



Project: CCDC PR-21  
 Location: McKinney, TX  
 Date: May 23, 2024  
 Addendum: 0



Owner: Brenan Phelps 972-814-1428. Email. Brenan@DFSUtilities.com  
 Lead Estimator: Louie Alexander Email. Louie@DFSUtilities.com

**Water Line**

Item	Description	Quantity	Unit
	No Water Improvements		
		Subtotal For Water Line : \$ -	

**Sanitary Sewer**

Item	Description	Quantity
	No Sewer Improvements	
		Subtotal For Sanitary Sewer : \$ -

**Storm Drain**

Item	Description	Quantity	Unit	Unit Cost	Total Cost
1	Pedestrian Grate Inlet	1	EA	\$ 2,688.84	\$ 2,688.84
2	8" Trench Drain	30	LF	\$ 338.84	\$ 10,165.06
3	Connect to Existing Grate Inlet	2	EA	\$ 569.42	\$ 1,138.84
4	Demo Concrete	60	SqFt	\$ 79.42	\$ 4,765.06
5	6" SDR 35	135	LF	\$ 51.88	\$ 7,003.90
6	Roof Dain Boot	1	EA	\$ 2,651.95	\$ 2,651.95
7	Grout in Trench Drain with Concrete	1	EA	\$ 2,651.95	\$ 2,651.95
8	OH&P	10	%	3106.56	\$ 3,106.56

*grating not required per Architect*

Subtotal For Storm Drain : \$ ~~31,065.60~~ → \$28,413.65

Grand Total : \$ ~~34,172.46~~ → \$31,255.01

**Additional Costs If Needed**

1	Payment & Performance bond to Owner or GC	1	LS	\$ 1,240.45	\$ 1,240.45
2	Haul off of Spoils	60	CY	\$ 15.00	\$ 900.00

**Pricing Includes the following Items:**

- Staking
- One Mobilization
- Trench Safety
- Import of Select Material For Embedment
- Removal & Replacement of Paving

**Pricing Excludes the following Items:**

- City Bonds
- TxDot Permits
- Meter Fees and/or Deposits
- Conduits or Sleeves for other trades
- Landscaping, seeding or sod
- Tree removal or replacement
- Additional Mobilization
- Locate of Private Utilities
- Raven Lining of Sewer Manhole
- Inlet protection
- City Permits
- Relocation of Existing Utilities
- Roof Drain Connections
- Erosion Control
- Plumbers Permits
- Rock Excavation
- Camera Testing
- Flowable Fill

**Additional Qualifications:**

- Utilities placed to within 5' of building. Private piping to be done under plumbers permit.
- Fireline Riser priced to 1' above finished floor
- Fire Line to be permitted and installed by licensed SCR-G-2606378
- We propose to provide Equipment, labor & Material to preform the above Operations
- Cost per task are not stand alone. If you request partial bids pricing will change due to allocations.
- THIS QUOTE IS VOID AFTER 30 DAYS FROM PROPOSED DATE

