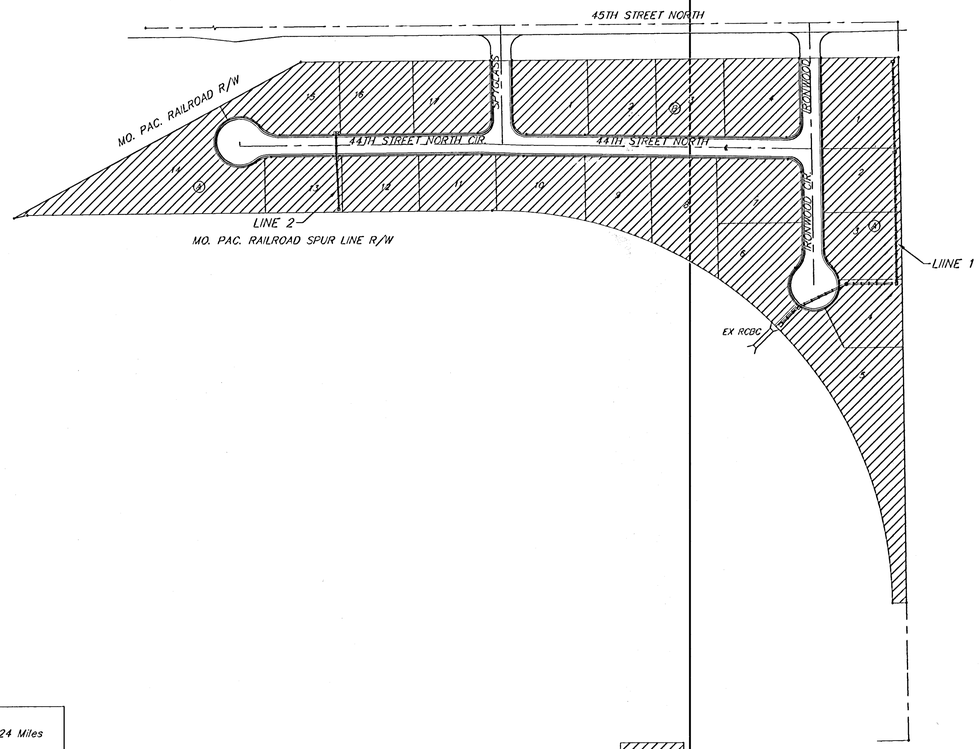
STREETS AND INCIDENTAL
STORM WATER SEWER IMPROVEMENTS
to serve

Willow Place Addition

Project Number
472-83267
OC.A. #765655

CITY OF WICHITA, KANSAS

Michael E. Lindebak, P.E. City Engineer



Project Length	
1280 L.F.	0.24 Miles

Project Earthwork Totals	
Excavation =	131.1 C.Y.
Loose Fill =	2136.6 C.Y.
Compacted Fill =	2299.1 C.Y.
Borrow =	4,791 C.Y.

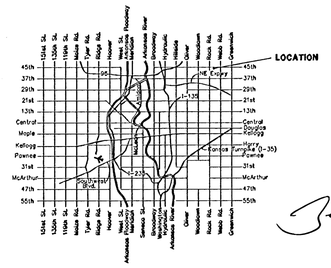
Benefit District

Scale: 1" = 100'

DRAINAGE
BOOKED
7-6-01
MCG
D-514

Sheet Index

Title Sheet	1
29' Pavement Detail	2
Misc. Pavement Details	3
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44th Street North	6
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Iron Wood Cir. & Iron Wood	8
Storm Water Sewer Line 1	9-10
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Single Type 1A Inlet Detail	14
Special Yard Inlet Detail	15
Shallow Manhole Detail	16
Ring & Cover Detail	17
Earth Work Cross Section	18-22
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Vicinity Map

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:

Cox Communications	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	1-800-344-7233
City of Wichita Water Dept.	268-4908
City of Wichita Traffic Engineering	269-4446

2. 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.

3. 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 stockpiles 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 archeological investigations unless buried in a previously approved borrow location.

4. 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.

5. Limits of earthwork shall match existing ground elevations at the right-of-way line unless otherwise noted on the plans with a new finished grade elevation. When a new finished grade elevation is shown, the earthwork shall extend one foot beyond the right-of-way line and then sloped up or down using permissible slopes to match the existing ground surface.

6. The Contractor shall adjust water valve boxes and fire hydrants as directed by the Engineer at the price bid for said adjustments. The Water Department shall field located water valves one time during construction when requested by Contractor. It shall be the Contractor's responsibility to preserve such field locations during the construction process. Water valves, water valve boxes or fire hydrants damaged during construction shall be repaired by the Contractor at his own expense.

7. 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.

8. 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 prior to seeding.

9. A saw cut of at least one-half the depth of existing surface courses of one-fourth the depth of the existing total pavement thickness shall be provided at locations where proposed construction abuts as existing surface course or pavement for which partial removal of that surface or pavement is required. Sawed joint to facilitate removal within three (3) feet of existing joints will not be permitted and for such instances the limits of removal shall extend to the existing joint. Such saw cuts will not be paid for directly and this cost shall be considered as included in the bid item "Right of Way Clearing and Site Restoration."

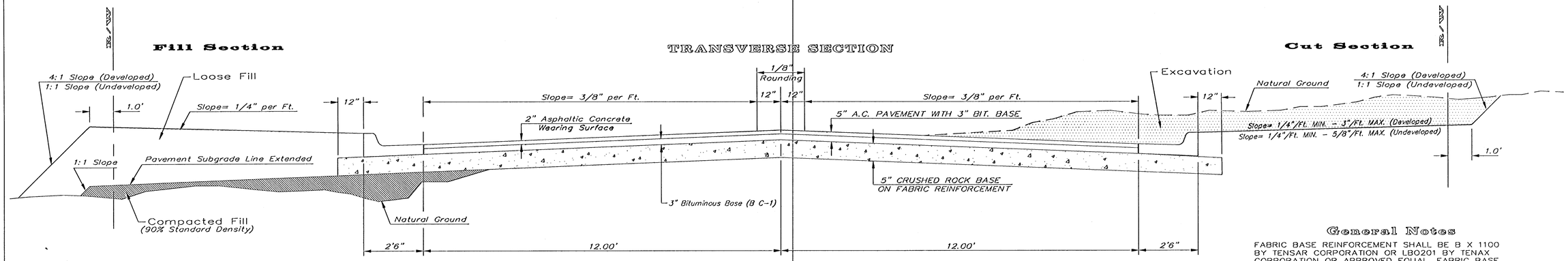
10. Contractor shall take extra precautions when placing fill on the site, due to the water main not being loaded.

BRIAN LEE PELTIER
LICENSED
13744
10/1/00
KANSAS
PROFESSIONAL ENGINEER

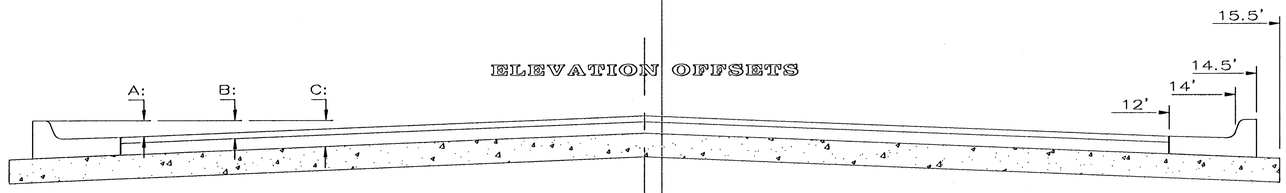
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ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

TYPICAL 29' B-B PAVEMENT DETAILS

TRANSVERSE SECTION



ELEVATION OFFSETS



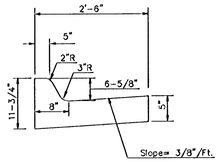
DISTANCE FROM CENTERLINE (LT. & RT.)

	0'	2'	4'	6'	7'	8'	10'	12'	14'	14.5'	15.5'
A: Top of Curbs to Top of Surface Lift	0.13	0.18	0.24	0.30	0.33	0.36	0.43	0.49	—	—	—
B: Top of Curbs to Top of Upper Base Lift	0.30	0.35	0.41	0.47	0.50	0.53	0.60	0.66	—	—	—
C: Top of Curbs to Top of C.R. Subgrade	0.55	0.60	0.66	0.72	0.75	0.78	0.85	0.91	0.97	0.98	1.01

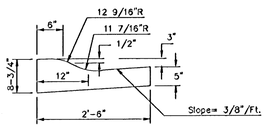
CRUSHED ROCK GRADATION REQUIREMENTS
PERCENT OF AGGREGATE RETAINED

2-1/2"	0
3/4"	20 - 60
#4	50 - 80
#40	80 - 94
#200	90 - 98

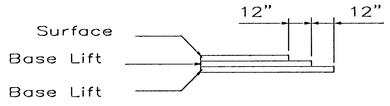
ROCK QUALITY SHALL CONFORM TO THE REQUIREMENTS SPECIFIED BE THE KDOT 1990 EDITION STANDARD SPECIFICATION SUBSECTION 1102 FOR DURABILITY CLASS I.



COMBINED CURB & GUTTER

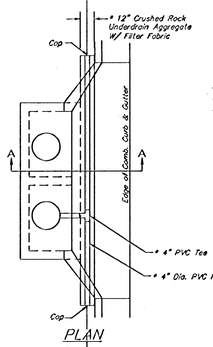


COMBINED ROLL TYPE CURB & GUTTER



TRANSVERSE CONSTRUCTION JOINTS

Transverse construction joints shall be constructed in flexible base pavements at locations where pavement joins existing flexible base pavement as shown by the detail. All costs associated with the construction of the transverse joint shall be included in the bid price for Square Yards 5" ASPHALTIC CONCRETE (3" BITUMINOUS BASE).



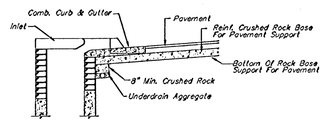
PLAN

* UNDERDRAIN AGGREGATE
Percent of Aggregate Retained

1"	0
3/4"	0 to 10
3/8"	45 to 80
#4	90 to 100
#8	95 to 100

Rock Quality Shall Conform To The Requirements Specified By K.D.O.T. 1990 Edition Standard Specifcation Subsection 1102 For Durability Class I.

NOTE: Place 4" PVC Perforated Pipe at all drainage sump locations.
Cost of Underdrain System to be Incidental to the Reinforced Crushed Rock Subgrade.
Inlet Type May Vary From That Shown.



(Min. 15 Perforations Per Lin. Ft. @ 1/4" Dia.)
Perforations To Be on Bottom Half

SECTION A-A

PAVEMENT UNDERDRAIN DETAIL
NOT TO SCALE

General Notes

FABRIC BASE REINFORCEMENT SHALL BE B X 1100 BY TENSAR CORPORATION OR LBO201 BY TENAX CORPORATION OR APPROVED EQUAL. FABRIC BASE REINFORCEMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

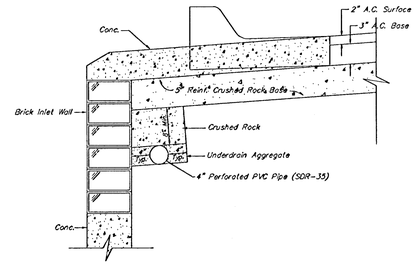
ROCK BASE IS TO BE COMPACTED AND SMOOTHED WITH A STEEL FACED ROLLER PRIOR TO PLACEMENT OF ASPHALT. TACK COAT WILL NOT BE APPLIED TO ROCK BASE.

A TACK COAT OF EMULSIFIED ASPHALT (SC-1H OR CSS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALONS PER SQUARE YARD BETWEEN EACH LIFT OF ASPHALTIC MATERIAL.

BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC CONTROLS FOR LINE AND GRADE.

CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF ONE (1) FOOT FROM JOINTS IN PRECEDING LIFTS AND PLACED SO THAT A JOINT WILL BE CONSTRUCTED ON THE CENTERLINE OF THE TOP LIFT.

THE ASPHALTIC CONCRETE PAVEMENT BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 5" ASPHALTIC CONCRETE (3" BITUMINOUS BASE.)



