03/09/1999 18:22:42 SWSC0V.DWG

STORM WATER SEWER #522

to serve

AUBURN HILLS 8TH ADDITION

Project Number

468-82956

Index Code

751275

CITY OF WICHITA, KANSAS

Michael E. Lindebak, P.E. City Engineer

GENERAL NOTES:

1. *Contractor will be required to provide notice to utility companies a minimum of twenty-four (24) hours prior to any excavation, as follows:*

Kansas One-Call	*687-2470*

   The Contractor must notify the following in case of an emergency:

Multimedia Cablevision	*262-0661*
K.P.L. Gas Service Company	*383-8650*
Kansas Gas & Electric Company	*383-8600*
Peoples Gas Company	*942-8350*
Southwestern Bell Telephone Company	*1-571-2611*
City of Wichita Water Dept.	*268-4908*
City of Wichita Traffic Engineering	*269-4446*

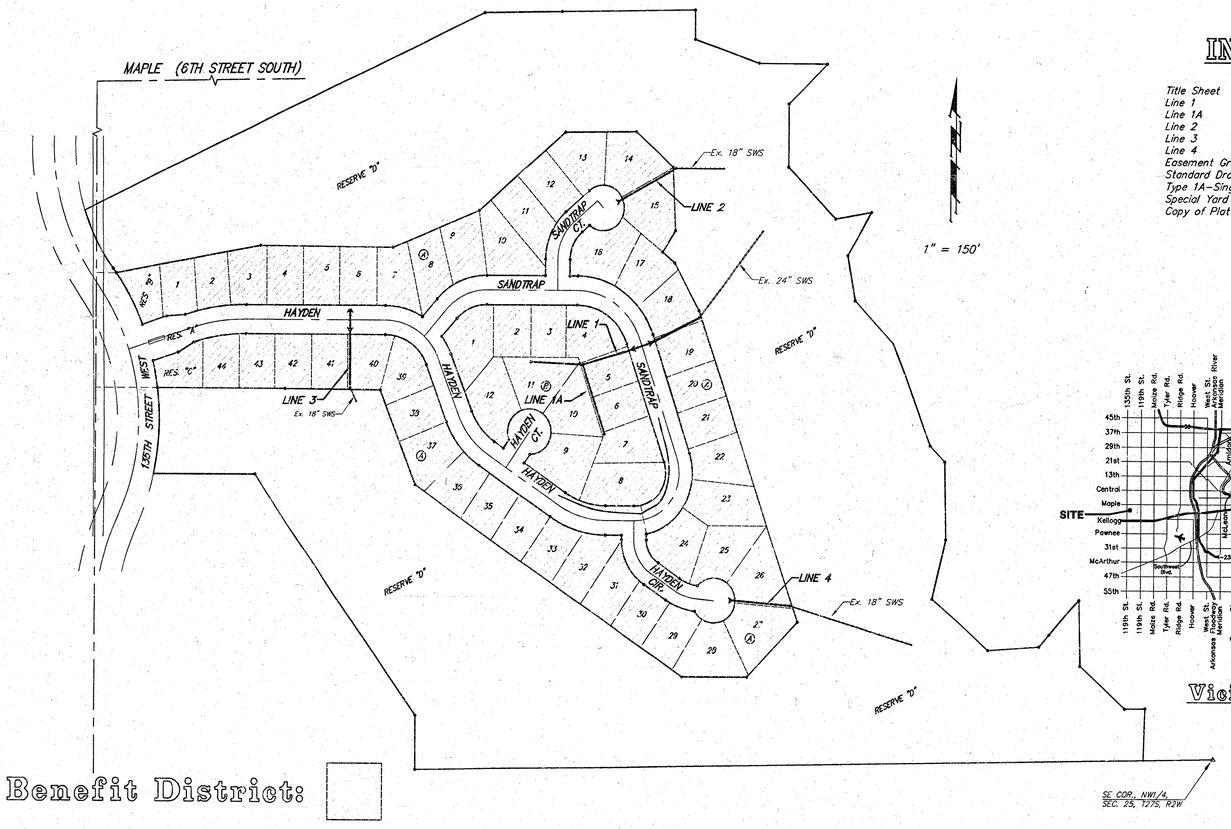
2. *Underground utility service lines and overhead utility pole lines are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. Existing utilities and their location, as shown on the plans, represent the best information obtainable for design. The Contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.*

3. *Trees and shrubs in public right-of-way which are in direct conflict with proposed new construction shall be removed by the Contractor with the Engineer's approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage.*

4. *The Contractor shall be responsible for preserving property irons. The Contractor will be required to re-establish any property irons which are damaged or destroyed by his construction operations. Such irons shall be re-established by a licensed land surveyor in accordance with state laws.*

5. *All areas disturbed by construction operations shall by seeded with rye grass at a rate of 300 lbs/acre immediately following construction in that area. Prior to seeding, area shall be prepared per City specs.*

6. *When connecting to existing inlet or stub, the contractor shall reshape inlet bottom or adjust the existing stubs's alignment or elevation as necessary. Cost shall be subsidiary to other bid items.*



1" = 150'

BENCHMARKS:

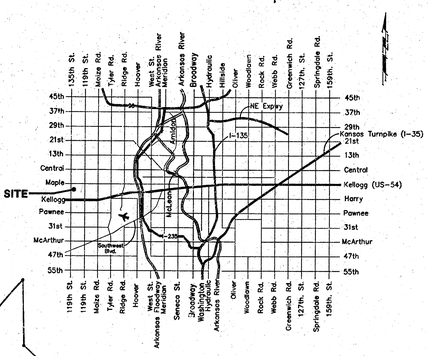
City Disc - 34.3' E. & 35' N. of S.W. Corner of N.W. 1/4, Sec. 25, T-27-S, R-2-W.
Elev. = 156.63 (City Datum)

City Disc - 135th St. W. & Maple, 30' N. & 15' E. CL Both.
Elev. = 150.20 (City Datum)

INDEX:

Title Sheet	*1*
Line 1	*2*
Line 1A	*3*
Line 2	*4*
Line 3	*5*
Line 4	*6*
Easement Grading Plan	*7*
Standard Drop Inlet Detail	*8*
Type 1A-Single Curb Inlet Detail	*9*
Special Yard Inlet Detail	*10*
Copy of Plat	*11*

BOOKED
D-437
10/99
MCG



Vicinity Map

Benefit District:

