

Engineer's Summary of Infrastructure Cost

Name of Project: Water, Sanitary Sewer & Drainage Facilities and Paving Improvements to Serve Tuscan Lakes SF 55-2 SE & SF 60-2 SE

Owner of Project: Tuscan Lakes Development, L.P.

Owner's Address: City of League City, Galveston County, Texas

General description of infrastructure improvements: Construction of water, sanitary sewer and drainage facilities and paving improvements to serve the section.

Date of Construction Completion: Final Inspection held

Summary of Costs:

Municipal Water System:

Engineering Service:	\$8,948
Construction:	\$129,409

Municipal Wastewater System:

Engineering Service:	\$14,830
Construction:	\$214,481

Municipal Storm Sewer and Drainage System:

Engineering Service:	\$38,542
Construction:	\$557,435

Municipal Street Improvements:

Engineering Service:	\$528,784
Construction:	\$40,410

Private Street Improvement: N/A

Engineering Service:	
Construction:	

Private Drainage Improvements: N/A

Engineering Service:	
Construction:	

I certify that to the best of my knowledge the above information represents the final costs of Infrastructure improvements within the project

Signature and Title:  PROJECT MANAGER

Date: 9/9/2015

Attachments: spread sheet of final unit quantities and unit costs of construction

ITEM DESCRIPTION	CONTRACT	COMPLETE	
	UNIT COST	TOTAL QTY. TO DATE	TOTAL AMT. TO DATE
WATER ITEMS			
1. 6" PVC WATER LINE, C-900, DR 18, CL 235, ALL DEPTHS, INCLUDES ALL CAST IRON FITTINGS, COMPLETE IN PLACE	\$14.00	0	\$0.00
2. 8" PVC WATER LINE, C-900, DR 18, CL 235, ALL DEPTHS, INCLUDES ALL CAST IRON FITTINGS, COMPLETE IN PLACE	\$17.00	3244	\$55,148.00
3. FLUSHING VALVE UNIT, ALL DEPTHS, INCLUDES APPROPRIATE TEE, 6" GATE VALVE & BOX, 6" LEAD AND FLUSHING VALVE, AND TRENCH SAFETY, PER TECHNICAL SPECIFICATIONS, COMPLETE IN PLACE	\$4,800.00	7	\$33,600.00
4. 6" AWWA GATE VALVE AND BOX, ALL DEPTHS, COMPLETE IN PLACE	\$710.00	0	\$0.00
5. 8" AWWA GATE VALVE AND BOX, ALL DEPTHS, COMPLETE IN PLACE	\$1,150.00	8	\$9,200.00
6. 12" X 8" TAPPING SLEEVE & VALVE, COMPLETE IN PLACE	\$5,250.00	1	\$5,250.00
7. REMOVE AND RELOCATE EXISTING FLUSHING VALVE UNIT (CONTRACTOR SHALL SUPPLY TEE, VALVE BOX AND LEAD), (TO BE RE-PAINTED IN ACCORDANCE WITH CITY OF LEAGUE CITY GENERAL DESIGN AND CONSTRUCTION STANDARDS) REMOVE EXISTING REDUCER, AND CONNECT PROPOSED WATER LINE, ALL DEPTHS, INCLUDING FITTINGS, AND REPAINT, COMPLETE IN PLACE	\$950.00	2	\$1,900.00
8. REMOVE AND RELOCATE EXISTING GATE VALVE AND CONNECT PROPOSED WATERLINE, ALL DEPTHS, COMPLETE IN PLACE	\$475.00	1	\$475.00
9. TRENCH SAFETY, ALL DEPTHS, COMPLETE IN PLACE	\$0.10	2877	\$287.70
10. 8" X 8" TAPPING SLEEVE & VALVE, COMPLETE IN PLACE	\$4,600.00	1	\$4,600.00
11. STEEL CASING FOR 8" WATERLINE (TO INCLUDE ALL FITTINGS), NOT INCLUDING THE WATER LINE PIPE, COMPLETE IN PLACE	\$72.00	234	\$16,848.00
SUBTOTAL WATER ITEMS			\$127,308.70
SANITARY SEWER ITEMS			
1. 8" PVC SEWER PIPE, ASTM D-2241, SDR 26, 0' - 8' CUT, COMPLETE IN PLACE	\$23.00	1,107.00	\$25,461.00
2. 8" PVC SEWER PIPE, ASTM D-2241, SDR 26, 8' - 12' CUT, COMPLETE IN PLACE	\$23.00	1,559.00	\$35,857.00
3. 10" PVC SEWER PIPE, ASTM D-2241, SDR 26, 12' - 16' CUT, COMPLETE IN PLACE	\$24.00	341.00	\$8,184.00
4. STANDARD SANITARY SEWER MANHOLE FOR 6" - 24" SANITARY SEWER PIPES, (8' DEPTH), COMPLETE IN PLACE	\$3,400.00	24.00	\$81,600.00
5. EXTRA DEPTH OF SANITARY SEWER MANHOLE, (OVER 8' DEPTH), COMPLETE IN PLACE	\$195.00	33.00	\$6,435.00
6. LONG SIDE DOUBLE OR SINGLE 6" PVC PIPE SERVICE LEADS, ASTM D2241, SDR 26, ALL DEPTHS, INCLUDING CEMENT STABILIZED SAND BACKFILL, RISER, WYE, PLUG, MARKER, AND ANY NECESSARY FITTINGS, ETC., COMPLETE IN PLACE	\$32.00	684.00	\$21,888.00
7. SHORT SIDE DOUBLE OR SINGLE 6" PVC PIPE SERVICE LEADS, ASTM D2241, SDR 26, ALL DEPTHS, INCLUDING CEMENT STABILIZED SAND BACKFILL, RISER, WYE, PLUG, MARKER, TRENCH SAFETY, AND ANY NECESSARY FITTINGS, ETC., COMPLETE IN PLACE	\$650.00	23.00	\$14,950.00
8. STANDARD 6" SANITARY SEWER STACK, (3' DEPTH), COMPLETE IN PLACE	\$600.00	5.00	\$3,000.00
9. EXTRA DEPTH OF 6" SANITARY SEWER STACK (OVER 3' DEPTH), COMPLETE IN PLACE	\$28.00	0.80	\$22.40
10. CORE INTO EXISTING SANITARY SEWER MANHOLE AND CONNECT PROPOSED SEWER PIPE (ALL SIZES), COMPLETE IN PLACE	\$1,600.00	1.00	\$1,600.00
11. T.V. INSPECTION FOR 8" TO 15" SANITARY SEWER, PER LEAGUE CITY REQUIREMENTS, COMPLETE IN PLACE	\$2.20	3,007.00	\$6,615.40
12. TRENCH SAFETY SYSTEM, ALL DEPTHS, COMPLETE IN PLACE	\$0.10	3,691.00	\$369.10
SUBTOTAL SANITARY SEWER ITEMS			\$205,981.90

