

STORM WATER SEWER #496

to serve

LARK 6TH ADDITION - PHASE III

CITY OF WICHITA, KANSAS

Michael E. Lindebak, P.E. City Engineer

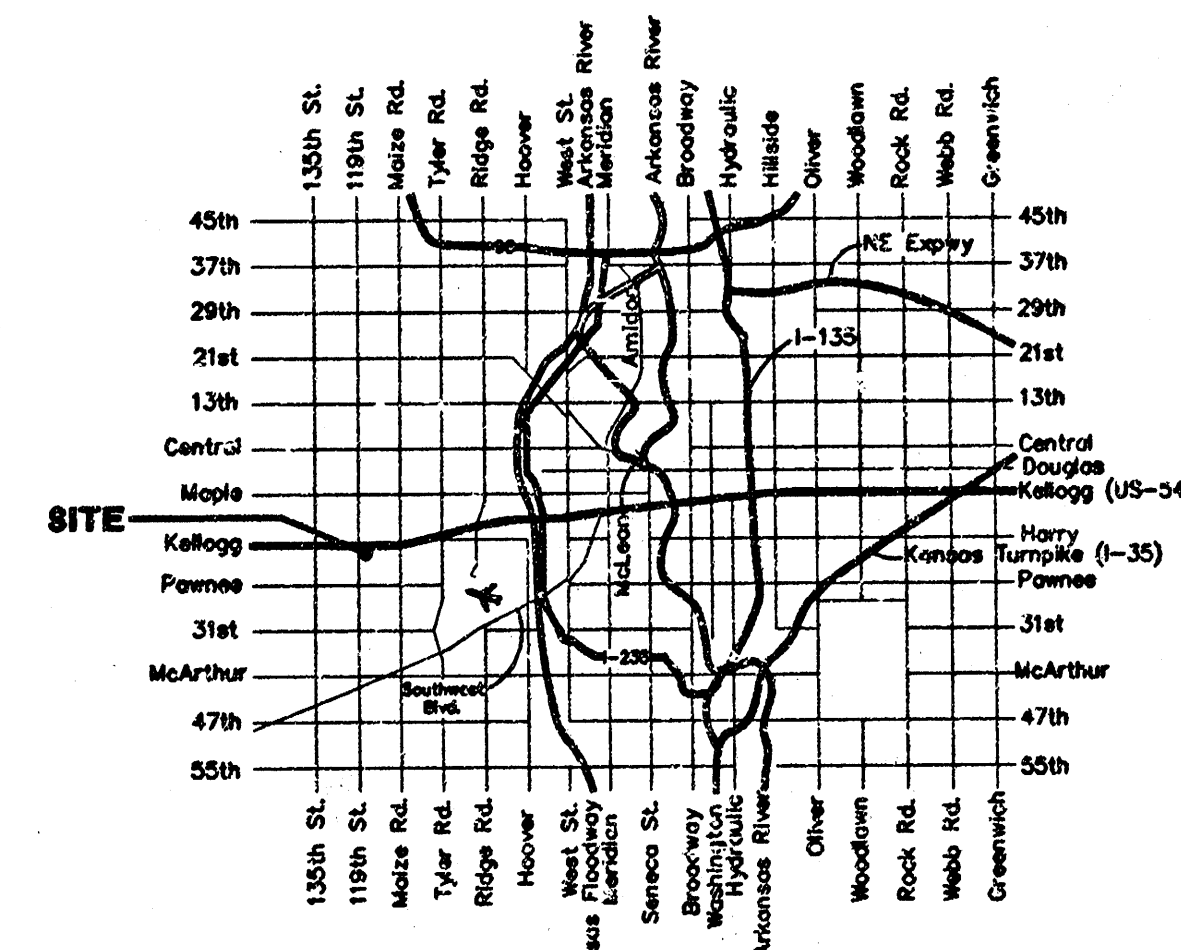
Project Number

468-82796

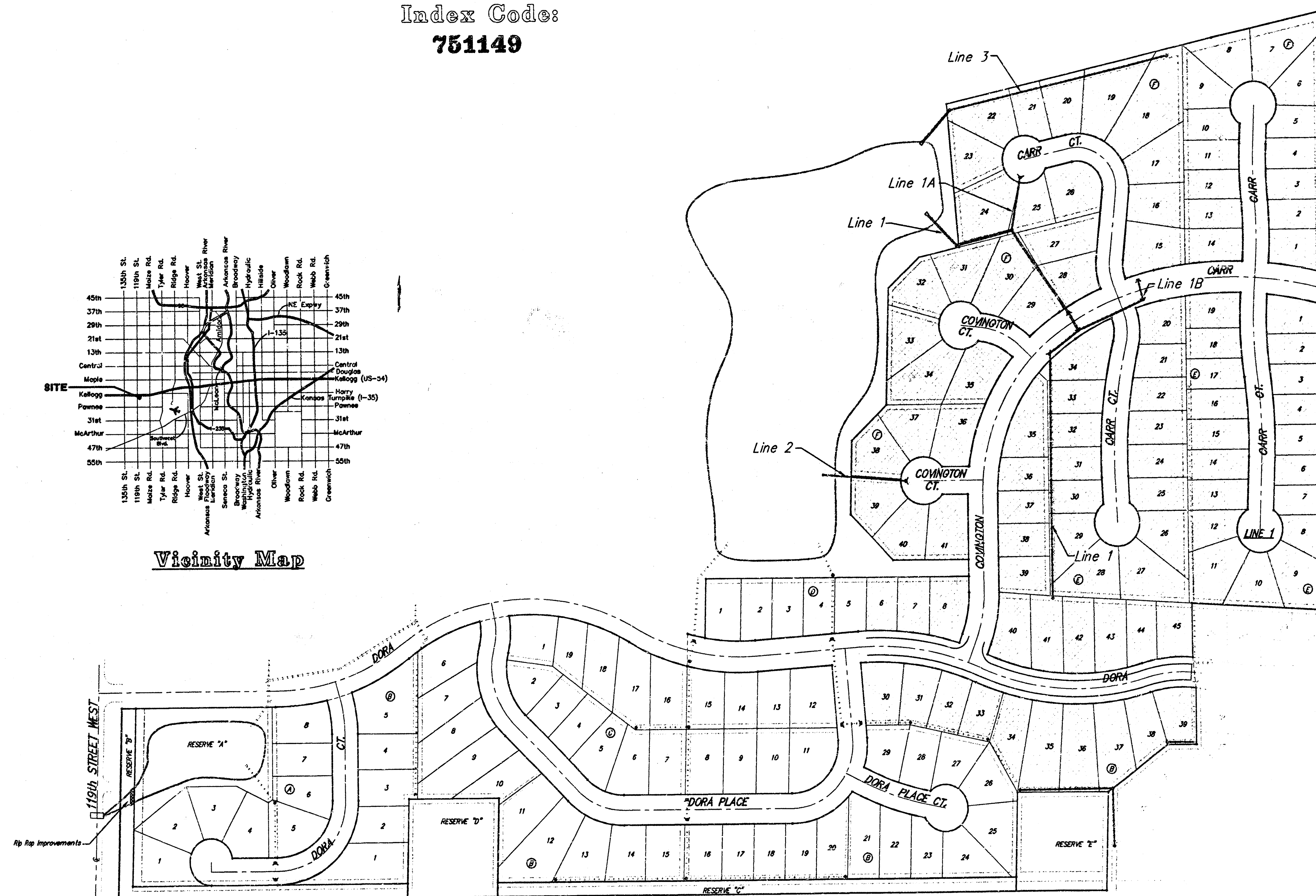
Index Code:

751149

Scale: 1" = 150'



Vicinity Map



Benchmarks:

R.R. Spike in East Side of P.P.
Located 112.5' North of the
North R/W of Dora and 41.5'
East of the C of 119th St W.
Elev. = 145.26 (City Datum)

V-Notch Cut in Curb at the
Northwest Corner of Lot 1,
Block 5, Lark 3rd Addition.
Elev. = 145.48 (City Datum)

Sheet Index

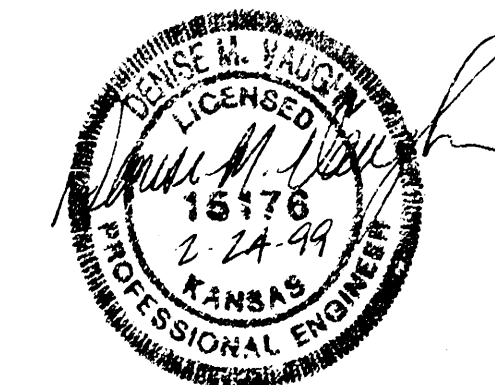
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Line 1B	6
Line 2	7
Line 3	8-9
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Easement Grading Plan	11
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GENERAL NOTES:

- 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
The Contractor must notify the following in case of an emergency:
Cablevision 262-4270
or
K.P.L. Gas Service Company 263-2061
Kansas Gas & Electric Company 263-7511
Peoples Nat. Gas Company 264-1141
Southwestern Bell Telephone Company 942-8350
City of Wichita Water Department 1-571-2611
City of Wichita Sewer Maintenance 268-4908
268-4071
- Utility service lines, poles, valve boxes, meters, and etcetera 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.
- Rubble from the removal of miscellaneous structures and excess excavation which is to be wasted shall be disposed of on sites to be provided by the Contractor. These sites shall be approved by the Engineer as to suitability, appearance and site location. Locations that, in the opinion of the Engineer, will leave an unsightly appearance will not be approved. All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a flood plain would a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps. of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits would require additional archaeological investigations unless buried in a previously approved borrow location.
- 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 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 law.
- All areas disturbed by construction shall be seeded at 300 lbs./acre with Rye Grass immediately following construction in that area. Contractor shall prepare ground per City specifications.

Easement Grading Quantities
Excavation = 130 C.Y.
Compacted Fill = 1170 C.Y.

Benefit District



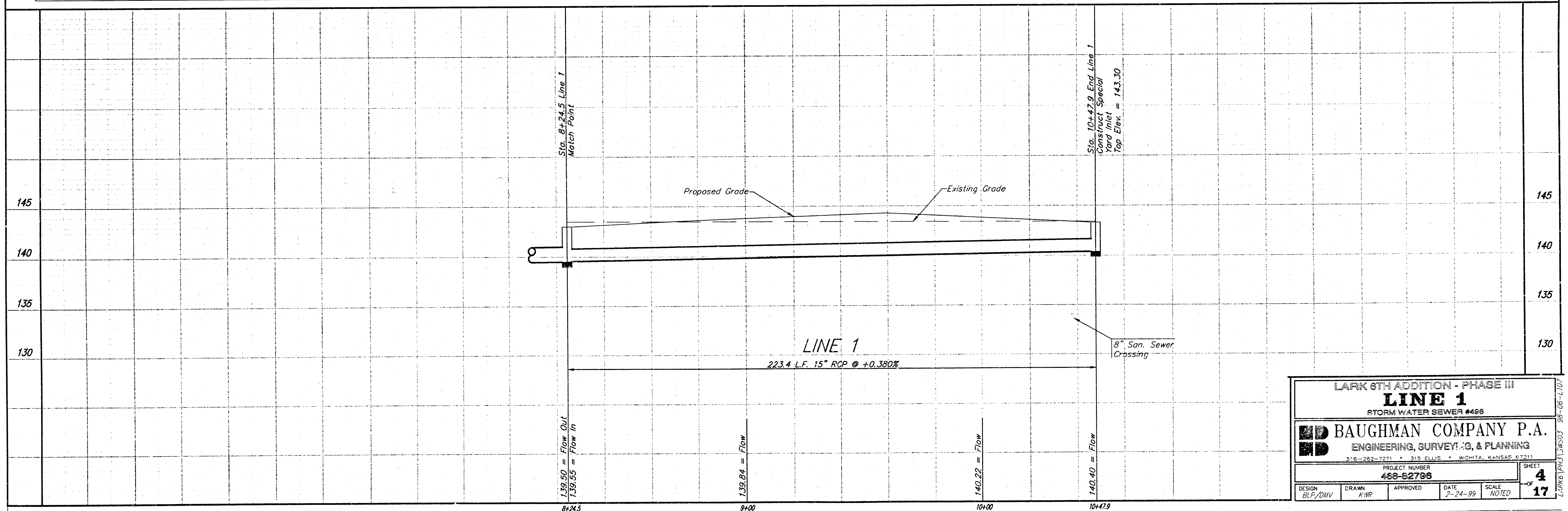
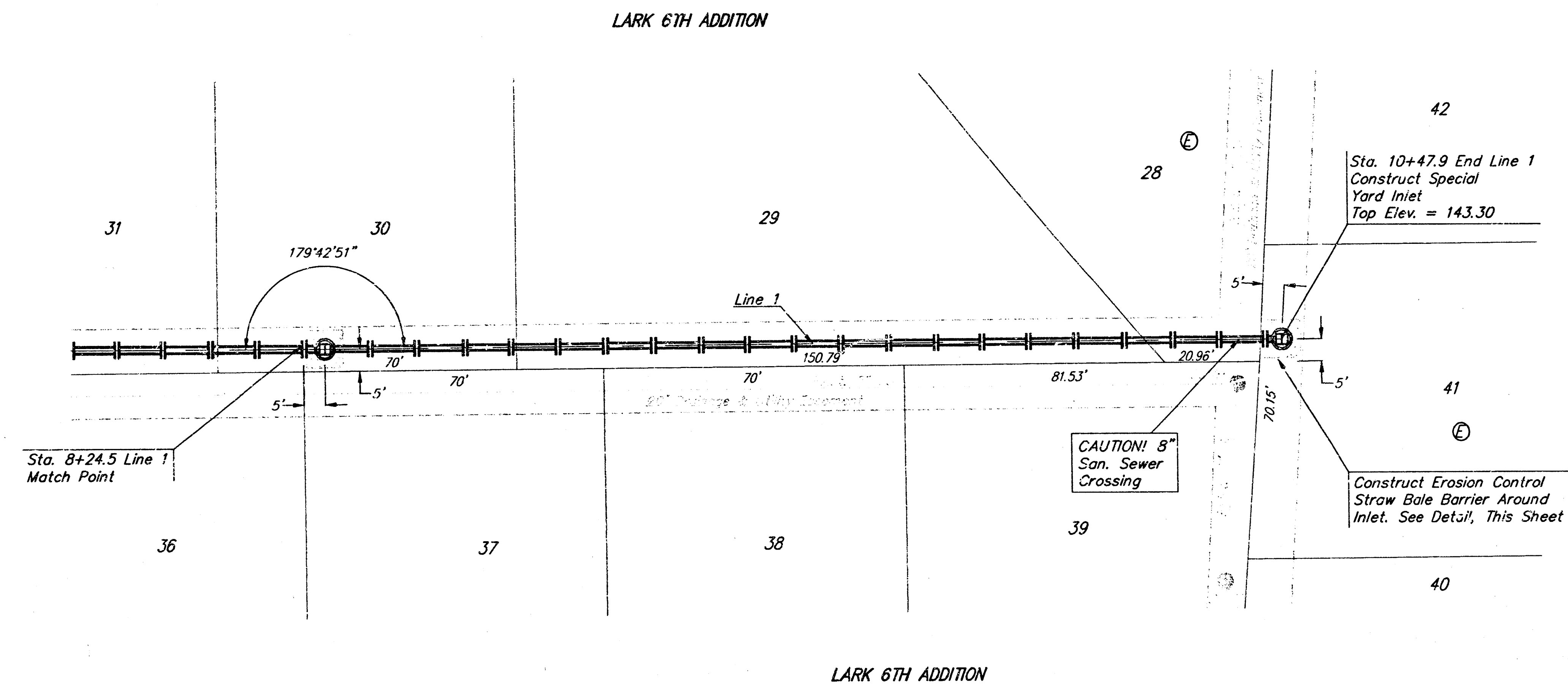
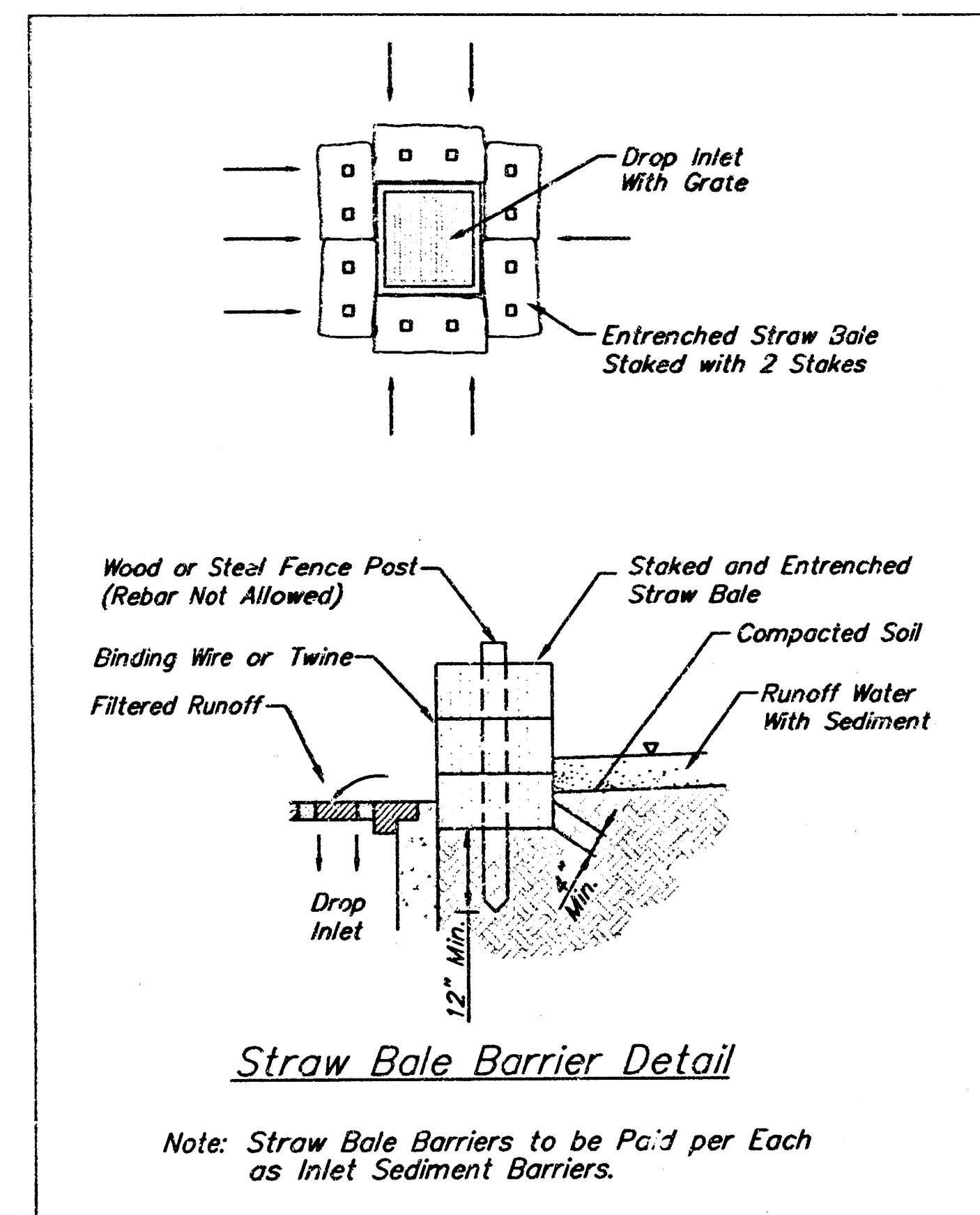
BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 316-262-7272 • WICHITA, KANSAS 67211

