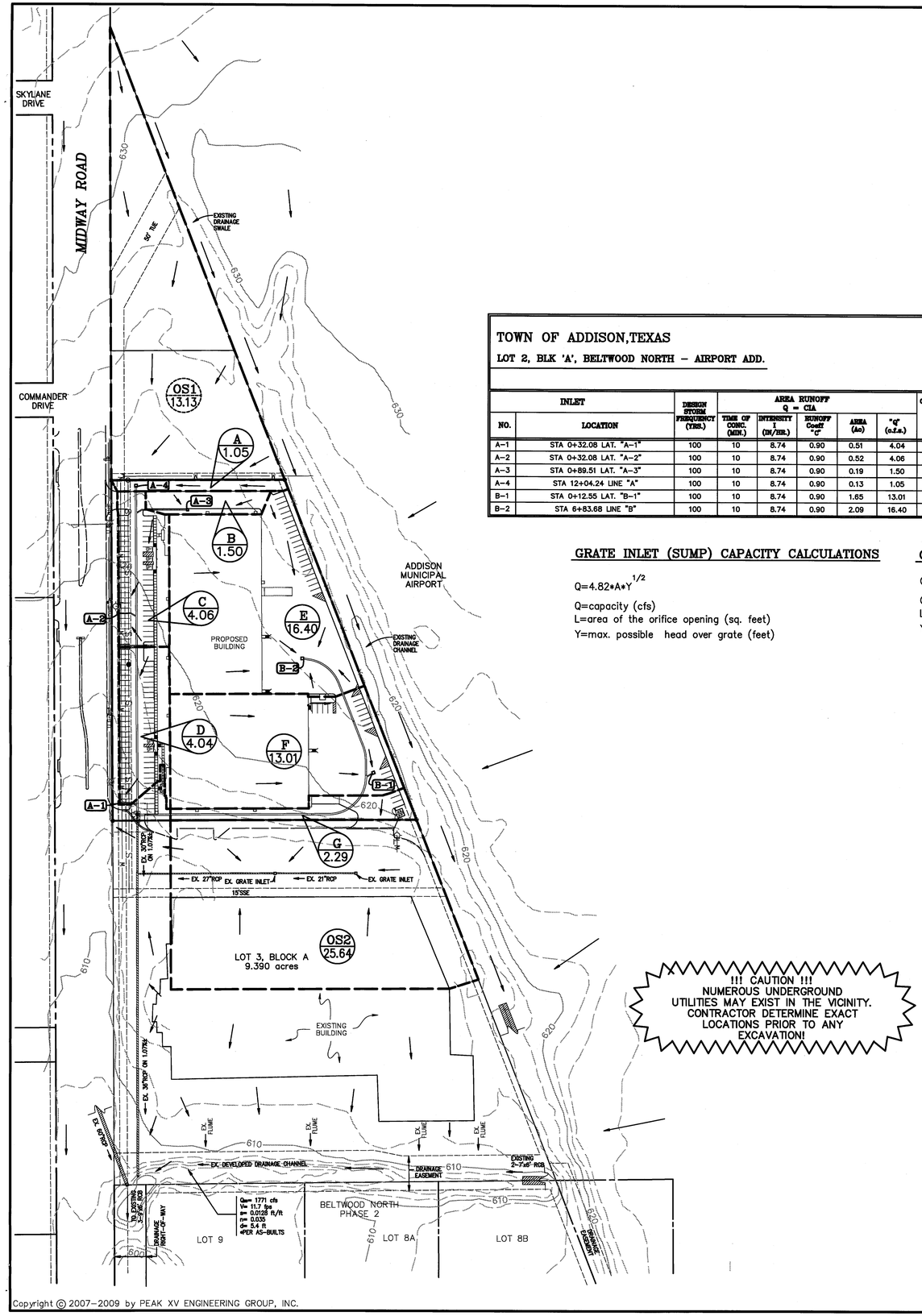

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!!! CAUTION !!!
NUMEROUS UNDERGROUND UTILITIES MAY EXIST IN THE VICINITY. CONTRACTOR DETERMINE EXACT LOCATIONS PRIOR TO ANY EXCAVATION!

