

PLANS FOR THE CONSTRUCTION OF BEAR CREEK PARK SANITARY SEWER IMPROVEMENTS

(FOR THE RESTROOM FACILITIES)

KELLER, TEXAS

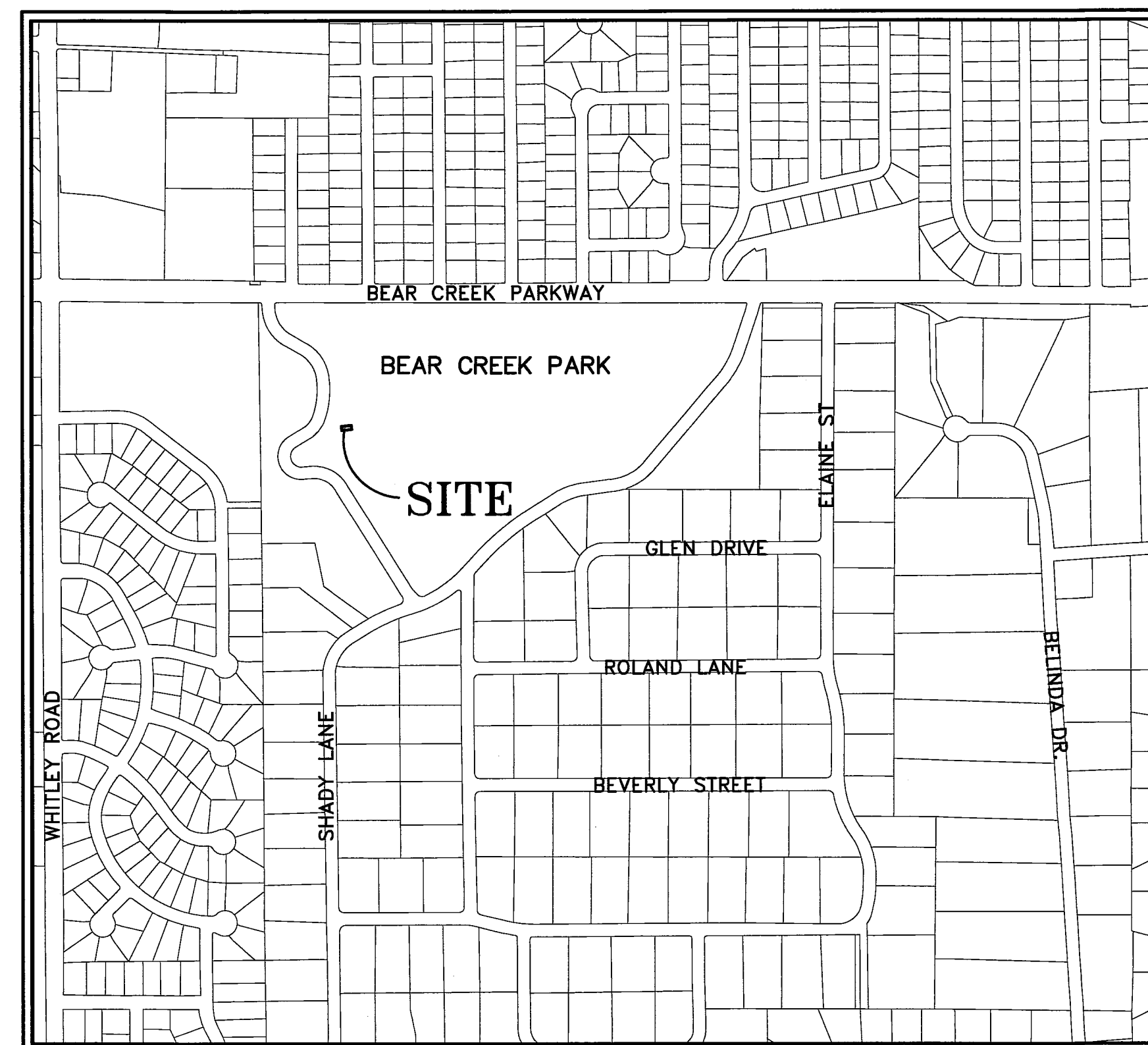
AUGUST 2019

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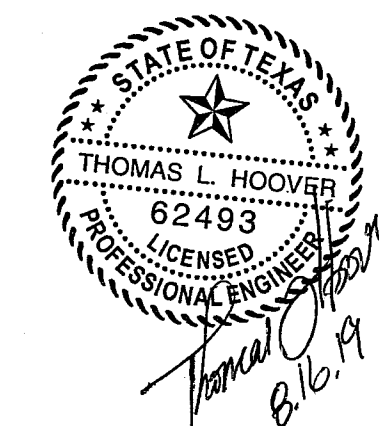


MAYOR	PAT McGRAIL
PLACE 1	MITCH HOLMES
PLACE 2/MAYOR PRO TEM	SEAN HICKS
PLACE 3	SHERI ALMOND
PLACE 4	BECKIE PAQUIN
PLACE 5	CHRIS WHATLEY
PLACE 6	TAG GREEN
CITY MANAGER	MARK HAFNER
DIR COMMUNITY SERVICES	CODY MABERRY
PARKS MAINT. MGR.	GARY DAVIS



LOCATION MAP 1"=500'

THOMAS HOOVER ENGINEERING, LLC
P.O. BOX 1808
KELLER, TEXAS 76244
(817) 913-1350 PHONE
T.B.P.E. FIRM REGISTRATION NO. 006009



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CITY OF KELLER
1100 BEAR CREEK ROAD
KELLER, TEXAS 76244
TEL (817) 743-4000
CONTACT: CODY MABERRY
cmaberry@cityofkeller.com

PREPARER/ENGINEER
THOMAS HOOVER ENGINEERING, LLC
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KELLER, TX 76244
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CONTACT: THOMAS HOOVER
tom.theng@yahoo.com

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Date _____

Public Works Director/City Engineer

BEAR CREEK PARK SANITARY SEWER IMPROVEMENTS

GENERAL CONSTRUCTION NOTES:

1. TOPOGRAPHIC INFORMATION TAKEN FROM A TOPOGRAPHIC SURVEY BY COLVIN SURVEYING COMPANY. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHIC AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, HE SHALL HAVE MADE, AT HIS EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR REVIEW.
2. CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURIS- DITION FOR EXCAVATION AND TRENCHING PROCEDURE. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING AND OTHER MEANS OF PROTECTION. THIS IS TO INCLUDE, BUT NOT LIMITED FOR ACCESS & EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPON- SIBLE TO COMPLY WITH PERFORMANCE CRITERIA FOR OSHA.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST & DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
- 4.. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANY TWO WORKING DAYS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.

EROSION CONTROL NOTES:

1. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED AS SOON AS PRACTICAL AND NOT MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED UNLESS CONSTRUCTION ACTIVITIES ARE TO RESUME WITHIN 21 DAYS.
2. EXCAVATED AND TOP SOIL STOCKPILES SHALL BE COVERED AT THE END OF EACH WORK DAY. STOCKPILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR AT LEAST 21 DAYS WILL BE STABILIZED WITH TEMPORARY SEASONAL GRASS SEED AND MULCH OR OTHER ACCEPTABLE PRACTICES. AREAS OF THE SITE WHICH ARE TO BE PAVED WILL BE TEMPORARILY STABILIZED UNTIL PAVEMENT IS INSTALLED.
3. AT THE END OF EACH WORKING DAY, THE CONTRACTOR SHALL INSTALL A DIVERSION DIKE AROUND THE TOP OF EACH CUT OR FILL SLOPE TO DIRECT RUN-OFF AWAY FROM THE FACE OF THE SLOPE TO A NON-EROSIVE OUTLET AREA.
4. STABILIZE ALL POINTS OF INGRESS AND EGRESS WITH CRUSHED STONE UNTIL JUST PRIOR TO PAVING OPERATIONS TO PREVENT TRACKING OF MUD ONTO PUBLIC ROADWAYS.
5. CONTRACTOR SHALL LIMIT MUD ACCUMULATION ON ALL PUBLIC STREETS AROUND THE PROJECT. MUD FOUND IN PUBLIC STREETS SHALL BE CLEANED AT THE END OF THE WORK DAY.
6. SEED ALL EMBANKMENTS WITH SLOPES OF 3:1 OR GREATER AND ALL DRAINAGE SWALES IMMEDIATELY AFTER GRADING. PERMANENT STABILIZATION OF EMBANKMENT WITH SLOPES OF 3:1 OR GREATER MAY BE DONE BY HYDROSEEDING WITH BERMUDA DURING THE MONTHS OF MAY THROUGH SEPTEMBER AND COOL GROW DURING THE MONTHS OF OCTOBER THROUGH APRIL.
7. IF STABILIZATION OF DISTURBED AREAS IS TO BE ACCOMPLISHED DURING SEPTEMBER 15 THROUGH APRIL 1, THE STABILIZATION SHALL CONSIST OF HYDROMULCHING WITH COOL GROW OR EQUAL.
8. DURING CONSTRUCTION, ALL TREES SHALL BE PROTECTED AS INDICATED ON THE PLAN.
9. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASE SHALL BE STABILIZED.
10. DURING SUMMER MONTHS, THE CONTRACTOR MAY NEED TO INSTALL TEMPORARY IRRIGATION TO ENSURE ADEQUATE WATERING OF THE GRASSES.
11. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO LOCAL EROSION AND SEDIMENT CONTROL CODES.
12. SILT BARRIERS SHALL BE CONSTRUCTED AROUND ALL INLETS AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. SEDIMENT ACCUMULATED BEHIND SILT BARRIERS SHALL BE REMOVED WHEN A DEPTH OF 6-INCHES IS REACHED.
13. TEMPORARY STRAW BALE BERMS/DIKES SHALL BE INSTALLED ACROSS DRAINAGE CHANNELS/SWALES FROM DISTURBED AREAS. BALES SHALL BE SECURELY ANCHORED UTILIZING STEEL OR WOODEN STAKES. BALES SHALL BE REPLACED UPON FAILURE.
14. CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL DEVICES DURING CONSTRUCTION TO PREVENT BLOCKAGES FROM ACCUMULATED SETTLEMENT. ADDITIONAL STRAW BALES MAY BE REQUIRED BY THE ARCHITECT, ENGINEER, OR LOCAL INSPECTOR.
15. CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROLS AND REMOVE SILTATION ONLY WHEN THERE IS SUFFICIENT GROWTH OF GROUND COVER TO PREVENT EROSION.

