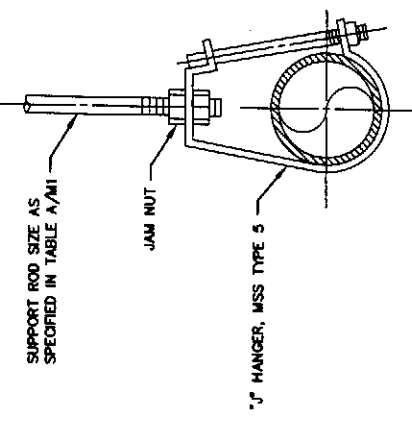
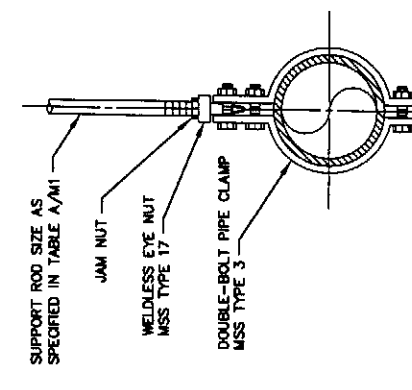


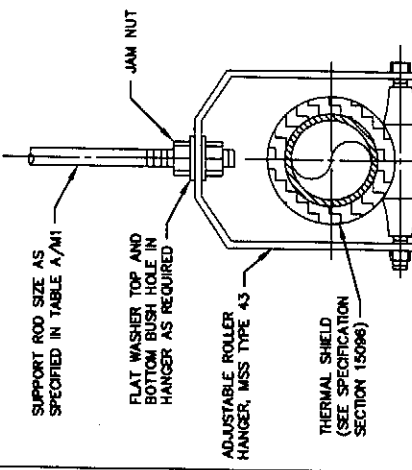
TYPE 1 PIPE HANGER
1/2" THROUGH 12" PIPE



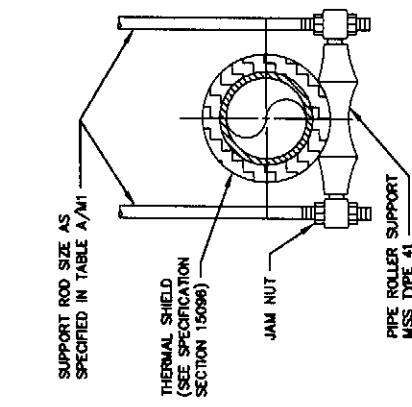
TYPE 2 PIPE HANGER
1/2" THROUGH 6" PIPE



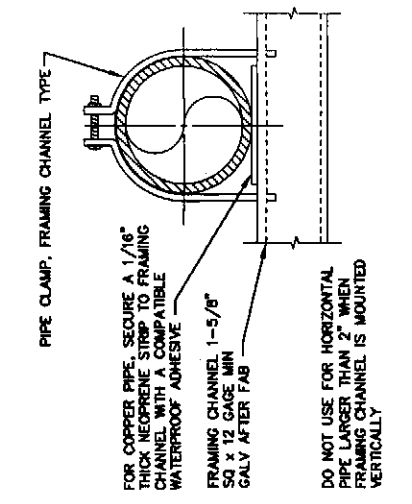
TYPE 3 PIPE HANGER
3/4" THROUGH 12" PIPE



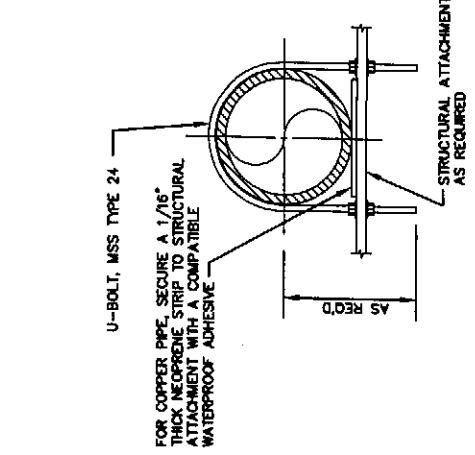
TYPE 4 PIPE HANGER
3/8" THROUGH 12" PIPE



