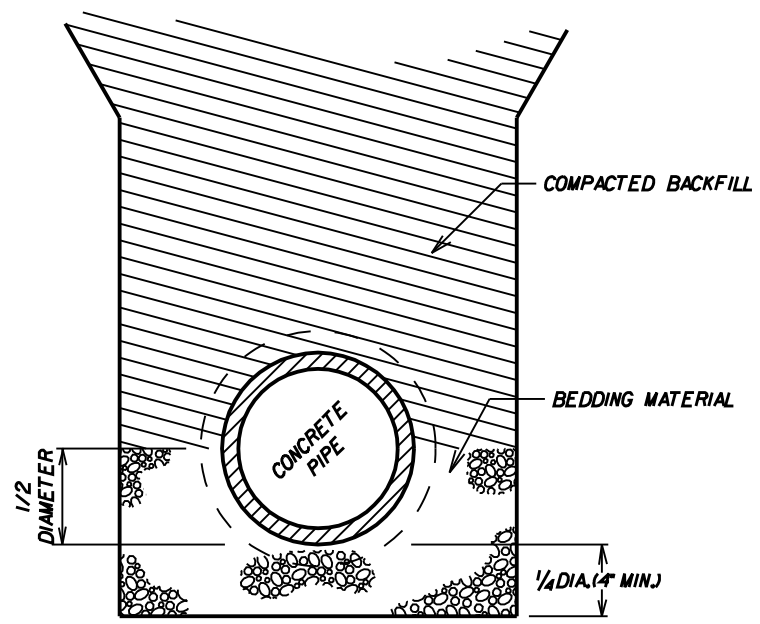


FLEXIBLE PIPE



CONCRETE PIPE



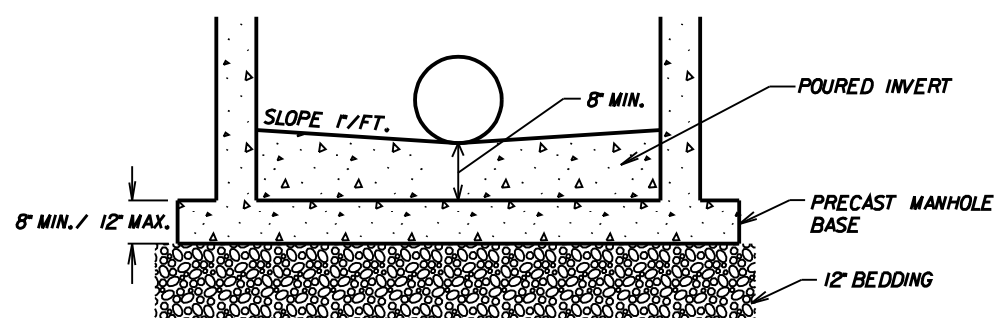
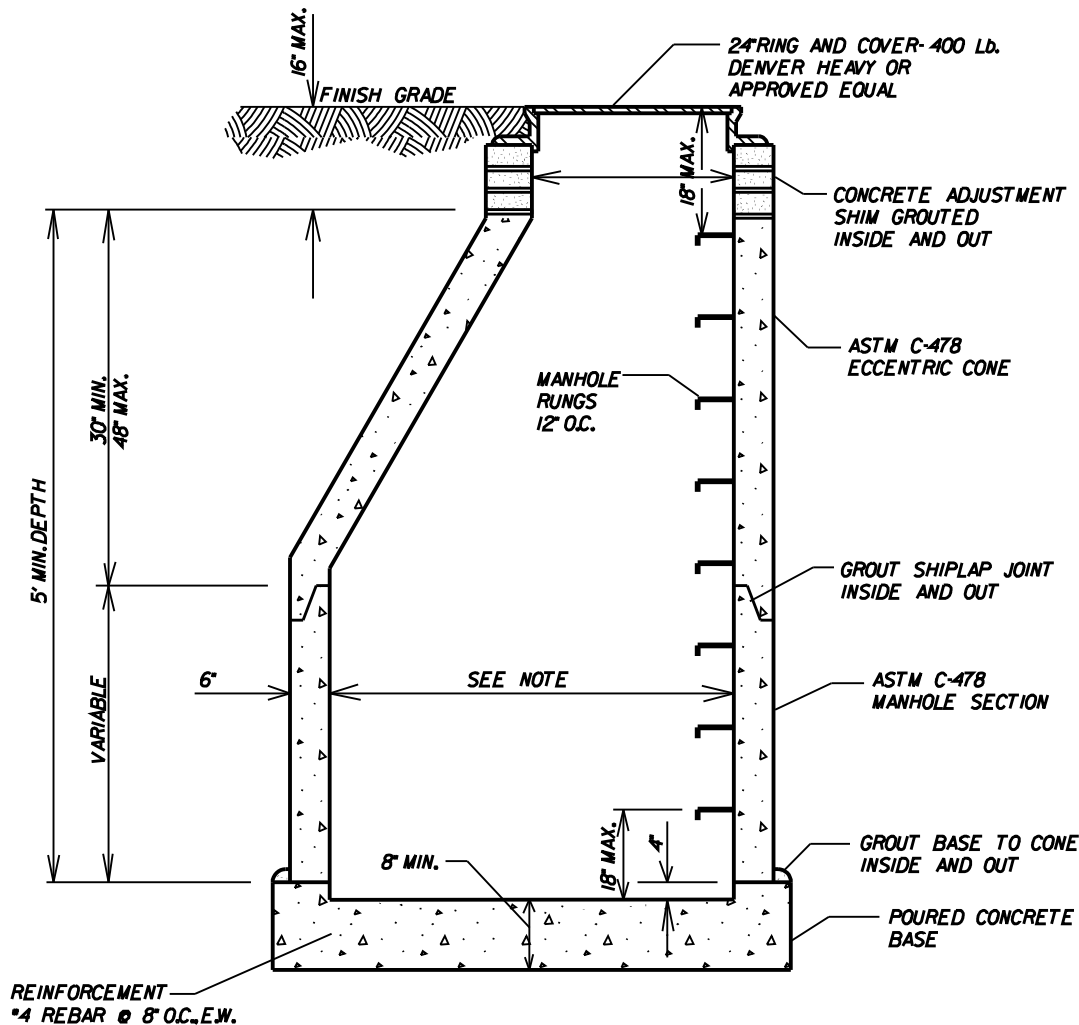
PUBLIC WORKS DIVISION

**STORM DRAINAGE
TYPICAL PIPE BEDDING
DETAIL 300-01**

DATE: NOV., 2000

SCALE: NOT TO SCALE

REB



NOTE: MINIMUM INSIDE DIAMETER OF MANHOLE SHALL BE AS FOLLOWS.

