STORM WATER SEWER IMPROVEMENTS
FOR
REFLECTION RIDGE PLAZA
LOCATED IN THE
THE S.E.1/4, SEC. 4, T.27 S., R.1 W.,
SEDGWICK COUNTY, KANSAS
CITY OF WICHITA PRIV. PROJ. NO. 807 PPS(607861)
MIKE LINDEBAK, P.E., CITY ENGINEER
JUNE 1998

GENERAL NOTES

1. ALL ELEVATIONS SHOWN ARE BASED ON CITY OF WICHITA DATUM(MEAN SEA LEVEL ELEV.- 1187.4 = CITY DATUM).

2. CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF FORTY-EIGHT(48)HOURS TO UTILITY COMPANIES PRIOR TO STARTING 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
KG&E-GAS	263-7511
KG&E-ELECTRIC	264-1141
PEOPLES NATURAL GAS	942-8311
SOUTHWESTERN BELL TELEPHONE	1-571-2611
CITY OF WICHITA WATER DEPARTMENT	268-4908

THE CONTRACTOR SHALL NOTIFY PIPELINE COMPANIES AT LEAST 24 HOURS IN ADVANCE OF ANY WORK BEING PERFORMED ACROSS AND/OR ADJACENT TO PIPELINES.

3. THE 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.

4. THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY DIRECTLY 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.

6. THE CONTRACTOR SHALL RESTORE ALL DITCHES, SWALES, ROAD SHOULDERS, ENTRANCES AND BANK LINES TO THEIR ORIGINAL SLOPES AND GRADES EXCEPT AS SHOWN OTHERWISE.

7. A SAW CUT OF AT LEAST ONE-HALF THE DEPTH OF EXISTING SURFACE COURSES OR ONE-FOURTH THE DEPTH OF THE EXISTING TOTAL PAVEMENT THICKNESS SHALL BE PROVIDED AT LOCATIONS WHERE PROPOSED CONSTRUCTION ABUTS AN EXISTING SURFACE COURSE OR PAVEMENT FOR WHICH PARTIAL REMOVAL OF THAT SURFACE OR PAVEMENT IS REQUIRED, EXCEPT WHEN SUCH SAW CUTS ARE WITHIN THREE (3) FEET OF AN EXISTING JOINT, THE LIMITS OF REMOVAL SHALL BE EXTENDED TO THE EXISTING JOINT. SUCH SAW CUTS WILL NOT BE PAID FOR DIRECTLY AND THIS COST SHALL BE CONSIDERED AS SUBSIDIARY TO THE REMOVAL OF THE SURFACE OR PAVEMENT.

8. PAVEMENT REMOVAL AND/OR REPLACEMENT WILL BE MEASURED AND PAID FOR ON THE LINEAL FOOT BASIS AS MEASURED ALONG THE CENTERLINE OF THE WATER LINE REGARDLESS OF WIDTH, PAVEMENT TYPE AND/OR PAVEMENT THICKNESS. MINIMUM LIMITS OF SUCH PAVEMENT REMOVAL AND REPLACEMENT SHALL BE ONE FOOT BEYOND THE LIMITS OF THE EXCAVATION MADE FOR THE WATER LINE OR THE STRUCTURE, EXCEPT WHEN SUCH SAW CUTS ARE WITHIN THREE (3) FEET OF AN EXISTING JOINT THE LIMITS OF REMOVAL SHALL BE EXTENDED TO THE EXISTING JOINT. REMOVAL AND REPLACEMENT OF EXISTING PAVEMENT SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE CITY OF WICHITA STANDARD SPECIFICATIONS.

9. INTERURBAN TRAFFIC GENERATED OUTSIDE THE PROJECT AREA SHALL NOT BE CARRIED THROUGH CONSTRUCTION. LOCAL RESIDENTIAL TRAFFIC GENERATED WITHIN THE PROJECT AREA SHALL BE CARRIED THROUGH CONSTRUCTION AS FURTHER PROMULGATED BY PROJECT SPECIAL PROVISIONS.

10. 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. LOCATION INFORMATION HAS 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 WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.

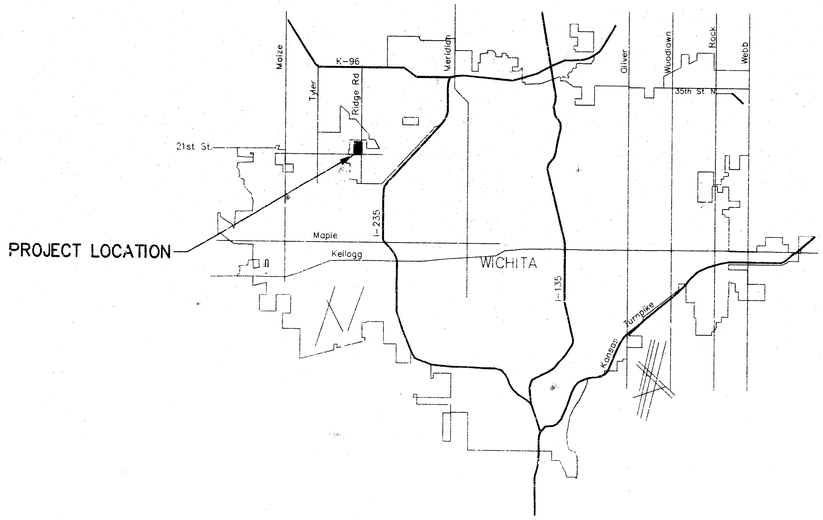
11. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS, THAT IN THE OPINION OF THE ENGINEER, WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED.

ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOODPLAIN WOULD REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WOULD REQUIRE ADDITIONAL ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.

12. PROPERTIES WITHIN THE PROJECT LIMITS MAY HAVE UNDERGROUND SPRINKLER SYSTEMS IN THE PUBLIC RIGHT-OF-WAY WHICH CONFLICT WITH NEW CONSTRUCTION. CONTRACTOR WILL BE REQUIRED TO REMOVE SUCH IMPROVEMENTS SHOULD THEY NOT BE REMOVED BY THEIR OWNER AT THE TIME OF CONSTRUCTION OF THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SALVAGE ALL SPRINKLER HEADS AND/OR VALVES AND GIVE SUCH MATERIAL TO THEIR OWNER. PORTIONS OF UNDERGROUND SPRINKLER SYSTEMS NOT IN CONFLICT WITH NEW CONSTRUCTION SHALL BE PROTECTED FROM DAMAGE AND SHALL REMAIN IN PLACE. ALL WORK IN CONNECTION WITH UNDERGROUND SPRINKLER SYSTEMS SHALL BE CONSIDERED AS SUBSIDIARY TO THE CONTRACT PAY ITEMS OF WORK.