ITEM DESCRIPTION	CONTRACT	COMPLETE	
	UNIT COST	TOTAL QTY. TO DATE	TOTAL AMT. TO DATE
STORM SEWER ITEMS			
1. 24" RCP STORM SEWER, ASTM C-76, CLASS III, ALL DEPTHS, COMPLETE IN PLACE	\$65.00	1,088.00	\$70,720.00
2. 30" RCP STORM SEWER, ASTM C-76, CLASS III, ALL DEPTHS, COMPLETE IN PLACE	\$82.00	836.00	\$68,552.00
3. 36" RCP STORM SEWER, ASTM C-76, CLASS III, ALL DEPTHS, COMPLETE IN PLACE	\$106.00	233.00	\$24,698.00
4. 42" RCP STORM SEWER, ASTM C-76, CLASS III, ALL DEPTHS, COMPLETE IN PLACE	\$132.00	76.00	\$10,032.00
5. 48" RCP STORM SEWER, ASTM C-76, CLASS III, ALL DEPTHS, COMPLETE IN PLACE	\$147.00	66.00	\$9,702.00
6. 18" X 28 1/2" ARCH RCP STORM SEWER, ASTM C-506, CLASS III, ALL DEPTHS, COMPLETE IN PLACE	\$122.00	155.00	\$18,910.00
7. 6' X 3' RCB STORM SEWER CULVERT, ASTM C-1433, ALL DEPTHS, COMPLETE IN PLACE	\$291.00	184.00	\$53,544.00
8. 6' X 4' RCB STORM SEWER CULVERT, ASTM C-1433, ALL DEPTHS, COMPLETE IN PLACE	\$315.00	181.00	\$57,015.00
9. TYPE "C" MANHOLE FOR 42" STORM SEWERS AND SMALLER, COMPLETE IN PLACE	\$2,950.00	17.00	\$50,150.00
10. TYPE "C" MANHOLE FOR 48" STORM SEWERS AND LARGER, COMPLETE IN PLACE	\$10,400.00	1.00	\$10,400.00
11. JUNCTION BOX WITH TYPE "C" MANHOLE TOP FOR BOX CULVERT STORM SEWER AND RCP STORM SEWER, ALL DEPTHS, (ALL SIZES), COMPLETE IN PLACE	\$27,300.00	2.00	\$54,600.00
12. STAGE I - STANDARD 5' PRECAST INLET ("H-2"), ALL DEPTHS, INCLUDES TEMPORARY SILT BARRIER FENCE FOR STAGE I INLETS, COMPLETE IN PLACE	\$1,400.00	22.00	\$30,800.00
13. STAGE II - STANDARD 5' PRECAST INLET ("H-2"), COMPLETE IN PLACE	\$1,100.00	22.00	\$24,200.00
14. STAGE I - STANDARD 10' CURB INLET, ALL DEPTHS, INCLUDES TEMPORARY SILT BARRIER FENCE FOR STAGE I INLETS, COMPLETE IN PLACE	\$3,400.00	2.00	\$6,800.00
15. STAGE II - STANDARD 10' CURB INLET, COMPLETE IN PLACE	\$1,150.00	2.00	\$2,300.00
16. GRATE A-Z INLET, COMPLETE IN PLACE	\$4,600.00	3.00	\$13,800.00
17. BREAK INTO JUNCTION BOX, CONNECT PROPOSED STORM SEWER (ALL SIZES), COMPLETE IN PLACE	\$700.00	1.00	\$700.00
18. 6:1 SLOPE END TREATMENT WITH BARS FOR 18" X 28 1/2" ARCH RCP STORM SEWER, COMPLETE IN PLACE	\$3,100.00	6.00	\$18,600.00
19. FLARED WINGWALL FOR 3 - 6'X3' BOX CULVERT, INCLUDES WINGWALLS AND CONCRETE APRON PER TXDOT DETAILS, COMPLETE IN PLACE	\$7,500.00	2.00	\$15,000.00
20. REGRADE EXISTING ROADSIDE DITCH, COMPLETE IN PLACE	\$9.00	200.00	\$1,800.00
21. T.V. INSPECTION FOR STORM SEWER, PER LEAGUE CITY REQUIREMENTS, COMPLETE IN PLACE	\$1.50	2,820.00	\$4,230.00
22. TRENCH SAFETY, (ALL DEPTHS), COMPLETE IN PLACE	\$0.10	2,820.00	\$282.00
SUBTOTAL STORM SEWER ITEMS			\$546,835.00
DEWATERING ITEMS			
1. BEDDING AND BACKFILL FOR WET SAND CONSTRUCTION AND UNSATISFACTORY SOIL CONDITIONS (PER DETAIL), (TO BE USED ONLY AS DIRECTED BY THE ENGINEER), COMPLETE IN PLACE	\$5.00	0	\$0.00
2. DEWATERING, (TO BE USED ONLY AS DIRECTED BY THE ENGINEER), COMPLETE IN PLACE	\$20.00	850	\$17,000.00
SUBTOTAL DEWATERING ITEMS			\$17,000.00

