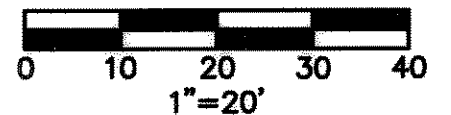


RUNOFF COLLECTION POINT (INLET OR MANHOLE)		DISTANCE BETWEEN COLLECTION POINTS	INCREMENTAL DRAINAGE AREA			ACCUMULATED "CA"	TIME AT UPSTREAM STATION (MINUTES)	DESIGN STORM FREQUENCY (YEARS)	INTENSITY "I" (INCHES/HR)	STORM WATER RUNOFF "Q" (C.F.S.)	SLOPE OF HYDRAULIC GRADIENT "S" (FT/FT)	SELECTED STORM SEWER SIZE	VELOCITY IN SEWER BETWEEN COLLECTION POINTS "V" (F.P.A.)	HEAD LOSS COEFF. (K _J)	VELOCITY HEAD LOSS AT UPSTREAM STATION (FEET)	FLOW TIME IN SEWER (MINUTES)	TIME AT DOWNSTREAM STATION (MINUTES)	REMARKS
UPSTREAM STATION	DOWNSTREAM STATION		AREA NO.	DRAINAGE AREA "A" (ACRES)	RUNOFF COEFF. "C"													
1	2																	
2+72	2+61.47	10.53	OS-1	20.97	0.61	12.77	10	100	125.11	0.0076	48"	9.96	---	---	0.02	10.02	CONN TO EX 42"	
2+61.47	1+84.63	76.84	OS-1	20.97	0.61	12.77	10.02	100	125.11	0.0076	48"	9.96	0.45	0.69	0.13	10.15	30' BEND	
1+84.63	1+20.45	64.18	F	0.01	0.80	0.01	12.78	100	125.24	0.0078	48"	9.97	0.40	0.82	0.11	10.26	60' WYE CONN	
1+20.45	0+22.71	97.74	E	0.05	0.90	0.05	12.83	100	125.73	0.0077	48"	10.01	0.40	0.82	0.16	10.42	60' WYE CONN	
0+22.71	0+00	22.71	B+C	1.02	0.90	0.92	13.75	100	134.75	0.0088	48"	10.72	0.40	0.71	0.04	10.46	60' WYE CONN	

CAUTION!!
 CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-245-4545) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. BURY & PARTNERS IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DEPICTING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.



