

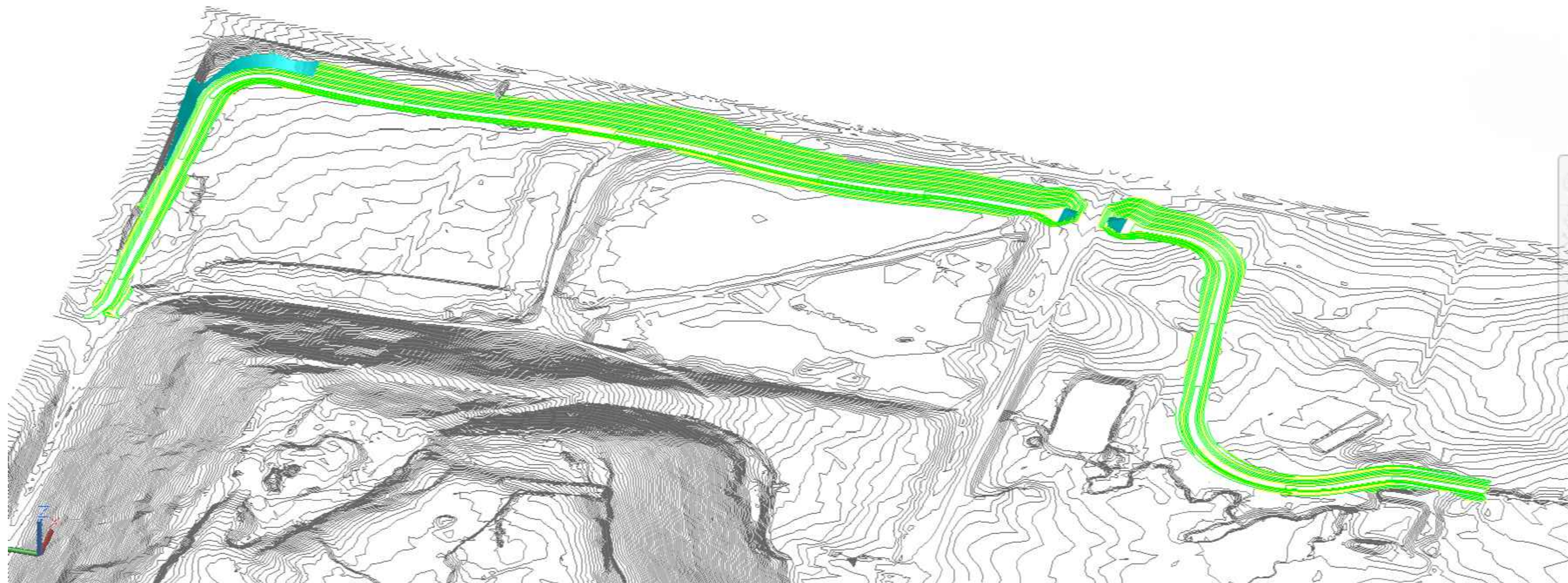
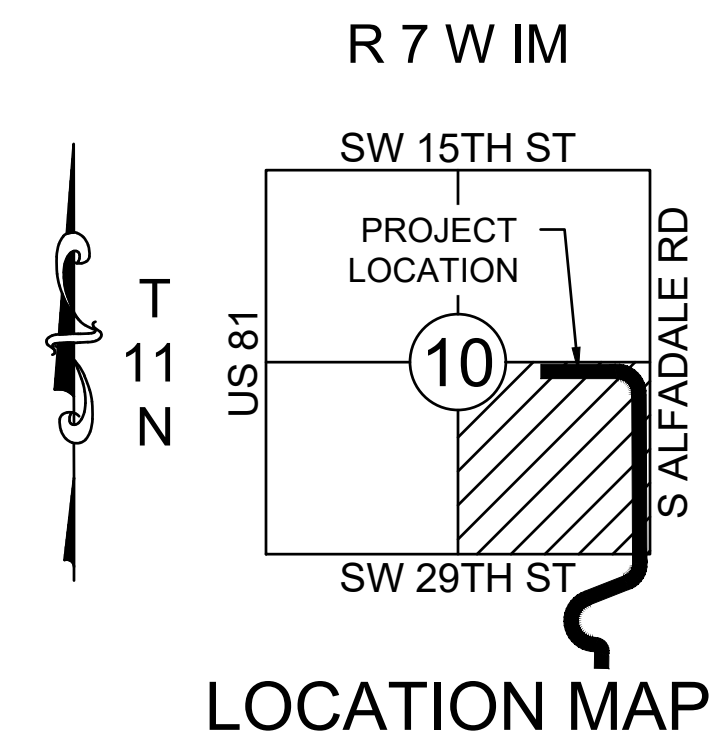
C.H. GUERNSEY & COMPANY  
 5555 N. GRAND BLVD.  
 OKLAHOMA CITY, OK 73112 405.416.8100  
 C.A. ARCHITECTURE: #00577 EXPIRES JUNE 30, 2025  
 C.A. ENGINEERING: #10 EXPIRES JUNE 30, 2024

OKLAHOMA ENVIRONMENTAL MANAGEMENT AUTHORITY

# CANADIAN COUNTY LANDFILL CHANNEL RELOCATION

20435 SW 29th ST  
 UNION CITY, OK 73090

CONSTRUCTION DOCUMENTS  
 26 JANUARY 2024



SHEET INDEX	
Sheet Number	Sheet Title
C-001	COVER SHEET
C-002	LEGEND & GENERAL NOTES
CS100	OVERALL SITE PLAN
C-201	PLAN & PROFILE STA 10+00 TO STA 15+00
C-202	PLAN & PROFILE STA 15+00 TO STA 20+00
C-203	PLAN & PROFILE STA 20+00 TO STA 25+00
C-204	PLAN & PROFILE STA 25+00 TO STA 30+00
C-205	PLAN & PROFILE STA 30+00 TO STA 35+00
C-206	PLAN & PROFILE STA 35+00 TO STA 40+00
C-207	PLAN & PROFILE STA 40+00 TO STA 45+00
C-208	PLAN & PROFILE STA 45+00 TO STA 50+00
C-209	PLAN & PROFILE STA 50+00 TO STA 55+00
C-210	PLAN & PROFILE STA 55+00 TO STA 56+04
CG100	EROSION CONTROL PLAN
C-501	CIVIL DETAILS
C-502	EROSION CONTROL NOTES & DETAILS



DESIGNED BY: D ANDERSON  
 DRAWN BY: B BIESEMEYER  
 DATE: 26 JAN 2024  
 PROJECT NO.: OK07848-010

MRK	DESCRIPTION	DATE	BY

OEMA UNION CITY LANDFILL CHANNEL MODIFICATION  
 20435 SW 29th ST, UNION CITY, OK 73090

COVER SHEET



C-001

1/26/2024 11:27 AM  
 Q:\E\13-State-County\OE\MA\OK\70484-002-Union City Landfill Channel\006 CAD\OK70484-002\_C-001.dwg

- GENERAL NOTES:**
- DO NOT SCALE:** VERIFY ALL DIMENSIONS AND LAYOUT PRIOR TO CONSTRUCTION. ALL DIMENSIONS SHALL BE CHECKED AGAINST EXIST CONDITIONS ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTING OFFICER IMMEDIATELY.
  - SHOP DRAWINGS SHALL BE PREPARED BY THE FABRICATOR. COPYING OF THESE CONSTRUCTION DOCUMENTS FOR USE AS SHOP DRAWINGS WILL NOT BE PERMITTED.
  - DESIGN IS VOID AFTER TWO YEARS FROM ORIGINAL DATE OF ISSUE, UNLESS UPDATED TO ACCEPTABLE CODES AND PRACTICES AT THAT TIME.
  - INFORMATION PROVIDED ON THESE DRAWINGS RELATED TO EXISTING CONDITIONS IS BASED ON AVAILABLE REFERENCE DOCUMENTS AND LIMITED FIELD OBSERVATION. IMMEDIATELY REPORT TO AND AWAIT DIRECTION FROM THE CONTRACTING OFFICER IF ANY DISCREPANCY BETWEEN THE CONTRACT DOCUMENTS AND THE EXISTING CONDITIONS IS DISCOVERED.
  - SUPPORT, BRACE AND SECURE EXISTING STRUCTURES AS REQUIRED. THE SUBCONTRACTOR IS SOLELY RESPONSIBLE FOR THE SAFETY OF EXISTING STRUCTURES DURING CONSTRUCTION. FIELD VERIFY ALL EXISTING DIMENSIONS WHICH AFFECT THE NEW CONSTRUCTION PRIOR TO ORDERING MATERIALS.
  - REPLACE IN KIND ANY EXISTING CONDITIONS DISTURBED DURING CONSTRUCTION INCLUDING BUT NOT LIMITED TO VEGETATION, PAVEMENT, CURB AND GUTTER, DRAINAGE FEATURES, UTILITIES, TRAFFIC SIGNAL DETECTION LOOPS, AND ALL OTHER SITE FEATURES AND RELATED APPURTENANCES.
  - IF FIELD CONDITIONS ARE FOUND TO BE DIFFERENT THAN SHOWN ON THE PLANS, NOTIFY THE ENGINEER AND CONTRACTING OFFICER IMMEDIATELY SO THAT APPROPRIATE ACTION CAN BE TAKEN.
  - CAREFULLY PRESERVE ALL MONUMENTS, BENCHMARKS, RANGE TIES, AND PROPERTY MARKERS. RESET ALL DISTURBED SURVEY MARKERS, INCLUDING MONUMENTS, SECTION CORNERS, ALIQUOT CORNER MARKERS, ETC.
  - EXISTING UTILITY LOCATIONS SHOWN ON THE DRAWING ARE APPROXIMATE. OBTAIN EXACT LOCATION AND ELEVATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.
  - EXISTING UTILITIES IDENTIFIED ON THESE DRAWINGS WERE COMPILED FROM INFORMATION PROVIDED BY UTILITY OWNERS, GIS DATABASE, POTHOLES, AND/OR FIELD OBSERVATIONS. EXISTING UTILITIES SHOWN ON THE DRAWINGS ARE APPROXIMATE LOCATIONS AND NOT ALL UTILITIES MAY BE SHOWN. OBTAIN EXACT LOCATIONS AND ELEVATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.
  - THE AREA OF WORK FOR THIS PROJECT IS SHOWN ON THE PLANS. LIMIT ALL CONSTRUCTION ACTIVITIES AND DISTURBANCES TO THIS AREA.
  - SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ALL TESTING, OBSERVATIONS, AND INSPECTIONS, UNLESS OTHERWISE NOTED.
  - PROVIDE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PER SPECIFICATION.
  - COMPLY WITH ALL ENVIRONMENTAL REGULATIONS PER SPECIFICATIONS AND CONTRACTING OFFICER.
  - THE PLANS AND REFERENCED CONSTRUCTION SPECIFICATIONS DESCRIBE THE WORK CONTEMPLATED AND IDENTIFY THE WORK TO BE DONE AND THE MATERIALS NECESSARY FOR CONSTRUCTION. THESE PLANS ARE INTENDED TO BE FULLY EXPLANATORY. THE PLAN AND SPECIFICATION DOCUMENTS SHALL BE CONSTRUED AND INTERPRETED AS A WHOLE AND THEREFORE, ANYTHING SHOWN, INDICATED OR SPECIFIED IN ONE AND NOT THE OTHER, SHALL BE INTERPRETED AS BEING SHOWN, INDICATED OR SPECIFIED IN BOTH.
  - MINOR DEVIATIONS FROM THE DESIGN LAYOUT ARE ANTICIPATED AND SHALL BE CONSIDERED INCIDENTAL AND INCLUDED AS AN ORDINARY PART OF THE WORK. NO CHANGES THAT ALTER THE CHARACTER OF THE WORK CAN BE MADE OR WILL BE PERMITTED BY THE OWNER WITHOUT THE ISSUANCE OF A CHANGE ORDER.
  - NO PLEA OF IGNORANCE OF EXISTING CONDITIONS OR OF DIFFICULTIES OR CONDITIONS ENCOUNTERED IN THE EXECUTION OF THE WORK WILL BE ACCEPTED AS AN EXCUSE FOR ANY FAILURE OR OMISSION. FULFILL EVERY DETAIL OF ALL OF THE REQUIREMENTS IN THE CONTRACT DOCUMENTS GOVERNING THE WORK.

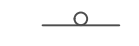




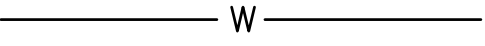
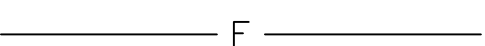

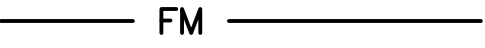

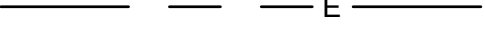

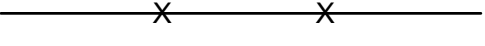
- CAST IN PLACE CONCRETE - GENERAL:**
- ALL EXPOSED EDGES OF CONCRETE TO BE CHAMFERED 1/2", UNLESS OTHERWISE NOTED.
  - ALL REINFORCING BARS SHALL BE DEFORMED BILLET STEEL CONFORMING TO ASTM A 615 - GRADE 60 UNLESS OTHERWISE NOTED.
  - PROVIDE ALL FORMWORK AND SHORING DESIGN.
  - PROTECT OF THE WORK. ANY CONCRETE SUFFERING DAMAGE SUCH AS GRAFFITI, TACK COAT SPRAY, FOOTPRINTS, RAIN DAMAGE, ETC., WILL BE REPAIRED OR REPLACED AT THE DIRECTION OF THE ENGINEER BY THE SUBCONTRACTOR AT THE SUBCONTRACTOR'S EXPENSE PRIOR TO FINAL ACCEPTANCE AND PAYMENT. IF ANY CONCRETE MUST BE REPLACED BECAUSE OF RAVELING AT THE JOINTS, IMPROPER JOINTS, RANDOM CRACKING, GRAFFITI, FOOTPRINTS, ETC., THE ENTIRE SLAB WILL BE REPLACED AT THE SUBCONTRACTOR'S EXPENSE.
  - PROTECT/GUARD ALL PROTRUDING REINFORCING STEEL AND/OR FORMWORK WITHIN THE WORK AREA ONTO WHICH WORKERS COULD FAIL TO ELIMINATE THE HAZARD OF IMPALEMENT.
  - TAKE APPROPRIATE MEASURES TO ENSURE THE SAFETY OF PEDESTRIANS DURING ALL CURB, GUTTER, AND SIDEWALK WORK.

- EROSION CONTROL NOTES - GENERAL:**
- A COPY OF THE EROSION CONTROL SITE PLAN MUST BE ON SITE AT ALL TIMES AND MADE AVAILABLE UPON REQUEST.
  - THE CONTRACTOR IS RESPONSIBLE FOR COMPLETING THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND SUBMITTING THE SWPPP AND ANY REQUIRED PERMITS TO ODEQ, CANADIAN COUNTY, THE CITY OF UNION CITY, AND ANY OTHER FEDERAL, STATE, OR LOCAL AUTHORITIES HAVING JURISDICTION.
  - THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL DEVICES; CONTRACTOR SHALL REPAIR OR REPLACE ALL DAMAGED EROSION CONTROL DEVICES PROMPTLY.



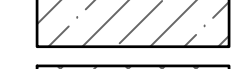

- SLOPE PROTECTION NOTES:**
- BASIS OF DESIGN IS PRESTO GEOSYSTEMS "GEOWEB" SLOPE AND SHORELINE PROTECTION SYSTEM. (HTTPS://WWW.PRESTOGEO.COM)
  - DELEGATED DESIGN: CONTRACTOR IS RESPONSIBLE FOR DESIGN OF SLOPE PROTECTION SYSTEM TO THE REQUIREMENTS GIVEN BELOW AND IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS. CONTRACTOR SHALL PROVIDE DESIGN CALCULATIONS FOR SLOPE PROTECTION SYSTEM, INCLUDING BUT NOT LIMITED TO, ANCHORAGE SYSTEM AND CELL SIZE CALCULATIONS, TO BE SIGNED BY A LICENSED PROFESSIONAL ENGINEER. CONTRACTOR SHALL PROVIDE MANUFACTURER'S DETAIL AND INSTALLATION DRAWINGS FOR THE SLOPE PROTECTION SYSTEM, AND SPECIFICATIONS FOR SAME, TO THE DESIGNER OF RECORD AND THE OWNER PRIOR TO INSTALLATION.
  - GEOCELL SYSTEM: POLYETHYLENE STRIPS ATTACHED TOGETHER TO FORM A WEBBING WHICH EXPANDS TO PROVIDE INTERLOCKED CELLS FOR FILL MATERIAL. CELL SIZE SHALL HAVE A LENGTH OF BETWEEN 8" AND 12", A WIDTH OF BETWEEN 8" AND 15", AND A DEPTH OF 6". POLYETHYLENE STRIPS SHALL BE PERFORATED.
  - GEOCELL ANCHORAGE: ANCHOR GEOCELL SYSTEM WITH CREST ANCHORAGE, GEOCELL ANCHORS, AND TOE ANCHORAGE:
    - CREST ANCHORAGE: ANCHOR GEOCELL SYSTEM AT TOP OF SLOPE WITH STAKES OR RODS, OF A SIZE, LENGTH, AND SPACING DETERMINED BY THE DELEGATED DESIGN PROFESSIONAL, WITH CLIPS OR OTHER ATTACHMENT DEVICES DESIGNED TO INTERFACE WITH THE GEOCELL SYSTEM.
    - GEOCELL ANCHORS: PROVIDE INTERMEDIATE ANCHORS TO ANCHOR GEOCELLS TO SUBGRADE OF SLOPE OF A TYPE AND AT A SPACING DETERMINED BY THE DELEGATED DESIGN PROFESSIONAL, WITH CLIPS OR OTHER ATTACHMENT DEVICES DESIGNED TO INTERFACE WITH THE GEOCELL SYSTEM.
    - TOE ANCHORAGE: ANCHOR GEOCELL SYSTEM AT TOE OF SLOPE WITH STAKES OR RODS, OF A SIZE, LENGTH, AND SPACING DETERMINED BY THE DELEGATED DESIGN PROFESSIONAL, WITH CLIPS OR OTHER ATTACHMENT DEVICES DESIGNED TO INTERFACE WITH THE GEOCELL SYSTEM.
  - GEOCELL FILL MATERIAL: FILL GEOCELL SYSTEM WITH AGGREGATE MATERIAL RECOMMENDED BY MANUFACTURER.

Contractor shall stockpile the excavated clay material (18,390 Cu Yd) from the other other material at Spoil Location A.


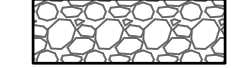
**NEW WORK LEGEND:**

-  SIGN
-  WHEEL STOP
-  ADA PARKING STALL
-  FIRE HYDRANT
-  BOLLARD
-  WATER LINE
-  FIRE LINE
-  SANITARY LINE
-  SANITARY FORCE MAIN
-  STORM LINE
-  ELECTRICAL LINE (UNDERGROUND)
-  COMM LINE (UNDERGROUND)
-  CHAINLINK FENCE

**DEMOLITION LEGEND:**

-  CONCRETE PAVEMENT DEMO
-  CONCRETE SIDEWALK DEMO
-  BUILDING RENOVATION
-  GRAVEL & LANDSCAPING DEMO

**PAVING LEGEND:**

-  SLOPE STABILIZATION
-  AGGREGATE SURFACING

**ABBREVIATIONS**

- AI AREA INLET
- BOC BACK OF CURB
- CB CATCH BASIN
- CI CURB INLET
- C COMMUNICATIONS
- CMH COMM. MANHOLE
- C.O. CLEAN OUT
- CP CULVERT PIPE
- CU UNDERGROUND COMMUNICATIONS
- CWS CHILLED WATER SUPPLY
- CWR CHILLED WATER RETURN
- CY CUBIC YARD
- E ELECTRIC LINE
- EMH ELECTRIC MANHOLE
- F FIRE LINE
- FDC FIRE DEPARTMENT CONNECTION
- FES FLARED END SECTION
- FFE FINISHED FLOOR ELEVATION
- FH FIRE HYDRANT
- FL FLOW LINE
- FM FORCE MAIN
- FOC FACE OF CURB
- FO FIBER OPTIC
- G GAS LINE
- GR GAS REGULATOR
- GM GAS METER
- GV GAS VALVE
- HDPE HIGH DENSITY POLYETHYLENE
- HH HAND HOLE
- HW HEADWALL
- HWS HOT WATER SUPPLY
- HWR HOT WATER RETURN
- HAG HORIZONTAL AT GRADE
- HUG HORIZONTAL UNDERGROUND
- HYD HYDRANT
- JBOX JUNCTION BOX
- INV INVERT
- I.P. IRON PIN
- IW INDUSTRIAL WASTE
- IRR IRRIGATION LINE
- LF LINEAR FEET
- LP LIGHT POLE
- L.S. LIFT STATION
- MH MANHOLE
- M.W. MONITORING WELL
- MSEC MID-SOUTH ELECTRIC COOPERATIVE
- OHE OVERHEAD ELECTRIC
- RCP REINFORCED CONCRETE PIPE
- PB PULL BOX
- PE POLYETHYLENE
- PED PEDESTAL/RISER
- P.I.V. POST INDICATOR VALVE
- PP POWER POLE
- PSI POUND PER SQUARE INCH
- PVC POLYVINYL CHLORIDE PIPE
- SD STORM DRAIN
- SF SILT FENCE
- SF SQUARE FEET
- SS SANITARY SEWER
- TC TOP OF CURB
- TELE TELEPHONE LINE
- TMH TELEPHONE MANHOLE
- TR TELEPHONE RISER
- UE UNDERGROUND ELECTRIC
- VAG VERTICAL AT GRADE
- W WATER LINE
- WMH WATER MANHOLE
- WM WATER METER
- WV WATER VALVE

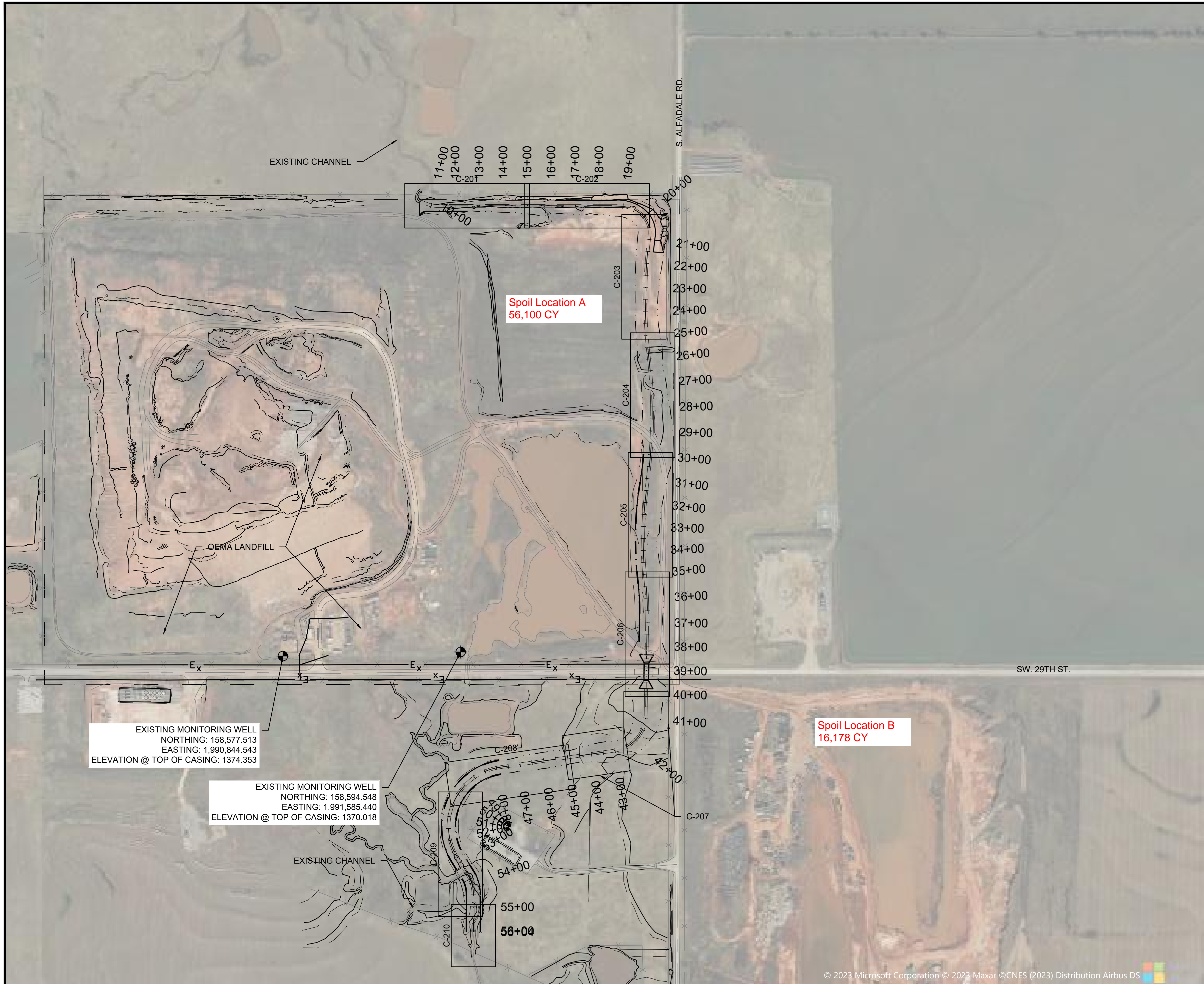
PAY ITEM LIST			
ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY
1	CLEARING & GRUBBING	LSUM	1
2	UNCLASSIFIED EXCAVATION	CY	83,705
3	EMBANKMENT/FILL	CY	6,537
4	SPOIL (Location A)	CY	<del>72,278</del> 56,100
5	SPOIL (Location B)	CY	<del>4,890</del> 16,178
6	RIPRAP	TON	255
7	FILTER BLANKET	TON	128
8	SLOPE STABILIZATION	SY	1,260
9	SOLID SLAB SOD	SY	44,015
10	18' X 9' CONCRETE HEADWALL	EA	2
11	18' X 9' RCB	LF	72
12	CONSTRUCTION STAKING	LSUM	1
13	MOBILIZATION	LSUM	1
14	EROSION CONTROL/SWPPP MANAGEMENT	LSUM	1