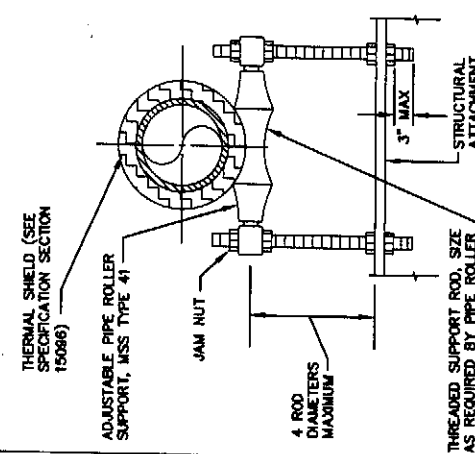
TYPE 5 PIPE HANGER
6" THROUGH 12" PIPE



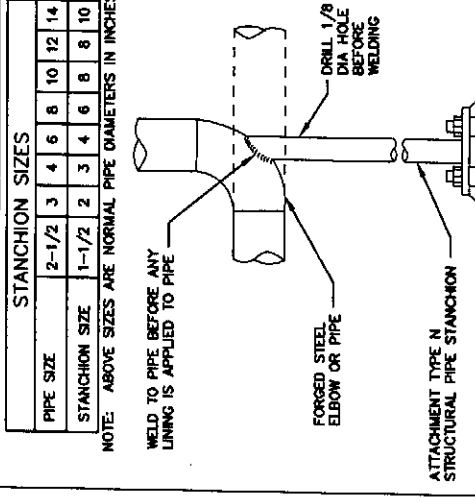
TYPE 6 PIPE HANGER
3/8" THROUGH 12" PIPE



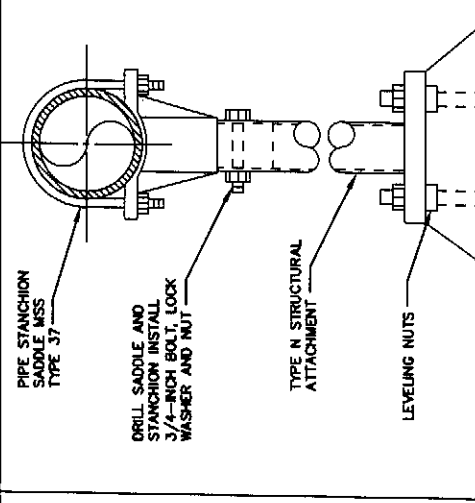
TYPE 7 PIPE HANGER
1/2" THROUGH 12" PIPE