PARKS COORDINATION:

CONTRACTOR SHALL PROVIDE A DETAILED SCHEDULE ON ALL CONSTRUCTION ACTIVITIES AND COORDINATE WITH GARY DAVIS (817-743-4050) FOR ANY CLOSURES OF SIDEWALKS/TRAILS. ALL SIDEWALKS THAT ARE TO BE REMOVED AND REPLACED SHALL BE ADEQUATELY PROTECTED AGAINST PEDESTRIAN USE UNTIL ACCEPTANCE BY THE OWNER.

THE RIM ELEVATIONS OF ALL PROPOSED MANHOLES SHALL BE COORDINATED IN THE FIELD WITH GARY DAVIS PRIOR TO SETTING OF GRADE RINGS FOR THE COVERS. NO OPEN TRENCHES OR EXCAVATIONS SHALL BE ALLOWED AFTER CONSTRUCTION ACTIVITIES END FOR THE DAY.

KELLER NOTES:

1. THE APPLICABLE STANDARDS, SPECIFICATIONS AND ORDINANCES OF THE CITY OF KELLER, TEXAS SHALL APPLY AS THOUGH FULLY SET FORTH HEREIN. THE CITY OF KELLER SPECIFICATIONS ARE MADE UP OF THE CURRENT VERSION OF THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" PUBLISHED BY N.C.T.C.O.G. AND AS MODIFIED BY THE CURRENT VERSION OF THE CITY OF KELLER "DESIGN AND TECHNICAL CONSTRUCTION STANDARDS". THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE TCEQ. REGULATIONS.
2. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF KELLER. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT MATERIAL OR WORKMANSHIP THAT DOES NOT CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY OF KELLER.
3. ALL DISTURBED OFF-SITE AREAS SHALL BE SODDED AS SHOWN ON THE CONSTRUCTION PLANS.
4. THE CONTRACTOR SHALL HAVE ONE (1) "REVIEWED AND RELEASED FOR CONSTRUCTION" SET OF CONSTRUCTION PLANS ON THE JOB SITE DURING CONSTRUCTION.
5. THE CONTRACTOR SHALL NOTIFY THE CITY OF KELLER AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO COMMENCING CONSTRUCTION.
6. REMAIN ACCESS TO RESIDENTIAL PROPERTIES. PROVIDE TEMPORARY PAVEMENT CROSSING

UTILITY COORDINATION:

CONTRACTOR SHALL ON ALL UTILITIES, COORDINATE INSPECTION AND/OR LOCATION OF UTILITIES PRIOR TO CONSTRUCTION ACTIVITIES.

DIGG TESS - LINE LOCATES 800.344.8377
FOR: LONE STAR GAS CO.-TXU GAS
SOUTHWESTERN BELL TELEPHONE
VERIZON TELEPHONE
TXU ELECTRIC - LINE LOCATES 800.233.2133
TRI-COUNTY ELECTRIC -817.431.1541
CITY OF KELLER - 817.743.4200

GENERAL NOTES:

1. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE CITY OF KELLER STANDARDS AND SPECIFICATIONS.
2. UTILITY CONTRACTOR AND STREET CONTRACTOR ARE TO NOTIFY A CITY TECHNICAL CONSTRUCTION INSPECTOR, AT 817-743-4080, AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
3. ALL SANITARY SEWER PIPE SHALL BE SDR 35 PVC (ASTM D-3034).
4. ALL STORM DRAINAGE PIPE SHALL BE ASTM C-76, CLASS III REINFORCED CONCRETE, UNLESS NOTED OTHERWISE.
5. ALL WATER MAINS SHALL BE PVC AWWA-C900, DR18, CLASS 150.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF A MAXIMUM NUMBER OF PASSING FIELD DENSITY TESTS ON LIME AND CEMENT STABILIZED SUBGRADE EQUAL TO THE RATIO OF 1 PER 100 LINEAR FEET OF STREET AND ALL FAILING DENSITY TESTS AND REQUIRED MOISTURE-DENSITY CURVES.
7. ALL FILL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR METHOD (ASTM D-698).
8. ROUTE WATER LINES AROUND STORM DRAIN INLETS WITH A MINIMUM OF 12" CLEARANCE OUT-TO-OUT.
9. "CURB RAMPS" ARE TO BE CONSTRUCTED ON ALL PERMANENT CURB RETURNS AT INTERSECTIONS OF ALL STREETS OR AS DIRECTED BY THE PUBLIC WORKS DEPARTMENT.
10. ALL CONSTRUCTION BARRICADING TO BE IN ACCORDANCE WITH THE TEXAS DEPARTMENT OF TRANSPORTATIONS CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" GUIDELINES.
11. GATE VALVES SHALL CONFORM TO CURRENT ADOPTED VERSION OF SPECIFICATION ANSI/AWWA C509-87.
12. ALL ROCK RIPRAP TO BE PLACED ON FILTER FABRIC.
13. ALL EXPOSED CONCRETE PORTIONS OF BRIDGES, CULVERTS, WINGWALLS, AND HEADWALLS WILL REQUIRE A TWO-RUB FINISH IN ACCORDANCE WITH NCTCOG ITEM NO. 702.4.13.1, TYPE 1 WITH TWO-RUB FINISH.
14. MATERIAL DISPOSAL FOR CITY PROJECTS- THE CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DIRECTOR IN WRITING OF PROPOSED MATERIAL DISPOSAL SITES TO BE UTILIZED WITHIN THE CITY OF KELLER. THE NOTIFICATION SHALL INCLUDE THE LEGAL LOT/BLOCK, ADDITION DESCRIPTION AND ADDRESS OF THE PROPOSED SITE. THE PUBLIC WORKS DIRECTOR SHALL BE NOTIFIED TWO (2) WEEKS IN ADVANCE OF ANY MATERIAL BEING DEPOSITED.
15. MATERIAL DISPOSAL FOR DEVELOPER PROJECTS- THE CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DIRECTOR IN WRITING OF PROPOSED MATERIAL DISPOSAL SITES TO BE UTILIZED OUTSIDE OF THE PROJECT LIMITS AND INSIDE OF THE CITY OF KELLER. PROJECT LIMITS SHALL BE DEFINED AS PROPERTY OWNED BY THE DEVELOPER AND PART OF THE ADDITION BEING CONSTRUCTED. THE NOTIFICATION SHALL INCLUDE LEGAL LOT/BLOCK, ADDITION DESCRIPTION AND ADDRESS OF THE PROPOSED SITE. THE PUBLIC WORKS DIRECTOR SHALL BE NOTIFIED TWO (2) WEEKS IN ADVANCE OF ANY MATERIAL BEING DEPOSITED.



GENERAL NOTES

REVISION DATE:
12/10/2010

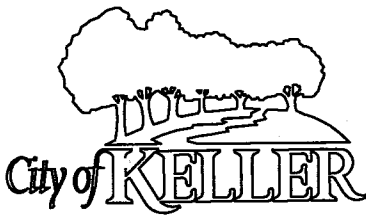
SHEET: 1

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CITY OF KELLER

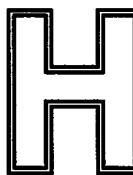
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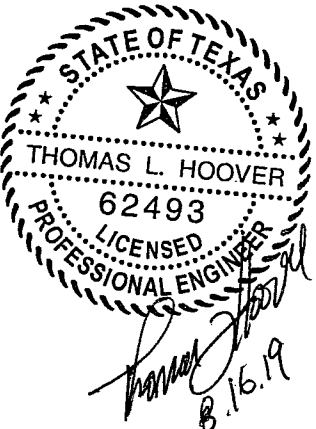