DESIGNED BY:	D ANDERSON	DATE:	26 JAN 2024
DRAWN BY:	B BIESEMEYER	PROJECT NO.:	OK07848-010
MRK		DESCRIPTION	
		DATE	
		BY	

OEMA UNION CITY LANDFILL CHANNEL MODIFICATION  
 20435 SW 29th ST, UNION CITY, OK 73090

**LEGEND & GENERAL NOTES**



1 OVERALL SITE LAYOUT PLAN

**GENERAL NOTES:**

- A. REFER TO SHEET C-002 FOR ADDITIONAL NOTES AND REQUIREMENTS.
- B. CONTRACTOR SHALL EXERCISE CARE TO AVOID DAMAGE TO ANY EXISTING PAVEMENT, UTILITIES, STRUCTURES, OR OTHER FEATURES TO REMAIN. ANY DAMAGE TO EXISTING PAVEMENT, UTILITIES, STRUCTURES, OR OTHER FEATURES TO REMAIN SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.
- C. ANY UNDERGROUND UTILITIES SHOWN WERE LOCATED FROM PREVIOUS SURVEY AND RECORDED DOCUMENTS. NO EXCAVATION WAS PERFORMED TO DETERMINE SIZE OR DEPTH, OR TO VERIFY LOCATION. THERE MAY BE OTHER UTILITIES PRESENT BESIDES THOSE SHOWN ON THESE PLANS, AND THOSE SHOWN ON THESE PLANS MAY NOT BE LOCATED AS INDICATED HERE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL UNDERGROUND UTILITIES AND THE LOCATION THEREOF PRIOR TO BEGINNING CONSTRUCTION.
- D. CONTRACTOR SHALL REMOVE ANY DEMOLISHED MATERIALS AND LEGALLY DISPOSE OF SAID MATERIAL OFF-SITE.
- E. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.
- F. EXCEPT IN AREAS NOTED OTHERWISE, ALL SLOPES SHALL BE 3H:1V. ANY AREAS WHERE SLOPE IS NOTED TO EXCEED 3H:1V SHALL BE PROTECTED BY SLOPE STABILIZATION AS SHOWN IN THE DETAILS.
- G. ALL DISTURBED AREAS NOT PAVED SHALL BE SODDED UNLESS INDICATED OTHERWISE.
- H. ANY EROSION CONTROL DEVICES, INSTALLATION, AND MAINTENANCE THEREOF SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY.
- I. THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL DEVICES AND BEST MANAGEMENT PRACTICES (BMP'S) SUCH THAT NO STORMWATER POLLUTION ENTERS EXISTING DRAINAGE SYSTEMS OR ROADWAYS AND MUST COORDINATE THE BMP'S AS REQUIRED FOR ANY CONSTRUCTION PHASING.
- J. THE CONTRACTOR IS RESPONSIBLE FOR SUBMISSION OF A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TO THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY AS REQUIRED.
- K. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE SWPPP AT THE JOB SITE, POSTED PROMINENTLY AND READILY AVAILABLE TO THE PUBLIC, THAT INCLUDES THE MOST CURRENT VERSION OF THE EROSION CONTROL PLAN. THIS PLAN SHALL BE KEPT UPDATED TO SHOW ANY CHANGES TO THE EROSION CONTROL BMP'S AND ALL MAINTENANCE THAT HAS BEEN PERFORMED ON THE BMP'S, ALONG WITH THE DATES OF SUCH CHANGES AND MAINTENANCE, IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY.
- L. THE CONTRACTOR SHALL MAINTAIN ALL BMP'S IN A FUNCTIONAL CONDITION, EFFECTING MAINTENANCE AT ANY TIME A GIVEN BMP HAS IMPAIRED FUNCTION DUE TO DAMAGE OR SEDIMENT BUILDUP. IMPAIRED FUNCTION INCLUDES, BUT IS NOT LIMITED TO, TORN OR DOWNED SILT FENCE, TORN ROCK BAGS, WASHED OUT GRAVEL AND RIP RAP OR ANY OTHER DEFECT OR DAMAGE THAT IMPAIRS THE FUNCTION OF A BMP. THE CONTRACTOR SHALL INSPECT ALL BMP'S AT LEAST ONCE PER WEEK AND AFTER ANY RAINFALL OF 1" OR MORE.
- M. EARTHWORK VOLUMES:  
 TOTAL CUT: 83,037 CY  
 TOTAL FILL: 6,675 CY  
 SLOPE STABILIZATION: 420 CY (1,259 SY)  
 NET: 75,941 CY SPOIL



DESIGNED BY: D ANDERSON  
 DRAWN BY: B BIESEMEYER  
 DATE: 26 JAN 2024  
 PROJECT NO.: OK07848-010

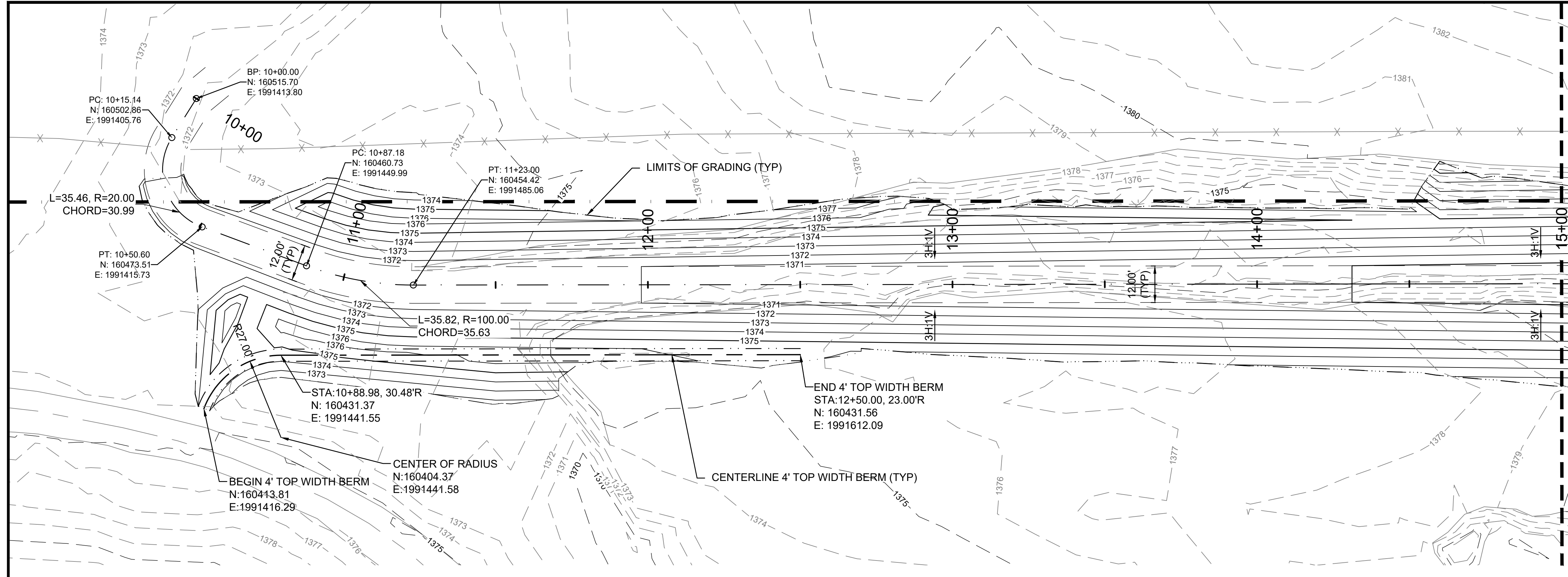
MRK	DESCRIPTION	DATE	BY

OEMA UNION CITY LANDFILL CHANNEL MODIFICATION  
 20435 SW 29th ST, UNION CITY, OK 73090

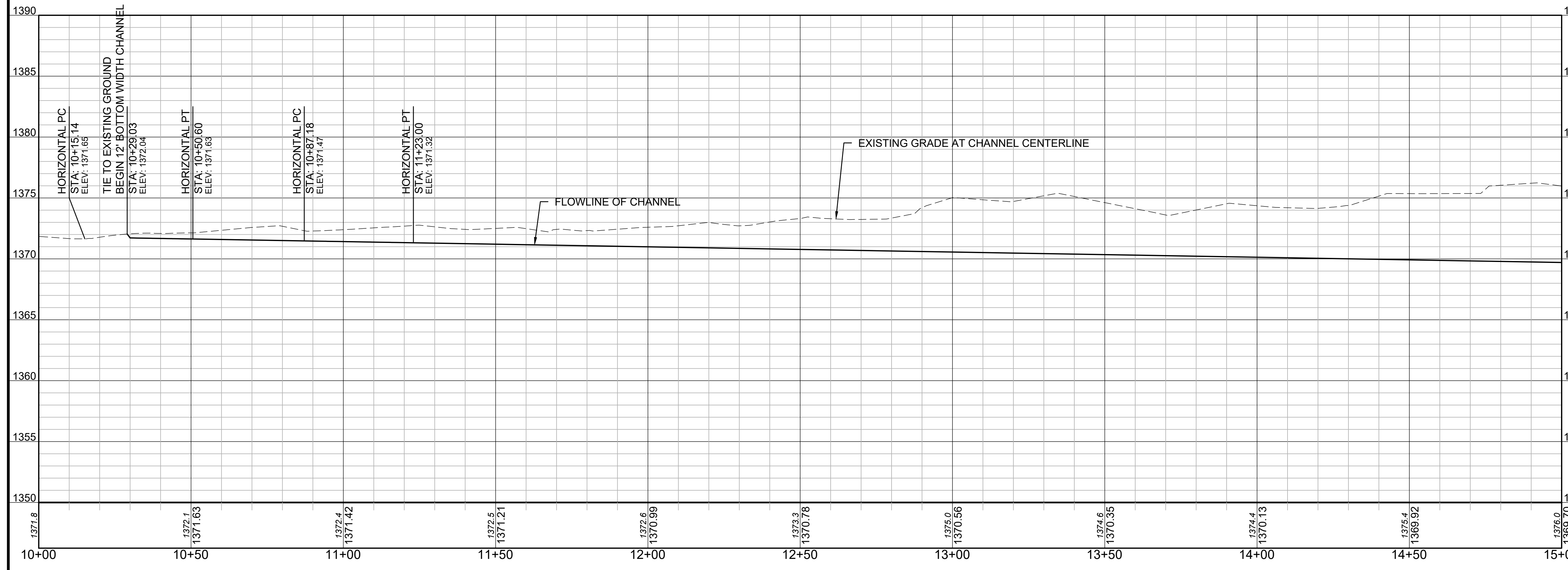
OVERALL SITE PLAN

CS100

C.H. GUERNSEY & COMPANY  
 5555 N. GRAND BLVD.  
 OKLAHOMA CITY, OK 73112, 405.416.8100  
 C.A. ARCHITECTURE: #00577 EXPIRES JUNE 30, 2025  
 C.A. ENGINEERING: #10 EXPIRES JUNE 30, 2024



1 SITE LAYOUT PLAN STA 10+00.00 TO STA 15+00.00



2 CHANNEL PROFILE STA 10+00.00 TO STA 15+00.00

- GENERAL NOTES:**
- REFER TO SHEET C-002 FOR ADDITIONAL NOTES AND REQUIREMENTS.
  - CONTRACTOR SHALL EXERCISE CARE TO AVOID DAMAGE TO ANY EXISTING PAVEMENT, UTILITIES, STRUCTURES, OR OTHER FEATURES TO REMAIN. ANY DAMAGE TO EXISTING PAVEMENT, UTILITIES, STRUCTURES, OR OTHER FEATURES TO REMAIN SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.
  - ANY UNDERGROUND UTILITIES SHOWN WERE LOCATED FROM PREVIOUS SURVEY AND RECORDED DOCUMENTS. NO EXCAVATION WAS PERFORMED TO DETERMINE SIZE OR DEPTH, OR TO VERIFY LOCATION. THERE MAY BE OTHER UTILITIES PRESENT BESIDES THOSE SHOWN ON THESE PLANS, AND THOSE SHOWN ON THESE PLANS MAY NOT BE LOCATED AS INDICATED HERE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL UNDERGROUND UTILITIES AND THE LOCATION THEREOF PRIOR TO BEGINNING CONSTRUCTION.
  - CONTRACTOR SHALL REMOVE ANY DEMOLISHED MATERIALS AND LEGALLY DISPOSE OF SAID MATERIAL OFF-SITE.
  - ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.
  - EXCEPT IN AREAS NOTED OTHERWISE, ALL SLOPES SHALL BE 3H:1V. ANY AREAS WHERE SLOPE IS NOTED TO EXCEED 3H:1V SHALL BE PROTECTED BY SLOPE STABILIZATION AS SHOWN IN THE DETAILS.
  - ALL DISTURBED AREAS NOT PAVED SHALL BE SODDED UNLESS INDICATED OTHERWISE.
  - ANY EROSION CONTROL DEVICES, INSTALLATION, AND MAINTENANCE THEREOF SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY.
  - THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL DEVICES AND BEST MANAGEMENT PRACTICES (BMP'S) SUCH THAT NO STORMWATER POLLUTION ENTERS EXISTING DRAINAGE SYSTEMS OR ROADWAYS AND MUST COORDINATE THE BMP'S AS REQUIRED FOR ANY CONSTRUCTION PHASING.
  - THE CONTRACTOR IS RESPONSIBLE FOR SUBMISSION OF A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TO THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY AS REQUIRED.
  - THE CONTRACTOR SHALL MAINTAIN A COPY OF THE SWPPP AT THE JOB SITE, POSTED PROMINENTLY AND READILY AVAILABLE TO THE PUBLIC, THAT INCLUDES THE MOST CURRENT VERSION OF THE EROSION CONTROL PLAN. THIS PLAN SHALL BE KEPT UPDATED TO SHOW ANY CHANGES TO THE EROSION CONTROL BMP'S AND ALL MAINTENANCE THAT HAS BEEN PERFORMED ON THE BMP'S, ALONG WITH THE DATES OF SUCH CHANGES AND MAINTENANCE, IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY.
  - THE CONTRACTOR SHALL MAINTAIN ALL BMP'S IN A FUNCTIONAL CONDITION, EFFECTING MAINTENANCE AT ANY TIME A GIVEN BMP HAS IMPAIRED FUNCTION DUE TO DAMAGE OR SEDIMENT BUILDUP. IMPAIRED FUNCTION INCLUDES, BUT IS NOT LIMITED TO, TORN OR DOWNED SILT FENCE, TORN ROCK BAGS, WASHED OUT GRAVEL AND RIP RAP OR ANY OTHER DEFECT OR DAMAGE THAT IMPAIRS THE FUNCTION OF A BMP. THE CONTRACTOR SHALL INSPECT ALL BMP'S AT LEAST ONCE PER WEEK AND AFTER ANY RAINFALL OF 1" OR MORE.

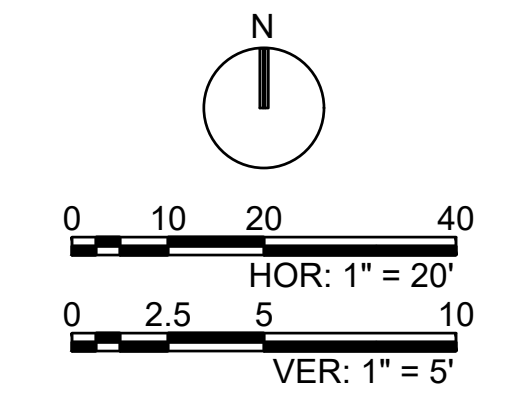


DESIGNED BY: D ANDERSON  
 DRAWN BY: B BIESEMEYER  
 DATE: 26 JAN 2024  
 PROJECT NO.: OK07848-010

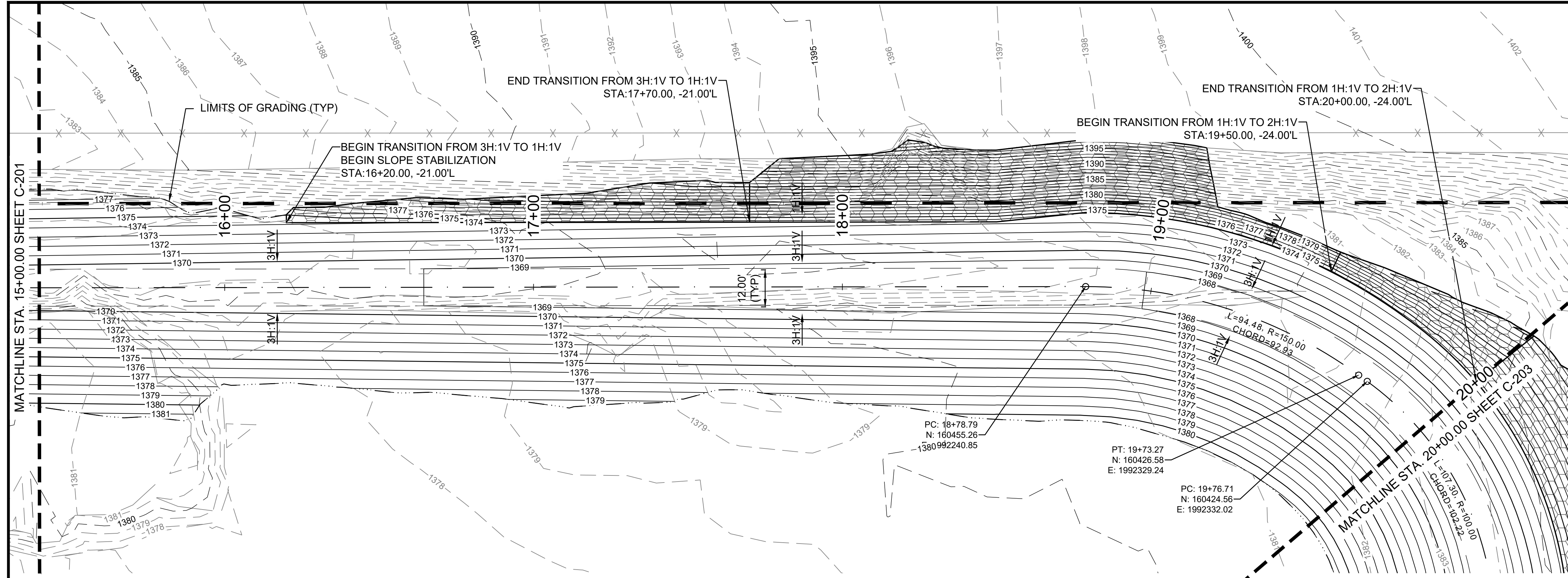
MRK	DESCRIPTION	DATE	BY

OKLAHOMA CITY LANDFILL CHANNEL MODIFICATION  
 20+35 SW 29th ST, UNION CITY, OK 73090

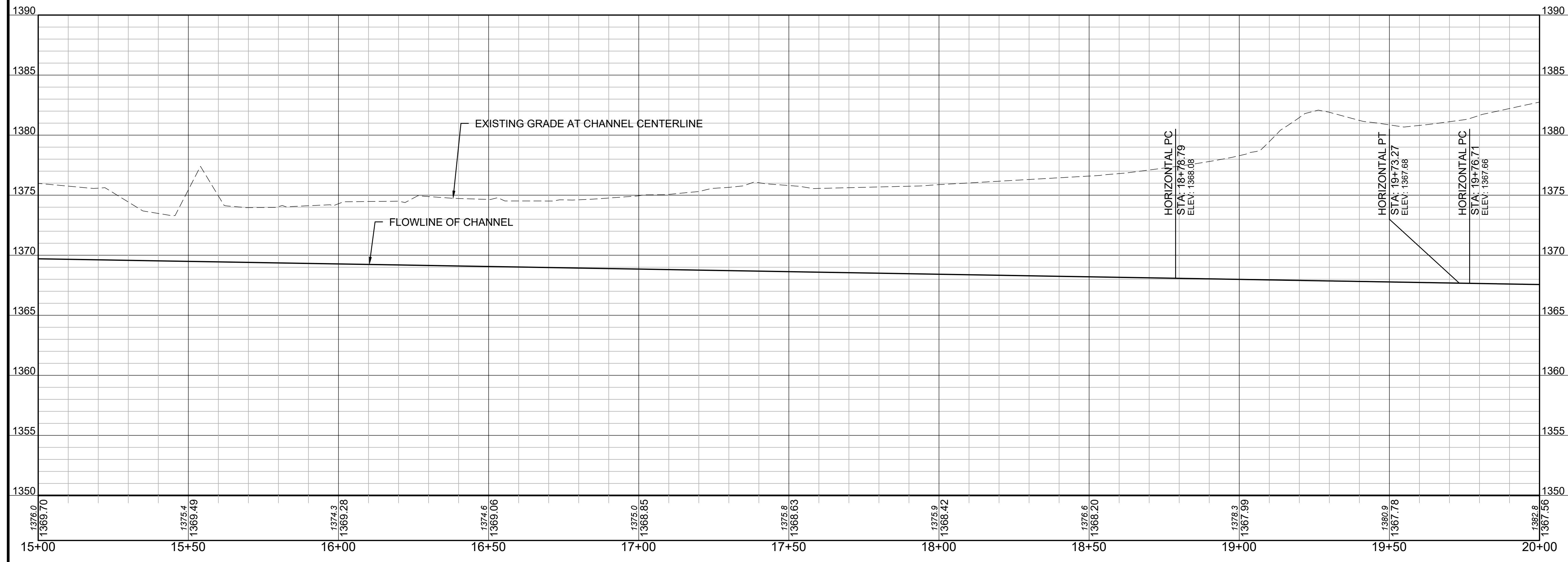
PLAN & PROFILE STA 10+00 TO STA 15+00



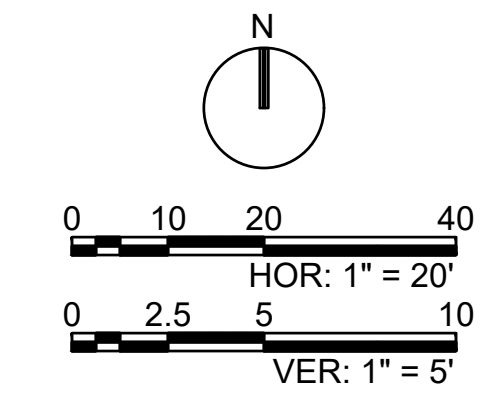
Q:\E&E\13-State-County\OEMA\OK07848-002-Union City Landfill Channel\006 CAD\OK07848-002\_C-201.dwg  
 1/26/2024 11:28 AM




1 SITE LAYOUT PLAN STA 15+00.00 TO STA 20+00.00





2 CHANNEL PROFILE STA 15+00.00 TO STA 20+00.00



- GENERAL NOTES:**
- REFER TO SHEET C-002 FOR ADDITIONAL NOTES AND REQUIREMENTS.
  - CONTRACTOR SHALL EXERCISE CARE TO AVOID DAMAGE TO ANY EXISTING PAVEMENT, UTILITIES, STRUCTURES, OR OTHER FEATURES TO REMAIN. ANY DAMAGE TO EXISTING PAVEMENT, UTILITIES, STRUCTURES, OR OTHER FEATURES TO REMAIN SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.
  - ANY UNDERGROUND UTILITIES SHOWN WERE LOCATED FROM PREVIOUS SURVEY AND RECORDED DOCUMENTS. NO EXCAVATION WAS PERFORMED TO DETERMINE SIZE OR DEPTH, OR TO VERIFY LOCATION. THERE MAY BE OTHER UTILITIES PRESENT BESIDES THOSE SHOWN ON THESE PLANS, AND THOSE SHOWN ON THESE PLANS MAY NOT BE LOCATED AS INDICATED HERE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL UNDERGROUND UTILITIES AND THE LOCATION THEREOF PRIOR TO BEGINNING CONSTRUCTION.
  - CONTRACTOR SHALL REMOVE ANY DEMOLISHED MATERIALS AND LEGALLY DISPOSE OF SAID MATERIAL OFF-SITE.
  - ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.
  - EXCEPT IN AREAS NOTED OTHERWISE, ALL SLOPES SHALL BE 3H:1V. ANY AREAS WHERE SLOPE IS NOTED TO EXCEED 3H:1V SHALL BE PROTECTED BY SLOPE STABILIZATION AS SHOWN IN THE DETAILS.
  - ALL DISTURBED AREAS NOT PAVED SHALL BE SODDED UNLESS INDICATED OTHERWISE.
  - ANY EROSION CONTROL DEVICES, INSTALLATION, AND MAINTENANCE THEREOF SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY.
  - THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL DEVICES AND BEST MANAGEMENT PRACTICES (BMP'S) SUCH THAT NO STORMWATER POLLUTION ENTERS EXISTING DRAINAGE SYSTEMS OR ROADWAYS AND MUST COORDINATE THE BMP'S AS REQUIRED FOR ANY CONSTRUCTION PHASING.
  - THE CONTRACTOR IS RESPONSIBLE FOR SUBMISSION OF A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TO THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY AS REQUIRED.
  - THE CONTRACTOR SHALL MAINTAIN A COPY OF THE SWPPP AT THE JOB SITE, POSTED PROMINENTLY AND READILY AVAILABLE TO THE PUBLIC, THAT INCLUDES THE MOST CURRENT VERSION OF THE EROSION CONTROL PLAN. THIS PLAN SHALL BE KEPT UPDATED TO SHOW ANY CHANGES TO THE EROSION CONTROL BMP'S AND ALL MAINTENANCE THAT HAS BEEN PERFORMED ON THE BMP'S, ALONG WITH THE DATES OF SUCH CHANGES AND MAINTENANCE, IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY.
  - THE CONTRACTOR SHALL MAINTAIN ALL BMP'S IN A FUNCTIONAL CONDITION, EFFECTING MAINTENANCE AT ANY TIME A GIVEN BMP HAS IMPAIRED FUNCTION DUE TO DAMAGE OR SEDIMENT BUILDUP. IMPAIRED FUNCTION INCLUDES, BUT IS NOT LIMITED TO, TORN OR DOWNED SILT FENCE, TORN ROCK BAGS, WASHED OUT GRAVEL AND RIP RAP OR ANY OTHER DEFECT OR DAMAGE THAT IMPAIRS THE FUNCTION OF A BMP. THE CONTRACTOR SHALL INSPECT ALL BMP'S AT LEAST ONCE PER WEEK AND AFTER ANY RAINFALL OF 1" OR MORE.

