STORM WATER SEWER NO. 581

to serve

COPPER GATE ESTATES - PHASE I

CITY OF WICHITA, KANSAS

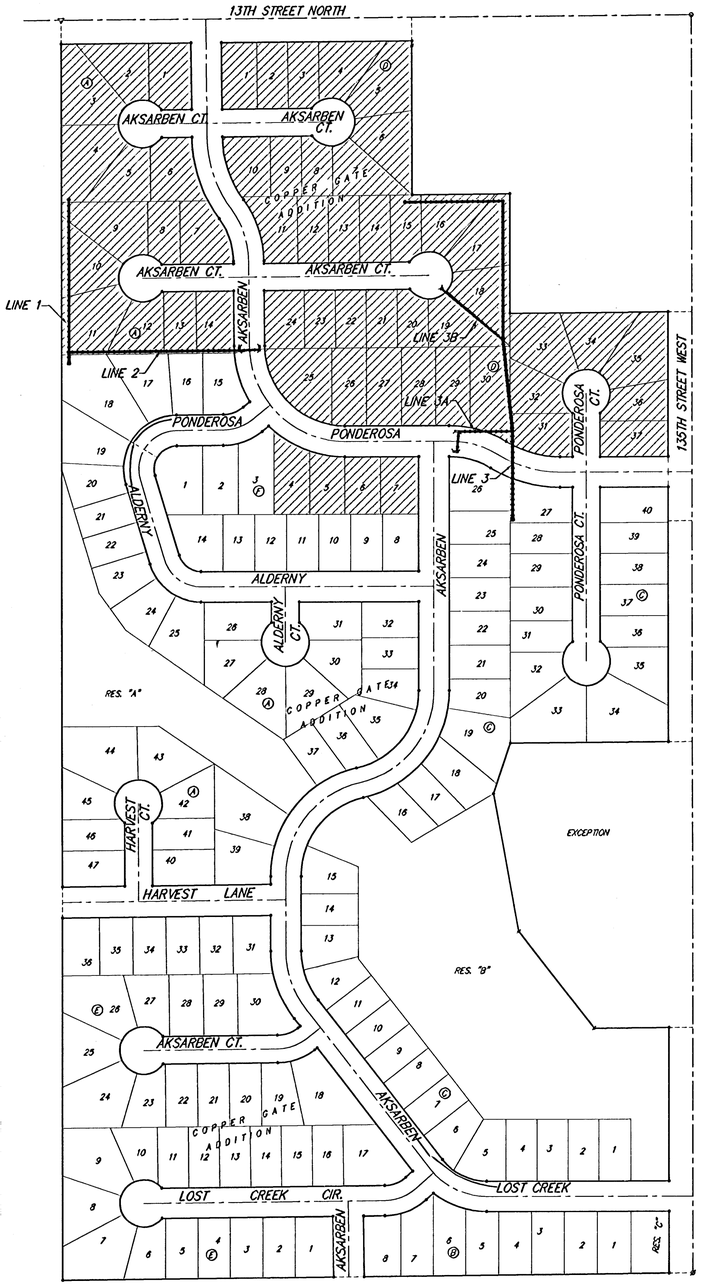
Neil D. Cable, P.E. City Engineer

Project Number

468-83559

OCA Number

751327



Scale: 1" = 150'

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	262-4270
Kansas Gas Service	1-888-482-4950
Westar Energy	383-8650
Aquila Energy	1-888-482-4950
Southwestern Bell	268-2245
City of Wichita Water Dept.	268-4563
City of Wichita Sewer Maint.	268-4024
City of Wichita Storm Sewer Maint.	268-4090
City of Wichita Traffic Maint.	268-4034

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

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

4. The Contractor shall give all property owners and/or tenants of developed property abutting the construction of this project a minimum of ten (10) days advance notice prior to start of construction.

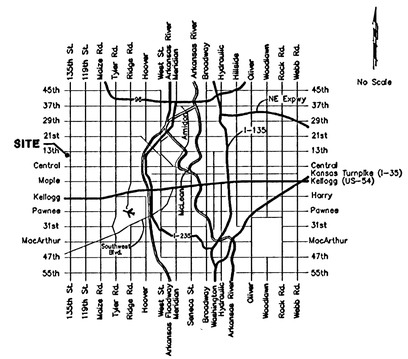
5. The Contractor shall be responsible for preserving property irons. The Contractor will be required to re-establish any property irons which are damaged or destroyed by his construction operations. Such irons shall be re-established by a licensed land surveyor in accordance with state laws.

BENCHMARKS:

City of Wichita benchmark at the SE corner of intersection of 135th Street West and 13th Street North.
Elev. = 167.83 (City Datum)

BOOKED
1-2-04
MLG
C-2566

Sheet Index



Vicinity Map

Benefit District

As Built Parplan Unless Noted Otherwise
7/03 KK

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


BENCHMARK:
City of Wichita benchmark at the SE corner of intersection of 135th Street West and 13th Street North.
Elev. = 167.83 (City Datum)
Scale: 1" = 20' Horizontal
1" = 5' Vertical
• = Iron
Sta 0+00, Line 1
Begin construction of 30" SWS w/end section.
Install 24.0 S.Y. light stone rip-rap as indicated.
Sta 0+25.0, Line 1
= Sta 0+00, Line 2
Const. std. shallow manhole (5' dia.) w/ grated lid (Neenah R-2501 or equivalent).
Top Elev. = 171.20
Sta 3+35.0, End Line 1
Construct special yard inlet.
Top Elev. = 173.50
LINE 1
Ex.—OH—E
PP
119.50'
172.45'
28.05'
30' Drng. & Util. Esmt.
20' Drng. & Util. Esmt.
10' Util. Esmt. (by Sep. Inst.)
18'
20'
89°10'40"
90°49'20"
Move East 5' to Clear Trees
Install hay bale barrier per detail, sheet 14.
Install hay bale barrier per detail, sheet 14.
COPPER GATE ESTATES
LINE 2
18
11
10
9
4
5
A
Remove Existing Trees Only as Necessary For Construction. Cost to be Included in Bid Item "Site Clearing & Restoration"
Existing Grade = Proposed Grade
175
170
165
160
25.0 L.F. 30" RCP @ +0.800%
310.0 L.F. 15" RCP @ +0.661%
LINE 1
166.50 = Flow
166.70 = Flow Out (S)
167.95 = Flow In (N)
167.20 = Flow In (E)
168.12 = Flow
168.45 = Flow
168.78 = Flow
169.11 = Flow
169.44 = Flow
169.77 = Flow
170.00 = Flow
0+00
0+25.0
0+50
1+00
1+50
2+00
2+50
3+00
3+35.0
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COPPER GATE ESTATES - PHASE I

LINE 1

STORM WATER SEWER IMPROVEMENTS

BAUGHMAN COMPANY P.A.
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PROJECT NUMBER	SHEET
468-83559	2 of 15

DESIGN	DRAWN	APPROVED	DATE	SCALE
NBW	TMS/JAK		4/02/03	Noted

COPPER GATE ESTATES - PHASE I

LINE 2

STORM WATER SEWER IMPROVEMENTS

BAUGHMAN COMPANY P.A.
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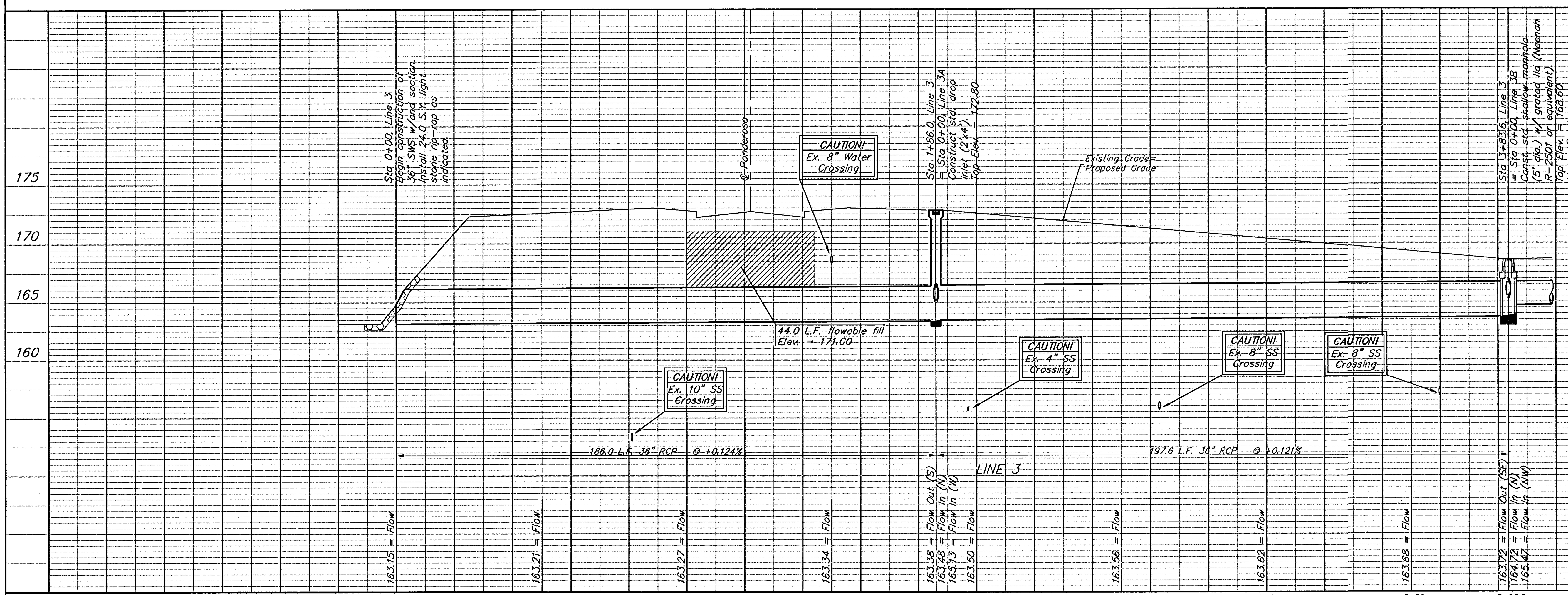
PROJECT NUMBER	SHEET
488-83569	3 of 15