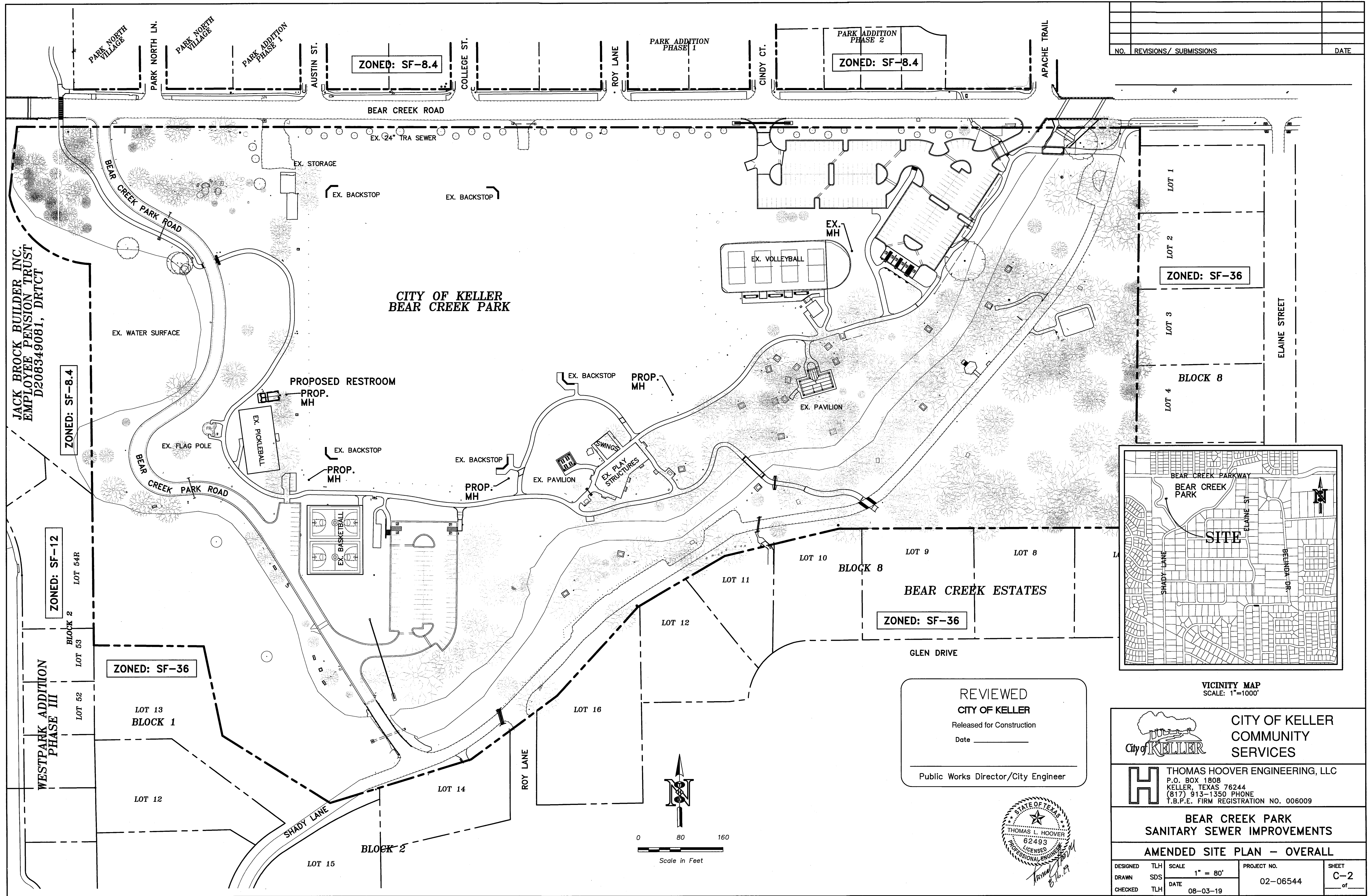
THOMAS HOOVER ENGINEERING, LLC
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T.B.P.E. FIRM REGISTRATION NO. 006009

BEAR CREEK PARK
SANITARY SEWER IMPROVEMENTS

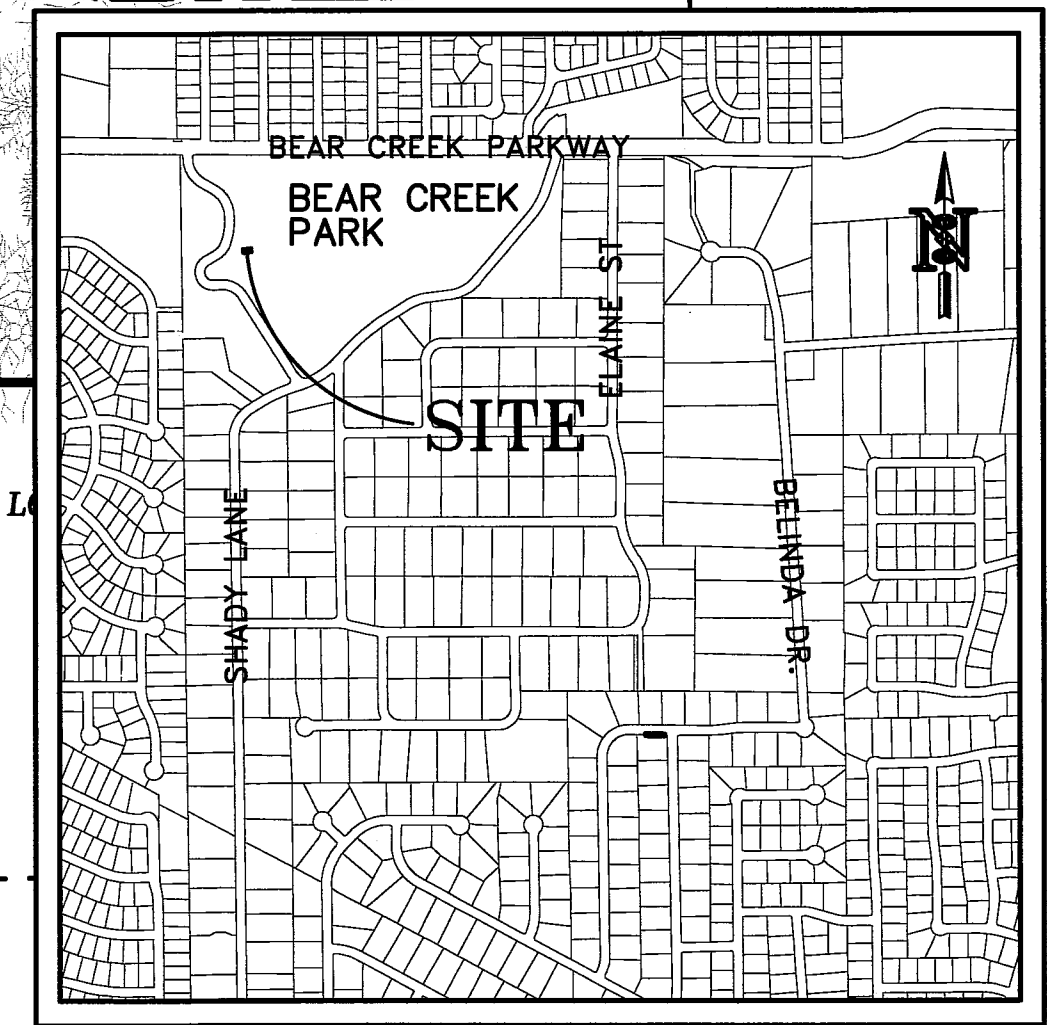
GENERAL NOTES

DESIGNED	TLH	SCALE	N.T.S.	PROJECT NO. 02-06544	SHEET C-1 of
DRAWN	SDS	DATE			
CHECKED	TLH		08-03-19		

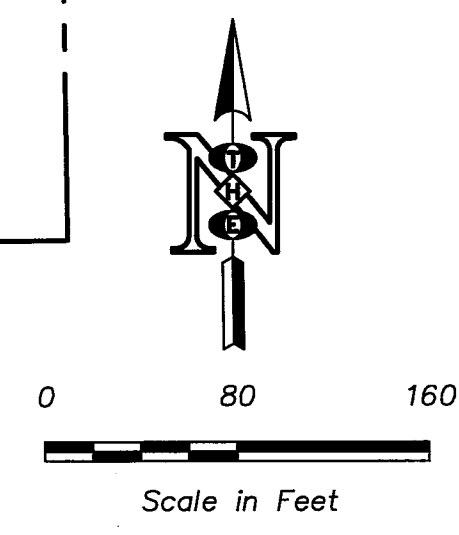
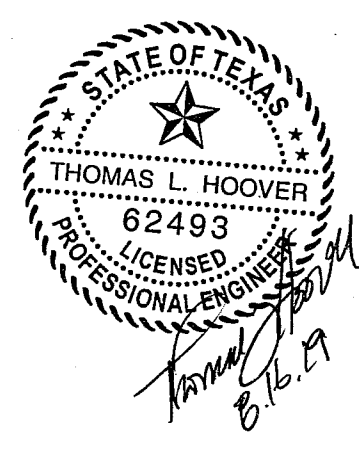




NO.	REVISIONS/ SUBMISSIONS	DATE



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CITY OF KELLER
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Public Works Director/City Engineer



VICINITY MAP
SCALE: 1"=1000'

