

NOTE: CONTRACTOR SHALL NOT STORE EQUIPMENT OR MATERIALS IN FLOODPLAIN CONSTRUCTION PLANS FOR

> TOWNE CENTER DETENTION POND DESIGN

PROJECT NO. SW-2020-01-06-02

CITY OF TULSA, OKLAHOMA ENGINEERING SERVICES DEPARTMENT

- CITY LIMITS 56TH ST N 56TH ST N 46TH ST N 46TH ST N 361H ST N 36TH ST N APACHE ST 11 IH ST 31ST ST

TURNPAK

209TH E AVE 225TH E AVE[.] 241TH E AVE

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PROJECT SITE

APPLICABLE STANDARDS: CITY OF TULSA: SEE SHEET 2

SEE SHEET 2

APPROVED BY

wither CITY ENGINEER

51ST ST

81S1 ST

91S1 S1

101ST_ST

02.08.23 DATE

01.24.23 ADVERTISEMENT DATE

Prepared By:

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MESHEK & ASSOCIATES, L.L.C. C.A. 1487 EXPIRES 6/30/23 1437 S. BOULDER AVE, STE. 1550 TULSA, OK 74119 (PH) 918-392-5620 (FAX) 918-392-5621 SHEET 1 OF 26 SHEETS

7 --- PROFILE NUMBER --- SHEET NUMBER ON WHICH IT IS LOCATED

REFERS TO A PROFILE OR ELEVATION

DETAIL DESCRIPTION

DATUM INFORMATION

HORIZONTAL DATUM NAD '83(2011) OKLAHOMA NORTH ZONE 3501

VERTICAL DATUM NAVD '88 (GEOID 12B)

ADS 85 - 3" ALUMINUM CAP MONUMENT N=423598.892 E=2539558.990 ELEV.=643.000

2019 OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION SHALL GOVERN. CITY OF TULSA ENGINEERING SERVICES DEPARTMENT CURRENT STANDARDS WILL BE

	NUMBER	NOTIFIED
WATER DESIGN	918-596-9566	
WASTEWATER DESIGN	918-596-9564	
TRANSPORTATION DESIGN	918-596-9636	
UTILITY COORDINATION - CHRIS KOVAC	918-596-9649	
STORMWATER DESIGN	918-596-9498	
PSO - ADAM FIELDS	877-250-6257	
ONG - JONATHON MEADOWS	918-831-8215	
AT&T - AL NICHOLS	918-596-4237	
COX COMMUNICATION - BRANDON WADE	918-286-4716	
MTTA - ERIC SMITH	918-830-0024	



41ST S

51ST 5

61ST S

715T ST

BIST ST

91ST ST

101ST_ST

121ST 5

NOTE:

ALL CONSTRUCTION TO BE IN STRICT ACCORDANCE WITH CURRENT CITY OF TULSA ENGINEERING SERVICES DEPARTMENT, STANDARDS AND SPECIFICATIONS.

THIS PROJECT COMPLIES WITH ALL OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (ODEQ) REQUIREMENTS.

ENTIRE PROJECT IS WITHIN CORPORATE LIMITS OF CITY OF TULSA (COT)

GENERAL CONSTRUCTION NOTES

- 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 TULSA ENGINEERING SERVICES DEPARTMENT'S STANDARD SPECIFICATIONS AND STANDARD DETAILS AND STANDARD DRAWINGS AND CITY OF TULSA SPECIAL PROVISIONS,
- THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS GOVERNING SAFETY, HEALTH AND 2. 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
- PAY ITEMS SHALL BE AS SPECIFIED ON THE CITY OF TULSA OR ON THE ODOT STANDARD DRAWINGS EXCEPT AS MODIFIED BY THE CONTRACT
- 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
- 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. THE FOLLOWING IS A LIST OF UTILITY OWNERS; AT&T, PUBLIC SERVICE COMPANY OF OKLAHOMA (AEP), OKLAHOMA NATURAL GAS (ONG), COX COMMUNICATIONS, MCI/VERIZON, EASYTEL COMMUNICATIONS, WELLSCO VALLOR TELECOM, CITY OF TULSA-WATER AND SEWER, CITY OF TULSA-TRAFFIC OPERATIONS. SEE TITLE SHEET FOR CONTACT
- 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.
- THE CONTRACTOR SHALL TAKE REASONABLE PRECAUTIONS TO PREVENT EXCESS MOISTURE FROM INCLEMENT 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
- THE CONTRACTOR SHALL PRESERVE THE INTEGRITY OF THE SANITARY SEWER STRUCTURES AND ALL OTHER UTILITY STRUCTURES WITHIN THE PROJECT EXTENTS
- THE CONTRACTOR SHALL WORK IN COOPERATION WITH THE CITY OF TULSA 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
- 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 ADDITION, AND APPLICABLE ODOT STANDARD DRAWINGS, THE CONTRACTOR SHALL PROVIDE A PROPOSED TRAFFIC CONTROL PLAN FOR APPROVAL BY THE ENGINEER PRIOR TO BEGINNING WORK.
- THE CONTRACTOR SHALL NOTIFY THE CITY OF TULSA FIELD ENGINEERING, 918-596-9404, A MINIMUM OF 48 HOURS PRIOR 11. TO COMMENCING WORK OR PRIOR TO REMOVING TRAFFIC SIGNS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF ALL EXISTING TRAFFIC SIGNS AND MARKINGS REMOVED OR DAMAGED AS LISTED IN THE SIGNAGE SCHEDULE FOR THE PROJECT, ALL SIGNS AND POLES PROVIDED SHALL BE NEW AND UNDAMAGED AND SHALL MEET THE REQUIREMENTS OF COT SPECIFICATION 608 TRAFFIC SIGNS, ALL TRAFFIC MATERIALS REMOVED SHALL BE HANDLED PER COT SPECIFICATION 625 REMOVAL OF TRAFFIC ITEMS.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR PREPARATION AND DISTRIBUTION OF A WRITTEN NOTICE TO RESIDENTS 48 HOURS PRIOR TO BEGINNING PAVEMENT REMOVAL AND MILLING AND OVERLAY OPERATIONS.
- LOCAL AND THROUGH TRAFFIC SHALL BE MAINTAINED THROUGH THE PROJECT AT ALL TIMES.
- ALL PUBLIC AND PRIVATE STREETS AND DRIVES SHALL BE ACCESSIBLE AT ALL TIMES.
- 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
- 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, THE CONTRACTOR WILL BE REQUIRED TO OBTAIN AN EARTH CHANGE PERMIT IF ANY MATERIAL IS STORED ON THE PROJECT SITE AND/OR DISPOSED OF WITHIN THE CITY LIMITS.
- 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.
- 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
- 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.

- IF THE CONTRACTOR ENCOUNTERS VOIDS WHEN PATCHING STREETS, THE CONTRACTOR SHALL CALL FIELD ENGINEERING AT 918-596-7814 FOR AN INSPECTION BEFORE PROCEEDING WITH WORK
- THE PROJECT SHALL BE CONSTRUCTED WITH CONTINUOUS FLOW OF MATERIAL SUPPLIED TO THE PROJECT SUCH THAT THE LAYDOWN MACHINE WILL REMAIN IN MOTION, ANY DELAY IN FORWARD PROGRESSION OF THE LAYDOWN MACHINE MAY REQUIRE A TRANSVERSE JOINT AS DIRECTED BY THE ENGINEER
- 23. NO FLY ASH IS ALLOWED TO BE USED ON THIS PROJECT.
- 24. PHYSICAL TESTING FOR QUALITY ASSURANCE SHALL BE FURNISHED BY THE CITY.
- CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY QUALITY CONTROL TESTING TO ENSURE THAT PROJECT REQUIREMENTS ARE MET
- 26. MASONRY STRUCTURES SHALL NOT BE CONSTRUCTED WITHIN THE STREET RIGHT-OF-WAY,
- ALL CONCRETE CURB AND GUTTERS SHALL BE MONOLITHIC POURS, DOWELED-ON CURBS WILL NOT BE ALLOWED.
- 28. NO LIFTING HOLES WILL BE ALLOWED ON ANY REINFORCED CONCRETE PIPES OR REINFORCED CONCRETE BOXES.
- CURB RAMP CONSTRUCTION SHALL COMPLY WITH THE CURRENT AMERICANS WITH DISABILITIES ACT STANDARDS,
- 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 FSTABLISHED FOR ASTM D 4956-01 TYPE III RETROREFLECTIVE SHEETING.
- ALL SANITARY AND STORM SEWER MANHOLE CASTINGS AND LIDS THAT ARE LOCATED IN THE STREET AND ARE 31. DISTURBED BY THE CONTRACTOR SHALL BE REPLACED WITH NEW LIDS AND CASTINGS AND THE OLD ONES SHALL BE SALVAGED AND DELIVERED TO THE METAL RECYCLE BINS IN THE STOCKROOM AREA AT SEWER OPERATIONS AND MAINTENANCE, 9319 E, 42ND STREET NORTH, BETWEEN THE HOURS OF 7:30 AM AND 3:00 PM MONDAY THROUGH FRIDAY,
- 32. THE SIGN PLACEMENT STATIONING AND LOCATIONS SHOWN ON THE PLAN SHEETS AND SUMMARY SHEETS ARE APPROXIMATE, EXACT STATIONING AND LOCATIONS SHALL BE VERIFIED BY THE CONTRACTOR SO THAT THE SIGN IS INSTALLED IN ACCORDANCE WITH CITY OF TULSA STANDARDS, CURRENT AMERICANS WITH DISABILITIES ACT STANDARDS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES IN ORDER TO PROVIDE OPTIMUM VISIBILITY TO THE ONCOMING/APPROACHING MOTORIST, IF A PROPOSED LOCATION CONFLICTS WITH OTHER SIGNS, UTILITIES, OR OTHER ROADWAY FEATURES, THE ENGINEER SHALL BE NOTIFIED.
- POST LENGTHS SHOWN ON SIGN SUMMARY ARE APPROXIMATE, EXACT LENGTHS SHALL BE DETERMINED BY A FIELD 33. SURVEY CONDUCTED BY THE CONTRACTOR
- ALL ASPHALT STREETS THAT ARE TO BE RECONSTRUCTED SHALL BE LEFT WITH A DRIVABLE SURFACE AT ALL TIMES. 34. THE CONTRACTOR WILL NOT BE ALLOWED TO MILL OFF ALL THE ASPHALT BEFORE EXCAVATION BEGINS,
- THE CONTRACTOR SHALL REPLACE ANY SECTION CORNERS OR OTHER PERMANENT RIGHT OF WAY MARKERS REMOVED OR DISTURBED 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
- 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.
- STRAW OR HAY BALES AS STORMWATER BEST MANAGEMENT PRACTICES ARE NO LONGER ALLOWED ON CONSTRUCTION PROJECTS.
- THE CONTRACTOR MUST CALL 1-800-458-4251 IMMEDIATELY IF A NATURAL GAS PIPELINE IS CUT, DAMAGED, OR OTHERWISE DISTURBED.
- PRIOR TO FINAL ACCEPTANCE, ALL EXPOSED CURB SURFACES SHALL BE CLEANED OF ALL DICOLORATION SUCH AS ASPHALT STAIN, TIRE MARKS, OR OTHER DISFIGUREMENT.
- ALL FEATURES OF THIS PROJECT INCLUDING, BUT NOT LIMITED TO, SIDEWALKS, CURB RAMPS, AND CROSSWALKS SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT, ACCESSIBILITY GUIDELINES, AND THE PROPOSED ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT-OF-WAY, PUBLISHED ON JULY 26, 2011 BY THE U.S. ACCESS BOARD. WHERE SPATIAL LIMITATIONS OR EXISTING FEATURES WITHIN THE LIMITS OF THE PROJECT PREVENT FULL COMPLIANCE WITH THIS ACT, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER UPON DISCOVERY OF SUCH FEATURES. THE CONTACTOR SHALL NOT PROCEED WITH ANY ASPECT OF THE WORK, WHICH IS NOT IN FULL COMPLIANCE WITH THE ADA WITHOUR PRIOR WRITTEN APPROVAL FROM THE ENGINEER. ANY WORK WHICH IS NOT PERFORMED WITHIN THE GUIDELINES OF THE ADA, FOR WHICH THE CONTRACTOR DOES NOT HAVE WRITTEN APPROVAL, SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE,
- 41: ALL TRENCH WIDTHS & BEDDING MATERIAL SHALL BE AS SHOWN ON COT STANDARD PIPE BEDDING DETAIL, STANDARD NO. 751. SPECIFIED TRENCH WIDTHS SHALL BE MAINTAINED FULL DEPTH FROM THE FLOWLINE TO THE GRADING TEMPLATE. THE CONTRACTOR SHALL KEEP THE OPEN TRENCH DRAINED.
- THE CONTRACTOR SHALL NOTIFY THE METROPOLITAN TULSA TRANSIT AUTHORITY (MTTA), ERIC SMITH 918-830-0024, A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK, LANE CLOSURES OR PRIOR TO DETOURING TRAFFIC.
- CONTRACTOR SHALL NOT STORE EQUIPMENT OR MATERIALS IN THE FLOODPLAIN.
- 44. PORTIONS OF THIS PROJECT ARE TO BE CONSTRUCTED IN A PERENNIAL STREAM, WET CONDITIONS, THE POTENTIAL FOR GROUNDWATER, AND THE NEED FOR PUMPING SHOULD BE ANTICIPATED. THE CONTRACTOR SHALL KEEP THE OPEN TRENCH DRAINED, NO ADDITIONAL PAYMENT WILL BE MADE.