PIPE SIZE	MIN. MANHOLE DIAMETER
15" TO 36"	48"
42" TO 48"	60"
54" TO 60"	72"

MAX. 400' APART FOR 15" TO 36" LINES
 MAX. 500' APART FOR 42" > LINES.

REVISED 11/2003



PUBLIC WORKS DIVISION

STORM DRAINAGE STANDARD MANHOLE DETAIL 300-02

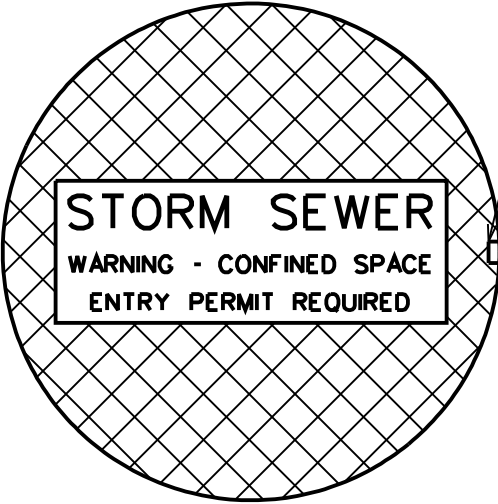
REB

DATE: FEB., 2001

SCALE: NOT TO SCALE

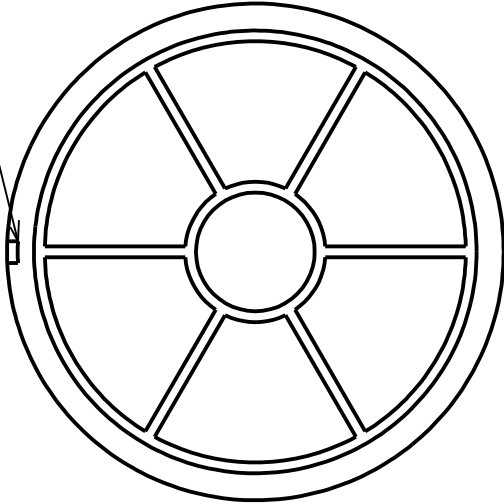


PROFILE



TOP VIEW

PICK HOLE



BOTTOM VIEW



PUBLIC WORKS DIVISION

STORM DRAINAGE
STANDARD MANHOLE COVER
DETAIL 300-03

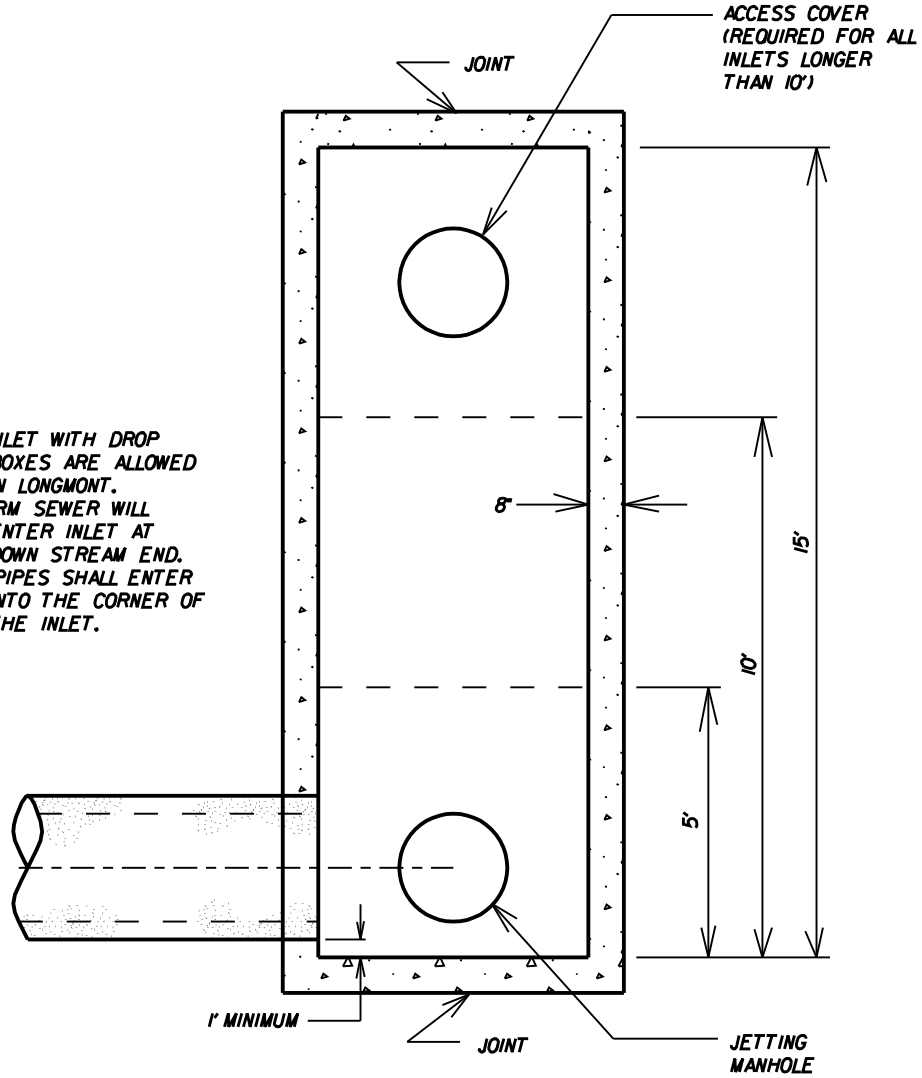
DATE: NOV., 2000

SCALE: NOT TO SCALE

REB

NOTE:

- 1. NO INLET WITH DROP BOXES ARE ALLOWED IN LONGMONT.
- 2. STORM SEWER WILL ENTER INLET AT DOWN STREAM END.
- 3. NO PIPES SHALL ENTER INTO THE CORNER OF THE INLET.