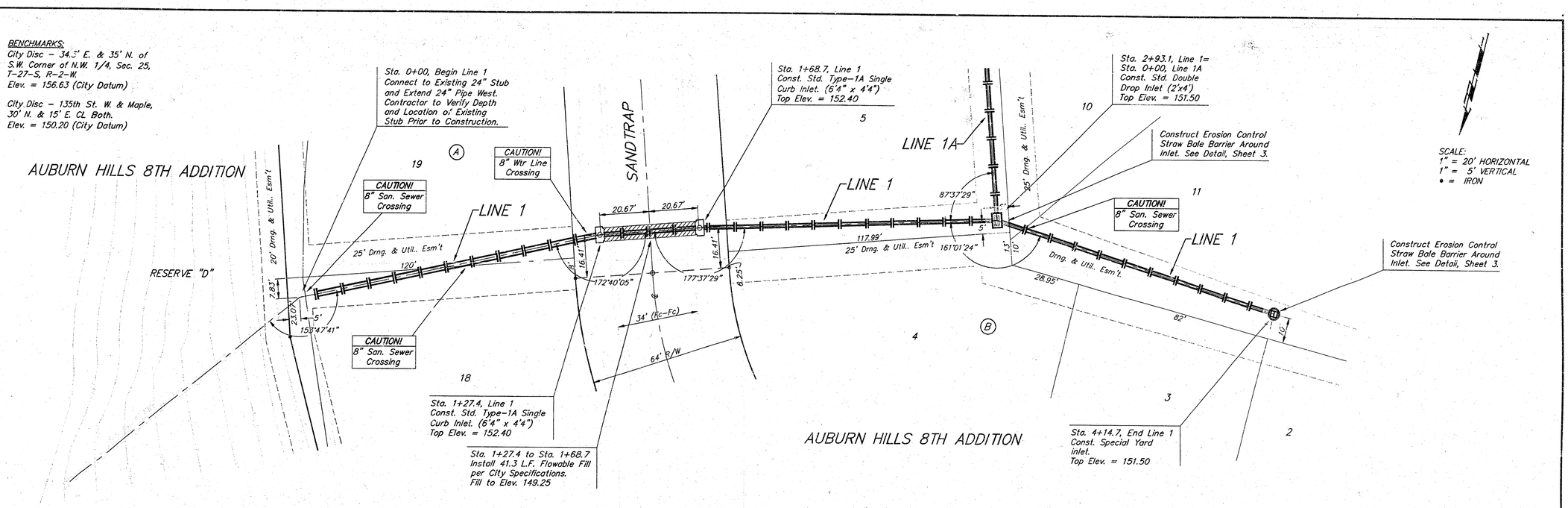


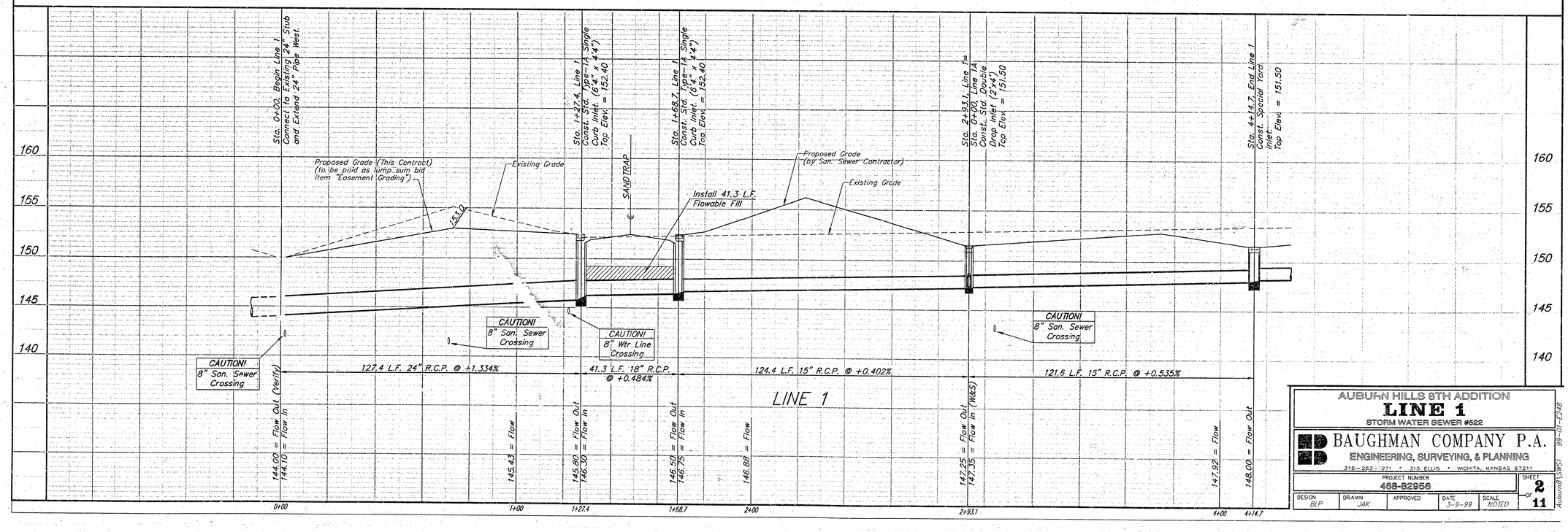
BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

03/09/1999 16:28:21 SMS1.DWG

BENCHMARKS:
City Disc – 34.3' E. & 35' N. of S.W. Corner of N.W. 1/4, Sec. 25, T–27–S, R–2–W.
Elev. = 156.63 (City Datum)

City Disc – 135th St. W. & Maple, 30' N. & 15' E. CL Both.
Elev. = 150.20 (City Datum)





AUBURN HILLS 8TH ADDITION
LINE 1
STORM WATER SEWER #522

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316–262–1271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER	SHEET
468-82956	2 OF 11

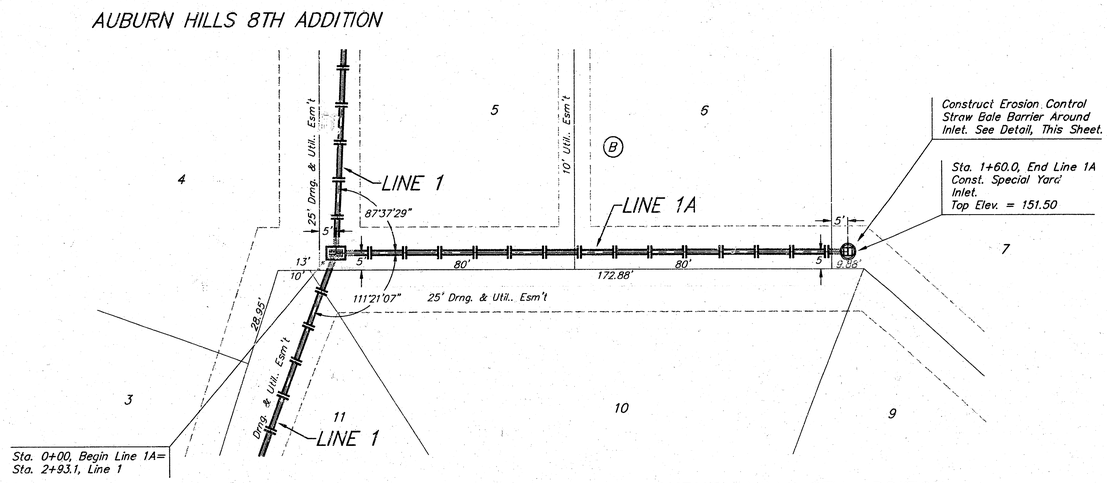
DESIGN	DRAWN	APPROVED	DATE	SCALE
BLP	JAK		3-9-99	NOTED

99-01-E248 Auburn8\SW01

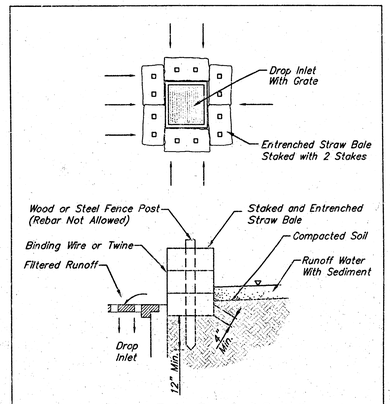
03/09/1999 16:28:43 SWS2.DWG

BENCHMARKS:
City Disc – 34.3' E. & 35' N. of S.W. Corner of N.W. 1/4, Sec. 25, T–27–S, R–2–W.
Elev. = 156.63 (City Datum)

City Disc – 135th St. W. & Maple, 30' N. & 15' E. CL Both.
Elev. = 150.20 (City Datum)

