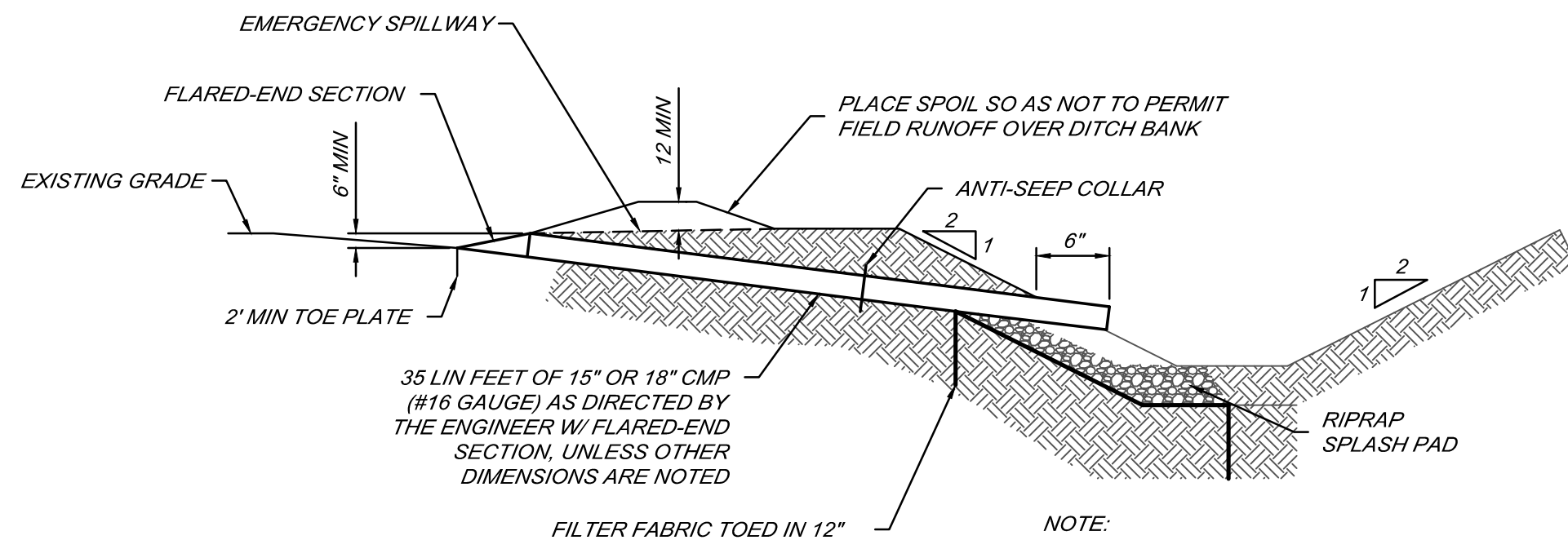
PLAIN RIPRAP SPILLWAY PLAN VIEW
NOT TO SCALE