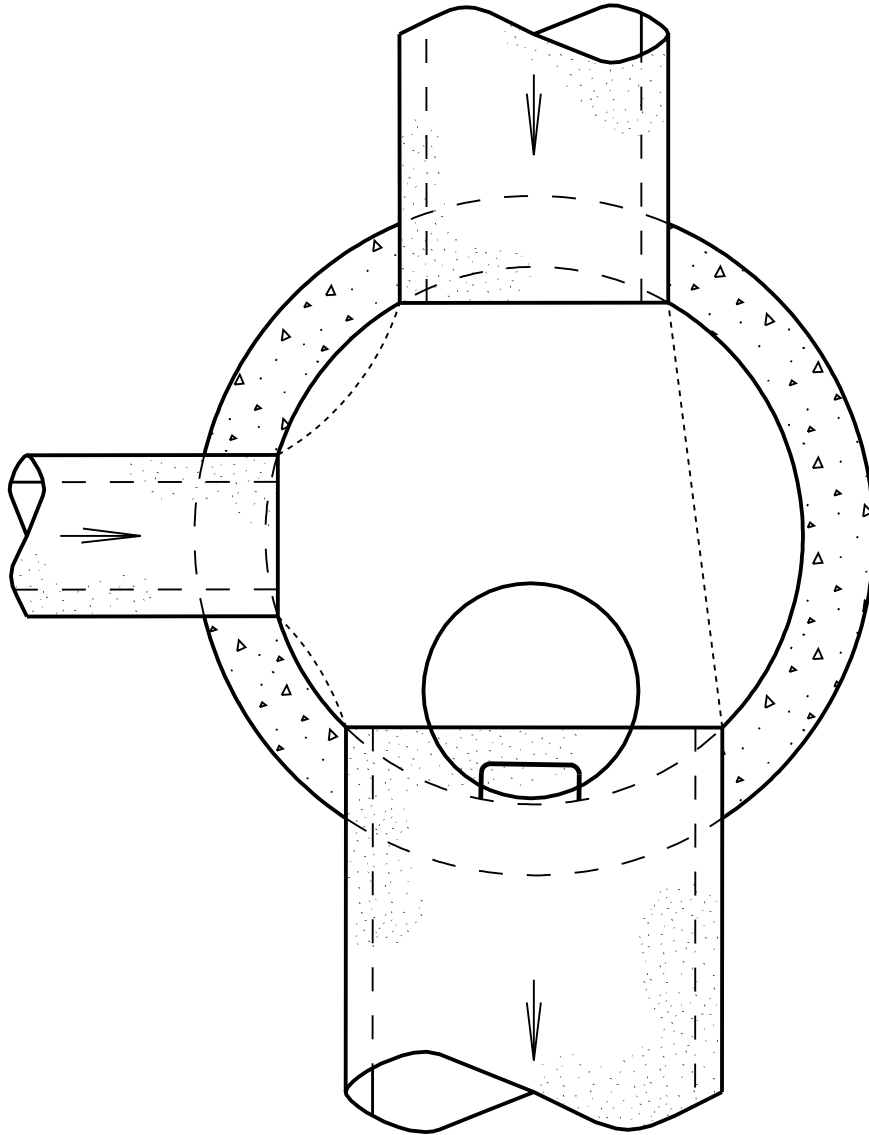
PUBLIC WORKS DIVISION

**STORM DRAINAGE
TYPE R INLET ACCESS LOCATION
DETAIL 300-04**

REB

DATE: FEB., 2001

SCALE: NOT TO SCALE



NOTES:

1. THE MANHOLE COVER SHALL BE LOCATED OVER THE DOWNSTREAM STORM SEWER PIPE EXITING THE MANHOLE.
2. THIS ALLOWS FOR THE JET NOZZLE TO BE INSERTED DOWN THE MANHOLE COVER, MAKE ONE 90° BEND AND ENTER THE UPSTREAM PIPE LINE. IT IS FED INTO THE PIPE TO THE UPSTREAM MANHOLE. THE WATER JET IS TURNED ON AND PULLED BACK THROUGH THE PIPELINE. THE DIRT AND WATER ARE VACUUMED OUT OF THE MANHOLE INTO A STORAGE TANK.
3. IF TWO (OR MORE) PIPES ARE ENTERING THE MANHOLE, THE COVER SHALL BE LOCATED OPPOSITE OF THE TWO PIPES, THE LARGER PIPE BEING THE MORE IMPORTANT.
4. STEP ALIGNMENT SHALL BE COORDINATED WITH THE CITY INSPECTOR FOR PIPES GREATER THAN 36".

REVISED 11/03



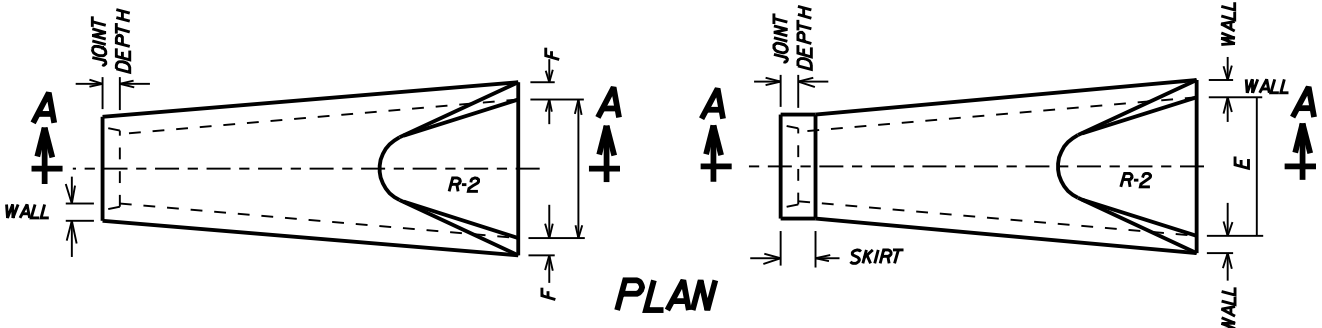
PUBLIC WORKS DIVISION

**STORM DRAINAGE
MANHOLE COVER LOCATION
DETAIL 300-05**

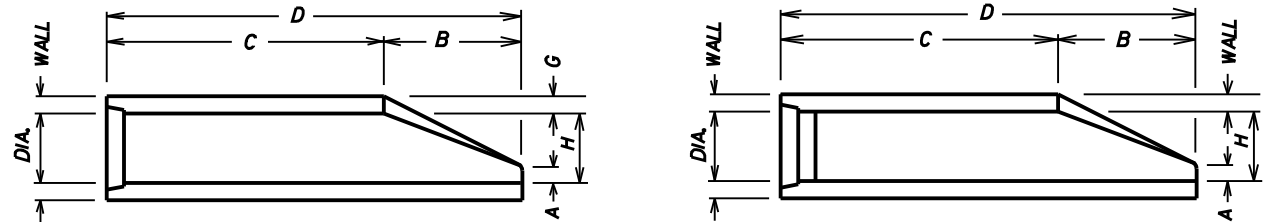
REO

DATE: NOV., 2000

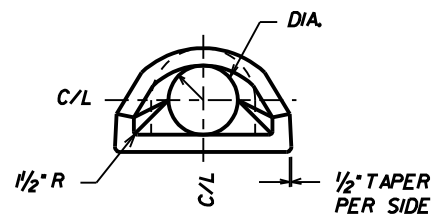
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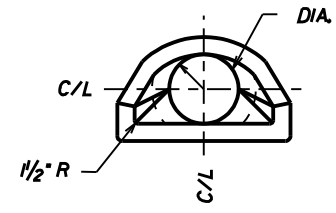
PLAN



