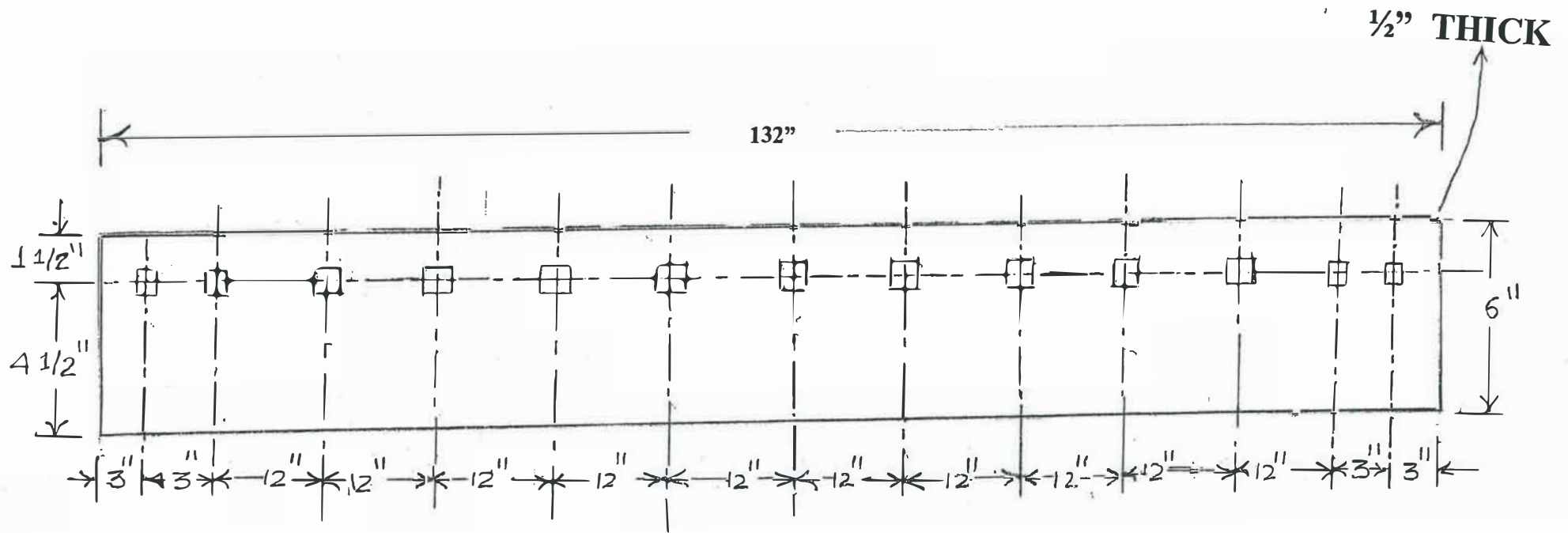


BLADE "Z"

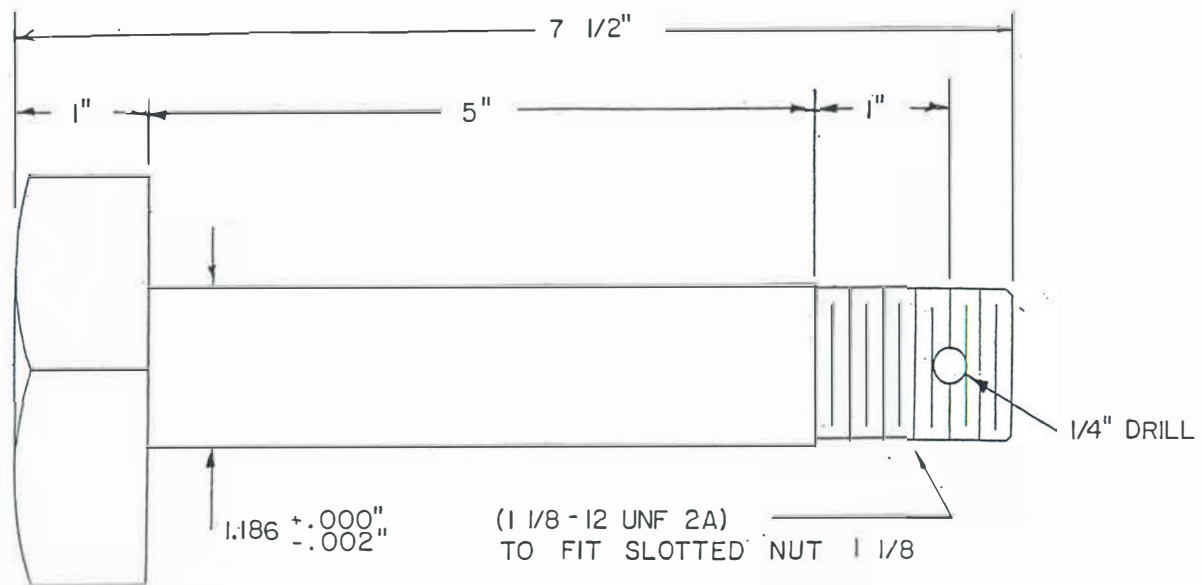
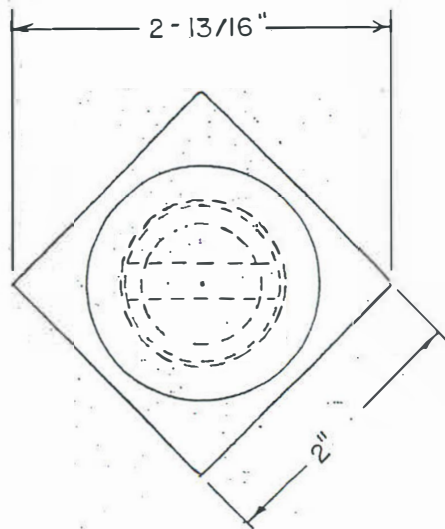
13 HOLES, 11/16" SQUARE



1/2" x 6" x 132"

"MATERIAL: HIGH CARBON ABRASIVE RESISTANT
STEEL SAE1091"

MATERIAL FOR AXLE
CARBON STEEL C-1020 C-1040

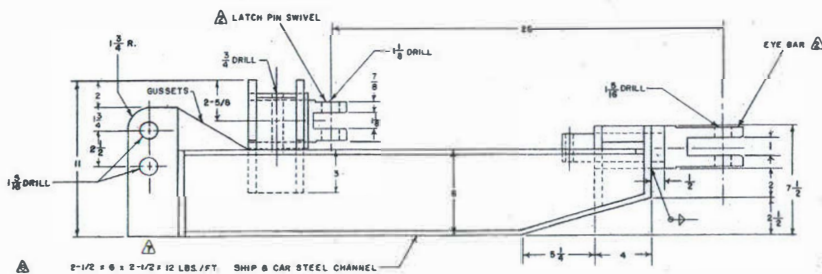
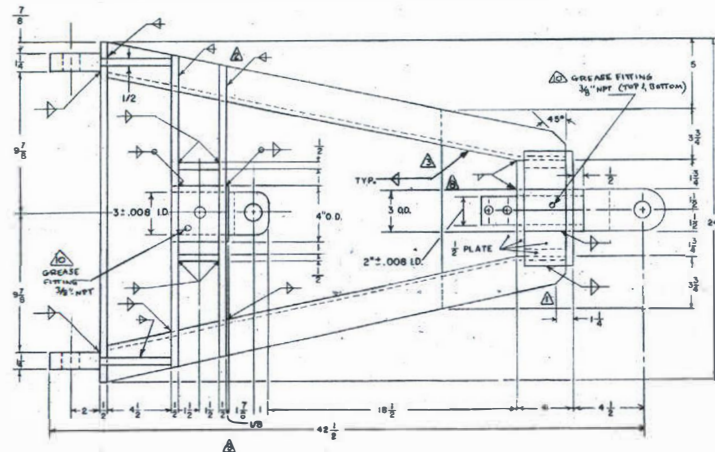


NEW JERSEY DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION AND MAINTENANCE
BUREAU OF EQUIPMENT

SNOW PLOW AXLE
FOR 8" OR 10" WHEEL

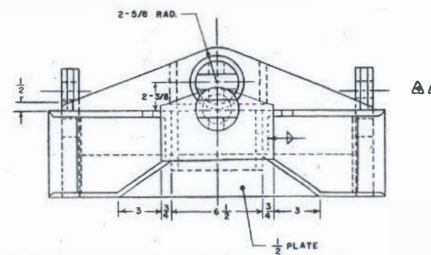
REV 2	A.P.S.	11-25-74	CHANGE TITLE	SUBMITTED BY <i>LLW</i>	DRAWN BY MARTIN PILCH	SCALE FULL	DWG. NO.
REV 1	M.P.	7-27-73	ADDITION OF HOLE CHANGED 1.187 TO 1.186	APPROVED BY <i>J. Beepel</i>	JOB NO <i>---</i>	DATE JUNE 11, 1973	1060 4-121

- NOTES:
1. ALL WELDS TO BE CONTINUOUS
 2. EYE BAR AND LATCH PIN SWIVEL FOUND IN GREATER DETAIL ON DWG. NO. 4-134



MAT'L:

CHANNEL — SHIP & CAR STEEL CHANNEL
 PLATE — HOT ROLLED STRUCTURAL STEEL QUALITY
 TUBING — COLD DRAWN SEAMLESS CARBON STEEL



7/1/75 JWB	ADDED 3 GREASE FITTINGS				
4/28/75 ARS	SHORTEN LATCH PIN SWIVEL RECEIVER				
3/26/75 JWB	ADD WELD SYMBOLS				
3/17/75 APS	ADD HOLE, RADIUS, & DIMS.				
3/9/75 APS	CHG. NOM. OF CHANNEL				
2/17/75 APS	REDUCE HEIGHT OF REAR 1/2" PLATE & CHG. POS. OF GUSSETS				
2/10/75 APS	CLARIFY REAR SECTION OF P.B. & CHG. DIMS.	77- GHE- 0024	10-R-11-23-(24,42,113,18) 1 MOD.		
1/10/75 APS	CHANGE FRONT SECTION OF P.B.	76- GHE- 0009	M.R. 10- 32- 15- 1 MOD.		
12/27/75 JWB	ADDED "NO" TO NOTES, NOTE 5, TYPE OF MET. WELD, AND THICKNESS OF PLATE	75- 6HE- 0049	M.R. 11- 36- 15- 1	SUBMITTED BY: <i>[Signature]</i>	DRAWN BY: <i>[Signature]</i>
12/27/75 APS	MADE ADDITIONS TO FRONT SECTION OF PUSH BAR	75- GHE- 0045	10-R-12-75-(52,53)-1475,22,75-1	APPROVED BY: <i>[Signature]</i>	SCALE: NONE
REV DATE BY	REMARKS	ORDER REQUEST NO.	APPLICABLE SNOW PLOW	JOB NO.	DATE: OCTOBER 23, 1975

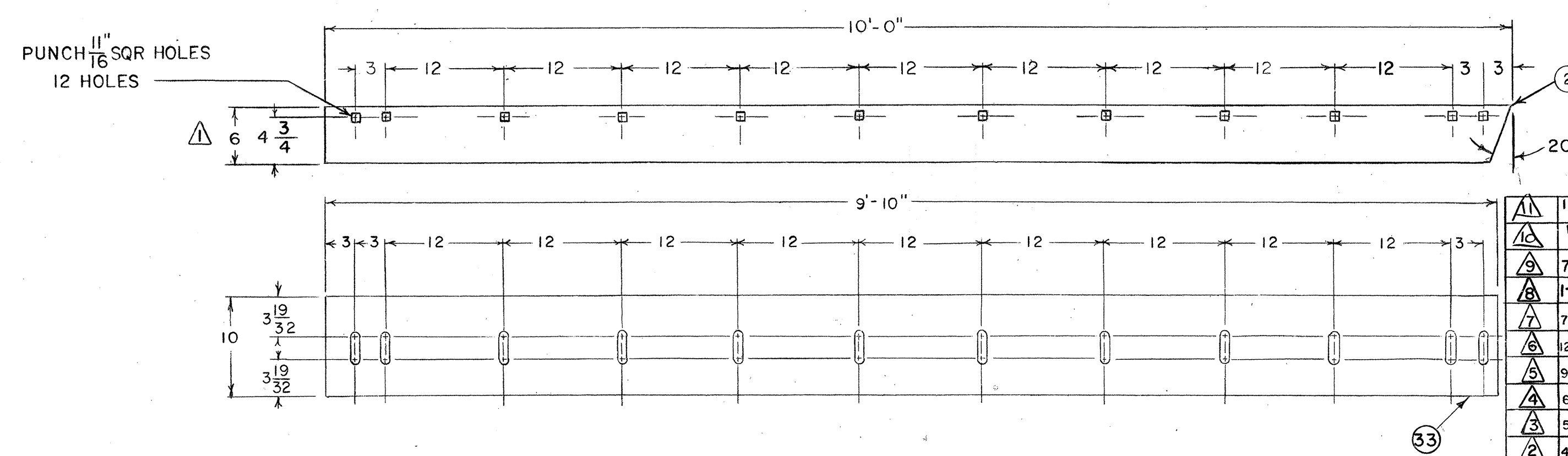
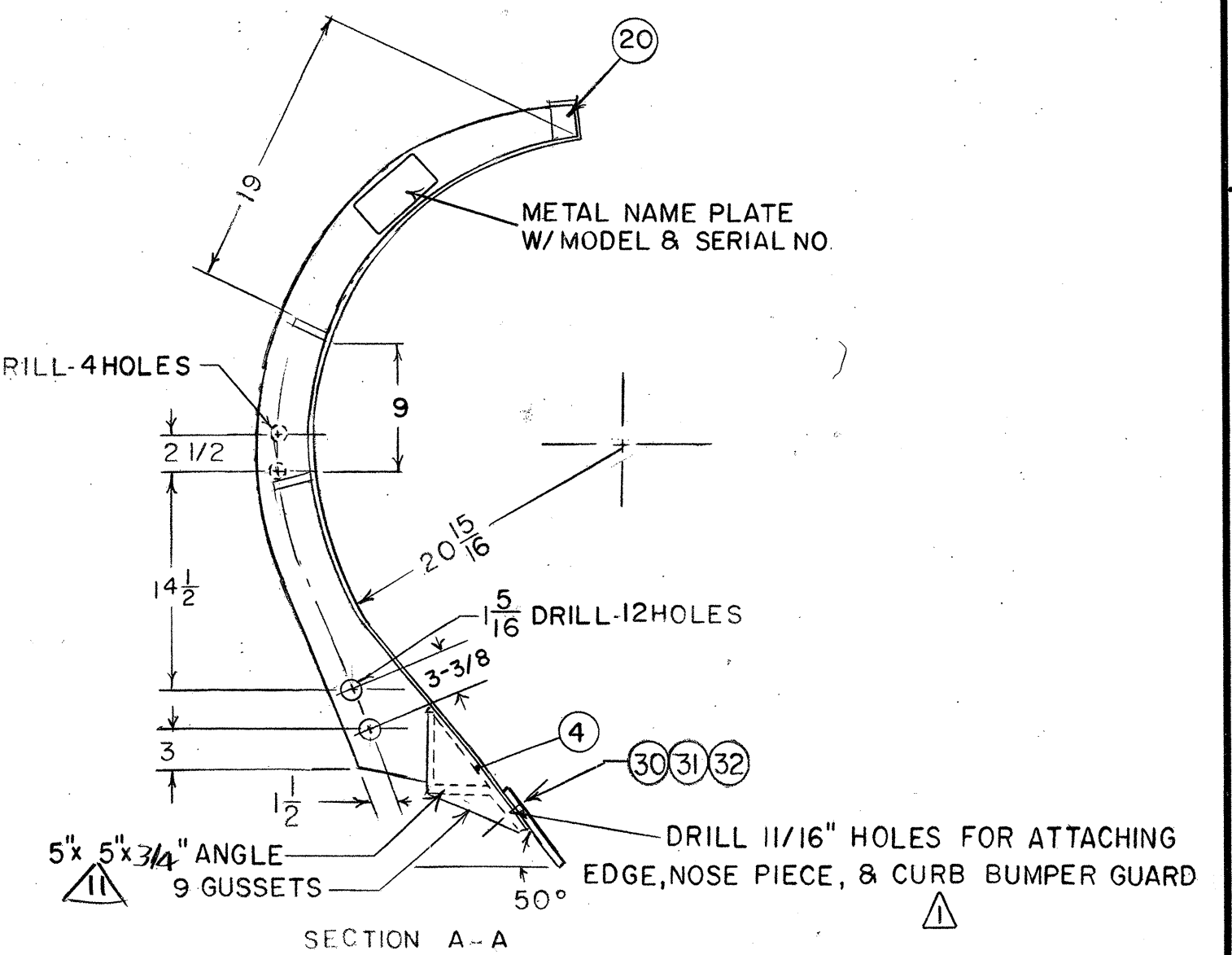
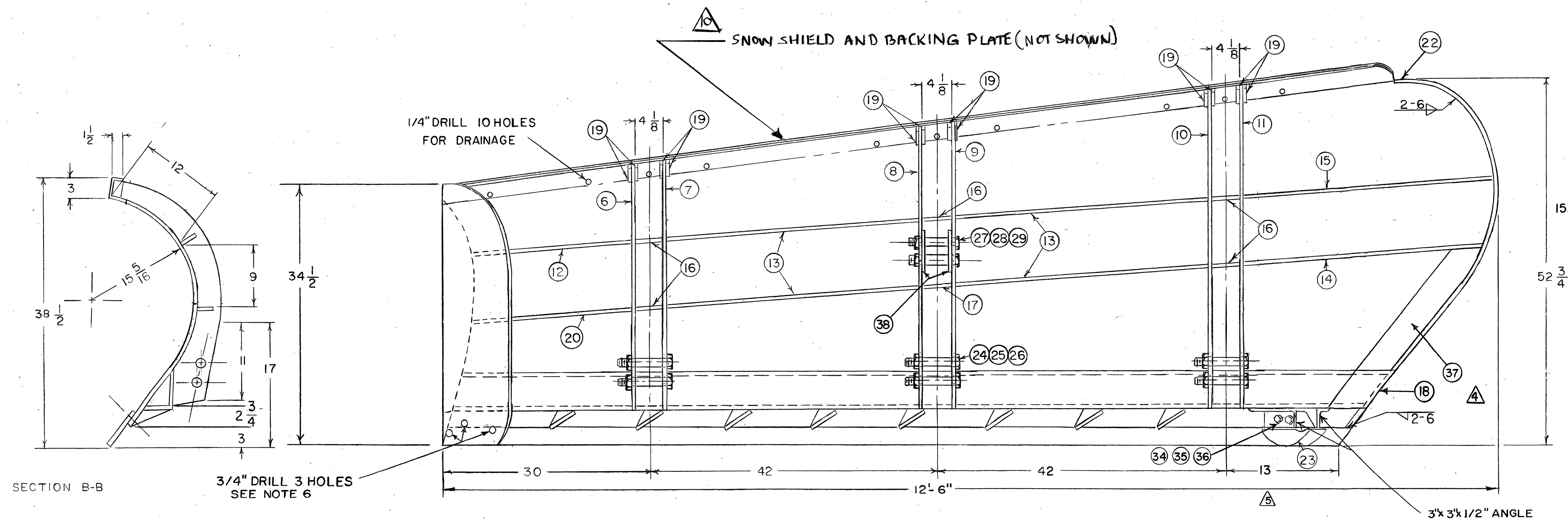
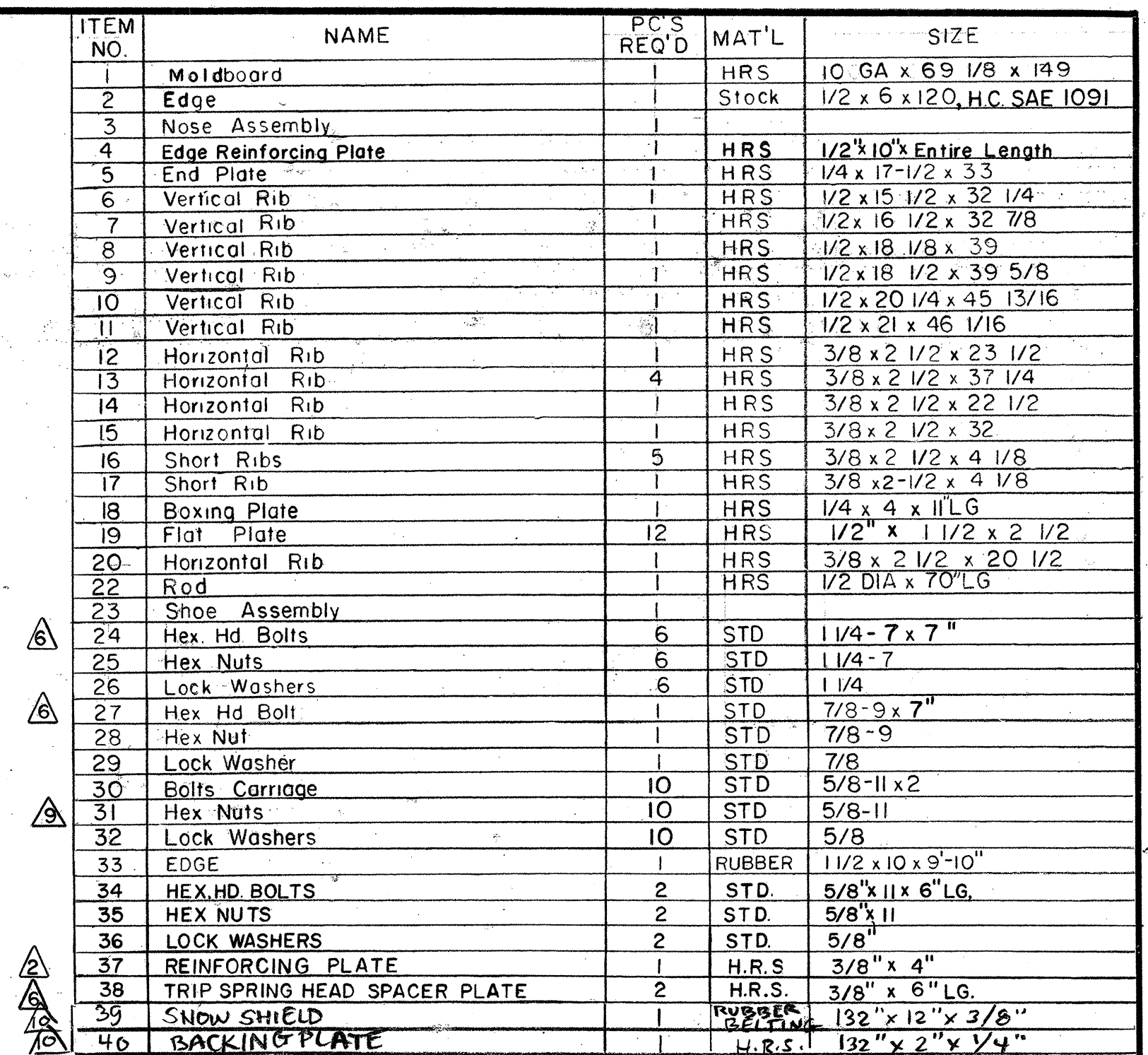
NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT	
LARGE SNOW PLOW PUSH BAR	
DWG. NO.	1076-8-13