13. THE CONTRACTOR MUST EXAMINE THE CONSTRUCTION SITE PRIOR TO BIDDING AND BE SATISFIED AS TO THE WORK SHOWN FOR COMPLETION. AFTER BIDS HAVE BEEN RECEIVED, THE CONTRACTOR SHALL NOT ASSERT THAT THERE WAS A MISUNDERSTANDING OF THE QUANTITIES OF WORK OR OF THE NATURE FOR THE WORK TO BE COMPLETED.

14. PRIOR TO LAYING THE NEW SEWER LINES THE CONTRACTOR SHALL EXPOSE AND VERIFY THE ELEVATION, GRADE AND ALIGNMENT OF THE EXISTING STORM WATER SEWER AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES FROM THE PLAN.



LOCATION MAP

PROJECT LOCATED IN THE
S.E.1/4, SEC. 4, T.27S., R.1W.
SEDGWICK COUNTY, KANSAS

BOOKED
3-22-99
MCG
D-418

INDEX OF SHEETS

1. Title Sheet
2. Site Plan
3.-5. Plan/Profile Sheet
6. Drop Inlet Details
7. Curb Inlet Detail (Type 1, 6"x5')
8. Curb Inlet Detail (Type 1, 6"x10')
9. Standard Shallow MH Details

APPROVED AS NOTED
By CITY ENGINEER OF WICHITA

Sanitary Sewers _____
Storm Sewers VRH 6/18/98
Driveway Approaches _____
Water Mains _____
Paving _____

NOTE TO CONTRACTOR

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 THE PUBLIC RIGHT-OF-WAY BY THE CONTRACTOR WITHOUT SUCH INSPECTION NOR SHALL ANY WORK BE COMMENCED IN DEDICATED EASEMENTS OR PUBLIC RIGHT-OF-WAY WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER.

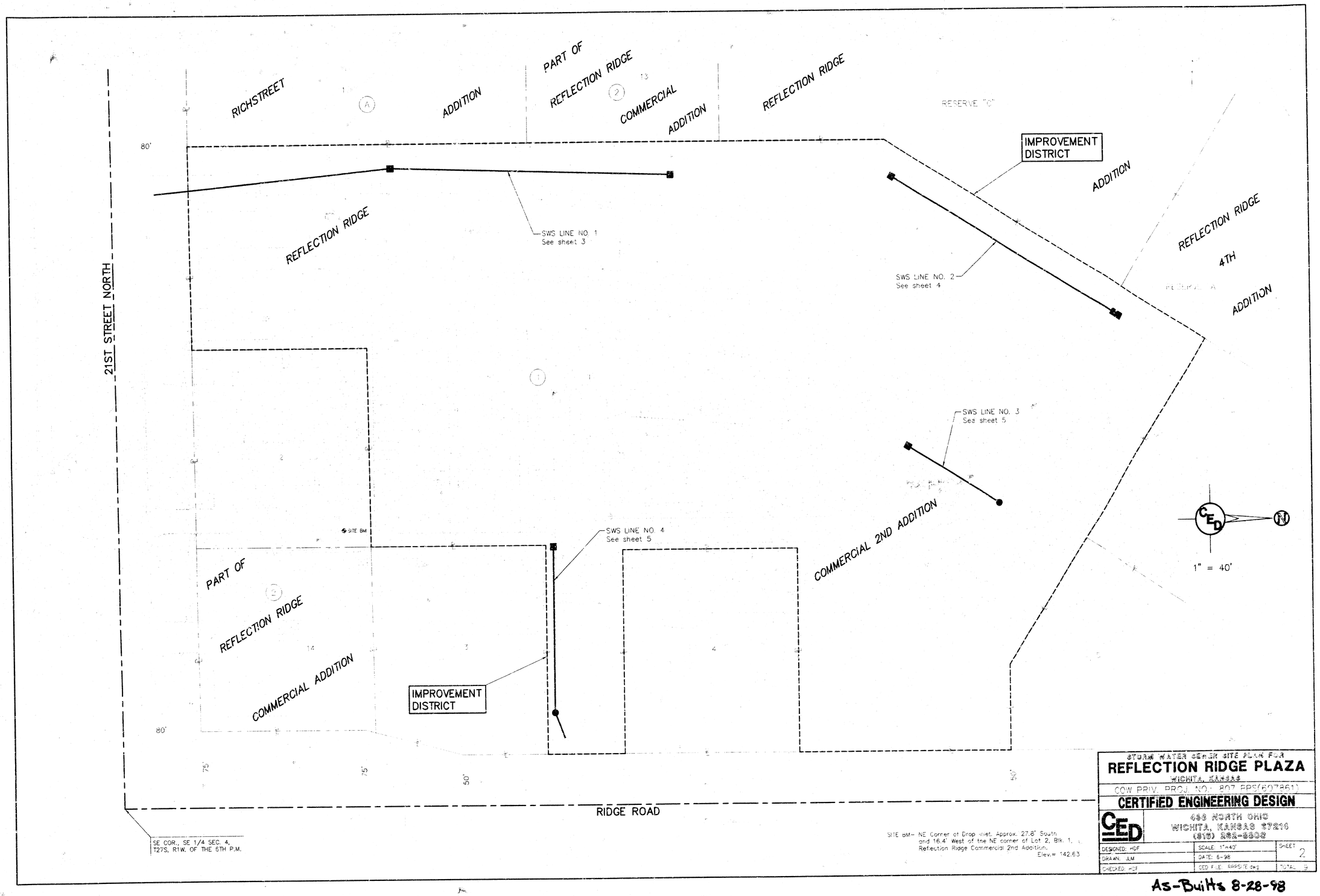
As-Builts
8-28-98

RANDALL DALE FUNK
LICENSED
10891
KANSAS
PROFESSIONAL ENGINEER
6-17-98

COW PRIV. PROJ. NO. 807 PPS(607861)

CERTIFIED ENGINEERING DESIGN
CED
438 NORTH OHIO
WICHITA, KANSAS 67214
(316) 262-8808

SHEET 1
TOTAL 9



STORM WATER SEWER SITE PLAN FOR

REFLECTION RIDGE PLAZA

WICHITA, KANSAS

COW PRIV. PROJ. NO.: 807 PPS/807861)

CERTIFIED ENGINEERING DESIGN

CED
455 NORTH ORIO
WICHITA, KANSAS 67214
(316) 262-3808

DESIGNED: HDF	SCALE: 1"=40'	SHEET 2
DRAWN: JLM	DATE: 6-98	
CHECKED: HDF	CED FILE: RRPS/TE.dwg	TOTAL 5

As-Builts 8-28-98

SWS NO. 2, Sta. 12+64.10=
SWS Curb Inlet 2
N= 20799.2778
E= 19386.1642

SWS NO. 2, Sta. 14+93.17=
SWS Area Inlet 1
N= 20570.2382
E= 19382.4492
Const. Std. 2'x4' Drop Inlet
Inlet Top Elev.= 142.6

SWS NO. 2, Sta. 17+82.63=
SWS Area Inlet 2
N= 20280.9049
E= 19373.8659
Const. Std. 2'x4' Drop Inlet
Inlet Top Elev.= 142.6

1" = 20'

Two Story Office Building (by others)

REFLECTION RIDGE

COMMERCIAL

Retail Store (by others)

Prop. 8" Waterline (by others)

2ND ADDITION

32.4'

23.6'

⌀4 Rebar

REFLECTION RIDGE

RESERVE "C"

ADDITION

CAPT. CT.