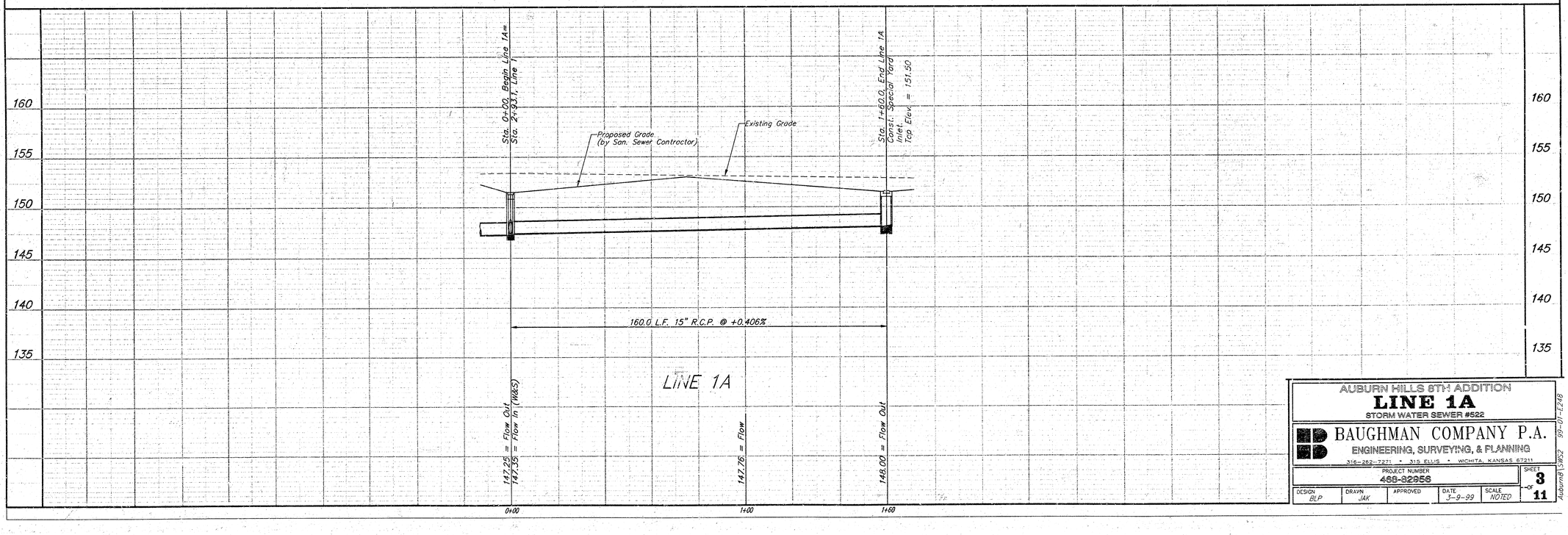


SCALE:
1" = 20' HORIZONTAL
1" = 5' VERTICAL
• = IRON



Straw Bale Barrier Detail

Note: Straw Bale Barriers to be Paid per Each as Inlet Sediment Barriers.



AUBURN HILLS 8TH ADDITION
LINE 1A
STORM WATER SEWER #522

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316–262–7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER					SHEET
468-82956					3 OF 11
DESIGN	DRAWN	APPROVED	DATE	SCALE	
BLP	JAK		3-9-99	NOTED	

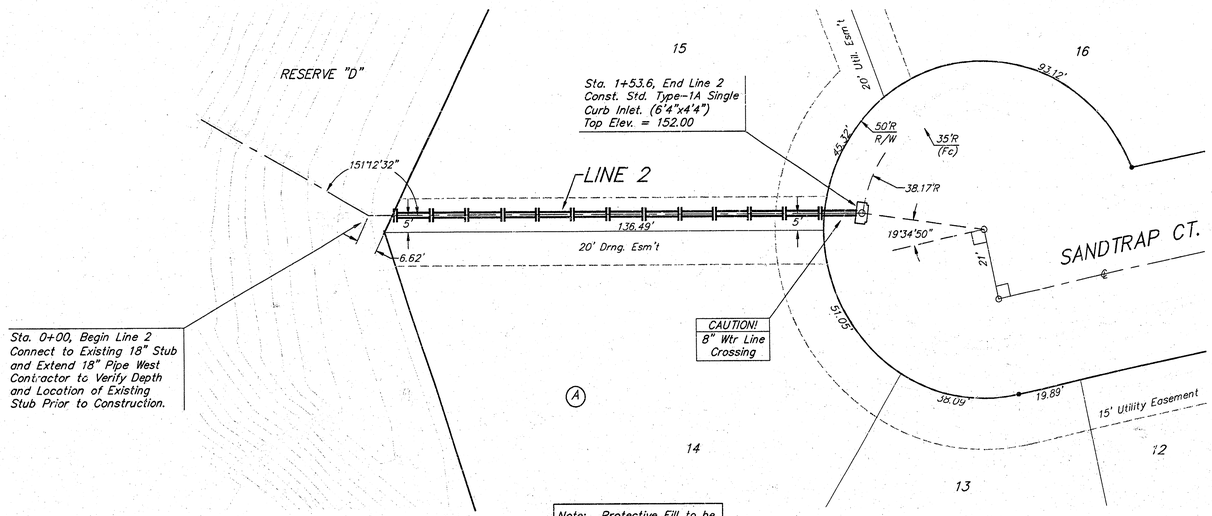
99-01-1248
Auburn\SWS2

03/09/1999 18:23:07 SWS3.DWG

BENCHMARKS:
City Disc – 34.3' E. & 35' N. of S.W. Corner of N.W. 1/4, Sec. 25, T-27-S, R-2-W.
Elev. = 156.63 (City Datum)

City Disc – 135th St. W. & Maple, 30' N. & 15' E. ℄ Both.
Elev. = 150.20 (City Datum)

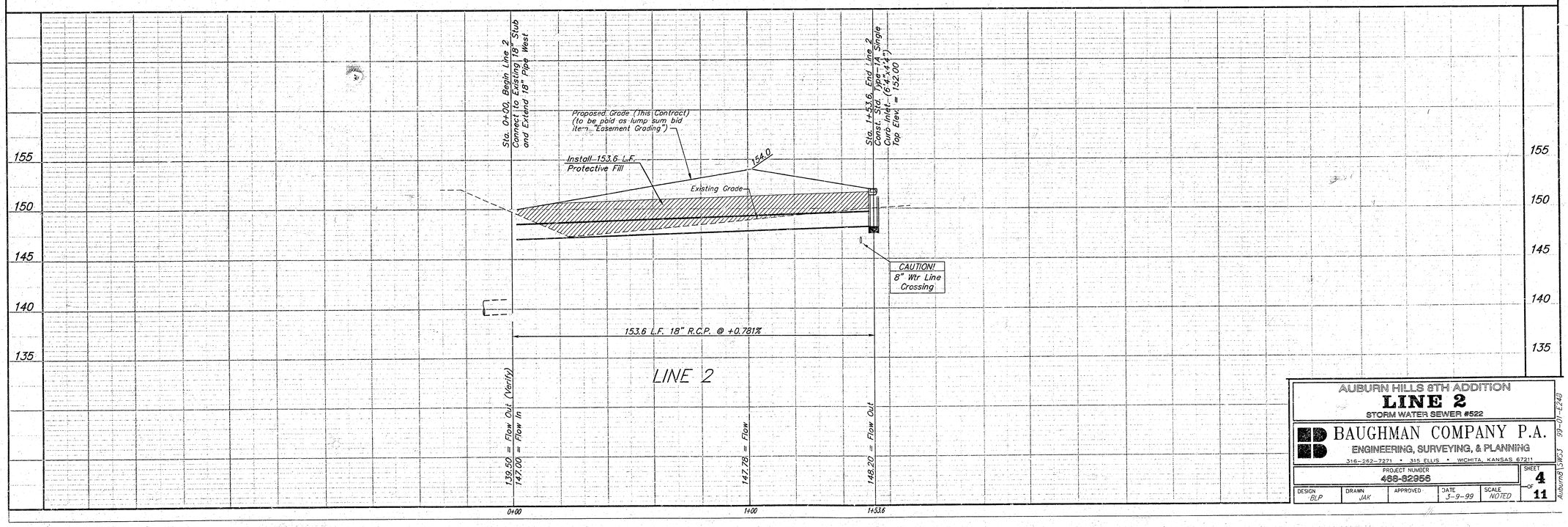
AUBURN HILLS 8TH ADDITION



Note: Protective Fill to be Placed and Compacted per City Specs Prior to Storm Water Sewer Installation.