NEW JERSEY DEPARTMENT OF TRANSPORTATION
 DIVISION OF CONSTRUCTION AND MAINTENANCE
 BUREAU OF EQUIPMENT

LARGE SNOW FLOW PUSH BAR

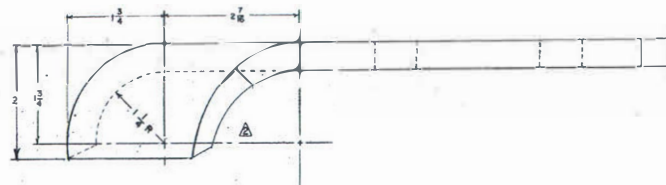
SUBMITTED BY: *[Signature]* DRAWN BY: L.J. CERVONKA J. SCALE: NONE
 APPROVED BY: *[Signature]* JOB NO. DATE: OCTOBER 23, 1975
 DWG. NO. 4-134

1. ALL FILLLET WELDS 3/16" UNLESS OTHERWISE SPECIFIED.
2. ALL RIBS & FLAT PLATES HAVE FILLLET WELDS, 2" WELD LENGTH & 6" PITCH.
3. FOR CARBIDE EDGE, SEE N.J.D.O.T., BUREAU OF EQUIP. DRAWING NO. 4-113. 
4. MOLDBOARD SKIN MUST EXTEND TO BOTTOM EDGE OF EDGE REINFORCING PLATE. (ITEM NO. 4) TACK WELD ONLY. 
5. MOLDBOARD SKIN TO BE SMOOTH ROLLED OR BRAKE FORMED 
6. FRONT TWO HOLES ON END PLATE TO BE DRILLED IN LINE WITH 3/4" SQ. PUNCHED HOLES OF INNER NOSE PIECE. VERTICAL LOCATION OF REAR HOLE TO BE ESTABLISHED AFTER CONNECTING OUTER NOSE PIECE. 
7. LAST TWO BOLTS OF RIGHT END CONNECTING BLADE & ACCESSORY TO MOLDBOARD ARE TO BE 1-1/2" LG. CARRIAGE BOLTS. 
8. SNOW SHIELD AND CRACKING PLATE TO BE ATTACHED WITH 1/2" BOLTS AND NUTS

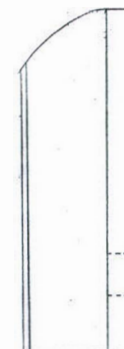
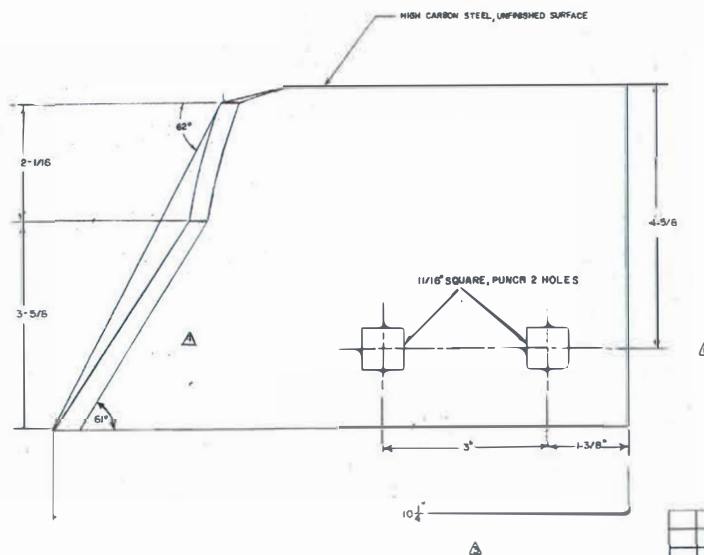


1	11-14-74	JMB	INCREASED FROM 1/2" TO 3/4" THICK
2	11-16-74	JMB	ADDED SNOW SHIELD
3	7-1-86	A.P.S.	
4	1-5-77	A.P.S.	
5	7-28-76	S.B.	
6	12-15-75	A.P.S.	
7	9-11-75	A.P.S.	
8	6-9-75	A.P.S.	
9	5-5-75	A.P.S.	77-GHE-0024
10	4-22-75	A.P.S.	75-GHE-0049
11	11-22-74	A.P.S.	75-GHE-0045
REV	DATE	BY	ORDER REQUEST NO.

NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
SNOW PLOW MODEL O-R. 12.75-(32, 53)-(14.75, 22.75) -1			
SUBMITTED BY <i>A. J. CERVINKA Jr.</i>	DRAWN BY A.J. CERVINKA Jr.	SCALE 3/32" = 1"	DWG. NO. 1075 4-131
APPROVED BY <i>J. Czerwinski</i>	JOB NO. <i>_____</i>	DATE OCTOBER 19, 1973.	



MATL:
HIGH CARBON STEEL

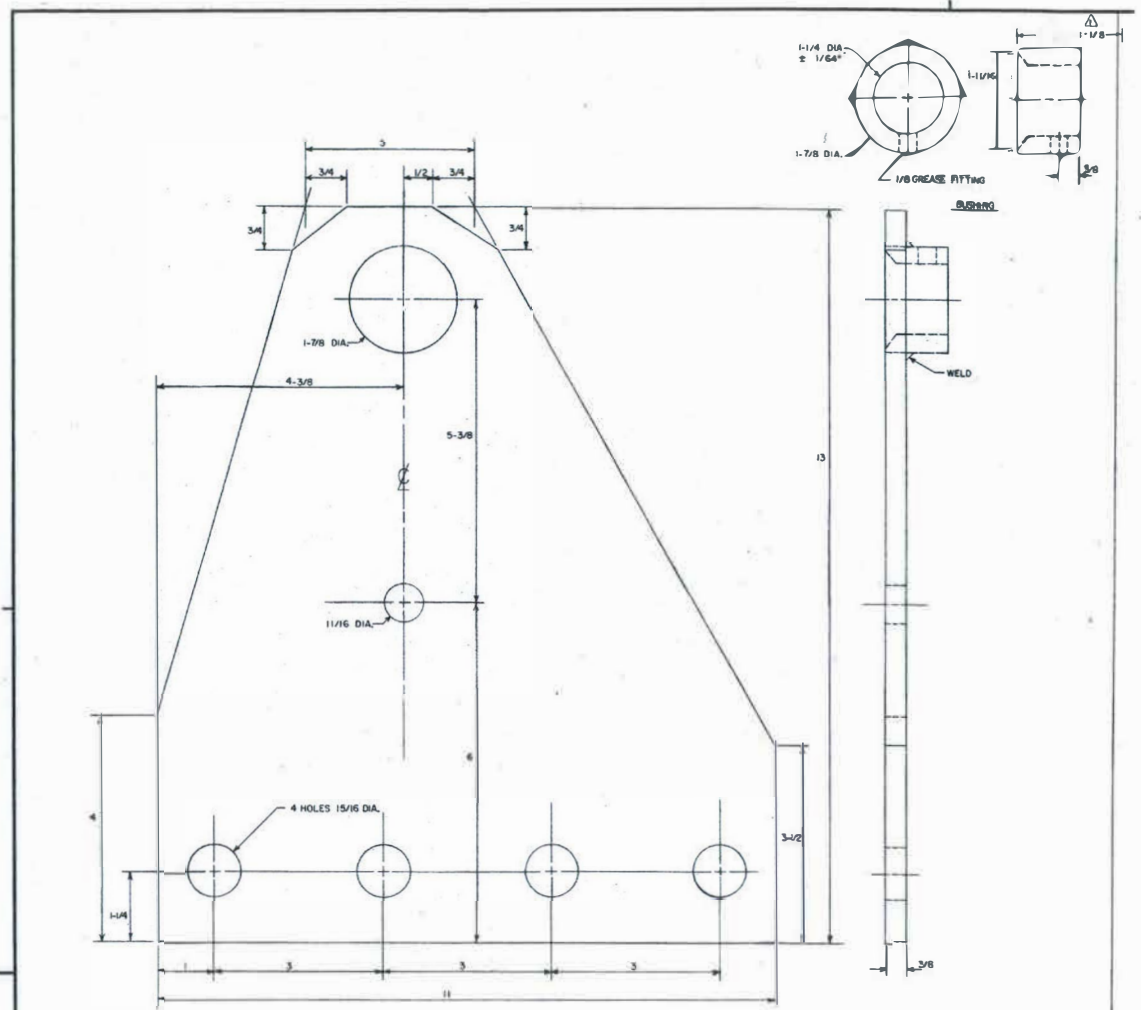


NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
CURB BUMPER GUARD			
4	SHYUJWG	1-CURV. LEFT END	
4	WVW SB	CHANGE HOLES DIMENSIONS	77-GHE-0024
4	WVW APS	REVISE TOP VIEW	75-GHE-0049
4	WVW APS	CHANGE HOLE LOCATION	75-GHE-0045
REV	DATE	BY	REMARKS
			ORDER REQUEST NO.
			APPLICABLE SNOW PLOWS
SUBMITTED BY		DRAWN BY	SCALE
A. J. CERVONEA		A. J. CERVONEA	FULL SCALE
APPROVED BY		JOB NO.	DATE
F. D. B. B.			OCTOBER 29, 1973
DWG. NO.			1077
			4-133

VENDOR REF.
GOOD ROADS CURB BUMPER GUARD NO. 62100431

REVISION
Drawn by
Checked by

1000 1000



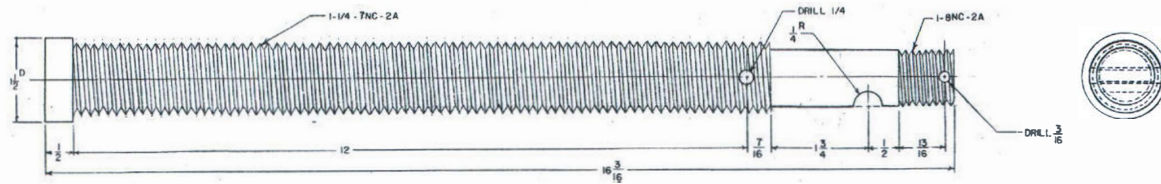
NOTES

1. 3/8" STD. THICK. HOT ROLLED PLATE STEEL
2. ALL OTHER DIMENSIONS ± 1/16"
3. BUSHING WELDED IN TRUNNION PLATE
4. POSITION BUSHING WITH CHAMFER DOWN
5. WELD BUSHING IN OPPOSITE SIDE OF PLATE FOR STREET SIDE TRUNNION PLATE
6. TRUNNION PLATES TO BE BOLTED TO SEMI-CIRCLE W/ 7/8" - 9UNC BOLTS, NUTS, & LOCKWASHERS
7. TRUNNION PLATES TO BE WELDED TOGETHER W/ PIPE SPACER & 5/8" - 11UNC BOLT, NUT, & LOCKWASHER.
8. BUSHING MATERIAL: COLD FINISHED STEEL

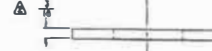
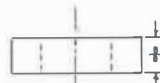
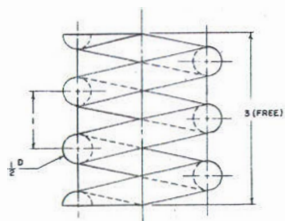
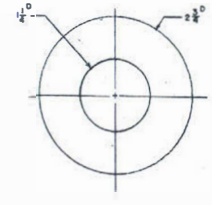
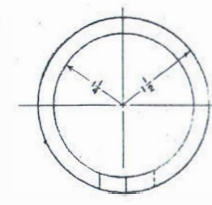
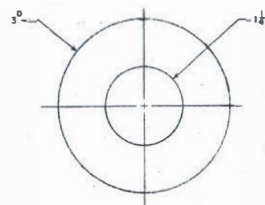
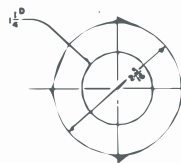
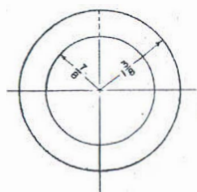
TRUNNION PLATE (CURB SIDE)

NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
TRUNNION PLATE			
77-GHE-0024	0-R.11.25-(24,42)-(13,18)-1 MOD.	SUBMITTED BY:	STEVE TOTH
76-GHE-0009	M.R.10-32-15-1 MOD.	DRAWN BY:	STEVE TOTH
75-GHE-0049	M.R.11-36-15-1	SCALE:	FULL SIZE
75-GHE-0045	0-R.12.75-(32,53)-(14,75,22,75)-1	APPROVED BY:	JOB NOT
ORDER REQUEST	APPLICABLE SNOW PLOWS	DATE:	FEB. 27, 1974
REV. DATE	REMARKS	DWG. NO.	1092
			4-143

REVISION
Drawn by
Checked by



ADJUSTING BOLT
NO. 62100642
MATERIAL: COLD FINISHED,
MEDIUM CARBON STEEL
HEAT TREATED



SPRING
NO. 62100637
MATERIAL: SPRING STEEL

THRUST BEARING
NO. 62100637
TIMKEN NO. T-126, OR
APPROVED EQUAL

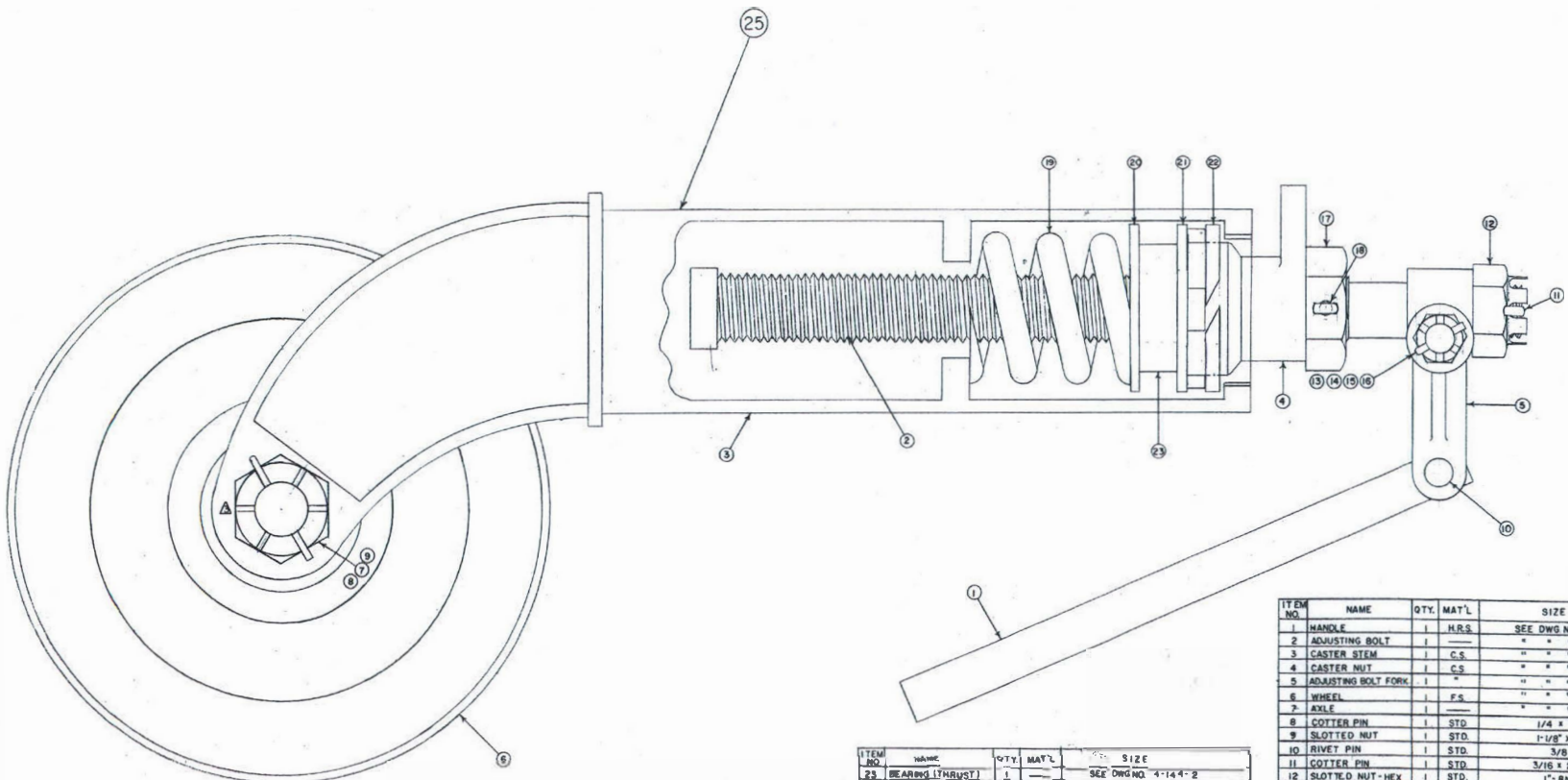
BEARING WASHER
STD. STEEL WASHER

RETAINING RING
NO. 62100638
MATERIAL: SPRING STEEL

WASHER
STD. STEEL WASHER

VENOOR REF. GOOD ROADS

NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
CASTER ASSEMBLY			
REV	DATE	BY	REMARKS
1	9-27-43	APS	CHANGE THICKNESS OF WASHER
2	10-22-43	APS	CHANGE 1/2" OF THRUST BEARING
3	11-10-43	APS	ADDED 1/2" OF WASHER
ORDER REQUEST NO.		APPLICABLE SNOW PLOWS	
76-GHE-0009		M.R. 10-32-15-1 MOD.	
75-GHE-0049		M.R. 11-36-15-1	
75-GHE-0045		O-R. 12-75-(32,53)-04,75,22,75-1	
SUBMITTED BY		DRAWN BY	
A. J. CERVINKA JR.		A. J. CERVINKA JR.	
DATE		FEBRUARY 27, 1974	
JOB NO.		SCALE	
1" = 1"		DWG. NO.	
1093		4-144	



ITEM NO.	NAME	QTY.	MAT'L	SIZE
23	BEARING (THRUST)	1		SEE DWG NO. 4-144-2
24				
25	COMPLETE CASTER ASSEMBLY - 2 REQ'D FOR EA. SNOW PLOW ASSY.			