  
 OKLAHOMA ENVIRONMENTAL MANAGEMENT AUTHORITY

  
**guernsey**  
 guernsey.us

  
 1-26-24

DESIGNED BY:	D ANDERSON	DRAWN BY:	B BIESEMEYER
DATE:	26 JAN 2024	PROJECT NO.:	OK07848-010
MRK	DESCRIPTION	DATE	BY

OEMA UNION CITY LANDFILL CHANNEL MODIFICATION  
 20+35 SW 29th ST, UNION CITY, OK 73090

PLAN & PROFILE STA 15+00 TO STA 20+00

C-202

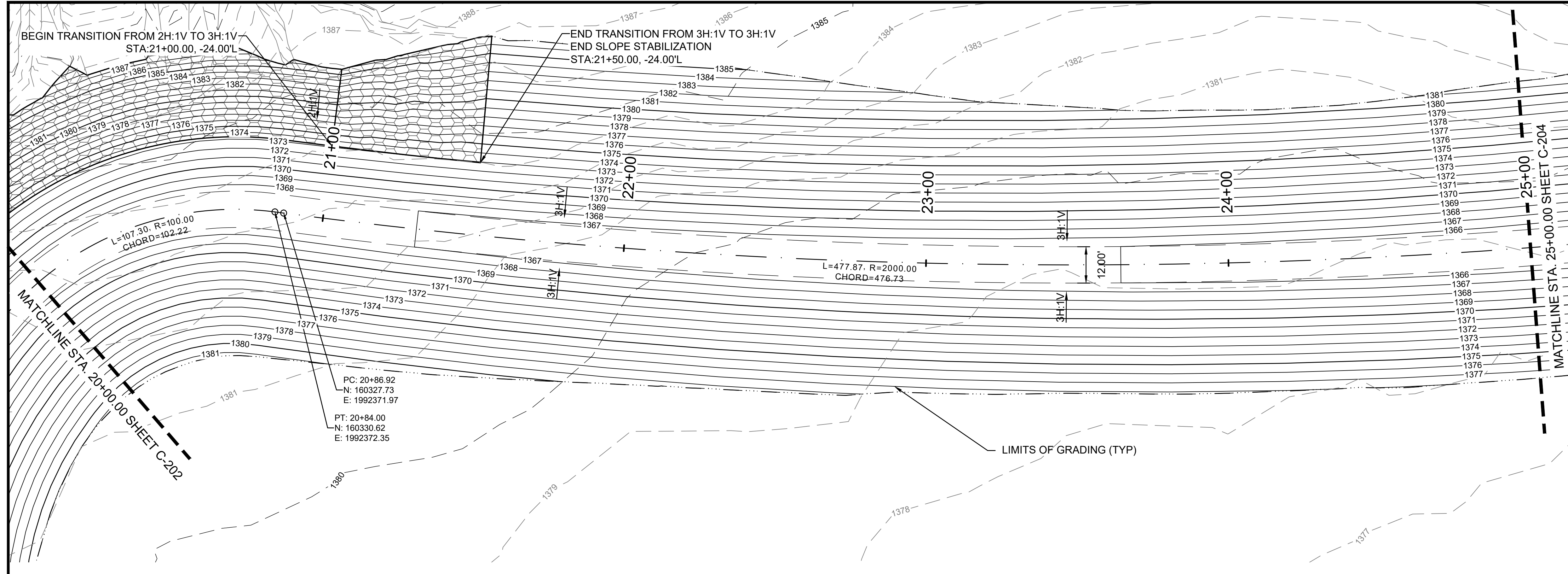


DESIGNED BY: D ANDERSON  
 DRAWN BY: B BIESEMEYER  
 DATE: 26 JAN 2024  
 PROJECT NO.: OK07848-010

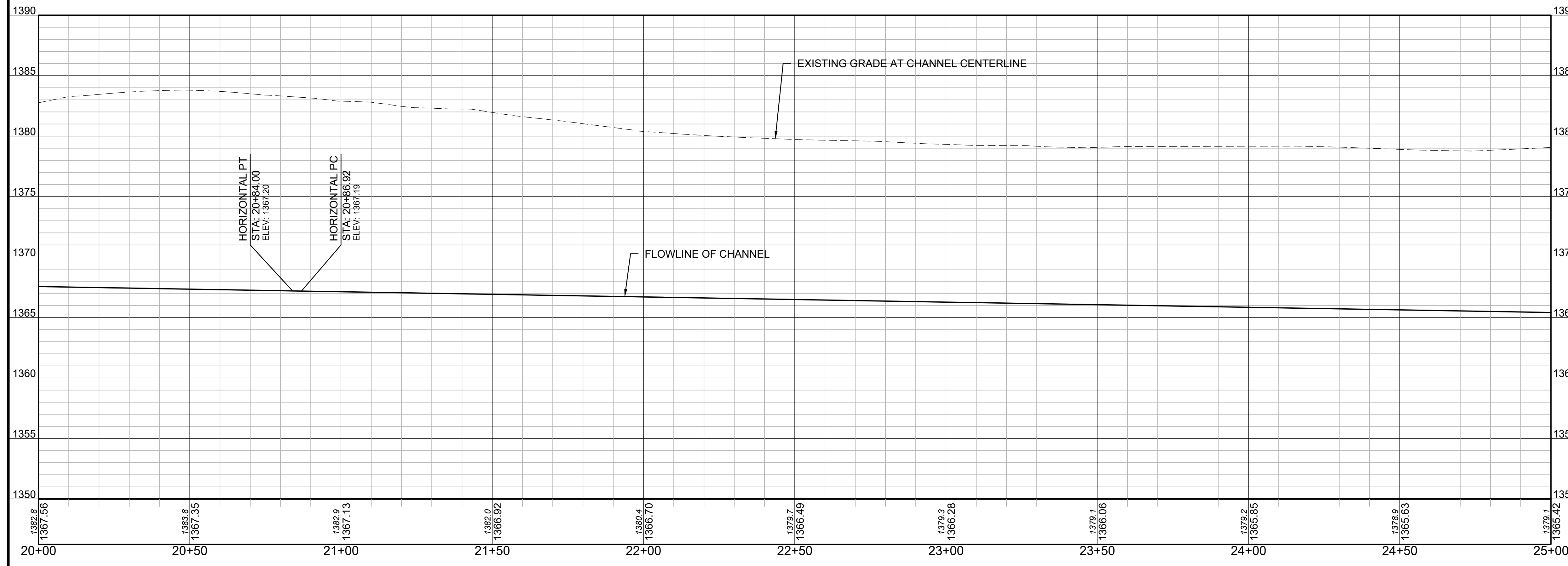
MRK	DESCRIPTION	DATE	BY

OEMA UNION CITY LANDFILL CHANNEL MODIFICATION  
 20+35 SW 29th ST, UNION CITY, OK 73090

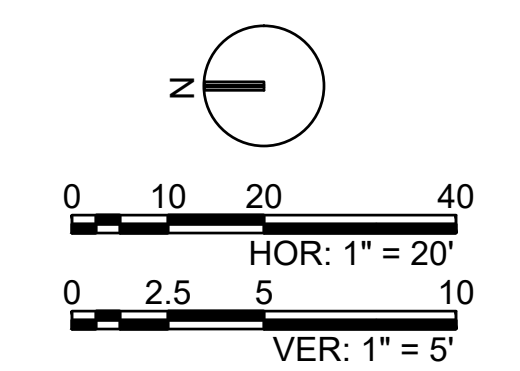
- GENERAL NOTES:**
- REFER TO SHEET C-002 FOR ADDITIONAL NOTES AND REQUIREMENTS.
  - CONTRACTOR SHALL EXERCISE CARE TO AVOID DAMAGE TO ANY EXISTING PAVEMENT, UTILITIES, STRUCTURES, OR OTHER FEATURES TO REMAIN. ANY DAMAGE TO EXISTING PAVEMENT, UTILITIES, STRUCTURES, OR OTHER FEATURES TO REMAIN SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.
  - ANY UNDERGROUND UTILITIES SHOWN WERE LOCATED FROM PREVIOUS SURVEY AND RECORDED DOCUMENTS. NO EXCAVATION WAS PERFORMED TO DETERMINE SIZE OR DEPTH, OR TO VERIFY LOCATION. THERE MAY BE OTHER UTILITIES PRESENT BESIDES THOSE SHOWN ON THESE PLANS, AND THOSE SHOWN ON THESE PLANS MAY NOT BE LOCATED AS INDICATED HERE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL UNDERGROUND UTILITIES AND THE LOCATION THEREOF PRIOR TO BEGINNING CONSTRUCTION.
  - CONTRACTOR SHALL REMOVE ANY DEMOLISHED MATERIALS AND LEGALLY DISPOSE OF SAID MATERIAL OFF-SITE.
  - ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.
  - EXCEPT IN AREAS NOTED OTHERWISE, ALL SLOPES SHALL BE 3H:1V. ANY AREAS WHERE SLOPE IS NOTED TO EXCEED 3H:1V SHALL BE PROTECTED BY SLOPE STABILIZATION AS SHOWN IN THE DETAILS.
  - ALL DISTURBED AREAS NOT PAVED SHALL BE SODDED UNLESS INDICATED OTHERWISE.
  - ANY EROSION CONTROL DEVICES, INSTALLATION, AND MAINTENANCE THEREOF SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY.
  - THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL DEVICES AND BEST MANAGEMENT PRACTICES (BMP'S) SUCH THAT NO STORMWATER POLLUTION ENTERS EXISTING DRAINAGE SYSTEMS OR ROADWAYS AND MUST COORDINATE THE BMP'S AS REQUIRED FOR ANY CONSTRUCTION PHASING.
  - THE CONTRACTOR IS RESPONSIBLE FOR SUBMISSION OF A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TO THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY AS REQUIRED.
  - THE CONTRACTOR SHALL MAINTAIN A COPY OF THE SWPPP AT THE JOB SITE, POSTED PROMINENTLY AND READILY AVAILABLE TO THE PUBLIC, THAT INCLUDES THE MOST CURRENT VERSION OF THE EROSION CONTROL PLAN. THIS PLAN SHALL BE KEPT UPDATED TO SHOW ANY CHANGES TO THE EROSION CONTROL BMP'S AND ALL MAINTENANCE THAT HAS BEEN PERFORMED ON THE BMP'S, ALONG WITH THE DATES OF SUCH CHANGES AND MAINTENANCE, IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY.
  - THE CONTRACTOR SHALL MAINTAIN ALL BMP'S IN A FUNCTIONAL CONDITION, EFFECTING MAINTENANCE AT ANY TIME A GIVEN BMP HAS IMPAIRED FUNCTION DUE TO DAMAGE OR SEDIMENT BUILDUP. IMPAIRED FUNCTION INCLUDES, BUT IS NOT LIMITED TO, TORN OR DOWNED SILT FENCE, TORN ROCK BAGS, WASHED OUT GRAVEL AND RIP RAP OR ANY OTHER DEFECT OR DAMAGE THAT IMPAIRS THE FUNCTION OF A BMP. THE CONTRACTOR SHALL INSPECT ALL BMP'S AT LEAST ONCE PER WEEK AND AFTER ANY RAINFALL OF 1" OR MORE.

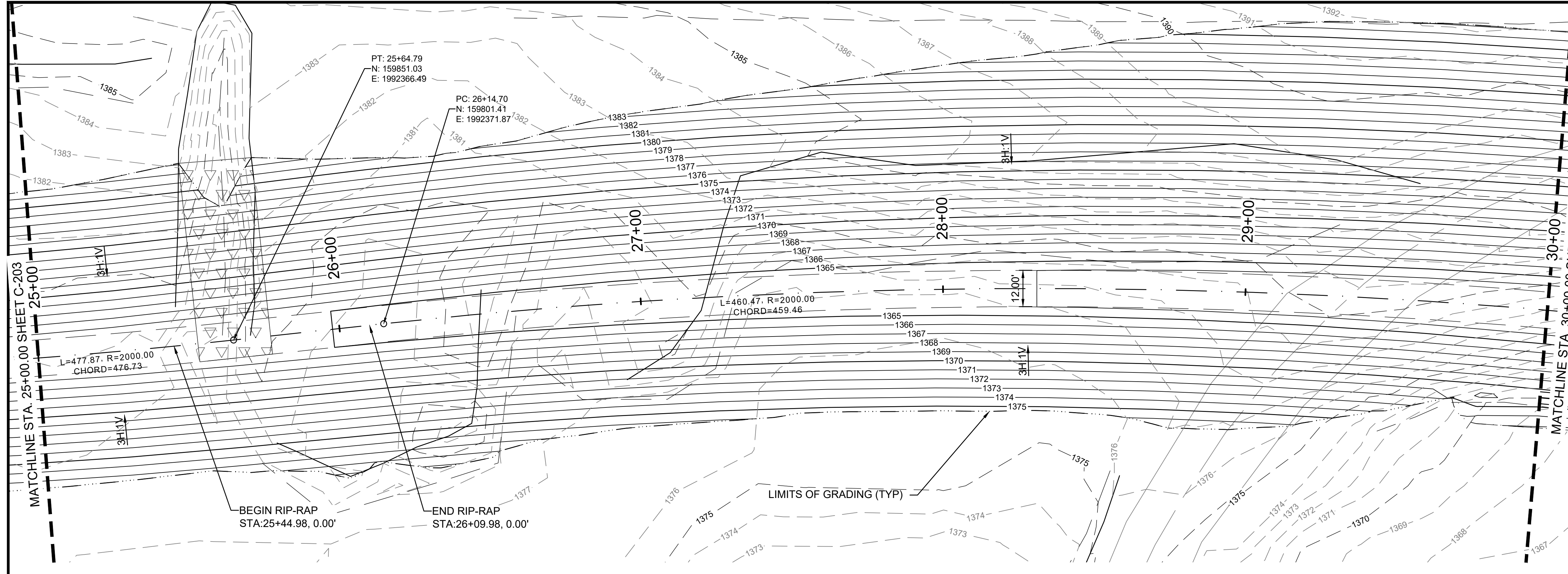


1 SITE LAYOUT PLAN STA 20+00.00 TO STA 25+00.00

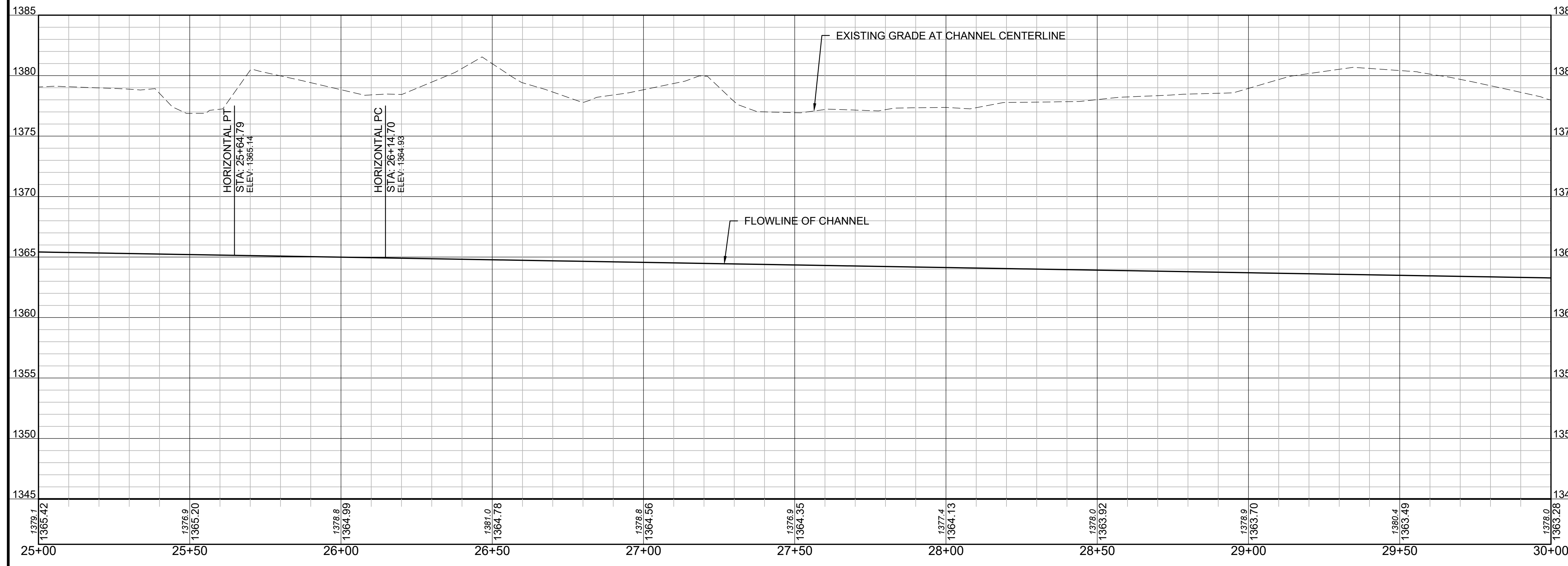


2 CHANNEL PROFILE STA 20+00.00 TO STA 25+00.00





1 SITE LAYOUT PLAN STA 25+00.00 TO STA 30+00.00



2 CHANNEL PROFILE STA 25+00.00 TO STA 30+00.00

- GENERAL NOTES:**
- REFER TO SHEET C-002 FOR ADDITIONAL NOTES AND REQUIREMENTS.
  - CONTRACTOR SHALL EXERCISE CARE TO AVOID DAMAGE TO ANY EXISTING PAVEMENT, UTILITIES, STRUCTURES, OR OTHER FEATURES TO REMAIN. ANY DAMAGE TO EXISTING PAVEMENT, UTILITIES, STRUCTURES, OR OTHER FEATURES TO REMAIN SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.
  - ANY UNDERGROUND UTILITIES SHOWN WERE LOCATED FROM PREVIOUS SURVEY AND RECORDED DOCUMENTS. NO EXCAVATION WAS PERFORMED TO DETERMINE SIZE OR DEPTH, OR TO VERIFY LOCATION. THERE MAY BE OTHER UTILITIES PRESENT BESIDES THOSE SHOWN ON THESE PLANS, AND THOSE SHOWN ON THESE PLANS MAY NOT BE LOCATED AS INDICATED HERE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL UNDERGROUND UTILITIES AND THE LOCATION THEREOF PRIOR TO BEGINNING CONSTRUCTION.
  - CONTRACTOR SHALL REMOVE ANY DEMOLISHED MATERIALS AND LEGALLY DISPOSE OF SAID MATERIAL OFF-SITE.
  - ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.
  - EXCEPT IN AREAS NOTED OTHERWISE, ALL SLOPES SHALL BE 3H:1V. ANY AREAS WHERE SLOPE IS NOTED TO EXCEED 3H:1V SHALL BE PROTECTED BY SLOPE STABILIZATION AS SHOWN IN THE DETAILS.
  - ALL DISTURBED AREAS NOT PAVED SHALL BE SODDED UNLESS INDICATED OTHERWISE.
  - ANY EROSION CONTROL DEVICES, INSTALLATION, AND MAINTENANCE THEREOF SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY.
  - THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL DEVICES AND BEST MANAGEMENT PRACTICES (BMP'S) SUCH THAT NO STORMWATER POLLUTION ENTERS EXISTING DRAINAGE SYSTEMS OR ROADWAYS AND MUST COORDINATE THE BMP'S AS REQUIRED FOR ANY CONSTRUCTION PHASING.
  - THE CONTRACTOR IS RESPONSIBLE FOR SUBMISSION OF A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TO THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY AS REQUIRED.
  - THE CONTRACTOR SHALL MAINTAIN A COPY OF THE SWPPP AT THE JOB SITE, POSTED PROMINENTLY AND READILY AVAILABLE TO THE PUBLIC, THAT INCLUDES THE MOST CURRENT VERSION OF THE EROSION CONTROL PLAN. THIS PLAN SHALL BE KEPT UPDATED TO SHOW ANY CHANGES TO THE EROSION CONTROL BMP'S AND ALL MAINTENANCE THAT HAS BEEN PERFORMED ON THE BMP'S, ALONG WITH THE DATES OF SUCH CHANGES AND MAINTENANCE, IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY.
  - THE CONTRACTOR SHALL MAINTAIN ALL BMP'S IN A FUNCTIONAL CONDITION, EFFECTING MAINTENANCE AT ANY TIME A GIVEN BMP HAS IMPAIRED FUNCTION DUE TO DAMAGE OR SEDIMENT BUILDUP. IMPAIRED FUNCTION INCLUDES, BUT IS NOT LIMITED TO, TORN OR DOWNED SILT FENCE, TORN ROCK BAGS, WASHED OUT GRAVEL AND RIP RAP OR ANY OTHER DEFECT OR DAMAGE THAT IMPAIRS THE FUNCTION OF A BMP. THE CONTRACTOR SHALL INSPECT ALL BMP'S AT LEAST ONCE PER WEEK AND AFTER ANY RAINFALL OF 1" OR MORE.