LEGEND

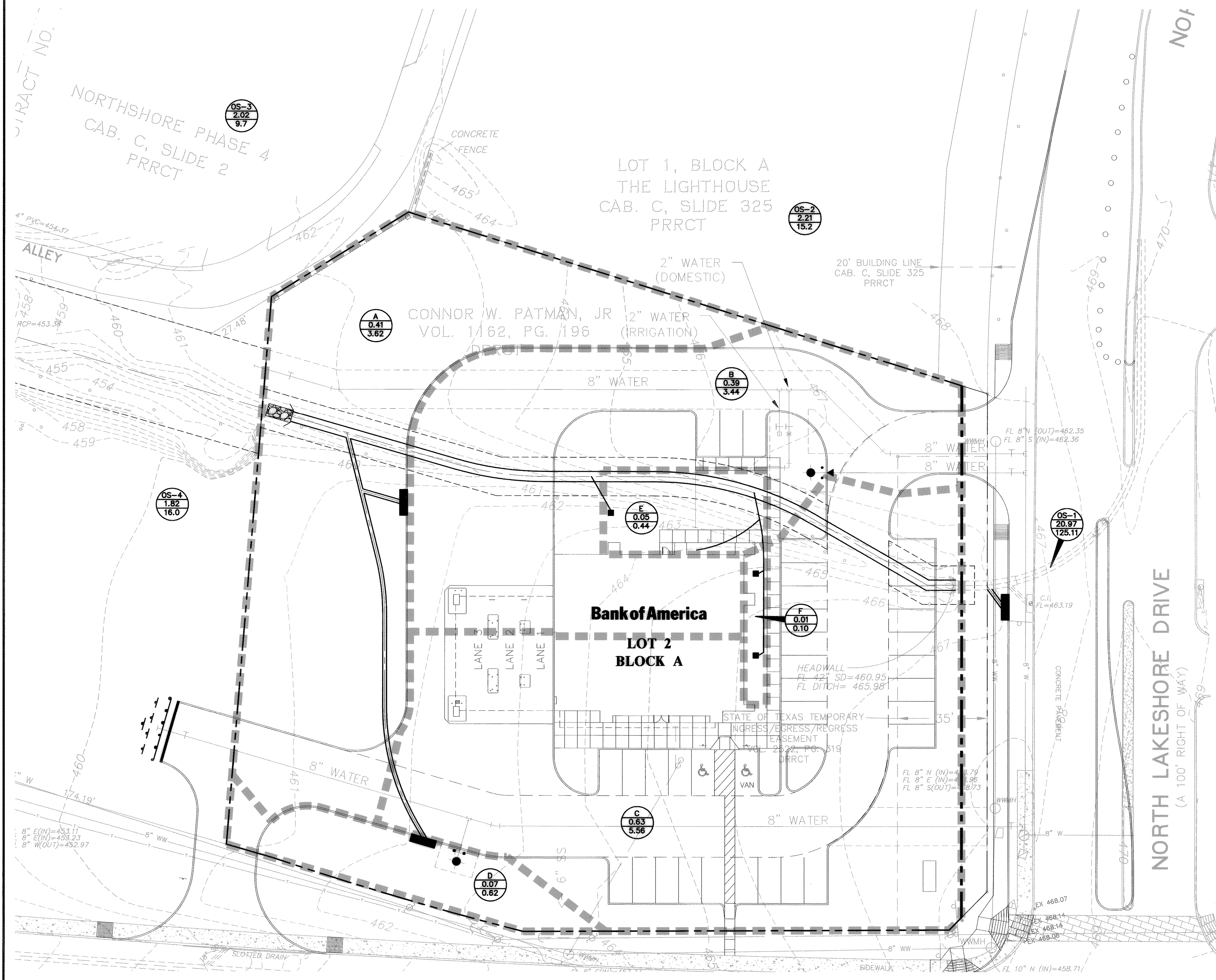
	DRAINAGE AREA DESIGNATION
	DRAINAGE AREA BOUNDARY
	DRAINAGE AREA DIVIDE
	DIRECTION OF FLOW

DRAINAGE AREA CALCULATIONS

DRAINAGE AREA	AREA (ACRES)	T _c (MIN)	C (ULT.)	I ₁₀₀ (IN/HR)	Q ₁₀₀ (CFS)	NOTES
A	0.41	10	0.90	9.80	3.62	TO DRAINAGE DITCH WEST OF SITE
B	0.39	10	0.90	9.80	3.44	TO 10' CURB INLET
C	0.63	10	0.90	9.80	5.56	TO 10' CURB INLET
D	0.07	10	0.90	9.80	0.62	TO PROP. DRIVE AT S.H. 66
E	0.05	10	0.90	9.80	0.44	TO 12" GRATE INLET
F	0.01	10	0.90	9.80	0.10	TO 12" GRATE INLETS
OS-1	20.85	10	0.61	9.80	124.0	SEE TABLE BELOW FOR CALCULATIONS
OS-2	2.21	10	0.70	9.80	15.20	DRAINS TOWARD DRAINAGE DITCH
OS-3	2.02	12	0.50	9.80	9.70	AREA 10 OF NORTHSHORE PHASE 4 PLANS SHEET 7/12
OS-4	1.82	10	0.90	9.80	16.00	DRAINS TOWARDS DRAINAGE DITCH

DRAINAGE CALCULATIONS FOR OFFSITE RUNOFF TO EX. 42" STORM DRAIN (OS-1)