REFLECTION RIDGE

COMMERCIAL

ADDITION

NIGHSTREET

ADDITION

229.07 L.F. 15" Pipe

289.46 L.F. 15" Pipe

SITE BM- NE Corner of Drop Inlet. Approx. 27.8' South and 16.4' West of the NE corner of Lot 2, Blk. 1, Reflection Ridge Commercial 2nd Addition.
Elev.= 142.63

UTILITIES SHOWN REPRESENT THE BEST INFORMATION AVAILABLE FOR DESIGN. ADDITIONAL UTILITIES MAY BE PRESENT ON THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION, DEPTH AND SIZE OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE LIABLE FOR ANY DAMAGE CAUSED BY THE FAILURE TO DO SO.

REVISED SWS LINE NO. 2

SWS Curb Inlet 2
Top Elev.= 142.8

SWS Area Inlet 1
Top Elev.= 142.6

SWS Area Inlet 2
Top Elev.= 142.6

Proposed Ground (by others)

Existing Ground

FL Out= 136.90
FL In= 137.03

229.07 L.F. 15" RCP @0.39%

FL= 137.92

289.46 L.F. 15" RCP @0.39%

FL= 137.05

155 150 145 140 135 130 125 120 115

13+00 14+00 15+00 16+00 17+00

STORM WATER SEWER IMPROVEMENTS FOR
REFLECTION RIDGE PLAZA
WICHITA, KANSAS
COW PRIV. PROJ. NO.: 807 PPS(607861)

CERTIFIED ENGINEERING DESIGN
CED
438 NORTH OHIO
WICHITA, KANSAS 67214
PH. (316)262-8808 FAX (316)262-0080

DESIGNED: HDF	SCALE: 1"=20'	SHEET 3R
DRAWN: JLM	DATE: 5-98	
CHECKED: HDF	CED FILE: REVSWSP1.dwg	TOTAL 9

As-Builts 8-28-98

SWS NO. 2, Sta. 9+98.81=
SWS Curb Inlet 1
N= 21027.1912
E= 19521.9534
Const. Std Type 1 Curb Inlet over Exist. 24" RCP SWS.
W= 4' 4", L= 11'-4"
Inlet Top Elev.= 142.3

SWS NO. 2, Sta. 12+64.10=
SWS Curb Inlet 2
N= 20799.2778
E= 19386.1642
Const. Std. Type 1 Curb Inlet
W= 4'-4", L= 6'-4"
Inlet Top Elev.= ~~140.5~~ 142.3

Two Story
Office Building
(by others)

REFLECTION RIDGE
COMMERCIAL
2ND ADDITION
RESERVE "A"
ADDITION
RESERVE "C"

93.1'
23.2'
27.3'

#4 Rebar

CP #5
#4 Rebar
N= 21121.1293
E= 19547.8414

CP #2
#4 Rebar
N= 20792.3387
E= 19350.0452

SWS NO. 2, Sta. 9+92.94=
N= 21032.2415
E= 19524.9312
Contractor to cut back existing 18" CMP to install into back of Proposed Curb Inlet.
West end Elev.= 140.25
East end Elev.= 140.05

264.10 L.F. 15" Pipe

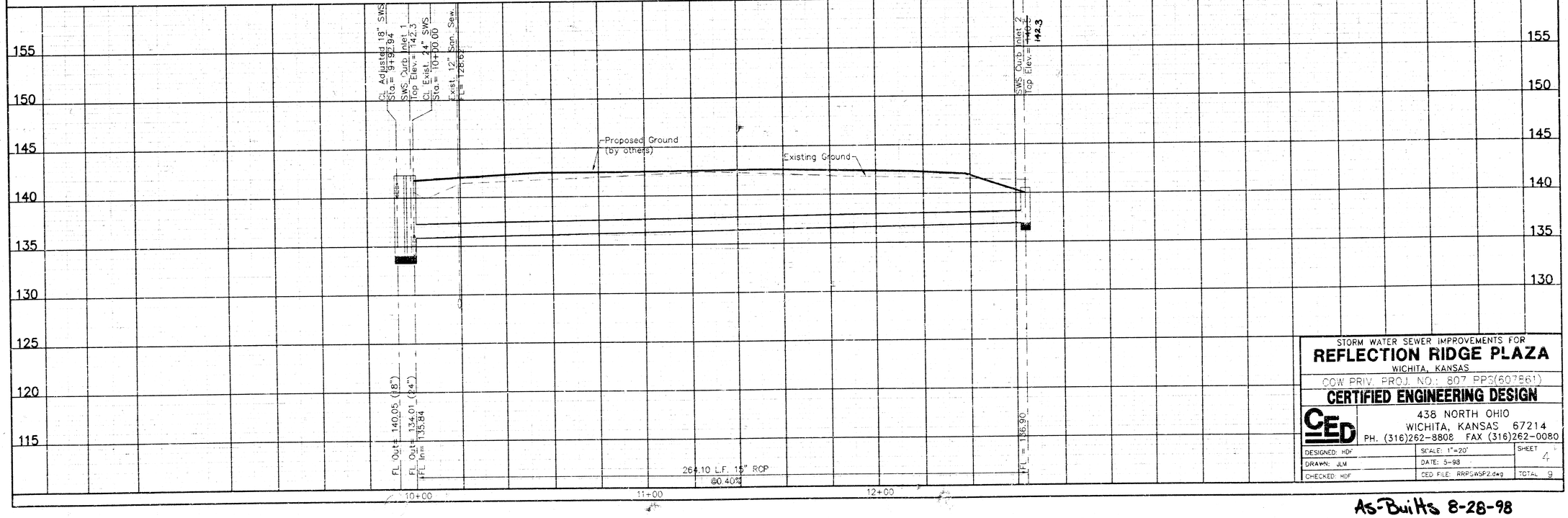
CAUTION!!!
Existing 12" Sanitary Sewer.

1" = 20'

UTILITIES SHOWN REPRESENT THE BEST INFORMATION AVAILABLE FOR DESIGN. ADDITIONAL UTILITIES MAY BE PRESENT ON THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION, DEPTH AND SIZE OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE LIABLE FOR ANY DAMAGE CAUSED BY THE FAILURE TO DO SO.