DESIGN	DRAWN	APPROVED	DATE	SCALE
NBW	TMS/JAK		4/02/03	Noted



COPPER GATE ESTATES - PHASE I

LINE 3

STORM WATER SEWER IMPROVEMENTS

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

PROJECT NUMBER	SHEET
468-83559	4 OF 15

DESIGN	DRAWN	APPROVED	DATE	SCALE
NBW	TMS/JAK		4/02/03	Noted

CopperGate/SWS302-10-F433


BENCHMARK:
City of Wichita benchmark at the SE corner of intersection of 135th Street West and 13th Street North.
Elev. = 167.83 (City Datum)
Scale: 1" = 20' Horizontal
1" = 5' Vertical
• = Iron
COPPER GATE ESTATES
LINE 3B
LINE 3
CAUTION! Ex. 4" SS Crossing
20' Drng. & Util. Esmt.
Install hay bale barrier per detail, sheet 14.
Sta 3+83.6, Line 3 = Sta 0+00, Line 3B Match Point
Sta 6+68.5, Line 3 Construct std. drop inlet (2'x4'). Top Elev. = 168.80 Match Point
Existing Grade= Proposed Grade
284.9 L.F. 24" RCP @ +0.204%
163.72 = Flow Out (SE)
164.72 = Flow In (N)
165.47 = Flow In (NW)
164.75 = Flow
164.86 = Flow
164.96 = Flow
165.06 = Flow
165.16 = Flow
165.26 = Flow
165.30 = Flow Out (S)
166.05 = Flow In (W)
3+83.6
4+00
4+50
5+00
5+50
6+00
6+50
6+68.5
As Built Per Plan Unless Noted Otherwise 7/03 KK
COPPER GATE ESTATES - PHASE I
LINE 3
STORM WATER SEWER IMPROVEMENTS
BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211
PROJECT NUMBER 488-83569
DESIGN NBW
DRAWN TMS/JAK
APPROVED
DATE 4/02/03
SCALE Noted
SHEET 5 OF 15

BENCHMARK:
City of Wichita benchmark at the SE corner of intersection of 135th Street West and 13th Street North.
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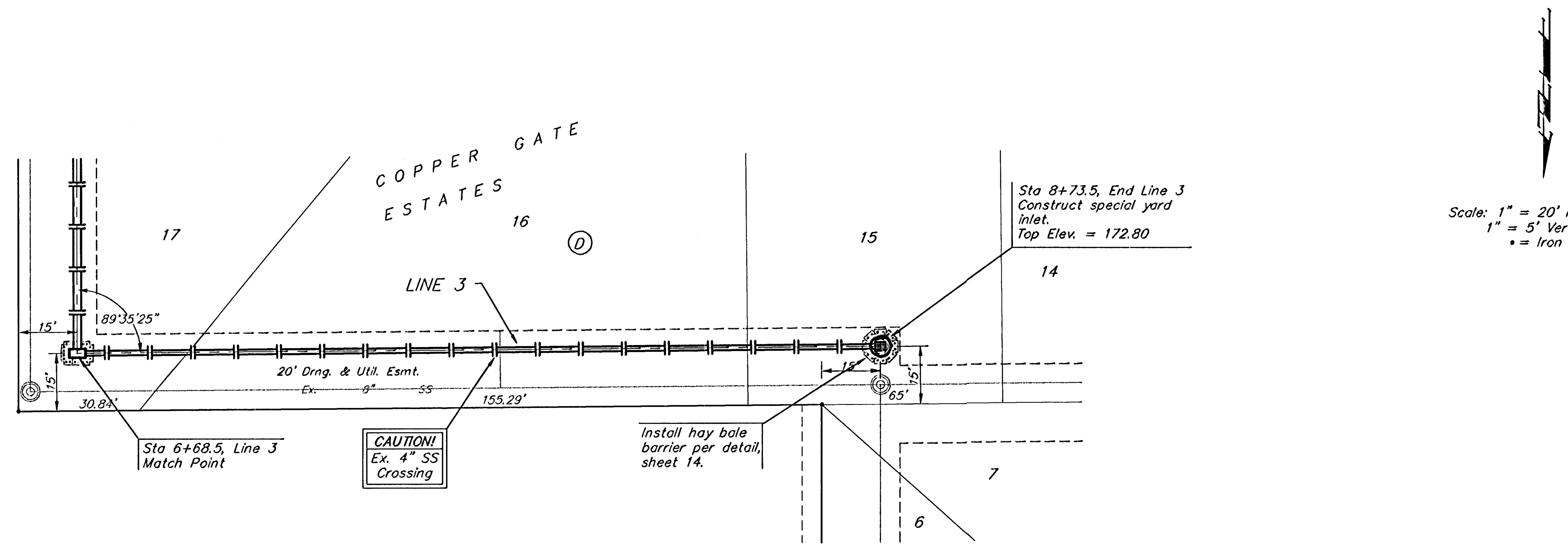
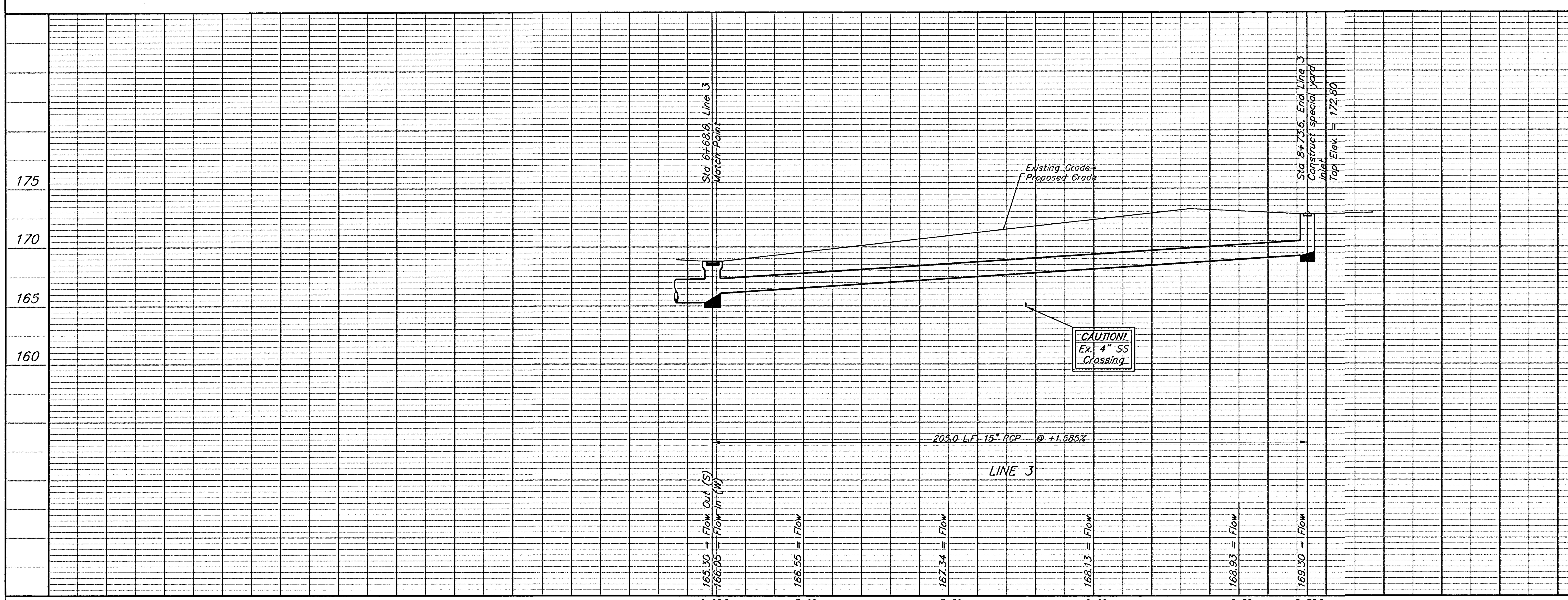