0 100 200
GRAPHIC SCALE IN FEET

BENCHMARKS

TOWN OF ADDISON B.M.#7:
SQUARE CUT ON TOP OF AN INLET AT THE NORTHWEST CORNER OF SUNBELT & WESTGROVE
ELEV. = 628.54'

TxDOT (furnished by TOWN OF ADDISON) COA-8:
2" BRASS DISK STAMPED "TxDOT COA-8 GPS" LOCATED ON TOP OF AN INLET 200'± SOUTHEAST OF THE INTERSECTION OF KELLER SPRINGS & MIDWAY ON THE EAST SIDE OF MIDWAY ROAD.
ELEV. = 638.75'

ABBREVIATIONS LEGEND

MIN. FF = MINIMUM FINISHED FLOOR ELEV.
RCP = REINFORCED CONCRETE PIPE (DRAINAGE)
TR = TELEPHONE RISER
WV = WATER VALVE
FH = FIRE HYDRANT
SSMH = SANITARY SEWER MANHOLE
PP = POWER OR UTILITY POLE
OHE = OVERHEAD POWER OR UTILITY LINE
ROW = RIGHT-OF-WAY
℄ = CENTERLINE
℗ = PROPERTY LINE
BL = BUILDING LINE
DE = DRAINAGE EASEMENT
UE = UTILITY EASEMENT
SSE = SANITARY SEWER EASEMENT
WE = WATER LINE EASEMENT
TUE = T.U. UTILITY EASEMENT

TOWN OF ADDISON, TEXAS

LOT 2, BLK 'A', BELTWOOD NORTH – AIRPORT ADD.

100 YEAR DESIGN CALCULATIONS

INLET DESIGN CALCULATIONS

INLET NO.	INLET LOCATION	DESIGN STORM FREQUENCY (YRS.)	AREA RUNOFF Q = CIA: TIME OF CONC. (MIN.)	INTENSITY I (IN/HR.)	RUNOFF Coeff "c"	AREA (Ac)	"CA" (c.f.s.)	CARRY-OVER FROM UPSTREAM INLET (c.f.s.)	CROSS-OVER FROM OTHER DRAINAGE AREAS (c.f.s.)	TOTAL FLOW (c.f.s.)	STREET CAPACITY (c.f.s.)	GUTTER SLOPE (FT/100 FT)	CROWN TYPE	SELECTED INLET: INLET OPENING LENGTH	TYPE	MAX. DEPTH (Feet)	MAX. CAPACITY (CFS)	ACTUAL DEPTH (Feet)	CARRY-OVER TO DOWNSTREAM INLET (c.f.s.)
A-1	STA 0+32.08 LAT. "A-1"	100	10	8.74	0.90	0.51	4.04	0.00	0.00	4.04	NA	SAG	NA	5'	CURB	0.50	5.30	0.42	0.00
A-2	STA 0+32.08 LAT. "A-2"	100	10	8.74	0.90	0.52	4.06	0.00	0.00	4.06	NA	SAG	NA	5'	CURB	0.50	5.30	0.42	0.00
A-3	STA 0+89.51 LAT. "A-3"	100	10	8.74	0.90	0.19	1.50	0.00	0.00	1.50	NA	SAG	NA	3'	CURB	0.50	3.18	0.30	0.00
A-4	STA 12+04.24 LINE "A"	100	10	8.74	0.90	0.13	1.05	0.00	13.13	14.18	NA	SAG	NA	4'x4'	DROP	1.00	48.00	0.48	0.00
B-1	STA 0+12.55 LAT. "B-1"	100	10	8.74	0.90	1.65	13.01	0.00	0.00	13.01	NA	SAG	NA	38"x38"	GRATE	0.75	18.87	0.36	0.00
B-2	STA 6+83.68 LINE "B"	100	10	8.74	0.90	2.09	16.40	0.00	0.00	16.40	NA	SAG	NA	38"x38"	GRATE	1.40	21.79	0.57	0.00