Approved By: \_\_\_\_\_  
 Sign: \_\_\_\_\_  
 Date: \_\_\_\_\_

Sincerely,  
 Brenan Phelps  
 972-814-1428





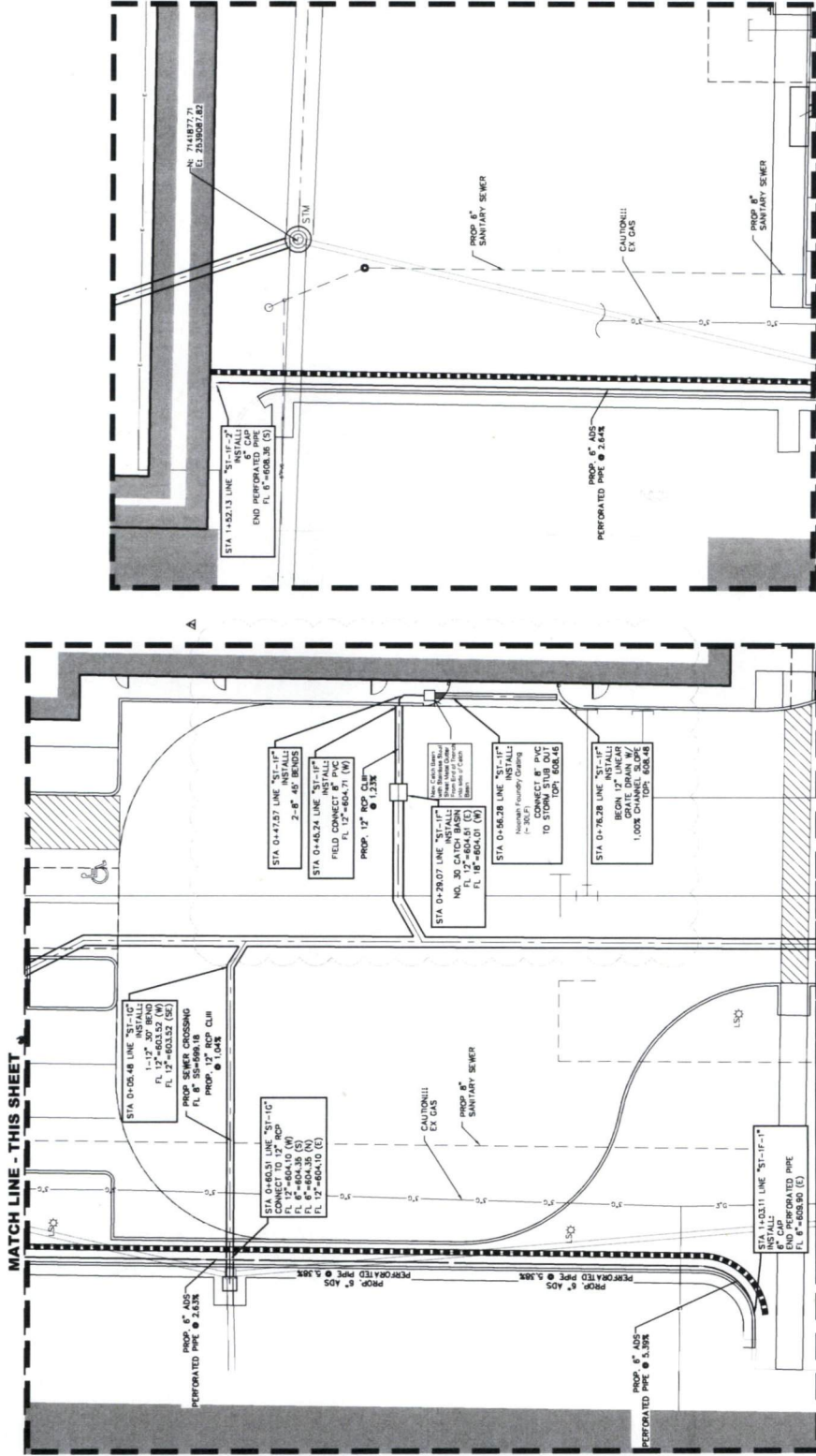
GRAPHIC SCALE IN FEET

0 5 10 20 30

- 1"=10'
- 2"=20'
- 3"=30'
- 4"=40'
- 5"=50'
- 6"=60'
- 7"=70'
- 8"=80'
- 9"=90'
- 10"=100'
- 11"=110'
- 12"=120'
- 13"=130'
- 14"=140'
- 15"=150'
- 16"=160'
- 17"=170'
- 18"=180'
- 19"=190'
- 20"=200'
- 21"=210'
- 22"=220'
- 23"=230'
- 24"=240'
- 25"=250'
- 26"=260'
- 27"=270'
- 28"=280'
- 29"=290'
- 30"=300'
- 31"=310'
- 32"=320'
- 33"=330'
- 34"=340'
- 35"=350'
- 36"=360'
- 37"=370'
- 38"=380'
- 39"=390'
- 40"=400'
- 41"=410'
- 42"=420'
- 43"=430'
- 44"=440'
- 45"=450'
- 46"=460'
- 47"=470'
- 48"=480'
- 49"=490'
- 50"=500'
- 51"=510'
- 52"=520'
- 53"=530'
- 54"=540'
- 55"=550'
- 56"=560'
- 57"=570'
- 58"=580'
- 59"=590'
- 60"=600'
- 61"=610'
- 62"=620'
- 63"=630'
- 64"=640'
- 65"=650'
- 66"=660'
- 67"=670'
- 68"=680'
- 69"=690'
- 70"=700'
- 71"=710'
- 72"=720'
- 73"=730'
- 74"=740'
- 75"=750'
- 76"=760'
- 77"=770'
- 78"=780'
- 79"=790'
- 80"=800'
- 81"=810'
- 82"=820'
- 83"=830'
- 84"=840'
- 85"=850'
- 86"=860'
- 87"=870'
- 88"=880'
- 89"=890'
- 90"=900'
- 91"=910'
- 92"=920'
- 93"=930'
- 94"=940'
- 95"=950'
- 96"=960'
- 97"=970'
- 98"=980'
- 99"=990'
- 100"=1000'

