

**STORM WATER SEWER IMPROVEMENTS**

to serve

**Hickory Creek Estates  
Phase III**

**CITY OF WICHITA, KANSAS**

Michael E. Lindebak, P.E. City Engineer

Private Project Number

**008 PPS (607881)**

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BENCHMARKS:

□ Cut on Top of Curb Return at Southwest Corner of Hickory Creek and Hickory Creek Ct. at Northeast Corner of Lot 26, Block 2.

Elevation = 150.01 City Datum

□ Cut on Top of Curb at PC on Hickory Creek at East Side of Lot 9, Block 3.

Elevation = 162.21 City Datum

□ Cut on South Edge of Concrete Entrance to Lift Station 0.5' East of East Edge of Manhole Adjacent to Northwest Corner of Lot 1, Block 5.

Elevation = 155.60 City Datum

GENERAL NOTES:

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

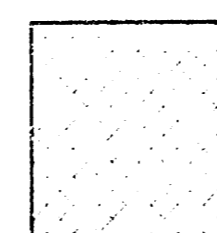
Kansas One-Call	687-2470
Multimedia Cablevision	262-0661
K.P.L. Gas Service Company	383-8650
Kansas Gas & Electric Company	383-8600
Peoples Gas Company	942-8250
Southwestern Bell Telephone Company	1-571-2811
City of Wichita Water Dept.	268-4508
City of Wichita Traffic Engineering	269-4446

The Contractor must notify the following in case of an emergency:
- 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.
- 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.
- The Contractor shall give all property owners and/or tenants of developed property abutting the construction of this project a minimum of ten (10) days advance notice prior to start of construction.
- 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.
- Contractor shall grade the storm sewer alignment to the profile and elevations shown on the easement grading plans. All costs for grading shall be paid as lump sum for easement grading.
- All areas disturbed by construction operations shall be 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.

BOOKED  
8-29-00  
MCS  
D-278

Scale: 1" = 150'

Benefit District



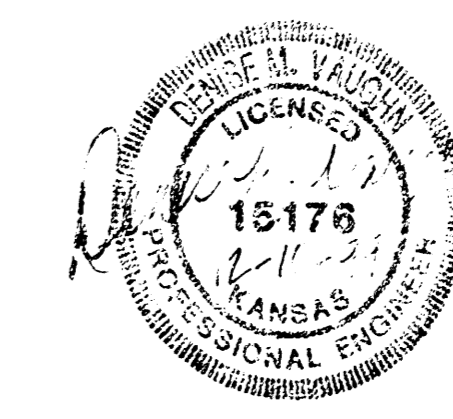
As Built 7/00 KIC

APPROVED AS NOTED  
BY CITY ENGINEER OF WICHITA,

Storm Sewers VRH 12/10/99

NOTE TO CONTRACTORS

Installation, inspection and testing for this project is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection to be in accordance with the City of Wichita standard construction engineering practices and certified by a Licensed Professional Engineer. No work shall be performed in dedicated easements or public right-of-way by the Contractor without such inspection nor shall any work be commenced without written authorization by the City Engineer. All Construction and Materials shall comply with the City of Wichita Specifications and Standards (on file and available in the City Engineer's Office).



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

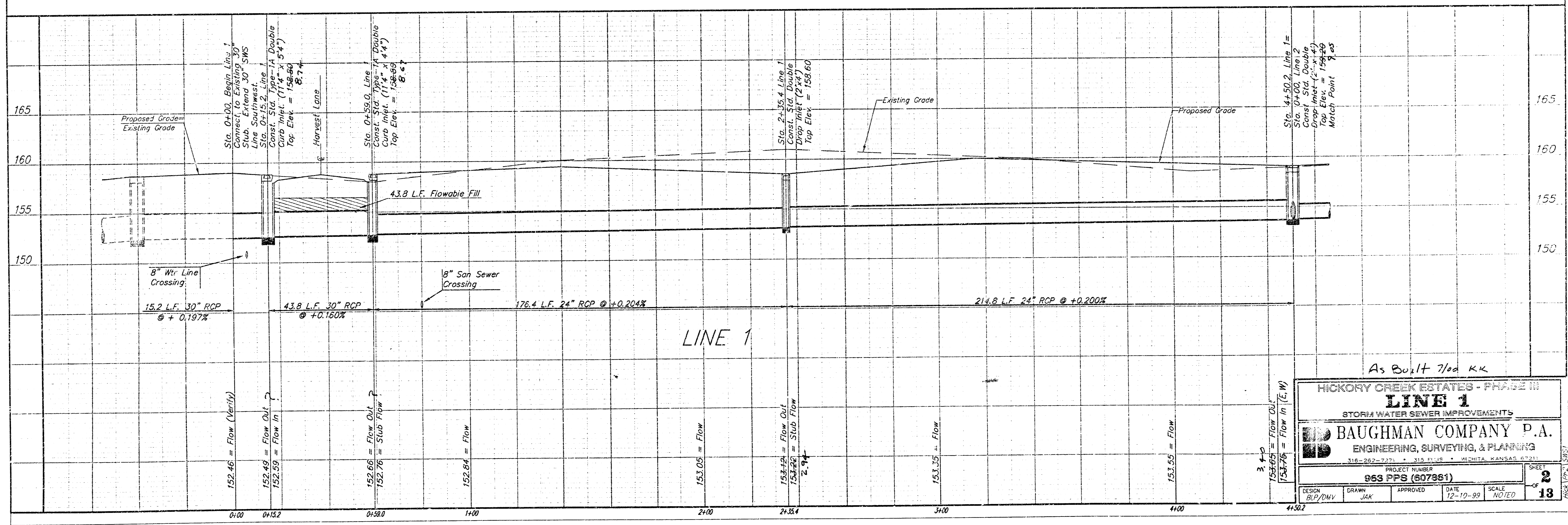
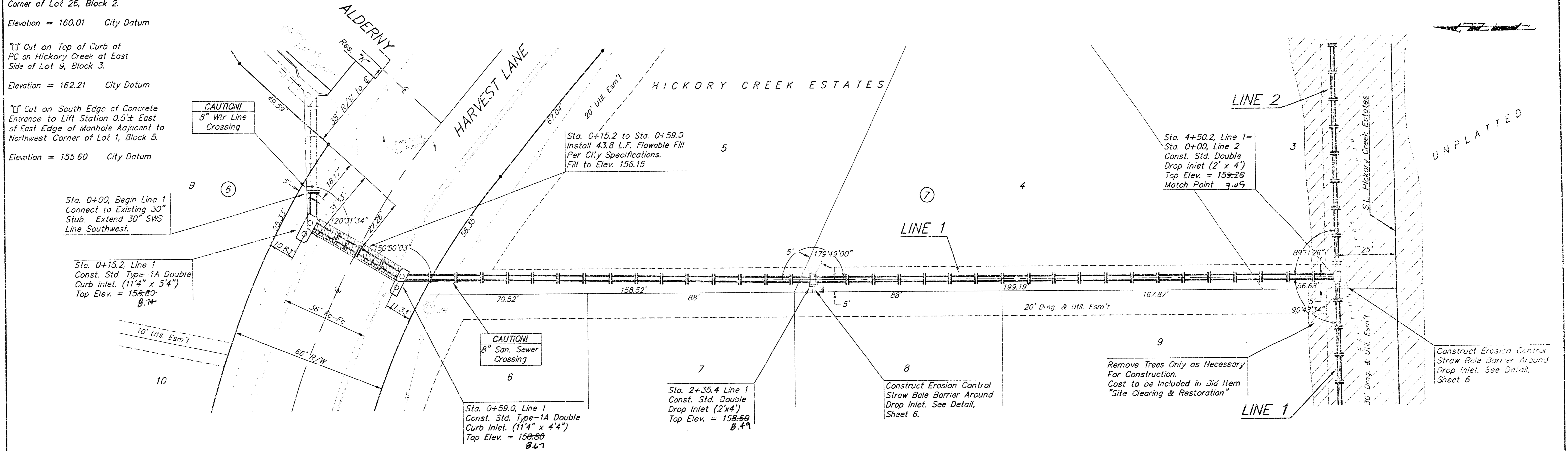
**Benchmarks:**

☐ Cut on Top of Curb Return at Southwest Corner of Hickory Creek and Hickory Creek Ct. at Northeast Corner of Lot 26, Block 2.  
Elevation = 160.01 City Datum

☐ Cut on Top of Curb at PC on Hickory Creek at East Side of Lot 9, Block 3.  
Elevation = 162.21 City Datum

☐ Cut on South Edge of Concrete Entrance to Lift Station 0.5± East of East Edge of Manhole Adjacent to Northwest Corner of Lot 1, Block 5.  
Elevation = 155.60 City Datum

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



As Built 7/02 KK

<b>HICKORY CREEK ESTATES - PHASE III</b>			
<b>LINE 1</b>			
STORM WATER SEWER IMPROVEMENTS			
<b>BAUGHMAN COMPANY P.A.</b>			
ENGINEERING, SURVEYING, & PLANNING			
216-282-2771 • 318 BLUE • WICHITA, KANSAS 67211			
PROJECT NUMBER <b>963 PPS (607861)</b>		SHEET <b>2</b>	
DESIGN BLP/DNV	DRAWN JAK	APPROVED	DATE 12-10-99
		SCALE NOTED	
		<b>13</b>	

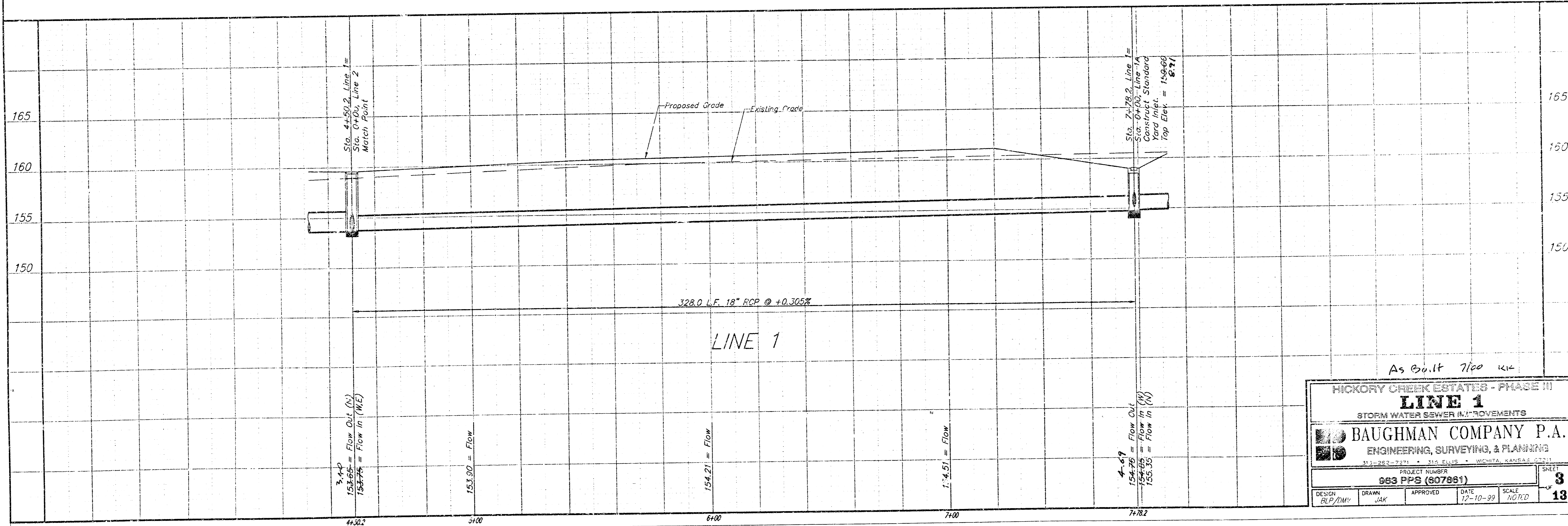
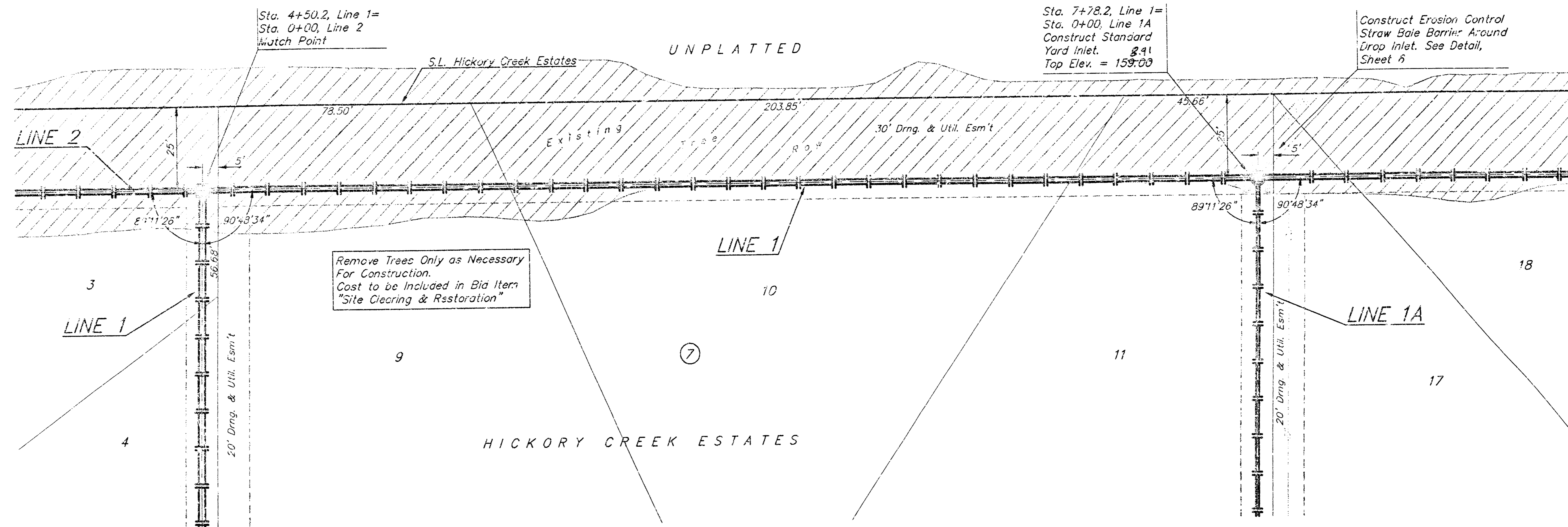
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Elevation = 162.21 City Datum

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Elevation = 155.60 City Datum