TRENCH DRAIN DETAIL FOR RES. STREETS
NOT TO SCALE

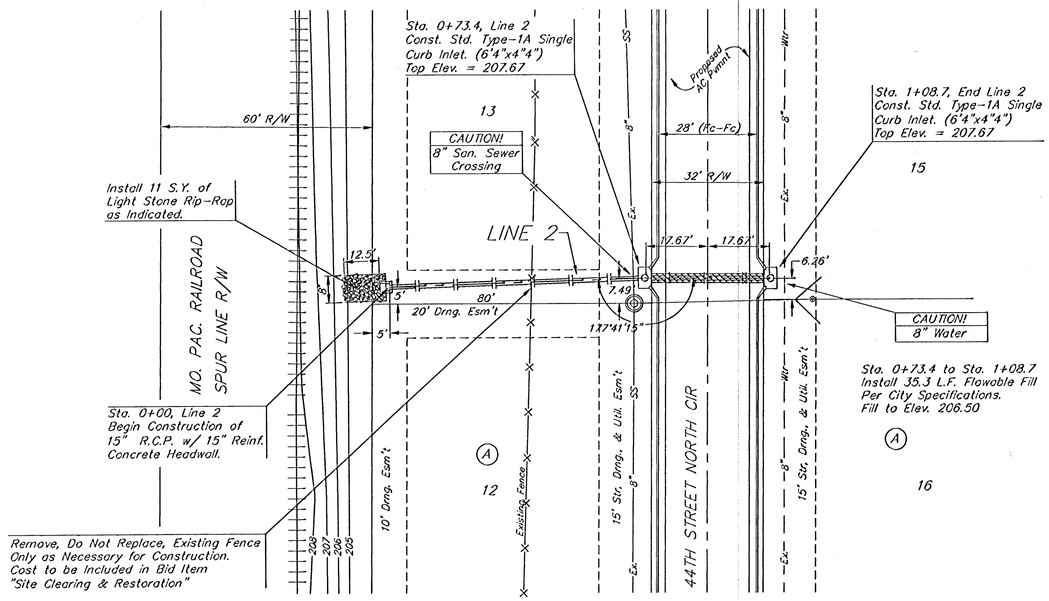
5 INCH Residential Asphaltic Concrete Pavement w/Crushed Rock Base on Fabric Reinforcement
City of Wichita, Kansas

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

PROJECT NUMBER				SHEET
472-83287				2 OF 23
DESIGN C.O.W.	DRAWN Staff	APPROVED	DATE 10-01-99	SCALE

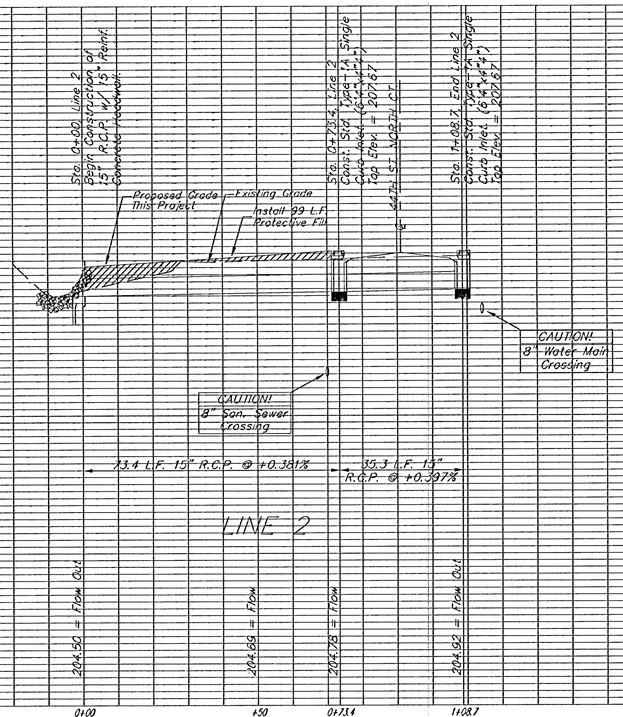
Details 12Track

WILLOW PLACE ADDITION



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

WILLOW PLACE ADDITION



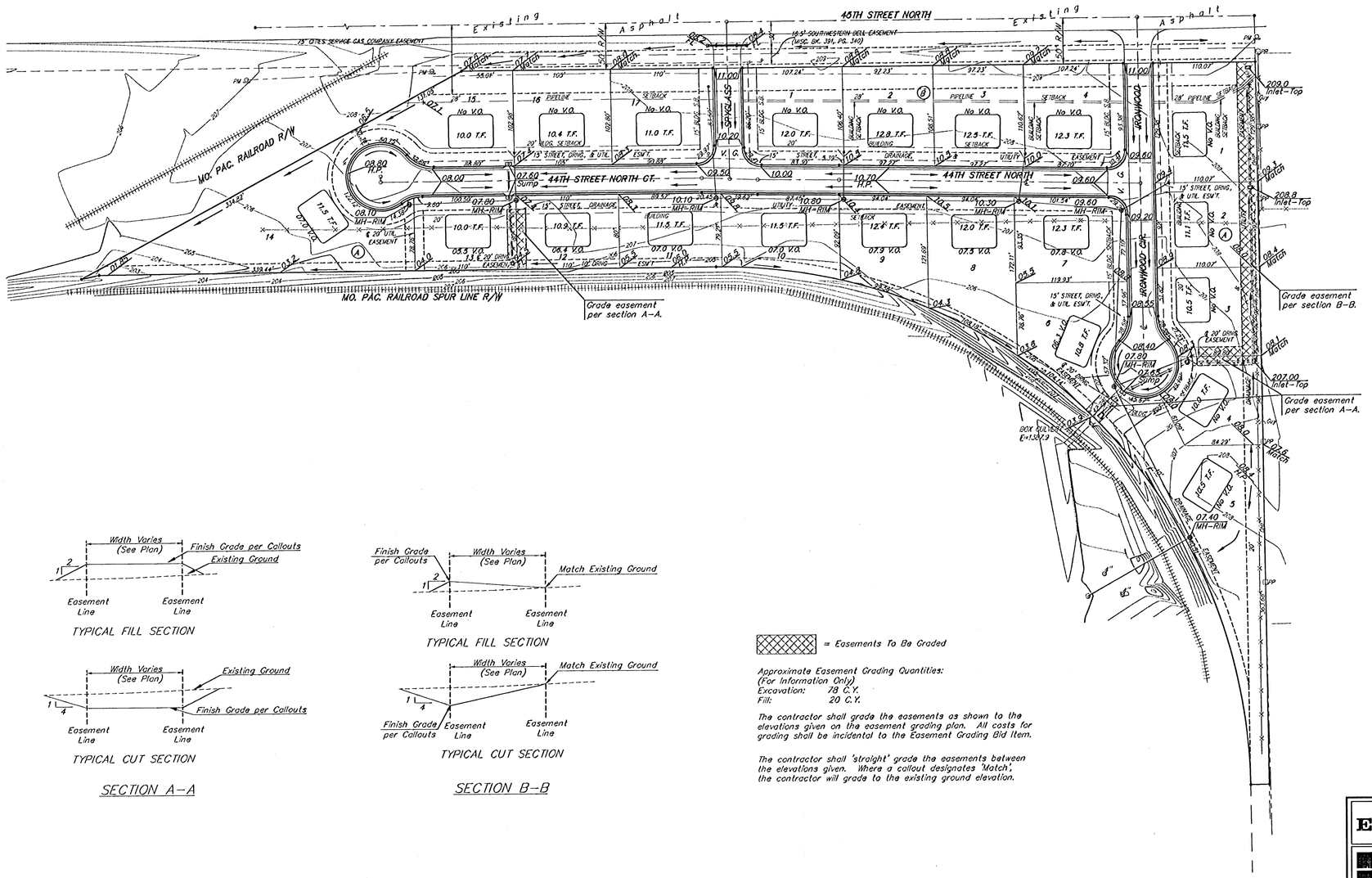
WILLOW PLACE ADDITION
LINE 2

BAUGHMAN COMPANY P.A.
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PROJECT NUMBER	SHEET
472-83267	11 OF 23

DESIGN	DRAWN	APPROVED	DATE	SCALE
BLP	JAK			NOTED

Willowpl1.Sht3 00-09-2815



SCALE: 1" = 60'
• = IRON

TYPICAL FILL SECTION

TYPICAL FILL SECTION

TYPICAL CUT SECTION

SECTION A-A

TYPICAL CUT SECTION

SECTION B-B

= Easements To Be Graded

Approximate Easement Grading Quantities:
(For Information Only)
Excavation: 78 C.Y.
Fill: 20 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.

WILLOW PLACE ADDITION

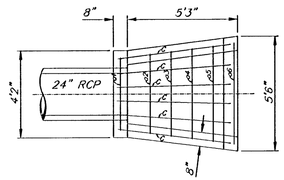
ESMT. GRADING PLAN

CITY OF WICHITA, KANSAS

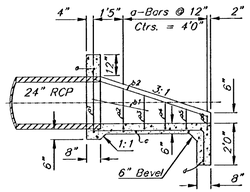
BAUGHMAN COMPANY P.A.
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316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER				SHEET
472-83287				12 OF 23
DESIGN: BLP	DRAWN: JAK	APPROVED	DATE: 10/00	SCALE: 1" = 60'

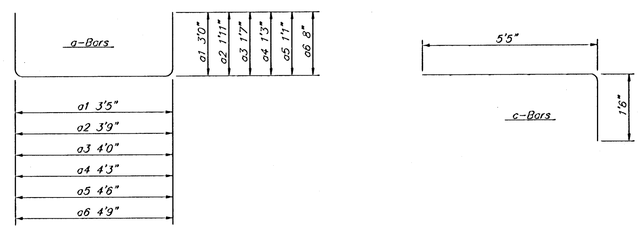
Willowplc\Esmt\SMS 00-09-2815



PLAN



SECTION



REBAR SCHEDULE

Bar	Shape	No.	Length	Weight
a1		1	9'5"	6.29
a2		1	7'7"	5.07
a3		1	7'2"	4.79
a4		1	6'9"	4.51
a5		1	6'4"	4.23
a6		1	6'1"	4.06
b1		2	2'9"	3.67
b2		2	5'10"	7.79
c		6	6'11"	27.72
d		1	5'0"	3.37
e		1	3'10"	2.56
Total Rebar				74.03 Lbs.
Concrete				1.40 C.Y.

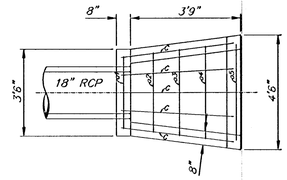
A Deduction in Concrete Quantities Has Been Made for Pipe Openings Through the Headwall

* Field Bend or Cut Reinforcing as Required for Clearance.

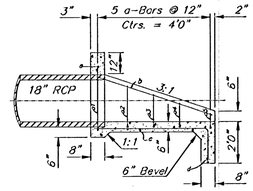
All Concrete Reinforcement to be #4 Rebar

All Rebar to Have Min. of 1 1/2" Conc. Cover

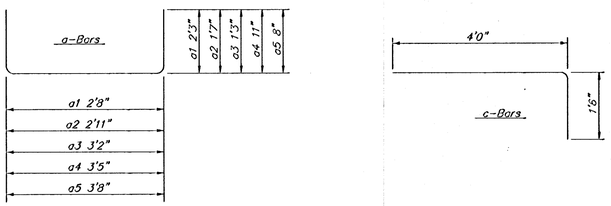
HEADWALL FOR 24" RCP



PLAN



SECTION



REBAR SCHEDULE

Bar	Shape	No.	Length	Weight
a1		1	7'2"	4.79
a2		1	6'1"	4.06
a3		1	5'8"	3.79
a4		1	5'3"	3.51
a5		1	5'0"	3.34
b		2	4'0"	5.34
c		5	5'6"	18.37
d		1	4'0"	2.67
e		1	3'2"	2.12
Total Rebar				47.99 Lbs.
Concrete				0.91 C.Y.

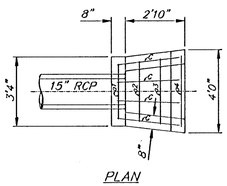
A Deduction in Concrete Quantities Has Been Made for Pipe Openings Through the Headwall

* Field Bend or Cut Reinforcing as Required for Clearance.

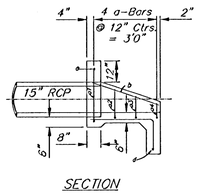
All Concrete Reinforcement to be #4 Rebar

All Rebar to Have Min. of 1 1/2" Conc. Cover

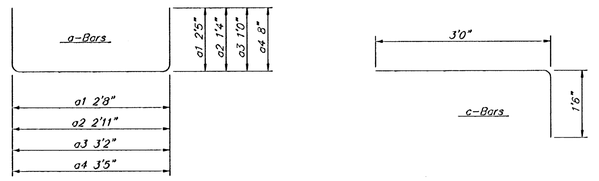
HEADWALL FOR 18" RCP



PLAN



SECTION



REBAR SCHEDULE

Bar	Shape	No.	Length	Weight
a1		1	7'6"	5.01
a2		1	5'7"	3.73
a3		1	5'2"	3.45
a4		1	4'9"	3.17
b		2	4'0"	5.34
c		4	5'6"	14.70
d		1	3'5"	2.28
e		1	2'8"	1.78
Total Rebar				39.46 Lbs.
Concrete				0.67 C.Y.

A Deduction in Concrete Quantities Has Been Made for Pipe Openings Through the Headwall

* Field Bend or Cut Reinforcing as Required for Clearance.

All Concrete Reinforcement to be #4 Rebar

All Rebar to Have Min. of 1 1/2" Conc. Cover

HEADWALL FOR 15" RCP

GENERAL NOTES

1. ALL PIPES SHALL BE FLUSH CUT PRIOR TO BEING CAST INTO CONCRETE HEADWALL
2. CONCRETE USED IN HEADWALL CONSTRUCTION SHALL BE SAME AS PER CITY STANDARD PAVING MIX EXCEPT THAT IT SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI.
3. ALL EXPOSED EDGES SHALL BE BEVELED 1/2".
4. REINFORCING STEEL SHALL COMPLY TO A.S.T.M. DESIGNATION A615 GRADE 60. ALL DIMENSIONS RELATIVE TO REINFORCING STEEL ARE TO CENTERLINE OF BAR UNLESS OTHERWISE NOTED.
5. THE "REIN. CONC. HEADWALL" SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH IN PLACE WHICH SHALL INCLUDE ALL LABOR, MATERIALS, EXCAVATION, CONCRETE, REINFORCING STEEL AND ALL OTHER INCIDENTAL ITEMS NECESSARY TO COMPLETE THE WORK. MATERIAL QUANTITIES SHOWN ARE FOR INFORMATION ONLY.