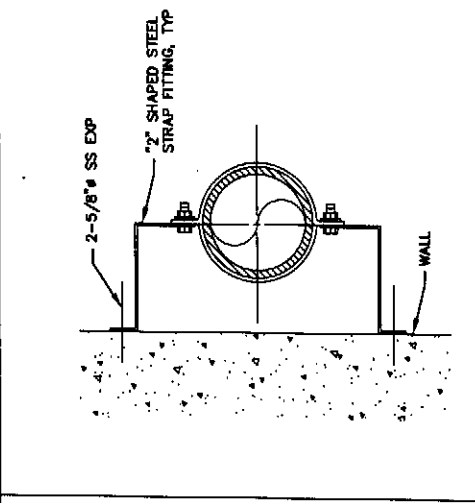
TYPE 8 PIPE HANGER
1" THROUGH 12" PIPE



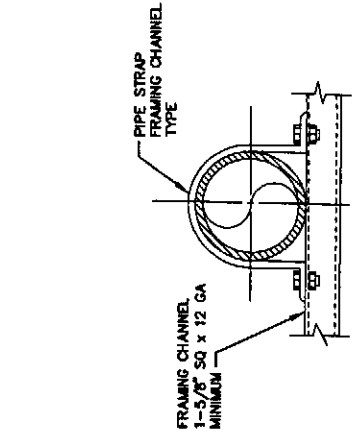
TYPE 9 PIPE HANGER
3" THROUGH 20" PIPE



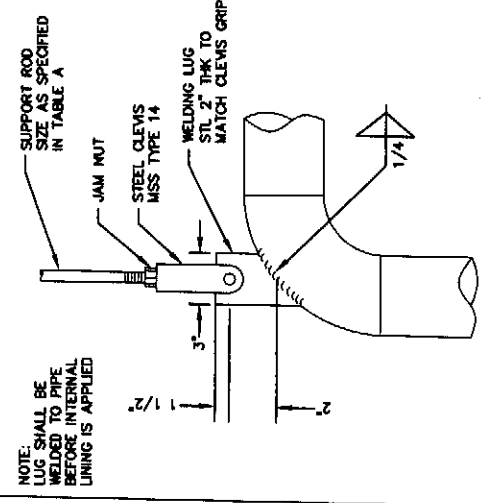
TYPE 10 PIPE HANGER
3" THROUGH 20" PIPE



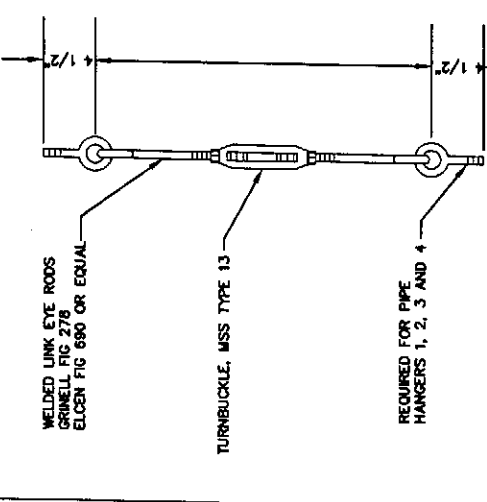
TYPE 11 PIPE HANGER
FOR VERTICAL PIPE ONLY
3/4" THROUGH 8" PIPE



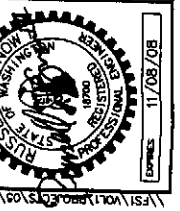
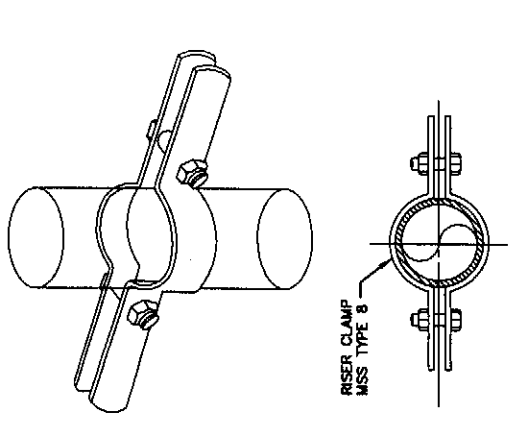
TYPE 13 PIPE HANGER
1/2" THROUGH 6" PIPE



TYPE 14 PIPE HANGER
2" THROUGH 12" PIPE



TYPICAL SUPPORT ROD FOR PIPES SUBJECT TO HORIZONTAL MOVEMENT
SEE NOTE 9 TABLE "A" NOTES



REVISIONS

GENERAL NOTES

DESIGNED BY	LR
DRAWN BY	MR
CHECKED BY	gfw
APPROVED BY	
DATE PRINTED	09/20/07
SCALE	NOT TO SCALE
FBI. NO.	