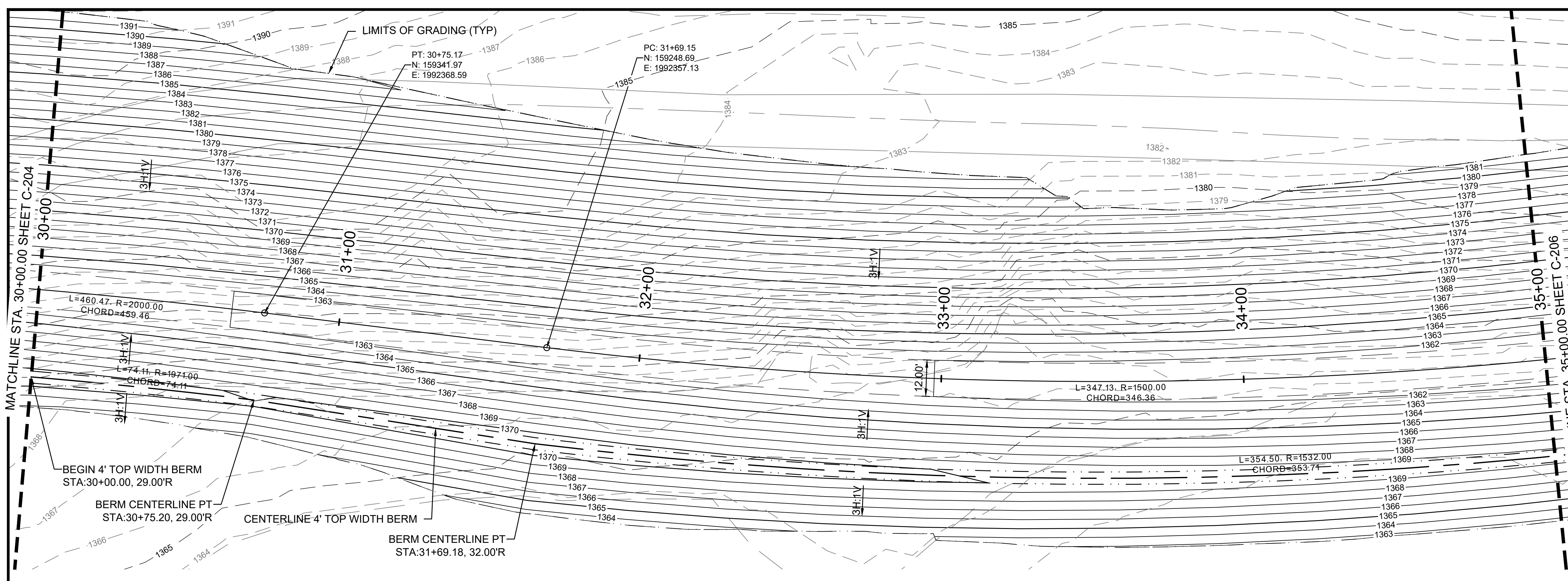


DESIGNED BY: D ANDERSON  
 DRAWN BY: B BIESEMEYER  
 DATE: 26 JAN 2024  
 PROJECT NO.: OK07848-010

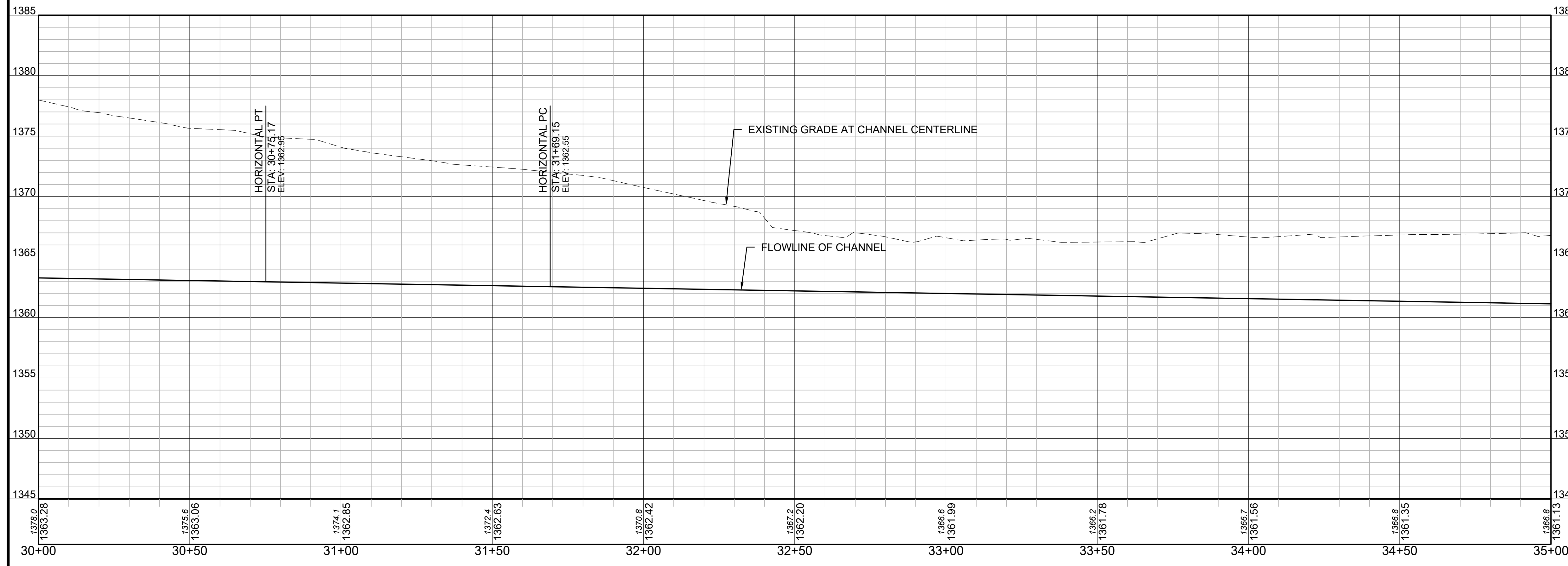
MRK	DESCRIPTION	DATE	BY

OKLAHOMA ENVIRONMENTAL MANAGEMENT AUTHORITY  
 20435 SW 29th ST, UNION CITY, OK 73090

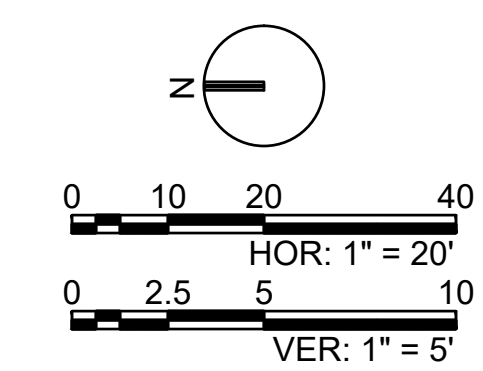
PLAN & PROFILE STA 25+00 TO STA 30+00



1 SITE LAYOUT PLAN STA 30+00.00 TO STA 35+00.00



2 CHANNEL PROFILE STA 30+00.00 TO STA 35+00.00



- GENERAL NOTES:**
- REFER TO SHEET C-002 FOR ADDITIONAL NOTES AND REQUIREMENTS.
  - CONTRACTOR SHALL EXERCISE CARE TO AVOID DAMAGE TO ANY EXISTING PAVEMENT, UTILITIES, STRUCTURES, OR OTHER FEATURES TO REMAIN. ANY DAMAGE TO EXISTING PAVEMENT, UTILITIES, STRUCTURES, OR OTHER FEATURES TO REMAIN SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.
  - ANY UNDERGROUND UTILITIES SHOWN WERE LOCATED FROM PREVIOUS SURVEY AND RECORDED DOCUMENTS. NO EXCAVATION WAS PERFORMED TO DETERMINE SIZE OR DEPTH, OR TO VERIFY LOCATION. THERE MAY BE OTHER UTILITIES PRESENT BESIDES THOSE SHOWN ON THESE PLANS, AND THOSE SHOWN ON THESE PLANS MAY NOT BE LOCATED AS INDICATED HERE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL UNDERGROUND UTILITIES AND THE LOCATION THEREOF PRIOR TO BEGINNING CONSTRUCTION.
  - CONTRACTOR SHALL REMOVE ANY DEMOLISHED MATERIALS AND LEGALLY DISPOSE OF SAID MATERIAL OFF-SITE.
  - ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.
  - EXCEPT IN AREAS NOTED OTHERWISE, ALL SLOPES SHALL BE 3H:1V. ANY AREAS WHERE SLOPE IS NOTED TO EXCEED 3H:1V SHALL BE PROTECTED BY SLOPE STABILIZATION AS SHOWN IN THE DETAILS.
  - ALL DISTURBED AREAS NOT PAVED SHALL BE SODDED UNLESS INDICATED OTHERWISE.
  - ANY EROSION CONTROL DEVICES, INSTALLATION, AND MAINTENANCE THEREOF SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY.
  - THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL DEVICES AND BEST MANAGEMENT PRACTICES (BMP'S) SUCH THAT NO STORMWATER POLLUTION ENTERS EXISTING DRAINAGE SYSTEMS OR ROADWAYS AND MUST COORDINATE THE BMP'S AS REQUIRED FOR ANY CONSTRUCTION PHASING.
  - THE CONTRACTOR IS RESPONSIBLE FOR SUBMISSION OF A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TO THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY AS REQUIRED.
  - THE CONTRACTOR SHALL MAINTAIN A COPY OF THE SWPPP AT THE JOB SITE, POSTED PROMINENTLY AND READILY AVAILABLE TO THE PUBLIC, THAT INCLUDES THE MOST CURRENT VERSION OF THE EROSION CONTROL PLAN. THIS PLAN SHALL BE KEPT UPDATED TO SHOW ANY CHANGES TO THE EROSION CONTROL BMP'S AND ALL MAINTENANCE THAT HAS BEEN PERFORMED ON THE BMP'S, ALONG WITH THE DATES OF SUCH CHANGES AND MAINTENANCE, IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY.
  - THE CONTRACTOR SHALL MAINTAIN ALL BMP'S IN A FUNCTIONAL CONDITION, EFFECTING MAINTENANCE AT ANY TIME A GIVEN BMP HAS IMPAIRED FUNCTION DUE TO DAMAGE OR SEDIMENT BUILDUP. IMPAIRED FUNCTION INCLUDES, BUT IS NOT LIMITED TO, TORN OR DOWNED SILT FENCE, TORN ROCK BAGS, WASHED OUT GRAVEL AND RIP RAP OR ANY OTHER DEFECT OR DAMAGE THAT IMPAIRS THE FUNCTION OF A BMP. THE CONTRACTOR SHALL INSPECT ALL BMP'S AT LEAST ONCE PER WEEK AND AFTER ANY RAINFALL OF 1" OR MORE.

**OEMA ENVIRONMENTAL MANAGEMENT AUTHORITY**

**guernsey**  
guernsey.us

**BRETT A. BIESEMAYER**  
REGISTERED PROFESSIONAL ENGINEER  
15023  
1-26-24

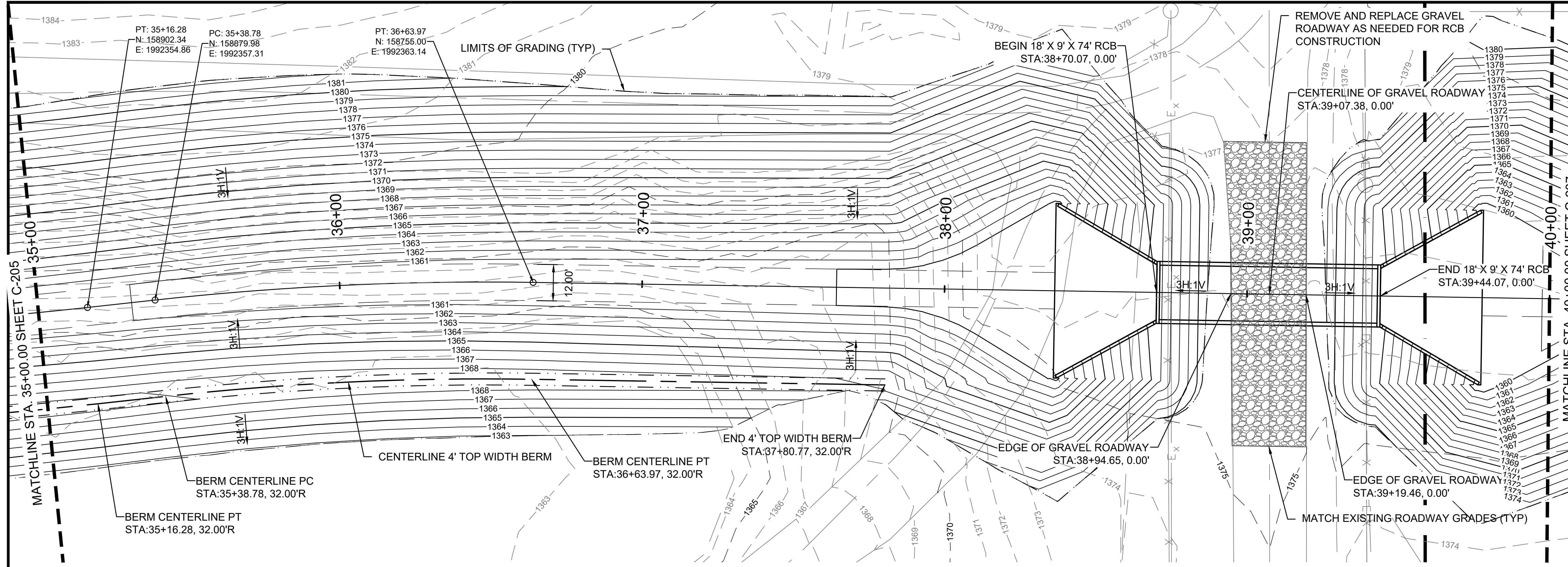
DESIGNED BY: D ANDERSON	DRAWN BY: B BIESEMAYER	DATE: 26 JAN 2024	PROJECT NO.:
			OK07848-010
		MRK	DESCRIPTION
		DATE	BY

OEMA UNION CITY LANDFILL CHANNEL MODIFICATION  
 20435 SW 29th ST, UNION CITY, OK 73090

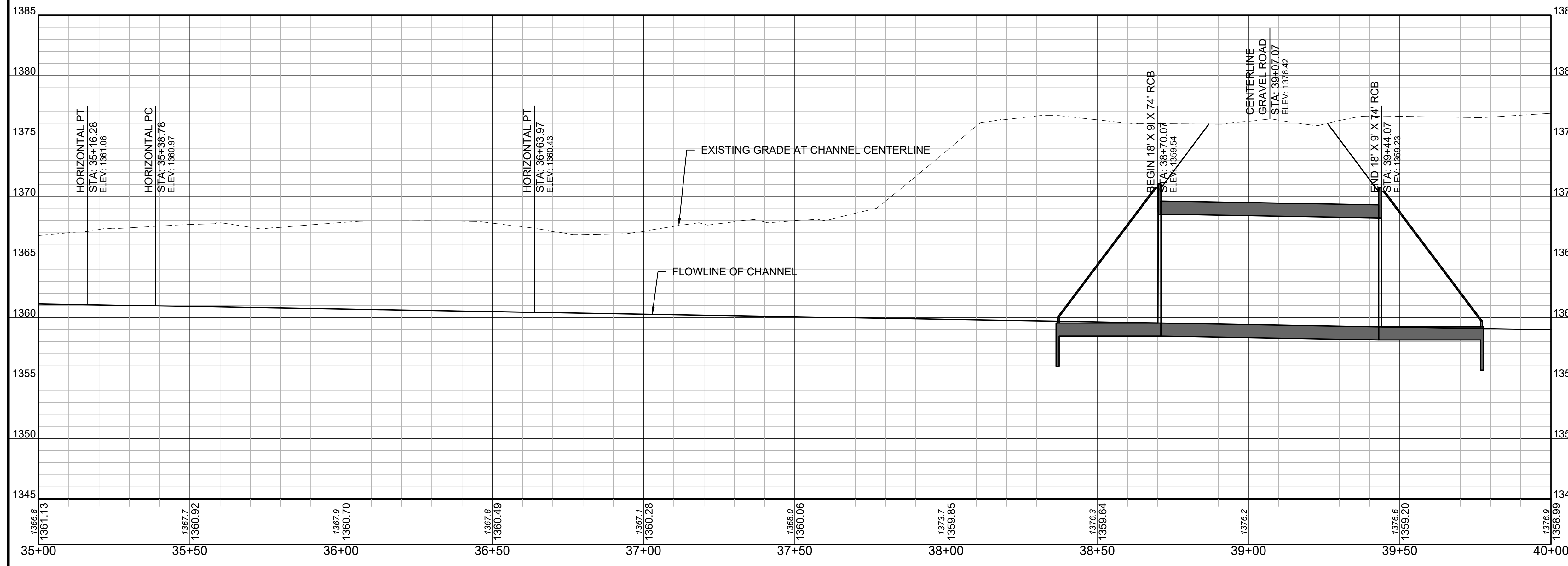
**PLAN & PROFILE STA 30+00 TO STA 35+00**

**C-205**





1 SITE LAYOUT PLAN STA 35+00.00 TO STA 40+00.00



2 CHANNEL PROFILE STA 35+00.00 TO STA 40+00.00

- GENERAL NOTES:**
- REFER TO SHEET C-002 FOR ADDITIONAL NOTES AND REQUIREMENTS.
  - CONTRACTOR SHALL EXERCISE CARE TO AVOID DAMAGE TO ANY EXISTING PAVEMENT, UTILITIES, STRUCTURES, OR OTHER FEATURES TO REMAIN. ANY DAMAGE TO EXISTING PAVEMENT, UTILITIES, STRUCTURES, OR OTHER FEATURES TO REMAIN SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.
  - ANY UNDERGROUND UTILITIES SHOWN WERE LOCATED FROM PREVIOUS SURVEY AND RECORDED DOCUMENTS. NO EXCAVATION WAS PERFORMED TO DETERMINE SIZE OR DEPTH, OR TO VERIFY LOCATION. THERE MAY BE OTHER UTILITIES PRESENT BESIDES THOSE SHOWN ON THESE PLANS, AND THOSE SHOWN ON THESE PLANS MAY NOT BE LOCATED AS INDICATED HERE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL UNDERGROUND UTILITIES AND THE LOCATION THEREOF PRIOR TO BEGINNING CONSTRUCTION.
  - CONTRACTOR SHALL REMOVE ANY DEMOLISHED MATERIALS AND LEGALLY DISPOSE OF SAID MATERIAL OFF-SITE.
  - ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.
  - EXCEPT IN AREAS NOTED OTHERWISE, ALL SLOPES SHALL BE 3H:1V. ANY AREAS WHERE SLOPE IS NOTED TO EXCEED 3H:1V SHALL BE PROTECTED BY SLOPE STABILIZATION AS SHOWN IN THE DETAILS.
  - ALL DISTURBED AREAS NOT PAVED SHALL BE SODDED UNLESS INDICATED OTHERWISE.
  - ANY EROSION CONTROL DEVICES, INSTALLATION, AND MAINTENANCE THEREOF SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY.
  - THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL DEVICES AND BEST MANAGEMENT PRACTICES (BMP'S) SUCH THAT NO STORMWATER POLLUTION ENTERS EXISTING DRAINAGE SYSTEMS OR ROADWAYS AND MUST COORDINATE THE BMP'S AS REQUIRED FOR ANY CONSTRUCTION PHASING.
  - THE CONTRACTOR IS RESPONSIBLE FOR SUBMISSION OF A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TO THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY AS REQUIRED.
  - THE CONTRACTOR SHALL MAINTAIN A COPY OF THE SWPPP AT THE JOB SITE, POSTED PROMINENTLY AND READILY AVAILABLE TO THE PUBLIC, THAT INCLUDES THE MOST CURRENT VERSION OF THE EROSION CONTROL PLAN. THIS PLAN SHALL BE KEPT UPDATED TO SHOW ANY CHANGES TO THE EROSION CONTROL BMP'S AND ALL MAINTENANCE THAT HAS BEEN PERFORMED ON THE BMP'S, ALONG WITH THE DATES OF SUCH CHANGES AND MAINTENANCE, IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY.
  - THE CONTRACTOR SHALL MAINTAIN ALL BMP'S IN A FUNCTIONAL CONDITION, EFFECTING MAINTENANCE AT ANY TIME A GIVEN BMP HAS IMPAIRED FUNCTION DUE TO DAMAGE OR SEDIMENT BUILDUP. IMPAIRED FUNCTION INCLUDES, BUT IS NOT LIMITED TO, TORN OR DOWNED SILT FENCE, TORN ROCK BAGS, WASHED OUT GRAVEL AND RIP RAP OR ANY OTHER DEFECT OR DAMAGE THAT IMPAIRS THE FUNCTION OF A BMP. THE CONTRACTOR SHALL INSPECT ALL BMP'S AT LEAST ONCE PER WEEK AND AFTER ANY RAINFALL OF 1" OR MORE.



