STORM WATER SEWER IMPROVEMENTS
TO SERVE
Messiah Baptist Church

Private Project Number

779 PPS (607861)

CITY OF WICHITA, KANSAS

Michael E. Lindebak, P.E. City Engineer

March, 1998

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:

Cablevision	262-0661
or	263-2061
K.P.L. Gas Service Company	263-7511
Kansas Gas & Electric Company	264-1141
Southwestern Bell Telephone Company	1-800-344-7233
City of Wichita Water Department	268-4908
City of Wichita Sewer Maintenance	268-4071

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

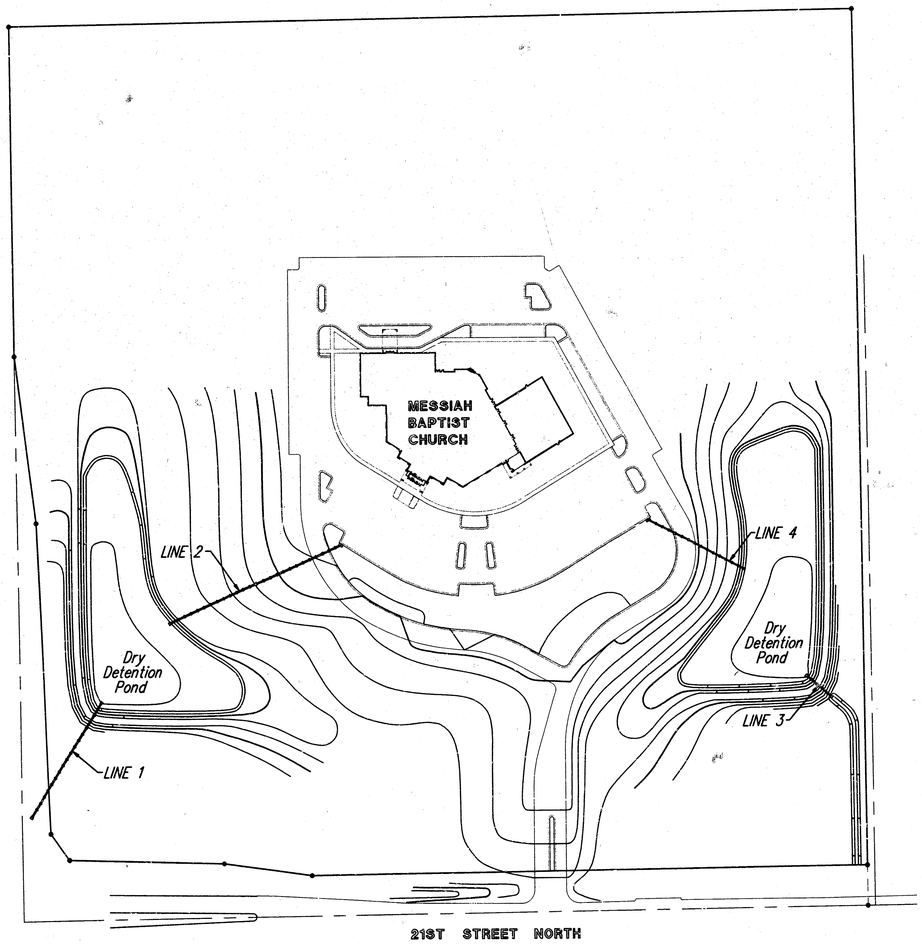
3. All areas disturbed by construction operations shall by seeded with rye grass at a rate of 300 lbs/acre immediately following construction in that area. Ground shall be prepared per City of Wichita specifications prior to seeding.

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. 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.

6. It will be the Contractor's responsibility to field check the project area to determine the extent of Site Clearing and Restoration to be performed.

7. Contractor shall not start work on the project until the project inspector is assigned to the project and is present on the site. Any work done without inspection will be required to be uncovered for inspection.



0 50 100

Scale: 1" = 100'

BENCHMARK:

GREENWICH AND 21st ST. NORTH CITY OF WICHITA BENCHMARK -- DISC 41' SOUTH AND 58' WEST OF IRON CTR LINE BOTH. 17.0' SW OF ASPHALT, 14.2' EAST OF FACE P.P. 17.0' WEST OF FACE P.P. ELEVATION = 1361.38 (MSL)

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5. Line 2 Plan/Profile
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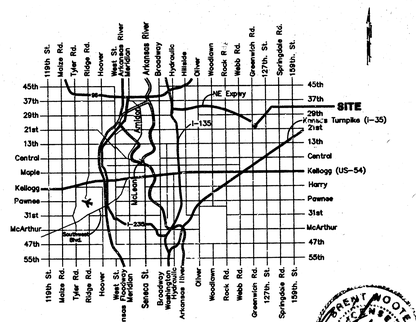
7. Type-1 Curb Inlet Detail
8. Ring & Cover Detail
9. Copy of Messiah Baptist Church 4th Addition Plat

APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA
Storm Sewer VRH 3/17/98

NOTE TO CONTRACTORS

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).

