

EXHIBIT A
DRAINAGE EASEMENT

EXHIBIT B
ENGINEERING PLANS

SYMBOL LEGEND

- CONTROL POINT
- SURVEYED BENCHMARK
- AIR RELEASE VALVE
- ELECTRIC CONTROL BOX
- MONITORING WELL
- ELECTRIC METER
- FIRE HYDRANT
- FLAG POLE
- GATE POST
- GUARD RAIL POST
- GUY ANCHOR
- GUY POLE
- LIGHT POLE
- MAIL BOX
- POWER POLE/TELEPHONE POLE
- MANHOLE: SANITARY, STORM
- SIGN
- SPIGOT
- SANITARY SEWER CLEAN OUT
- SANITARY SEWER LAMPHOLE
- WATER VALVE
- WATER METER
- TELEPHONE BOX
- TELEPHONE RISER
- GAS METER
- GAS VALVE
- BUSH/HEDGE
- SMALL CONIFEROUS TREE
- LARGE CONIFEROUS TREE
- SMALL DECIDUOUS TREE
- LARGE DECIDUOUS TREE
- Fence Line (All Types)
- Overhead Electric
- Underground Electric
- Overhead Telephone
- Underground Telephone
- Underground Cable Television
- Natural Gas Line
- Fiber Optic Cable
- Water Line
- Existing Storm Sewer
- Sanitary Sewer Line
- Proposed C.R.L.

DRAWING REFERENCE LEGEND

- 7 → DETAIL NUMBER
- 8 → SHEET NUMBER ON WHICH IT IS LOCATED
- 1 → DETAIL DESCRIPTION
- SCALE: 1"=XX'



CITY OF NORMAN, OKLAHOMA

CONSTRUCTION PLANS

FOR

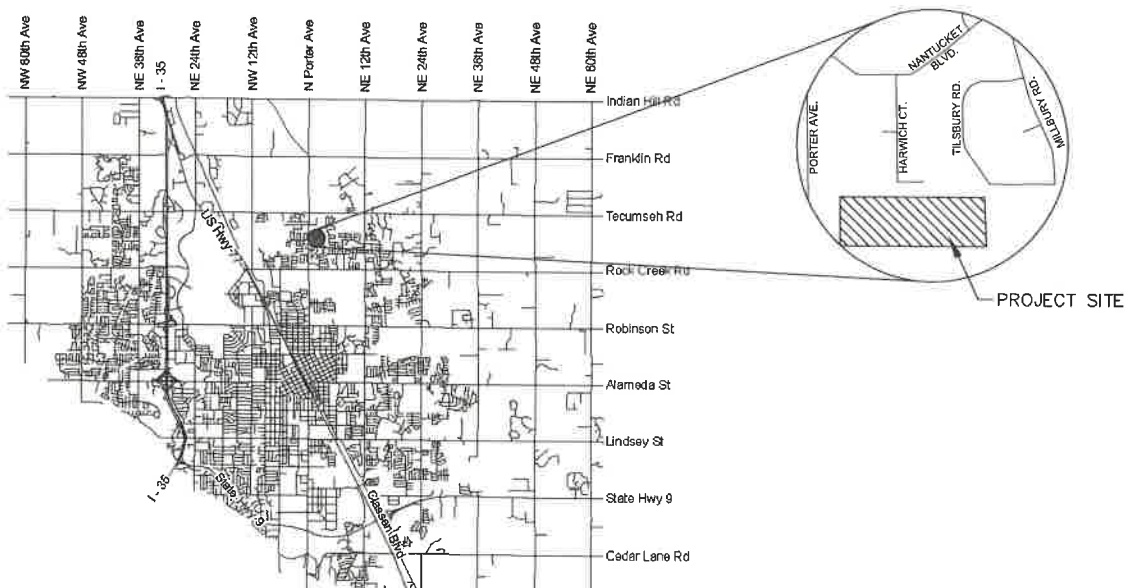
VINEYARD SUBDIVISION

DRAINAGE IMPROVEMENTS

CLEVELAND COUNTY

DRAWING INDEX

- 1 - COVER SHEET
- 2 - PAY ITEMS & NOTES
- 3 - 9 - DETAILS
- 10 - 11 - SURVEY DATA & RIGHT OF WAY
- 12 - STORM WATER MANAGEMENT PLAN
- 13 - EROSION CONTROL
- 14 - DAM GEOMETRY & PROFILE
- 15 - 16 - PLAN AND PROFILES
- 17 - 19 - DAM CROSS SECTIONS
- 20 - 23 - CHANNEL CROSS SECTIONS



LOCATION MAP

APPLICABLE SPECIFICATIONS:

CURRENT OKLAHOMA DEPARTMENT OF TRANSPORTATION LATEST EDITION (O.D.O.T.) STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION SHALL BE USED FOR THE TECHNICAL SPECIFICATIONS.

CITY OF NORMAN STANDARD SPECIFICATIONS FOR CONSTRUCTION.

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) REGULATIONS SHALL APPLY FOR ALL WASTE AND SEWER RELATED WORK.

DATUM INFORMATION

HORIZONTAL DATUM
NAD '83

VERTICAL DATUM
NAVD '88

NOTES:

ALL CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH CURRENT CITY OF NORMAN STANDARDS AND SPECIFICATIONS.

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1/19/2023
DATE



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SHEET 1 OF 23 SHEETS

GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE 2009 OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND THE CURRENT CITY OF NORMAN STANDARD SPECIFICATIONS AND DETAILS.
2. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS GOVERNING SAFETY, HEALTH AND SANITATION. THE CONTRACTOR SHALL PROVIDE ALL SAFEGUARDS, SAFETY DEVICES AND PROTECTIVE EQUIPMENT, AND TAKE ANY OTHER NEEDED ACTION ON AS HIS OWN RESPONSIBILITY OR AS THE ENGINEER MAY DETERMINE REASONABLY NECESSARY TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACT.
3. PAY ITEMS SHALL BE AS SPECIFIED ON THE CITY OF NORMAN OR ON THE ODOT STANDARD DRAWINGS EXCEPT AS MODIFIED BY THE CONTRACT.
4. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK IN EACH AREA. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT RESULT FROM HIS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UTILITIES.
5. THE LOCATIONS OF THE UTILITIES ARE SHOWN ACCORDING TO ALL AVAILABLE INFORMATION. THE CONTRACTOR SHALL NOTIFY EACH UTILITY OWNER PRIOR TO COMMENCEMENT OF WORK TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATIONS.
6. THE CONTRACTOR SHALL GIVE THE NOTIFICATION CENTER OF OKLAHOMA ONE-CALL SYSTEM, INC. NOTICE OF ANY EXCAVATION NO SOONER THAN TEN DAYS NOR LATER THAN 48 HOURS EXCLUDING SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS, PRIOR TO THE COMMENCEMENT OF WORK. PHONE 1-800-522-6543.
7. THE CONTRACTOR SHALL TAKE REASONABLE PRECAUTIONS TO PREVENT EXCESS MOISTURE FROM INOLENT WEATHER OR OTHER SOURCES FROM ENTERING ANY STREET EXCAVATION. IF EXCESS MOISTURE DOES ENTER THE EXCAVATION THROUGH THE NEGLIGENCE OF THE CONTRACTOR AND THE ADJOINING PAVEMENT IS ADVERSELY EFFECTED BY THE EXCESS MOISTURE, THE CONTRACTOR SHALL REPLACE THE ADJOINING PAVEMENT AND SUBBASE AT HIS SOLE EXPENSE.
8. THE CONTRACTOR SHALL PRESERVE THE INTEGRITY OF THE SANITARY SEWER STRUCTURES AND ALL OTHER UTILITY STRUCTURES WITHIN THE PROJECT EXTENTS.
9. THE CONTRACTOR SHALL WORK IN COOPERATION WITH THE CITY OF NORMAN TO ESTABLISH, INSTALL, MAINTAIN, AND OPERATE COMPLETE, ADEQUATE, AND SAFE TRAFFIC CONTROLS DURING THE ENTIRE CONSTRUCTION PERIOD. ALL FLAGMEN, BARRICADES, AND TRAFFIC CONTROL DEVICES SHALL BE APPROVED BY THE FIELD ENGINEERING REPRESENTATIVE.
10. CONSTRUCTION SIGNAGE WILL BE INSTALLED IN A MANNER APPROVED BY THE ENGINEER, IN ACCORDANCE WITH CHAPTER VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, AND APPLICABLE ODOT STANDARD DRAWINGS. THE CONTRACTOR SHALL PROVIDE A PROPOSED TRAFFIC CONTROL PLAN FOR APPROVAL BY THE ENGINEER PRIOR TO BEGINNING WORK.
11. THE CONTRACTOR SHALL NOTIFY THE CITY OF NORMAN A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK OR PRIOR TO REMOVING TRAFFIC SIGNS.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF ALL EXISTING TRAFFIC SIGNS AND MARKINGS REMOVED OR DAMAGED FOR THE PROJECT. ALL SIGNS AND POLES PROVIDED SHALL BE NEW AND UNDAMAGED.
13. THE CONTRACTOR WILL BE RESPONSIBLE FOR PREPARATION AND DISTRIBUTION OF A WRITTEN NOTICE TO RESIDENTS 48 HOURS PRIOR TO BEGINNING PAVEMENT REMOVAL OPERATIONS.
14. LOCAL AND THROUGH TRAFFIC SHALL BE MAINTAINED THROUGH THE PROJECT AT ALL TIMES.
15. ALL PUBLIC AND PRIVATE STREETS AND DRIVES SHALL BE ACCESSIBLE AT ALL TIMES.
16. ALL BROKEN CONCRETE, WASTE MATERIAL, AND OTHER DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE LIMITS OF THE PROJECT AND DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER. NO ADDITIONAL PAYMENT WILL BE MADE FOR THE DISPOSAL OF THIS MATERIAL.
17. ALL EXCAVATED MATERIAL NOT REQUIRED IN THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF BY THE CONTRACTOR IN A MANNER ACCEPTABLE TO THE ENGINEER WITHOUT COST TO THE CITY. EARTH CHANGE PERMIT REQUIRED IF DISTURBING ≥ 1 ACRE. CONTRACTOR MUST OBTAIN AN ECP & OKR10 COVERAGE.
18. ALL TREES, BRUSH AND OTHER DEBRIS THAT MIGHT INTERFERE WITH THE FLOW OF WATER IS TO BE CLEANED OUT TO THE RIGHT-OF-WAY LINE IN A MANNER APPROVED BY THE ENGINEER. ALL COST TO BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF WORK. TREES OUTSIDE THE FILL SLOPES AND THE TOP OF CUT SLOPES SHALL NOT BE DISTURBED EXCEPT WITH THE WRITTEN APPROVAL OF THE ENGINEER.
19. WHERE MATERIALS ARE TRANSPORTED IN THE PROSECUTION OF WORK, VEHICLES SHALL NOT BE LOADED BEYOND THE CAPACITY RECOMMENDED BY THE VEHICLE MANUFACTURER OR AS PRESCRIBED BY ANY FEDERAL, STATE OR LOCAL LAW OR REGULATION.
20. ANY DAMAGE TO THE ROADWAY PAVEMENT, CURB, DRIVEWAYS OR SIDEWALK CAUSED BY THE CONTRACTOR'S OPERATION SHALL BE REPAIRED TO THE ENGINEER'S SATISFACTION AND SHALL BE ACCOMPLISHED AT THE CONTRACTOR'S SOLE EXPENSE. ALL DISTURBED ITEMS SHALL BE REPAIRED TO MATCH EXISTING MATERIALS AND PATTERNING.
21. IF THE CONTRACTOR ENCOUNTERS VOIDS WHEN PATCHING STREETS, THE CONTRACTOR SHALL CALL CITY OF NORMAN FOR AN INSPECTION BEFORE PROCEEDING WITH WORK.

GENERAL CONSTRUCTION NOTES (CONTINUED):

22. PHYSICAL TESTING FOR QUALITY ASSURANCE SHALL BE FURNISHED BY THE CITY.
23. MASONRY STRUCTURES SHALL NOT BE CONSTRUCTED WITHIN THE STREET RIGHT-OF-WAY.
24. ALL CONCRETE CURB AND GUTTERS SHALL BE MONOLITHIC POURS. DOWELED-ON CURBS WILL NOT BE ALLOWED.
25. NO LIFTING HOLES WILL BE ALLOWED ON ANY REINFORCED CONCRETE PIPES OR REINFORCED CONCRETE BOXES.
26. REFLECTORIZED SHEETING ON SIGNS AND BARRICADES SHALL BE OF A CUBIC PRISMATIC TYPE AND SHALL MEET THE SPECIFICATIONS ESTABLISHED FOR ASTM D 4956-01 TYPE IX RETROREFLECTIVE SHEETING. REFLECTORIZED SHEETING ON DRUMS AND TUBE CHANNELIZERS SHALL BE OF A HIGH-INTENSITY TYPE AND SHALL MEET THE SPECIFICATIONS ESTABLISHED FOR ASTM D 4956-01 TYPE III RETROREFLECTIVE SHEETING.
27. THE CONTRACTOR SHALL REPLACE ANY SECTION CORNERS OR OTHER PERMANENT RIGHT OF WAY MARKERS REMOVED OR DISBURSED AS A RESULT OF THE CONSTRUCTION OF THIS PROJECT. REPLACEMENT OF SECTION CORNERS OR ANY OTHER MONUMENTS SHALL BE PERFORMED BY A LICENSED LAND SURVEYOR AUTHORIZED TO PERFORM WORK IN THE STATE OF OKLAHOMA.
28. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL AND MAINTENANCE OF THE STORMWATER DRAINAGE. STORMWATER PONDING ON THE CONSTRUCTION SITE THAT IS THE RESULT OF CONSTRUCTION WILL NOT BE ALLOWED.
29. STRAW OR HAY BALES AS STORMWATER BEST MANAGEMENT PRACTICES ARE NO LONGER ALLOWED ON CONSTRUCTION PROJECTS.
30. THE CONTRACTOR MUST CALL 1-800-458-4251 IMMEDIATELY IF A NATURAL GAS PIPELINE IS CUT, DAMAGED, OR OTHERWISE DISTURBED.
31. PRIOR TO FINAL ACCEPTANCE, ALL EXPOSED CURB SURFACES SHALL BE CLEANED OF ALL DISCOLORATION SUCH AS ASPHALT STAIN, TIRE MARKS, OR OTHER DISFIGUREMENT.
32. CONTRACTOR SHALL NOT STORE EQUIPMENT OR MATERIALS IN THE FLOODPLAIN.