APPLICABLE CITY OF TULSA STANDARD DRAWINGS AND DETAILS REFERENCES:

PROJECT SIGN STD NO. 102 - PROJECT SIGN

EROSION CONTROL METHODS
STD NO. 126 - SILT FENCE AND CONSTRUCTION ENTRANCE

PAVEMENT CUTS FOR UTILITIES
STD NO. 713 - STANDARD DETAIL FOR PAVEMENT REMOVAL AND REPLACEMENT

STD NO. 714 - STANDARD DETAIL FOR PAVEMENT CUTS

STD NO. 725 - STANDARD PAVEMENT PATCH AND REPAIR

APPLICABLE ODOT STANDARDS:

SSS-2-1

- SOLID SLAB SODDING - SLOPED CONCRETE END SECTIONS SCFS-4-1

DC-4-1 PAVED DITCHES AND FLUMES - TEMPORARY SILT DIKE APPLICATIONS TSD-0

- REINFORCED SILT FENCE INSTALLATION AND APPLICATIONS RSF-0

- INLET PROTECTION (AGGREGATE AND REINFORCED SILT FENCE APPLICATIONS) IPD-0

GENERAL CONSTRUCTION NOTES

PROJECT #SW-2020-01-06-02 TOWNE CENTER DETENTION POND DESIGN

> CITY OF TULSA, OKLAHOMA ENGINEERING SERVICES DEPARTMENT

Meshek & Associates, L.L.C.

Boulder Avenue, Sulte 1550 Tulso, OK 74119 (918)39

CFW 10/22 APPROVED: DATE PLAN SCALE DESIGNED PROFILE SCALE PROJ. MGR. LEAD ENGR. FIELD WOR. Ten 11 22 VERTICAL: A 11-22

NOTE: CONTRACTOR SHALL NOT STORE EQUIPMENT OR MATERIALS IN FLOODPLAIN EARTHWORK / EROSION CONTROL / SITE PREPARATION (E1 - E11)

- E-1: ALL COSTS FOR REMOVING TREES, SHRUBS, STUMPS, POSTS, AND ALL OTHER DEBRIS AND/OR OBSTRUCTIONS NOT COVERED BY A SEPARATE PAY ITEM ARE INCLUDED IN THE PRICE BID.
- E-2: ALL EXISTING DRAINAGE STRUCTURES SHALL BE CLEANED AND CLEARED OF ALL SEDIMENTATION AND DEBRIS TO THE RIGHT OF WAY, COST OF CLEARING SHALL BE INCLUDED IN THE PRICE BID.
- THE CONTRACTOR SHALL BE PAID FOR UNCLASSIFIED EXCAVATION ON THE BASIS OF PLAN QUANTITY. ANY ADDITIONAL EXCAVATION REQUIRED OR OVERRUN OF PLAN QUANTITY WILL BE PAID FOR ON THE BASIS OF UNIT PRICE BID FOR THE ITEM, CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SURVEY TO VERIFY ANY ADDITIONAL QUANTITIES:
- E-4: NOT USED
- E-5: NOT USED
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROL AND MAINTENANCE OF THE STORM WATER DRAINAGE E-6: FROM THE CONSTRUCTION SITE. STORM WATER PONDING ON THE CONSTRUCTION SITE THAT IS THE RESULT OF CONSTRUCTION WILL NOT BE ALLOWED. ALL COST ASSOCIATED WITH STORM WATER MANAGEMENT, AS WELL AS REMOVAL OF ALL SILT AND DEBRIS FROM ALL DRAINAGE STRUCTURES, STORM SEWER PIPES AND APPURTENANCES T-7: PRICE BID FOR THIS ITEM INCLUDES INSTALLATION, MAINTENANCE AND SUBSEQUENT REMOVAL OF PROJECT SIGN. WITHIN THE PROJECT LIMITS AT END OF PROJECT, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THIS ITEM.
- EROSION PROTECTION SHALL BE PLACED AS FOLLOWS: A) AROUND INLETS TO PREVENT INFLOW OF ERODED MATERIAL INTO STORM SEWER SYSTEM; B) IN LOCATIONS THROUGHOUT PROJECT SITE, AS DETERMINED BY THE ENGINEER, TO PREVENT WASH OF ERODED MATERIAL ONTO ADJACENT PROPERTY; C) FOR ENTIRE DURATION OF PROJECT, WITH MAINTENANCE AND REPLACEMENTS, AS DIRECTED BY THE ENGINEER; D) WITH PERIODIC REMOVAL OF SEDIMENT IN ACCORDANCE WITH STORMWATER MANAGEMENT PLAN, ALL COST FOR ITEMS A-D ABOVE SHALL BE INCLUDED IN UNIT PRICE BID FOR THIS ITEM.
- PRICE BID SHALL INCLUDE MAINTENANCE, SEDIMENT REMOVAL, DISPOSAL, AND REMOVAL OF FILTERS AT PROJECT
- F-9 NOT USED
- ESTIMATED QUANTITY IS BASED ON SODDING OF ALL DISTURBED AREAS OUTSIDE THE FINAL PAVING LIMITS AND WITHIN THE FINAL GRADING LIMITS AS INDICATED BY THE TOP-OF-CUT/TOE-OF-SLOPE LINE ON THE PLANS (EXCLUDING SURFACES OF STRUCTURES, FIXTURES AND APPURTENANCES), SOD SHALL BE OF LIKE-KIND TO EXISTING SOD. PRICE BID INCLUDES PLACEMENT AND COMPACTION OF SUITABLE BACKFILL, ANY EXISTING GRASSED AREAS BEYOND THE ABOVE STATED LIMITS THAT ARE DAMAGED AS A RESULT OF CONSTRUCTION OPERATIONS SHALL BE RESODDED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S SOLE
- E-11: COST OF WATERING AND FERTILIZING SHALL BE INCLUDED, FERTILIZERS SHALL BE 10-20-10 AND SHALL BE APPLIED AT THE RATE OF 1.5 LBS PER 10 SQ YDS. FERTILIZER SHALL BE APPLIED PER SECTION 230,04H OF ODOT STANDARD SPECIFICATIONS, WATERING SHALL BE APPLIED AS NECESSARY UNTIL VEGETATION IS ESTABLISHED OR UNTIL THE WORK IS ACCEPTED AS COMPLETE

SURFACING / STRUCTURES (S1 - S21)

S-1 TO S-11: NOT USED

- S-12: THE USE OF FLY-ASH IN CONCRETE IS PROHIBITED.
- S-13: INCLUDES ALL COST OF SAWED JOINTS AND SEALING OF ALL JOINTS INCLUDING LONGITUDINAL JOINTS.

S-14 TO S-21 NOT USED

S-22: COST OF ALL MATERIALS AND LABOR REQUIRED FOR THE OUTLET STRUCTURE SHALL BE INCLUDED IN THE PRICE BID, INCLUDING CLASS C CONCRETE, WELDED WIRE REINFORCEMENT, AND SUBGRADE METHOD B.

REMOVAL / ADJUSTMENT (R1 - R6)

- R-1: WASTE MATERIAL TO BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE IN A MANNER APPROVED BY THE ENGINEER.
- ALL SAW CUTTING AND REMOVAL SHALL BE INCLUDED IN THE COST OF THE ITEM TO BE ADJUSTED, REMOVED,
- R-3: NOT USED
- R-4: NOT USED
- R-5: ITEMS TO BE REMOVED MAY OR MAY NOT BE PRESENT IN ANY SPECIFIED CONDITION.
- R-6: SHALL INCLUDE ALL COSTS ASSOCIATED WITH PLUGGING/ PATCHING HOLES IN EXISTING STRUCTURES TO REMAIN.

GENERAL (G1 - G10)

9-1-TO G-2: NOT USED

- G-3: CONSTRUCTION STAKING SHALL INCLUDE SURVEYING AND THE FURNISHING, PLACING, AND MAINTAINING OF THE CONSTRUCTION LAYOUT STAKES NECESSARY FOR THE PROPER COMPLETION AND INSPECTION OF THE ENTIRE
- G-4: THE COST TO REPLACE REMOVED OR DAMAGED SECTION CORNERS AND ALL OTHER PERMANENT RIGHT OF WAY MARKERS SHALL BE INCLUDED IN THE PRICE BID FOR THIS ITEM. NO ADDITIONAL PAYMENT WILL BE MADE.

G-5 TO G-9: NOT USED

G-10: PAY ITEM INCLUDES ALL MOWING WITHIN THE RIGHT-OF-WAY AS DIRECTED DURING CONSTRUCTION.

DRAINAGE (D1 - D15)

D-1 TO D-15 NOT USED

TRAFFIC (T1 - T8)

T-1 TO T-6: NOT USED

- T-8: CONTRACTOR SHALL FURNISH SUFFICIENT ORANGE SAFETY FENCING TO PROTECT THE GENERAL PUBLIC DURING EXCAVATION OPERATIONS FROM OPEN TRENCHES AND OTHER HAZARDS.

SPECIAL NOTES

- PRICE BID TO INCLUDE CONSTRUCTION ENTRANCE AND RESTORATION OF ANY DISTURBED AREAS TO THE SATISFACTION OF THE CITY OF TULSA:
- CONTRACTOR SHALL NOT STORE EQUIPMENT OR MATERIALS IN FLOODPLAIN.
- LOCATIONS TO BE DETERMINED IN THE FIELD AND WORK TO BE PERFORMED AT THE DIRECTION OF THE FIELD ENGINEER, QUANTITY IS ESTIMATED AND MAY BE OMITTED IN ITS ENTIRETY.
- 5-23: ITEM TO BE QUICKSET FLOWABLE FILL OR APPROVED EQUAL. QUANTITIES TO BE USED AT THE DISCRETION OF THE ENGINEER.

PAY ITEMS

TEM NO.	SPEC NO.	DESCRIPTION	NOTES	UNIT	QUANTITY
1	201(A)	CLEARING AND GRUBBING	E-1,2 G-10	LSUM	1
2	202(A)	UNCLASSIFIED EXCAVATION	E-3,4,5 R-1 T-8	CY	6260
3	205(A)	TYPE A SALVAGED TOPSOIL		CY	4042
4	220	SWPPP DOCUMENTATION AND MANAGEMENT	E-6,8	LSUM	1
5	221(C)	TEMPORARY SILT FENCE	E-7	LF	2037
6	221(F)	TEMPORARY SILT DIKE	E-7	LF	528
7	221(H)	(PL) TEMPORARY INLET SEDIMENT FILTER		EA	1
8	230(A)	SOLID SLAB SODDING	E-10,11	5Y	29098
9	303(A)	AGGREGATE BASE TYPE A	1, 2	CY	117
10	310(B)	SUBGRADE METHOD "B"		SY	576
11	325	SEPARATOR FABRIC		SY	749
12	411(8)	SUPERPAVE, TYPE S3 (PG 64-22)		TON	118
13	411(C)	SUPERPAVE, TYPE S4 (PG 64-22)		TON	59
14	509(A)	CLASS AA CONCRETE	S-12,13	CY	53
15	509(D)	CLASS C CONCRETE	S-12,13	CY	128
16	511(A)	REINFORCING STEEL	7.	LB	3003
17	601(B)	TYPE I-A PLAIN RIPRAP		TON	363
18	601(C)	TYPE I-A FILTER BLANKET		TON	51
19	609(B)	COMBINED CURB & GUTTER	5-12,13	LF	20
20	613(N)	TYPE A4 SLOPED CONCRETE END SECTION		EA	3
21	619(8)	REMOVAL OF CURB AND GUTTER	R-1,2,5,6	LF	20
22	619(B)	REMOVAL OF EXISTING PIPE	R-1,2,5,6	LF	91
23	619(B)	REMOVAL OF CONCRETE APRON	R-1,2,5,6	SY	74
24	619(B)	REMOVAL OF CONCRETE DITCH LINER	R-1,2,5,6	SY	666
25	619(B)	REMOVAL OF CONCRETE SLOPE PROTECTION	R-1,2,5,6	SY	1108
26	619(B)	REMOVAL OF FENCE	R-1,2,5,6	LF	90
27	619(B)	REMOVAL OF ASPHALT PAVEMENT		SY	524
28	624(E)	FENCE-STYLE CLF (6' HIGH, CLASS A)		LF	90
29	641	MOBILIZATION		EA	1
30	642	CONSTRUCTION STAKING LEVEL I	G-3,4	EA	1
31	SPECIAL	OUTLET STRUCTURE	5-22	EA	1
32	SPECIAL	OWNER ALLOWANCE		ALLOW	1
33	SPECIAL	PROJECT SIGN (CITY OF TULSA)	T-7	EA	1
34	(SP)COT 20	QUICKSET FLOWABLE FILL	G-15-23	CY	10
35	-	ONSTRUCTION AS-BUILT		EA	
36	A Comment of the Comm	CONTRACTOR'S QUALITY CONTROL		LSUM	
37	601(1)	FILTER FABRIC (FIPEAP)		5Y	233