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



As Built 7/00 KCC

<b>HICKORY CREEK ESTATES - PHASE III</b>			
<b>LINE 1</b>			
STORM WATER SEWER (18" DIAMETER)			
<b>BAUGHMAN COMPANY P.A.</b>			
ENGINEERING, SURVEYING, & PLANNING			
PROJECT NUMBER: 963 PPS (607861)			
DESIGN: BLP/DMV	DRAWN: JAK	APPROVED:	DATE: 12-10-99 SCALE: 1/4" = 1'-0"
			SHEET: 3 OF 13

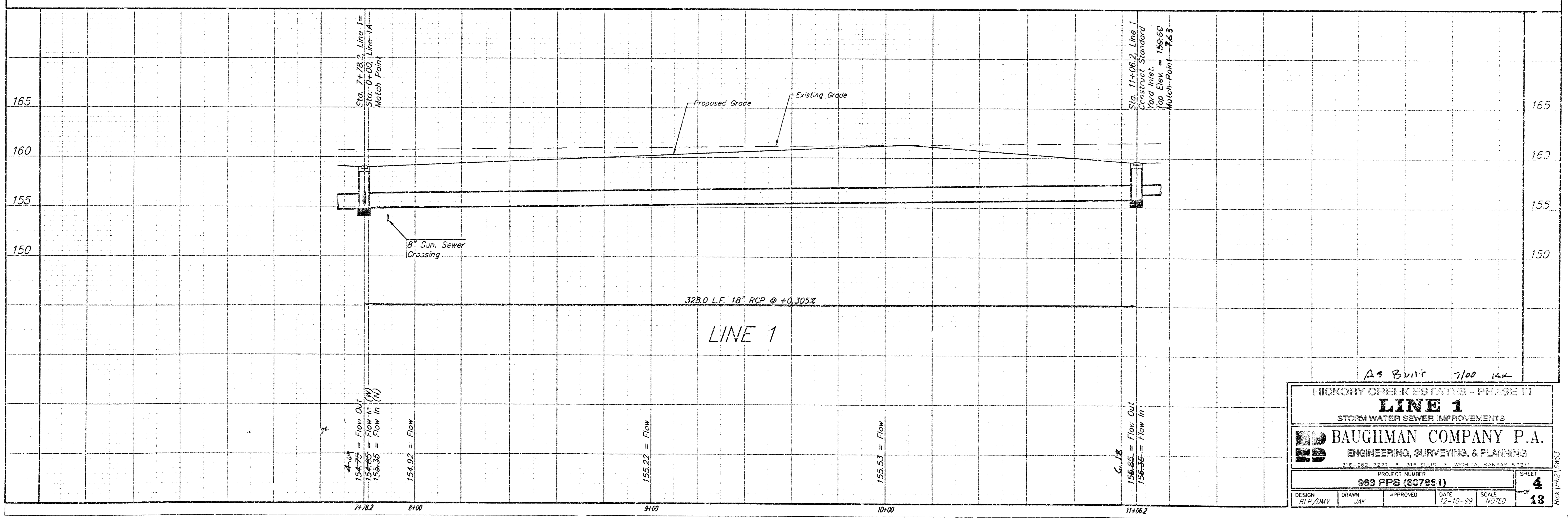
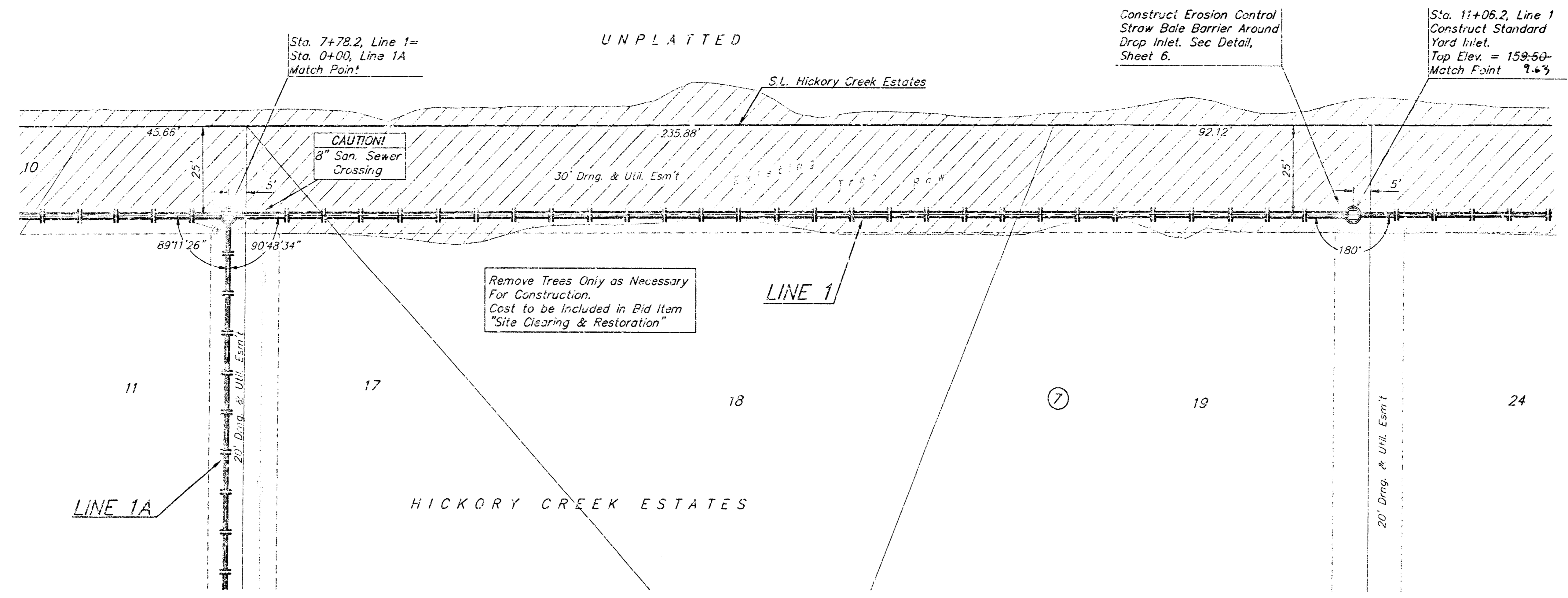
**Benchmarks:**

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Elevation = 160.01 City Datum

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Elevation = 162.21 City Datum

☐ Cut on South Edge of Concrete Entrance to Lift Station 0.5± East of East Edge of Manhole Adjacent to Northwest Corner of Lot 1, block 5.  
Elevation = 155.60 City Datum

SCALE:  
1" = 20' HORIZONTAL  
1" = 5' VERTICAL  
\* = IRON



**Benchmarks:**

☐ Cut on Top of Curb Return at Southwest Corner of Hickory Creek and Hickory Creek Ct. at Northeast Corner of Lot 25, Block 2.

Elevation = 160.01 City Datum

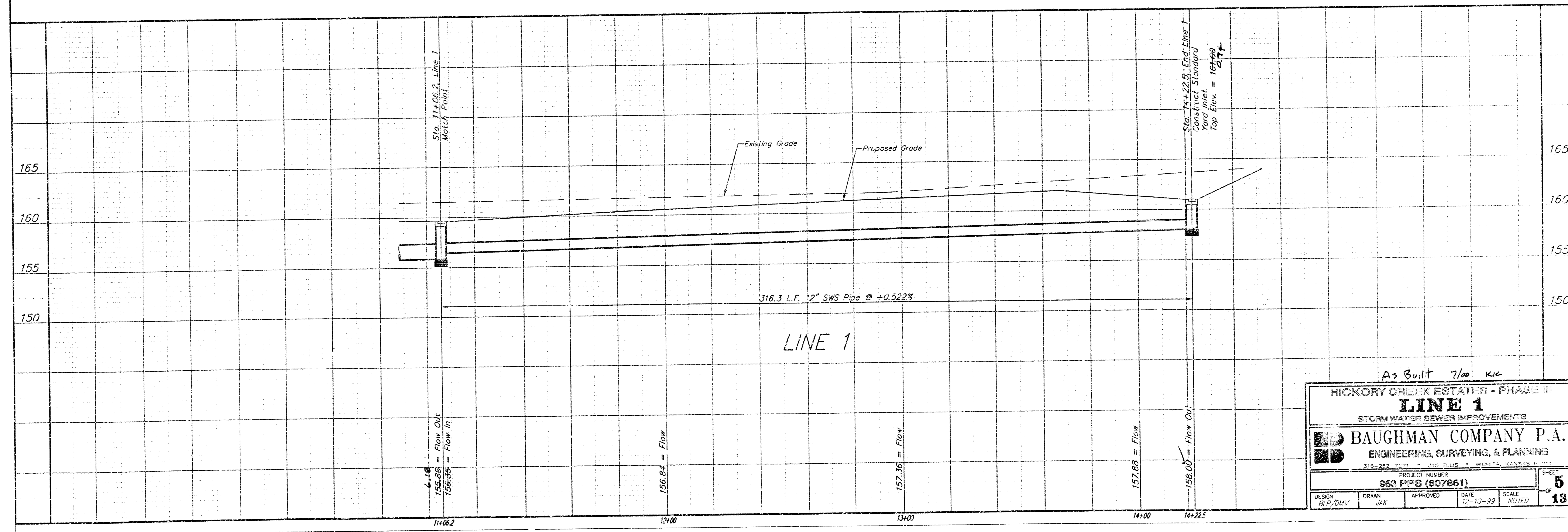
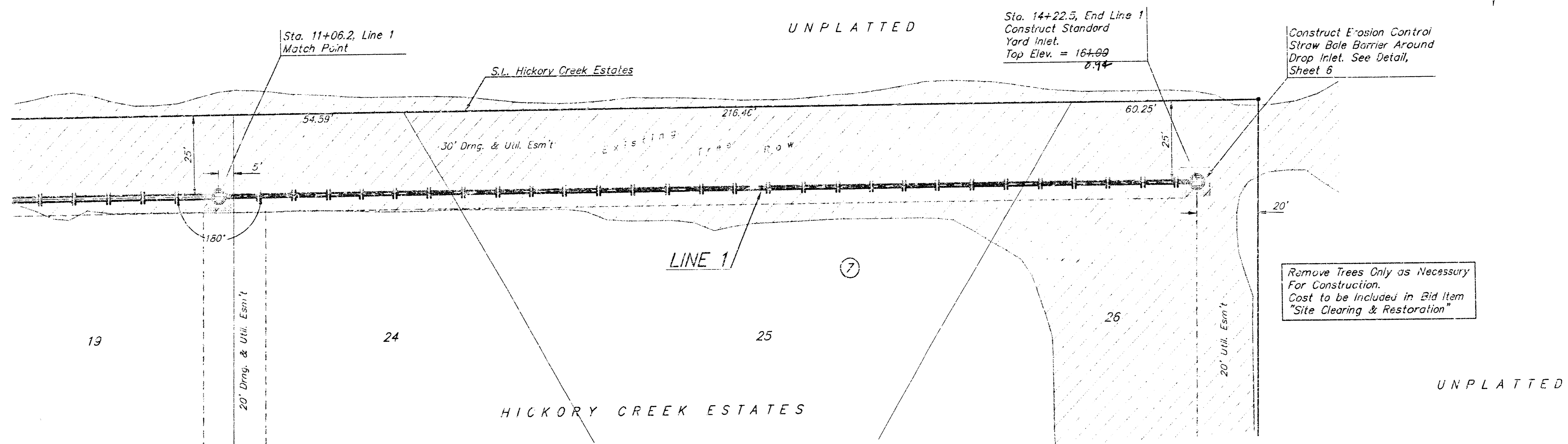
☐ Cut on Top of Curb at PC on Hickory Creek at East Side of Lot 3, Block 2.

Elevation = 162.21 City Datum

☐ Cut on South Edge of Concrete Entrance to Lift Station 0.5± East of East Edge of Manhole Adjacent to Northwest Corner of Lot 1, Block 5.

Elevation = 155.60 City Datum

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



As Built 7/00 KIC

<b>HICKORY CREEK ESTATES - PHASE III</b>			
<b>LINE 1</b>			
STORM WATER SEWER IMPROVEMENTS			
<b>BAUGHMAN COMPANY P.A.</b>			
ENGINEERING, SURVEYING, & PLANNING			
316-262-2121 • 316 ELLIS • WICHITA, KANSAS 67211			
PROJECT NUMBER <b>963 PPS (607861)</b>			SHEET <b>5</b>
DESIGN B.P./DMV	DRAWN JAK	APPROVED	DATE 12-10-09
		SCALE NOTED	OF <b>13</b>

**Benchmarks:**

□ Cut on Top of Curb Return at Southwest Corner of Hickory Creek and Hickory Creek Ct. at Northeast Corner of Lot 26, Block 2.

Elevation = 160.01 City Datum

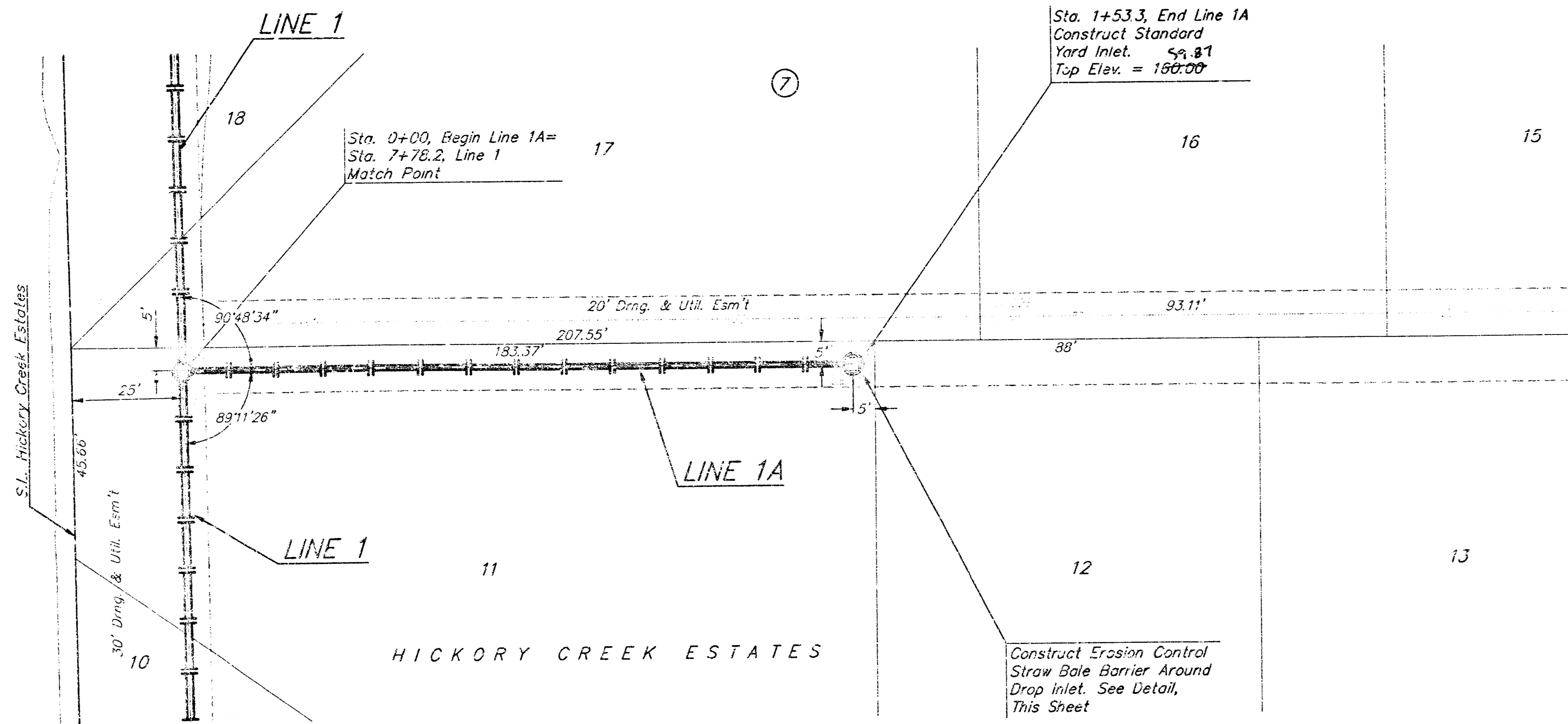
□ Cut on Top of Curb at PC on Hickory Creek Ct. at East Side of Lot 9, Block 3.