**GRADING & DRAINAGE GENERAL NOTES**

1. REFER TO SHEET C105 FOR GRADING & DRAINAGE GENERAL NOTES.



MATCH LINE - THIS SHEET

MATCH LINE - THIS SHEET

TOPOGRAPHIC INFORMATION SHOWN IS BASED ON A TOPOGRAPHIC SURVEY PREPARED BY HALT ASSOCIATES, INC. WORK SHALL BE DONE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT BY ALLIANCE GEOTECHNICAL GROUP, DATED AUGUST 14, 2008.

NO.	DATE	BY	REVISION
1	04/17/2008	WJF	ISSUED FOR PERMIT
2	07/07/2008	WJF	REVISED TO REFLECT CITY COMMENTS
3	07/07/2008	WJF	REVISED TO REFLECT CITY COMMENTS

**Pacheco Koch**  
 CIVIL ENGINEERING  
 1700 W. WILSON STREET  
 DALLAS, TX 75208  
 TEL: 972.241.2700  
 FAX: 972.241.2700

**STORM SEWER PLAN**  
**COLLIN COUNTY ADF - PHASE 1 ADDITION**  
**COLLIN COUNTY JUSTICE CENTER**  
**4300 COMMUNITY AVENUE**  
**CITY OF MCKINNEY, COLLIN COUNTY, TEXAS**

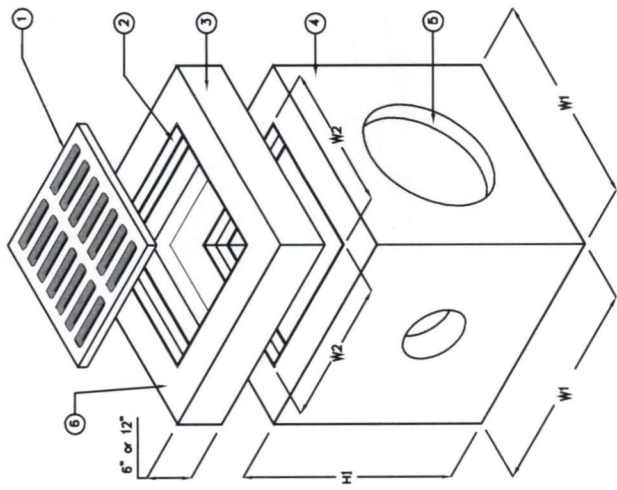
DESIGN	DATE	SCALE	NOTES	FILE	NO.
CAD	08/11/2007	1"=10'			<b>C114</b>

**PRELIMINARY**  
 THIS DOCUMENT IS PREPARED FOR THE PURPOSE OF ACQUISITION ONLY AND IS NOT TO BE USED FOR BIDDING OR CONSTRUCTION PURPOSES. THE USER OF THIS DOCUMENT SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. DATE: 04/17/2008

**COORDINATE!!**

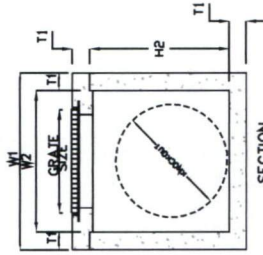
CONTACT:  
 1-800-DIG-TEXAS  
 1-800-337-8667  
 ONCOR ENERGY 972-886-1399  
 1-877-599-4199  
 CHARTER SPECTRUM 1-800-711-9112  
 TXU 1-800-711-9112  
 TEXAS ONE CALL 811  
 48 HOURS PRIOR TO CONSTRUCTION