Scale: 1" = 20' Horizontal
1" = 5' Vertical
• = Iron



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9/03 KK

COPPER GATE ESTATES - PHASE I
LINE 3
STORM WATER SEWER IMPROVEMENTS

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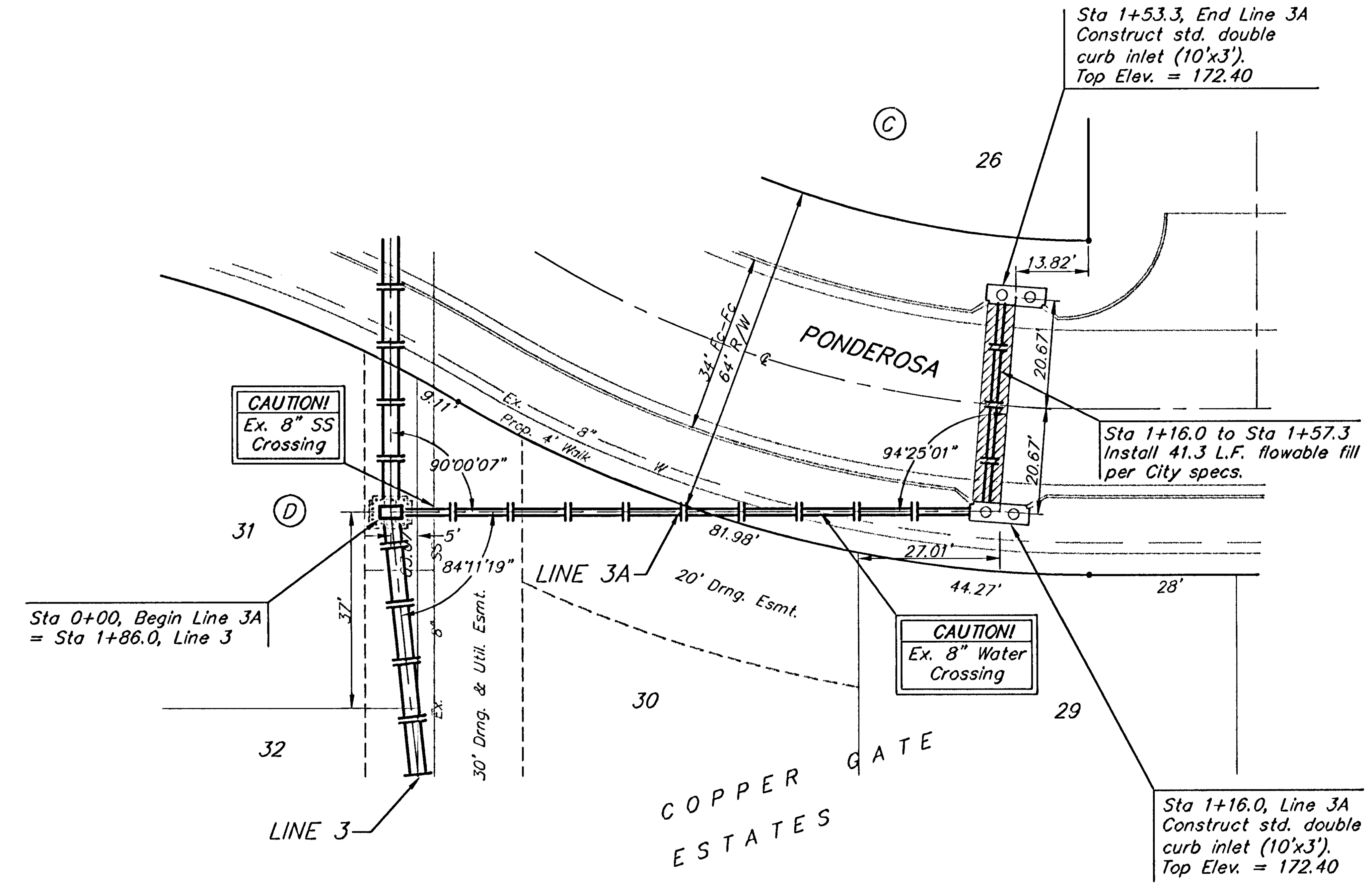
PROJECT NUMBER	SHEET
488-83559	6 of 14

DESIGN	DRAWN	APPROVED	DATE	SCALE
NBW	TMS/JAK		4/02/03	Noted

BENCHMARK:
City of Wichita benchmark at the SE corner of intersection of 135th Street West and 13th Street North.
Elev. = 167.83 (City Datum)

Scale: 1" = 20' Horizontal
1" = 5' Vertical
• = Iron



As Built Per Plan Unless Noted Otherwise
9/13 KK

COPPER GATE ESTATES - PHASE I

LINE 3A

STORM WATER SEWER IMPROVEMENTS

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PROJECT NUMBER	SHEET
468-83559	7 OF 15

DESIGN	DRAWN	APPROVED	DATE	SCALE
NBW	TMS/JAK		4/02/03	Noted

CopperGate/SWS6 02-10-F433

BENCHMARK:
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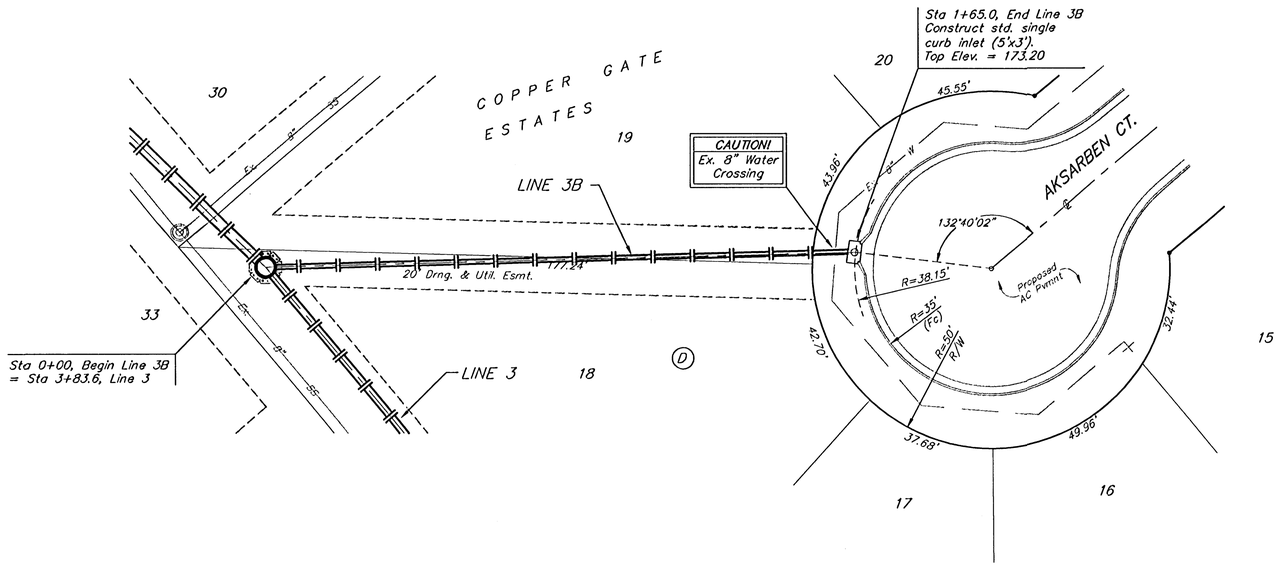

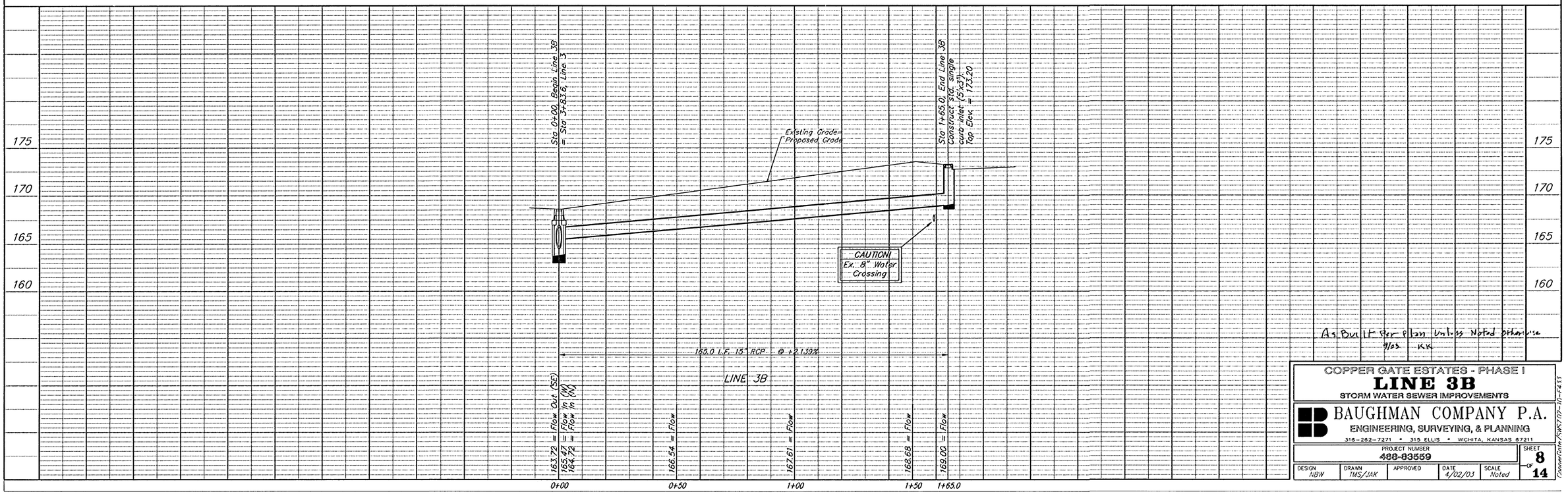

As Built per plan Unless Noted otherwise
7/03 KK

COPPER GATE ESTATES - PHASE I
LINE 3B
STORM WATER SEWER IMPROVEMENTS

BAUGHMAN COMPANY P.A.
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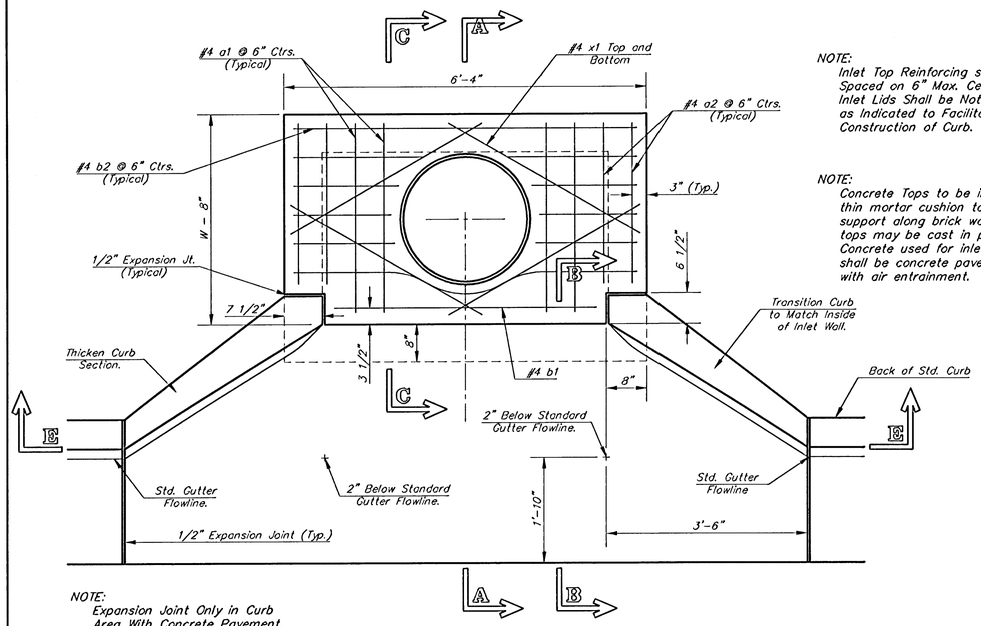
PROJECT NUMBER	SHEET
488-83559	8 OF 14

DESIGN	DRAWN	APPROVED	DATE	SCALE
NBW	TMS/JAK		4/02/03	Noted

CopperGate/SWS700-10-F4.ai

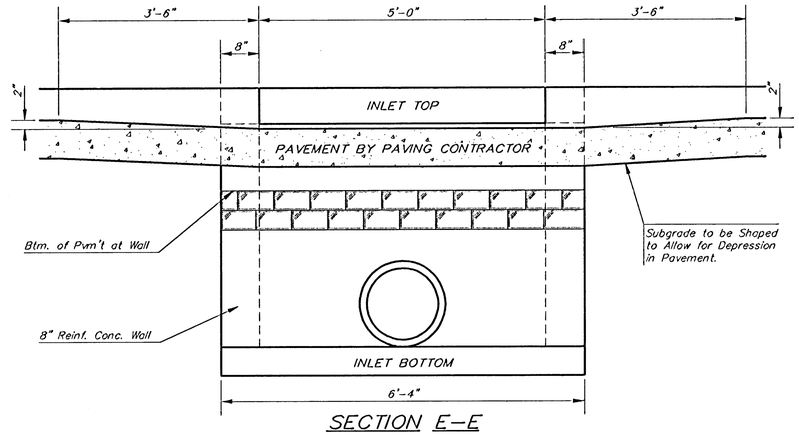


NOTE:
Inlet Top Reinforcing shall be Spaced on 6" Max. Centers. Inlet Lids Shall be Notched Out as Indicated to Facilitate Construction of Curb.