AUBURN HILLS 8TH ADDITION

SCALE:
1" = 20' HORIZONTAL
1" = 5' VERTICAL
• = IRON



AUBURN HILLS 8TH ADDITION
LINE 2
STORM WATER SEWER #522

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER	SHEET
488-82356	4 OF 11

DESIGN	DRAWN	APPROVED	DATE	SCALE
BLP	JAK		3-9-99	NOTED

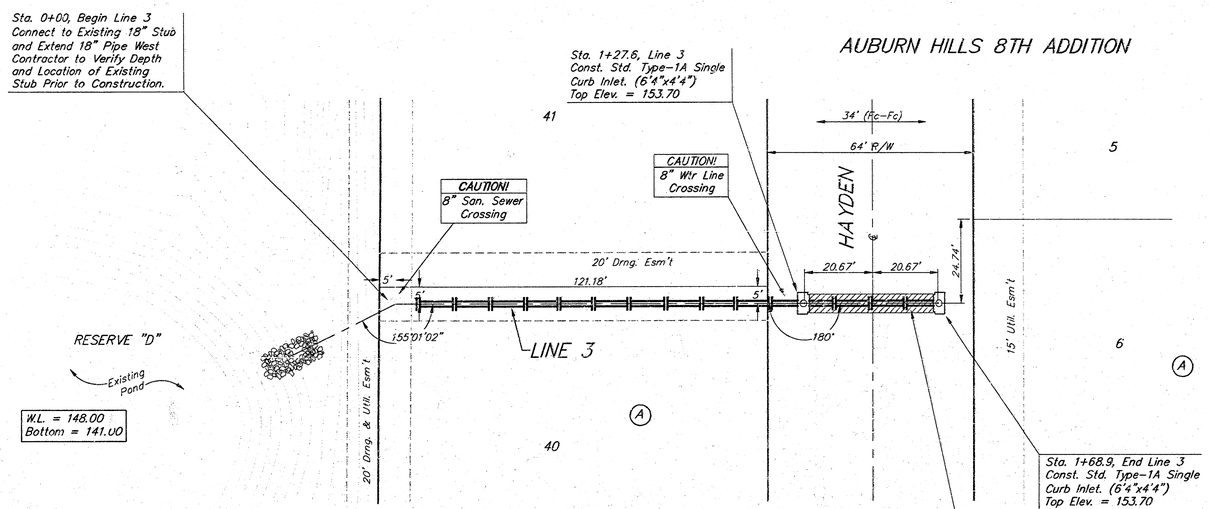
99-01-E240
Auburn8\SWS3

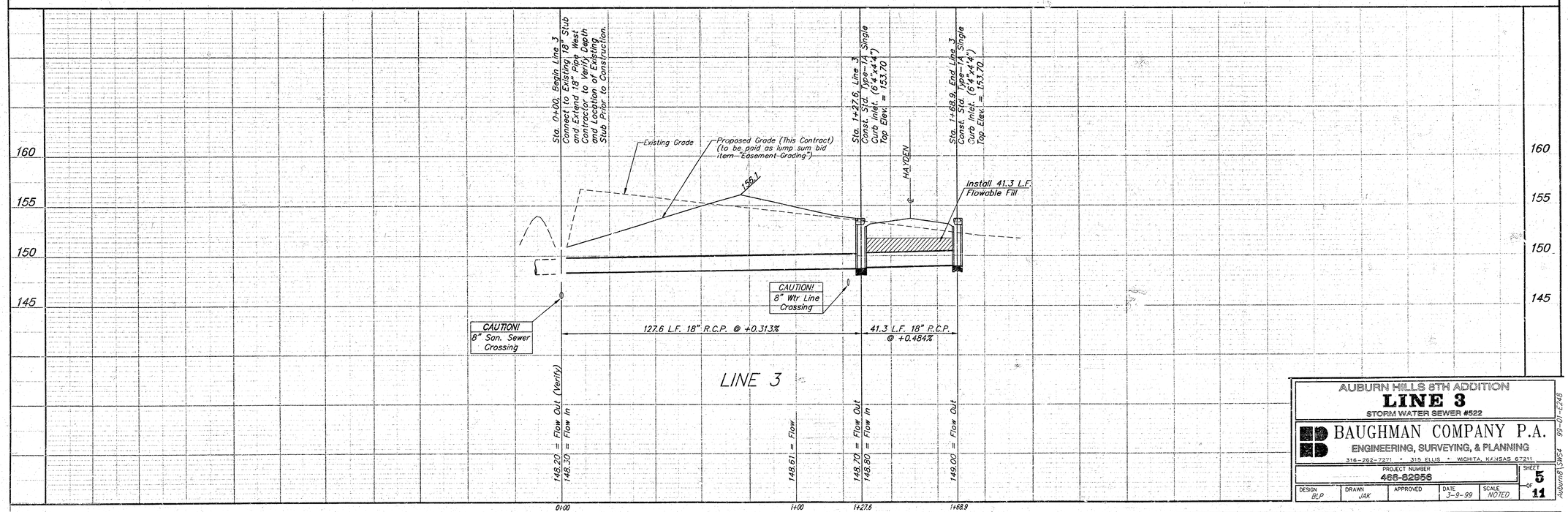
03/05/1999 10:30:22 SMS4.PWC

BENCHMARKS:
City Disc – 34.3' E. & 35' N. of S.W. Corner of N.W. 1/4, Sec. 25, T–27–S, R–2–W.
Elev. = 156.63 (City Datum)

City Disc – 135th St. W. & Maple, 30' N. & 15' E. CL Both.
Elev. = 150.20 (City Datum)

SCALE:
1" = 20' HORIZONTAL
1" = 5' VERTICAL
• = IRON





AUBURN HILLS 8TH ADDITION
LINE 3
STORM WATER SEWER #522

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316–262–7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER					SHEET
466-82956					5 OF 11
DESIGN	DRAWN	APPROVED	DATE	SCALE	
BLP	JAK		3-9-99	NOTED	

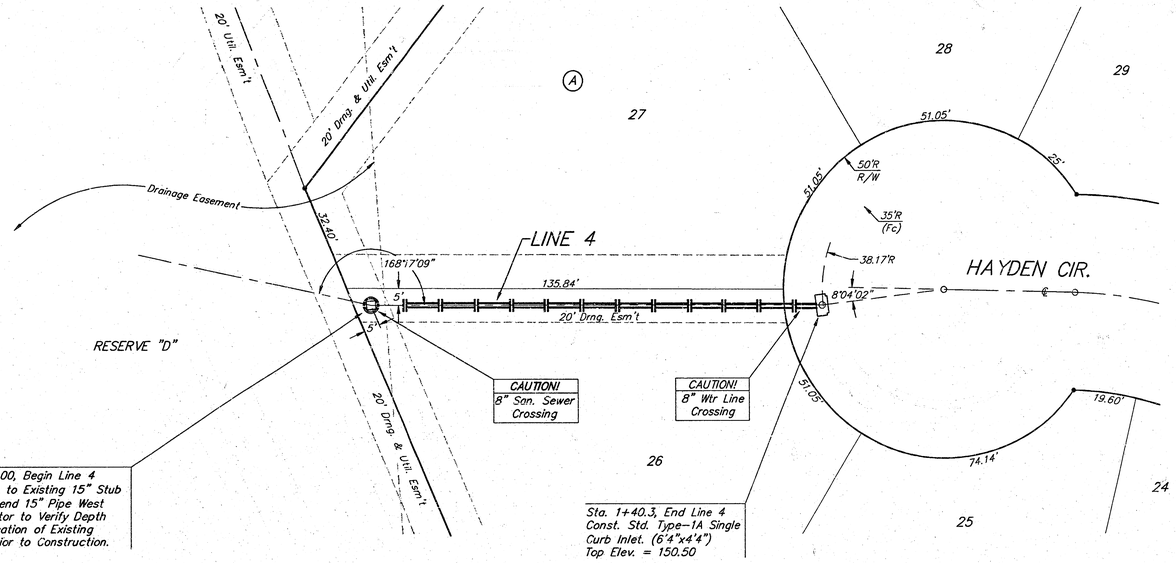
95-01-2248
Auburn5.SW24

03/10/1999 09:59:55 SWS5.DWG

BENCHMARKS:
City Disc – 34.3' E. & 35' N. of S.W. Corner of N.W. 1/4, Sec. 25, T-27-S, R-2-W.
Elev. = 156.63 (City Datum)

City Disc – 135th St. W. & Maple, 30' N. & 15' E. CL Both.
Elev. = 150.20 (City Datum)