ITEM DESCRIPTION	CONTRACT	COMPLETE	
	UNIT COST	TOTAL QTY. TO DATE	TOTAL AMT. TO DATE
MISCELLANEOUS ITEMS			
1. STRIPPING MIN. 4-INCHES OF SURFACE MATERIAL AND HAULING TO OFFSITE FOR R.O.W.'S AND ADJACENT UTILITY EASEMENTS, (TO BE USED ONLY AS DIRECTED BY THE ENGINEER), COMPLETE IN PLACE	\$750.00	0	\$0.00
2. EXTRA CEMENT STABILIZED SAND BACKFILL, (2 SACK PER TON), (TO BE USED ONLY AS DIRECTED BY THE ENGINEER), COMPLETE IN PLACE	\$25.00	0	\$0.00
3. 6" CONCRETE SLAB FOR STORM SEWER BEDDING (AS PER CITY OF LEAGUE CITY GENERAL DESIGN AND CONSTRUCTION STANDARDS) (TO BE USED ONLY AS DIRECTED BY THE ENGINEER), COMPLETE IN PLACE	\$15.00	0	\$0.00
4. HYDROMULCH SEEDING FROM BACK OF CURB TO R.O.W., (TO BE USED ONLY AS DIRECTED BY THE ENGINEER), INCLUDING WATERING, COMPLETE IN PLACE	\$750.00	0	\$0.00
5. REMOBILIZATION FOR THE INSTALLATION OF THE ADDITIONAL WATER LINE AND COMPLETION OF THE CULVERTS ON FM 270	\$4,200.00	1	\$4,200.00
SUBTOTAL MISCELLANEOUS ITEMS			\$4,200.00
TOTALS TO DATE			\$901,325.60

Construction of the Paving and Appurtenances to serve Tuscan Lakes SF 55-2 SE & 60-2 SE