BOOKED
8-24-99
MCG
D-431



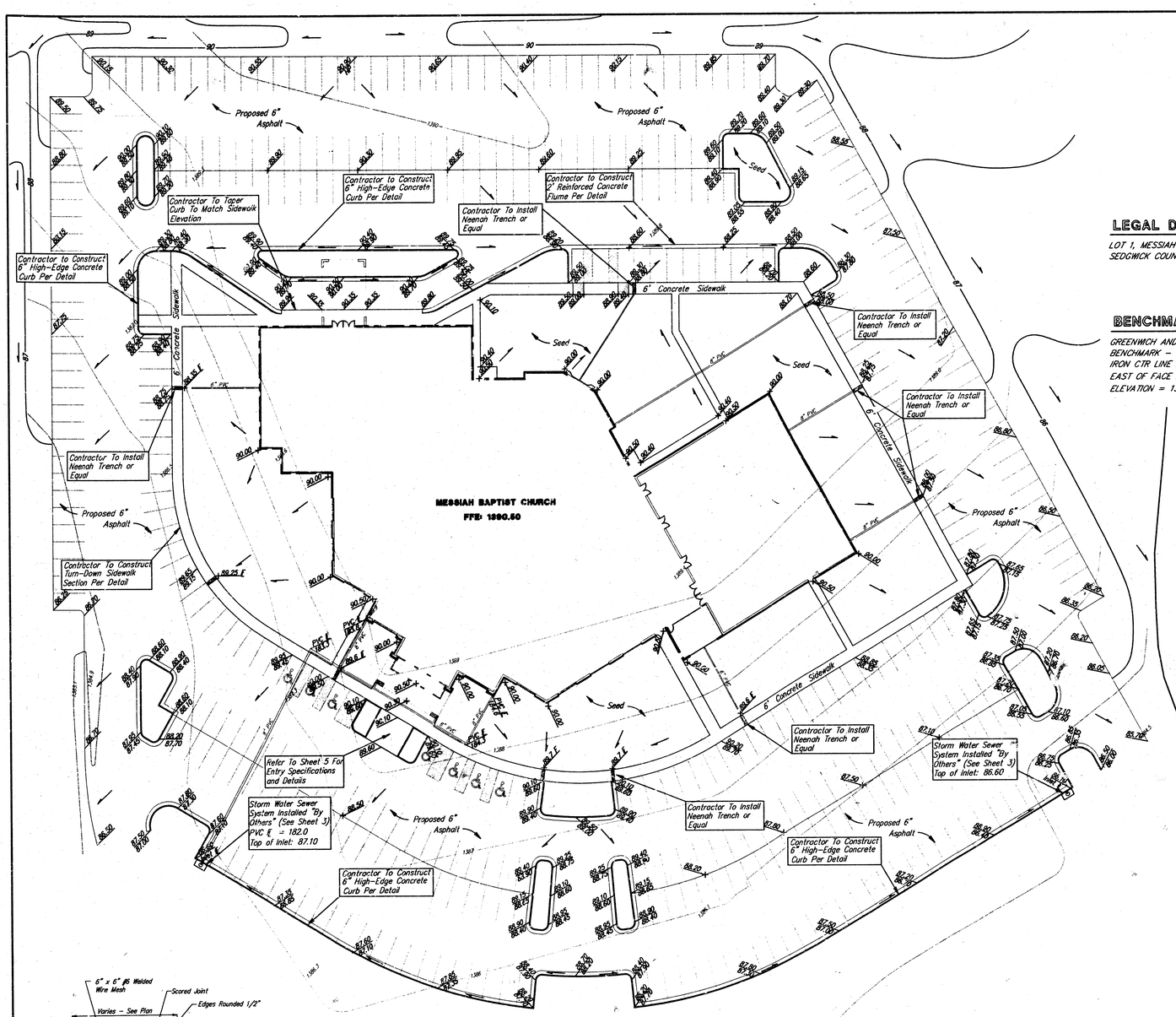
Vicinity Map



PROJECT INSPECTED BY BAUGHMAN
ASBUILT 5/98 BAUGHMAN CO.-DY 3/17/98.

BOOKED

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



SCALE: 1" = 30'

LEGAL DESCRIPTION:

LOT 1, MESSIAH BAPTIST CHURCH 4TH ADDITION, SEDGWICK COUNTY, KANSAS

BENCHMARK:

GREENWICH AND 21st ST. NORTH CITY OF WICHITA BENCHMARK – DISC 41' SOUTH AND 58' WEST OF IRON CTR LINE BOTH. 17.0' SW OF ASPHALT, 14.2' EAST OF FACE P.P. 17.0' WEST OF FACE P.P. ELEVATION = 1361.38 (MSL)

GRADING NOTES:

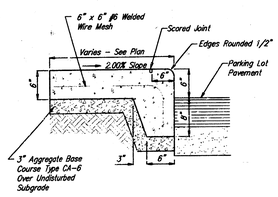
1. Contractor will be required to provide notice to utility companies a minimum of twenty-four (24) hours prior to any excavation, as follows:

   Kansas One-Call 687-2470

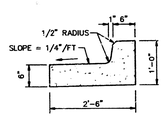
   The Contractor must notify the following in case of an emergency.

Cablevision	262-4270
or	263-2061
K.P.L. Gas Service Company	383-8650
Kansas Gas & Electric Company	383-8600
Southwestern Bell Telephone Company	1-571-2611

2. Exist. utilities and their locations, as shown on the plans, represent the best information obtainable for design. Location information hus been obtained from the various utility companies and is either from company record drawings or company-provided field locations. The Contractor will be required to work around existing utilities which do not conflict with proposed construction.
3. Traffic affected by the construction on this project shall be handled in accordance with the latest edition of the Manual on Uniform Traffic Control Devices.
4. The Contractor to verify utility locations prior to construction of this project.
5. All disturbed areas shall be seeded with Rebel II fescue at the rate of 340 lbs. per acre. Fertilizer (13-13-13) shall be applied at the rate of 100 lbs. per acre.
6. Signing and striping shall be installed in accordance with City of Wichita Specifications and Codes. Striping shall be painted markings in conformance with the latest edition of the Standard Specifications for State Road and Bridge Construction by the Kansas Department of Transportation.
7. All striping shall be solid, 4" in width and shall be yellow in color.
8. All trees and shrubs in direct conflict with construction shall be removed.
9. Paved Lot to be constructed with 6" asphaltic concrete pavement (4" bituminous base/2" A.C. surface) and subgrade to be compacted to 98% Standard Density and treated with 25 lbs./s.y. Pebble Quick Lime. Asphaltic pavement to conform with City of Wichita pavement specifications.
10. Utility service connections are to be installed per applicable City codes
11. Contractor to ensure positive drainage away from building foundation and turf areas to proposed sidewalk trench frame openings or across sidewalks.
12. Contractor to maintain a minimum of .5% slope on proposed PVC roof drain pipes throughout project.



TYP. CURB-WALK SECTION
NOT TO SCALE



TYP. LOW EDGE CURB AND GUTTER SECTION
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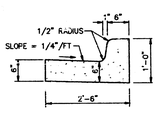

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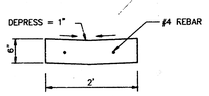
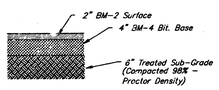
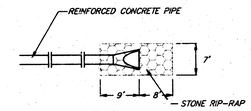


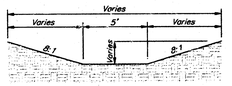
TYP. CONCRETE SWALE SECTION
NOT TO SCALE



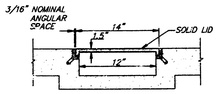
6" ASPHALT PAVEMENT SECTION
NOT TO SCALE