- BENCH MARK LIST**
- BM 100 SET \* 8" O.D. 36" LF WEST AND 27.60 LF SOUTH OF THE EXISTING SHERIFF'S STATION SOUTHWEST BUILDING CORNER.  
 N: 25.886533  
 E: 25.886533  
 ELEV=863.08
  - BM 101 1/2" SR W/ TP CAP 62.6 LF WEST AND 54.0 LF NORTH OF THE EXISTING SHERIFF'S STATION SOUTHWEST BUILDING CORNER.  
 N: 25.884013  
 E: 25.884013  
 ELEV=864.77
  - BM 102 SET \* 8" O.D. 36" LF WEST AND 27.60 LF SOUTH OF THE EXISTING SHERIFF'S STATION SOUTHWEST BUILDING CORNER.  
 N: 25.886812  
 E: 25.886812  
 ELEV=862.18



ISOMETRIC

NOTE: KNOCKOUTS-STD.  
PENETRATIONS-OPTIONAL



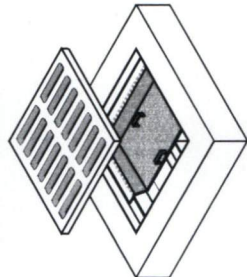
SECTION

MARK	QTY	DESCRIPTION
1	1	GRATE OR COVER AS REQUESTED. SEE OPTIONS
2	1	CAST-IN STEEL FRAME
3	1	OPTIONAL TOP/EXTENSION 6" TO 18"
4	1	PRECAST CONCRETE BASIN SECTION
5	4	KNOCKOUTS (STD) AND PENETRATIONS (OPT) AS REQUIRED. SEE KO DIMENSION FOR MAXIMUM PIPE O.D.*
6	1	MANUFACTURER'S INSTRUCTIONS

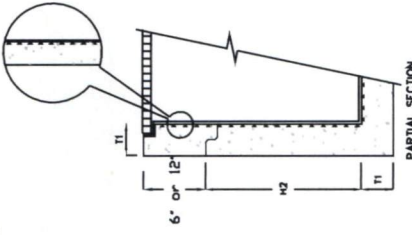
MFG: PARKUSA  
888-611-PARK  
WWW.PARKUSA.COM  
PARKUSA, CB-1  
DATE MANUFACTURED

ADDITIONAL OPTIONS

REMOVABLE BARS SCREEN 1/2 (2) LFT HARKLE, 304 STAINLESS STEEL, 1/2 HOLES @ 1/2 O.C. (SEE PRECIPITATION DUTY)



HIGH DENSITY POLYETHYLENE (HDPE) LIFT W/ ANCHORS



MODEL	W1	W2	H1	H2	T1	T2	KO	GRATE SIZE	OPEN AREA	WEIGHT LBS
CB-12	18"	10"	21"	18"	3"	2"	10"	12" x 12" x 1/2"	90	180
CB-14	24"	12"	28"	24"	4"	3"	15"	18" x 18" x 1/2"	120	600
CB-18	24"	16"	34"	30"	4"	4"	15"	18" x 18" x 1/2"	168	1,000
CB-20	26"	18"	34"	30"	5"	5"	17"	20" x 20" x 1/2"	170	1,335
CB-24	32"	22"	41"	38"	6"	6"	24"	24" x 24" x 1/2"	268	2,245
CB-27	30"	26"	42"	38"	6"	6"	24"	27" x 27" x 1/2"	350	2,875
CB-30	42"	30"	42"	38"	6"	6"	30"	32" x 32" x 1/2"	490	3,675
CB-36	48"	36"	48"	38"	6"	6"	32"	36" x 36" x 1/2"	693	4,585
CB-46	60"	48"	60"	48"	6"	6"	48"	36" x 36" x 1/2"	693	7,250
CB-60	72"	60"	72"	60"	6"	6"	60"	36" x 36" x 1/2"	693	10,500
CB-72	84"	72"	78"	72"	6"	6"	72"	36" x 36" x 1/2"	693	19,350
CB-84	96"	84"	78"	72"	6"	6"	72"	36" x 36" x 1/2"	693	19,350