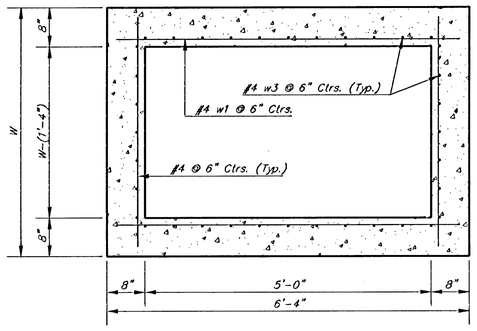
NOTE:
Concrete Tops to be installed on thin mortar cushion to insure full support along brick walls. Concrete tops may be cast in place or precast. Concrete used for inlet construction shall be concrete pavement mix with air entrainment.

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

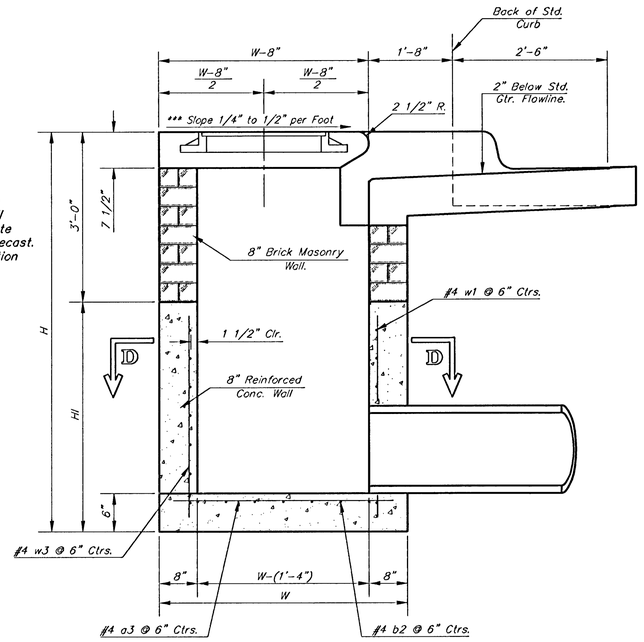
PLAN



SECTION E-E

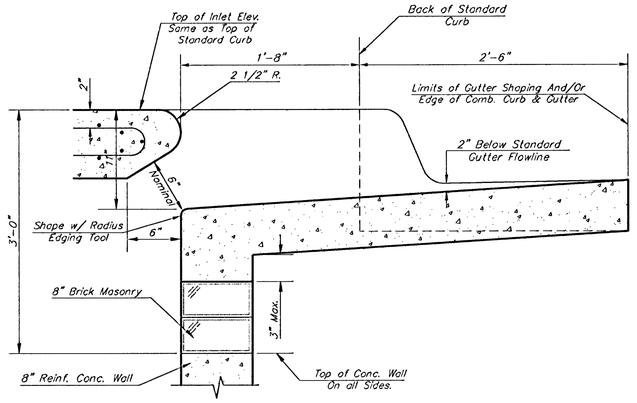


SECTION D-D

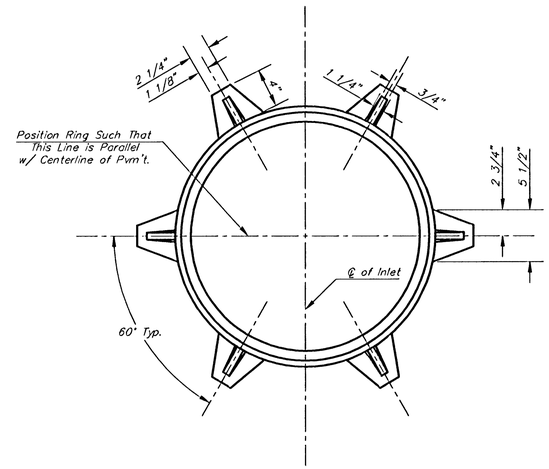


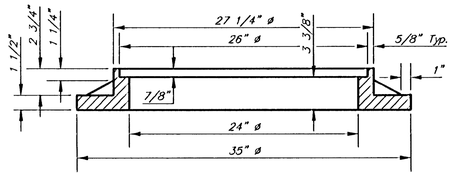
SECTION A-A

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



SECTION B-B

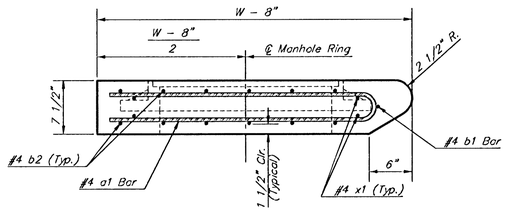




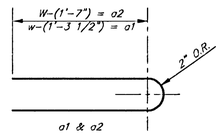
MANHOLE RING AND COVER

Weight = 180 Lbs.

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



SECTION C-C



BENDING DIAGRAM

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

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

PRECAST SLAB AND FLOOR REINFORCING

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

WALL REINFORCING

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

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

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

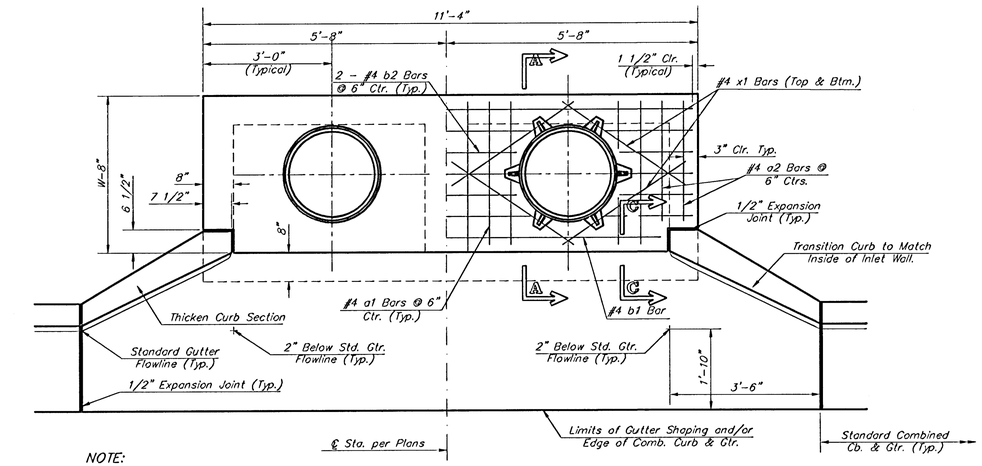
CITY OF WICHITA STANDARD TYPE 1A
Curb Inlet Details
INLET OPENING = 8' X 5'-0"

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

PROJECT NUMBER 488-83559

DESIGN	DRAWN	APPROVED	DATE	SCALE	SHEET
C.O.W.	Staff		4/02/03	None	9 OF 15

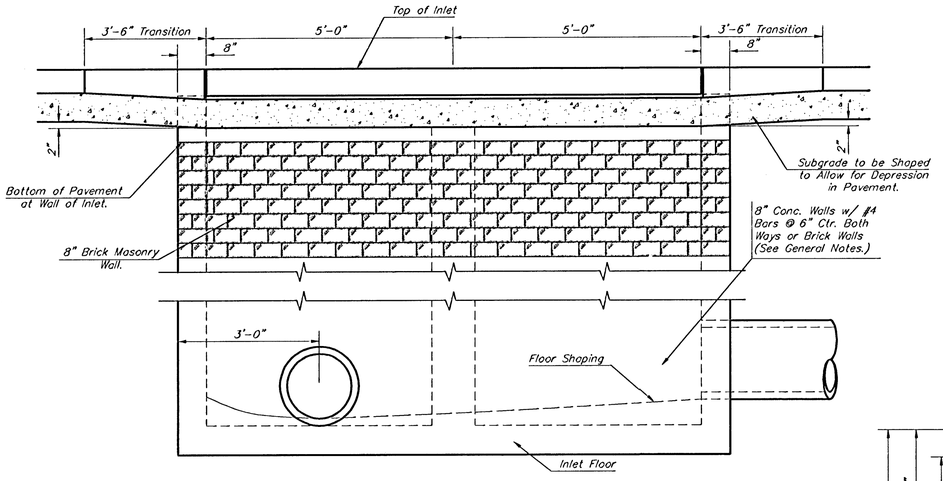
02-08-5347
Type1A-S



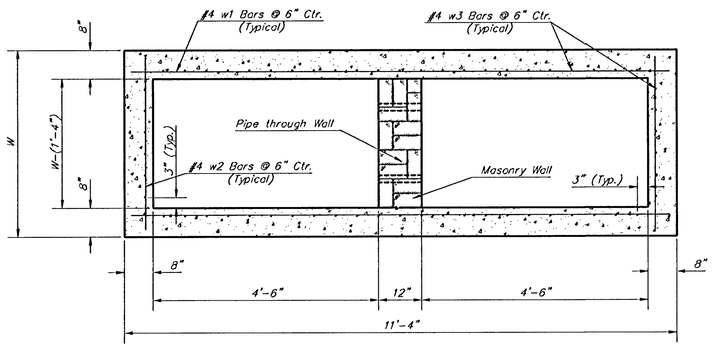
NOTE:
Expansion Joint Only in Curb Area with Concrete Pavement.