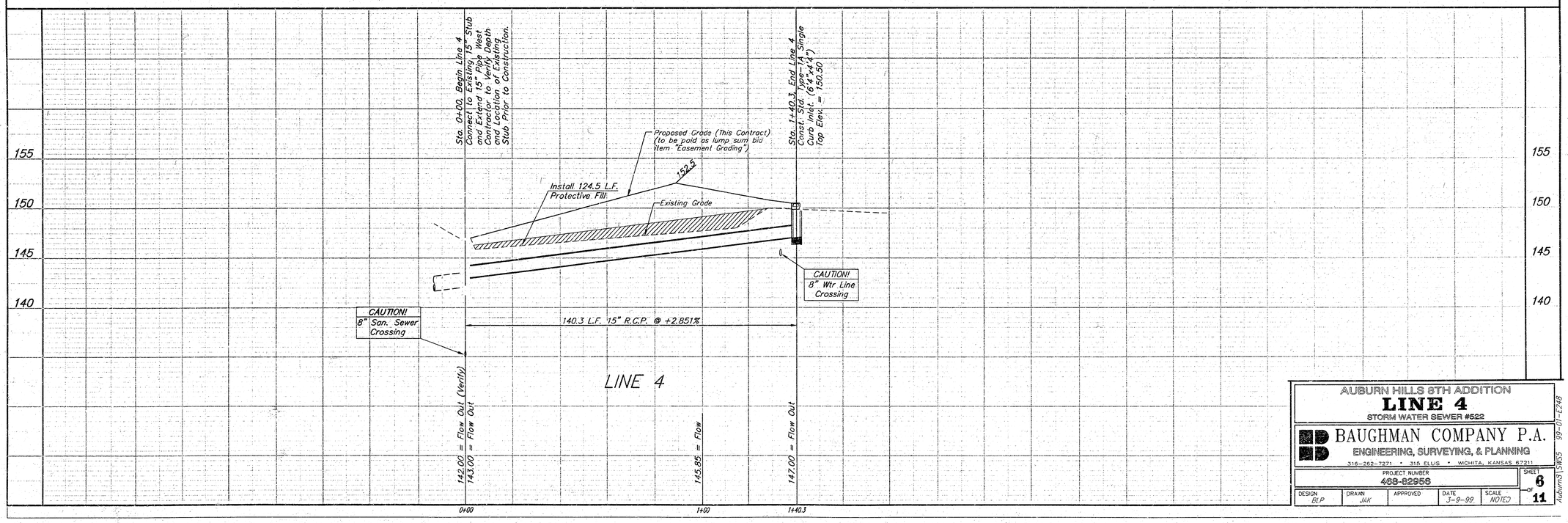
AUBURN HILLS 8TH ADDITION



SCALE:
1" = 20' HORIZONTAL
1" = 5' VERTICAL
• = IRON

Note: Protective Fill to be Placed and Compacted per City Specs Prior to Storm Water Sewer Installation.

AUBURN HILLS 8TH ADDITION



AUBURN HILLS 8TH ADDITION
LINE 4
STORM WATER SEWER #522

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER	SHEET
468-82956	6 OF 11

DESIGN	DRAWN	APPROVED	DATE	SCALE
BLP	JAK		3-9-99	NOTED

99-01-E248 Auburn5 SWS5

03/10/1999 16:15:16 SUBSEMT.DWG

SCALE: 1" = 60'

• = Iron

BENCHMARK:

CITY DISC – 34.3' E. & 3.3' N. OF S.W. CORNER OF N.W. 1/4, SEC. 25, T-27-S, R-2-W.
ELEV. = 1356.63 CITY DATUM
1344.03 M.S.L.

CITY DISC – 135TH ST. W. & MAPLE, 30' N. & 15' E. ℄ BOTH.
ELEV. = 150.20 CITY DATUM
1337.60 M.S.L.

RESERVE "D"

RESERVE "B"

RESERVE "C"

10' UTILITY EASEMENT

HAYDEN

HAYDEN CT.

SANDTRAP

SANDTRAP CT.

135TH STREET WEST

Existing 12" San. Sewer

20' SANITARY SEWER EASEMENT FILM ____ PAGE ____

Width Varies (See Plan)
Finish Grade per Callouts
Existing Ground
Easement Line
Easement Line
TYPICAL FILL SECTION

Width Varies (See Plan)
Existing Ground
Finish Grade per Callouts
Easement Line
Easement Line
TYPICAL CUT SECTION

Note: All excess soil shall remain on site and shall be stockpiled at a location to be determined by the design engineer.

= Easements To Be Graded

Approximate Easement Grading Quantities:
Excavation: 2394 C.Y.
Fill: 1107 C.Y.

The contractor shall grade the easements as shown to the elevations given on the easement grading plan. All costs for grading shall be incidental to the Easement Grading Bid Item.

The contractor shall 'straight' grade the easements between the elevations given. Where a callout designates 'Match', the contractor will grade to the existing ground elevation.

AUBURN HILLS 8TH ADDITION

EASEMENT GRADING

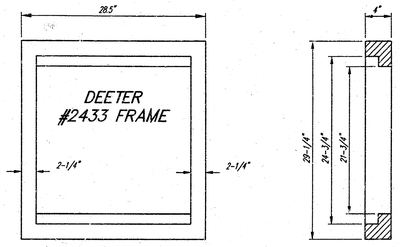
WICHITA, KANSAS

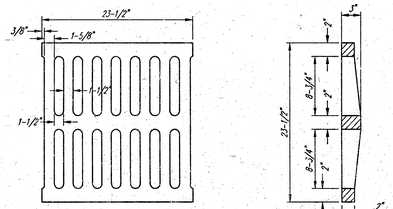
BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER					SHEET
488-82957					7 OF 11
DESIGN	DRAWN	APPROVED	DATE	SCALE	
BLP	JAK/JW		3-9-99	1" = 60'	

Auburn\SHEET

03/10/1999 10:01:06 PROPINT2.DWG

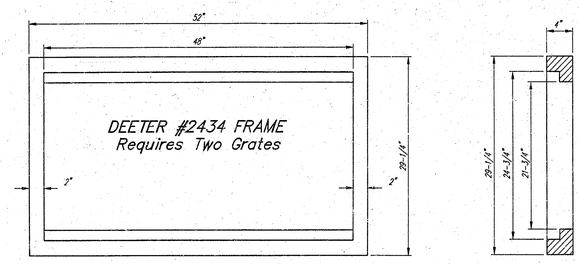




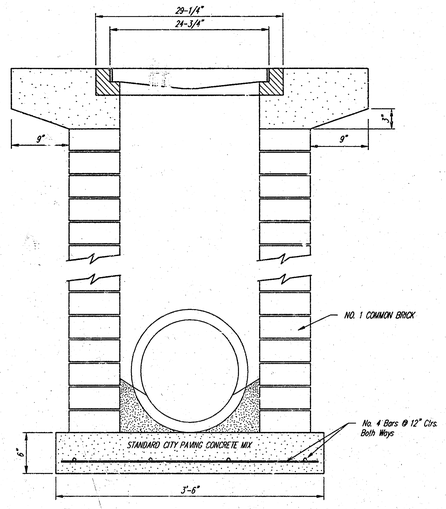
DEETER #2433 GRATE

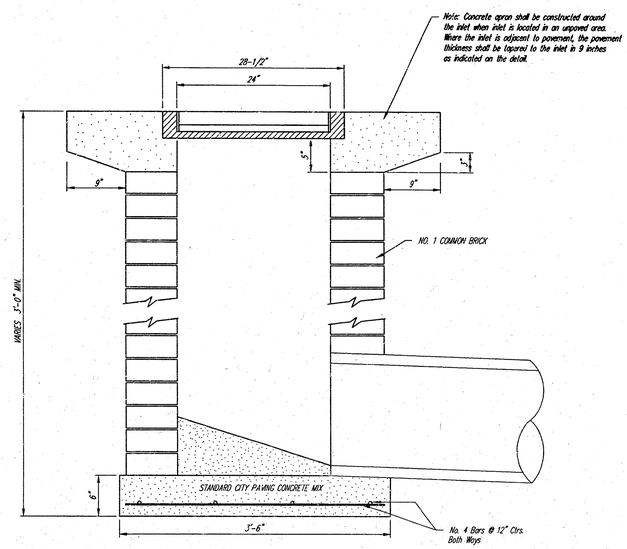
NOTE: Grates shall be imprinted on the top surface with "CITY OF WICHITA" using letters at least 1" in height. Other marking methods may be approved by the engineer.