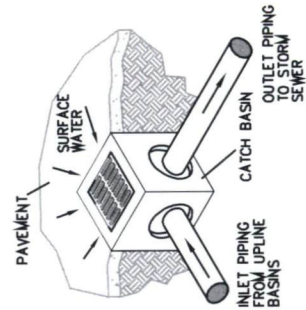
\*KNOCKOUTS NOT AVAILABLE

SPECIFICATIONS

CONCRETE : CLASS 1/1 CONCRETE WITH OF DESIGN STRENGTH OF 4500 PSI AT 28 DAYS. UNIT IS OF MONOLITHIC CONSTRUCTION AT FLOOR AND FIRST STAGE OF WALL WITH SECTIONAL RISER TO REQUIRED DEPTH.

REINFORCEMENT: GRADE 60 REINFORCED STEEL REBAR CONFORMING TO ASTM A615 ON REQUIRED CENTERS OR EQUAL.

C.I. CASTINGS: CAST IRON FRAMES AND GRATES ARE MANUFACTURED OF GREY CAST IRON CONFORMING TO ASTM A48-76 CLASS 30.



**COVER OPTIONS**

ALSO RESISTANT FROM GRATING, 1/2 STAINLESS STEEL FRAME (PRESTRAIN DUTY)

GRAVING GRATING  
ACID-RESISTANT  
POLYURETHANE GRATING/  
FRAME (PRESTRAIN DUTY)

ALSO RESISTANT FROM GRATING, 1/2 STAINLESS STEEL FRAME (PRESTRAIN DUTY)

D.I. CASTINGS, MANHOLE FRAMES, COVERS OR GRATES ARE MANUFACTURED OF MALLEABLE IRON TO ASTM A48, A815, A818, A819, A820, A821, A822, A823, A824, A825, A826, A827, A828, A829, A830, A831, A832, A833, A834, A835, A836, A837, A838, A839, A840, A841, A842, A843, A844, A845, A846, A847, A848, A849, A850, A851, A852, A853, A854, A855, A856, A857, A858, A859, A860, A861, A862, A863, A864, A865, A866, A867, A868, A869, A870, A871, A872, A873, A874, A875, A876, A877, A878, A879, A880, A881, A882, A883, A884, A885, A886, A887, A888, A889, A890, A891, A892, A893, A894, A895, A896, A897, A898, A899, A900, A901, A902, A903, A904, A905, A906, A907, A908, A909, A910, A911, A912, A913, A914, A915, A916, A917, A918, A919, A920, A921, A922, A923, A924, A925, A926, A927, A928, A929, A930, A931, A932, A933, A934, A935, A936, A937, A938, A939, A940, A941, A942, A943, A944, A945, A946, A947, A948, A949, A950, A951, A952, A953, A954, A955, A956, A957, A958, A959, A960, A961, A962, A963, A964, A965, A966, A967, A968, A969, A970, A971, A972, A973, A974, A975, A976, A977, A978, A979, A980, A981, A982, A983, A984, A985, A986, A987, A988, A989, A990, A991, A992, A993, A994, A995, A996, A997, A998, A999, A1000

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EMERGENCY DUTY CAST IRON GRATE

CAST IRON FRAME & GRATE 19500-SERIES

D.I. CASTINGS, MANHOLE FRAMES, COVERS OR GRATES ARE MANUFACTURED OF MALLEABLE IRON TO ASTM A48, A815, A818, A819, A820, A821, A822, A823, A824, A825, A826, A827, A828, A829, A830, A831, A832, A833, A834, A835, A836, A837, A838, A839, A840, A841, A842, A843, A844, A845, A846, A847, A848, A849, A850, A851, A852, A853, A854, A855, A856, A857, A858, A859, A860, A861, A862, A863, A864, A865, A866, A867, A868, A869, A870, A871, A872, A873, A874, A875, A876, A877, A878, A879, A880, A881, A882, A883, A884, A885, A886, A887, A888, A889, A890, A891, A892, A893, A894, A895, A896, A897, A898, A899, A900, A901, A902, A903, A904, A905, A906, A907, A908, A909, A910, A911, A912, A913, A914, A915, A916, A917, A918, A919, A920, A921, A922, A923, A924, A925, A926, A927, A928, A929, A930, A931, A932, A933, A934, A935, A936, A937, A938, A939, A940, A941, A942, A943, A944, A945, A946, A947, A948, A949, A950, A951, A952, A953, A954, A955, A956, A957, A958, A959, A960, A961, A962, A963, A964, A965, A966, A967, A968, A969, A970, A971, A972, A973, A974, A975, A976, A977, A978, A979, A980, A981, A982, A983, A984, A985, A986, A987, A988, A989, A990, A991, A992, A993, A994, A995, A996, A997, A998, A999, A1000