HAMMOND COLLIER
WADE LIVINGSTONE

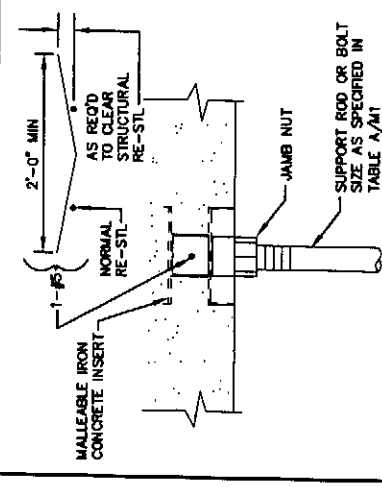
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WENATCHEE (509) 662-1762
OMAK (360) 826-3861
LAKEMOOD (253) 472-1992

CITY OF ENTIAI
2007 WASTEWATER TREATMENT FACILITIES IMPROVEMENTS

PIPE SUPPORTS AND PIPE ATTACHMENTS

JOB NO. 0523004-03
DRAWING NO. M1
SHEET OF

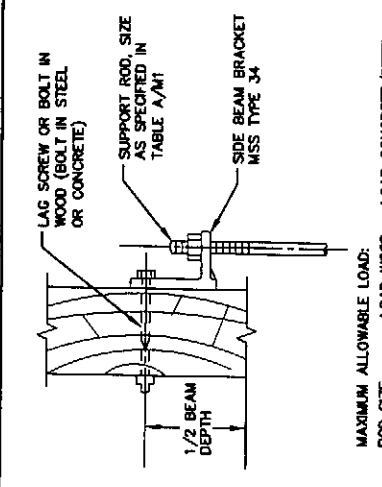
CALL THREE BUSINESS DAYS BEFORE YOU DIG
1-800-424-5555



TYPE A
STRUCTURAL ATTACHMENT

MAXIMUM ALLOWABLE LOAD:
LOAD
3/8" 610 LBS
1/2" 1130 LBS
5/8" 1810 LBS
3/4" 2710 LBS
7/8" 3770 LBS

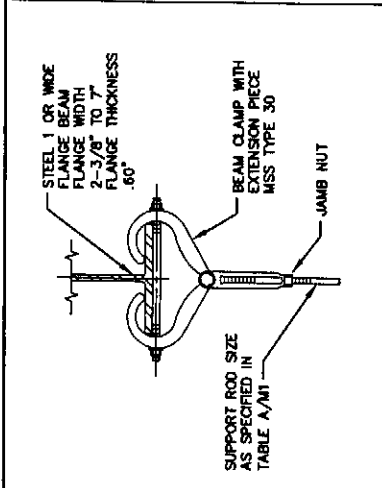
SPACING SHALL BE AS REQUIRED BUT SHALL NOT EXCEED THOSE SPANS SHOWN IN TABLE A/M1



TYPE B
STRUCTURAL ATTACHMENT

MAXIMUM ALLOWABLE LOAD:
LOAD WOOD CONCRETE/STEEL
3/8" 390 LBS 610 LBS
1/2" 640 LBS 1130 LBS
5/8" 760 LBS 1810 LBS
3/4" 830 LBS 2710 LBS
7/8" 830 LBS 3770 LBS

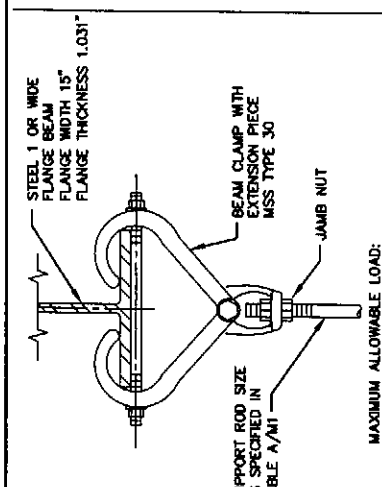
SPACING SHALL BE AS REQUIRED BUT SHALL NOT EXCEED THOSE SPANS SHOWN IN TABLE A/M1