SITE BM- NE Corner of Drop Inlet. Approx. 27.8' South and 16.4' West of the NE corner of Lot 2, Blk. 1, Reflection Ridge Commercial 2nd Addition.
Elev.= 142.63

SWS LINE NO. 2

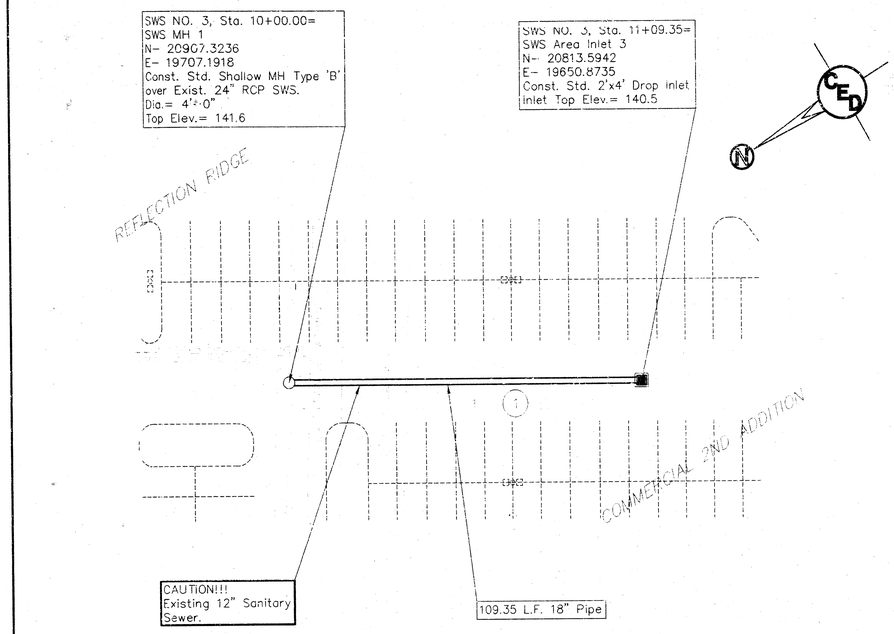


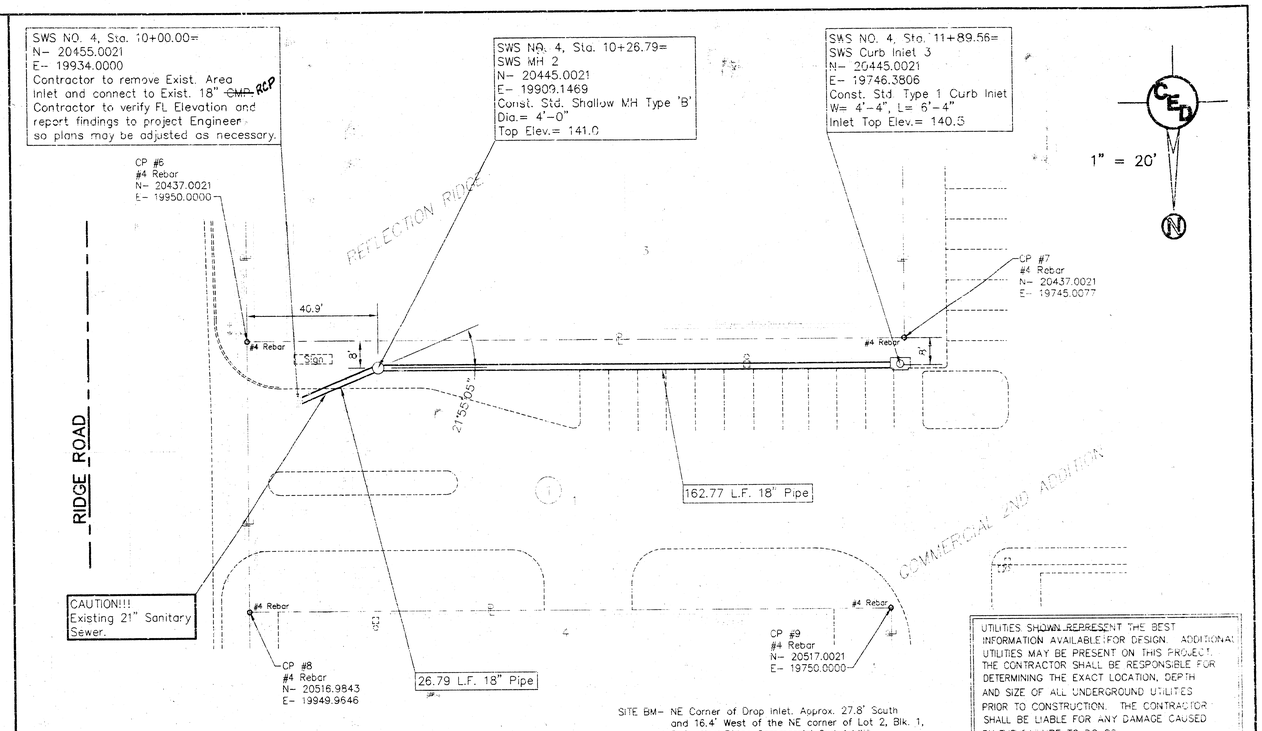
STORM WATER SEWER IMPROVEMENTS FOR
REFLECTION RIDGE PLAZA
WICHITA, KANSAS
COW PRIV. PROJ. NO.: 807 PPS(607861)

CERTIFIED ENGINEERING DESIGN
438 NORTH OHIO
WICHITA, KANSAS 67214
PH. (316)262-8808 FAX (316)262-0080

DESIGNED: HDF	SCALE: 1"=20'	SHEET 4
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CHECKED: HDF	CED FILE: RRPSWSP2.dwg	TOTAL 9

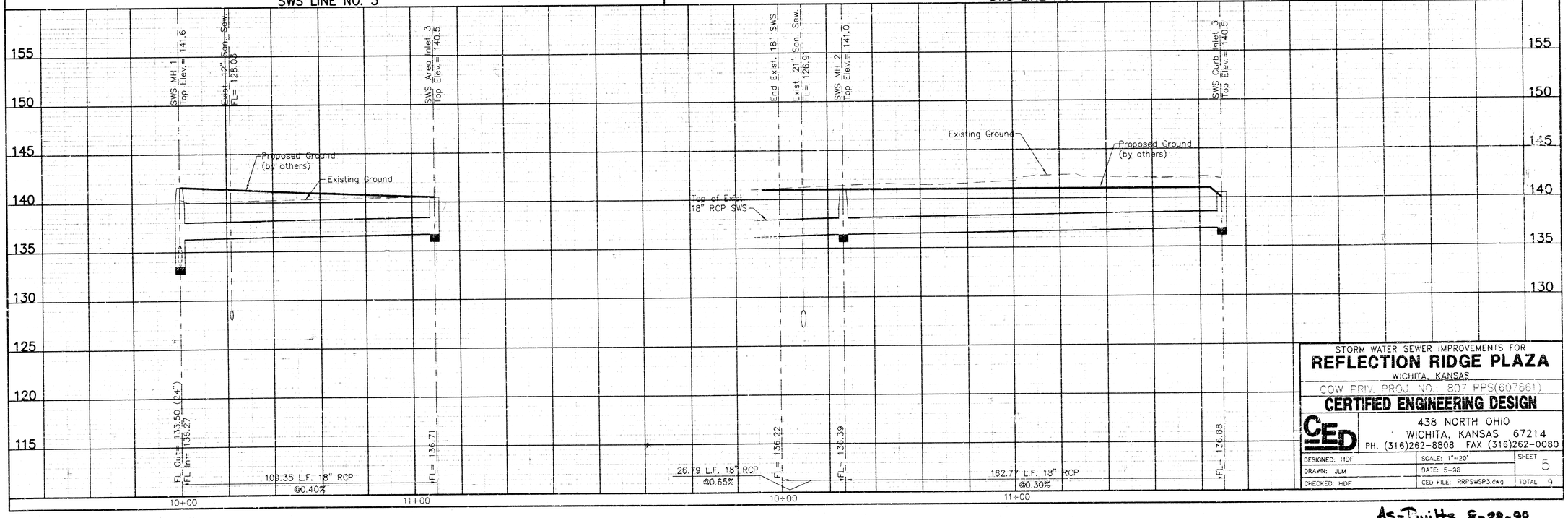
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SWS LINE NO. 3