PAY ITEM NOTES:

1. WORK SHALL CONSIST OF CLEARING, GRUBBING, REMOVING AND DISPOSING OF ALL VEGETATION AND DEBRIS (INCLUDES TREES) WHICH ARE WITHIN THE RIGHT-OF-WAY AND EASEMENT AREAS, EXCEPT SUCH OBJECTS AS ARE DESIGNATED TO REMAIN OR ARE TO BE REMOVED IN ACCORDANCE WITH OTHER SECTIONS OF THE ODOT SPECIFICATIONS OR THESE DOCUMENTS. THIS WORK SHALL ALSO INCLUDE THE PRESERVATION FROM INJURY OR DEFAUCEMENT OF ALL VEGETATION AND OBJECTS DESIGNATED TO REMAIN WITHIN THE LIMITS OF CONSTRUCTION.
2. CONTRACTOR SHALL FURNISH SUFFICIENT ORANGE SAFETY FENCING TO PROTECT THE GENERAL PUBLIC DURING EXCAVATION OPERATIONS FROM OPEN TRENCHES AND OTHER HAZARDS.
3. THIS WORK SHALL CONSIST OF ALL NECESSARY TEMPORARY MEASURES AND DEVICES TO CONTROL EROSION AND SEDIMENT WITHIN THE PROJECT LIMITS AND TO MINIMIZE THE POLLUTION OF RIVERS, STREAMS, IMPOUNDMENTS AND PRIVATE PROPERTIES. SUCH MEASURES MAY INCLUDE BERMS, DIKES, SLOPE DRAINS, SILTATION SCREENS, FABRICS, SEDIMENT FILTERS, SEDIMENT BASINS, FIBER MATS, NETTING, GRAVEL, RIP RAP, MULCHES, GRASSES AND OTHER SEDIMENT CONTROL DEVICES AND PERMANENT EROSION CONTROLS SPECIFIED ON THE PLAN SHEETS TO ASSURE THE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL OF EROSION AND SEDIMENT THROUGHOUT THE CONSTRUCTION AND POST CONSTRUCTION PERIOD.
4. THE CONTRACTOR SHALL APPLY SOLID SLAB SODDING IN LIKE KIND TO THAT EXISTING WHERE TURF IS DAMAGED DURING CONSTRUCTION OR OTHER MISCELLANEOUS WORK ITEMS. THE COST OF TOPSOIL, BACKFILL, SODDING, FERTILIZING, AND WATERING SHALL BE INCIDENTAL TO THIS ITEM. SODDING, FERTILIZING, AND WATERING SHALL BE IN CONFORMANCE WITH RESPECTIVE SPECIFICATIONS. FERTILIZER SHALL BE AN APPROVED TURF FERTILIZER APPLIED AT A RATE OF 1.5 LB PER 10 SQUARE YARDS. WATERING SHALL BE APPLIED AS NECESSARY TO ESTABLISH VEGETATION OR UNTIL WORK IS ACCEPTED AS COMPLETE.
5. TO BECOME THE PROPERTY OF AND BE DISPOSED OF BY THE CONTRACTOR IN A MANNER APPROVED BY THE ENGINEER.
6. TO INCLUDE THE COST OF SAW CUTTING AND EXCAVATION TO NATIVE MATERIALS.
7. TO INCLUDE THE COST OF REMOVAL OF CONCRETE WALLS AND RAILROAD TIE WALLS.
8. CONTRACTOR SHALL INCLUDE THE COST OF THE FOLLOWING ITEMS:
 - 8.1. 18" TYPE 1, PLAIN RIPRAP - B3 SY
 - 8.2. BOLLARDS - 2 EA
 - 8.3. WARNING SIGNAGE - 1 EA
 - 8.4. IRRIGATION SYSTEMS (REPAIR)
 - 8.5. FENCE STYLE WIDE (2' HIGH) - 400 LF (FOR REPAIR)
 - 8.6. ANY ITEMS REPAIRED DURING CONSTRUCTION SHALL BE TO THE SATISFACTION OF THE ENGINEER.
 - 8.7. 9"x4" GALVANIZED STEEL ORIFICE PLATE AS CALLED FOR IN DETAIL 1, SECTION B-8, PAGE 6
9. TO INCLUDE THE COST OF TRENCH EXCAVATION AND STANDARD BEDDING MATERIAL.
10. THIS ITEM TO BE USED FOR THE DAM CORE MATERIAL IN THE CASE THAT ADEQUATE SUITABLE CLAY MATERIAL EXCAVATED AT THE SITE IS NOT ENCOUNTERED. ITEM MAY BE OMITTED IN ITS ENTIRETY.

11. CONTRACTOR TO COORDINATE WITH PROPERTY OWNER TO REPLACE FENCE LIKE-KIND.
12. TREES UNDER 6" SHALL BE INCLUDED IN CLEARING AND GRUBBING.
13. ITEM QUANTITY INCLUDES VARIABLE HEIGHT FENCE PANELS REFERRED TO ON PLANS. HEIGHT VARIES FROM 4.4' TO 8.0'.
14. ITEM SHALL MEET OR EXCEED ASTM F2881 AND AASHTO M330 SPECIFICATIONS FOR HP STORM PIPE. CONTRACTOR TO PROVIDE ADS POLYPROPYLENE PIPE OR APPROVED EQUAL.

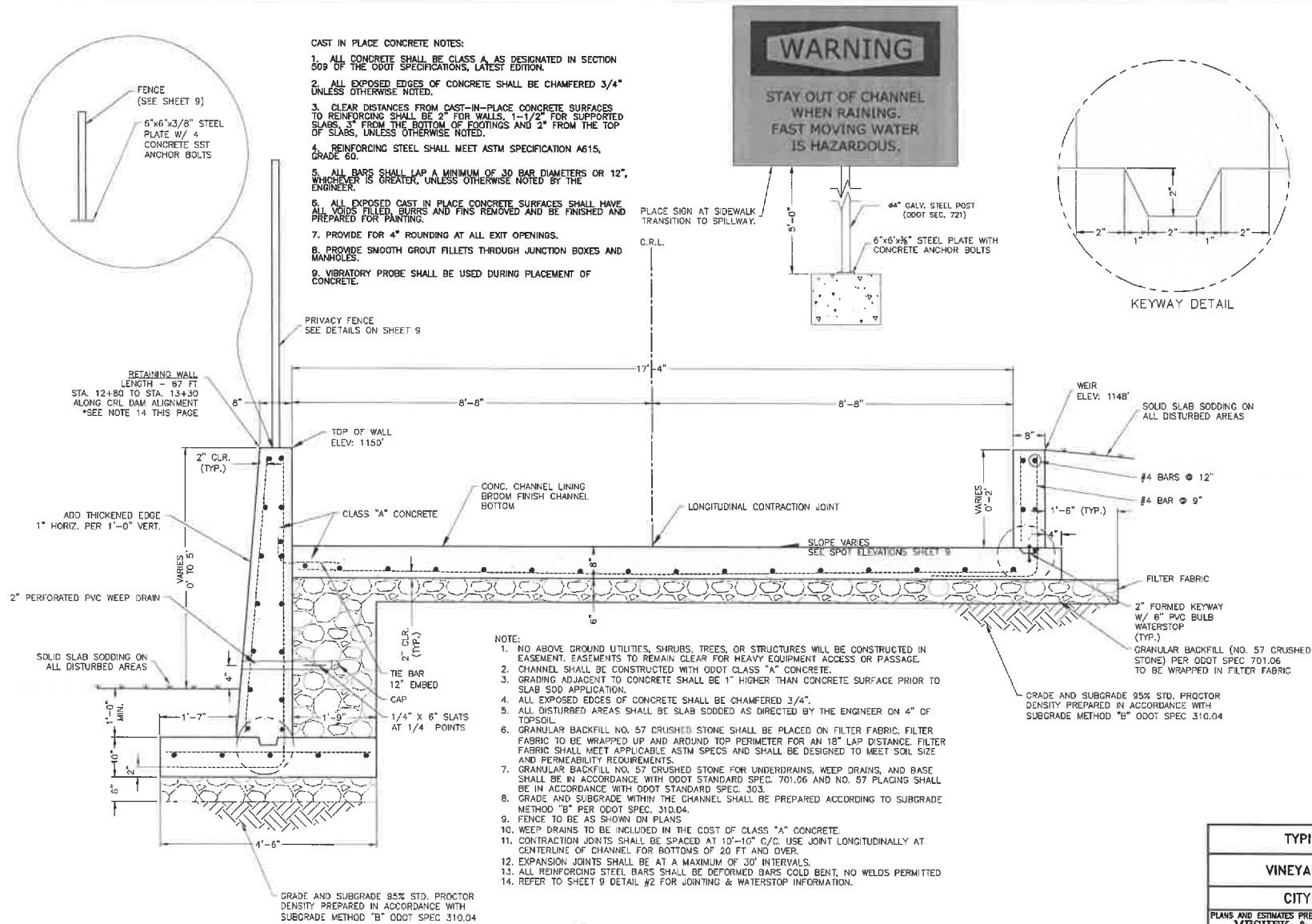
VINEYARD SUBDIVISION				
PAY ITEMS				
ITEM NUMBER	SPEC NUMBER	ITEM DESCRIPTION	NOTES	QUANTITY
1	201(A)	CLEARING AND GRUBBING	1 EA	1.00
2	202(A)	UNCLASSIFIED EXCAVATION	5 CY	2,253.00
3	202(B)	SELECT BORROW	10 CY	1,225.00
4	221(C)	TEMPORARY SILT FENCE	3 LF	1,650.00
5	221(F)	TEMPORARY SILT DIKE	3 LF	124.00
6	228	NYLON EROSION CONTROL MAT	3 SY	71.00
7	230(A)	SOLID SLAB SODDING (LIKE-KIND)	3.4 SY	6,266.00
8	240(A)	REMOVING TREES 6" TO 12" IN DIAMETER	12 EA	99.00
9	240(A)	REMOVING TREES 13" TO 18" IN DIAMETER	12 EA	25.00
10	240(A)	REMOVING TREES 19" TO 24" IN DIAMETER	12 EA	5.00
11	240(A)	REMOVING TREES 25" & MORE IN DIAMETER	12 EA	5.00
12	310(S)	SUBGRADE METHOD B	SY	983.00
13	501(F)	GRANULAR BACKFILL (#57 CRUSHED STONE)	CY	782.00
14	509(S)	CLASS C CONCRETE	CY	305.00
15	509(S)	CLASS C CONCRETE	CY	17.00
16	511(A)	REINFORCING STEEL	LB	25,000.00
17	503(C)	FILTER FABRIC	SY	3,747.00
18	519(A)	4" CONCRETE SIDEWALK	SF	1,576.00
19	633(C)	24" HP POLYPROPYLENE PIPE (HP STORM PP)	2.934 LF	1,046.00
20	639(A)	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	5.67 USUM	1.00
21	639(B)	REMOVAL OF FENCE	5 LF	818.00
22	639(B)	REMOVAL OF SIDEWALK	5.6 SY	348.00
23	639(B)	REMOVAL OF EXISTING PIPE	2.5 LF	486.00
24	639(B)	REMOVAL OF SIDEWALK	5 EA	1.00
25	634(S)	FENCE STYLE C/F 4" HIGH (BLACK VINYL COATED)	LF	145.00
26	624	FENCE POST AND NAIL	11 LF	148.00
27	624	(PL) WOOD PRIVACY FENCE (F)	LF	810.00
28	624	(PL) WOOD PRIVACY FENCE (B)	13 LF	158.00
29	641	MOBILIZATION	EA	1.00
30	642	CONSTRUCTION STAKING LEVEL 1	EA	1.00
31	SPECIAL 605	URBAN RAW RESTORATION	8 USUM	1.00

APPLICABLE ODOT STANDARDS:

SSS-1-1
TSC2-3-2
TSD-2-0
CSCD-5-4
SPI-4-1
SPB-1-4

SOLID SLAB SODDING
TEMPORARY SEDIMENT CONTROLS
TEMPORARY SILT DIKE
CONCRETE SURFACING CONSTRUCTION DETAILS
STANDARD PIPE INSTALLATION
STANDARD PIPE BEDDING

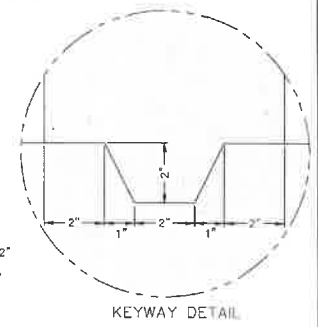
PAY ITEMS & NOTES				
VINEYARD SUBDIVISION				
CITY OF NORMAN				
PLANS AND ESTIMATES PREPARED BY: MESHEK & ASSOCIATES, L.L.C. 1437 S. BOLLINGER AVENUE, SUITE 1000 TULSA, OK 74119 (918)282-0800				
REVISION	BY	DATE	DRAWN	AD
			DESIGNED	HCW 03/22
			SURVEY	PDH 11/17
			C.A. 1457 DOWNS 6/30/23	
			SHEET: 2 OF 23	



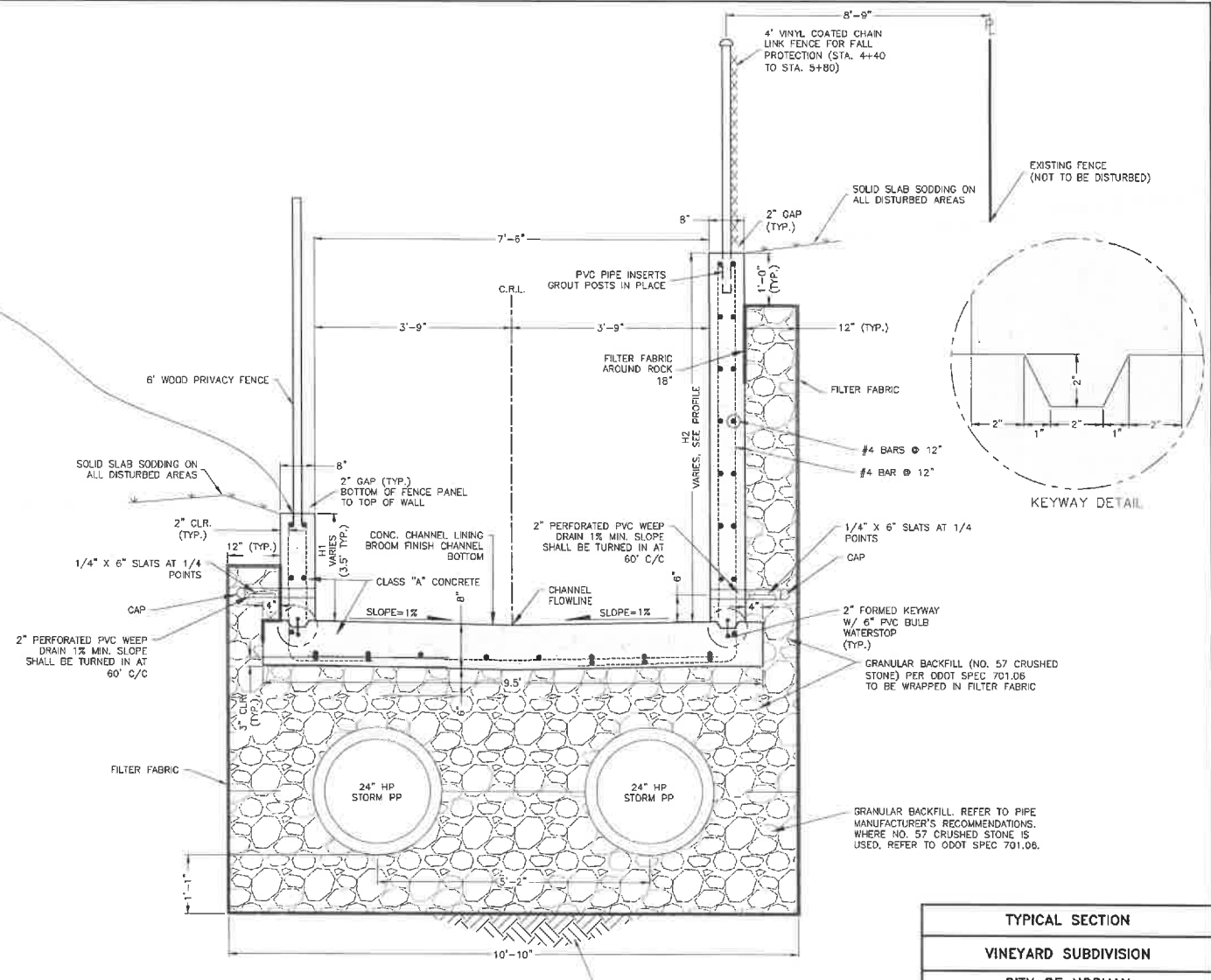
1 CONCRETE CHANNEL

SCALE: NONE

TYPICAL SECTION			
VINEYARD SUBDIVISION			
CITY OF NORMAN			
PLANS AND ESTIMATES PREPARED BY:			
MESHEK & ASSOCIATES, L.L.C. 1437 S. BOULEVARD AVENUE, SUITE 1500 TULSA, OK 74118 (918)362-5600			
REVISION	BY	DATE	DRAWN DESIGNED SURVEY
			AD 03/22 HCW 03/22 PDH 11/17
			C.A. 1487 EXPIRES 6/30/23
			SHEET: 3 OF 23

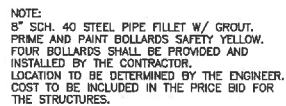


1. NO ABOVE GROUND UTILITIES, SHRUBS, TREES, OR STRUCTURES WILL BE CONSTRUCTED IN EASEMENT. EASEMENTS TO REMAIN CLEAR FOR HEAVY EQUIPMENT ACCESS OR PASSAGE.
2. CHANNEL SHALL BE CONSTRUCTED WITH ODOT CLASS "A" CONCRETE.
3. GRADING ADJACENT TO CONCRETE SHALL BE 1" HIGHER THAN CONCRETE SURFACE TO ALLOW FOR MINOR TO SLIGHT SLOPE.
4. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4".
5. ALL DISTURBED AREAS SHALL BE SLAB SOODED AS DIRECTED BY THE ENGINEER ON 4" OF TOPSOIL.
6. GRANULAR BACKFILL NO. 57 CRUSHED STONE SHALL BE PLACED ON FILTER FABRIC. FILTER FABRIC SHALL BE WRAPPERS AND AROUND PERIMETER FOR AN 18" LAP DISTANCE. FILTER FABRIC SHALL MEET APPLICABLE ASTM SPECS AND SHALL BE DESIGNED TO MEET SOIL SIZE AND PERMEABILITY REQUIREMENTS.
7. GRANULAR BACKFILL SHALL BE CRUSHED STONE FOR UNDERDRAINS, WEIR DRAINS, AND BASE SHALL BE IN ACCORDANCE WITH ODOT STANDARD SPEC. 701.06 AND NO. 57 PLACING SHALL BE IN ACCORDANCE WITH ODOT STANDARD SPEC. 303.
8. GRASS AND SUBGRADE PREPARED FOR CHANNEL SHALL BE PREPARED ACCORDING TO SUBGRADE METHOD "B" PER ODOT SPEC. 310.04.
9. FENCE TO BE AS SHOWN ON PLANS
10. ~~WEIR~~ DRAINS TO BE INCLUDED IN THE COST OF CLASS "A" CONCRETE.