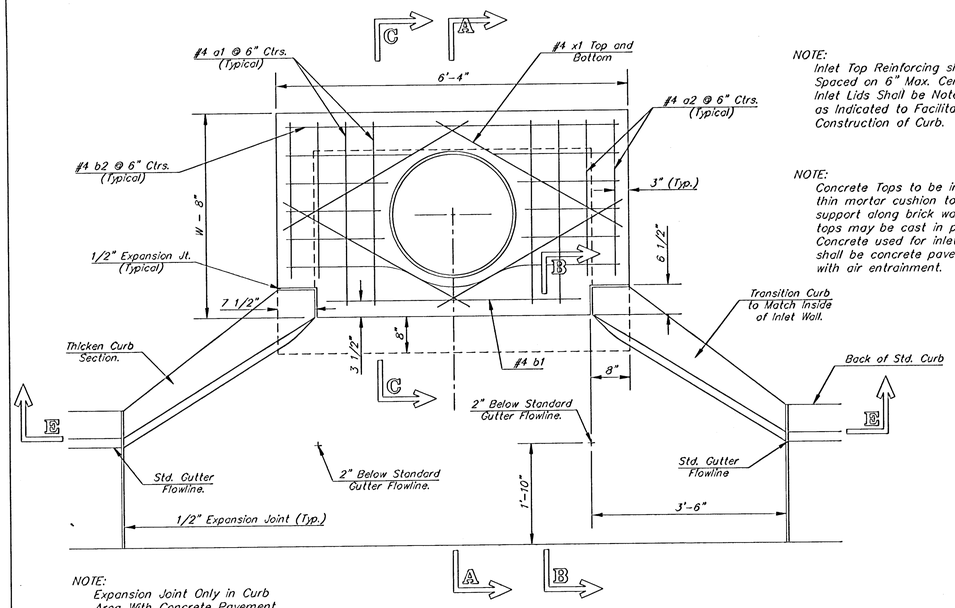
HEADWALL DETAIL

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

PROJECT NUMBER	SHEET
472-83287	13 OF 23

DESIGN	DRAWN	APPROVED	DATE	SCALE
BLP/DMV	JAK			NONE

HDWDET1

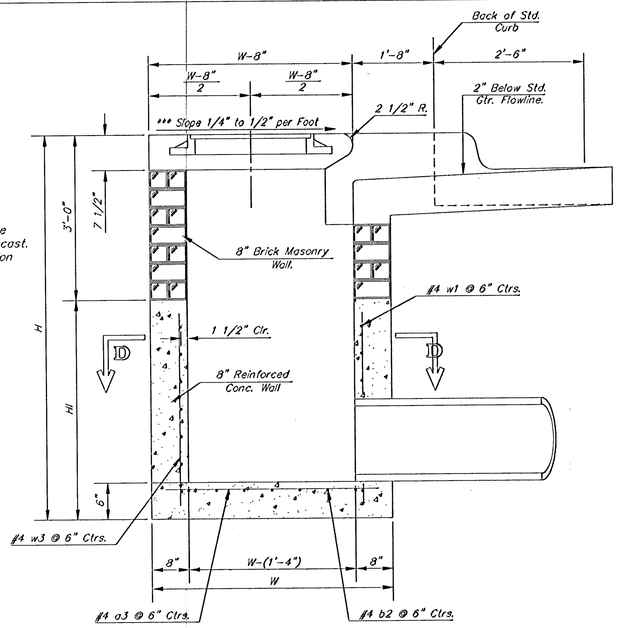


NOTE:
Expansion Joint Only in Curb Area With Concrete Pavement.

PLAN

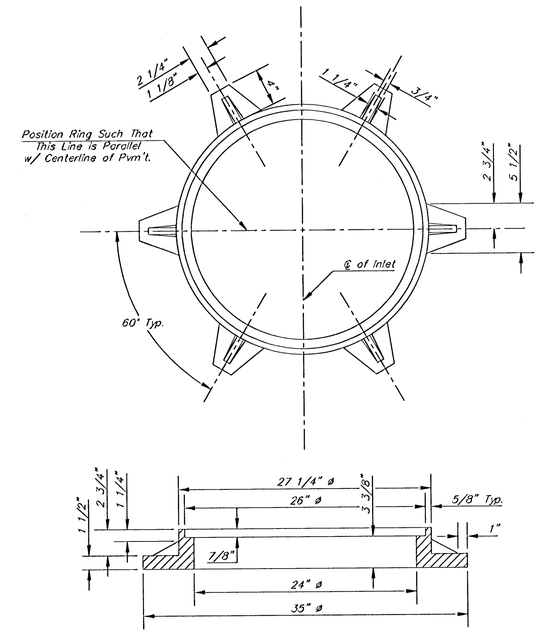
NOTE:
Inlet Top Reinforcing shall be Spaced on 6" Max. Centers. Inlet Lids Shall be Notched Out as Indicated to Facilitate Construction of Curb.

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

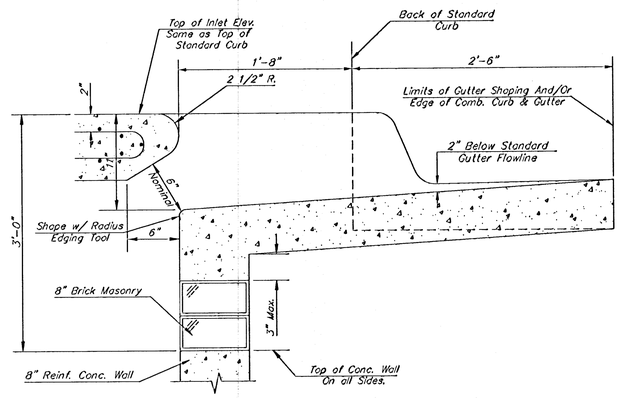
***NOTE: Slope of inlet tops to Match Sidewalk or Parking Slopes within Limits Indicated.



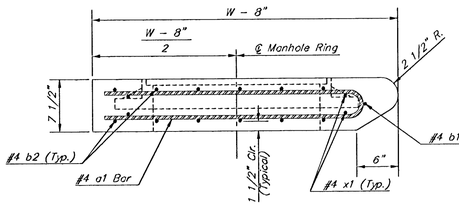
MANHOLE RING AND COVER

Weight = 180 Lbs.

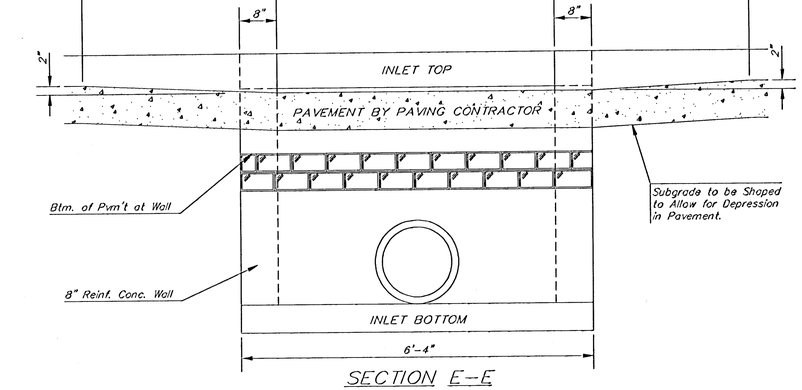
*See City of Wichita Standard Manhole Ring and Cover Detail Sheet for Cover Details to Be Used With Inlet Frome.



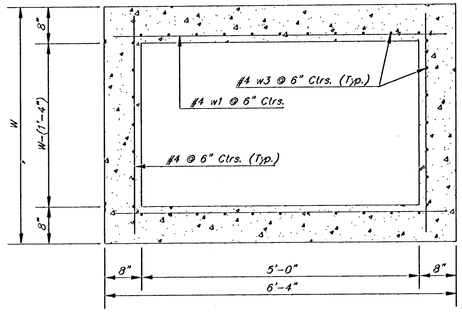
SECTION B-B



SECTION C-C



SECTION E-E



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 the unit price bid for each inlet hookup.

Inlet invert shall be shaped with a 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	8'-7"	6	8'-7"	6	10'-7"	6	12'-7"	6	14'-7"
a2	#4	4	8'-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"

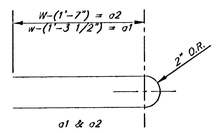
WALL REINFORCING

		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 = 8' X 5'-0"

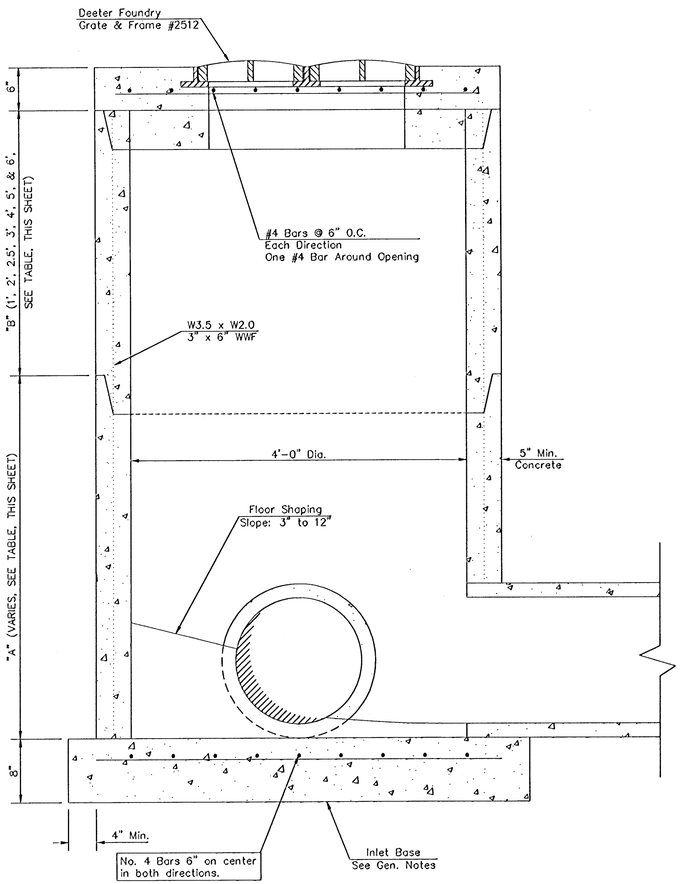
BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER 472-83267

SHEET 14 OF 23

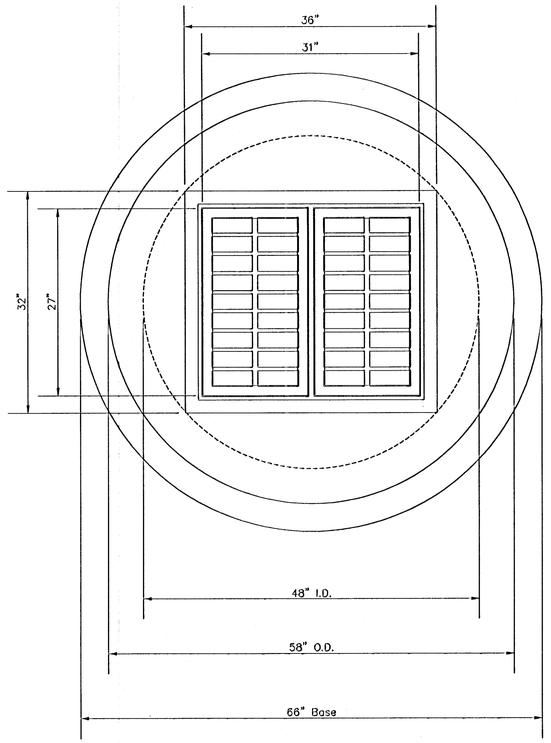
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C.O.W.	Staff		11-30-98	None

Type1A-S



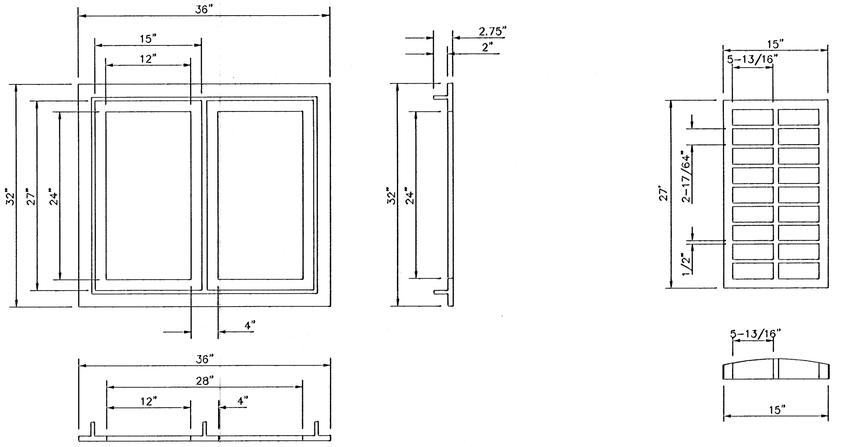
YARD INLET

LINE #	STA.	TOP OF INLET	INLET FLOW	"A"	"B"



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'.



DEETER #2512 CATCH BASIN INLET GRATE & FRAME

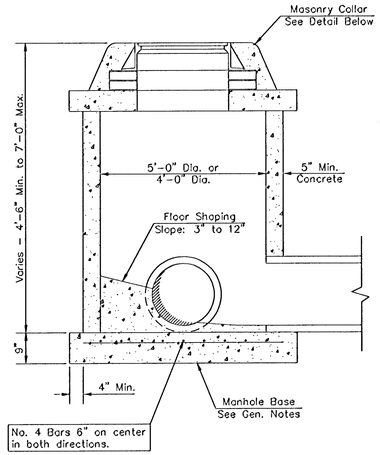
SPECIAL YARD INLET
WICHITA, KANSAS

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

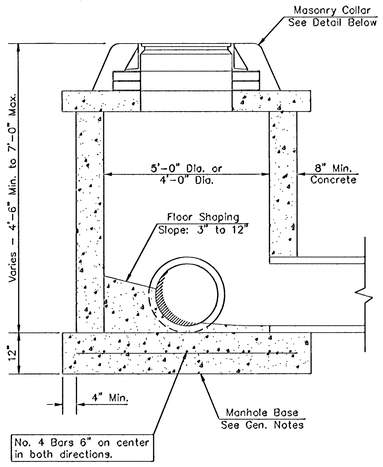
PROJECT NUMBER	SHEET
472-83287	15 OF 23

DESIGN	DRAWN	APPROVED	DATE	SCALE
			12/18/98	NONE

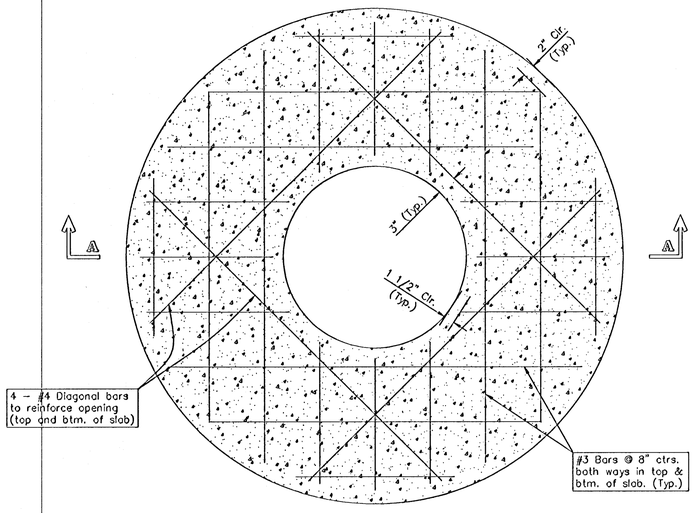
DETAILS Yardinlet



SHALLOW TYPE "P" MANHOLE



SHALLOW TYPE "C" MANHOLE



PLAN

GENERAL NOTES

1. Mortar used in masonry construction shall contain 8 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. 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.