SWS LINE NO. 4

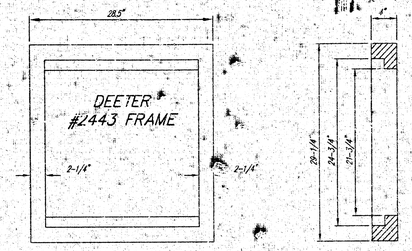


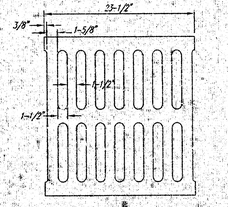
STORM WATER SEWER IMPROVEMENTS FOR
REFLECTION RIDGE PLAZA
WICHITA, KANSAS
COW PRIV. PROJ. NO.: 807 PPS(607561)

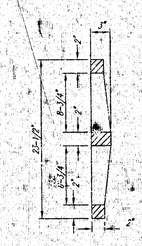
CERTIFIED ENGINEERING DESIGN
438 NORTH OHIO
WICHITA, KANSAS 67214
PH. (316)262-8808 FAX (316)262-0080

DESIGNED: HDF	SCALE: 1"=20'	SHEET 5
DRAWN: JLM	DATE: 5-98	
CHECKED: HDF	CED FILE: RRPSWSP3.dwg	TOTAL 9

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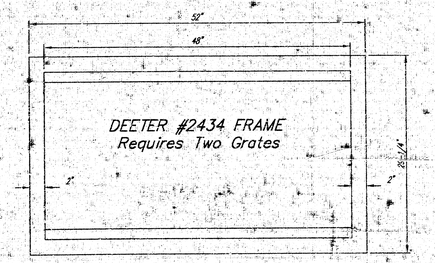


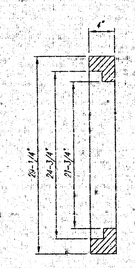


DEETER #2433 GRATE

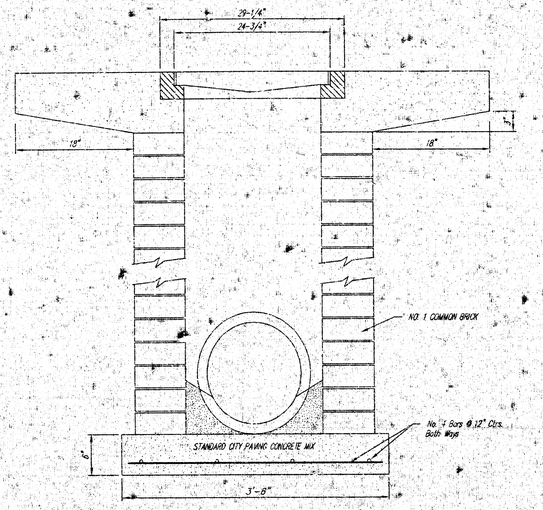
24" x 24" Frame and Grate Detail

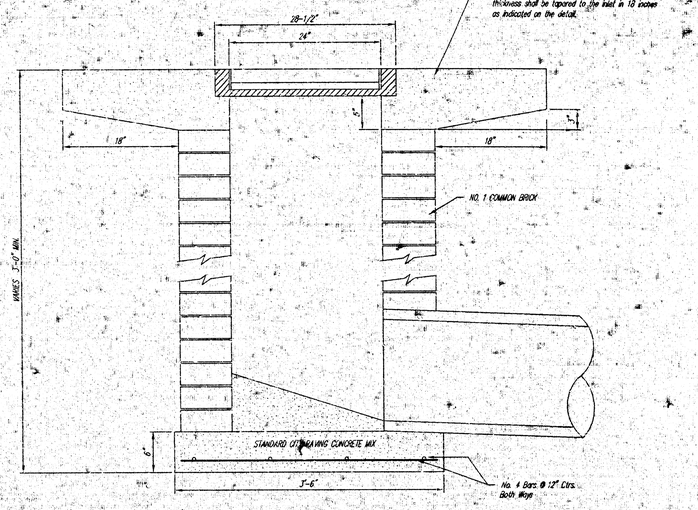
NOTE: Grates shall be imprinted on the top surface with "CITY OF WICHITA" using letters at least 1" in height. Other marking methods may be approved by the engineer.

