



**REVIEW BY FORT BEND COUNTY  
COMMISSIONERS COURT**

**Fort Bend County  
Engineering Department**  
301 Jackson Suite 401  
Richmond, Texas 77469  
281.633.7500  
Permits@fortbendcountytx.gov

Right of Way Permit  
 Commercial Driveway Permit  
 Permit No: 2017-13486

**Applicant:** D.L. Meacham, LP

**Job Location Site:** 22505 Williams Oak Lane, Richmond, TX 77469

**Bond No.** ██████████ **Date of Bond:** 3/24/2014 **Amount:** \$50,000.00

The above applicant came to make use of certain Fort Bend County property subject to, "The Order Regulating the Laying, Construction, Maintenance, and Repair of Buried Cables, Conduits, and Pole Lines, In, Under, Across or Along Roads, Streets, Highways, and Drainage Ditches in Fort Bend County, Texas, Under the Jurisdiction of the Commissioners Court of Fort Bend County, Texas," as passed by the Commissioners Court of Fort Bend County, Texas, of the Minutes of the Commissioners Court of Fort Bend County, Texas, to the extent that such order is not inconsistent with Chapter 181, Vernon's Texas Statutes and Codes Annotated.

**Notes:**

1. Evidence of review by the Commissioners Court must be kept on the job site and failure to do so constitutes grounds for job shutdown.
2. Written notices are required:
  - a. 48 hours in advance of construction start up, and
  - b. When construction is completed and ready for final inspection, submit notification to Permit Administrator thru MyGovernmentOnline.org portal.
3. This permit expires one (1) year from date of permit if construction has not commenced.

On this 9th day of May, 2017, Upon Motion of Commissioner Meyers, seconded by Commissioner MORales, duly put and carried, it is ORDERED, ADJUDGED AND DECREED that said notice of said above purpose is hereby acknowledged by the Commissioners Court of Fort Bend County, Texas, and that said notice be placed on record according to the regulation order thereof.

**Signature**

Presented to Commissioners Court and approved.

By: Chandy O. AJ  
 County Engineer

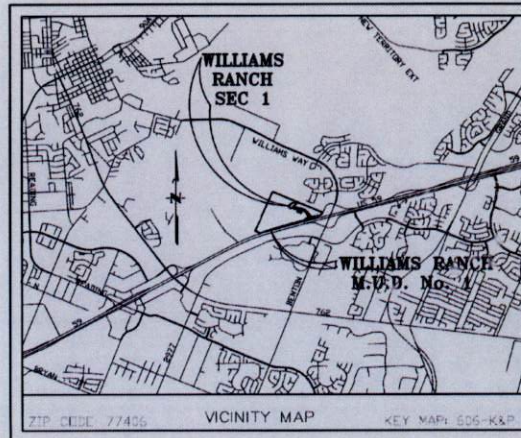
Date Recorded 5-15-2017 Comm. Court No. 11B

By: N/A  
 Drainage District Engineer/Manager

Clerk of Commissioners Court  
 By: Jonda Willes  
 Deputy



**PROPOSED RECREATION CENTER  
TO SERVE  
WILLIAMS RANCH-PHASE III  
LOCATED NORTH OF THE INTERSECTION AT:  
WILLIAMS OAK LANE AND WILLIAMS RANCH DRIVE  
RICHMOND, TEXAS 77406  
(FORT BEND COUNTY)**



<b>INDEX OF DRAWINGS</b>	
SHT. NO.	DESCRIPTION
1	COVER SHEET
2	COPY OF PLAT
3	GRADING & UTILITIES LAYOUT (C-1.01)
4	STORM SEWER LAYOUT (C-2.01)
5	STORM TABLE CALCULATIONS (C-2.02)
6	SWPPP LAYOUT (C-3.01)
7	NOTES AND DETAILS (C-4.01)
8-12	CITY OF RICHMOND NOTES AND DETAILS (C-5.01-5.05)
13	FORT BEND COUNTY NOTES AND DETAILS (C-6.01)
14	PED-12A DETAILS (C-7.01)
15	TCP FOR DRIVEWAY CONNECTION (C-7.01)
16	LANDSCAPE AND GRADING PLAN (L-2.01 BY OTHERS)
17	HARDSCAPE PLAN (L-3.01 BY OTHERS)
18	PLANTING PLAN (L-4.01 BY OTHERS)
19	PLANTING NOTES, SCHEDULES & DETAILS (L-4.02 BY OTHERS)

THIS SITE IS LOCATED WITHIN THE BOUNDARIES OF FORT BEND COUNTY MUD NO. 1.

**FORT BEND COUNTY ENGINEER**

ENGINEER: Richard W. Stolleis, P.E.  
For RICHARD W. STOLLEIS, P.E.

DATE: 3/15/17

THESE SIGNATURES ARE VOID IF CONSTRUCTION HAS NOT COMMENCED IN ONE (1) YEAR FROM DATE OF APPROVAL.

APPROVED: Maxwell  
 DEVELOPMENT COORDINATOR

DATE: 3/19/17

TEXAS ENGINEERING & MAPPING CO.  
REGISTRATION # F-2908



Digitally signed by  
 Carlos J. Barillas  
 Date: 2017.02.13  
 18:01:07 -0600

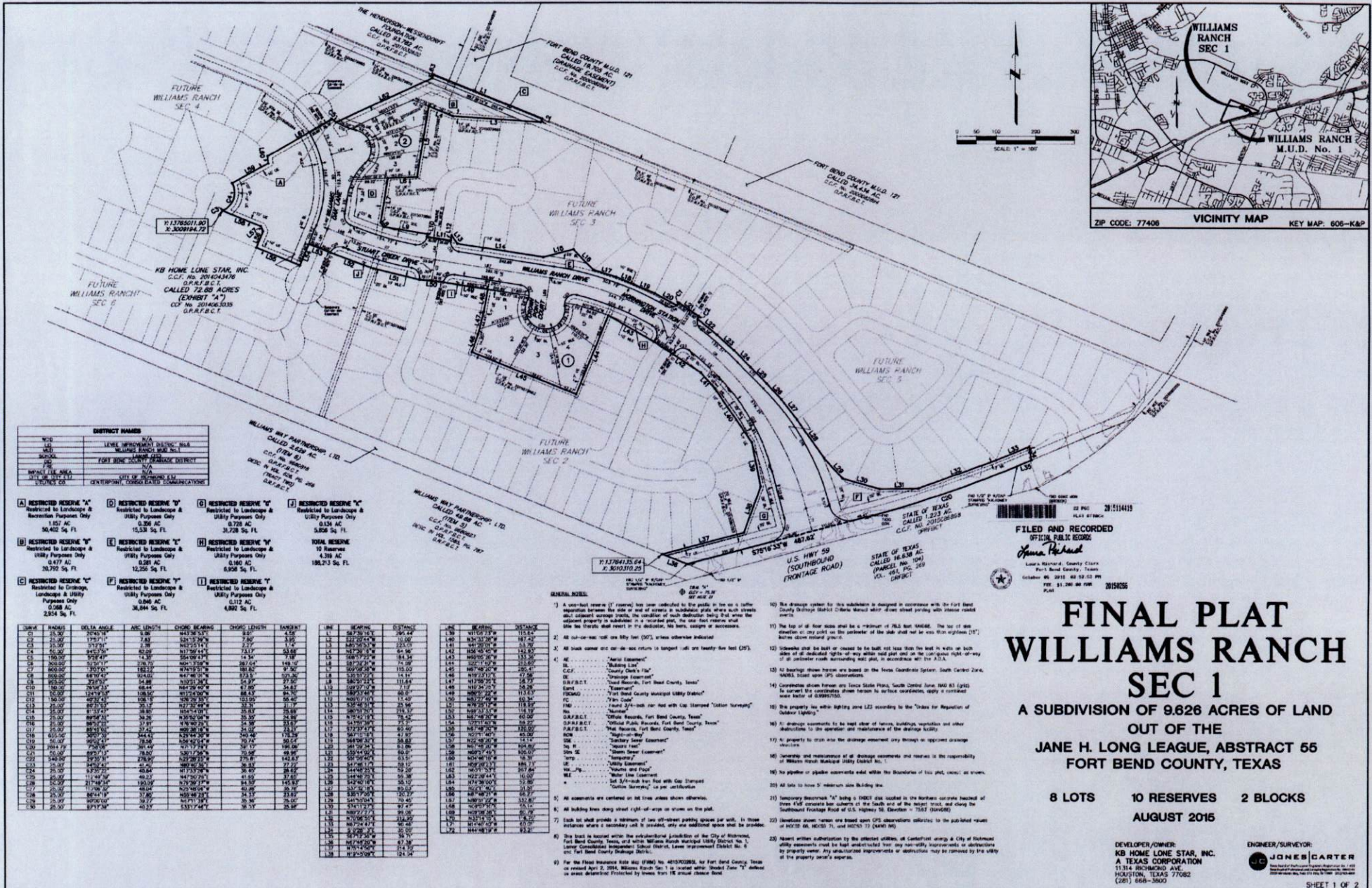


TEXAS ENGINEERING AND MAPPING CO.  
 12810 CENTURY DRIVE  
 STAFFORD, TEXAS 77477  
 PHONE (817) 481-8248 FAX (817) 481-8205

SHEET NUMBER

1 OF 19

PLAT NAME: FINAL PLAT WILLIAMS RANCH SECTION 1



DISTRICT NAME	LEVEL	RECORDING AGENCY
W-10	W-10	W-10
W-11	W-11	W-11
W-12	W-12	W-12
W-13	W-13	W-13
W-14	W-14	W-14
W-15	W-15	W-15
W-16	W-16	W-16
W-17	W-17	W-17
W-18	W-18	W-18
W-19	W-19	W-19
W-20	W-20	W-20

- A) RESTRICTED RESERVE "A" Restricted to Landscaping & Recreation Purpose Only 1.887 AC 50,402 Sq. Ft.
- B) RESTRICTED RESERVE "B" Restricted to Landscaping & Utility Purpose Only 0.477 AC 30,797 Sq. Ft.
- C) RESTRICTED RESERVE "C" Restricted to Landscaping, Landscaping & Utility Purpose Only 0.268 AC 2,854 Sq. Ft.
- D) RESTRICTED RESERVE "D" Restricted to Landscaping & Utility Purpose Only 0.386 AC 15,538 Sq. Ft.
- E) RESTRICTED RESERVE "E" Restricted to Landscaping & Utility Purpose Only 0.281 AC 12,256 Sq. Ft.
- F) RESTRICTED RESERVE "F" Restricted to Landscaping & Utility Purpose Only 0.866 AC 38,844 Sq. Ft.
- G) RESTRICTED RESERVE "G" Restricted to Landscaping & Utility Purpose Only 0.728 AC 37,228 Sq. Ft.
- H) RESTRICTED RESERVE "H" Restricted to Landscaping & Utility Purpose Only 0.960 AC 6,908 Sq. Ft.
- I) RESTRICTED RESERVE "I" Restricted to Landscaping & Utility Purpose Only 4.359 AC 186,713 Sq. Ft.
- J) RESTRICTED RESERVE "J" Restricted to Landscaping & Utility Purpose Only 0.104 AC 7,262 Sq. Ft.