DRAINAGE AREA	AREA (ACRES)	T _c (MIN)	C (ULT.)	I ₁₀₀ (IN/HR)	Q ₁₀₀ (CFS)	NOTES
14	3.89	10	0.50	9.80	19.08	FROM NORTHSHORE DRAINAGE SHEET 3, DATED 10/72 BY HAROLD EVANS
15	1.85	10	0.50	9.80	9.07	FROM NORTHSHORE DRAINAGE SHEET 3, DATED 10/72 BY HAROLD EVANS
16	5.20	10	0.50	9.80	25.48	FROM NORTHSHORE DRAINAGE SHEET 3, DATED 10/72 BY HAROLD EVANS
17	3.86	10	0.50	9.80	18.91	FROM NORTHSHORE DRAINAGE SHEET 3, DATED 10/72 BY HAROLD EVANS
19	1.60	10	0.90	9.80	14.11	FROM NORTHSHORE DRAINAGE SHEET 3, DATED 10/72 BY HAROLD EVANS
RESIDENTIAL	2.39	10	0.50	9.80	11.71	ALONG ALTA VISTA ST. PART OF AREA 18 OF NORTHSHORE SHEET 3
LAKESHORE	1.15	10	0.90	9.80	10.14	2 NORTHBOUND LANES ON LAKESHORE DRIVE, PART OF AREA 18
WAL-MART	1.22	10	0.35	9.80	4.18	AREA 23 OF DRAINAGE MAP, SHEET C7 OF WAL-MART #3530 PLANS BY K.H.
WAL-MART	0.23	10	0.90	9.80	2.03	AREA 14 OF DRAINAGE MAP, SHEET C7 OF WAL-MART #3530 PLANS BY K.H.
WAL-MART	0.22	10	0.90	9.80	1.94	AREA 12 OF DRAINAGE MAP, SHEET C7 OF WAL-MART #3530 PLANS BY K.H.
FINANCIAL	0.96	10	0.90	9.80	8.47	N.E.C. OF INTERSECTION AT S.H. 66 AND LAKESHORE DRIVE
TOTAL (OS-1)	20.97	10	0.61	9.80	124.11	



RECORD DRAWING

RECORD DRAWINGS:
 THE INTENT OF THE OWNER AND ENGINEER WAS TO CONSTRUCT THE FACILITIES ACCORDING TO THESE PLANS AS APPROVED BY THE CITY OF ROCKWALL. THE OWNER OR ENGINEER DID NOT VERIFY LINES OR GRADES AFTER CONSTRUCTION AND IS NOT AWARE OF ANY CHANGES OR REVISIONS TO THESE PLANS DURING CONSTRUCTION EXCEPT AS NOTED BASED ON INFORMATION PROVIDED BY: CENTEX CONSTRUCTION COMPANY
 3100 MCKINNON STREET, 7TH FLOOR
 DALLAS, TEXAS 75201
 PHONE: (214) 468-4700
 FAX: (214) 468-4257
 CONTACT: ROBERT BOE (PROJECT MANAGER)

Oculus Inc.
 393 NORTH EUCLID SUITE 240
 ST. LOUIS, MO 63108 USA
 T: 314.367.6100
 F: 314.367.1489
 WWW.OCULUSINC.COM

SERIAL NUMBER:
 NRSP VERSION: 2.5
 BULLETIN:
 Project Name
 BANK OF AMERICA TX-0541 ROCKWALL, TX
 S.H. 66 & NORTH LAKESHORE DRIVE

PROTOTYPE LAYOUT
 MEDIUM - TX-0541 OCULUS #
 Issue Date & Issue Description By

Scale: 1"=20' Date: 7-8-05
 Designed By: BAA
 Drawn By: DSM
 Checked By: BPI
 File: F:\30332-08\33208DAM.DWG
 Project No.: 30332-08

**BANK OF AMERICA TX-0541
 LOT 2, BLOCK A, BOWLES ADDN.
 S.H. 66 & N. LAKESHORE DRIVE
 ROCKWALL, TX**

SHEET C4.1

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 ENGINEERING SOLUTIONS
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3 CITY COMMENTS NO. 1/08/2005