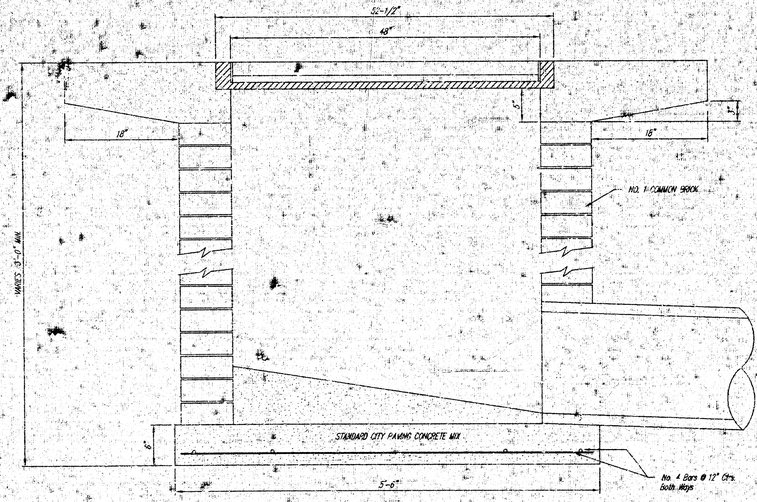




Double 24" x 24" Frame Detail







STORM WATER SEWER IMPROVEMENTS

DROP INLET DETAIL

WICHITA, KANSAS

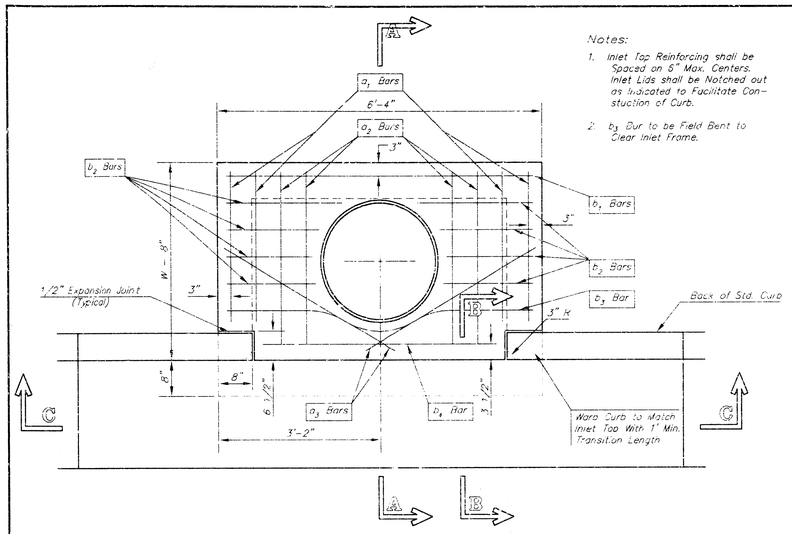
COW PRIV. PROJ. NO. 807 PPS(607861)

CERTIFIED ENGINEERING DESIGN

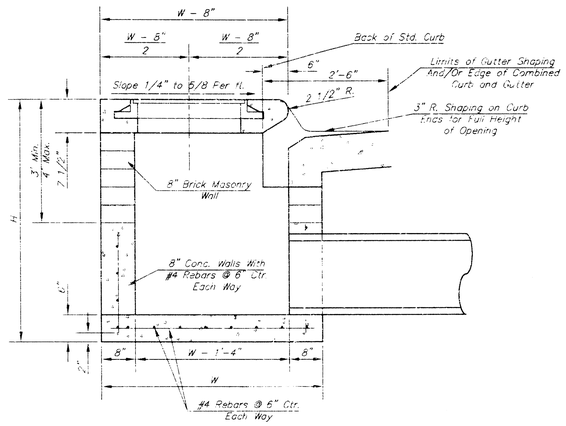
CED
438 NORTH OHIO
WICHITA, KANSAS 67214
(316) 262-8808

DESIGNED: HDF	SCALE: NTS	SHEET 6
DRAWN: HDF	DATE: 4-98	
CHECKED: HDF	CED FILE: DRUPINLT.dwg	TOTAL 9

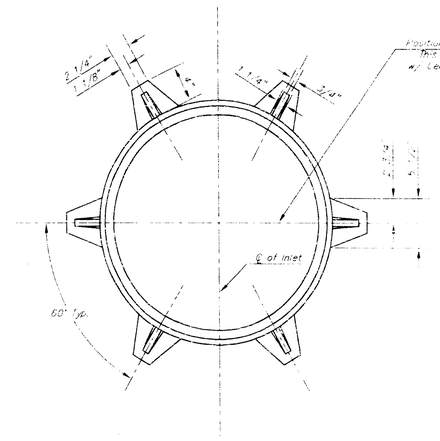
As-Builts 8-28-98

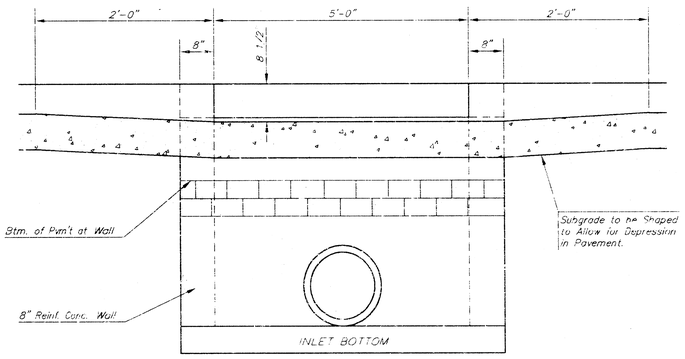


PLAN

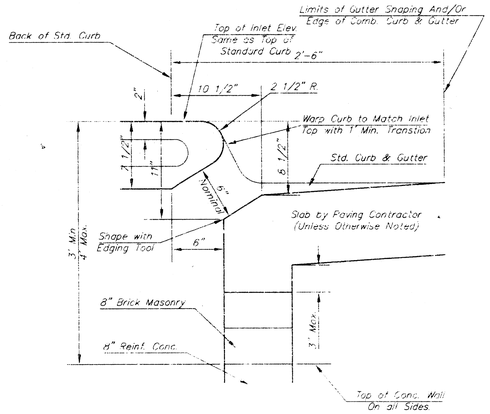


SECTION A—A

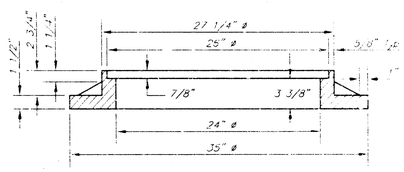




SECTION C—C



SECTION B--B



WT. = 180 lbs.

MANHOLE RING AND COVER

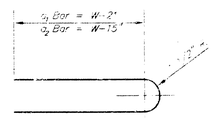
*See City of Wichita Standard Manhole Ring and Cover Detail Sheet for Cover Details to Be Used With Inlet Frame.

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	#5	
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"	5'-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±



BENDING DIAGRAM

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. 1, 1984

CITY OF WICHITA STANDARD TYPE
CURB INLET DETAILS
INLET OPENING 5' x 8'-3"