DESIGNED BY: D ANDERSON  
 DRAWN BY: B BIESEMEYER  
 DATE: 26 JAN 2024  
 PROJECT NO.: OK07848-010

MRK	DESCRIPTION	DATE	BY

OEIA UNION CITY LANDFILL CHANNEL MODIFICATION  
 20+35 SW 29th ST, UNION CITY, OK 73090

PLAN & PROFILE STA 35+00 TO STA 40+00



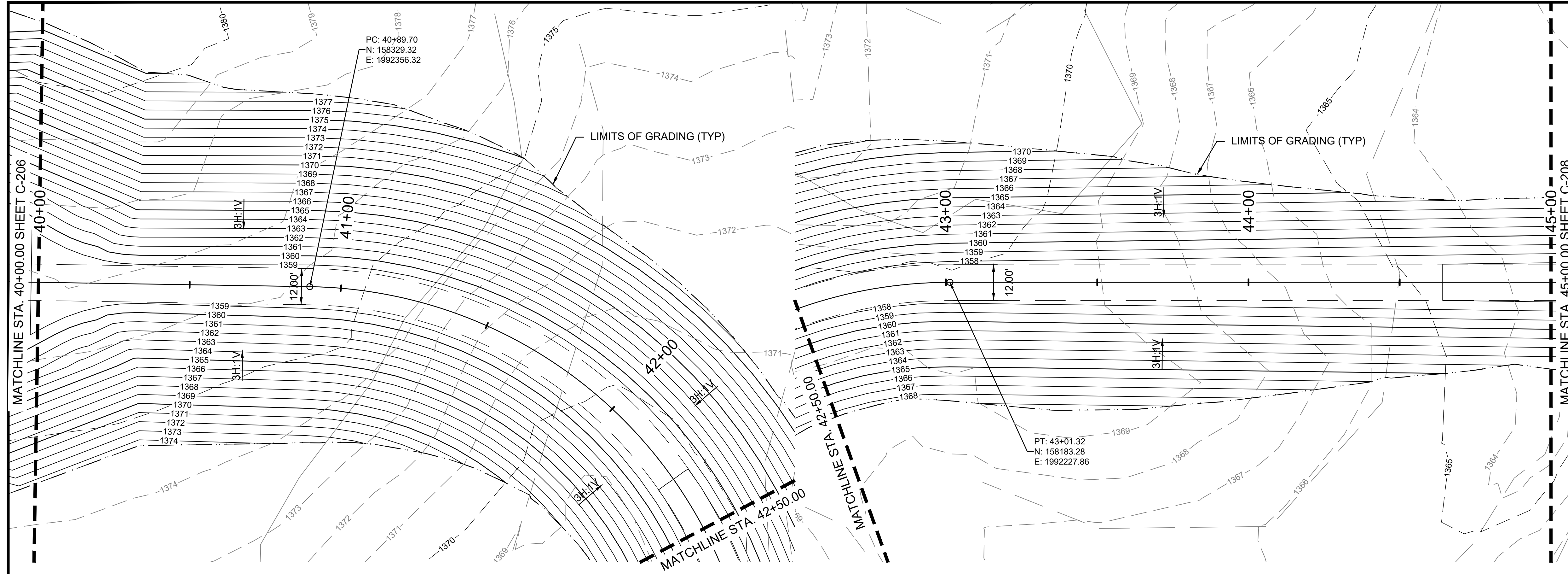
DESIGNED BY: D ANDERSON  
 DRAWN BY: B BIESEMEYER  
 DATE: 26 JAN 2024  
 PROJECT NO.: OK07848-010

MRK	DESCRIPTION	DATE	BY

OKLAHOMA CITY LANDFILL CHANNEL MODIFICATION  
 20435 SW 29th ST, UNION CITY, OK 73090

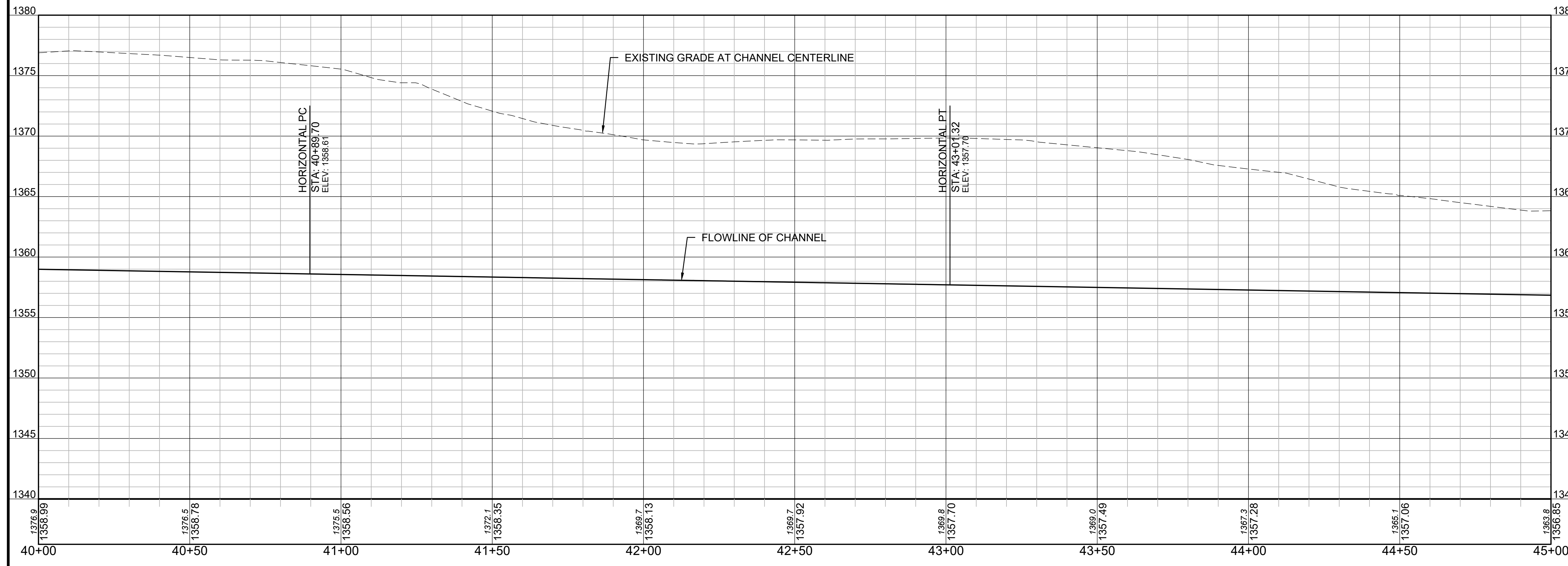
PLAN & PROFILE STA 40+00 TO STA 45+00  
 C-207

- GENERAL NOTES:**
- REFER TO SHEET C-002 FOR ADDITIONAL NOTES AND REQUIREMENTS.
  - CONTRACTOR SHALL EXERCISE CARE TO AVOID DAMAGE TO ANY EXISTING PAVEMENT, UTILITIES, STRUCTURES, OR OTHER FEATURES TO REMAIN. ANY DAMAGE TO EXISTING PAVEMENT, UTILITIES, STRUCTURES, OR OTHER FEATURES TO REMAIN SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.
  - ANY UNDERGROUND UTILITIES SHOWN WERE LOCATED FROM PREVIOUS SURVEY AND RECORDED DOCUMENTS. NO EXCAVATION WAS PERFORMED TO DETERMINE SIZE OR DEPTH, OR TO VERIFY LOCATION. THERE MAY BE OTHER UTILITIES PRESENT BESIDES THOSE SHOWN ON THESE PLANS, AND THOSE SHOWN ON THESE PLANS MAY NOT BE LOCATED AS INDICATED HERE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL UNDERGROUND UTILITIES AND THE LOCATION THEREOF PRIOR TO BEGINNING CONSTRUCTION.
  - CONTRACTOR SHALL REMOVE ANY DEMOLISHED MATERIALS AND LEGALLY DISPOSE OF SAID MATERIAL OFF-SITE.
  - ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.
  - EXCEPT IN AREAS NOTED OTHERWISE, ALL SLOPES SHALL BE 3H:1V. ANY AREAS WHERE SLOPE IS NOTED TO EXCEED 3H:1V SHALL BE PROTECTED BY SLOPE STABILIZATION AS SHOWN IN THE DETAILS.
  - ALL DISTURBED AREAS NOT PAVED SHALL BE SODDED UNLESS INDICATED OTHERWISE.
  - ANY EROSION CONTROL DEVICES, INSTALLATION, AND MAINTENANCE THEREOF SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY.
  - THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL DEVICES AND BEST MANAGEMENT PRACTICES (BMP'S) SUCH THAT NO STORMWATER POLLUTION ENTERS EXISTING DRAINAGE SYSTEMS OR ROADWAYS AND MUST COORDINATE THE BMP'S AS REQUIRED FOR ANY CONSTRUCTION PHASING.
  - THE CONTRACTOR IS RESPONSIBLE FOR SUBMISSION OF A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TO THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY AS REQUIRED.
  - THE CONTRACTOR SHALL MAINTAIN A COPY OF THE SWPPP AT THE JOB SITE, POSTED PROMINENTLY AND READILY AVAILABLE TO THE PUBLIC, THAT INCLUDES THE MOST CURRENT VERSION OF THE EROSION CONTROL PLAN. THIS PLAN SHALL BE KEPT UPDATED TO SHOW ANY CHANGES TO THE EROSION CONTROL BMP'S AND ALL MAINTENANCE THAT HAS BEEN PERFORMED ON THE BMP'S, ALONG WITH THE DATES OF SUCH CHANGES AND MAINTENANCE, IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY.
  - THE CONTRACTOR SHALL MAINTAIN ALL BMP'S IN A FUNCTIONAL CONDITION, EFFECTING MAINTENANCE AT ANY TIME A GIVEN BMP HAS IMPAIRED FUNCTION DUE TO DAMAGE OR SEDIMENT BUILDUP. IMPAIRED FUNCTION INCLUDES, BUT IS NOT LIMITED TO, TORN OR DOWNED SILT FENCE, TORN ROCK BAGS, WASHED OUT GRAVEL AND RIP RAP OR ANY OTHER DEFECT OR DAMAGE THAT IMPAIRS THE FUNCTION OF A BMP. THE CONTRACTOR SHALL INSPECT ALL BMP'S AT LEAST ONCE PER WEEK AND AFTER ANY RAINFALL OF 1" OR MORE.

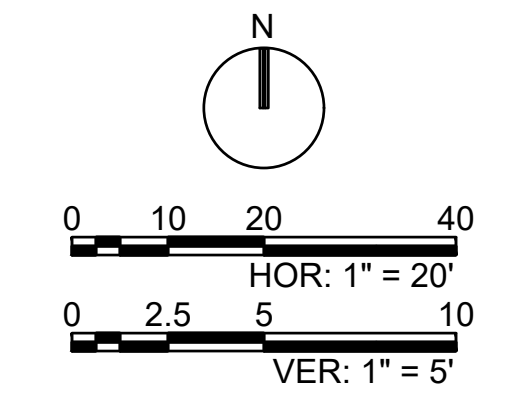


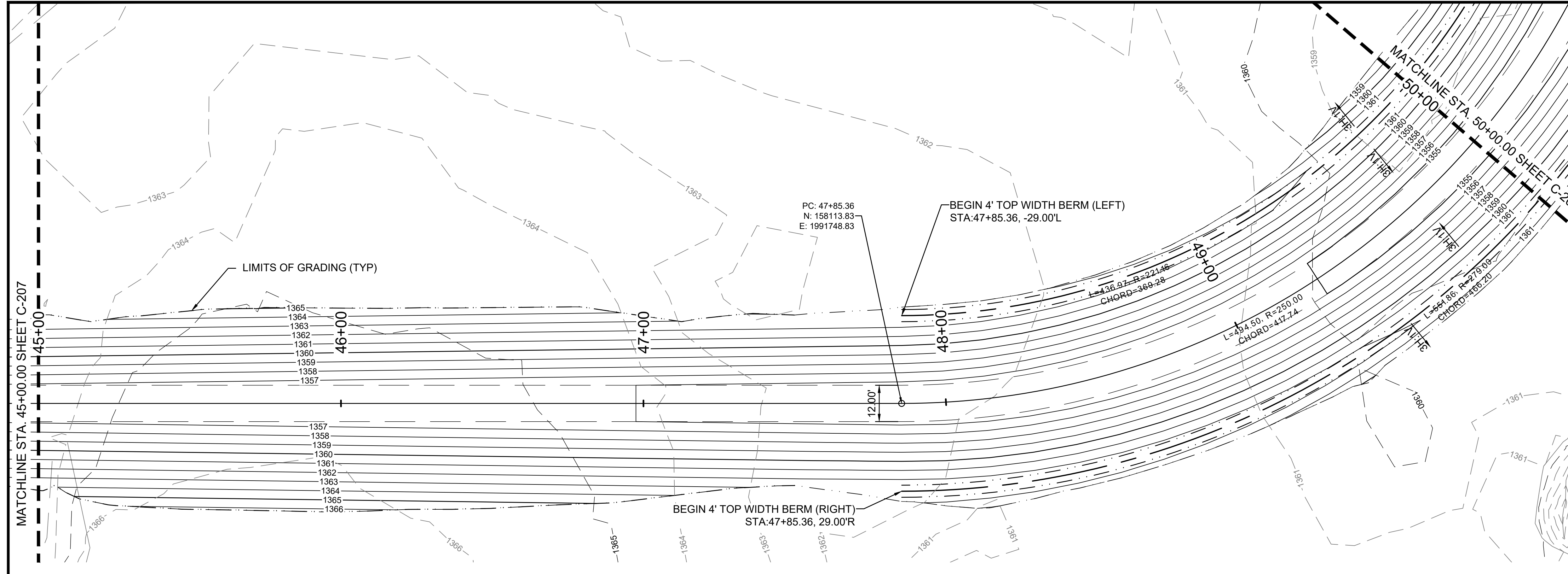
1 SITE LAYOUT PLAN STA 40+00.00 TO STA 42+50.00

2 SITE LAYOUT PLAN STA 42+50.00 TO STA 45+00.00

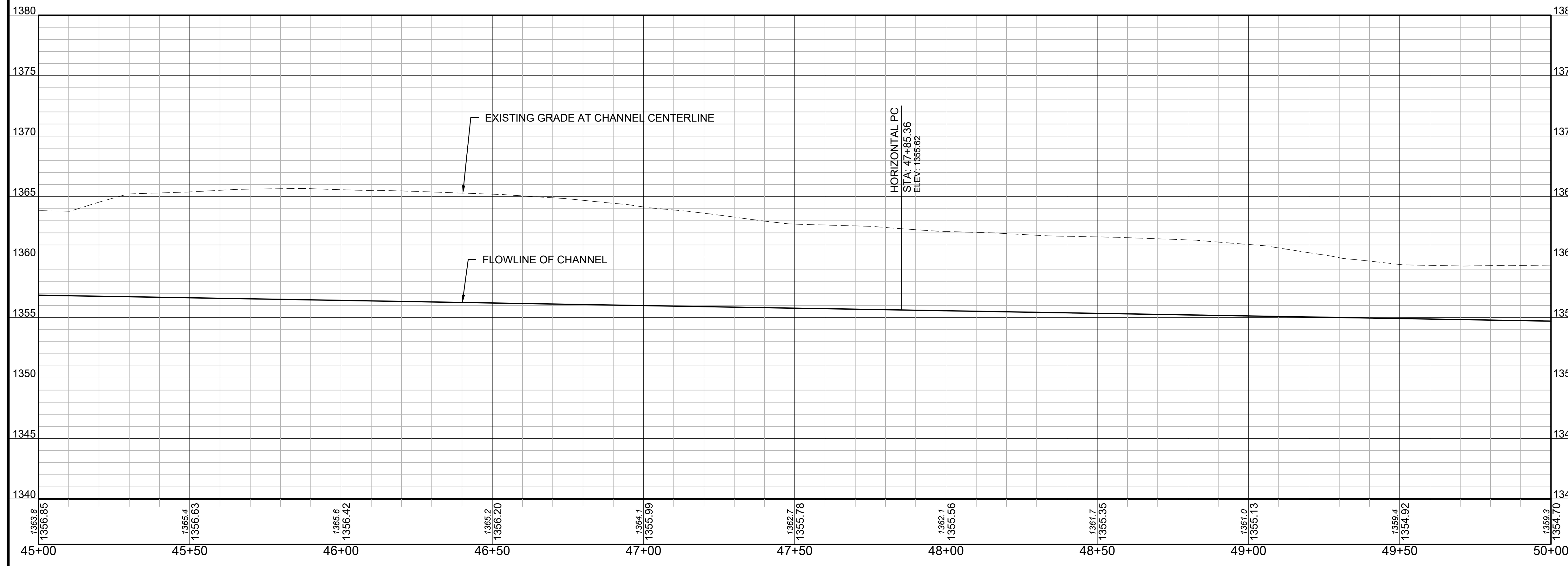


3 CHANNEL PROFILE STA 40+00.00 TO STA 45+00.00

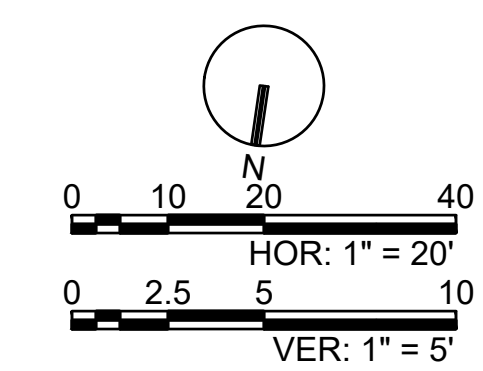





1 SITE LAYOUT PLAN STA 45+00.00 TO STA 50+00.00




2 CHANNEL PROFILE STA 45+00.00 TO STA 50+00.00




- GENERAL NOTES:**
- REFER TO SHEET C-002 FOR ADDITIONAL NOTES AND REQUIREMENTS.
  - CONTRACTOR SHALL EXERCISE CARE TO AVOID DAMAGE TO ANY EXISTING PAVEMENT, UTILITIES, STRUCTURES, OR OTHER FEATURES TO REMAIN. ANY DAMAGE TO EXISTING PAVEMENT, UTILITIES, STRUCTURES, OR OTHER FEATURES TO REMAIN SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.
  - ANY UNDERGROUND UTILITIES SHOWN WERE LOCATED FROM PREVIOUS SURVEY AND RECORDED DOCUMENTS. NO EXCAVATION WAS PERFORMED TO DETERMINE SIZE OR DEPTH, OR TO VERIFY LOCATION. THERE MAY BE OTHER UTILITIES PRESENT BESIDES THOSE SHOWN ON THESE PLANS, AND THOSE SHOWN ON THESE PLANS MAY NOT BE LOCATED AS INDICATED HERE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL UNDERGROUND UTILITIES AND THE LOCATION THEREOF PRIOR TO BEGINNING CONSTRUCTION.
  - CONTRACTOR SHALL REMOVE ANY DEMOLISHED MATERIALS AND LEGALLY DISPOSE OF SAID MATERIAL OFF-SITE.
  - ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.
  - EXCEPT IN AREAS NOTED OTHERWISE, ALL SLOPES SHALL BE 3H:1V. ANY AREAS WHERE SLOPE IS NOTED TO EXCEED 3H:1V SHALL BE PROTECTED BY SLOPE STABILIZATION AS SHOWN IN THE DETAILS.
  - ALL DISTURBED AREAS NOT PAVED SHALL BE SODDED UNLESS INDICATED OTHERWISE.
  - ANY EROSION CONTROL DEVICES, INSTALLATION, AND MAINTENANCE THEREOF SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY.
  - THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL DEVICES AND BEST MANAGEMENT PRACTICES (BMP'S) SUCH THAT NO STORMWATER POLLUTION ENTERS EXISTING DRAINAGE SYSTEMS OR ROADWAYS AND MUST COORDINATE THE BMP'S AS REQUIRED FOR ANY CONSTRUCTION PHASING.
  - THE CONTRACTOR IS RESPONSIBLE FOR SUBMISSION OF A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TO THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY AS REQUIRED.
  - THE CONTRACTOR SHALL MAINTAIN A COPY OF THE SWPPP AT THE JOB SITE, POSTED PROMINENTLY AND READILY AVAILABLE TO THE PUBLIC, THAT INCLUDES THE MOST CURRENT VERSION OF THE EROSION CONTROL PLAN. THIS PLAN SHALL BE KEPT UPDATED TO SHOW ANY CHANGES TO THE EROSION CONTROL BMP'S AND ALL MAINTENANCE THAT HAS BEEN PERFORMED ON THE BMP'S, ALONG WITH THE DATES OF SUCH CHANGES AND MAINTENANCE, IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY.
  - THE CONTRACTOR SHALL MAINTAIN ALL BMP'S IN A FUNCTIONAL CONDITION, EFFECTING MAINTENANCE AT ANY TIME A GIVEN BMP HAS IMPAIRED FUNCTION DUE TO DAMAGE OR SEDIMENT BUILDUP. IMPAIRED FUNCTION INCLUDES, BUT IS NOT LIMITED TO, TORN OR DOWNED SILT FENCE, TORN ROCK BAGS, WASHED OUT GRAVEL AND RIP RAP OR ANY OTHER DEFECT OR DAMAGE THAT IMPAIRS THE FUNCTION OF A BMP. THE CONTRACTOR SHALL INSPECT ALL BMP'S AT LEAST ONCE PER WEEK AND AFTER ANY RAINFALL OF 1" OR MORE.



OKLAHOMA ENVIRONMENTAL MANAGEMENT AUTHORITY



guernsey.us



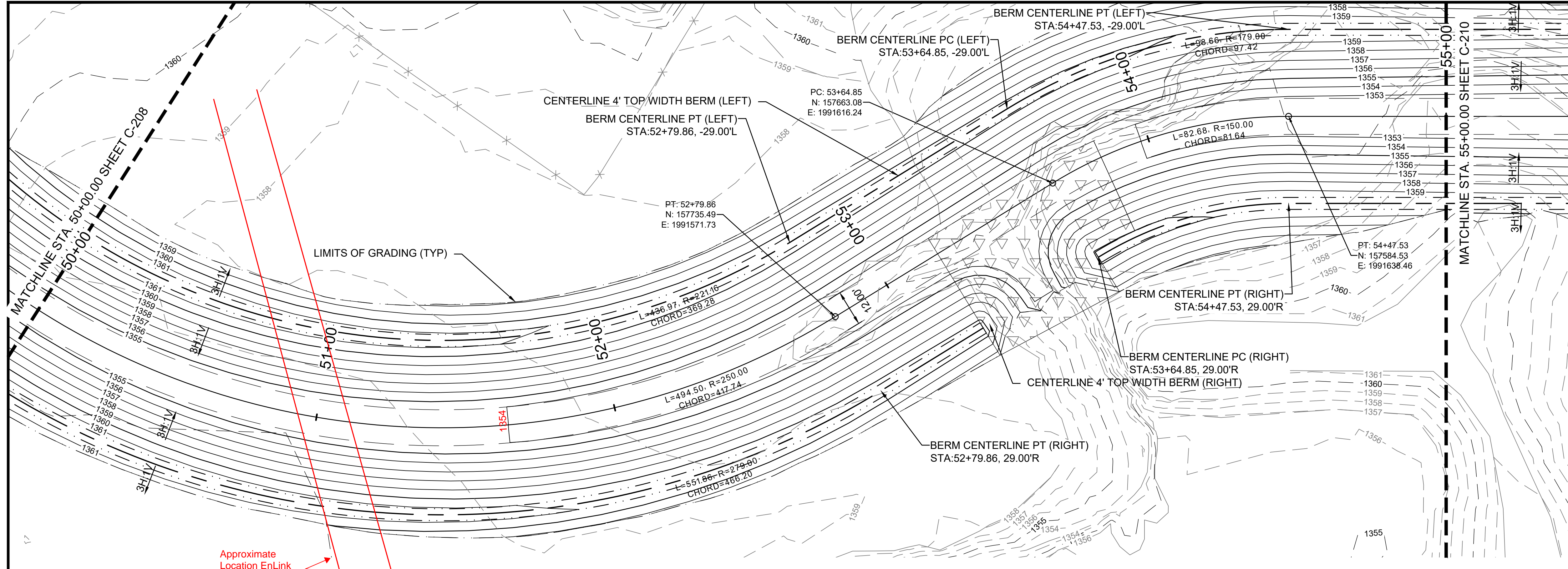
1-26-24

DESIGNED BY: D ANDERSON	DRAWN BY: B BIESEMEYER	DATE: 26 JAN 2024	PROJECT NO.: OK07848-010
		BY	
		DATE	
		DESCRIPTION	
		MRK	

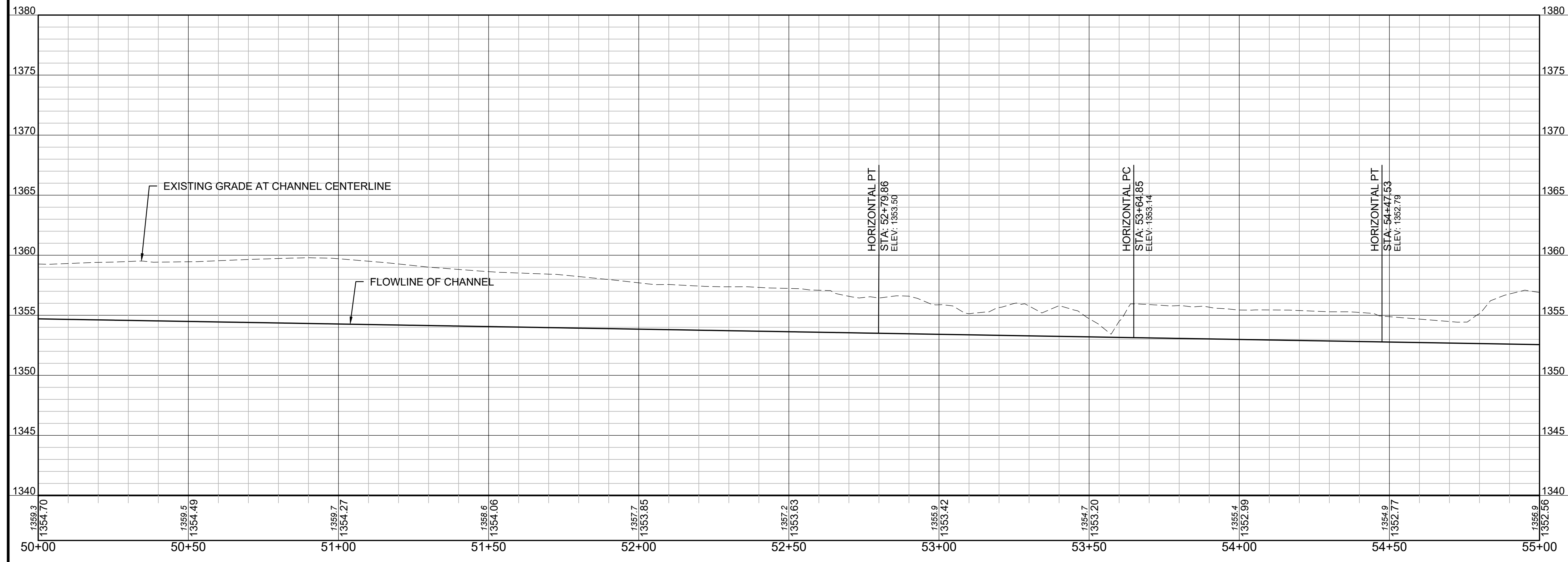
OEMA UNION CITY LANDFILL CHANNEL MODIFICATION  
 20435 SW 29th ST, UNION CITY, OK 73090

