



Wastewater Infrastructure Construction Waiver and Wastewater lot/acreage fee exemption

Oso George Village Unit 2



Aerial Overview



NOTES

1. LAND USE CHARACTERISTICS WERE DETERMINED FROM THE FLOREN BLUFF AREA DEVELOPMENT PLAN, SEPTEMBER 14, 1986, FROM THE ADOPTED CORPUS CHRISTI FUTURE LAND USE MAP, MAY 24, 2006, (ORDINANCE 18327) AND THROUGH A REVIEW WITH DEVELOPMENT SERVICES STAFF ON JUNE 2, 2006.
2. IN THE ABSENCE OF EXISTING FLOW DATA, RESIDENTIAL FLOWS WERE ASSIGNED TO BE 300 GPCD/DAY AS PER TCEQ 30 TAC 317.4 (6/6 DATED JANUARY 6, 2005).
3. ONLY DEVELOPABLE LAND WAS CONSIDERED IN THE POPULATION PRODUCTION CALCULATIONS.
4. THE SERVICE AREAS WERE DEFINED THROUGH DISCUSSIONS WITH CITY STAFF.
5. ALL PIPE SIZES AND SLOPES MEET TCEQ RULES AS ESTABLISHED IN 30 TAC 317, EFFECTIVE JANUARY 6, 2005.
6. THE PEAKING FACTOR WAS CALCULATED USING THE HARGREAVES EMERGENCY FORMULA WHICH HAS BEEN WIDELY USED IN PREVIOUS AREA MASTER PLANS.
7. SOME MANHOLES ARE NOT SHOWN FOR CLARITY.
8. THE SERVICE AREA WAS ASSUMED TO BE FULLY DEVELOPED.
9. ALL OF THE ELEVATION CONTOURS WERE DERIVED FROM THE CITY OF CORPUS CHRISTI LIDAR DATA COLLECTED IN 2003.
10. TO THE EXTENT POSSIBLE, THE UPSTREAM END OF ALL LATERALS SHALL HAVE A MINIMUM DEPTH OF 3 FEET.
11. SOME LOCATIONS BELOW 10 FOOT ELEVATION FOR TOWN FLOOD PLANS MAY REQUIRE LOW PRESSURIZED PUMPING SYSTEMS TO BE PROVIDED BY PROPERTY OWNER.
12. THE ALIGNMENTS & LOCATIONS OF THE WASTEWATER FACILITIES ARE SHOWN SCHEMATICALLY.



SCALE: 1"=500'

CAYO DEL OSO

Oso George Village
Unit 2
(47.58 Acres)

WALDRON
FIELD

BARNEY M. DAVIS
COOLING RESERVOIR

WASTEWATER COLLECTION SYSTEM MASTER PLAN LAGUNA MADRE WWTP SERVICE AREA AREA 3



- ### LEGEND
- PROPOSED WASTEWATER LINE
 - EXISTING WASTEWATER LINE
 - PROPOSED FORCEMAIN
 - EXISTING FORCEMAIN
 - EXISTING WASTEWATER LINES OUTSIDE OF AREA 3
 - AREA 3 SERVICE AREA BOUNDARY
 - LIFT STATION INTERNAL BOUNDARY
 - SUB-AREA BOUNDARY
 - ADJACENT SUB-BASIN BOUNDARY
 - EXISTING INDIVIDUAL ON-SITE RWT TREATMENT SYSTEM
 - WATER
 - SUB AREA CALLOUT
 - PROPOSED LIFT STATION
 - EXISTING LIFT STATION
 - PROPOSED MANHOLE
 - EXISTING MANHOLE

FINAL

CITY OF
CORPUS CHRISTI,
TEXAS
WASTEWATER
DEPARTMENT



Department of Engineering Services

BROWN AND CALDWELL

LNV ENGINEERING
engineers & consultants

CIVIL • ELECTRICAL • MECHANICAL • ENVIRONMENTAL
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801 NAVIGATION, SUITE 300 • CORPUS CHRISTI, TEXAS 78408
PH: (361) 853-1784 • FAX: (361) 853-1785 • WWW.LNVE.COM



EXHIBIT 6

[illegible]

