

		BILL OF MATERIALS
MK.	QTY.	DESCRIPTION
1	1	DODECAGONAL SHAFT 240 A/F TO 200 A/F x 6.35
2	1	DODECAGONAL ARM 200 A/F TO 130 A/F x 6.35
3	1	BASE PLATE 40 THICK
4	1	BACKUP STRIP 40 X 6 (FOR SHAFT)
5	1	BACKUP STRIP 40 x 6 (FOR ARM)
6	1	END PLATE 130 A/F OCTAGONAL 6 THICK
7	8	19 DIA. A325 BOLTS GALVANIZED
8	2	FLANGE PLATE 400 x 400 x 32
9	2	SIDE GUSSET PLATE 20 x 400 x 135
10	1	TOP GUSSET PLATE 10 THICK
11	1	BOTTOM GUSSET PLATE 10 THICK
12	1	COVER PLATE 210 DIA x 10 THICK
13	2	DODECAGONAL INTERIOR GUSSET PLATE 8 THICK
		HANDHOLE MARK H1
14	1	COVER PLATE 11 GA. x 160x 340 (A569)
15	1	REINFORCING RING 8 x 65 x 830
16	2	CLAMP BAR 6 x 40 x 180
17	2	10 DIA. x 140 BOLT S/S (TYPE 316)
18	1	GROUND STUD ASSEMBLY 10 DIA. x 40
		HANDHOLE MARK H2
19	1	COVER PLATE 11 GA. x 130 x 220 (A569)
20	1	REINFORCING RING 8 x 65 x 555
21	1	CLAMP BAR 6 x 40 x 150
17	1	10 DIA. x 140 BOLT S/S (TYPE 316)
18	1	GROUND STUD ASSEMBLY 10 DIA. x 40
* <sub>NO</sub>	TFS:	

## NOTES:

- 1. MARK NO. 16 & 21 C/W 8-DIA. PUNCHED 10 N.C. TAPPED AT THE CENTER OF PLATE.
- 2. MARK NO. 17 C/W CUP WASHER.
- 3. MARK NO. 18 C/W 2-10 DIA. HEX NUT, 2-TERMINAL WASHER. & 1-LOCKWASHER

## **GENERAL NOTES**

1. DESIGN DATA

AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL TRAFFIC SIGNALS, 4TH EDITION, 2001.

DESIGN WIND LOAD = 1.44 kPa (30 PSF)

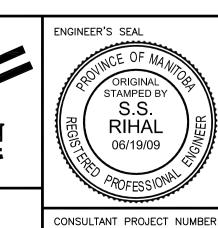
DESIGN ICE LOAD = 0.15 kPa (3 PSF)

- 2. ALL MATERIALS SHALL BE CSA G40.21 350W STRUCTURAL STEEL
- 3. ALL MATERIALS EXCEPT STAINLESS STEEL AND ALUMINUM SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH CSA G164 TO A MIN. NET RETENSION OF 600 g/m<sup>2</sup>
- 4. ALL AREAS OF DAMAGED GALVANIZING SHALL BE REPAIRED WITH SELF-FLUXING LOW TEMPERATURE, ZINC BASED ALLOY ROD OR SPRAY-ON COATING CALLED "ZINGA".
- 5. NEW STRUCTURE TO BE INSTALLED ON NEW CONCRETE PILE FOUNDATION AND ANCHOR BOLTS.
- 6. NEW 50 mm. MAX. GROUT PAD TO BE PROVIDED AFTER INSTALLING THE STRUCTURE.
- 7. SIGN PLATE
- 2 SIGN PLATES, MAXIMUM SIZE 915 x 915 mm EACH. SUPPLIED AND INSTALLED BY THE CITY OF WINNIPEG TRAFFIC SERVICES BRANCH.

STRUC										
-ST	150 . <u>WM</u>	WATERMAIN 150 WM		<u>HYDRO</u> HYDRO		HYDRO 150 mm W.M.		WATERMAIN	150 mm W.M.	Г
1SS	<b></b>	HYDRANT	-	MTS	M.T.S.	MTS		HYDRANT	+	l١
нss\онss	$\otimes$	VALVE	$\otimes$		CONCRETE			VALVE	X	
HSS	300 LDS	LAND DRAINAGE SEWER	300 LDS		ASPHALT		300 mm L.D.S.	LAND DRAINAGE SEWER	300 mm L.D.S.	] ;
¢\	250 WWS	WASTE WATER SEWER	250 WWS		PLANING		250 mm W.W.S.	WASTE WATER SEWER	250 mm W.W.S.	Ì
45\Contrac	0	MANHOLE	•		SIDEWALK		—· <del>×</del> ·—	€ PROFILE	- -	j
Sont		CATCH BASIN			PAVING STONES		<del></del>	NORTH/WEST GUTTER		1
5/(	$\nabla$	CURB INLET	▼		PARTIAL DEPTH REPAIR		<del></del>	SOUTH/EAST GUTTER		֓֞֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓
15	<del></del>	JUNCTIONS	<del></del>		PROPERTY LINE			NORTH/WEST T/LANE		5
60\	[]	CULVERT		<del> </del>	SURVEY BAR			SOUTH/EAST T/LANE	-	5
CAD	100_GAS	GAS	100 GAS		PARAPLEGIC RAMP					
) (3:	EXISTING	LEGEND-PLAN	PROPOSED	EXISTING	LEGEND-PLAN	PROPOSED	EXISTING	LEGEND-PROFILE	PROPOSED	

	UNDERGROUND STRUCTURES	E
	SINDERCORO SIND SINCE SINCE	
-	SUPV. U/G STRUCTURES DATE COMMITTEE	
	COMMITTEE	
	NOTE:	
	LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE. BUT NO GUARANTEE IS GIVEN	
	THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT	2
	LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES	1
)	BEFORE PROCEEDING WITH CONSTRUCTION.	NC

RGROUND STRUCTURES	B.M ELE				DESIGNED BY	SSR	'1,		
					DRAWN BY TJH				
'G STRUCTURES DATE E					CHECKED BY	NBU	DILLON		
OF UNDERGROUND STRUCTURES AS RE BASED ON THE BEST INFORMATION					APPROVED BY		CONSULTING		
LE. BUT NO GUARANTEE IS GIVEN EXISTING UTILITIES ARE SHOWN OR E GIVEN LOCATIONS ARE EXACT. ATION OF EXISTENCE AND EXACT. IN OF ALL SERVICES MUST BE DEFORM THE INDIVIDUAL UTILITIES	2	ISSUED FOR TENDER ISSUED FOR REVIEW	06/19/09	TJH TJH	HOR. SCALE	AS NOTED	RELEASED FOR CONSTRUCTION		
PROCEEDING WITH CONSTRUCTION.	NO.	REVISIONS	DATE	BY	DATE		DATE		



09-1545



## THE CITY OF WINNIPEG TRANSIT DEPARTMENT

ON STREET TRANSIT PRIORITY	
IMPROVEMENTS - PHASE 3	

WESTBOUND, EAST OF HENDERSON HWY.

IMPROVEMENTS - PHASE 3	SHEET		OF	
		21		23
OHSS NO. S_743 (2 OF 2) JOHNSON AVE. WEST	CONSULT	TANT DR	AWING	NUMBER

S743-09-02