1788-2055 (11.2)

ITEM DESCRIPTION	CONTRACT	COMPLETE	
	UNIT COST	TOTAL QTY. TO DATE	TOTAL AMT. TO DATE
PAVING IMPROVEMENT ITEMS			
1. ROADWAY EXCAVATION, COMPLETE IN PLACE	\$4.30	2800	\$12,040.00
2. HYDRATED LIME FOR STABILIZED SUB – GRADE, (6 % LIME BY WEIGHT) AS REQUIRED BY SOIL CONDITIONS AND APPROVED BY ENGINEER, COMPLETE IN PLACE	\$190.00	170	\$32,300.00
3. 6" LIME STABILIZED SUB-GRADE (MANIPULATION), COMPLETE IN PLACE	\$1.50	11320	\$16,980.00
4. 2" HOT MIX ASPHALTIC CONCRETE SURFACE COURSE, MATERIAL AND CONSTRUCTION, REQUIREMENT SHALL BE IN ACCORDANCE WITH THD 3540, TYPE "D", COMPLETE IN PLACE	\$58.60	311	\$18,224.60
5. 12" CEMENT STABILIZED LIMESTONE BASE COURSE, MATERIAL AND CONSTRUCTION, REQUIREMENT SHALL BE IN ACCORDANCE WITH THD 3540, TYPE "D", COMPLETE IN PLACE	\$61.60	357	\$21,991.20
6. 6" REINFORCED CONCRETE PAVEMENT, COMPLETE IN PLACE	\$37.50	10000	\$375,000.00
7. 6" REINFORCED CONCRETE CURB, COMPLETE IN PLACE	\$2.90	5950	\$17,255.00
8. PERMANENT TRAFFIC CONTROL DEVICES (INCLUDING ALL TRAFFIC BUTTONS, PAVEMENT STRIPING, STREET SIGNS, TRAFFIC SIGNS, AND REMOVAL OF EXISTING STRIPING), COMPLETE IN PLACE	\$6,590.00	1	\$6,590.00
9. TEMPORARY TRAFFIC CONTROL PLAN (TO INCLUDE ALL DEVICES), COMPLETE IN PLACE	\$5,500.00	1	\$5,500.00
10. LOT GRADING, INCLUDING MANIPULATION AND COMPACTION OF EXISTING FILL TO REQUIRED ELEVATION AS SHOWN ON LOT GRADING PLAN, COMPLETE IN PLACE	\$8,790.00	1	\$8,790.00
11. REMOVE AND DISPOSE EXISTING TYPE III BARRICADE, COMPLETE IN PLACE	\$250.00	1	\$250.00
12. WHEELCHAIR RAMPS AND 5' X 5' LANDING PAD (AS SHOWN ON DETAIL SHEETS), COMPLETE IN PLACE	\$1,040.00	8	\$8,320.00
13. 6" SCHEDULE 40 PVC, COMPLETE IN PLACE	\$31.10	130	\$4,043.00
14. METAL BEAM GUARD FENCE, TO INCLUDE SINGLE GUARDRAIL TERMINAL, AND TERMINAL ANCHOR SECTION, PER CONSTRUCTION PLANS AND DETAILS, COMPLETE IN PLACE	\$92.00	0	\$0.00
SUBTOTAL PAVING IMPROVEMENT ITEMS			\$527,283.80
MISCELLANEOUS ITEMS			
1. STRIPPING (ALL STRIPPING TO BE APPLIED ON SITE AFTER THE FINAL GRADE) (TO BE USED ONLY AS DIRECTED BY THE ENGINEER), COMPLETE IN PLACE	\$200.00	0	\$0.00
2. HYDRATED LIME FOR STABILIZED SUB-GRADE, (6% LIME BY WEIGHT) AS REQUIRED BY SOILS CONDITIONS AND APPROVED BY ENGINEER, COMPLETE IN PLACE	\$190.00	0	\$0.00
3. 6" LIME STABILIZED SUB-GRADE (MANIPULATION)	\$1.50	0	\$0.00
4. 4" X 6" X 14" POSTAL PAD W/ 4-TYPE III EMNCLOSURES (TAN COLOR, MAIL SLOTS FACING SIDEWALK), COMPLETE IN PLACE	\$850.00	1	\$850.00
5. 4" X 4" X 14" SIDEWALK W/ SCORED LINES AT 4' INTERVALS (CROSS SCOPE AT 1.5% MIN & 2.0 % MAX), COMPLETE IN PLACE	\$650.00	1	\$650.00
SUBTOTAL MISCELLANEOUS ITEMS			\$1,500.00
TOTALS TO DATE			\$528,783.80