2. 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.

3. 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.

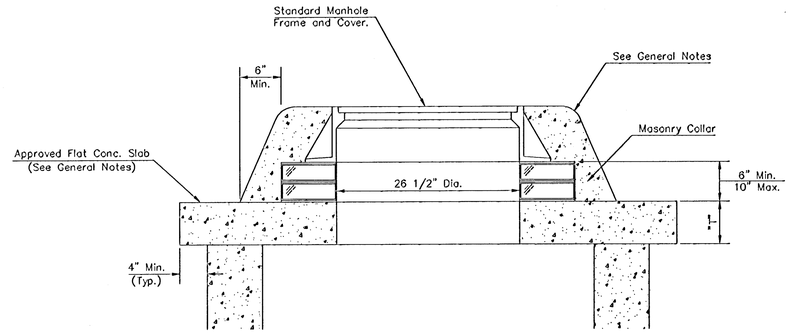
4. Pipes installed within the excavation made for the manhole shall be cradled with concrete to the limits of the manhole excavation. When clay pipe is used, the cradle shall extend to the first joint outside the manhole. The cradle shall be terminated at the clay pipe joint in a manner which will maintain 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.

5. 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.

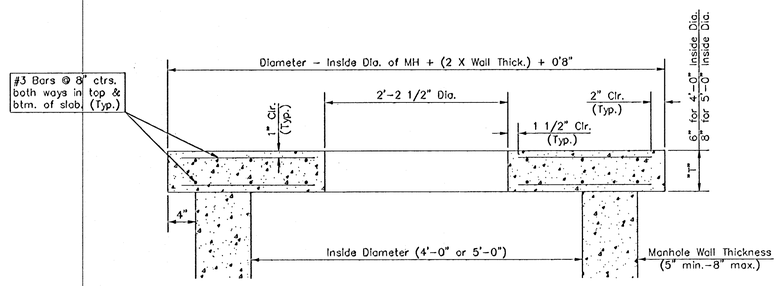
6. The crowns of inflowing pipes shall never be set lower than the crown of the outflowing pipe.

7. Standard shallow manholes type "P" and "C" shall be paid for at the unit price bid per each for the type and diameter indicated. All standard shallow manhole diameters will be 4' unless indicated otherwise.

8. All brick used in manhole construction shall meet Grade SW of ASTM C652 or C62-87.



MASONRY COLLAR DETAIL



SECTION A–A

FLAT CONCRETE SLAB DETAILS

CITY OF WICHITA, KANSAS

STD. SHALLOW MANHOLES

TYPE 'P' AND TYPE 'C'

BAUGHMAN COMPANY P.A.

ENGINEERING, SURVEYING, & PLANNING

316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

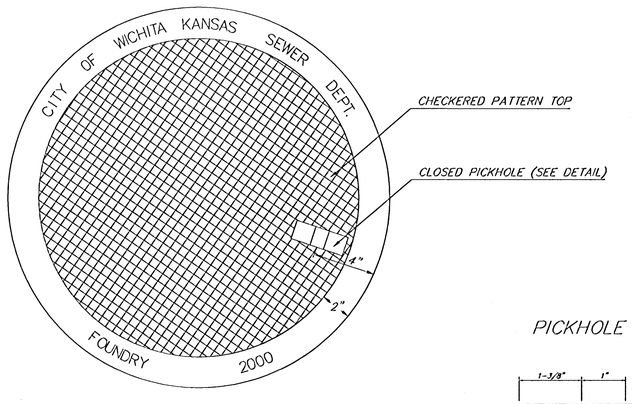
PROJECT NUMBER				SHEET
472-83267				16 OF 23
DESIGN: STAFF	DRAWN: STAFF	APPROVED: STAFF	DATE: PRESENT	SCALE: NONE

DETAIL \SHL MANH2.DWG

MANHOLE FRAME AND COVER DETAIL

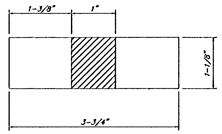
ADOPTED AS STANDARD DESIGN BY
CITY OF WICHITA, KANSAS

MANHOLE COVER
Weight = 180 Lbs.

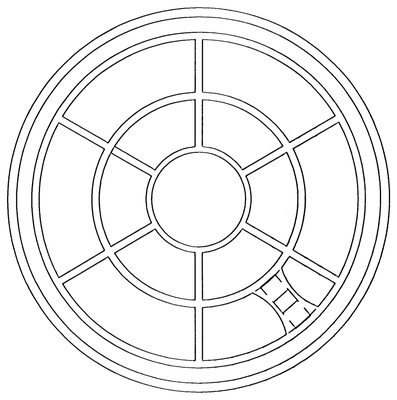


TOP VIEW

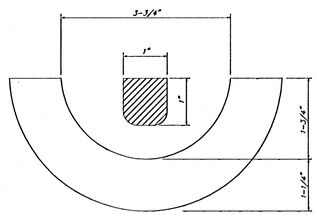
PICKHOLE DETAIL



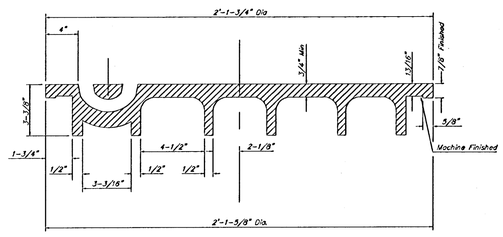
TOP VIEW



BOTTOM VIEW

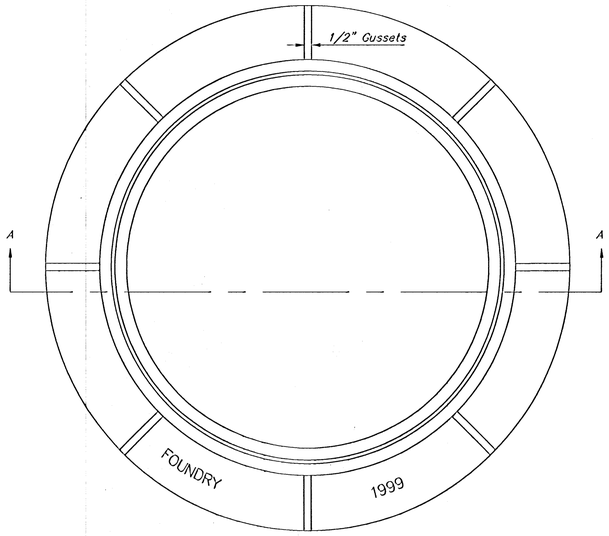


SECTION VIEW

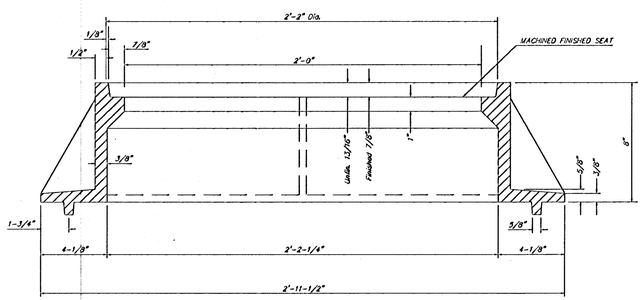


SECTION VIEW

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.

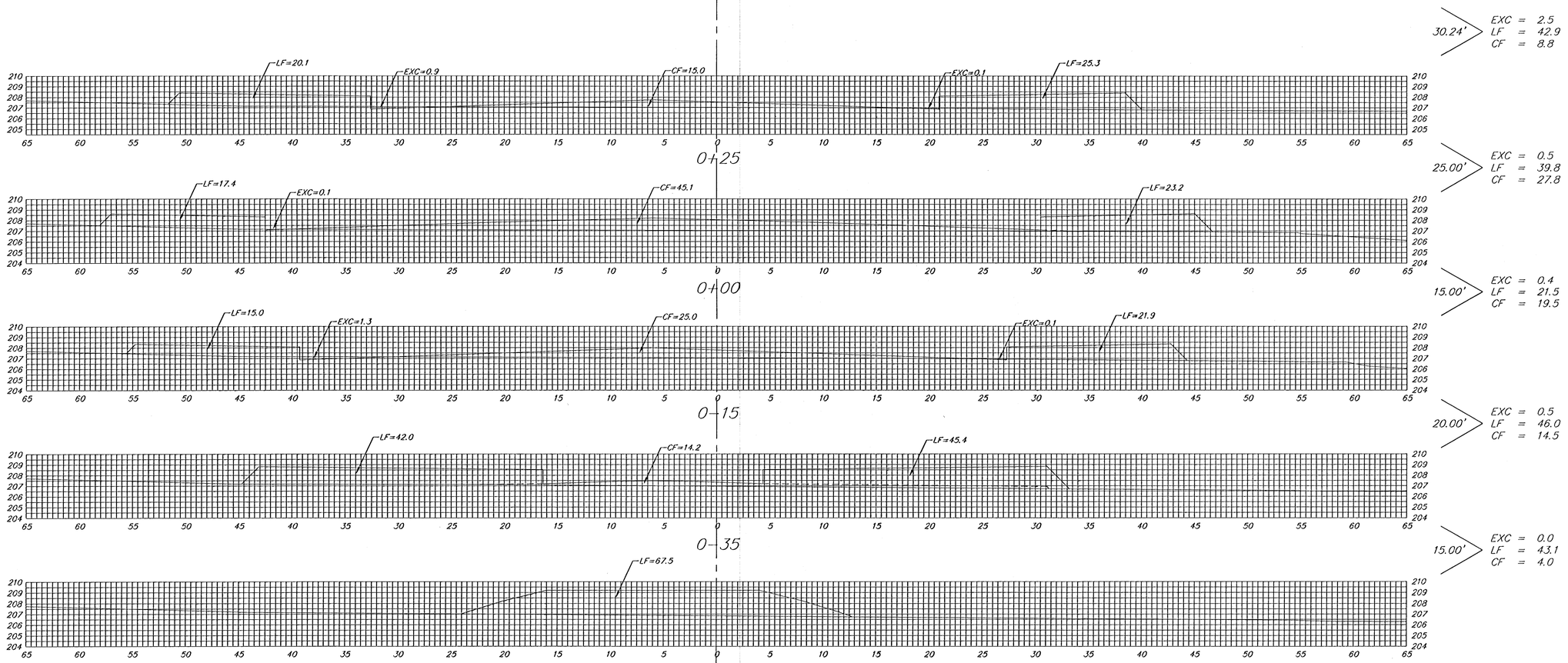
MANHOLE FRAME AND COVER DETAIL
ADOPTED AS STANDARD DESIGN BY
CITY OF WICHITA, KANSAS

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

PROJECT NUMBER				SHEET
472-83267				17 of 23
DESIGN: STAFF	DRAWN: STAFF	APPROVED	DATE: 9/22/00	SCALE: NONE

110-165-F717

Williamsburg, VA



SHEET TOTAL:
EXCAVATION = 3.9
LOOSE FILL = 193.3
COMPACTED FILL = 74.6

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

PROJECT NUMBER
472-83287

REV.

SHEET 18 OF 23

EXC = 0.0
LF = 101.1
CF = 171.7
50.00'

EXC = 0.0
LF = 103.3
CF = 205.9
50.00'

EXC = 0.0
LF = 103.1
CF = 202.1
50.00'

EXC = 0.0
LF = 101.4
CF = 175.1
50.00'

EXC = 0.0
LF = 83.1
CF = 125.7
41.65'

EXC = 0.0
LF = 48.2
CF = 84.8
32.45'

EXC = 0.0
LF = 50.5
CF = 66.8
35.06'

EXC = 0.0
LF = 74.2
CF = 41.4
40.84'

EXC = 2.2
LF = 74.7
CF = 18.2
50.00'

EXC = 14.8
LF = 49.9
CF = 1.5
50.00'

EXC = 32.5
LF = 30.7
CF = 0.0
50.00'

EXC = 29.4
LF = 33.7
CF = 0.0
50.00'

EXC = 11.5
LF = 45.6
CF = 0.7
44.76'

LF=28.4 CF=105.1
LF=28.9 CF=117.3
LF=28.4 CF=101.0
LF=27.9 CF=86.1
LF=27.3 CF=74.8
LF=26.9 CF=66.3
LF=25.9 CF=36.6
LF=26.2 CF=18.1
LF=18.8 EXC=0.6 CF=1.6
LF=11.8 EXC=13.6
LF=8.5 EXC=21.5
LF=13.3 EXC=10.3
LF=16.9 EXC=1.4 CF=0.8

LF=27.0
LF=27.3
LF=26.7
LF=26.4
LF=26.0
LF=24.9
LF=22.1
LF=14.6 EXC=1.8
LF=8.6
LF=4.2
LF=10.4
LF=14.4 EXC=2.1

6+00
5+50
5+00
4+50
4+08.35
3+75.90
3+40.84
3+00
2+50
2+00
1+50
1+00
0+55.24

44TH STREET NORTH

44TH STREET NORTH CIR

SHEET TOTAL:
EXCAVATION = 90.4
LOOSE FILL = 899.5
COMPACTED FILL = 1093.9

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

REV.