TYPICAL RIP-RAP DETAIL
NOT TO SCALE



TYPICAL DRAINAGE CHANNEL SECTION
NOT TO SCALE



NEENAH LIGHT DUTY TRENCH FRAME (R-4991-DX)
NOT TO SCALE

Revised March 16, 1998 JAB

MESSIAH BAPTIST CHURCH
SITE GRADING
PARKING LOT GRADES

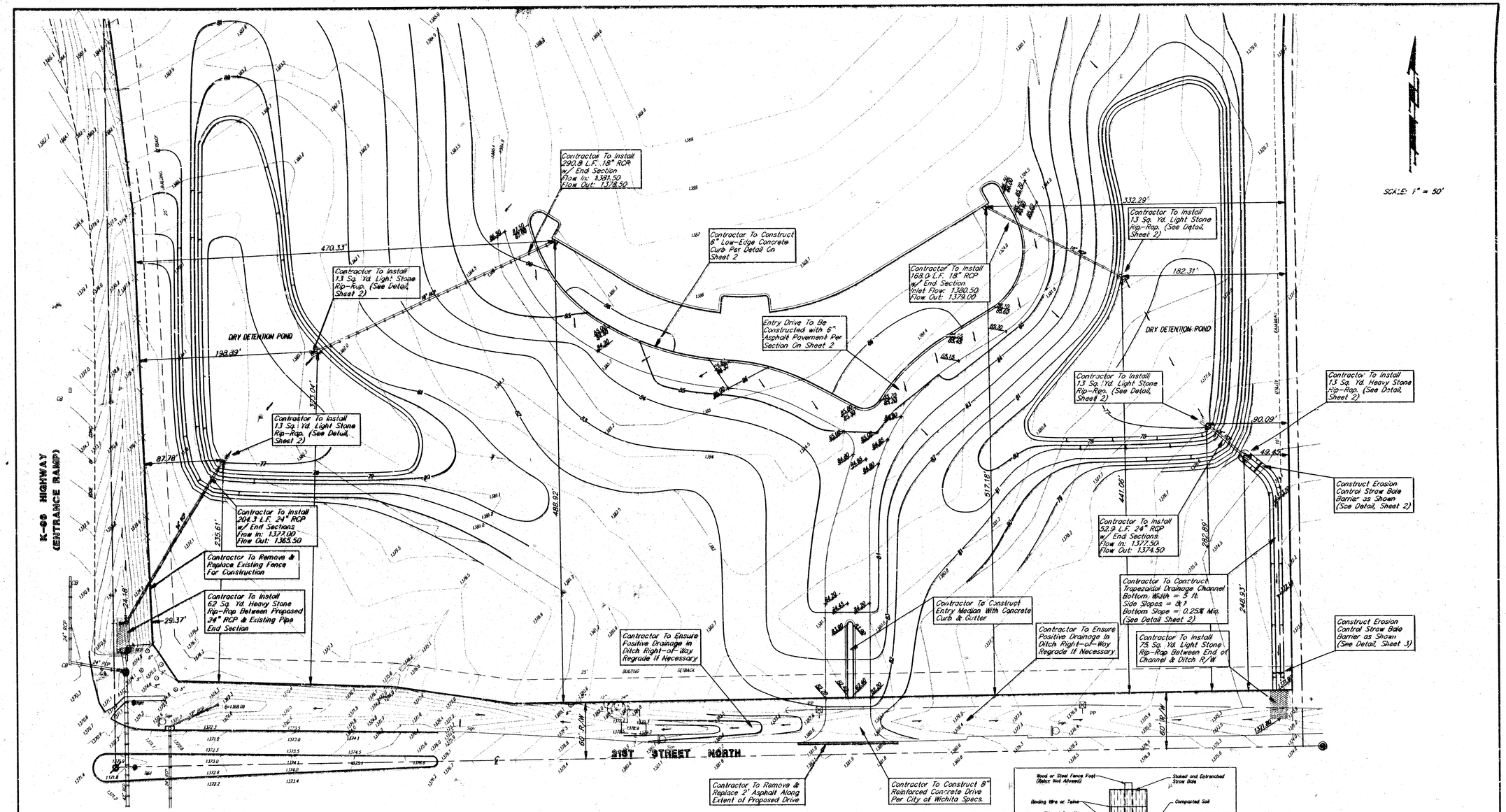
BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316 262 7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER 779 PPS (607861)

SHEET 2 OF 9

DESIGN	DRAWN	APPROVED	DATE	SCALE
NBW	JAB	NBW	12/21/97	1" = 30'

ENG\MESSIAH\grading



Straw Bale Barrier Detail

LEGAL DESCRIPTION:

LOT 1, MESSIAH BAPTIST CHURCH 4TH ADDITION, SEDGWICK COUNTY, KANSAS

BENCHMARK:

GREENWICH AND 21st ST. NORTH CITY OF WICHITA BENCHMARK – DISC 41' SOUTH AND 58' WEST OF IRON CTR LINE BOTH. 17.0' SW OF ASPHALT, 14.2' EAST OF FACE P.P. 17.0' WEST OF FACE P.P. ELEVATION = 1361.38 (MSL)

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

Cablevision	262-4270
K.P.L. Gas Service Company	263-2061
Kansas Gas & Electric Company or Southwestern Bell Telephone Company	383-8650 383-8000 1-571-2611

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4. The Contractor to verify utility locations prior to construction of this project.
5. All disturbed areas shall be seeded with Rebel II fescue at the rate of 340 lbs. per acre. Fertilizer (13-13-13) shall be applied at the rate of 100 lbs. per acre.
8. All trees and shrubs in direct conflict with construction shall be removed.
9. Entry drive to be constructed with 6" asphaltic concrete pavement (4" bituminous base/2" A.C. surface) and subgrade to be compacted to 95% Standard Density and treated with 25 lbs./s.y. Pebble Quick Lime. Asphaltic pavement to conform with City of Wichita pavement specifications.
10. Contractor is to ensure that all on site drainage is directed into the proposed detention ponds or ditch right-of-way
11. Contractor to obtain necessary KDOT permits for drainage construction in the K-96 ramp Right-of-way.
12. Contractor to obtain necessary Sedgwick County highway permits for access to 21st Street North.