PLAN

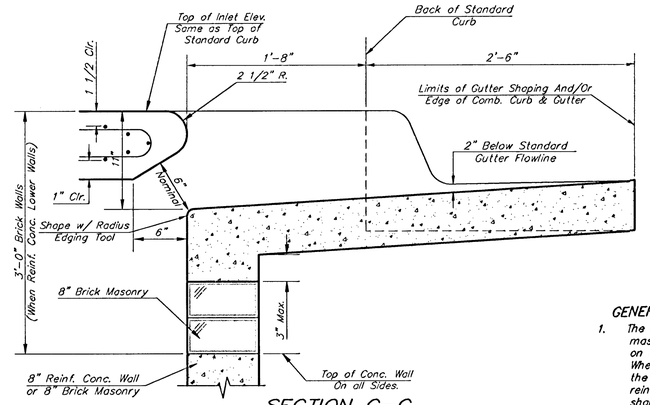
*Left Side Shown Without Slab Reinforcing, Right Side Shown With Slab Reinforcing



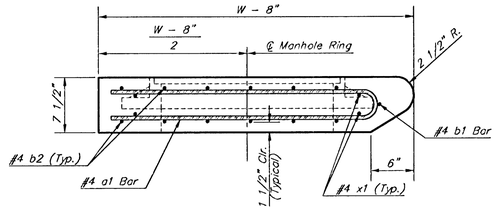
ELEVATION



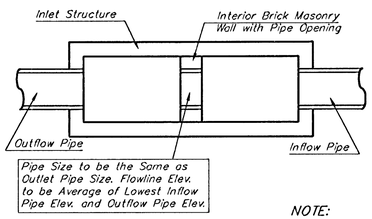
SECTION B–B



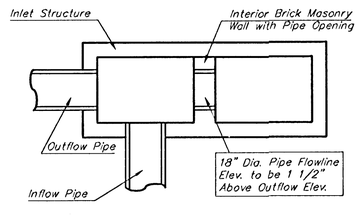
SECTION C–C



SECTION A–A

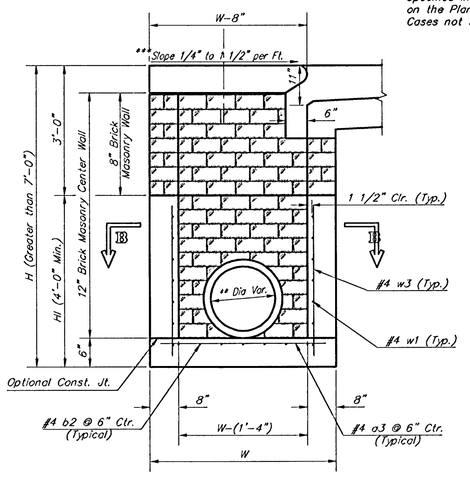


CASE I



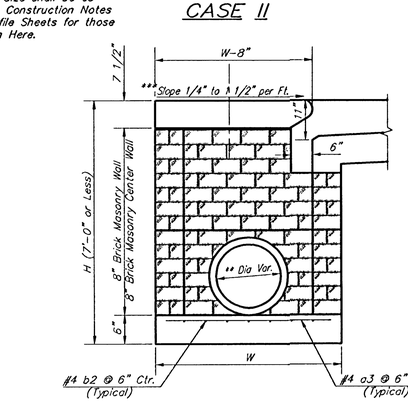
CASE II

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



TYPICAL INLET SECTION AT CENTER WALL

(Reinforced Concrete Walls)



TYPICAL INLET SECTION AT CENTER WALL

(Masonry Walls)

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

PRECAST SLAB AND FLOOR REINFORCING

		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	13	6'-7"	13	8'-7"	13	10'-7"	13	12'-7"	13	14'-7"
a2	#4	4	6'-0"	4	8'-0"	4	10'-0"	4	12'-0"	4	14'-0"
a3	#4	23	4'-1"	23	5'-1"	23	6'-1"	23	7'-1	23	8'-1"
b1	#4	1	9'-9"	1	9'-9"	1	9'-9"	1	9'-9"	1	9'-9"
* b2	#4	23	11'-1"	29	11'-1"	35	11'-1"	41	11'-1"	47	11'-1"
x1	#4	16	3'-10"	16	4'-2"	16	4'-6"	16	4'-10"	16	5'-2"

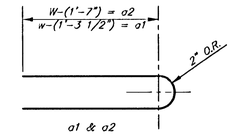
WALL REINFORCING

		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	11'-1"	①	11'-1"	①	11'-1"	①	11'-1"	①	11'-1"
w2	#4	①	4'-1"	①	5'-1"	①	6'-1"	①	7'-1"	①	8'-1"
w3	#4	52	②	56	②	60	②	64	②	68	②

* Field Bend or Cut Reinforcing as Required for Clearance.
① 4 (H1 - 12") (H1 - 21") Rounded down to nearest 0.5'
② H1 - 3"

GENERAL NOTES:

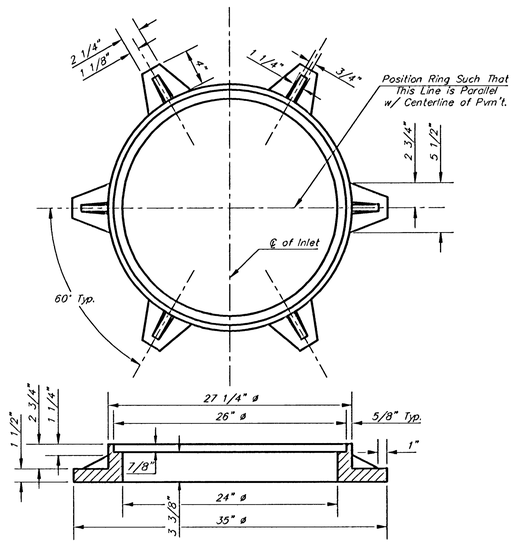
1. The contractor shall be required to construct 8" brick masonry walls between the concrete inlet base and top on this inlet when W=6'-4" or less and H=7'-0" or less. When W is greater than 6'-4" and H is less than 7'-0" the outside inlet walls below the brick stock shall be reinforced concrete construction and the center wall shall be of masonry construction as shown for the masonry wall option.
2. 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.
3. 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.
4. Inlet top reinforcing shall be spaced on 6" max. centers. Inlet lids shall be notched out as indicated to facilitate construction of curb. Bars in inlet top to be field bent or cut to clear manhole ring.
5. The ends of all pipes installed in inlets shall be cut off flush with the inside face of the inlet wall.



BENDING DIAGRAM

STANDARD CURB INLET PRECAST TOPS

W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4'-4"	3'-8" 11'-4" 7 1/2"	21" & SMALLER	0.83±
5'-4"	4'-8" 11'-4" 7 1/2"	24" & 30"	1.09±
6'-4"	5'-8" 11'-4" 7 1/2"	36" & 42"	1.35±
7'-4"	6'-8" 11'-4" 7 1/2"	48" & 54"	1.61±
8'-4"	7'-8" 11'-4" 7 1/2"	60" & 66"	1.87±



MANHOLE RING AND COVER

Weight = 180 lbs.

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

Revised - Feb. 16, 1989

CITY OF WICHITA STANDARD TYPE 1A

Curb Inlet Details

INLET OPENING = 8' X 10'-0"

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

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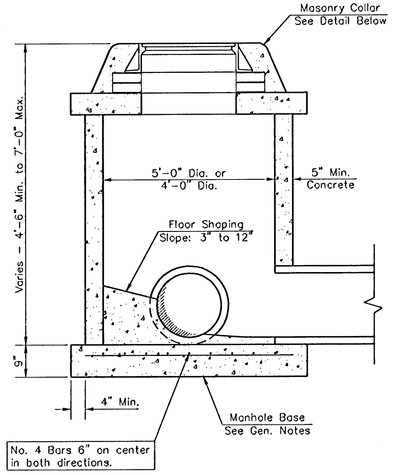
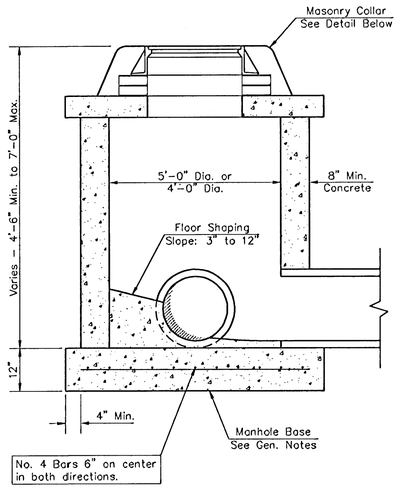
488-83559	10 of 15