LARK 6TH ADDITION - PHASE III					
LINE 1					
STORM WATER SEWER #498					
 BAUGHMAN COMPANY P.A. ENGINEERING, SURVEYING, & PLANNING					
316-262-7271 316-616-5 WICHITA, KANSAS 67211					
PROJECT NUMBER 488-92796					
DESIGN BLP/DMV	DRAWN KWR	APPROVED	DATE 2-24-99	SCALE NOTED	SHEET 2 OF 17

BENCHMARK:

R.R. Spikes in East side of P.P.
Located 112.5' North of the
North R/W of Dora and 41.5'
East of the C of 119th St. W.
Elev. = 145.26 (City Datum)

V-Notch Cut in Curb at the
Northwest Corner of Lot 1,
Block 5, Lark 3rd Addition.
Elev. = 145.48 (City Datum)



BENCHMARK:

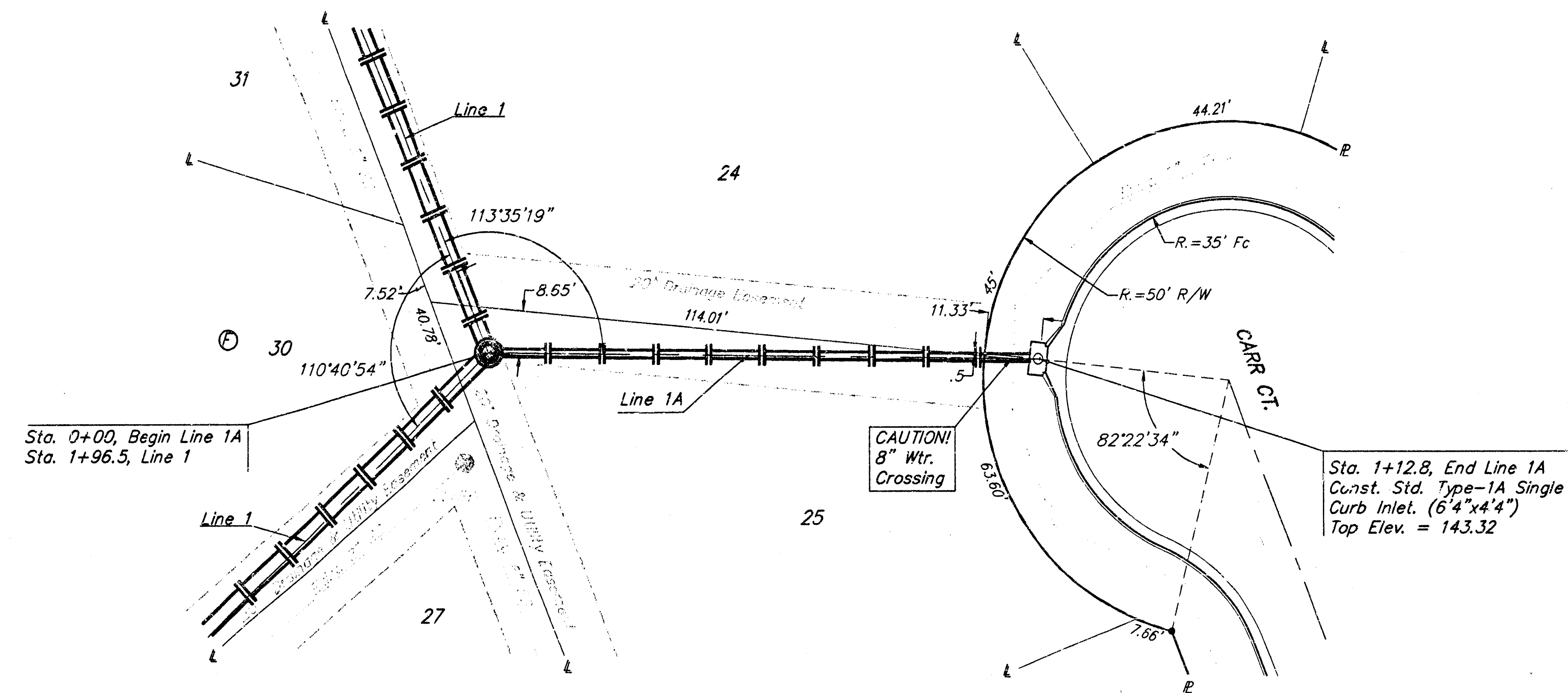
R.R. Spike in East side of P.P.
Located 112.5' North of the
North R/W of Dard and 41.5'
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Northwest Corner of Lot 1,
Block 5, Lark 3rd Addition.
Elev. = 145.48 (City Datum)

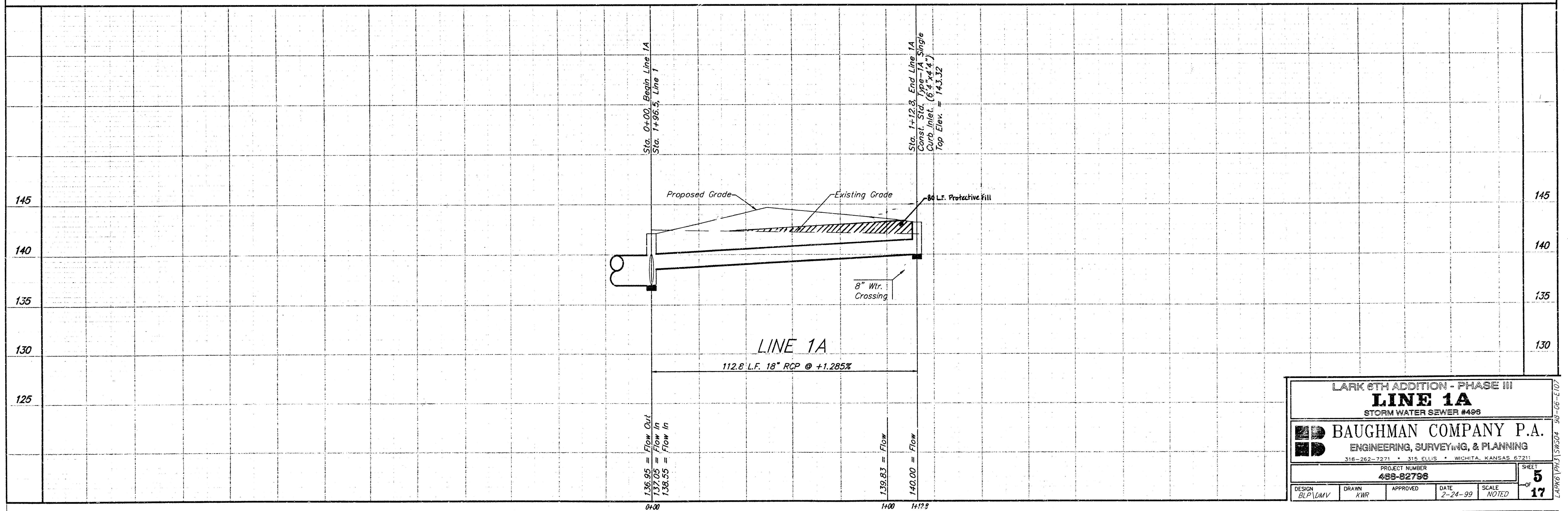
LARK 6TH ADDITION



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



LARK 6TH ADDITION



LARK 6TH ADDITION - PHASE III
LINE 1A
STORM WATER SEWER #496

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
318-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

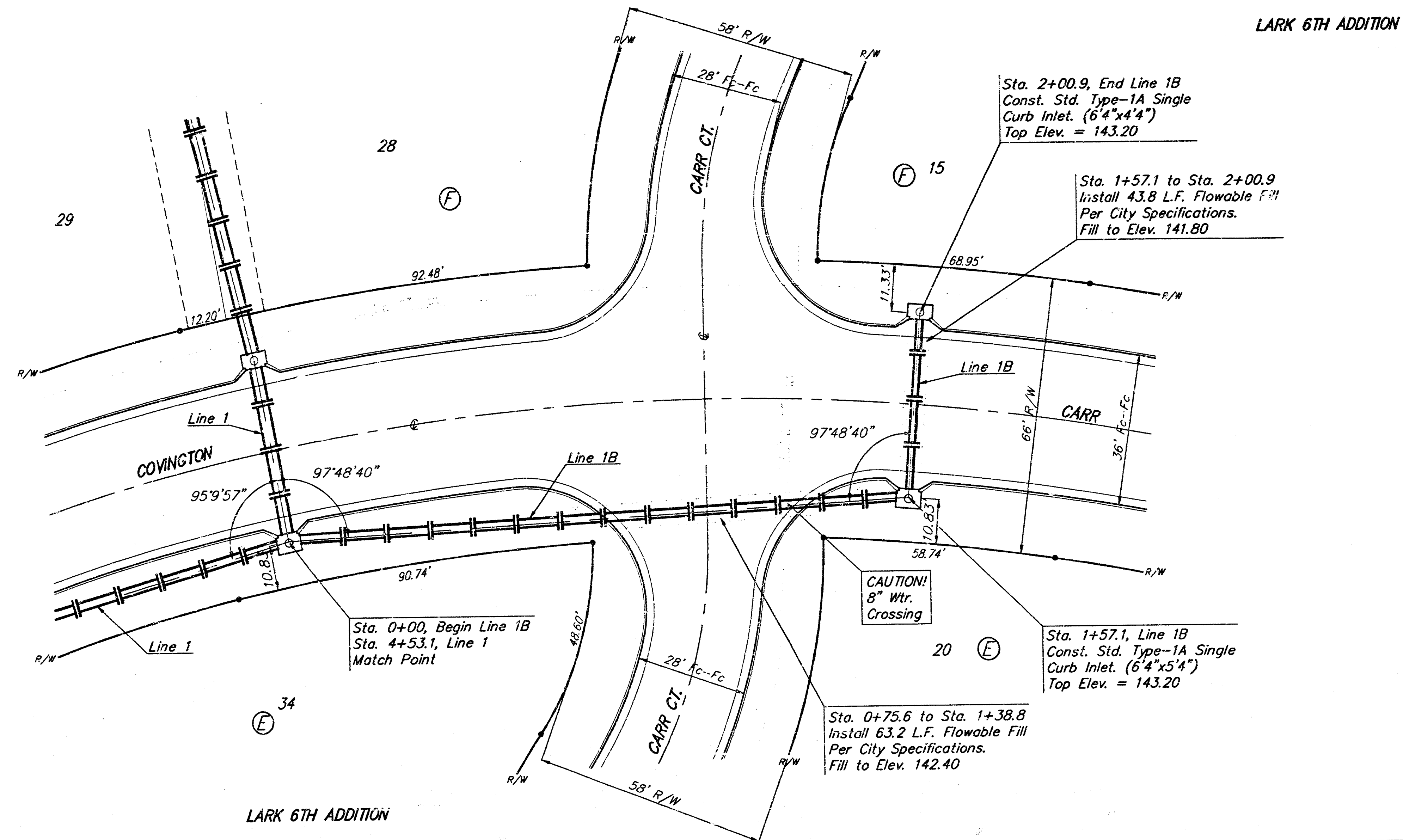
PROJECT NUMBER
488-82796

DESIGN: ELP/DMV DRAWN: KWR APPROVED: DATE: 2-24-99 SCALE: NOTED SHEET: 5 OF 17

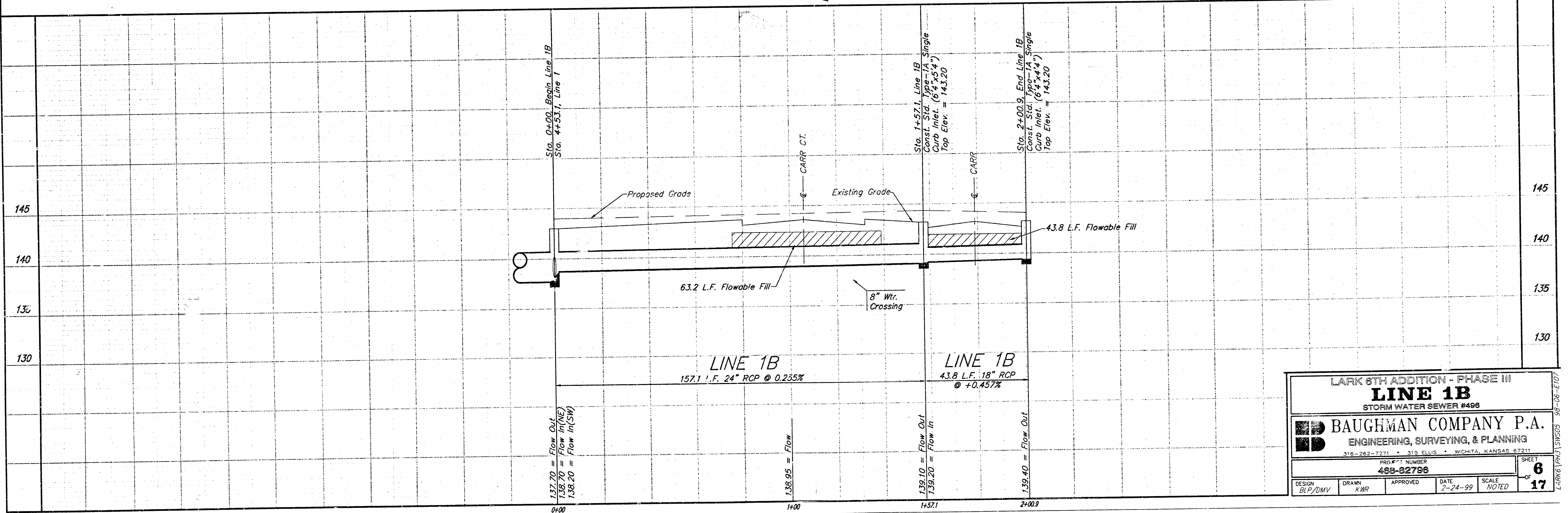
BENCHMARK:

R.R. Spike in East side of P.P.
Located 112.5' North of the
North R/W of Dora and 41.5'
East of the C. of 119th St. W.
Elev. = 145.26 (City Datum)

V-Notch Cut in Curb at the
Northwest Corner of Lot 1,
Block 5, Lark 3rd Addition.
Elev. = 145.48 (City Datum)



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



LARK 6TH ADDITION - PHASE III
LINE 1B
STORM WATER SEWER #496

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

PROJECT NUMBER
488-82796

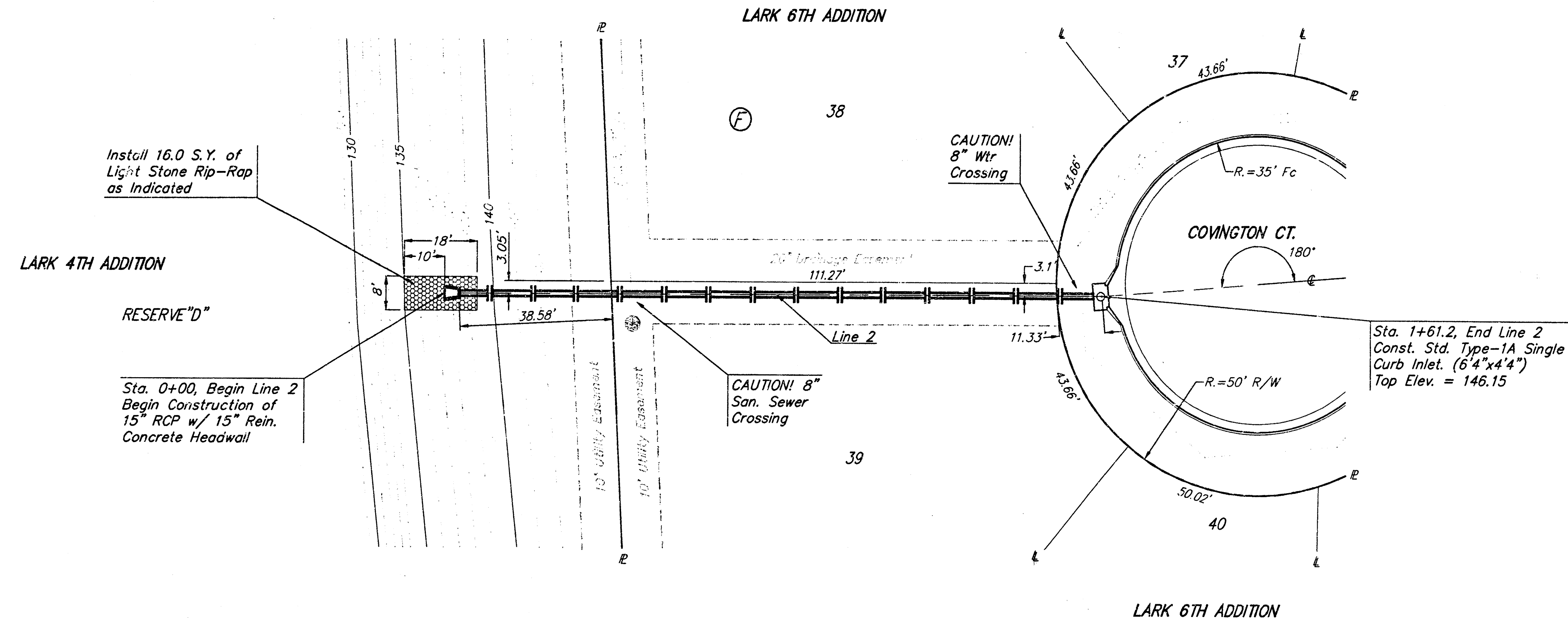
DESIGN BLP/DMV	DRAWN KWR	APPROVED	DATE 2-24-99	SCALE NOTED
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SHEET
6
OF
17

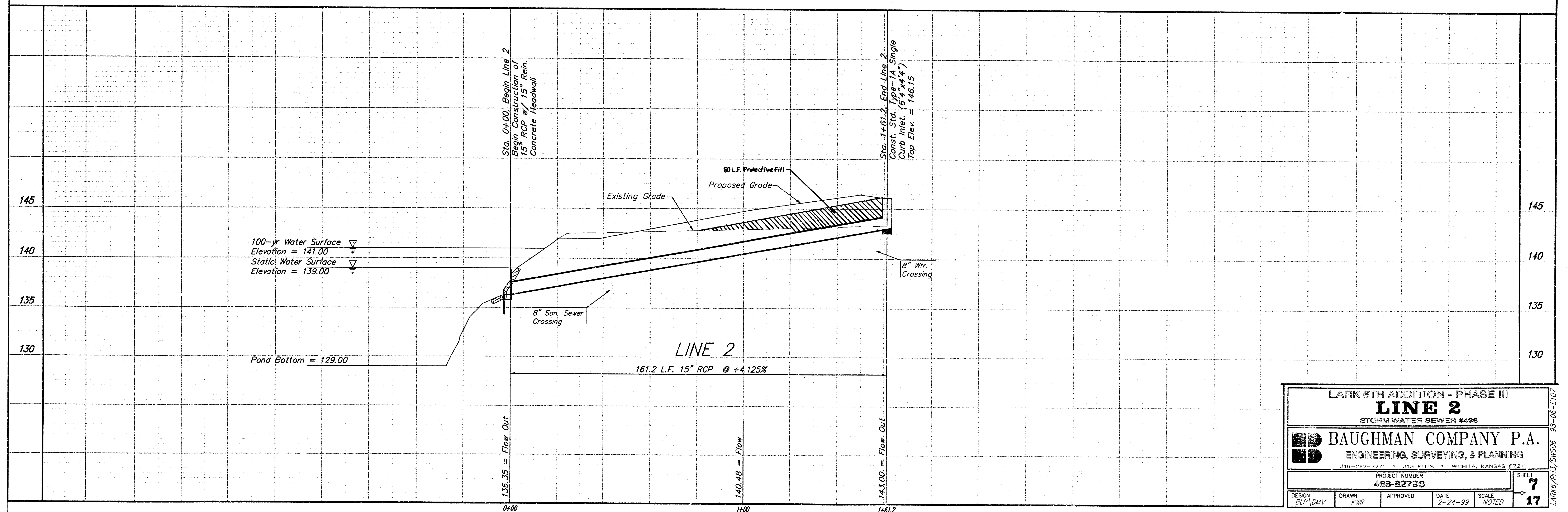
BENCHMARK

R.R. Spike in East side of P.P.
Located 112.5' North of the
North R/W of Dora and 41.5'
East of the C of 119th St. W.
Elev. = 145.26 (City Datum)

V-Notch Cut in Curb at the
Northwest Corner of Lot 1,
Block 5, Lark 3rd Addition.
Elev. = 145.48 (City Datum)



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

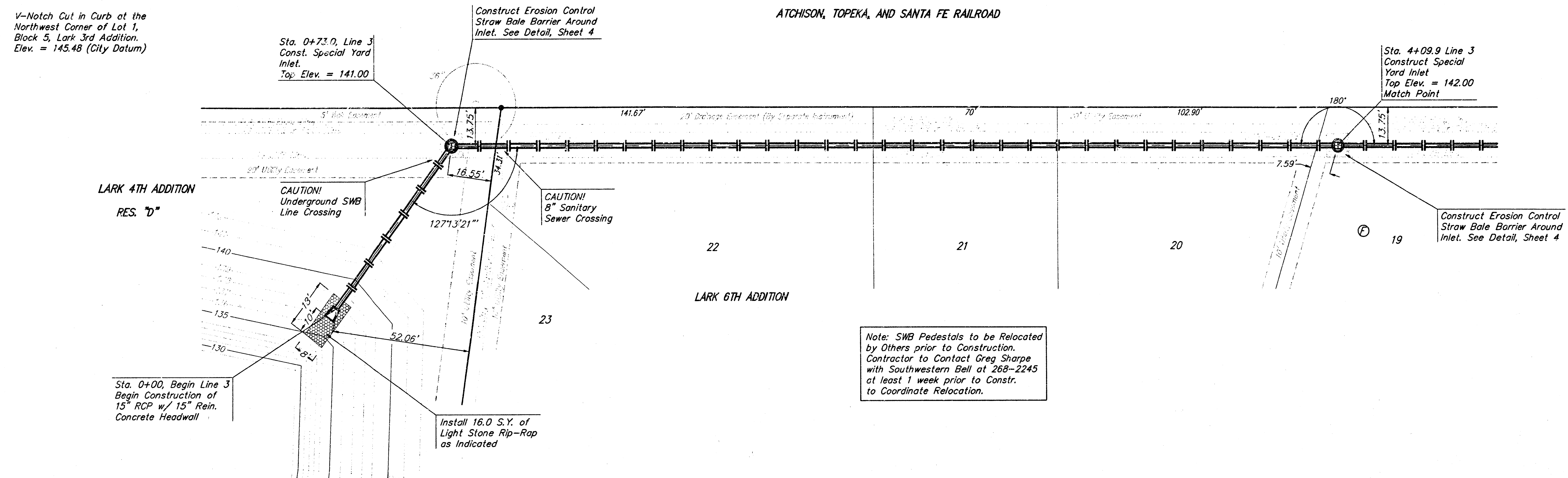


LARK 6TH ADDITION - PHASE III			
LINE 2			
STORM WATER SEWER #428			
BAUGHMAN COMPANY P.A.			
ENGINEERING, SURVEYING, & PLANNING			
315-262-7271 • 315 ELLIS • WICHITA, KANSAS 67201			
PROJECT NUMBER 488-82783			
DESIGN ELP/DMV	DRAWN KWR	APPROVED	DATE 2-24-99
SCALE NOTED			SHEET 7 OF 17

BENCHMARK:

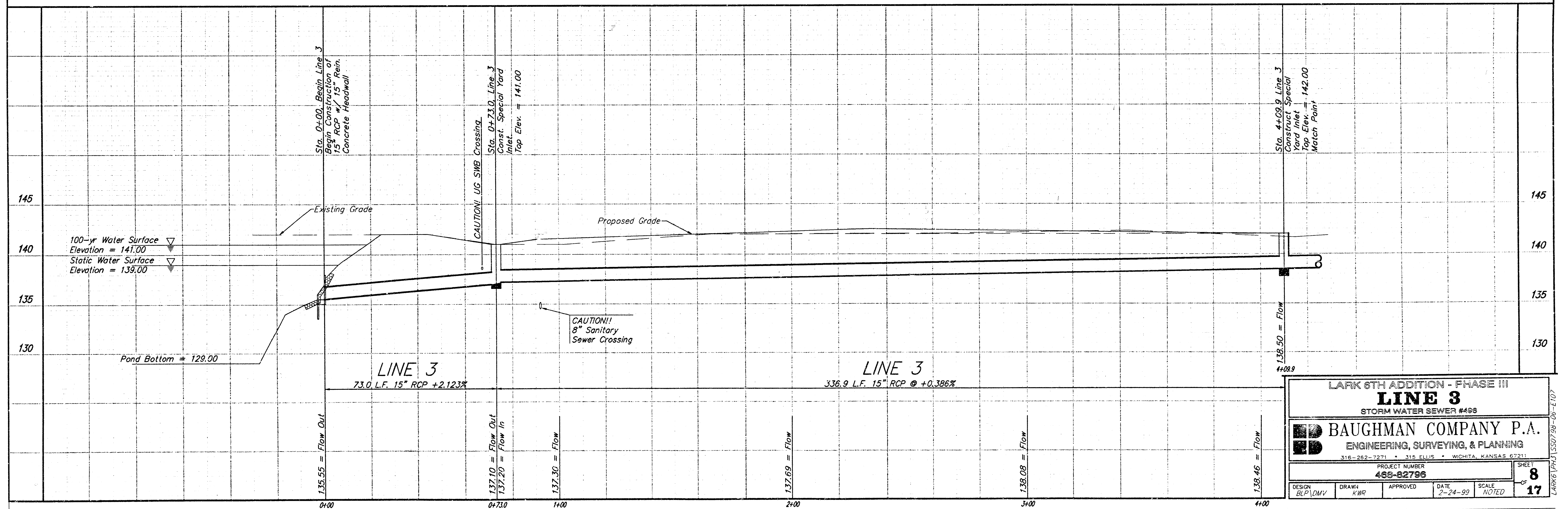
R.R. Spike in East side of P.P.
Located 112.5' North of the
North R/W of Dora and 41.5'
East of the E of 119th St. W.
Elev. = 143.26 (City Datum)

V-Notch Cut in Curb at the
Northwest Corner of Lot 1,
Block 5, Lark 3rd Addition.
Elev. = 145.48 (City Datum)



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

Note: SWB Pedestals to be Relocated
by Others prior to Construction.
Contractor to Contact Greg Sharpe
with Southwestern Bell at 268-2245
at least 1 week prior to Constr.
to Coordinate Relocation.