PLAIN RIPRAP SPILLWAY CROSS SECTION
NOT TO SCALE

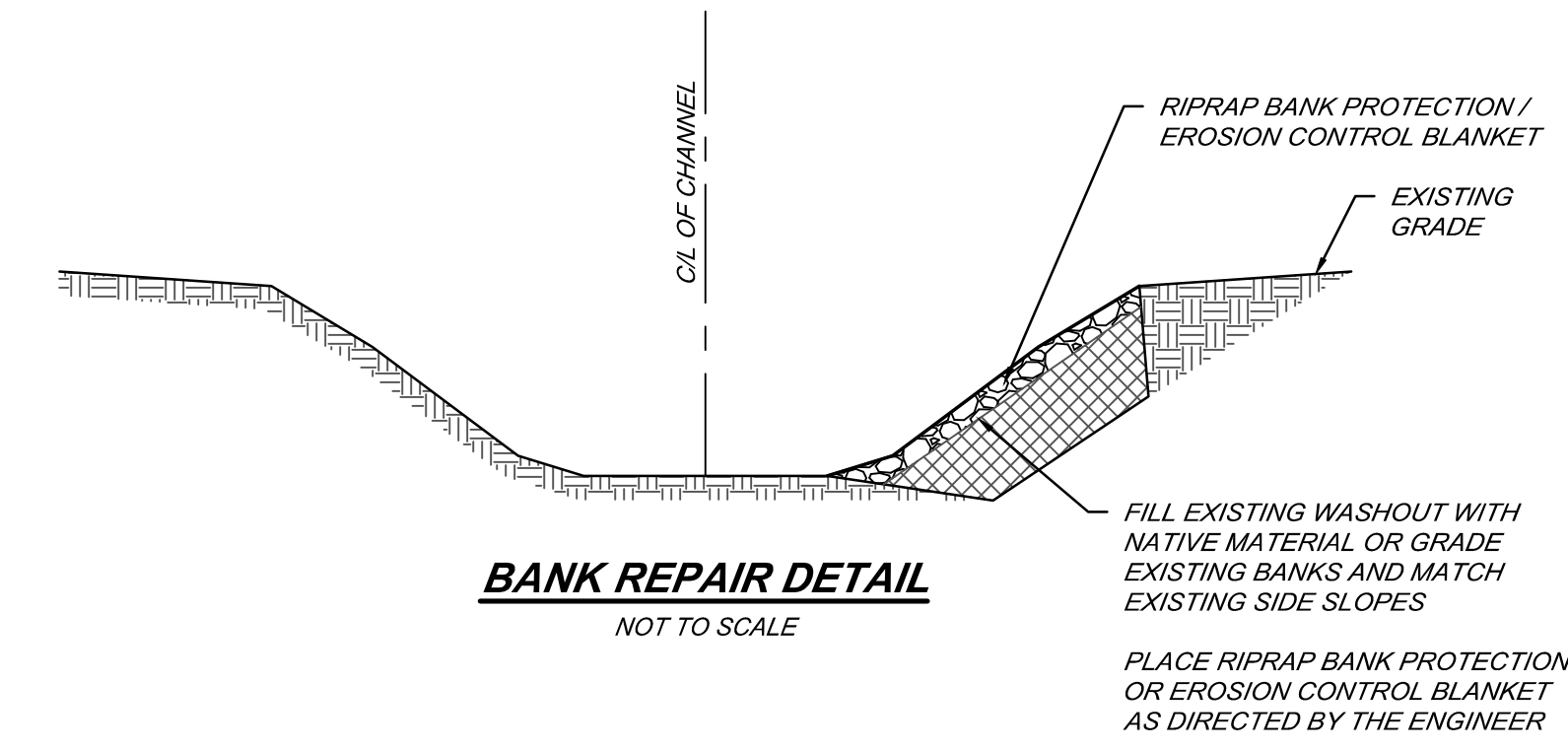


PLAIN RIPRAP SPILLWAY CROSS SECTION
NOT TO SCALE

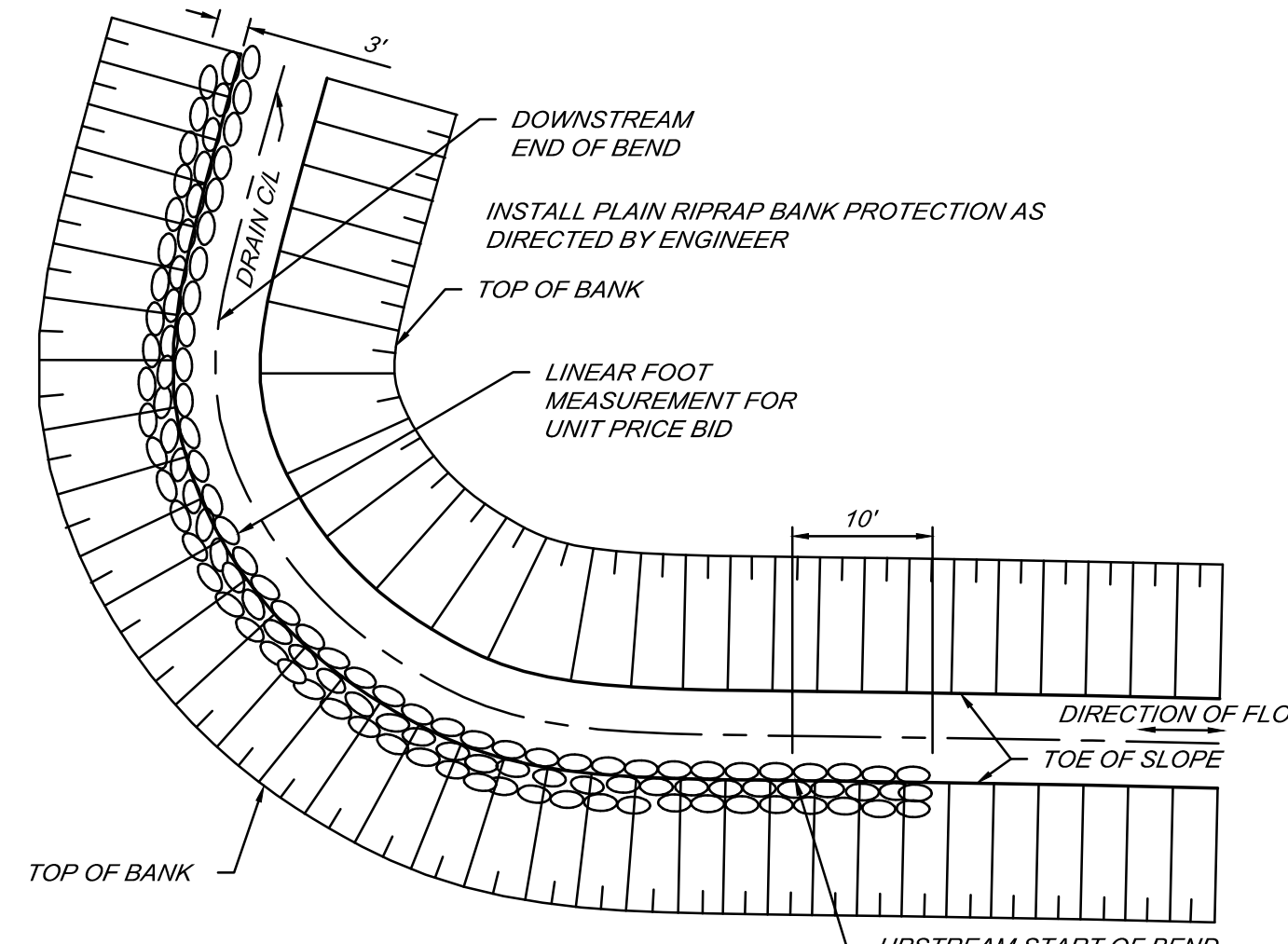


NOTE:
CENTERLINE OF SPLASH PAD MUST BE RECESSED 12" DEEPER THAN BANK TO CREATE A "V" SHAPE

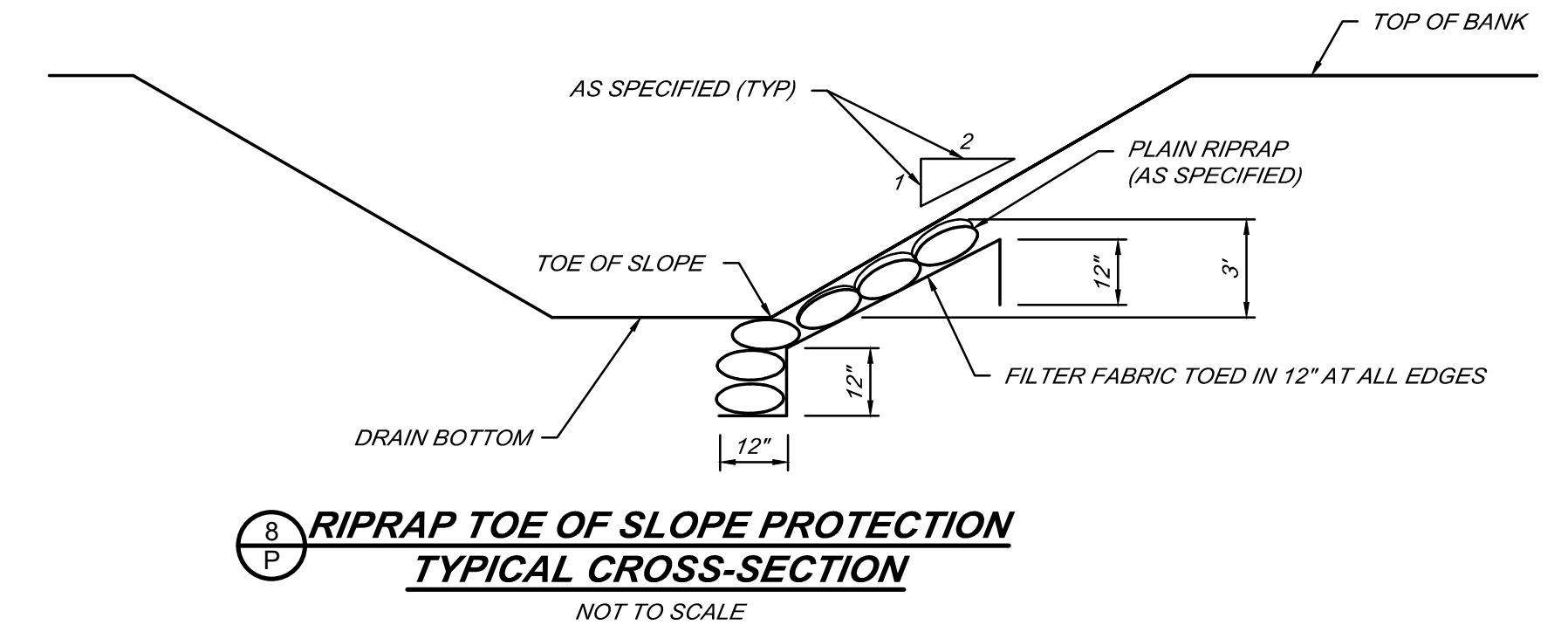
SPLASH PADS WILL NOT PASS INSPECTION IF THEY ARE NOT "V" SHAPED



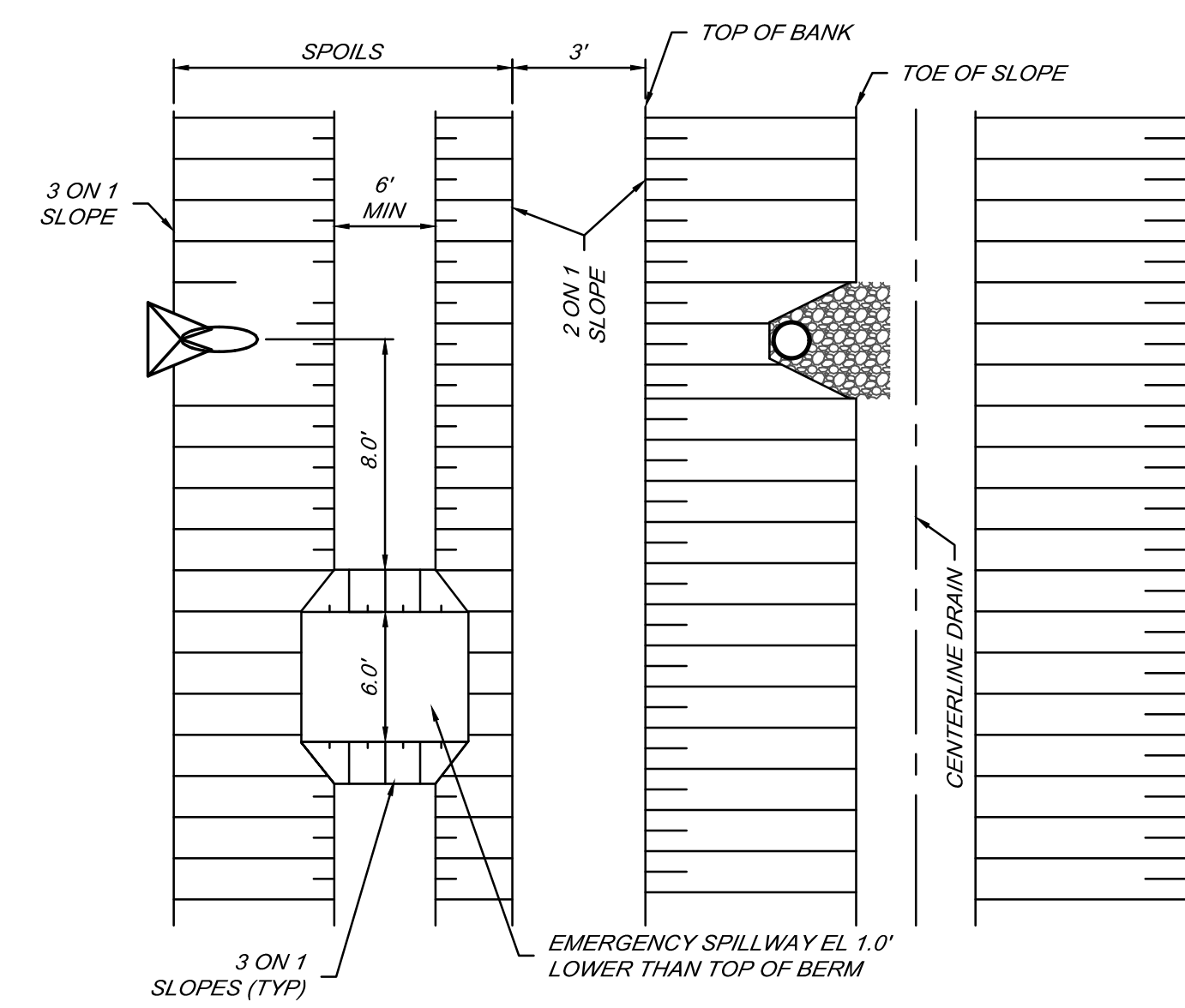
BANK REPAIR DETAIL
NOT TO SCALE



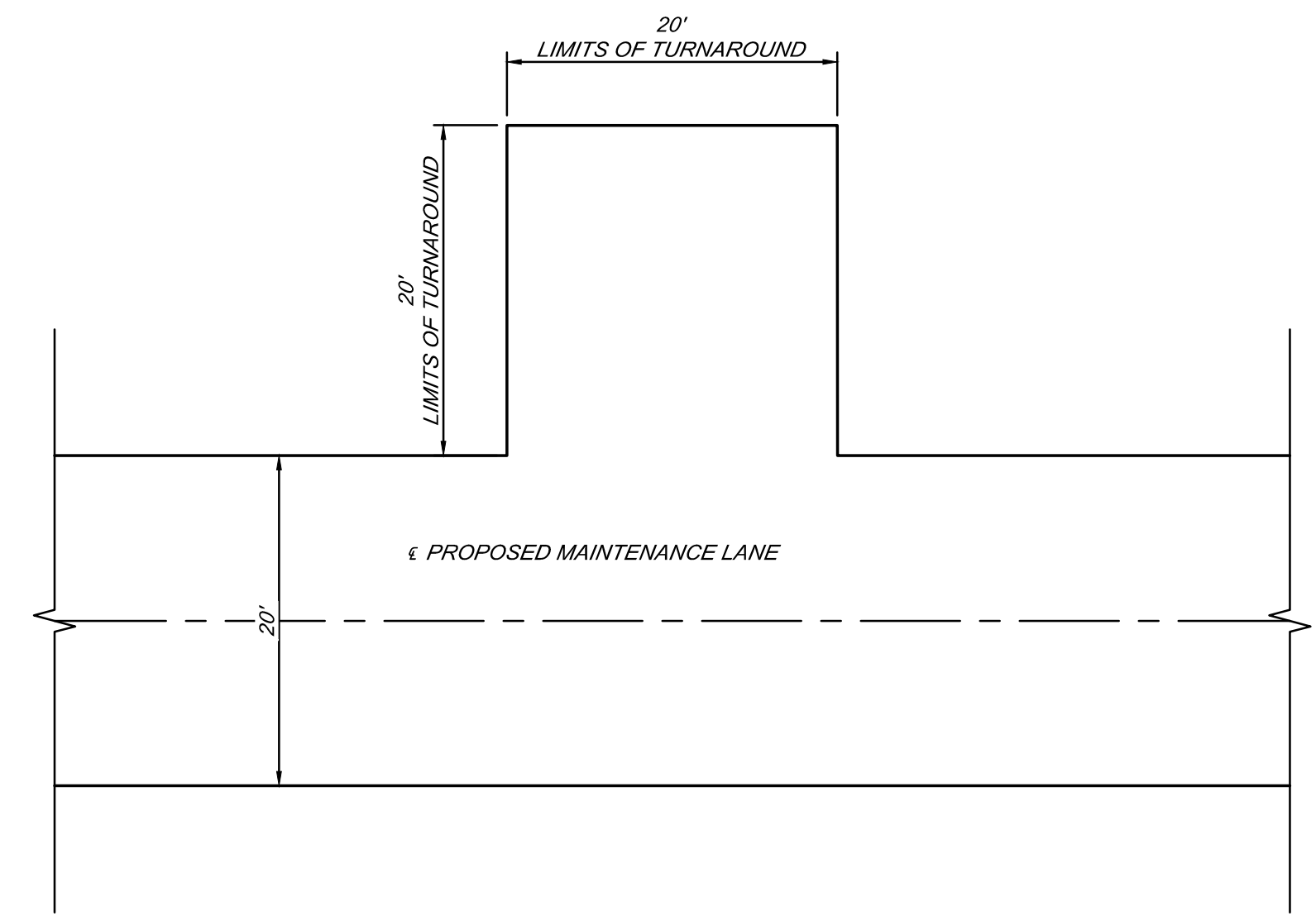
RIPRAP TOE OF SLOPE PROTECTION PLAN VIEW
NOT TO SCALE



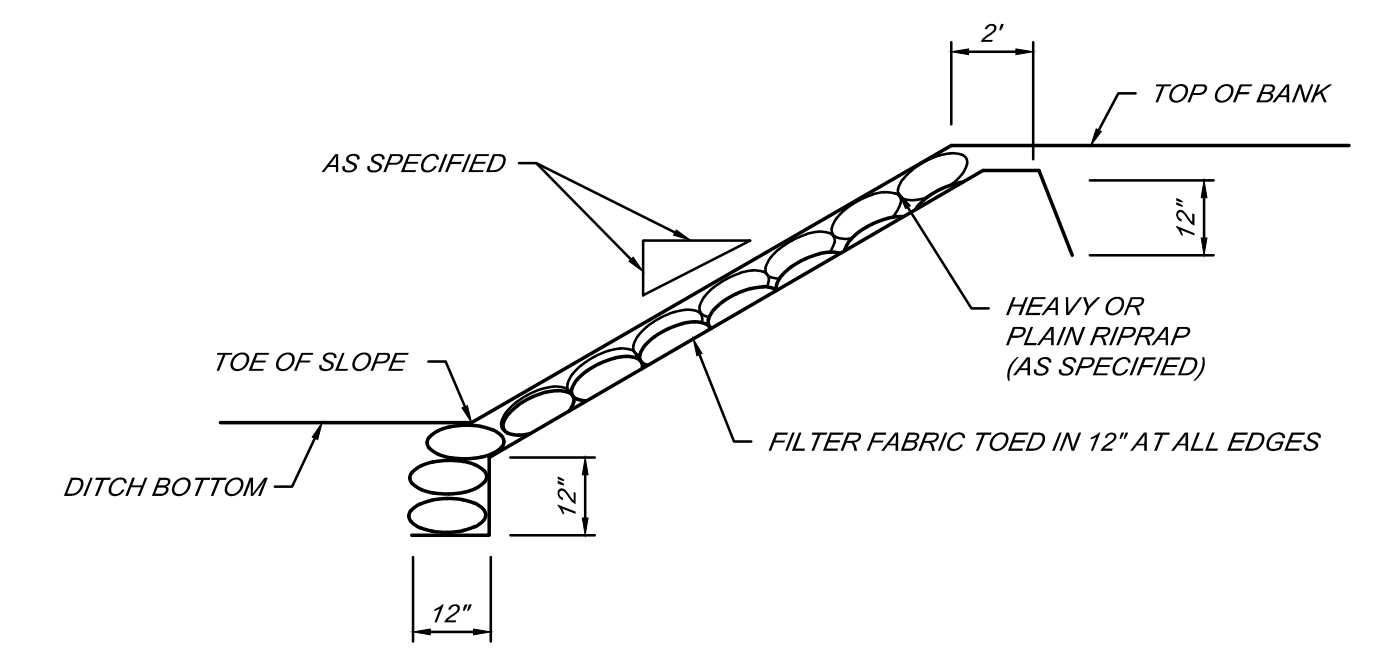
RIPRAP TOE OF SLOPE PROTECTION TYPICAL CROSS-SECTION