PLAN & PROFILE STA 45+00 TO STA 50+00

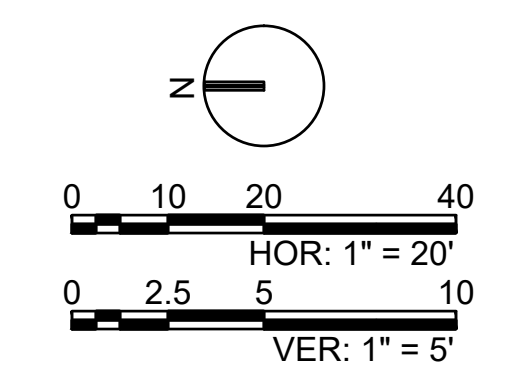
C-208

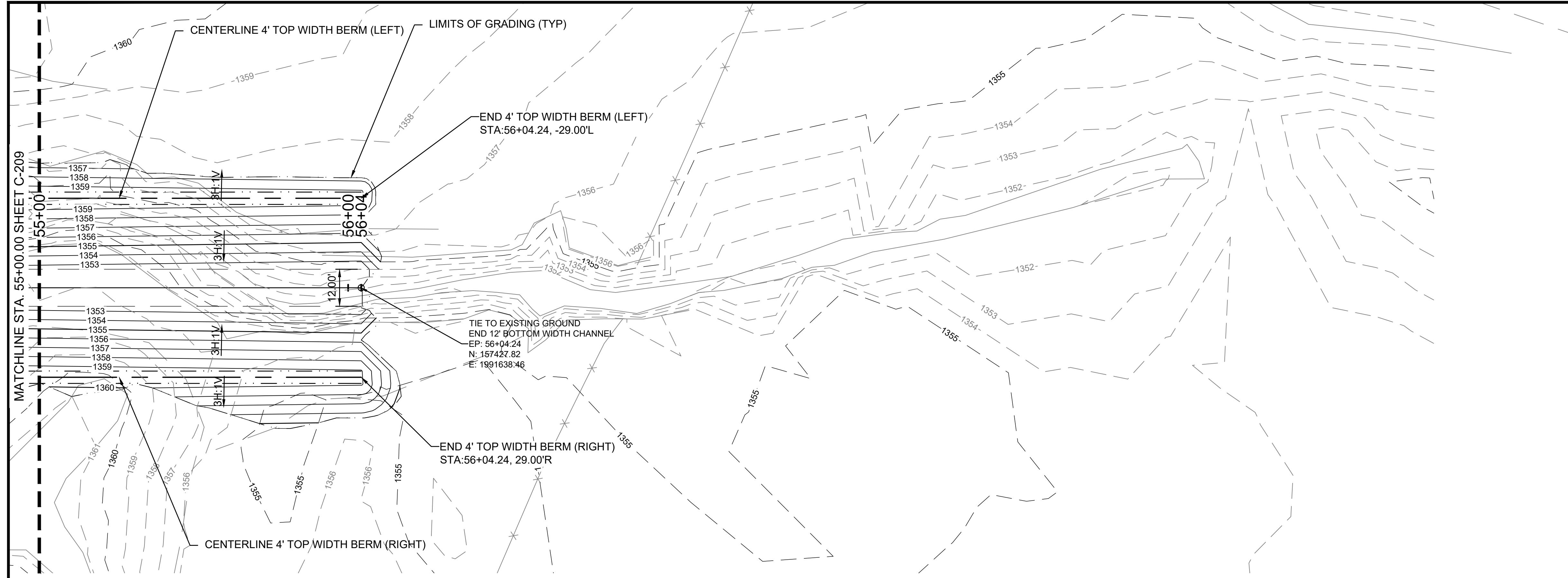


1 SITE LAYOUT PLAN STA 50+00.00 TO STA 55+00.00

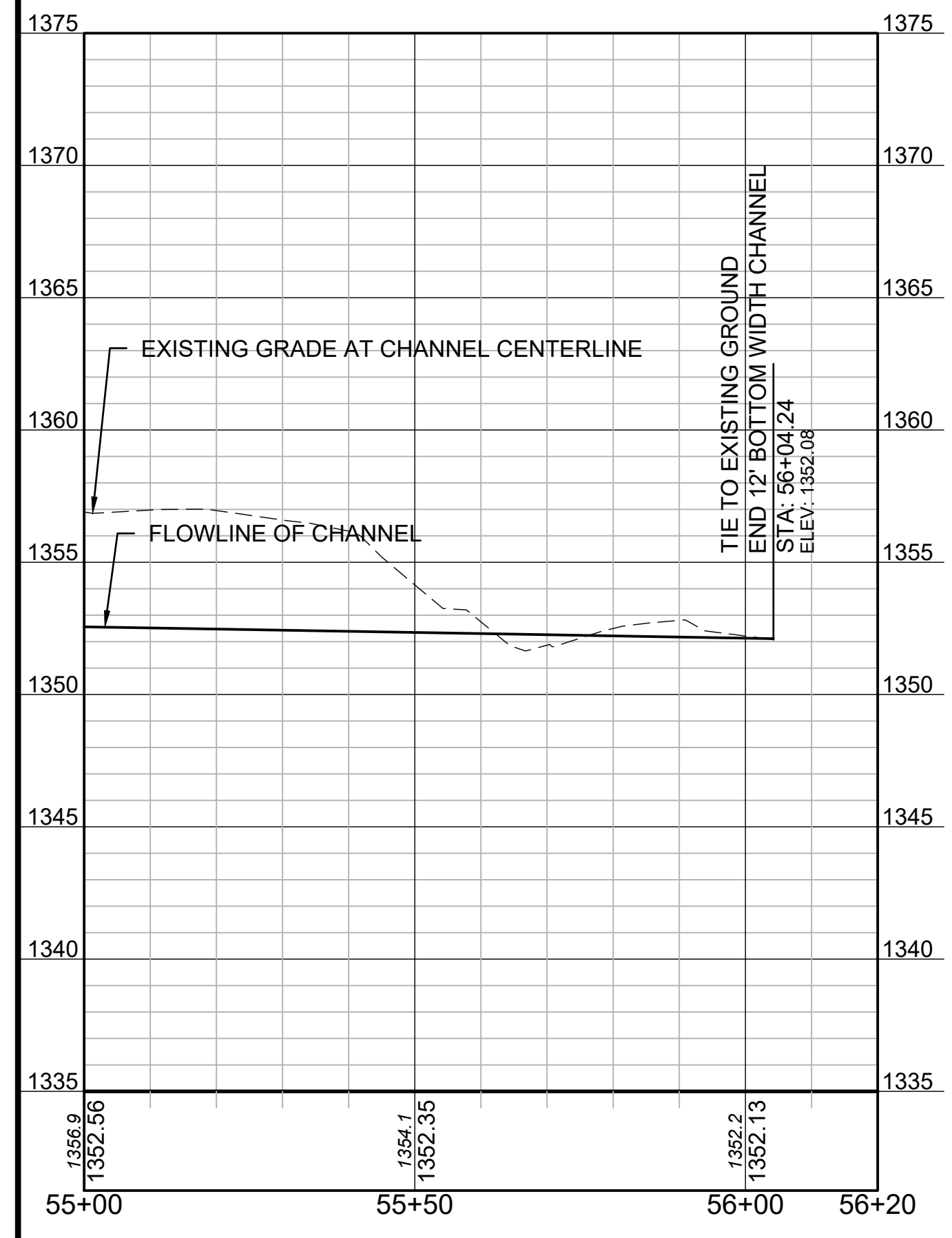


2 CHANNEL PROFILE STA 50+00.00 TO STA 55+00.00





1 SITE LAYOUT PLAN STA 55+00.00 TO STA 56+04.24



2 CHANNEL PROFILE STA 55+00.00 TO STA 56+04.24

- GENERAL NOTES:**
- A. REFER TO SHEET C-002 FOR ADDITIONAL NOTES AND REQUIREMENTS.
  - B. CONTRACTOR SHALL EXERCISE CARE TO AVOID DAMAGE TO ANY EXISTING PAVEMENT, UTILITIES, STRUCTURES, OR OTHER FEATURES TO REMAIN. ANY DAMAGE TO EXISTING PAVEMENT, UTILITIES, STRUCTURES, OR OTHER FEATURES TO REMAIN SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.
  - C. ANY UNDERGROUND UTILITIES SHOWN WERE LOCATED FROM PREVIOUS SURVEY AND RECORDED DOCUMENTS. NO EXCAVATION WAS PERFORMED TO DETERMINE SIZE OR DEPTH, OR TO VERIFY LOCATION. THERE MAY BE OTHER UTILITIES PRESENT BESIDES THOSE SHOWN ON THESE PLANS, AND THOSE SHOWN ON THESE PLANS MAY NOT BE LOCATED AS INDICATED HERE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL UNDERGROUND UTILITIES AND THE LOCATION THEREOF PRIOR TO BEGINNING CONSTRUCTION.
  - D. CONTRACTOR SHALL REMOVE ANY DEMOLISHED MATERIALS AND LEGALLY DISPOSE OF SAID MATERIAL OFF-SITE.
  - E. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.
  - F. EXCEPT IN AREAS NOTED OTHERWISE, ALL SLOPES SHALL BE 3H:1V. ANY AREAS WHERE SLOPE IS NOTED TO EXCEED 3H:1V SHALL BE PROTECTED BY SLOPE STABILIZATION AS SHOWN IN THE DETAILS.
  - G. ALL DISTURBED AREAS NOT PAVED SHALL BE SODDED UNLESS INDICATED OTHERWISE.
  - H. ANY EROSION CONTROL DEVICES, INSTALLATION, AND MAINTENANCE THEREOF SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY.
  - I. THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL DEVICES AND BEST MANAGEMENT PRACTICES (BMP'S) SUCH THAT NO STORMWATER POLLUTION ENTERS EXISTING DRAINAGE SYSTEMS OR ROADWAYS AND MUST COORDINATE THE BMP'S AS REQUIRED FOR ANY CONSTRUCTION PHASING.
  - J. THE CONTRACTOR IS RESPONSIBLE FOR SUBMISSION OF A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TO THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY AS REQUIRED.
  - K. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE SWPPP AT THE JOB SITE, POSTED PROMINENTLY AND READILY AVAILABLE TO THE PUBLIC, THAT INCLUDES THE MOST CURRENT VERSION OF THE EROSION CONTROL PLAN. THIS PLAN SHALL BE KEPT UPDATED TO SHOW ANY CHANGES TO THE EROSION CONTROL BMP'S AND ALL MAINTENANCE THAT HAS BEEN PERFORMED ON THE BMP'S, ALONG WITH THE DATES OF SUCH CHANGES AND MAINTENANCE, IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY.
  - L. THE CONTRACTOR SHALL MAINTAIN ALL BMP'S IN A FUNCTIONAL CONDITION, EFFECTING MAINTENANCE AT ANY TIME A GIVEN BMP HAS IMPAIRED FUNCTION DUE TO DAMAGE OR SEDIMENT BUILDUP. IMPAIRED FUNCTION INCLUDES, BUT IS NOT LIMITED TO, TORN OR DOWNED SILT FENCE, TORN ROCK BAGS, WASHED OUT GRAVEL AND RIP RAP OR ANY OTHER DEFECT OR DAMAGE THAT IMPAIRS THE FUNCTION OF A BMP. THE CONTRACTOR SHALL INSPECT ALL BMP'S AT LEAST ONCE PER WEEK AND AFTER ANY RAINFALL OF 1" OR MORE.

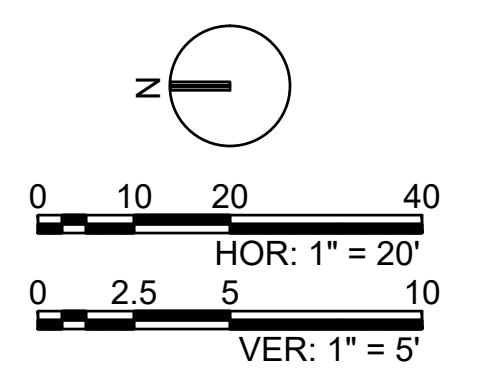


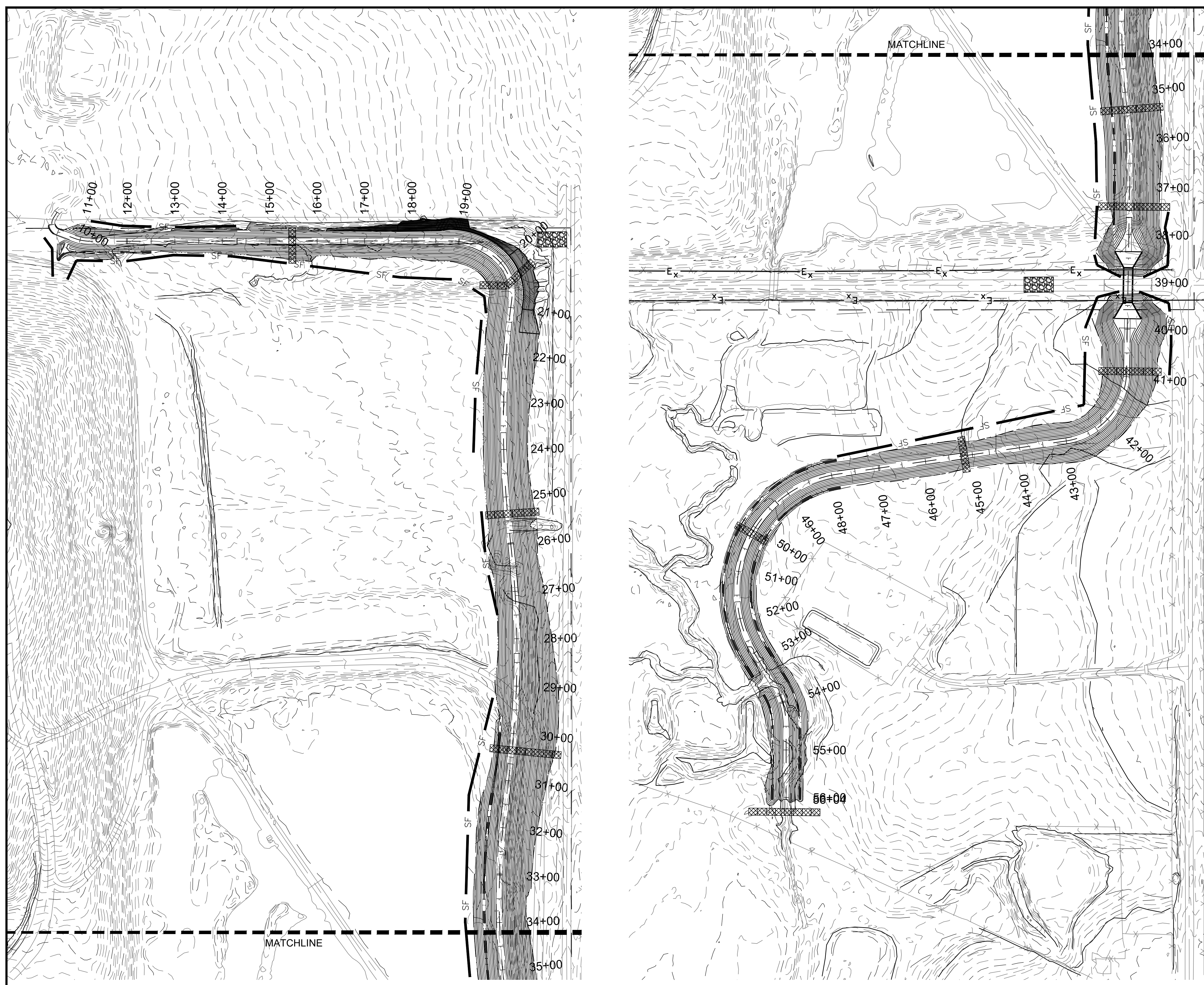
DESIGNED BY: D ANDERSON  
 DRAWN BY: B BIESEMEYER  
 DATE: 26 JAN 2024  
 PROJECT NO.: OK07848-010

MRK	DESCRIPTION	DATE	BY

OEMA UNION CITY LANDFILL CHANNEL MODIFICATION  
 20435 SW 29th ST, UNION CITY, OK 73090

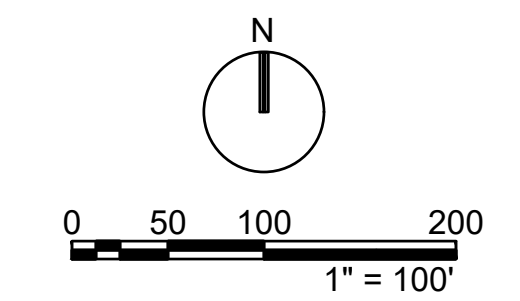
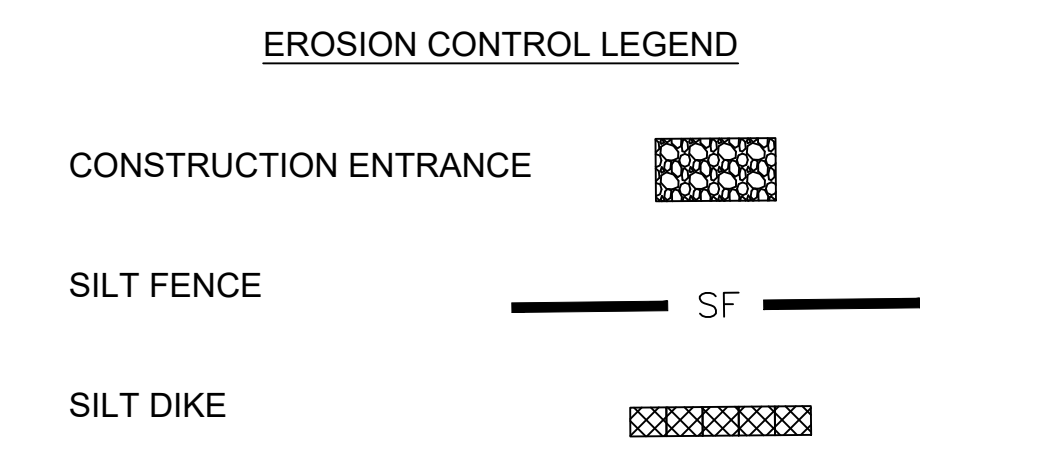
PLAN & PROFILE STA 55+00 TO STA 56+04







1 EROSION CONTROL PLAN


- GENERAL NOTES:**
- REFER TO SHEET C-002 AND C-502 FOR ADDITIONAL NOTES AND REQUIREMENTS.
  - ANY EROSION CONTROL DEVICES, INSTALLATION, AND MAINTENANCE THEREOF SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
  - CONSTRUCT AND MAINTAIN TEMPORARY GRAVEL ENTRANCES/EXITS IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF UNION CITY, CANADIAN COUNTY, AND ODEQ.
  - THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL DEVICES AND BEST MANAGEMENT PRACTICES (BMP'S) SUCH THAT NO STORMWATER POLLUTION ENTERS EXISTING DRAINAGE SYSTEMS OR ROADWAYS AND MUST COORDINATE THE BMP'S AS REQUIRED FOR ANY CONSTRUCTION PHASING.
  - THE CONTRACTOR IS RESPONSIBLE FOR SUBMISSION OF A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TO THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY AS REQUIRED.
  - THE CONTRACTOR SHALL MAINTAIN A COPY OF THE SWPPP AT THE JOB SITE, POSTED PROMINENTLY AND READILY AVAILABLE TO THE PUBLIC, THAT INCLUDES THE MOST CURRENT VERSION OF THE EROSION CONTROL PLAN. THIS PLAN SHALL BE KEPT UPDATED TO SHOW ANY CHANGES TO THE EROSION CONTROL BMP'S AND ALL MAINTENANCE THAT HAS BEEN PERFORMED ON THE BMP'S, ALONG WITH THE DATES OF SUCH CHANGES AND MAINTENANCE, IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF UNION CITY, CANADIAN COUNTY, AND THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY.
  - THE CONTRACTOR SHALL MAINTAIN ALL BMP'S IN A FUNCTIONAL CONDITION, EFFECTING MAINTENANCE AT ANY TIME A GIVEN BMP HAS IMPAIRED FUNCTION DUE TO DAMAGE OR SEDIMENT BUILDUP. IMPAIRED FUNCTION INCLUDES, BUT IS NOT LIMITED TO, TORN OR DOWNED SILT FENCE, TORN ROCK BAGS, WASHED-OUT GRAVEL AND RIP-RAP AND ANY OTHER DEFECT OR DAMAGE THAT IMPAIRS THE FUNCTION OF A BMP. THE CONTRACTOR SHALL INSPECT ALL BMP'S AT LEAST ONCE PER WEEK AND AFTER ANY RAINFALL OF 1" OR MORE.
  - DISTURBED AREAS NOT PAVED OR LANDSCAPED SHALL BE SODDED AS SPECIFIED.







**guernsey**  
guernsey.us

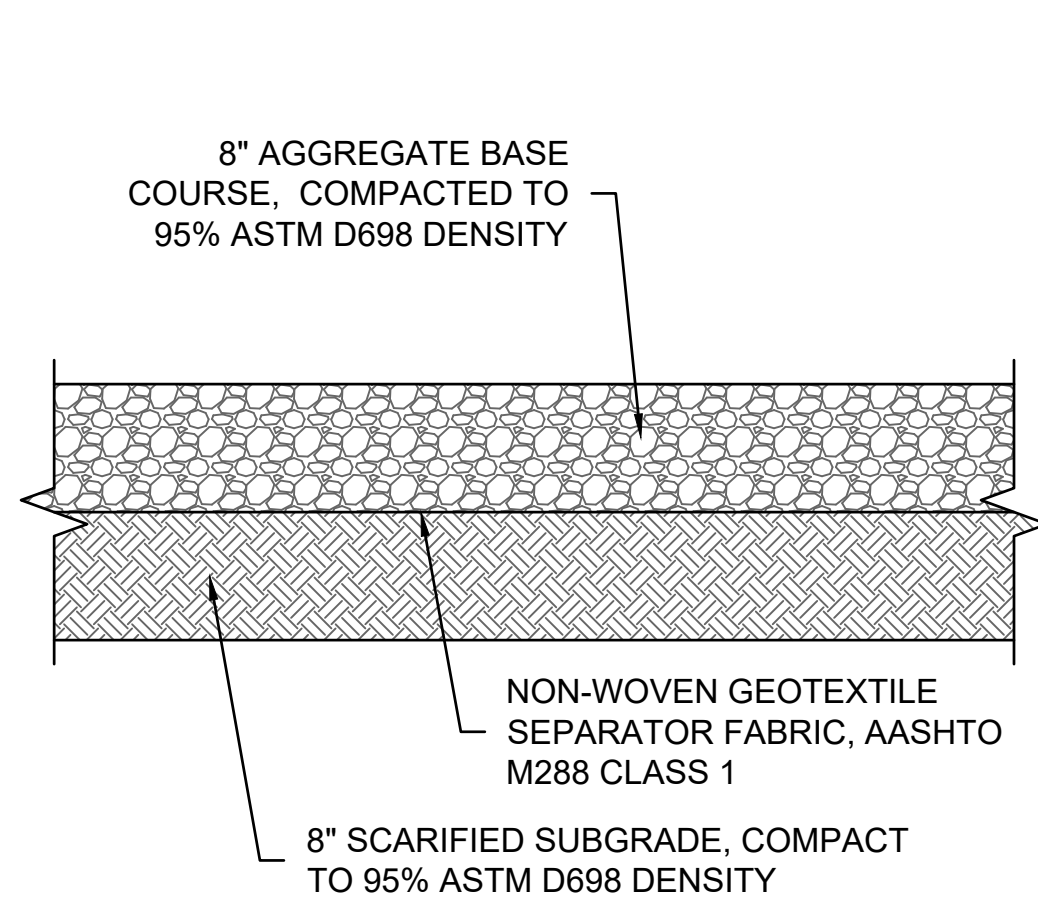


DESIGNED BY: D ANDERSON	DRAWN BY: B BIESEMEYER	PROJECT NO.: OK07848-010
DATE: 26 JAN 2024	DATE:	BY:
DESCRIPTION	DATE	
MRK		