ITEM NO.	NAME	QTY.	MAT'L	SIZE
1	HANDLE	1	H.R.S.	SEE DWG NO. 4-144-3
2	ADJUSTING BOLT	1	"	" " 4-144-2
3	CASTER STEM	1	C.S.	" " " 4-144-1
4	CASTER NUT	1	C.S.	" " " 4-144-3
5	ADJUSTING BOLT FORK	1	"	" " " 4-144-3
6	WHEEL	1	F.S.	" " " 4-155
7	AXLE	1	"	" " " 4-121
8	COTTER PIN	1	STD.	1/4 X 2
9	SLOTTED NUT	1	STD.	1-1/8" X 12 UNF
10	RIVET PIN	1	STD.	3/8
11	COTTER PIN	1	STD.	3/16 X 2
12	SLOTTED NUT-HEX	1	STD.	1"-8NC
13	BOLT-HEX HD.	1	STD.	1/2" X 20 UNF
14	WASHER	1	STD.	1/2
15	SLOTTED NUT-HEX	1	STD.	1/2" X 20 UNF
16	COTTER PIN	1	STD.	1/8" X 1-1/4"
17	HEX NUT	1	STD.	1-1/4" X 7 NC
18	COTTER PIN	1	STD.	1/4"
19	SPRING	1	SPG. STL	SEE DWG NO. 4-144-2
20	BEARING WASHER	1	STD.	" " " 4-144-2
21	WASHER	1	STD.	" " " 4-144-2
22	RETAINING RING	1	SPG. STL	" " " 4-144-2

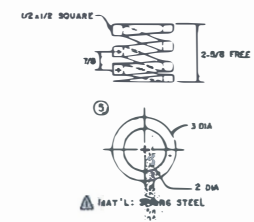
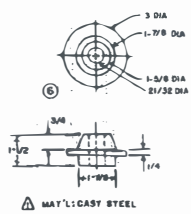
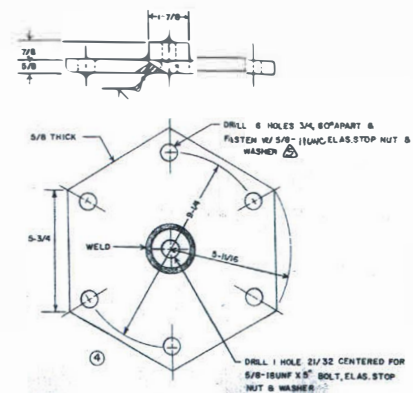
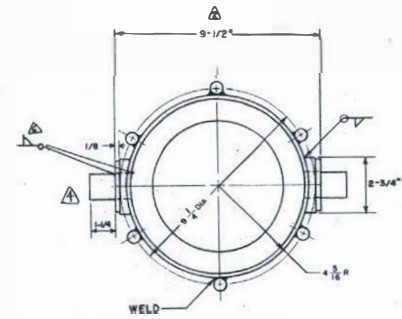
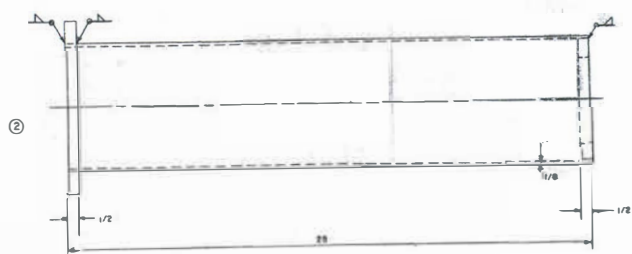
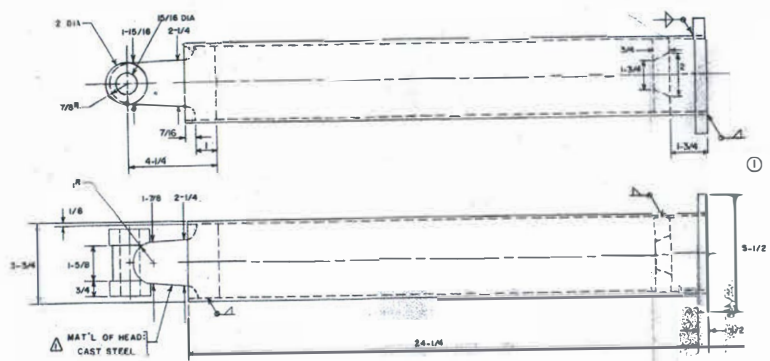
NEW JERSEY DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION AND MAINTENANCE
BUREAU OF EQUIPMENT

CASTER ASSEMBLY

REV.	DATE	BY	REMARKS	ORDER REQUEST NO.	APPLICABLE SNOW PLOWS	SUBMITTED BY	DRAWN BY	DATE	DWG. NO.
1	11-25-75	APS	INSTALL AXLE PROPERLY	76-GHE-0009	M.R. 10-32-15-1 MOD	W. J. CERYNKA	A. J. CERYNKA	FEBRUARY 28, 1974	1093
2	11-25-75	APS	DELETE ITEM 24	75-GHE-0049	M.R. 11-34-15-1				4-144-2
3	11-25-75	APS	ADD 19 PWS NO'S TO ITEM CHART	75-GHE-0045	OR 12 75-132-931-14 75-22751-1				

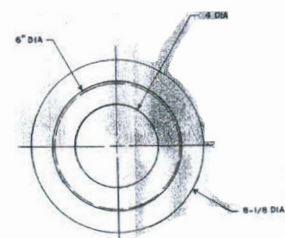
VENDOR REF. GOOD ROADS NO. 62100635

REVISION
Drawn by
Checked by



UNLESS OTHERWISE SPECIFIED ELSEWHERE ON THIS
DRAWING, THE FOLLOWING MAY BE USED

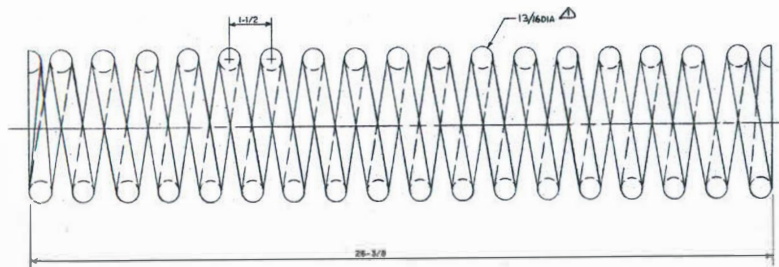
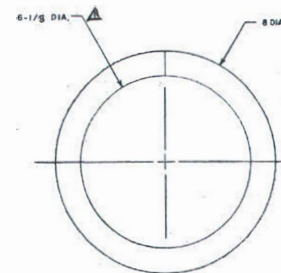
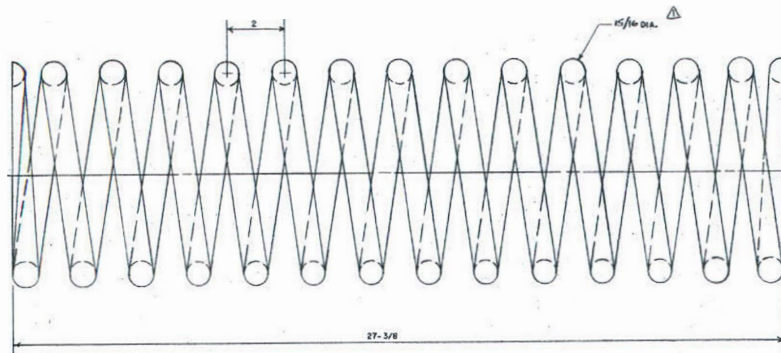
TUBING _____	COLD DRAWN SEAMLESS CARBON STEEL
PLATE _____	HEAVY WOLVED STRUCTURAL STEEL QUALITY
ROUND STOCK _____	COLD FINISHED MEDIUM CARBON STEEL



ITEM NO.	NAME
1	CENTER TUBE ASSEMBLY
2	TURNING ASSEMBLY
3	OUTSIDE TUBE ASSEMBLY
4	COVER PLATE ASSEMBLY
5	RECOIL SPRING
6	SPRING BOSS

		NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT	
		TRIP SPRING ASSEMBLY	
1-1/2" 3/8" CHANGED TO 3/4" DIAMETER 2-3/4" 1/2" ADDED WELLS 3-3/4" 1/2" CHANGED TO CORRECT THREAD 4-3/4" 1/2" SHAF. EXTENDED TO DOOR 5-3/4" 1/2" ADDED GRADE 8'S 6-3/4" 1/2" 75-GH-0049 7-3/4" 1/2" 75-GH-0045 REV DATE BY ORDER REQUEST	SUBMITTED BY: <i>E. J. Smith</i> APPROVED BY: <i>E. J. Smith</i> DRAWN BY: STEVE TOTH JOB NO: _____ SCALE: 3/4" = 1" DATE: MARCH 5, 1978 DOC NO. 1038-17		

REVISION: _____
 Drawn by _____
 Checked by _____

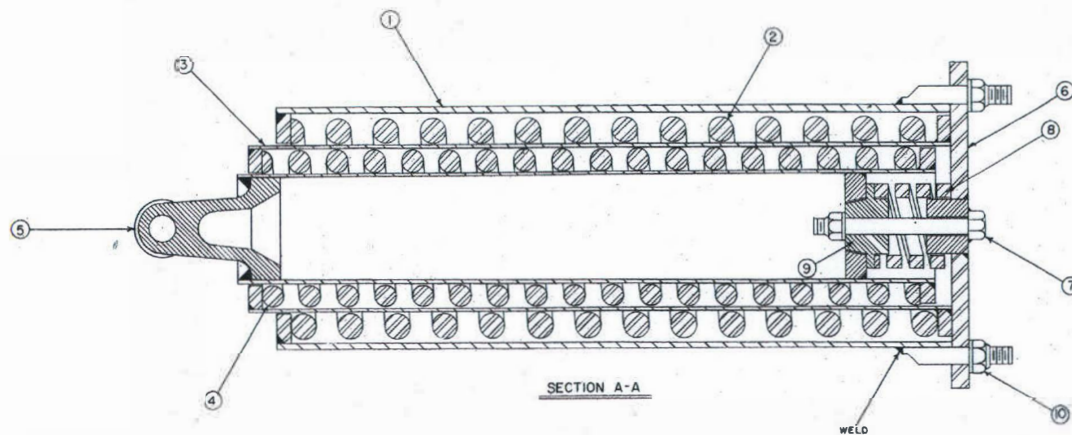


NOTES:
1. ENDS OF SPRINGS TO BE TAPERED DOWN AND SQUARED

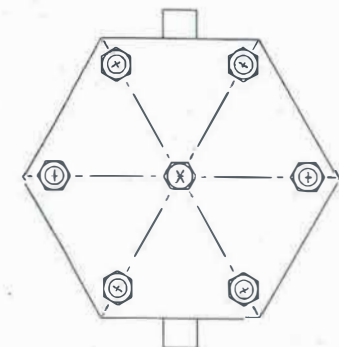
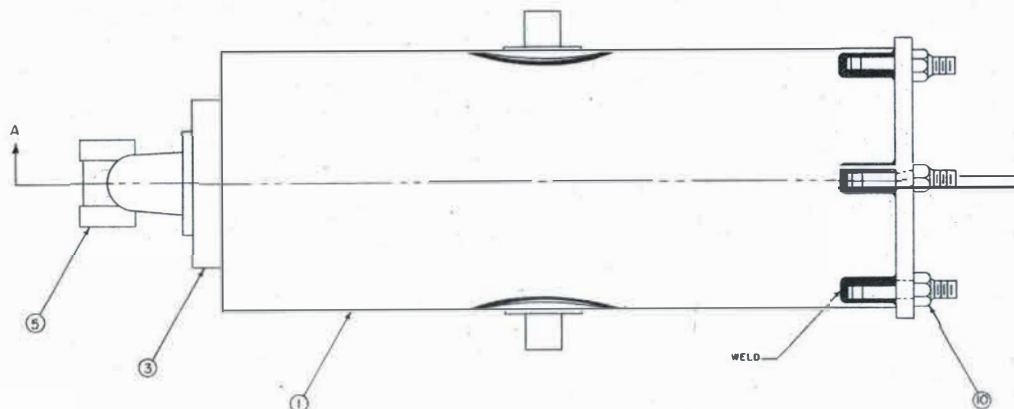
MAT'L
ALLOY SPRING STEEL-S150H-HOT WOUND
TO BE MANUFACTURED TO ASTM SPEC
A-228 LR MAT'L EQUAL OR GREATER
THAN ASTM A-689, A-29 AND A-304

REVISION	Drawn by	Checked by

				NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT				
				TRIP SPRING ASSEMBLY				
				77-GHE-0024	SUBMITTED BY:	DRAWN BY:	SCALE:	DWG. NO.
				75-GHE-0049	J. G. G. H.	STEVE TOOTH	1/2"=1'	1094
				75-GHE-0045				
				DR 12.75-138	APPROVED BY:	JOB NO:	DATE:	
				531-114,75,22,75-1	J. G. G. H.	MARCH 8, 1974	1094	M-145
				APPLICABLE SNOW PLOWS				
REV	DATE	BY	REMARKS	ORDER REQUEST NO.				



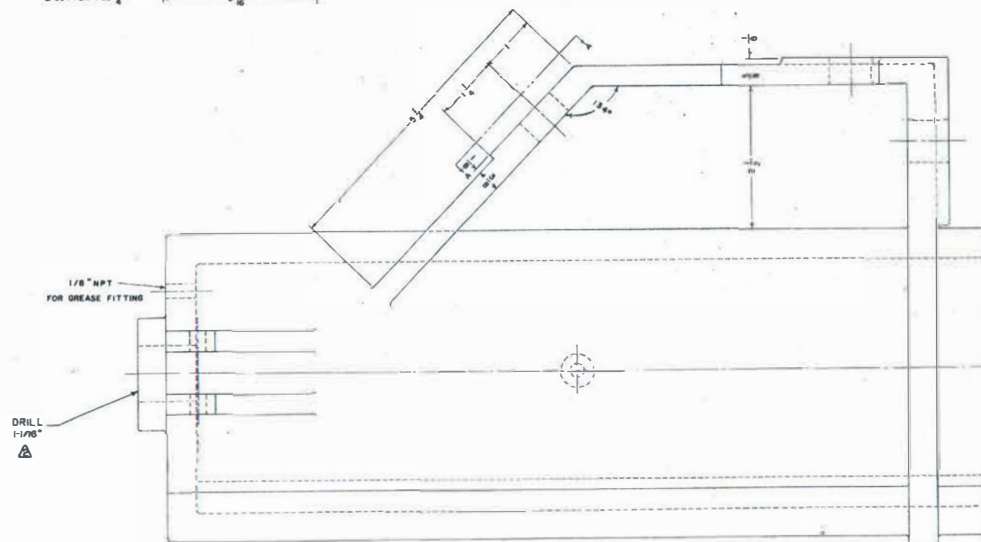
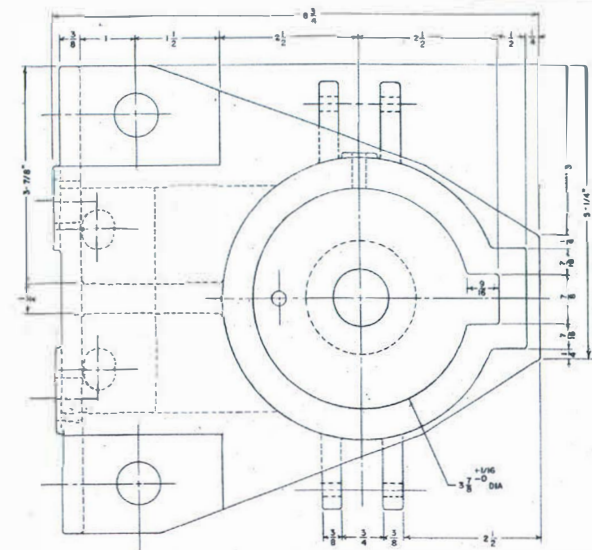
ITEM	NAME	QTY	DWG. NO.
1	OUTSIDE TUBE ASSEMBLY	1	4-145-1, ITEM 3
2	OUTSIDE SPRING	1	4-145-2
3	TUBING ASSEMBLY	1	4-145-1, ITEM 2
4	INSIDE SPRING	1	4-145-2
5	CENTER TUBE ASSEMBLY	1	4-145-1, ITEM 1
6	COVER PLATE ASSEMBLY	1	4-145-1, ITEM 4
7	5/8" X 18 UNF X 5" BOLT	1	
8	RECOIL SPRING	1	4-145-1, ITEM 5
9	SPRING BOSS	1	4-145-1, ITEM 6
10	5/8" X 18 UNF ELAS STOP NUT & WASHER	7EA	

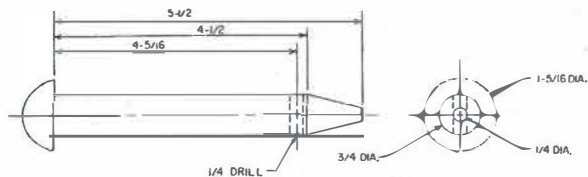


NOTES

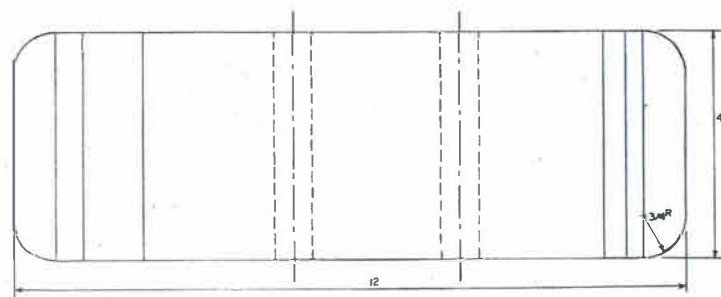
- 1 SECTION LINGING DOES NOT REPRESENT TYPE OF MATERIAL. ONLY CLARIFICATION BETWEEN PARTS.
- 2 MATERIAL SPECIFIED ON DWG. NO. 4-145-1 & 4-145-2.
- 3 DO NOT SCALE

NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
TRIP SPRING ASSEMBLY			
SUBMITTED BY A. P. SMITH	DRAWN BY A. P. SMITH	SCALE NONE	DWG. NO. 4-145
REV. DATE BY	REMARKS	ORDER REQUEST NO.	APPLICABLE SNOW FLOW
71-ONE-0024	75-ONE-0049	0-14275-153-631-1475, 22751	APPROVED BY J. B. Smith
			JOB NO. DATE NOV 11, 1974

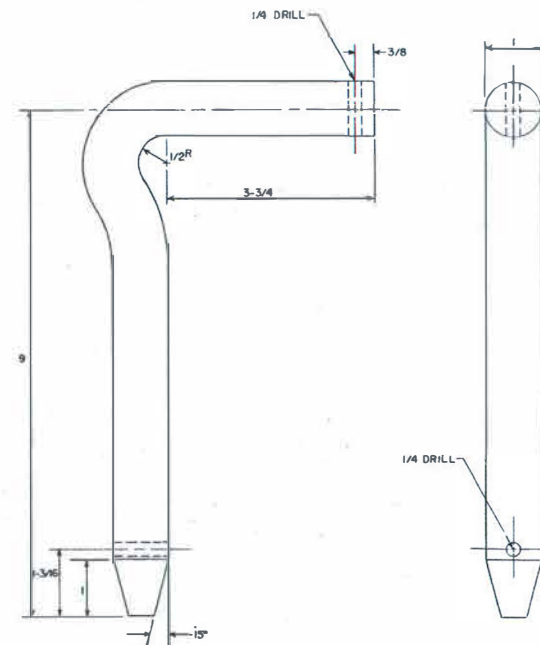
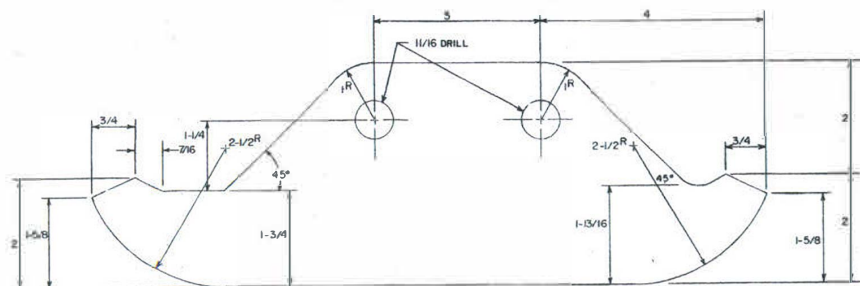
[illegible]



HINGE PIN & LIFT ARM CHAIN RIVET PIN
BT. HEAD RIVET 3/4 DIA. 5-1/2 LG.
MAT'L: HRS
62100240



SHOE 62100794 MAT'L: CAST IRON



LOCKING PIN 62100501 MAT'L: MILD STEEL
1" DIA. 13" LG

NOTES

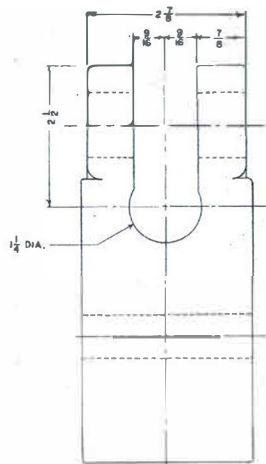
- 1 DRILLED HOLES (1/16) IN SHOE MUST BE DRILLED STRAIGHT AND PARALLEL.
- 2 SHOE TO BE CONNECTED TO MOLDBOARD ANGLE BY 2-5/8" x 6" LG BOLTS W/ LOCKWASHERS & NUTS.
- 3 1/4" COTTER PIN TO BE PLACED THRU HINGE PIN AND L.A.C. RIVET PIN AFTER INSTALLATION.
- 4 SHOE USED ONLY ON MODEL(S) O-R 12.75-(32.53)-84.75, 22.75-1 & O-R 11.25-(24.42)-(13.18)-1 MOD. Δ
- 5 1/4" COTTER PIN TO BE INSERTED THRU LOWER 1/4" HOLE OF LOCKING PIN AFTER INSTALLATION.