NOT TO SCALE



SURFACE OUTLET TUBE DETAIL
NOT TO SCALE



MAINTENANCE LANE - TURNAROUND
NOT TO SCALE



RIPRAP BANK PROTECTION
NOT TO SCALE

BY	MARK	REVISIONS	DATE
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<p>MARSH CREEK #2 DRAIN SAGINAW COUNTY, MICHIGAN</p>			
<p>STANDARD DETAILS</p>			
<p>DE. BY: PCC/CDV DR. BY: MJC</p>		<p>CH. BY: CDV APP. BY: NDC</p>	
		<p>PROJECT NO. 135292SG2023</p>	
<p>STDS.</p>		<p>SHEET 22 OF 23</p>	
<p>DATE: DECEMBER, 2024 SCALE: SCALE</p>		<p>FILE NO. DR-4707-22</p>	
		<p>DR 22</p>	

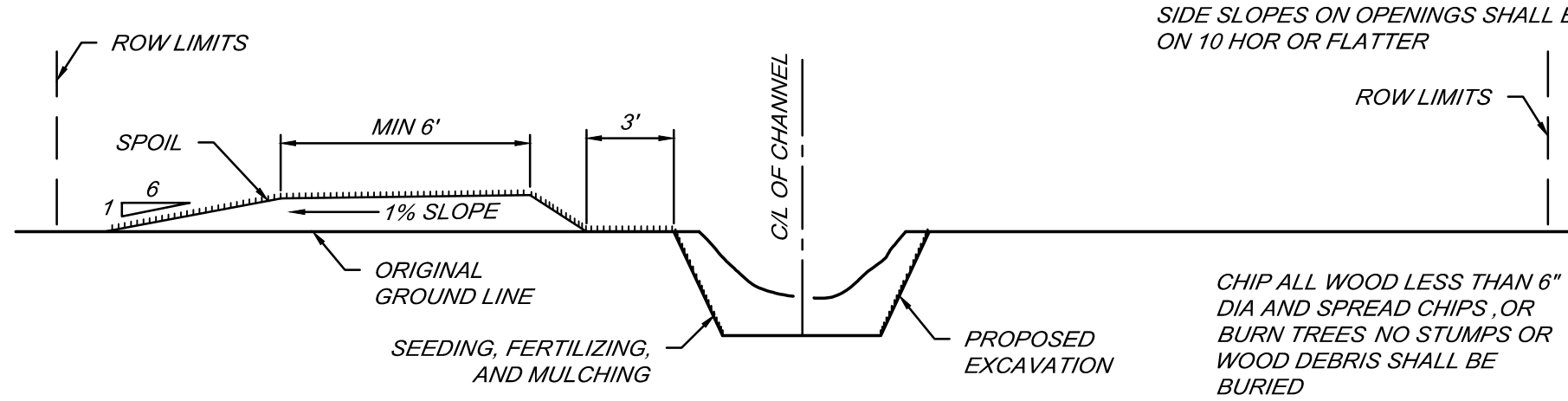
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Saginaw, MI 48607
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P:\proj\2023\135292SG2023 - Marsh Creek #2 Drain - AutoCAD_General.dwg (R-4707-22-22_DTE) PLS.swp 13/06/2024 11:29:09 AM cad.dwg (nonscale)

EXCAVATE FROM ONLY ONE SIDE OF DRAIN AS DESIGNATED ON PLANS OR DETERMINED BY ENGINEER

FOR EXCAVATION FROM ONE SIDE OF DRAIN, OPPOSITE SIDE OF DRAIN MUST BE CLEARED TO TOP OF BANK

LEAVE OPENINGS IN DEBRIS PILE AND SPOIL BANK WHERE NECESSARY SO THAT NO PONDING OF SURFACE WATER OCCURS



PROVIDE 4" TOPSOIL IN LAWN AREAS NO SPOILS WILL BE LEVELED IN LAWN AREAS UNLESS INDICATED ON PLAN OR WITH WRITTEN PERMISSION FROM LANDOWNER