 **CITY OF KELLER
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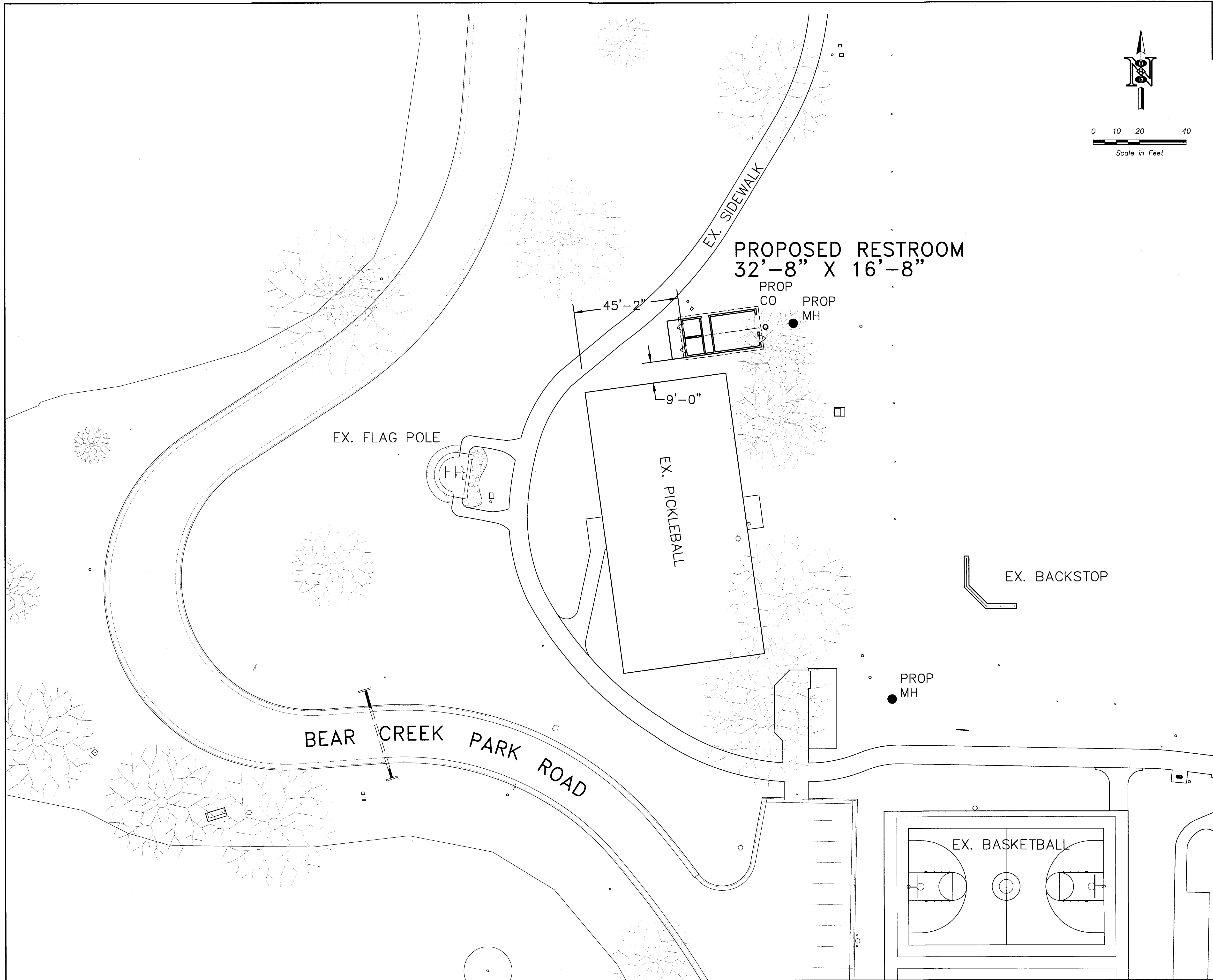
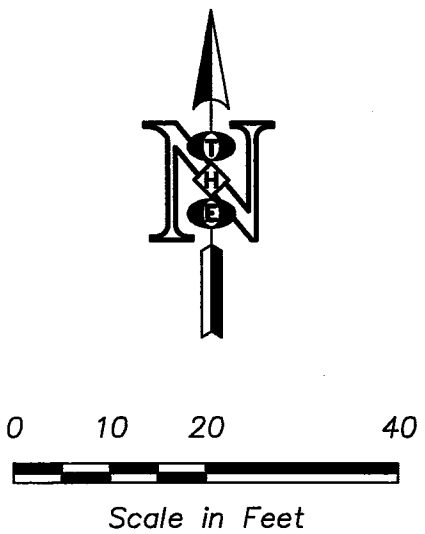
 **THOMAS HOOVER ENGINEERING, LLC**
P.O. BOX 1808
KELLER, TEXAS 76244
(817) 913-1350 PHONE
T.B.P.E. FIRM REGISTRATION NO. 006009

**BEAR CREEK PARK
SANITARY SEWER IMPROVEMENTS**

AMENDED SITE PLAN - OVERALL

DESIGNED TLH	SCALE 1" = 80'	PROJECT NO. 02-06544	SHEET C-2 of
DRAWN SDS	DATE 08-03-19		
CHECKED TLH			

NO.	REVISIONS/ SUBMISSIONS	DATE



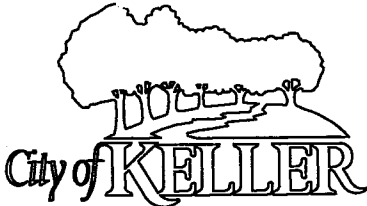
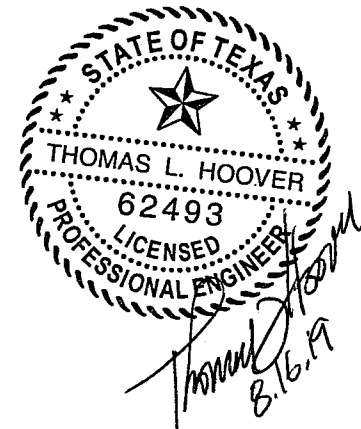
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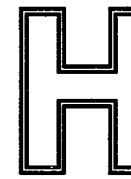
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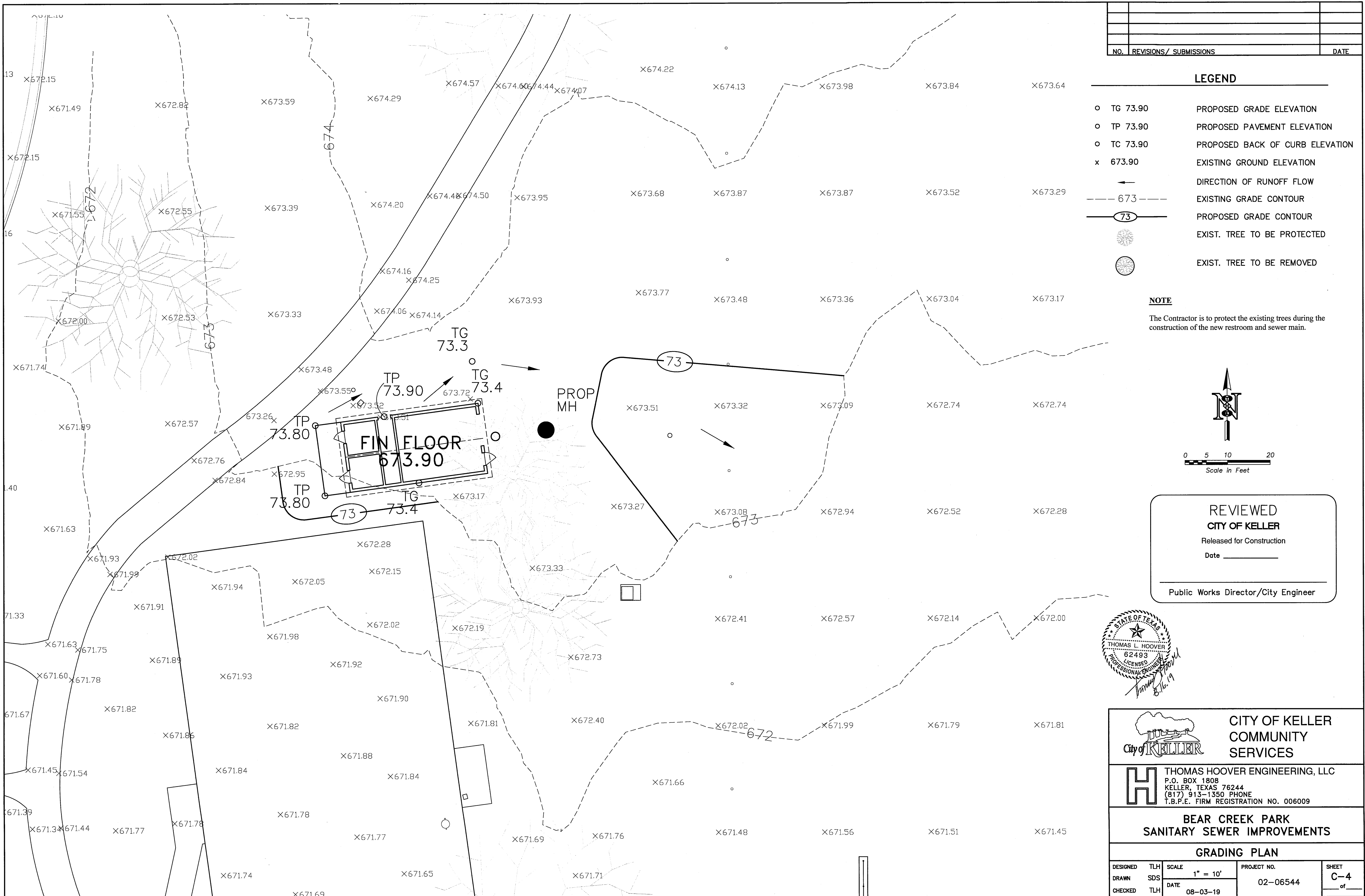


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**BEAR CREEK PARK
SANITARY SEWER IMPROVEMENTS**

SITE PLAN - ENLARGED

DESIGNED	TLH	SCALE	1" = 20'	PROJECT NO.	02-06544	SHEET	C-3
DRAWN	SDS	DATE	08-03-19			of	
CHECKED	TLH						



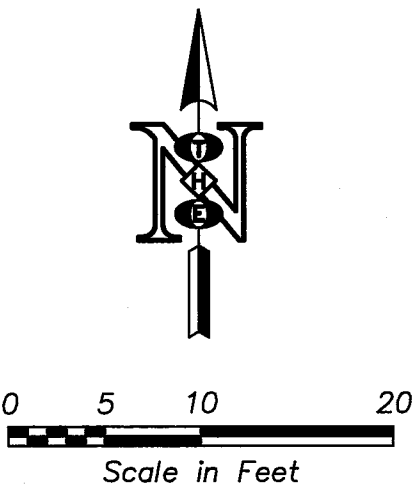
NO.	REVISIONS/ SUBMISSIONS	DATE

LEGEND

- TG 73.90 PROPOSED GRADE ELEVATION
- TP 73.90 PROPOSED PAVEMENT ELEVATION
- TC 73.90 PROPOSED BACK OF CURB ELEVATION
- x 673.90 EXISTING GROUND ELEVATION
- DIRECTION OF RUNOFF FLOW
- 673 --- EXISTING GRADE CONTOUR
- 73 ○ PROPOSED GRADE CONTOUR
- EXIST. TREE TO BE PROTECTED
- EXIST. TREE TO BE REMOVED

NOTE

The Contractor is to protect the existing trees during the construction of the new restroom and sewer main.