*Moldboard shoe not applicable

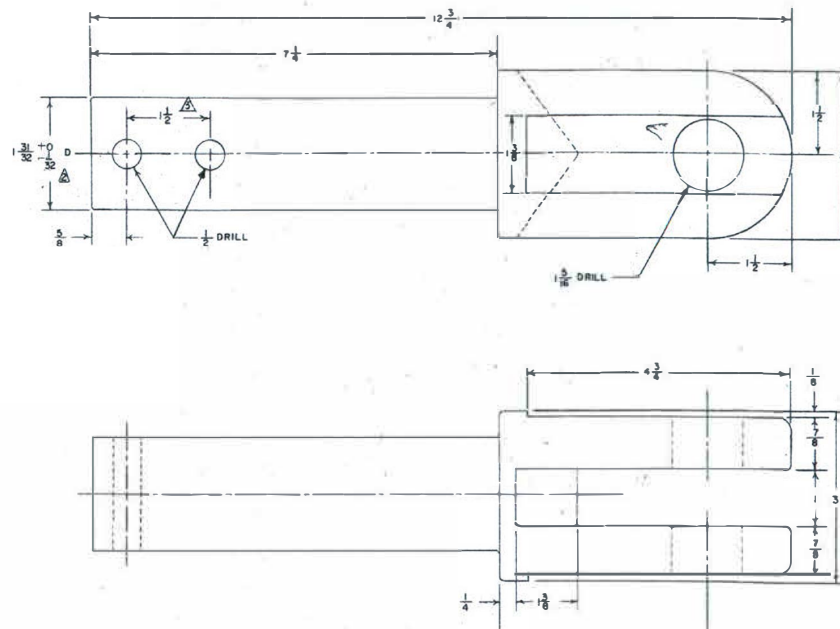
REVISION
Drawn by
Checked by

VENDOR REFERENCE GOOD ROADS

NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
SHOE, LOCKING PIN, AND RIVET PIN			
77-GHE-0024	O-R 11.25-(24.42)-(13.18)-1 MOD.	SUBMITTED BY:	STEVE TOOTH
76-GHE-0009	M.R. 10-32-15-1 MOD.	DRAWN BY:	STEVE TOOTH
75-GHE-0049	M.R. 11-36-15-1	APPROVED BY:	JOHN JOHNSON
75-GHE-0045	O-R 12.75-(32.53)-(84.75, 22.75)-1	DATE:	MARCH 2, 1974
REV	DATE	BY	REMARKS
1	11/16	APPS	CHANGED NOTE NO. 4
2	11/16	APPS	CHANGED NOTE NO. 4
3	11/16	APPS	CHANGED NOTE NO. 4
4	11/16	APPS	CHANGED NOTE NO. 4
5	11/16	APPS	CHANGED NOTE NO. 4
6	11/16	APPS	CHANGED NOTE NO. 4
7	11/16	APPS	CHANGED NOTE NO. 4
8	11/16	APPS	CHANGED NOTE NO. 4
9	11/16	APPS	CHANGED NOTE NO. 4
10	11/16	APPS	CHANGED NOTE NO. 4
11	11/16	APPS	CHANGED NOTE NO. 4
12	11/16	APPS	CHANGED NOTE NO. 4
13	11/16	APPS	CHANGED NOTE NO. 4
14	11/16	APPS	CHANGED NOTE NO. 4
15	11/16	APPS	CHANGED NOTE NO. 4
16	11/16	APPS	CHANGED NOTE NO. 4
17	11/16	APPS	CHANGED NOTE NO. 4
18	11/16	APPS	CHANGED NOTE NO. 4
19	11/16	APPS	CHANGED NOTE NO. 4
20	11/16	APPS	CHANGED NOTE NO. 4
21	11/16	APPS	CHANGED NOTE NO. 4
22	11/16	APPS	CHANGED NOTE NO. 4
23	11/16	APPS	CHANGED NOTE NO. 4
24	11/16	APPS	CHANGED NOTE NO. 4
25	11/16	APPS	CHANGED NOTE NO. 4
26	11/16	APPS	CHANGED NOTE NO. 4
27	11/16	APPS	CHANGED NOTE NO. 4
28	11/16	APPS	CHANGED NOTE NO. 4
29	11/16	APPS	CHANGED NOTE NO. 4
30	11/16	APPS	CHANGED NOTE NO. 4
31	11/16	APPS	CHANGED NOTE NO. 4
32	11/16	APPS	CHANGED NOTE NO. 4
33	11/16	APPS	CHANGED NOTE NO. 4
34	11/16	APPS	CHANGED NOTE NO. 4
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38	11/16	APPS	CHANGED NOTE NO. 4
39	11/16	APPS	CHANGED NOTE NO. 4
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41	11/16	APPS	CHANGED NOTE NO. 4
42	11/16	APPS	CHANGED NOTE NO. 4
43	11/16	APPS	CHANGED NOTE NO. 4
44	11/16	APPS	CHANGED NOTE NO. 4
45	11/16	APPS	CHANGED NOTE NO. 4
46	11/16	APPS	CHANGED NOTE NO. 4
47	11/16	APPS	CHANGED NOTE NO. 4
48	11/16	APPS	CHANGED NOTE NO. 4
49	11/16	APPS	CHANGED NOTE NO. 4
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52	11/16	APPS	CHANGED NOTE NO. 4
53	11/16	APPS	CHANGED NOTE NO. 4
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62	11/16	APPS	CHANGED NOTE NO. 4
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81	11/16	APPS	CHANGED NOTE NO. 4
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83	11/16	APPS	CHANGED NOTE NO. 4
84	11/16	APPS	CHANGED NOTE NO. 4
85	11/16	APPS	CHANGED NOTE NO. 4
86	11/16	APPS	CHANGED NOTE NO. 4
87	11/16	APPS	CHANGED NOTE NO. 4
88	11/16	APPS	CHANGED NOTE NO. 4
89	11/16	APPS	CHANGED NOTE NO. 4
90	11/16	APPS	CHANGED NOTE NO. 4
91	11/16	APPS	CHANGED NOTE NO. 4
92	11/16	APPS	CHANGED NOTE NO. 4
93	11/16	APPS	CHANGED NOTE NO. 4
94	11/16	APPS	CHANGED NOTE NO. 4
95	11/16	APPS	CHANGED NOTE NO. 4
96	11/16	APPS	CHANGED NOTE NO. 4
97	11/16	APPS	CHANGED NOTE NO. 4
98	11/16	APPS	CHANGED NOTE NO. 4
99	11/16	APPS	CHANGED NOTE NO. 4
100	11/16	APPS	CHANGED NOTE NO. 4



⚠ MAT'L: CAST STEEL



EYE BAR

△ MAT'L - STEEL WELDMENT

NOTES

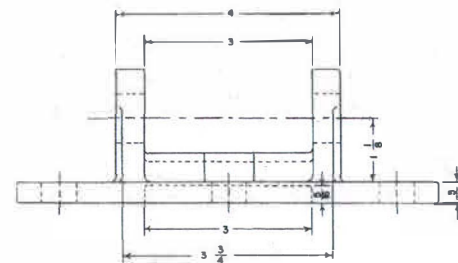
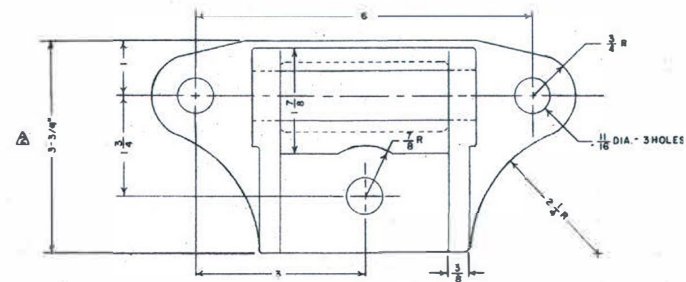
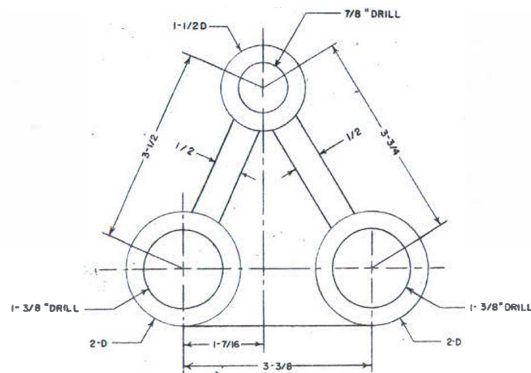
- 1 EYE BAR HELD INTO POSITION IN PUSH BAR BY 1/2" COTTER PIN.
2 LATCH PIN SWIVEL TO BE HELD INTO POSITION IN PUSH BAR BY 5/8"-
II UNC BOLT, NUT, & LOCKWASHER

3420 JWS 80198 JWS 80198 JWS				DELETED CAST MODEL ADDED SECOND HOLE CHANGE TOLERANCE		77-GHE-0024 78-GHE-0009 75-GHE-0049 75-GHE-0045		O-R. 11.25-(24.42)-(13.18)-1 MOD. N.R. 10-32-15 MOD. N.R. 11-36-15-1 O-R. 12.75-(32.53)-(44.75,22.5)-1		NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT				LATCH PIN SWIVEL AND EYE BAR		SUBMITTED BY A. J. CERVINKA		DRAWN BY A. J. CERVINKA		SCALE FULL		DATE APR 19, 1974		DWG. NO. 15-4	
W274.A.P.S. REV DATE BY				ADDED TYPE OF MAT'L REMARKS		ORDER NUMBER NO.		APPLICABLE SNOW PLOWS																	

1. MATERIAL TO BE CAST STEEL.

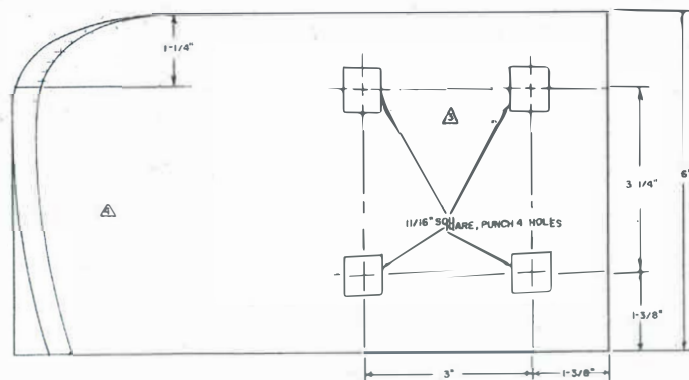
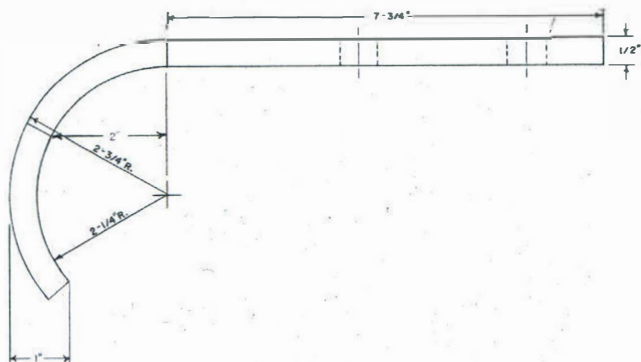
2. SEMICIRCLE HINGE TO BE MOUNTED TO SEMICIRCLE WITH 5/8" RIVETS OR 5/8" FINE THREADED BOLTS, NUTS & LOCK WASHERS, WITH 1" LONG TACK WELDS 3 ROUNDS AND FILLETS TO BE 1/8".

3. FASTEN MOLDBOARD HINGE TO MOLDBOARD W/ 1-1/4" X 7 UNC X 6-1/2" BOLTS, NUTS, AND LOCK WASHERS, 2 OF EA PER HINGE.

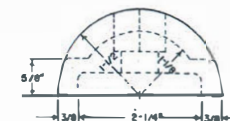
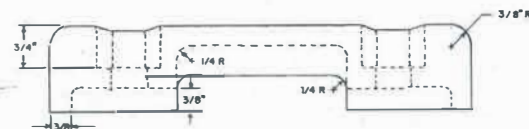
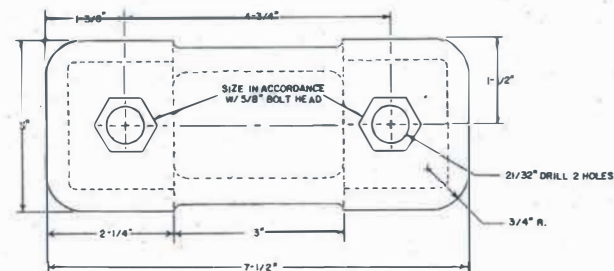


Technical drawing of a mechanical part. The part has a semi-circular top with a radius of $\frac{7}{8}R$. The top surface is labeled $\frac{7}{8}$ DIA. - 2 HOLES. The bottom surface is labeled $\frac{3}{8}R$. The part has a total width of $1\frac{1}{4}$ and a height of 1 . The drawing includes a center line and a dimension line for the height.

NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT				MOLDBOARD AND SEMICIRCLE HINGES	
77-GHE-0024 75-GHE-0049 75-GHE-0045				SUBMITTED BY <i>Garbon</i> DRAWN BY J. SMITH JOB NO. <i>~~~~~</i>	
9-R.11.25-(24.42)-(13.81) MOD. 9-R.12.75-(32.53)-(14.75, 22.75)- APPLICABLE SNOW PLOWS				SCALE _____ SCALE _____ DATE _____ JULY 18, 1974	
ORDER REQUEST NO.				DWG. NO. <i>1156</i>	



WRAP AROUND-RIGHT SIDE
MATL: HIGH CARBON STEEL



CURB BUMPER

11/11/77
MATL: STEEL W/REINFC

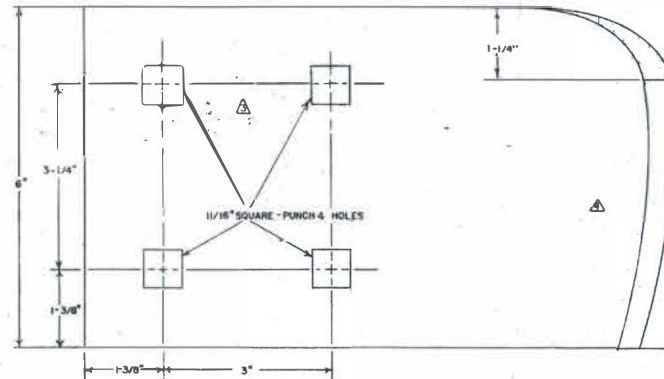
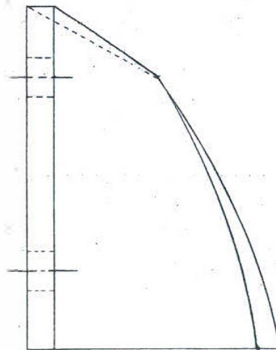
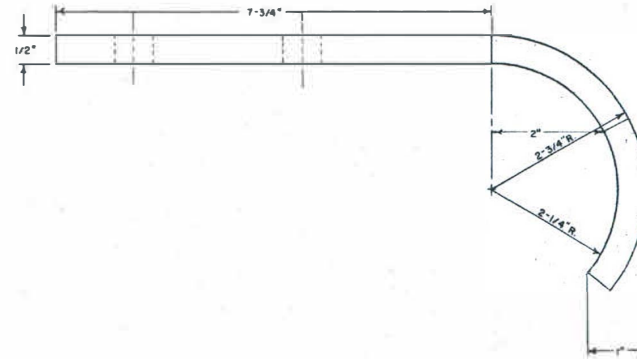
				NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
				WRAP AROUND-RIGHT SIDE			
				CURB BUMPER			
3-B-01-10-10	INCLD CANT STEEL			SUBMITTED BY	DRAWN BY	SCALE	DWS:100
3-B-01-10-10	MODIFY LEFT END			11/11/77	A. R. SMITH	FULL	
3-B-01-10-10	ADD 2 TOP HOLES			APPROVED BY	JOB NO.	DATE	
3-B-01-10-10	ADD TO NOTE 4			11/11/77		NOV 13, 1974	
3-B-01-10-10	ADD INCH MARKS						
REV DATE BY	REMARKS	ORDER REQUEST NO.	APPLICABLE SNOW PLOWS				

NOTES

1. UNLESS OTHERWISE SPECIFIED, FILLETS AND ROUNDS ARE TO HAVE 1/8" R
2. ALL SHARP EDGES AND BURRS TO BE REMOVED
3. FASTEN CURB BUMPERS TO MOLDBOARD W/ 5/8" X 11 UNC BOLTS, NUTS, AND LOCK WASHERS.
4. FASTEN WRAP AROUND TO MOLDBOARD W/ 5/8" X 11 UNC 2-1/2" CARRIAGE BOLTS, NUTS, LOCK WASHERS.

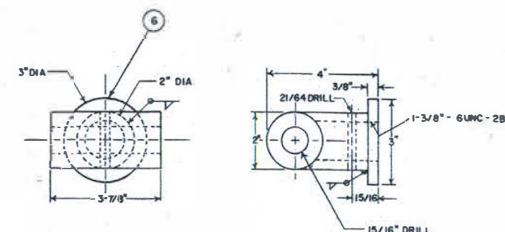
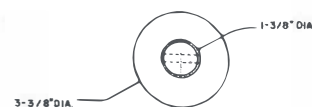
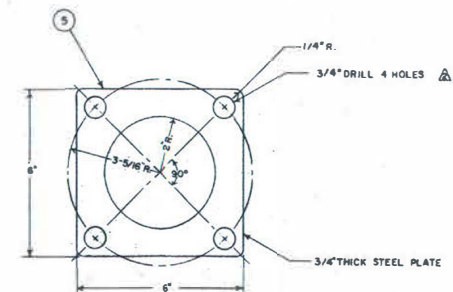
NOTES

- 1 SHARP EDGES AND BURRS TO BE REMOVED.
- 2 FASTEN WRAP AROUND TO MOLDBOARD W/ 5/8" x 11UNC x 2-1/2" CARRIAGE BOLTS, NUTS, AND LOCKWASHERS.

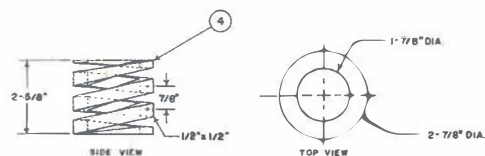
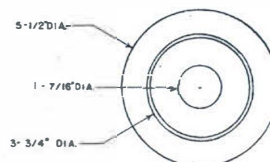
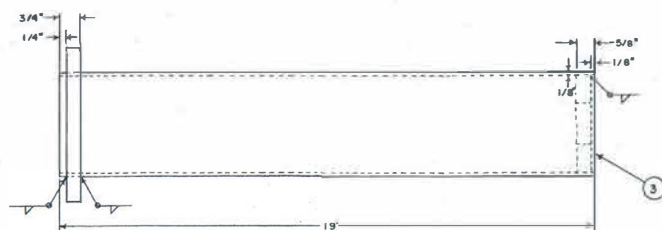


WRAP AROUND-LEFT SIDE
MATL: HIGH CARBON STEEL

NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
WRAP AROUND-LEFT SIDE			
4 30170 JWH	MODIFY RIGHT DTD	SUBMITTED BY	DRAWN BY
3 1500 B	ADD 2 TOP HOLES	APPROVED BY	A.P. SMITH
7 188APS	ADD TO NOTE 2	JOB NO.	SCALE
2 3 1/2 APS	ADD INCH MARKS	DATE	FULL
REVISION BY	REMARKS	ORDER REQUEST NO.	APPLICABLE SNOW PLOWS
		M.R. 10-32-15-1 MOD.	4-159
		M.R. 11-36-15-1	NOV 15, 1974



Δ NOTE
TENSION ROD ASSEMBLY IS COMPOSED
OF ITEMS (2) AND (6)



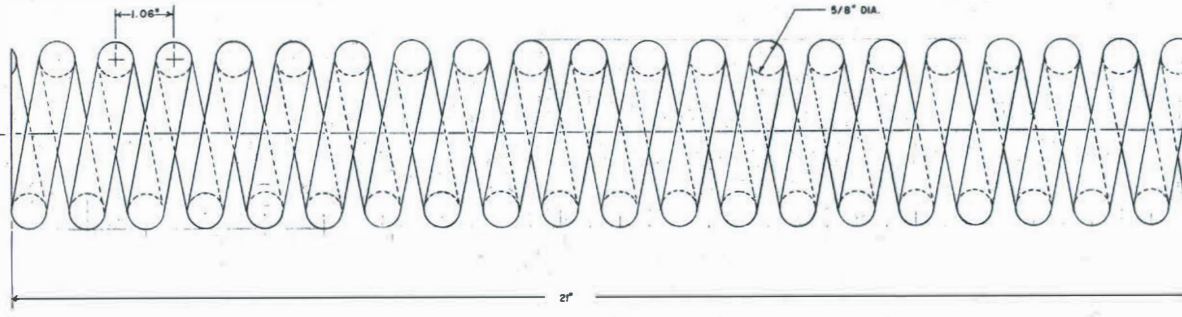
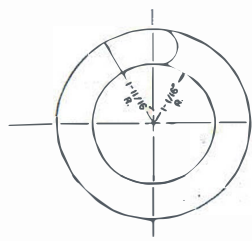
ITEM	NAME	QTY
1	OUTSIDE TUBE ASSEMBLY	1
2	TENSION ROD	1
3	INSIDE TUBE ASSEMBLY	1
4	RECOIL SPRING	1
5	COVER PLATE	1
6	FLOW COUPLING	1

MAT'L:

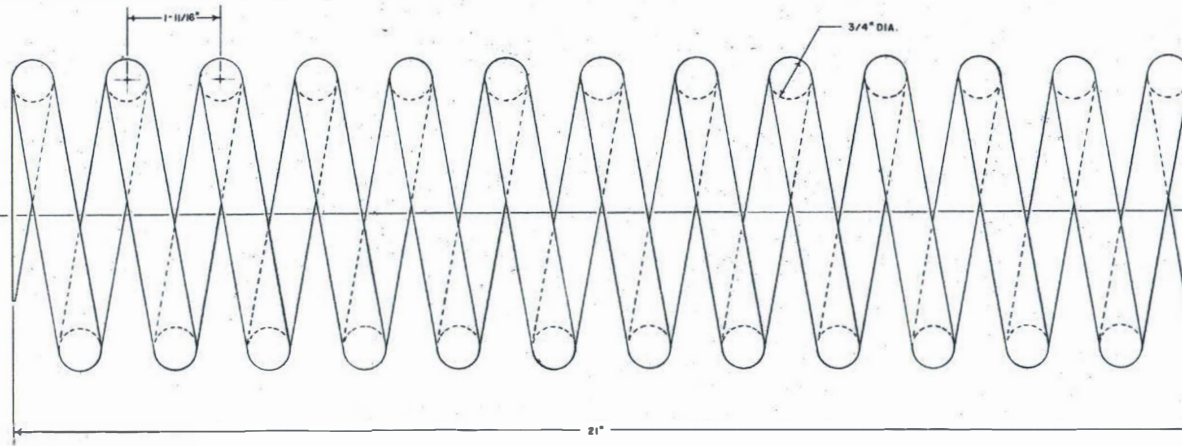
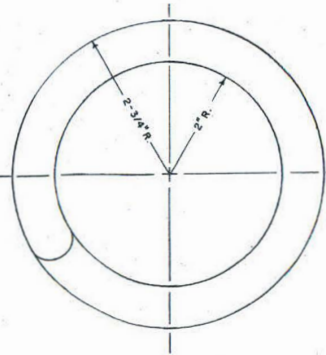
PLATE _____ STRUCTURAL STEEL QUALITY
 TUBING _____ DRAWN OVER MANDREL CARBON STEEL
 ROUND STOCK W/O THREADING _____ COLD FINISHED STEEL
 ROUND STOCK W/THREADING _____ COLD FINISHED MEDIUM CARBON STEEL
 SPRING _____ SPRING STEEL

[illegible]

May be replaced with a spring made of 9/16" round wire, 3-1/4" O.D., ground at both ends for a free height of 2-5/8", with suitable spring constant.