SEC. A-A



END VIEW



DIAMETER	WALL THICKNESS	JOINT DEPTH	WEIGHT	A	FLAIR LENGTH B	BARREL LENGTH C	LAY LENGTH D	FLAIR WIDTH E	F	G	H	R-1	R-2	SKIRT
12"	4"	3 3/4"	530°	4"	24"	45 3/8"	73 1/8"	24"	2 3/4"	3/8"	13"	10 1/16"	9"	NA
15"	4"	3 3/4"	740°	6"	27"	42 1/2"	69 1/2"	30"	3"	4"	16"	12 1/2"	11"	NA
18"	4 1/2"	4"	2440°	9"	27"	46"	73"	36"	3 1/4"	3 3/4"	19"	15 1/2"	12"	NA
24"	5 1/2"	4 1/4"	3260°	9 1/2"	43 1/2"	29 3/4"	73 1/4"	48"	3 3/4"	4 3/4"	25"	16 1/16"	14"	NA
30"	5 3/4"	4 1/4"	4200°	12"	54"	19"	73"	60"	4 1/4"	5 3/4"	31"	18 5/16"	15"	NA
36"	6 5/8"	4 1/2"	7880°	15"	63"	33 3/4"	96 3/4"	72"	4 3/4"	6 1/16"	37"	24 1/16"	20"	NA
42"	4 1/2"	4 5/8"	5380°	21"	63"	29"	92"	78"	NA	NA	43"	27 1/4"	22"	13"
48"	5"	4 5/8"	6550°	24"	72"	20"	92"	84"	NA	NA	48 1/2"	28 1/8"	22"	11"
54"	6 1/4"	4 1/4"	8040°	27"	65"	27"	92"	90"	NA	NA	55"	32 7/8"	24"	11"
60"	6 3/4"	4 1/4"	8750°	30"	60"	32"	92"	96"	NA	NA	61"	36 3/4"	24"	11"
72"	7"	5 1/2"	12520°	34"	78"	21"	99"	108"	NA	NA	73"	38 5/8"	24"	7 3/4"



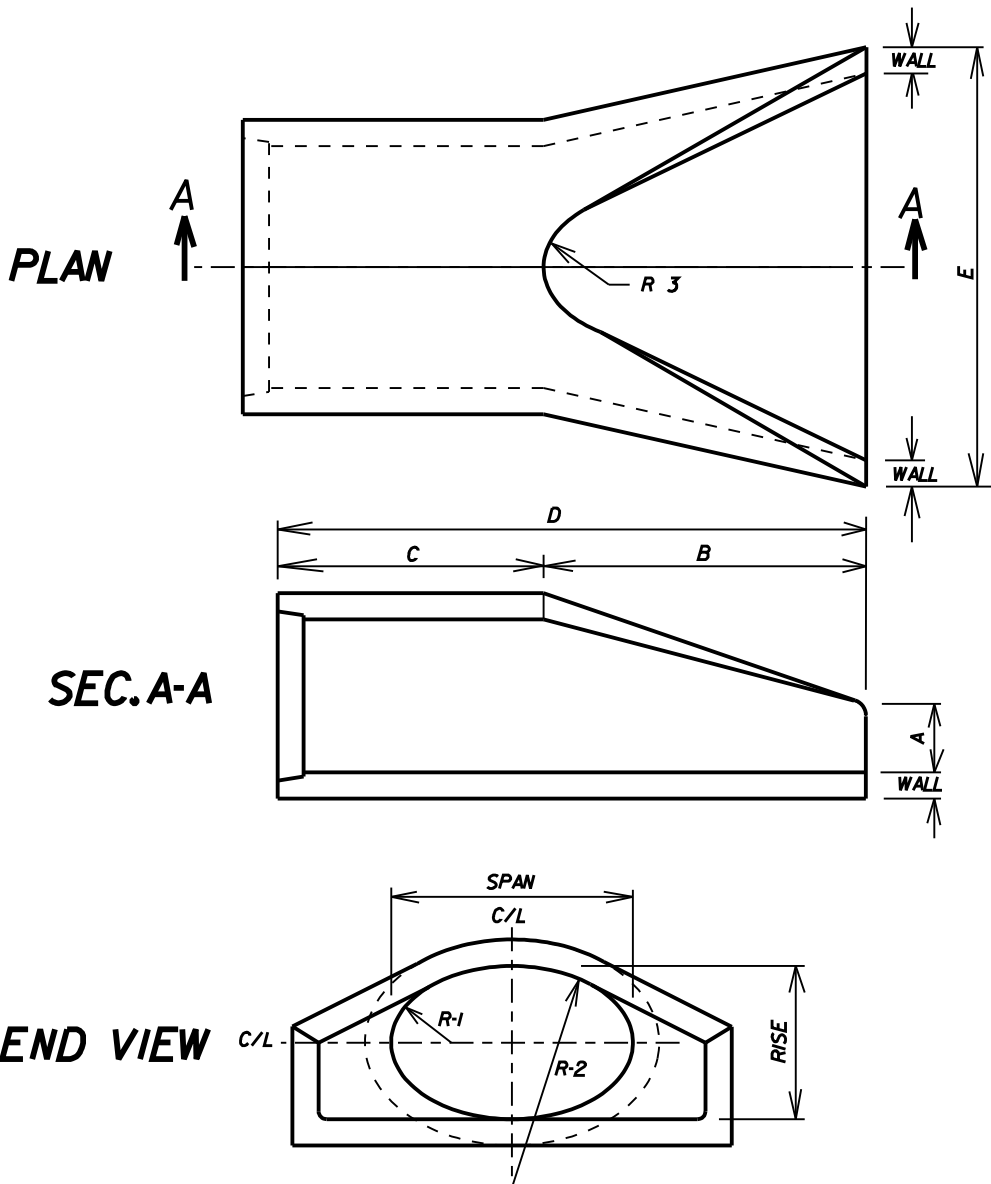
PUBLIC WORKS DIVISION

**STORM DRAINAGE
STANDARD FLARED END SECTION
DETAIL 300-06A**

DATE: FEB., 2001

SCALE: NOT TO SCALE

REV



EQUIVALENT CIRCULAR PIPE DIAMETER	NOMINAL INSIDE RISE X SPAN	WALL THICKNESS	WEIGHT	A	FLAIR LENGTH B	BARREL LENGTH C	LAY LENGTH D	FLAIR WIDTH E	R - 1	R - 2	R - 3
18"	14" X 23"	2 3/4"	1300*	8"	2'-4"	3'-9"	6'-1"	36"	6 3/32"	19 5/16"	6"
24"	19" X 30"	3/4"	1675*	8 1/2"	3'-4"	2'-9"	6'-1"	48"	8 7/32"	26 1/4"	7"
30"	24" X 38"	3 3/4"	2450*	9 1/2"	4'-6"	1'-6"	6'-0"	60"	10 1/4"	32 3/16"	9"
36"	29" X 45"	4 1/2"	4840*	11 1/2"	5'-1"	3'-0"	8'-1"	72"	12 5/8"	39 3/8"	12"
42"	34" X 53"	5"	6456*	15 3/4"	5'-0"	3'-0"	8'-0"	78"	14 9/32"	45 2 9/32"	13"
48"	38" X 60"	5 1/2"	7870*	2'	5'-0"	3'-0"	8'-0"	84"	15 7/8"	51 9/32"	14"
54"	43" X 68"	6"	9990*	25 1/2"	5'-0"	3'-0"	8'-0"	90"	18 2 1/32"	58 9/32"	16"