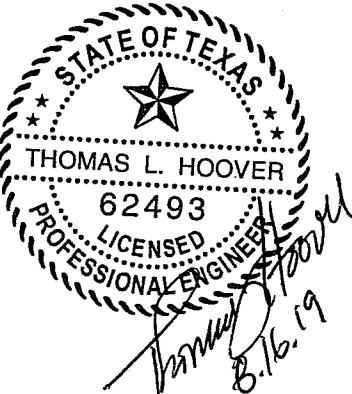
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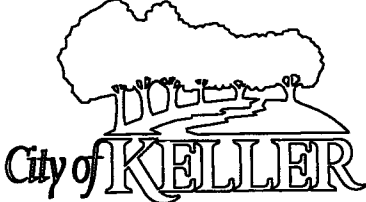
CITY OF KELLER

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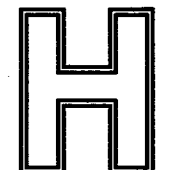
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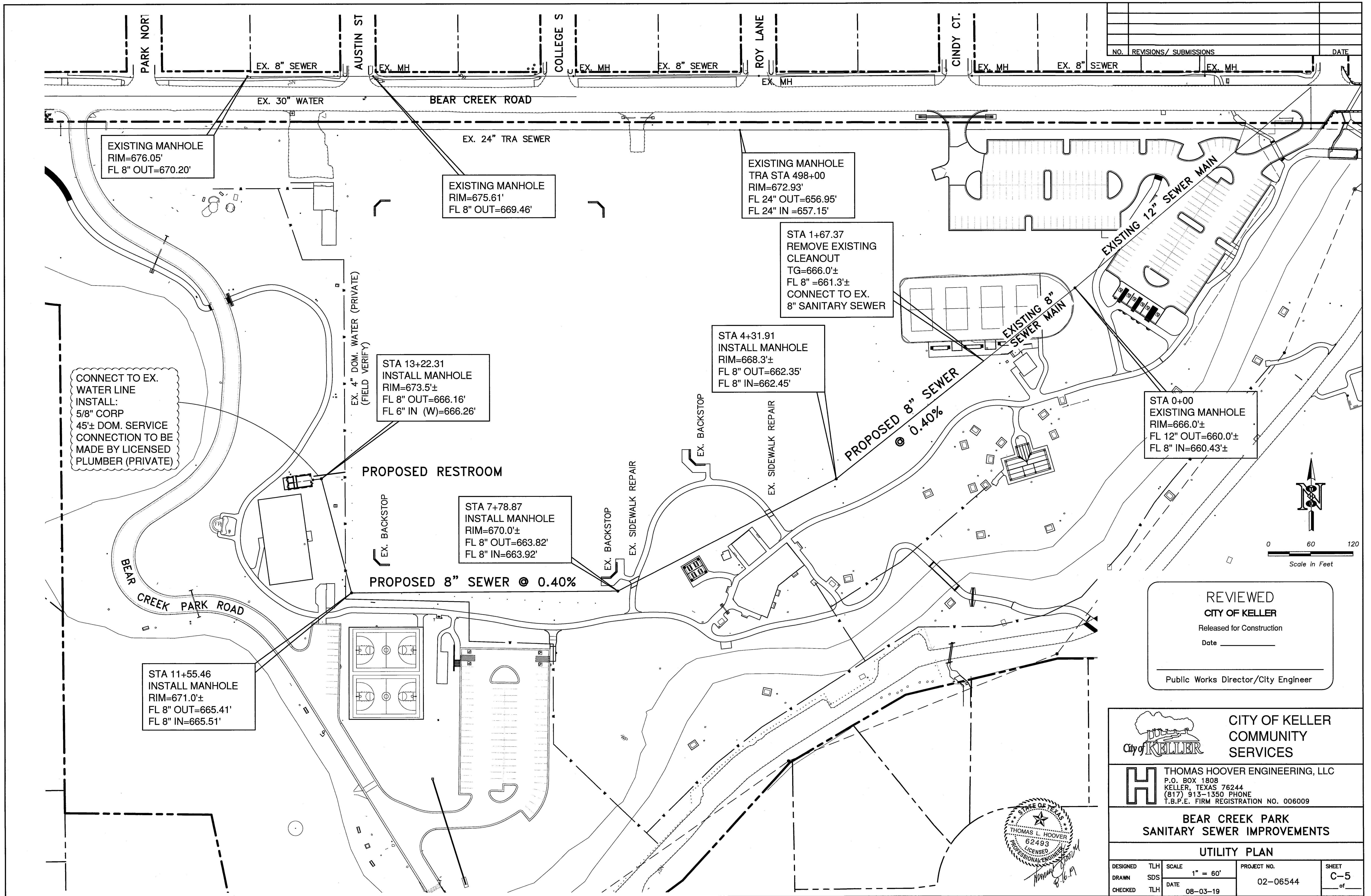


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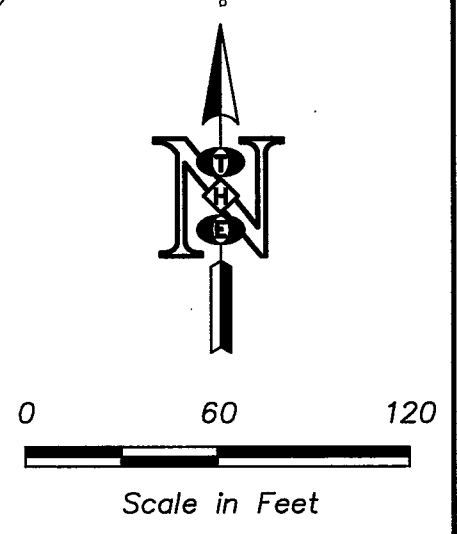
BEAR CREEK PARK
SANITARY SEWER IMPROVEMENTS

GRADING PLAN

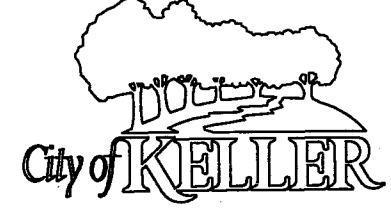
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DRAWN	SDS	DATE	08-03-19			
CHECKED	TLH					



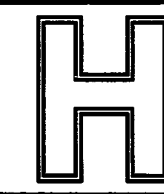
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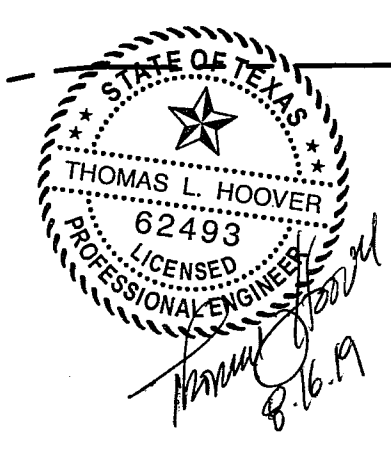