SHEET 19 OF 23

PROJECT NUMBER
472-83267

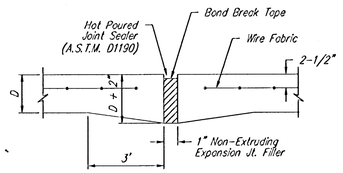
SHEET TOTAL:
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LOOSE FILL = 411.0
COMPACTED FILL = 452.5

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

REV.

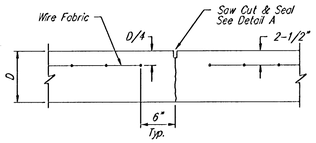
SHEET 20 OF 23

PROJECT NUMBER
472-83287

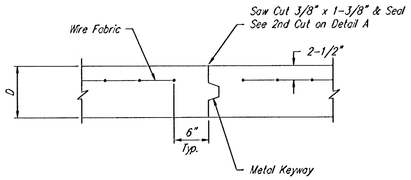


EXPANSION JOINT

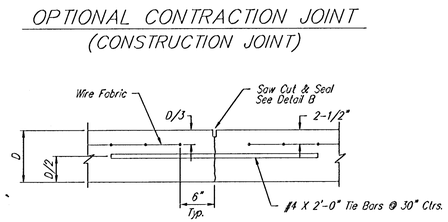
NOTE: Extra Thickness to be Subsidiary to Price of Square Yards Pavement



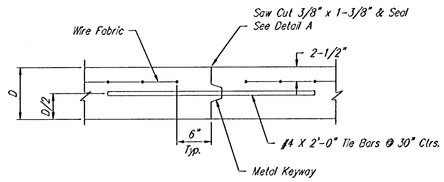
CONTRACTION JOINT DETAIL (C.J.)



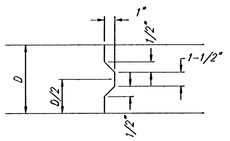
OPTIONAL CONTRACTION JOINT (CONSTRUCTION JOINT)



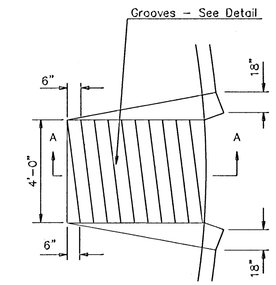
LONGITUDINAL JOINT DETAIL (L.J.)



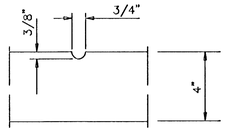
OPTIONAL LONGITUDINAL JOINT DETAIL (L.J.) (CONSTRUCTION JOINT)



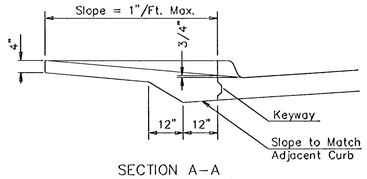
KEYWAY DETAIL



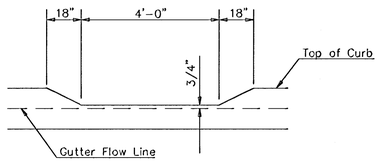
WHEELCHAIR RAMP PLAN VIEW



GROOVE DETAIL

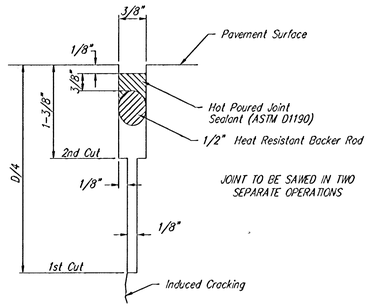


SECTION A-A

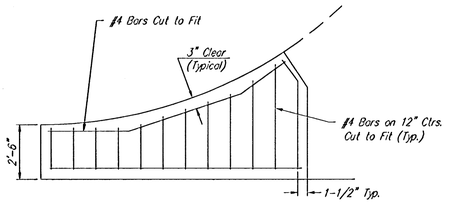


DEPRESSED CURB DETAIL

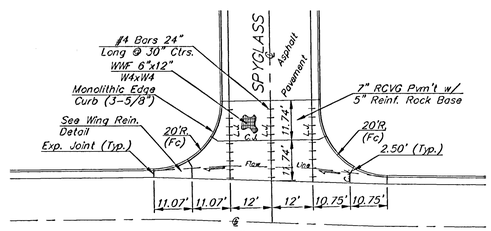
WHEELCHAIR RAMP DETAIL



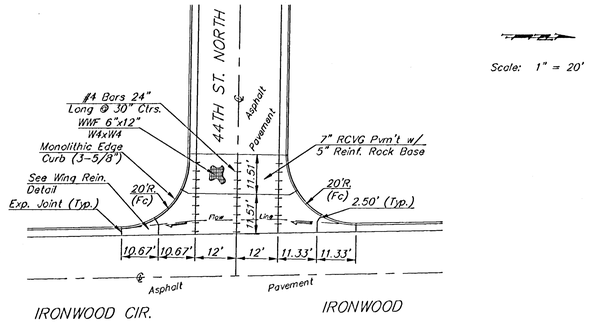
SAW JOINT DETAIL "A"



WING REINFORCING DETAIL



Scale: 1" = 20'



Scale: 1" = 20'

VALLEY GUTTER DETAILS

NOTE: 6"x12" W4xW4 Wire Fabric Reinforcing Shall Be Placed So That The Wires With The 6" Spacing Will Run Parallel With The Longitudinal Joints.

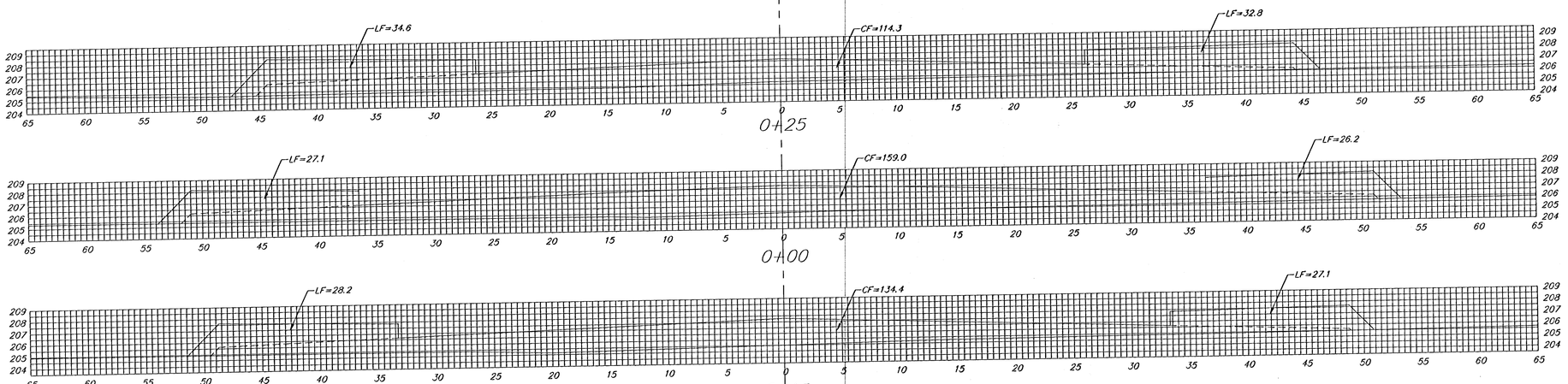
WILLOW PLACE ADDITION
VALLEY GUTTER & MISCELLANEOUS DETAILS

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

PROJECT NUMBER	SHEET
472-83287	3 OF 23

DESIGN	DRAWN	APPROVED	DATE	SCALE
BLP	JAK			NONE

Willowpl | Vgdet 00-09-E915



24.99' EXC = 0.0 LF = 56.0 CF = 90.9

25.00' EXC = 0.0 LF = 55.8 CF = 126.5

15.00' EXC = 0.0 LF = 30.1 CF = 81.5

20.00' EXC = 0.0 LF = 55.5 CF = 93.6

15.00' EXC = 0.0 LF = 59.1 CF = 32.8

SHEET TOTAL:
EXCAVATION = 0.0
LOOSE FILL = 256.6
COMPACTED FILL = 425.3

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

REV.

SHEET 21 OF 23

PROJECT NUMBER
472-83267

SHEET TOTAL:
EXCAVATION = 36.7
LOOSE FILL = 376.2
COMPACTED FILL = 252.8

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

PROJECT NUMBER
472-83287

REV.

SHEET 22 OF 23

PC 117-6

WILLOW PLACE
AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS

State of Kansas)
Sedgwick County) SS

We, Baughman Company, P.A., Surveyors in aforesaid county and state do hereby certify that we have surveyed and platted "WILLOW PLACE", an Addition to Wichita, Sedgwick County, Kansas and that the accompanying plat is a true and correct exhibit of the property surveyed, described as a tract of land lying in the NW1/4 of Sec. 29, Twp. 26-S, R-2-E of the 6th P.M., Sedgwick County, Kansas, more particularly described as follows: Commencing at the SE corner of said NW1/4; thence S89°00'08"W, 20.00 feet along the south line of said NW1/4; thence N00°49'16"W, 1825.09 feet, parallel with the east line of said NW1/4 to a point of beginning, said point being a point on a curve to the left; thence along said curve 887.25 feet, said curve having a central angle of 89°38'02", a radius of 567.15 feet, and a long chord of 799.50 feet, bearing N45°38'17"W; thence S89°32'42"W, 662.94 feet; thence S78°21'42"w, 19.59 feet to the southerly right-of-way line of Missouri Pacific Railroad; thence N61°31'26"E, 497.70 feet along said southerly line to a point lying 35.00 feet south of the north line of said NW1/4; thence N89°38'23"E, 824.88 feet, parallel with said north line, to a point on the east line of said NW1/4; thence S00°49'16"E, 792.07 feet along said east line; thence S89°10'44"W, 20.00 feet to the point of beginning.

Existing public easements and dedications being vacated by virtue of K.S.A. 12-512(b).

Baughman Company, P.A.

MICHAEL G. CONRE REGISTERED LAND SURVEYOR LS-971 3-11-2000

Michael G. Conre, Surveyor

Know all men by these presents that we, the undersigned, have caused the land in the surveyors certificate to be platted into Lots, Blocks, and Streets, to be known as "WILLOW PLACE", an Addition to Wichita, Sedgwick County, Kansas. The utility easement is hereby granted as indicated for the construction and maintenance of all public utilities. The drainage easements are hereby granted as indicated for drainage purposes. The drainage and utility easement is hereby granted as indicated for drainage purposes and for the construction and maintenance of all public utilities. The street, drainage, and utility easements are hereby granted as indicated for street related purposes, for drainage purposes, and for the construction and maintenance of all public utilities. The streets are hereby dedicated to and for the use of the public. All abutters rights of access to or from 45th Street North over and across the north line of Lots 1, 15, 16, and 17, Block A, and over and across the north line of Lots 1, 2, 3, and 4, Block B, are hereby granted to the City of Wichita, Kansas.

Forty-Fifth Street Properties, L.L.C.

Jerry D. Michaelis, Member

Brand Investments, LLC, Member, by Michael Brand, Member

State of Kansas)
Sedgwick County) SS

The foregoing instrument acknowledged before me, this 11TH day of AUGUST, 2000, by Jerry D. Michaelis, Member of Forty-Fifth Street Properties, L.L.C., on behalf of the limited liability company.

JUDITH M. TERHUNE
Notary Public - State of Kansas
My Appt. Expires 11-1-2001

Judith M. Terhune, Notary Public

My App't. Exp. 11-1-2001

This plat of "WILLOW PLACE", an Addition to Wichita, Sedgwick County, Kansas has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this 16TH day of MARCH, 2000.

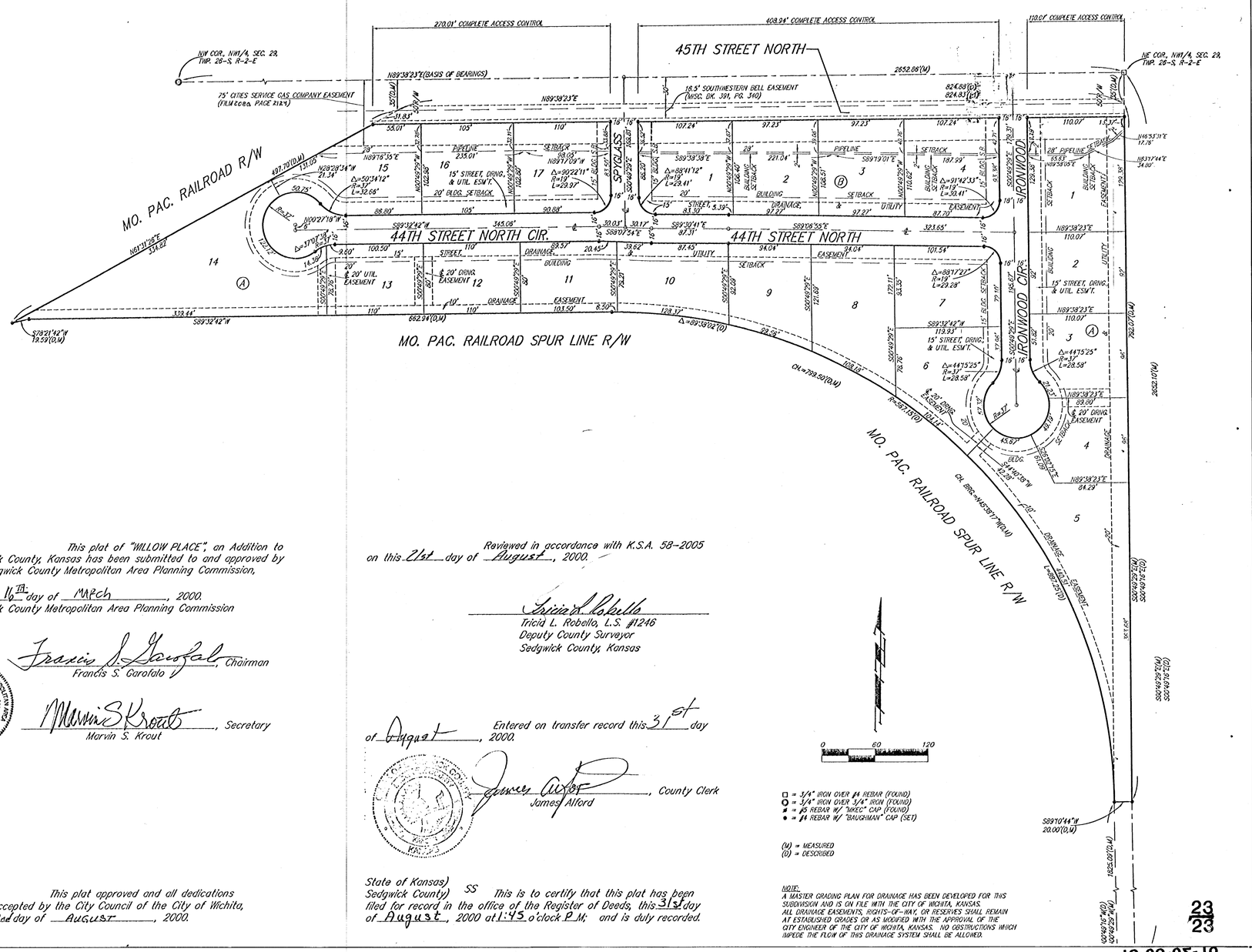
Wichita-Sedgwick County Metropolitan Area Planning Commission

WICHITA SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION SEAL KANSAS

Francis S. Garofalo, Chairman

Marvin S. Krout, Secretary

This plat approved and all dedications shown hereon accepted by the City Council of the City of Wichita, Kansas, this 22nd day of AUGUST, 2000.