Revised March 16, 1998 JMN
Revised February 13, 1998 BLG
Revised February 9, 1998 BLG

MESSIAH BAPTIST CHURCH

SITE GRADING

BAUGHMAN COMPANY P. A.
ENGINEERING, SURVEYING, & PLANNING
316-262-2271 • 315 ELLIS • WICHITA, KANSAS 67211

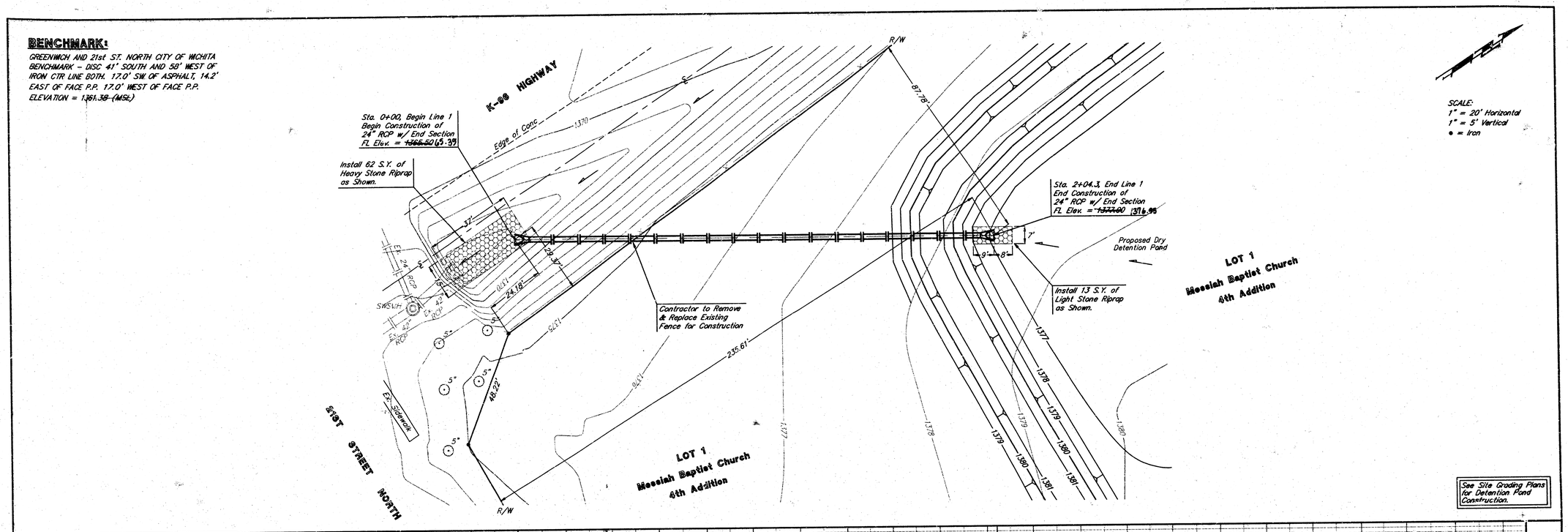
PROJECT NUMBER	SHEET
779 PPS (607861)	3 OF 9

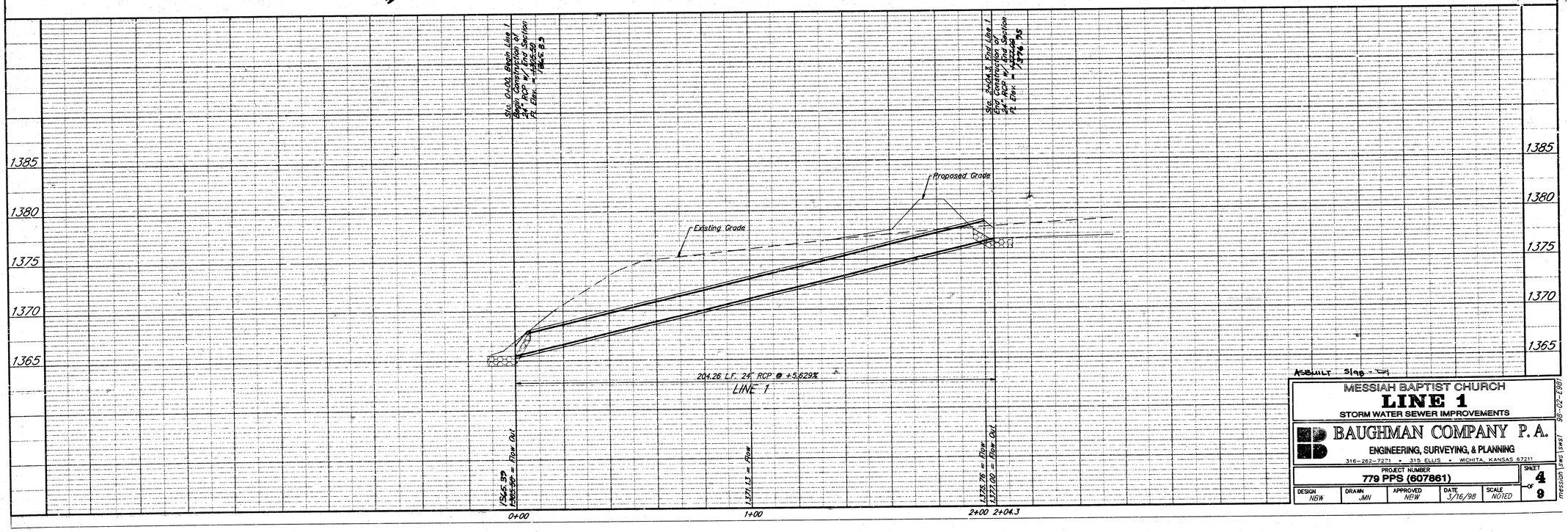
DESIGN	DRAWN	APPROVED	DATE	SCALE
NBW	JAB	NBW	12/21/97	1"=50'

mission grade

BENCHMARK:

GREENWICH AND 21st ST. NORTH CITY OF WICHITA BENCHMARK – DISC 41' SOUTH AND 58' WEST OF IRON CTR LINE BOTH. 17.0' SW. OF ASPHALT, 14.2' EAST OF FACE P.P. 17.0' WEST OF FACE P.P. ELEVATION = ~~1361.38 (MSL)~~





ASBUILT 5/98 - DH

MESSIAH BAPTIST CHURCH

LINE 1

STORM WATER SEWER IMPROVEMENTS

BAUGHMAN COMPANY P.A.