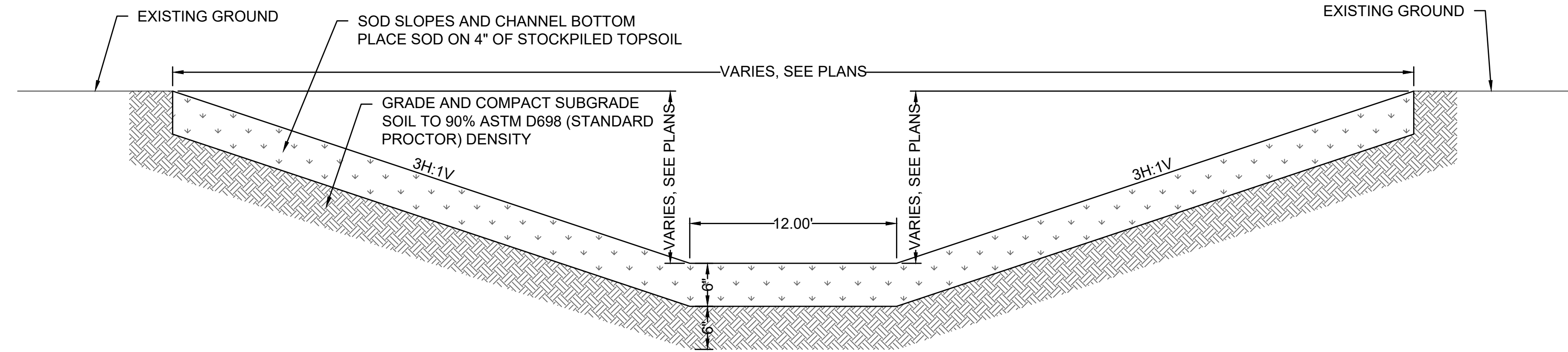
OEMA UNION CITY LANDFILL CHANNEL MODIFICATION  
 20435 SW 29th ST, UNION CITY, OK 73090

**EROSION CONTROL PLAN**

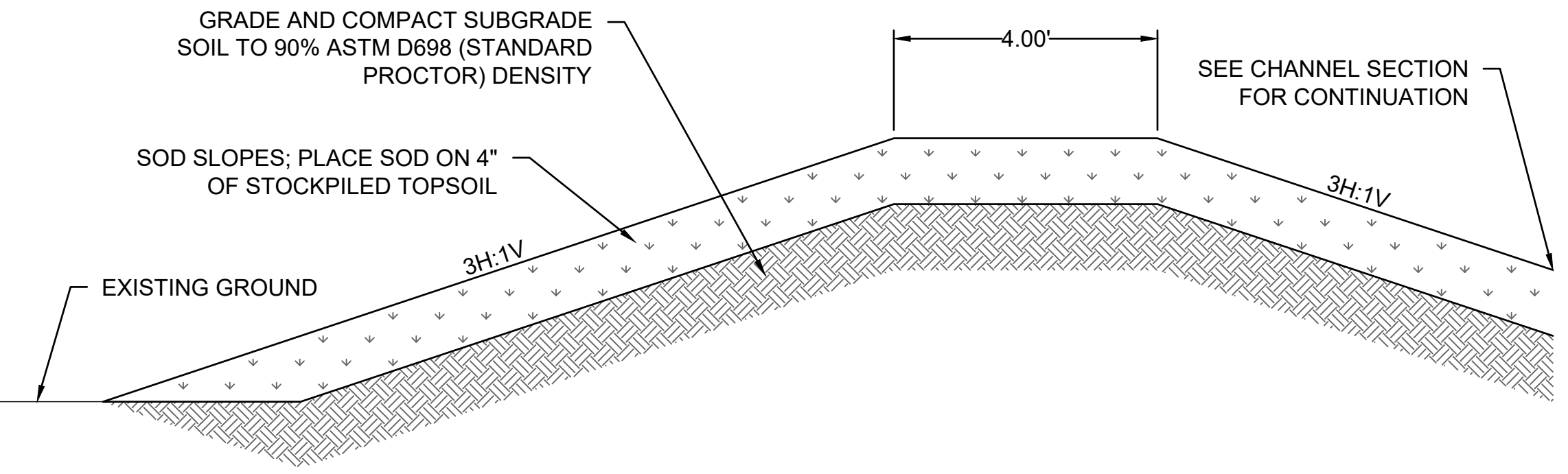
CG100



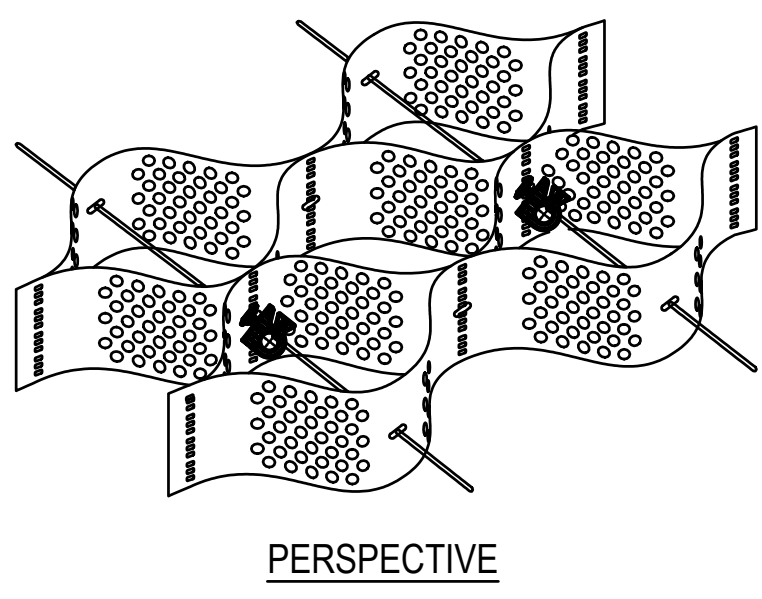
1 AGGREGATE SURFACING



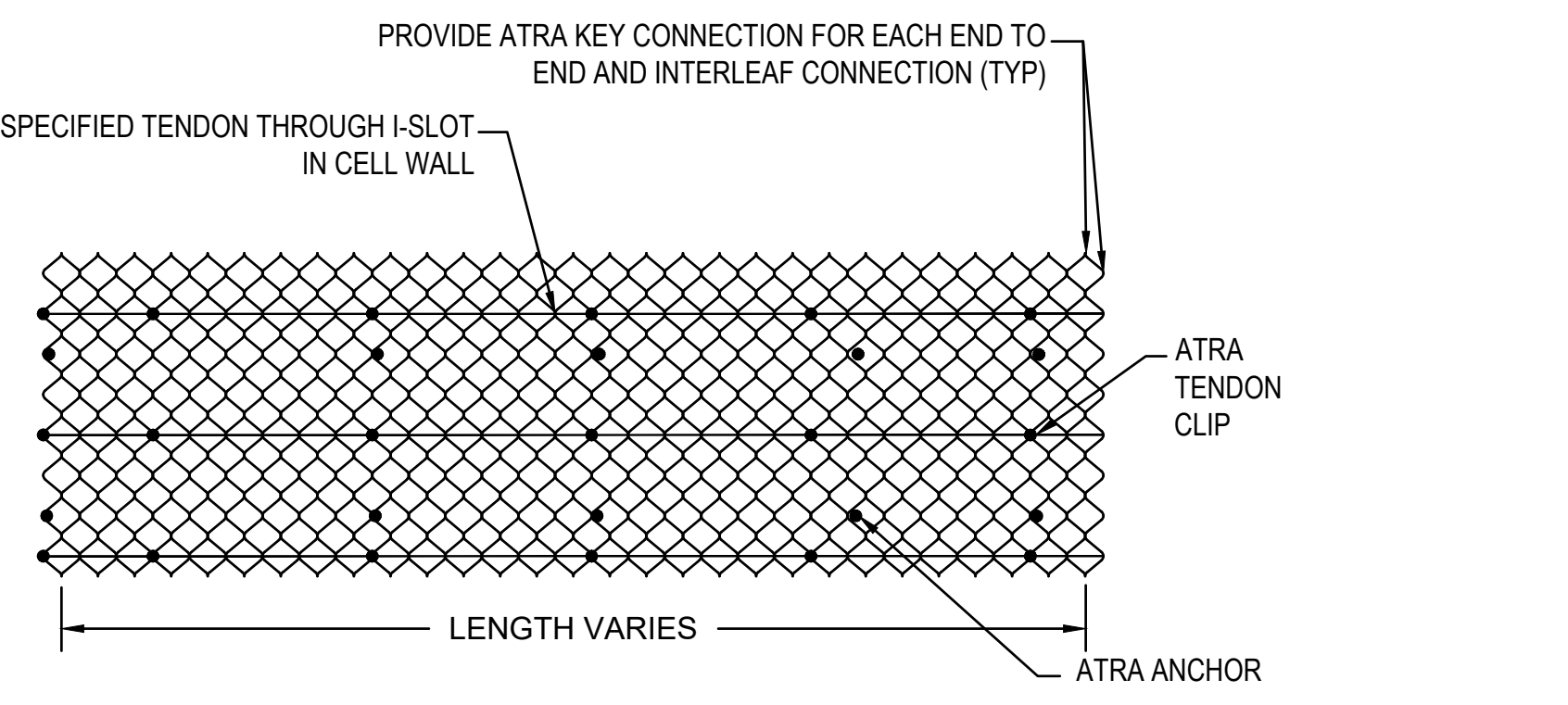
2 CHANNEL SECTION



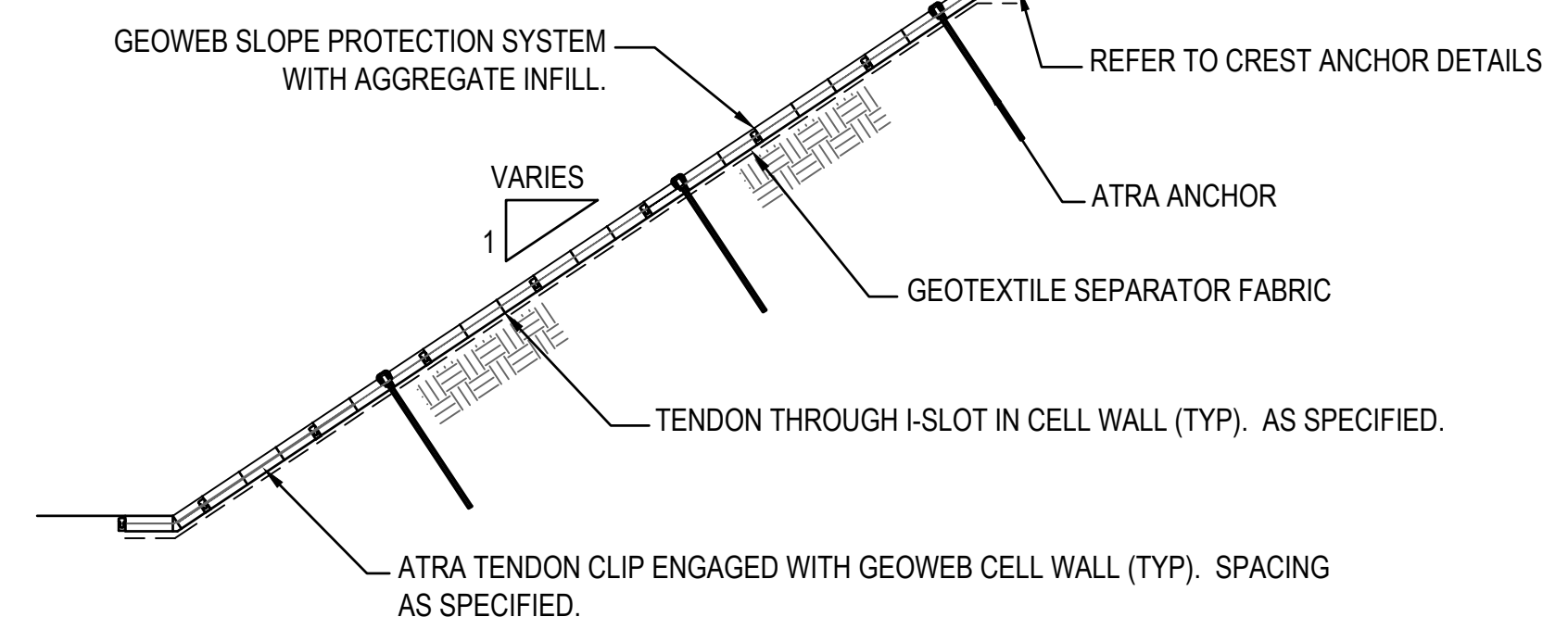
3 BERM SECTION



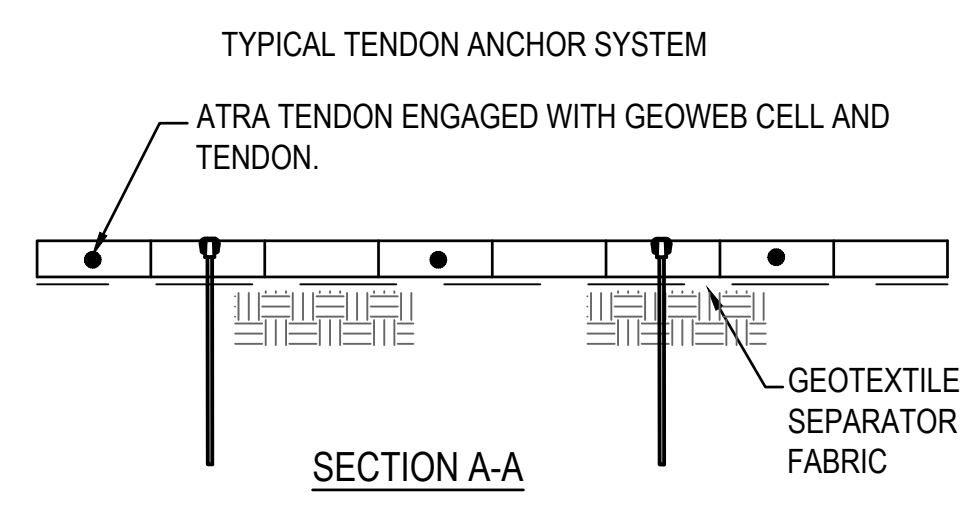
TENDON DATA		
TENDON TYPE	WIDTH, IN (MM)	BREAK STRENGTH LBF (KN)
<b>POLYESTER</b>		
TP-67	0.75 (19)	1506 (6.70)
TP-93	0.75 (19)	2090 (9.30)
TP-225	1.25 (32)	5100(22.7)
<b>KELVAR</b>		
TK-189	0.75 (19)	4000 (17.8)
<b>WOVEN POLYPROPYLENE</b>		
TPP-225	1.25 (32)	5100 (22.7)



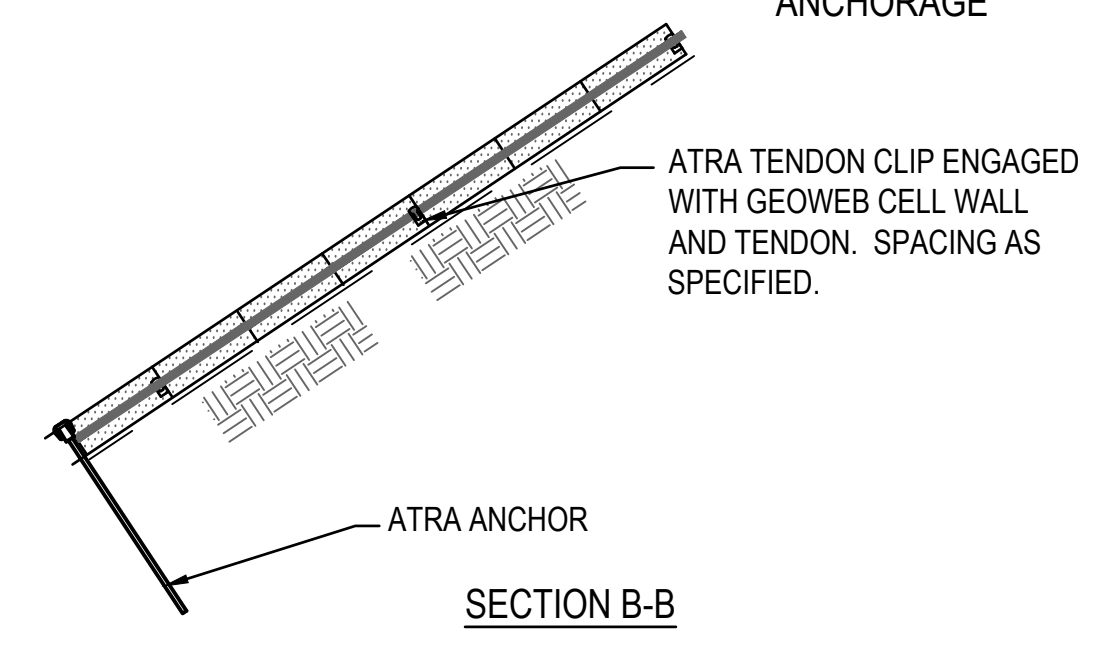
PLAN VIEW



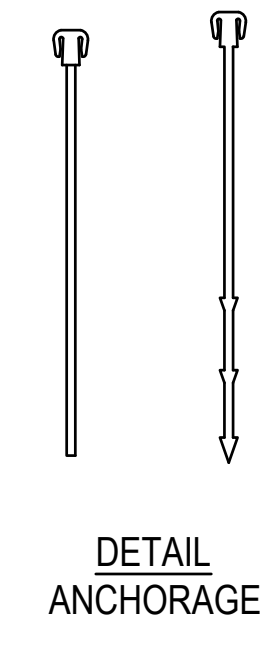
SECTION



SECTION A-A



SECTION B-B

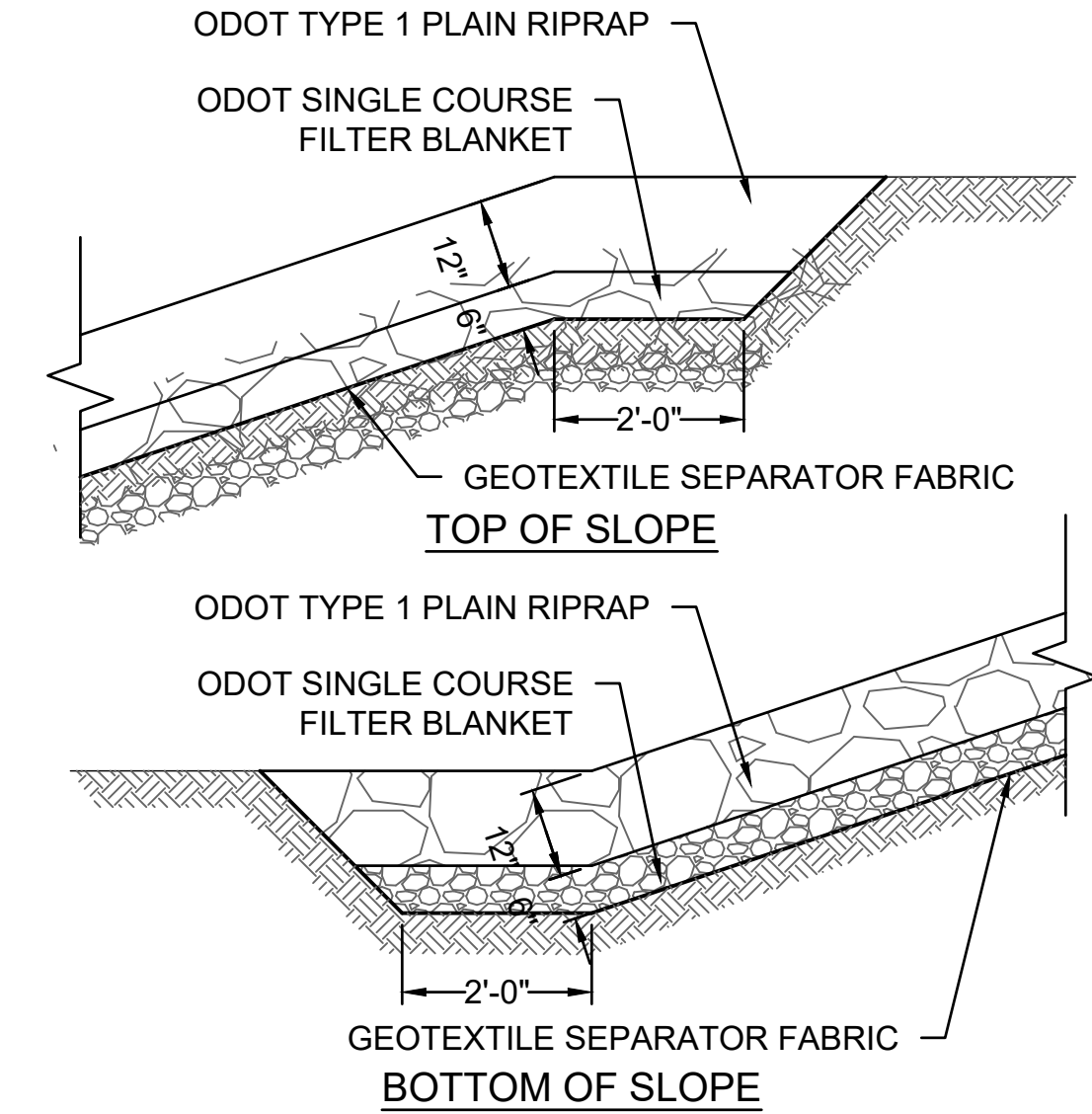


DETAIL ANCHORAGE

4 SLOPE STABILIZATION (MANUFACTURER'S DETAILS)

SLOPE STABILIZATION NOTES:

1. BASIS OF DESIGN IS PRESTO GEOSYSTEMS "GEOWEB" SLOPE AND SHORELINE PROTECTION SYSTEM. (HTTPS://WWW.PRESTOGEO.COM)
2. DELEGATED DESIGN: CONTRACTOR IS RESPONSIBLE FOR DESIGN OF SLOPE PROTECTION SYSTEM TO THE REQUIREMENTS GIVEN BELOW AND IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS. CONTRACTOR SHALL PROVIDE DESIGN CALCULATIONS FOR SLOPE PROTECTION SYSTEM, INCLUDING BUT NOT LIMITED TO, ANCHORAGE SYSTEM AND CELL SIZE CALCULATIONS, TO BE SIGNED BY A LICENSED PROFESSIONAL ENGINEER. CONTRACTOR SHALL PROVIDE MANUFACTURER'S DETAIL AND INSTALLATION DRAWINGS FOR THE SLOPE PROTECTION SYSTEM, AND SPECIFICATIONS FOR SAME, TO THE DESIGNER OF RECORD AND THE OWNER PRIOR TO INSTALLATION.
3. GEOCELL SYSTEM: POLYETHYLENE STRIPS ATTACHED TOGETHER TO FORM A WEBBING WHICH EXPANDS TO PROVIDE INTERLOCKED CELLS FOR FILL MATERIAL. CELL SIZE SHALL HAVE A LENGTH OF BETWEEN 8" AND 12", A WIDTH OF BETWEEN 8" AND 15", AND A DEPTH OF 6". POLYETHYLENE STRIPS SHALL BE PERFORATED.
4. GEOCELL ANCHORAGE: ANCHOR GEOCELL SYSTEM WITH CREST ANCHORAGE, GEOCELL ANCHORS, AND TOE ANCHORAGE:
  - 4.1. CREST ANCHORAGE: ANCHOR GEOCELL SYSTEM AT TOP OF SLOPE WITH STAKES OR RODS, OF A SIZE, LENGTH, AND SPACING DETERMINED BY THE DELEGATED DESIGN PROFESSIONAL, WITH CLIPS OR OTHER ATTACHMENT DEVICES DESIGNED TO INTERFACE WITH THE GEOCELL SYSTEM.
  - 4.2. GEOCELL ANCHORS: PROVIDE INTERMEDIATE ANCHORS TO ANCHOR GEOCELLS TO SUBGRADE OF SLOPE OF A TYPE AND AT A SPACING DETERMINED BY THE DELEGATED DESIGN PROFESSIONAL, WITH CLIPS OR OTHER ATTACHMENT DEVICES DESIGNED TO INTERFACE WITH THE GEOCELL SYSTEM.
  - 4.3. TOE ANCHORAGE: ANCHOR GEOCELL SYSTEM AT TOE OF SLOPE WITH STAKES OR RODS, OF A SIZE, LENGTH, AND SPACING DETERMINED BY THE DELEGATED DESIGN PROFESSIONAL, WITH CLIPS OR OTHER ATTACHMENT DEVICES DESIGNED TO INTERFACE WITH THE GEOCELL SYSTEM.
5. GEOCELL FILL MATERIAL: FILL GEOCELL SYSTEM WITH AGGREGATE MATERIAL RECOMMENDED BY MANUFACTURER.