REV	DATE	BY	DESCRIPTION
A			

PROJECT: . . . . .  
 CUSTOMER: . . . . .  
 ENGINEER: . . . . .  
 ORDER #: . . . . . PROJ #: . . . . .  
 DATE: . . . . . LOCATION: . . . . .



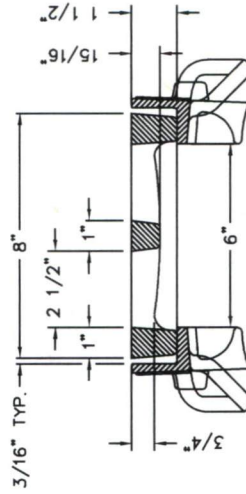
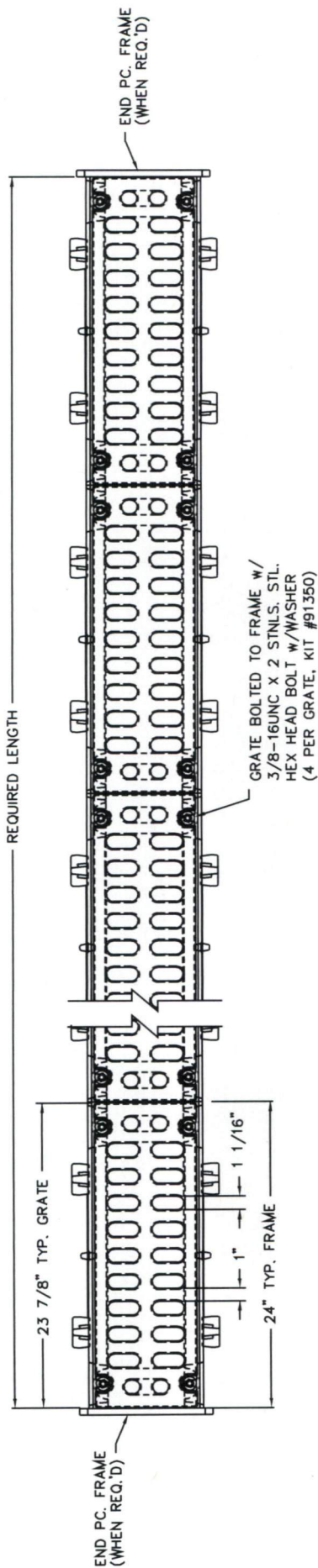
CATCH BASIN  
 MODEL CB - 12" THRU 84"

PM	PC	DRN	ENG	DWG. NO.	REV.
					A

DATE: . . . . . CB-1

MARK: -  
 LINE: -  
 STA: -  
 SHEET: -  
 DATE: -





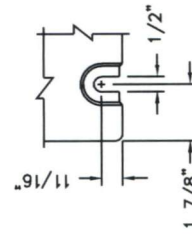
R-4999-AX TYPICAL SECTION  
TYPE "A" GRATE w/ TYPE "B" FRAME

SCALE 1:4

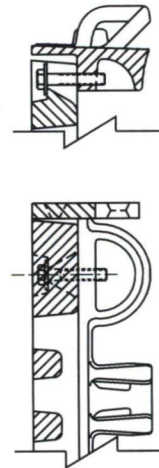
NOTES: FRAMES AND COVERS ARE FURNISHED IN STANDARD 2'-0" INCREMENTS. SPECIAL LENGTH FRAMES AND COVERS ARE FURNISHED FOR ANY OVERALL LENGTH.