GRADE AND SUBGRADE 95% STD. PROCTOR
DENSITY PREPARED IN ACCORDANCE WITH
SUBGRADE METHOD "B" ODOT SPEC 310.04

TYPICAL SECTION			
VINEYARD SUBDIVISION			
CITY OF NORMAN			
PLANS AND ESTIMATES PREPARED BY: MESHEK & ASSOCIATES, L.L.C. 1437 S. BOULDER AVENUE, SUITE 1500 TULSA, OK 74110 (918)382-5620			
REVISION	BY	DATE	AD
1	COH	6/18/12	HCW
ALJUST DETAIL-ENTIRE SHEET		DESIGNED	03/22
		SURVEY	03/22
		PDH	11/17
		C.A. 1487 EXPIRES	6/30/23
		SHEET:	4 OF 23



SCALE: NONE



NOTE: COPPER WATER STOP SHALL BE INSTALLED FULL HEIGHT OF WALL IN ALL VERTICAL EXPANSION JOINTS. ALL COSTS INCLUDING PREMOULDED EXPANSION MATERIAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR RETAINING WALL.



PLACE JOINTS @ 30' INTERVALS "MAXIMUM"

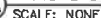


SCALE: NONE



SCALE: NONE

NOTE:
*PLACE EVERY 100 FEET AND AT THE END OF
EACH DAY'S PLACEMENT OR ANY STOPPAGE OF 30
MINUTES OR MORE.
PRICE TO BE INCLUDED IN PRICE BID FOR CLASS
"A" CONCRETE. PEDESTAL WIDTH TO MATCH
CHANNEL BOTTOM WIDTH, (8" MIN.).



NOTE: SAWED OR TOOLED JOINTS:
PLACE SAW JOINT A MAXIMUM OF
10' SPACING.



EMBED IMPERVIOUS CORE A MINIMUM OF 2 FT INTO EXISTING GRADE.

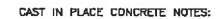
ALL FILL MATERIAL FOR EMBANKMENT (EXCLUDING IMPERMEABLE CORE) SHALL BE CONSTRUCTED BY BLENDING AND CONSOLIDATING MATERIAL ENCOUNTERED IN EXCAVATING THE SITE. REFERENCE ODOT CONSTRUCTION STANDARDS 202 - EARTHWORK.

IN ADDITION TO THIS SPECIFICATION, THE FILL SHALL MEET THE FOLLOWING REQUIREMENTS:

1. MINIMUM OF 70% FINE-S (MATERIAL PASSING THE #200 SIEVE)
2. 3" MAXIMUM PARTICLE SIZE IN THE TOP 3 FEET OF FILL.
3. MAXIMUM PARTICLE SIZE BELOW THE TOP 3 FEET OF FILL SHALL BE NO GREATER THAN THE COMPACTED LIFT DIMENSION (+8").
4. COMPACT FILL IN-PLACE TO 95% OF STANDARD PROCTOR DENSITY AT $\pm 2\%$ OF OPTIMUM MOISTURE CONTENT.
5. ON-SITE FILL MATERIALS SHALL BE BLENDED TO INSURE A MAXIMUM DRY DENSITY OF THE COMPACTED, CONSTRUCTED FILL BETWEEN 106 AND 110 POUNDS PER CUBIC FOOT.

PLACE FILL IN 8" MAXIMUM LOOSE LIFTS - MINIMUM OF 3 LIFTS PER 2'X4' BENCH. BENCH FILL INTO IMPERVIOUS CORE AND ADJACENT UNDISTURBED SOIL AS INDICATED. ALL LIFTS SHALL BE LEVEL AND UNIFORM.

SCALE: NONE

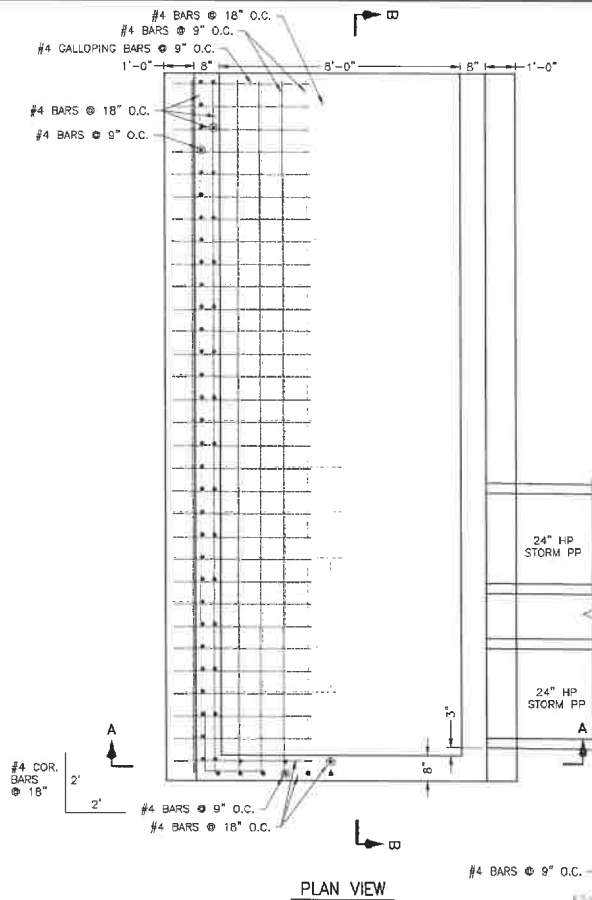


1. ALL CONCRETE SHALL BE CLASS A, AS DESIGNATED IN SECTION 509 OF THE ODOT SPECIFICATIONS, LATEST EDITION.
2. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.
3. CLEAR DISTANCES FROM CAST-IN-PLACE CONCRETE SURFACES TO REINFORCING SHALL BE 2" FOR WALLS, 1-1/2" FOR SUPPORTED SLABS, 3" FROM THE BOTTOM OF SLABS, AND 2" FROM THE TOP OF SLABS, UNLESS OTHERWISE NOTED.
4. REINFORCING STEEL SHALL MEET ASTM SPECIFICATION A615, GRADE 60.
5. ALL BARS SHALL HAVE A MINIMUM OF 30 BAR DIAMETERS OR 12" WHICHEVER IS GREATER, UNLESS OTHERWISE NOTED OR OTHERWISE CHANGED.
6. ALL EXPOSED CAST IN PLACE CONCRETE SURFACES SHALL HAVE ALL VOIDS FILLED, BURRS FINED, REMOVED AND BE FINISHED AND PREPARED FOR PAINTING.
7. PROVIDE FOR 4" ROUNDING AT ALL EXIT OPENINGS.
8. PROVIDE SMOOTH GROUT FILLETS THROUGH JUNCTION BOXES AND MANHOLES.
9. VIBRATORY PROBE SHALL BE USED DURING PLACEMENT OF CONCRETE.

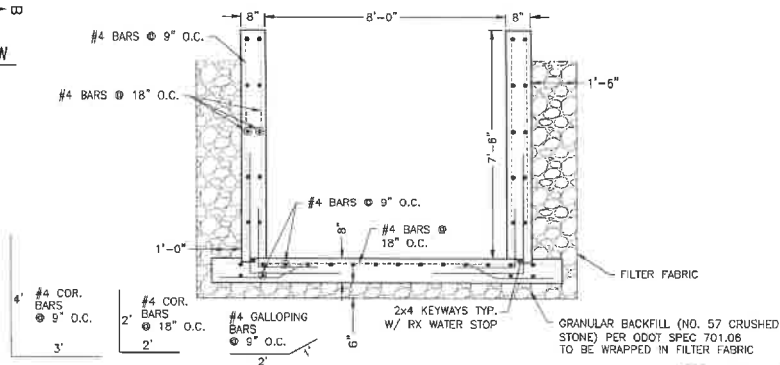
+0.051 C.Y. PER L.F. CONC.
FOR THICKENED EDGE

SCALE: NONE

DETAILS			
VINEYARD SUBDIVISION			
CITY OF NORMAN			
PLANS AND ESTIMATES PREPARED BY:			
MESHEK & ASSOCIATES, L.L.C.			
1437 S. BRIDGER AVENUE, SUITE 1350 TULSA, OK 74119 (918)392-5520			
REVISION	BY	DATE	
		DRAWN	AD 03/22
		DESIGNED	HCW 03/22
		SURVEY	PDH 11/17
		C.A. 1487 EXPIRES 6/30/23	
		SHEET: 5 OF 23	



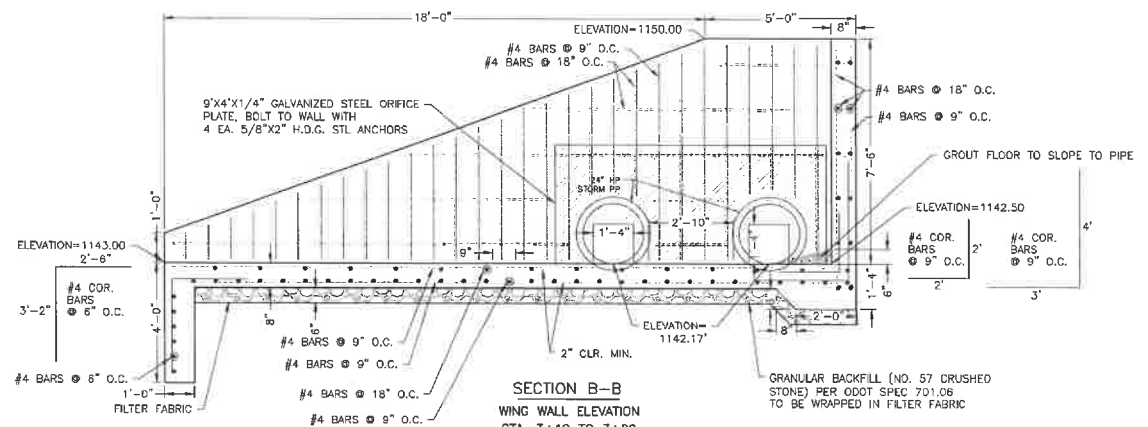
PLAN VIEW



SECTION A-A
HEADWALL ELEVATION

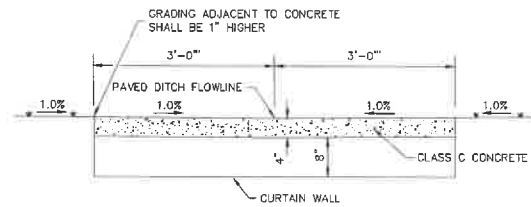
CAST IN PLACE CONCRETE NOTES:

1. ALL CONCRETE SHALL BE CLASS A, AS DESIGNATED IN SECTION 509 OF THE ODOT SPECIFICATIONS, LATEST EDITION.
2. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.
3. CLEAR DISTANCES FROM CAST-IN-PLACE CONCRETE SURFACES TO REINFORCING SHALL BE 2" FOR WALLS, 1-1/2" FOR SUPPORTED SLABS, 3" FROM THE BOTTOM OF FOOTINGS AND 2" FROM THE TOP OF SLABS, UNLESS OTHERWISE NOTED.
4. REINFORCING STEEL SHALL MEET ASTM SPECIFICATION A615, GRADE 60.
5. ALL BARS SHALL LAP A MINIMUM OF 30 BAR DIAMETERS OR 12", WHICHEVER IS GREATER, UNLESS OTHERWISE NOTED BY THE ENGINEER.
6. ALL EXPOSED CAST-IN-PLACE CONCRETE SURFACES SHALL HAVE ALL VOIDS FILLED, BURRS AND FINIS REMOVED AND BE FINISHED AND PREPARED FOR PAINT.
7. PROVIDE FOR 4" ROUNDED AT ALL EXIT OPENINGS.
8. PROVIDE SMOOTH GROUT FILLETS THROUGH JUNCTION BOXES AND MANHOLES.
9. VIBRATORY PROBE SHALL BE USED DURING PLACEMENT OF CONCRETE.

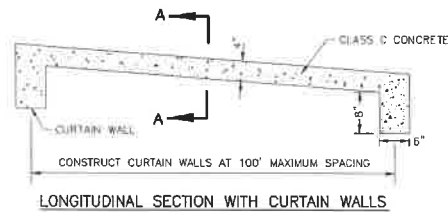


SECTION B-B
WING WALL ELEVATION
STA: 3+10 TO 3+29

DETAILS			
VINEYARD SUBDIVISION			
CITY OF NORMAN			
PLANS AND ESTIMATES PREPARED BY:			
MESHEK & ASSOCIATES, L.L.C.			
1437 S. BOLLINGER AVENUE, SUITE 1050 TULSA, OK 74110 (918)302-5600			
REVISION	BY	DATE	
		DRAWN	AD 03/22
		DESIGNED	HCW 03/22
		SURVEY	HBV 11/17
C.A. 1487 EXPIRES 6/30/23			
SHEET:		6	OF 23



SECTION A-A

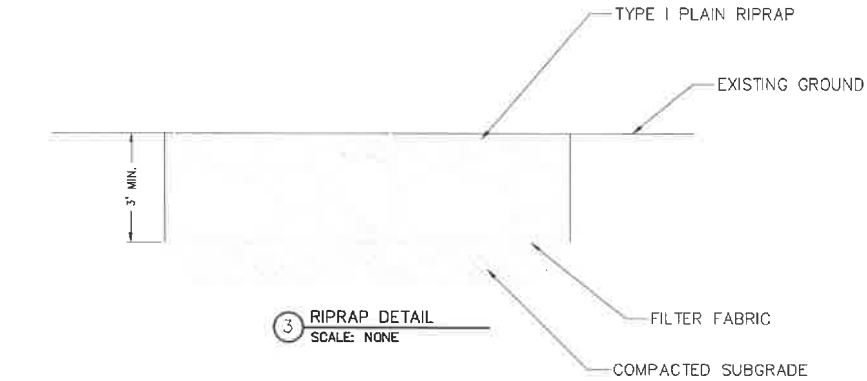


LONGITUDINAL SECTION WITH CURTAIN WALLS

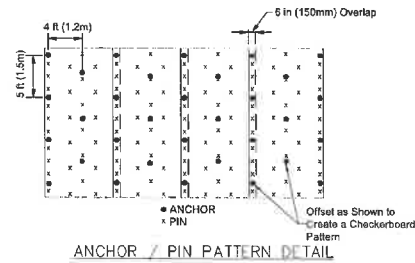
1 PAVED DITCH DETAIL
SCALE: NONE

PAYED DTICH GENERAL NOTES:

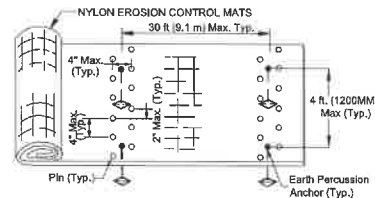
1. ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE 2019 ODOT STANDARD SPECIFICATIONS.
2. ALL COST OF ADDITIONAL BORROW OR EXCAVATION REQUIRED FOR INSTALLING PAVED DITCH SHALL BE INCLUDED IN PRICE BID FOR CLASS C CONCRETE.
3. THE DITCH SHALL BE WATERED AND COMPACTED BEFORE PLACING CLASS C CONCRETE.