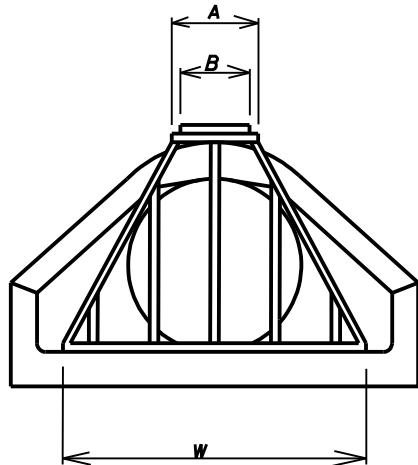
PUBLIC WORKS DIVISION

STORM DRAINAGE ELLIPTICAL FLARED END SECTION DETAIL 300-06B

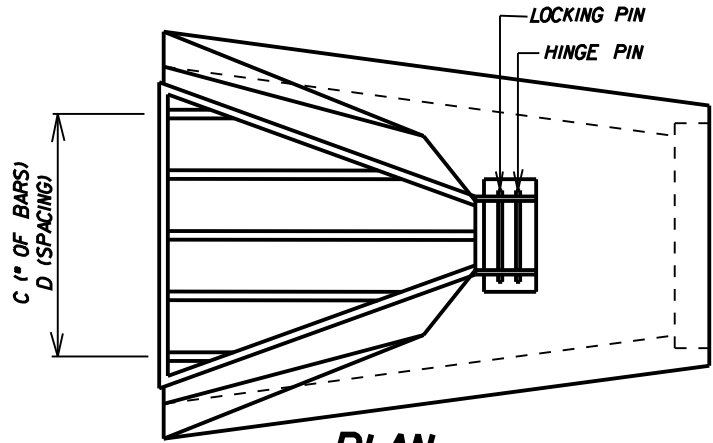
REV

DATE: FEB., 2001

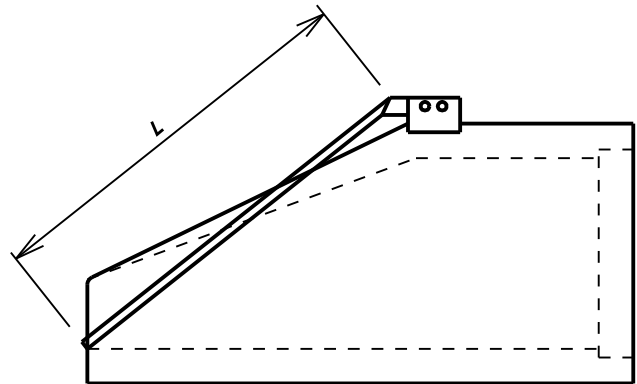
SCALE: NOT TO SCALE



END VIEW



PLAN



SIDE VIEW

PIPE DIAMETER	A	B	C	D	W	L
12"	11"	7.5"	3	6"	21"	30"
15"	9"	5.5"	3	6.5"	27"	28"
18"	10"	6.5"	3	8"	28"	31"
24"	12"	9.5"	5	8"	40"	47.5"
30"	15"	12.5"	5	9"	52"	59.75"
36"	18"	15.5"	7	8.5"	58"	71.25"
42"	21"	18.5"	7	9"	64"	75"
48"	24"	21.5"	9	8"	70"	82.75"
54"	24"	21"	14	6"	84"	84"
60"	24"	21"	22	6"	132"	108"
72"	24"	21"	22	6"	132"	108"



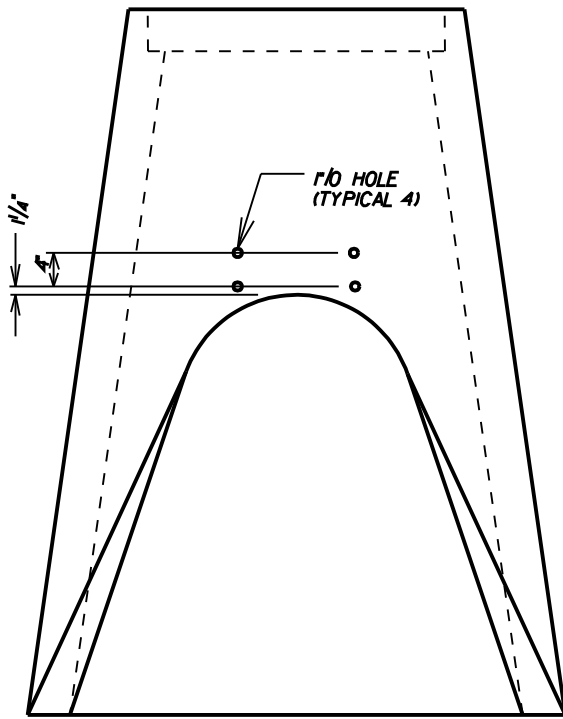
PUBLIC WORKS DIVISION

**STORM DRAINAGE
FLARED END SECTION TRASH RACK
(CIRCULAR PIPE)
DETAIL 300-06C**

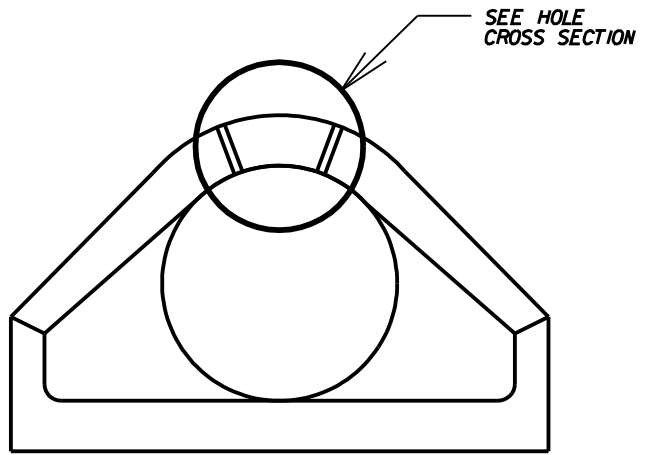
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DATE: FEB., 2001