INSIDE SPRING



OUTSIDE SPRING

NOTES

1. ENDS OF SPRINGS TO BE TAPERED ROUND AND SQUARED

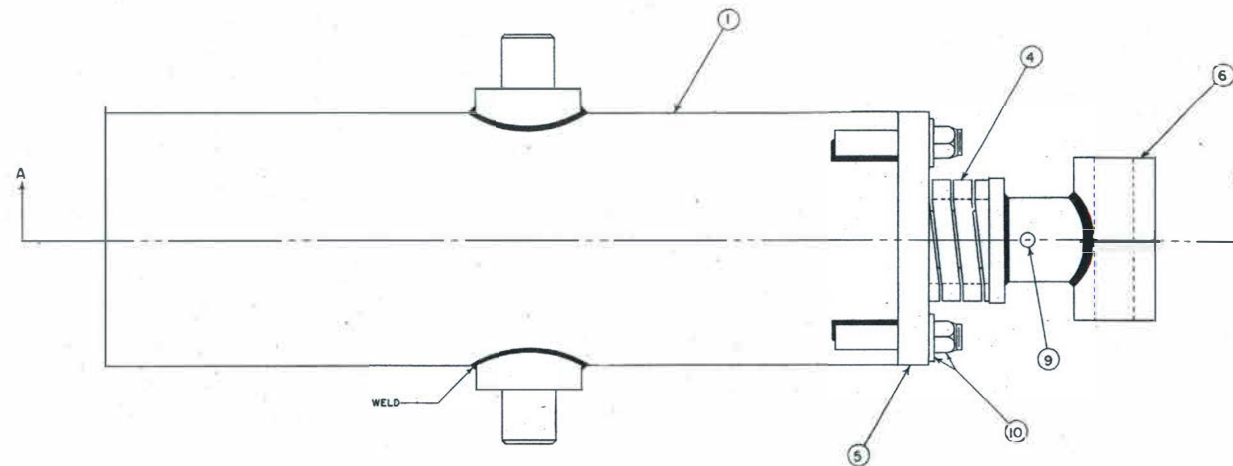
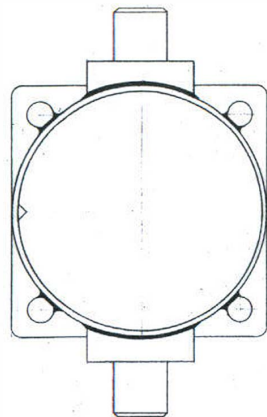
MATL:

ALLOY SPRING STEEL-S1604, NOT WOUND,
TO BE MANUFACTURED TO ASTM SPEC
A-1251R MAT'L EQUAL OR GREATER
THAN ASTM-A689, A-13 AND A-304

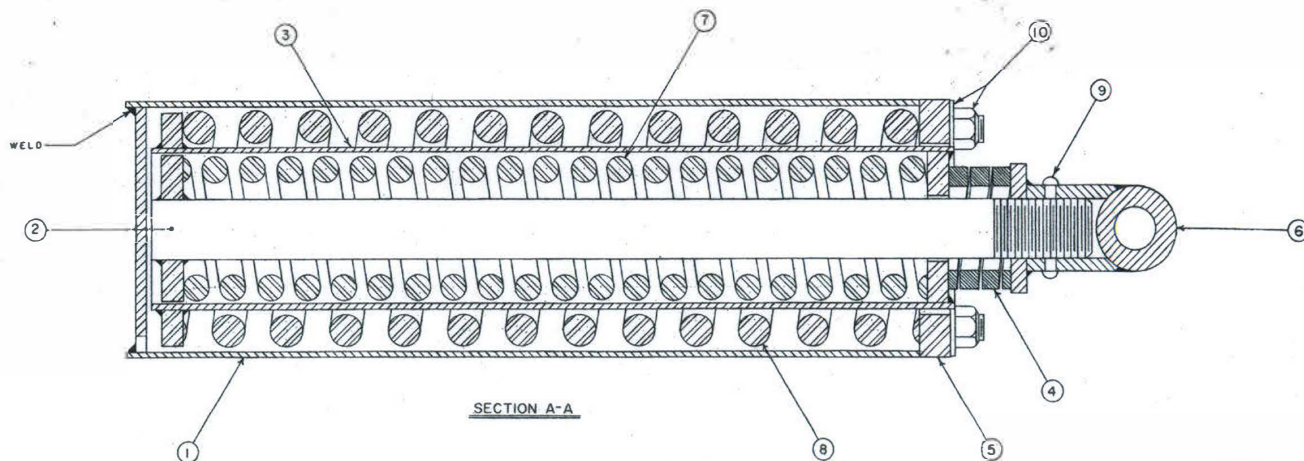
NEW JERSEY DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION AND MAINTENANCE
BUREAU OF EQUIPMENT

TRIP SPRING ASSEMBLY

REVIEWED BY	DATE	BY	DATE	REMARKS	ORDER REQUEST NO.	APPLICABLE SNOW FLOWS	SUBMITTED BY M.R. 10-32-15-1 MOD. M.R. 11-36-15-1	DRAWN BY A.P. SMITH	SCALE FULL	DATE DEC 6, 1974	DWG. NO. 4-180
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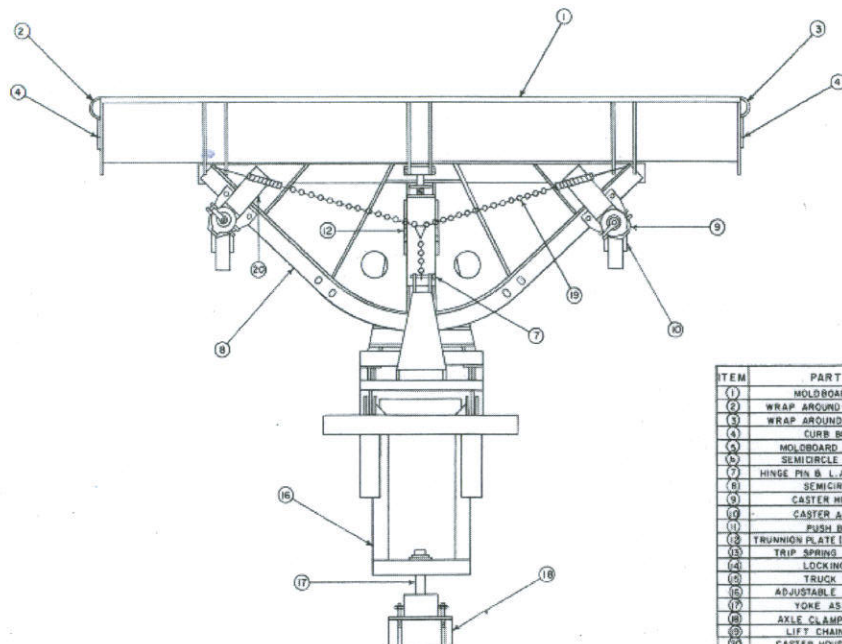
ITEM	NAME	QTY.	DWG. NO.
(1)	OUTSIDE TUBE ASSEMBLY	1	4-160-1, ITEM (1)
(2)	TENSION ROD	1	4-160-1, ITEM (2)
(3)	INSIDE TUBE ASSEMBLY	1	4-160-1, ITEM (3)
(4)	RECOIL SPRING	1	4-160-1, ITEM (4)
(5)	COVER PLATE	1	4-160-1, ITEM (5)
(6)	FLOW COUPLING	1	4-160-1, ITEM (6)
(7)	INSIDE SPRING	1	4-160-2
(8)	OUTSIDE SPRING	1	4-160-2
(9)	5/16" B.H. RIVET	1	STD.
(10)	5/8" X 18 UNF ELAS. STOP NUT & WASHER	4 EA.	STD.



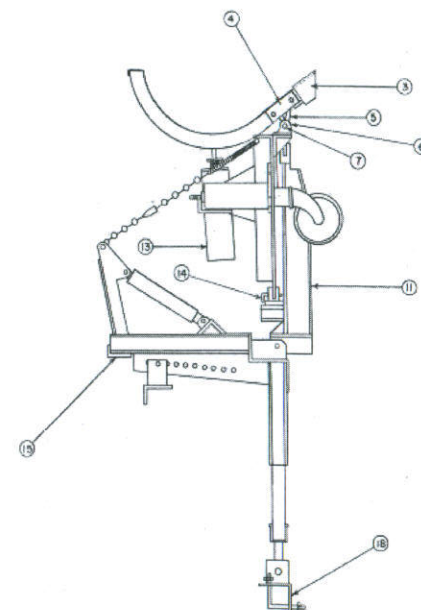
NOTES

1. SECTION LINING DOES NOT REPRESENT TYPE OF MATERIAL, ONLY CLARIFICATION BETWEEN PARTS.
2. MATERIAL SPECIFIED ON DWG. NO. 4-160-1 & 4-160-2.
3. DO NOT SCALE.
4. FASTEN FLOW COUPLING TO MOLDBOARD W/ 7/8", 9UNC BOLT, NUT, AND LOCKWASHER.

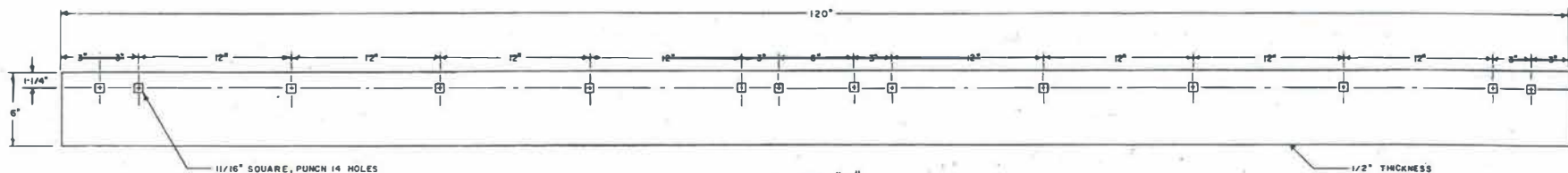
NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
TRIP SPRING ASSEMBLY			
Q-R. 11-25-(24,42)-(13,18)-1 MOD.	SUBMITTED BY	DRAWN BY	SCALE
M.R. 10-32-15-1 MOD.	<i>[Signature]</i>	A.P. SMITH	NONE
M.R. 11-36-15-1	APPROVED BY	JOB NO.	DATE
APPLICABLE SNOW PLOWS	<i>[Signature]</i>		DEC 13, 1974
REV DATE BY	CHG NAME OF ITEM (2)	78-0HE-0009	DWG. NO.
EMA/15		ORDER REQUEST NO.	1



ITEM	PART	QTY
(1)	MOLDBOARD	1
(2)	WRAP AROUND - LEFT SIDE	1
(3)	WRAP AROUND - RIGHT SIDE	1
(4)	CURB BUMPER	2
(5)	MOLDBOARD HINGE	3
(6)	SEMICIRCLE HINGE	3
(7)	HINGE PIN & L.A.C. RIVET PIN	4
(8)	SEMICIRCLE	1
(9)	CASTER HOUSING	2
(10)	CASTER ASSEMBLY	2
(11)	PUSH BAR	1
(12)	TRUNNION PLATE (ST. & CURB SIDE)	2
(13)	TRIP SPRING ASSEMBLY	1
(14)	LOCKING PIN	1
(15)	TRUCK HITCH	1
(16)	ADJUSTABLE EXTENSION	1
(17)	YOKE ASSEMBLY	1
(18)	AXLE CLAMP PLATE	1
(19)	LIFT CHAIN ASSEMBLY	1
(20)	CASTER HOUSING BRACE	2



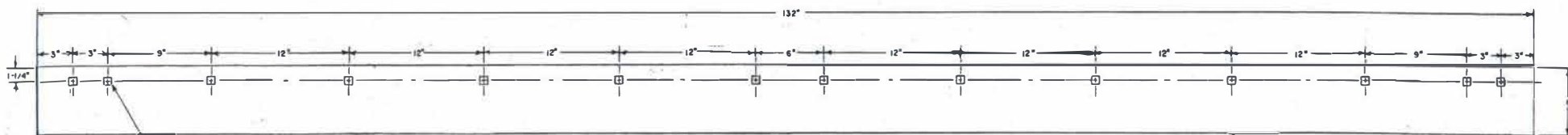
NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
SNOW PLOW ASSEMBLY			
SUBMITTED BY <i>[Signature]</i>	DRAWN BY A.P. SMITH	SCALE 3/32" = 1"	DWG. NO. 14-185
APPROVED BY <i>[Signature]</i>	JOB NO.	DATE DEC 24, 1974	
REVDATE BY	REMARKS	ORDER REQUEST NO.	APPLICABLE SNOW PLOWS



BLADE "A"
MAT'L: HIGH CARBON ABRASIVE
RESISTANT STEEL
SAE 1091

1 1/16" SQUARE, PUNCH 14 HOLES

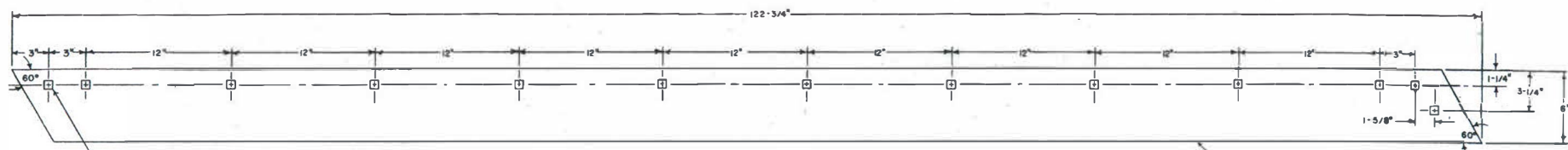
1/2" THICKNESS



BLADE "B"
MAT'L: HIGH CARBON ABRASIVE
RESISTANT STEEL
SAE 1091

1 1/16" SQUARE, PUNCH 14 HOLES

1/2" THICKNESS

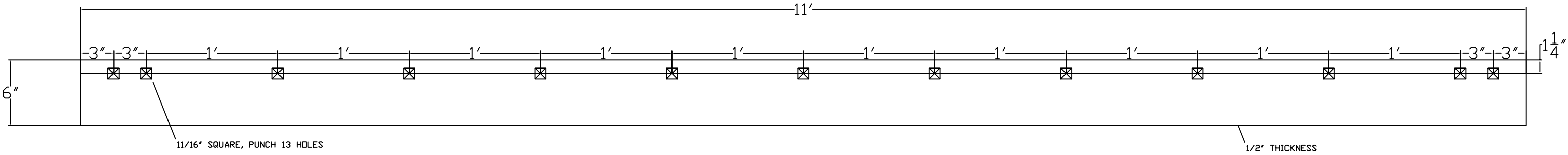


BLADE "C"
MAT'L: HIGH CARBON ABRASIVE
RESISTANT STEEL
SAE 1091

1 1/16" SQUARE, PUNCH 13 HOLES

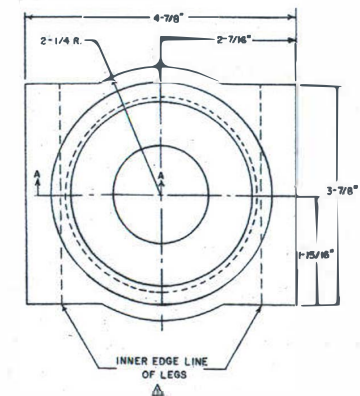
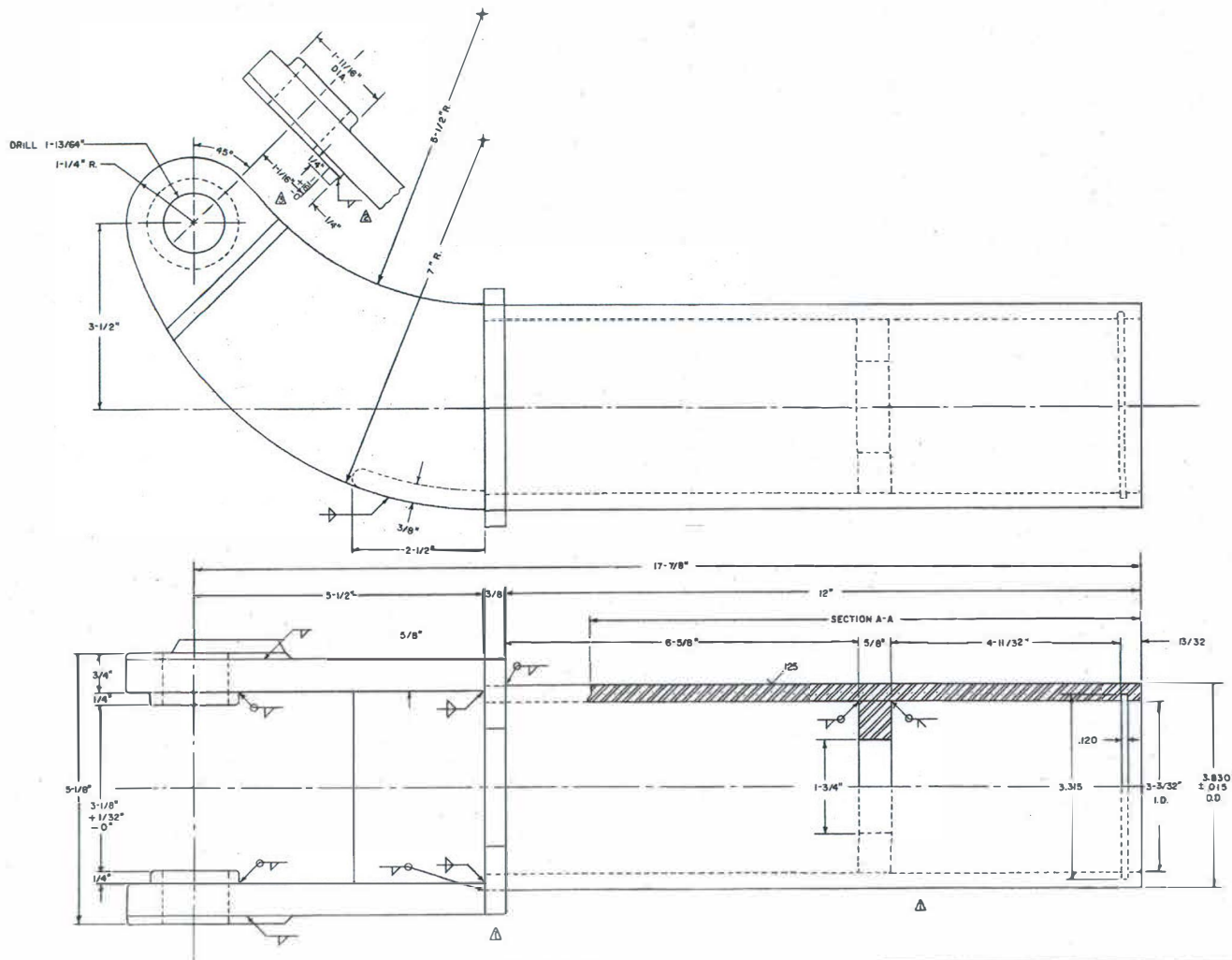
1/2" THICKNESS

NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
SNOW PLOW BLADES			
SUBMITTED BY J. P. SMITH	DRAWN BY A. P. SMITH	SCALE 1/4" = 1'	DWG. NO. 14-155
APPROVED BY	JOB NO.	DATE APRIL 8, 1975	
REV. DATE BY	REMARKS	ORDER REQUEST NO.	APPLICABLE SNOW PLOWS



BLADE "Z"
MAT'L: HIGH CARBON ABRASIVE
RESISTANT STEEL
SAE 1091

						NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF MAINTENANCE BUREAU OF EQUIPMENT			
						SNOW PLOW BLADES			
						SUBMITTED BY:	DRAWN BY: ALS	SCALE	DWG. NO.
						APPROVED BY:	JOB NO.	DATE 3/23/10	4-169A
REV	DATE	BY		REMARKS	ORDER REQUEST NO.	APPLICABLE SNOW PLOWS			



NOTES

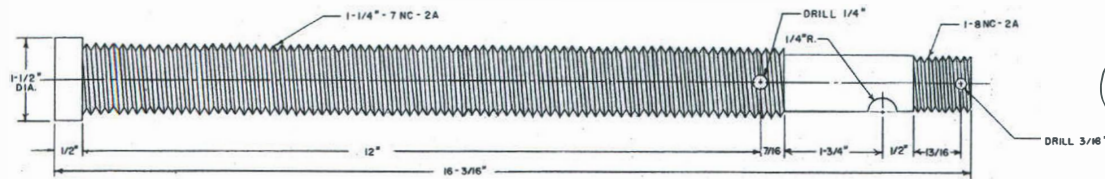
1. ALL WELDS TO BE CONTINUOUS.
2. REMOVE ALL BURRS AND SHARP EDGES.
3. DO NOT SCALE.