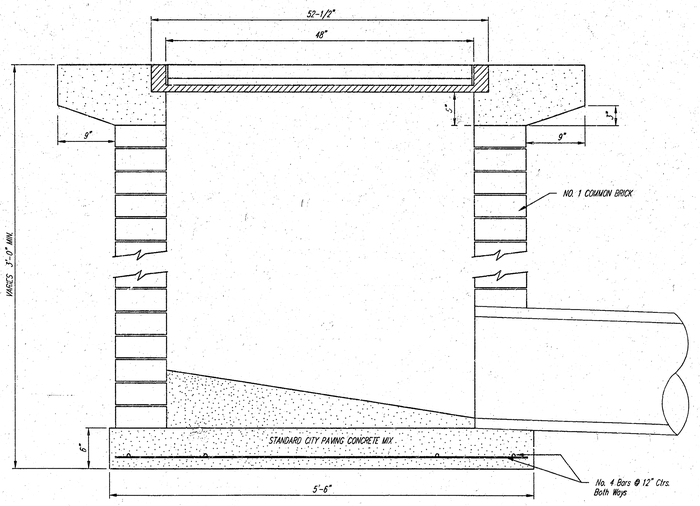
24" x 24" Frame and Grate Detail



Double 24" x 24" Frame Detail







City of Wichita Standard

Drop Inlet

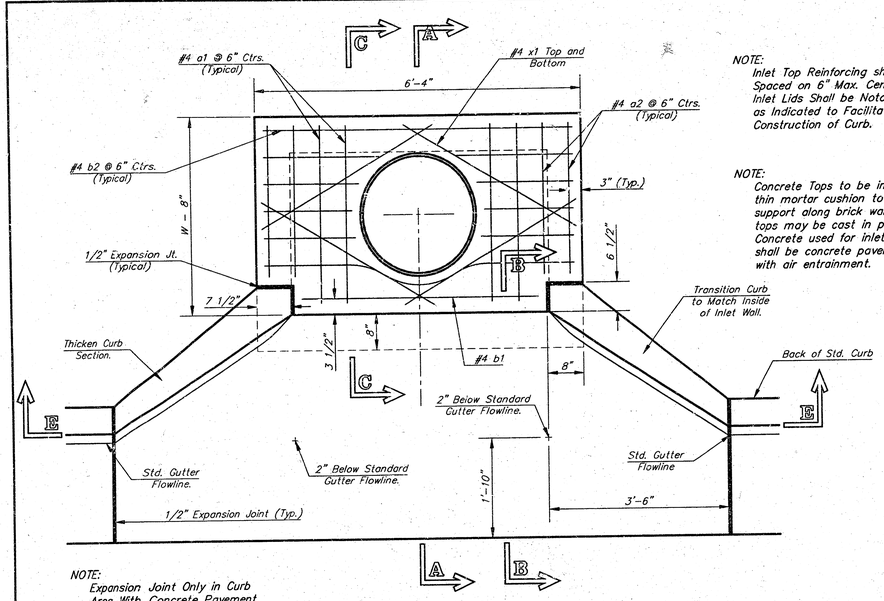
BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER	SHEET
488-82956	8 OF 11

DESIGN	DRAWN	APPROVED	DATE	SCALE
C.O.W.	Staff			NONE

IDrpint2

03/10/1999 10:03:18 TYP1A-S.DWG

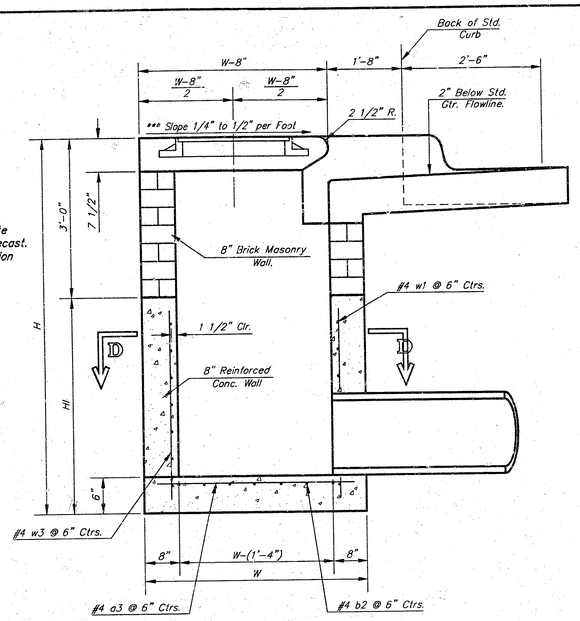


NOTE:
Expansion Joint Only in Curb Area With Concrete Pavement.

PLAN

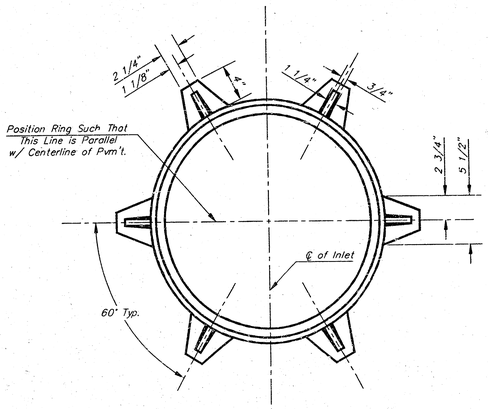
NOTE:
Inlet Top Reinforcing shall be Spaced on 6" Max. Centers. Inlet Lids Shall be Notched Out as Indicated to Facilitate Construction of Curb.

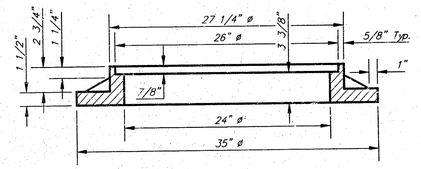
NOTE:
Concrete Tops to be installed on thin mortar cushion to insure full support along brick walls. Concrete tops may be cast in place or precast. Concrete used for inlet construction shall be concrete pavement mix with air entrainment.



SECTION A-A

***NOTE: Slope of Inlet tops to Match Sidewalk or Parking Slopes within Limits Indicated.

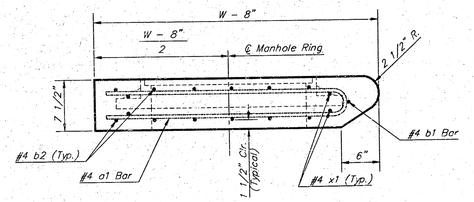




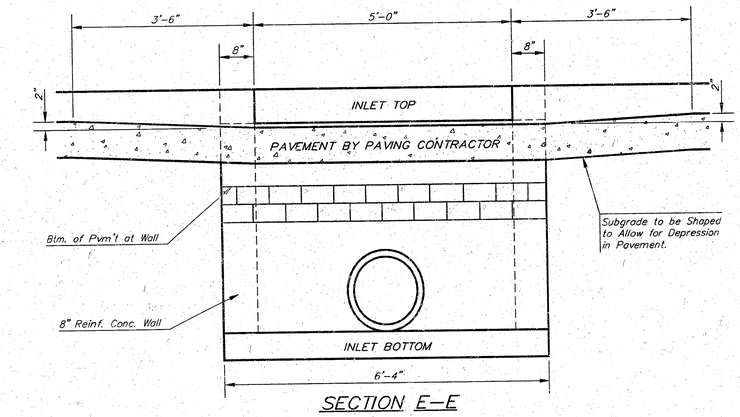
MANHOLE RING AND COVER

Weight = 180 Lbs.