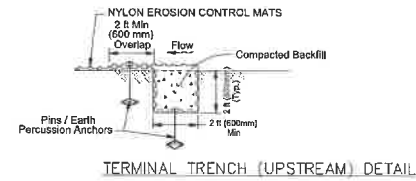
3 RIPRAP DETAIL
SCALE: NONE



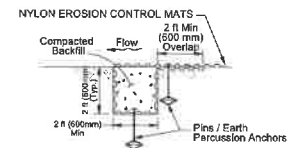
ANCHOR / PIN PATTERN DETAIL



SIMULATED CHECK SLOT DETAIL



TERMINAL TRENCH (UPSTREAM) DETAIL



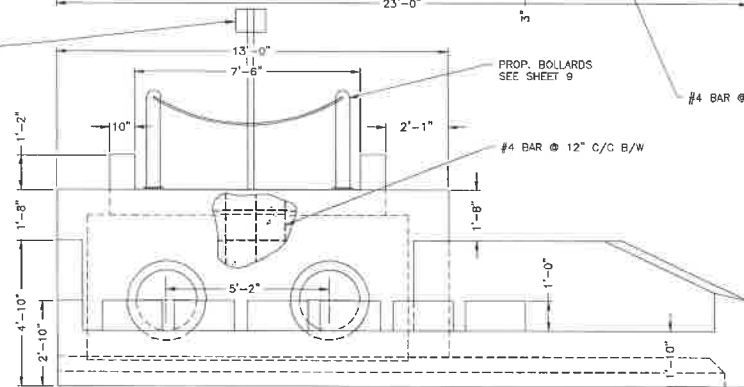
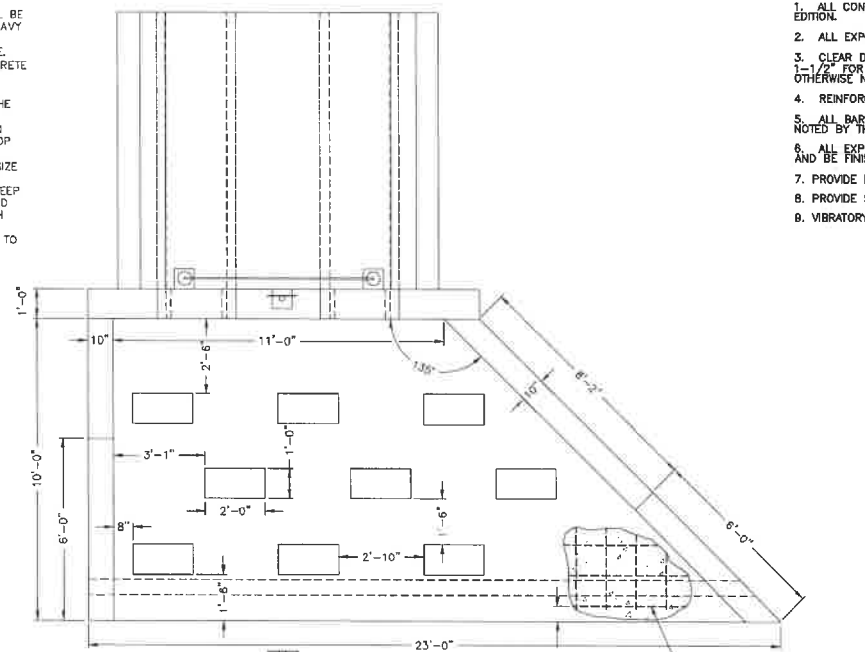
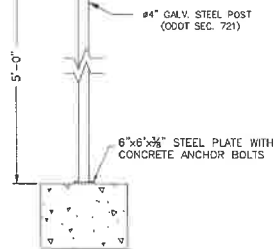
INITIAL TRENCH (DOWNSTREAM) DETAIL

2 NYLON EROSION CONTROL MAT DETAILS
SCALE: NONE

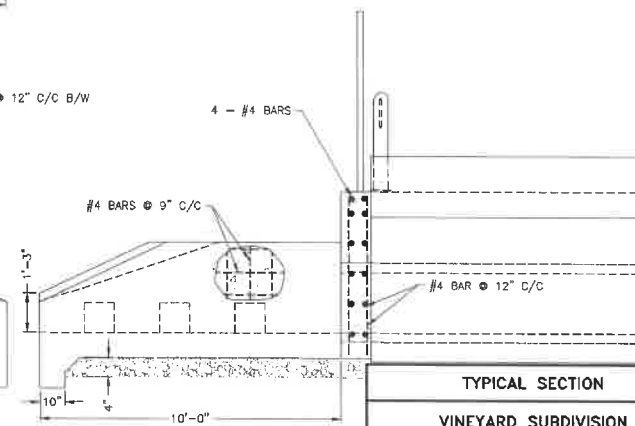
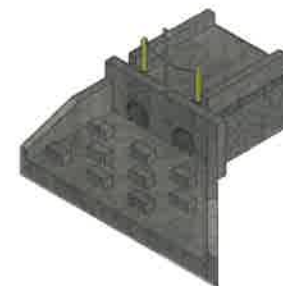
DETAILS			
VINEYARD SUBDIVISION			
CITY OF NORMAN			
PLANS AND ESTIMATES PREPARED BY: MESHEK & ASSOCIATES, L.L.C. 1437 S. BOULEVARD AVENUE, SUITE 1550 TULSA, OK 74110 (918)382-5830			
REVISION	BY	DATE	
		DRAWN	AD 03/22
		DESIGNED	HCW 03/22
		SURVEY	PDH 11/17
C.A. 1487 EXPIRES 4/30/23			
SHEET: 7		OF 23	

1. NO ABOVE GROUND UTILITIES, SHRUBS, TREES, OR STRUCTURES WILL BE CONSTRUCTED IN EASEMENTS. EASEMENTS TO REMAIN CLEAR FOR HEAVY EQUIPMENT ACCESS OR PASSAGE.
2. CHANNEL SHALL BE CONSTRUCTED WITH ODOT CLASS "A" CONCRETE.
3. TOPPING AND FINISH SHALL BE 1" HIGHER THAN CONCRETE SURFACE PRIOR TO SLAB SO APPLICATION.
4. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4".
5. ALL DISTURBED AREAS SHALL BE SLAB SODDED AS DIRECTED BY THE ENGINEER ON 4" OF TOPSOIL.
6. GRANULAR BACKFILL TO CRUSHED STONE SHALL BE PLACED ON FILTER FABRIC. FILTER FABRIC TO BE WRAPPED UP AND AROUND TOP PERIMETER FOR AN 18" LAP DISTANCE. FILTER FABRIC SHALL MEET APPLICABLE ASTM SPECIFICATIONS AND SHALL BE DESIGNED TO MEET SOIL SIZE AND PERMEABILITY REQUIREMENTS.
7. GRANULAR BACKFILL TO CRUSHED STONE FOR UNDERDRAINS, WEIR DRAINS, AND BASE SHALL BE IN ACCORDANCE WITH ODOT STANDARD SPEC. 701.06 AND NO. 57 PLACING SHALL BE IN ACCORDANCE WITH ODOT STANDARD SPEC. 701.07.
8. SUBGRADE UNDER THE HEADWALL SHALL BE PREPARED ACCORDING TO SUBGRADE METHOD "B" PER ODOT SPEC. 310.04.

1. ALL CONCRETE SHALL BE CLASS A, AS DESIGNATED IN SECTION 509 OF THE ODOT SPECIFICATIONS, LATEST EDITION.
2. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.
3. CLEAR DISTANCES FROM CAST-IN-PLACE CONCRETE SURFACES TO REINFORCING SHALL BE 2" FOR WALLS, 1-1/2" FOR SUPPORTED SLABS, 3" FROM THE BOTTOM OF FOOTINGS AND 2" FROM THE TOP OF SLABS, UNLESS OTHERWISE NOTED.
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9. VIBRATORY PROBE SHALL BE USED DURING PLACEMENT OF CONCRETE.



1 DISCHARGE STRUCTURE HEADWALL
SCALE: NONE



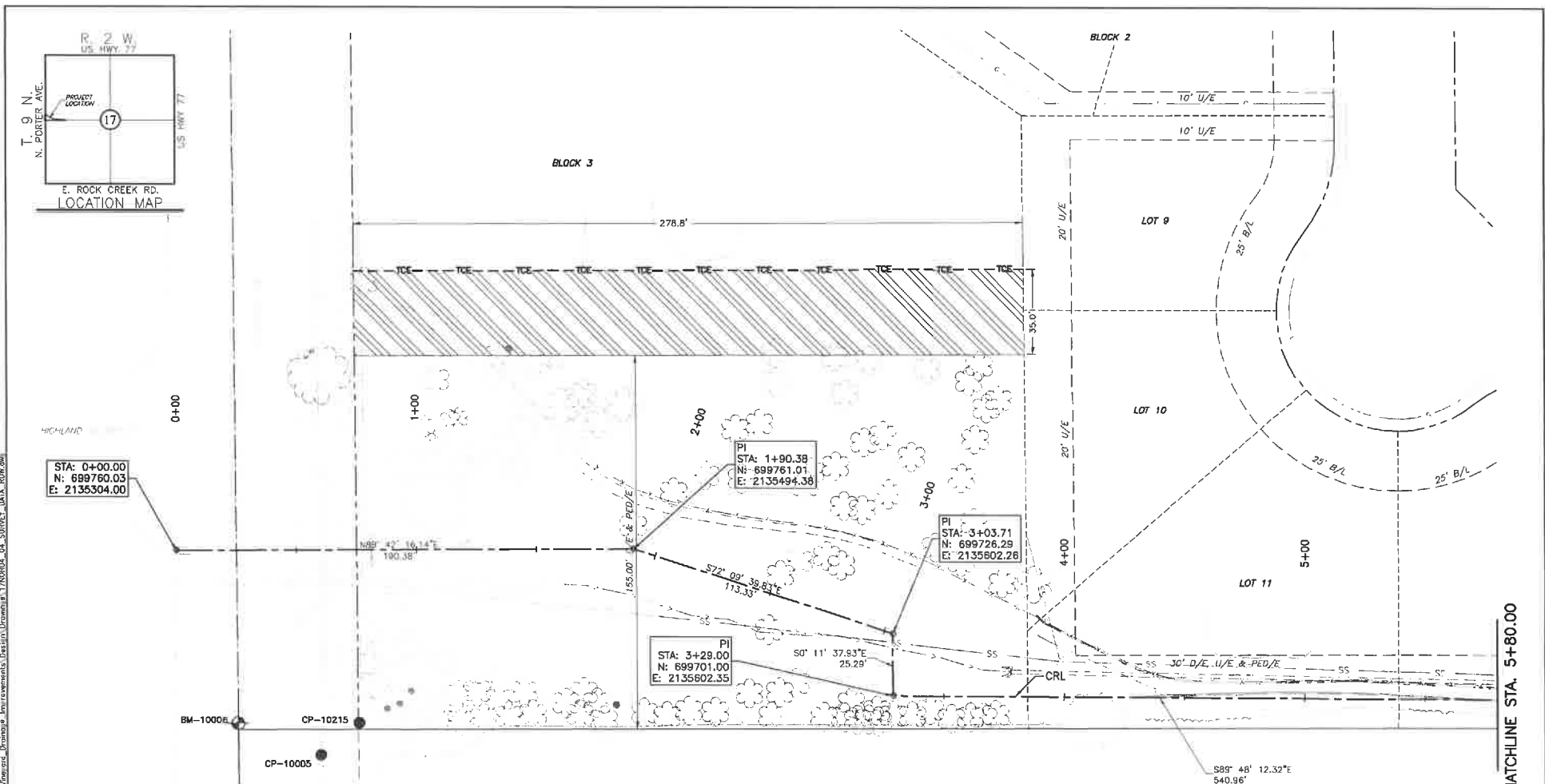
TYPICAL SECTION

VINEYARD SUBDIVISION

CITY OF NORMAN

PLANS AND ESTIMATES PREPARED BY:
MESHEK & ASSOCIATES, L.L.C.

REVISION	BY	DATE	DRAWN	AD	03/22
			DESIGNED	HCW	03/22
			SURVEY	PDH	11/17
C.A. 1487 EXPIRES 6/30/23					
SHEET: 8 OF 23					



STA: 0+00.00
N: 699760.03
E: 2135304.00

PI
STA: 1+90.38
N: 699761.01
E: 2135494.38

PI
STA: 3+03.71
N: 699726.29
E: 2135602.28

PI
STA: 3+29.00
N: 699701.00
E: 2135602.35

SURVEYOR'S CERTIFICATE

I, AARON BURNS, OF MESHEK & ASSOCIATES, L.L.C., A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF OKLAHOMA, DO HEREBY CERTIFY THAT THIS CONTROL, TOPOGRAPHIC, AND BOUNDARY SURVEY WAS COMPLETED UNDER MY DIRECT AND RESPONSIBLE CHARGE FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION AND MEETS THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYING AS ADOPTED BY THE OKLAHOMA STATE BOARD OF LICENSURE FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS."

THE HORIZONTAL AND VERTICAL DATUMS FOR THIS SURVEY ARE BASED ON THE OKLAHOMA STATE PLANE COORDINATE SYSTEM OK SOUTH 3502 USFT (NAD83-CORS96) AND NAVD 88. THE SURVEYING METHODS USED ARE AVERAGED RTK GPS OBSERVATIONS ON BETWEEN THE SOURCE CITY OF NORMAN BENCHMARKS OF 360 AND 361 AS BEING:

- NORTHING = 696,963.327
- EASTING = 2,135,282.382
- ELEVATION = 1178.75
- DESCRIPTION = 3.5" BRONZE DISC #380
- NORTHING = 696,995.529
- EASTING = 2,138,922.410
- ELEVATION = 1181.73
- DESCRIPTION = 3.5" BRONZE DISC #361



EXECUTED THIS 27th DAY OF MARCH 2020
AARON BURNS
REGISTERED PROFESSIONAL LAND SURVEYOR
OKLAHOMA P.L.S. 1923
CERTIFICATE OF AUTHORIZATION NO. 1487
EXPIRES JUNE 30, 2021

SURVEY CONTROL				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP-10212	700538.4307	2135418.2855	1148.25	PK NAIL FD.
CP-10213	700518.3658	2135479.4829	1147.21	PK NAIL FD.
CP-10214	699795.1671	2135123.9535	1156.02	PK NAIL FD. CA3949 SRB
CP-10215	699689.1912	2135380.0367	1151.30	1/2" REBAR FD.