ENGINEERING, SURVEYING, & PLANNING

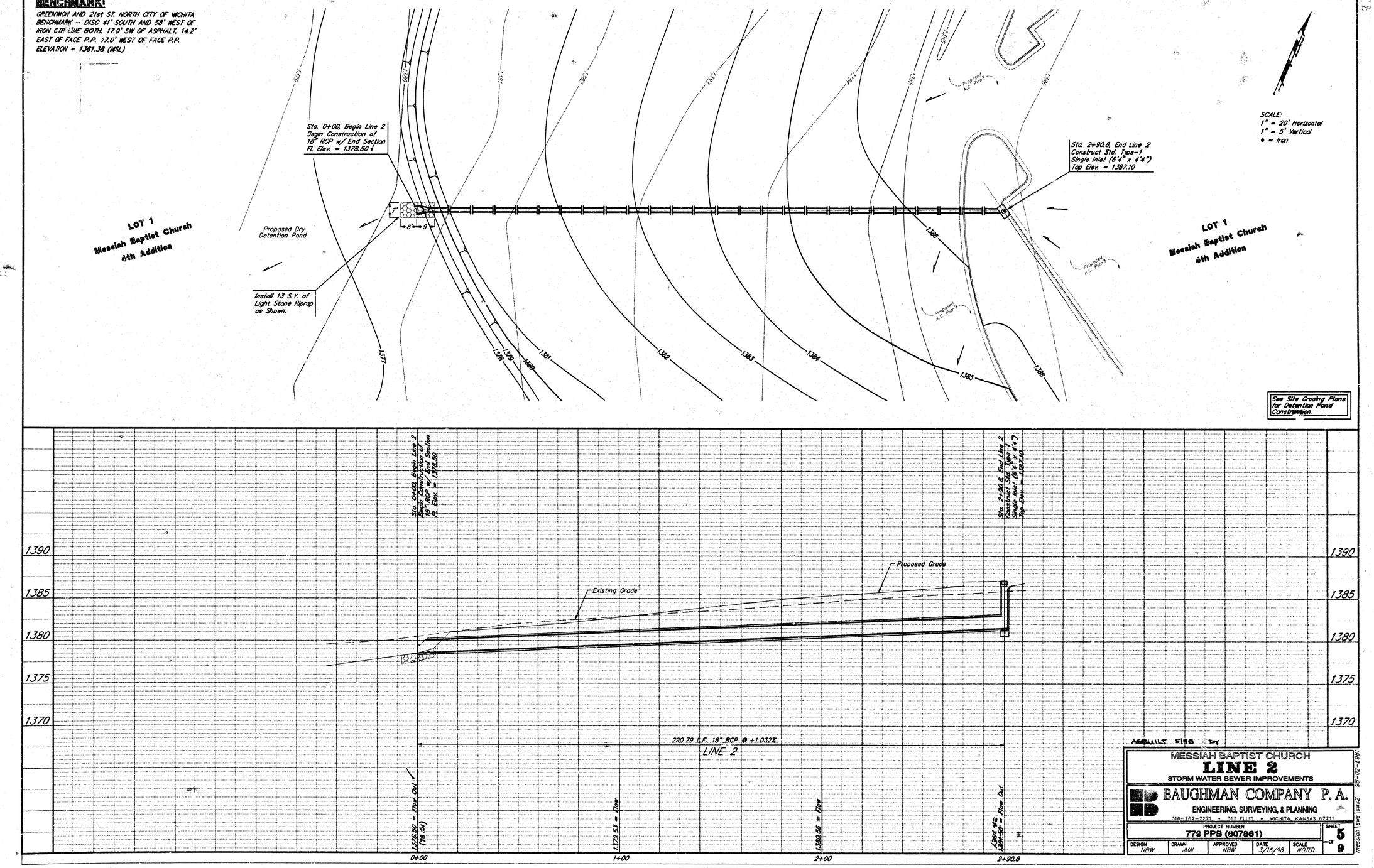
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER					SHEET
779 PPS (607861)					4 OF 9
DESIGN NBW	DRAWN JMN	APPROVED NBW	DATE 3/16/98	SCALE NOTED	

messiah sws sws1 98-02-E981

BENCHMARK:

GREENWICH AND 21st ST. NORTH CITY OF WICHITA BENCHMARK – DISC 41' SOUTH AND 58' WEST OF IRON CTR LINE BOTH. 17.0' SW OF ASPHALT, 14.2' EAST OF FACE P.P. 17.0' WEST OF FACE P.P. ELEVATION = 1361.38 (MSL)



ASBUILT 5/98 - DY

MESSIAH BAPTIST CHURCH

LINE 2

STORM WATER SEWER IMPROVEMENTS

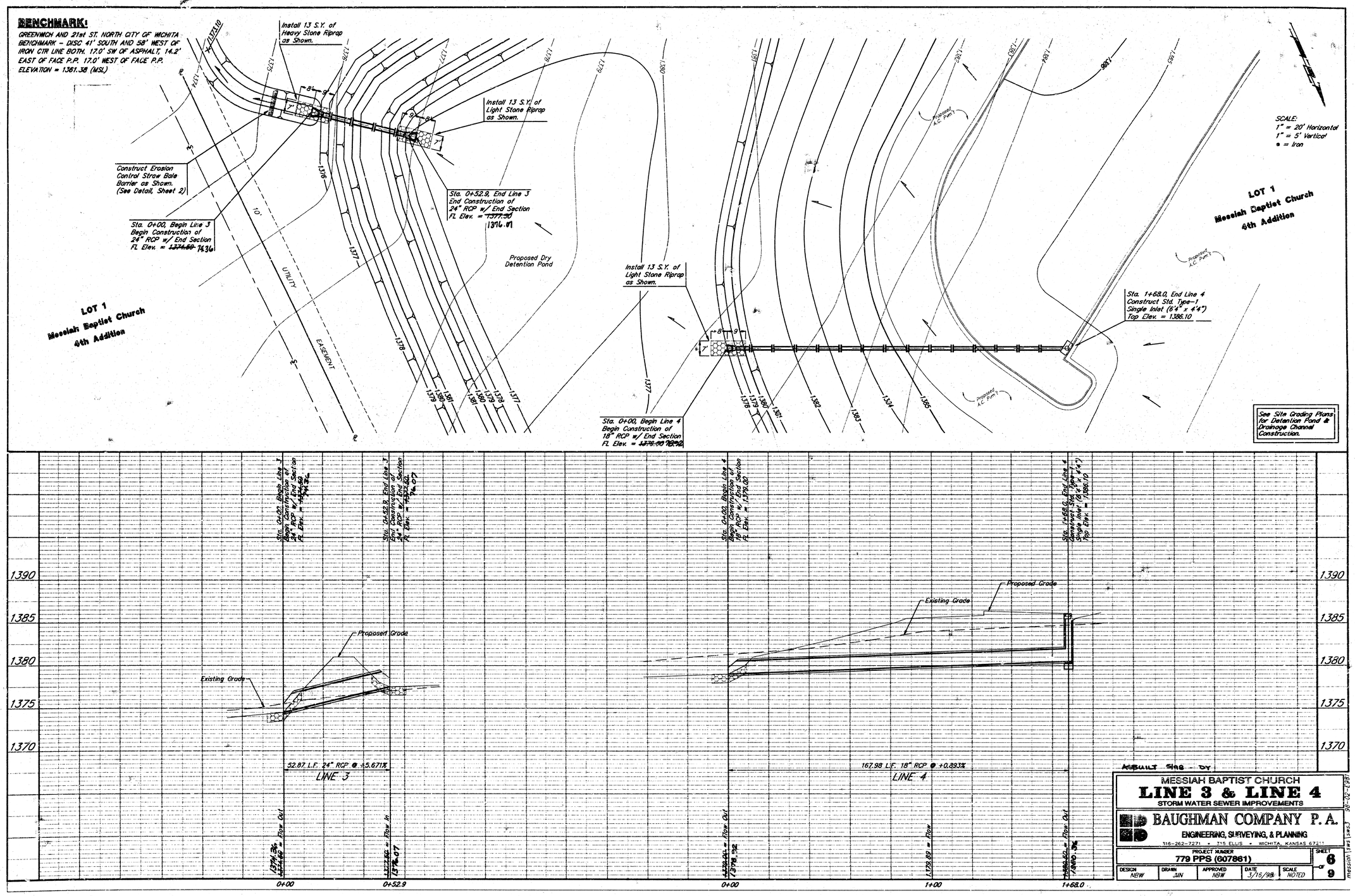
BAUGHMAN COMPANY P. A.