PAY ITEM NOTES

PROJECT #SW-2020-01-06-02 TOWNE CENTER

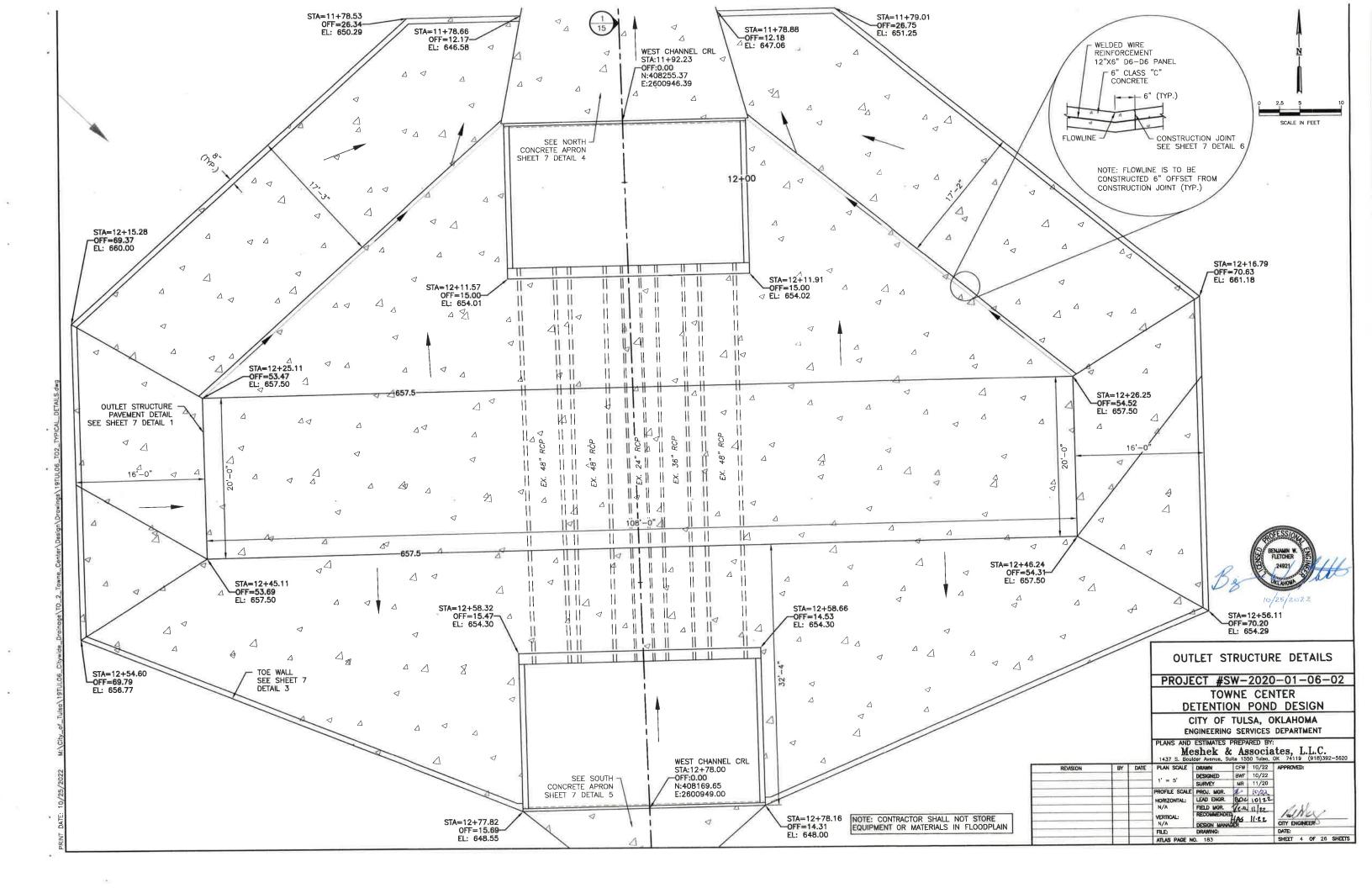
> DETENTION POND DESIGN CITY OF TULSA, OKLAHOMA

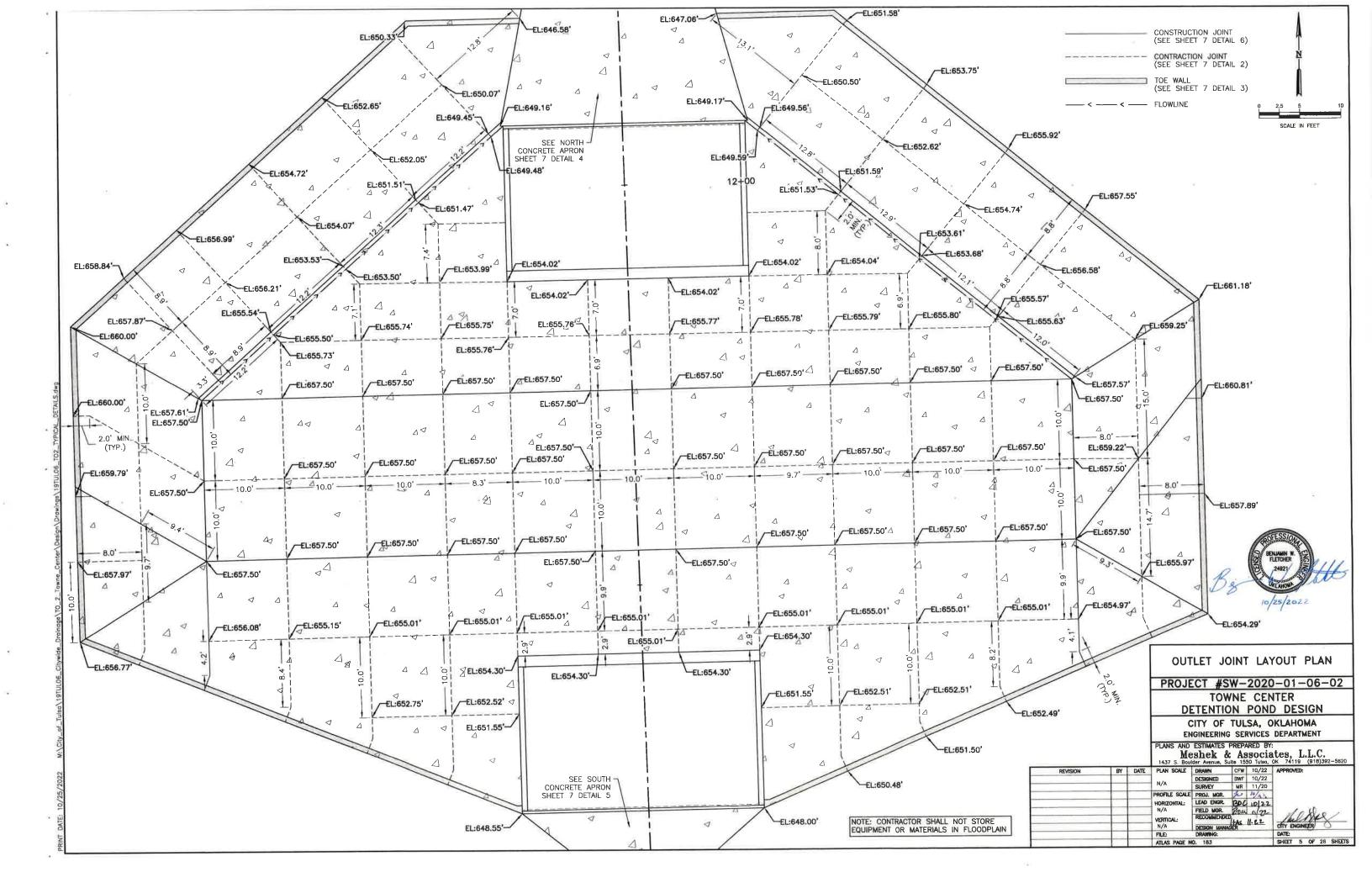
ENGINEERING SERVICES DEPARTMENT AND ESTIMATES PREPARED E

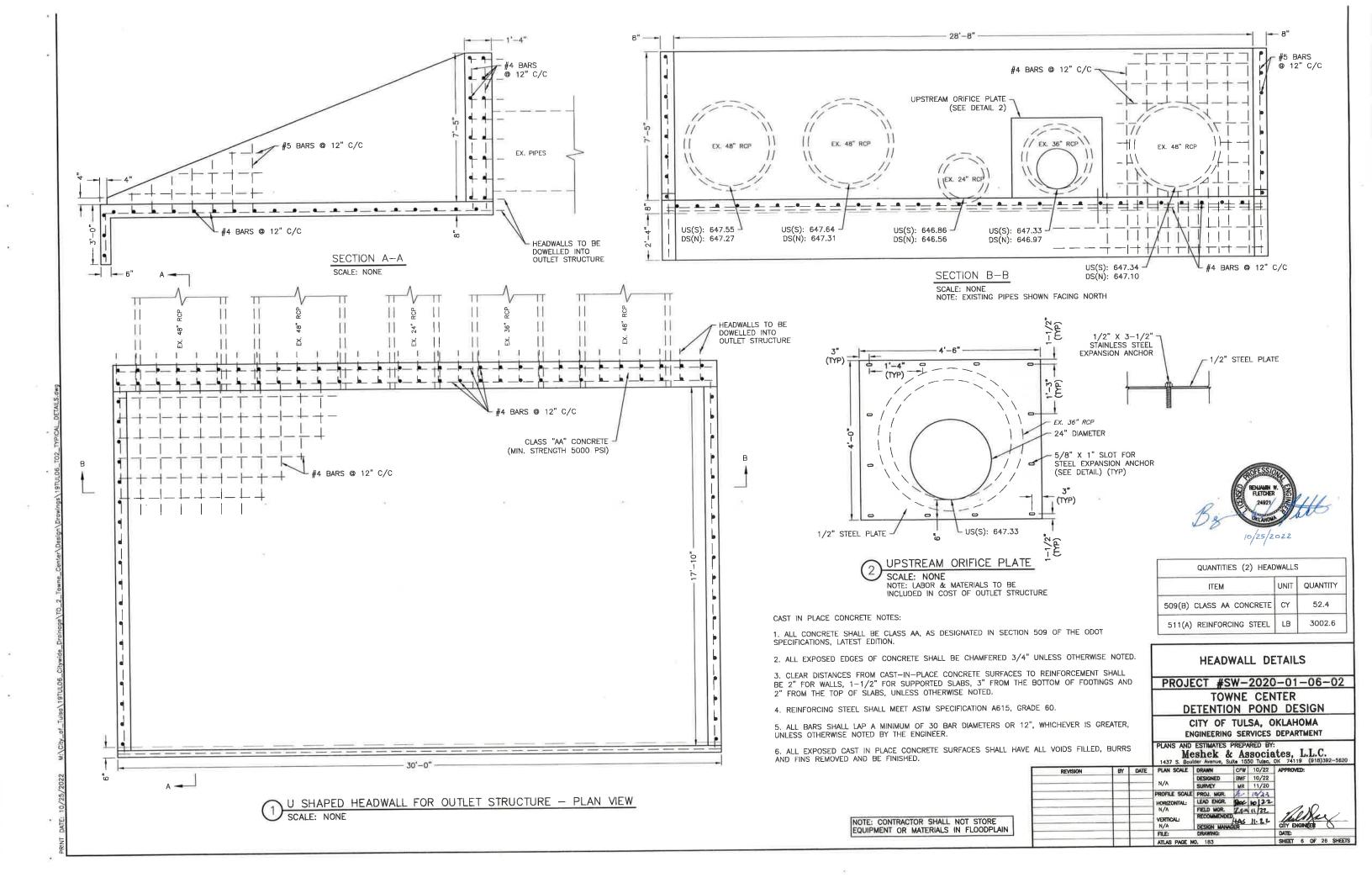
Meshek & Associates, L.L.C.

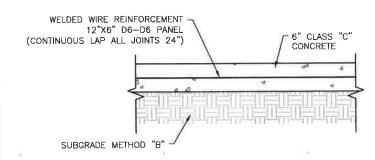
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			N/A	SURVEY	MR	11/20	
			PROFILE SCALE	PROJ. MGR.	W	69/22	
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NOTE: CONTRACTOR SHALL NOT STORE EQUIPMENT OR MATERIALS IN FLOODPLAIN



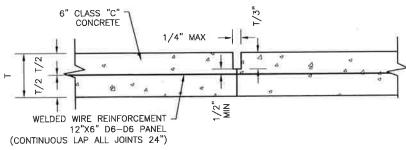




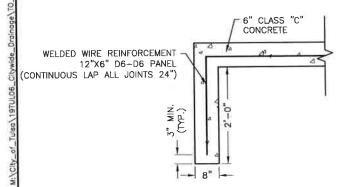


OUTLET STRUCTURE PAVEMENT DETAIL

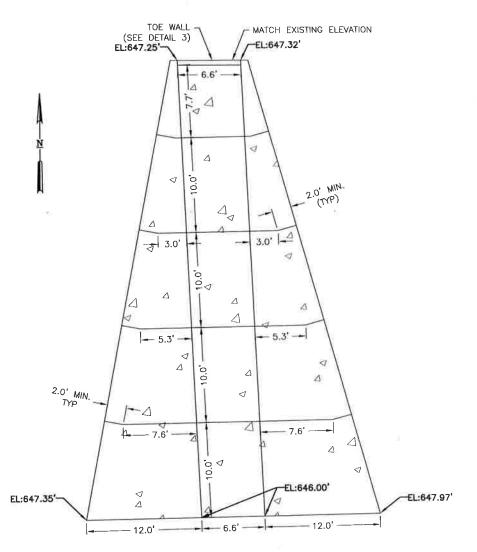
NOTE: COST OF ALL LABOR AND MATERIALS INCLUDED IN THE PRICE BID FOR OUTLET STRUCTURE



2 TYPICAL CONTRACTION JOINT
SCALE: NONE
NOTE: SAWED OR TOOLED JOINTS: PLACE SAW JOINT
A MAXIMUM OF 15' SPACING

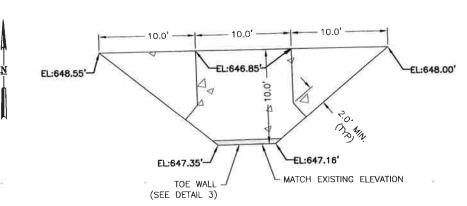


OUTLET STRUCTURE/ APRON TOE WALL DETAIL
SCALE: NONE



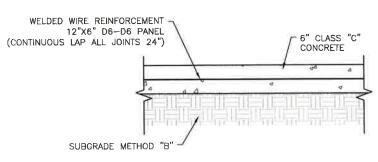
NORTH CONCRETE APRON SCALE: 1"=5"

NOTE: COST OF ALL LABOR AND MATERIALS INCLUDED IN THE PRICE BID FOR OUTLET STRUCTURE

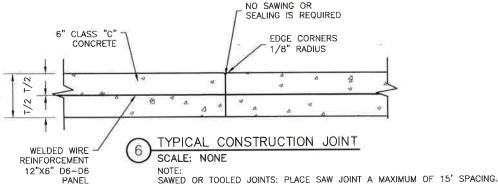


SOUTH CONCRETE APRON SCALE: 1"=5"

NOTE: COST OF ALL LABOR AND MATERIALS INCLUDED IN THE PRICE BID FOR OUTLET STRUCTURE



APRON DETAIL SCALE: NONE





DETAILS

PROJECT #SW-2020-01-06-02
TOWNE CENTER
DETENTION POND DESIGN

CITY OF TULSA, OKLAHOMA ENGINEERING SERVICES DEPARTMENT

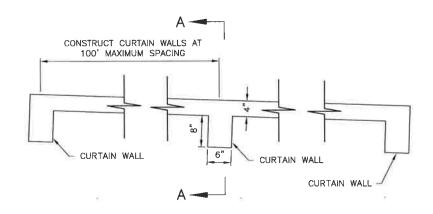
PLANS AND ESTIMATES PREPARED BY:

Meshek & Associates, L.L.C.

