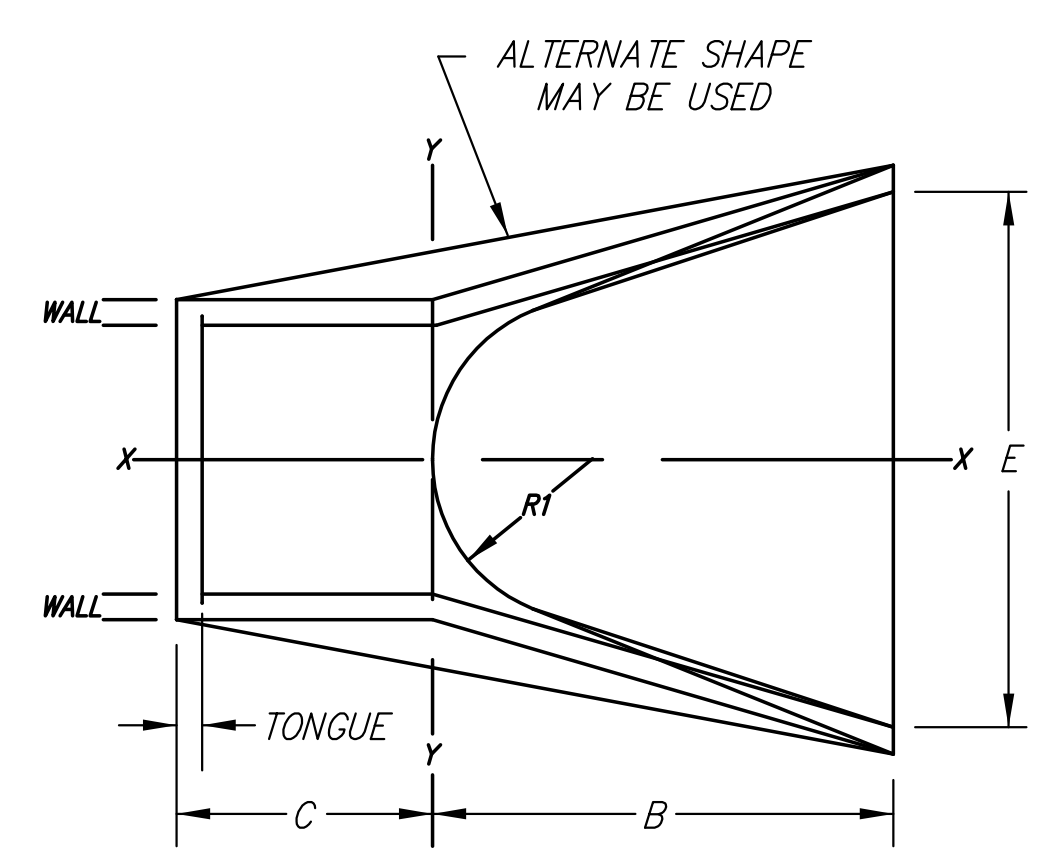
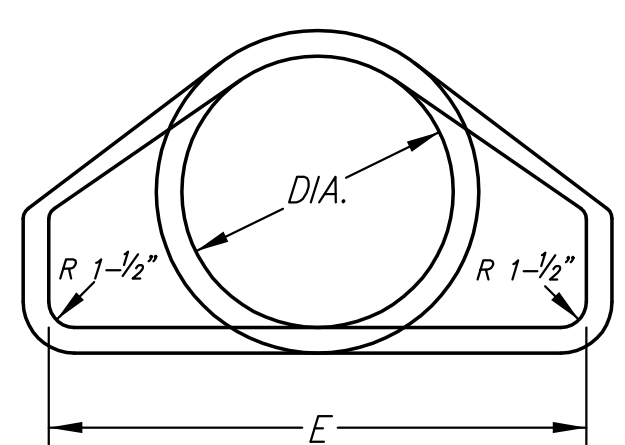