CURVE	BEARING	DELTA ANGLE	ARC LENGTH	CHORD BEARING	CHORD LENGTH	TANGENT
C1	25.00	72.00	3.80	243.50	3.80	4.52
C2	25.00	175.11	7.83	241.24	7.80	8.95
C3	25.00	101.69	2.98	243.50	2.97	3.50
C4	25.00	83.70	62.09	817.50	73.17	83.88
C5	100.00	92.00	14.30	14.30	14.30	7.39
C6	300.00	73.31	2.76	243.50	2.76	3.32
C7	300.00	120.00	18.84	18.84	18.84	9.78
C8	300.00	69.70	18.49	18.49	18.49	10.20
C9	300.00	27.00	34.88	34.88	34.88	24.87
C10	300.00	124.70	58.49	58.49	58.49	34.87
C11	25.00	102.00	10.19	10.19	10.19	5.00
C12	25.00	102.00	35.28	35.28	35.28	17.59
C13	25.00	102.00	36.28	36.28	36.28	18.29
C14	25.00	102.00	37.28	37.28	37.28	18.99
C15	25.00	102.00	38.28	38.28	38.28	19.69
C16	25.00	102.00	39.28	39.28	39.28	20.39
C17	25.00	102.00	40.28	40.28	40.28	21.09
C18	25.00	102.00	41.28	41.28	41.28	21.79
C19	25.00	102.00	42.28	42.28	42.28	22.49
C20	25.00	102.00	43.28	43.28	43.28	23.19
C21	25.00	102.00	44.28	44.28	44.28	23.89
C22	25.00	102.00	45.28	45.28	45.28	24.59
C23	25.00	102.00	46.28	46.28	46.28	25.29
C24	25.00	102.00	47.28	47.28	47.28	25.99
C25	25.00	102.00	48.28	48.28	48.28	26.69
C26	25.00	102.00	49.28	49.28	49.28	27.39
C27	25.00	102.00	50.28	50.28	50.28	28.09
C28	25.00	102.00	51.28	51.28	51.28	28.79
C29	25.00	102.00	52.28	52.28	52.28	29.49
C30	25.00	102.00	53.28	53.28	53.28	30.19
C31	25.00	102.00	54.28	54.28	54.28	30.89
C32	25.00	102.00	55.28	55.28	55.28	31.59
C33	25.00	102.00	56.28	56.28	56.28	32.29
C34	25.00	102.00	57.28	57.28	57.28	32.99
C35	25.00	102.00	58.28	58.28	58.28	33.69
C36	25.00	102.00	59.28	59.28	59.28	34.39
C37	25.00	102.00	60.28	60.28	60.28	35.09
C38	25.00	102.00	61.28	61.28	61.28	35.79
C39	25.00	102.00	62.28	62.28	62.28	36.49
C40	25.00	102.00	63.28	63.28	63.28	37.19
C41	25.00	102.00	64.28	64.28	64.28	37.89
C42	25.00	102.00	65.28	65.28	65.28	38.59
C43	25.00	102.00	66.28	66.28	66.28	39.29
C44	25.00	102.00	67.28	67.28	67.28	39.99
C45	25.00	102.00	68.28	68.28	68.28	40.69
C46	25.00	102.00	69.28	69.28	69.28	41.39
C47	25.00	102.00	70.28	70.28	70.28	42.09
C48	25.00	102.00	71.28	71.28	71.28	42.79
C49	25.00	102.00	72.28	72.28	72.28	43.49
C50	25.00	102.00	73.28	73.28	73.28	44.19
C51	25.00	102.00	74.28	74.28	74.28	44.89
C52	25.00	102.00	75.28	75.28	75.28	45.59
C53	25.00	102.00	76.28	76.28	76.28	46.29
C54	25.00	102.00	77.28	77.28	77.28	46.99
C55	25.00	102.00	78.28	78.28	78.28	47.69
C56	25.00	102.00	79.28	79.28	79.28	48.39
C57	25.00	102.00	80.28	80.28	80.28	49.09
C58	25.00	102.00	81.28	81.28	81.28	49.79
C59	25.00	102.00	82.28	82.28	82.28	50.49
C60	25.00	102.00	83.28	83.28	83.28	51.19
C61	25.00	102.00	84.28	84.28	84.28	51.89
C62	25.00	102.00	85.28	85.28	85.28	52.59
C63	25.00	102.00	86.28	86.28	86.28	53.29
C64	25.00	102.00	87.28	87.28	87.28	53.99
C65	25.00	102.00	88.28	88.28	88.28	54.69
C66	25.00	102.00	89.28	89.28	89.28	55.39
C67	25.00	102.00	90.28	90.28	90.28	56.09
C68	25.00	102.00	91.28	91.28	91.28	56.79
C69	25.00	102.00	92.28	92.28	92.28	57.49
C70	25.00	102.00	93.28	93.28	93.28	58.19
C71	25.00	102.00	94.28	94.28	94.28	58.89
C72	25.00	102.00	95.28	95.28	95.28	59.59
C73	25.00	102.00	96.28	96.28	96.28	60.29
C74	25.00	102.00	97.28	97.28	97.28	60.99
C75	25.00	102.00	98.28	98.28	98.28	61.69
C76	25.00	102.00	99.28	99.28	99.28	62.39
C77	25.00	102.00	100.28	100.28	100.28	63.09
C78	25.00	102.00	101.28	101.28	101.28	63.79
C79	25.00	102.00	102.28	102.28	102.28	64.49
C80	25.00	102.00	103.28	103.28	103.28	65.19
C81	25.00	102.00	104.28	104.28	104.28	65.89
C82	25.00	102.00	105.28	105.28	105.28	66.59
C83	25.00	102.00	106.28	106.28	106.28	67.29
C84	25.00	102.00	107.28	107.28	107.28	67.99
C85	25.00	102.00	108.28	108.28	108.28	68.69
C86	25.00	102.00	109.28	109.28	109.28	69.39
C87	25.00	102.00	110.28	110.28	110.28	70.09
C88	25.00	102.00	111.28	111.28	111.28	70.79
C89	25.00	102.00	112.28	112.28	112.28	71.49
C90	25.00	102.00	113.28	113.28	113.28	72.19
C91	25.00	102.00	114.28	114.28	114.28	72.89
C92	25.00	102.00	115.28	115.28	115.28	73.59
C93	25.00	102.00	116.28	116.28	116.28	74.29
C94	25.00	102.00	117.28	117.28	117.28	74.99
C95	25.00	102.00	118.28	118.28	118.28	75.69
C96	25.00	102.00	119.28	119.28	119.28	76.39
C97	25.00	102.00	120.28	120.28	120.28	77.09
C98	25.00	102.00	121.28	121.28	121.28	77.79
C99	25.00	102.00	122.28	122.28	122.28	78.49
C100	25.00	102.00	123.28	123.28	123.28	79.19

LINE	BEARING	DISTANCE	LINE	BEARING	DISTANCE
1	S82°28'10"W	29.44	19	N11°01'33"W	112.14
2	S22°22'45"W	12.00	20	S21°32'28"W	187.42
3	S45°25'25"W	22.01	21	S70°25'10"W	11.59
4	S68°28'10"W	64.96	22	S68°45'20"W	143.89
5	S82°28'10"W	84.54	23	S60°05'20"W	133.50
6	S82°28'10"W	74.99	24	S41°32'10"W	223.89
7	S82°28'10"W	65.44	25	S22°22'45"W	266.41
8	S82°28'10"W	55.89	26	S03°25'10"W	47.50
9	S82°28'10"W	46.34	27	N03°25'10"W	47.50
10	S82°28'10"W	36.79	28	N11°01'33"W	112.14
11	S82°28'10"W	27.24	29	N18°38'40"W	187.42
12	S82°28'10"W	17.69	30	N26°15'45"W	262.70
13	S82°28'10"W	8.14	31	N33°52'50"W	337.98
14	S82°28'10"W	-1.41	32	N41°29'55"W	413.26
15	S82°28'10"W	-10.96	33	N49°07'00"W	488.54
16	S82°28'10"W	-20.51	34	N56°44'05"W	563.82
17	S82°28'10"W	-30.06	35	N64°21'10"W	639.10
18	S82°28'10"W	-39.61	36	N71°58'15"W	714.38
19	S82°28'10"W	-49.16	37	N79°35'20"W	789.66
20	S82°28'10"W	-58.71	38	N87°12'25"W	864.94
21	S82°28'10"W	-68.26	39	N94°49'30"W	940.22
22	S82°28'10"W	-77.81	40	N102°26'35"W	1015.50
23	S82°28'10"W	-87.36	41	N110°03'40"W	1090.78
24	S82°28'10"W	-96.91	42	N117°40'45"W	1166.06
25	S82°28'10"W	-106.46	43	N125°17'50"W	1241.34
26	S82°28'10"W	-116.01	44	N132°54'55"W	1316.62
27	S82°28'10"W	-125.56	45	N140°32'00"W	1391.90
28	S82°28'10"W	-135.11	46	N148°09'05"W	1467.18
29	S82°28'10"W	-144.66	47	N155°46'10"W	1542.46
30	S82°28'10"W	-154.21	48	N163°23'15"W	1617.74
31	S82°28'10"W	-163.76	49	N171°00'20"W	1693.02
32	S82°28'10"W	-173.31	50	N178°37'25"W	1768.30
33	S82°28'10"W	-182.86	51	N186°14'30"W	1843.58
34	S82°28'10"W	-192.41	52	N193°51'35"W	1918.86
35	S82°28'10"W	-201.96	53	N201°28'40"W	1994.14
36	S82°28'10"W	-211.51	54	N209°05'45"W	2069.42
37	S82°28'10"W	-221.06	55	N216°42'50"W	2144.70
38	S82°28'10"W	-230.61	56	N224°19'55"W	2219.98
39	S82°28'10"W	-240.16	57	N231°57'00"W	2295.26
40	S82°28'10"W	-249.71	58	N239°34'05"W	2370.54
41	S82°28'10"W	-259.26	59	N247°11'10"W	2445.82
42	S82°28'10"W	-268.81	60	N254°48'15"W	2521.10
43	S82°28'10"W	-278.36	61	N262°25'20"W	2596.38
44	S82°28'10"W	-287.91	62	N270°02'25"W	2671.66
45	S82°28'10"W	-297.46	63	N277°39'30"W	2746.94
46	S82°28'10"W	-307.01	64	N285°16'35"W	2822.22
47	S82°28'10"W	-316.56	65	N292°53'40"W	2897.50
48	S82°28'10"W	-326.11	66	N300°30'45"W	2972.78
49	S82°28'10"W	-335.66	67	N308°07'50"W	3048.06
50	S82°28'10"W	-345.21	68	N315°44'55"W	3123.34
51	S82°28'10"W	-354.76	69	N323°22'00"W	3198.62
52	S82°28'10"W	-364.31</			

(STANDARD NO PARKING SIGN)



(A)



(B)



(C)

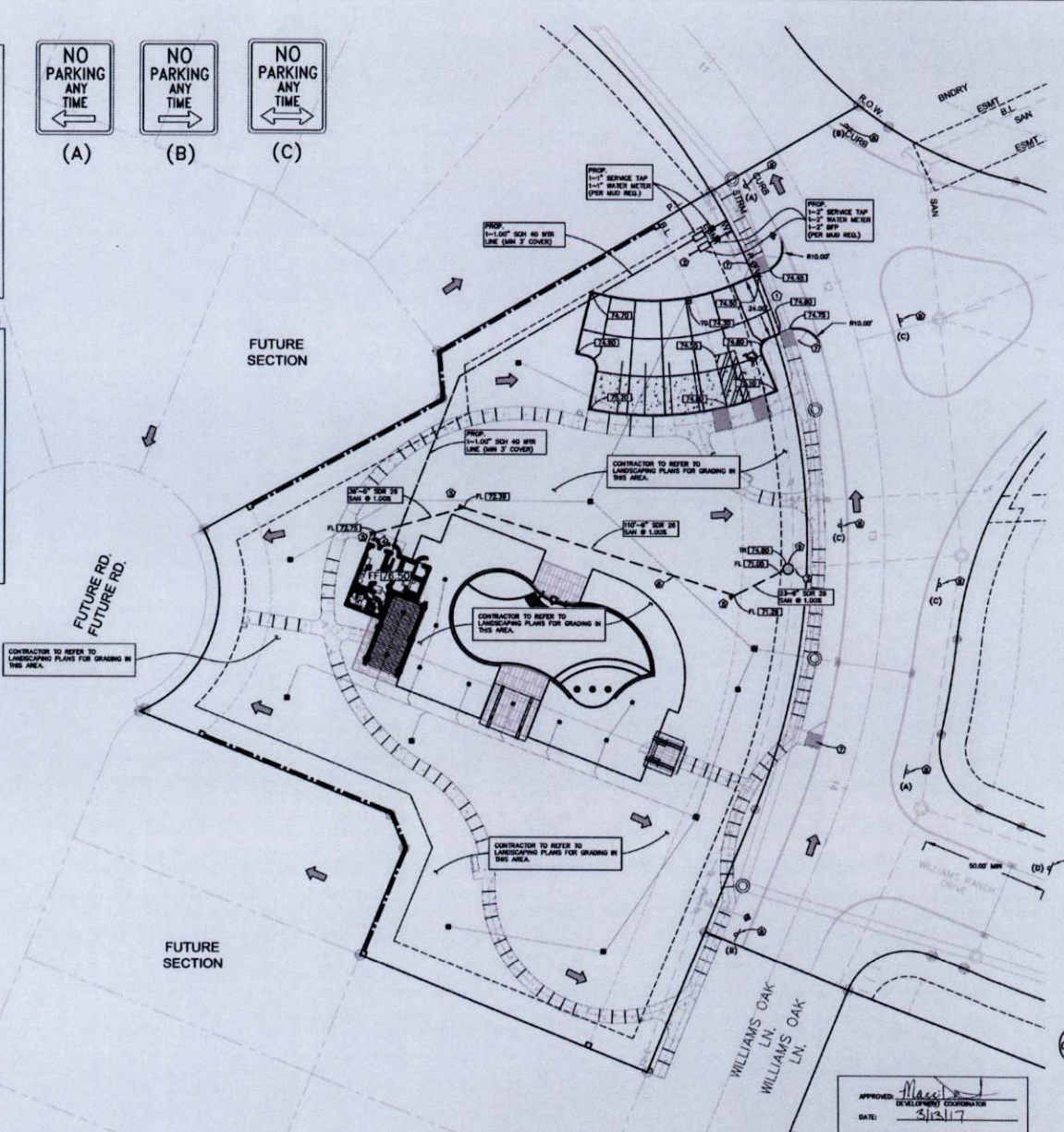
(STANDARD PLAYGROUND SIGN)



(D)

**LEGEND**

- SQUARE GRADE BEIT
- JUNCTION BOX
- TOP OF PAVEMENT
- TOP OF GRADE ELEV.
- TOP OF WALK ELEV.
- FLOWLINE ELEV.
- 6" THICK CONCRETE PAVEMENT
- 8" THICK CONCRETE PAVEMENT
- CONTROL JOINT
- EXPANSION JOINT
- 100-18 SHEET FLOW