CASTER STEM

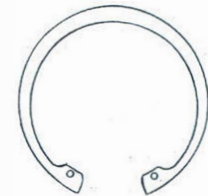
MAT'L:

PLATE _____ STRUCTURAL STEEL QUALITY
TUBING _____ COLD DRAWN SEAMLESS CARBON STEEL

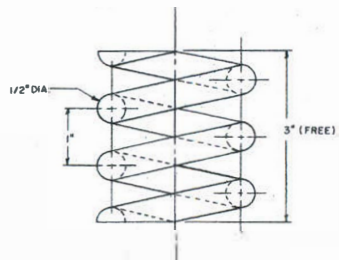
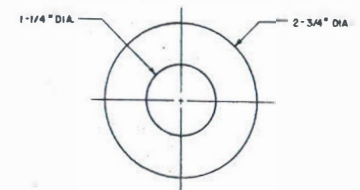
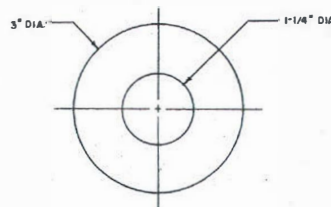
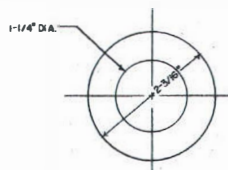
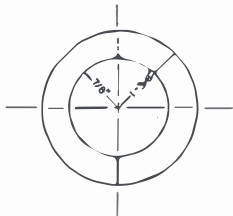
NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
CASTER ASSEMBLY			
(FABRICATION)			
O-R 11-25-(24,42)-(13,18)-1 MOD		SUBMITTED BY	DRAWN BY
M.R. 10-32-15-1 MOD		202/11/11	A.P. SMITH
M.R. 11-36-15-1		APPROVED BY	JOB NO.
O-R 12-75-(32,53)-(14,75,22,75)-1		DATE	4-182
REV	DATE	BY	REMARKS
			ORDER REQUEST NO.
			APPLICABLE SNOW PLOWS



ADJUSTING BOLT
MAT'L: COLD FINISHED,
MEDIUM CARBON STEEL
HEAT TREATED



RETAINING RING
TRUARC NO. W5000-312



SPRING
MAT'L: SPRING STEEL



THRUST BEARING
TIMKEN NO. T-125, OR
APPROVED EQUAL



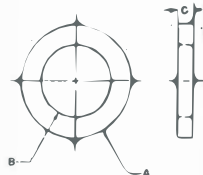
BEARING WASHER
STD. STEEL WASHER



SPACER
MAT'L: HOT ROLLED
STEEL



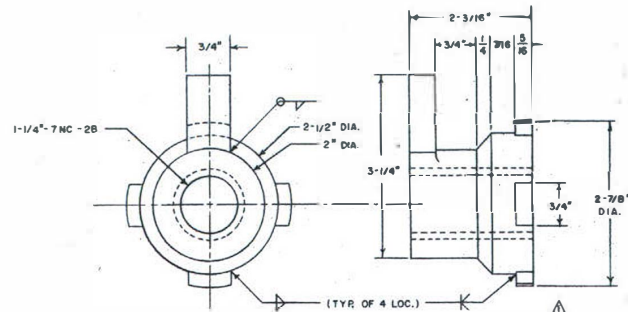
WASHER
STD. STEEL WASHER



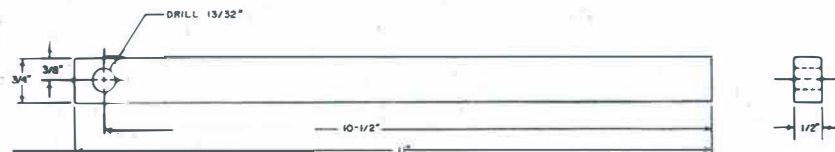
SNOWPLOW WHEEL SPACERS
MAT'L: SAE 1040 STEEL

PART NO.	A	B	C
WBS 125	2" O.D.	1-3/16" I.D.	1/8"
WBS 260	2" O.D.	1-3/16" I.D.	1/4"
WBS 500	2" O.D.	1-3/16" I.D.	1/2"
WBS 625	2" O.D.	1-3/16" I.D.	5/8"

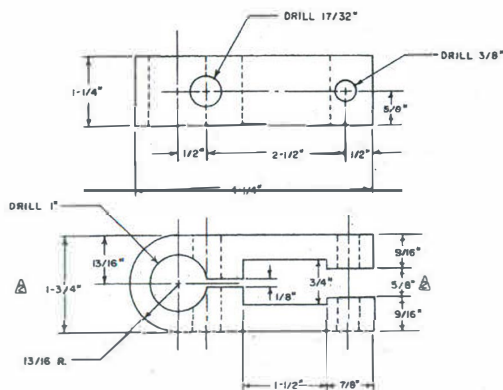
NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
CASTER ASSEMBLY (FABRICATION)			
1-R. 11.25-128 (22)-(13.18)-1 MOD. M.R. 10-32-15-1 MOD. M.R. 11-36-15-1		SUBMITTED BY K. Smith	DRAWN BY A.P. SMITH
0-R. 12.75-132 (53)-(14.75, 22.75)-1		APPROVED BY J. Smith	JOB NO.
REV. DATE BY	REMARKS	ORDER REQUEST NO.	APPLICABLE SNOW PLOWS
77-GHE-0024		DATE SEPT 4, 1975	
THICKNESS OF WASHERS		SCALE FULL	
4-182		DWG. NO. 2	



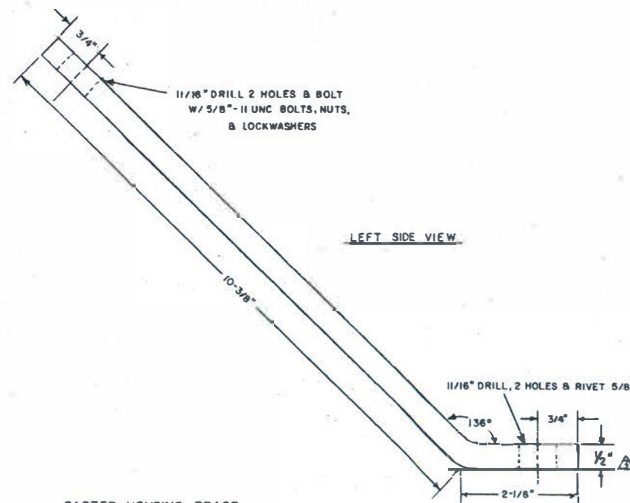
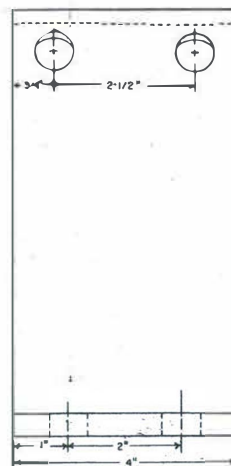
CASTER NUT
MAT'L: MEDIUM CARBON STEEL



HANDLE
MAT'L: HOT ROLLED STEEL

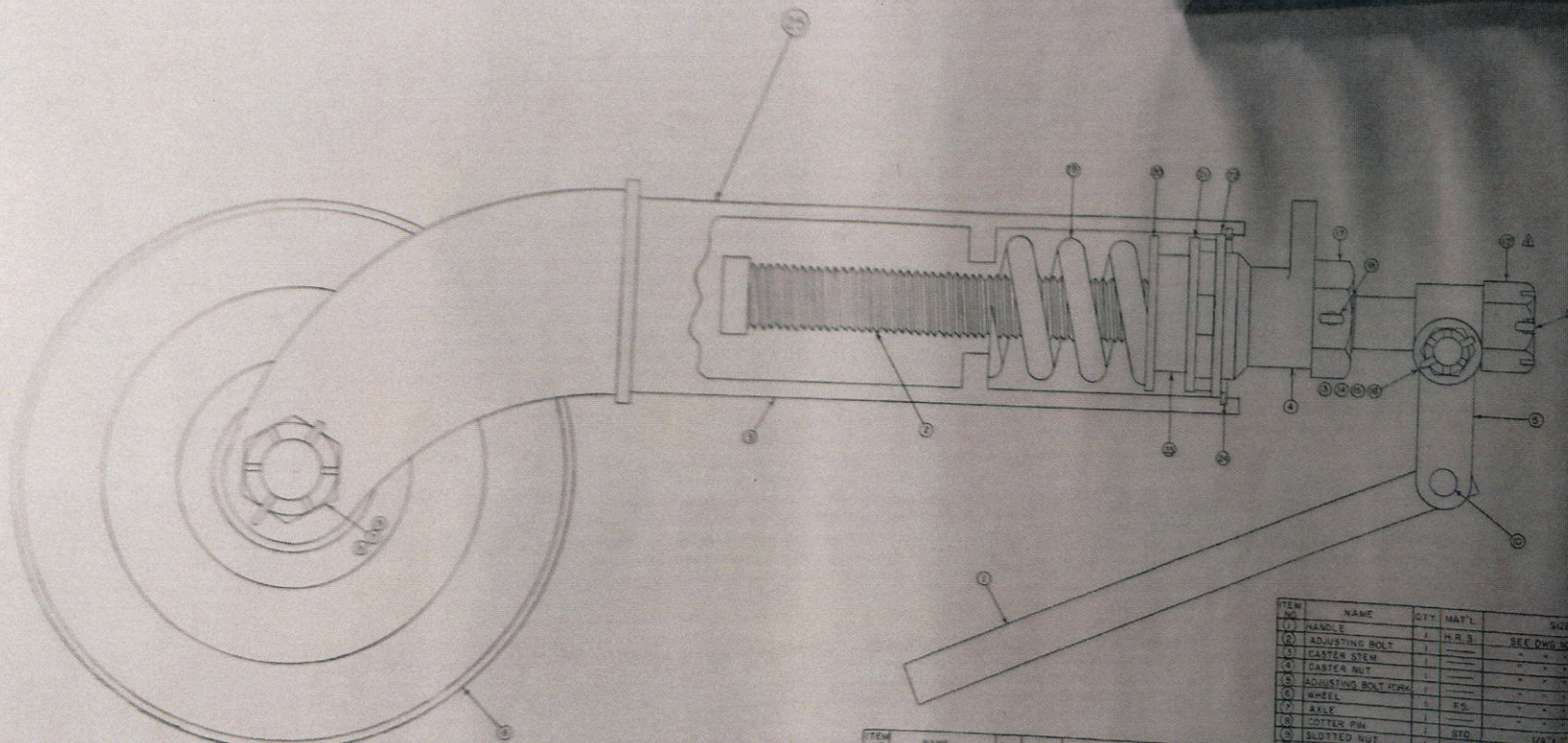


ADJUSTING BOLT FORK
MAT'L: MEDIUM CARBON STEEL



CASTER HOUSING BRACE
MAT'L: STRUCTURAL STEEL

				NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
				CASTER ASSEMBLY			
				(FABRICATION)			
				SUBMITTED BY	DRAWN BY	SCALE	DWG. NO.
				APPROVED BY	A.P. SMITH	FULL	4-102
				DATE	JOB NO.	DATE	SEPT. 5, 1975
				REMARKS	ORDER REQUEST NO.	APPLICABLE SNOW FLOWS	

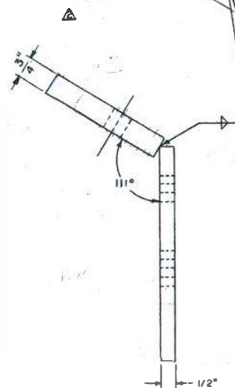
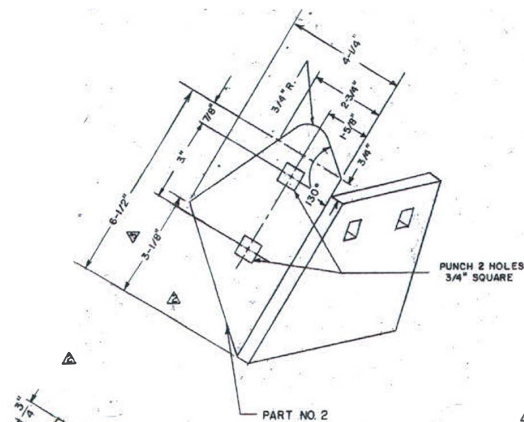


ITEM NO.	NAME	QTY	MAT'L	SIZE
13	BEARING (THRUST)	1		SEE DWG NO 4-182-2
14	RETAINING RING	1		4-182-2
22	COMPLETE CASTER ASSEMBLY - 2 REQD FOR EA SNOW FLOW ASSY			

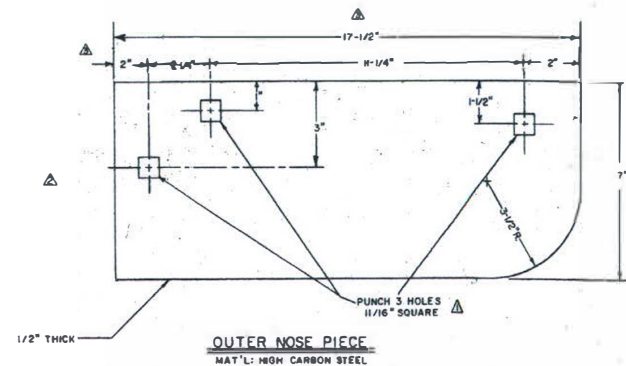
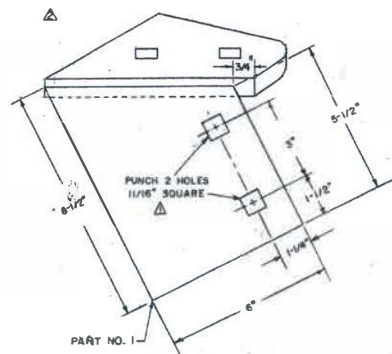
ITEM NO.	NAME	QTY	MAT'L	SIZE
1	HANDLE	1	H.R.S.	SEE DWG NO 4-182-3
2	ADJUSTING BOLT	1		" " 4-182-2
3	CASTER STEM	1		" " 4-182-1
4	CASTER NUT	1		" " 4-182-3
5	ADJUSTING BOLT W/KEY	1		" " 4-182-3
6	WHEEL	1		" " 4-182-3
7	AXLE	1	P.S.	" " 4-182-3
8	COTTER PIN	1		" " 4-182-3
9	SLOTTED NUT	1	STD.	1/4"x2"
10	RIVET PIN	1	STD.	1/16"x2 1/2"
11	COTTER PIN	1	STD.	3/16"
12	SLOTTED HEX NUT	1	STD.	3/8"x2"
13	BOLT - HEX HD	1	STD.	1/2"x2"
14	WASHER	1	STD.	1/2"x2"
15	SLOTTED HEX NUT	1	STD.	1/2"x2"
16	COTTER PIN	1	STD.	1/8"x2 1/2"
17	HEX NUT	1	STD.	1/8"x2 1/2"
18	COTTER PIN	1	STD.	1/16"x2 1/2"
19	SPRING	1	SPD ST.	1/2"
20	BEARING WASHER	1	STD.	SEE DWG NO 4-182-2
21	WASHER	1	STD.	" " 4-182-2
22	SPACER	1	H.R.S.	" " 4-182-2

NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
CASTER ASSEMBLY			
(FABRICATION)			
D.R. 1106 04-01-01-01 MOD. M.B. 10-32-10-1 MOD.		SUBMITTED BY K. A. [Signature]	SCALE 1/4" = 1"
D.R. 1106 04-01-01-01 MOD. M.B. 10-32-10-1 MOD.		APPROVED BY [Signature]	DATE SEPT 2, 1978
REV. DATE BY		REMARKS	
77-DNE JCBM		ORDER REQUEST NO.	
		APPLICABLE SNOW FLOW	

4-182-4



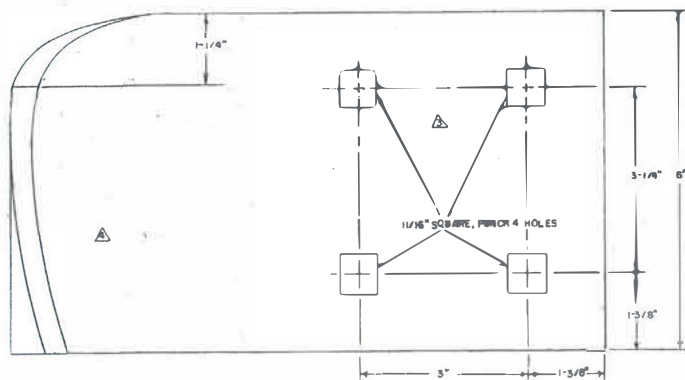
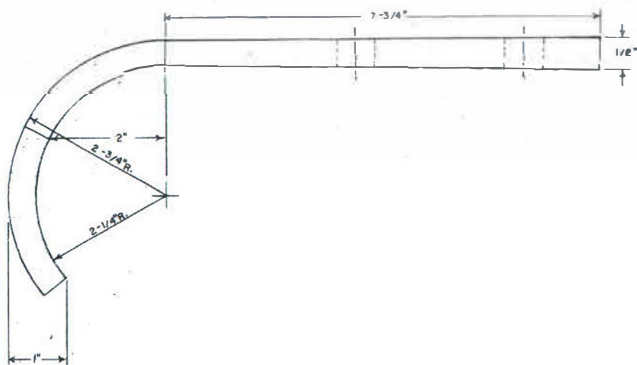
INNER NOSE PIECE
MAT'L: HIGH CARBON STEEL



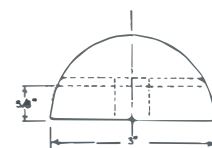
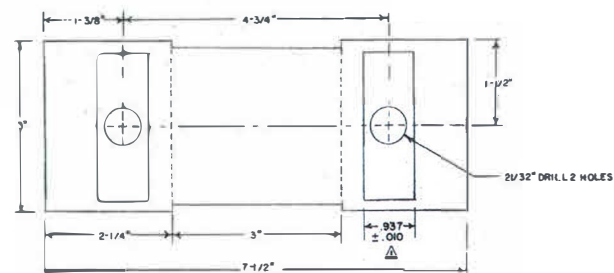
NOTES

1. THIS DRAWING SUPERSEDES DWS NO. 4-134.
2. REMOVE ALL BURRS AND SHARP EDGES.
3. ALL WELDS TO BE CONTINUOUS.
4. INNER NOSE PIECE - PLANE OF MEASURED ANGLE TO BE PERPENDICULAR TO PLANE OF PART 1 AND PART 2.
5. FASTEN INNER & OUTER NOSE PIECE TO MOLDBOARD END PLATE W/ 5/8" X 11 UNC BOLTS, ONE 2" LG. TWO 2-1/2" LG.

NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
INNER & OUTER NOSE PIECE			
7-1-88 APS ADD NOTE	SUBMITTED BY	DRAWN BY	SCALE
2-27-84 E.J.D. CHANGE OF DIMENSION	<i>Handwritten Signature</i>	A. P. SMITH	1/2" = 1"
3-9-82 JWB DELETED LIFTING EYE	APPROVED BY	JOB NO.	DATE
8-27-83 APS CHG SIZE OF PUNCHED HOLE	<i>Handwritten Signature</i>	<i>Handwritten</i>	NOV 21, 1975
REV DATE BY	REMARKS	ORDER REQUEST NO.	APPLICABLE SNOW FLOWS



WRAP AROUND-RIGHT SIDE
MATL: HIGH CARBON STEEL



CURB BUMPER
MATL: MEDIUM CARBON STEEL

- NOTES
1. ALL SHARP EDGES AND BURRS TO BE REMOVED.
 2. FASTEN CURB BUMPERS TO MOLDBOARD W/ 5/8" X 11 UNC BOLTS, NUTS AND LOCKWASHERS.
 3. FASTEN WRAP AROUND TO MOLDBOARD W/ 5/8" X 11 UNC 2-1/2" CARRIAGE BOLTS, NUTS, LOCKWASHERS.

				NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
				WRAP AROUND-RIGHT SIDE			
				CURB BUMPER			
4	2/10/96	JWB	MODIFY LEFT END	SUBMITTED BY		DRAWN BY	SCALE
3	8/19/96	JWB	ADD 2 TOP HOLES	9. P. 2		SATISH BAHL	FULL
2	7/1/96	ARS	ADD TO NOTE 3	APPROVED BY		JOB NO.	DATE
1	4/17/95	ARS	CHG. TOLERANCES				JULY 26, 1976
REV. DATE BY				ORDER REQUEST NO.		APPLICABLE SNOW PLANS	

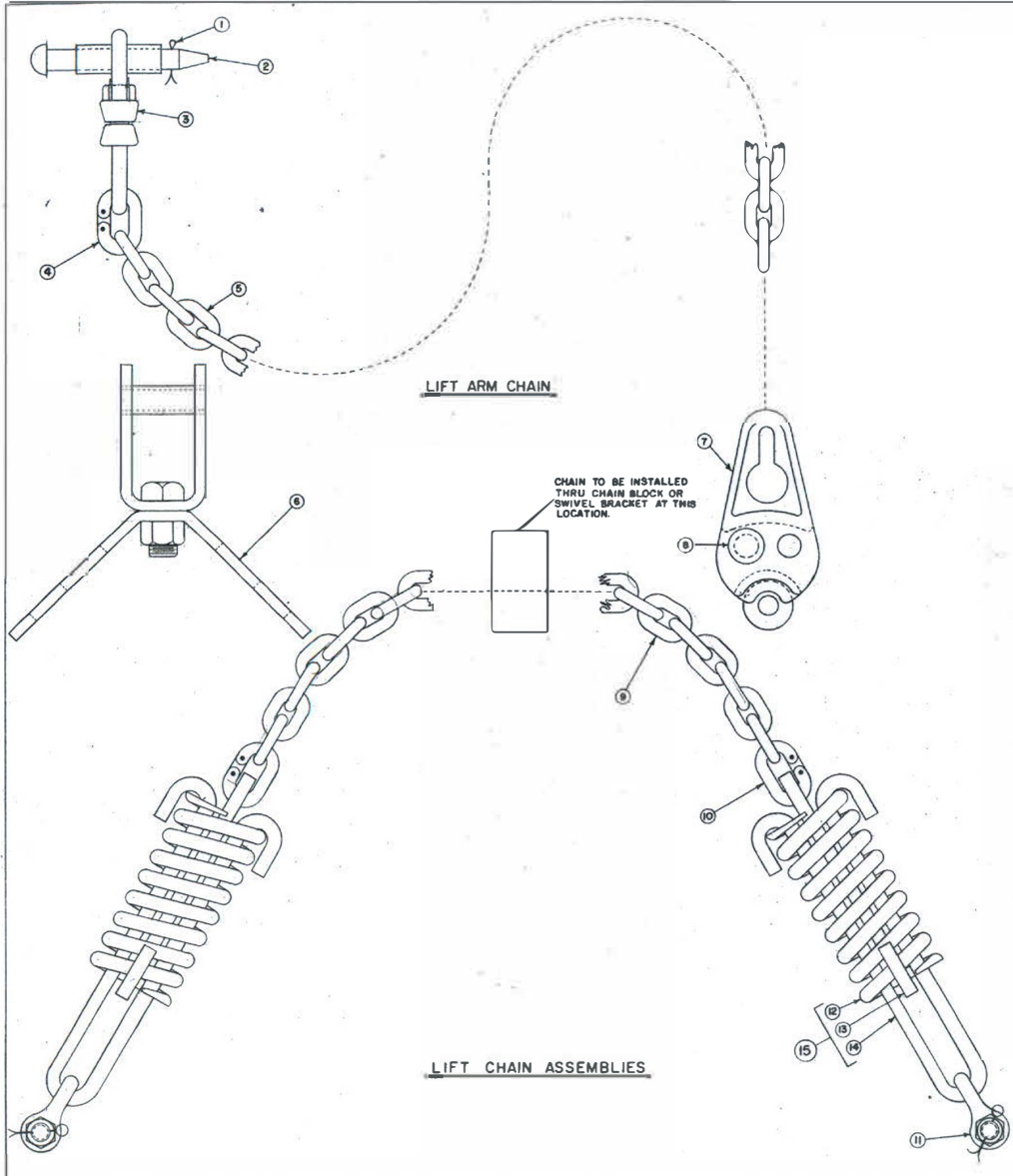


CHART NO. 1
LIFT ARM CHAIN

ITEM NO.	DESCRIPTION	QTY.	MATL.	SIZE
1	COTTER PIN	1	STD.	1/4" x 2" LG.
2	LIFT ARM CHAIN RIVET PIN	1	---	SEE DWG. NO. 4-192-2
3	PIPE WELDMENT	1	---	" " " 4-192-2
4	CONNECTING LINK	1	STD.	7/16"
5	3/8" HI-TEST STEEL CHAIN	1	STD.	16' LG.