ENGINEERING, SURVEYING, & PLANNING

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

PROJECT NUMBER					SHEET
779 PPS (607861)					5 OF 9
DESIGN	DRAWN	APPROVED	DATE	SCALE	
NBW	JMN	NBW	3/16/98	NOTED	

messiah | sws | sws2 98-02-E981



ASBUILT SIGN - DY

MESSIAH BAPTIST CHURCH

LINE 3 & LINE 4

STORM WATER SEWER IMPROVEMENTS

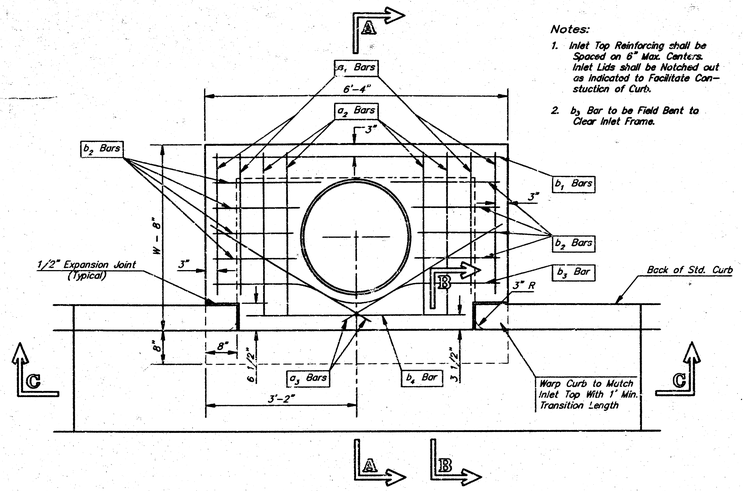
BAUGHMAN COMPANY P.A.

ENGINEERING, SURVEYING, & PLANNING

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

PROJECT NUMBER					SHEET
779 PPS (607861)					6 OF 9
DESIGN NBW	DRAWN JMN	APPROVED NBW	DATE 3/16/98	SCALE NOTED	

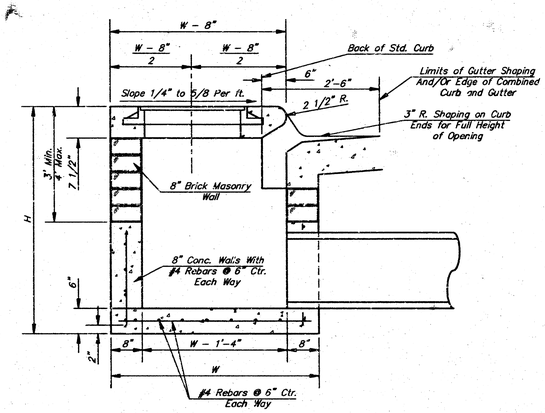
messiah\sws\sws3 98-02-E98



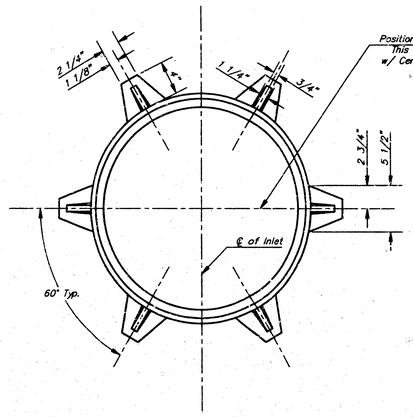
PLAN

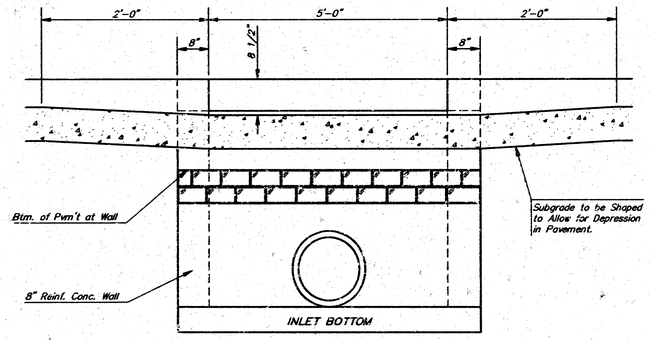
Notes:

1. Inlet Top Reinforcing shall be Spaced on 6" Max. Centers. Inlet Lids shall be Notched out as Indicated to Facilitate Construction of Curb.
2. b_3 Bar to be Field Bent to Clear Inlet Frame.

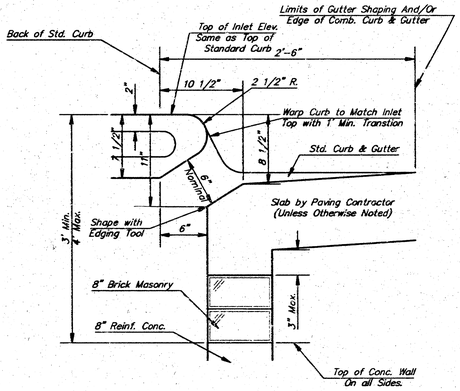


SECTION A–A

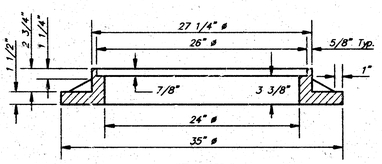




SECTION C–C



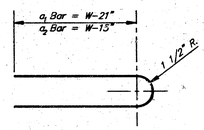
SECTION B–B



Wt. = 180 lbs.