DRAINAGE CALCULATIONS

AREA NO.	ACRES	C	Tc	I$_{10}$	Q$_{10}$	I$_{100}$	Q$_{100}$	PICK-UP POINTS: Inlet 1	Inlet 2	To DA
A	0.133	0.90	10	6.36	0.76	8.74	1.05	A-4		
B	0.190	0.90	10	6.36	1.09	8.74	1.50	A-3		
C	0.516	0.90	10	6.36	2.95	8.74	4.06	A-2		
D	0.514	0.90	10	6.36	2.94	8.74	4.04	A-1		
E	2.085	0.90	10	6.36	11.93	8.74	16.40	B-2		
F	1.653	0.90	10	6.36	9.46	8.74	13.01	B-1		
G	0.291	0.90	10	6.36	1.67	8.74	2.29			OS2
OS1	2.732	0.55	10	6.36	9.56	8.74	13.13			A
OS2	3.260	0.90	10	6.36	18.66	8.74	25.64	EXISTING GRATE INLETS		

GRATE INLET (SUMP) CAPACITY CALCULATIONS

$Q=4.82*A*Y^{1/2}$

Q=capacity (cfs)
L=area of the orifice opening (sq. feet)
Y=max. possible head over grate (feet)

CURB INLET (SUMP) CAPACITY CALCULATIONS

$Q=3.0*L*Y^{3/2}$

Q=capacity (cfs)
L=length of inlet opening (feet)
Y=total depth of inlet opening (feet)

RATIONAL METHOD

Q=C*I*A

Q ~ Flow (c.f.s.)
C ~ Runoff Coefficient
I ~ Intensity (in./hr.)
A ~ Drainage Area (Acres)

LEGEND

- X / 5.3 — PROPOSED AREA DESIGNATION / 100-YR DEVELOPED RUNOFF IN C.F.S.
- Y / 5.3 — PROPOSED AREA DESIGNATION / 100-YR UNDEVELOPED RUNOFF IN C.F.S.
- PROPOSED DRAINAGE AREA DIVIDE
- X-1 — PROPOSED INLET NUMBER
- OHE — EXIST. OVERHEAD UTILITY
- UGT — EXIST. UNDERGROUND CABLE
- W — W — EXIST. WATER LINE
- S — S — EXIST. SANITARY SEWER
- 460 — EXISTING CONTOURS
- DIRECTION OF FLOW
- EASEMENT
- PROPOSED RIDGE LINE
- PROPOSED DRAINAGE SWALE
- PROPOSED STORM SEWER W/ INLET
- EXISTING STORM SEWER W/ INLET

OWNER & DEVELOPER

S & B INVESTMENTS
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CONTACT: VICTOR A. SAHM, JR.

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NO.	REVISIONS NUMBER	BY	DATE
5	Revised per City of Carrollton/Released for Construction	CAC	06/01/09
4	Revised per the TOWN OF ADDISON	CAC	05/07/09
3	Revised per the TOWN OF ADDISON	CAC	04/24/09
2	Revised per the TOWN OF ADDISON	CAC	04/02/09
1	Submitted to the TOWN OF ADDISON	CAC	01/26/09

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RELEASED ON 06/01/09 FOR CONSTRUCTION

CECIL A. CHESHIER 92674 LICENSED PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY CECIL A. CHESHIER, P.E. #92674

DRAINAGE AREA MAP & CALCS.

(LOT 2, BLOCK A) RE-PLAT OF

BELTWOOD NORTH – AIRPORT ADDITION

TOWN OF ADDISON, DALLAS COUNTY, TEXAS

JOB NUMBER 18-0701

SHEET NUMBER C4.1

L:\2018-We Salem\2007\2018-0701 Airport Addition\CIVIL PLANS 04.pro
Mon Jun 01 15:38:45 2009