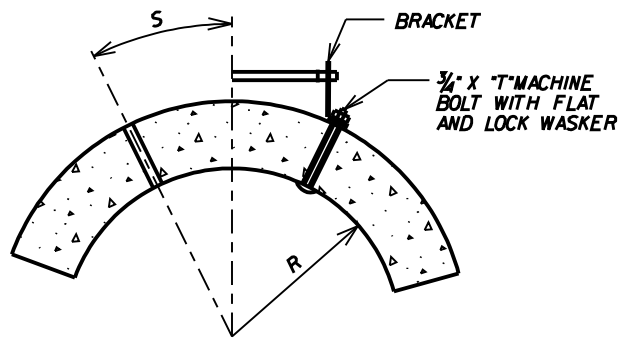
SCALE: NOT TO SCALE



PLAN



END VIEW



HOLE CROSS SECTION

PIPE DIAMETER	R	S	T
12"	8"	5.25"	4.5"
15"	9.75"	3.5"	4.75"
18"	11.5"	5"	5"
24"	15"	6.5"	5.5"
30"	18.5"	8"	6"
36"	22"	9.5"	6.5"
42"	25.5"	11"	7"
48"	29"	12.75"	7.5"
54"	33.25"	14.5"	8.5"
60"	36.75"	16.25"	9"
72"	43.75"	19.75"	11"



PUBLIC WORKS DIVISION

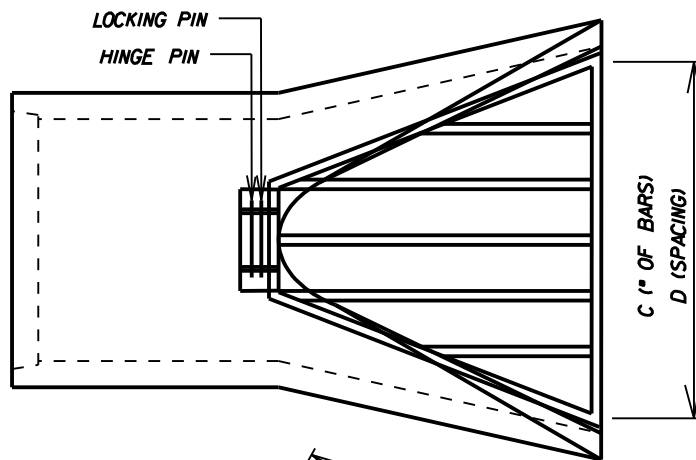
**STORM DRAINAGE
TRASH RACK MOUNTING DETAIL
(CIRCULAR FLARED END SECTION)
DETAIL 300-06D**

REO

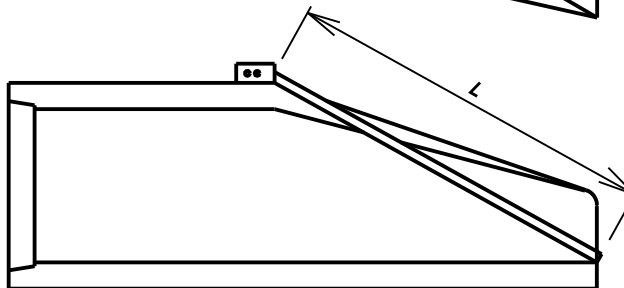
DATE: FEB., 2001

SCALE: NOT TO SCALE

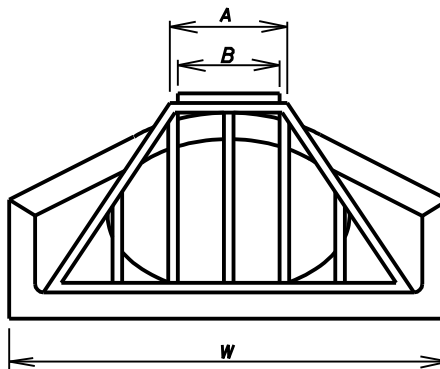
PLAN VIEW



SIDE VIEW



END VIEW



EQUIVALENT CIRCULAR PIPE DIAMETER	SPAN	RISE	A	B	C	D	W	L
18"	23"	14"	15"	12"	4	9.5"	38"	30"
24"	30"	19"	20"	17"	4	8.5"	40"	39.5"
30"	38"	24"	25"	21.75"	5	9"	52"	55"
36"	45"	29"	30"	26.75"	6	9.5"	64"	62.75"
42"	53"	34"	35"	31.5"	6	9.5"	64"	65"
48"	60"	38"	39"	36.38"	7	9"	70"	67"
54"	68"	43"	45"	42"	10	10"	80"	69"
60"	76"	48"	50"	47"	10	10"	90"	71"