- CONSTRUCTION NOTES:**
- CONTRACTOR SHALL CONSTRUCT PAVEMENT WITH SLOPE NO LESS THAN 0.2% AND NO GREATER THAN 8.0%. ANY PAVEMENT SLOPES THAT DO NOT COMPLY WITH THESE REQUIREMENTS SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
  - ALL PAVEMENT JOINTS SHALL ALIGN WITH ALL CURB JOINTS. ALL CURB JOINTS SHALL BE SEALED.
  - ALL SLEEVES SHALL HAVE A MAXIMUM CROSS SLOPE OF 2.0% PER ADA REQUIREMENTS.
  - CONTRACTOR TO OBTAIN ALL PERMITS REQUIRED BY FORT BEND COUNTY, TEXAS, PRIOR TO STARTING CONSTRUCTION OF UTILITY AND/OR CONDUITS WITHIN COUNTY ROADS OR TRUST RIGHTS OF WAY.
  - WHEN A LANDSCAPE MULCH IS INSTALLED ADJACENT TO THE BUILDING, THE LANDSCAPER SHALL PROVIDE A FRENCH DRAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE CONNECTION OF THE FRENCH DRAIN TO THE UNDERGROUND STORM SEWER USING A MINIMUM OF 1.0% OF BOTH THE FRENCH DRAIN AND STORM SEWER. P.E. COORDINATE WITH CIVIL ENGINEER FOR DETAIL IF NEEDED.
  - COORDINATE WITH ARCHITECT FOR ALL DEMOLITION.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH DRAINAGE PLAN AND ASSURE POSITIVE DRAINAGE FROM THE BUILDING OVER THE SIDEWALK AND TO THE PAVING LOT. ANY PROBLEMS ENCOUNTERED DURING CONSTRUCTION SHALL BE COORDINATED WITH THE ARCHITECT BEFORE FINAL CONSTRUCTION. IF LANDSCAPING BEDS ARE USED ADJACENT TO THE BUILDING CONTRACTOR SHALL ASSURE THAT DRAINAGE IS NOT BLOCKED. REFER TO LANDSCAPE FRENCH DRAIN DETAIL IF NEEDED.
  - CONTRACTOR SHALL COORDINATE WITH OWNER, GEOTECHNICAL ENGINEER AND STRUCTURAL ENGINEER FOR SELECT FILL REQUIREMENTS AND PROTECTIVE LINERS. BUILDING SHALL SEE SOILS REPORT FOR ALL REQUIRED SOILS. CONTRACTOR SHALL NOT PROCEED WITH CONSTRUCTION UNTIL THE REQUIRED SELECT FILL PROCEDURE UNDER BUILDING IS AND HAS BEEN APPROVED.
  - CONTRACTOR SHALL ALSO COORDINATE WITH SOILS REPORT FOR ALL REQUIRED FILL, COMPACTION AND LINE STABILIZATION UNDER PROPOSED PAVING SECTIONS.
  - CLEAN-OUTS, INLETS AND/OR JUNCTION BOXES LOCATED IN PAVEMENT OR SIDEWALK SHALL HAVE TRAFFIC BEARING LESS OF GRATES.
  - CONTRACTOR SHALL DETERMINE IF CONFLICT EXISTS AT ALL UTILITY CROSSINGS PRIOR TO STARTING CONSTRUCTION AND REPORT ANY CONFLICT TO ENGINEER IMMEDIATELY.
  - CONTRACTOR SHALL ALSO COORDINATE WITH SOILS REPORT FOR ALL PROPOSED FILL, COMPACTION AND LINE STABILIZATION UNDER PROPOSED PAVING SECTIONS.
  - ALL MANHOLES IN FINISH GRADE (FG) AREAS TO BE 3" ABOVE FG.
  - TOP OF GRADE (TG) ELEVATIONS FURNISHED BY OTHERS. COORDINATE WITH LANDSCAPE ARCHITECT FOR TO VERIFY/CONFIRM.

**NOTE:**  
CONTRACTOR TO CONTACT THE DISTRICT OPERATOR PRIOR TO STARTING ANY WORK ON ANY PROPERTY SERVING THE DISTRICT TO DO AN INSPECTION TO VERIFY DISTRICT FACILITIES.

**NOTE:**  
CONTRACTOR TO COORDINATE WITH LANDSCAPING ARCHITECT FOR ALL-BELTS AND PROPOSED GRASSES AROUND BUILDING/POOL DECK AREA AND LANDSCAPE AREAS.

- KEY NOTES:**
- PROP. DRAINAGE FOR FORT BEND COUNTY REQUIREMENTS. RE: CON. DETAILS.
  - CONTRACTOR TO COORDINATE W/ARRANGEMENT PLANS FOR CONTRADICTION OF 2" WITH LINE.
  - CONTRACTOR TO FIELD VERIFY EXISTING FLOWLINE ELEVATION BEFORE STARTING CONSTRUCTION AND ASSURE THAT DRAINAGE WILL FLOW DOWNSTREAM. IF ANY CONFLICT EXISTS CONTACT CIVIL ENGINEER IMMEDIATELY.
  - COORDINATE WITH MEP AND ARCHITECT FOR EXACT LOCATION AND CONTRIBUTION OF UTILITY INTO BUILDING.
  - PROP. SIGN CLEARANCE
  - CONTRACTOR TO MAINTAIN A MIN. 6.0' CLEARANCE BETWEEN UTILITY CROSSING.
  - ALL RAMP IN ROW TO BE TYPE 1, F203-A. RE: DETAILS ON SHEET C-208.
  - PROPOSED SIGN PER FORT BEND COUNTY A MAILED REQUIREMENTS. RE: SIGN DETAILS ON THIS SHEET.
  - PROP. 4" SANITARY MAN PER CITY REG. REF. C-304 FOR DETAIL. SANITARY MAN TO BE FURNISH WITH PROPOSED FINISHED GRADE.

TEXAS ENGINEERING & MAPPING CO.  
REGISTRATION # T-2909

**CARLOS J. SALLAS**  
REGISTERED PROFESSIONAL ENGINEER  
No. 58474  
Date: 2017.03.13  
12/01/20-05/20

Digitally signed by Carlos J. Sallas  
Date: 2017.03.13 12:01:20 -0500

**GRADING AND UTILITIES LAYOUT**

Sheet: C-207

SEE SHEET C-201	FOR GRADING & UTILITIES LAYOUT
SEE SHEET C-201	FOR STORM SEWER LAYOUT
SEE SHEET C-202	FOR STORM TABLE CALCULATIONS
SEE SHEET C-101	FOR SANITARY
SEE SHEET C-401	FOR GENERAL NOTES & DETAILS
SEE SHEET C-501	FOR CON. NOTES & DETAILS
SEE SHEET C-501	FOR FORT BEND COUNTY NOTES & DETAILS
SEE SHEET C-01	FOR PER-T&E DETAILS
SEE SHEET C-801	FOR T&P FOR DRIVEWAY CONNECTION

APPROVED: *[Signature]*  
DATE: 3/13/17

TEXAS ENGINEERING AND MAPPING CO.  
12010 CENTURY DRIVE  
STAFFORD, TEXAS 77477  
PHONE: (817) 461-5245 FAX: (817) 461-5246



WILLIAMS RANCH - PHASE III  
Richmond, TX  
RECREATION CENTER

PROJECT NO: 144285  
DATE: 02/08/2017  
DWG. NO: RVI-CB  
ISSUED: 02/08/2017  
REVISED: 02/08/2017  
02/07/2017 PRICE SHEET COMMENT

GRADING & UTILITIES

C-1.01

- 3) ALL PAVEMENT JOINTS SHALL ALIGN WITH ALL CURB JOINTS. ALL CURB JOINTS SHALL BE SEALED.
- 3) ALL SIDEWALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2.0% PER ADA REQUIREMENTS.
- 4) CONTRACTOR TO OBTAIN ALL PERMITS REQUIRED BY FORT BEND COUNTY, TEXAS, PRIOR TO STARTING CONSTRUCTION OF UTILITY AND/OR GALLEYS WITHIN COUNTY BRANCH OR TROOP JURISDICTION OF HWY.
- 5) WHEN A LANDSCAPE MESH IS INSTALLED ADJACENT TO THE BUILDING, THE LANDSCAPER SHALL PROVIDE A FRENCH DRAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE CONNECTION OF FRENCH DRAIN TO THE UNDERGROUND STORM SEWER USING A MINIMUM OF 1' OF BOTH THE FRENCH DRAIN AND STORM SEWER PIPE. COORDINATE WITH CIVIL ENGINEER FOR DETAIL, IF NEEDED.
- 6) COORDINATE WITH ARCHITECT FOR ALL DEMOLITION.
- 7) CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH DRAINAGE PLAN AND ASSURE POSITIVE DRAINAGE FROM THE BUILDING OVERS THE SIDEWALK AND TO THE PAVING LIST. ANY PROBLEMS ENCOUNTERED DURING CONSTRUCTION SHALL BE COORDINATED WITH THE CIVIL ENGINEER BEFORE FINAL CONSTRUCTION. IF LANDSCAPING BEDS ARE USED ADJACENT TO THE BUILDING, CONTRACTOR SHALL ASSURE THAT DRAINAGE IS NOT BLOCKED. REFER TO LANDSCAPE FRENCH DRAIN DETAIL, IF NEEDED.
- 8) CONTRACTOR SHALL COORDINATE WITH OWNER, GEOTECHNICAL ENGINEER AND STRUCTURAL ENGINEER FOR SELECT FILL REQUIREMENTS AND PROCEDURES UNDER BUILDING SLABS. SEE SOLE REPORT FOR ALL REQUIRED WITH CONSTRUCTION UNITS. THE REQUIRED SELECT FILL PROCEDURE UNDER BUILDING SLABS HAS BEEN APPROVED.
- 9) CONTRACTOR SHALL ALSO COORDINATE WITH SOLE REPORT FOR ALL REQUIRED FILL, COMPACTION AND LIME STABILIZATION UNDER PROPOSED PAVING SECTIONS.
- 10) CLEAN-OUTS, INLETS AND/OR ANCHOR BOXES LOCATED IN PAVEMENT OR SIDEWALK SHALL HAVE TRAFFIC BEARING LIDS OR GRATES.
- 11) CONTRACTOR SHALL DETERMINE IF CONFLICT EXISTS AT ALL UTILITY CROSSINGS PRIOR TO STARTING CONSTRUCTION AND REPORT ANY CONFLICT TO ENGINEER IMMEDIATELY.
- 12) CONTRACTOR SHALL ALSO COORDINATE WITH SOLE REPORT FOR ALL REQUIRED FILL, COMPACTION AND LIME STABILIZATION UNDER PROPOSED PAVING SECTIONS.
- 13) ALL MANHOLES IN FRESH GRADE (FD) AREAS TO BE 3" ABOVE FG.
- 14) TOP OF GRATE (TO) ELEVATIONS FURNISHED BY OTHERS. COORDINATE WITH LANDSCAPE ARCHITECT FOR TO REVISIONS.

NOTE:  
CONTRACTOR TO CONTACT THE DISTRICT OPERATOR PRIOR TO STARTING ANY WORK ON ANY PROPERTY WITHIN THE DISTRICT TO DO AN INSPECTION TO VERIFY DISTRICT FACILITIES.

- KEY NOTES:
- 1) CONTRACTOR TO COORDINATE WITH/INTEGRATE PLANS FOR CONTINUATION OF 2" W/ LINE.
  - 2) PROP. 10" HOPE @ 0.45% SLOPE.
  - 3) CONTRACTOR TO FIELD VERIFY EXISTING FLOWLINE ELEVATION BEFORE STARTING CONSTRUCTION AND ASSURE THAT DRAINAGE WILL FLOW DOWNSTREAM. IF ANY CONFLICT EXISTS CONTACT CIVIL ENGINEER IMMEDIATELY.