COMPONENT NO'S: SIDE PC. FRAME 4990-2415; END PC. FRAME 4990-3108;  
GRATE 4999-3081

MATERIAL: SIDE PC. FRAMES - CAST GRAY IRON ASTM A-48, CLASS 35A  
END PC. FRAMES AND GRATES - CAST GRAY IRON ASTM A-48, CLASS 35B  
FINISH: NO PAINT



BOLT SLOT DETAIL  
SCALE 1:4



FRAME & GRATE  
SHOWING DEBRIS CHUTE  
SCALE 1:4

DR.	E. NIVER	SCALE	1/8" = 1"	TITLE	R-4999-AX BOLTED STYLE TRENCH TYPE "A" GRATE w/ TYPE "B" FRAME
CHK.		DATE	10-26-2012	DWG. NO.	NEENAH NF-
APP.		NEENAH FOUNDRY COMPANY SECTION 1000000000			

# UNBOLTED UNITS

**MATERIALS**  
 UNDER NORMAL SITUATIONS, USE 3/4 INCH PLYWOOD FOR FORMING WALLS. 2x4'S ARE SUITABLE FOR STUDS, PLATES, BRACING AND SPREADERS. A TYPICAL INSTALLATION IS SHOWN IN FIGURE 1. DETAILS AND SUGGESTIONS ARE BASED ON USING THE NEENAH FOUNDRY TYPE "B" FRAME.

**FORMING PROCEDURES**  
 POUR THE FLOOR SLAB OF THE TRENCH ACCORDING TO THE PLANS AND SPECIFICATIONS. THE WIDTH OF THE FORMING, (SEE FIGURE 1) MEASURED FROM THE OUTSIDE EDGES OF THE FORMS, CORRESPONDS TO THE "C" DIMENSION ON FIGURE 4. DURING THE ENTIRE FORMING PROCEDURE, VERIFY THAT THE FORMS ARE PLUMB, STRAIGHT, SOLID AND LEVEL.

THE HEIGHT OF THE FORM CORRESPONDS TO THE FINAL GRADE ELEVATION WHEN INSTALLING THE NON-BOLTED FRAMES AND GRATES/LIDS. EXTEND THE SPREADERS BEYOND THE EDGE OF THE FORMS (SEE FIGURE 2 AND 3) TO PROVIDE A STOP FOR THE FRAME AND SEAT FORM.

TO ATTACH THE CAST IRON FRAME TO THE FORMING, THE USE OF A "SEAT FORM" IS RECOMMENDED TO ASSURE THAT THE FRAME IS AT THE PROPER ELEVATION AND TRUE. THE SEAT FORM HAS THE SAME DIMENSIONS AS THE FRAME, WITH THE HEIGHT CORRESPONDING TO THE FRAME HEIGHT (THE "B" DIMENSION), AND THE WIDTH THE SAME AS THE SEAT WIDTH OF THE FRAME. THE SEAT WIDTH SHOULD BE FIELD MEASURED TO ASSURE A PROPER FIT. ALL NEENAH FRAMES HAVE A SLIGHT RADIUS AT THE CORNER OF THE SEAT AND VERTICAL FACE SO THE SEAT FORM SHOULD BE BEVELED TO ACCOMMODATE THE RADIUS. MOST 2x4'S HAVE THIS RADIUS.

NAIL THE FRAME TO THE SEAT FORM USING THE NAIL HOLES IN THE FRAME. (FIGURE 2 & 3)