TYPE C
STRUCTURAL ATTACHMENT

MAXIMUM ALLOWABLE LOAD:
LOAD
3/8" 610 LBS
1/2" 1130 LBS
5/8" 1810 LBS
7/8" 3770 LBS

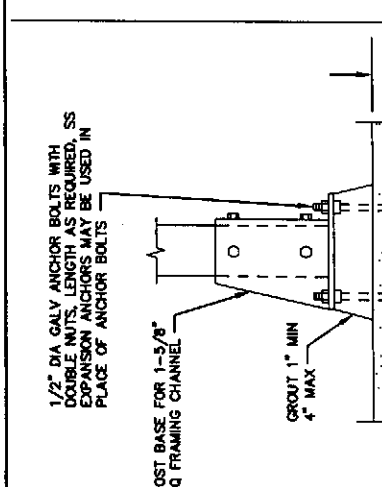
SPACING SHALL BE AS REQUIRED BUT SHALL NOT EXCEED THOSE SPANS SHOWN IN TABLE A/M1



TYPE D
STRUCTURAL ATTACHMENT

MAXIMUM ALLOWABLE LOAD:
LOAD
3/8" 610 LBS
1/2" 1130 LBS
5/8" 1810 LBS
7/8" 3770 LBS

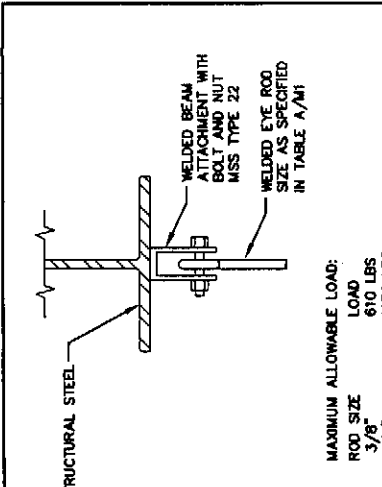
SPACING SHALL BE AS REQUIRED BUT SHALL NOT EXCEED THOSE SPANS SHOWN IN TABLE A/M1



TYPE E
STRUCTURAL ATTACHMENT

MAXIMUM ALLOWABLE LOAD:
LOAD
3/8" 610 LBS
1/2" 1130 LBS
5/8" 1810 LBS
3/4" 2710 LBS
7/8" 4860 LBS
1" 8000 LBS
1-1/4" 8000 LBS

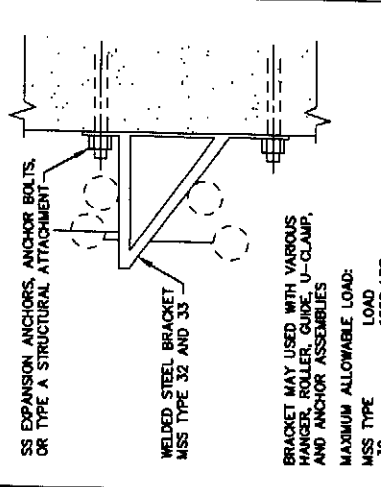
SPACING SHALL BE AS REQUIRED BUT SHALL NOT EXCEED THOSE SPANS SHOWN IN TABLE A/M1



TYPE F
STRUCTURAL ATTACHMENT

MAXIMUM ALLOWABLE LOAD:
LOAD
3/8" 610 LBS
1/2" 1130 LBS
5/8" 1810 LBS
3/4" 2710 LBS
7/8" 4860 LBS
1" 8000 LBS
1-1/4" 8000 LBS