DESIGN	DRAWN	APPROVED	DATE	SCALE
C.O.W.	Staff		4/02/03	NONE

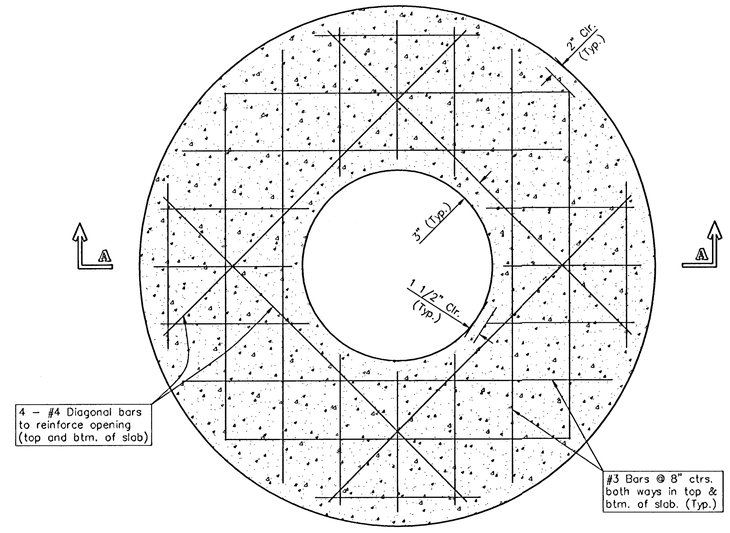
TYP1A-D



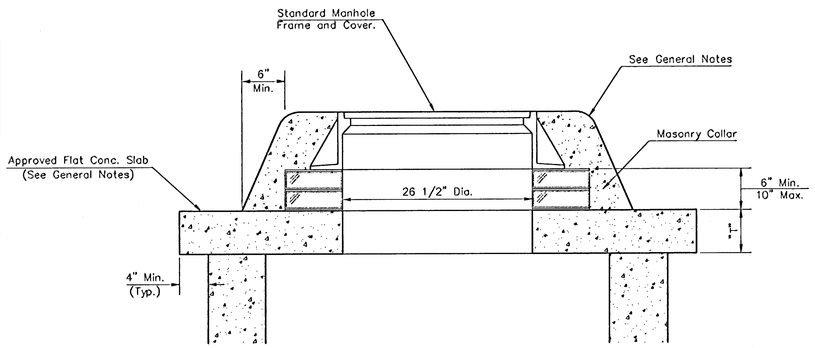
SHALLOW TYPE "P" MANHOLE



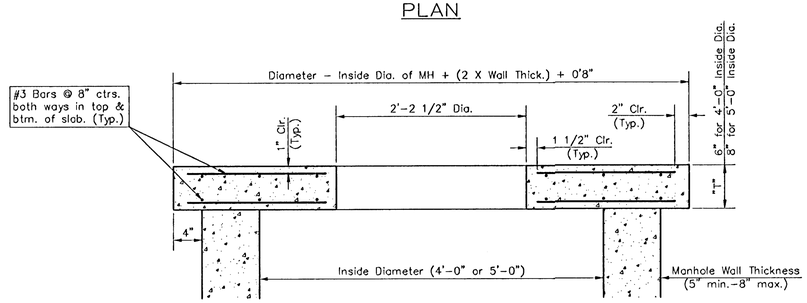
SHALLOW TYPE "C" MANHOLE



PLAN



MASONRY COLLAR DETAIL



SECTION A–A

FLAT CONCRETE SLAB DETAILS

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.

CITY OF WICHITA, KANSAS

STD. SHALLOW MANHOLES

TYPE 'P' AND TYPE 'C'

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
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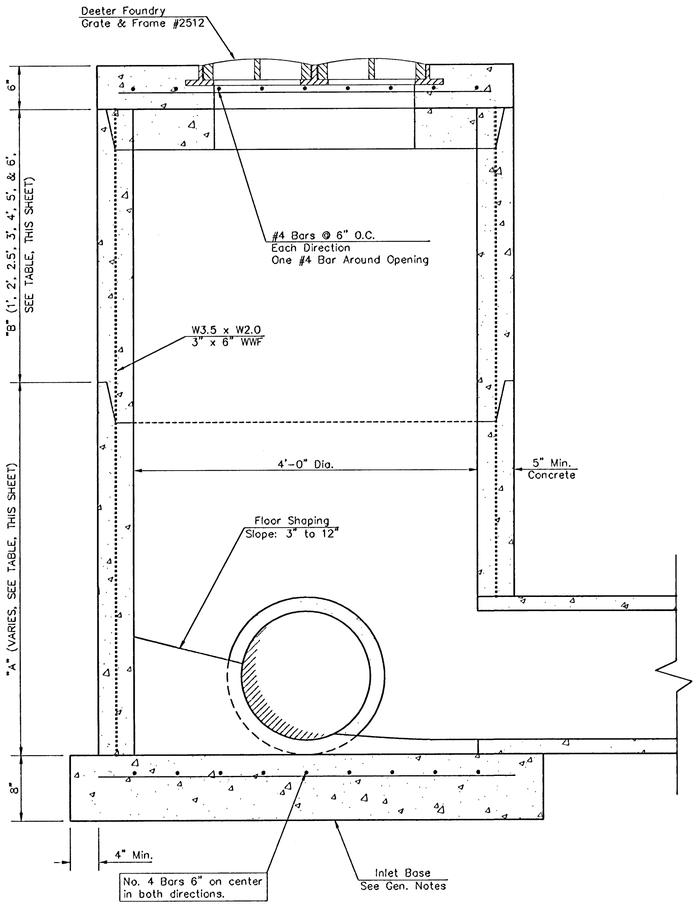
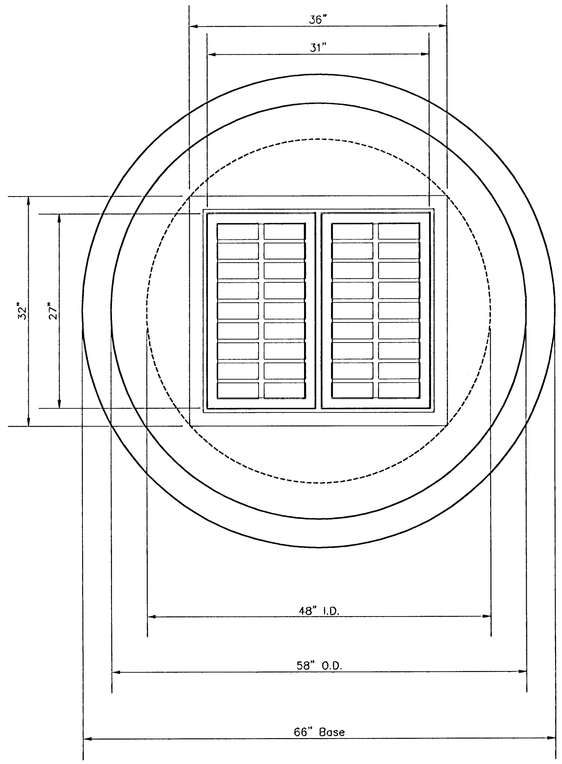
DESIGN	DRAWN	APPROVED	DATE	SCALE
STAFF	STAFF	STAFF	4/02/03	NONE

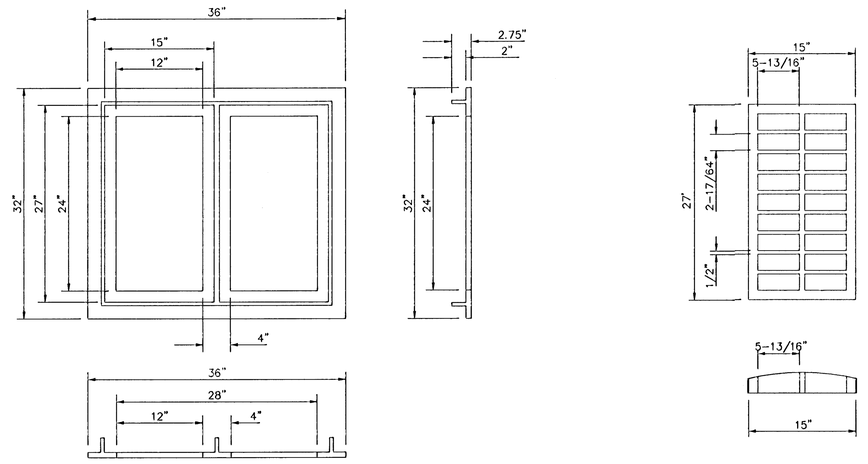
DETAIL SHUMH2.DWG



YARD INLET

LINE #	STA.	TOP OF INLET	INLET FLOW	"A"	"B"
1	3+35.0	173.50	170.00	2.30'	1.0'
3	8+73.5	172.80	169.30	2.30'	1.0'





DEETER #2512 CATCH BASIN INLET GRATE & FRAME

GENERAL NOTES

1. Mortar used in masonry construction shall contain 8 sacks of cement per cubic yard. Concrete used in yard inlet bases shall conform to the requirements of concrete for concrete pavement construction as specified in the city standard paving specifications using city concrete cement mix without air entraining.
2. Reinforcing steel shall be installed in the yard inlet bases and shall consist of no. 4 bars placed on 6" centers in both directions. The yard inlet base reinforcement shall be placed 6" above the bottom of the yard inlet base. All costs for furnishing and installing reinforcing steel shall be included in the unit price bid for the yard inlet.
3. The floors of all yard inlet shall be shaped with flow channels such that the inlets will be self cleaning and free of areas where solids could be deposited. Flow channels shall be formed to match the bottom halves of the inflowing pipes and the outflowing pipe as shown by the drawings. Inlet floors shall have slopes of 3 inches per foot in the areas outside of the flow channels sloped toward the flow channels. Pipes laid through inlets shall have the top half removed to neat lines for the full inside diameter of the inlet. Inlet floors shall then be shaped around the bottom half of the pipe which forms the flow channel.
4. Pipes installed within the excavation made for the inlet shall be cradled with concrete to the limits of the inlet excavation. When clay pipe is used, the cradle shall extend to the first joint outside the inlet. The cradle shall be terminated at the clay pipe joint in a manner which will maintain the flexibility of the joint. Cost of cradle within inlet excavation or to clay pipe joints adjacent to inlet shall be included in the unit price bid for the inlet.
5. Inlet grate castings and inlet frame castings shall conform to the requirements as indicated in the standard specifications and as shown in the standard detail drawing.
6. The crowns of inflowing pipes shall never be set lower than the crown of the outflowing pipe.
7. Joints between inlet sections to be sealed with two two wraps of extruded butyl rubber joint mastic meeting City of Wichita Type "P" Manhole Specifications.
8. Special yard inlet shall be paid for at the unit price bid per each. All standard yard inlet diameters will be 4'.