Elevation = 162.21 City Datum

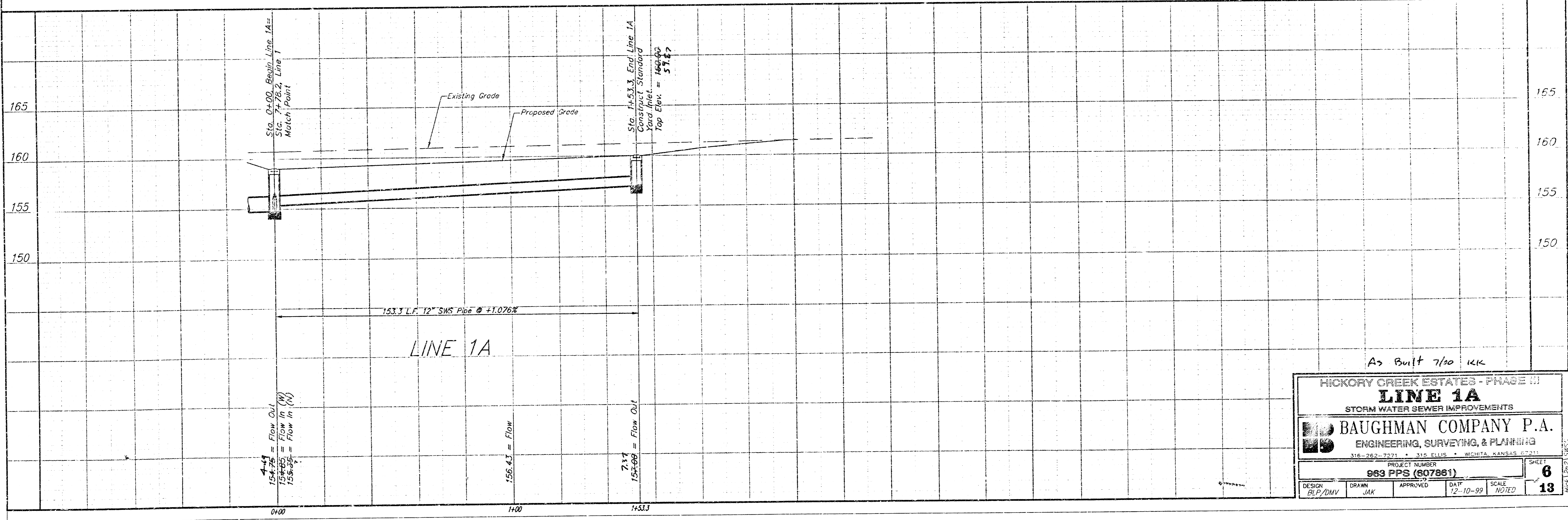
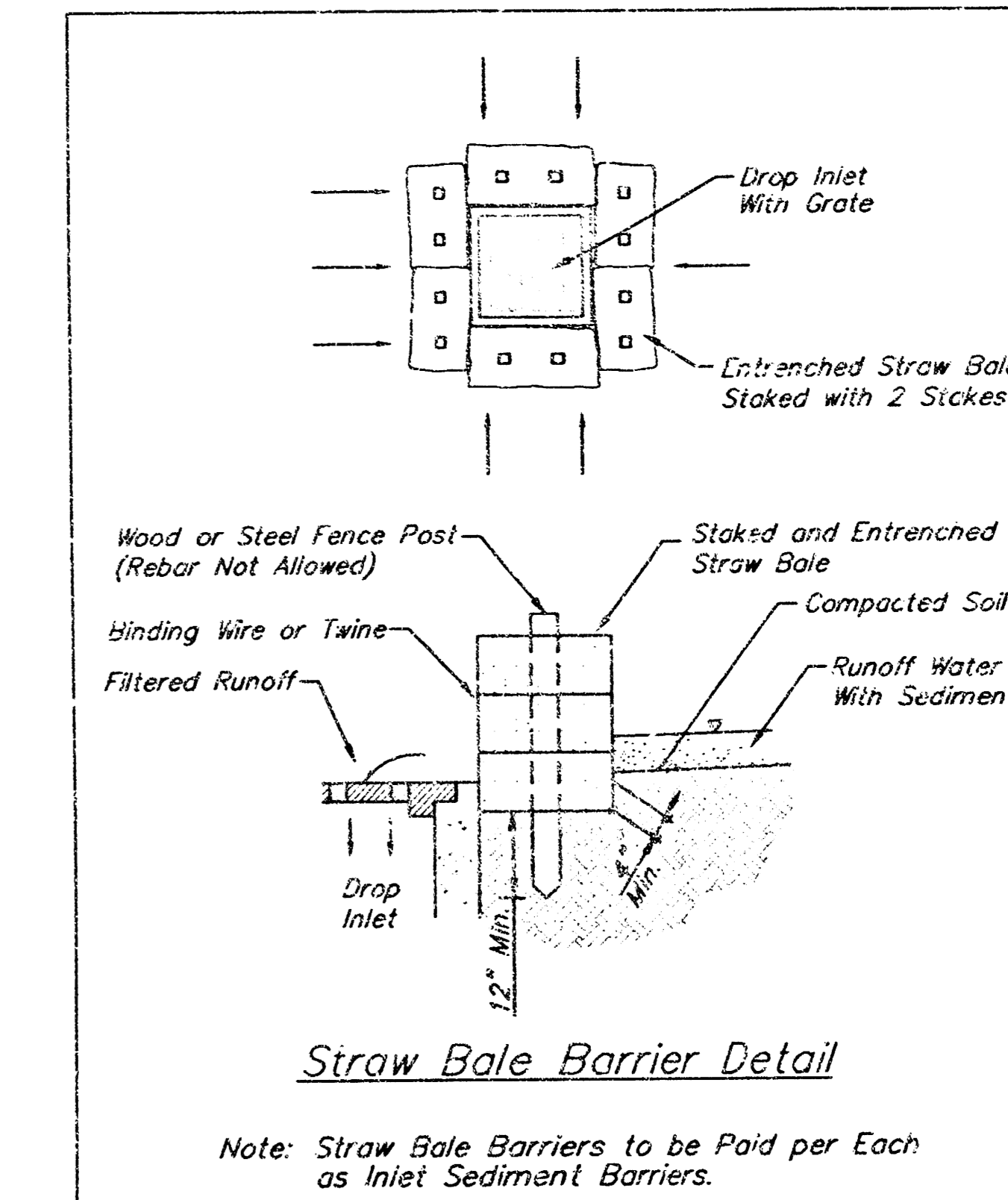
□ Cut on South Edge of Concrete Entrance to Lift Station 0.5'± East of East Edge of Manhole Adjacent to Northwest Corner of Lot 1, Block 5.

Elevation = 155.60 City Datum

UNPLATTED



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



HICKORY CREEK ESTATES - PHASE III  
**LINE 1A**  
STORM WATER SEWER IMPROVEMENTS

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

PROJECT NUMBER: **063 PPS (807861)**

DESIGN: BLP/DMV	DRAWN: JAK	APPROVED:	DATE: 12-10-99	SCALE: NOTED	SHEET: <b>6</b>
					FROM 13 OF 13 SHEETS

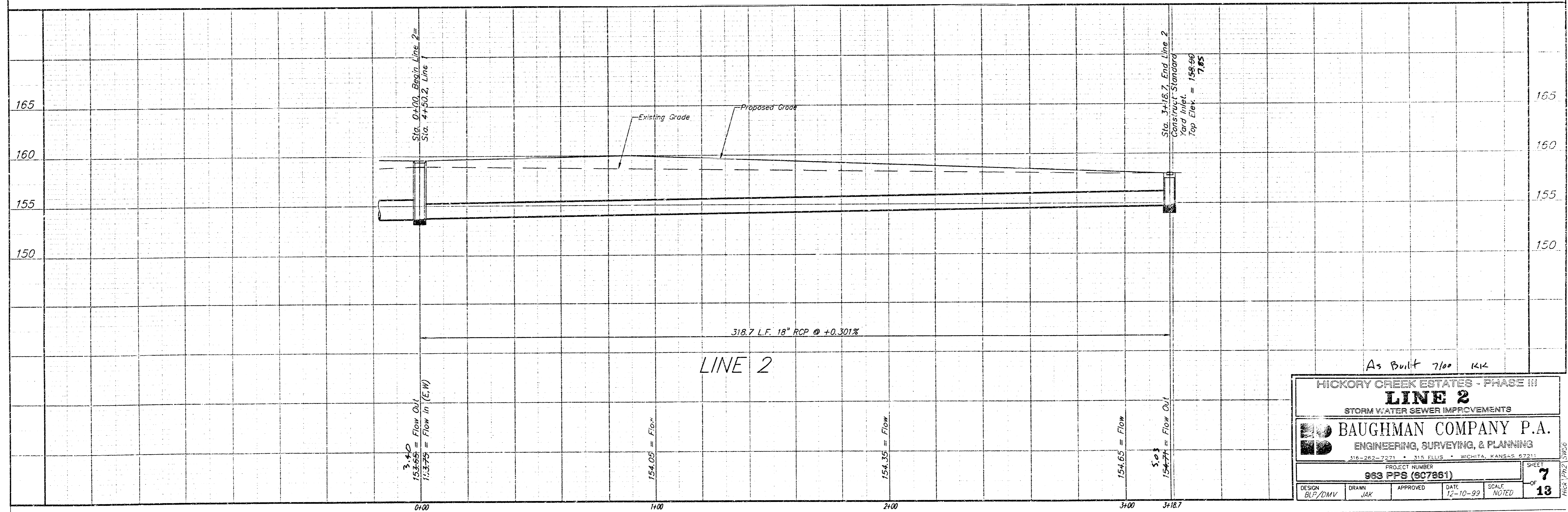
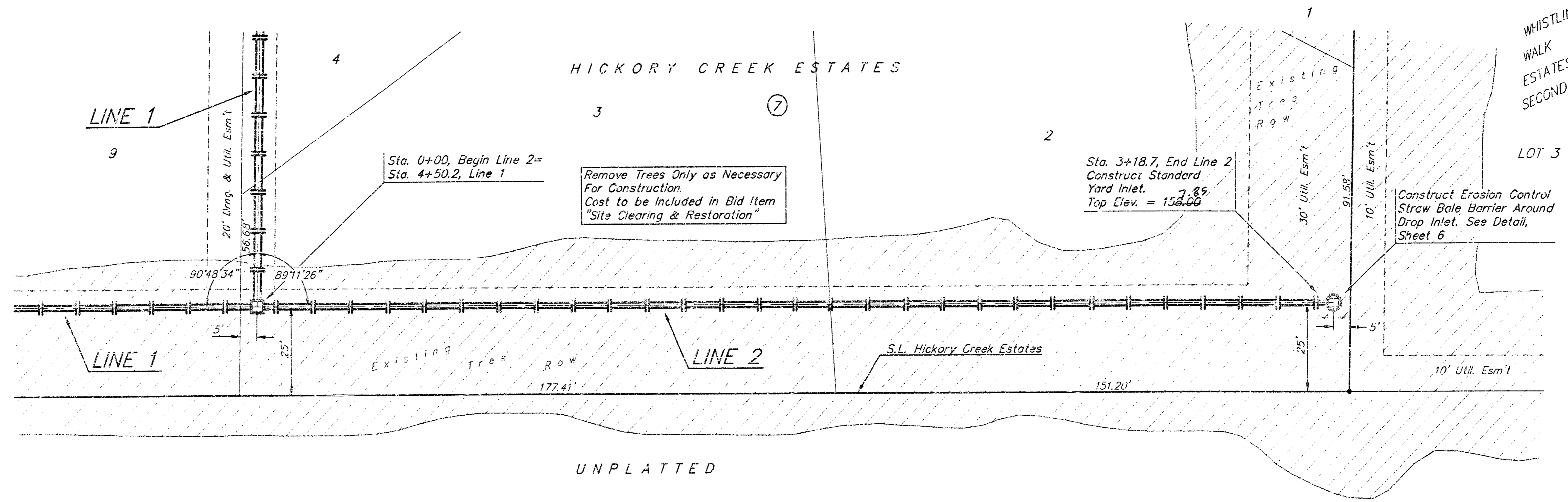
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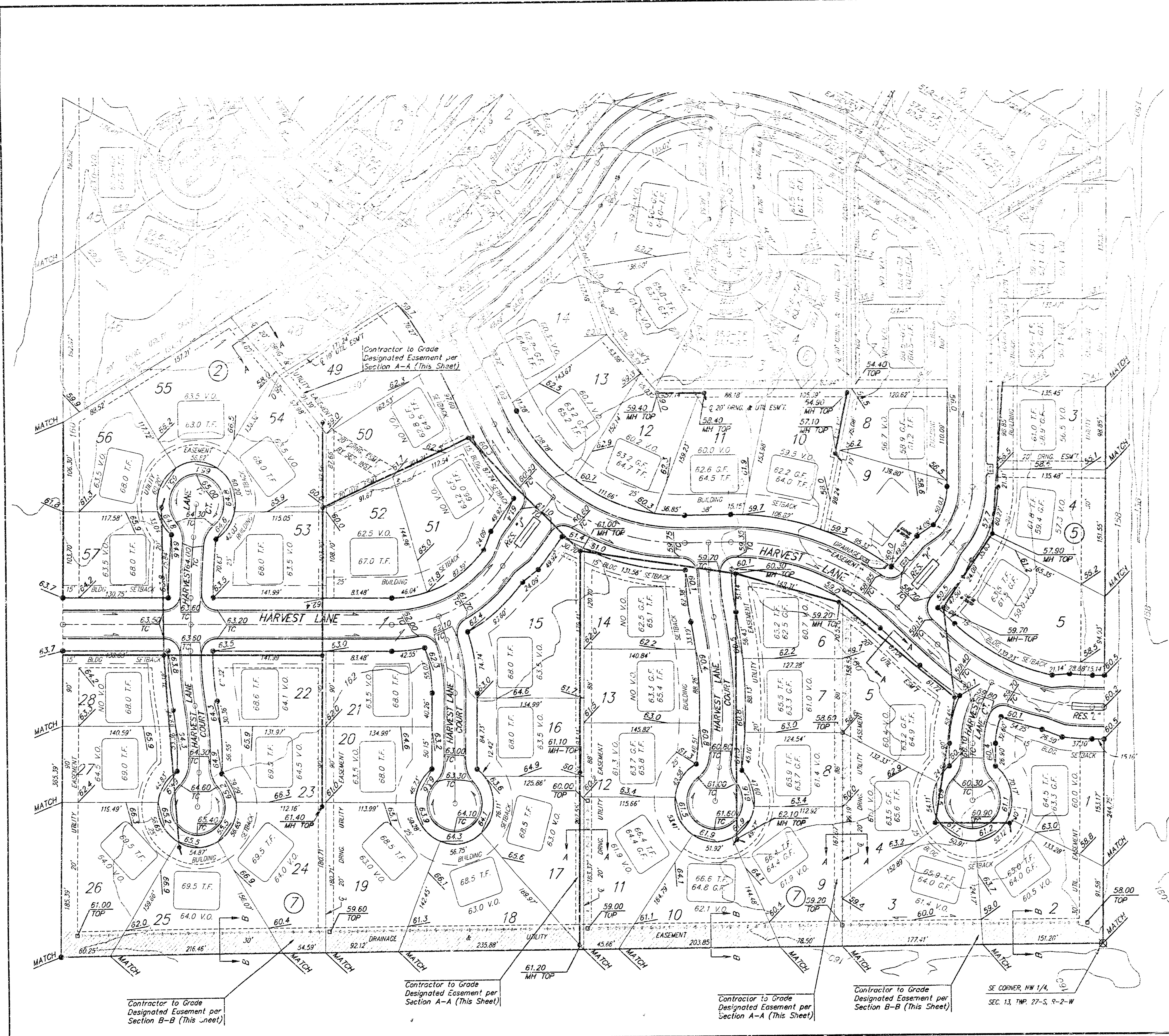
SCALE:  
1" = 20' HORIZONTAL  
1" = 5' VERTICAL  
• = IRON