LARK 6TH ADDITION - PHASE III
LINE 3
STORM WATER SEWER #498

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

PROJECT NUMBER
489-82798

DESIGN: BUL/DMV DRAWN: KWR APPROVED: DATE: 2-24-99 SCALE: NOTED

SHEET
8
17

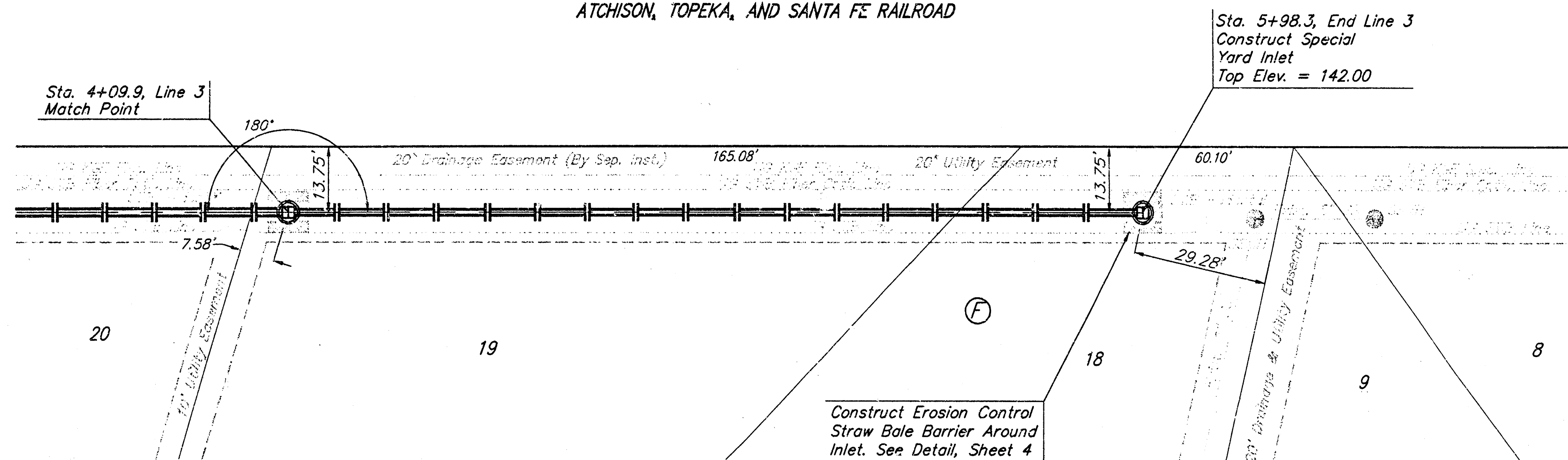
BENCHMARK:

R.R. Spike in East side of P.P.
Located 112.5' North of the
North R/W of Dora and 41.5'
East of the C. of 119th St. W.
Elev. = 145.26 (City Datum)

V-Notch Cut in Curb at the
Northwest Corner of Lot 1,
Block 5, Lark 3rd Addition.
Elev. = 145.48 (City Datum)

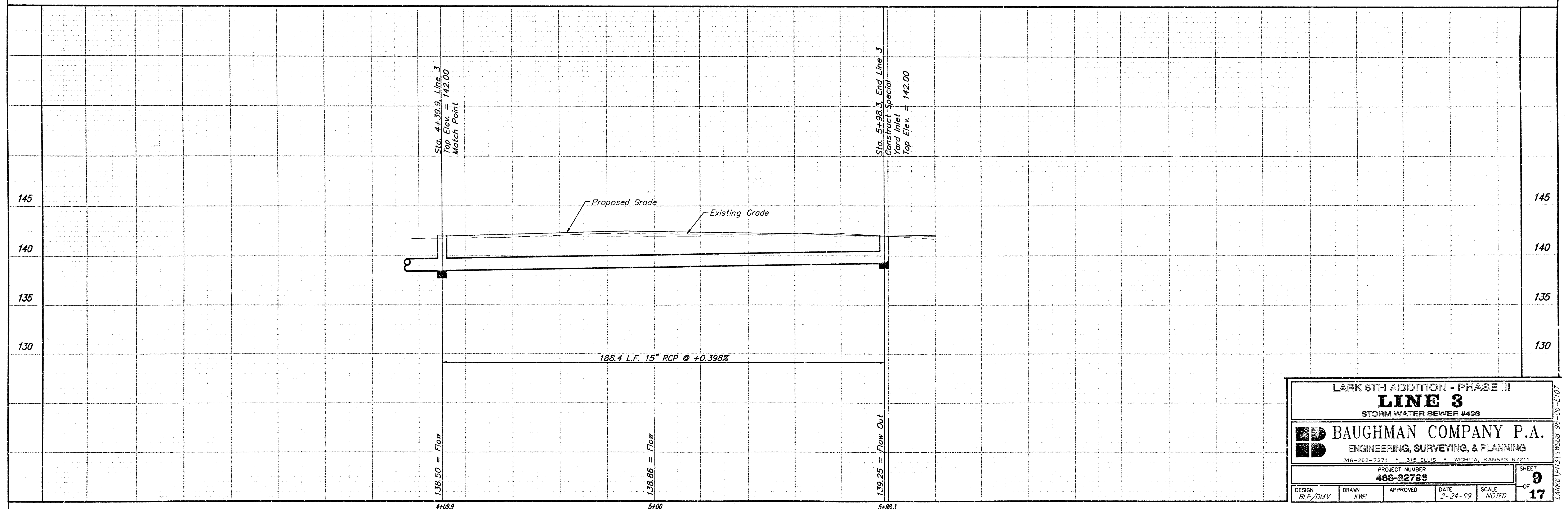
SCALE:
1" = 20' HORIZONTAL
1" = 5' VERTICAL
• = IRON

ATCHISON, TOPEKA, AND SANTA FE RAILROAD



Note: SWB Pedestals to be Relocated
by Others prior to Construction.
Contractor to Contact Greg Sharpe
with Southwestern Bell at 268-2245
at least 1 week prior to Constr.
to Coordinate Relocation.

LARK 6TH ADDITION



LARK 6TH ADDITION - PHASE III			
LINE 3			
STORM WATER SEWER #499			
BAUGHMAN COMPANY P.A.			
ENGINEERING, SURVEYING, & PLANNING			
316-262-2271 316-6115 WICHITA, KANSAS 67211			
PROJECT NUMBER 468-82798			
DESIGN BLP/DMV	DRAWN KWR	APPROVED	DATE 2-24-09 SCALE NOTED
SHEET 9			OF 17

[illegible]

LARK 6TH ADDITION - PHASE III					
RIP RAP IMPROVEMENTS					
STORM WATER SEWER #486					
 BAUGHMAN COMPANY P.A. ENGINEERING, SURVEYING, & PLANNING					
316-262-7211 FAX 316-262-7211 MOBILE 316-262-7211					
PROJECT NUMBER 486-32796				SHEET 10	
DATE 2-17-99				SCALE NOTED	
DESIGN BLP/DMV		DRAWN KWR		APPROVED [Signature]	

NOTE:

Proposed top of foundation elevations are shown on plans.
Contractor to set finish floor elevation.

All street elevations shown on plans are for top of curb (full height).

View-out elevations are denoted as XX.X V.O.

BENCHMARK:

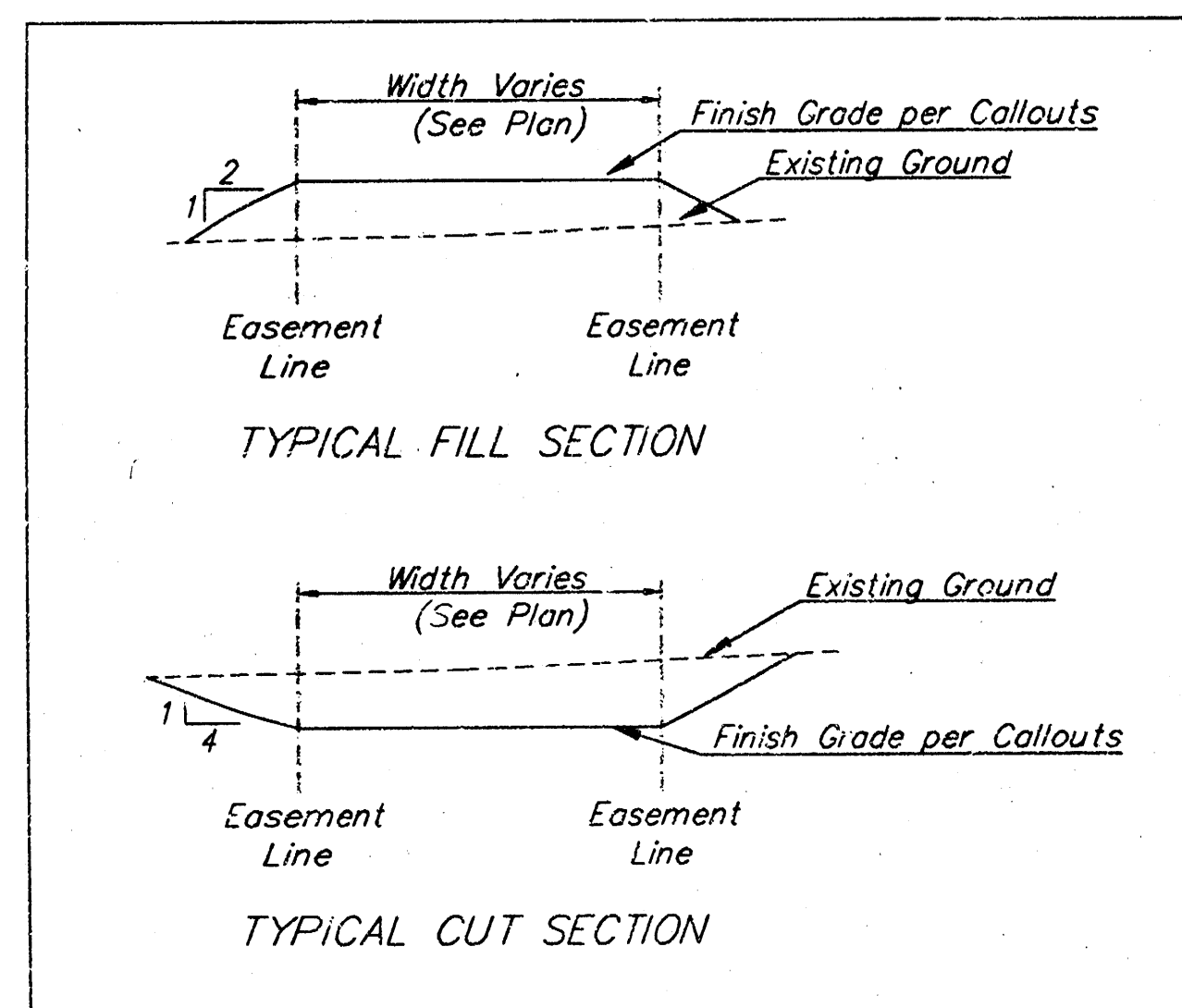
City of Wichita Bench Mark Disc.
N. End of W. Headwall of R.C.B.C.
Lark & May
Elev. = 139.20 (City Datum)

▨ = Easements To Be Graded

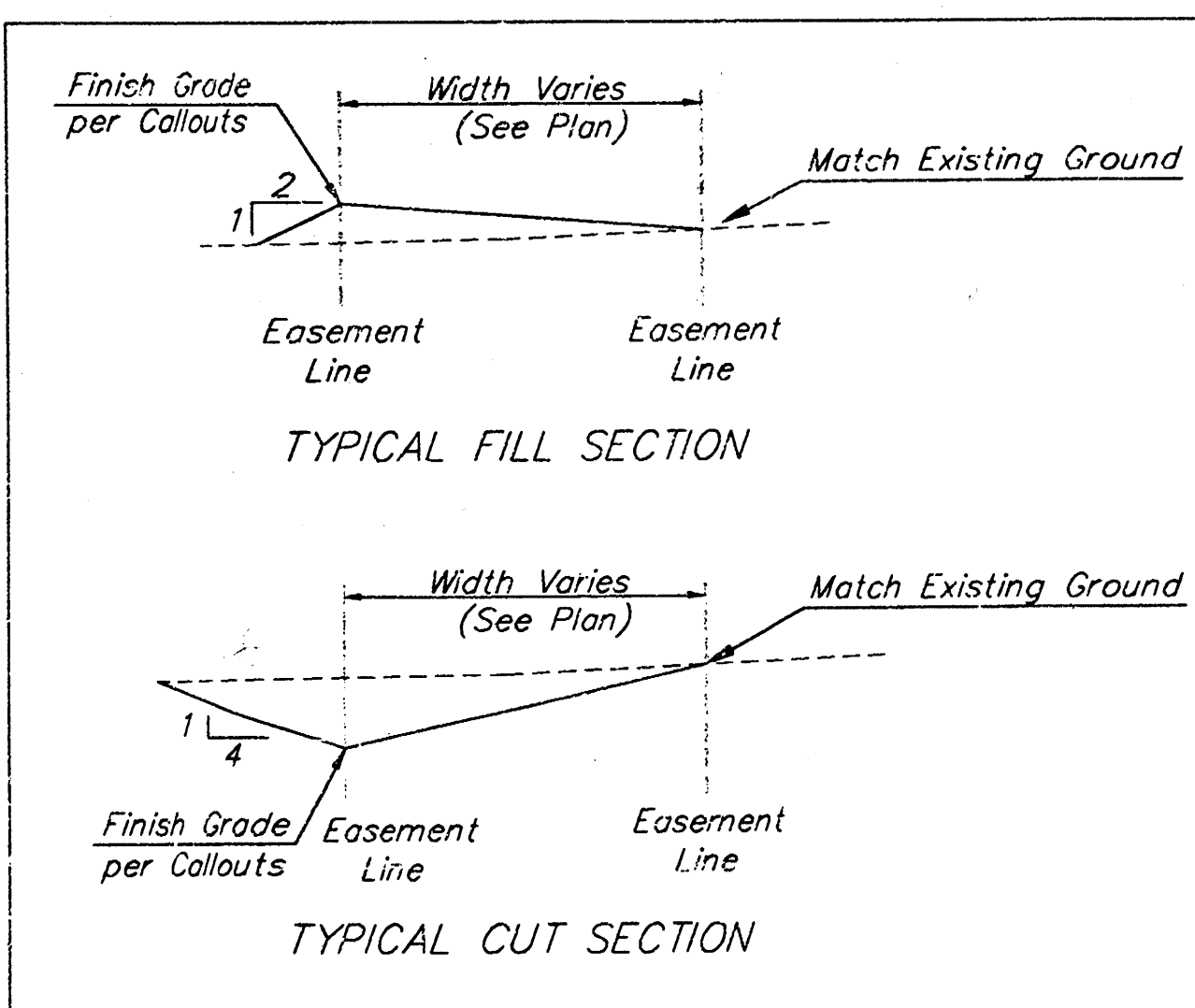
Approximate Easement Grading Quantities:
(For Information Only)
Excavation: 130 C.Y.
Fill: 1170 C.Y.

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.