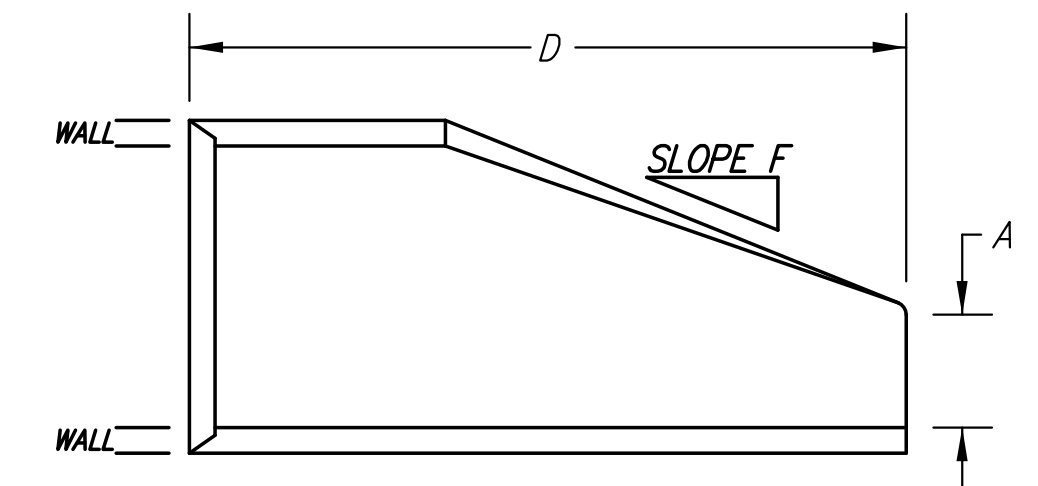
**PLAN**  
SCALE: 1"=5'