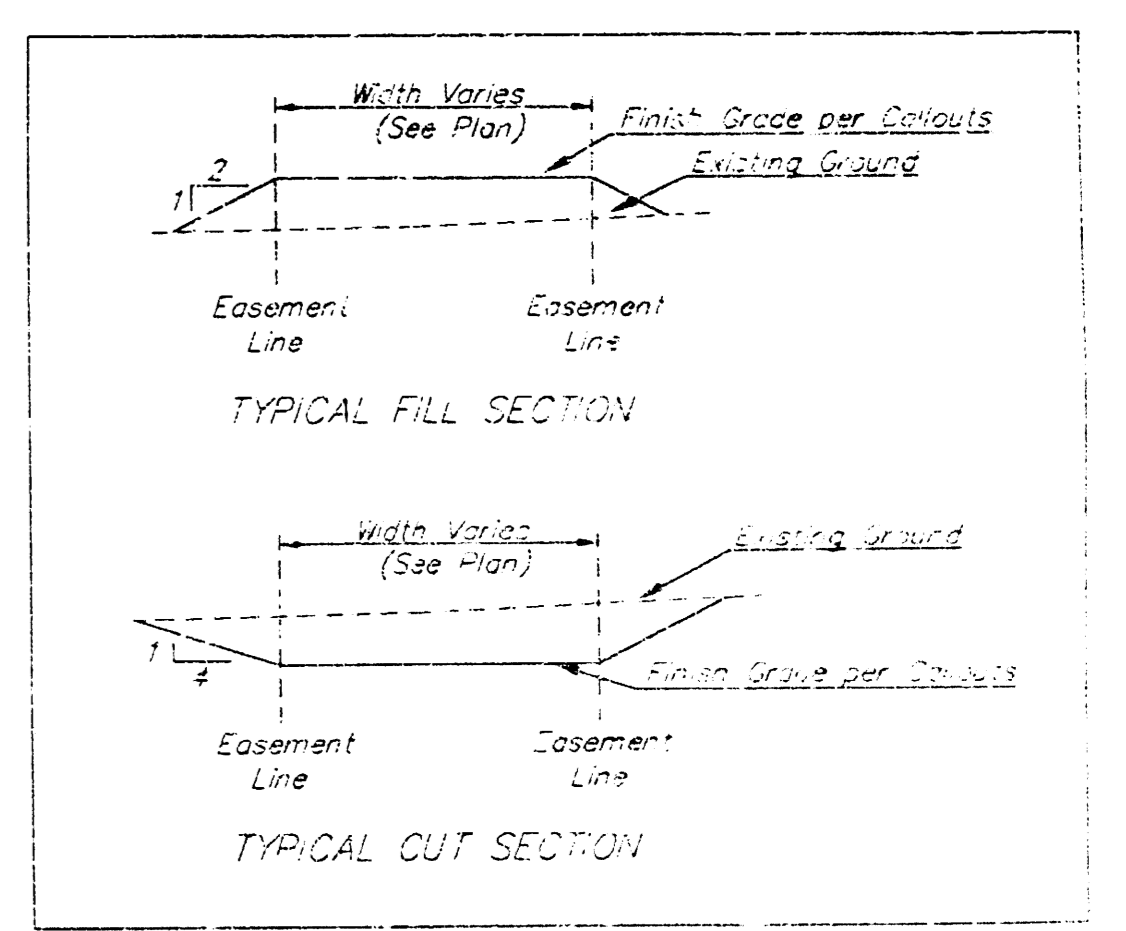
As Built 7/00 KIK

HICKORY CREEK ESTATES - PHASE III	
<b>LINE 2</b>	
STORM WATER SEWER IMPROVEMENTS	
BAUGHMAN COMPANY P.A.	
ENGINEERING, SURVEYING, & PLANNING	
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211	
PROJECT NUMBER	SHEET
983 PPS (807861)	7
DESIGN	DATE
BLP/DMV	12-10-99
DRAWN	SCALE
JAK	NOTED
APPROVED	OF
	13

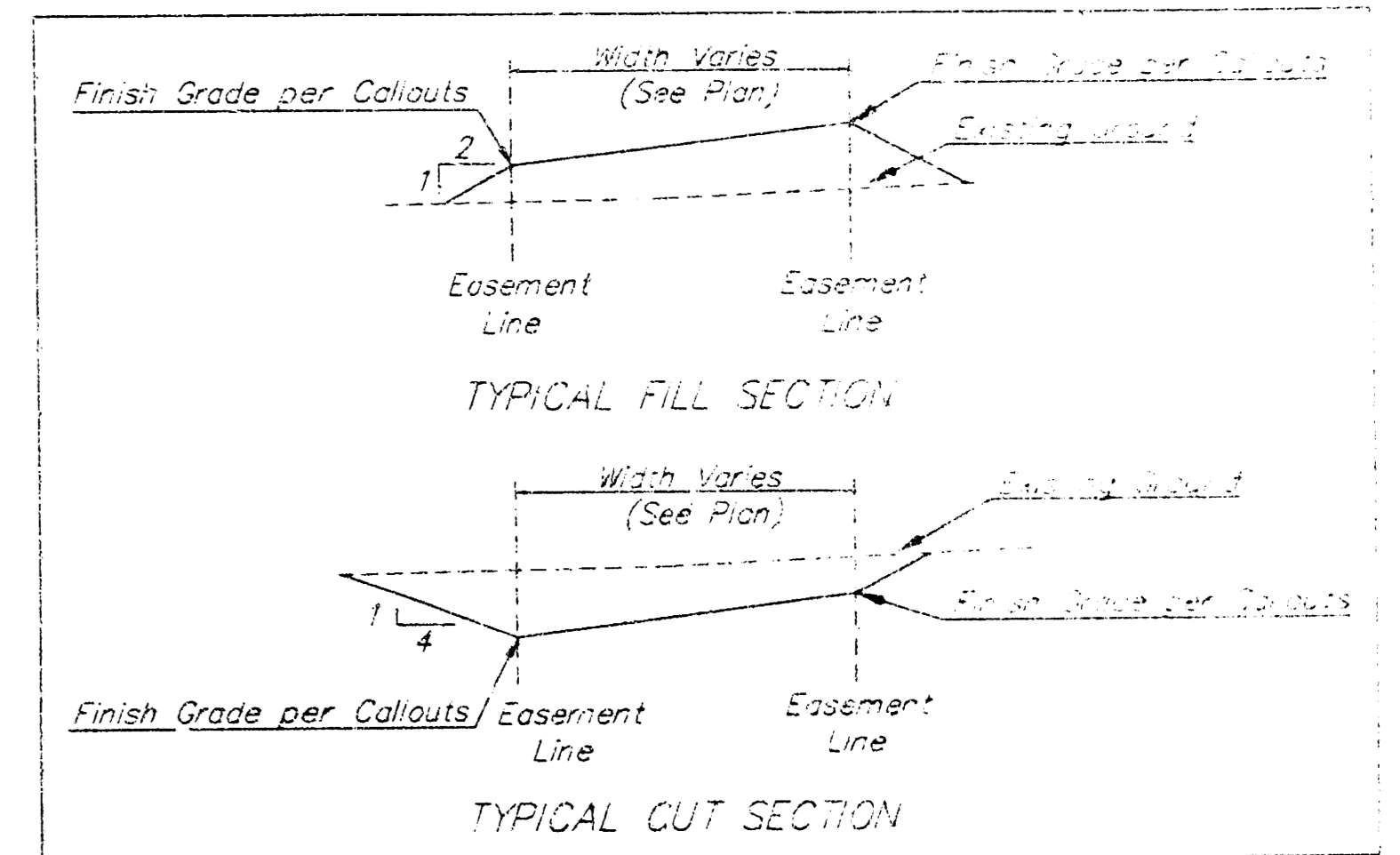




SCALE: 1"=60'



SECTION A-A



SECTION B-B

□ = Easements To Be Graded

The contractor shall grade the easements as shown in 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.

**Benchmarks:**

- BM 1: Cut on Top of Curb Return at Southwest Corner of Hickory Creek and Hickory Creek Ct. at Northeast Corner of Lot 26, Block 2. Elevation = 160.01 (City Datum)
- BM 2: Cut on Top of Curb at PC on Hickory Creek at East Side of Lot 9, Block 3. Elevation = 162.21 (City Datum)
- BM 3: Cut on South Edge of Concrete Entrance to Lift Station 0.5' East of East Edge of Manhole Adjacent to Northwest Corner of Lot 1, Block 5. Elevation = 155.60 (City Datum)

**HICKORY CREEK ESTATES - PHASE III  
ESMT GRADING PLAN**  
STORM WATER SEWER

**BAUGHMAN COMPANY P.A.**  
ENGINEERING, SURVEYING, & PLANNING  
318-262-7271 • 318 ELLIS • MOHAWK, KANSAS 67218

PROJECT NUMBER: **963 PPS (607861)**  
DESIGN: BLP/DNV | DRAWN: JAK | APPROVED: [Signature] | DATE: 12-10-99 | SCALE: NOTED | SHEET: **9** OF **18**

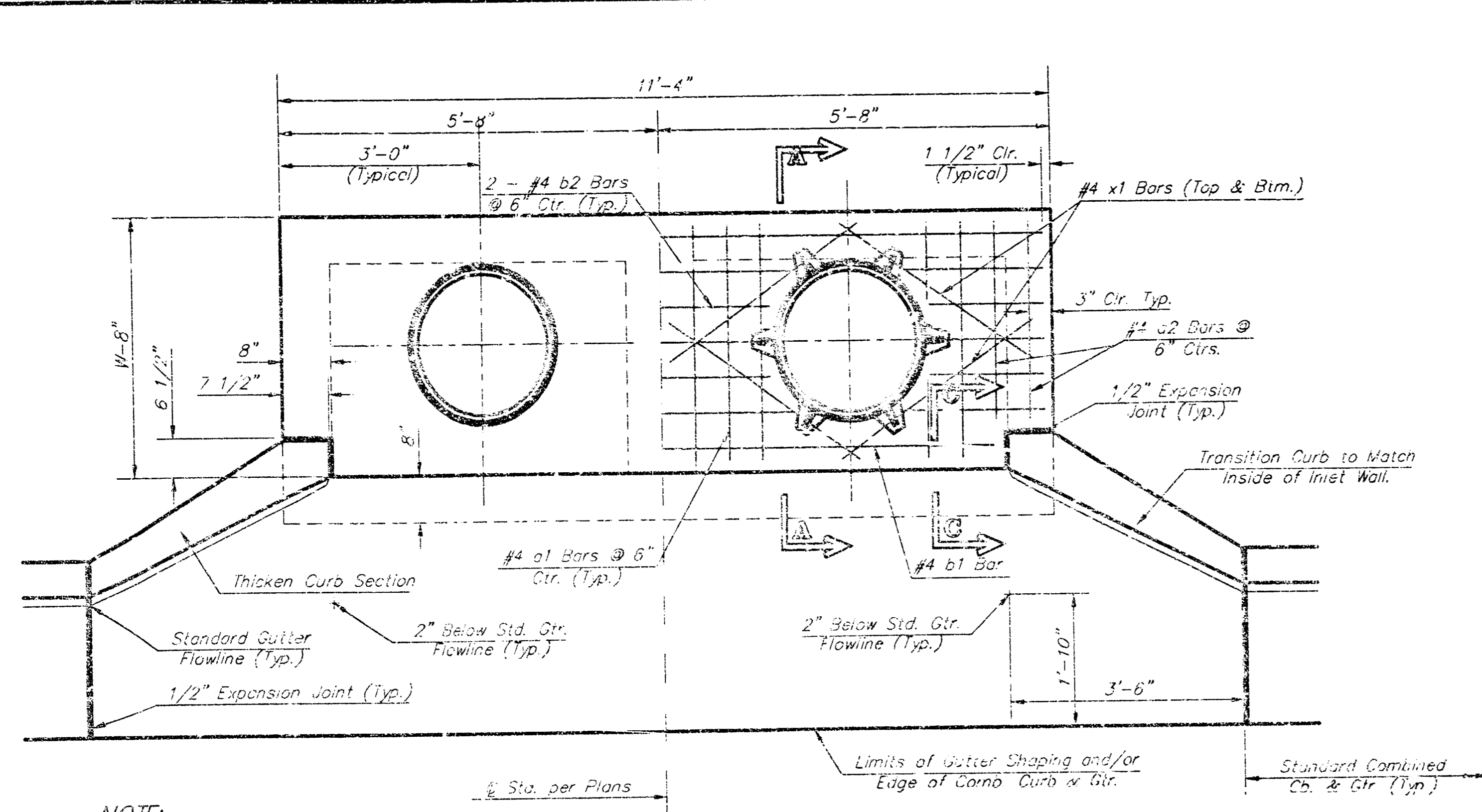
Contractor to Grade Designated Easement per Section B-B (This Sheet)