LIFT CHAIN ASSEMBLIES				
6	SWIVEL BRACKET	1	---	SEE DWG. NO. 4-192-3
7	CHAIN BLOCK	1	---	" " " 4-192-2
8	RIVET PIN	1	---	" " " 4-192-2
9	CHAIN	1	---	SEE CHART NO. 2
10	CONNECTING LINK	2	STD.	7/16"
11	FORGED AND/OR TYPE SAFETY SHOCKLE	2	STD.	1/2" BOW SIZE
12	SPRING	2	---	SEE DWG. NO. 4-192-2
13	SHORT SPRING HOOK	2	---	" " " 4-192-2
14	LONG SPRING HOOK	2	---	" " " 4-192-2

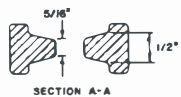
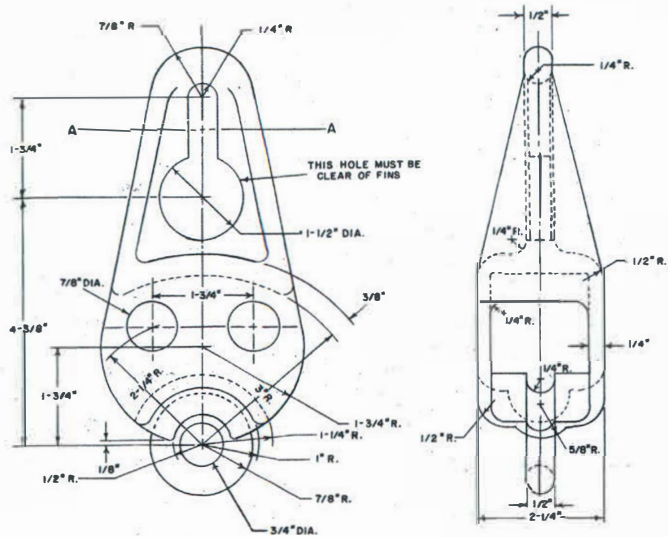
CHART NO. 2
LIFT CHAIN ASSEMBLY

TYPE	W/SPRINGS	W/O SPRINGS	ASSY. CONSISTS OF ITEMS	LENGTH OF ITEM 9	TYPE OF CHAIN	LIFT ARM CHAIN REQ'D FOR OPERATION
A	X		(7) (8) (9) (10) (11) (12) (13) (14)	2' - 0"	3/8" HI-TEST STEEL CHAIN	YES
B	X		(7) (8) (9) (10) (11) (12) (13) (14)	5' - 6"	" " " " " "	YES
C		X	(7) (8) (9) (10) (11) (12) (13) (14)	7' - 6"	" " " " " "	YES
D	X		(6) (9) (10) (11) (12) (13) (14)	8' - 0"	7/16" PROOF COIL CHAIN	NO
E		X	(6) (9) (10) (11)	10' - 0"	" " " " " "	NO
F	X		(7) (8) (9) (10) (11) (12) (13) (14)	7' - 0"	3/8" HI-TEST STEEL CHAIN	YES
G		X	(7) (8) (9) (10) (11)	9' - 0"	" " " " " "	YES

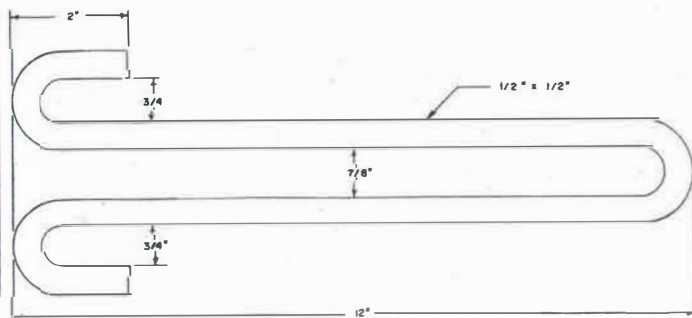
NOTES

- SEE SPECIFICATIONS OR PURCHASE ORDER FOR TYPE OF LIFT CHAIN ASSEMBLY DESIRED. REFER TO CHART NO. 2 FOR ITEMS TO BE ASSEMBLED.
- REFER TO CHART NO. 1 FOR DESCRIPTION AND QUANTITY OF ITEMS MENTIONED IN CHART NO. 2 FOR SPECIFIED TYPE.
- ALL CHAIN TO BE PLATED WITH A CORROSION RESISTANT METAL.
- ITEM NO. 10 MUST ACCOMPANY LIFT SPRING ASSEMBLY (ITEM 15) WHEN PURCHASED SEPARATELY.
- DWG. NO.'S 4-192-1, 4-192-2, & 4-192-3 SUPERSEDES DWG. NO. 4-151.

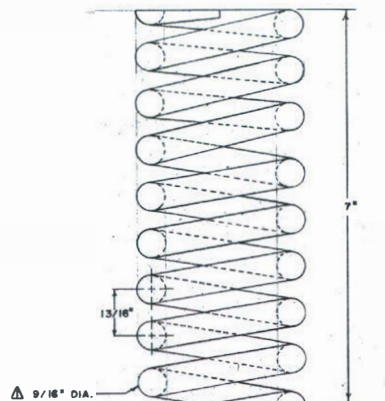
NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
SNOW PLOW LIFTING CHAINS			
SUBMITTED BY: J. J. WILSON	DRAWN BY: A. P. SMITH	SCALE: NONE	DWG. NO. 4-192
APPROVED BY:	JOB NO.:	DATE: APR. 13, 1977	
REV. DATE BY	REMARKS	ORDER REQUEST NO.	APPLICABLE SNOW PLOWS



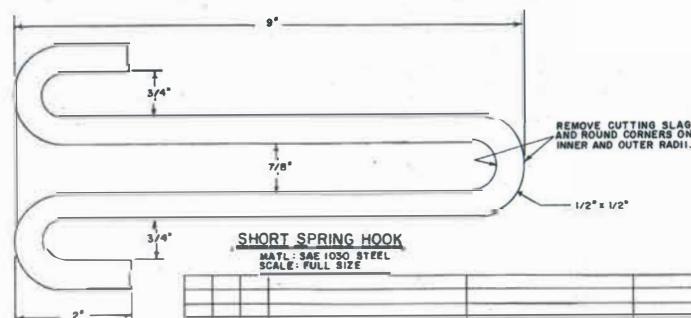
CHAIN BLOCK
MATL: CAST STEEL
SCALE: FULL SIZE



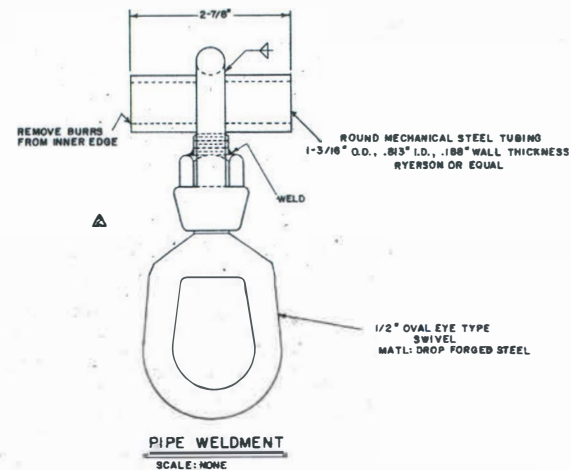
LONG SPRING HOOK
MATL: SAE 1050 STEEL
SCALE: FULL SIZE



SPRING
MATL: SPRING STEEL
SCALE: FULL SIZE

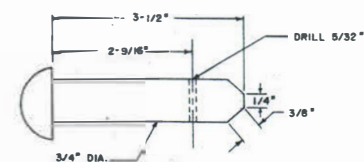


SHORT SPRING HOOK
MATL: SAE 1050 STEEL
SCALE: FULL SIZE



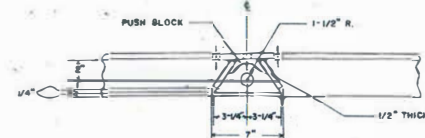
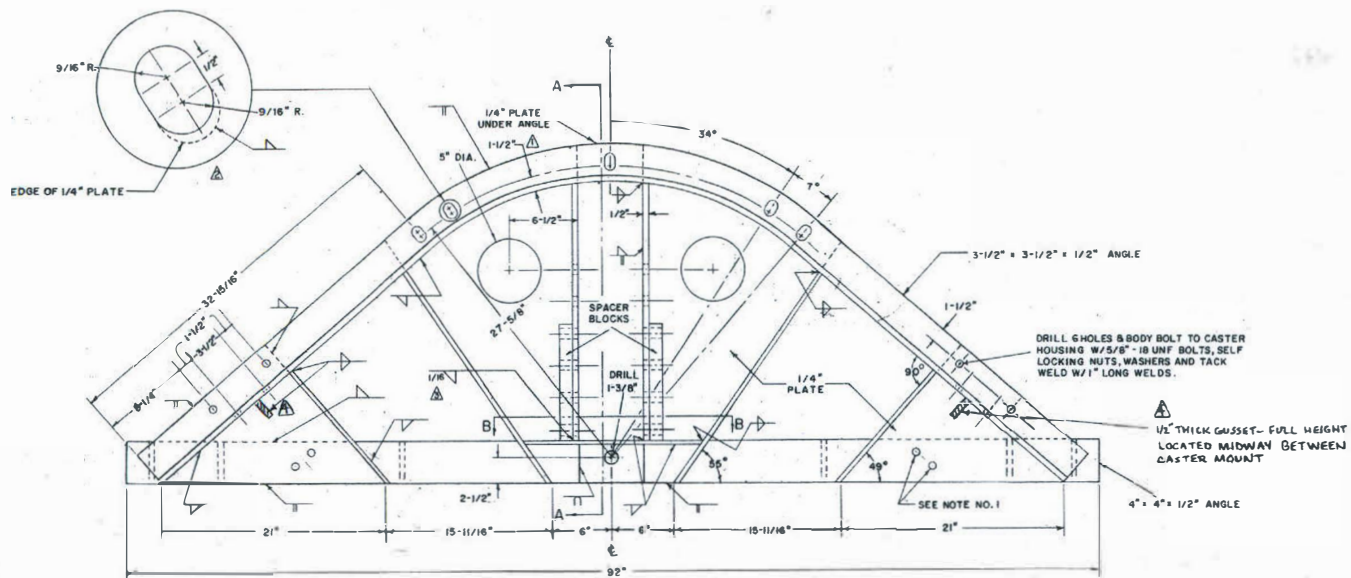
NOTES

1. REMOVE ALL BURRS.
2. CONSULT AGENCY FOR CHAIN BLOCK SAMPLE IF FULL MATERIAL COMPOSITION AND/OR TYPE MANUFACTURING PROCESS IS DESIRED FOR STRENGTH PURPOSES.
3. SPRING HOOKS ARE TO BE FLAME CUT FROM 1/2" PLATE STEEL.

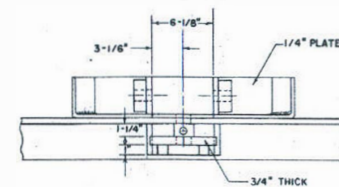


RIVET PIN
MATL: STEEL
SCALE: FULL SIZE

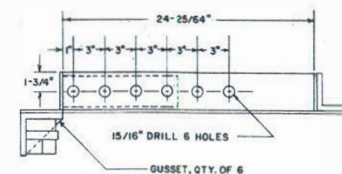
NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
SNOW PLOW LIFTING CHAINS			
SUBMITTED BY:	DRAWN BY:	SCALE:	DWG. NO.
APPROVED BY:	JOB NO.:	DATE:	4-192-2
REV. DATE BY:	REMARKS:	ORDER REQUEST NO.	APPLICABLE SNOW PLOW



BOTTOM VIEW



SECTION B-B

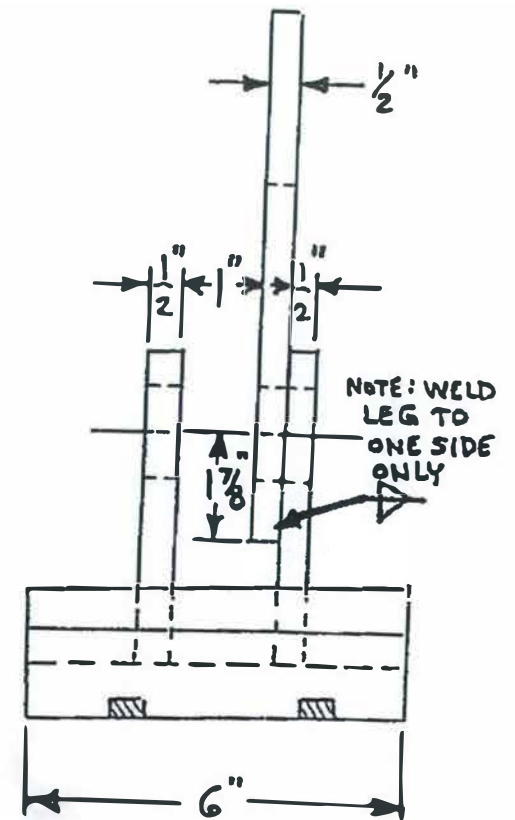


SECTION A-A

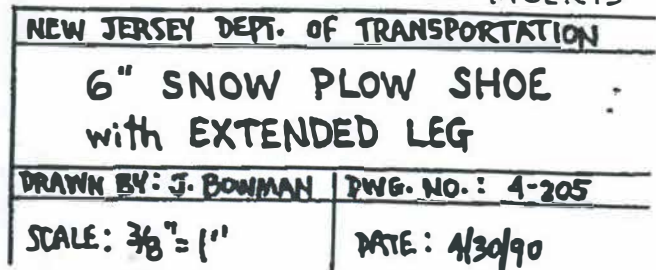
NOTES:

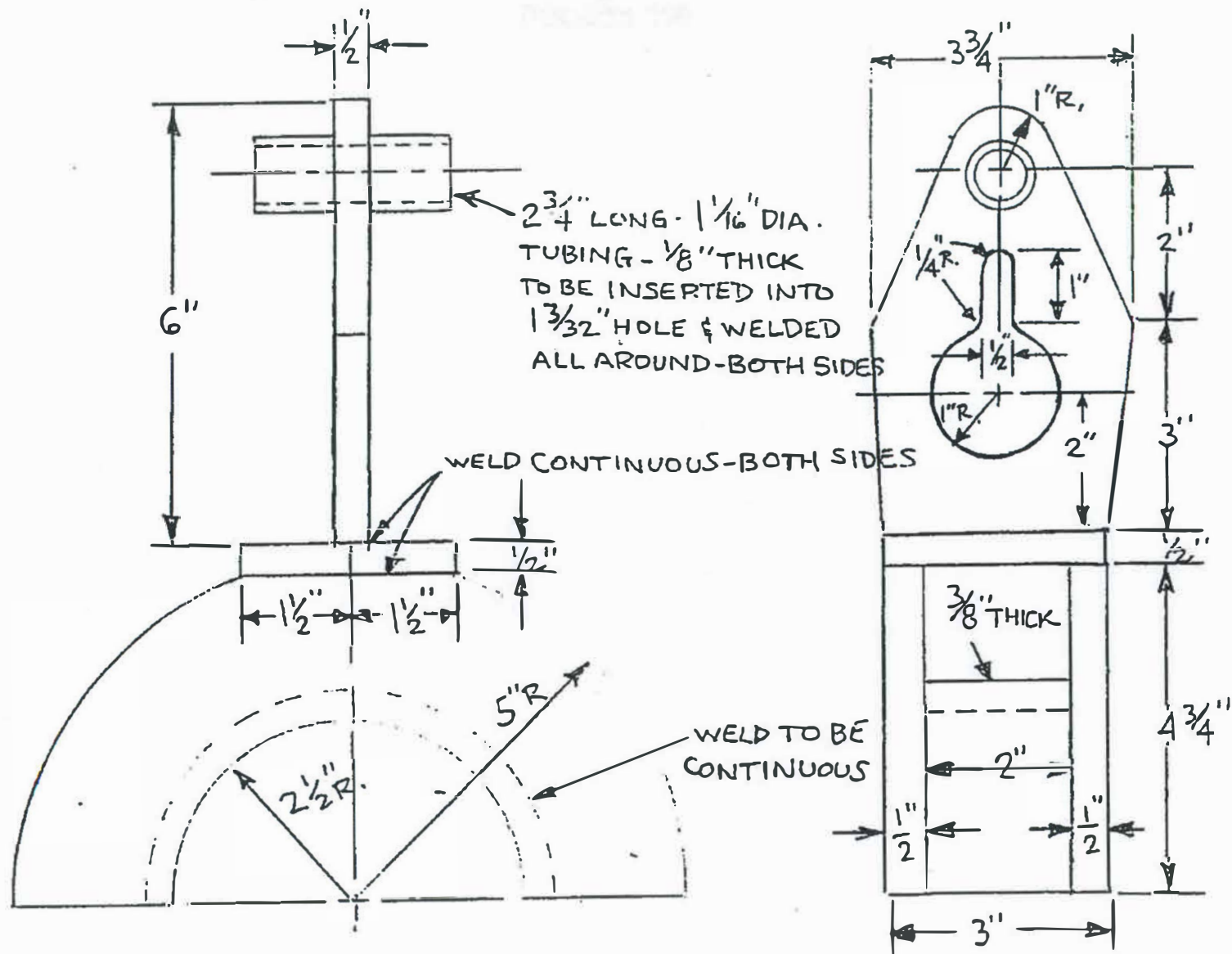
1. HOLES TO BE DRILLED WHEREVER CASTER HOUSING BRACKET MAY FALL.
2. CONNECT EYE BAR OF PUSH BAR TO SEMICIRCLE WITH 1-1/4" - 12 UNF x 5" LG. BOLT, SLOTTED NUT AND COTTER PIN.
3. ALL 1/4" AND 1/2" PLATE TO BE STRUCTURAL STEEL QUALITY, CUT AND SHAPED TO SIZE AND WELDED TO FRAME.
4. BOLTS AND NUTS TO BE MINIMUM GRADE 5 CORROSION RESISTANT.
5. SPACER BLOCKS TO BE 3"x1-1/4"x11" STRUCTURAL STEEL QUALITY W/HOLES CENTERED LENGTHWISE. BLOCKS NOT TO BE WELDED TO FRAME, USE ONLY ON O-R. (2.75, 32.53, 14.75, 22.75) - 1 MODEL.
6. EYE BAR MUST BE CAPABLE OF ANGLING AT LEAST 82° WHEN ATTACHED TO PUSH BLOCK SECTION
7. GUSSETS TO BE WELDED INTO PLACE W/FILLET WELDS.
8. ALL WELDS TO BE CONTINUOUS.

			NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT		
			LARGE SEMICIRCLE		
9/16" JWB	ADDED GUSSETS	O-R. 11.75-(24.42)-(15.18)-1 MOD.	SUBMITTED BY:	DRAWN BY:	SCALE:
3/16" TAPS	ADD WELD	M.R. 10-32-15-1 MOD.		A.P. SMITH	3/16" - 1"
1/2" TAPS	ADD NOTE & HIDDEN LINE	M.R. 11-36-15-1	APPROVED BY:	JDB NO.	DATE:
10/88 TAPS	ADD DIM.	O-R. 12.75-(32.53)-(14.75-22.75)			MARCH 6, 1988
REV	DATE	BY	REMARKS	APPLICABLE SHOW PLOWS	

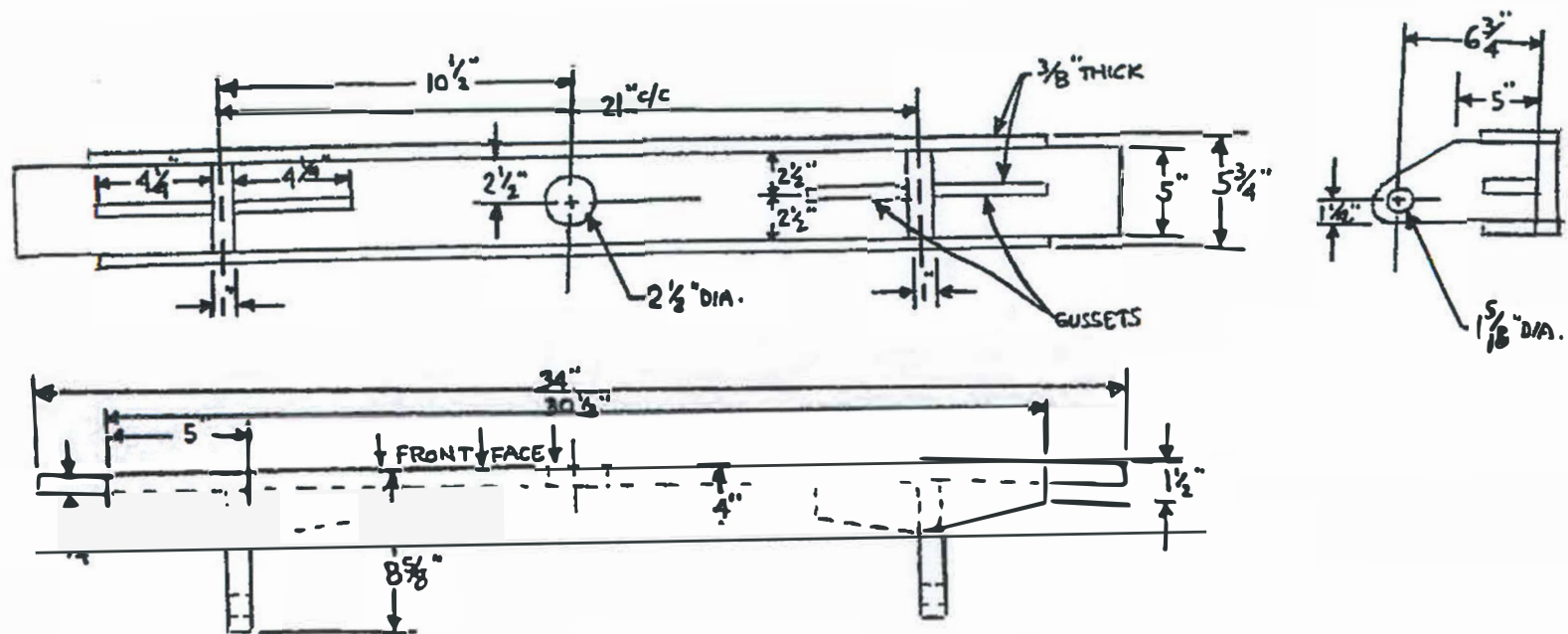


NOTE: TUNGSTEN CARBIDE
TO BE $\frac{3}{8}$ " THICK, RECESSED
INTO BOTTOM OF SHOE -
NO EXPOSED EDGES
SEE SPECS IN CONTRACT
FOR CARBIDE INSERTS





REV.		REV.		JWB	NEW JERSEY DEPT. OF TRAN.
2		1	DELETE CHAIN	4-209	LIFT CHAIN BLOCK-
	ADDED HOLE		HOLE, ADD WELDING	SCALE 1/2" = 1"	POWER REVERSING PLOW ...



