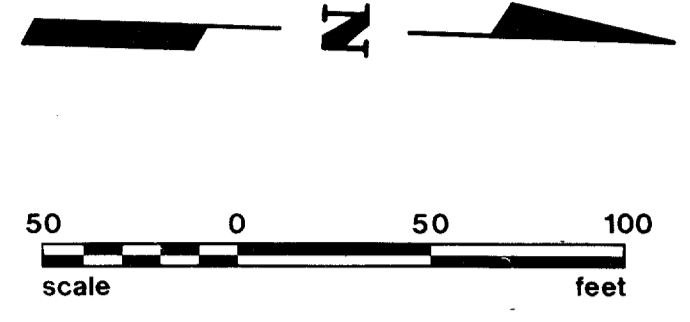


SANITARY SEWER CURVE DATA

CURVE NO.	DELTA	RADIUS	LENGTH	CHORD	TANGENT
1	30°56'23"	200.00'	108.00'	106.69'	55.35'
2	23°39'32"	200.00'	82.59'	82.00'	41.89'
3	23°18'33"	720.00'	292.91'	290.90'	148.51'
4	68°53'03"	305.00'	366.69'	345.00'	209.17'
5	51°53'20"	200.00'	181.13'	175.00'	97.31'
6	42°30'27"	200.00'	148.38'	145.00'	77.79'
7	17°15'19"	320.00'	96.37'	96.01'	48.55'
8	48°05'45"	200.00'	167.89'	163.00'	89.25'
9	30°44'02"	200.00'	107.28'	106.00'	54.97'
10	10°54'10"	200.00'	38.06'	38.00'	19.09'
11	63°20'11"	200.00'	221.09'	210.00'	123.37'



GENERAL WATER AND SANITARY SEWER NOTES

- ALL WATER MAINS SHALL BE DUCTILE IRON CLASS 51 WATER PIPE WITH POLYETHYLENE WRAP ON PIPE, FITTINGS, AND FIRE HYDRANT BASES.
- ALTERNATE - ALL 8" WATER MAINS SHALL BE PVC CLASS 200 WATER PIPE. FOR PVC SERVICE TAPS, TAPPINGS SADDLE SHALL BE USED.
- 8" WATER MAINS SHALL HAVE A MINIMUM COVER OF 48" BELOW FINISHED STREET GRADE OR 60" DEPTH IN UNIMPROVED STREETS OR AS REQUIRED TO CLEAR OTHER UTILITIES.
- ALL WATER DEADHEADS SHALL BE 1" COPPER, LOCATED AS SHOWN, AND REFERENCED AS FOLLOWS: TOTAL 45 1" DEADHEADS.
- ALL SANITARY SEWER LATERALS SHALL BE 6", LOCATED AS SHOWN, AND REFERENCED AS FOLLOWS: TOTAL 45 6" LATERALS.
- ALL WATER AND SANITARY SEWER LATERALS SHALL BE SEPARATED BY 10 FEET (MINIMUM).
- EXTEND WATER DEADHEADS AND SANITARY SEWER LATERALS 2' BEYOND PROPOSED CURBS, UNLESS OTHERWISE SHOWN.
- CONSTRUCTION SHALL BE IN ACCORDANCE WITH NCTCOG STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
- BULLHEAD SERVICES AND METER WILL BE INSTALLED BY THE CITY.
- CONTRACTOR SHALL USE 5° BEVEL BEND PIPE FOR PVC SANITARY SEWER IF NEEDED; DO NOT PULL PVC PIPE.
- REFER TO SHEET 16 FOR EMBEDMENT DETAILS.

JOHN L. SHIRLEY

Design: Waddie  
Drawn: Perez  
Date: 9-87

NOTE:  
CONTRACTOR SHALL VERIFY LOCATION OF EXIST. 8" WATER LINE PRIOR TO CONSTRUCTION.

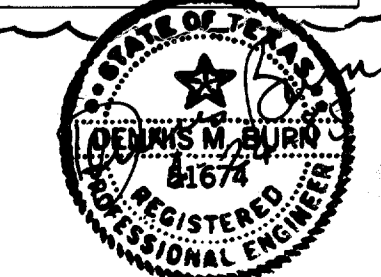
CAUTION:  
TEXAS PIPELINE CO. CROSSING. CONTRACTOR TO VERIFY DEPTH IN FIELD AND ADJUST IF NECESSARY. CONTACT MR. R. A. DUFF AT (409)279-2441 48 HOURS PRIOR TO CONSTRUCTION.

BENCHMARK LIST:  
 BM #1 RAILROAD SPIKE IN THE NORTH SIDE OF A POWER POLE APPROXIMATELY 620 FEET SOUTH OF BELTLINE ROAD AND 150 FEET WEST OF WINNWOOD ROAD. ELEV. 560.69  
 BM #2 RAILROAD SPIKE IN THE WEST SIDE OF A POWER POLE APPROXIMATELY 1300 FEET SOUTH OF BELTLINE ROAD AND 230 FEET WEST OF WINNWOOD ROAD. ELEV. 569.89

REVISIONS  
 1 REVISED STATIONS ON LINE 'B' AND LINE 'B-2'  
 2 REVISED STATION ON LINE 'D'

DESIGNED BY *Quis* DATE 5-31-85  
 R.O.W. APPROVED \_\_\_\_\_ DATE \_\_\_\_\_  
 ENGINEER OF DESIGN *Wicki Reed* DATE 6-11-85  
 CONTRACT NO. \_\_\_\_\_ DATE \_\_\_\_\_

DESIGNED BY: *Quis*  
 R.O.W. APPROVED: *Wicki Reed* DATE 5-85  
 ENGINEER OF DESIGN: *Wicki Reed* DATE 5-85  
 CONTRACT NO. 85-331-P ~ MIDWEST BRIDGE CORP. DATE 4-22-85



**WATER & SANITARY SEWER PLAN**  
**BELLBROOK ESTATES**  
 SHARIF · MUNIR · DAVIDSON DEVELOPMENT CORP.  
**WATER UTILITIES DEPARTMENT**  
**CITY OF DALLAS, TEXAS**

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
D.M.B.	O.R.D.	DEC. 1984	1" = 50'		411Q	1960