MANHOLE RING AND COVER

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



BENDING DIAGRAM

STEEL SCHEDULE

BAR		a_1	a_2	a_3	b_1 W=4'-4"	b_1 W=5'-4"	b_1 W=6'-4"	b_1 W=7'-4"	b_1 W=8'-4"	b_2	b_3	b_4	Wt. Lbs.
NUMBER		4	4	2	1	3	5	7	9	6	1	1	
SIZE		#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#6	
LENGTH	W=4'-4"	5'-7"	6'-7"	4'-0"	6'-1"	–	–	–	–	1'-9"	6'-2"	4'-8"	60±
	W=5'-4"	7'-7"	8'-7"	5'-0"	–	6'-1"	–	–	–	1'-9"	6'-2"	4'-8"	81±
	W=6'-4"	9'-7"	10'-7"	6'-0"	–	–	6'-1"	–	–	1'-9"	6'-2"	4'-8"	101±
	W=7'-4"	11'-7"	12'-7"	7'-0"	–	–	–	6'-1"	–	1'-9"	6'-2"	4'-8"	121±
	W=8'-4"	13'-7"	14'-7"	8'-0"	–	–	–	–	6'-1"	1'-9"	6'-2"	4'-8"	141±

Note: a_3 Bars to be Placed Approx. 2" Below Top of Inlet Cover.

STANDARD CURB INLET PRECAST TOPS

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

GENERAL NOTES

1. 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.
2. 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.
3. Inlet invert shall be shaped with 8 sack sand mix concrete to create flow channels and to increase hydraulic efficiency such that the inlet will be self cleaning between all inlet and/or outlet pipes.
4. The ends of all pipes installed in inlets shall be cut off flush with the inside face of the inlet wall.

Revised – Dec. 21, 1984

CITY OF WICHITA, KANSAS

TYPE 1 CURB INLET

INLET OPENING = 6"X5'-0"

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

PROJECT NUMBER 779 PPS (607861)

SHEET 7 OF 9

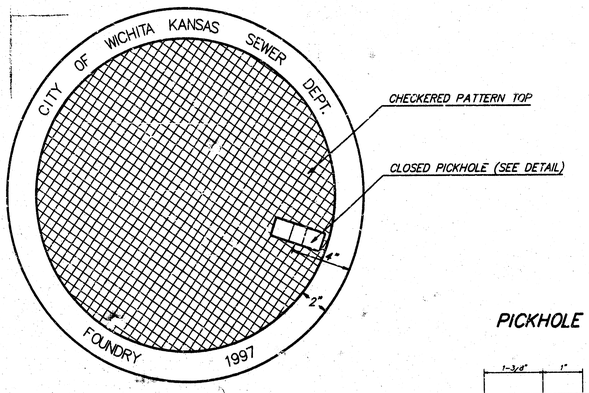
DESIGN	DRAWN	APPROVED	DATE	SCALE
C.O.W.	STAFF			NONE

DETAILS\STP1-S 98-02-E981

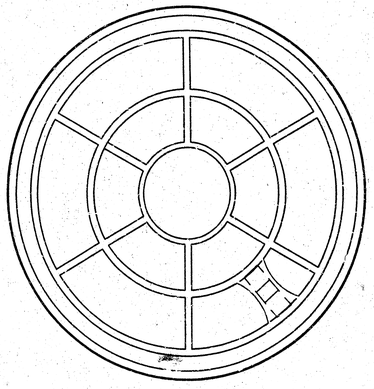
MANHOLE FRAME AND COVER DETAIL

ADOPTED AS STANDARD DESIGN BY
CITY OF WICHITA, KANSAS

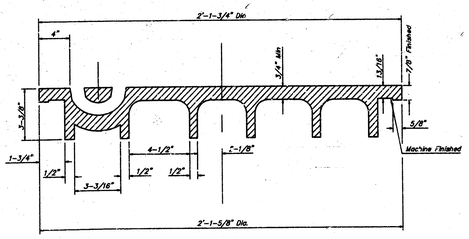
MANHOLE COVER
Weight = 180 Lbs.



TOP VIEW

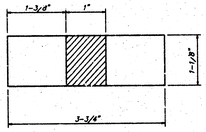


BOTTOM VIEW

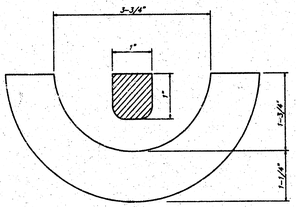


SECTION VIEW

PICKHOLE DETAIL

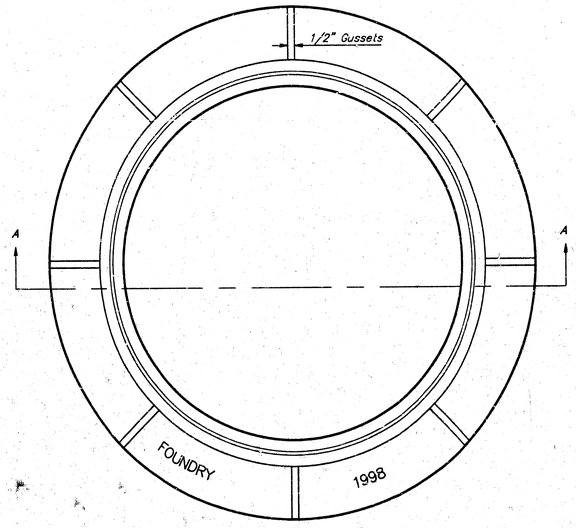


TOP VIEW

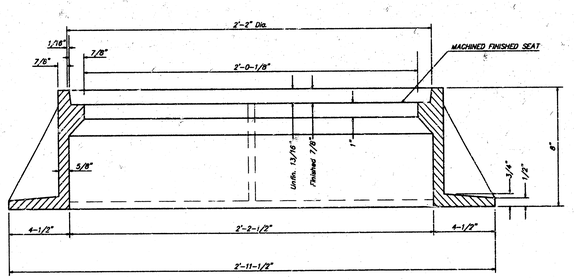


SECTION VIEW

MANHOLE FRAME
Weight = 240 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 FOUNDARY 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