Reviewed in accordance with K.S.A. 58-2005 on this 21st day of August, 2000.

Tricia L. Robello
Tricia L. Robello, L.S. #1246
Deputy County Surveyor
Sedgwick County, Kansas

Entered on transfer record this 31ST day of August, 2000.

James Alford, County Clerk

State of Kansas)
Sedgwick County) SS

This is to certify that this plat has been filed for record in the office of the Register of Deeds, this 31ST day of August, 2000 at 1:45 o'clock P.M; and is duly recorded.

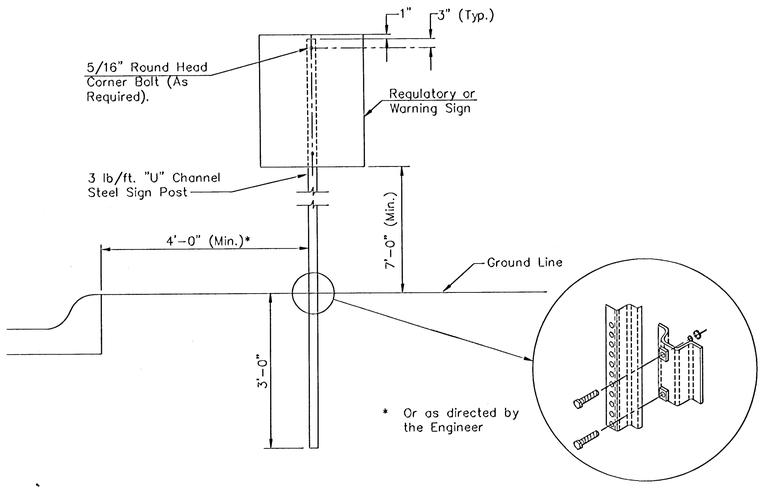
□ = 3/4" IRON OVER #4 REBAR (FOUND)
○ = 3/4" IRON OVER 3/4" IRON (FOUND)
▪ = #5 REBAR W/ "KREC" CAP (FOUND)
• = #4 REBAR W/ "BAUGHMAN" CAP (SET)

(M) = MEASURED
(D) = DESCRIBED

NOTE:
A MASTER GRADING PLAN FOR DRAINAGE HAS BEEN DEVELOPED FOR THIS SUBDIVISION AND IS ON FILE WITH THE CITY OF WICHITA, KANSAS. ALL DRAINAGE EASEMENTS, RIGHTS-OF-WAY, OR RESERVES SHALL REMAIN AT ESTABLISHED GRADES OR AS MODIFIED WITH THE APPROVAL OF THE CITY ENGINEER OF THE CITY OF WICHITA, KANSAS. NO OBSTRUCTIONS WHICH IMPEDE THE FLOW OF THIS DRAINAGE SYSTEM SHALL BE ALLOWED.

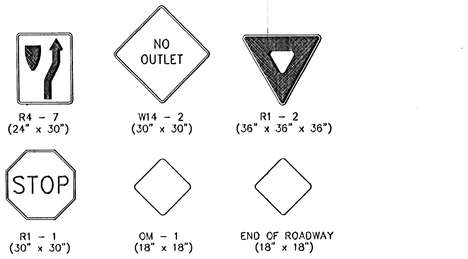
23/23

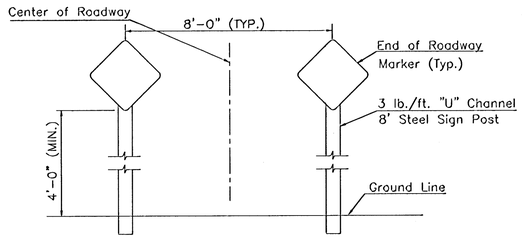
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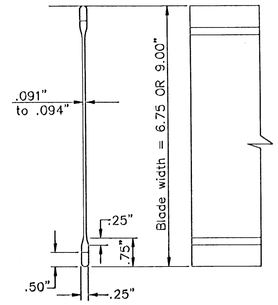
TYPICAL TRAFFIC CONTROL SIGN MOUNTING INSTALLATION

CURB AND GUTTER SECTION





TYPICAL END OF ROADWAY SIGN MOUNTING INSTALLATION



STREET NAME SIGN

BLADE DETAILS

SIGN ASSEMBLY TABLE			
STATION	OFFSET	SIGN	QUANTITY*
3+45	20' Lt.	D3 (SNS)	1
4+03	22' Lt.	D3 (SNS)	1
1+76	28' Lt.	D3 (SNS)	1
2+17	28' Lt.	D3 (SNS)	1
1+20	19' Lt.	D3 (SNS)	1
1+20	19' Rt.	R1-1 (Stop)	1
3+25	19' Lt.	D3 (SNS)	1
3+25	19' Rt.	R1-1 (Stop)	1
TOTAL			8

* For Information Only

NOTE: REFERENCES BELOW TO "STANDARD SPECIFICATIONS" DENOTE "STANDARD SPECIFICATION FOR STATE ROAD AND BRIDGE CONSTRUCTION EDITION 1990" BY THE KANSAS DEPARTMENT OF TRANSPORTATION.

1. POST ANCHORS: POSTS SHALL BE ANCHORED WITH A YIELDING BASE POST SUPPORT AS DETAILED.
2. POSTS FOR TRAFFIC CONTROL SIGNS: POSTS SHALL CONFORM TO THE REQUIREMENTS OF SUBSECTION 1620 OF THE STANDARD SPECIFICATIONS EXCEPT THAT ALL POSTS SHALL WEIGH 3 LBS./FOOT MINIMUM.
3. POSTS FOR STREET NAME SIGNS (SNS): POSTS SHALL BE 9 FEET LONG, CONSTRUCTED FROM 2 3/8" O.D. GALVANIZED STEEL PIPE WEIGHING A MINIMUM OF 3 LBS./FOOT. POSTS SHALL BE POSITIONED SO THAT THE BOTTOM BLADE IS 7 FEET ABOVE GRADE.
4. POSTS FOR END OF ROADWAY SIGN TO BE 8' LONG AND INSTALLED A MINIMUM OF 4' FROM ROADWAY TO BOTTOM OF SIGN.
5. SIGN BLANKS FOR TRAFFIC CONTROL SIGNS: SIGN BLANKS SHALL BE FABRICATED FROM 0.080" ALUMINUM ALLOY 6063-T6 CONFORMING TO THE REQUIREMENTS OF SUBSECTION 1626 OF THE STANDARD SPECIFICATIONS.
6. SIGN BLADES FOR STREET NAME SIGNS: EXTRUDED ALUMINUM BLADES SHALL BE ALUMINUM ALLOY CONFORMING TO 6063-T6 OR 5052-H38 (ASTM SPECIFICATION B221, LATEST ISSUE). BLADES SHALL HAVE AN ALODINE OR PHOSPHATE ETCHED FINISH. BLADES SHALL HAVE SQUARE CORNERS AND NO HOLES.

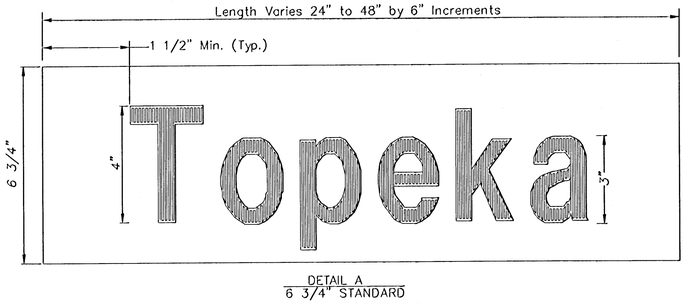
   MINIMUM BLADE LENGTH SHALL BE 24". MAXIMUM BLADE LENGTH SHALL BE 48". LENGTH VARIES BY INCREMENTS OF 6".

   BLADES BEARING THE STREET NAMES SHALL BE FIRMLY ATTACHED TO THE MOUNTING BRACKETS USING ALLEN-TYPE SET SCREWS. THE BLADES SHALL BE ORIENTED PARALLEL TO THE STREET.
7. MOUNTING BRACKETS FOR SIGNS: DIE-CAST ALUMINUM BRACKETS SHALL BE ALUMINUM ALLOY 360 HAVING A TENSILE STRENGTH OF 44,000 PSI. THE BRACKETS SHALL BE SMOOTHLY FINISHED FREE OF PITS, BURRS, AND FLAWS. EACH BRACKET SHALL BE TAPPED AND DRILLED FOR 5/16" ZINC-PLATED ALLEN-TYPE SET SCREWS HAVING SELF-LOCKING SAW-TOOTH ENDS.
8. FASTENERS: ALL STEEL FASTENERS FOR TRAFFIC CONTROL SIGNS SHALL BE GALVANIZED AND SHALL CONFORM TO THE REQUIREMENTS OF SUBSECTION 1614 OF THE STANDARD SPECIFICATIONS.
9. REFLECTIVE SHEETING: REFLECTIVE SHEETING SHALL BE TYPE II - HIGH PERFORMANCE CLASS HA IN ACCORDANCE WITH SUBSECTION 2201 OF THE STANDARD SPECIFICATIONS.
10. PROCESS INK: ALL PROCESS INK SHALL CONFORM TO THE REQUIREMENTS OF SUBSECTION 2202 OF THE STANDARD SPECIFICATIONS.
11. DETAILS: REGULATORY AND WARNING SIGNS SHALL CONFORM TO THE DETAILS IN "STANDARD HIGHWAY SIGNS", FHWA, 1979.
12. DETAILS - SNS: THE REFLECTIVE SHEETING FOR THE 6 3/4" STANDARD SIZE SNS IS TO BE THE HIGHWAY GREEN BACKGROUND WITH SILVER-WHITE #2 COPY WITH 4" UPPER CASE AND LOWER CASE PRIMARY COPY AND SUFFIX COPY, BOTH SERIES "C". FACES TO TRIM TO A 6 1/4". (SEE DETAIL A.)

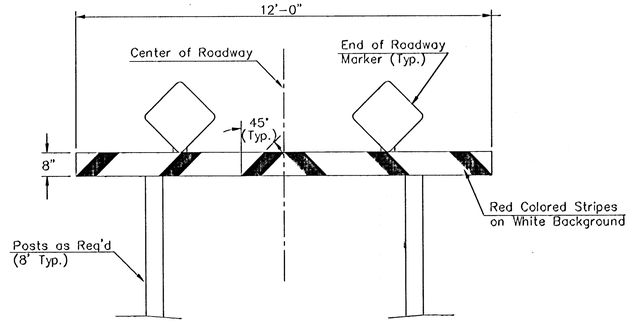
    THE REFLECTIVE SHEETING FOR THE 9" METRO SIZE SNS IS TO BE THE HIGHWAY GREEN BACKGROUND WITH SILVERWHITE #2 COPY WITH 5" UPPER CASE AND LOWER CASE PRIMARY COPY AND SUFFIX COPY, BOTH SERIES "C". THE CARDINAL DIRECTION CENTERED DIRECTLY BELOW THE BLOCK NUMBER SHALL BE AN UPPER CASE, 3" SERIES "C" LETTER. FACES TO TRIM TO A 8 1/2" WIDTH. (SEE DETAIL B.)

    FOR CUL-DE-SAC STREETS, A 9" METRO SIZE BLADE SHALL BE USED WITH THE HOUSE NUMBERS DISPLAYED BENEATH THE STREET NAME. LETTERING TO BE THE SAME AS FOR THE 6 3/4" SIZE BLADE, EXCEPT THAT THE HOUSE NUMBER INFORMATION SHALL BE 4" SERIES "C".