Contractor to Grade Designated Easement per Section A-A (This Sheet)

Contractor to Grade Designated Easement per Section A-A (This Sheet)

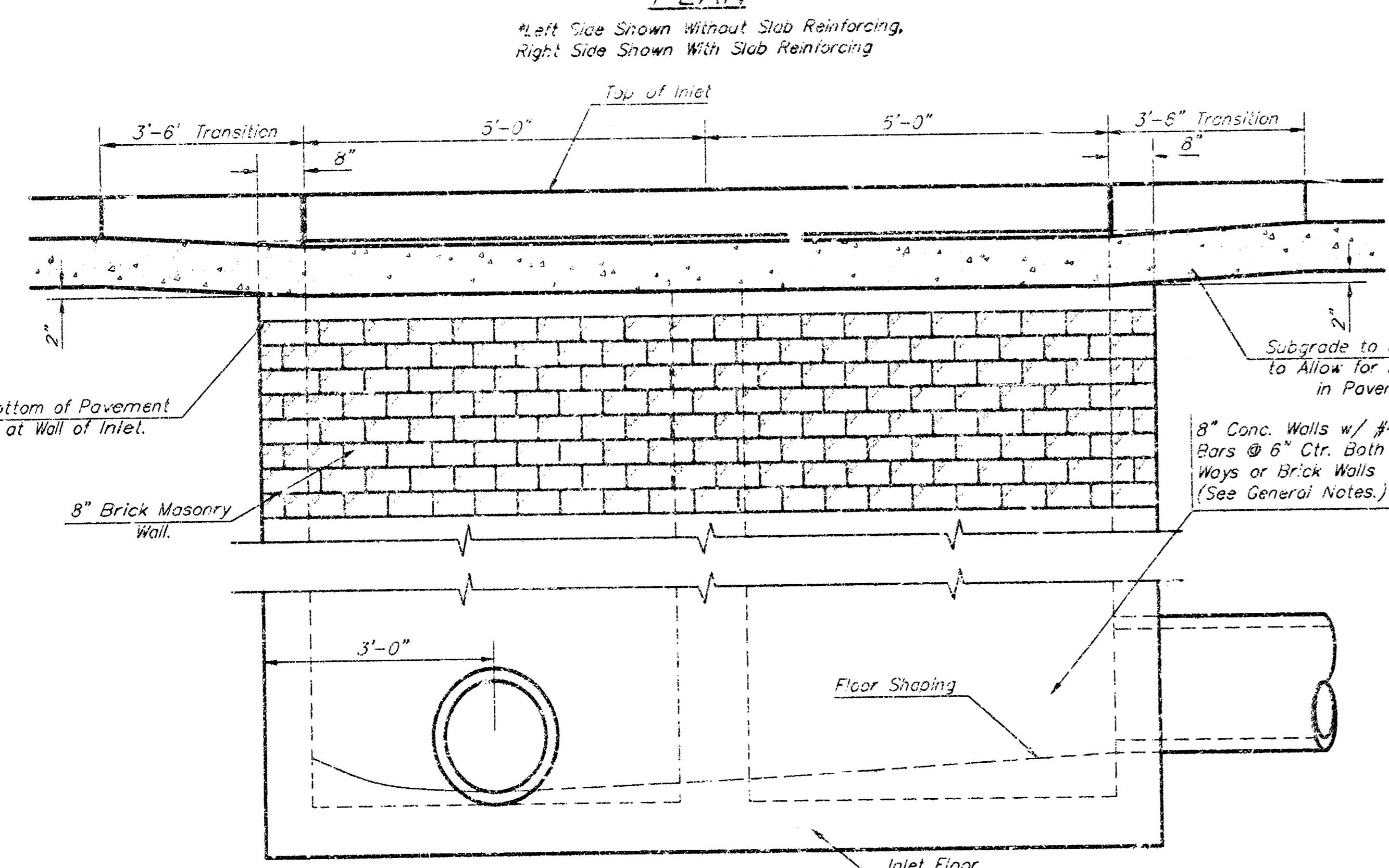
Contractor to Grade Designated Easement per Section B-B (This Sheet)

SE CORNER, MW 1/4,  
SEC. 13, TWP. 27-S, R-2-W

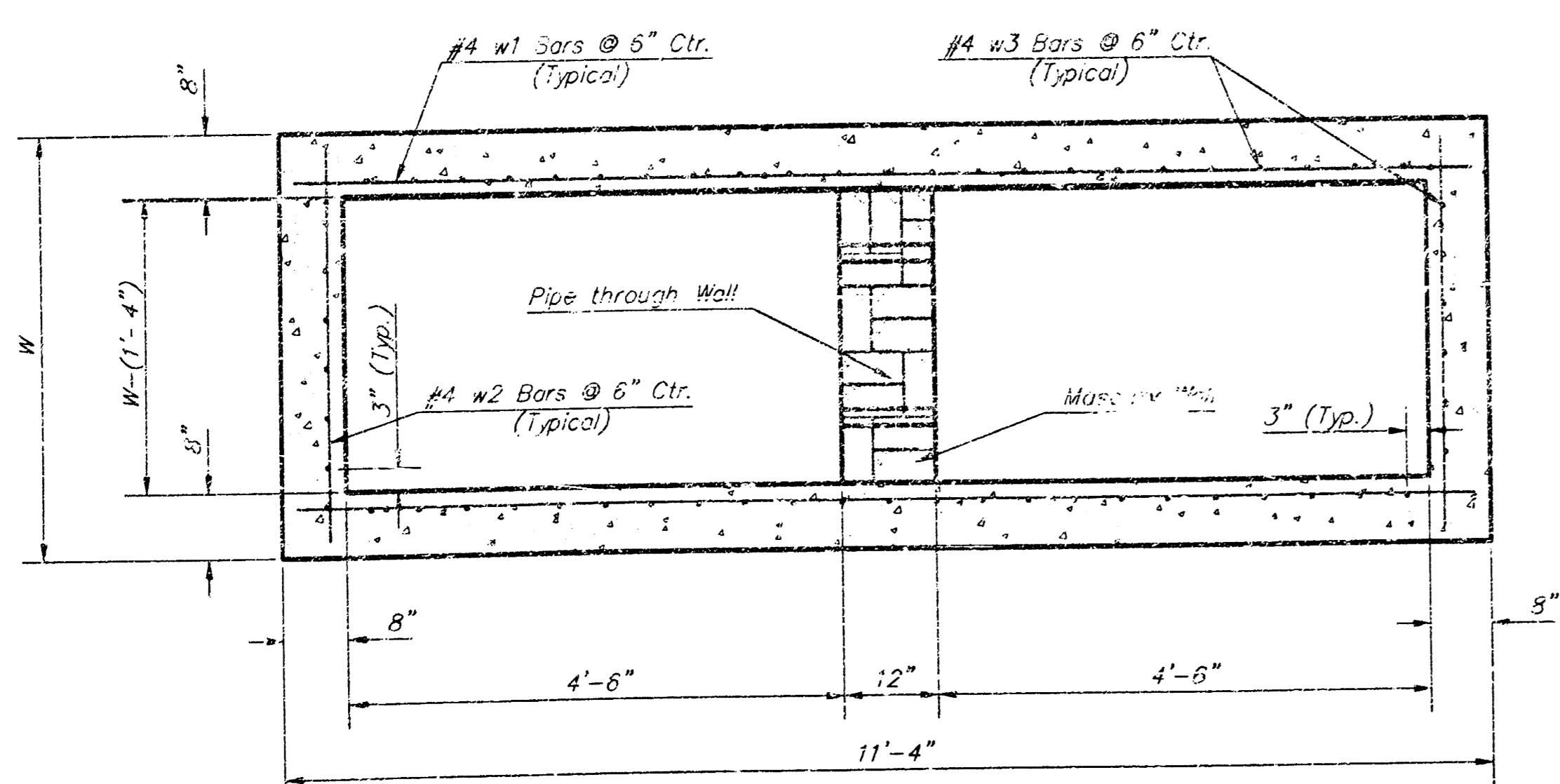


NOTE:  
Expansion joint Only in Curb Area with Concrete Pavement.