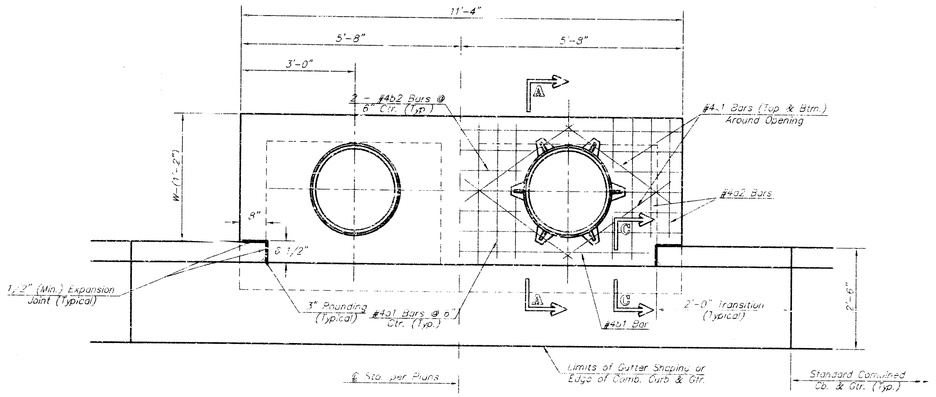
COW PRJ. PROJ. NO. 807 PROJECT

CERTIFIED ENGINEERING DESIGN

CED
632 NORTH OHIO
WICHITA, KANSAS 67214
(316) 262-8608

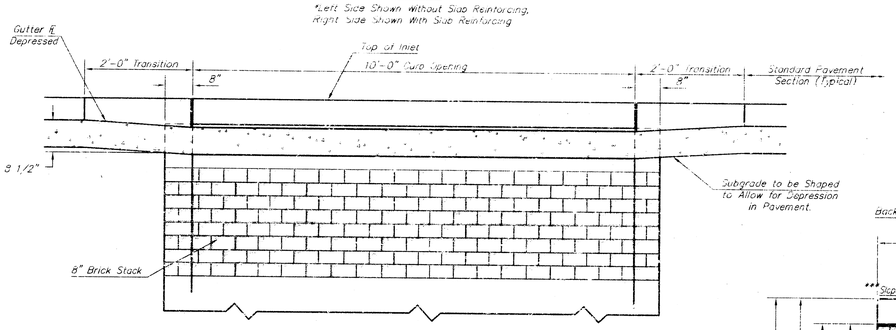
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DRAWN:	DATE:	
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As-Builts 8-28-98

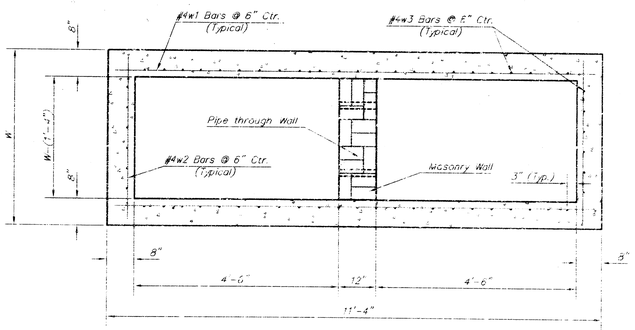


PLAN

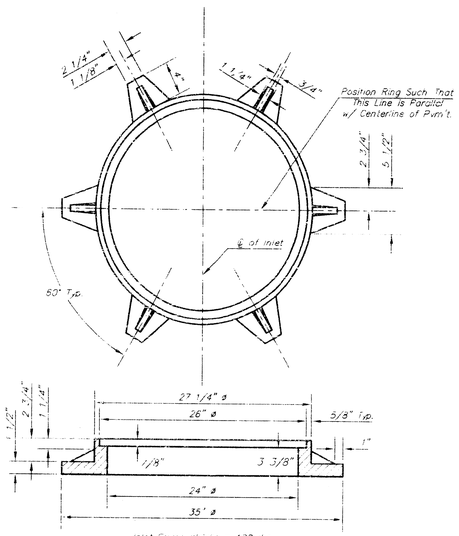
*Left Side Shown Without Slab Reinforcing, Right Side Shown With Slab Reinforcing



ELEVATION



SECTION B-B



Inlet Frame Weight = 180 lbs

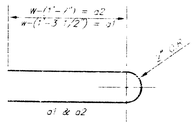
MANHOLE RING AND COVER

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

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	7'-7"	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	②	11'-1"	②	11'-1"	③	11'-1"	③	11'-1"	③	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	③	68	③

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

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



BENDING DIAGRAM

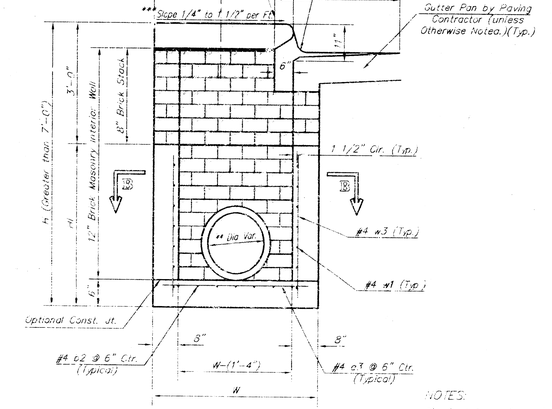
GENERAL NOTES:

Concrete shall be C.O.W. standard paving mix. All exposed edges shall be finished with an edging tool. Reinforcing bars shall be field bent or cut to clear pipes and inlet rings. All bars are #4 bars @ 6" spacing and shall have a minimum clearance of 1 1/2" unless otherwise noted. Floors of inlet shall be shaped with 3 sack sand mix concrete to increase hydraulic efficiency such that the inlet will be self cleaning between all inlet and/or outlet pipe(s). The contractor will be required to construct 8" brick masonry walls between the inlet base and top on the inlet when H=7'-0" or less and W=5'-4" or less. When H is greater than 6'-4" and H is less than 7'-0", the outside inlet walls below the brick stack shall be reinforced concrete construction.

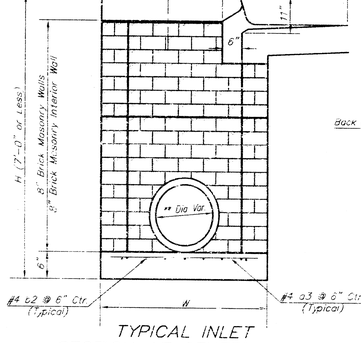
Concrete tops to be installed on thin mortar cushion to insure full support along brick walls. Concrete tops may be cast in place or precast.

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

This detail is identical to the standard detail drawing except that the gutter transition length is increased from 2'-0" to 3'-6".



TYPICAL INLET SECTION AT CENTER WALL (REINFORCED CONCRETE WALLS)

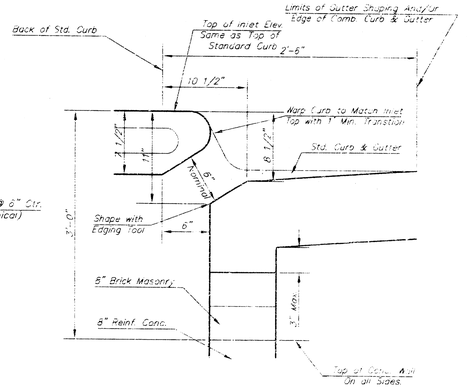


TYPICAL INLET SECTION AT CENTER WALL (MASONRY WALLS)

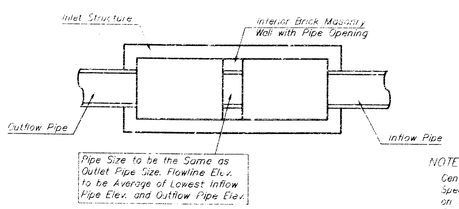
NOTES:

** A center wall opening shall be provided by means of a section of reinforced concrete pipe. See Case I and Case II below.