LEGEND

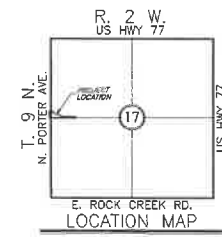
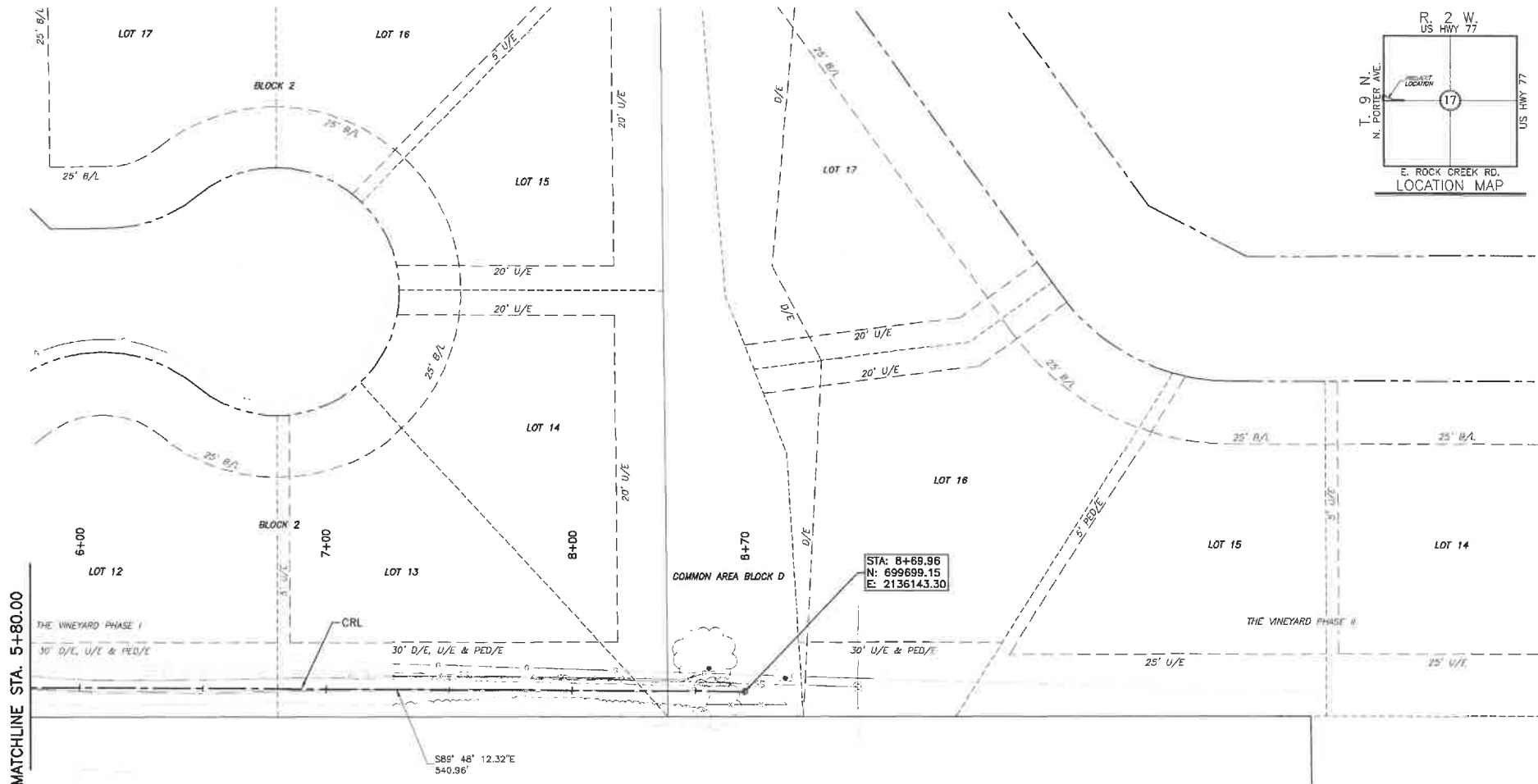
- C.R.L.
- SECTION LINE
- RIGHT-OF-WAY
- LOT LINE
- EXISTING BUILDING LINE
- EXISTING EASEMENT LINE
- PROPOSED TEMPORARY CONSTRUCTION EASEMENT
- BM-## BENCHMARK
- CP-## CONTROL POINT

SCALE IN FEET: 0, 10, 20, 40

SURVEY DATA & RIGHT OF WAY				
VINEYARD SUBDIVISION				
CITY OF NORMAN				
PLANS AND ESTIMATES PREPARED BY: MESHEK & ASSOCIATES, L.L.C. 1437 S. BOKULDER AVENUE, SUITE 1500 TULSA, OK 74116 (918)392-5620				
REVISION	BY	DATE	DRAWN	AD
			DESIGNED	AD 03/22
			SURVEY	HCW 03/22
			PDH	11/17
C.A. 1487 EXPIRES 6/30/23				
SHEET: 10 OF 23				

PRINT DATE: 01/19/2023
M:\City of Norman\1487_Vineyard_Subdivision\Improvements\Design\Drawings\1487000_04_SURVEY_DATA_R01.dwg

PRINT DATE: 8/13/2023
C:\Users\burns\OneDrive\Documents\Drawings\meshek\1500\1500-0000\1500-0000.dwg
C:\Users\burns\OneDrive\Documents\Drawings\meshek\1500\1500-0000\1500-0000.dwg



SURVEYOR'S CERTIFICATE

I, AARON BURNS, OF MESHEK & ASSOCIATES, L.L.C., A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF OKLAHOMA, DO HEREBY CERTIFY THAT THIS CONTROL, TOPOGRAPHIC, AND BOUNDARY SURVEY WAS COMPLETED UNDER MY DIRECT AND RESPONSIBLE CHARGE FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION AND MEETS THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYING AS ADOPTED BY THE OKLAHOMA STATE BOARD OF LICENSURE FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS."

THE HORIZONTAL AND VERTICAL DATUMS FOR THIS SURVEY ARE BASED ON THE OKLAHOMA STATE PLANE COORDINATE SYSTEM OK SOUTH 3502 USFT (NAD83-CORS96) AND NAVD 88. THE SURVEYING METHODS USED ARE AVERAGED RTK GPS OBSERVATIONS ON BETWEEN THE SOURCE CITY OF NORMAN BENCHMARKS OF 380 AND 381 AS BEING:

NORTHING = 896,983.327
EASTING = 2,135,292.382
ELEVATION = 1178.75
DESCRIPTION = 3.5" BRONZE DISC #380

NORTHING = 896,995.529
EASTING = 2,136,922.410
ELEVATION = 1181.73
DESCRIPTION = 3.5" BRONZE DISC #381



EXECUTED THIS 27th DAY OF MARCH 2020

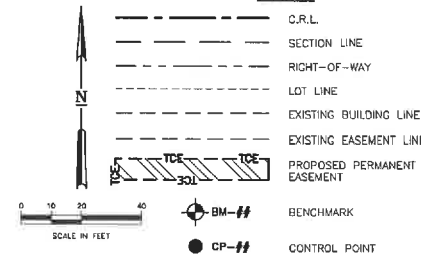
AARON BURNS
REGISTERED PROFESSIONAL LAND SURVEYOR
OKLAHOMA P.L.S. 1923

CERTIFICATE OF AUTHORIZATION NO. 1487
EXPIRES JUNE 30, 2021

SURVEY CONTROL

POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP-10212	700536.4307	2135418.2855	1148.25	PK NAIL FD.
CP-10213	700518.3658	2135479.4829	1147.21	PK NAIL FD.
CP-10214	699795.1671	2135123.9535	1156.02	PK NAIL FD. CA3949 SRB
CP-10215	699689.1912	2135380.0367	1151.30	1/2" REBAR FD.

LEGEND



SURVEY DATA & RIGHT OF WAY

VINEYARD SUBDIVISION

CITY OF NORMAN

PLANS AND ESTIMATES PREPARED BY: MESHEK & ASSOCIATES, L.L.C. 1437 S. BOWLING AVENUE, SUITE 1500, NORMAN, OK 74119 (581)382-0800				
REVISION	BY	DATE	DRAWN	AD
			HCW	03/22
			PDH	11/17
C.A. 1487 EXPIRES 6/30/23				
SHEET: 11 OF 23				

STORM WATER MANAGEMENT PLAN

SITE DESCRIPTION

PROJECT LIMITS: NORMAN OK, APPROXIMATELY 800' NORTH OF ROCK CREEK ROAD ON N PORTER AVE.

PROJECT DESCRIPTION: CONSTRUCT DETENTION POND, DRAINAGE STRUCTURES, STORM SEWER, CONCRETE CHANNEL, SIDEWALK AND FENCE.

SUGGESTED SEQUENCE OF EROSION CONTROL ACTIVITIES:

1. TEMPORARY EROSION CONTROL.
2. CLEARING AND GRUBBING OF EXISTING VEGETATION.
3. POND EXCAVATION.
4. DAM, OUTLET STRUCTURE AND CHANNEL CONSTRUCTION.
5. PERMANENT EROSION CONTROL.

SOIL TYPE: Grainola-Ironmound complex and Port silt loam

TOTAL AREA OF THE CONSTRUCTION SITE: 1.4 ACRES

ESTIMATED AREA TO BE DISTURBED: 1.4 ACRES

OFFSITE AREA TO BE DISTURBED: (FOR CONTRACTOR USE)

TOTAL IMPERVIOUS AREA PRE-CONSTRUCTION: 0.07 ACRES

TOTAL IMPERVIOUS AREA POST-CONSTRUCTION: 0.28 ACRES

POST-CONSTRUCTION RUNOFF COEFFICIENT OF THE SITE: 0.46

LATITUDE & LONGITUDE OF CENTER OF PROJECT: N35° 15' 17.2" W97° 26' 26.5"

PROJECT WILL DISCHARGE TO:

NAME OF RECEIVING WATERS: Little River

SENSITIVE WATERS OR WATERSHEDS: YES ☐ NO ☒

303 IMPAIRED WATERS: YES ☒ NO ☐

IF YES, LIST IMPAIRMENT: Total Dissolved Solids

LOCATED IN A TMDL: YES ☒ NO ☐

LAKE THUNDERBIRD TMDL: YES ☒ NO ☐

MS4 ENTITY YES ☒ NO ☐

IF YES, LOCATION: City of Norman

NOTE:

THIS SHEET SHOULD BE USED IN CONJUNCTION WITH A DRAINAGE MAP THAT ILLUSTRATES THE DRAINAGE PATTERNS/PATHWAYS AND RECEIVING WATERS FOR THIS PROJECT. THIS SHEET SHOULD ALSO BE USED WITH THE EROSION CONTROL SUMMARIES, PAY ITEMS, & NOTES.

EROSION AND SEDIMENT CONTROLS

SOIL STABILIZATION PRACTICES:

- TEMPORARY SEEDING
- ☒ PERMANENT SODDING, SPRIGGING OR SEEDING
- VEGETATIVE MULCHING
- SOIL RETENTION BLANKET
- ☒ PRESERVATION OF EXISTING VEGETATION

NOTE: TEMPORARY EROSION CONTROL METHODS MUST BE USED ON ALL DISTURBED AREAS WHERE CONSTRUCTION ACTIVITIES HAVE CEASED FOR OVER 14 DAYS. METHODS USED WILL BE AS SHOWN ON PLANS, OR AS DIRECTED BY THE ENGINEER.

STRUCTURAL PRACTICES:

- STABILIZED CONSTRUCTION EXIT
- ☒ TEMPORARY SILT FENCE
- ☒ TEMPORARY SILT DIKES
- TEMPORARY FIBER LOG
- DIVERSION, INTERCEPTOR OR PERIMETER DIKES
- DIVERSION, INTERCEPTOR OR PERIMETER SWALES
- ROCK FILTER DAMS
- TEMPORARY SLOPE DRAIN
- ☒ PAVED DITCH W/ DITCH LINER PROTECTION
- TEMPORARY DIVERSION CHANNELS
- TEMPORARY SEDIMENT BASINS
- TEMPORARY SEDIMENT TRAPS
- TEMPORARY SEDIMENT FILTERS
- TEMPORARY SEDIMENT REMOVAL
- RIP RAP
- INLET SEDIMENT FILTER
- TEMPORARY BRUSH SEDIMENT BARRIERS
- SANDBAG BERMS
- TEMPORARY STREAM CROSSINGS

OFFSITE VEHICLE TRACKING:

- ☒ HAUL ROADS DAMPENED FOR DUST CONTROL
- ☒ LOADED HAUL TRUCKS TO BE COVERED WITH TARPAULIN
- ☒ EXCESS DIRT ON ROAD REMOVED DAILY

NOTES:

THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE FOLLOWING:

MAINTENANCE AND INSPECTION:

ALL EROSION AND SEDIMENT CONTROLS WILL BE MAINTAINED IN GOOD WORKING ORDER FROM THE BEGINNING OF CONSTRUCTION UNTIL AN ACCEPTABLE VEGETATIVE COVER IS ESTABLISHED. INSPECTION BY THE CONTRACTOR AND ANY NECESSARY REPAIRS SHALL BE PERFORMED ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCH AS RECORDED BY A NON-FREEZING RAIN GAUGE TO BE LOCATED ON SITE. POTENTIALLY ERODIBLE AREAS, DRAINAGEWAYS, MATERIAL STORAGE, STRUCTURAL DEVICES, CONSTRUCTION ENTRANCES AND EXITS ALONG WITH EROSION AND SEDIMENT CONTROL LOCATIONS ARE EXAMPLES OF SITES THAT NEED TO BE INSPECTED.

WASTE MATERIALS:

PROPER MANAGEMENT AND DISPOSAL OF CONSTRUCTION WASTE MATERIAL IS REQUIRED BY THE CONTRACTOR. MATERIALS INCLUDE STOCKPILES, SURPLUS, DEBRIS AND ALL OTHER BY-PRODUCTS FROM THE CONSTRUCTION PROCESS. PRACTICES INCLUDE DISPOSAL, PROPER MATERIALS HANDLING, SPILL PREVENTION AND CLEANUP MEASURES. CONTROLS AND PRACTICES SHALL MEET THE REQUIREMENTS OF ALL FEDERAL, STATE AND LOCAL AGENCIES.

HAZARDOUS MATERIALS:

PROPER MANAGEMENT AND DISPOSAL OF HAZARDOUS WASTE MATERIALS IS REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING MANUFACTURER'S RECOMMENDATIONS, STATE AND FEDERAL REGULATIONS TO ENSURE CORRECT HANDLING, DISPOSAL, SPILL PREVENTION AND CLEANUP MEASURES. EXAMPLES INCLUDE BUT ARE NOT LIMITED TO: PAINTS, ACIDS, CLEANING SOLVENTS, CHEMICAL ADDITIVES, CONCRETE CURING COMPOUNDS AND CONTAMINATED SOILS.

GENERAL NOTES:

A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED TO COMPLY WITH THE OKLAHOMA POLLUTION DISCHARGE ELIMINATION SYSTEM (OPDES) REGULATIONS. THIS PLAN IS INITIATED DURING THE DESIGN PHASE, CONFIRMED IN THE PRE-WORK MEETINGS AND AVAILABLE ON THE JOB SITE ALONG WITH COPIES OF THE NOTICE OF INTENT (NOI) FORM AND PERMIT CERTIFICATE THAT HAVE BEEN FILED WITH THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (ODEQ). THE PLAN MUST BE KEPT CURRENT WITH UP-TO-DATE AMENDMENTS DURING THE PROGRESSION OF THE PROJECT. ALL CONTRACTOR OFF-SITE OPERATIONS ASSOCIATED WITH THE PROJECT MUST BE DOCUMENTED IN THE SWPPP. I.E., BORROW PITS, WORK ROADS, DISPOSAL SITES, ASPHALT/CONCRETE PLANTS, ETC. THE BASIC GOAL OF STORM WATER MANAGEMENT IS TO IMPROVE WATER QUALITY BY REDUCING POLLUTANTS IN STORM WATER DISCHARGES. RUNOFF FROM CONSTRUCTION SITES HAS A POTENTIAL FOR POLLUTION DUE TO EXPOSED SOILS AND THE PRESENCE OF HAZARDOUS MATERIALS USED IN THE CONSTRUCTION PROCESS. THE PREVENTION OF SOIL EROSION, CONTAINMENT OF HAZARDOUS MATERIALS AND/OR THE INTERCEPTION OF THESE POLLUTANTS BEFORE LEAVING THE CONSTRUCTION SITE ARE THE BEST PRACTICES FOR CONTROLLING STORM WATER POLLUTION.