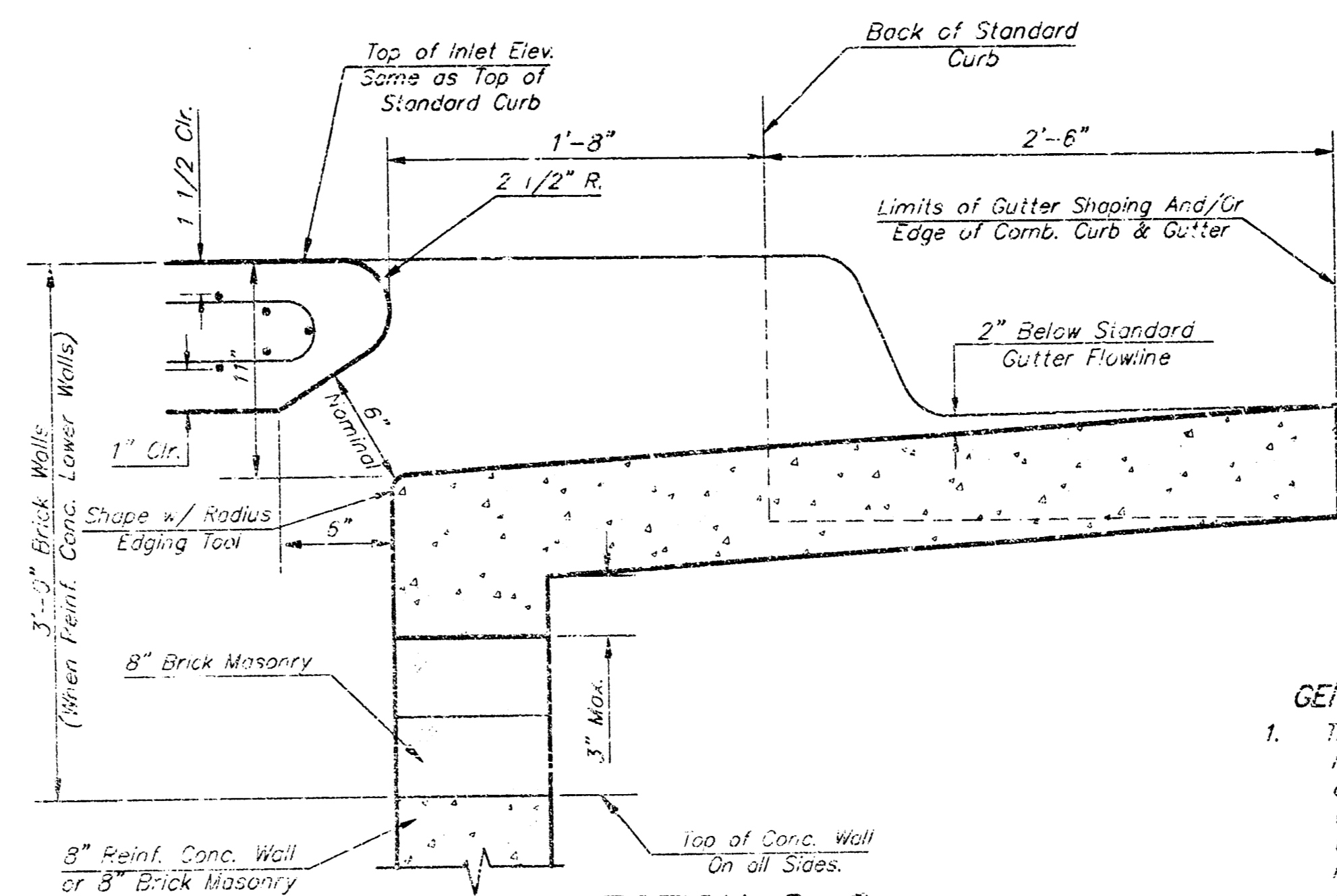
PLAN



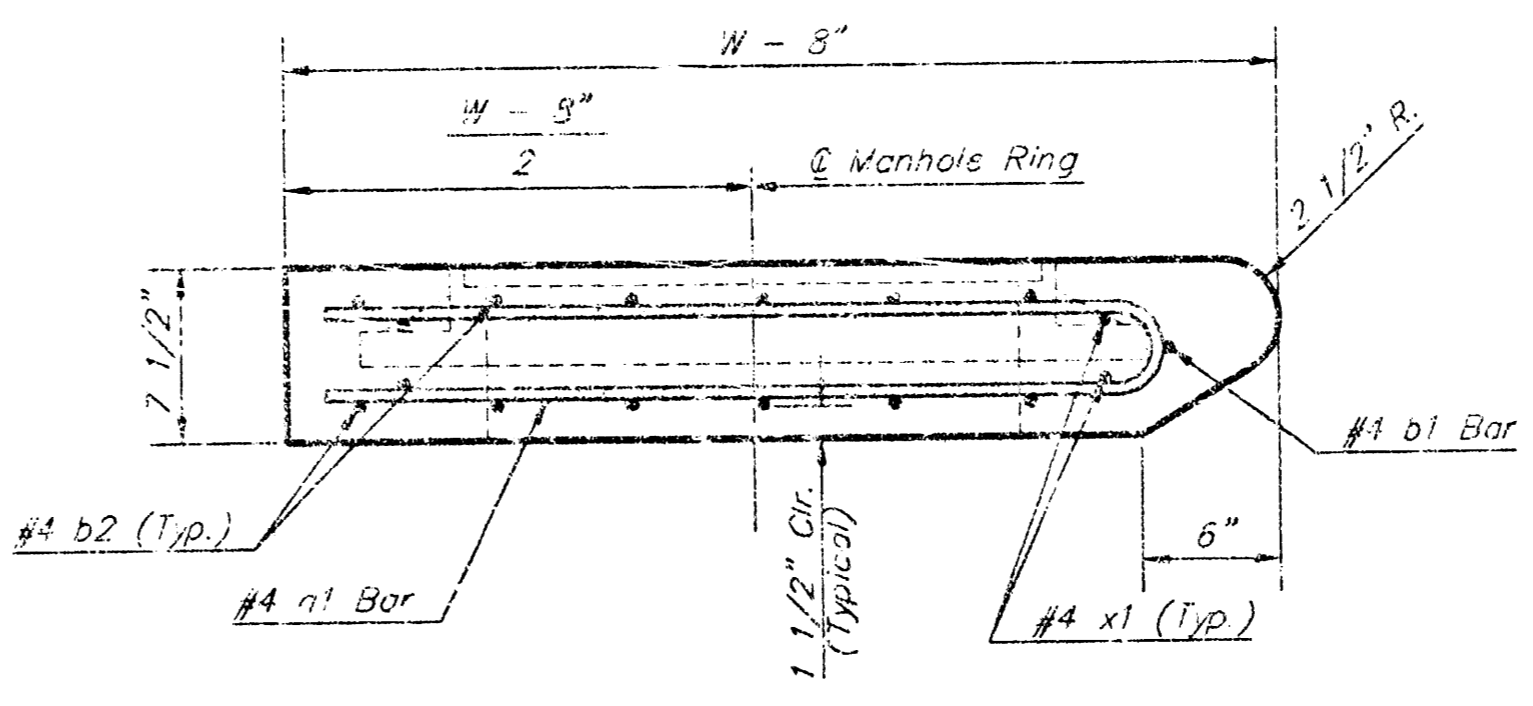
ELEVATION



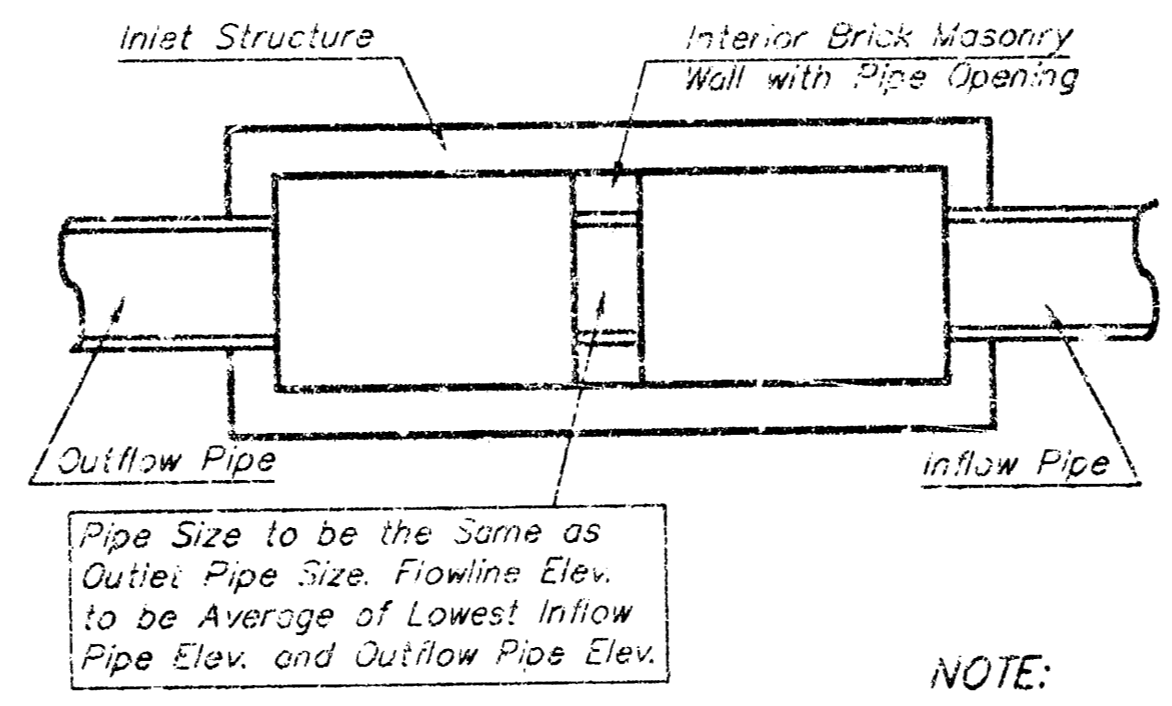
SECTION B-B



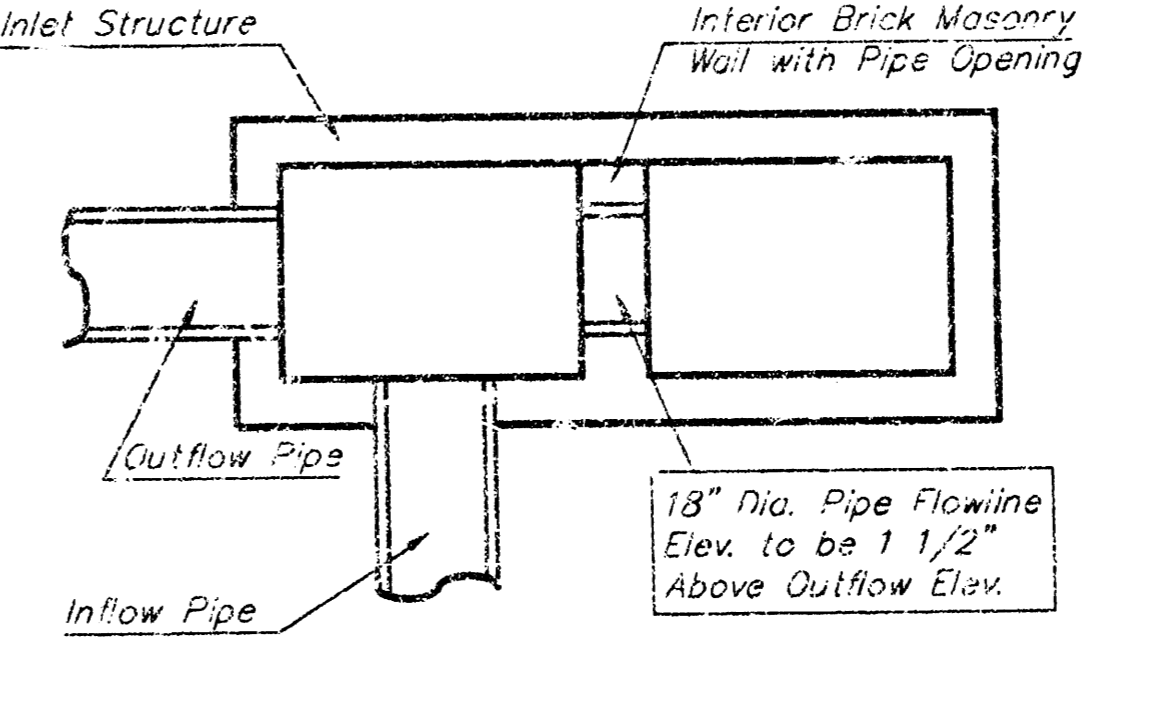
SECTION C-C



SECTION A-A

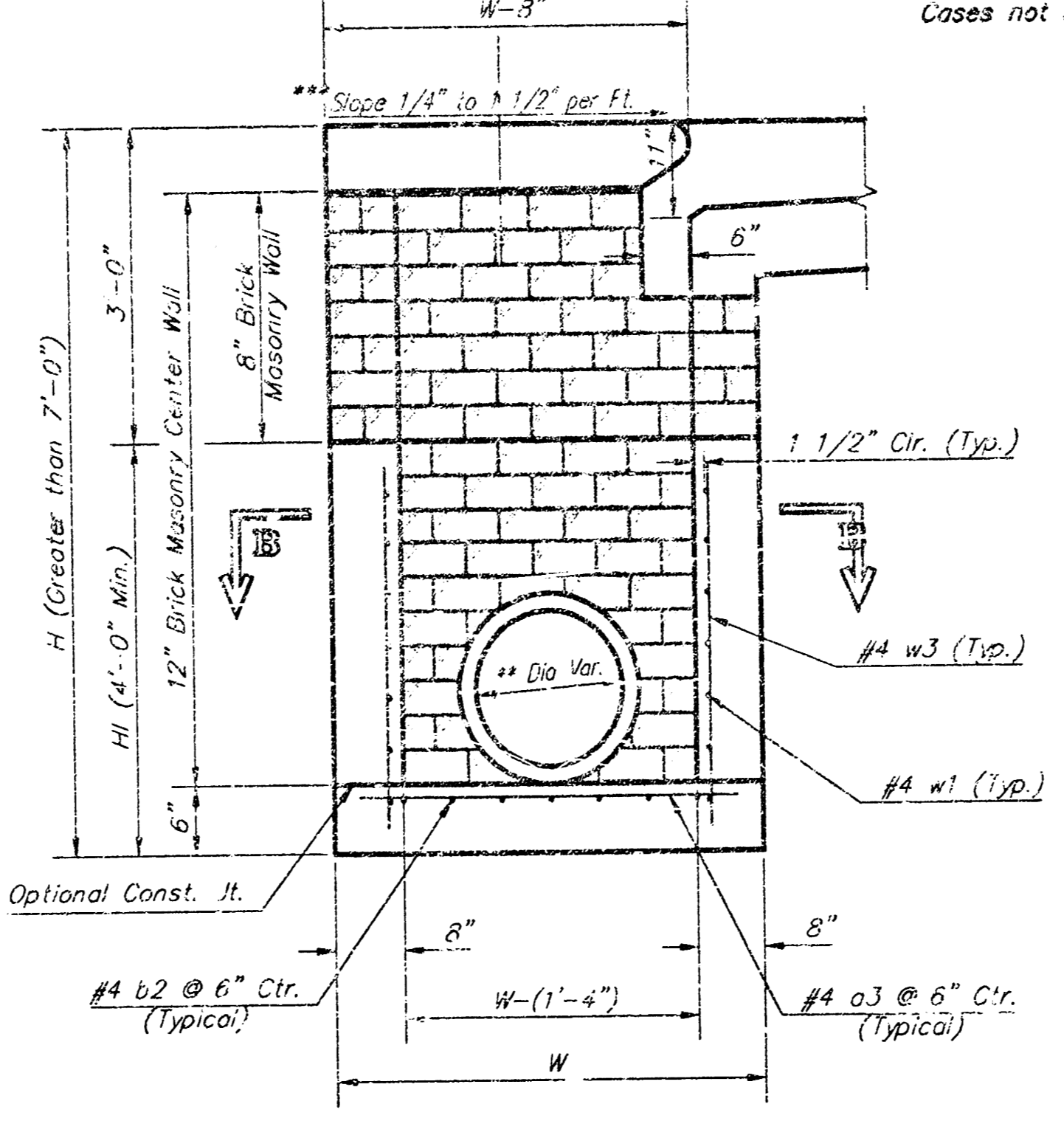


CASE I

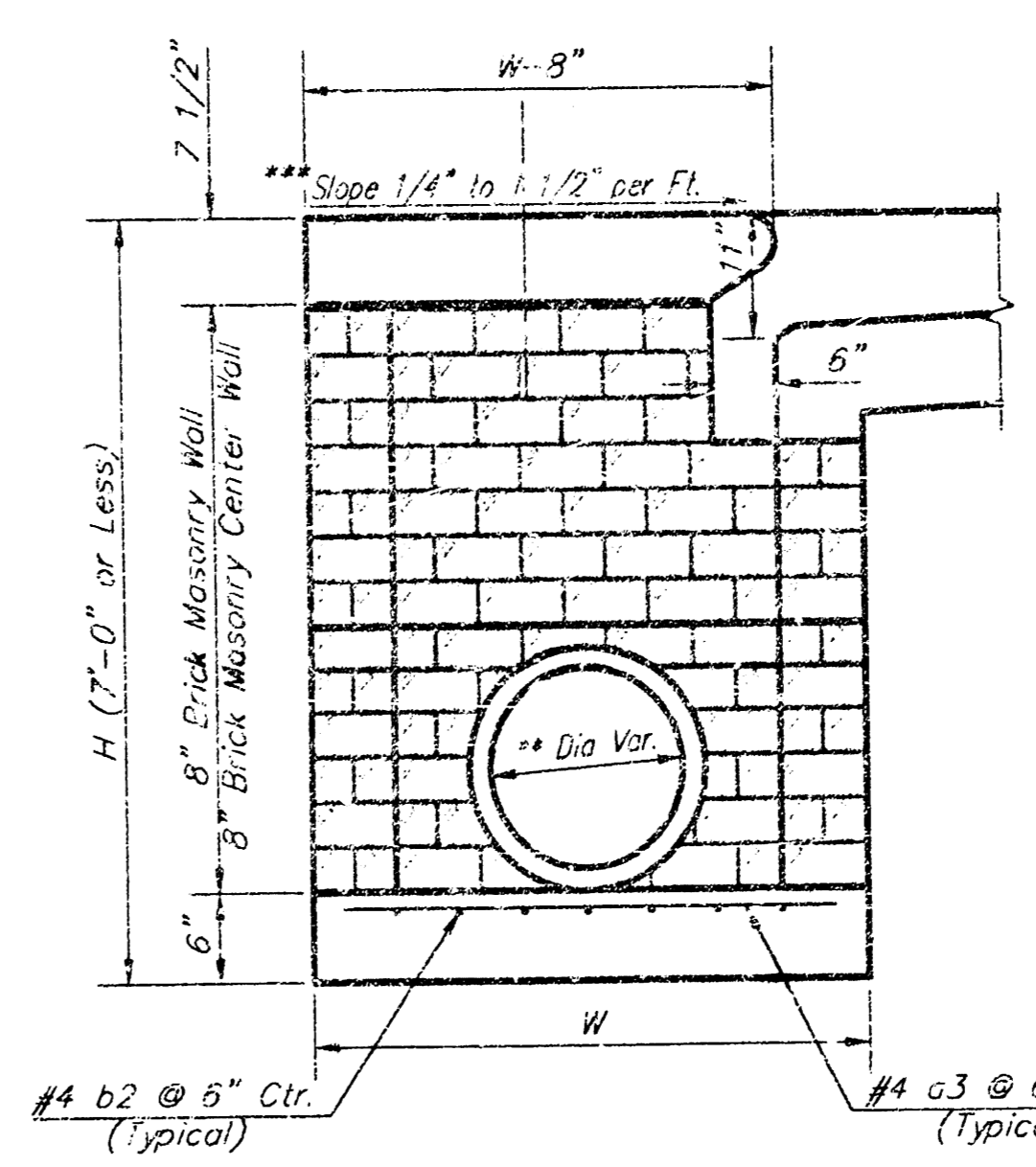


CASE II

NOTE:  
Center wall Pipe Size shall be as Specified in Inlet Construction Notes on the Plan/Profile Sheets for those Cases not Shown Here.