1437 S. Boulder Avenue, Sulte 1550 Tulao, OK 74119 (918)392-

			1437 S. Boul	der Avenue, St	ilte 15	50 Tulsa, I	OK 74119 (918)392-5620
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NOTE: CONTRACTOR SHALL NOT STORE EQUIPMENT OR MATERIALS IN FLOODPLAIN

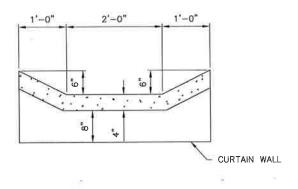


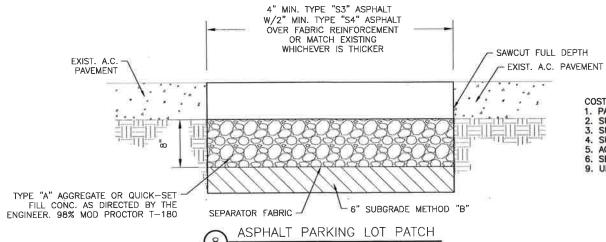
PAVED DITCH DETAIL (4' WIDE, DESIGN 2B) SCALE: NONE

4'-0" PAVED DITCH QUANTITIES K1 0.1045 CY/LF K2 0.1357 CY/CW

TOTAL CLASS C CONC.=(LENGTH OF PAVED DITCH)*(K1)+(# OF CURT. WALLS)*(K2)

K1=CU. YDS. OF CONCRETE PER LINEAR FOOT K2=CU. YDS. OF CONCRETE PER CURTAIN WALL





COST TO BE INCLUDED IN THE FOLLOWING ITEMS:

1. PAVEMENT REMOVAL (SY)

2. SUBGRADE METHOD "B" (SY)

2. SUBGRADE METHOD B (ST)
3. SUPERPAVE, TYPE S3 (TONS)
4. SUPERPAVE, TYPE S4 (TONS)
5. AGGREGATE BASE (TYPE A) (CY)
6. SEPARATOR FABRIC (SY)

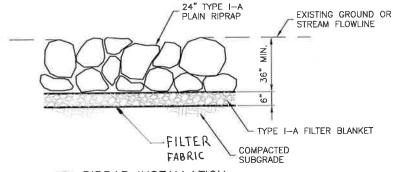
9. UNCLASSIFIED EXCAVATION (CY)

PAVED DITCH DETAIL (2' WIDE, DESIGN 2B) SCALE: NONE

	2'-0" PAVED DITCH QUANTITIES								
K1	0.0522 CY/LF								
K2	0.0572 CY/CW								

TOTAL CLASS C CONC .= (LENGTH OF PAVED DITCH)*(K1)+(# OF CURT. WALLS)*(K2)

K1=CU. YDS. OF CONCRETE PER LINEAR FOOT K2=CU, YDS. OF CONCRETE PER CURTAIN WALL



RIPRAP INSTALLATION

SCALE: NONE

NOTE: RIPRAP SHALL BE PLACED BELOW THE EXISTING STREAM LEVEL OR PROPOSED GRADING, ANY AND ALL PROTRUDING STONES SHALL BE REPLACED. DO NOT PLACE RIPRAP ABOVE STREAM FLOWLINE.



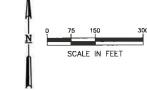
DETAILS

PROJECT #SW-2020-01-06-02 TOWNE CENTER DETENTION POND DESIGN

CITY OF TULSA, OKLAHOMA ENGINEERING SERVICES DEPARTMENT

AND ESTIMATES PREPARED BY Meshek & Associates, L.L.C.
Boulder Avenue, Sulte 1550 Tulso, OK 74119 (818)392-5820

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NOTE: CONTRACTOR SHALL NOT STORE				VERTICAL:	RECOMMENDED	140	11.22	1/2
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LEGEND

SECTION LINE
 RIGHT-OF-WAY
 LOT LINE
 EXISTING BUILDING LINE
 EXISTING FASEMENT LINE

BENCHMARK CONTROL POINT

DATUM INFORMATION

DESCRIPTION 1/2" REBAR SET W/ CAF

CHISELED "X" SET 1/2" REBAR SET W/ CAP

HORIZONTAL DATUM NAD '83(2011) OKLAHOMA NORTH ZONE 3501

SURVEY CONTROL

ELEVATION

662.44

660:49

POINT NORTHING EASTING

CP103 408222.88 2601289.74

408381.88 2600972.68

2601290,79

407264.12

CP102

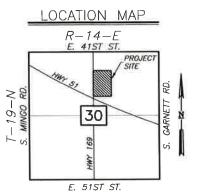
BM104

VERTICAL DATUM

ADS 85 - 3" ALUMINUM CAP MONUMENT

NAVD '88 (GEOID 12B)

N=423598.892 E=2539558.990 ELEV.=643.000



SURVEYOR'S CERTIFICATE

I, MICHAEL ROYCE, OF MESHEK & ASSOCIATES, LLC, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF OKLAHOMA, DO HEREBY CERTIFY THAT THIS HORIZONTAL/VERTICAL CONTROL 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."

I FURTHER CERTIFY, THE TOPOGRAPHICAL INFORMATION HEREON REPRESENTS A SURVEY PERFORMED UNDER MY DIRECT SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF OUR KNOWLEDGE.

DATE: 06/22/2022

MICHAEL ROYCE REGISTERED PROFESSIONAL LAND SURVEYOR OKLAHOMA L.S. 1627 CERTIFICATE OF AUTHORIZATION NO. 1487 EXPIRES JUNE 30, 2023

- 1. ABSTRACT OF TITLE OR ATTORNEY'S TITLE OPINION NOT AVAILABLE TO SURVEYOR AT DATE OF SURVEY.
- 2. THIS FIRM WAS NOT CONTRACTED TO RESEARCH EASEMENTS OR ENCUMBRANCES OF RECORD. NO ATTEMPT TO RESEARCH THE COUNTY RECORDS OR OTHER RECORD OFFICES WAS PERFORMED BY THIS FIRM, THEREFORE EASEMENTS MAY AFFECT THE SUBJECT TRACT THAT ARE NOT REFLECTED BY THIS PLAT
- 3. ALL UNDERGROUND UTILITIES MAY NOT BE SHOWN. (CALL "OKIE" BEFORE DIGGING!!)
- 4. THE HORIZONTAL AND VERTICAL DATUMS FOR THIS SURVEY ARE BASED ON THE OKLAHOMA STATE PLANE COORDINATE SYSTEM OK SOUTH 3502 (2011) AND NAVDBB (GEOID 12B). THE SURVEYING METHODS USED ARE CELLULAR NETWORK SOLUTION AND AVERAGED RTK GPS OBSERVATIONS ON THE SOURCE BENCHMARK



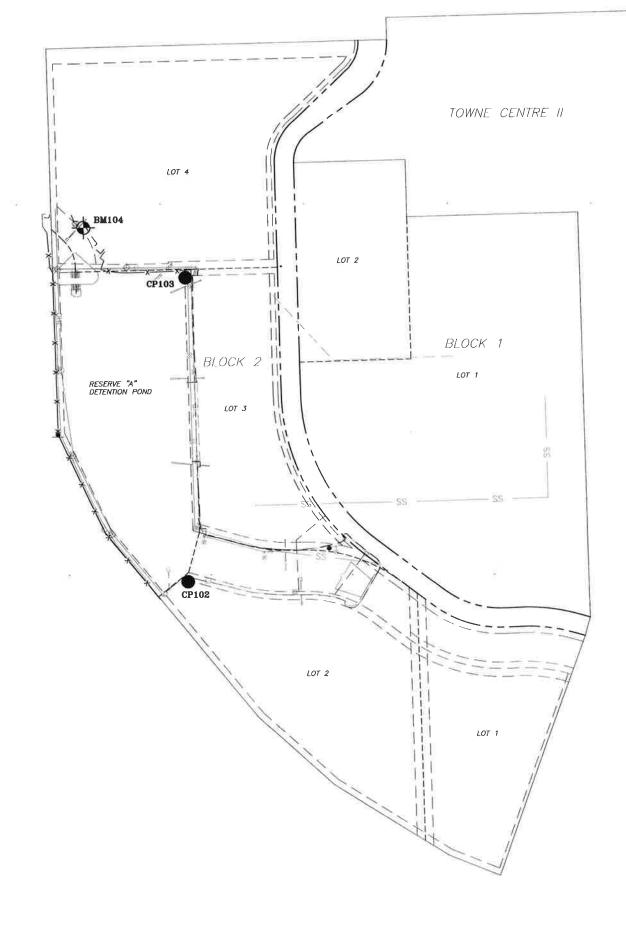
SURVEY DATA

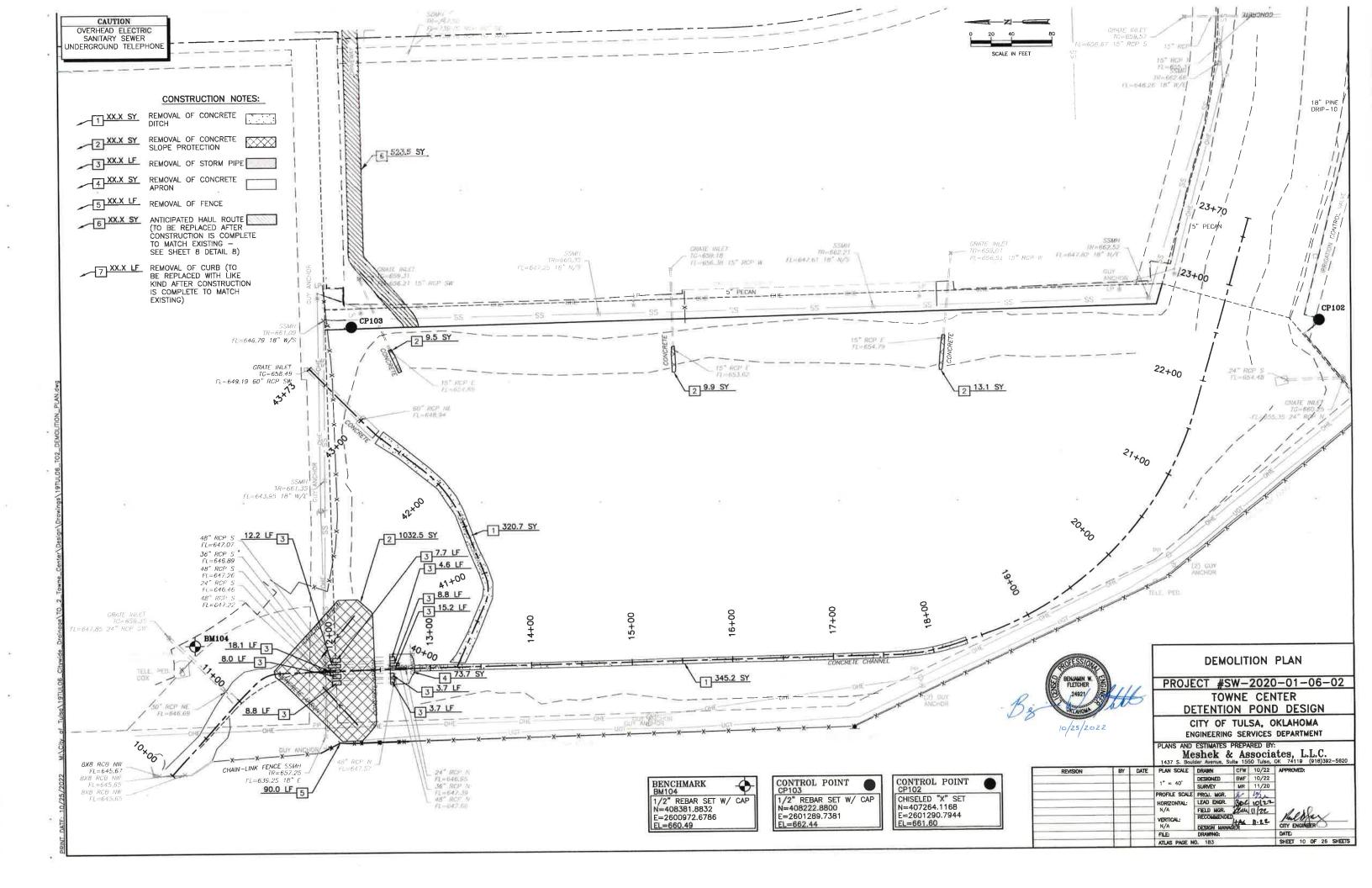
PROJECT #SW-2020-01-06-02 TOWNE CENTER DETENTION POND DESIGN

> CITY OF TULSA, OKLAHOMA ENGINEERING SERVICES DEPARTMENT

AND ESTIMATES PREPARED BY: Meshek & Associates, L.L.C.

			1437 S Boul	der Avenue, Su	Ite 15	50 Tulea, (OK 74119 (918)392-5620
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STORMWATER MANAGEMENT PLAN

SITE DESCRIPTION PROJECT LIMITS: THE PROJECT IS LOCATED IN THE NE/4 OF SECTION 30, T-19-N, R-14-E, AT THE NORTHEAST CORNER OF THE INTERSECTION OF US-169 AND THE BROKEN ARROW PROJECT DESCRIPTION: MAINTENANCE OF DETENTION FACILITY BY GRADING SLOPES ON WEST AND EAST SIDES, RE-GRADING OF LOW WATER FLOW AREAS, CONSTRUCTION OF OUTLET STRUCTURE, AND PAVED DITCH CONSTRUCTION SUGGESTED SEQUENCE OF EROSION CONTROL ACTIVITIES: 1. TEMPORARY EROSION CONTROL MEASURES 2. SITE CLEARING AND GRUBBING 3. SITE GRADING AND POND GRADING 4. OUTLET STRUCTURE AND PAVED DITCH CONSTRUCTION 5. PERMANENT EROSION CONTROL DENNIS-PHAROAH COMPLEX, DENNIS-RADLEY-COMPLEX, OKEMAH-PARSONS-PHAROAH COMPLEX (C/D. D. B) TOTAL AREA OF THE CONSTRUCTION SITE: 2.95 ACRES ESTIMATED AREA TO BE DISTURBED: OFFSITE AREA TO BE DISTURBED (FOR CONTRACTOR USE) TOTAL IMPERVIOUS AREA PRE-CONSTRUCTION: 0.40 ACRES TOTAL IMPERVIOUS AREA POST-CONSTRUCTION: 0.40 ACRES POST-CONSTRUCTION RUNOFF COEFFICIENT OF THE SITE: _ LATITUDE & LONGITUDE OF CENTER OF PROJECT: N36° 6' 4.89", W95" 51' 30.33" PROJECT WILL DISCHARGE TO: NAME OF RECEIVING WATERS: MINGO CREEK NO X SENSITIVE WATERS OR WATERSHEDS: NO X YES 303 IMPAIRED WATERS: IF YES, LIST IMPAIRMENT: NO X YES LOCATED IN A TMDL: NO X LAKE THUNDERBIRD TMDL: YES YES X NO MS4 ENTITY IF YES, LOCATION: TULSA COUNTY 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.