FOR EXCAVATION FROM ONE SIDE OF DRAIN, OPPOSITE SIDE OF DRAIN MUST BE CLEARED TO TOP OF BANK

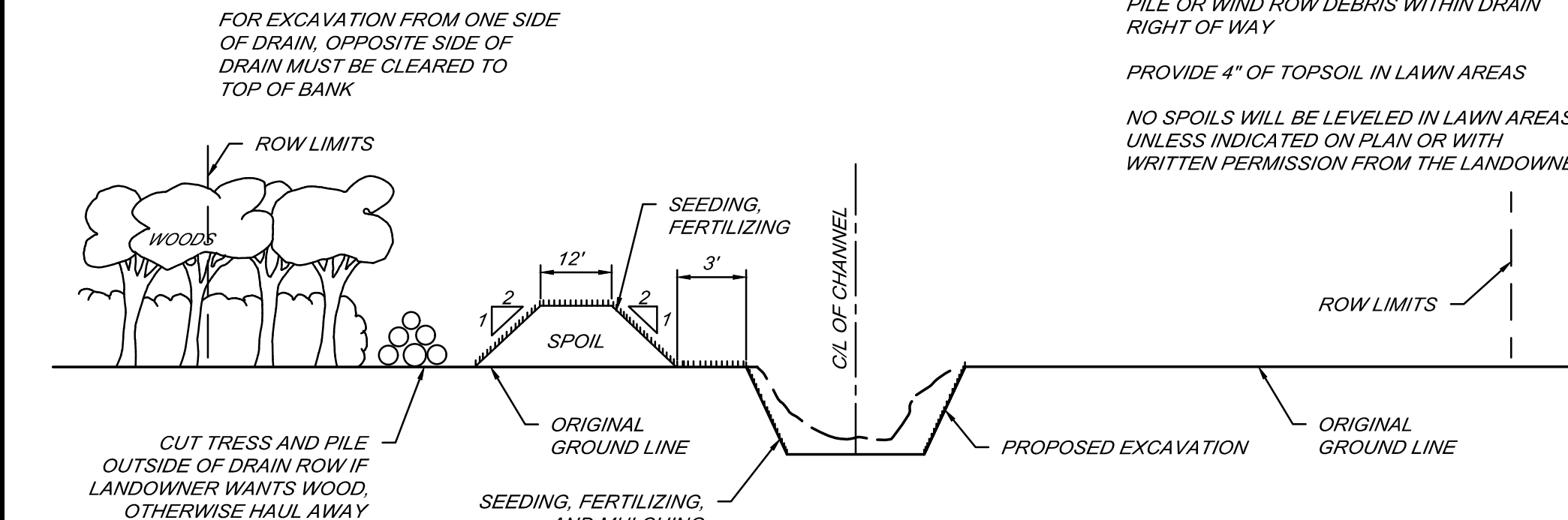
SEED AND RAKE DAILY SEE SPECIFICATION FOR APPLICATION RATES

PILE OR WIND ROW DEBRIS WITHIN DRAIN RIGHT OF WAY

PROVIDE 4" OF TOPSOIL IN LAWN AREAS

NO SPOILS WILL BE LEVELED IN LAWN AREAS UNLESS INDICATED ON PLAN OR WITH WRITTEN PERMISSION FROM THE LANDOWNER

SPOIL LEVELING DETAIL "A"
NOT TO SCALE

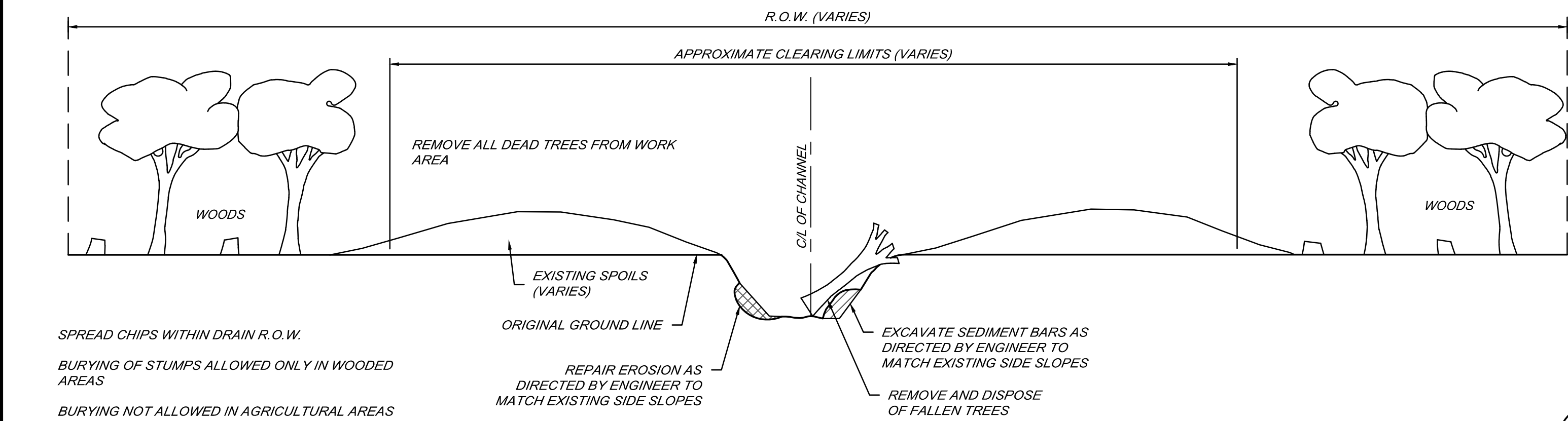


LEAVE OPENINGS IN DEBRIS PILE AND SPOIL BANK WHERE NECESSARY SO THAT NO PONDING OF SURFACE WATER OCCURS

CUT TREES AND PILE OUTSIDE OF DRAIN ROW IF LANDOWNER WANTS WOOD, OTHERWISE HAUL AWAY

SEED AND RAKE DAILY SEE SPECIFICATION FOR APPLICATION RATES

SPOIL LEVELING DETAIL "B"
NOT TO SCALE

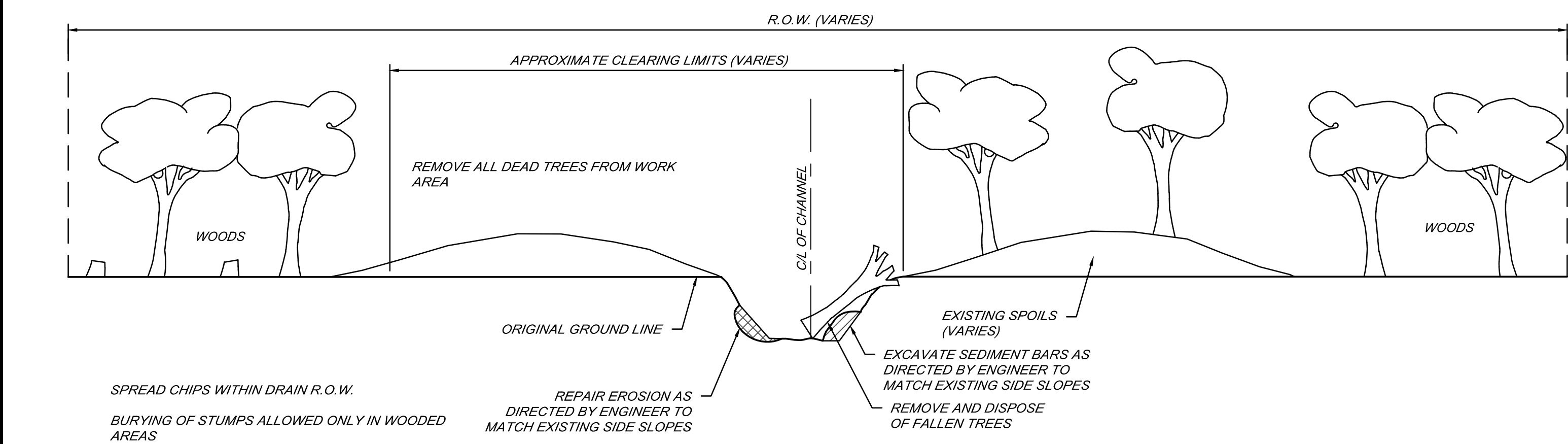


SPREAD CHIPS WITHIN DRAIN R.O.W.