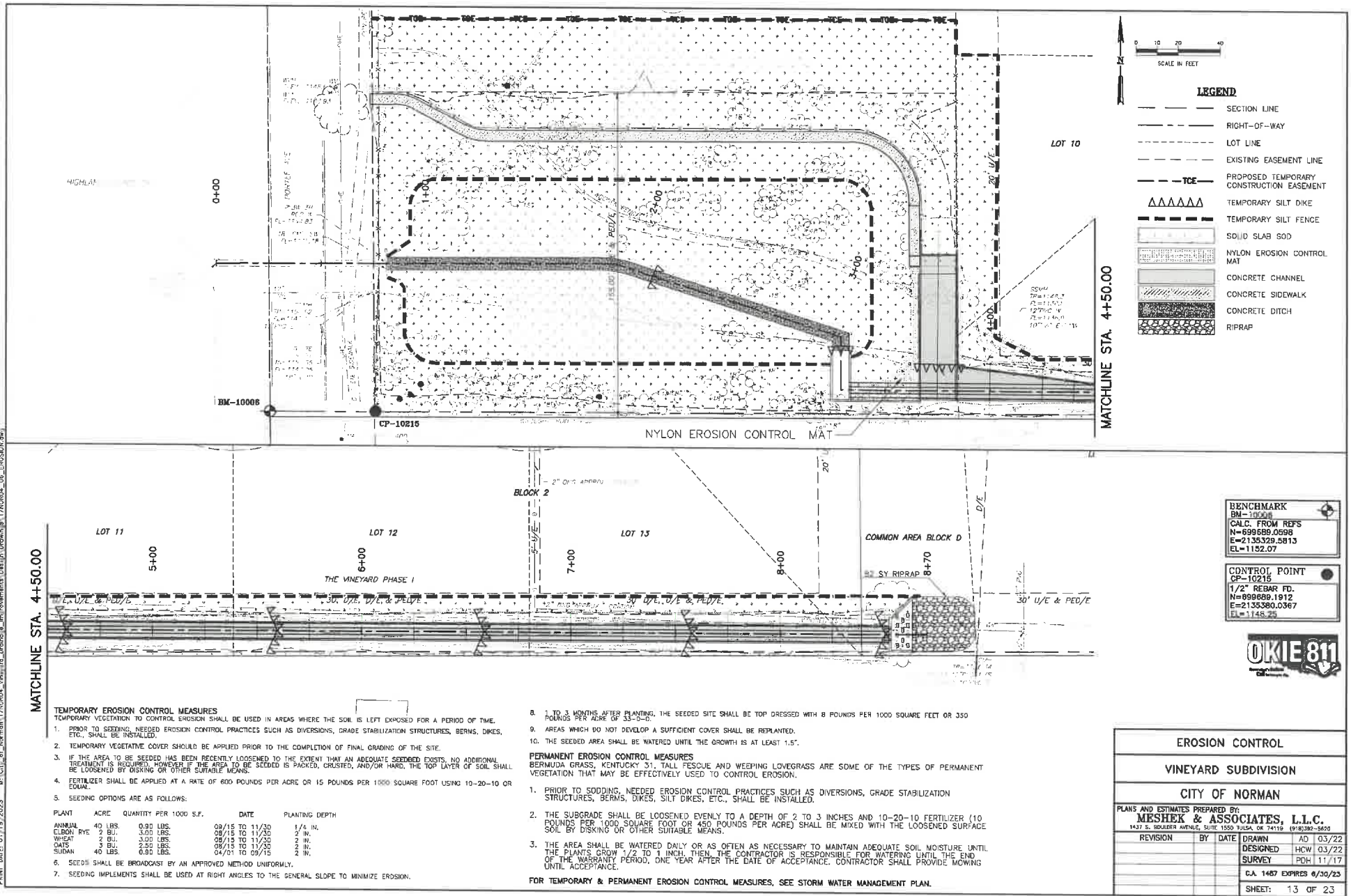
THE FOLLOWING SECTIONS OF THE 2009 ODOT STANDARD SPECIFICATIONS SHOULD BE NOTED:

- 103.05 BONDING REQUIREMENTS
- 104.10 FINAL CLEANING UP
- 104.12 CONTRACTOR'S RESPONSIBILITY FOR WORK
- 104.13 ENVIRONMENTAL PROTECTION
- 106.08 STORAGE AND HANDLING OF MATERIAL
- 107.01 LAWS, RULES AND REGULATIONS TO BE OBSERVED
- 107.20 STORM WATER MANAGEMENT
- 220 MANAGEMENT OF EROSION, SEDIMENTATION AND STORM WATER POLLUTION PREVENTION AND CONTROL
- 221 TEMPORARY SEDIMENT CONTROL

IN ADDITION:

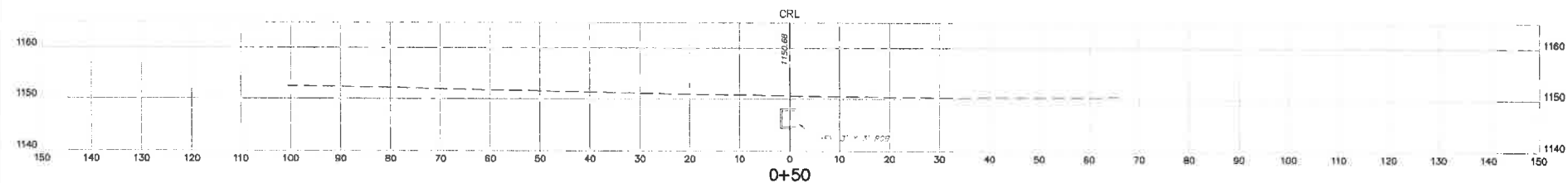
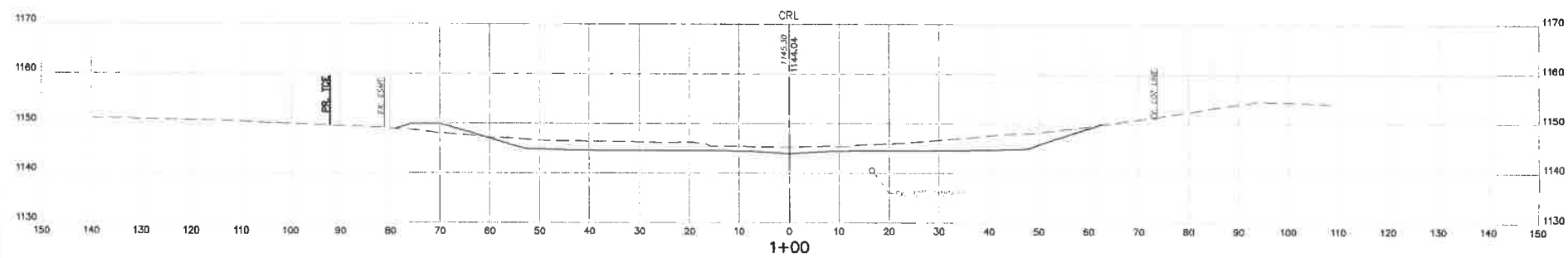
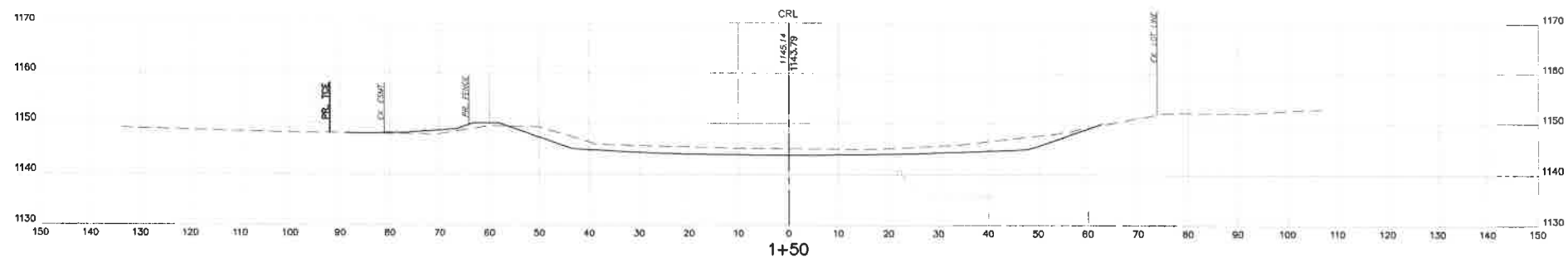
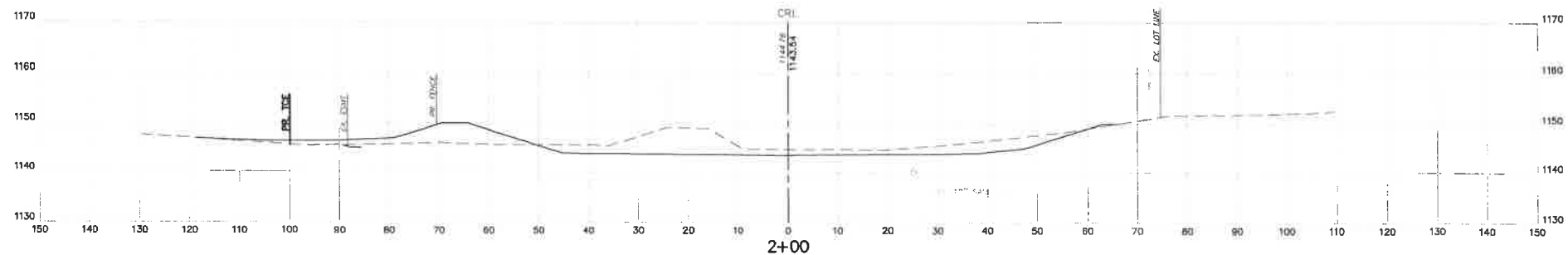
ODEQ GENERAL PERMIT (OKR10) FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES WITHIN THE STATE OF OKLAHOMA.
ODEQ, WATER QUALITY DIVISION, SEPTEMBER 13, 2017.

STORM WATER MANAGEMENT PLAN			
VINEYARD SUBDIVISION			
CITY OF NORMAN			
PLANS AND ESTIMATES PREPARED BY: MESHEK & ASSOCIATES, L.L.C. 1437 E. BOULEVARD AVENUE, SUITE 1500 TULSA, OK 74119 (918)362-5638			
REVISION	BY	DATE	AD
			03/22
			03/22
			11/17
			6/30/23
			12 OF 23

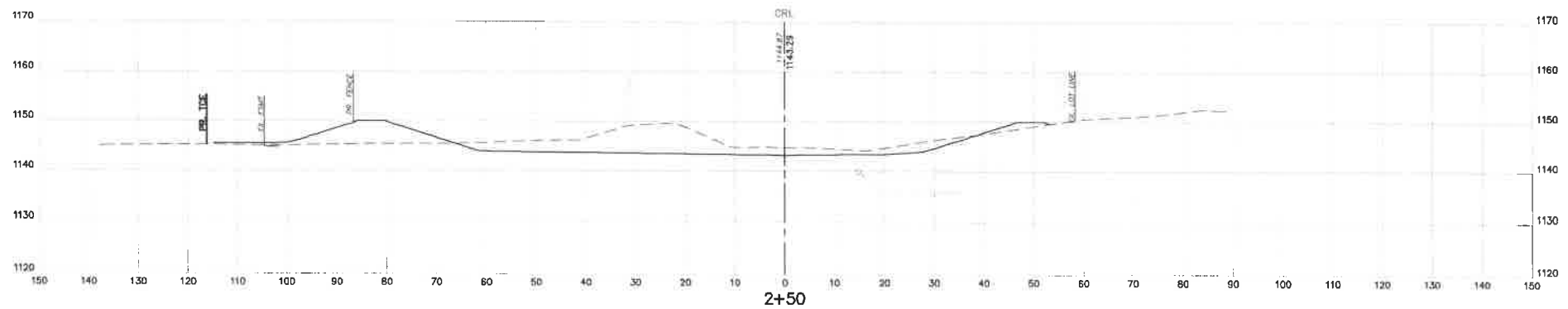
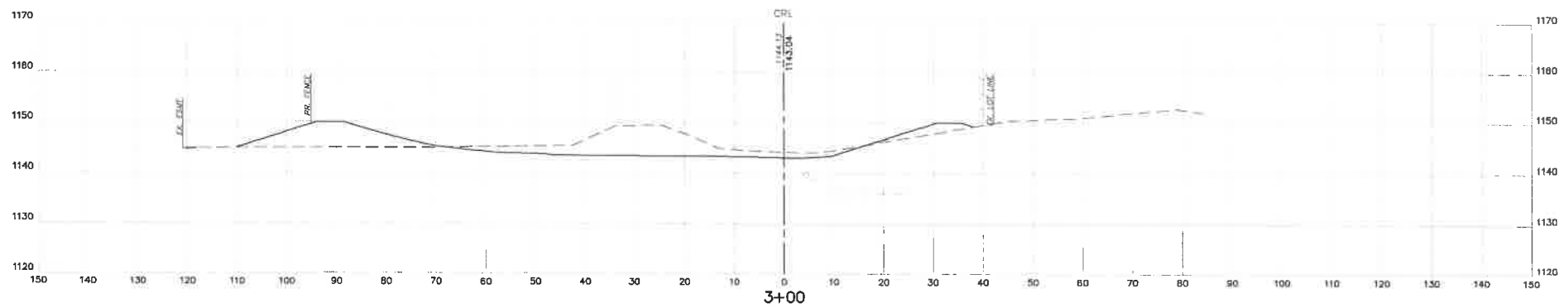
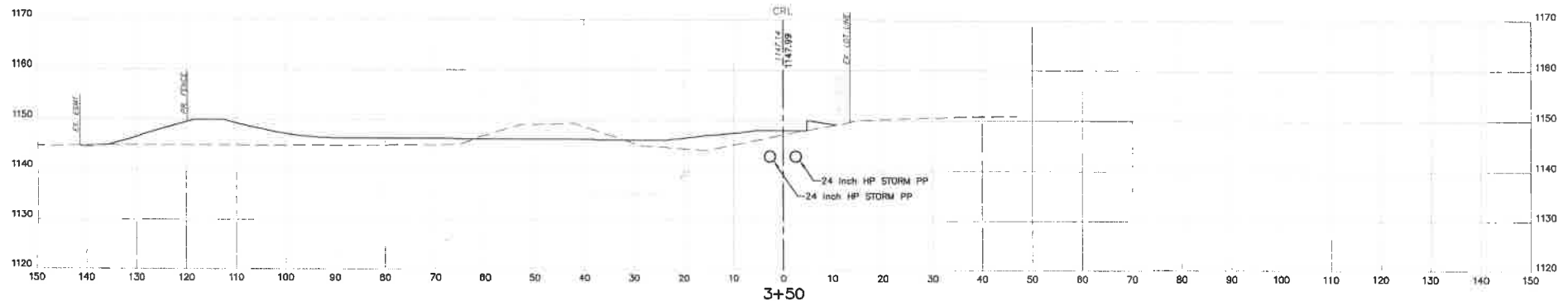