TEXAS ENGINEERING & MAPPING CO.  
REGISTRATION # E-2908

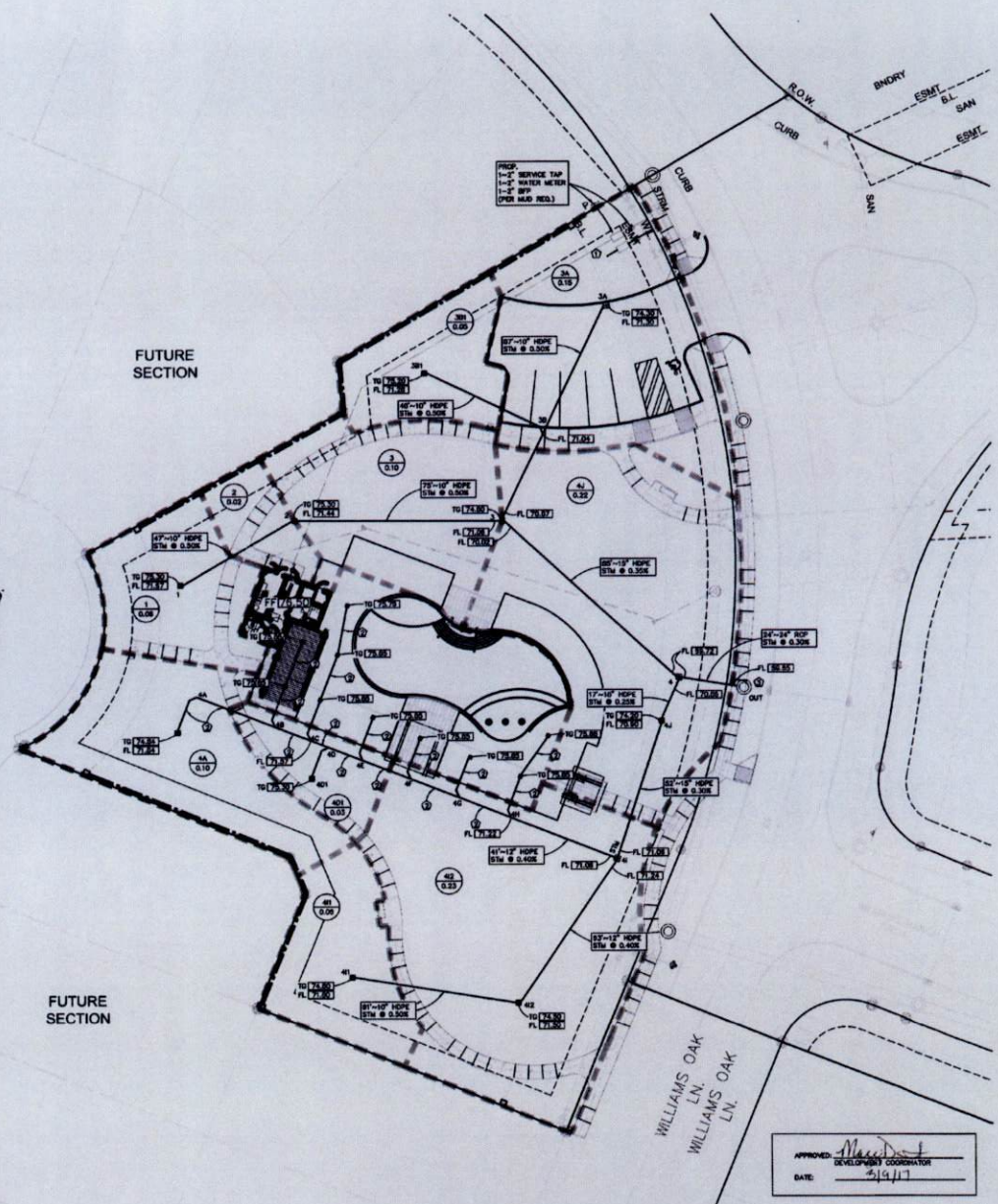


Digitally signed by  
Carlos J. Barillas  
Date: 2017.02.13 18:03:59 -0600

**C-2.01 STORM SEWER LAYOUT**  
Scale 1" = 20'

- JOB NO: 1212-3
- SEE SHT C-1.01 FOR DRAWING & UTILITIES LAYOUT
  - SEE SHT C-2.01 FOR STORM SEWER LAYOUT
  - SEE SHT C-2.02 FOR STORM TABLE CALCULATIONS
  - SEE SHT C-3.01 FOR SWPPP LAYOUT
  - SEE SHT C-4.01 FOR GENERAL NOTES & DETAILS
  - SEE SHT C-4.02 FOR PRELIM COUNTY NOTES & DETAILS
  - SEE SHT C-5.01 FOR FORT BEND COUNTY NOTES & DETAILS
  - SEE SHT C-7.01 FOR PRELIM DETAILS
  - SEE SHT C-8.01 FOR TOP FOR DRIVEWAY CONNECTION

TEXAS ENGINEERING AND MAPPING CO.  
18810 CENTURY DRIVE  
STARBURO, TEXAS 77877  
PHONE (281) 491-9548 FAX (281) 491-9588



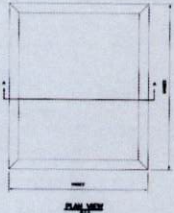
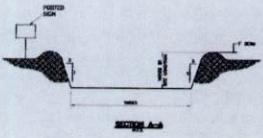
PROP.  
1"-2" SERVICE TAP  
1/2" HUBBY WITH  
1"-2" BPP  
(PER HUD REQ.)

**LEGEND**

	EXISTING ELEV.
	TOP OF GRATE ELEV.
	FLOW LINE ELEV.
	SQUARE GRATE INLET
	JUNCTION BOX
	DRAINAGE AREA
	AREA
	ACREAGE

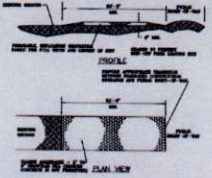
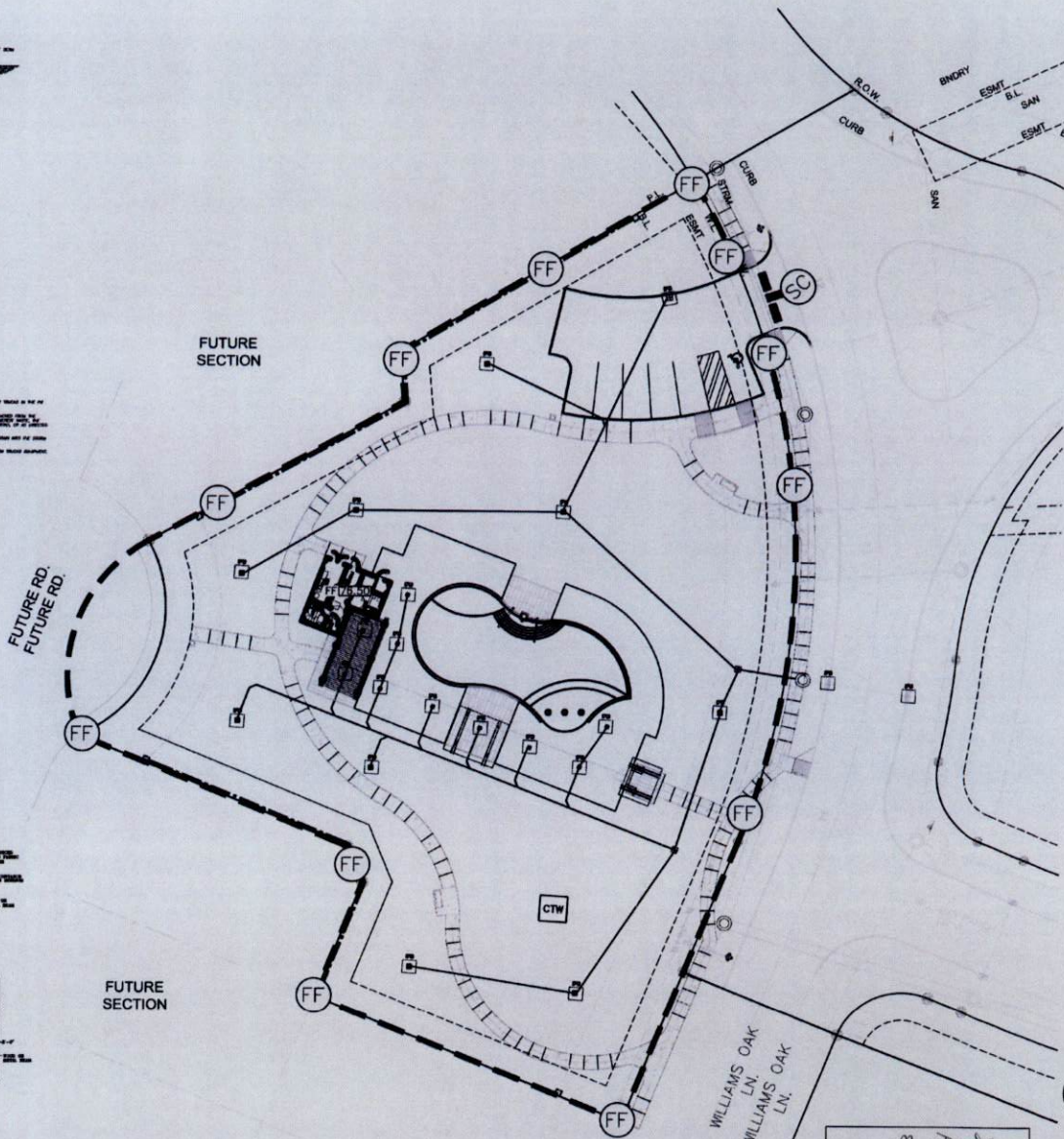
APPROVED: *[Signature]*  
DATE: 4/11/17





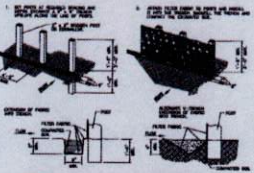
- GENERAL NOTES**
1. PERFORM AND MAINTAIN THROUGHOUT THE PROJECT PERIOD.
  2. MAINTAIN THE EXISTING CURB AND GUTTER THROUGHOUT THE PROJECT PERIOD.
  3. MAINTAIN THE EXISTING STORMWATER INFRASTRUCTURE THROUGHOUT THE PROJECT PERIOD.
  4. MAINTAIN THE EXISTING UTILITIES THROUGHOUT THE PROJECT PERIOD.
  5. MAINTAIN THE EXISTING LANDSCAPE THROUGHOUT THE PROJECT PERIOD.
  6. MAINTAIN THE EXISTING PAVEMENT THROUGHOUT THE PROJECT PERIOD.

**STORMWATER INFRASTRUCTURE**



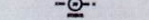
- GENERAL NOTES**
1. MAINTAIN THE EXISTING CURB AND GUTTER THROUGHOUT THE PROJECT PERIOD.
  2. MAINTAIN THE EXISTING STORMWATER INFRASTRUCTURE THROUGHOUT THE PROJECT PERIOD.
  3. MAINTAIN THE EXISTING UTILITIES THROUGHOUT THE PROJECT PERIOD.
  4. MAINTAIN THE EXISTING LANDSCAPE THROUGHOUT THE PROJECT PERIOD.
  5. MAINTAIN THE EXISTING PAVEMENT THROUGHOUT THE PROJECT PERIOD.

**STABILIZED CONCRETION ACCESS**



- GENERAL NOTES**
1. MAINTAIN THE EXISTING CURB AND GUTTER THROUGHOUT THE PROJECT PERIOD.
  2. MAINTAIN THE EXISTING STORMWATER INFRASTRUCTURE THROUGHOUT THE PROJECT PERIOD.
  3. MAINTAIN THE EXISTING UTILITIES THROUGHOUT THE PROJECT PERIOD.
  4. MAINTAIN THE EXISTING LANDSCAPE THROUGHOUT THE PROJECT PERIOD.
  5. MAINTAIN THE EXISTING PAVEMENT THROUGHOUT THE PROJECT PERIOD.

**FILTER FABRIC BANDS**



TEXAS ENGINEERING & MAPPING CO.  
REGISTRATION # F-2906



Digitally signed by Carlos J. Barillas  
Date: 2017.08.13 18:04:58 -06:00

**C-3.01 SWPPP LAYOUT**

- Scale: 1"=20'
- PROJECT NO: 144285  
DATE: 08/09/2017  
DRAWN BY: RMC/CJB
- ISSUED: 08/09/2017  
NO. 02/2017 PER. PERMIT SET
- SEE SHEET C-1.01 FOR GRADING & UTILITIES LAYOUT  
SEE SHEET C-2.01 FOR STORM SEWER LAYOUT  
SEE SHEET C-2.02 FOR STORM TABLE CALCULATIONS  
SEE SHEET C-3.01 FOR SWPPP LAYOUT  
SEE SHEET C-4.01 FOR GENERAL NOTES & DETAILS  
SEE SHEET C-5.01 FOR C.I.A. NOTES & DETAILS  
SEE SHEET C-6.01 FOR FORT BEND COUNTY NOTES & DETAILS  
SEE SHEET C-7.01 FOR P&ID DETAILS  
SEE SHEET C-8.01 FOR TOP FOR DRIVEWAY CONNECTION

TEXAS ENGINEERING AND MAPPING CO.  
12810 CENTURY DRIVE  
STAFFORD, TEXAS 77477  
PHONE: (281) 491-0526 FAX: (281) 491-0535

APPROVED: *M. S. [Signature]*  
DEVELOPMENT COORDINATOR  
DATE: 2/14/17



10 E. Holly Lane, Suite 145  
Houston, Texas 77037  
(713) 601-8025

WILLIAMS RANCH - PHASE III  
Richmond, TX

RECREATION CENTER

PROJECT NO: 144285  
DATE: 08/09/2017  
DRAWN BY: RMC/CJB

ISSUED: 08/09/2017  
NO. 02/2017 PER. PERMIT SET

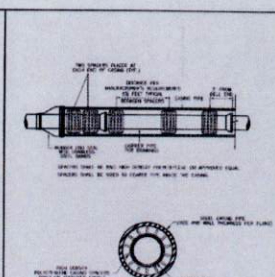
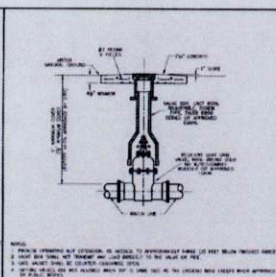
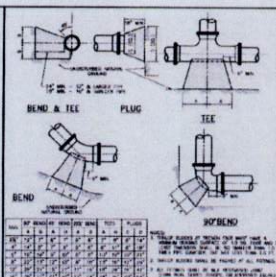
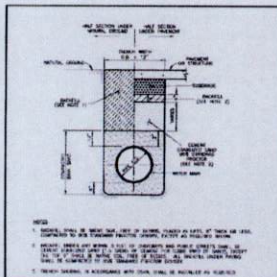
SWPPP LAYOUT

C-3.01

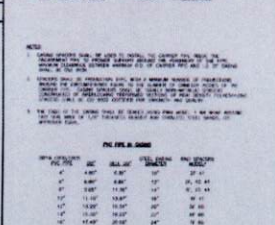
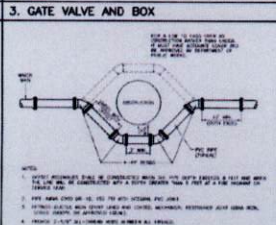
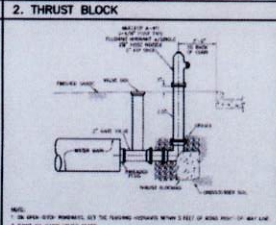
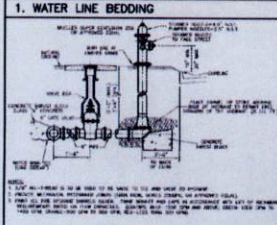
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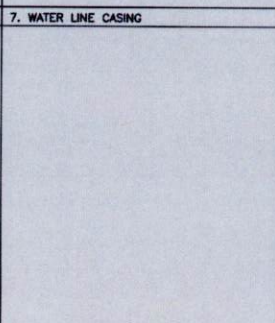
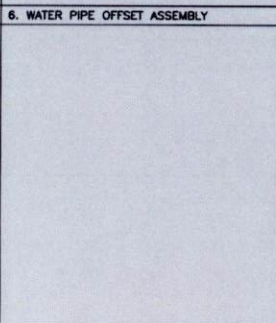
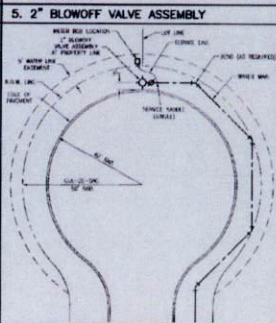
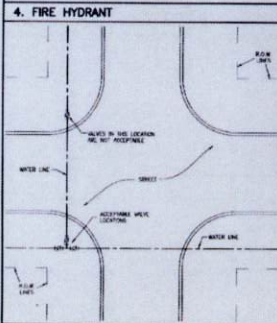




