Little Johnson/Security DBPS Excerpt: Table 7 Preliminary Cost Estimates, RCP & Curb Inlet

Table 7. Preliminary Cost Estimates: Security Basin-Storm Sewer System.

Item Description	Unit	Estimated Unit Price ($)	Total System Cost Quantity	Total System Cost Item Cost ($)
REINFORCED CONCRETE PIPE				
24-inch	LF	50	570	28,500
30-inch	LF	60	1,490	89,400
36-inch	LF	85	2,260	192,100
42-inch	LF	95	1,730	164,350
48-inch	LF	110	4,580	503,800
54-inch	LF	135	0	0
60-inch	LF	155	1,290	199,950
72-inch	LF	205	1,490	305,450
144-inch CSP (Tunnel)	LF	1,000	200	200,000
CONCRETE BOX CULVERT				
5 ft. x 6 ft.	LF	300	0	0
5 ft. x 8 ft.	LF	325	1,680	546,000
8 ft. x 12 ft.	LF	700	900	630,000
CURB INLETS				
10 ft.	EA	3,000	77	231,000
MANHOLES				
5 ft. diameter	EA	2,500	16	40,000
6 ft. diameter	EA	3,500	25	87,500
Box Base (Junction Structure)	EA	4,500	6	27,000
Inlet Structure	EA	10,000	1	10,000
Outlet Structure	EA	10,000	4	40,000
REMOVE AND RELOCATE EXISTING UTILITIES	LS			380,000
Subtotal				$3,675,050
Plus Contingency (5% of Construction Cost)				183,752
Plus Engineering (10% of Construction Cost & Contingency)				385,880
TOTAL ESTIMATED CONSTRUCTION COST				$4,244,682

Little Johnson/Security DBPS Excerpt: Drawing Sheet 22

HAVEN VALLEY

POND 1

24" RCP

STA 58+30 MH
2 INLETS

STA 61+00 MH

STA 29+50 MH

STA 23+50
3 INLETS

STA 16+60 MH
2 INLETS (20')

STA 7+20 MH
2 INLETS

WIDEFIELD DR

ROSE MONT DR

MAIN ST.

MARQUETTE DR.

LONGRIDGE DR.

STA 64+50 MH
2 INLETS

STA 55+
2 INLETS

STA 51+50 MH
3 INLETS

STA 46+30 MH
4 INLETS

STA 41+10 MH

STA 35+50 MH
3 INLETS

STA 18+20
JCT. STRUCT.
4 INLETS
(20')

STA 12+70 JCT. STRUCT.
2 INLETS (20')

EX 24" RCP

MATCHLINE STA 2+00 SEE SHEET 18

SCALE IN FEET

THIS DRAWING IS A MASTER PLANNING SHEET REPRESENTING PRELIMINARY AND CONCEPTUAL ENGINEERING. IT SHOULD NOT BE USED FOR CONSTRUCTION PURPOSES.

STA 64+50 MH
INV = 13.18

STA 61+00 MH
INV = 7.78

STA 58+30 MH
INV = 04.0

STA 55+00 MH
INV = 98.9

MATCHLINE STA 54+00 INV = 5797.5

620 L.F. of 30" R.C.P.
@ 1.4% Q_{10} = 30 cfs

430 L.F. of 36" R.C.P.
@ 1.4% Q_{10} = 80 cfs

STA 51+50 MH
INV = 93.0

STA 46+30 MH
INV = 89.88

STA 41+10 MH
INV = 86.78

STA 35+50 MH
INV = 78.0

STA 29+50 MH
INV = 53.4

STA 23+50 MH
INV = 45.0

STA 18+20
JCT. STRUCT.

STA 16+60 MH
INV = 25.78

STA 12+70 JCT. STRUCT.
INV = 19.54

STA 7+20 MH
INV = 16.24

JCT. STRUCT.
MATCH SEC. BLVD STA 7+40

MATCHLINE STA 54+00
INV = 5797.50

250 L.F. of
36" R.C.P.
@ 1.4%
Q_{10} = 80 cfs

1600 L.F. of 48" R.C.P. @ 0.6%
Q_{10} = 115 cfs

600 L.F. of 42"
R.C.P. @ 3.67%
Q_{10} = 115 cfs

600 L.F. of 42" R.C.P.
@ 1.4% Q = 115 cfs

330 L.F. of
42" R.C.P. @ 3.6%
Q_{10} = 140 cfs

550 L.F. of 72" R.C.P.
@ 1.6% Q_{10} = 450 cfs

1270 L.F. of 8'W x 5'H BOX
@ 0.6% Q_{10} = 450 cfs

INV = 11.92

83.4

56.0

31.22

INV = 68.1

INV = 38.5

INV = 88.34

MORNING SIDE — WIDEFIELD DRIVE OUTFALL

50+00 45+00 40+00 35+00 30+00 25+00 20+00 15+00 10+00 5+00 0+00 65+00 60+00 55+00

5830 5820 5810 5800 5790 5780 5770 5760 5750 5740 5730 5720 5710

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LITTLE JOHNSON/SECURITY CREEK
DRAINAGE BASIN PLANNING STUDY
PRELIMINARY DESIGN
PLAN & PROFILE: MORNINGSIDE - WIDEFIELD DRIVE OUTFALL

Project No.	PCO-EPC-01
Date:	10/87
Design:	TCF
Drawn:	EAK
Check:	TCF
Revisions:	

SHEET 22