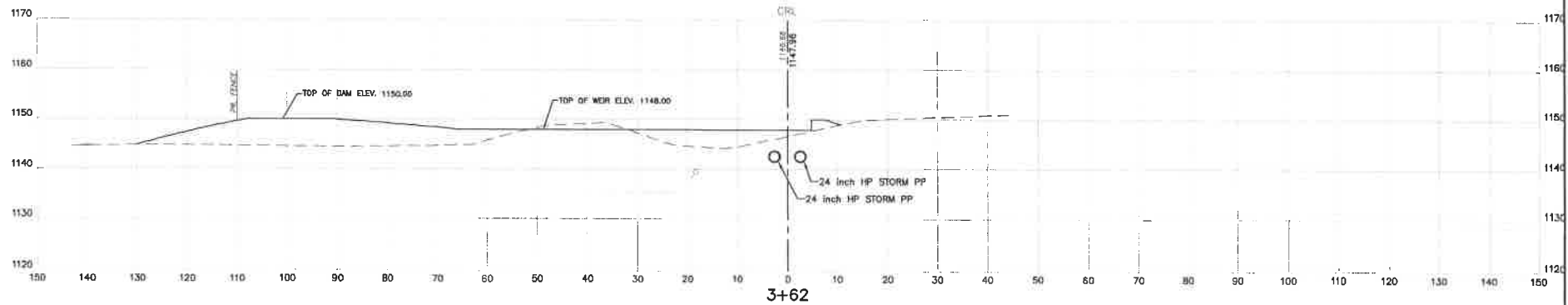
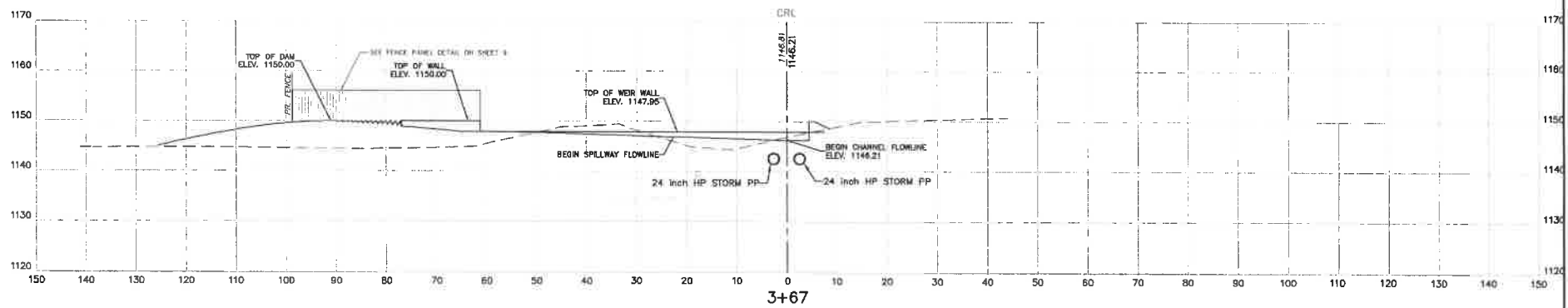
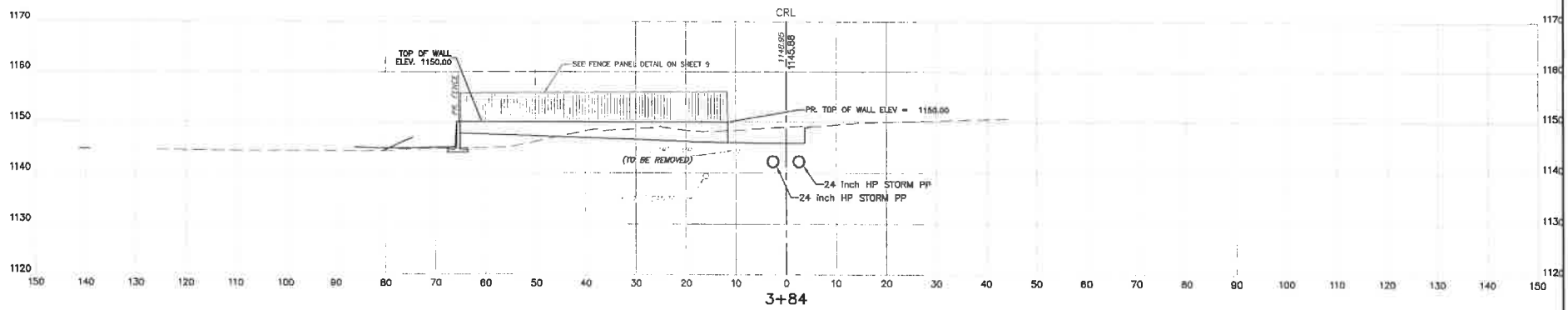
EROSION CONTROL			
VINEYARD SUBDIVISION			
CITY OF NORMAN			
PLANS AND ESTIMATES PREPARED BY:			
MESHEK & ASSOCIATES, L.L.C.			
1437 S. HOLLISTER AVENUE, SUITE 1500 WILSA, OK 74119 (918) 389-5605			
REVISION	BY	DATE	AD
			03/22
			03/22
			11/17
C.A. 1487 EXPIRES 8/30/25			
SHEET: 13 OF 23			



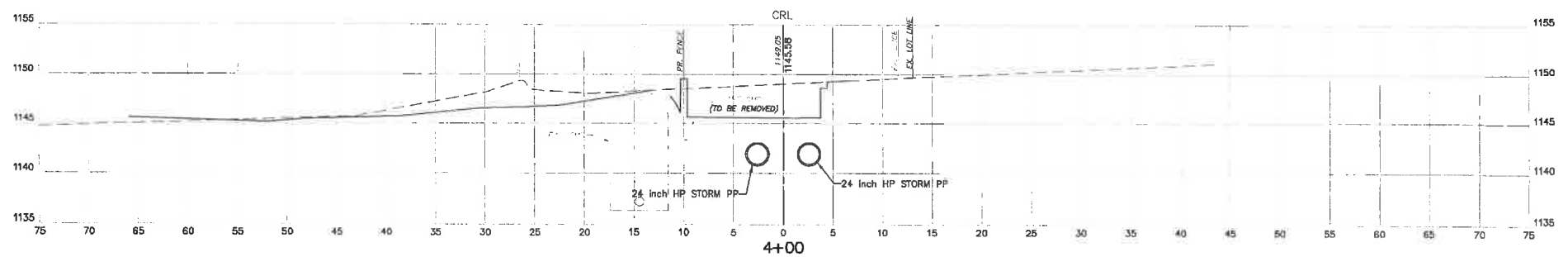
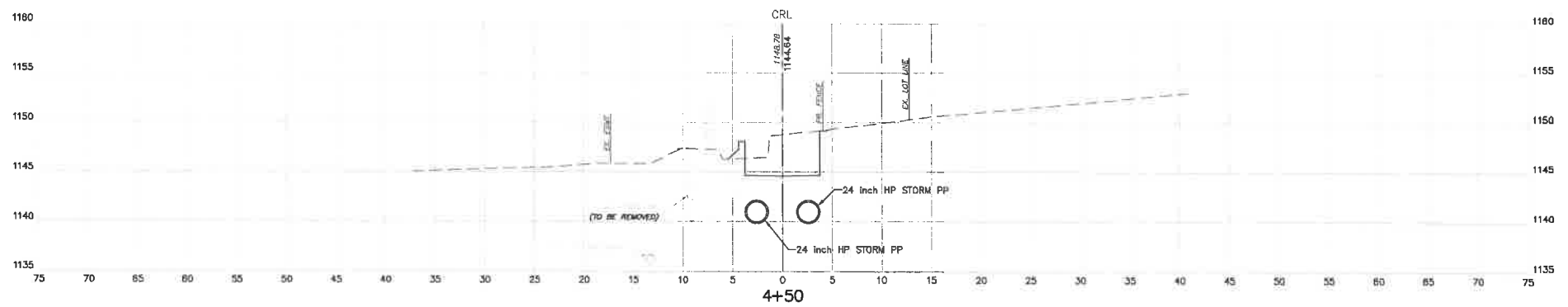
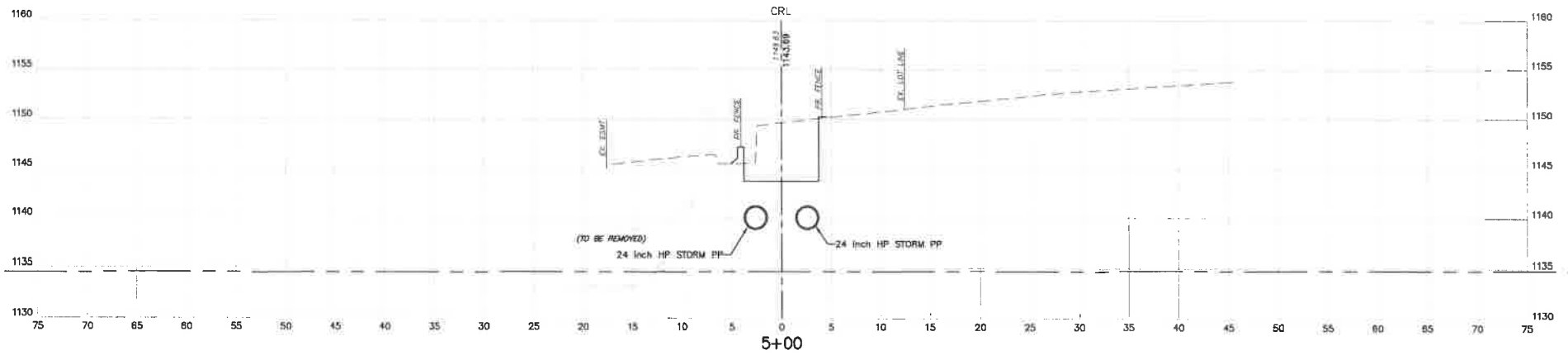


PRINT DATE: 01/19/2023 W: City of Norman 1706054-Vineyard-Proposed-Improvements-Drain-Grading-1706054.dwg Pond Sections.dwg

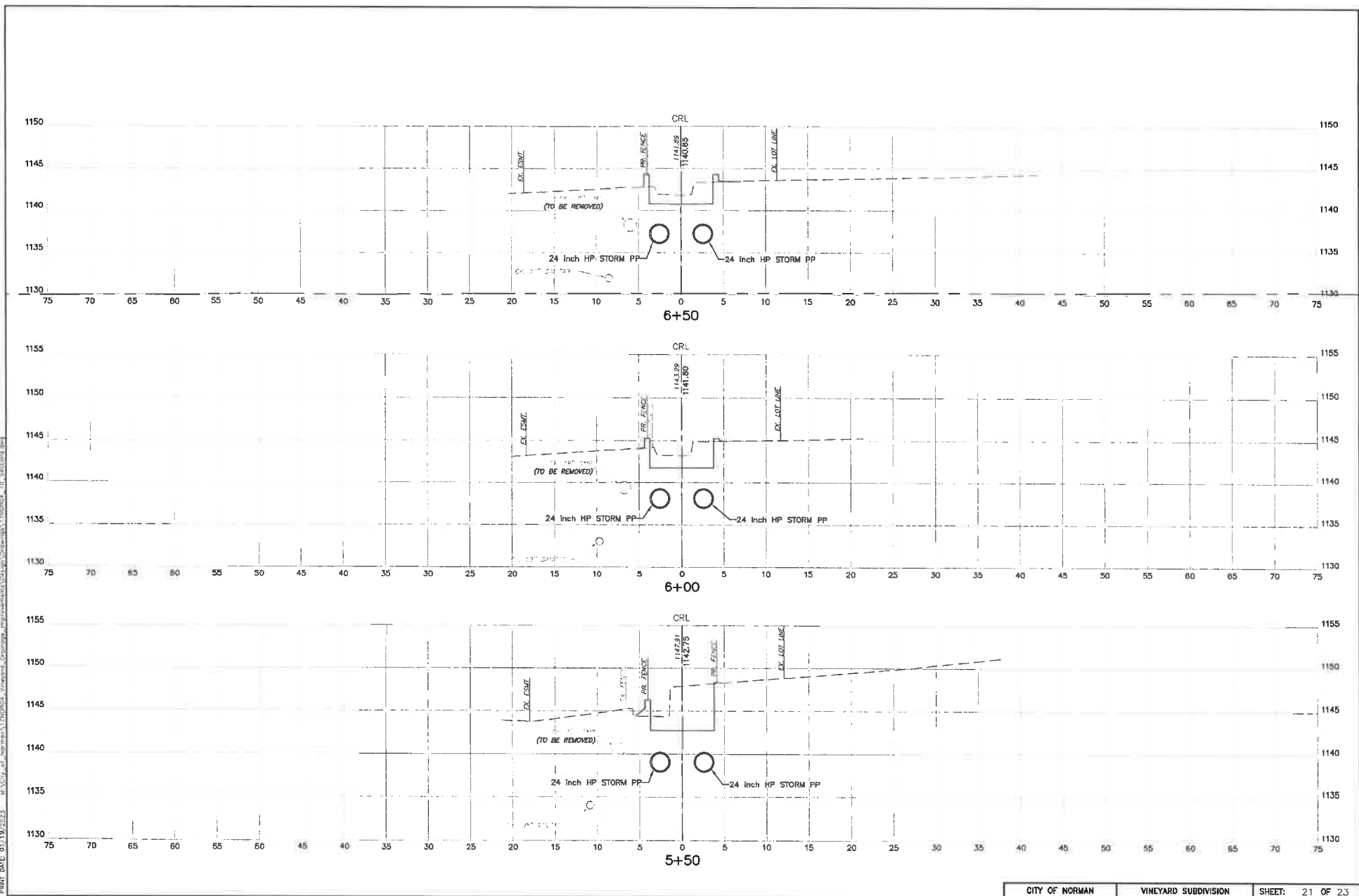




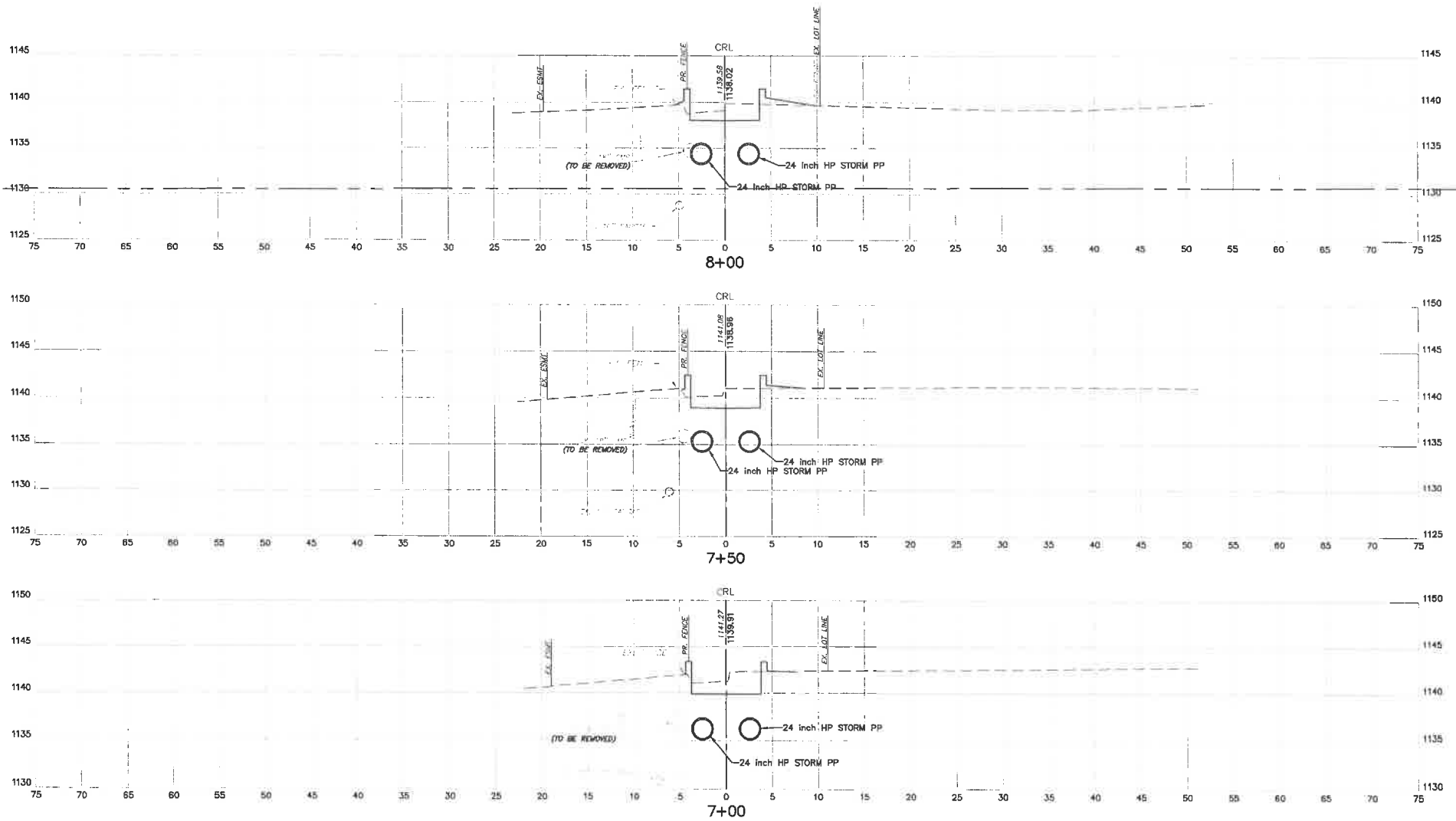
PRINT DATE 01/19/2023 M:\City of Norman\760804_Vineyard_Subdivisions\Design\Drawings\760804_10_Section.dwg



PRINT DATE: 01/19/2023 14:00:44 Norman\A\Projects\Vinyard\Drawings\Improvements\Utility\Drawings\Sheet 21 - Incident Det



PRINT DATE: 01/19/2023 M:\CITY OF NORMAN\NORMAN_VINEYARD_Environment\Drawings\TND004-10_Section.dwg



The image contains two cross-section diagrams of a road at station 8+50. The top diagram shows a road with a centerline (CRL) and a shoulder. The bottom diagram shows a road with a centerline (CRL) and a shoulder, with two 24-inch HP storm pipes (PP) indicated. The diagrams are labeled with stationing and elevation.