REVISED 08 / 18 / 2017

FROSION AND SEDIMENT CONTROLS

SOIL STABILIZATION PRACTICES:

____ TEMPORARY SEEDING

X PERMANENT SODDING, SPRIGGING OR SEEDING

___ VEGETATIVE MULCHING

SOIL RETENTION BLANKET

X 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:

X STABILIZED CONSTRUCTION EXIT

X TEMPORARY SILT FENCE

X TEMPORARY SILT DIKES

TEMPORARY FIBER LOG

DIVERSION, INTERCEPTOR OR PERIMETER DIKES

_____ DIVERSION, INTERCEPTOR OR PERIMETER SWALES

____ ROCK FILTER DAMS

____ TEMPORARY SLOPE DRAIN

X PAVED DITCH W/ DITCH LINER PROTECTION

TEMPORARY DIVERSION CHANNELS

_ TEMPORARY SEDIMENT BASINS

TEMPORARY SEDIMENT TRAPS

TEMPORARY SEDIMENT FILTERS

TEMPORARY SEDIMENT REMOVAL
X RIPRAP

INLET SEDIMENT FILTER

TEMPORARY BRUSH SEDIMENT BARRIERS

SANDBAG BERMS

_ TEMPORARY STREAM CROSSINGS

OFFSITE VEHICLE TRACKING:

X HAUL ROADS DAMPENED FOR DUST CONTROL

X LOADED HAUL TRUCKS TO BE COVERED WITH TARPAULIN

X 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 POLLUTIONS 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 2019 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.

STORMWATER MANAGEMENT PLAN

PROJECT #SW-2020-01-06-02
TOWNE CENTER
DETENTION POND DESIGN

CITY OF TULSA, OKLAHOMA ENGINEERING SERVICES DEPARTMENT

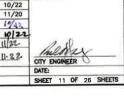
Meshek & Associates, L.L.C.

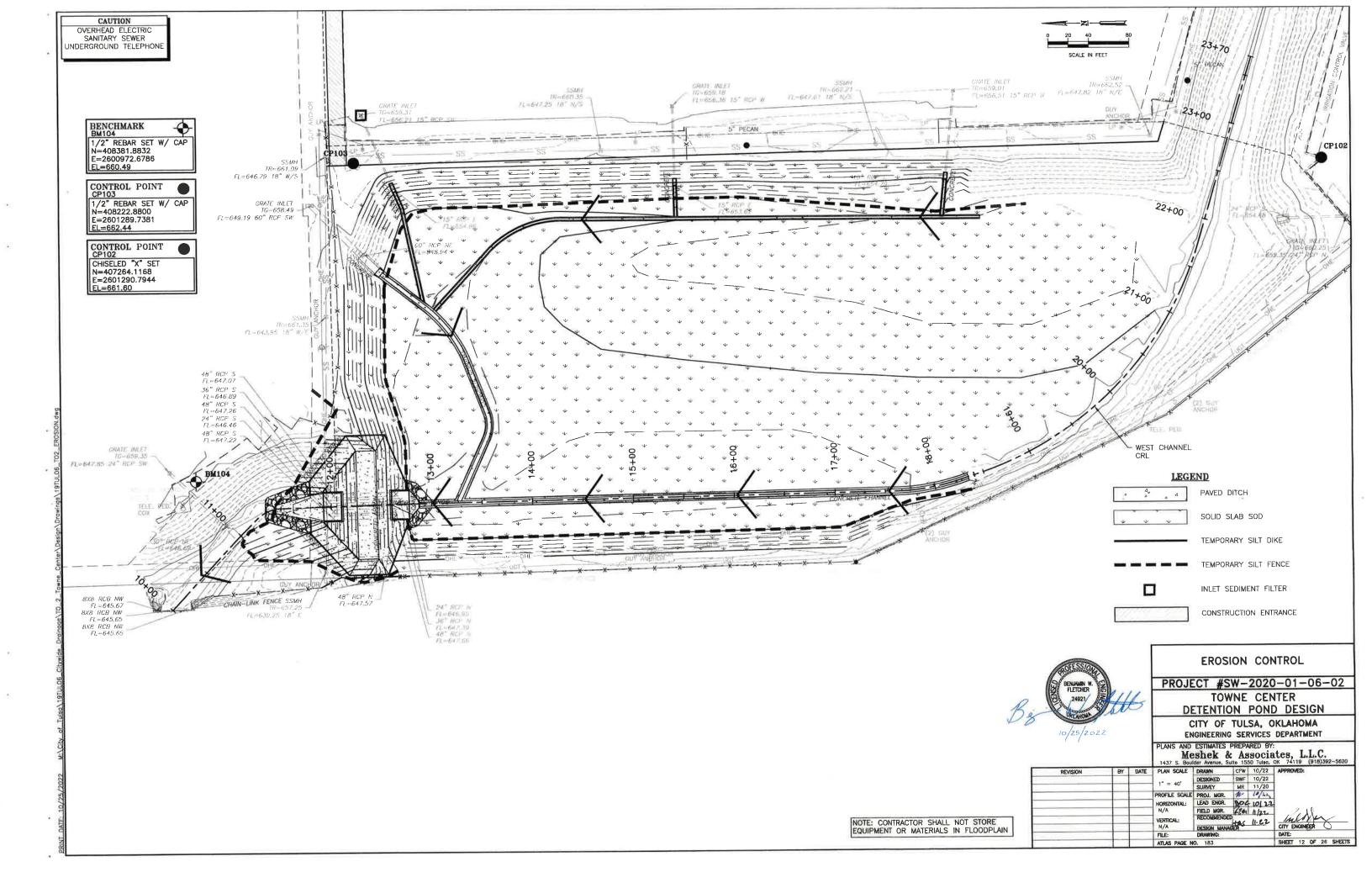
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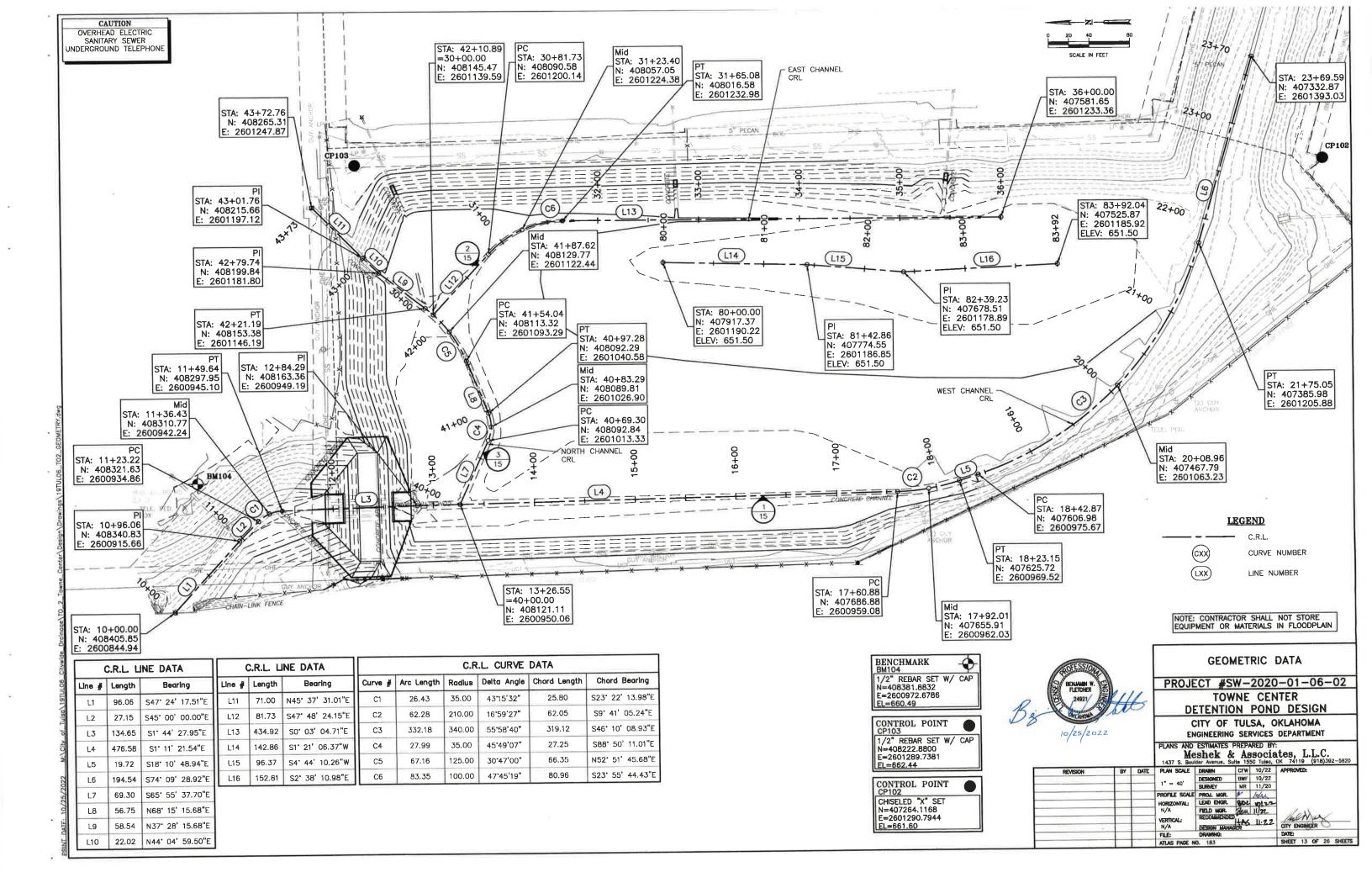