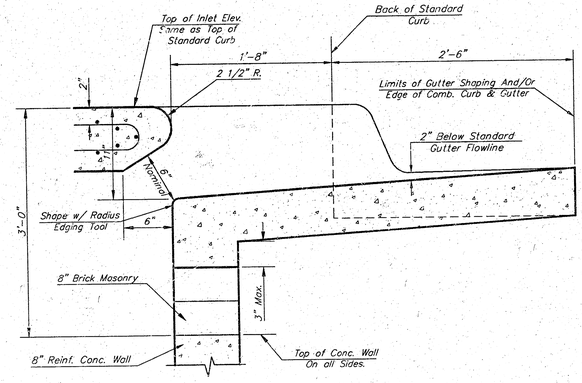
*See City of Wichita Standard Manhole Ring and Cover Detail Sheet for Cover Details to Be Used With Inlet Frame.



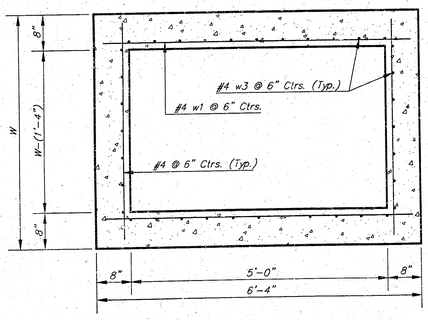
SECTION A-A



SECTION E-E



SECTION B-B



SECTION D-D

NOTE: Contractor shall have the option of constructing 8" brick masonry walls between the concrete inlet base and top on this inlet when W=6'-4" and H=7'-0" or less.

Additional curb and gutter construction necessary to connect set-back inlet to pavement will be paid for at ths unit price bid for each inlet hookup.

Inlet invert shall be shaped with 8 sack sand mix concrete to create flow channels and to increase hydraulic efficiency such that the inlet will be self-cleaning between all inlet and/or outlet pipes.

The ends of all pipes installed in inlets shall be cut off flush with the inside face of the inlet wall.

PRECAST SLAB AND FLOOR REINFORCING

		W = 4'-4"		W = 5'-4"		W = 6'-4"		W = 7'-4"		W = 8'-4"	
MARK	SIZE	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
* a1	#4	6	6'-7"	6	8'-7"	6	10'-7"	6	12'-7"	6	14'-7"
a2	#4	4	6'-0"	4	8'-0"	4	10'-0"	4	12'-0"	4	14'-0"
a3	#4	13	4'-1"	13	5'-1"	13	6'-1"	13	7'-1	13	8'-1"
b1	#4	1	4'-9"	1	4'-9"	1	4'-9"	1	4'-9"	1	4'-9"
* b2	#4	23	6'-1"	29	6'-1"	35	6'-1"	41	6'-1"	47	6'-1"
x1	#4	8	3'-10"	8	4'-2"	8	4'-6"	8	4'-10"	8	5'-2"

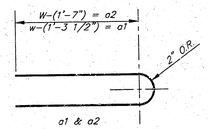
WALL REINFORCING

		W = 4'-4"		W = 5'-4"		W = 6'-4"		W = 7'-4"		W = 8'-4"	
MARK	SIZE	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
w1	#4	①	6'-1"	①	6'-1"	①	6'-1"	①	6'-1"	①	6'-1"
w2	#4	①	4'-1"	①	5'-1"	①	6'-1"	①	7'-1"	①	8'-1"
w3	#4	32	②	36	②	40	②	44	②	48	②

* Field Bend or Cut Reinforcing as Required for Clearance.

① 4 (HI - 12") (HI - 21") Rounded down to nearest 0.5'

② HI - 3"



BENDING DIAGRAM

STANDARD CURB INLET PRECAST TOPS

W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4'-4"	3'-8" x 6'-4" x 7 1/2"	21" & SMALLER	0.38±
5'-4"	4'-8" x 6'-4" x 7 1/2"	24" & 30"	0.51±
6'-4"	5'-8" x 6'-4" x 7 1/2"	36" & 42"	0.64±
7'-4"	6'-8" x 6'-4" x 7 1/2"	48" & 54"	0.77±
8'-4"	7'-8" x 6'-4" x 7 1/2"	60" & 66"	0.90±

Revised - Feb. 16, 1989

CITY OF WICHITA STANDARD TYPE 1A

Curb Inlet Details

INLET OPENING = 6" X 7'-0"

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER 468-82956

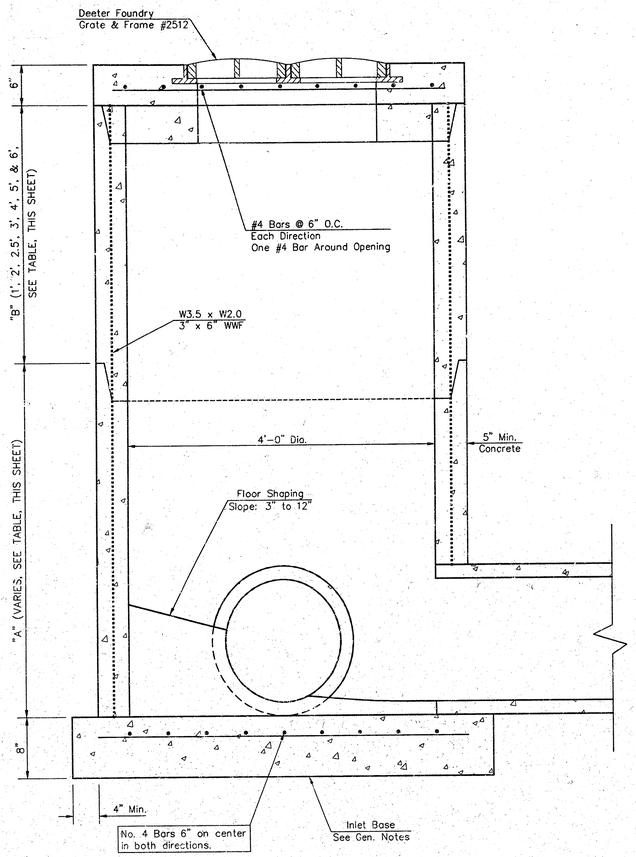
SHEET 9 OF 11

DESIGN	DRAWN	APPROVED	DATE	SCALE
C.O.W.	Staff			None

98-05-E082

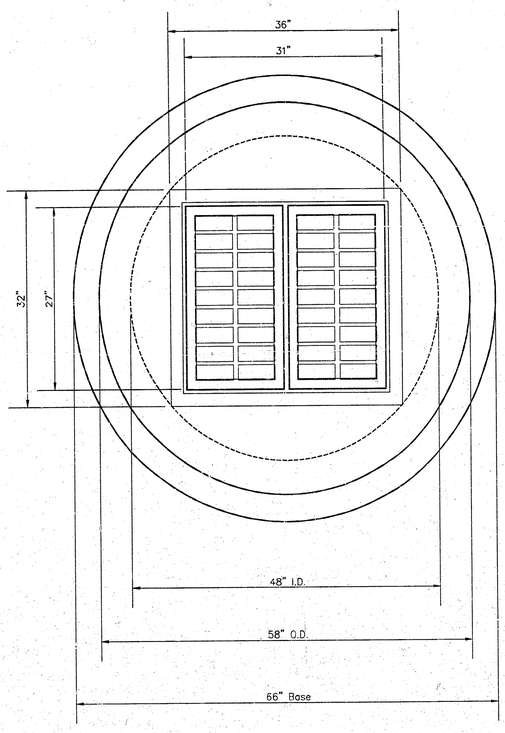
Type1A-S

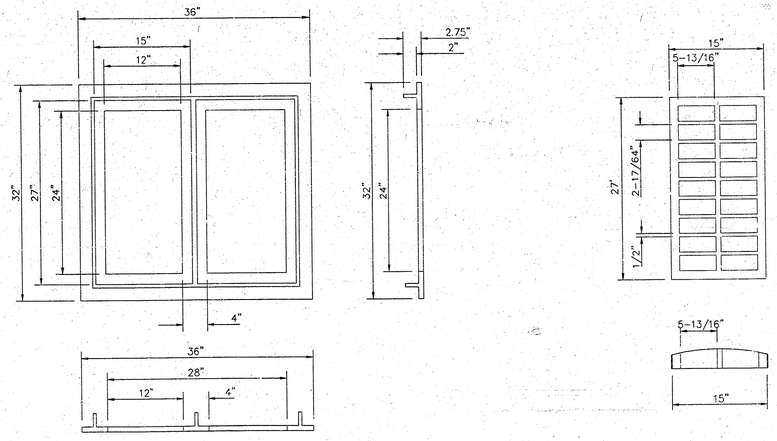
03/10/1999 10:14:19 YARDINLT.DWG



YARD INLET

LINE #	STA.	TOP OF INLET	INLET FLOW	"A"	"B"
1	4+14.7	151.50	148.00	3.00'	–
1A	1+60.0	151.50	148.00	3.00'	–





DEETER #2512 CATCH BASIN INLET GRATE & FRAME

GENERAL NOTES

1. Mortar used in masonry construction shall contain 8 sacks of cement per cubic yard. Concrete used in yard inlet bases shall conform to the requirements of concrete for concrete pavement construction as specified in the city standard paving specifications using city concrete cement mix without air entraining.