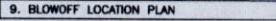
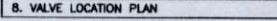
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2	WATER	
3	SCALE	
4	DATE	
5	BY	
6	CHECKED BY	
7	DATE	
8	SCALE	
9	DATE	
10	BY	
11	CHECKED BY	
12	DATE	



NO.	DESCRIPTION	QTY.
1	CITY OF RICHMOND STANDARD CONSTRUCTION DETAILS	
2	WATER	
3	SCALE	
4	DATE	
5	BY	
6	CHECKED BY	
7	DATE	
8	SCALE	
9	DATE	
10	BY	
11	CHECKED BY	
12	DATE	



NO.	DESCRIPTION	QTY.
1	CITY OF RICHMOND STANDARD CONSTRUCTION DETAILS	
2	WATER	
3	SCALE	
4	DATE	
5	BY	
6	CHECKED BY	
7	DATE	
8	SCALE	
9	DATE	
10	BY	
11	CHECKED BY	
12	DATE	



NO.	DESCRIPTION	QTY.
1	CITY OF RICHMOND STANDARD CONSTRUCTION DETAILS	
2	WATER	
3	SCALE	
4	DATE	
5	BY	
6	CHECKED BY	
7	DATE	
8	SCALE	
9	DATE	
10	BY	
11	CHECKED BY	
12	DATE	

APPROVED: *Maxwell*  
 DATE: 5/4/17

TEXAS ENGINEERING & MAPPING CO.  
 REGISTRATION # F-2806



Digitally signed by Carlos J. Barillas  
 Date: 2017.02.13 18:06:42 -0600

**CITY OF RICHMOND NOTES & DETAILS PG.2**

- SEE SHEET C-1.01 FOR GRADING & UTILITIES LAYOUT
- SEE SHEET C-2.01 FOR STORM SEWER LAYOUT
- SEE SHEET C-2.02 FOR STORM TABLE CALCULATIONS
- SEE SHEET C-3.01 FOR SWPPP LAYOUT
- SEE SHEET C-4.01 FOR GENERAL NOTES & DETAILS
- SEE SHEET C-5.01 FOR C-5.05 TYPICAL C.O.R. NOTES & DETAILS
- SEE SHEET C-6.01 FOR C-6.01 BEND COUNTY NOTES & DETAILS
- SEE SHEET C-7.01 FOR C-7.01 BEND COUNTY NOTES & DETAILS
- SEE SHEET C-8.01 FOR T-8.01 FOR DRIVEWAY CONNECTION

TEXAS ENGINEERING AND MAPPING CO.  
 12810 CENTURY DRIVE  
 STAFFORD, TEXAS 77477  
 PHONE: (281) 491-2500 FAX: (281) 491-2510



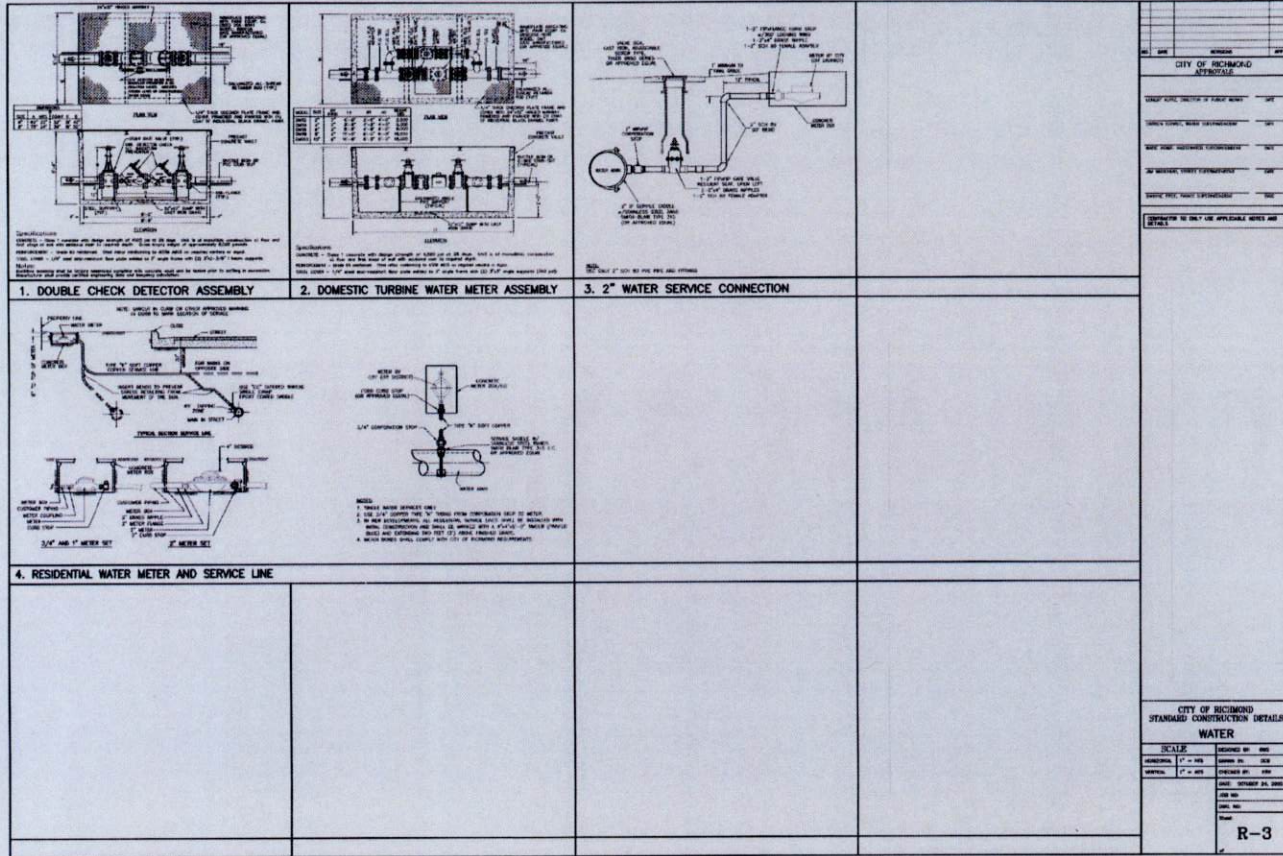
WILLIAMS RANCH - PHASE III  
 Recreation Center  
 Richmond, TX

PROJECT NO: 144285  
 DATE: 02/09/2017  
 SHEET NO: 02

C.O.R. NOTES & DETAILS PG.2

C-5.02

INDICATED FILE IS A LINK LISTED BY THE USER IN THE BIDDING



CITY OF RICHMOND STANDARD CONSTRUCTION DETAILS WATER	
SCALE	DESIGNED BY
RESIDENTIAL 1" = 4'-0"	DAVID P. JONES
COMMERCIAL 1" = 4'-0"	DAVID P. JONES
INDUSTRIAL 1" = 4'-0"	DAVID P. JONES
DATE: 02/04/17	
JOB NO:	
DATE:	
R-3	

APPROVED: *[Signature]*  
 DEVELOPER REPRESENTATIVE  
 DATE: 2/4/17

TEXAS ENGINEERING & MAPPING CO.  
 REGISTRATION # T-2958



Digitally signed by  
 Carlos J. Barillas  
 Date: 2017.02.13  
 18:07:08 -0500

**CITY OF RICHMOND  
 NOTES & DETAILS PG.3**  
 JRM: NO: 1212-3

- SEE SHT C-1.01 FOR GRADING & UTILITIES LAYOUT
- SEE SHT C-2.01 FOR STORM SEWER LAYOUT
- SEE SHT C-2.02 FOR STORM TABLE CALCULATIONS
- SEE SHT C-3.01 FOR SWEEPING LAYOUT
- SEE SHT C-4.01 FOR GENERAL NOTES & DETAILS
- SEE SHT C-4.02 FOR C.E.R. NOTES & DETAILS
- SEE SHT C-6.01 FOR FORT BEND COUNTY NOTES & DETAILS
- SEE SHT C-7.01 FOR FISC PERMIT DETAILS
- SEE SHT C-8.01 FOR TCP FOR DRIVEWAY CONNECTION

**TEXAS ENGINEERING AND MAPPING CO.**  
 12810 CENTURY DRIVE  
 STAFFORD, TEXAS 77477  
 PHONE: (817) 467-8800 FAX: (817) 461-8806







Fort Bend County Engineering  
 FORT BEND COUNTY TEXAS

Richard W. Stokes, P.E.  
 County Engineer

Fort Bend County  
 Construction - General Notes

- Fort Bend County must be notified of the proposed construction meeting.
- Contractor shall notify Fort Bend County Engineering Department 48 hours prior to commencing construction and 48 hours notice to any construction activity within the limits of the paving of construction.
- Contractor is responsible for obtaining all permits required from Fort Bend County prior to commencing construction of any improvements within County road right of way.
- All paving improvements shall be constructed in accordance with Fort Bend County "Rules, Regulations and Requirements" relating to the Approval and Acceptance of Improvements in subdivisions as currently amended.
- All road curbs, curb radii and curb alignment shown indicate back of curb.
- A continuous longitudinal reinforcing bar shall be used in the curbs.
- All concrete pavement shall be 3" thick concrete with a minimum compressive strength of 3000 psi at 28 days. Temperature expansion joints shall be installed at each curb return and at a maximum spacing of 60 feet.
- All weather access to all existing streets and driveways shall be maintained at all times.
- 4" x 12" reinforced concrete curbs shall be placed in lines of single family lots only. All other areas shall be 8" reinforced concrete curb.
- At all intersection locations, Type 7 ramps shall be placed in accordance with TxDOT Plan-12a standard detail sheet, A.D.A. - Handicap Ramps shall be installed with correct paving at all intersections and comply with current A.D.A. regulations.
- Curb headers are required at curb connections to handicap ramps, with no construction joint within 7' of ramp.
- All intersections requiring Traffic Control measures shall have A.D.A. wheel chair ramps installed.
- Guidelines are set forth in the Texas "Manual on Uniform Traffic Control Devices", as currently amended shall be observed. The Contractor shall be responsible for providing adequate flagmen, signing, striping and warning devices, etc. during construction - both day and night.
- All 4x4 stop signs shall be "30x40" with diamond grade sheeting per Texas Manual on Uniform Traffic Control Devices.
- Street name signage shall be on a 9" high sign face black reflective green background. Street names shall be upper and lowercase lettering with uppercase letters of 4" minimum and lowercase letters of 4.5" minimum. The letters shall be reflective white. Street name signs shall be mounted on sign post.
- A Blue Octagon Reflective Sign shall be placed at all fire hydrant locations. The bottom shall be placed 22 inches off of the top of the curb on the back side of the hydrant.

NOTE: Fort Bend County notes supersede any conflicting notes.

**WARNING:** The Project and all parts thereof shall be subject to inspection from time to time by inspection designated by Fort Bend County. The work hereon shall remain the Contractor's responsibility. Retention shall be retained by the Contractor or held by any of the work as set in accordance with the drawings and specifications, requirements and specifications of Fort Bend County or any provision of any Project law or contract or any of its successors or any other law or contract or any of its successors.

801 Jackson St., Suite 900, Richmond TX 77406  
 Phone 281-433-7000

C:\Construction\Projects\Williams\_Ranch\Notes\REVISED\_0217\_10\_06.rvt

WALK AND DRIVEWAY, SIDEWALK, DRIVEWAY, CURB OR CURB TYPE OR FINISH MATERIALS, SIDEWALKS, DRIVEWAYS, SIDEWALKS, DRIVEWAYS, CURB TYPE OR FINISH MATERIALS, SIDEWALKS, DRIVEWAYS, CURB TYPE OR FINISH MATERIALS.

A. SIDEWALKS AND DRIVEWAYS ON CURB TYPE STREETS

B. SIDEWALKS AND DRIVEWAYS ON CURBED TYPE STREETS

GENERAL NOTES:

- CONCRETE SHALL BE PORTLAND CEMENT CONCRETE (PCC) WITH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.
- CONCRETE SHALL BE PLACED IN LINES OF SINGLE FAMILY LOTS ONLY. ALL OTHER AREAS SHALL BE 8" REINFORCED CONCRETE.
- CONCRETE SHALL BE PLACED IN LINES OF SINGLE FAMILY LOTS ONLY. ALL OTHER AREAS SHALL BE 8" REINFORCED CONCRETE.
- CONCRETE SHALL BE PLACED IN LINES OF SINGLE FAMILY LOTS ONLY. ALL OTHER AREAS SHALL BE 8" REINFORCED CONCRETE.