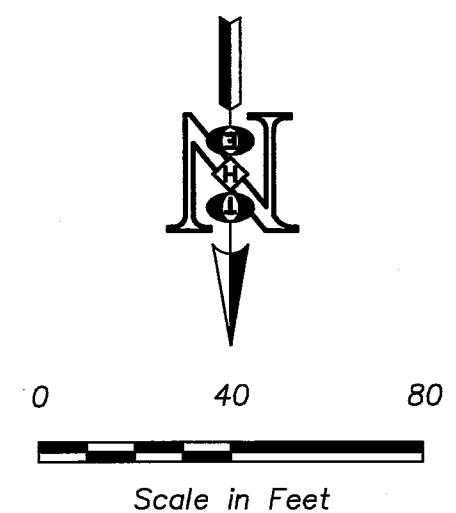
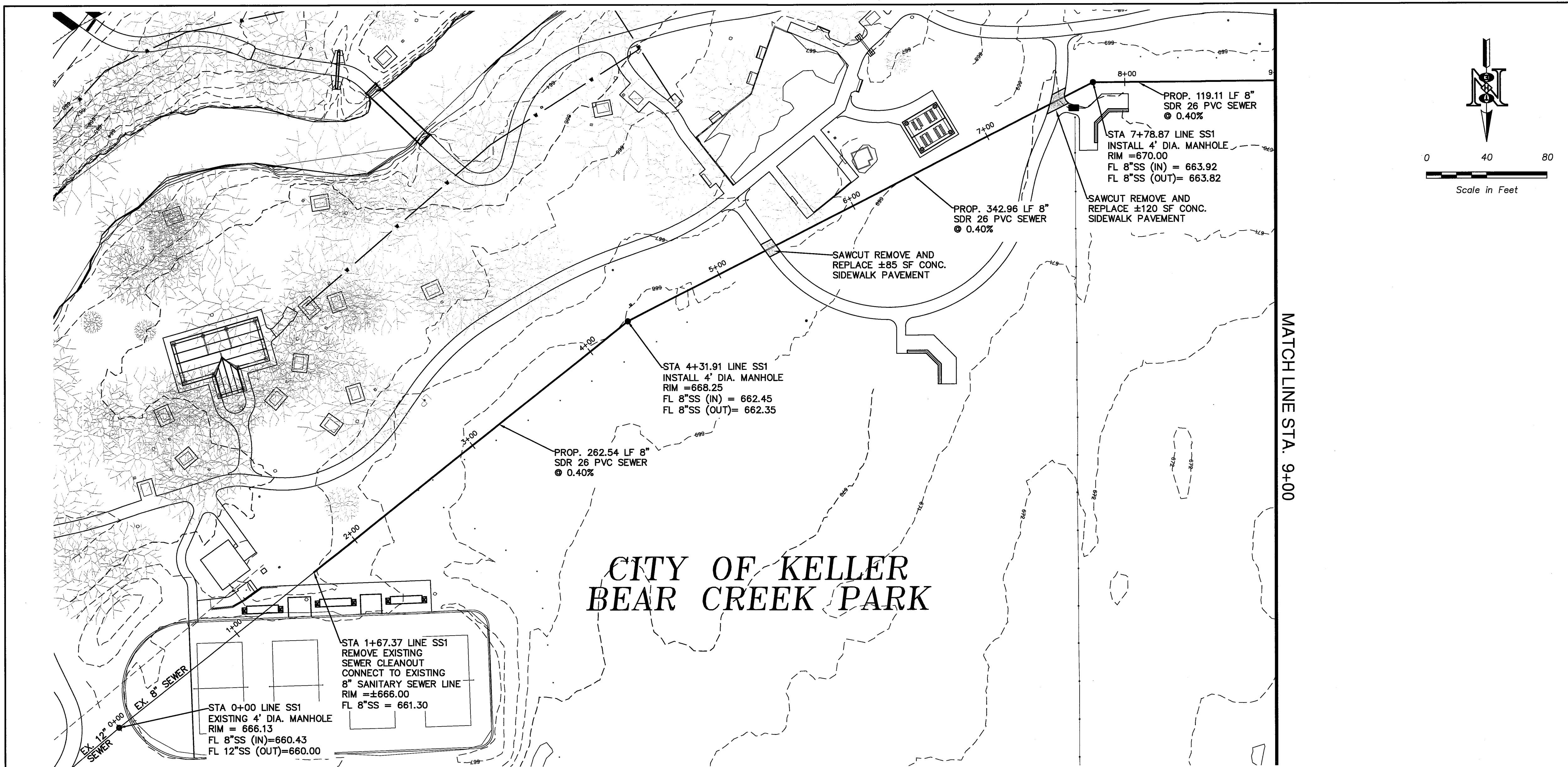
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**BEAR CREEK PARK
SANITARY SEWER IMPROVEMENTS**

UTILITY PLAN

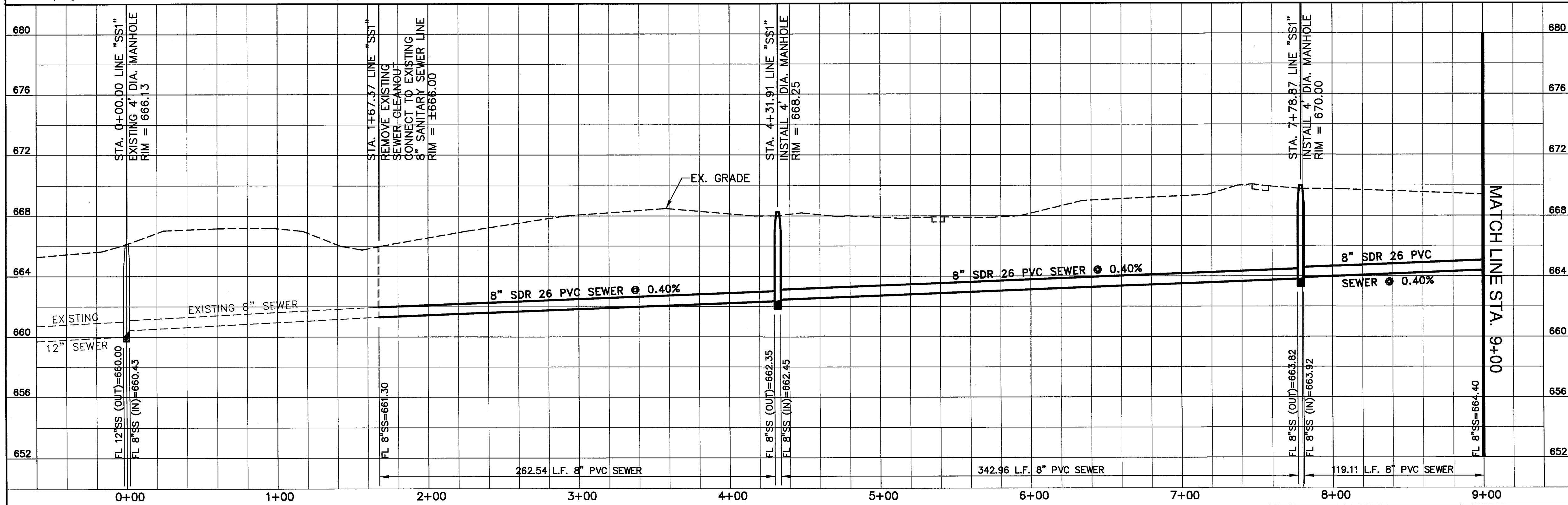
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DRAWN SDS	DATE 08-03-19		
CHECKED TLH			





CITY OF KELLER BEAR CREEK PARK

MATCH LINE STA. 9+00

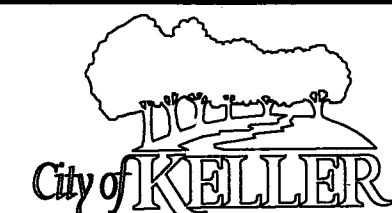
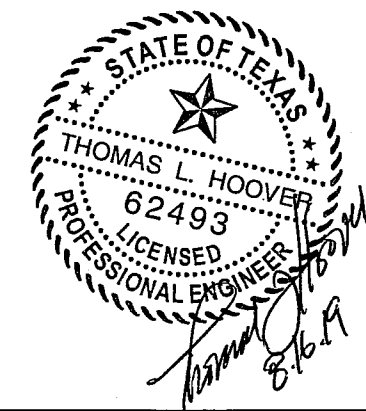