**PIPE PLAN**



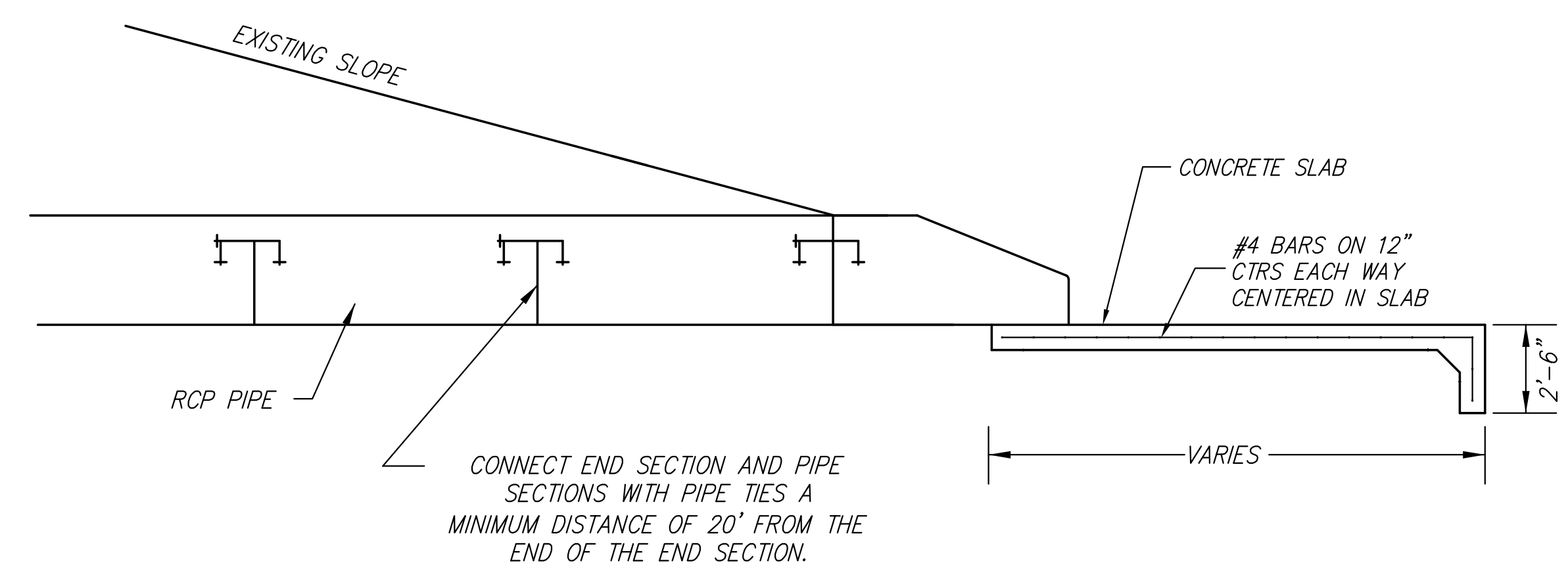
**SECTION Y-Y**



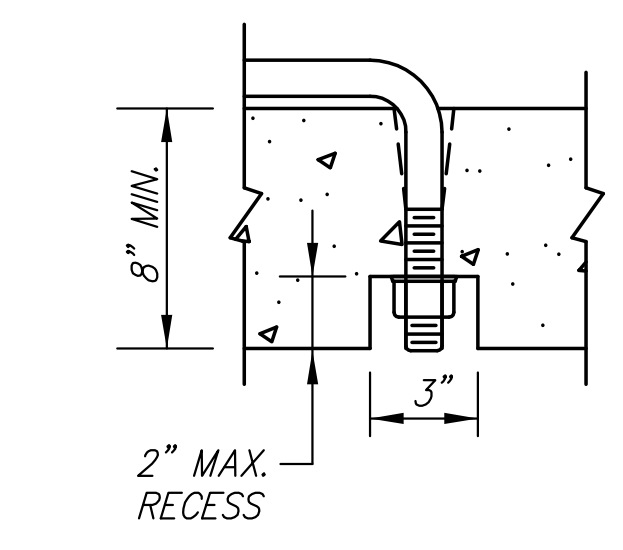
**SECTION X-X**

DIAM.	A	B	C	D	E	F	R1	TONGUE	WALL
12"	4"	2' 0"	4' 0-7/8"	6' 0-7/8"	2' 0"	3:1	9"	1-1/2"	2"
15"	6"	2' 3"	3' 10"	6' 1"	2' 6"	3:1	11"	2"	2 1/4"
18"	9"	2' 3"	3' 10"	6' 1"	3' 0"	3:1	12"	2-1/2"	2 1/2"
24"	9-1/2"	3' 7-1/2"	2' 6"	6' 1-1/2"	4' 0"	3:1	14"	2-1/2"	3"
30"	1' 0"	4' 6"	1' 7-3/4"	6' 1-3/4"	5' 0"	3:1	15"	3"	3-1/2"
36"	1' 3"	5' 3"	1' 10-3/4"	8' 1-3/4"	6' 0"	3:1	20"	3-1/2"	4"
42"	1' 9"	5' 3"	2'-11"	8' 2"	6' 6"	3:1	22"	3-3/4"	4-1/2"
48"	2' 0"	6' 0"	2' 2"	8' 2"	7' 0"	3:1	22"	4-1/4"	5"
54"	2' 3"	5' 5"	2' 11"	8' 4"	7' 6"	3:1	24"	4-3/4"	5-1/2"
60"	2' 6"	5' 0"	3' 3"	8' 3"	8' 0"	2.4:1	24"	5"	6"
66"	2' 0"	6' 6"	1' 9"	8' 3"	8' 6"	2:1	24"	5-1/2"	7"
72"	2' 0"	6' 6"	1' 9"	8' 3"	9' 0"	2:1	24"	6"	7-1/2"