    SHOP DRAWINGS OF LAYOUT FOR SNS SHALL BE SUBMITTED TO THE TRAFFIC ENGINEERING DIVISION OF THE CITY OF WICHITA FOR APPROVAL PRIOR TO FABRICATION. THE FINISHED SIGNS AS SUPPLIED SHALL BE OF GOOD APPEARANCE, FREE FROM RAGGED EDGES, CRACKS SCALES OR BLISTERS AND SHALL BE CLEAN-CUT. SIGNS SHALL BE PACKED IN SUCH MANNER AS TO PREVENT DAMAGE OR DEFACEMENT DURING SHIPMENT OR STORAGE.
13. PERMANENT TRAFFIC CONTROL AND SNS: PERMANENT TRAFFIC CONTROL AND SNS SHALL BE MEASURED AND PAID FOR AT THE LUMP SUM PRICE FOR SIGNING. THE PAYMENT AS SET FORTH ABOVE SHALL BE CONSIDERED FULL COMPENSATION FOR ALL EXCAVATION, BACKFILLING. POSTS, ANCHORS, FASTENERS, MATERIALS, LABOR, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK.

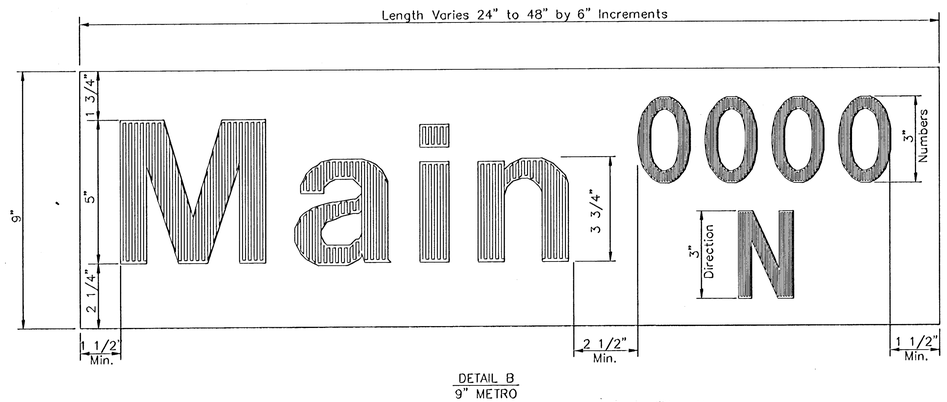


DETAIL A
6 3/4" STANDARD

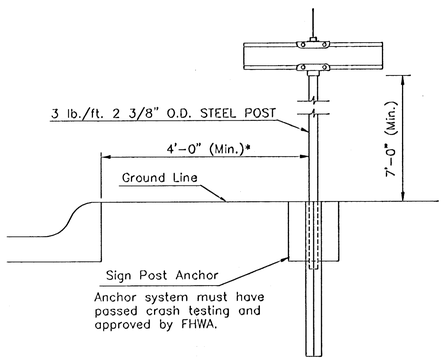


TYPE I BARRICADE DETAIL W/ E.O.R. MARKER

STREET NAME	NO. BLADES REQ'D	
	6 3/4" STD	9" METRO
Spyglass	2	
44th St Cir	1	
44th St	3	
Spyglass 4500 N		1
45th St 8500 E		1
Ironwood	1	
Ironwood Cir	1	
Ironwood 4500 N		1
45th St 8700 E		1



DETAIL B
9" METRO



TYPICAL STREET NAME SIGN MOUNTING INSTALLATION

CURB AND GUTTER SECTION

City of Wichita Public Works

SIGNING DETAIL

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

PROJECT NUMBER	SHEET
472-83287	4 OF 23

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

Williamson Signdet

SCALE: 1" = 20'
• = Iron

WILLOW PLACE ADDITION

44TH STREET NORTH CIR.

SPYGLASS

Match Line

MO. PAC. RAILROAD R/W

MO. PAC. RAILROAD SPUR LINE R/W

Sta. 0+00
P.V.I.
Elev. = 208.90
30' V.C.

Sta. 0+55.24

Sta. 0+43.30

Sta. 1+45.00
P.V.I.
Elev. = 207.60
53.02' V.C.

Sta. 3+40.84

Sta. 3+45.06-P.I.

Sta. 3+75.90
= ℄ Spyglass

Sta. 3+75.90
P.V.I.
Elev. = 209.85
No V.C.

Sta. 4+05.26-P.I.

Sta. 4+08.35

-0.691%
-0.766%
-0.557%
-0.541%
+0.970%
+0.978%
+0.564%
+0.543%

45'
52°06'00"
38°12'48"
178°37'55"
177°40'36"
87°18'25"
92°41'35"

Const. 7" Reinforced Concrete Valley Gutter Pavement on 5" Rein. Rock Base w/Monolithic Edge Curb. (3-5/8") (See Detail, Sheet 3.)

Construct Roll-Type Curb & Gutter (3-5/8") (Both Sides)

Valve Box Elev. = 209.80

Valve Box Elev. = 210.05

Sta. 3+45, 20' Lt. Install Std. D3 (SNS) Ass'y per City Specs. " Spyglass " & " 44th St Cir " (See Detail, Sheet 4)

Sta. 4+03, 20' Lt. Install Std. D3 (SNS) Ass'y per City Specs. " Spyglass " & " 44th St " (See Detail, Sheet 4)

Const. Sediment Barrier (Both Sides) (See Detail, Sheet 8)

Const. Std. Type 1A Inlet Hook-Up (Both Sides)

Construct 5" A.C. Pavement w/5" Reinf. Rock Base.

Install subdivision benchmark (Flat Survey Marker No. 8134-08 3" top diameter) in top of curb. Cost shall be incidental to L.F. Roll-Height Curb & Gutter.

Warped Crown (See Note)

Existing Fence

15' Str., Drng., & Util. Esm't

20' Drng. Esm't

20' Util. Esm't

10' Drng. Esm't

NOTE: Warp Crown to Conform to the Aprox. Center of Proposed Pavement.

Roll type curb & gutter to be constructed on the pavement on this sheet. Top of curb elevation are given for full height curb.

WILLOW PLACE ADDITION
44TH STREET NORTH CIR.
LOTS 11-17, BLOCK A

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

PROJECT NUMBER 472-83287

SHEET 5 OF 23

DESIGN	DRAWN	APPROVED	DATE	SCALE
BLP	JAK			NOTED

00-09-5815

Willowplc1.Sht1

SCALE: 1" = 20'
• = Iron

WILLOW PLACE ADDITION

+0.970% | +0.564% | -0.519%

Sta. 3+40.84 | Sta. 3+75.90 = ℄ Spyglass | Sta. 4+08.35 = Match Line | Sta. 4+92.57 – P.I. | P.V.I. Elev. = 210.80 35' V.C. | Sta. 5+50.00 | Sta. 7+81.19 | Sta. 8+16.22 = ℄ Ironwood

SPYGLASS V. C.

IRONWOOD V. C.

44TH STREET NORTH CIR.

44TH STREET NORTH

IRONWOOD CIR.

Iron @ Sta. 3+39.84

Valve Box Elev. = 210.05

Iron @ Sta. 4+09.33

Construct 5" A.C. Pavement w/5" Reinf. Rock Base.

Sta. 7+81.19 End Construction of 5" A.C. Pavement w/ 5" Reinf. Rock Base

Valve Box Elev. = 209.55

Install subdivision benchmark (Flat Survey Marker No. 81.34–08 3" top diameter) in top of curb. Cost shall be incidental to L.F. Roll–Height Curb & Gutter.

Construct Roll–Type Curb & Gutter (3–5/8") (Both Sides)

Trans. form Full Cr. to 1/2 Cr. in 10'

Existing Fence

Sta. 3+45.06 – P.I. | Sta. 3+75.90 P.V.I. Elev. = 209.85 No V.C. | Sta. 4+05.26 – P.I. | Sta. 4+92.57 – P.I. | Sta. 5+50.00 P.V.I. Elev. = 210.80 35' V.C. | Sta. 7+81.19 | Sta. 8+16.22 = ℄ Ironwood Cir.

Subdivision Bench Marks

Street & Station	Location Description	Elevation
44th Street North Cir. 3+40.84, 14.25' Lt.	Adjacent to Fire Hydrant at S. End of W. Curb Return of 44th Street North Cir. & Spyglass	
44th Street North 7+81.19, 14.25' Lt.	Adjacent to Fire Hydrant at W. End of N. Curb Return of 44th Street North & Ironwood	

Roll type curb & gutter to be constructed on the pavement on this sheet.
Top of curb elevation are given for full height curb.

WILLOW PLACE ADDITION
44TH STREET NORTH
STA. 4+05.26 TO STA. 8+16.22

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

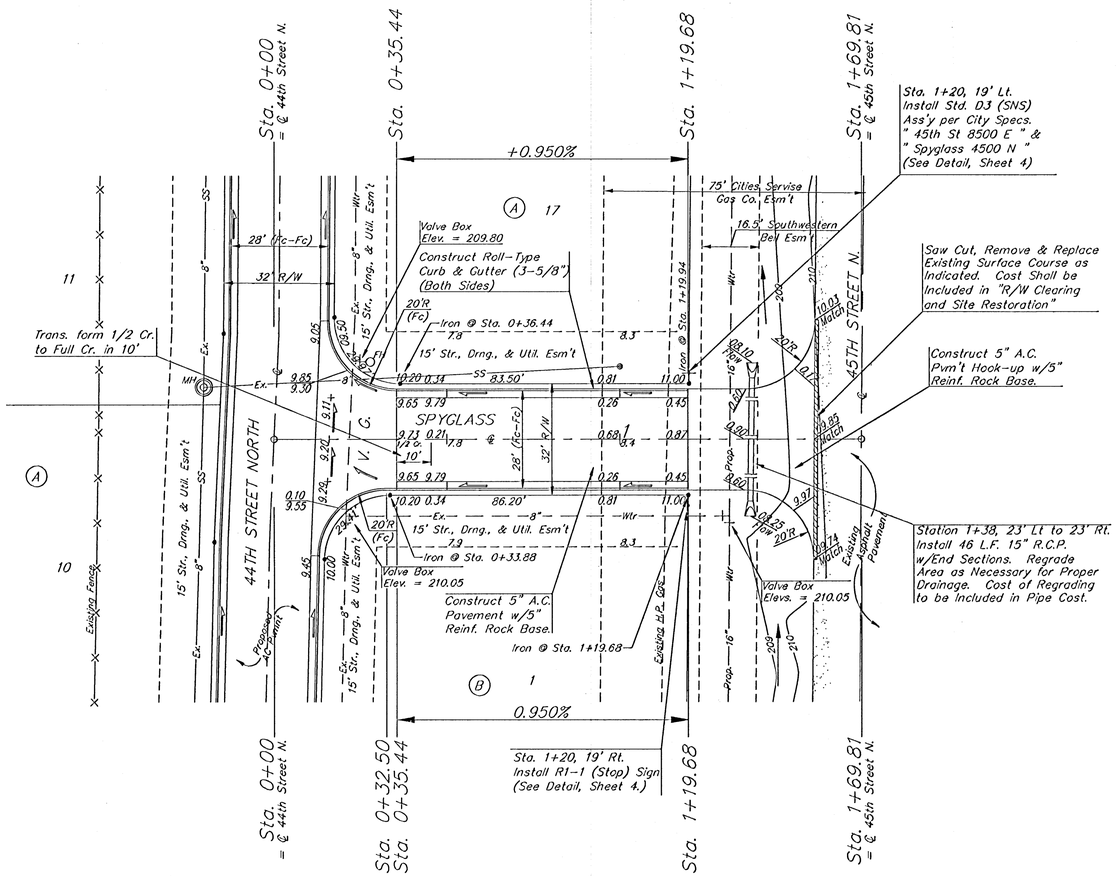
PROJECT NUMBER	SHEET
472-83267	6 OF 23

DESIGN	DRAWN	APPROVED	DATE	SCALE
BLP	JAK			NOTED

Willowpl1.Sht2 00-09-2815

SCALE: 1" = 20'
• = Iron

WILLOW PLACE ADDITION



Note: The Paving Contractor shall coordinate with the Water Main contractor that is constructing the 16" water main in 45th St. N. The pavement hookups shall not be constructed until the water main at the crossings have been installed.