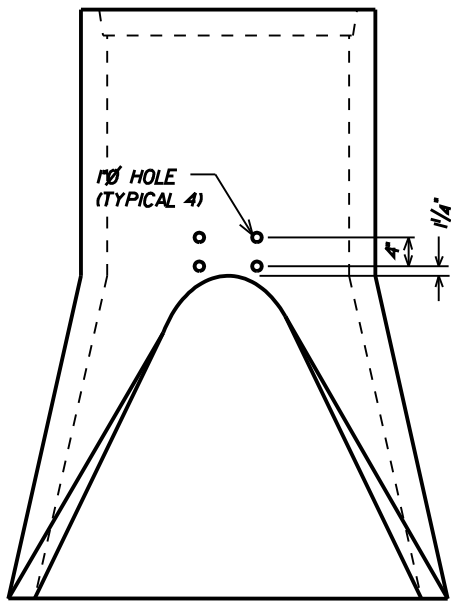
PUBLIC WORKS DIVISION

**STORM DRAINAGE
FLARED END SECTION TRASH RACK
(ELLIPTICAL PIPE)
DETAIL 300-06E**

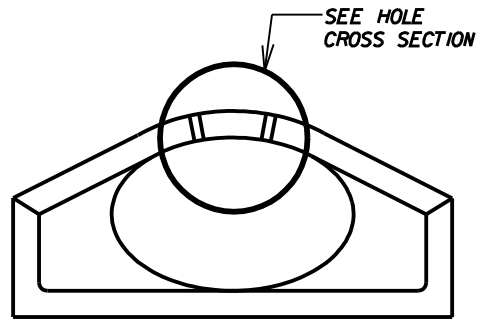
REB

DATE: FEB., 2001

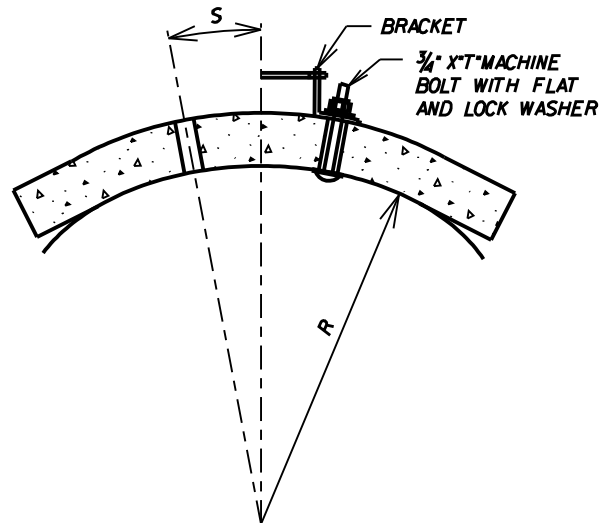
SCALE: NOT TO SCALE



PLAN VIEW



END VIEW



HOLE CROSS SECTION

EQUIVALENT CIRCULAR PIPE DIAMETER	SPAN	RISE	R	S	T
18"	23"	14"	23"	7.75"	4.25"
24"	30"	19"	29"	10.25"	5.75"
30"	38"	24"	36.25"	12.75"	6.25"
36"	45"	29"	43.5"	15.25"	7"
42"	53"	34"	50.5"	17.75"	7.5"
48"	60"	38"	57.63"	20"	8"
54"	68"	43"	63"	23"	8.5"
60"	76"	48"	70"	26"	9"



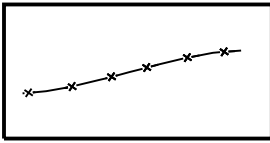
PUBLIC WORKS DIVISION

**STORM DRAINAGE
TRASH RACK MOUNTING DETAIL
(ELLIPTICAL FLARED END SECTION)
DETAIL 300-06F**

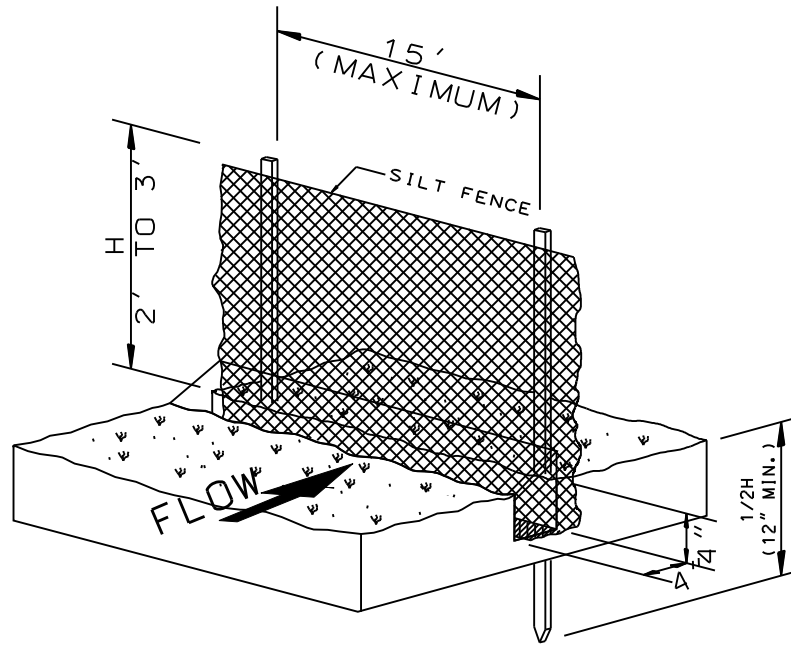
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DATE: FEB., 2001

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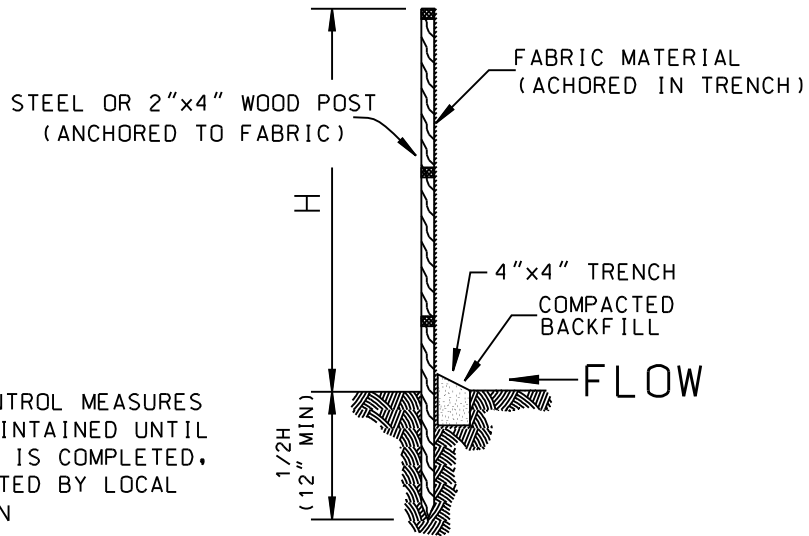


SF



SILT FENCE INSTALLATION

-NTS-



NOTE: EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL LANDSCAPING IS COMPLETED, OR AS DIRECTED BY LOCAL JURISDICTION

SECTION

-NTS-

Urban Drainage and Flood Control District
Drainage Criteria Manual (V.3)



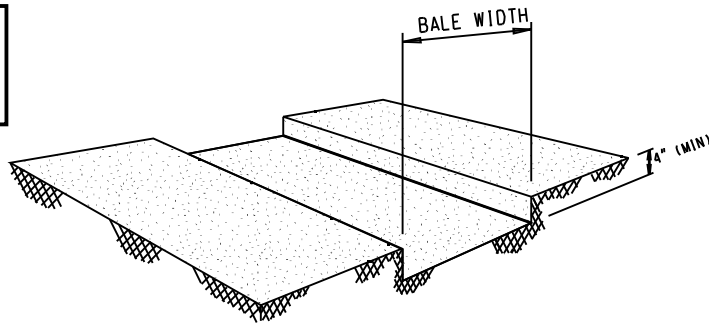
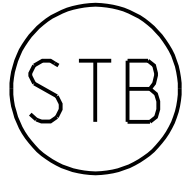
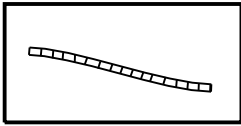
PUBLIC WORKS DIVISION