SPECIAL YARD INLET

WICHITA, KANSAS

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
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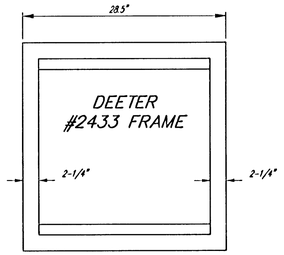
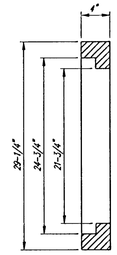
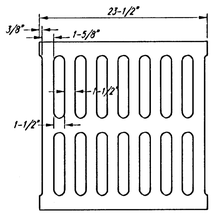
PROJECT NUMBER	SHEET
468-83559	12 OF 15

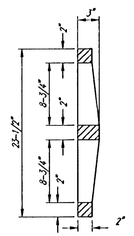
DESIGN	DRAWN	APPROVED	DATE	SCALE
			4/02/03	NONE

02-10-6453
Yardinlet





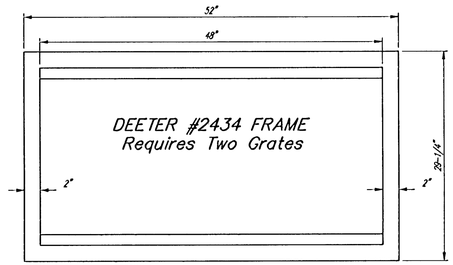


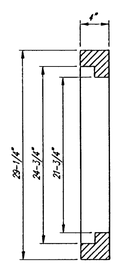


DEETER #2433 GRATE

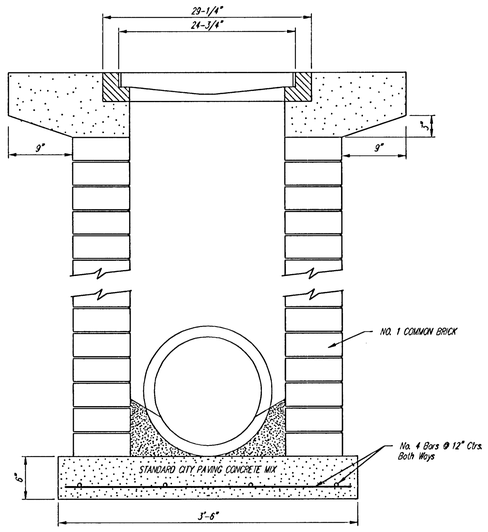
NOTE: Grates shall be imprinted on the top surface with "CITY OF WICHITA" using letters at least 1" in height. Other marking methods may be approved by the engineer.

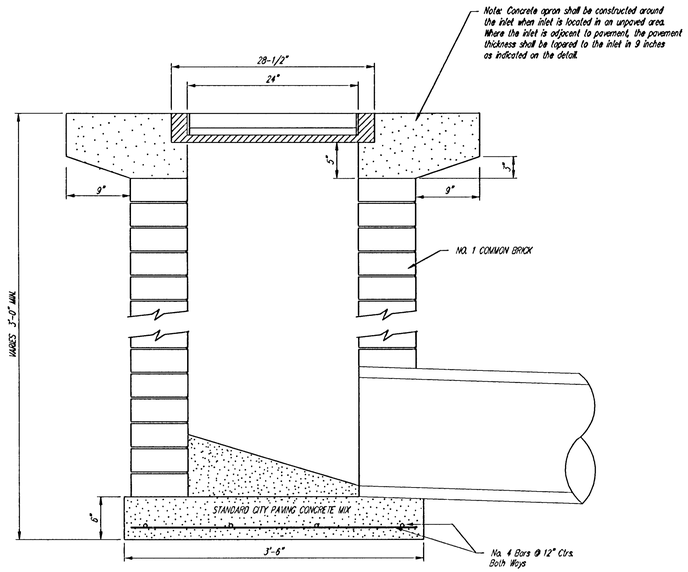
24" x 24" Frame and Grate Detail

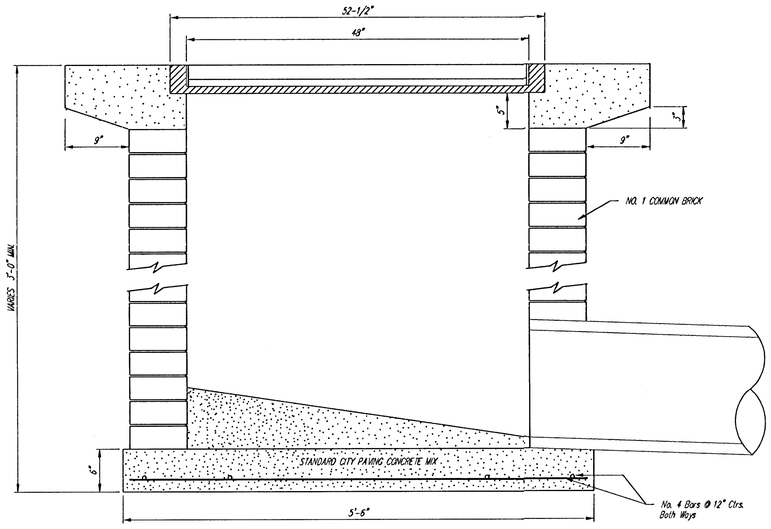




Double 24" x 24" Frame Detail







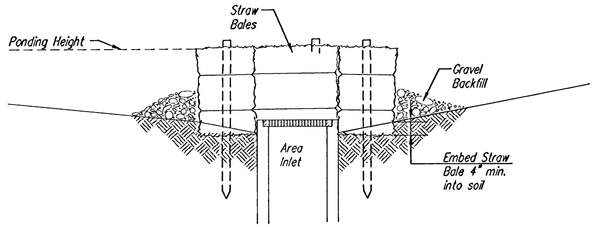
City of Wichita Standard

Drop Inlet

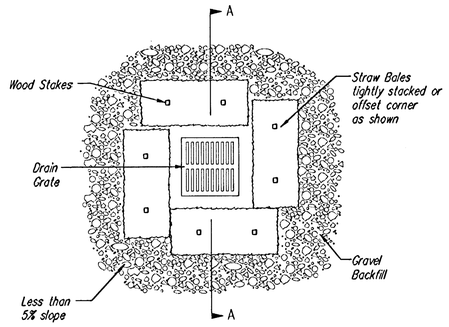
BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER					SHEET
488-83559					13 OF 15
DESIGN	DRAWN	APPROVED	DATE	SCALE	
C.O.W.	Staff		4/02/03	NONE	

Drop12



SECTION A-A



STRAW BALE BARRIERS FOR AREA INLETS
(INLET PROTECTION)

Material Specification:

Bale area inlet barriers should be constructed of wheat straw, oat straw, prairie hay, or bromegrass hay that is free of weeds declared noxious by the Kansas State Board of Agriculture.
The stakes used to anchor the bales should be a hardwood material with the following minimum dimensions: 2" square (nominal) by 4' long.

Placement:

Bale area inlet barriers should be placed directly around the perimeter of a drop inlet. When a bale area inlet barrier is located near an inlet that has steep approach slopes, the storage capacity behind the barrier is drastically reduced. Timely removal of sediment must occur for a barrier to operate properly in this location.

Proper Installation Method:

Excavate a trench around the perimeter of the area inlet that is at least 4" deep by a bale's width wide.
Place the bales in the trench, making sure that they are butted tightly. Some bales may need to be shortened to fit into the trench around the area inlet. Two stakes should be driven through each bale, approximately 6" to 8" in from the bale ends.
Stakes should be driven at least 12" into the ground.
Once all the bales have been installed and anchored, place the excavated soil against the receiving side of the barrier and compact it. The compacted soil should be no more than 3" to 4" deep.
Note: When a bale area inlet barrier is placed in a shallow median ditch, make sure that the top of the barrier is not higher than the paved road. In this configuration, water may spread onto the roadway causing a hazardous condition.

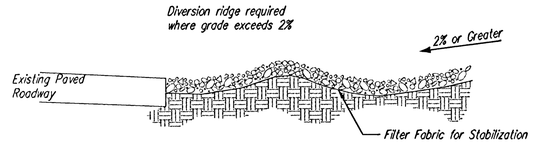
List of common placement installation mistakes to avoid:

Bales should be placed directly against the perimeter of the area inlet. This allows overtopping water to flow directly into the inlet instead of onto nearby soil causing scour.
Bale area inlet barriers must be dug into the ground. Bales at ground level do not work because they allow water to flow under the barrier.

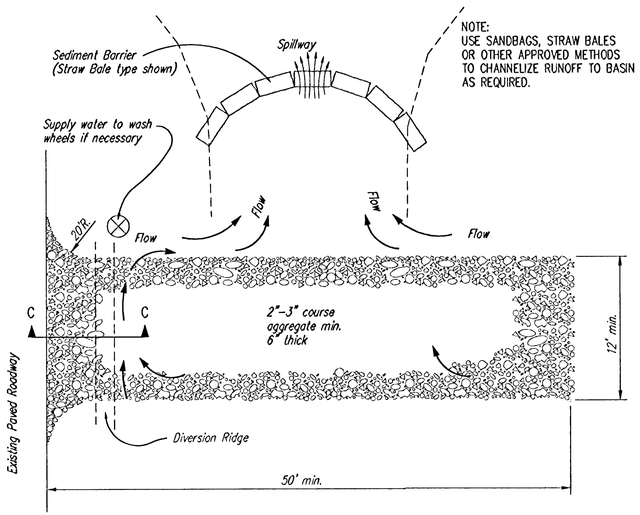
Inspection and Maintenance:

Bale area inlet barriers should be inspected every 7 days and within 24 hours of a rainfall 1/2" or more. The following is a list of questions that should be addressed during each inspection:

Does water flow under the area inlet barrier?
Does water flow through spaces between abutting bales?
Are any bales dislodged?
Are bales decomposing due to age andlor water damage?
Does sediment need to be removed from behind the area inlet barrier?



SECTION C-C



STABILIZED CONSTRUCTION ENTRANCE

NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN, AS SHOWN ABOVE.
4. DRIVE ENTRANCES ONTO RESIDENTIAL LOTS WILL NOT BE REQUIRED TO HAVE THE SEDIMENT BARRIER SHOWN, BUT WHEEL WASHING MAY BE REQUIRED IF STABILIZED ENTRANCE IS NOT SUFFICIENT TO KEEP MUD FROM BEING TRACKED ONTO ADJACENT STREET. ENTRANCE SHALL EXTEND FROM BACK OF CURB TO DWELLING.