PROPOSED WASTEWATER LINE
 EXISTING WASTEWATER LINE
 EXISTING POWERLINE
 EXISTING FENCELINE
 EXISTING WASTEWATER LINES
 EXISTING OF AREA 3
 AREA 3 SERVICE AREA BOUNDARY
 LIFT STATION INTERVAL DOWNGRADES
 SUB AREA BOUNDARY
 ALIGNMENT SUB-BASIN BOUNDARY
 EXISTING INDIVIDUAL CONCRETE
 WWT TREATMENT SYSTEM
 WATER
 SUB AREA CALLOUT
 PROPOSED LIFT STATION
 EXISTING LIFT STATION
 PROPOSED MANHOLE
 EXISTING MANHOLE
 EXISTING MAINLINE

FINAL

CITY OF
CORPUS CHRISTI
TEXAS
WASTEWATER
DEPARTMENT

**WASTEWATER COLLECTION
SYSTEM MASTER PLAN
LAGUNA MADRE WWTP
SERVICE AREA
AREA 3**

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CIVIL • STRUCTURAL • TRANSPORTATION • SURVEYING •
MAINTENANCE • CONSTRUCTION MANAGEMENT

[illegible]

EXHIBIT 6

Engineer's Preliminary Opinion of Probable Construction Costs



**Texas Geo Tech
Engineering &
Land Surveying, Inc.**

Title: Wastewater and Lift Station Improvements

Owner: George Mostaghahsi

Contact:

Address:

Phone:

Fax:

Date of Estimate: September 12, 2017

Engineer: Juan Perales, P.E.

Address: 5525 S. Staples Suite B2
Corpus Christi, Texas 78411

Phone: (361) 993-0808

Fax: (361) 993-2955

ESTIMATE SUMMARY

A. Preliminary Wastewater and Lift Station Improvements

| ITEM NO. | DESCRIPTION | QUANTITY | UNIT | | CONTRACT UNIT PRICE | TOTAL COST |
|--|-----------------------------------|----------|------|--|---------------------|------------------------|
| WASTEWATER | | | | | | |
| 1 | CLEARING & GRUBBING | 1 | LS | | \$ 2,500.00 | \$ 2,500.00 |
| 2 | SEEDING & MULCHING | 1 | LS | | \$ 2,250.00 | \$ 2,250.00 |
| 3 | EROSION CONTROL | 1 | LS | | \$ 3,500.00 | \$ 3,500.00 |
| 4 | TRAFFIC CONTROL PLAN / PERMITTING | 1 | LS | | \$ 12,000.00 | \$ 12,000.00 |
| 5 | TRENCH SAFETY FOR EXCAVATIONS | 17,500 | LF | | \$ 2.00 | \$ 35,000.00 |
| 6 | 8" PVC - WASTEWATER | 1,150 | LF | | \$ 40.00 | \$ 46,000.00 |
| 7 | 12" PVC - WASTEWATER | 1,300 | LF | | \$ 50.00 | \$ 65,000.00 |
| 8 | 24" PVC - WASTEWATER | 3,100 | LF | | \$ 140.00 | \$ 434,000.00 |
| 9 | 6" PVC - FORCE MAIN | 13,000 | LF | | \$ 35.00 | \$ 455,000.00 |
| 10 | DUCTILE IRON FTINGS | 1 | LS | | \$ 5,000.00 | \$ 5,000.00 |
| 11 | AIR RELEASE VALVE W/BOLLARDS | 12 | EA | | \$ 3,580.00 | \$ 42,960.00 |
| 12 | CONNECT TO MANHOLE | 5 | EA | | \$ 1,000.00 | \$ 5,000.00 |
| 13 | FIBERGLASS MANHOLE | 3 | EA | | \$ 3,200.00 | \$ 9,600.00 |
| 14 | PAVEMENT REPLACEMENT | 500 | SY | | \$ 60.00 | \$ 30,000.00 |
| 15 | GRADING | 1 | LS | | \$ 2,500.00 | \$ 2,500.00 |
| 16 | LIFT STATION - PEAK FLOW 1.5 MGD | 1 | LS | | \$ 850,000.00 | \$ 850,000.00 |
| 17 | ENVIRONMENTAL EVAL. & MITIGATION | 1 | LS | | \$ 50,000.00 | \$ 50,000.00 |
| Subtotal | | | | | | \$ 2,050,310.00 |
| 18 | CONSTRUCTION OVERHEAD | 10% | | | | \$ 205,031.00 |
| 19 | ENGINEERING AND CONTINGENCIES | 25% | | | | \$ 512,577.50 |
| A. Preliminary Wastewater and Lift Station Improvements | | | | | Total: | \$ 2,767,918.50 |



Staff Recommendation

- **Approve wastewater infrastructure waiver and wastewater lot/acreage fee exemption.**