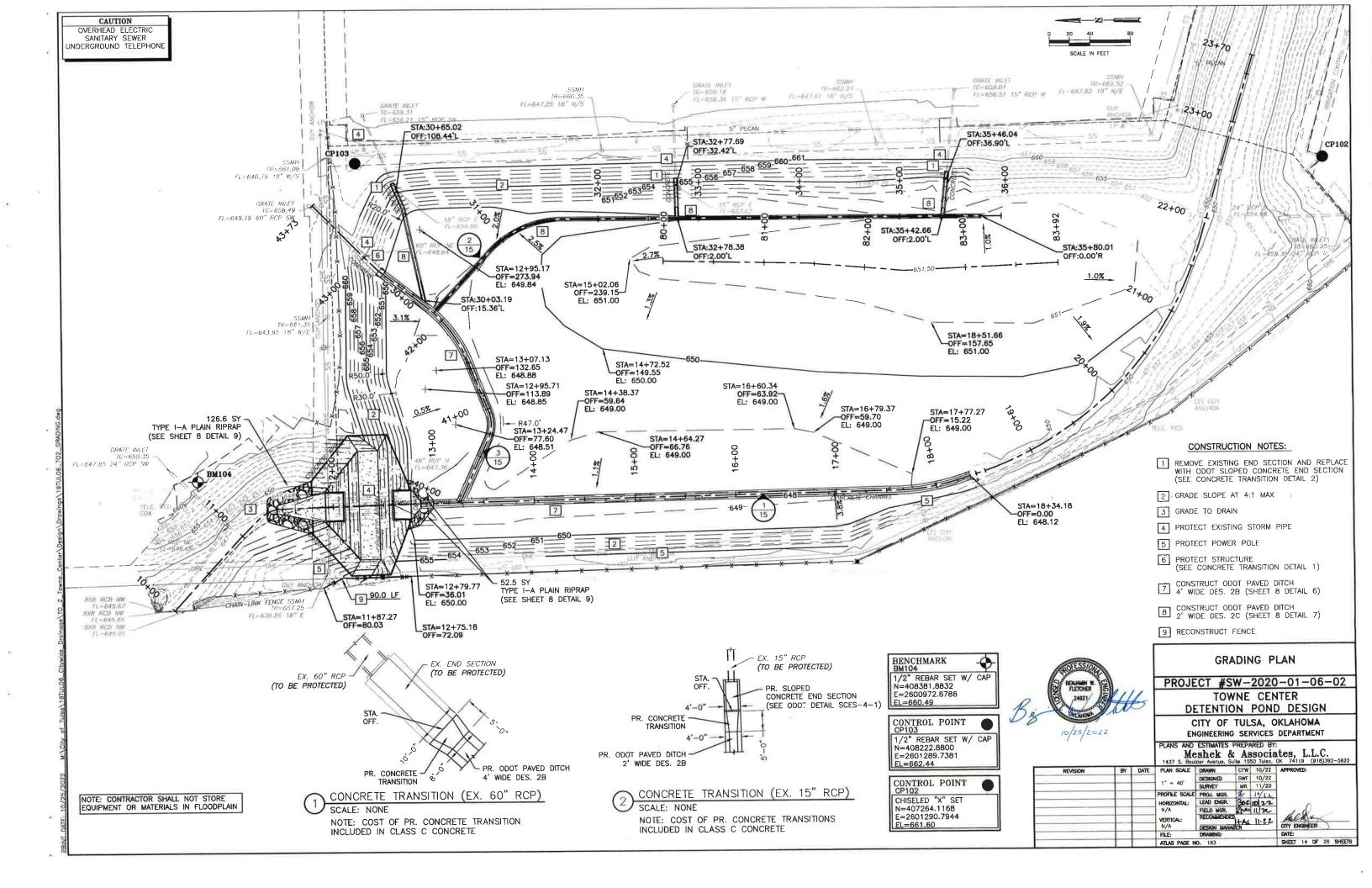
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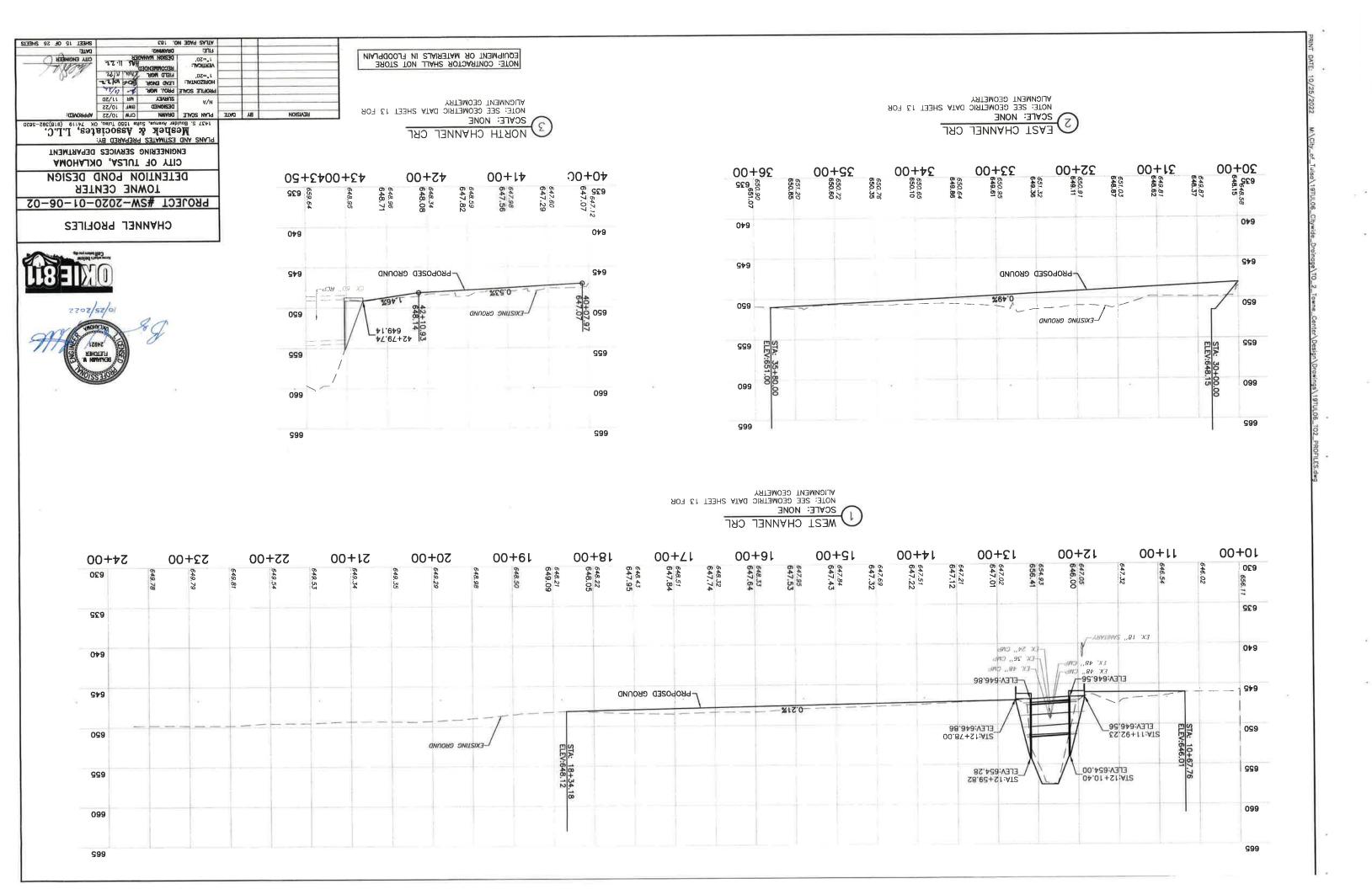
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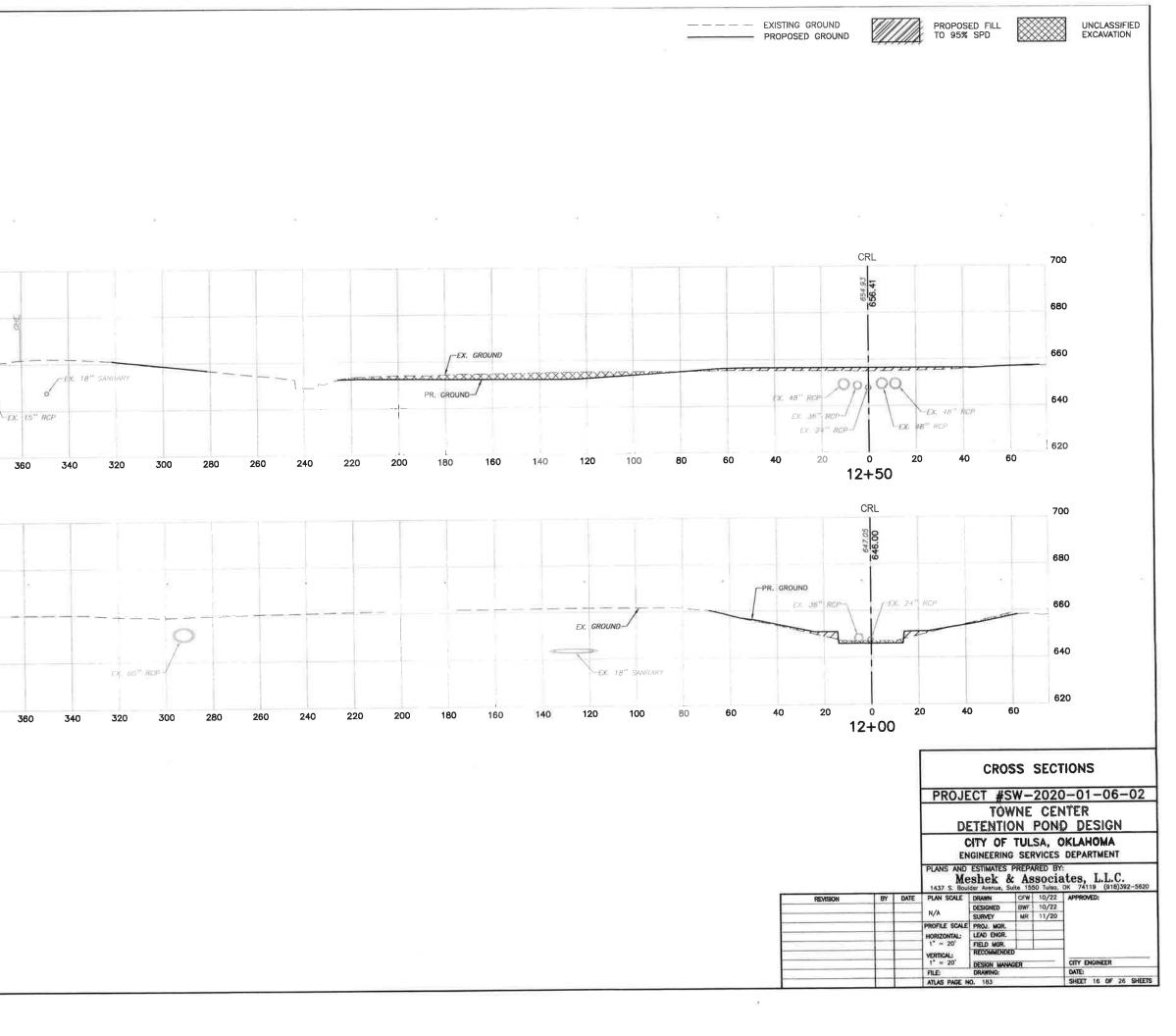