DATE: SEPTEMBER 2005

**STORM DRAINAGE
SILT FENCE EROSION BARRIER
DETAIL 300-07**

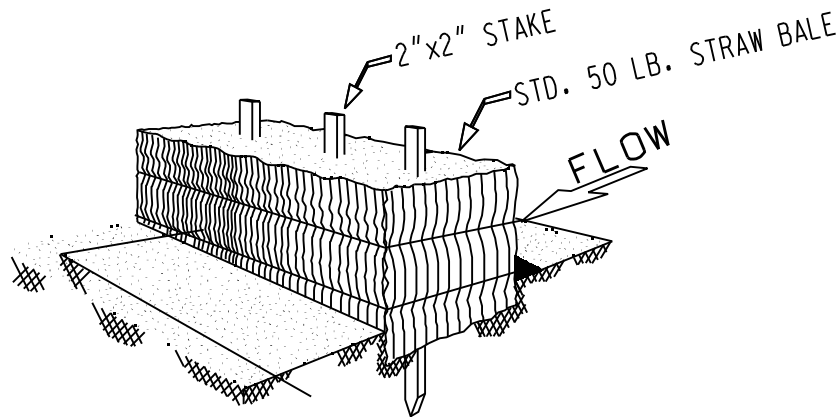
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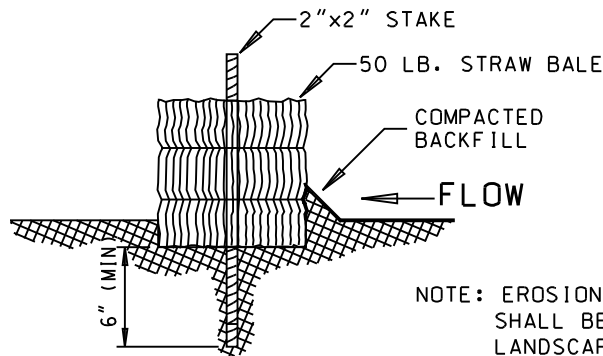
TRENCH EXCAVATION

-NTS-



STRAW BALE INSTALLATION

-NTS-



NOTE: EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL LANDSCAPING IS COMPLETED, OR AS DIRECTED BY LOCAL JURISDICTION

SECTION

-NTS-

Urban Drainage and Flood Control District
Drainage Criteria Manual (V.3)



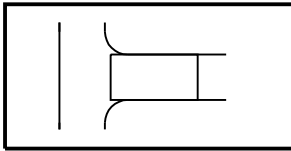
PUBLIC WORKS DIVISION

DATE: SEPTEMBER, 2005

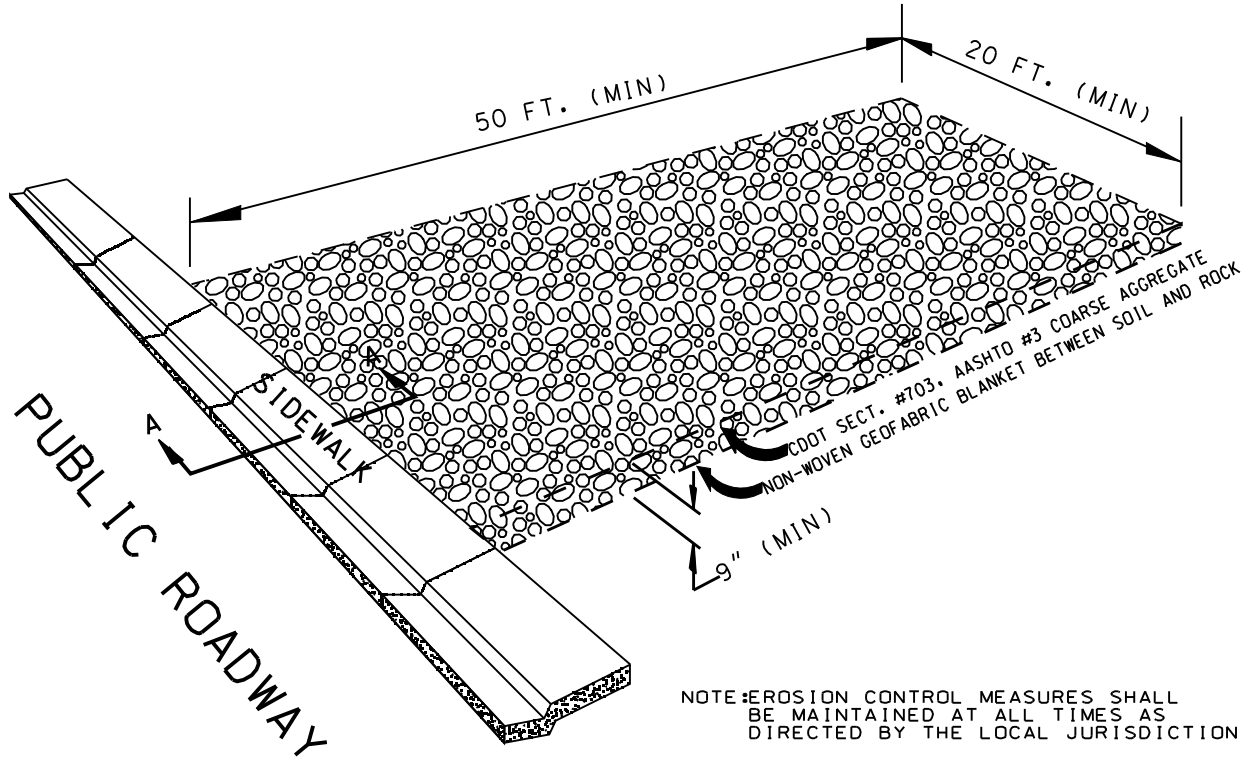
**STRAW BALE EROSION BARRIER
DETAIL 300-08**

SCALE: NOT TO SCALE

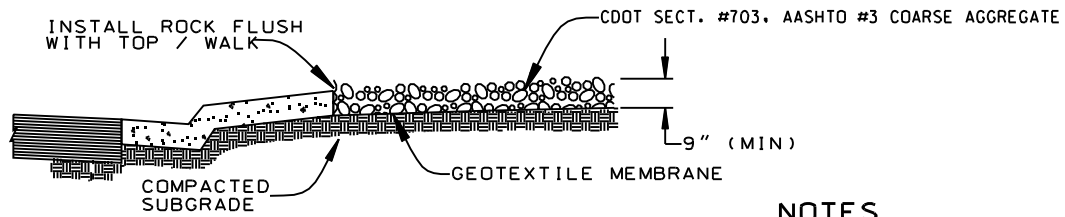
REB



CE



NOTE: EROSION CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES AS DIRECTED BY THE LOCAL JURISDICTION



SECTION A-A

-NTS-

NOTES

1. ALL ROCK TO BE REMOVED UPON COMPLETION OF CONSTRUCTION.
2. PUBLIC ROADWAY TO BE KEPT CLEAN AND FREE OF MUD, DIRT AND DEBRI AT ALL TIMES.

Urban Drainage and Flood Control District
 Drainage Criteria Manual (V.3)



PUBLIC WORKS DIVISION

DATE: SEPTEMBER, 2005

STORM DRAINAGE
 CONSTRUCTION STAGING PAD
 DETAIL 300 09

REB

SCALE: NOT TO SCALE