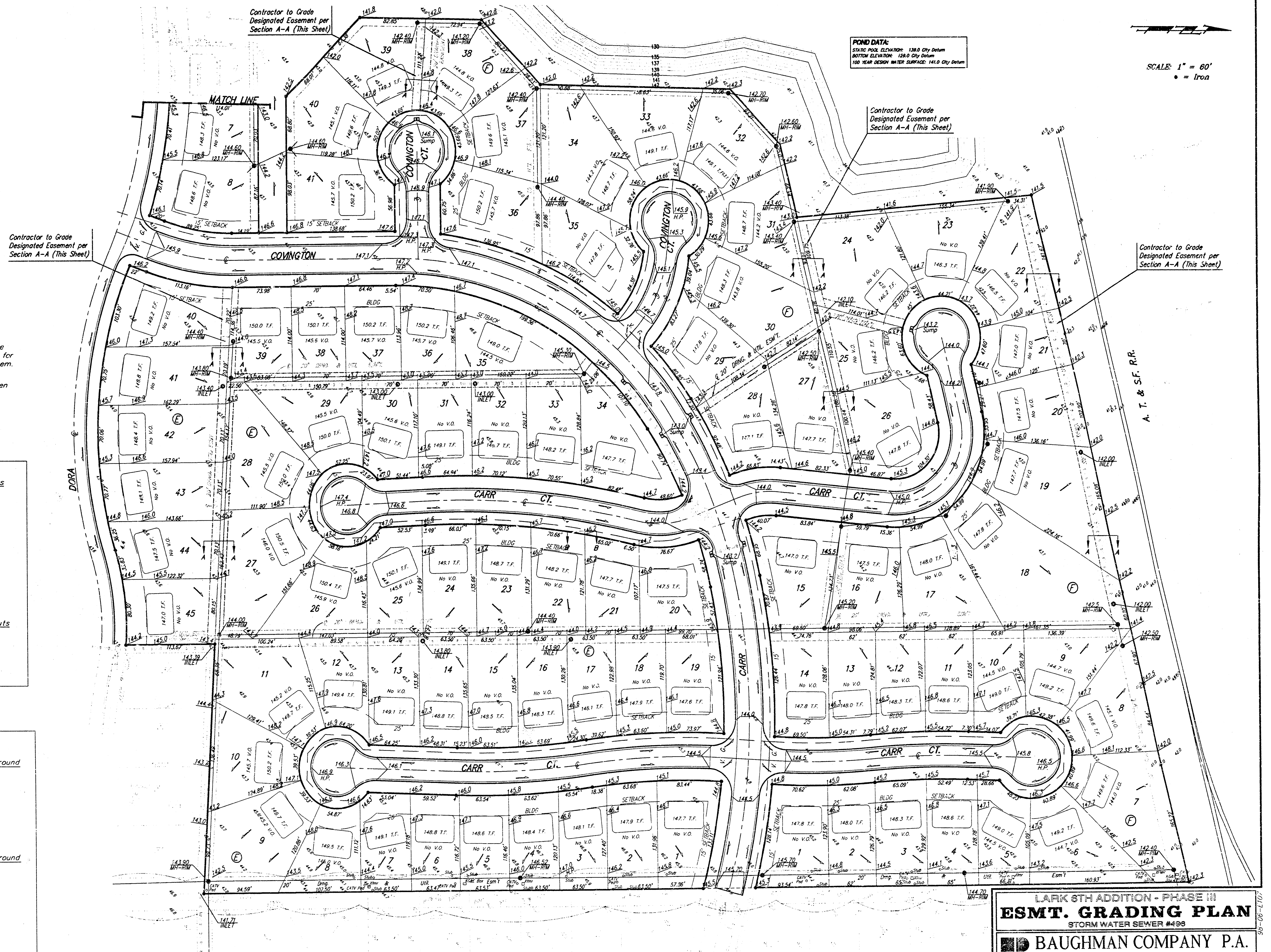
The contractor shall 'straight' grade the easements between the elevations given. Where a callout designates 'Match', the contractor will grade to the existing ground elevation.



SECTION A-A



SECTION B-B



POND DATA:
STATIC POND ELEVATION: 138.0 City Datum
BOTTOM ELEVATION: 128.0 City Datum
100 YEAR DESIGN WIND SURFACE: 141.0 City Datum

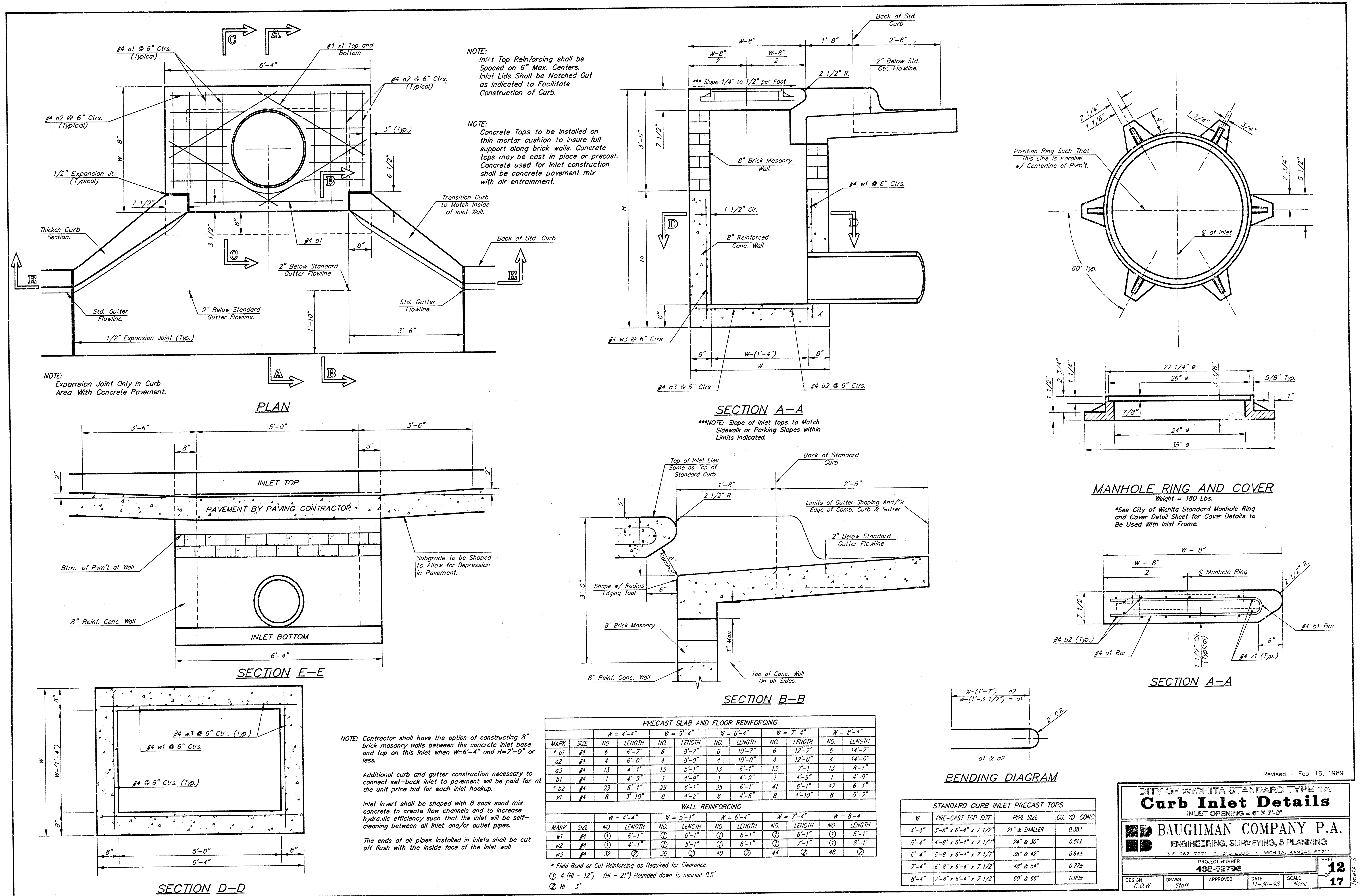
SCALE: 1" = 60'
• = Iron

LARK 8TH ADDITION - PHASE III
ESMT. GRADING PLAN
STORM WATER SEWER #498

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

PROJECT NUMBER: 488-
DESIGN: DMV
DRAWN: BLP
APPROVED: [Signature]
DATE: 2-24-99
SCALE: NOTED

SHEET 11 OF 17
SW/25-1710



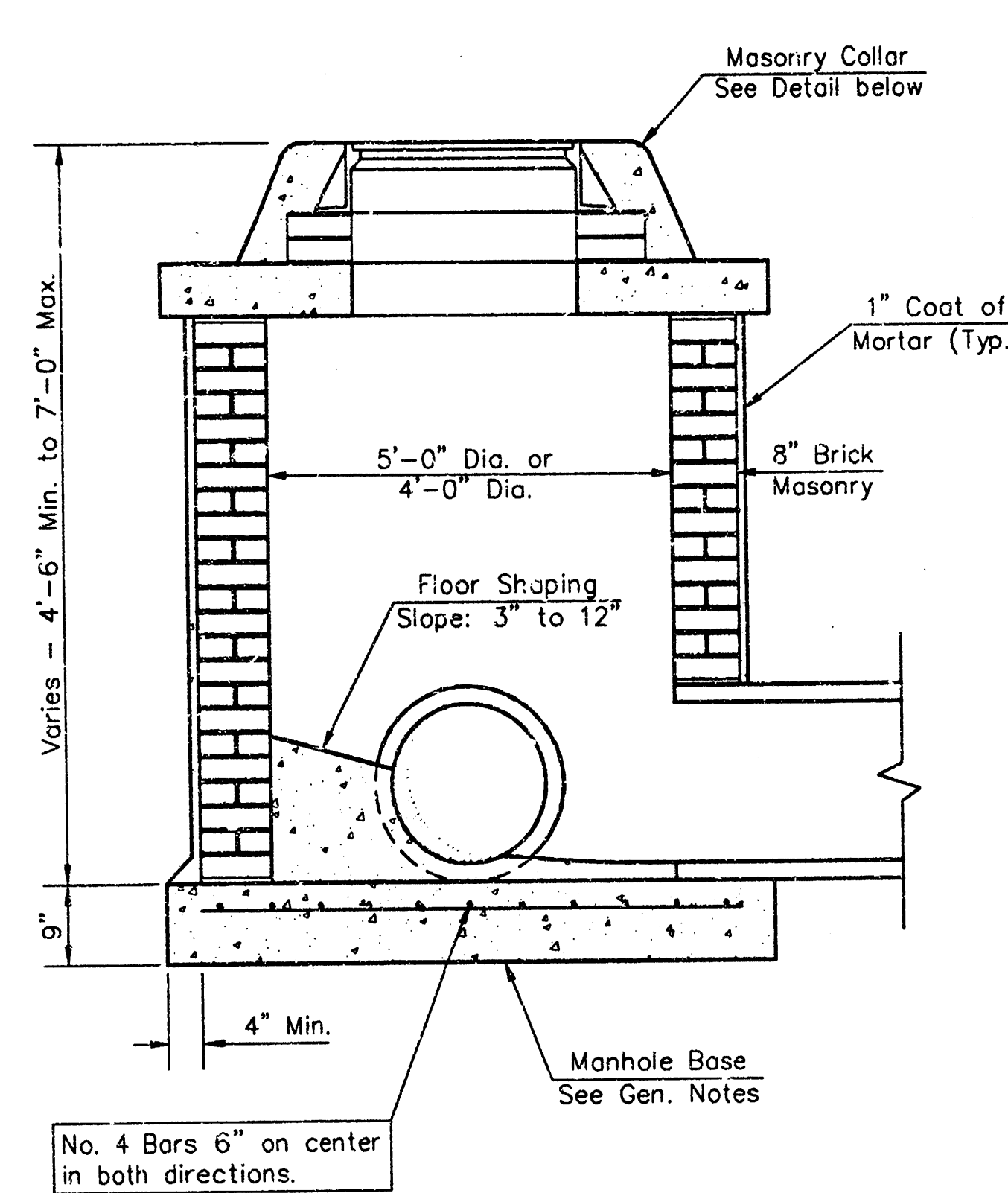
1. Mortar used in masonry construction shall contain 3 sacks of cement per cubic yard. Concrete used in yard inlet bases shall conform to the requirements of concrete for concrete pavement construction as specified in the city standard paving specifications using city concrete cement mix without air 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 so that the inlets will be self cleaning and free of areas where solids could be deposited. Flow channels shall be provided in the middle of 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 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".

[illegible]