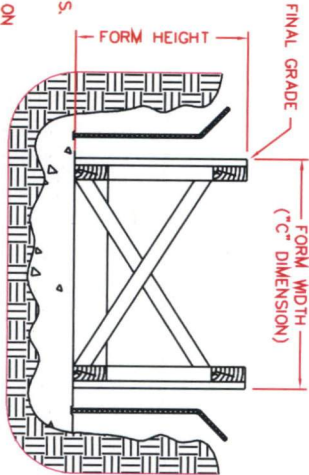


FIGURE 1

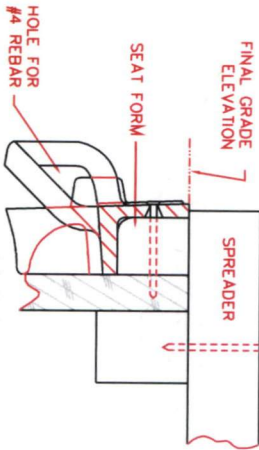


FIGURE 2

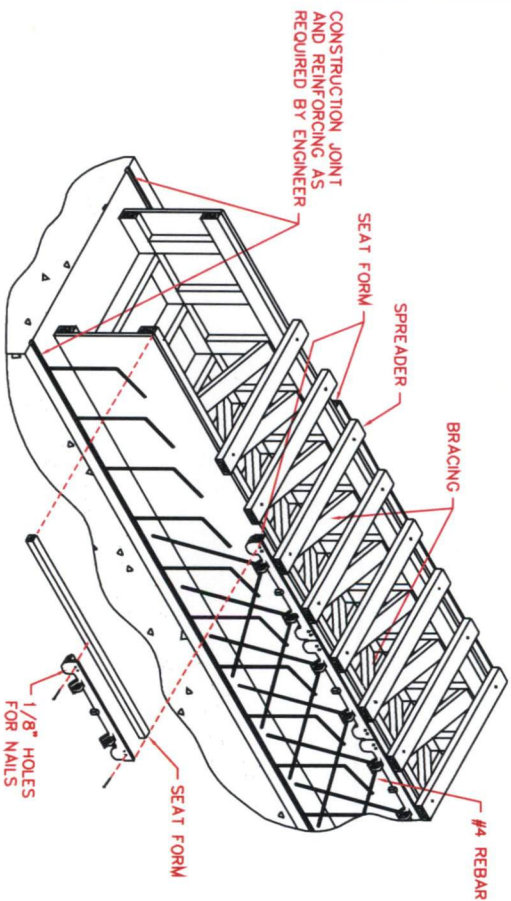


FIGURE 3

THE REBAR SHOWN IN THE VERTICAL WALLS OF THE TRENCH (SEE FIGURE 3) IS FOR ILLUSTRATIVE PURPOSES ONLY. PROPER SIZING AND PLACEMENT IS THE RESPONSIBILITY OF THE ENGINEERING FIRM PROVIDING THE PROJECT DESIGN.

FRAMES SHOULD BUTT TOGETHER SNUGLY, LEAVING AS LITTLE GAP AS POSSIBLE TO ELIMINATE CREEP. PLACE A #4 REBAR THROUGH THE HOLES IN THE ANCHOR LUGS TO PROVIDE ANCHORAGE IN THE CONCRETE. VERIFY THE SPACE BETWEEN THE EDGE OF THE GRATE AND FRAME SO THE GRATES WILL FIT PROPERLY. THIS SHOULD BE NO GREATER THAN 3/16" (SEE FIGURE 4).

POUR CONCRETE AND USE THE TOP EDGE OF THE FRAME AS A SCREED POINT.

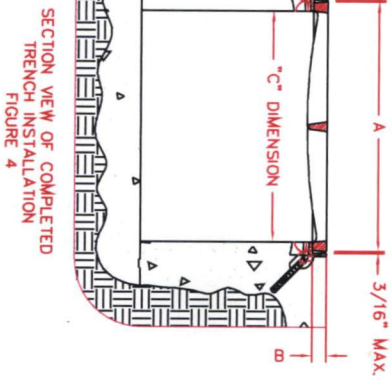


FIGURE 4

**GENERAL COMMENTS**  
 ALL FRAME SECTIONS ARE MANUFACTURED AND FURNISHED IN STANDARD 2'-0" LENGTHS. IT IS THE RESPONSIBILITY OF THE INSTALLER TO CUT THE FRAME PIECES TO THE PROPER LENGTH AND MITER THE CORNERS WHERE APPLICABLE. IN CASES WHERE TRENCH DIRECTION MUST CHANGE, SPECIAL DRAWINGS WILL BE FURNISHED BY OUR ENGINEERING SERVICES DEPARTMENT. THESE PRINTS WILL SHOW SPECIAL LENGTHS AND CUTS OF GRATES/LIDS, AND OTHER ESSENTIAL INFORMATION.

DR	CSM	SCALE	TITLE
CHK		1"=1'-0"	SUGGESTED FORMING INSTRUCTIONS FOR R-4990 TYPE 'B' FRAME AND GRATE/LID
APP.		DATE	
		08-23-2006	
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