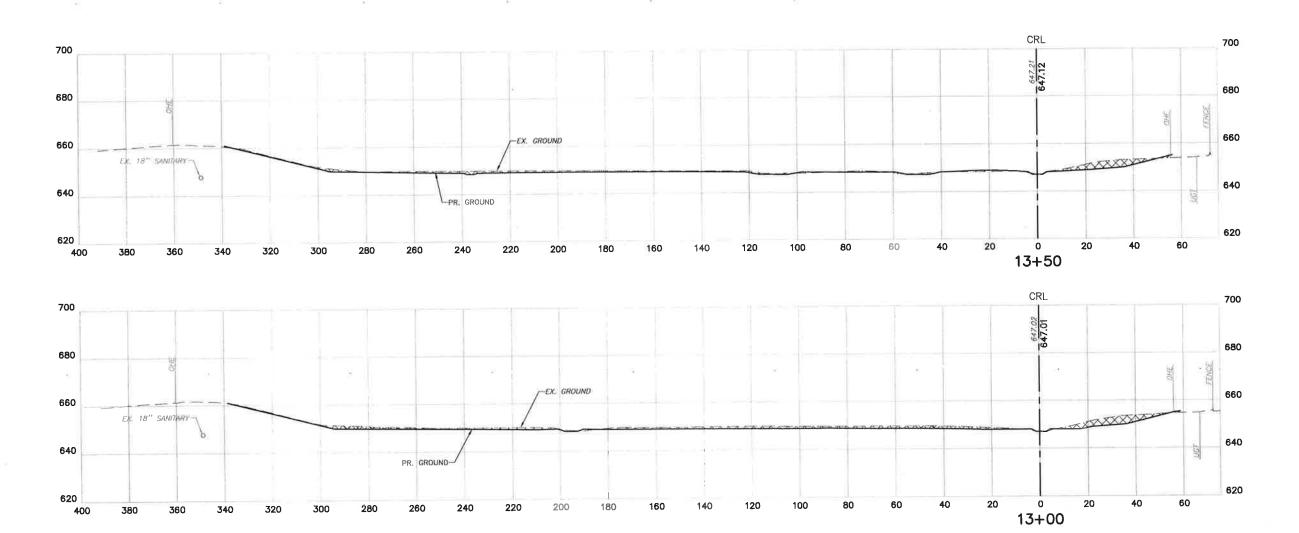












CROSS SECTIONS

PROJECT #SW-2020-01-06-02
TOWNE CENTER
DETENTION POND DESIGN

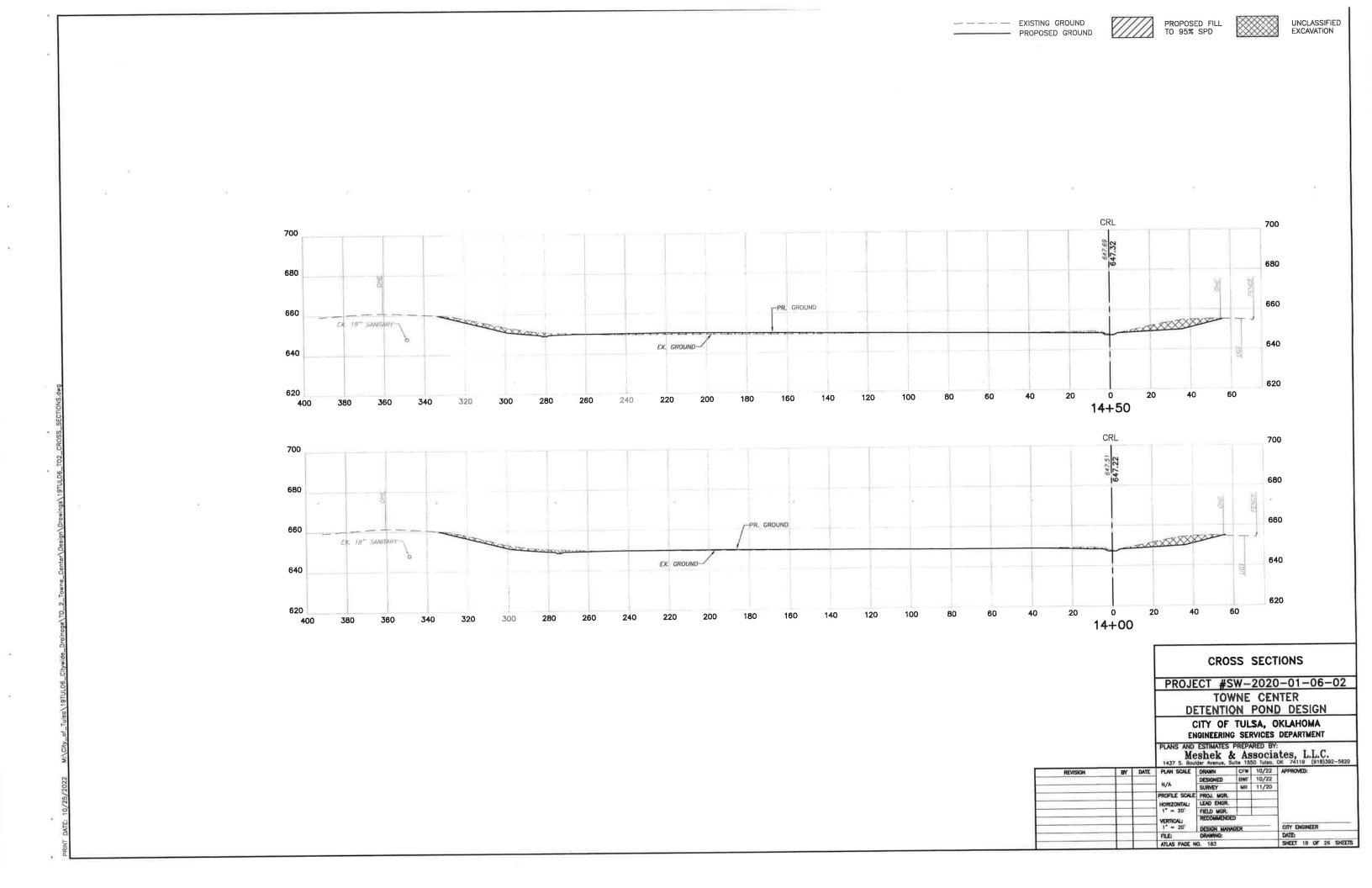
CITY OF TULSA, OKLAHOMA

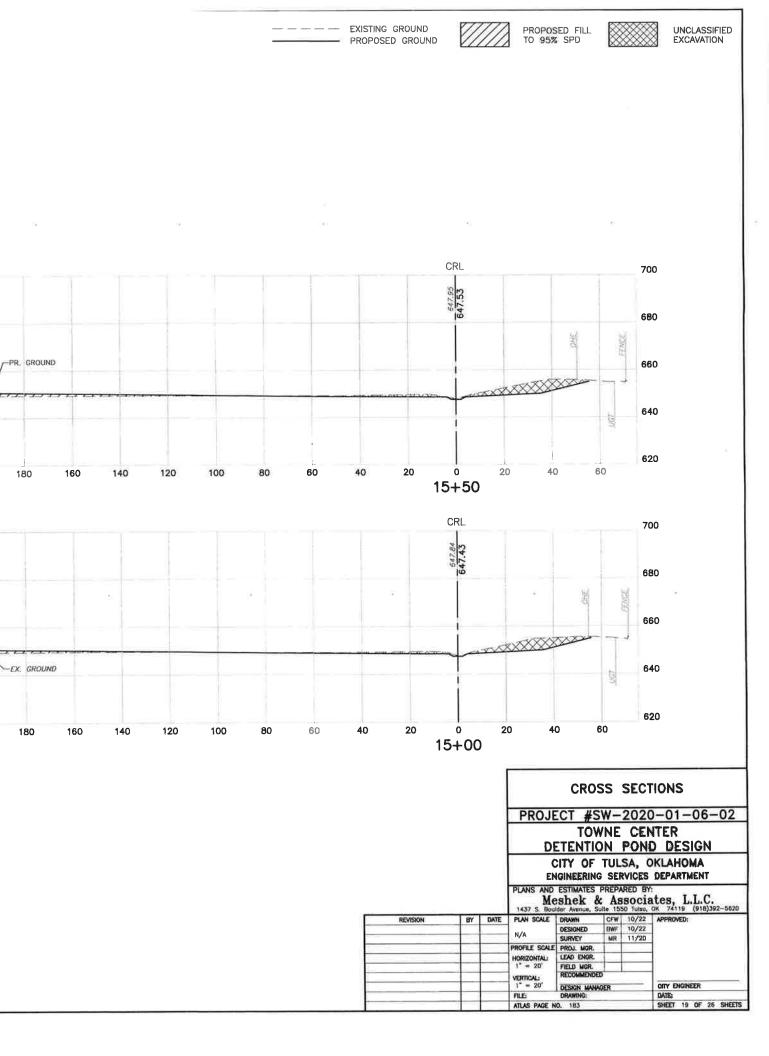
ENGINEERING SERVICES DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
Meshek & Associates, L.L.C.

1437 S. Boulder Avenue, Suite 1550 Tulso, OX 74119 (918)392-5620

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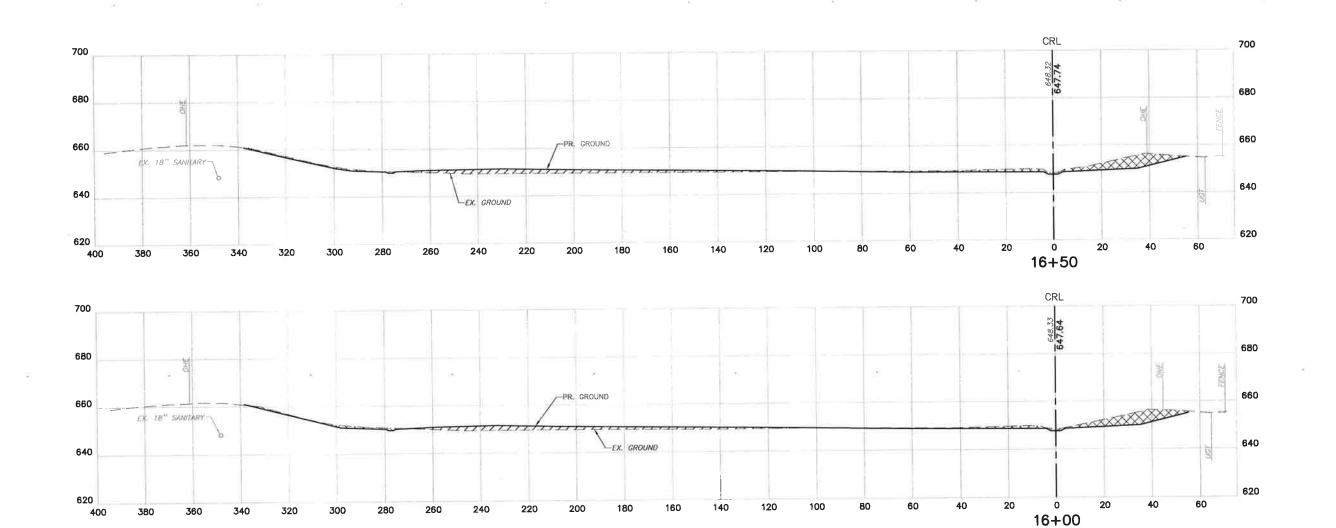


EX 15" RCP-

EX. 18" SANITARY

EX. GROUND-

PR. GROUND



CROSS SECTIONS

PROJECT #SW-2020-01-06-02
TOWNE CENTER
DETENTION POND DESIGN

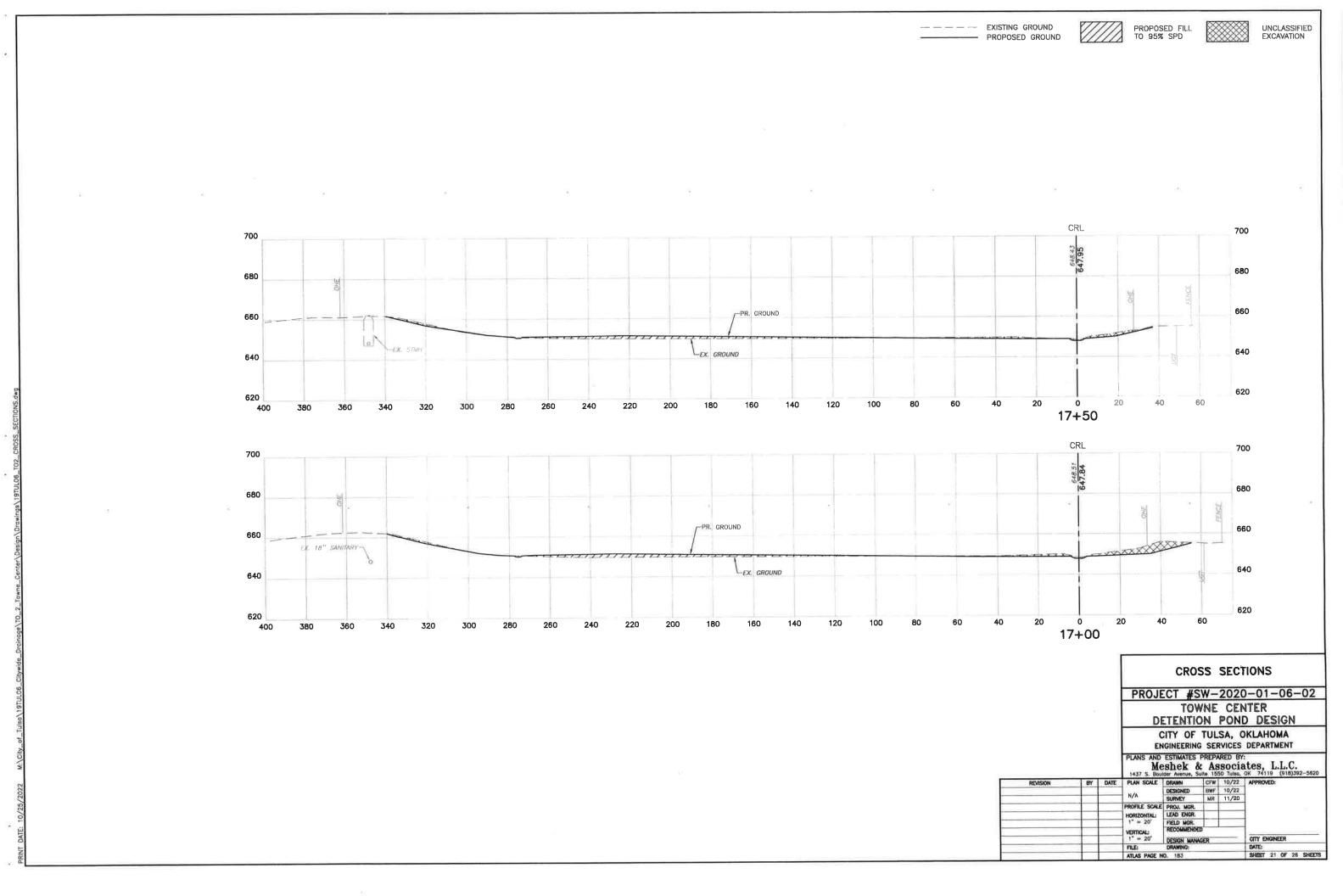
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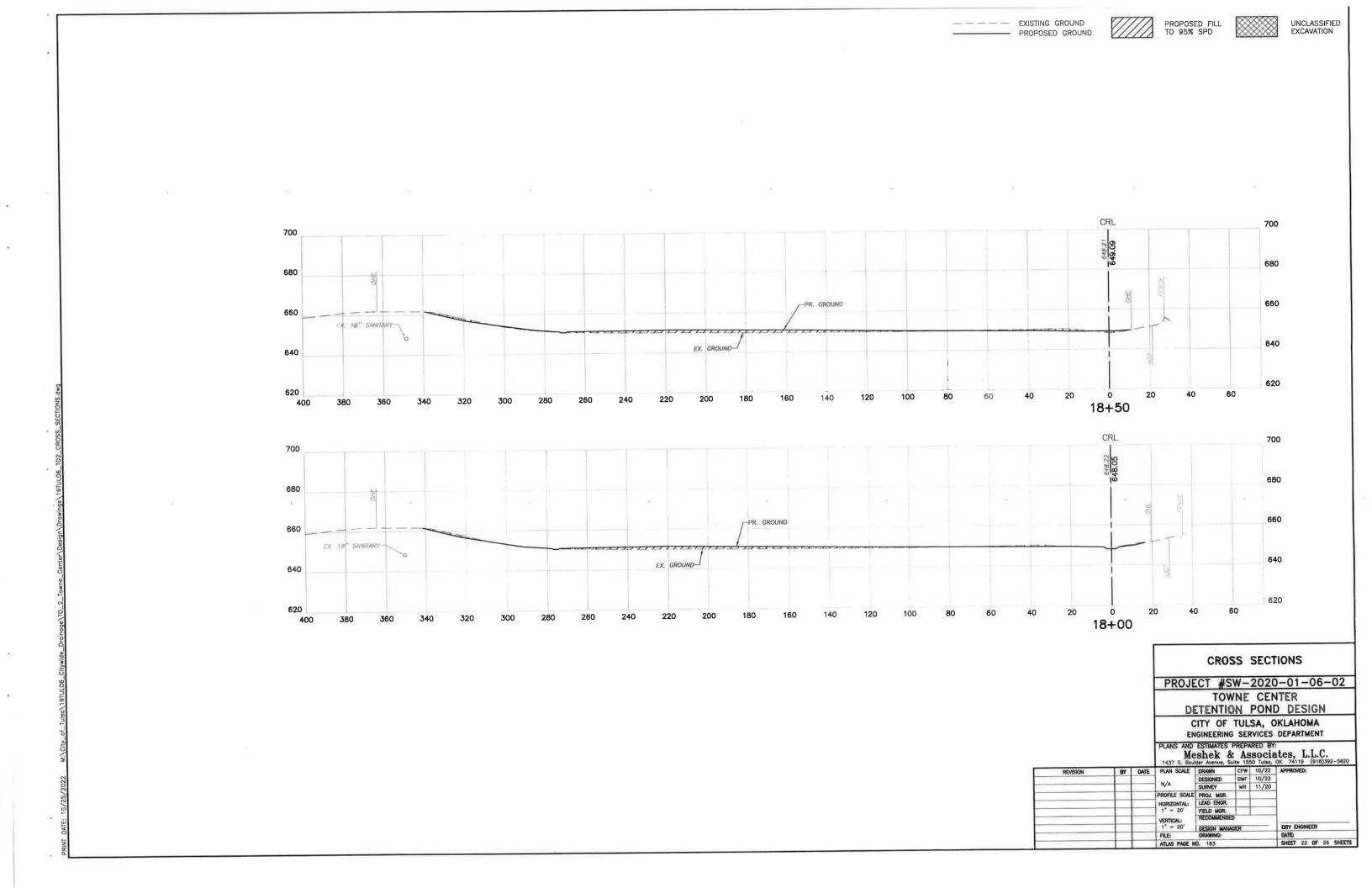
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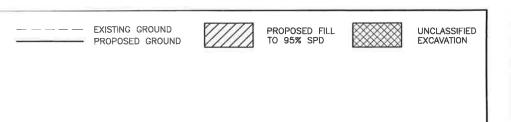
Meshek & Associates, L.L.C.