SPACING SHALL BE AS REQUIRED BUT SHALL NOT EXCEED THOSE SPANS SHOWN IN TABLE A/M1

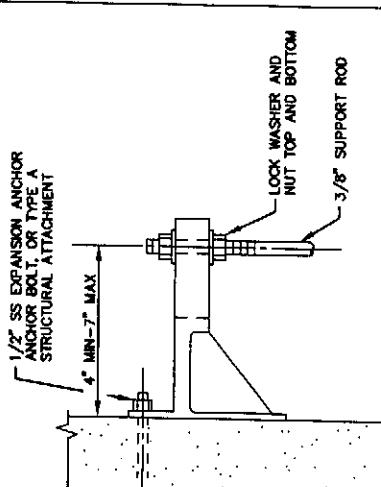


TYPE G
STRUCTURAL ATTACHMENT

MAXIMUM ALLOWABLE LOAD:
LOAD
32 1500 LBS
33 3000 LBS

USE DESIGN WEIGHTS SHOWN IN TABLE A/M1 TO DETERMINE TOTAL LOAD

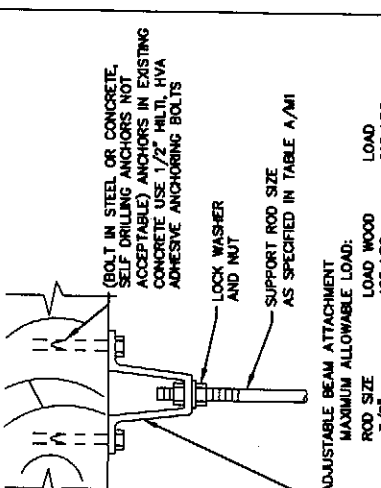
SPACING SHALL BE AS REQUIRED, BUT SHALL NOT EXCEED THOSE SPANS SHOWN IN TABLE A/M1



TYPE H
STRUCTURAL ATTACHMENT

MAXIMUM ALLOWABLE LOAD: 180 LBS

SPACING SHALL BE AS REQUIRED, BUT SHALL NOT EXCEED THOSE SPANS SHOWN IN TABLE A/M1

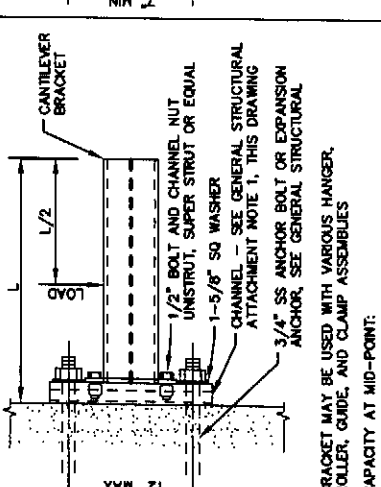


TYPE J
STRUCTURAL ATTACHMENT

ADJUSTABLE BEAM ATTACHMENT
MAXIMUM ALLOWABLE LOAD:
LOAD WOOD
3/8" 425 LBS
1/2" 715 LBS
5/8" 810 LBS
3/4" 1500 LBS
7/8" 1650 LBS
1" 3770 LBS