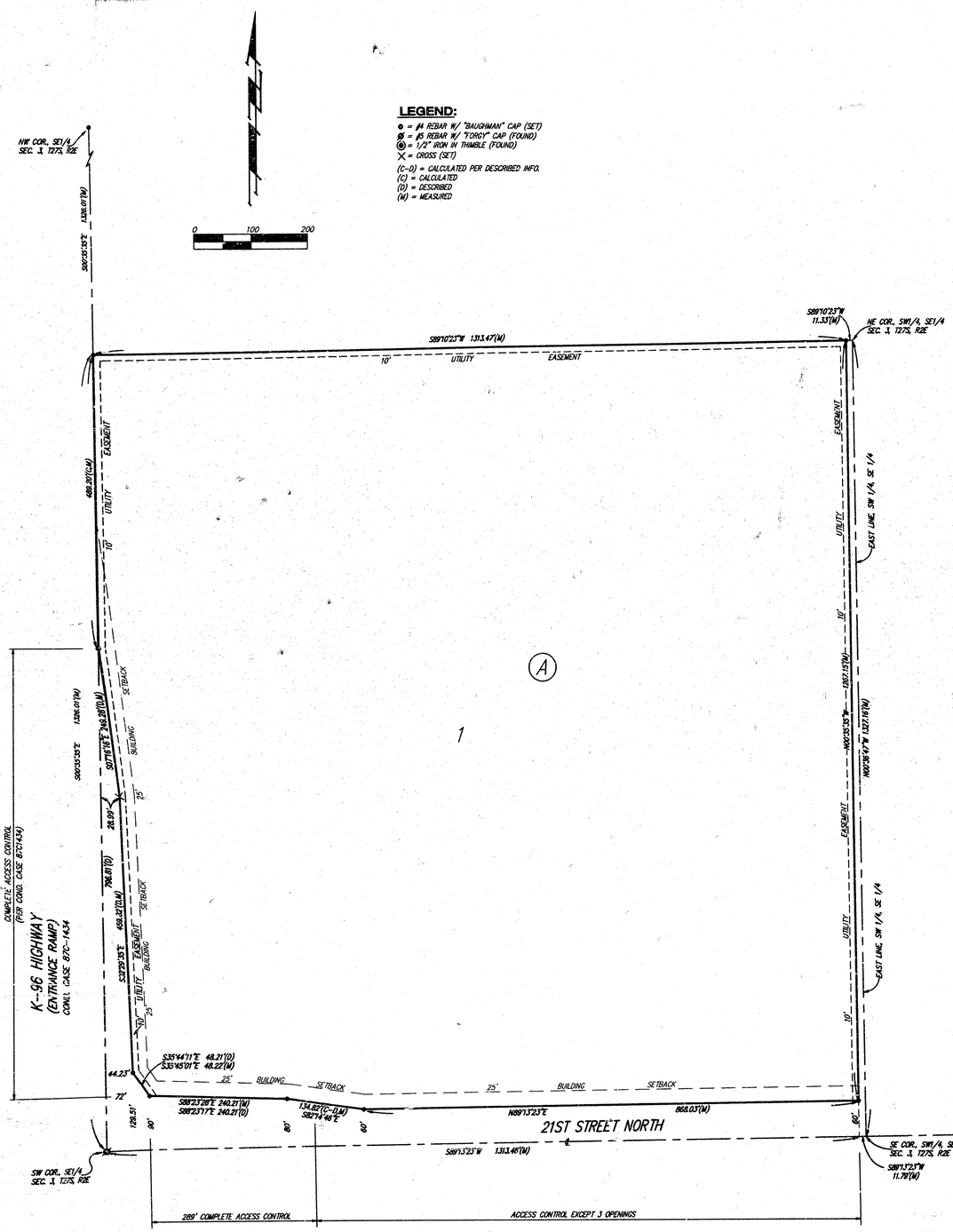
BAUGHMAN COMPANY P. A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER					SHEET
779 PPS (607861)					8 OF 9
DESIGN	DRAWN	APPROVED	DATE	SCALE	
	Staff			None	

DETAILS \ MARKING 96-02-E981

MESSIAH BAPTIST CHURCH 4TH ADDITION

SEDGWICK COUNTY, KANSAS



State of Kansas) SS
Sedgwick County)

We, Baughman Company, P.A. Surveyors in aforesaid County and State do hereby certify that we have surveyed and platted "MESSIAH BAPTIST CHURCH 4TH ADDITION", Sedgwick County, Kansas, and that the accompanying plat is a true and correct exhibit of the property surveyed, described as follows:

The West 40 acres of the Southwest Quarter of the Southeast Quarter of Section 3, Township 27 South, Range 2 East of the Sixth Principal Meridian, Sedgwick County, Kansas, EXCEPT that part condemned in Case 87C-1434.

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

Baughman Company, P.A.

_____, Surveyor
Michael G. Conrey

Know all men by these presents that we, the undersigned, have caused the land in the surveyors certificate to be platted into a Lot and a Block to be known as "MESSIAH BAPTIST CHURCH 4TH ADDITION", Sedgwick County, Kansas. The utility easements are hereby granted as indicated for the construction and maintenance of all public utilities. All abutters rights of access to or from 21st Street North over and across the south line of Lot 1, Block A, are hereby granted to the appropriate governing body provided, however, that said Lot 1 shall have access to 21st Street North at three locations over all except the west 289 feet of said south line as shall be determined by the Engineer for the appropriate governing body.

Messiah Baptist Church, Inc.

_____, President

State of Kansas) SS
Sedgwick County)

The foregoing instrument acknowledged before me, this_____day of_____, 199__, by_____, President of Messiah Baptist Church, Inc., on behalf of the corporation.

_____, Notary Public

My App't. Exp._____

This plat of "MESSIAH BAPTIST CHURCH 4TH ADDITION", Wichita, Sedgwick County, Kansas has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commision, Wichita, Kansas.

Dated this_____day of_____, 199__

Wichita-Sedgwick County Metropolitan Area Planning Commission

_____, Chairman
John C. Frye

_____, Secretary
Marvin S. Krout

This plat approved and all dedications shown hereon accepted by the City Council of the City of Wichita, Kansas, this_____day of_____, 199__.

_____, Mayor
Bob Knight

_____, City Clerk
Pat Burnett

This plat approved and all dedications shown hereon accepted by the Board of Commissioners of Sedgwick County, Kansas, this_____day of_____, 199__

_____, Chairman
Thomas G. Winters

_____, Chair Pro-Tem
Paul W. Hancock

_____, Commissioner
Betsy Gwin

_____, Commissioner
Melody C. Miller

_____, Commissioner
Mark F. Schroeder

_____, County Clerk
James Alford

Entered on transfer record this_____day of_____, 199__.

_____, County Clerk
James Alford

State of Kansas) SS
Sedgwick County)

This is to certify that this plat has been filed for record in the office of the Register of Deeds, this_____day of_____, 199__, at_____o'clock___M; and is duly recorded.

_____, Register of Deeds
Larry Consolver

_____, Deputy
Michael D. Hurtt

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
(316)-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211
PROJECT NO. 97-02-P715 F:\PLAT\MESSIAH.DWG-mjc