2. Reinforcing steel shall be installed in the yard inlet bases and shall consist of no. 4 bars placed on 6" centers in both directions. The yard inlet base reinforcement shall be placed 6" above the bottom of the yard inlet base. All costs for furnishing and installing reinforcing steel shall be included in the unit price bid for the yard inlet.

3. The floors of all yard inlet shall be shaped with flow channels such that the inlets will be self cleaning and free of areas where solids could be deposited. Flow channels shall be formed to match the bottom halves of the inflowing pipes and the outflowing pipe as shown by the drawings. Inlet floors shall have slopes of 3 inches per foot in the areas outside of the flow channels sloped toward the flow channels. Pipes laid through inlets shall have the top half removed to neat lines for the full inside diameter of the inlet. Inlet floors shall then be shaped around the bottom half of the pipe which forms the flow channel.

4. Pipes installed within the excavation made for the inlet shall be cradled with concrete to the limits of the inlet excavation. When clay pipe is used, the cradle shall extend to the first joint outside the inlet. The cradle shall be terminated at the clay pipe joint in a manner which will maintain the flexibility of the joint. Cost of cradle within inlet excavation or to clay pipe joints adjacent to inlet shall be included in the unit price bid for the inlet.

5. Inlet grate castings and inlet frame castings shall conform to the requirements as indicated in the standard specifications and as shown in the standard detail drawing.

6. The crowns of inflowing pipes shall never be set lower than the crown of the outflowing pipe.

7. Joints between inlet sections to be sealed with two two wraps of extruded butyl rubber joint mastic meeting City of Wichita Type "P" Manhole Specifications.

8. Special yard inlet shall be paid for at the unit price bid per each. All standard yard inlet diameters will be 4'.

SPECIAL YARD INLET

WICHITA, KANSAS

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 313 ELLIS • WICHITA, KANSAS 67211

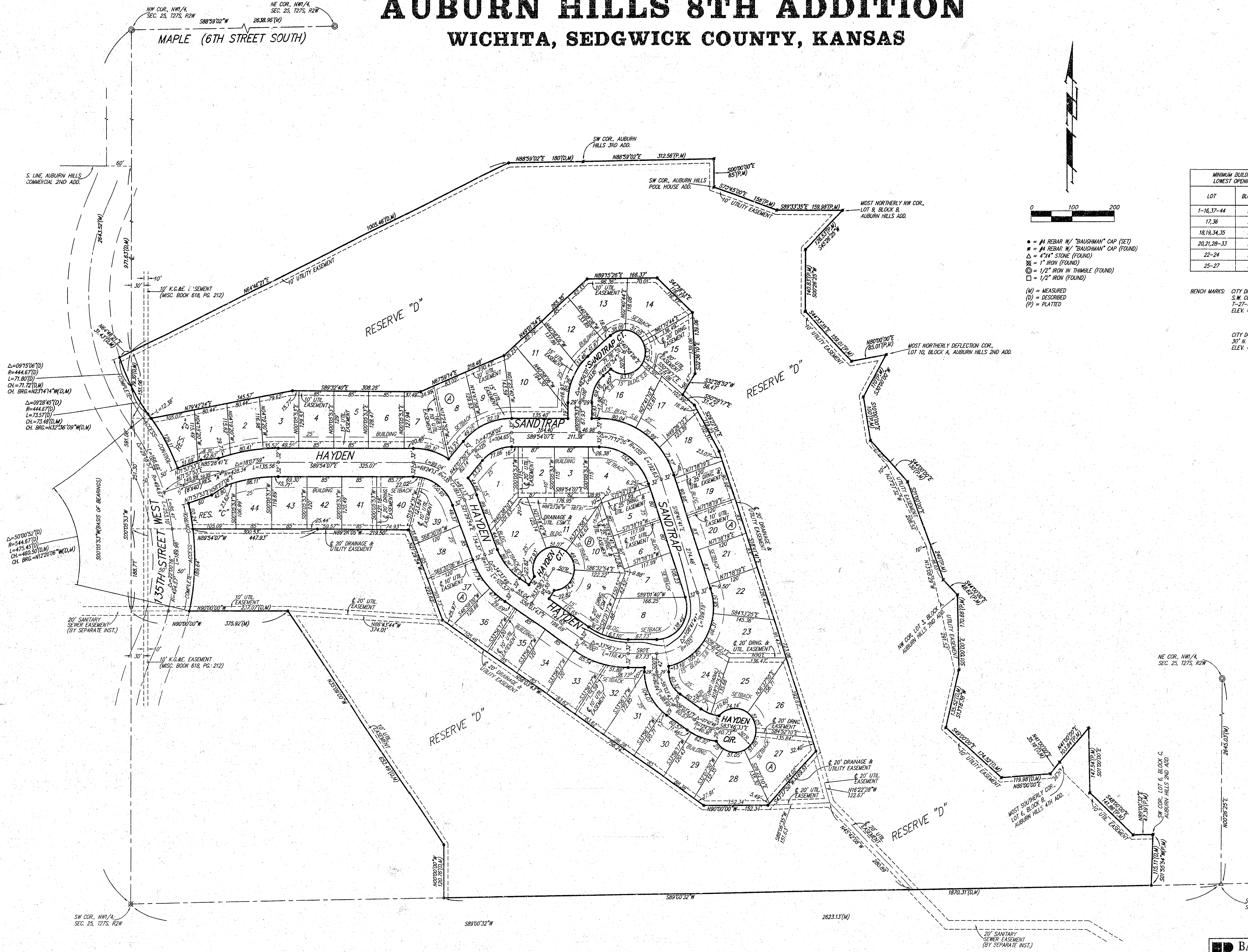
PROJECT NUMBER	SHEET
488-62956	10 of 11

DESIGN	DRAWN	APPROVED	DATE	SCALE
			12/18/98	NONE

DETAILS \yard\inlet

AUBURN HILLS 8TH ADDITION

WICHITA, SEDGWICK COUNTY, KANSAS



0 100 200

● = #4 REBAR W/ "BAUGHMAN" CAP (SET)
⌀ = #4 REBAR W/ "BAUGHMAN" CAP (FOUND)
△ = 4"X4" STONE (FOUND)
⊠ = 1" IRON (FOUND)
◎ = 1/2" IRON IN THIMBLE (FOUND)
□ = 1/2" IRON (FOUND)

(M) = MEASURED
(D) = DESCRIBED
(P) = PLATTED

MINIMUM BUILDING PAD ELEVATION FOR LOWEST OPENING TO THE STRUCTURES			
LOT	BLOCK	ELEVATION	
		CITY DATUM	MSL
1-16,37-44	A	151.0	1338.4
17,36	A	150.0	1337.4
18,19,34,35	A	149.0	1336.4
20,21,28-33	A	148.0	1335.4
22-24	A	147.0	1334.4
25-27	A	146.0	1333.4

BENCH MARKS: CITY DISC - 34.3' E. & 3.3' N. OF S.W. CORNER OF N.W. 1/4, SEC. 25, T-27-S, R-2-W.
ELEV. = 156.63 CITY DATUM
1344.03 M.S.L.

CITY DISC - 135TH ST. W. & MAPLE, 30' N. & 15' E. ℄ BOTH.
ELEV. = 150.20 CITY DATUM
1337.60 M.S.L.

BAUGHMAN COMPANY P. A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

18-05-01-18