TYPICAL INLET SECTION AT CENTER WALL (Reinforced Concrete Walls)



TYPICAL INLET SECTION AT CENTER WALL (Masonry Walls)

NOTES:  
\* A center wall opening shall be provided by means of a section of reinforced concrete pipe. See Case I and Case II above.  
\*\*\* Slope of inlet tops to match sidewalk of parking slopes within limits indicated

PRECAST SLAB AND FLOOR REINFORCING											
MARK	SIZE	W = 4'-4"		W = 5'-4"		W = 6'-4"		W = 7'-4"		W = 8'-4"	
		NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
#1	#4	13	6'-7"	13	8'-7"	13	10'-7"	13	12'-7"	4	14'-7"
#2	#4	4	6'-0"	4	8'-0"	4	10'-0"	4	12'-0"	4	14'-0"
#3	#4	23	4'-1"	23	5'-1"	23	6'-1"	23	7'-1"	23	8'-1"
#4	#4	1	4'-9"	1	9'-9"	1	9'-9"	1	9'-9"	1	9'-9"
#5	#4	23	11'-1"	29	11'-1"	35	11'-1"	41	11'-1"	47	11'-1"
#6	#4	16	3'-10"	16	4'-2"	16	4'-6"	16	4'-10"	16	5'-2"

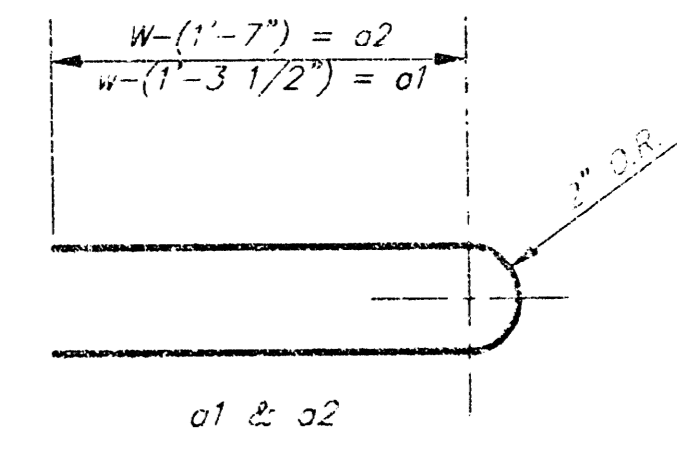
  

WALL REINFORCING											
MARK	SIZE	W = 4'-4"		W = 5'-4"		W = 6'-4"		W = 7'-4"		W = 8'-4"	
		NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
#1	#4	1	11'-1"	1	11'-1"	1	11'-1"	1	11'-1"	1	11'-1"
#2	#4	1	4'-1"	1	5'-1"	1	6'-1"	1	7'-1"	1	8'-1"
#3	#4	52	2	56	2	60	2	64	2	68	2

\* Field Bend or Cut Reinforcing as Required for Clearance.  
① 4 (H = 12") (H = 21") Rounded down to nearest 0.5"  
② H = 3"

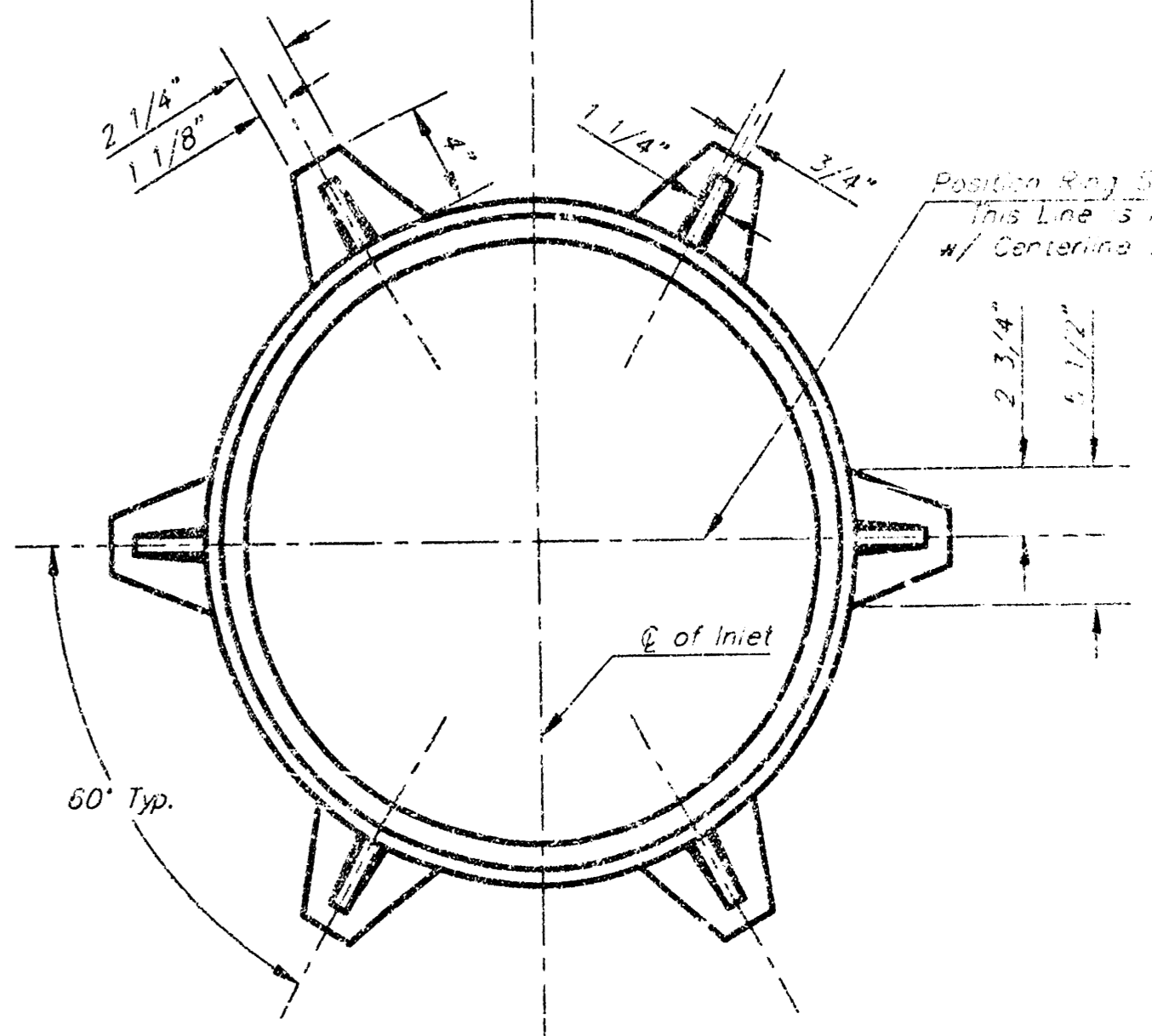
GENERAL NOTES:

- The contractor shall be required to construct 8" brick masonry walls between the concrete inlet base and top on this inlet when W=4'-4" or less and H=7'-0" or less. When W is greater than 5'-4" and H is less than 7'-0" the outside inlet walls below the brick stack shall be reinforced concrete construction and the center wall shall be of masonry construction as shown for the masonry wall option.
- Inlet invert shall be shaped with 8 sack sand 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.
- Concrete tops to be installed on this 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.
- Inlet top reinforcing shall be spaced on 6" max. centers. Inlet ribs shall be notched out as indicated to facilitate construction of curb. Bars in inlet top to be field bent or cut to clear manhole ring.
- The ends of all pipes installed in inlets shall be cut off flush with the inside face of the inlet wall.



BENDING DIAGRAM

STANDARD CURB INLET PRECAST TOPS			
W	PRE-CAST TOP SIZE	PIPE SIZE	W.C. INLET
4'-4"	3'-8" 11'-4" 7 1/2"	24" & 30"	12" & 18"
5'-4"	4'-8" 11'-4" 7 1/2"	24" & 30"	12" & 18"
6'-4"	5'-8" 11'-4" 7 1/2"	24" & 30"	12" & 18"
7'-4"	6'-8" 11'-4" 7 1/2"	24" & 30"	12" & 18"
8'-4"	7'-8" 11'-4" 7 1/2"	24" & 30"	12" & 18"



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.

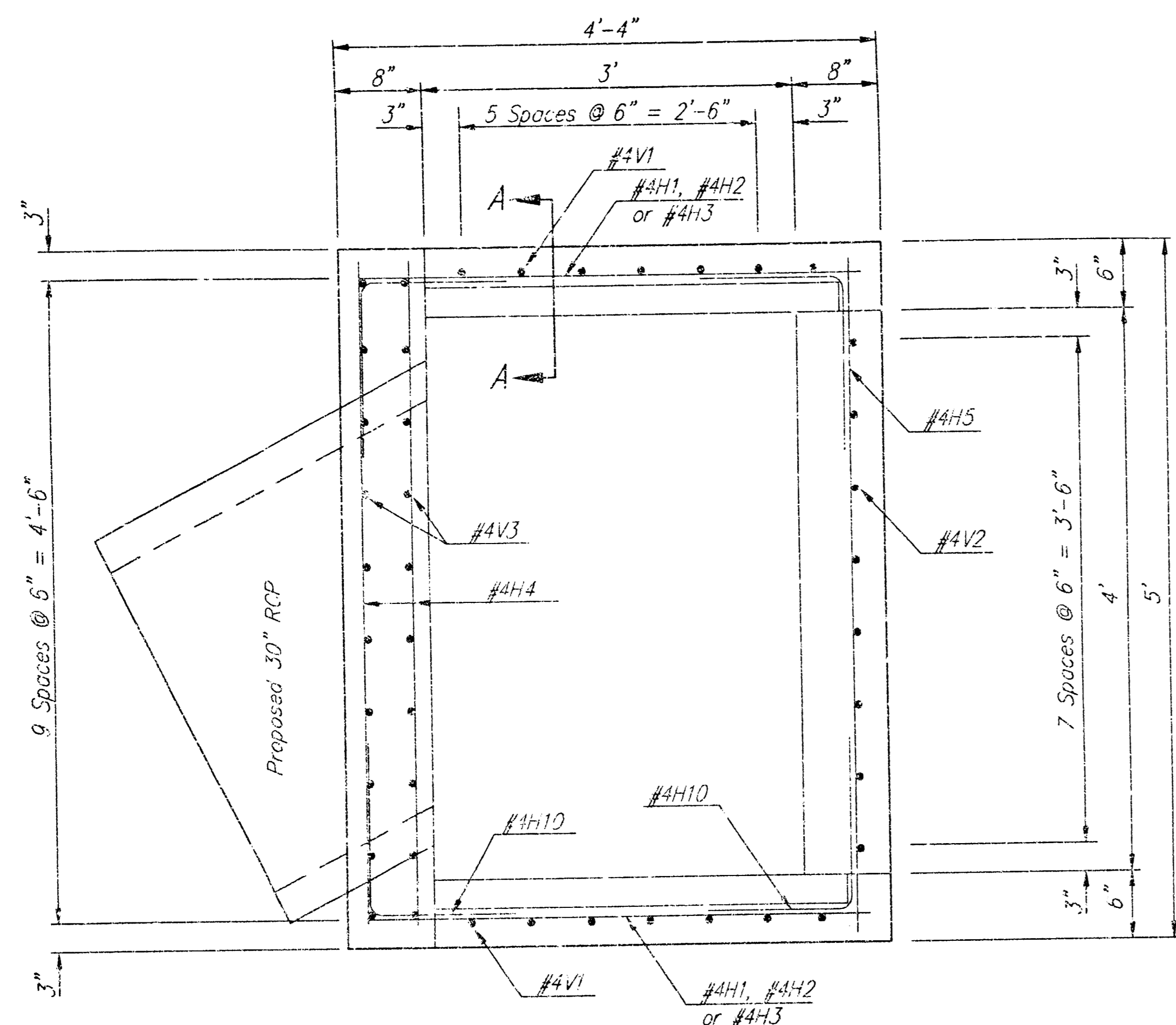
Revised - Feb. 16, 1989

CITY OF WICHITA STANDARD TYPE 1A  
**Curb Inlet Details**  
INLET OPENING = 3' X 3'-0"

**BAUGHMAN COMPANY P.A.**  
ENGINEERING, SURVEYING, & PLANNING  
318-292-7721 • 318 LILLIE • WICHITA, KANSAS 67201

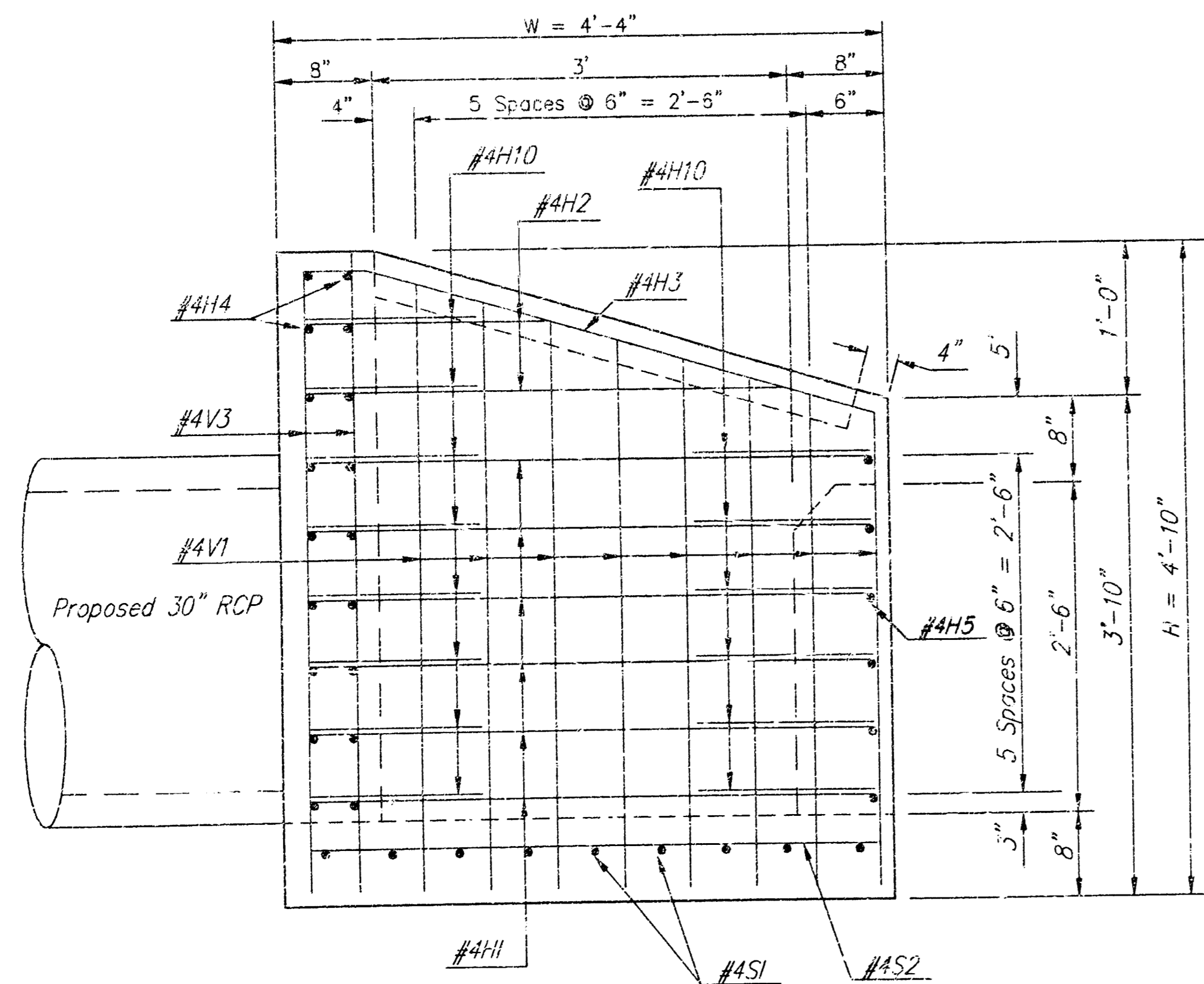
PROJECT NUMBER: 963 PPS (607851) SHEET: 10 OF 13