*** Slope of inlet tops to match sidewalk or parking slopes within limits indicated

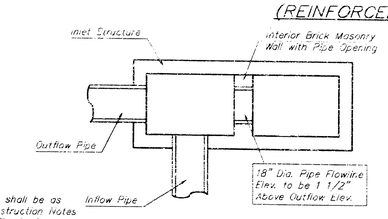


SECTION C-C

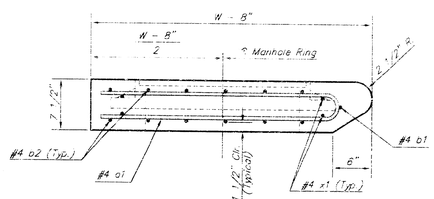


CASE I

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



CASE II



SECTION A-A

Revised - Feb. 16, 1994

CITY OF WICHITA STANDARD TYPE 1

CURB INLET DETAILS

INLET OPENING 5' x 10'-0"

COW PRIV. PROJ. NO.: 807 PPS(807861)

CERTIFIED ENGINEERING DESIGN

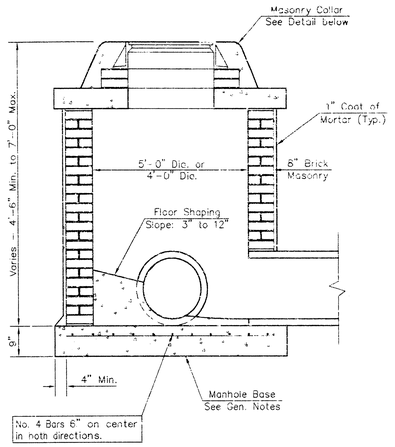
CED

439 NORTH OHIO
WICHITA, KANSAS 67214
(316) 262-8808

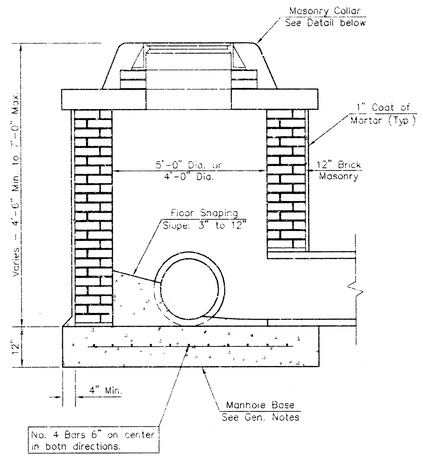
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As-Builts 8-28-98

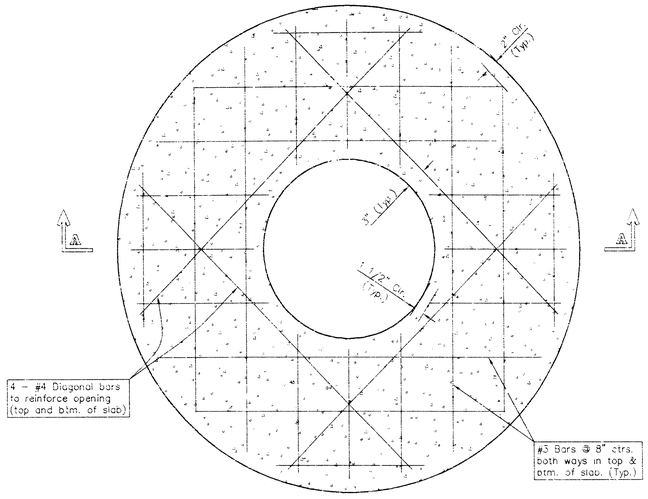
Sheet No.	Total Sheets
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SHALLOW TYPE "A" MANHOLE



SHALLOW TYPE "B" 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. Type "A" shallow manholes can be used on sewers when the manhole is not located within public street pavement. Manholes constructed where pipe sizes are smaller than 24" shall have an inside diameter of 4'. Manholes constructed where pipe sizes are 24" or larger shall have an inside diameter of 5'. Completed manhole shall be without leaks and water tight.

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.

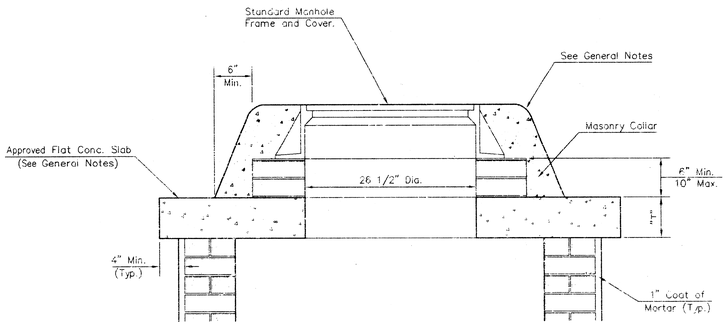
4. Pipes installed within the excavation made for the manhole shall be cradled with concrete to the limits of the manhole excavation. When clay pipe is used, the cradle shall extend to the first joint outside the manhole. The cradle shall be terminated at the clay pipe joint in a manner which will maintain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

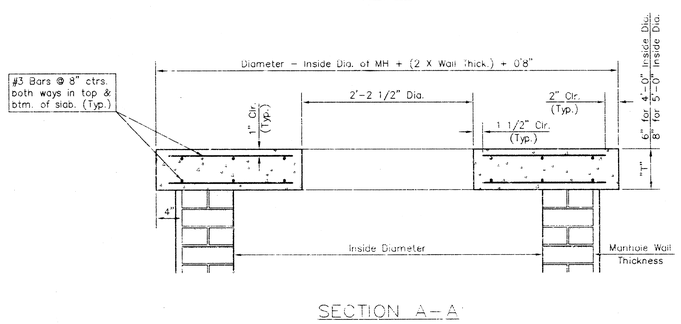
6. The crowns of inflowing pipes shall never be set lower than the crown of the outflowing pipe.

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

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

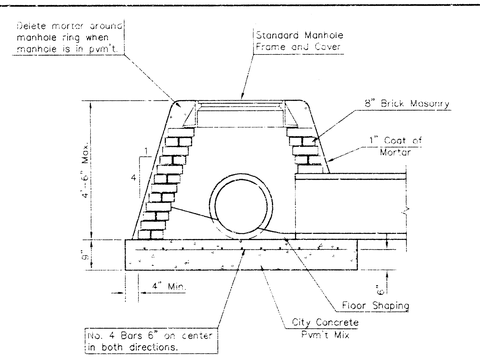


MASONRY COLLAR DETAIL

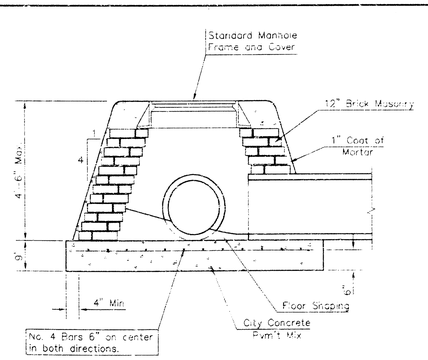


SECTION A-A

FLAT CONCRETE SLAB DETAILS



SPECIAL SHALLOW TYPE "A" MANHOLE



SPECIAL SHALLOW TYPE "B" MANHOLE

STANDARD/SPECIAL SHALLOW MANHOLES TYPE 'A' & 'B'

18 08 05 04

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