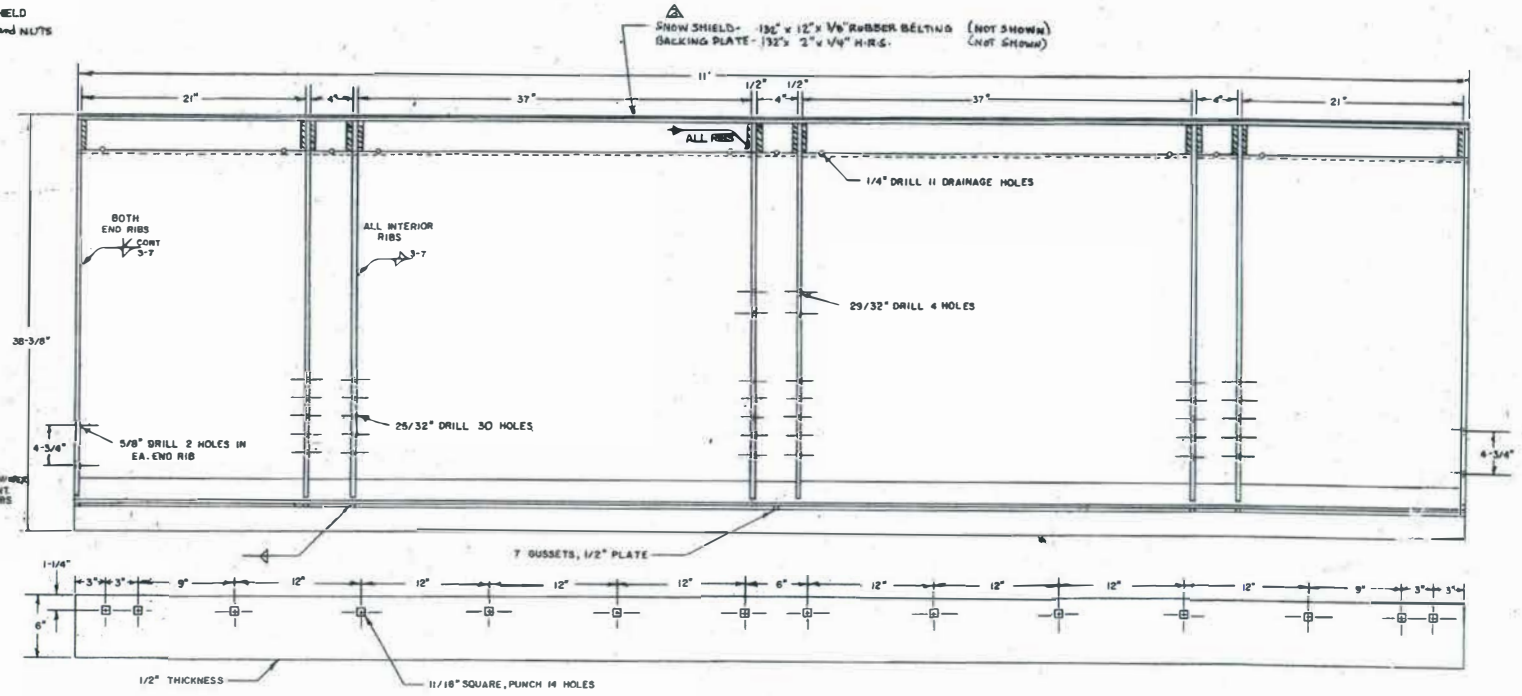
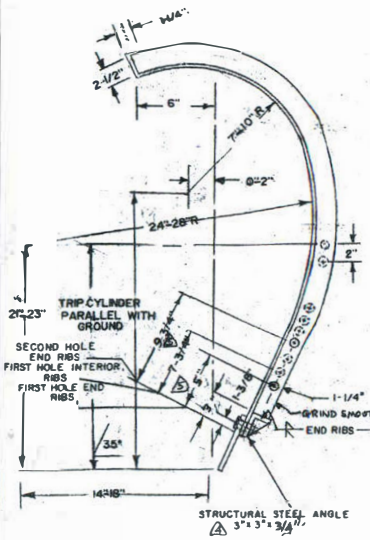
NOTE: ALL WELDS TO BE ALL-AROUND, CONTINUOUS
EXCEPT NO WELDS ON FRONT FACE

MATERIAL: HOT ROLLED
STRUCTURAL STEEL

NEW JERSEY DEPARTMENT OF TRANSPORTATION		
OSCILLATING DRIVE BAR POWER-REVERSING		
DRAWN by JW B	DATE: 5/9/94	DWG. NO 4-211

NOTES

1. THIS DRAWING SUPERSEDES DWG NO. 4-126.
2. ALL VERTICAL RIBS 1/2" x 2-1/2" STRUCTURAL STEEL QUALITY PLATE.
3. MOLDBOARD SKIN TO BE 3/16" STRUCTURAL STEEL QUALITY PLATE, SMOOTH ROLLED OR BRAKE FORMED.
4. MOLDBOARD SKIN TO EXTEND TO BOTTOM EDGE OF FRONT ANGLE, SKIN EDGE - TACK WELD ONLY.
5. BLADE TO BE HIGH CARBON ABRASIVE RESISTANT STEEL.
6. FOR CARBIDE EDGE (BLADE) SEE N.J.D.O.T. BUL. OF EQUIP. DWG. NO. 4-113.
7. BLADE TO BE ATTACHED TO MOLDBOARD W/ 5/8" x 11 UNC x 2" CARRIAGE BOLTS, NUTS & LOCKWASHERS (N/A LAST 2 BOLTS ON EACH SIDE).
8. BOLT HOLES IN RIBS FOR ATTACHING MOLDBOARD HINGE TO BE SPACED APART 1-3/4".
9. ALL WELDS TO BE 3/16" MIN.
10. HOLES IN BOTTOM BLADE ANGLE TO BE DRILLED 5/8" DIA.
11. 14 GUSSETS, 2" x 2-1/4" x 3/16" STEEL WELDED TO RIBS
12. DRILL FIVE (5) HOLES - 9/16" DIA TO MATE WITH SNOW SHIELD
13. SNOW SHIELD TO BE ATTACHED WITH 1/2" BOLTS AND NUTS

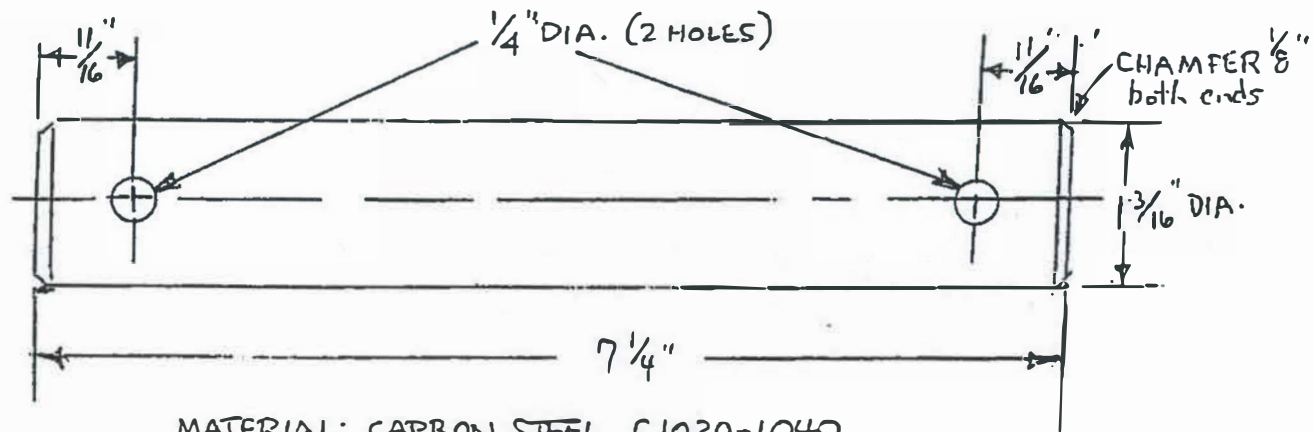


Blade Support Angle to be 4"x4"x3/4"

Blade used is Blade "Z"

Moldboard to have additional holes punched to accommodate 3 ft and 4 ft long carbide blades.

NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
SNOW PLOW MODEL M.R. 11-38-4000-J			
SUBMITTED BY <i>W. J. Smith</i>	DRAWN BY A. P. SMITH	SCALE 3/16" = 1'	DWG. NO. 4-213
APPROVED BY <i>W. J. Smith</i>	JOB NO. _____	DATE JUNE 22, 1998	
REV. DATE BY	REMARKS	ORDER REQUEST NO.	APPLICABLE SNOW PLOWS

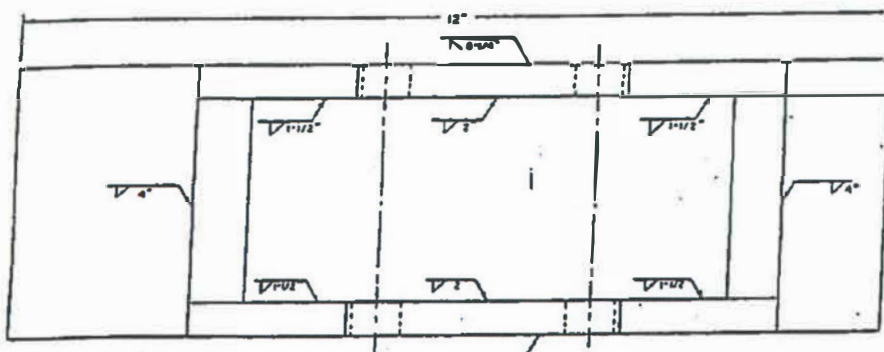


MATERIAL: CARBON STEEL C1020-1040

NEW JERSEY DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION AND MAINTENANCE
BUREAU OF EQUIPMENT

AXLE-PIN TYPE

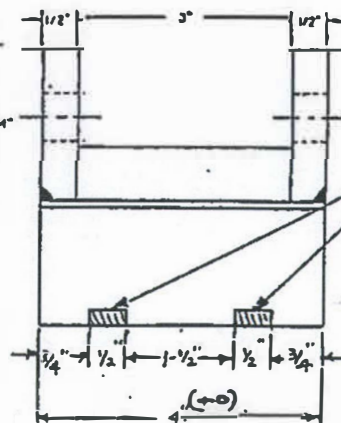
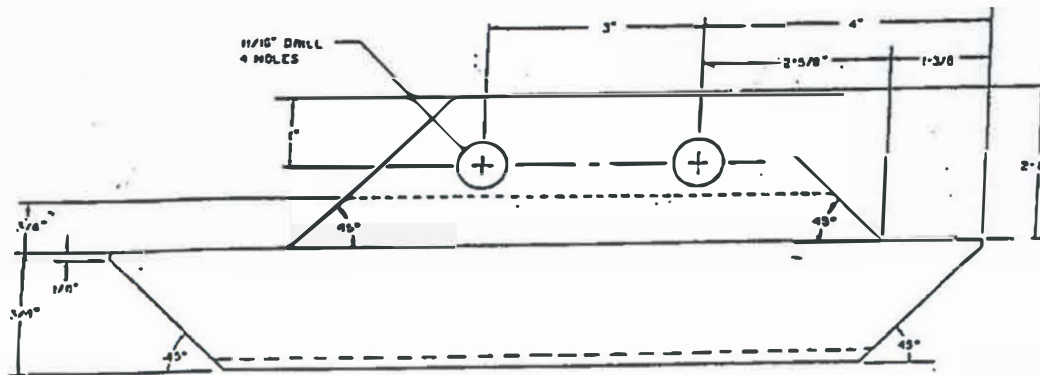
REV 2				SUBMITTED BY <i>John Doe</i>	DRAWN BY JWB	SCALE FULL	DWG. NO.
REV 1				APPROVED BY	JOB NO	DATE 9-1-95	4-219



NOTES

1. ALL MAT'L TO BE MEDIUM CARBON STEEL.
2. ALL WELDS TO BE 3/16" WITH LENGTH AS NOTED.
3. DRILLED HOLES (1/16") IN SHOE MUST BE DRILLED STRAIGHT AND PARALLEL.
4. SHOE TO BE CONNECTED TO MOLDBOARD AND 2 BY TWO (2) 5/8" x 6" L6 BOLTS WITH LOCKWASHERS & NUTS.

NOTE: EAR TO BE BEVELLED & WELDED
SO THAT THERE IS NO WELD
EXPOSED WELD EXCEEDING 4" MAXIMUM WIDTH



TUNGSTEN CARBIDE TO BE 3/8" THICK,
RECESSED INTO BOTTOM OF SHOES,
NO EXPOSED EDGES.
SEE CONTRACT FOR SPECS ON
CARBIDE INSERTS

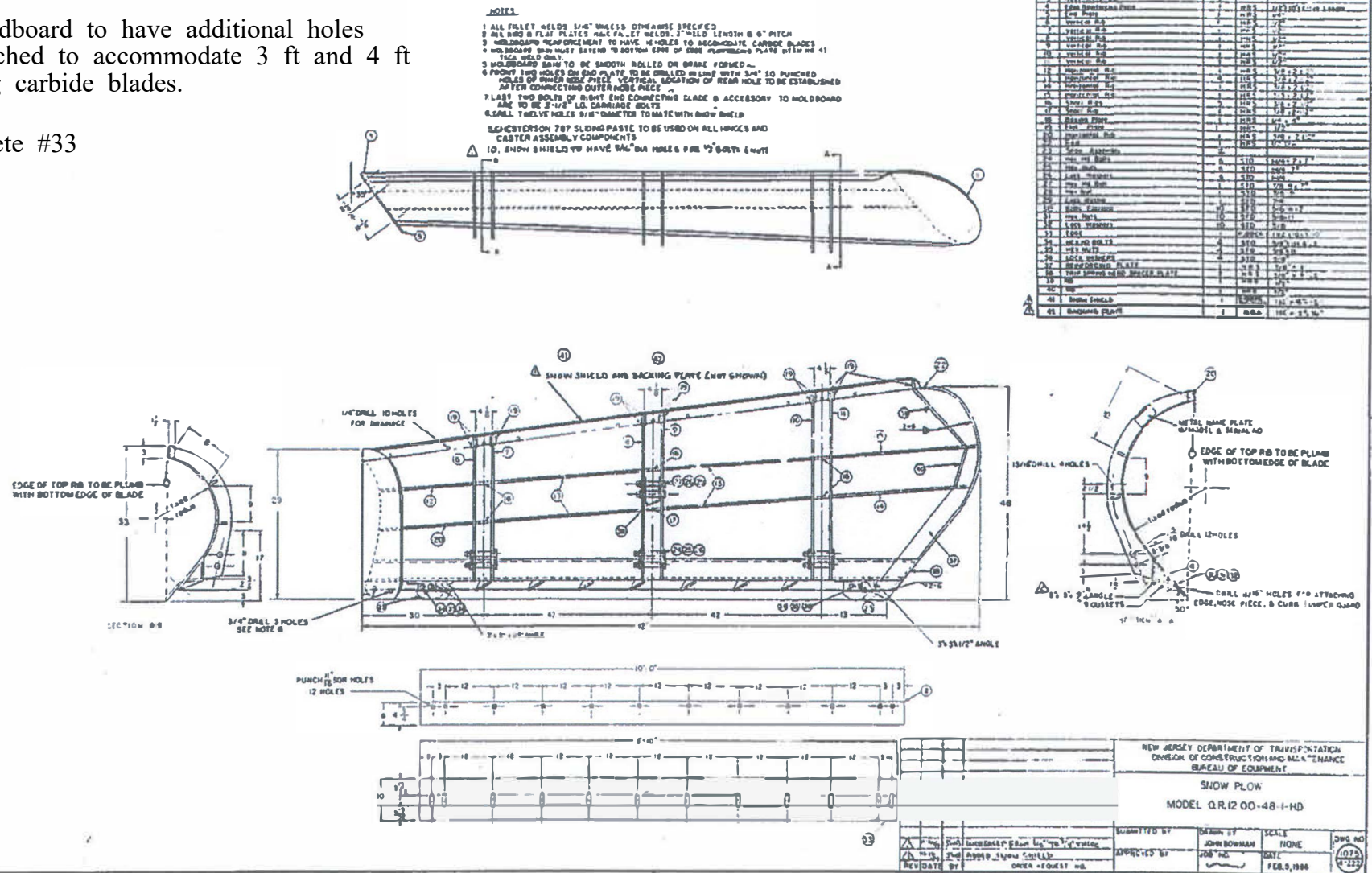
NEW JERSEY DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION AND MAINTENANCE
BUREAU OF EQUIPMENT

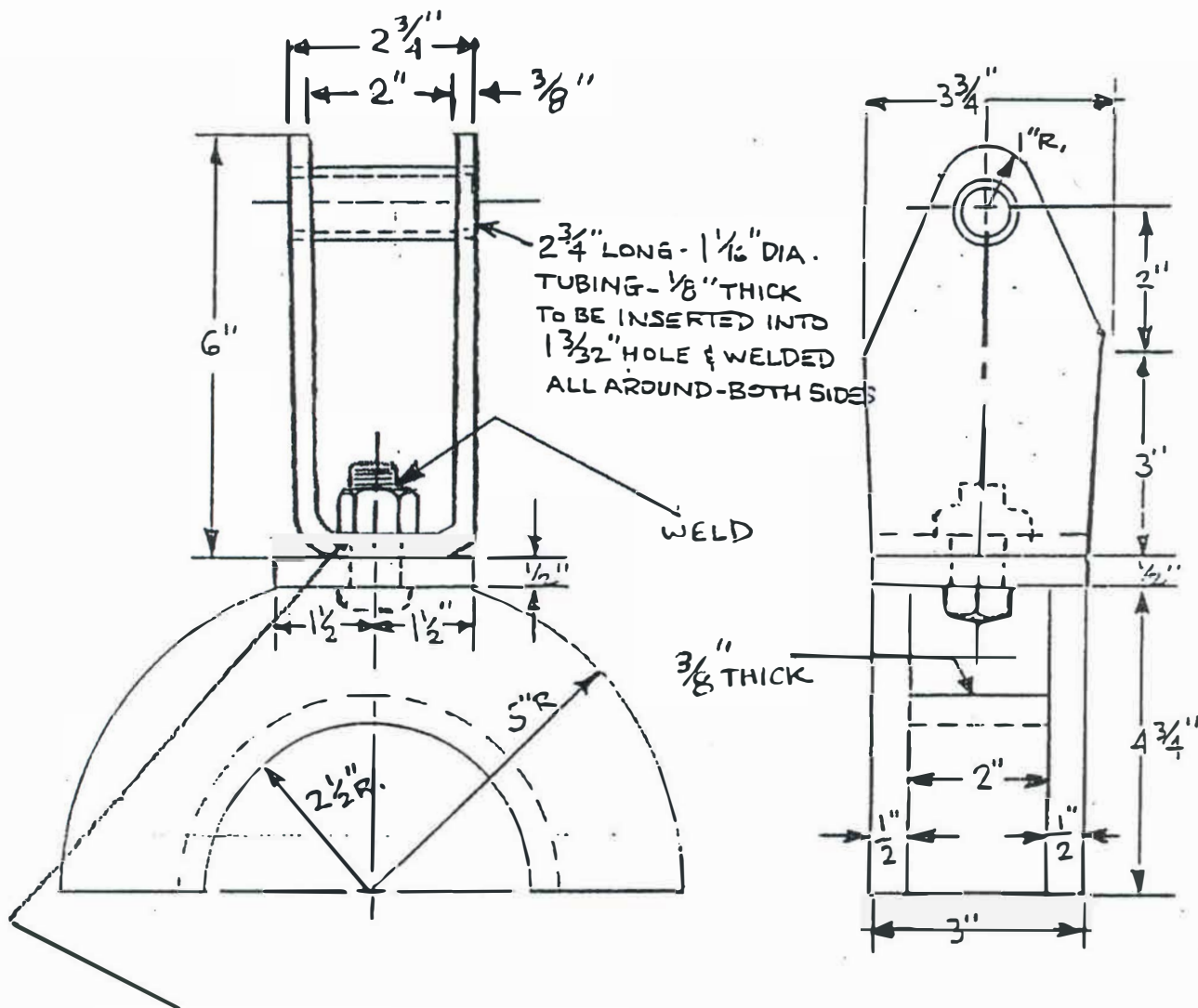
MOLDBOARD SHOE with
TUNGSTEN CARBIDE INSERTS

REV			SUBMITTED BY	DRAWN BY	SCALE	DWG.
2						
REV			APPROVED BY	JOB NO.	DATE	
1					2-14-96	

ADDED WELD
NOTE

Delete #33





DRILL $1"$, 2 HOLES, FASTEN UPPER & LOWER SECTIONS TOGETHER WITH $1" \times 12 \text{ UNF} \times 2"$ BOLT & NUT AND WELD

NEW JERSEY DEPT. OF TRANSPORTATIONS

SWIVEL CHAIN BLOCK-for P.R. PLOWS

DRAWN BY:

John Brown

DATE:

OCT. 20, 2000

DWG NO.

4-230