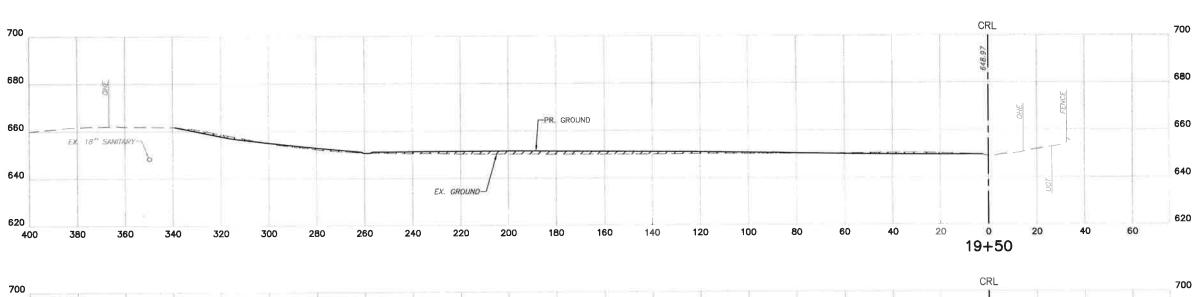
1437 S. Boulder Avenue, Sulte 1550 Tulso, Ok. 74119 (918)392-5

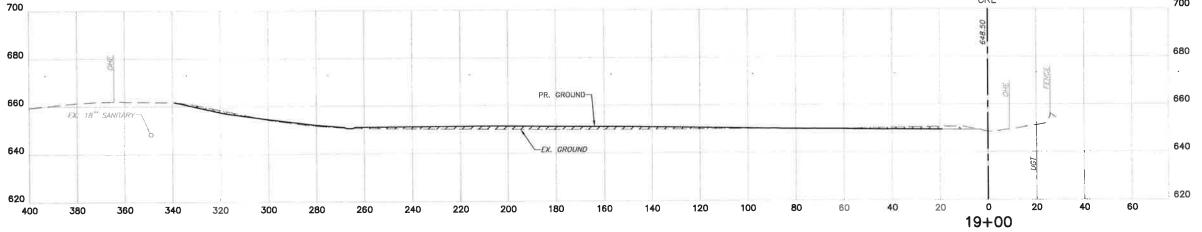
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				N/A	SURVEY	MR	11/20	1		
				PROFILE SCALE	PROJ. MGR.			1		
				HORIZONTAL:	LEAD ENGR.			1		
				1" = 20'	FIELD MGR.			1		
				VERTICAL:	RECOMMENDE)				
				1" = 20"	DESIGN MANAGER			CITY ENGINEER		
				FILE	FILE: DRAWING: DATE:					
				ATLAS PAGE N	0. 183			SHEET 20 OF 26 SHEETS		











CROSS SECTIONS

PROJECT #SW-2020-01-06-02

TOWNE CENTER
DETENTION POND DESIGN

CITY OF TULSA, OKLAHOMA ENGINEERING SERVICES DEPARTMENT

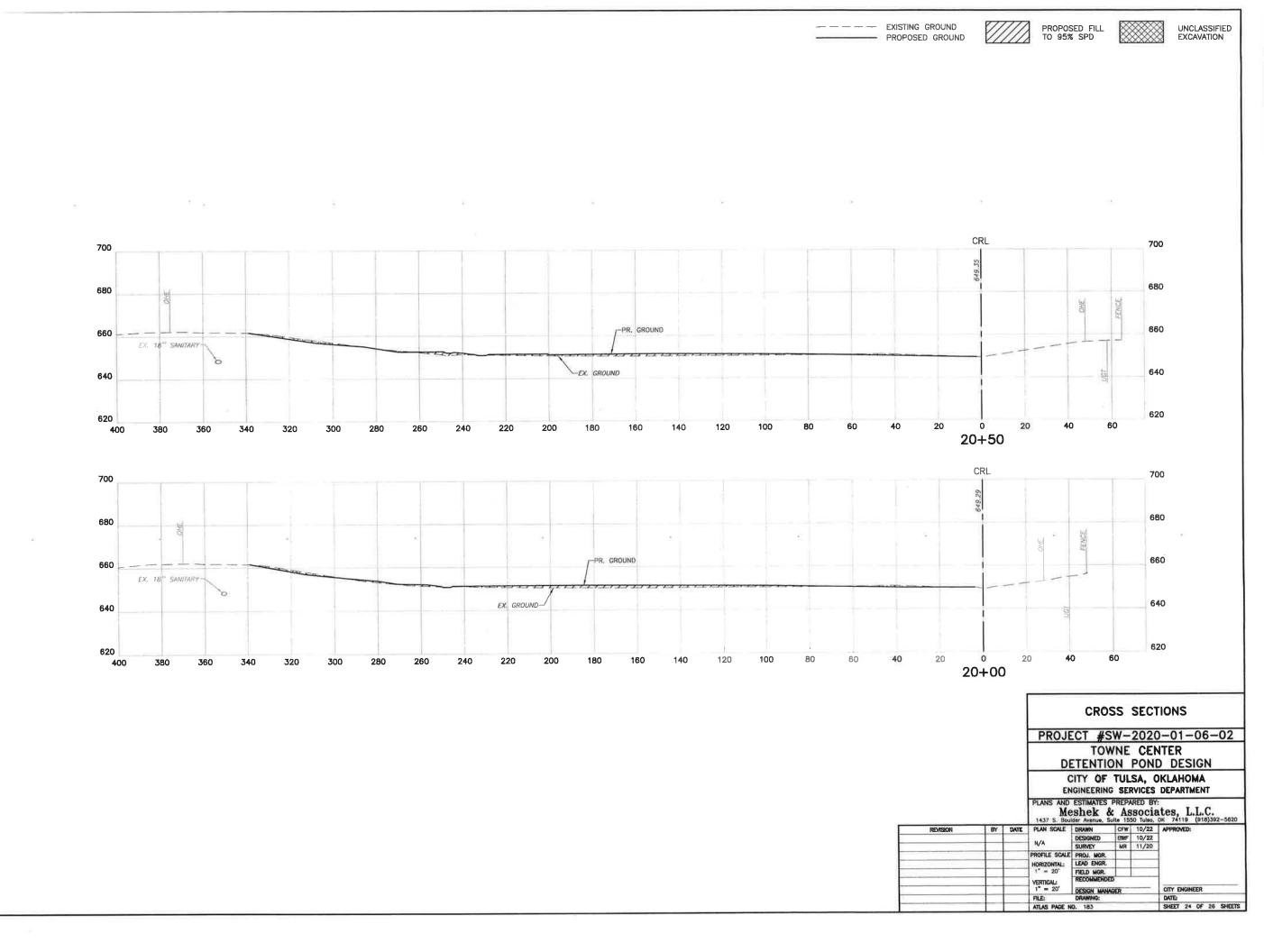
PLANS AND ESTIMATES PREPARED BY:

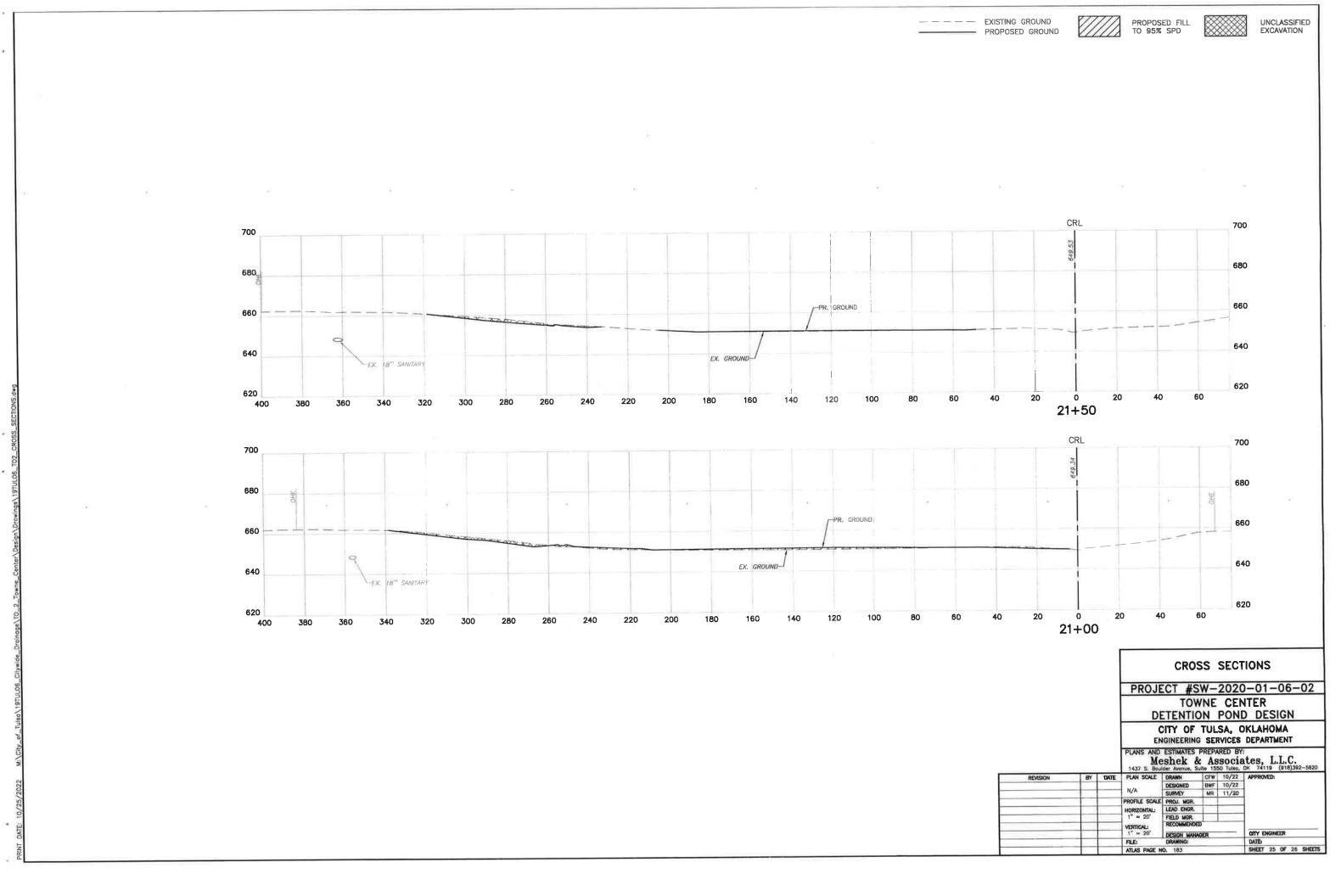
Meshek & Associates, L.L.C.

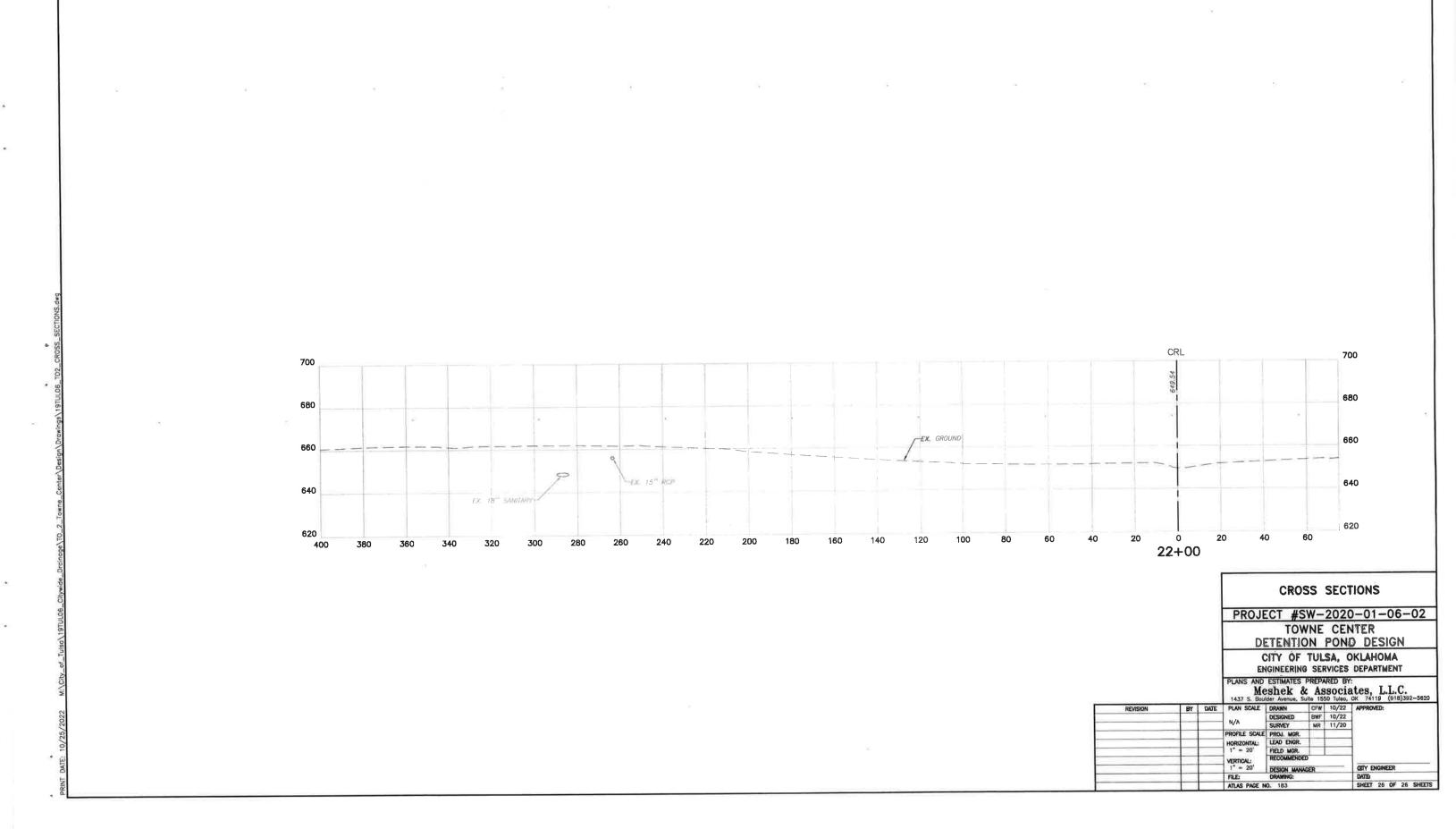
1437 S. Boulder Avolue, Suite 1550 Tulan, OK 74119 (918)392

REVISION	BY	DATE	PLAN SCALE	DRAWN	CFW	10/22	APPROVED:
			1	DESIGNED	BWF	10/22	
			N/A	SURVEY	MR	11/20	1
			PROFILE SCALE	PROJ. MGR.			
			HORIZONTAL:	LEAD ENGR.			
			1" = 20"	FIELD MGR.			
		VERTICAL: RECOMMENDED					
			1" = 20"	DESIGN MANA	DER		CITY ENGINEER DATE:
			FILE:	DRAWING:			
			ATLAS PAGE N	0. 183			SHEET 23 OF 26 SHEETS

TE: 10/25/2022 Mt\City_of_Tulsa\19TUL06_Citywide_Drainage\T0_2_Towne_Center\Design\Drawings\11







UNCLASSIFIED EXCAVATION

PROPOSED FILL TO 95% SPD

---- Existing ground

PROPOSED GROUND