SIDEWALKS & DRIVEWAYS ON CURB TYPE STREETS COMMERCIAL AREA	DRAWN BY: L. BROECKA DATE DRAWN: 2-1-04	REVISED BY: L. BROECKA DATE REVISED: 4-1-09
	APPROVED BY: L. HOOE DATE: 2-1-04	DRAWING NO: FBC-0254

FORT BEND COUNTY ENGINEERING DEPARTMENT

GENERAL NOTES FOR SIDEWALKS AND DRIVEWAYS

- SAW CUT EXISTING CURB AT EACH END AND BACK OFF CURB FROM BE CORNER TO FACE OF PROPOSED DRIVEWAY.
- SAW CUT EXISTING PAVEMENT A MINIMUM OF 18" AWAY FROM FACE OF CURB (GUTTER LINE) AND SPREAD 18" TO EXPOSE EXISTING REINFORCEMENT STEEL.
- CONTACT SUBGRADE FOR PROPOSED DRIVEWAY CONNECTION FROM PROPOSED SAW CUT AT EXISTING PAVEMENT TO RIGHT-OF-WAY LINE. CONTACT TO STATE OF TEXAS PROJECT DESIGN (S/D) OR DISTRICT ENGINEER. USE COUNTY ENGINEER'S RECORDS. THE RECORDS REQUIRE LABORATORY TESTS TO BE CONDUCTED.
- PLACE AND COMPACT 4" OF FAN BANK SAND.
- MAINTAIN GUTTER LINE WITH FACE OF EXISTING CURB.
- PROPOSED DRIVEWAY REINFORCING STEEL IS TO BE 3/8" TO EXISTING HOODWAY REINFORCING STEEL WITH A MINIMUM LAP OF 12 INCHES.
- PROPOSED DRIVEWAY REINFORCING STEEL IS TO BE #4 DETORMEE REINFORCING STEEL WITH A MINIMUM LAP OF 24 INCHES. EACH WAY WITH 12 INCHES MINIMUM LAP 18" x 6" NO. 4 W/ AS ALTERNATE FROM PROPOSED SAW CUT TO RIGHT-OF-WAY LINE.
- PROPOSED DRIVEWAY CURB, GUTTER LINE, AND GRASS SHALL MATCH EXISTING STREET.
- PROPOSED DRIVEWAY SHALL BE CONCRETE WITH PORTLAND CEMENT CONCRETE CLASS "A" STRUCTURE (REFER TO SPECIFICATION 03307). 7 INCHES THICK FROM PROPOSED SAW CUT TO RIGHT-OF-WAY LINE (DRIVEWAY LINE).
- PROPOSED SIDEWALK SHALL BE CONCRETE WITH PORTLAND CEMENT CONCRETE CLASS "A" STRUCTURE (REFER TO SPECIFICATION 03307). 4 INCHES THICK AND 4 FEET MINIMUM WIDTH. SEE DRAWING NO. FBC 244 FOR ADDITIONAL INFORMATION AND DETAILS.

CONSTRUCTION NOTES FOR SIDEWALKS & DRIVEWAYS WITH CURB TYPE STREETS COMMERCIAL AREA	DRAWN BY: L. BROECKA DATE DRAWN: 2-1-04	REVISED BY: L. BROECKA DATE REVISED: 3-10-05
	APPROVED BY: L. HOOE DATE: 2-1-04	DRAWING NO: FBC-0258

FORT BEND COUNTY ENGINEERING DEPARTMENT

APPROVED: *[Signature]*  
 DEVELOPMENT COORDINATOR  
 DATE: 3/9/17

TEXAS ENGINEERING & MAPPING CO.  
 REGISTRATION # F-2906



Digitally signed by  
 Carlos J. Barillas  
 Date: 2017.02.13 18:08:34 -0600

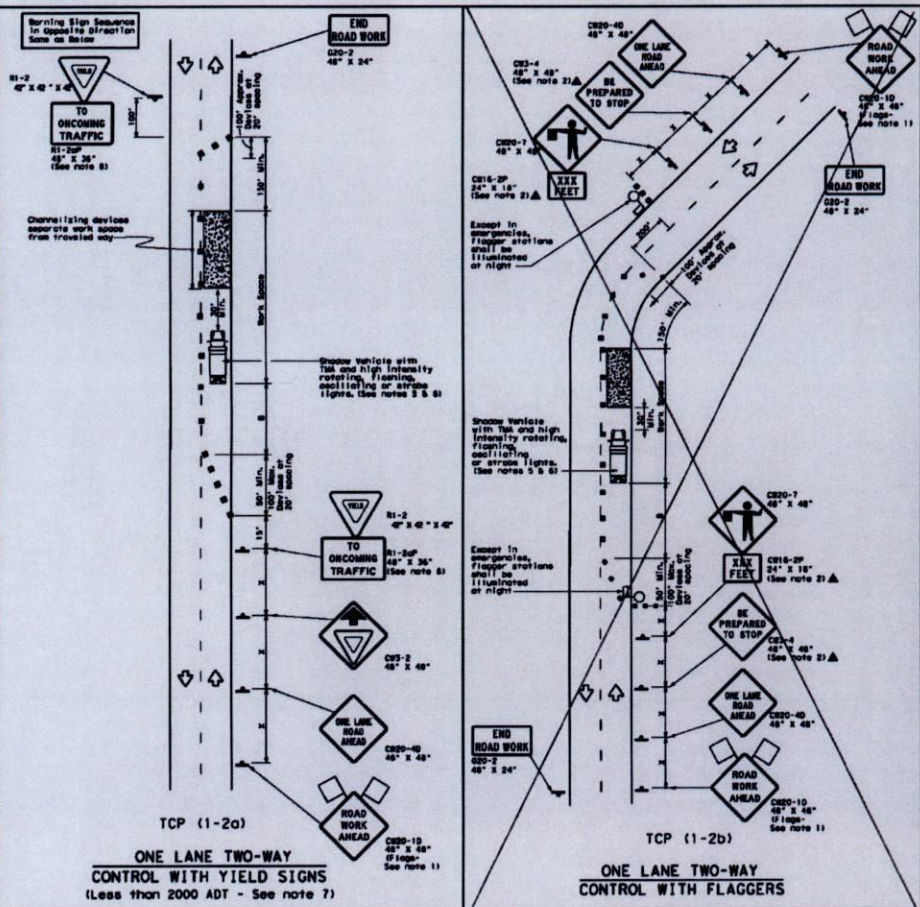
**FORT BEND COUNTY  
 NOTES & DETAILS**

- SEE SHIT C-1.01 FOR GRAZING & UTILITIES LAYOUT  
 SEE SHIT C-2.01 FOR STORM SEWER LAYOUT  
 SEE SHIT C-3.02 FOR STORM TABLE CALCULATIONS  
 SEE SHIT C-3.01 FOR SWPPP LAYOUT  
 SEE SHIT C-4.01 FOR GENERAL NOTES & DETAILS  
 SEE SHIT C-4.01 TO C-5.05 FOR C.O.R. NOTES & DETAILS  
 SEE SHIT C-6.01 FOR FORT BEND COUNTY NOTES & DETAILS  
 SEE SHIT C-6.01 FOR FBC PLAN DETAILS  
 SEE SHIT C-8.01 FOR DRIVEWAY CONNECTION

TEXAS ENGINEERING AND MAPPING CO.  
 12810 CENTURY DRIVE  
 STAFFORD, TEXAS 77477  
 PHONE: (817) 481-8200 FAX: (817) 481-8206



DISCLAIMER: The use of any equipment is governed by the "Texas Department of Transportation Project Manual", in accordance with the provisions of the "Texas Department of Transportation Project Manual" and the "Texas Department of Transportation Project Manual".



**LEGEND**

Type 3 Barricade	Channelizing Devices
Heavy Work Vehicle	Truck Mounted Attenuator (TMA)
Trailer Mounted Flashing Arrow Board	Portable Changeable Message Sign (PCMS)
Sign	Traffic Flow
Flag	Flagger

Speed Limit	Minimum Buffer Distance	Minimum Buffer Distance	Minimum Buffer Distance	Minimum Buffer Distance	Minimum Buffer Distance	Minimum Buffer Distance	Minimum Buffer Distance	Minimum Buffer Distance	Minimum Buffer Distance
30	150'	165'	180'	30'	60'	120'	90'	200'	
35	205'	225'	245'	30'	70'	140'	120'	250'	
40	255'	285'	315'	40'	80'	160'	155'	305'	
45	305'	345'	385'	45'	90'	180'	195'	355'	
50	355'	405'	455'	50'	100'	200'	240'	405'	
55	405'	465'	525'	60'	110'	220'	285'	465'	
60	455'	525'	595'	60'	120'	240'	320'	525'	
65	505'	585'	665'	65'	130'	260'	350'	585'	
70	555'	645'	735'	70'	140'	280'	475'	645'	
75	605'	705'	805'	75'	150'	300'	540'	705'	

**TYPICAL USAGE**

MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY

**GENERAL NOTES**

- Flags attached to signs where shown are REQUIRED.
- All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plan, or for routine maintenance work, when approved by the Engineer.
- The CRD-4 "BE PREPARED TO STOP" sign may be installed after the CRD-4 "ONE LANE ROAD AHEAD" sign, but greater sign spacing shall be maintained.
- Sign spacing may be increased or an additional CRD-10 "ROAD WORK AHEAD" sign may be used if advance warning ahead of the flagger or W11-2 "YIELD" sign is less than 1500 feet.
- A Show vehicle with TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of work without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Show vehicle one day.
- Additional Show vehicles with TMA may be positioned off the paved surface, next to those shown in order to protect other work spaces.

**TCP (1-2a)**

**TCP (1-2b)**

**Texas Department of Transportation**  
Traffic Operations Division

**TRAFFIC CONTROL PLAN**  
**ONE-LANE TWO-WAY**  
**TRAFFIC CONTROL**

TCP (1-2) - 12

APPROVED: *[Signature]*  
DEVELOPMENT COORDINATOR  
DATE: 2/15/17

TEXAS ENGINEERING & MAPPING CO.  
REGISTRATION # 7-2908

Digitally signed by Carlos J. Barillas  
Date: 2017.02.13 18:09:39 -0500

PROJECT NO: 144285  
DATE: 02/09/2017  
DW: SP  
HW: CB

ISSUED: 2018/04/08 508 CO. PROGRESS SET  
2017/02/09 FBC PERMIT SET

**TCP FOR DRIVEWAY CONNECTION**

SEE SHEET C-1.01 FOR GRADING & UTILITIES LAYOUT  
SEE SHEET C-2.01 FOR STORM SEWER LAYOUT  
SEE SHEET C-3.02 FOR STORM TABLE CALCULATIONS  
SEE SHEET C-1.01 FOR SWPPP LAYOUT  
SEE SHEET C-4.01 FOR GENERAL NOTES & DETAILS  
SEE SHEET C-5.01 FOR C-5.05 FOR C.O.R. NOTES & DETAILS  
SEE SHEET C-6.01 FOR FORT BEND COUNTY NOTES & DETAILS  
SEE SHEET C-7.01 FOR PED-TSA DETAILS  
SEE SHEET C-8.01 FOR TCP FOR DRIVEWAY CONNECTION

TEXAS ENGINEERING AND MAPPING CO.  
12819 CENTURY DRIVE  
STAFFORD, TEXAS 77477  
PHONE: (817) 481-2525 FAX: (817) 481-8555

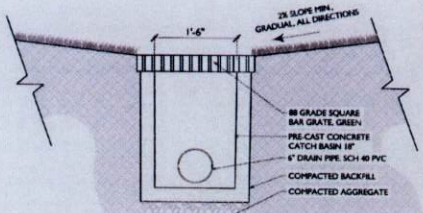


19 Blair Hollow Lane, Suite 140  
Houston, Texas 77027  
(713) 621-8025

WHILE ANALYSIS IS IN PROGRESS  
Richmond, TX  
RECREATION CENTER

C-8.01

JOB NO: 1212-3



1 LAWN DRAIN INLET  
SCALE: 1" = 1'-0"

FUTURE SECTION

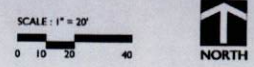
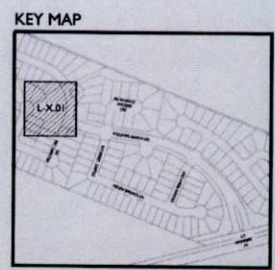
FUTURE RD.