CITY OF WICHITA

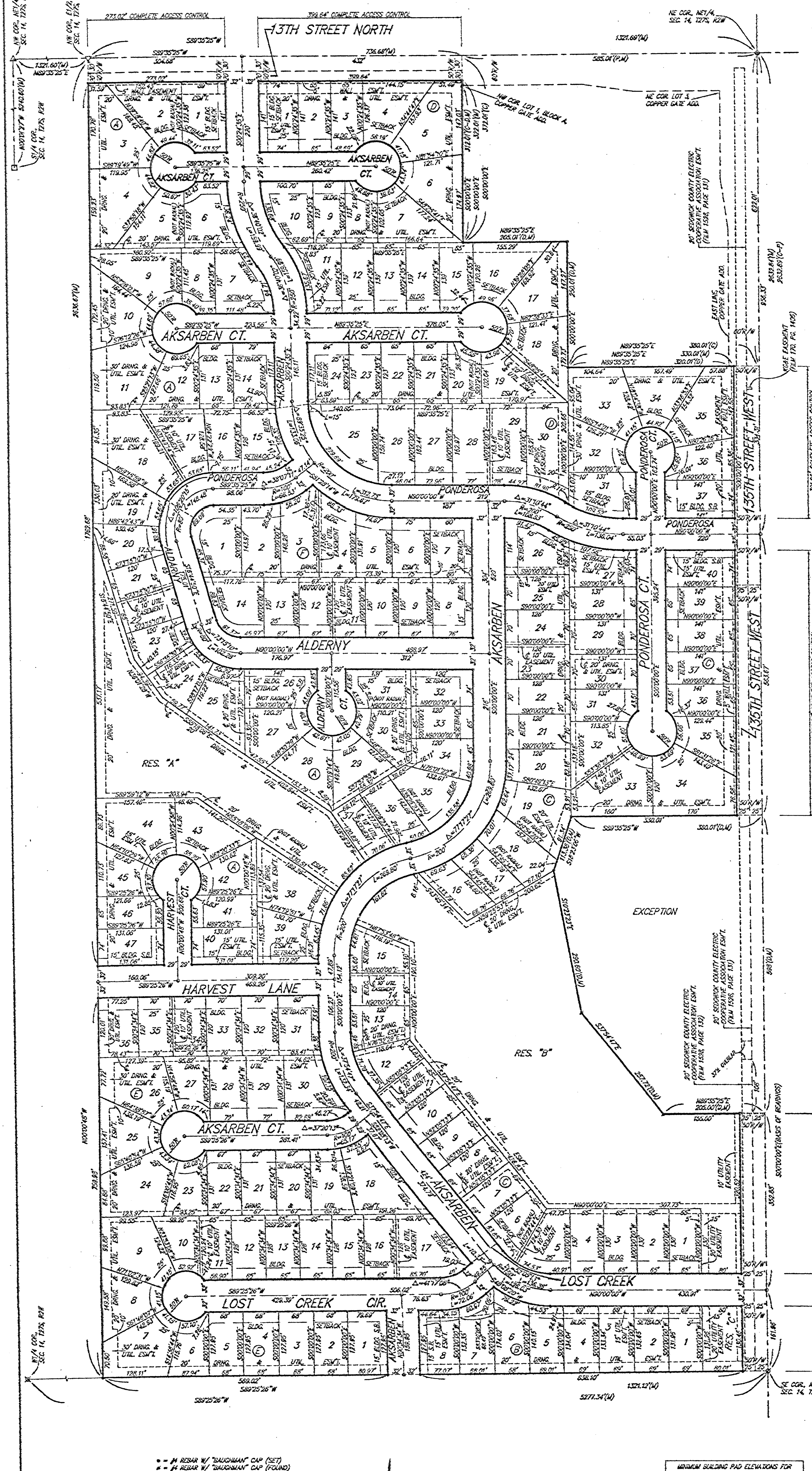
SOIL EROSION BMP DETAILS

CHRISTOPHER M. CARRIER, P.E.
STORM WATER ENGINEER

PROJECT NUMBER	OCA NO.
468-83559	751327

DATE	
APR 2003	SHEET 14 OF 15

COPPER GATE ESTATES
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 "COPPER GATE ESTATES", Wichita, Sedgwick County, Kansas and that the accompanying plat is a true and correct exhibit of the property surveyed, described as follows: The E1/2 of the NE1/4 of Sec. 14, Twp. 27-S, R-2-W of the 6th P.M., Sedgwick County, Kansas, EXCEPT that part platted as Copper Gate Addition, Sedgwick County, Kansas, and EXCEPT that part of said E1/2 described as follows: Commencing at the NE corner of said NE1/4; thence S00°00'00"E along the east line of said NE1/4, 1520.00 feet for a point of beginning; thence S89°35'25"W parallel with the north line of said NE1/4, 380.01 feet; thence S18°23'06"W, 113.38 feet; thence S10°23'23"E, 290.60 feet; thence S37°54'47"E, 257.72 feet to a point 2118.00 feet south of the north line of said NE1/4 as measured parallel with the east line of said NE1/4; thence N89°35'25"E parallel with the north line of said NE1/4, 205.00 feet to a point on the east line of said NE1/4; thence N00°00'00"E along the east line of said NE1/4, 598.00 feet to the point of beginning, TOGETHER with all of Lot 2, Block A, in said Copper Gate Addition, and TOGETHER with that part of Lot 1 in said Block A described as follows: Beginning at the most easterly corner common to said Lots 1 and 2; thence S89°35'25"W along the north line of said Lot 2, 200.00 feet to the NW corner of said Lot 2; thence S00°00'00"W along the west line of said Lot 2, 200.00 feet to the SW corner of said Lot 2; thence S89°35'25"W along the south line of said Lot 1, 325.01 feet to the SW corner of said Lot 1; thence N00°00'00"E along the west line of said Lot 1, 686.69 feet; thence N89°35'25"E, 205.01 feet to a point 205.00 feet normally distant east of the west line of said Lot 1; thence S00°00'00"E, 250.01 feet; thence N89°35'25"E, 320.01 feet to a point on the east line of said Lot 1; thence S00°00'00"E along the east line of said Lot 1, 236.69 feet to the point of beginning, all being subject to road rights-of-way of record.

All being situated in the NE1/4 of Sec. 14, Twp. 27-S, R-2-W of the 6th P.M., Sedgwick County, Kansas.

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

Baughman Company, P.A.

______________ 10-04-2002, 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 Lots, Blocks, Streets, and Reserves to be known as "COPPER GATE ESTATES", Wichita, Sedgwick County, Kansas. The utility easements are hereby granted as indicated for the construction and maintenance of all public utilities. The drainage and utility easements are hereby granted as indicated 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. Reserves "A" and "B" are hereby reserved for open space, landscaping, berms, drainage purposes, lakes, sidewalks, and utilities as confined to easements. Reserve "C" is hereby reserved for open space, drainage purposes, landscaping, berms, sidewalks, and utilities as confined to easement. Reserves "A", "B", and "C" shall be owned and maintained by the homeowners association for the addition. Access controls shall be as depicted on the face of the plat and are hereby granted to the City of Wichita, Kansas. The Minimum Building Pad Elevations for the lowest opening to the structures shall be as indicated on the face of the plat.

Kelsey Investments, Inc., a Kansas corporation

______________, President
Paul E. Kelsey

State of Kansas)
Sedgwick County) SS The foregoing instrument acknowledged before me, this____day of__________, 2002, by Paul E. Kelsey, President of Kelsey Investments, Inc., a Kansas corporation, on behalf of the corporation.

______________, Notary Public

My App't. Exp.__________

This plat of "COPPER GATE ESTATES", Wichita, Sedgwick County, Kansas has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this_____day of______________, 2002.
Wichita-Sedgwick County Metropolitan Area Planning Commission

______________, Chair
J. D. Michaelis

______________, Secretary
Michael E. Lindebak

This plat approved and all dedications shown hereon accepted by the City Council of the City of Wichita, Kansas, this_____ day of ____________, 2002.

At the direction of the City Council

______________, City Manager
Chris Cherches

______________, City Clerk
Pat Burnett

Reviewed in accordance with K.S.A. 58-2005 on this_______day of___________, 2002.

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

Entered on transfer record this_______day of___________, 2002.

______________, County Clerk
Don Brace

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____day of__________, 2002 at_____o'clock___M; and is duly recorded.

______________, Register of Deeds
Bill Meek

______________, Deputy
Linda Kizzire

● = #4 REBAR W/ "BAUGHMAN" CAP (SET)
⌀ = #4 REBAR W/ "BAUGHMAN" CAP (FOUND)
○ = 1/2" IRON (FOUND)
Ø = 3/4" IRON (FOUND)
⊠ = 1" IRON (FOUND)
△ = STONE W/ #5 REBAR ON E. SIDE (FOUND)
▽ = STONE (FOUND)
□ = #5 REBAR (FOUND)

(M) = MEASURED
(D) = DESCRIBED
(P) = PLATTED
(C-D) = CALCULATED PER DESCRIBED INFO.

0 100 200

BENCHMARK
135th St. W. & 13th St. N. – City of Wichita Benchmark Disc at SE. Corner of Intersection.
56.00' E. of ℄
55.00' N. of ℄
Elev. = 167.83 City Datum
1355.23 NGVD29

135th St. W. & 13th St. N. – City of Wichita Benchmark Disc at SW. Corner of Intersection. E. side of concrete base for HLP
30.00' S. of ℄
35.00' W. of ℄
Elev. = 168.25 City Datum
1355.65 NGVD29

MINIMUM BUILDING PAD ELEVATIONS FOR LOWEST OPENING TO THE STRUCTURES

LOT	BLOCK	ELEVATION CITY DATUM
20	A	170.0
21,22	A	169.0
23,24	A	168.0
25,27	A	167.0
28,37,38	A	166.0
42	A	167.0
43	A	168.0
44	A	169.0
1	B	165.0
1-18	C	165.0

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.

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING

20-11-01-03