5 RIPRAP INSTALLATION

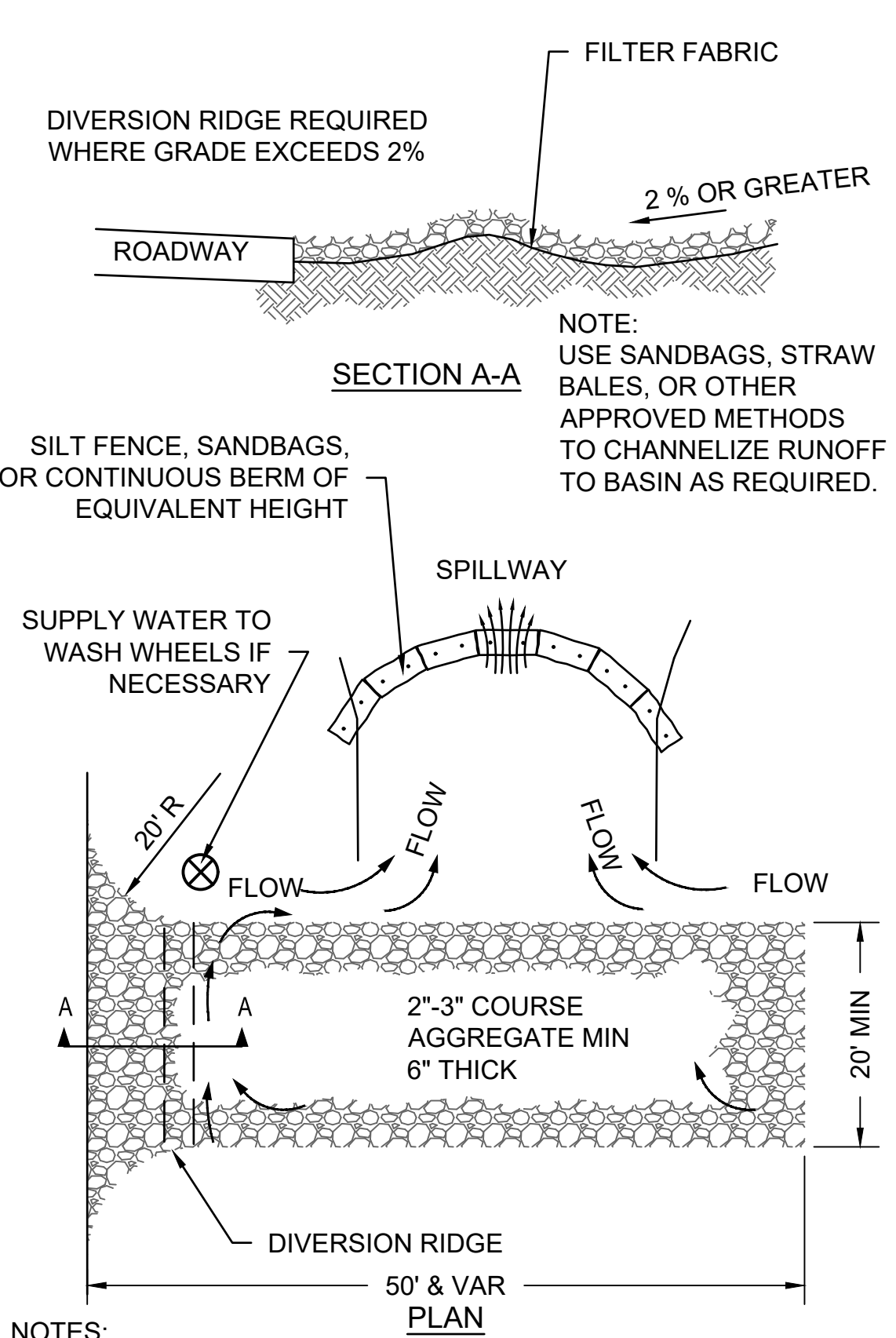


DESIGNED BY: D ANDERSON  
 DRAWN BY: B BIESEMEYER  
 DATE: 26 JAN 2024  
 PROJECT NO.: OK07848-010

MRK	DESCRIPTION	DATE	BY

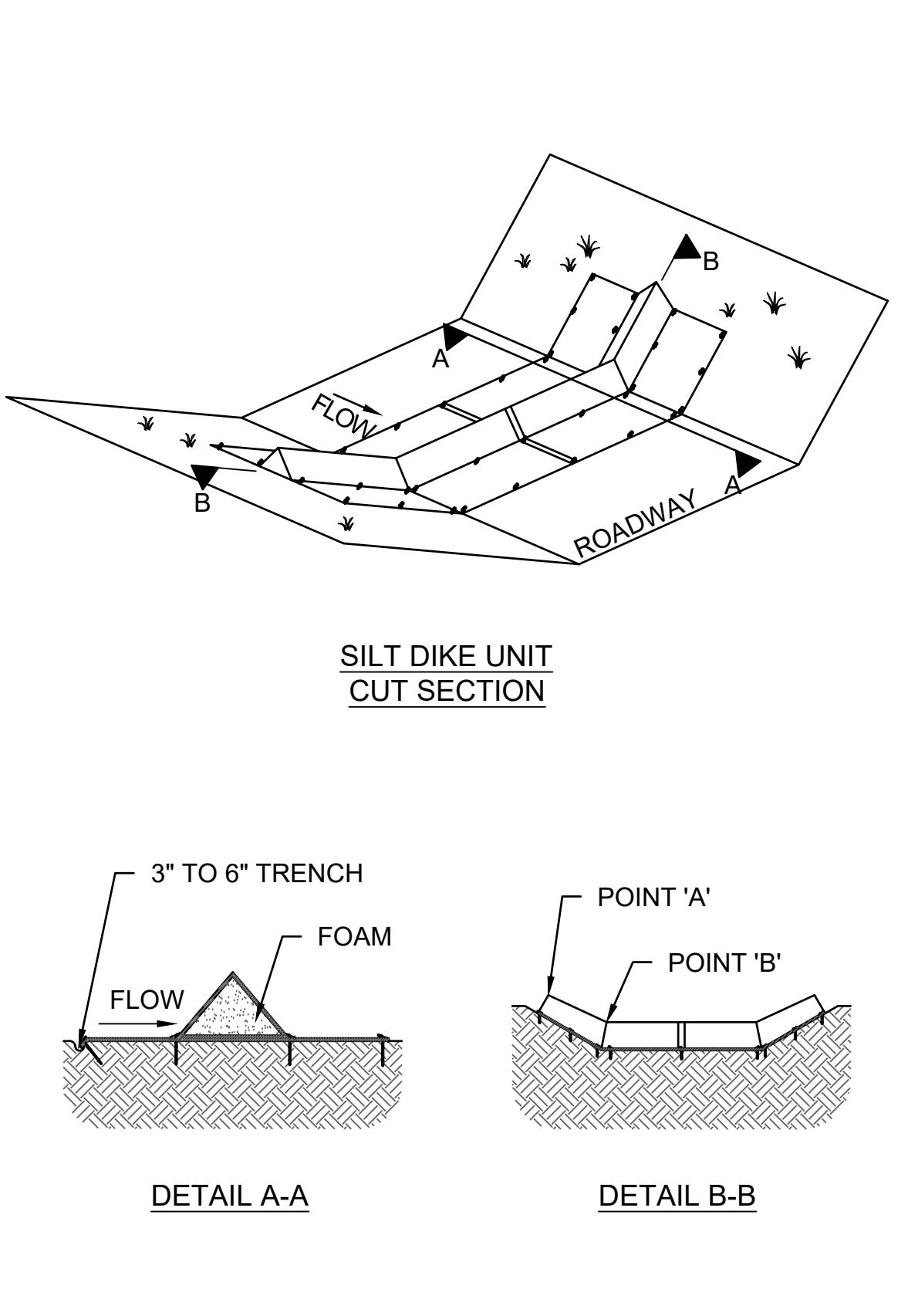
OEMA UNION CITY LANDFILL CHANNEL MODIFICATION  
 20435 SW 29th ST, UNION CITY, OK 73090

CIVIL DETAILS



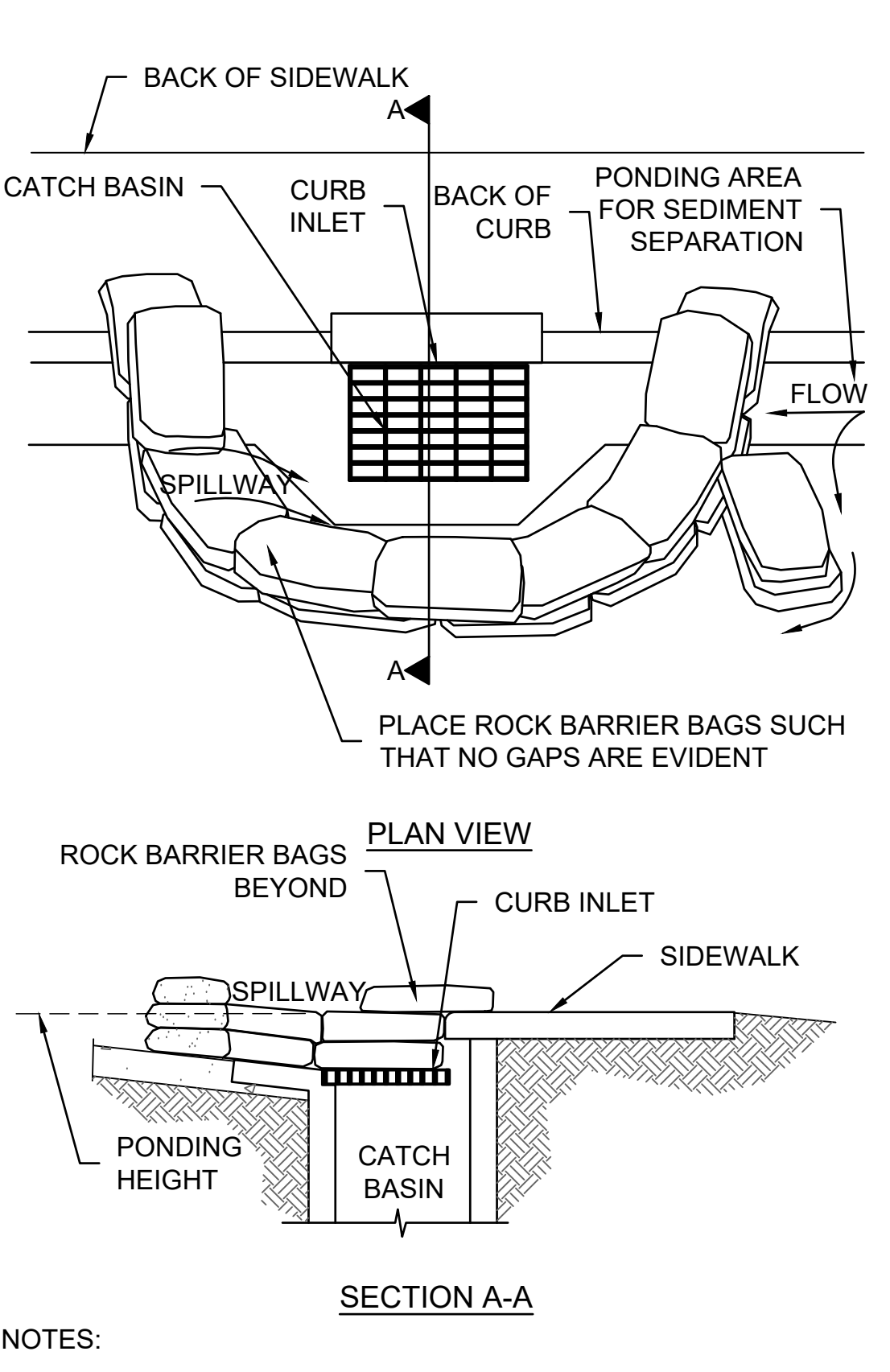
- NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO STREETS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
  2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO ROADWAYS OR PUBLIC RIGHT-OF-WAY.
  3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA THAT IS STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

**1 TEMPORARY GRAVEL CONSTRUCTION ENTRANCE**



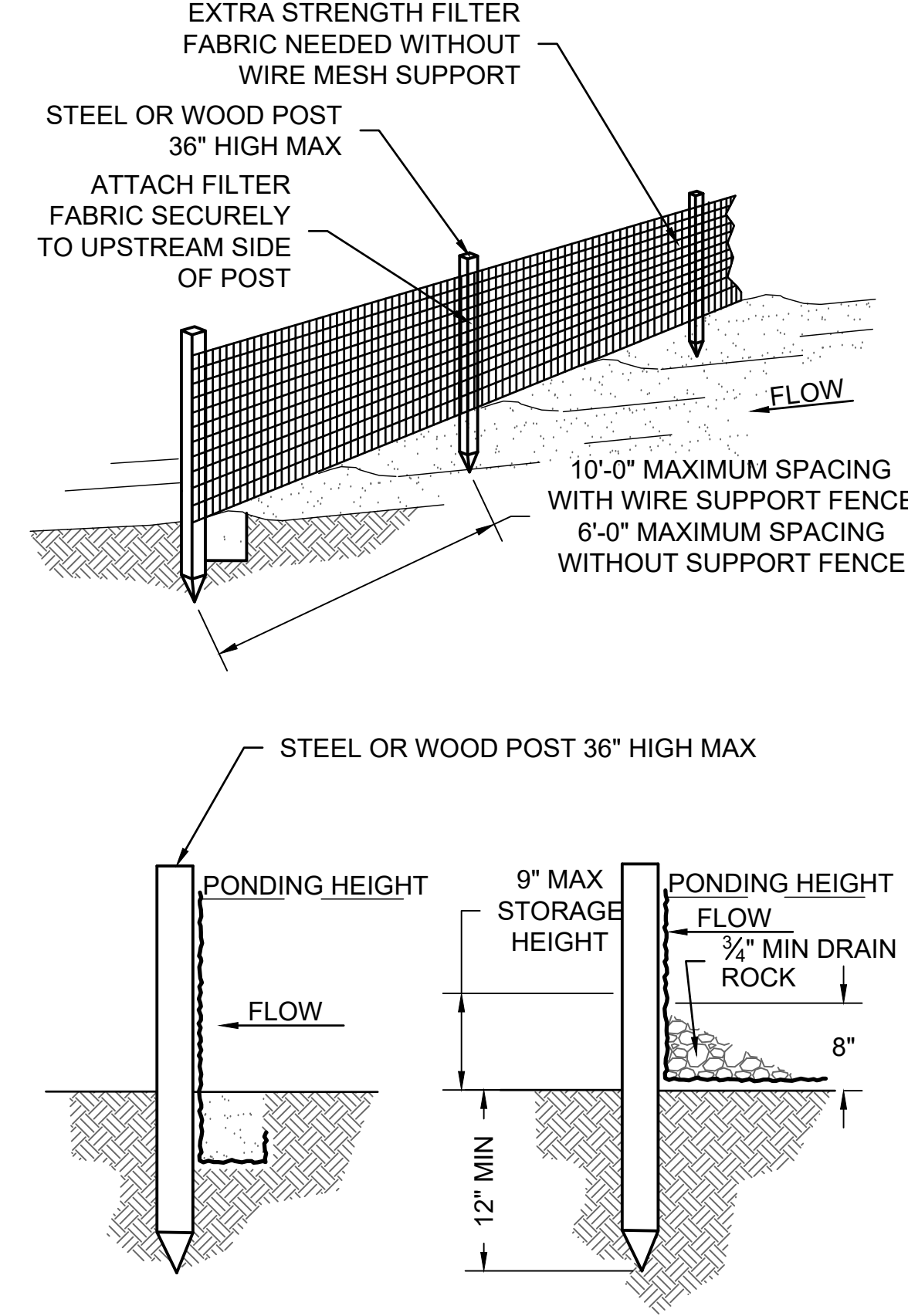
- NOTES:
1. STAPLE SHALL BE PLACED WHERE THE UNITS OVERLAP AND IN THE CENTER OF THE 7' UNIT AS SHOWN ON DETAIL 'A-A'.
  2. POINT 'A' MUST BE HIGHER THAN POINT 'B' TO ENSURE THAT THE WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.

**2 EROSION BLANKETS SILT DIKE INSTALLATION**



- NOTES:
1. PLACE CURB TYPE ROCK BAG BARRIER ON GENTLY SLOPING STREET, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
  2. BAGS OF WOVEN GEOTEXTILE FABRIC, FILLED WITH GRAVEL, MUST BE LAYERED SUCH THAT NO GAPS ARE EVIDENT.
  3. LEAVE A ONE SANDBAG GAP IN THE TOP ROW ON THE SIDE AWAY FROM FLOW, TO PROVIDE A SPILLWAY; OR IN THE CENTER IF PONDING IS NEEDED ON BOTH SIDES.
  4. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

**3 ROCK BAG CURB INLET SEDIMENT BARRIER**



- NOTES:
1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
  2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" MAXIMUM RECOMMENDED STORAGE HEIGHT.
  3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTED SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

**4 SILT FENCE DETAIL**

- GENERAL NOTES:**  
 THE PROJECT HAS ALSO BEEN DESIGNED TO MINIMIZE ADVERSE OFF-SITE AFFECTS OF SOIL EROSION AND RESULTING SEDIMENT LOSS THROUGH THE USE OF PROPER CONSTRUCTION TECHNIQUES AND BY INSTALLING BOTH TEMPORARY AND PERMANENT MANAGEMENT PRACTICES. ALL SOIL-DISTURBING ACTIVITIES PERFORMED BY THE CONTRACTOR WILL BE ACCOMPLISHED IN SUCH A MANNER AS TO PREVENT THE LOSS OF SEDIMENT FROM THE CONSTRUCTION SITE DURING RAINFALL EVENTS. TO ACCOMPLISH THIS THE FOLLOWING SPECIFIC STEPS WILL BE TAKEN DURING CONSTRUCTION:
- A. IMMEDIATELY AFTER MOBILIZATION AND PRIOR TO INITIATING ANY SOIL-DISTURBING ACTIVITIES, THE CONTRACTOR WILL INSTALL ALL SPECIFIED PERIMETER CONTROLS ON THE SITE. THESE PRACTICES HAVE BEEN DESIGNED TO TRAP ANY SEDIMENT PRODUCED DURING SOIL-DISTURBING ACTIVITIES AND TO PREVENT OFFSITE DAMAGE. IT IS RECOGNIZED THAT SOME MINOR PREPARATION MAY BE REQUIRED TO PROPERLY INSTALL THESE PRACTICES.
  - B. THE RECOMMENDED SEQUENCE FOR INSTALLATION AND REMOVAL OF EROSION AND SEDIMENT CONTROL MEASURES ARE AS FOLLOWS: PERIMETER CONTROL MEASURES (SILT FENCING) INSTALLED AT DESIGNATED AREAS; CLEANING OF STREET DURING CONSTRUCTION; SITE GRADING, INCLUDING TEMPORARY SLOPE STABILIZATION AS NEEDED; INSTALLATION OF UTILITIES; BUILDING CONSTRUCTION; PAVING; FINAL GRADING; INSTALLATION OF GRASS; REMOVAL OF TEMPORARY PRACTICES; AND REMOVAL OF PERIMETER CONTROLS; AND SITE CLEANUP.
  - C. DURING ALL SOIL-DISTURBING ACTIVITIES, THE CONTRACTOR WILL TAKE APPROPRIATE STEPS USING ACCEPTED CONSTRUCTION METHODS TO MINIMIZE THE TIME OF EXPOSURE OF UNPROTECTED SOIL AND OTHER CONSTRUCTION METHODS TO RAINFALL. PARTICULAR CARE MUST BE EXERCISED WHEN DEALING WITH STOCKPILES OF TOPSOIL OR OTHER FILL MATERIALS WITH SOIL ON SLOPES. THE CONTRACTOR WILL MAINTAIN A LOG OF THE DATES OF ALL MAJOR GRADING AND SOIL DISTURBANCE ACTIVITIES AND OF THE INSTALLATION OF ALL MANAGEMENT PRACTICES OR CONTROL MEASURES.
  - D. IF DURING THE COURSE OF CONSTRUCTION ANY AREA OF SOIL IS EXPOSED, INCLUDING STOCKPILES, THAT WILL REMAIN EXPOSED WITHOUT SUITABLE EROSION CONTROL MEASURES FOR MORE THAN 14 CALENDAR DAYS, TEMPORARY STABILIZATION MEASURES SHOULD BE INSTALLED UNLESS FURTHER SOIL-DISTURBING ACTIVITIES ARE PLANNED ON SUCH AREAS WITHIN AN ADDITIONAL 7 CALENDAR DAYS. SUITABLE TEMPORARY SOIL STABILIZATION MEASURES ARE CONSIDERED TO BE PERIMETER CONTROLS ALONG ALL SIDE SLOPE AND DOWN SLOPE BORDERS OF THE DISTURBED AREA. PLEASE NOTE THAT, DEPENDING ON THE SITE, PERIMETER CONTROLS ALONE MAY NOT BE SUCCESSFUL, SINCE LARGE AMOUNTS OF SEDIMENT PRODUCED BY A HEAVY RAIN ON EXPOSED SOIL COULD OVERWHELM SUCH MEASURES.
  - E. AT THE CONTRACTOR'S DISCRETION, ADDITIONAL TEMPORARY EROSION CONTROL PRACTICES (SUCH AS HAY BALE BARRIERS OR SILT FENCES) MAY BE INSTALLED ALONG ANY DOWN SLOPE AND SIDE SLOPE PERIMETER OF AREAS DISTURBED DURING EARTH-MOVING OPERATIONS TO PREVENT UNNECESSARY SEDIMENT MOVEMENT. ANCHORED EROSION CONTROL MATTING, MULCHES OR OTHER ACCEPTABLE METHODS MAY ALSO BE INSTALLED AT THE CONTRACTOR'S DISCRETION TO STABILIZE ANY UNPROTECTED AREAS DURING CONSTRUCTION AND HOLD THEM TO FINAL GRADE.
  - F. AS SITE CONDITIONS WARRANT, THE CONTRACTOR MAY ALSO CHOOSE TO MODIFY THE TYPE OR ARRANGEMENT OF SPECIFIED PRACTICES TO IMPROVE THEIR EFFECTIVENESS. AS WITH ANY OTHER PROJECT CHANGES, THE CONTRACTOR MUST PRESENT ANY SUCH PROPOSED MODIFICATIONS TO THE CONTRACTING OFFICE FOR APPROVAL PRIOR TO INSTALLATION.
  - G. THE CONTRACTOR SHALL INSPECT ALL SPECIFIED PRACTICES AT LEAST ONCE EVERY WEEK AND AFTER ALL RAINFALL EVENTS TO ENSURE THE INTEGRITY OF EACH PRACTICE IS INTACT. ANY DAMAGE NOTED DURING SUCH INSPECTIONS SHALL BE PROMPTLY REPAIRED TO RESTORE THE PRACTICE TO ITS ORIGINAL SPECIFICATIONS. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES SPECIFIED IN THESE PLANS, INCLUDING PERIODIC REGRADING AND FINAL GRADING AFTER REMOVAL OF SUCH SEDIMENT CONTROL MEASURES.
  - H. WHEN WATER IS USED FOR DUST CONTROL, OR TO PROMOTE GRASS, CARE SHOULD BE EXERCISED TO PREVENT THE ESCAPE OF THIS WATER AND ANY SEDIMENT IT MAY CARRY FROM THE CONSTRUCTION SITE.
  - I. CARE MUST BE EXERCISED TO PREVENT EXCESSIVE OFFSITE TRACKING OF MUD OR SEDIMENT BY CONSTRUCTION VEHICLES. IN ADDITION TO THE SPECIFIED GRAVEL ENTRANCE, PROPERLY GRAVELED TRANSITION AREAS SHOULD BE ESTABLISHED AT ALL TEMPORARY SITE EXITS TO ASSIST IN MUD REMOVAL FROM DEPARTING VEHICLES. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING THE STREET, AS DIRECTED BY THE CONTRACTING OFFICER, WHEN MUD IS TRACKED ONTO STREET FROM THE CONSTRUCTION SITE.
  - J. DURING THE SITE CLEANUP, PRIOR TO THE POSSESSION DATE, EACH TEMPORARY PRACTICE WILL BE COMPLETELY REMOVED AND THE AREA RESTORED TO APPROPRIATE POST-PROJECT CONDITION. THIS WILL INVOLVE FINAL GRADING AND INSTALLATION OF SOD OR SEEDING OF GRASS ON ALL BARE SOIL AREAS TO ESTABLISH MINIMUM REVEGETATION DENSITY OF 70% OR EQUIVALENT SEDIMENT STABILIZATION MEASURES (GEOTEXTILES, MULCHES, GABIONS, ETC.) USED TO STABILIZE A SITE UNTIL PERMANENT VEGETATION IS ESTABLISHED. CLEAN ALL DRAINAGE INLETS SUBJECT TO CONSTRUCTION SILT/SEDIMENT BUILD-UP PRIOR TO DEMOBILIZATION.
  - K. PLACE EROSION CONTROL BLANKET AND NETTING OVER ANY STORED MATERIALS.

MRK	DESCRIPTION	DATE	BY

OEMA UNION CITY LANDFILL CHANNEL MODIFICATION  
 20435 SW 29th ST, UNION CITY, OK 73090