BURYING OF STUMPS ALLOWED ONLY IN WOODED AREAS

BURYING NOT ALLOWED IN AGRICULTURAL AREAS

SITE CLEARING WITH MAINTENANCE LANE DETAIL - BOTH SIDES
NOT TO SCALE

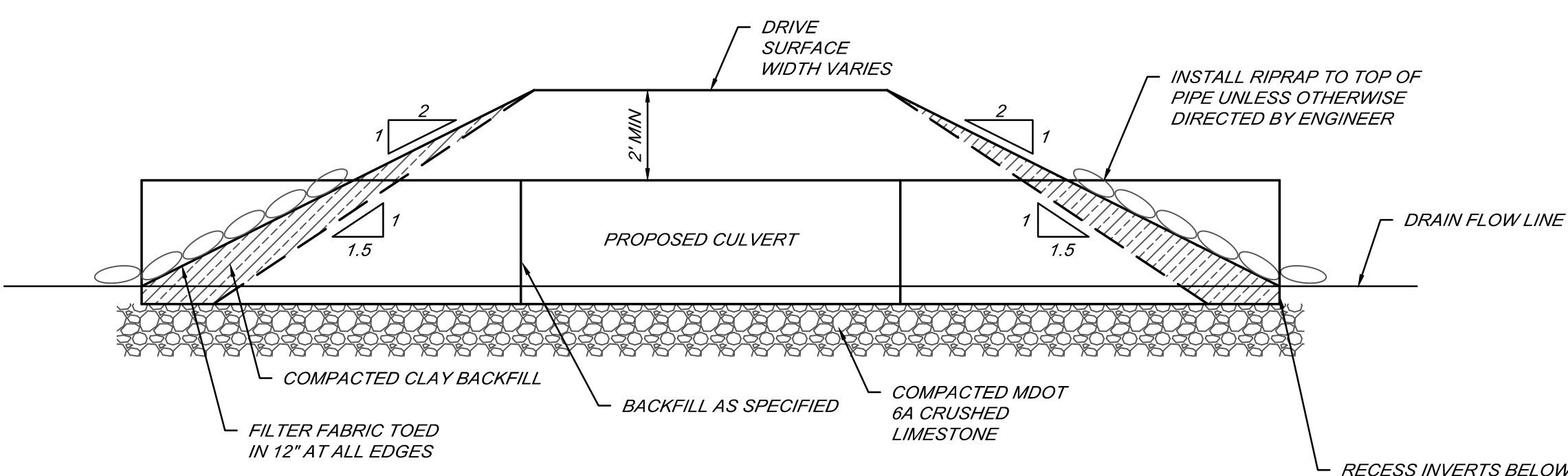


SPREAD CHIPS WITHIN DRAIN R.O.W.

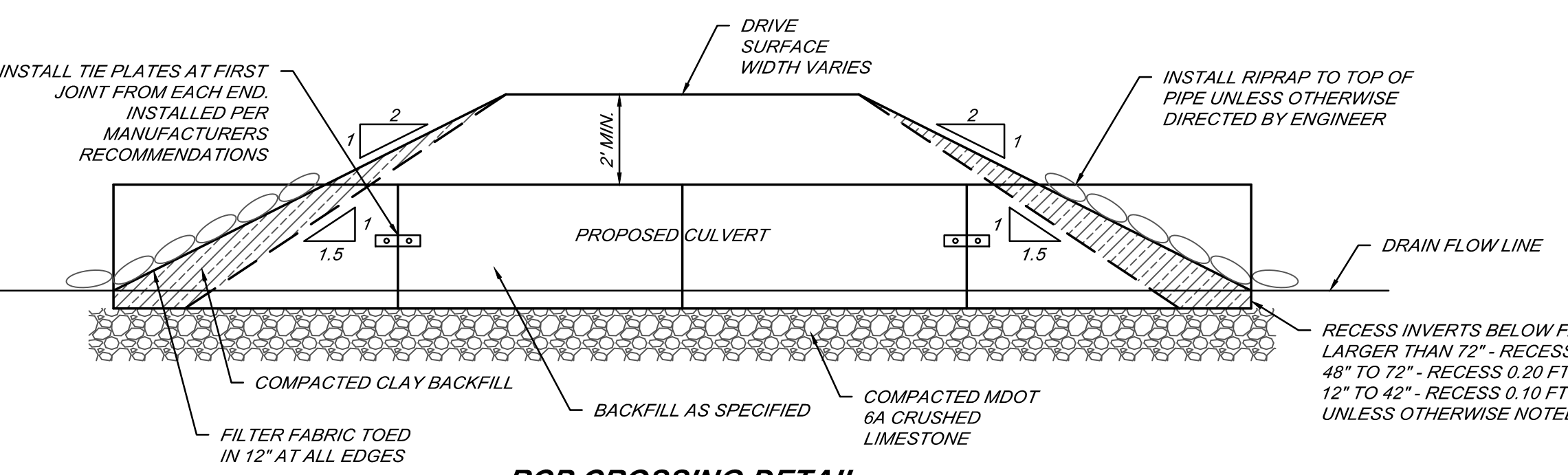
BURYING OF STUMPS ALLOWED ONLY IN WOODED AREAS