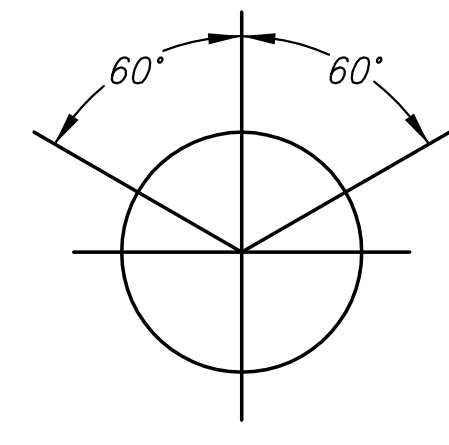
TONGUE LENGTHS BASED ON QUINN STANDARD



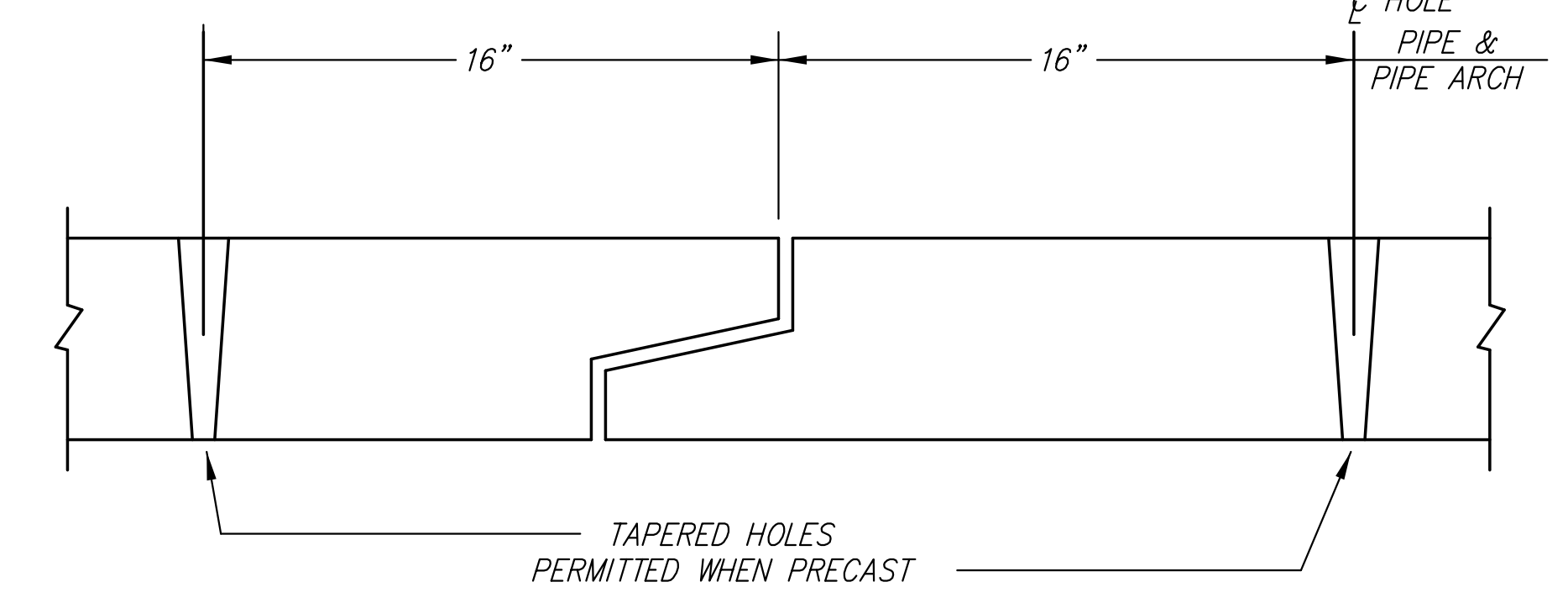
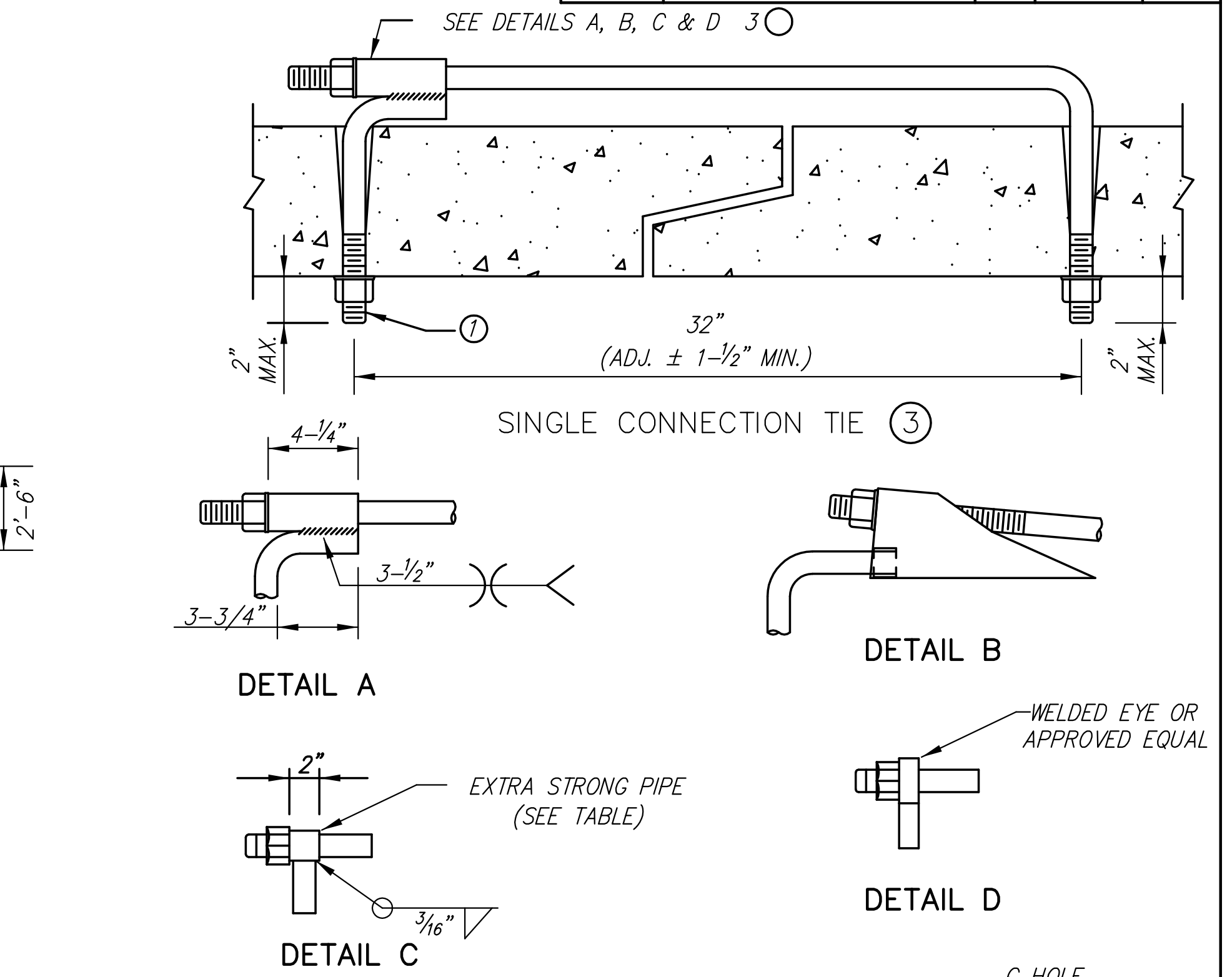
**SECTION**