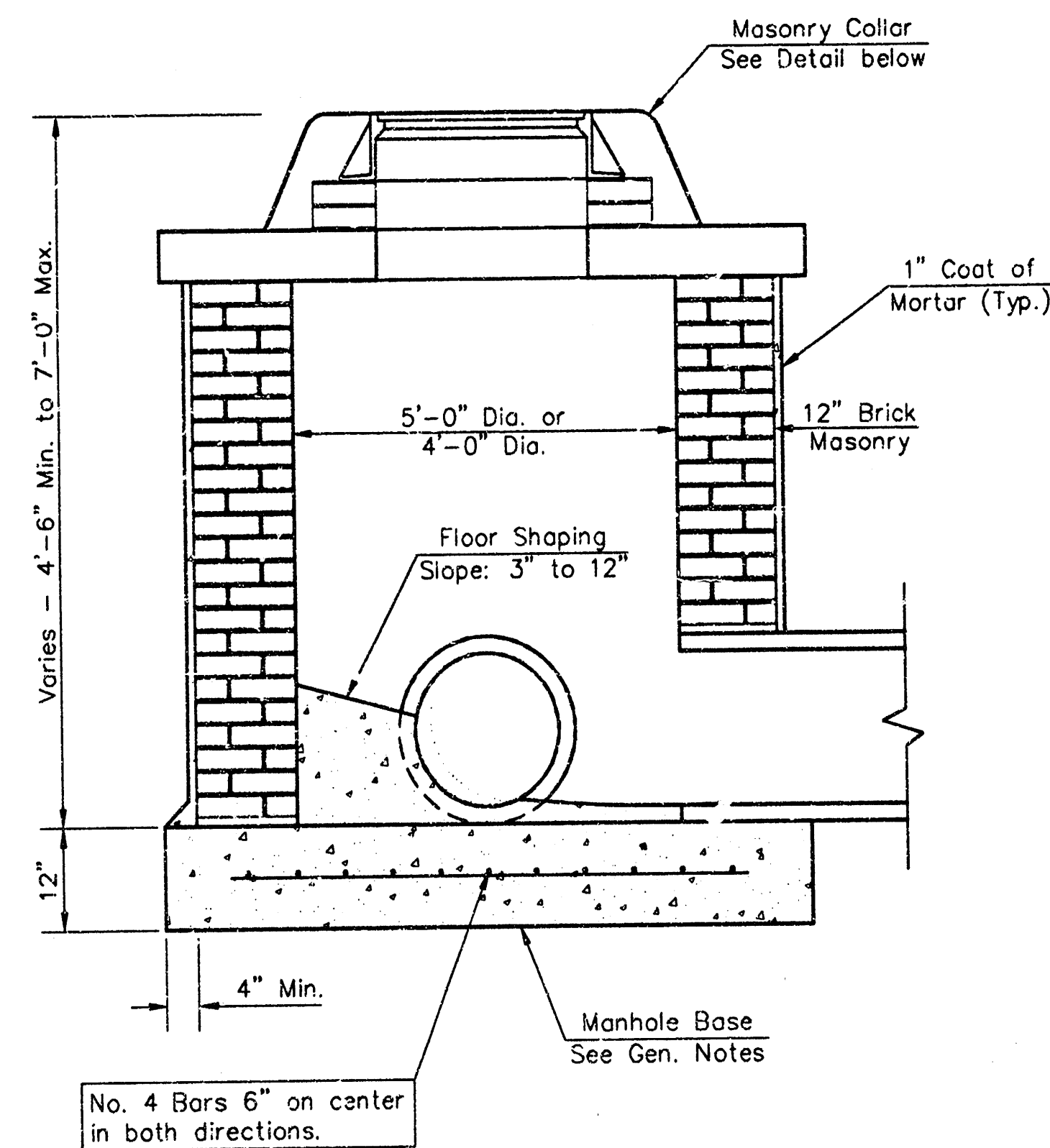
YARD INLET

DEETER #2512 CATCH BASIN INLET GRATE & FRAME

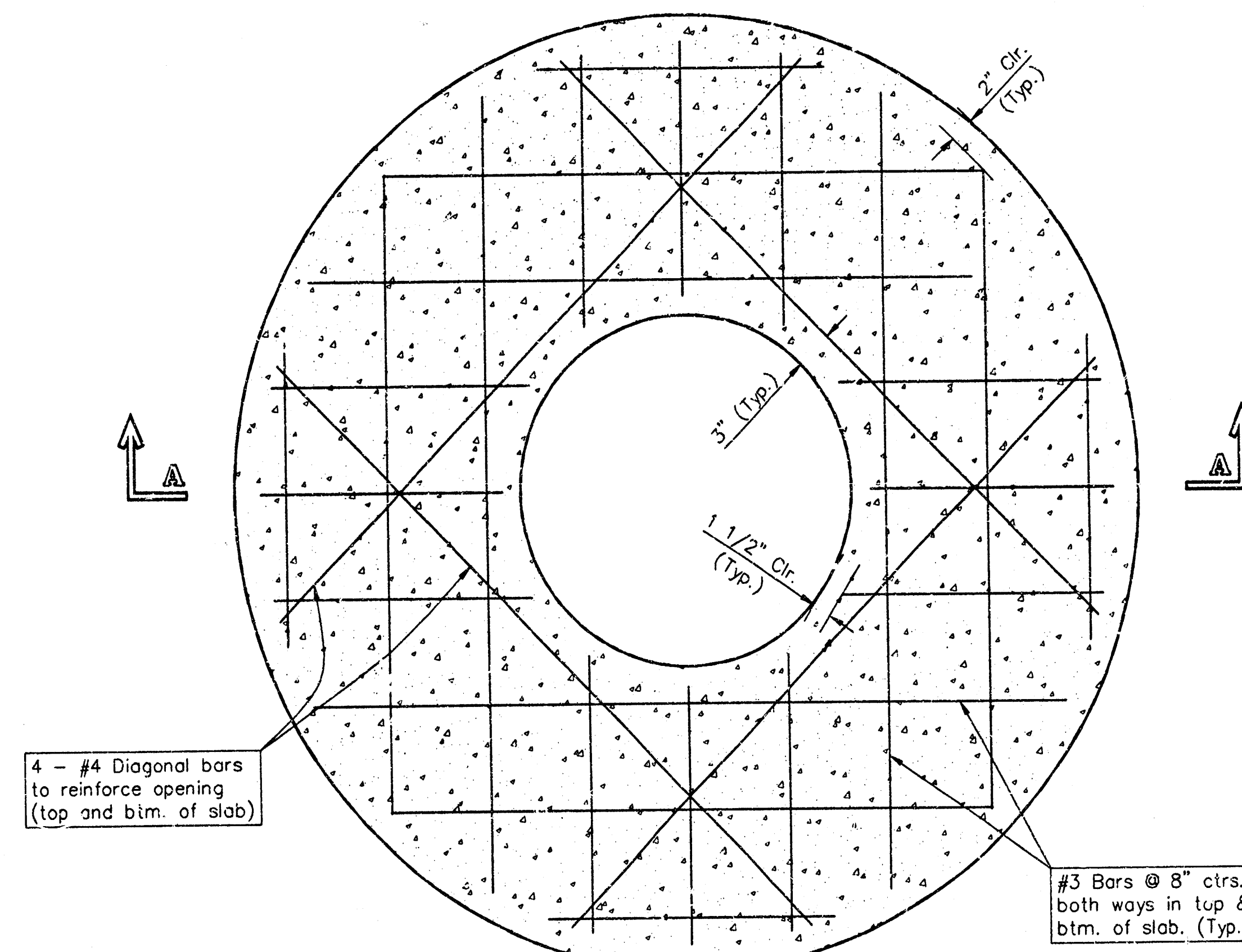
SPECIAL YARD INLET				
WICHITA, KANSAS				
 BAUGHMAN COMPANY P.A. ENGINEERING, SURVEYING, & PLANNING				
318-222-7271 • 318 ELLIS • WICHITA, KANSAS 67211				
PROJECT NUMBER 456-62796				SHEET 13
DESIGN	DRAWN	APPROVED	DATE 12/15/98	SCALE NONE
			OF 17	DE TALES / Terminal