WILLOW PLACE ADDITION
SPYGLASS
STA. 0+00 TO STA. 1+69.81

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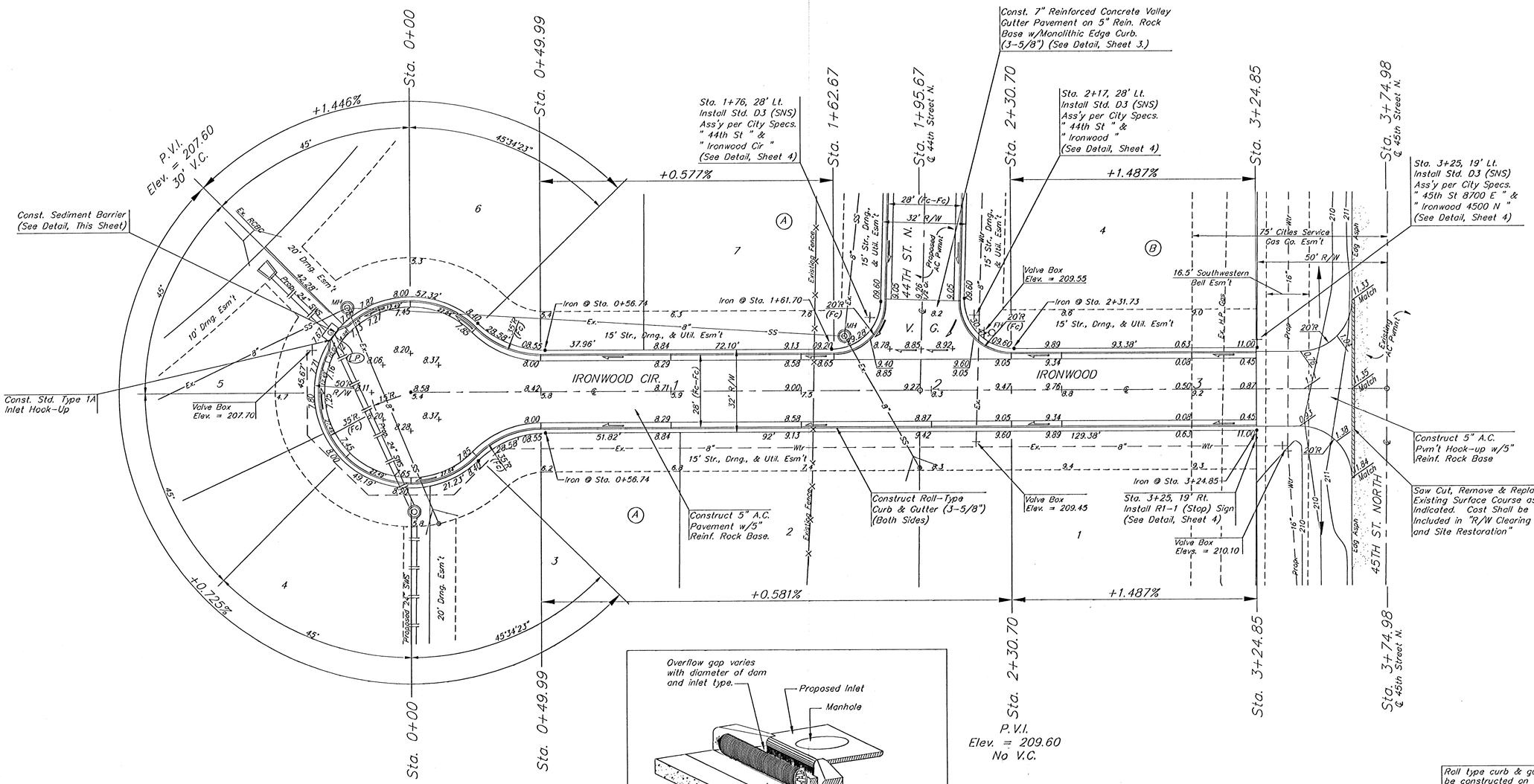
PROJECT NUMBER	SHEET
472-83267	7 OF 23

DESIGN	DRAWN	APPROVED	DATE	SCALE
BLP	JAK			NOTED

00-09-6815
Willowplc\Str3

WILLOW PLACE ADDITION

SCALE: 1" = 20'
• = Iron



WILLOW PLACE ADDITION

INLET PROTECTION

Perforated Pipe w/ Gravel

Roll type curb & gutter to be constructed on the pavement on this sheet. Top of curb elevation are given for full height curb.

Note: The Paving Contractor shall coordinate with the Water Main contractor that is constructing the 16" water main in 45th St. N. The pavement hookups shall not be constructed until the water main at the crossings have been installed.

WILLOW PLACE ADDITION
IRONWOOD & IRONWOOD CIR.
STA. 0+00 TO STA. 3+74.98

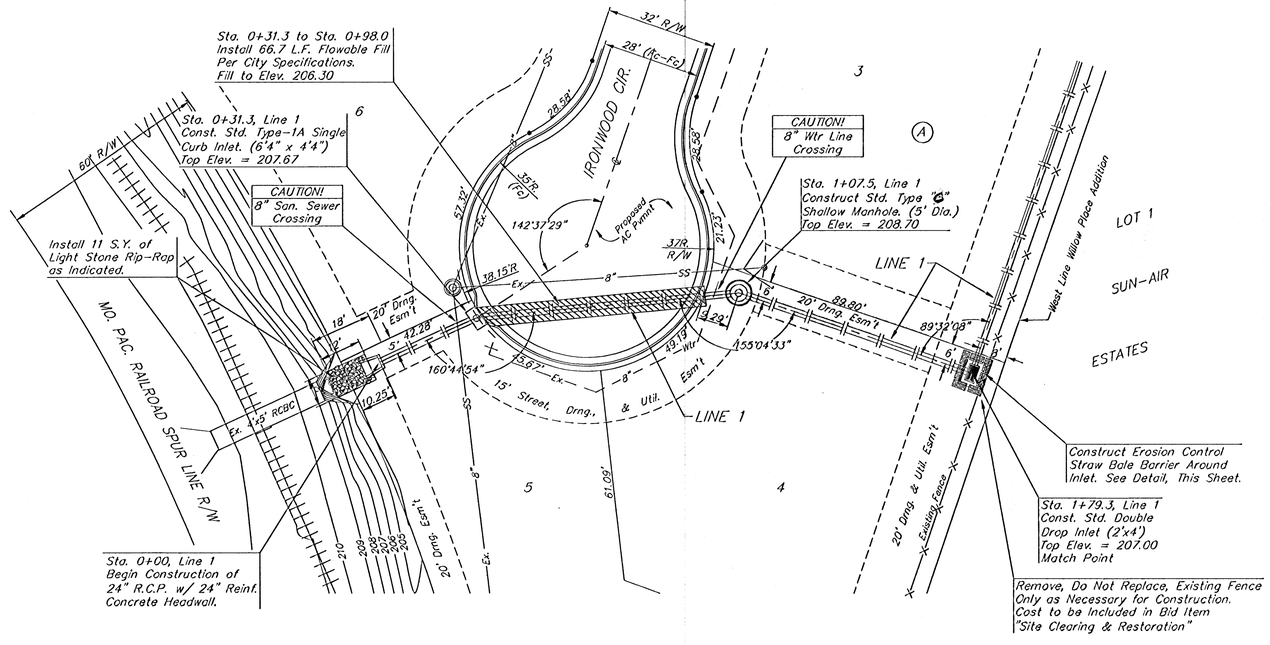
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PROJECT NUMBER	SHEET
472-83287	8 OF 23

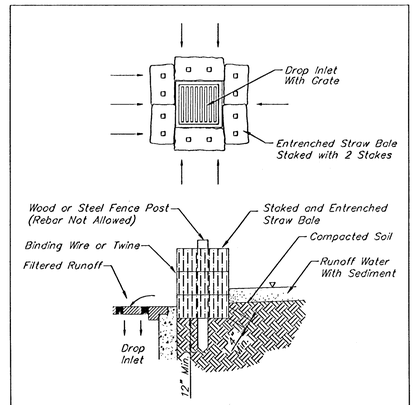
DESIGN	DRAWN	APPROVED	DATE	SCALE
BLP	JAK			NOTED

00-08-6815
Willowplc\St4

WILLOW PLACE ADDITION

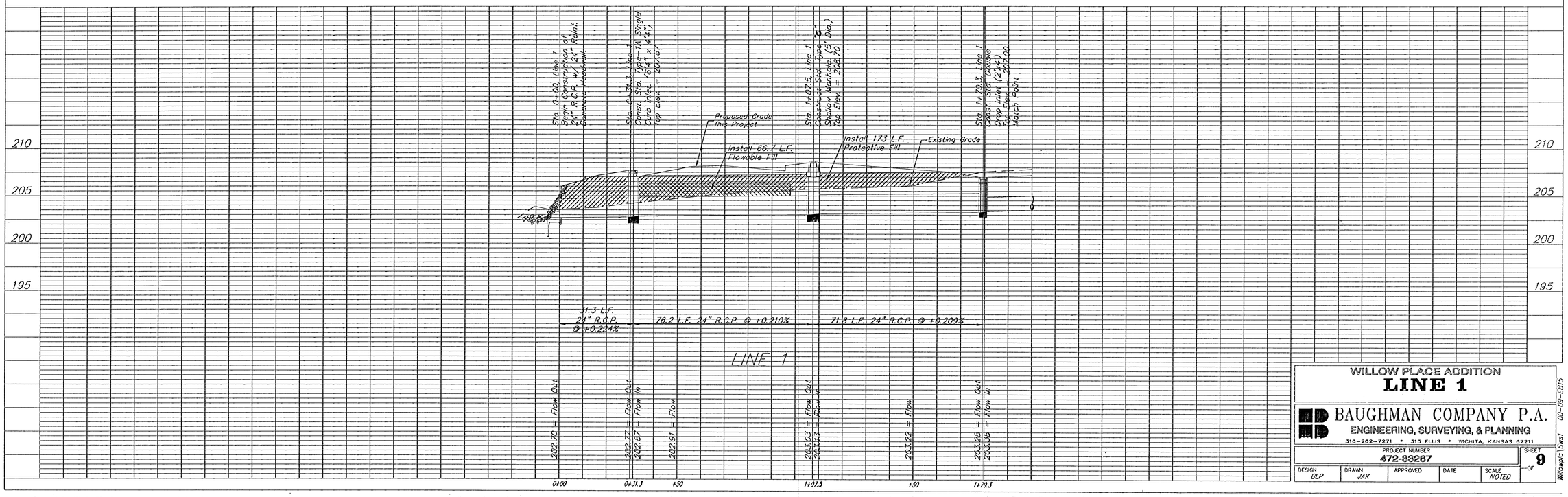


SCALE:
1" = 20' HORIZONTAL
1" = 5' VERTICAL
• = IRON



Straw Bale Barrier Detail

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



WILLOW PLACE ADDITION
LINE 1

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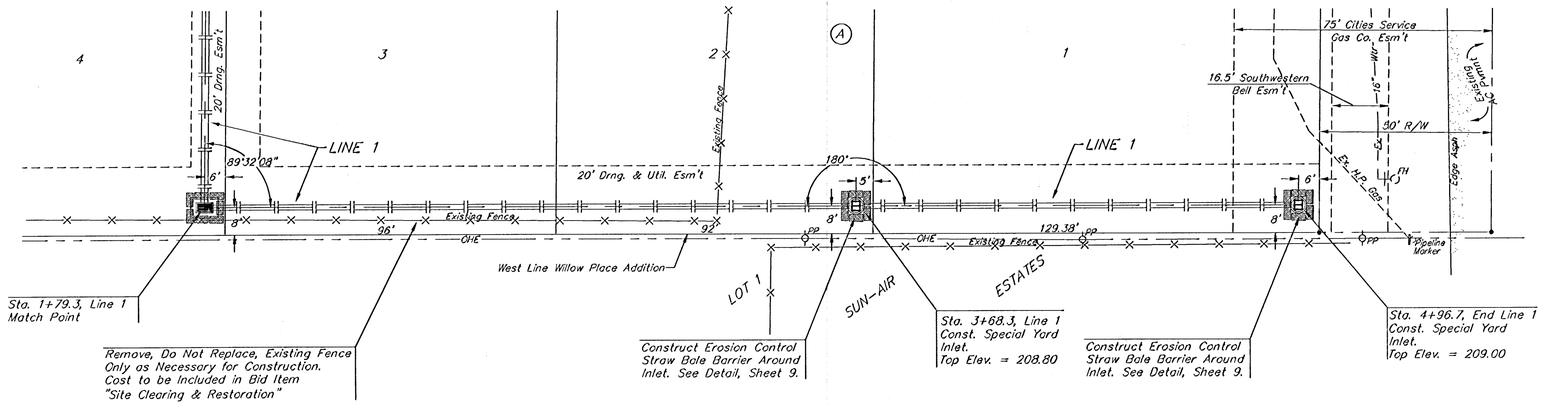
PROJECT NUMBER	SHEET
472-83287	9 OF

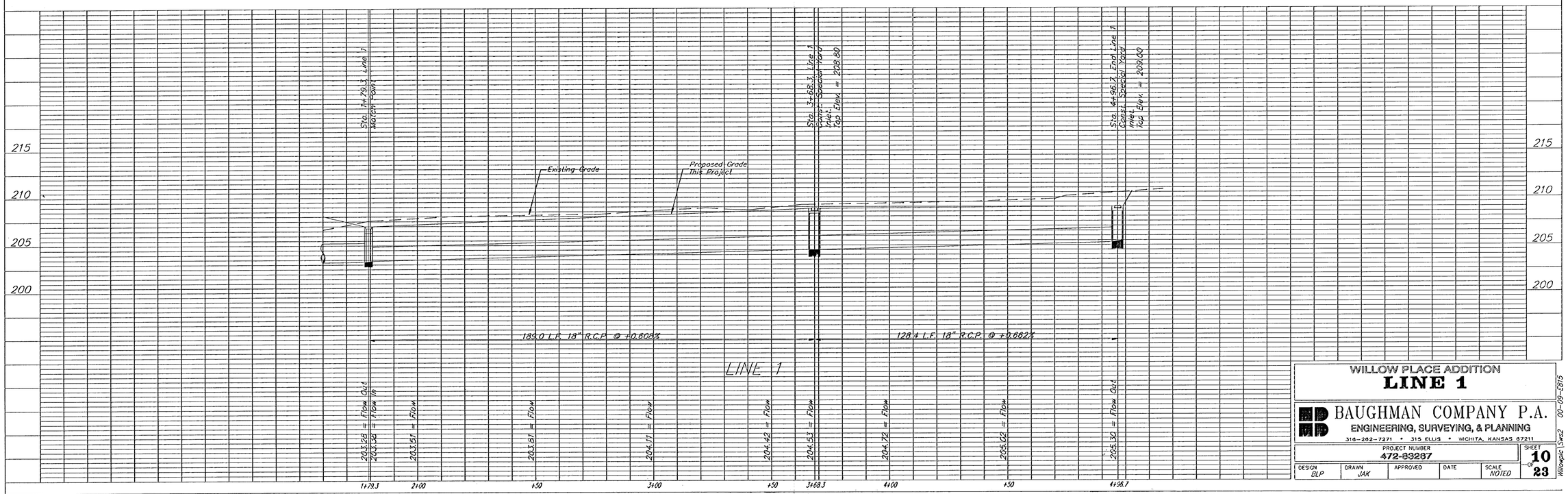
DESIGN	DRAWN	APPROVED	DATE	SCALE
BLP	JAK			NOTED

Willowpl1.Sht 00-09-0815

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

WILLOW PLACE ADDITION





WILLOW PLACE ADDITION
LINE 1

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PROJECT NUMBER				SHEET
472-83287				10 OF 23
DESIGN BLP	DRAWN JAK	APPROVED	DATE	SCALE NOTED

00-09-2815
Willowpl1.Sw52