SPACING SHALL BE AS REQUIRED BUT SHALL NOT EXCEED THOSE SPANS SHOWN IN TABLE A/M1

REF: B-LINE FIGURE B3052

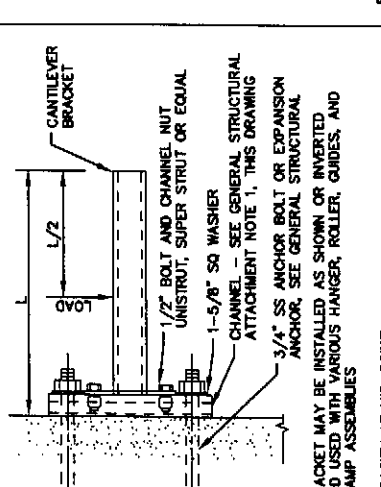


TYPE K
STRUCTURAL ATTACHMENT

BRACKET MAY BE USED WITH VARIOUS HANGER, ROLLER, GUIDE, AND CLAMP ASSEMBLIES

CAPACITY AT MID-POINT:
LOAD
L 12" 2000 LBS
6" 1300 LBS
18" 1000 LBS
24" 800 LBS
30" 650 LBS
36" 650 LBS

SPACING SHALL BE AS REQUIRED BUT SHALL NOT EXCEED THOSE SPANS SHOWN IN TABLE A/M1

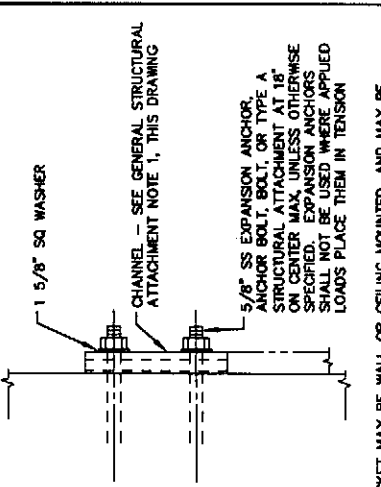


TYPE L
STRUCTURAL ATTACHMENT

BRACKET MAY BE INSTALLED AS SHOWN OR INVERTED AND USED WITH VARIOUS HANGER, ROLLER, GUIDES, AND CLAMP ASSEMBLIES

CAPACITY AT MID-POINT:
LOAD
L 12" 1800 LBS
6" 1000 LBS
18" 700 LBS
24" 500 LBS
30" 500 LBS

SPACING SHALL BE AS REQUIRED BUT SHALL NOT EXCEED THOSE SPANS SHOWN IN TABLE A/M1

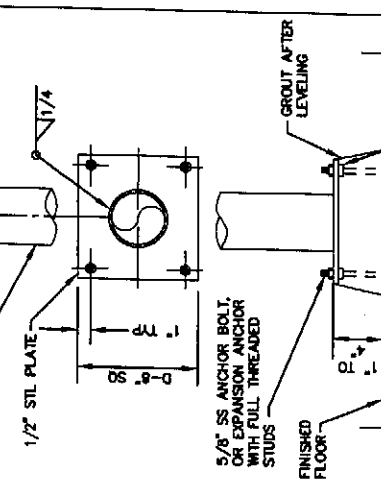


TYPE M
STRUCTURAL ATTACHMENT

BRACKET MAY BE WALL OR CEILING MOUNTED, AND MAY BE USED WITH VARIOUS HANGER, GUIDE, RACK, OR ANCHOR, AND SWAY BRACE ASSEMBLIES

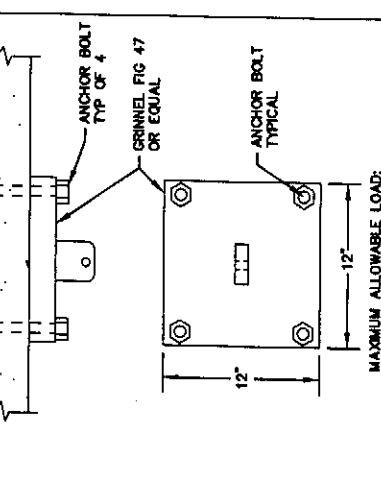
MAXIMUM LOAD CAPACITY SHALL BE AS RECOMMENDED BY THE CHANNEL MANUFACTURER

SPACING SHALL BE AS REQUIRED, BUT SHALL NOT EXCEED THOSE SPANS SHOWN IN TABLE A/M1



TYPE N
STRUCTURAL ATTACHMENT

SPACING SHALL BE AS REQUIRED, BUT SHALL NOT EXCEED THOSE SPANS SHOWN IN TABLE A/M1



TYPE P
STRUCTURAL ATTACHMENT

MAXIMUM ALLOWABLE LOAD:
LOAD
PLATE THICKNESS 3/4" 1" 1 1/2"

ROD SIZE 1" 1 1/4" 1 1/2"

ATTACH ROD TO STEEL PLAT WITH RIGID STEEL CLEVIS. GRINNEL FIG 299 OR EQUAL



TYPE J
STRUCTURAL ATTACHMENT

ADJUSTABLE BEAM ATTACHMENT
MAXIMUM ALLOWABLE LOAD:
LOAD WOOD
3/8" 425 LBS
1/2" 715 LBS
5/8" 810 LBS
3/4" 1500 LBS
7/8" 1650 LBS
1" 3770 LBS