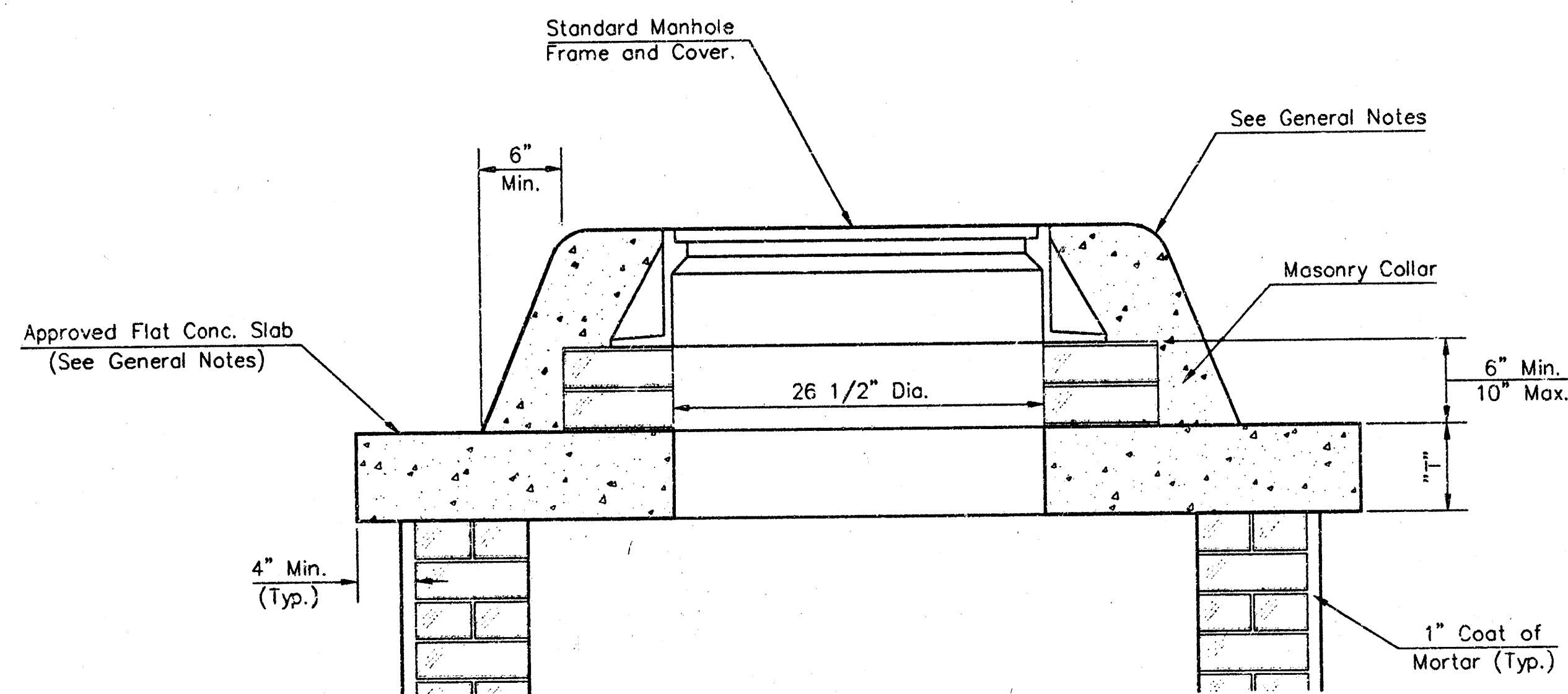
SHALLOW TYPE "A" MANHOLE



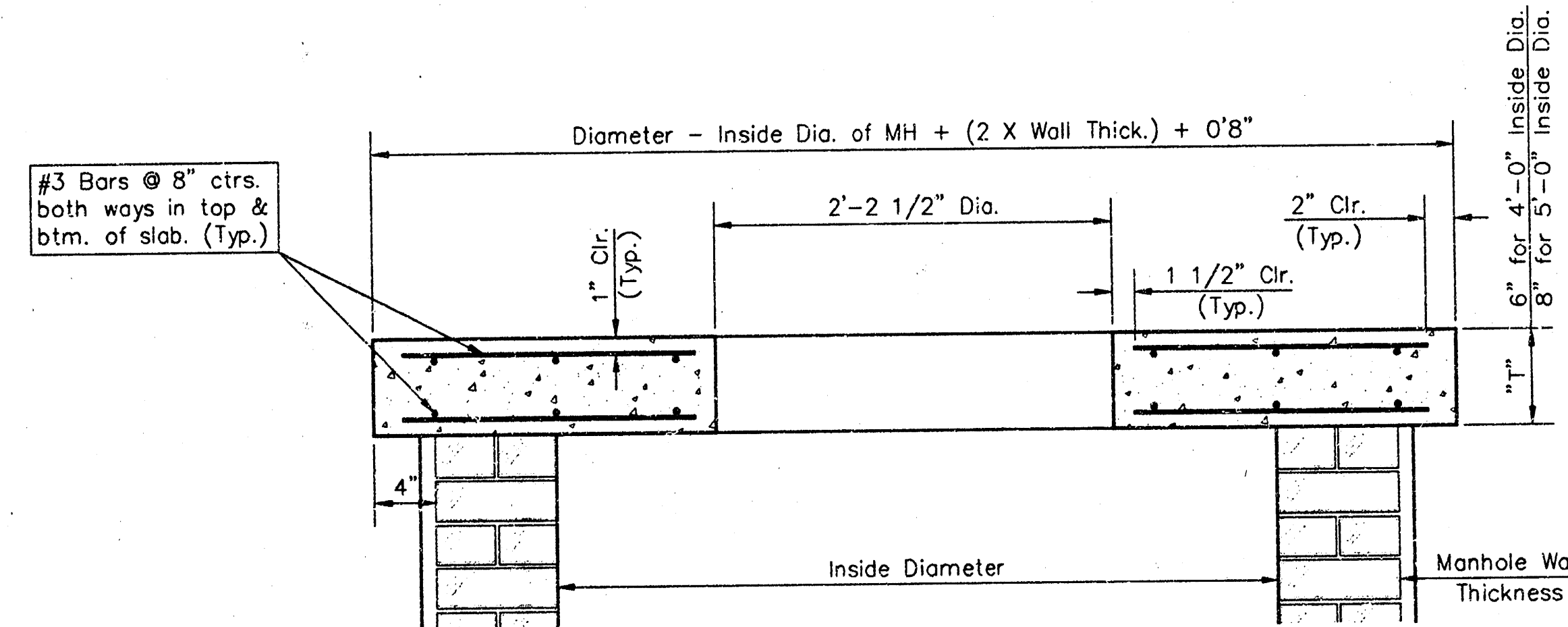
SHALLOW TYPE "B" MANHOLE



PLAN

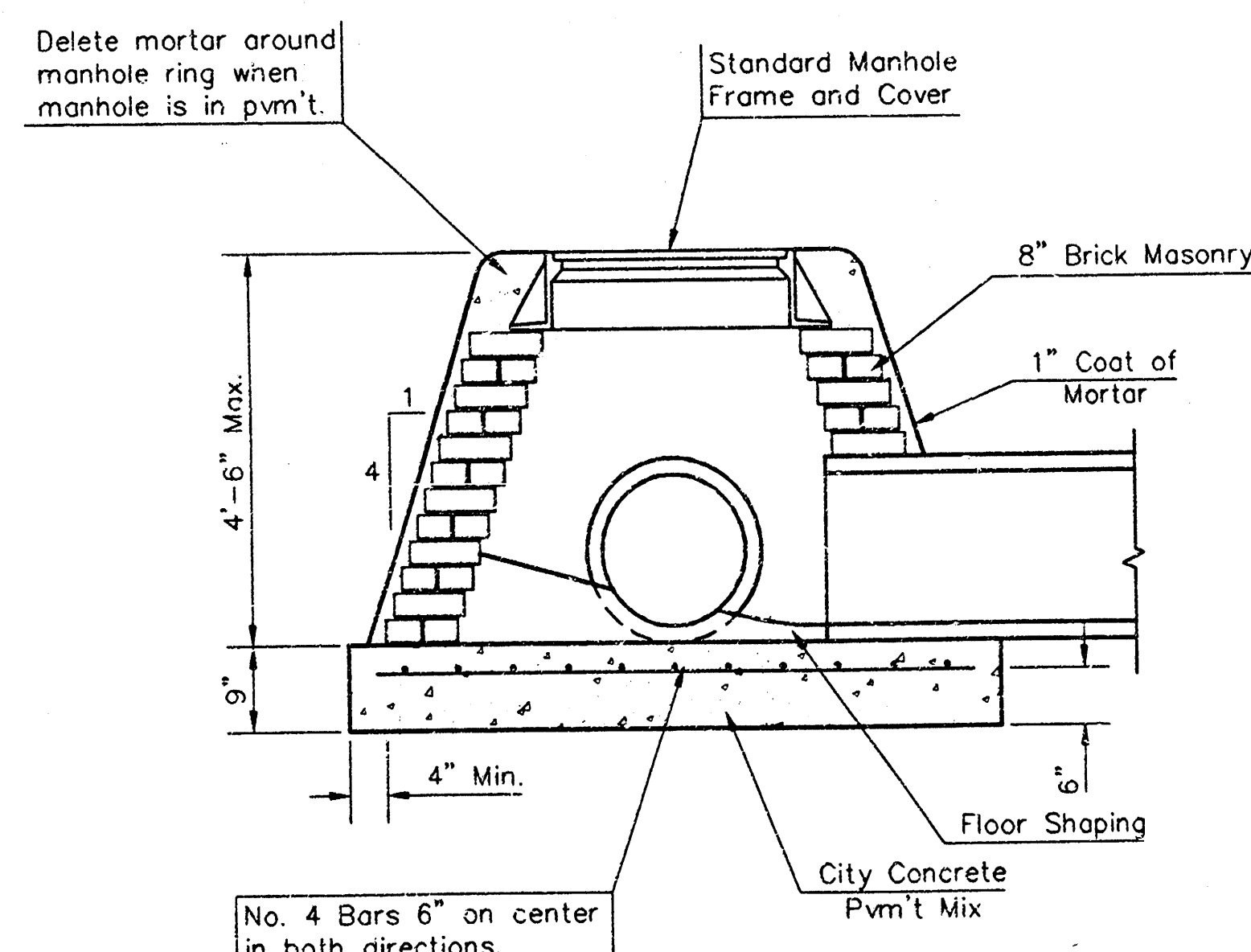


MASONRY COLLAR DETAIL

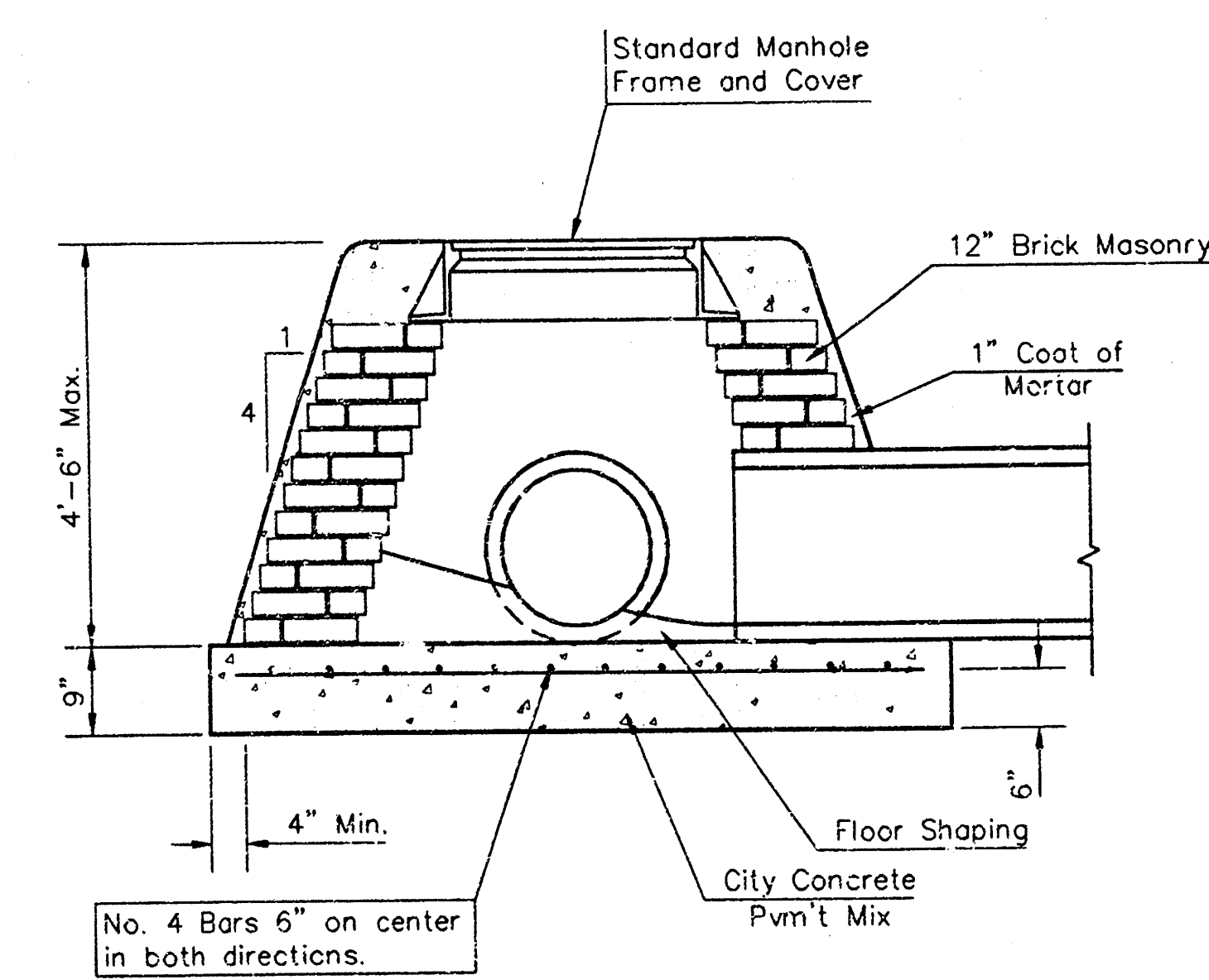


SECTION A-A

FLAT CONCRETE SLAB DETAILS



SPECIAL SHALLOW TYPE "A" MANHOLE



SPECIAL SHALLOW TYPE "B" MANHOLE

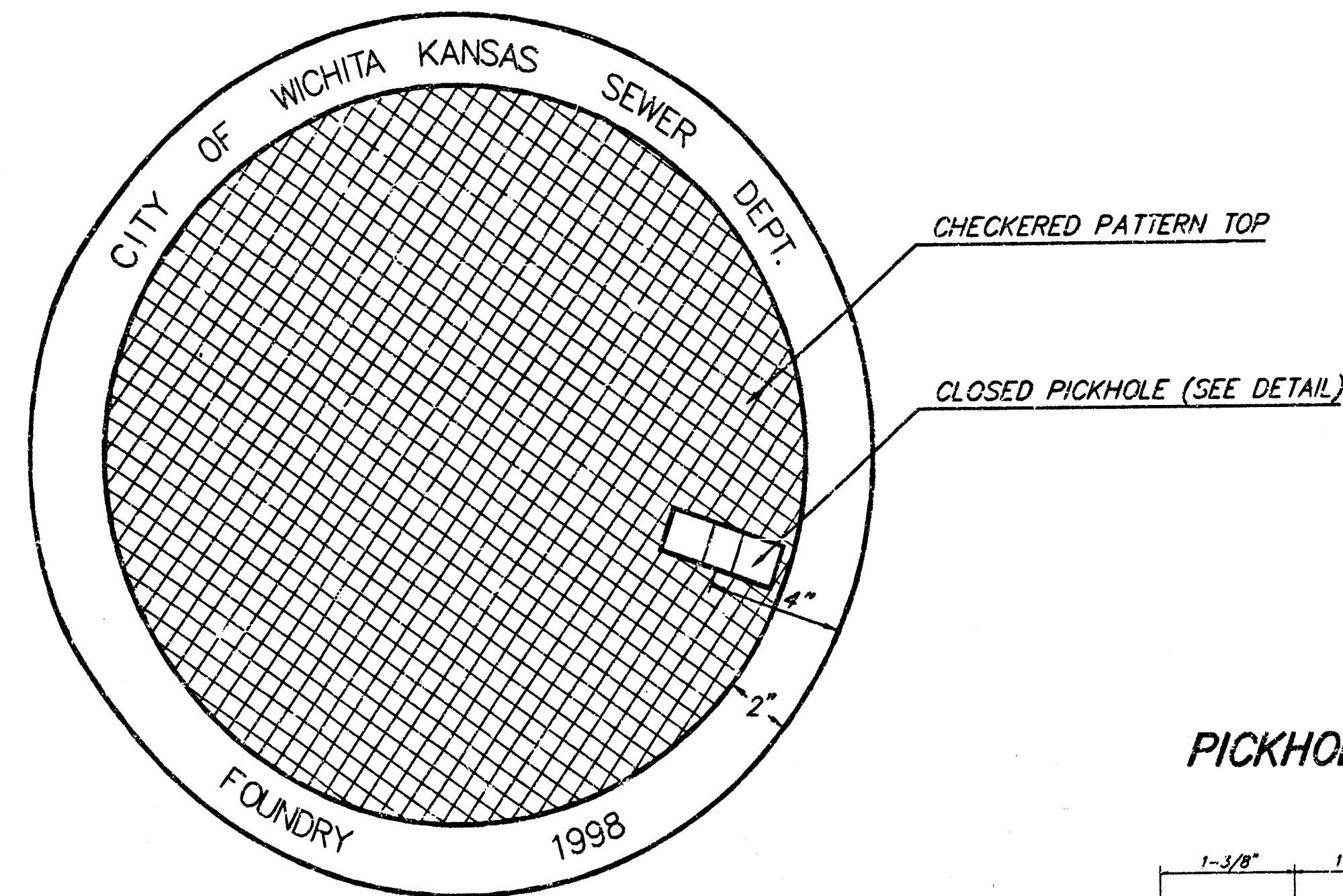
GENERAL NOTES

- Mortar used in masonry construction shall contain 9 sacks of cement per cubic yard. Concrete used in manhole 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 admixture. Mortar shall be placed around the manhole ring as shown on the drawings when manholes are constructed in unpaved areas. Type "A" shallow manholes can be used on sewers when the manhole is not located within public street pavement. Manholes constructed where pipe sizes are smaller than 24" shall have an inside diameter of 4". Manholes constructed where pipe sizes are 24" or larger shall have an inside diameter of 5". Completed manhole shall be without leaks and water tight.
- Reinforcing steel shall be installed in the manhole bases and shall consist of no. 4 bars placed on 6" centers in both directions. The manhole base reinforcement shall be placed 6" above the bottom of the manhole base. All costs for furnishing and installing reinforcing steel shall be included in the unit price bid for the manhole.
- The floors of all manholes shall be shaped with flow channels such that the manholes will be self cleaning and free of areas where solids could be deposited as sewage flows through the manhole from all inlet pipes to the outlet pipe. Flow channels shall be formed to match the bottom halves of the inflowing pipes and the outflowing pipe as shown by the drawings. Manhole 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 manholes shall have the top half removed to neat lines for the full inside diameter of the manhole. Manhole floors shall then be shaped around the bottom half of the pipe which forms the flow channel.
- Pipes installed within the excavation made for the manhole shall be cradled with concrete to the limits of the manhole excavation. When clay pipe is used, the cradle shall extend to the first joint outside the manhole. 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 manhole excavation or to clay pipe joints adjacent to manhole shall be included in the unit price bid for the manhole.
- Manhole cover castings and manhole frame castings shall conform to the requirements as indicated in the standard specifications and as shown in the standard detail drawings.
- The crowns of inflowing pipes shall never be set lower than the crown of the outflowing pipe.
- Standard shallow manholes type "A" and "B" shall be paid for at the unit price bid per each for the type and diameter indicated. Standard special shallow manholes type "A" and "B" shall be paid for at the unit price bid per each for the type indicated. All standard shallow manhole diameters will be 4' unless indicated otherwise.
- All brick used in manhole construction shall meet Grade SW of ASTM C652 or C62-87.

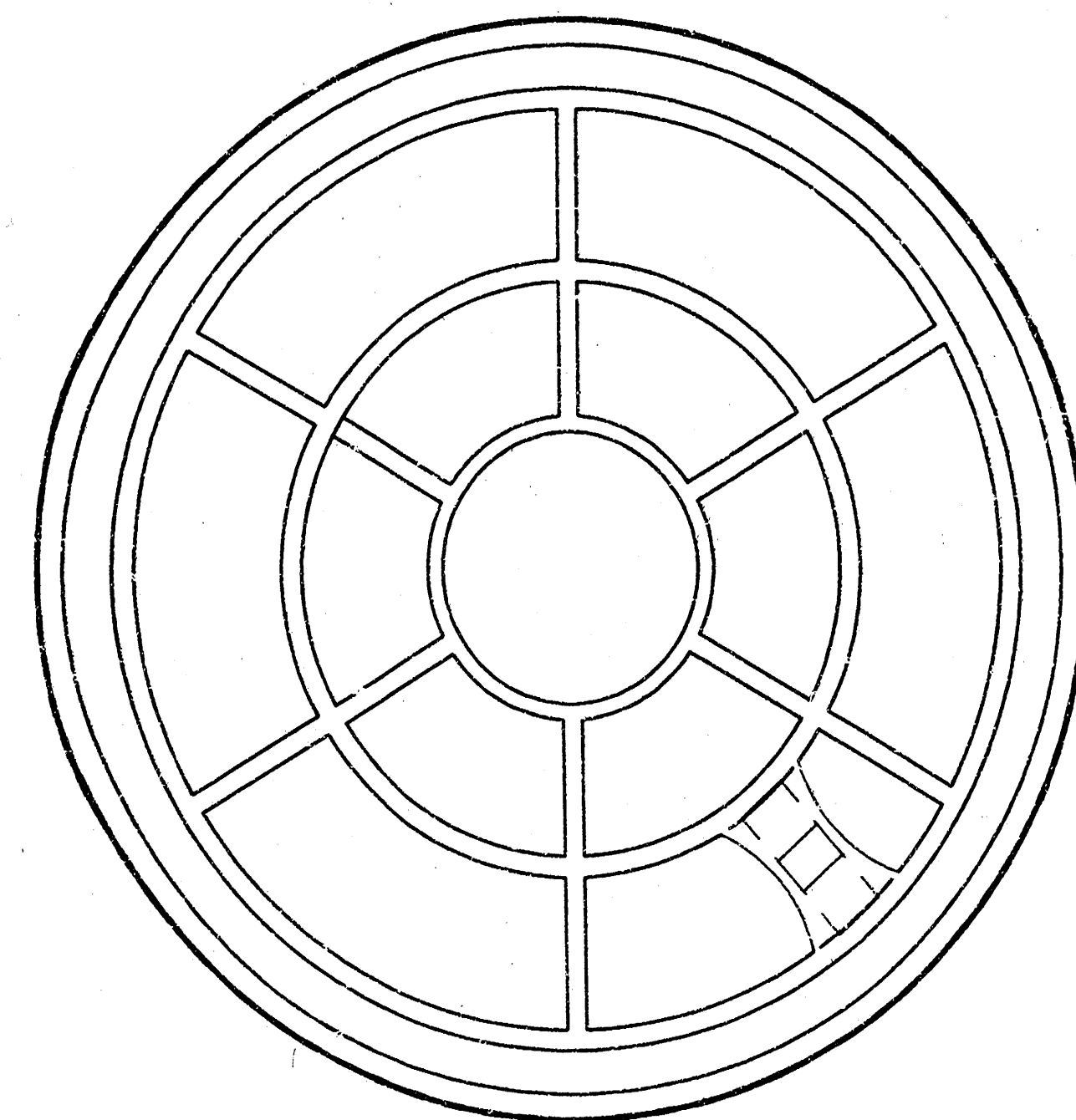
CITY OF WICHITA, KANSAS			
Std. Manhole Detail			
TYPE "A" AND TYPE "B"			
BAUGHMAN COMPANY P.A.			
ENGINEERING, SURVEYING, & PLANNING			
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211			
PROJECT NUMBER		SHEET	
488-82796		14	
DESIGN	DRAWN	APPROVED	DATE
C.O.W.	Staff		NOV 92

Detail 13/11/92

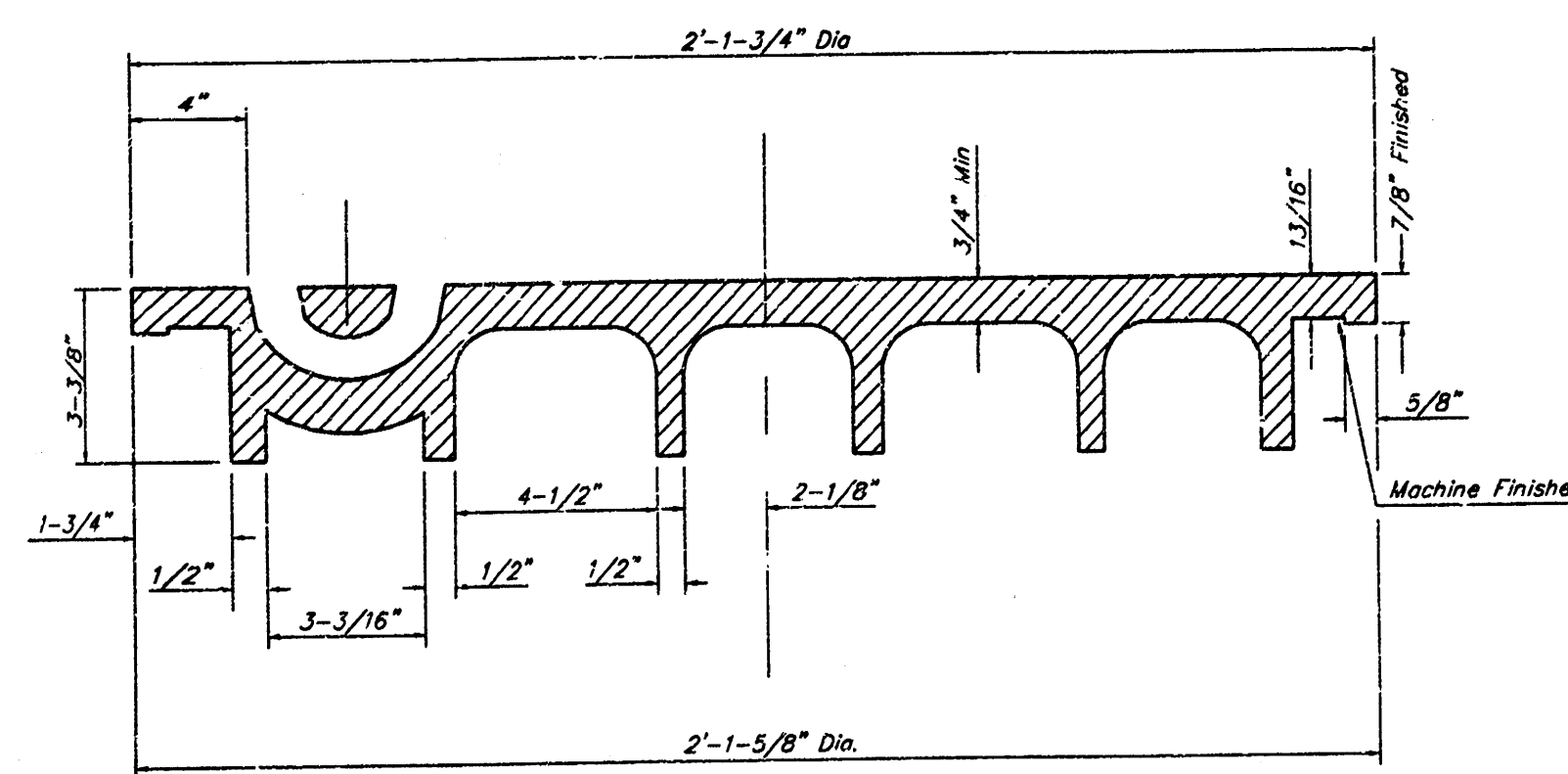
MANHOLE COVER
Weight = 180 Lbs.