FUTURE SECTION

**LEGEND**

- PL — PROPERTY LINE
- L.O.C. — LIMIT OF CONSTRUCTION
- X" IRR IRRIGATION SLEEVE (w/ size)
- ⊕ DETAIL CALLOUT
- ⊖ MATERIAL CALLOUT
- ⬇ P.O.B. POINT OF BEGINNING
- UPGRADE CEDAR FENCE
- - - POOL FENCING

- GRADING NOTES:**
1. THESE GRADING PLANS ARE INTENDED TO SHOW VERTICAL CONTROL OF THE SITE AND ARE BASED UPON THE BENCHMARKS, EXISTING ELEVATIONS AND TOPOGRAPHY AS PROVIDED BY THE OWNER'S SURVEYOR. HOWEVER, THE LANDSCAPE CONTRACTOR, UPON SUBMITTAL OF BID, AGREES TO ACCEPT THE SITE GRADES AND MAKE ALL ADJUSTMENTS REQUIRED TO ACCOMPLISH THE WORK AS PROPOSED. ADDITIONALLY PROPOSED DESIGN ELEVATIONS FOR ADJACENT CONSTRUCTION PROJECTS MAY HAVE TO BE INCORPORATED IF NECESSARY. (CONSTRUCTION DRAWINGS FOR WORK BY OTHERS, IF APPLICABLE, ARE AVAILABLE UPON REQUEST). STAKING OF FUTURE ADJACENT IMPROVEMENTS, BY THIS CONTRACT PHASE OR BY OTHERS, MAY BE REQUIRED IF DIRECTED BY THE OWNER'S REPRESENTATIVE TO ENSURE PROPER COORDINATION AND REQUESTED STAKING IS TO BE PROVIDED AS PART OF THIS BASE BID.
  2. THIS LANDSCAPE CONTRACTOR SHALL VERIFY ALL EXISTING GRADES TO REMAIN AND ALL ADJACENT NEW CONSTRUCTION GRADES FOR COMPLIANCE WITH THOSE SHOWN, PRIOR TO BID AND CONSTRUCTION. ALL DEVIATIONS OR CONFLICTS WITH PROPOSED WORK SHALL BE REPORTED IMMEDIATELY (WITH FOLLOW-UP WRITTEN) NOTICE WITHIN 24 HOURS TO THE OWNER'S REPRESENTATIVE FOR DIRECTION TO PROCEED.
  3. IT IS THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY TO PROVIDE PROPER POSITIVE DRAINAGE THROUGHOUT THIS CONTRACT AREA. FIELD CONDITIONS SHALL BE VERIFIED IN CONJUNCTION WITH THE PROPOSED ELEVATIONS TO ENSURE THAT ADEQUATE DRAINAGE IS PROVIDED. REPORT DEVIATIONS OR CONFLICTS TO OWNER'S REPRESENTATIVE.
  4. ALL DESIGN ELEVATIONS SHOWN ARE "FINISHED GRADES" UNLESS OTHERWISE INDICATED. LANDSCAPE CONTRACTORS SHALL REFER TO DRAWINGS, DETAILS AND SPECIFICATIONS REGARDING DEPTH OF SUB-GRADE MATERIALS REQUIRED TO CONSTRUCT PROJECT IMPROVEMENTS.
  5. CONTRACTOR IS RESPONSIBLE FOR HAULING ALL EXCESS SOIL OFF SITE FOR DISPOSAL. NO EXCESS SOIL IS TO BE PLACED ANYWHERE ON SITE UNLESS CALLED FOR IN THE PLANS OR THE CONTRACTOR RECEIVES WRITTEN APPROVAL FROM THE OWNER'S REPRESENTATIVE WITH INSTRUCTION ON WHERE THE SOIL IS TO BE PLACED AND THE QUANTITY TO BE PLACED.



**rvi**  
Planning • Landscape Architecture

19 Blair Hollow Lane, Suite 105  
Houston, Texas 77057  
(713) 431-8933

LANDSCAPE ARCHITECT  
STATE OF TEXAS  
2281

10.26.2016

**WILLIAMS RANCH - PHASE III**  
Richmond, TX  
**RECREATION CENTER**

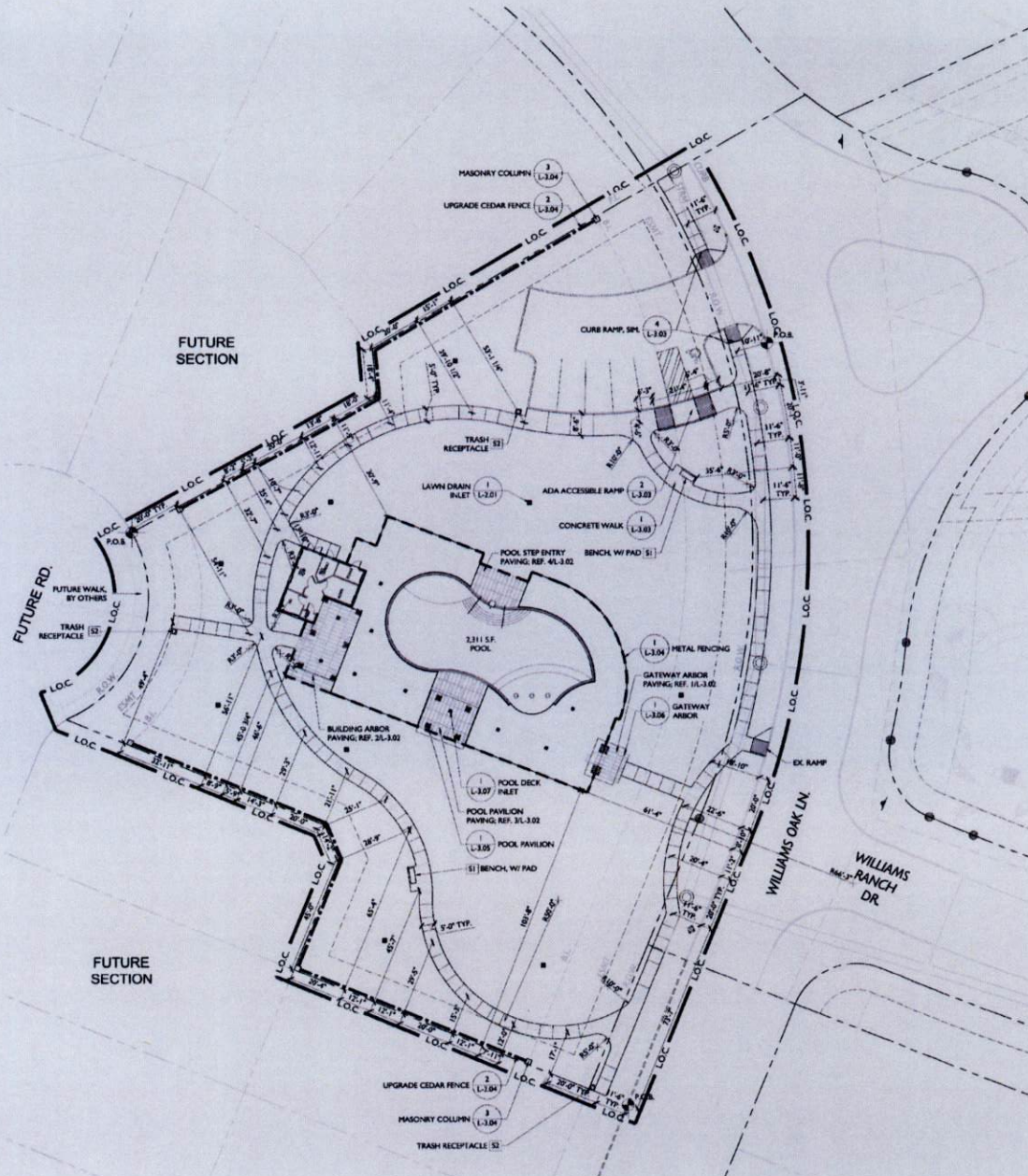
PROJECT NO: 144285  
DATE: 08/20/16  
DRAWN BY: RW  
REV: 76

ISSUED:  
PROJECT SET: 08/19/16

Landscape Grading Plan

L-2.01

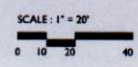
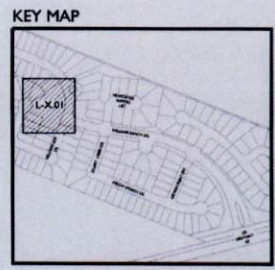
PROJECT FILE: 16-2047-14485 WILLIAMS RANCH HARDSCAPE/SCAPE PLAN/PHASE III, REV. 09/26/2016 L-3.01 HARDSCAPE PLAN/PHASE III



**LEGEND**

— PL —	PROPERTY LINE
— LOC —	LIMIT OF CONSTRUCTION
X' IRR	IRRIGATION SLEEVE (w/ size)
(#) (L-X.00)	DETAIL CALLOUT
(M)	MATERIAL CALLOUT
P.O.B.	POINT OF BEGINNING
— — — — —	UPGRADE CEDAR FENCE
- - - - -	POOL FENCING

- NOTES:**
- CONTRACTOR SHALL REVIEW PROPOSED LAYOUT OF LIGHTING SYSTEM AND EQUIPMENT LOCATIONS WITH OWNER'S REPRESENTATIVE PRIOR TO COMMENCING INSTALLATION. PROVIDE ONE YEAR WARRANTY ON ALL EQUIPMENT, INCLUDING LAMPS, BALLASTS, AND INSTALLATION, INCLUDING SETTLING OF TRENCHES.
  - CONTRACTOR SHALL REVIEW CONDUIT LAYOUT WITH OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. CONTRACTOR SHALL INSTALL ALL CONDUIT TO CONFORM TO NATIONAL ELECTRIC CODE, AND ALL OTHER GOVERNING CODES.
  - REFER TO MEP DRAWING FOR ASSIGNED PANELS AND CIRCUITS FOR THE SITE LIGHTING AND ELECTRICAL. REFER TO LANDSCAPE ARCHITECTURE DRAWINGS FOR INFORMATION ON LOCATIONS AND INSTALLATION DETAILS FOR SITE LIGHTING FIXTURES AND EQUIPMENT.
  - ALL DUPLEX AND FOURPLEX OUTLET RECEPTACLES TO HAVE "WHILE IN USE" METAL WEATHER PROOF COVERS SUCH AS THOMAS & BETTS RED DOT MODEL #CKMUV OR SIMILAR. ALL RECEPTACLES TO BE ON GFCI BREAKERS.
  - ALL LIGHTING TO BE CONTROLLED BY PHOTOCELL CIRCUITS FOR POOL DECK LIGHTING, SHADE STRUCTURES, AND BUILDING MOUNTED LIGHTS ON POOL SIDE LIGHTING TO BE CONTROLLED BY TIME CLOCKS (SEPARATE TIME CLOCK FOR EACH CIRCUIT AREA).
  - REFER TO MEP FOR PANEL AND CIRCUITS FOR POOL EQUIPMENT AND POOL LIGHTING.
  - INSTALL CONDUIT AS REQUIRED FOR GATE ACCESS EQUIPMENT.



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10.26.2016

**WILLIAMS RANCH - PHASE III**  
Richmond, TX  
**RECREATION CENTER**

PROJECT NO: 144785  
DATE: 09/23/16  
OWNER: PH  
REVISED: PH

Hardscape Plan

L-3.01

3/15/17



**PLANTING NOTES:**

- EXISTING CONDITIONS:** THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTING THE PROJECT SITE TO BECOME FAMILIAR WITH ALL EXISTING SITE CONDITIONS, UTILITIES, AND STRUCTURES PRIOR TO COMMENCING WORK. REFER TO SECTION 0140 "PROJECT COORDINATION" AND SECTION 01730 "EXECUTION."
- THE CONTRACTOR SHALL NOT PROCEED WITH CONSTRUCTION IF UNSATISFACTORY OR PREVIOUSLY UNKNOWN CONDITIONS EXIST. SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT AND OWNER IN WRITING IMMEDIATELY AND THE CONTRACTOR SHALL NOT PROCEED WITH THE WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED IN AN ACCEPTABLE MANNER. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGES COSTS RESULTING FROM BODILY INJURY AND/OR DAMAGE BY THE CONTRACTOR TO OWNERS PROPERTY OR UTILITIES AND SHALL ASSUME FULL RESPONSIBILITY FOR REMEDIAL WORK OR REVISIONS REQUIRED DUE TO FAILURE TO PROVIDE SUCH WRITTEN NOTIFICATION.
- THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO MATERIAL DELIVERY AND FABRICATION AND SHALL PROVIDE WRITTEN NOTIFICATION TO THE OWNER AND LANDSCAPE ARCHITECT SHOULD EXISTING CONDITIONS DIFFER FROM THOSE INDICATED IN THE DRAWINGS.
- UTILITIES:** THE CONTRACTOR IS RESPONSIBLE FOR CALLING 811 (THE DESIGNATED UNIVERSAL "CALL BEFORE YOU DIG" NUMBER IN TEXAS) TO CONTACT THE ONE-CALL CENTER AND COORDINATE UTILITY LOCATION SERVICES. THE CONTRACTOR SHALL IDENTIFY ALL EXISTING UTILITIES (ABOVE-GROUND AND UNDERGROUND) PRIOR TO INITIATING THE WORK AND SHALL EXERCISE EXTREME CAUTION WHEN WORKING NEAR EXISTING UTILITIES. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY OF ANY APPARENT CONFLICTS BETWEEN PROPOSED CONSTRUCTION AND LOCATIONS OF EXISTING AND PROPOSED UTILITIES. REFER TO SECTION 0140 "PROJECT COORDINATION."
- TOPSOIL:** THE CONTRACTOR SHALL BE RESPONSIBLE FOR PURCHASE, DELIVERY, AND PLACEMENT OF TOPSOIL (IF SPECIFIED) IN AREAS INDICATED IN THE DRAWINGS IN PREPARATION FOR TURF INSTALLATION. CONTRACTOR SHALL VISIT THE SITE TO REVIEW AND CONFIRM EXTENT OF SOILS WORK PRIOR TO COMMENCEMENT OF INSTALLATION. THE CONTRACTOR SHALL SUBMIT SAMPLES OF EXISTING AND PROPOSED SOILS AND SOIL TEST REPORTS FOR REVIEW BY LANDSCAPE ARCHITECT. REFER TO SECTION 01300 "SUBMITTAL PROCEDURES."
- GRADING:** THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINE GRADING OF ALL AREAS TO BE SEED, SODDED, AND LANDSCAPED. EXISTING SOILS IN TURF AND LANDSCAPED AREAS SHALL BE SCARIFIED, RAKED TO REMOVE AND DISPOSE OF STONES OF 1" DIAMETER AND OTHER DEBRIS, AND FINE GRADED TO ACHIEVE SPECIFIED SOIL QUALITY AND TO OBTAIN POSITIVE SURFACE DRAINAGE. PLACE IMPORTED SOILS TO DEPTH INDICATED IN DRAWINGS.
- EROSION CONTROL:** THE CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION CONTROL OF SLOPED AREAS WITHIN "LIMIT OF CONSTRUCTION" AND FOR COORDINATING ANY PROPOSED EROSION CONTROL MEASURES WITH EROSION CONTROL INSTALLATIONS INDICATED IN CIVIL ENGINEERING DRAWINGS (IF APPLICABLE).
- LAYOUT:** THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACCURATELY LAYING OUT LANDSCAPE BEDS AND TURF AREAS AS INDICATED IN THE DRAWINGS. LIMITS OF TURF AND BEDLINES INDICATED IN THE DRAWINGS ARE DIAGRAMMATIC. LAYOUT SHALL BE PAINTED OR STAKED IN THE FIELD FOR REVIEW BY LANDSCAPE ARCHITECT PRIOR TO EXCAVATION. CONTRACTOR SHALL REVIEW ACTUAL LIMITS OF TURF AND LANDSCAPED AREAS AND CONFIRM ACCURATE BID QUANTITY TAKEOFFS BEFORE INSTALLATION. FOLLOWING REVIEW OF LAYOUT, COORDINATE INSTALLATION OF IRRIGATION SYSTEM TO CONFORM TO THE APPROVED LAYOUT.
- QUANTITIES:** MATERIAL QUANTITIES PROVIDED IN THE DRAWINGS ARE PROVIDED ONLY AS A CONVENIENCE TO THE CONTRACTOR AND ARE NOT INTENDED FOR BID PURPOSES. THE CONTRACTOR IS RESPONSIBLE FOR PREPARING INDEPENDENT TAKEOFFS, BASED ON THE DRAWINGS, AND FOR CONFIRMING ACCURATE BID QUANTITIES. IN THE EVENT OF A CONFLICT BETWEEN QUANTITIES SHOWN IN THE DRAWINGS AND THOSE INDICATED IN THE PLANT LIST OR OTHER SCHEDULES, QUANTITIES SHOWN IN THE DRAWINGS SHALL PREVAIL.
- WEED CONTROL:** NO LESS THAN TWO WEEKS PRIOR TO LAWN AND LANDSCAPE INSTALLATION, BRADICATE EXISTING WEEDS AND UNWANTED VEGETATION INDICATED IN DRAWINGS TO BE REMOVED WITH BROAD SPECTRUM SYSTEMIC HERBICIDE APPLIED BY LICENSED APPLICATION PERSONNEL FOLLOWING ALL MANUFACTURERS' RECOMMENDATIONS. DO NOT INITIATE SEEDING WORK UNTIL EXISTING VEGETATION IS DEAD.
- BED PREPARATION:** THE CONTRACTOR SHALL EXCAVATE LANDSCAPE BEDS AS INDICATED IN THE DRAWINGS AS REQUIRED TO ACCOMMODATE A 6" DEPTH OF PREPARED SOIL AND 3" DEPTH OF SURFACE MULCH. SOILS REMOVED FROM BED AREAS THAT MEET TOPSOIL SPECIFICATIONS MAY BE USED IN AREAS TO BE SODDED OR SEEDED. STONE LARGER THAN 1" DIAMETER AND ALL DEBRIS AND TRASH SHALL BE REMOVED AND DISPOSED OF OFF-SITE. FOLLOWING EXCAVATION, PLACE PREPARED SOIL IN LANDSCAPE BEDS. PREPARED SOILS SHALL CONSIST OF 4" IMPORTED TOPSOIL AND 2" SOIL CONDITIONER, THOROUGHLY BLENDED TOGETHER BEFORE PLACEMENT. THIS MIX SHALL ALSO BE USED TO BACKFILL THE PLANTING PITS OF ALL PIT-PLANTED SHRUBS AND TREES. REFER TO SECTION 02300 "LAWNS AND GRASSES" AND SECTION 02330 "LANDSCAPING."