Top Diagram:

- Station: 8+50
- Elevation: 1140 to 1120
- Centerline (CRL) is marked at 0.
- Shoulder is marked at 75 on the left and 70 on the right.
- The road surface is shown with a slight dip towards the centerline.

Bottom Diagram:

- Station: 8+50
- Elevation: 1145 to 1125
- Centerline (CRL) is marked at 0.
- Shoulder is marked at 75 on the left and 70 on the right.
- Two 24-inch HP storm pipes (PP) are indicated with circles and labels: "24 inch HP STORM PP" and "(TO BE REMOVED)".
- The road surface is shown with a slight dip towards the centerline.

EXHIBIT C
TEMPORARY CONSTRUCTION EASEMENT AREA



Legal Exhibit "A"

Page 1 of 2

Temporary Construction Easement Legal Description Tract 2A

A tract of land in The Vineyard Phase 1, Cleveland County, State of Oklahoma, according to the official government survey thereof, more particularly described as follows, to-wit: **Commencing** at the Southeast corner of Lot 1, Block 3, The Vineyard Phase I; Thence N 0°26'06" W along the East line of said Lot 1 a distance of 155.00 feet to a point on an existing platted Drainage Easement and Pedestrian Easement also being the **Point of Beginning** Thence S89°48'22" W along said platted easement a distance of 278.80 feet to a point on the easterly Right-of-Way line of Porter Avenue; thence N 00° 28' 18" W a distance of 35.00 feet; thence N89° 48' 22" E for a distance of 278.82 feet; thence S 00° 26' 06" E a distance of 35.00 feet to **Point of Beginning**. Said tract of land contains 9,758.35 square feet or 0.22 acres, more or less.

Surveyor's Certification

I, Michael Royce, a professional land surveyor in the state of Oklahoma, certify that the above legal description close in accord with existing records, is a true representation of the Temporary Construction Easement as described, and meets the minimum technical standards for land surveying of the State of Oklahoma. The accompanying map represents a survey performed in the field and is true and correct to the best of my knowledge and belief as of this date. This exhibit meets the Oklahoma minimum standards for the practice of land surveying as adopted by the Oklahoma State Board of Licensure for Professional Engineers and Land Surveyors.

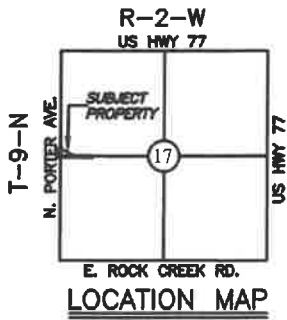
04-04/2022

Date:



A handwritten signature in blue ink that reads "Michael Royce".

Michael Royce
Oklahoma P.L.S. No. 1627
State of Oklahoma Certificate of Authorization
No. CA 1487
Expiration date 06/30/2023



LEGAL EXHIBIT "A"

PAGE 2 OF 2

PARCEL NO.: TRACT 2A
COUNTY: CLEVELAND
OWNER: YEAKLEY, DAVID E
& BRENDA J

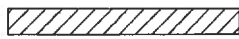
LEGAL DESCRIPTION

PART OF THE VINEYARD PHASE 1, INDIAN B&M,
CLEVELAND COUNTY, STATE OF OKLAHOMA. (SEE
EXHIBIT A, PAGE 1 OF 2)

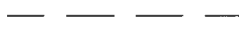
BEARING BASIS

THE BEARINGS SHOWN HEREON ARE
OKLAHOMA STATE PLANE GRID AND
NOT ASTRONOMICAL

LEGEND



TEMP. CONSTRUCTION
EASEMENT



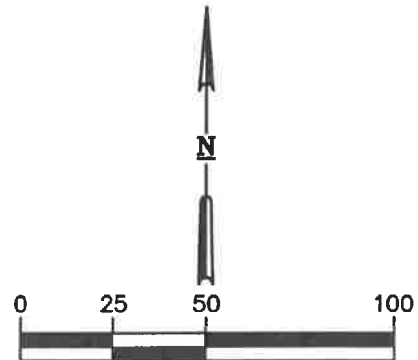
EXISTING EASEMENT



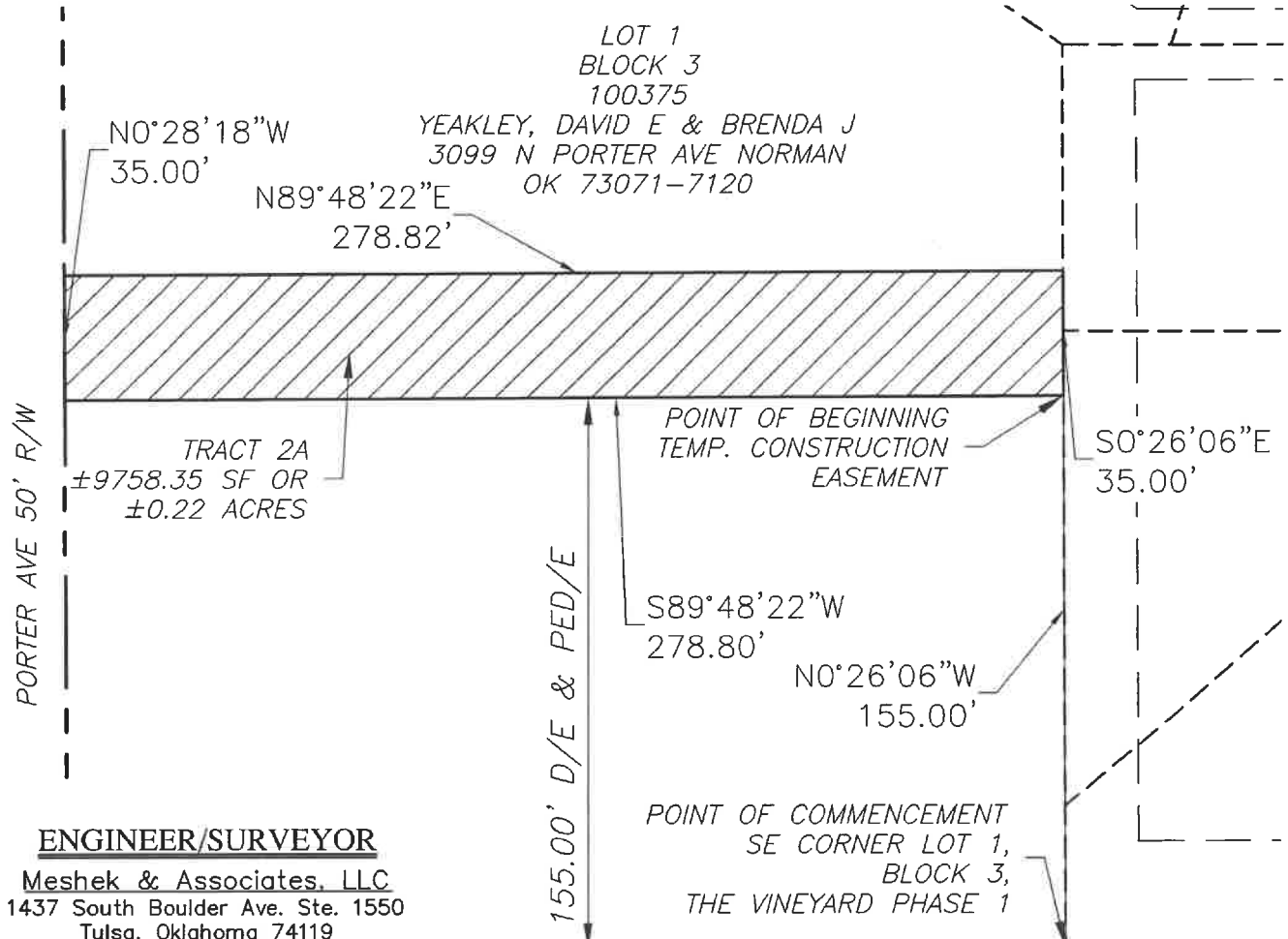
PROPERTY LOT LINE



EXISTING RIGHT-OF-WAY



SCALE IN FEET



ENGINEER/SURVEYOR

Meshek & Associates, LLC
1437 South Boulder Ave. Ste. 1550
Tulsa, Oklahoma 74119
Certificate of Authorization No. 1478
Expires June 30, 2021

EXHIBIT D
PROJECT AREA

BENCHMARK
BM-10006
CALC. FROM REFS
N=699689.0588
E=2135329.5813
EL=1152.07

CONTROL POINT
CP-10215
1/2" REBAR FD.
N=699689.1912
E=2135330.0367
EL=1148.26

STA: 16+30.83
N: 699683.18
E: 2135377.28

PC
STA: 16+17.53
N: 699683.54
E: 2135369.18
PT
STA: 16+28.35
N: 699683.10
E: 2135388.74
ELEV=1148.00

STA: 15+01.04
N: 699623.87
E: 2135421.80

PC
STA: 16+00.00
N: 699621.34
E: 2135432.94

PT
STA: 14+08.93
N: 699821.83
E: 2135606.80

PC
STA: 13+59.15
N: 699771.66
E: 2135627.10

STA: 10+00.00
N: 699689.15
E: 2135374.31

STA: 12+63.83
N: 699696.04
E: 2136437.83



LEGEND

- SECTION LINE
- RIGHT-OF-WAY
- LOT LINE
- EXISTING EASEMENT LINE
- PROPOSED TEMPORARY CONSTRUCTION EASEMENT
- CONSTRUCT CONCRETE CHANNEL
- CONSTRUCT CONCRETE SIDEWALK
- CONSTRUCT CONCRETE DITCH
- HW TOP OF WALL ELEVATION
- BW BASE OF WALL ELEVATION

MIDLAND VILLAGE CH

SOUP
HW=1150.00
FL=1145.19
5' DIA

SOUP
HW=1150.00
FL=1145.17
5' DIA

CAUTION
NATURAL GAS
SANITARY SEWER
WATERLINE
OVERHEAD ELECTRIC

BM-10006

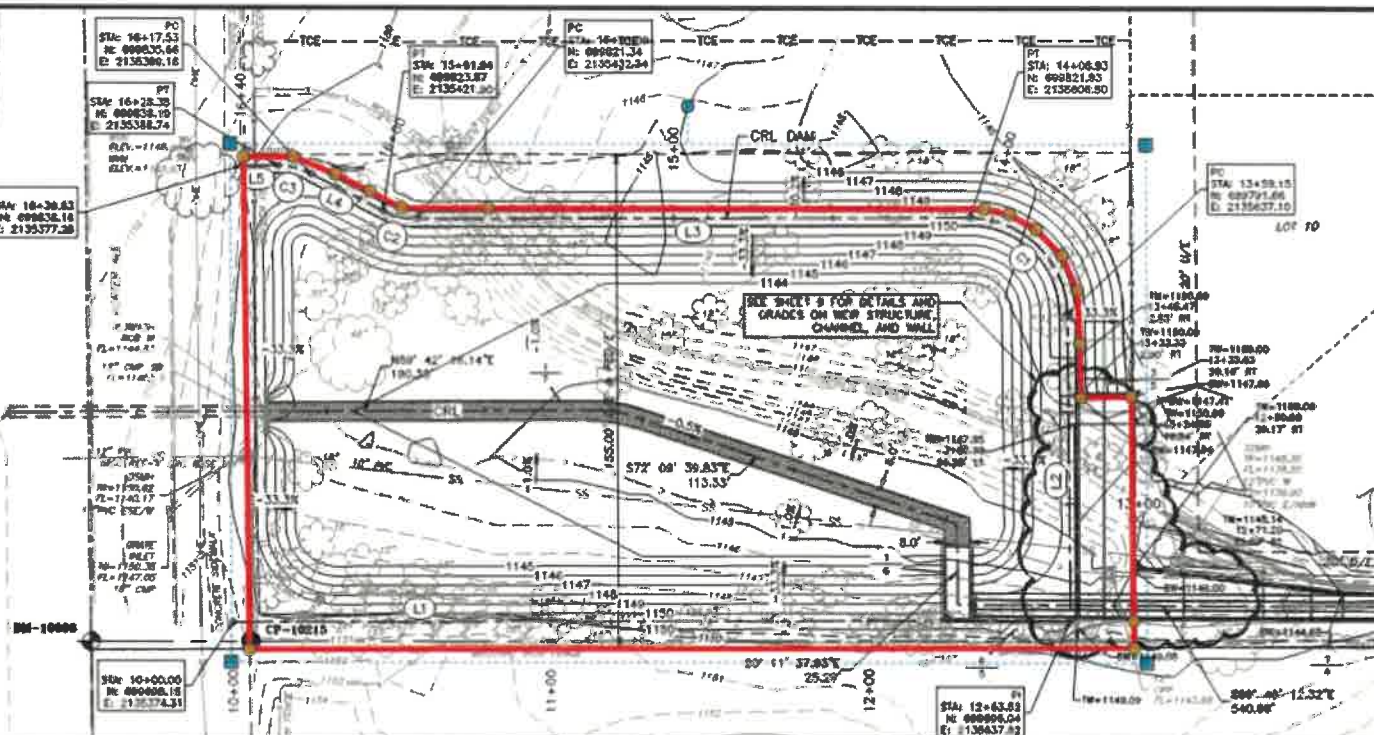


EXHIBIT E
MAINTENANCE AGREEMENT

13/I

Maintenance Agreement

Agreement made, effective as of the fifteenth day of December, 2003, between "The Vineyard Association LLC., of Norman, Oklahoma, referred to in this contract as "the Declarant" and "David and Brenda Yeakley, of 3099 Porter Avenue, Norman, Oklahoma, referred to in this contract as "Owner", is as follows:

Land Maintenance agreement

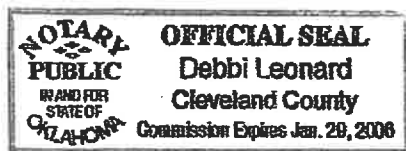
Declarant agrees to maintain and provide water to the existing sprinkler system for those portions of the West side of Lot 1 Block 3, The Vineyard Phase I, already established with a sprinkler system. Included are all sprinkler heads already connected to the existing Vineyard irrigation system as of December 15th, 2003. Owner agrees that no other sprinkler heads will be attached to the existing system unless required under the discretion of Declarant.

Declarant agrees to give Owner access to all controls to those sprinkler lines effecting Owners property.

In addition Declarant agrees to provide landscape maintenance to the South Portion of Lot 1 Block 3 known as "the Detention Area". This to include any land South of the existing "Jogging Trail" East and West to all Lot 1 Block 3 property lines. This agreement does not include any portions of Lot 1 Block 3 not included as "Jogging Trail" or "Detention Area"

Declarant agrees that this document will become transferable with the sale or transfer of Lot 1 Block 3, The Vineyard Phase I.

IN WITNESS WHEREOF, each party to this agreement has caused it to execute at Norman, Oklahoma, on the date indicated below:



By: [Signature] date 12/22/03
Michael R. Leonard, for the Declarant
The Vineyard Phase I

By: [Signature] date 12-22-03
David Yeakley
[Signature] date 12-22-03
Brenda Yeakley

Return to: David & Brenda
3099 n. Porter Ave
Norman, OK 73071