BURYING NOT ALLOWED IN AGRICULTURAL AREAS

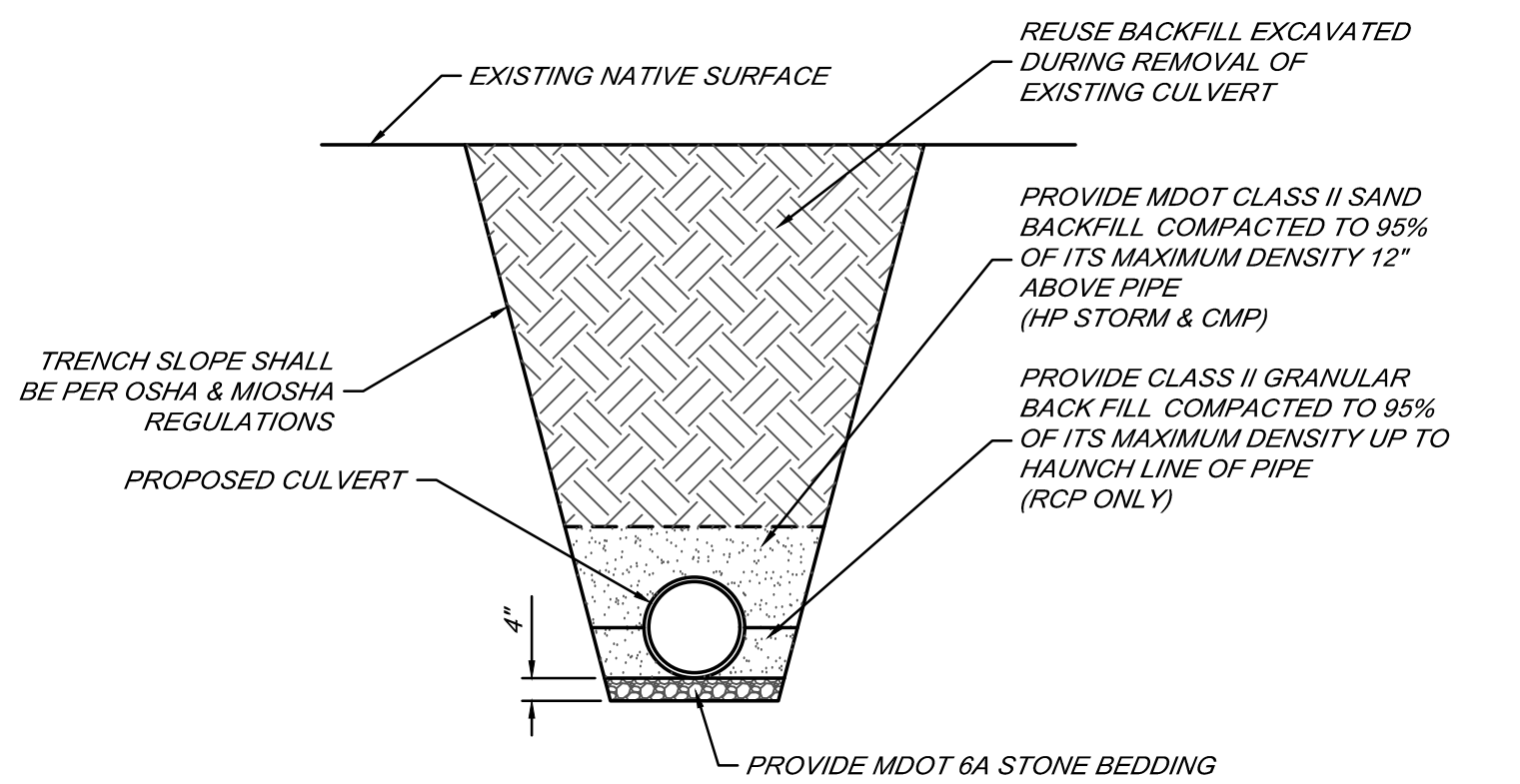
SITE CLEARING WITH MAINTENANCE LANE DETAIL - ONE SIDE
NOT TO SCALE



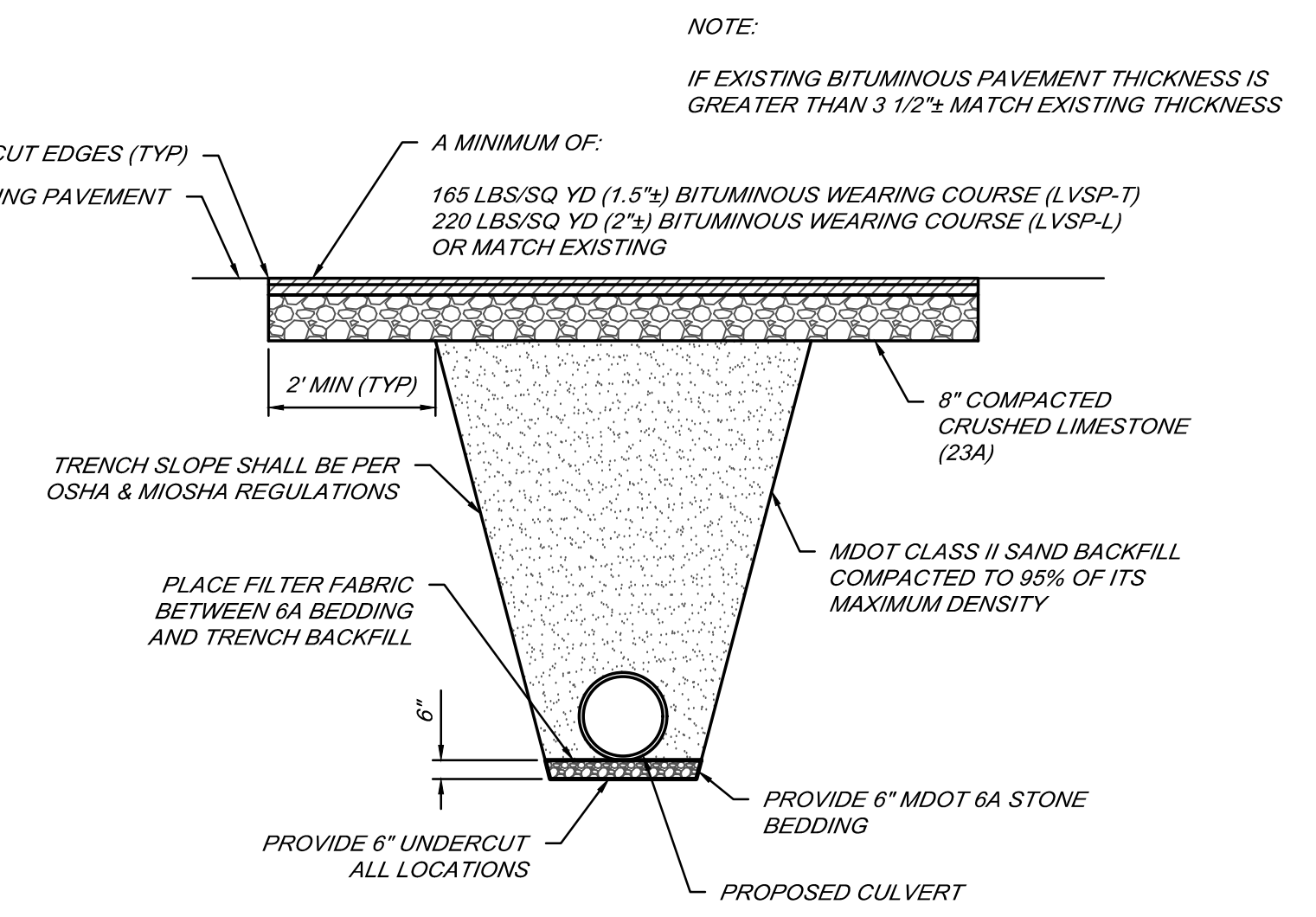
HP STORM CROSSING DETAIL
NOT TO SCALE



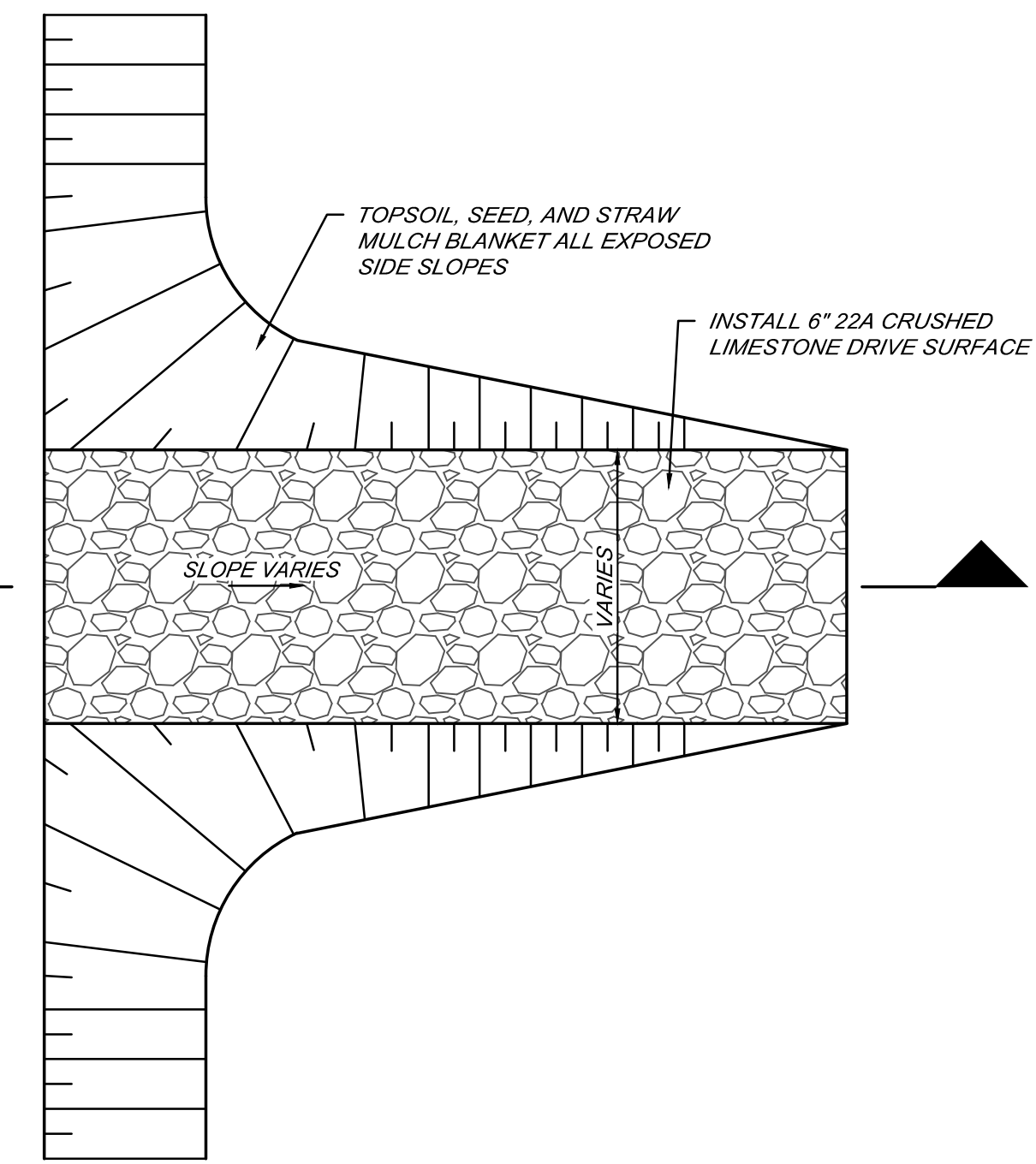
RCP CROSSING DETAIL
NOT TO SCALE



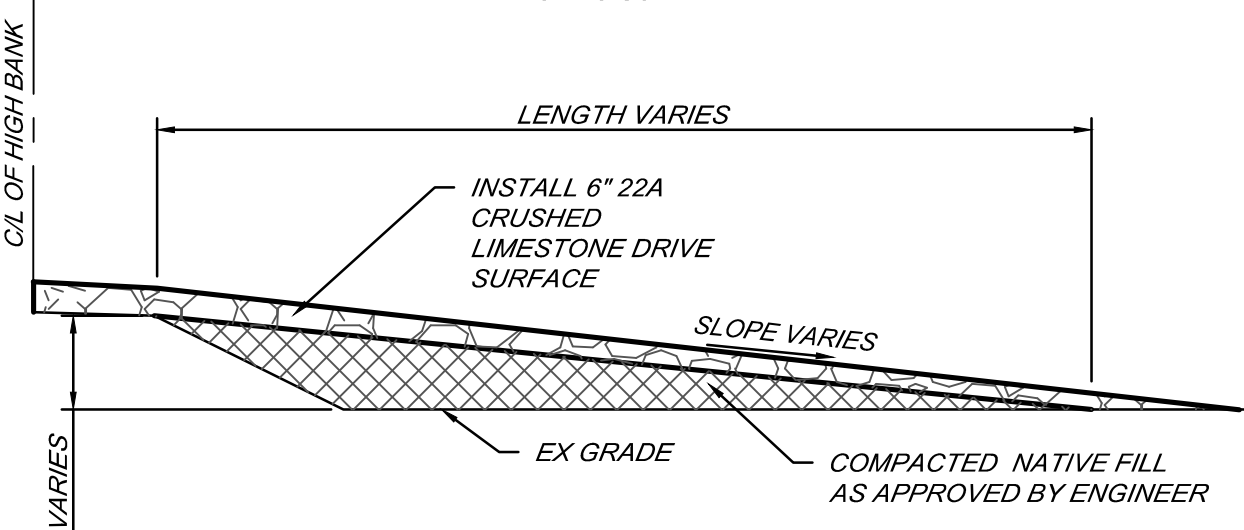
TYPICAL NATIVE DRIVE CROSSING DETAIL
NOT TO SCALE



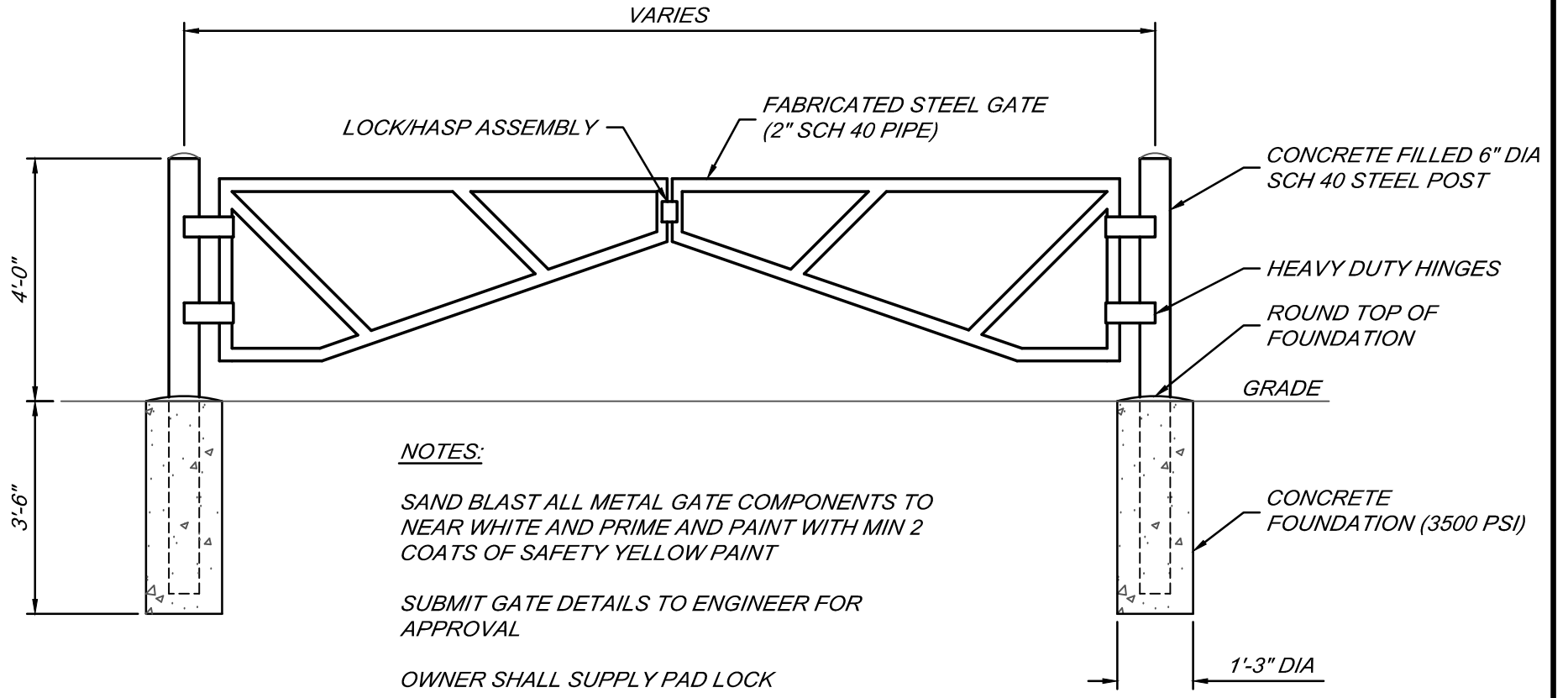
SCRC BITUMINOUS PAVEMENT RESTORATION
NOT TO SCALE



ACCESS RAMP - PLAN VIEW
NOT TO SCALE



ACCESS RAMP - PROFILE VIEW
NOT TO SCALE



DOUBLE VEHICLE GATE DETAIL
NOT TO SCALE

NOTES:

SAND BLAST ALL METAL GATE COMPONENTS TO NEAR WHITE AND PRIME AND PAINT WITH MIN 2 COATS OF SAFETY YELLOW PAINT

SUBMIT GATE DETAILS TO ENGINEER FOR APPROVAL

OWNER SHALL SUPPLY PAD LOCK

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<p>STDS.</p>		<p>PROJECT NO. 135292SG2023</p>	
<p>DATE: DECEMBER, 2024 SCALE:</p>		<p>SHEET 23 OF 23 FILE NO. DR-4707-23</p>	
		<p>DR 23</p>	

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 CHANG, SEAN@SPICERGROUP.COM