- PLANT MATERIALS:** ALL PLANTS SHALL BE NURSERY-GROWN PLANT MATERIALS MEETING ALL AMERICAN NURSERY AND LANDSCAPE ASSOCIATION STANDARDS (ANSI Z66.1-2004) AND MINIMUM SPECIFICATIONS INDICATED IN THE PLANT LIST. ALL CONTAINER-GROWN NURSERY STOCK SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED, AND ESTABLISHED IN THE CONTAINER IN WHICH IT IS GROWING. CONTAINER-GROWN NURSERY STOCK SHALL HAVE A WELL-ESTABLISHED ROOT SYSTEM REACHING THE SIDES OF THE CONTAINER TO MAINTAIN A FIRM BALL WHEN THE CONTAINER IS REMOVED AND SHALL NOT HAVE GIRDLING ROOTS OR EXCESSIVE ROOT GROWTH ENCIRCLING THE INSIDE OF THE CONTAINER. SPREAD MEASUREMENTS SHALL BE THE AVERAGE SPREAD OF THE BRANCHES OF THE PLANT, WITHOUT LEAVES. HEIGHT MEASUREMENTS SHALL BE FROM THE SOIL LINE FOR CONTAINER-GROWN PLANTS AND FROM THE GROUND FOR FIELD-GROWN PLANTS AND SHALL EXTEND TO THE TOP OF ALL CANES, WITHOUT LEAVES. REFER TO SECTION 02330 "LANDSCAPING."
- INSTALLATION:** HANDLE ALL PLANTS WITH CARE WHILE TRANSPORTING AND INSTALLING. MAINTAIN AS SPECIFIED UNTIL DATE OF FINAL ACCEPTANCE. PLANTS SHALL BE INSTALLED TO PRESENT BEST SIDE FACING THE VIEWER. INSTALL PLANT QUANTITIES INDICATED IN THE PLANT LIST. ADJUST PLANT SPACING AS REQUIRED TO FILL BEDS.
- MULCH:** MULCH SHALL BE BLACK SHREDDED HARDWOOD MULCH, AS SPECIFIED. AFTER PLANT INSTALLATION, MULCH LANDSCAPE BEDS AND WATERING SAUCERS TO FILL 2" DEPTH, AS INDICATED IN THE SPECIFICATIONS AND PLANTING DETAILS.
- WARRANTY:** WARRANTY PLANT MATERIALS TO REMAIN ALIVE AND BE IN HEALTHY, VIGOROUS CONDITION FOR A PERIOD OF ONE (1) YEAR AFTER DATE OF FINAL ACCEPTANCE, AS SPECIFIED. WARRANTY SHALL COVER ALL PLANT MATERIALS THAT DECLINE IN HEALTH OR DIE. THE WARRANTY DOES NOT INCLUDE DAMAGE CAUSED BY VANDALISM, BLOWING BY WIND, HAIL, ABNORMAL FREEZES, DROUGHT, OR NEGLIGENCE BY THE OWNER. THE WARRANTY IS INTENDED TO COVER CONTRACTOR NEGLIGENCE, INFESTATIONS, DISEASE, DAMAGE, AND PLANTING SHOCK TO PLANTS. PLANTS REPLACED UNDER WARRANTY SHALL BE WARRANTED FOR ONE YEAR FOLLOWING REPLACEMENT. REFER TO SECTION 02330 "LANDSCAPING"

**PLANT SCHEDULE**

TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CALIPER	HT	SPD	SPACING	REMARKS
CM	5	CERCIS HEDICANA	MEXICAN REDBUD	45 GAL	2.5" CAL	8' - 10'	4' - 6'	AS SHOWN	MULTI-TRUNK.
LT	6	LAGERSTROEMIA X TUSCARORA	ORANGE MYRTLE CORAL PINK	45 GAL	2.5" CAL	10' - 12'	4' - 6'	AS SHOWN	MULTI-TRUNK.
QM	7	QUERCUS POLYTHORPA 'MONTEREY'	MONTEREY OAK	45 GAL	3.5" CAL	12' - 15'	6' - 8'		
QV	8	QUERCLUS VIRGINIANA	SOUTHERN LIVE OAK	100 GAL	3.5" CAL	16' - 18'	8' - 10'		
LP	7	LALULUS PARVIFOLIA 'ALLEE'	ALLEE LACEBARK ELM	45 GAL	2.5" CAL	15'	6' - 8'	AS SHOWN	

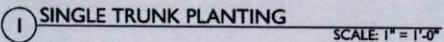
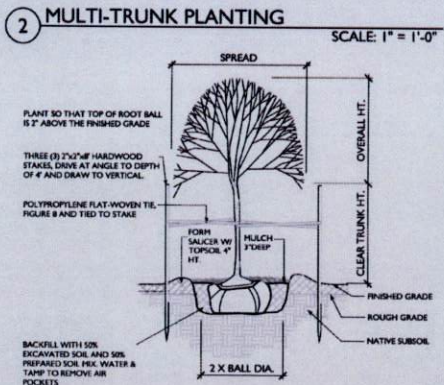
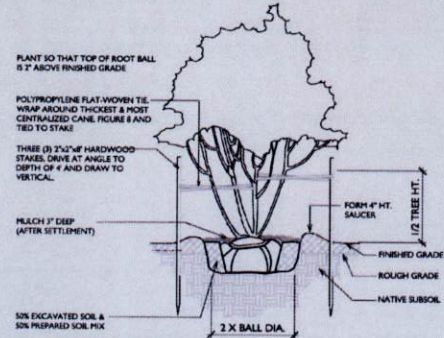
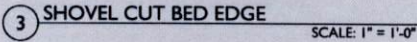
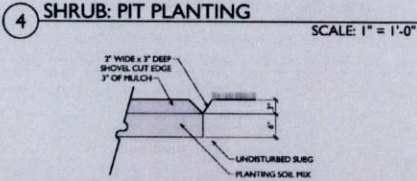
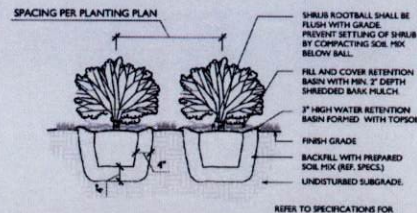
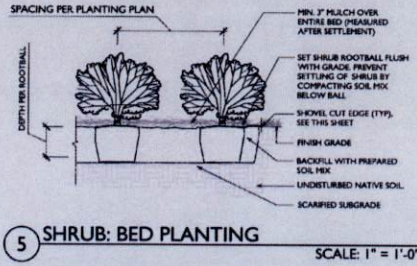
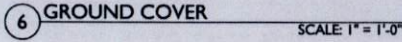
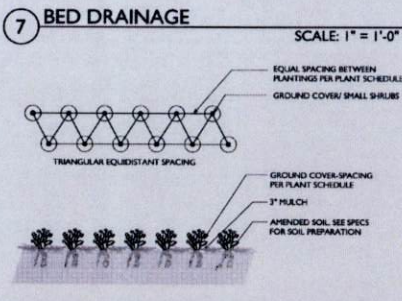
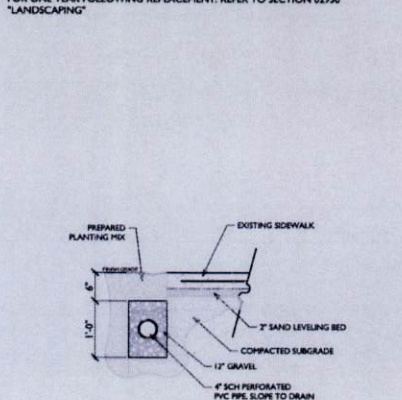
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	CONT	COLOR	HT	SPRD	SPACING	REMARKS
HP	17	HESPERALOE PARVIFLORA	RED YUCCA	1 GAL		18"	24"	60" o.c.	WELL ROOTED, FULL IN POT.

SHRUB AREAS	QTY	BOTANICAL NAME	COMMON NAME	CONT	COLOR	HT	SPRD	SPACING	REMARKS
CD	60	CALLISTEMON VIMINALIS 'LITTLE JOHN'	DWARF WEEPING BOTTLEBRUSH	1 GAL		18"		36" o.c.	WELL ROOTED, FULL IN POT.
CH2	368	CURHEA HYSSOPIFOLIA 'MONGA'	ITSY BITSY WHITE FALSE HEATHER	1 GAL	WHITE	4'-4"	6'-8"	18" o.c.	WELL ROOTED, FULL IN POT.
DV	62	DIANELLA TASHMANICA 'VARIEGATA'	FLAX LILY	1 GAL		12"	10"	30" o.c.	WELL ROOTED, FULL IN POT.
DB	157	DIETES BICOLOR	BICOLOR IRIS	3 GAL		12" - 18"	10"	24" o.c.	WELL ROOTED, FULL IN POT.
IM	142	ITEA VIRGINICA 'MERLOT'	SWEETSPRE	3 GAL		10"	10"	30" o.c.	WELL ROOTED, FULL IN POT.
MG	196	MULLENBERGIA CAPILLARIS 'GULF COAST'	GULF COAST MUHLY	1 GAL		12" - 18"	12"	30" o.c.	WELL ROOTED, FULL IN POT.
MC	44	MYRICA CERIFERA 'NANA'	DWARF WAX MYRTLE	3 GAL		24" - 30"	24"	36" o.c.	WELL ROOTED, FULL IN POT.
RC	72	ROSA HEDIFLORA 'DRIFT CORAL'	ROSE 'DRIFT CORAL'	2 GAL		12" - 18"	36"	30" o.c.	WELL ROOTED, FULL IN POT.
WT	505	WEDDIA TRILOBATA	WEDDIA	1 GAL		6" - 8"		30" o.c.	WELL ROOTED, FULL IN POT.

GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	CONT					REMARKS
SOD	29,435 SF	SOD	SOD						REF. SPECS.



19 Briar Hollow Lane, Suite 145  
Houston, Texas 77027  
(713) 431-8933



10.26.2016

**WILLIAMS RANCH - PHASE III**  
Richmond, TX  
RECREATION CENTER

PROJECT NO: 144285  
DATE: 08/20/16  
DRAWN BY: RL  
SCALE: AS SHOWN

Planting Notes  
Schedules &  
Details

L-4.02

Max Deed 3/9/17