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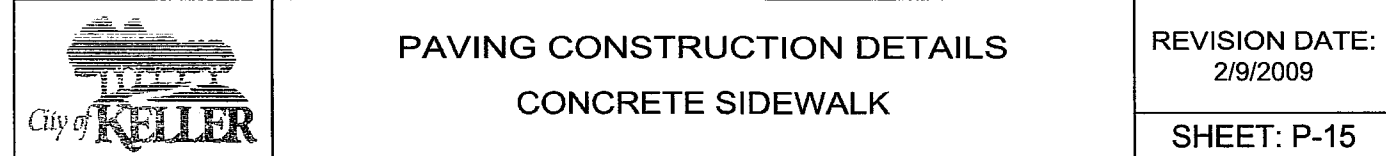
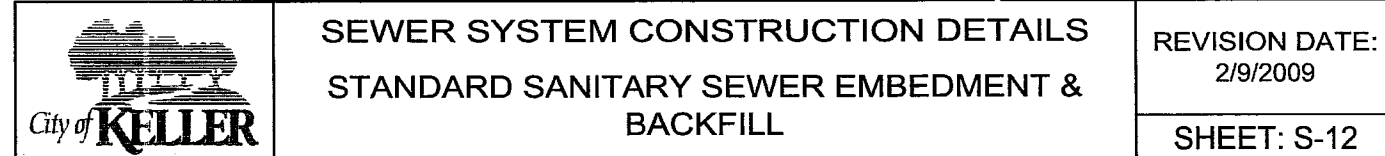
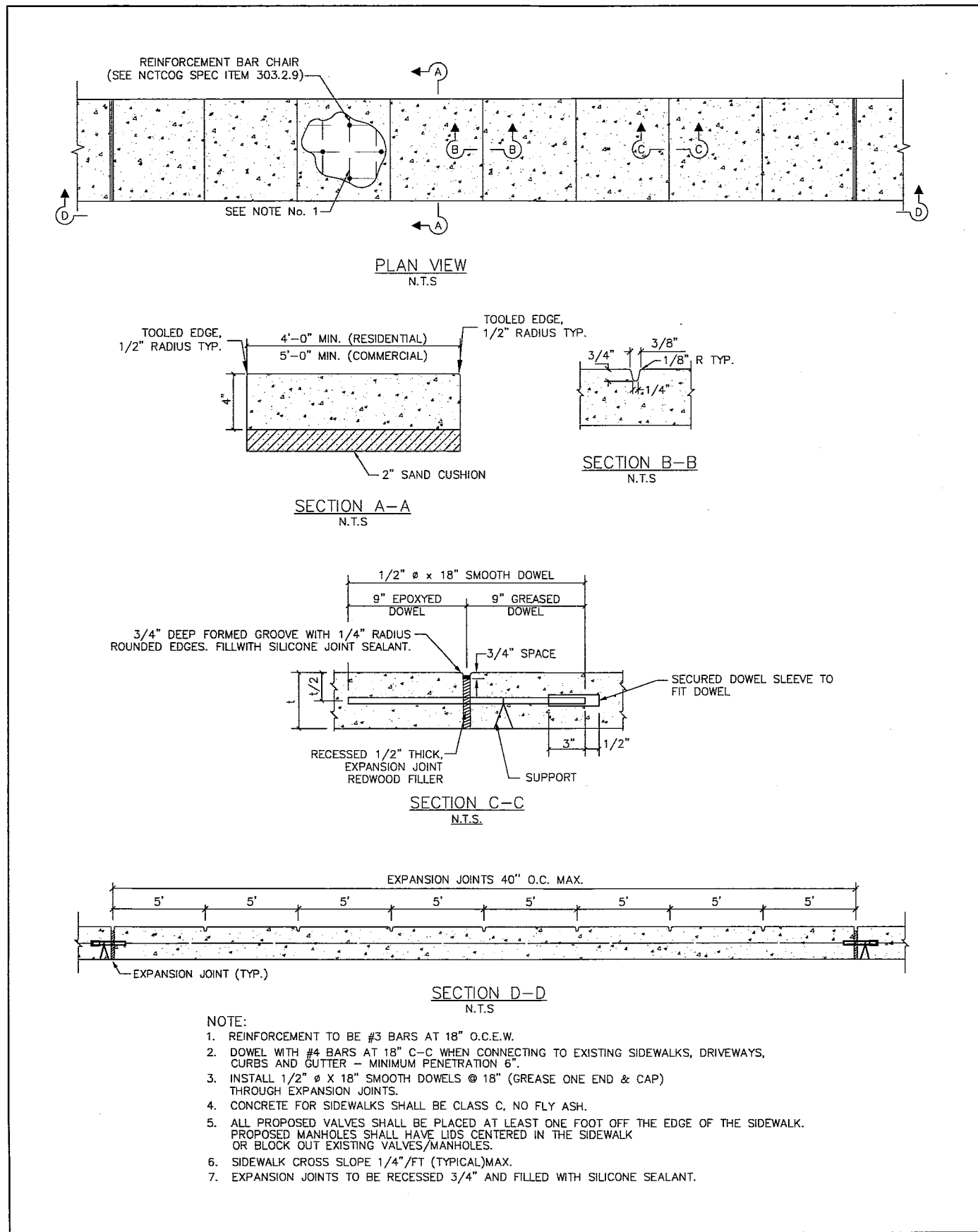
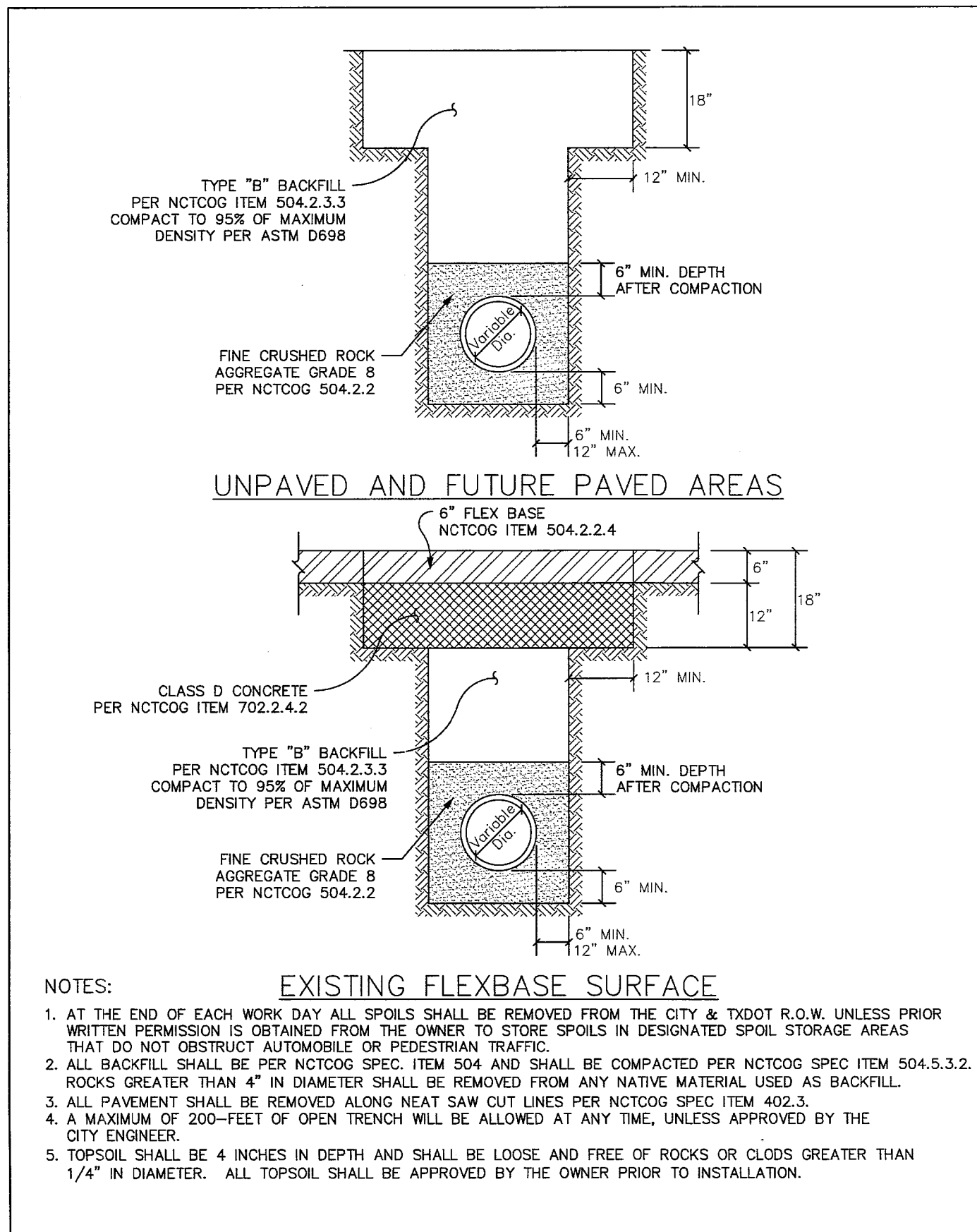
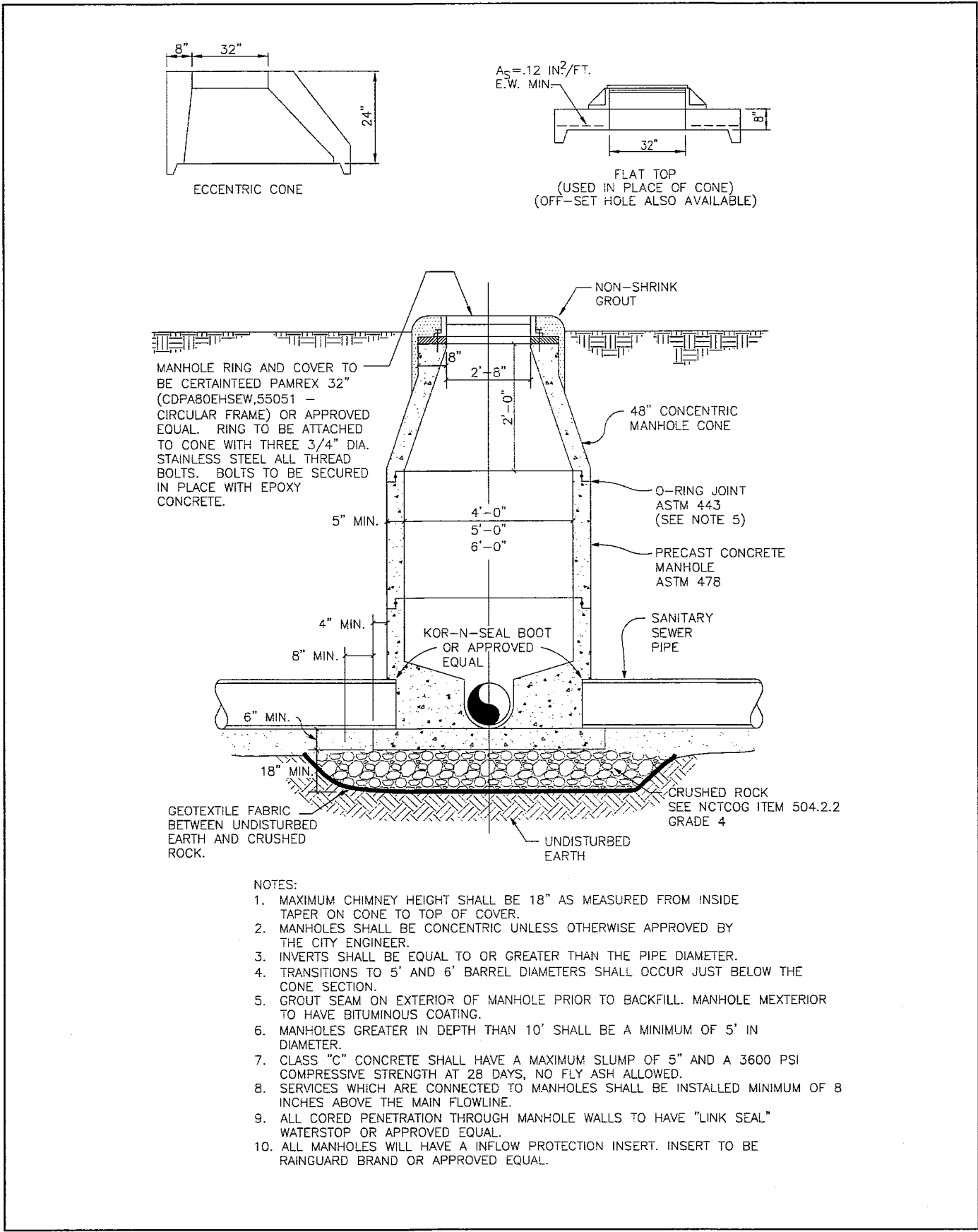
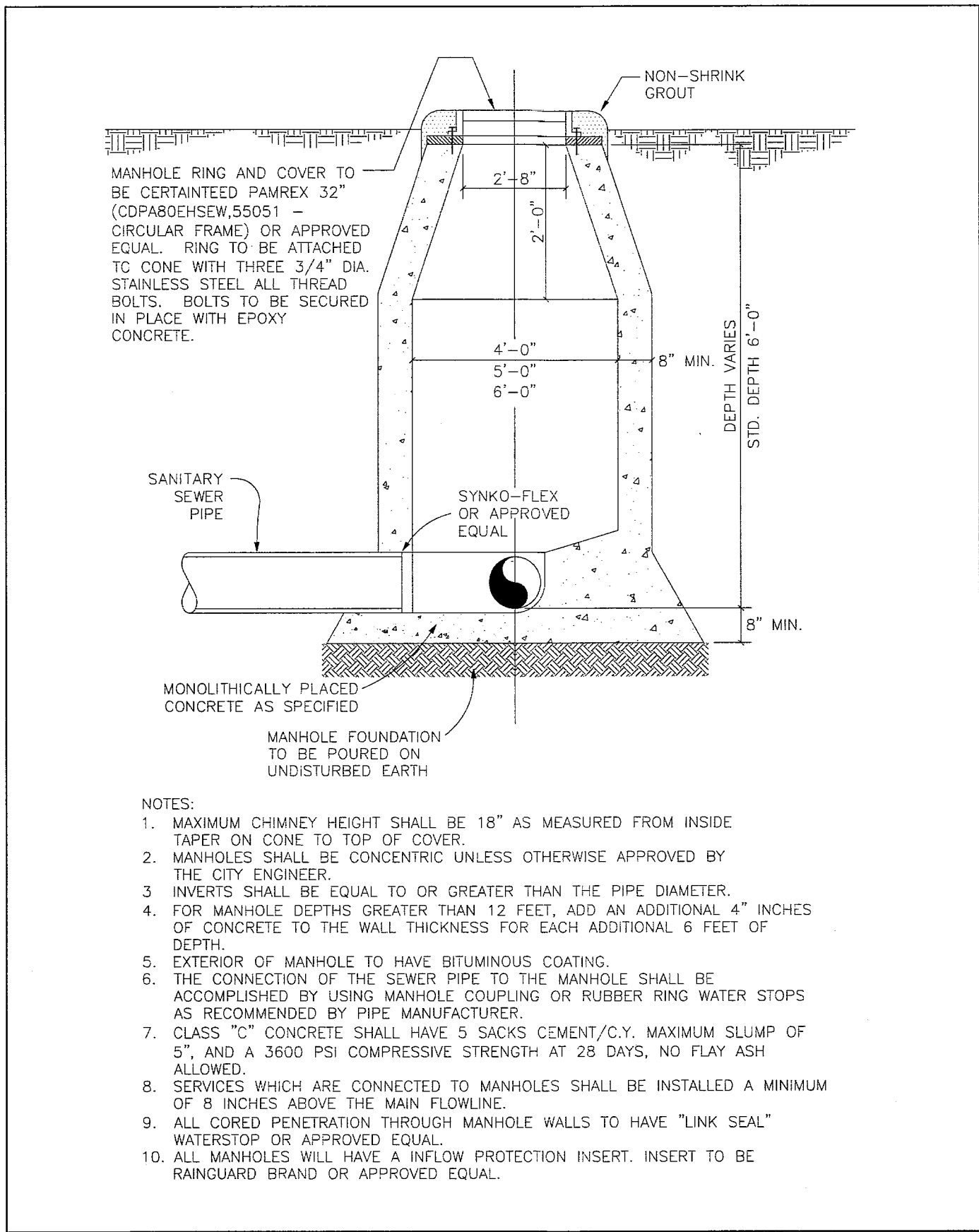
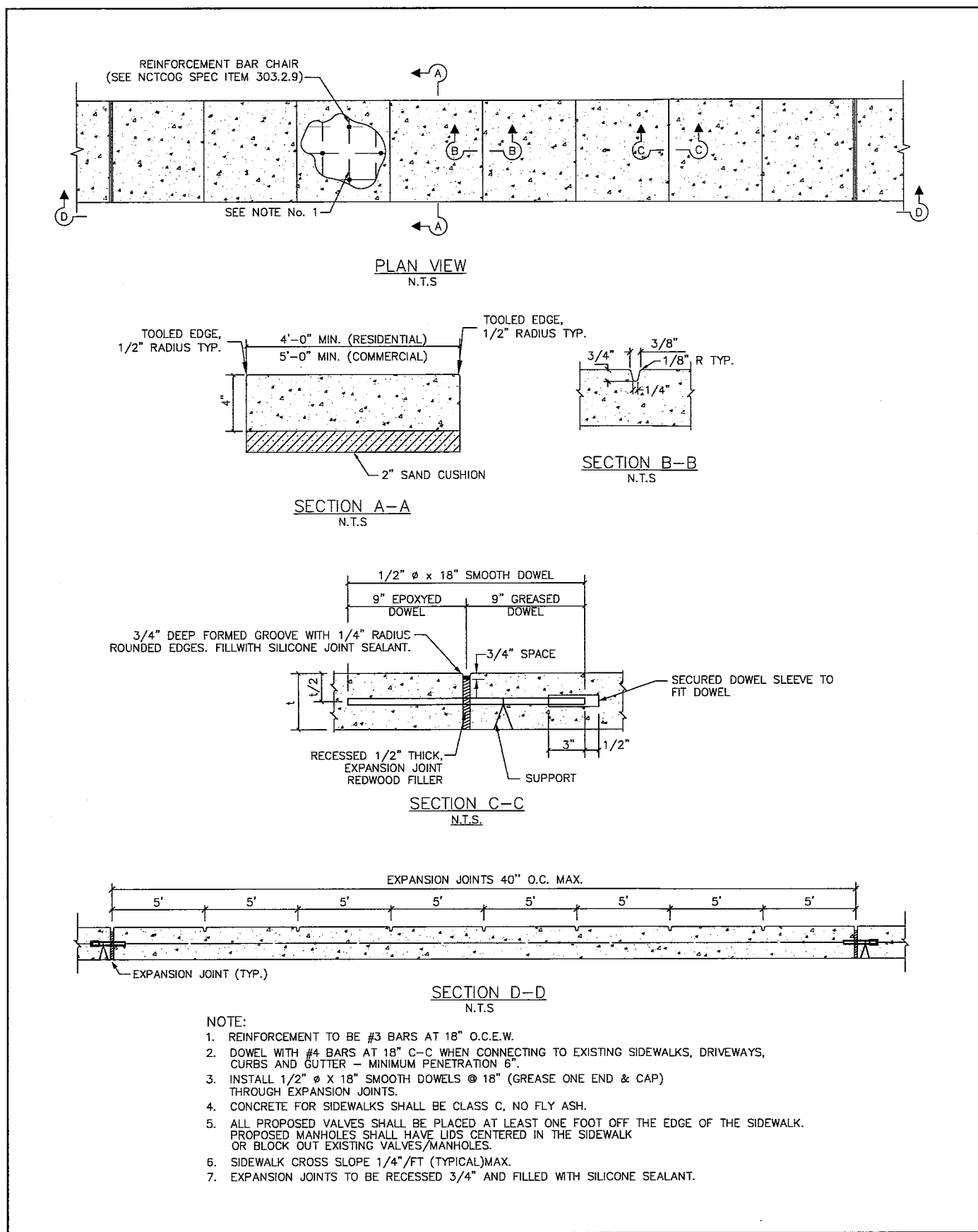


CITY OF KELLER
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**BEAR CREEK PARK
SANITARY SEWER IMPROVEMENTS**
**SANITARY SEWER PLAN & PROFILE
STA. 0+00 TO 9+00**

DESIGNED TLH	SCALE 1"=4' V 1"=40' H	PROJECT NO. 02-06544	SHEET C-6 of
DRAWN SDS	DATE 08-03-19		
CHECKED TLH			



NO.	REVISIONS / SUBMISSIONS	DATE

REVIEWED
CITY OF KELLER
Released for Construction
Date _____
Public Works Director/City Engineer

**CITY OF KELLER
COMMUNITY SERVICES**

THOMAS HOOVER ENGINEERING, LLC
P.O. BOX 1808
KELLER, TEXAS 76244
(817) 913-1350 PHONE
T.B.P.E. FIRM REGISTRATION NO. 006009

**BEAR CREEK PARK
SANITARY SEWER IMPROVEMENTS**

DETAILS

DESIGNED	TLH	SCALE	AS SHOWN	PROJECT NO.	02-06544	SHEET	C-8
DRAWN	SDS	DATE	08-03-19				of
CHECKED	TLH						