SPACING SHALL BE AS REQUIRED BUT SHALL NOT EXCEED THOSE SPANS SHOWN IN TABLE A/M1

REF: B-LINE FIGURE B3052



TYPE K
STRUCTURAL ATTACHMENT

BRACKET MAY BE USED WITH VARIOUS HANGER, ROLLER, GUIDE, AND CLAMP ASSEMBLIES

CAPACITY AT MID-POINT:
LOAD
L 12" 2000 LBS
6" 1300 LBS
18" 1000 LBS
24" 800 LBS
30" 650 LBS
36" 650 LBS

SPACING SHALL BE AS REQUIRED BUT SHALL NOT EXCEED THOSE SPANS SHOWN IN TABLE A/M1

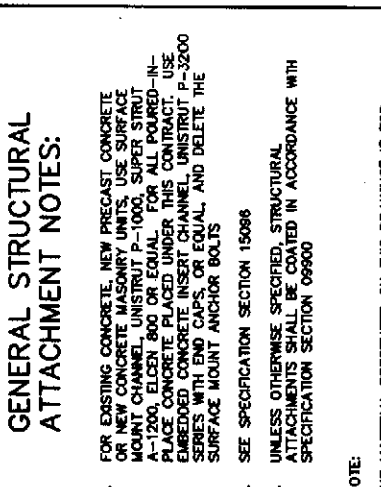


TYPE L
STRUCTURAL ATTACHMENT

BRACKET MAY BE INSTALLED AS SHOWN OR INVERTED AND USED WITH VARIOUS HANGER, ROLLER, GUIDES, AND CLAMP ASSEMBLIES

CAPACITY AT MID-POINT:
LOAD
L 12" 1800 LBS
6" 1000 LBS
18" 700 LBS
24" 500 LBS
30" 500 LBS

SPACING SHALL BE AS REQUIRED BUT SHALL NOT EXCEED THOSE SPANS SHOWN IN TABLE A/M1



TYPE M
STRUCTURAL ATTACHMENT

BRACKET MAY BE WALL OR CEILING MOUNTED, AND MAY BE USED WITH VARIOUS HANGER, GUIDE, RACK, OR ANCHOR, AND SWAY BRACE ASSEMBLIES

MAXIMUM LOAD CAPACITY SHALL BE AS RECOMMENDED BY THE CHANNEL MANUFACTURER

SPACING SHALL BE AS REQUIRED, BUT SHALL NOT EXCEED THOSE SPANS SHOWN IN TABLE A/M1

GENERAL STRUCTURAL ATTACHMENT NOTES:

- FOR EXISTING CONCRETE, NEW PRECAST CONCRETE OR NEW CONCRETE MASONRY UNITS, USE SURFACE MOUNT CHANNEL, UNISTRUT P-1000, SUPER STRUT A-1200, ELDEX 800 OR EQUAL. FOR ALL POURED-IN-PLACE CONCRETE USE GRINNEL'S CONTRACT USE SERIES WITH ENDO CLIPS OR EQUAL, AND DELETE THE SURFACE MOUNT ANCHOR BOLTS
- SEE SPECIFICATION SECTION 15086
- UNLESS OTHERWISE SPECIFIED, STRUCTURAL ATTACHMENTS SHALL BE COATED IN ACCORDANCE WITH SPECIFICATION SECTION 09900

NOTE:
THE MATERIAL PRESENTED ON THIS DRAWING IS FOR REFERENCE USE. SOME OF THE DETAILS OR INFORMATION PRESENTED ON THIS DRAWING MAY NOT BE REQUIRED AS PART OF THIS CONTRACT.

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LAKEWOOD (253) 472-1992

CITY OF ENTIAI
2007 WASTEWATER TREATMENT FACILITIES IMPROVEMENTS

PIPE SUPPORTS AND STRUCTURAL ATTACHMENTS

JOB NO. 0523004-03
DRAWING NO. M2
SHEET OF

DESIGNED BY LR
DRAWN BY MR
CHECKED BY JPL
APPROVED BY
DATE PRINTED 09/20/07
SCALE NOT TO SCALE
FBI NO.

GENERAL NOTES

REVISIONS

DATE 11/09/08