TOP VIEW

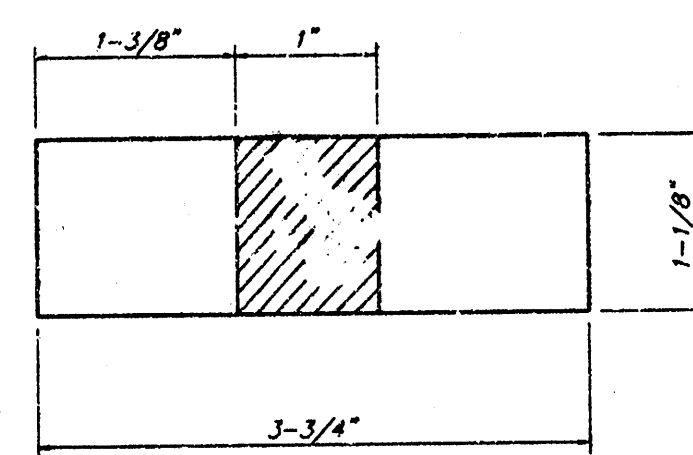


BOTTOM VIEW

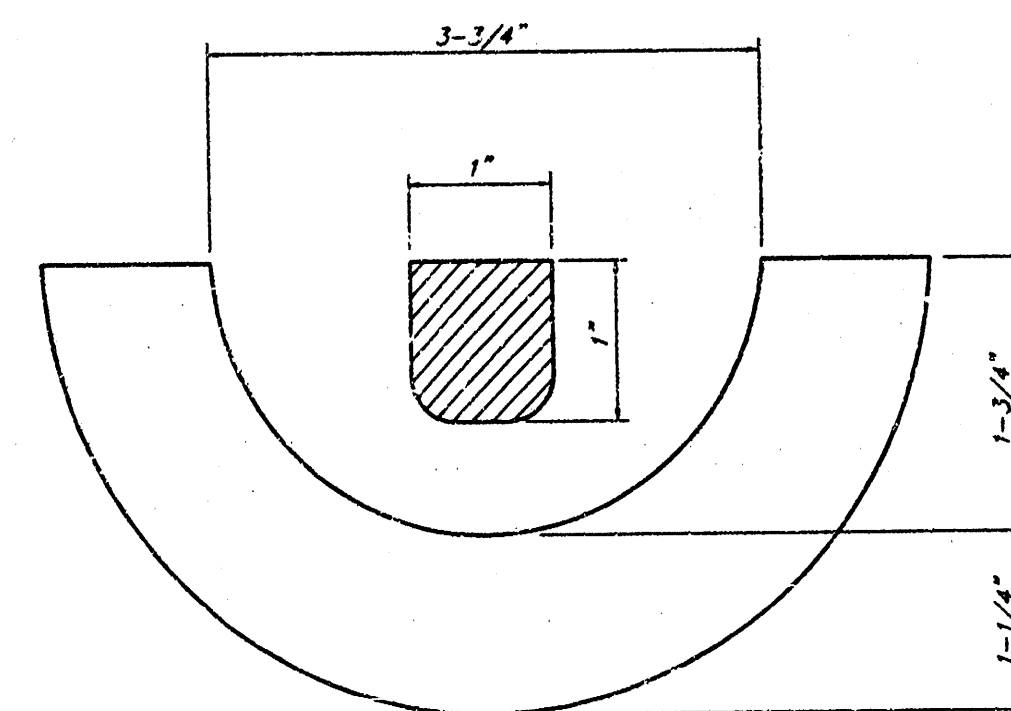


SECTION VIEW

PICKHOLE DETAIL



TOP VIEW

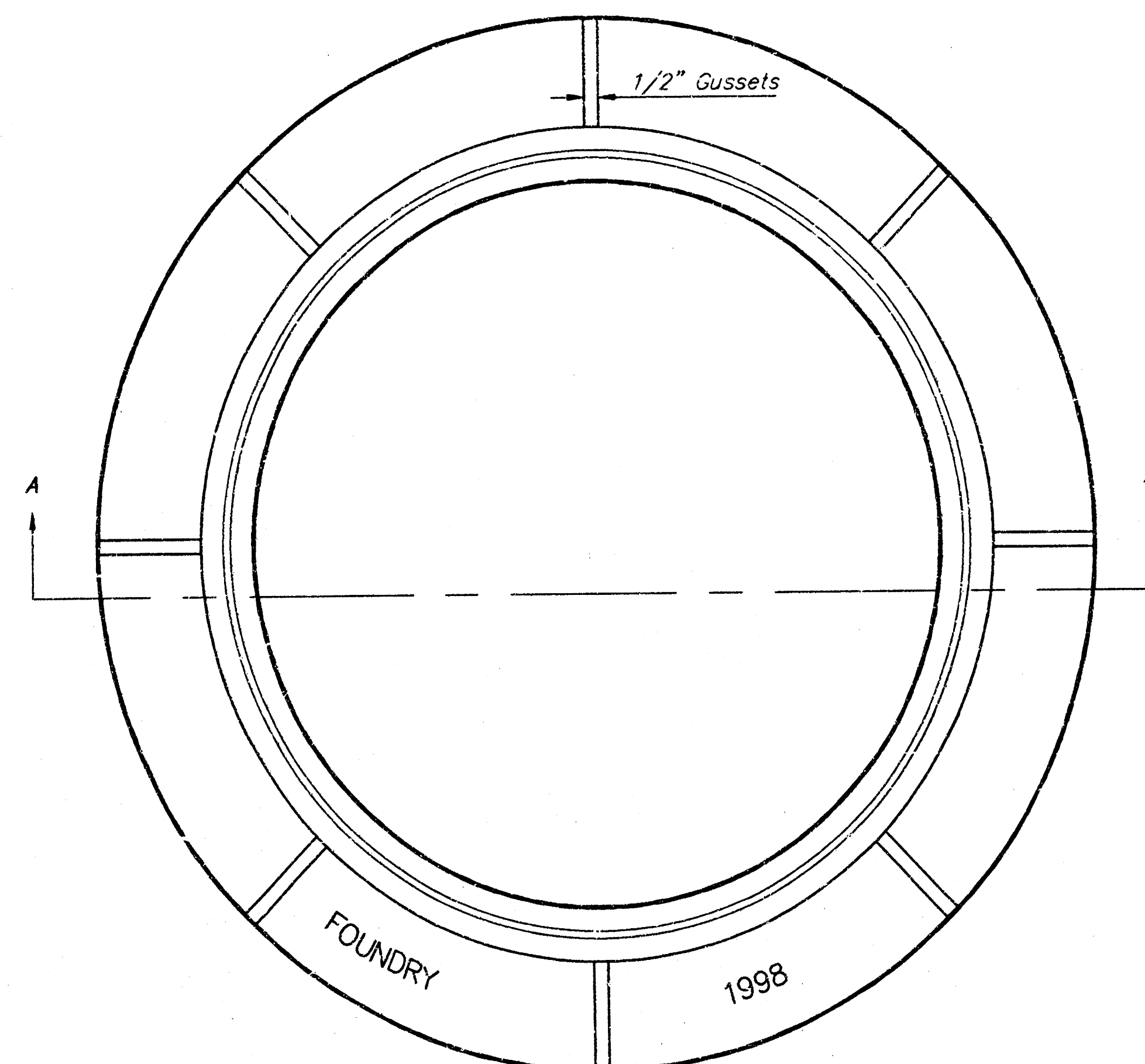


SECTION VIEW

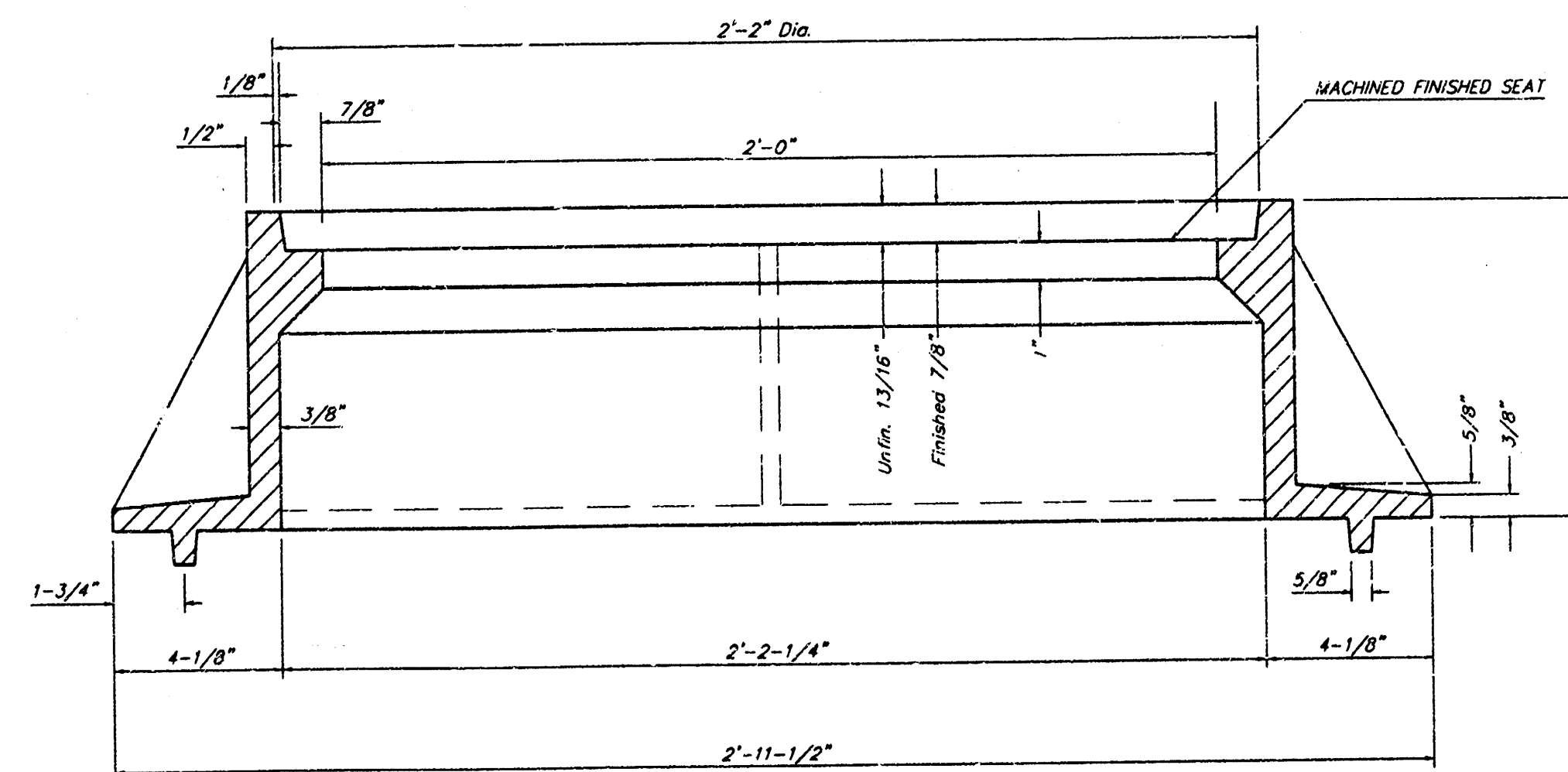
MANHOLE FRAME AND COVER DETAIL

ADOPTED AS STANDARD DESIGN BY
CITY OF WICHITA, KANSAS

MANHOLE FRAME
Weight = 145 Lbs.



TOP VIEW



SECTION A-A

GENERAL NOTES

MANHOLE CASTINGS SHALL BE MANUFACTURED USING GOOD QUALITY GRAY IRON CONFORMING TO CLASS 30 OF A.S.T.M. DESIGNATION A-48. DIMENSIONS AND WEIGHTS SHOWN ON THE DETAILED DRAWINGS SHALL BE CONSIDERED AS MINIMUM REQUIREMENTS AND ANY DEVIATIONS FROM THE DIMENSIONS SHOWN MUST BE SPECIFICALLY APPROVED. THE FINISHED CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTIONS OR OTHER DEFECTS.

MANHOLE CASTINGS SHALL BE COATED WITH AN ASPHALT PAINT RESULTING IN A SMOOTH, TOUGH AND TENACIOUS COATING WHICH IS NOT BRITTLE OR TACKY.

MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE FOUNDRY WILL FIT INTERCHANGEABLY INTO A FRAME MANUFACTURED BY ANOTHER FOUNDRY AND STILL MEET ALLOWABLE CLEARANCES AND NON-ROCKING REQUIREMENTS. THIS WILL REQUIRE MANUFACTURING OF THE MATCHING FACES ON THE COVER AND THE FRAME TO CLOSE TOLERANCES.

THE OUTSIDE CIRCUMFERENCE OF THE VERTICAL FACE OF THE COVER AND THE INSIDE CIRCUMFERENCE OF THE VERTICAL FACE IN THE FRAME RECESS SHALL BE MANUFACTURED TO TOLERANCES SUCH THAT THE CLEARANCE BETWEEN THE COVER AND FRAME WILL NOT EXCEED 1/8" AT ANY POINT AROUND THE CIRCUMFERENCE OF THE COVER. THE SEATING SURFACES BETWEEN THE COVER AND FRAME SHALL BE MACHINED SUCH AS THESE SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUMFERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.

THE MANHOLE FRAME AND COVER SHALL BE MARKED WITH LETTERING INDICATING THE NAME OF THE MANUFACTURER AND THE YEAR WHEN THE COVER OR FRAME WAS CAST. THE COVER SHALL BE FURTHER IDENTIFIED WITH REGARDS TO OWNERSHIP USING LETTERS AT LEAST 1 INCH IN HEIGHT. THIS IDENTIFICATION SHALL BE "CITY OF WICHITA SEWER DEPARTMENT". THE WORD DEPARTMENT MAY BE ABBREVIATED. THE TEXTURE OF THE TOP SURFACE OF THE COVER SHALL BE MANUFACTURED IN A CHECKERED PATTERN DESIGN AS INDICATED ON THE DRAWINGS. SMOOTH BLOCKOUTS SHALL BE UTILIZED TO HIGHLIGHT THE LETTERING ON THE COVER SURFACE. THE TOTAL AREA OF SMOOTH SURFACE BLOCKOUT SHALL NOT EXCEED THE AREA AS INDICATED ON THE DRAWING. POSITIONING OF SMOOTH BLOCKOUTS AND LETTERING MAY VARY FROM THAT SHOWN ON THE DETAILED DRAWING.

MANHOLE FRAME AND COVER DETAIL					
ADOPTED AS STANDARD DESIGN BY CITY OF WICHITA, KANSAS					
BAUGHMAN COMPANY P.A. ENGINEERING, SURVEYING, & PLANNING 316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211					
PROJECT NUMBER 488-62796					SHEET 15
DESIGN STAFF	DRAWN STAFF	APPROVED	DATE	SCALE NONE	17

LARK 6TH ADDITION

F. PEATY LAKE OF UMS-MSC

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