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

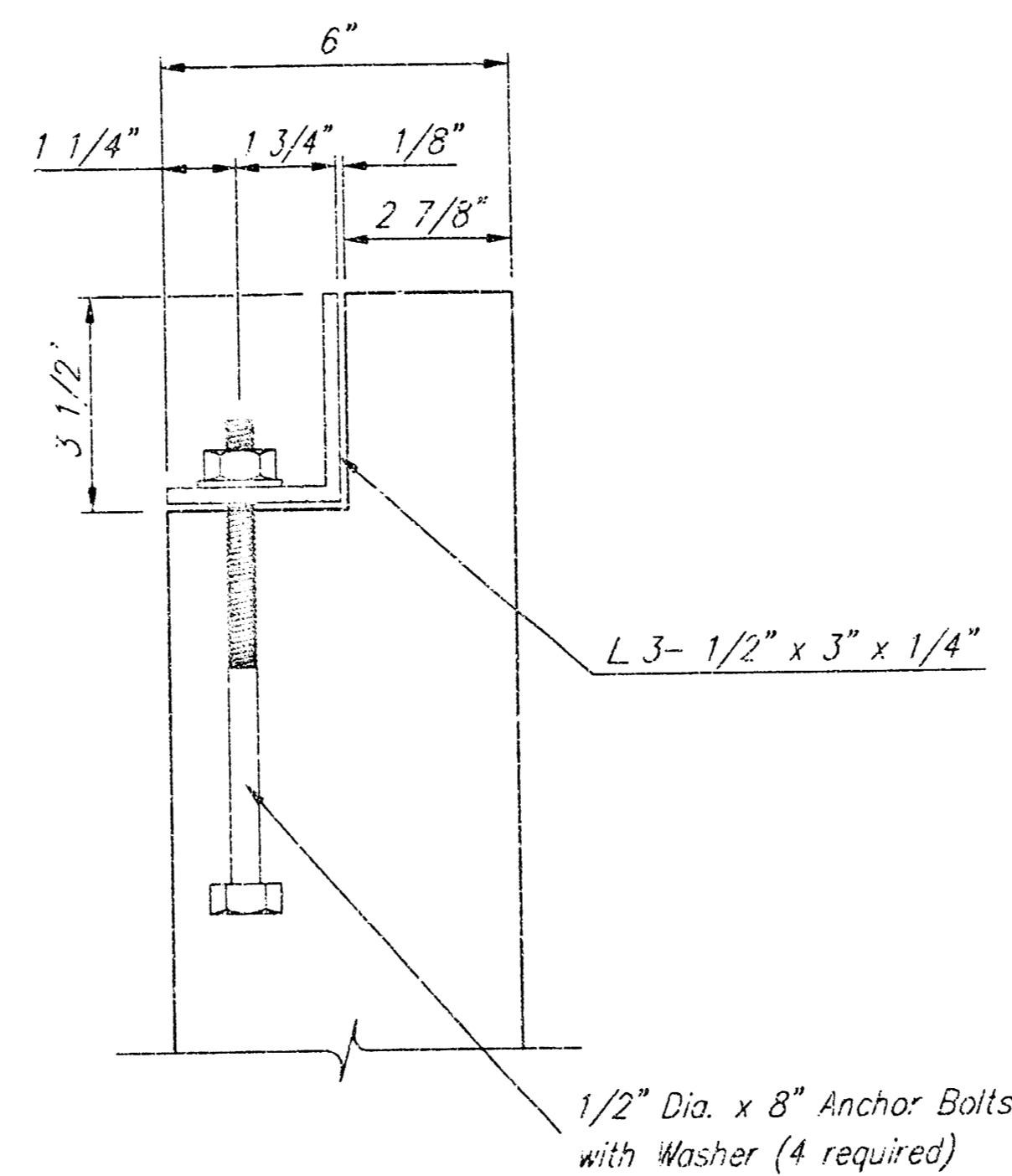


Note:  
End of 30" RCP shall be cut or cast to fit flush with the inside face of the inlet wall.

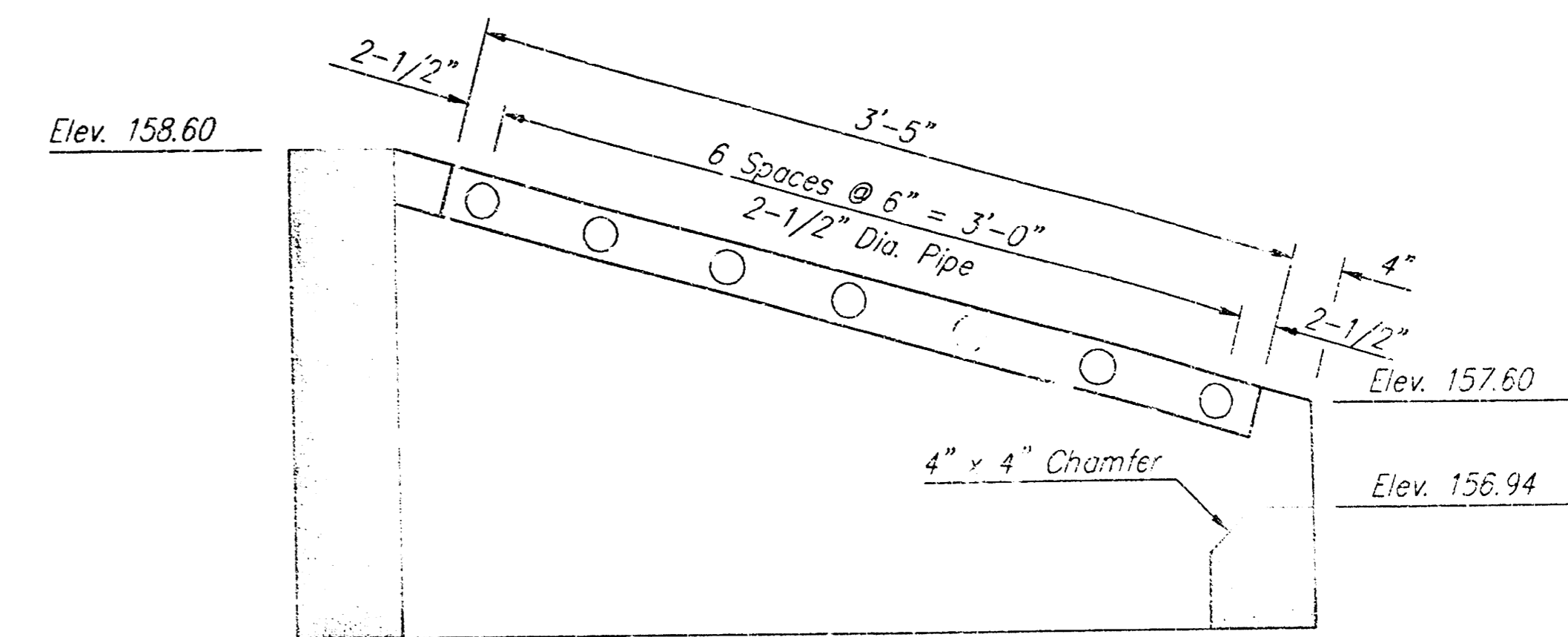
PLAN



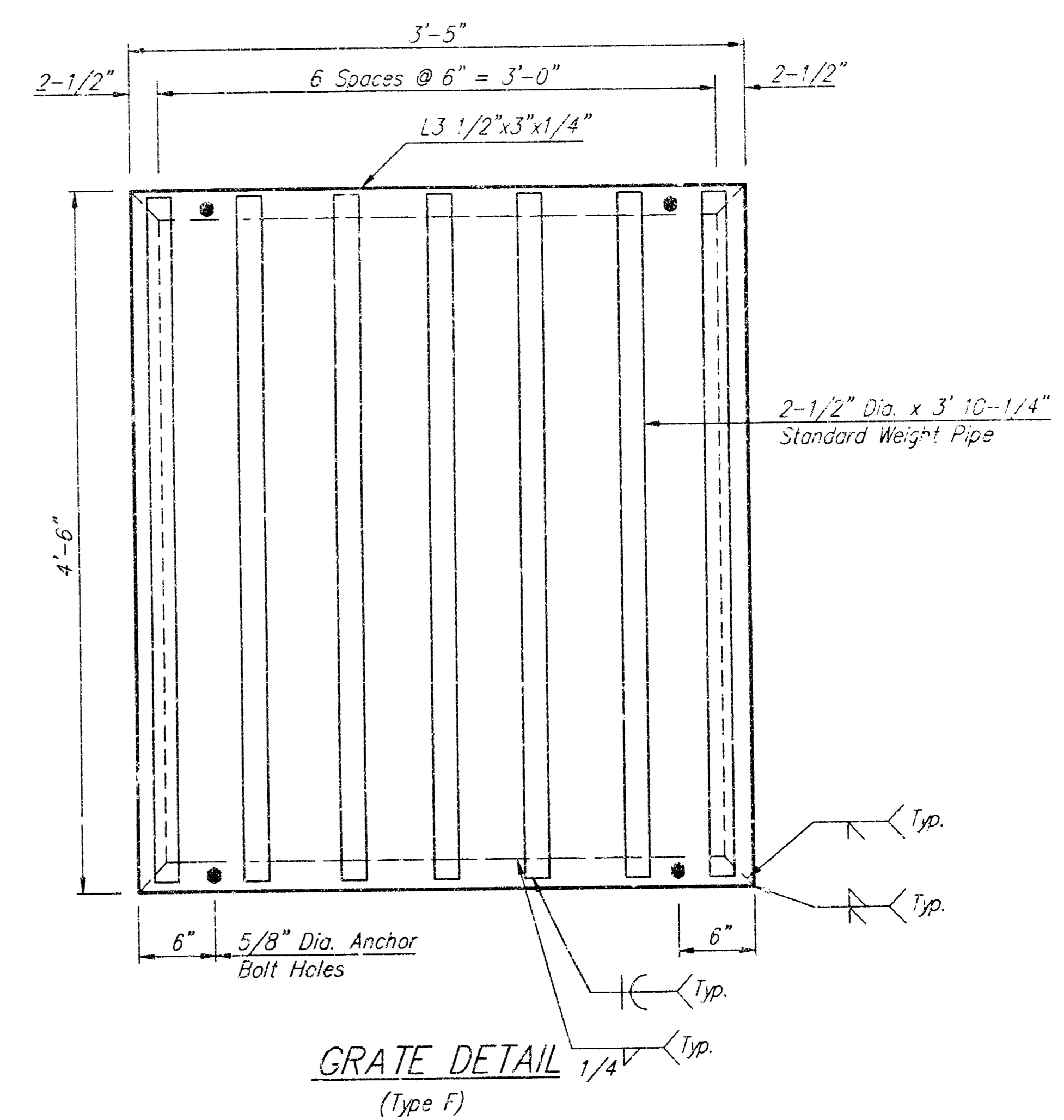
EXTERIOR WALL ELEVATION



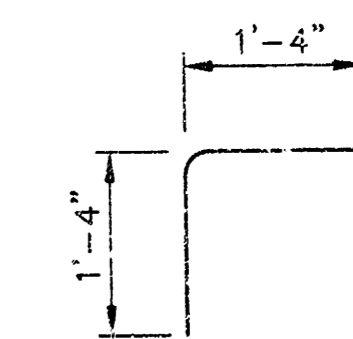
SECTION A-A



SECTION B-B



GRATE DETAIL  
(Type F)



H10

General Notes

Class A Concrete shall be used throughout. At the Contractor's option, Class A Concrete (AE) may be used. Bevel all exposed edges with a 3/4" triangular molding or an approved edging tool. Deductions in concrete quantities have been made for pipe openings.

Reinforcing Steel shall be a minimum Grade 60 ASTM A615.

All dimensions relative to placement of reinforcing are to the centerline of bars unless otherwise noted. All Clearances are 1-1/2" unless otherwise noted.

Pipes will enter and leave the inlet at various positions. Field bend or cut reinforcing to clear pipes.

Inlet invert shall be shaped with unreinforced Class A Concrete.

Special Ditch Inlet shall be measured and paid for at the contract unit price bid per each. This shall be considered full compensation for all excavation, backfilling, materials, labor, equipment, tools and incidentals necessary to complete the work.

The grate shall be fabricated from standard or commercial grade structural steel and black steel pipe. The unit shall be hot dipped galvanized after fabrication, in accordance with ASTM A123 except the weight of coating shall average not less than 2.0 ounces per square foot of actual surface and no individual test shall show less than 1.8 ounces of coating per square foot of actual surface area.

HICKORY CREEK ESTATES - PHASE II				
<b>SPECIAL DITCH INLET</b>				
STORM WATER SEWER IMPROVEMENTS				
BAUGHMAN COMPANY P.A.				
ENGINEERING, SURVEYING, & PLANNING				
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211				
PROJECT NUMBER 963 PPS (607861)				SHEET 11
DESIGN	DRAWN DMV	APPROVED	DATE	SCALE NONE
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