**OPTIONAL RECESS DETAIL ②**



**ROUND PIPE**



Holes shall be cast or drilled 16" from centerline of joints for box culverts, as shown above, unless forms are set up for 16" spacing from outside of joint.

**NOTES:**  
 ANY DISTURBED AREAS WITHIN THE RIVER BANKS SHALL BE RESTORED AS FOLLOWS: SEEDING TO BE ACCOMPLISHED DURING THE PERIOD OF AUGUST 15 THROUGH MARCH 15 WITH THE FOLLOWING AMOUNT AND TYPE OF SEED FOR THE MIX AT A RATE OF 8 POUNDS TOTAL PER 1,000 SQUARE FEET:  
 4 POUNDS K-31 FESCUE  
 2 POUNDS WESTERN WHEATGRASS  
 2 POUNDS SMOOTH BROME  
 COST TO BE SUBSIDIARY TO "SITE RESTORATION".

PIPE SIZE (INCHES)	ROD THREAD DIA.	ROD THREAD DIA.	EXTRA STRONG PIPE INSIDE DIA.
12 - 27	5/8"	5/8"	3/4"
30 - 66	3/4"	3/4"	1"
72 - 108	1"	1"	1-1/4"

PIPE SIZE LISTED IS INSIDE DIA. OF ROUND PIPE OR EQUIVALENT DIA. OF PIPE ARCH.

- TIE RODS SHALL BE GALVANIZED OR POWER WASHED AND DIPPED IN AN APPROVED ZINC RICH EPOXY PRIME PAINT AFTER FABRICATION.
- TIES TO BE USED ONLY TO HOLD PIPE SECTIONS TOGETHER, NOT FOR PULLING SECTIONS TIGHT.
- TIE ROD THREADS SHALL PROJECT TO THE INSIDE OF PIPE EXCEPT AS NOTED IN PLANS.
  - TIE ROD THREADS SHALL BE RECESSED WHEN PIPE IS USED AS CATTLE PASS OR PEDESTRIAN TRAIL.
  - TIES MAY BE COMPLETED WITH U-BOLT TIES, SINGLE CONNECTION TIES (AS SHOWN) OR DOUBLE CONNECTION TIES.

KANSAS DEPARTMENT OF TRANSPORTATION

**RCP OUTFALL DETAIL**

PROJECT NO. 87 N-0357-01 SEDGWICK CO.

**M K E C ENGINEERING CONSULTANTS, INC.**  
 WICHITA, KANSAS

DESIGNED BY: LAC CHECKED BY: JRA  
 DRAWN BY: WJN DATE: 4/07/05 SHEET 71 OF 185