

2021-08-13

Tel: 416-392-5900 Fax: 416-392-5934

## REQUEST FOR PROPOSAL ENGINEERING SERVICES FOR THE INSTALLATION OF FIRE SPRINKLER SYSTEMS AT THE AFRICAN RAINFOREST AND INDO MALAYA PAVILIONS RFP 24 (2021-07)

#### **ADDENDUM 3**

This addendum shall be incorporated into, and form part of RFT No.: TZC T 42-2020-11 and take precedence over all requirements of the previously issued bid documents including plans. This addendum must be signed by the bidder (signing officer) in the appropriate space and must be attached to the form for submission by the bidder. This addendum consists of six **(6)** page(s) and the documents listed below.

#### 1. CLOSING DATE:

Original Closing Date: Wednesday, 2021-08-18, 1200 hours (noon, local time) Revised Closing Date: Friday, 2021-08-20, 1200 hours (noon, local time)

#### 2. SCHEDULE OF EVENTS:

The following schedule of events replaces the original schedule of events from Section 8.0 of the RFP:

Pre-Award	
Release of RFP	2021-07-23
Proponents' Question Deadline	2021-08-03
Submissions Due	2021-08-20
Interviews, if necessary	Week of August 23 <sup>rd</sup>
Notification of Award by the Toronto Zoo	Week of August 23rd
Post Award	
Preliminary Draft Design Due	2021-10-08
Final Design Due	2021-11-24
Release of Tender	2021-12-03
Construction Begins	2022-03-21

#### 3. QUESTION:

The Schedule of Events identifies the Construction Begins 2022-03-21, however it does not identify a proposed Substantial Performance date. The Scope of Services requires the Consultant to attend and take minutes at all design and construction meetings throughout the duration of the project. Can the Zoo provide an estimate for the number of meeting the Consultant is to participate in, or a proposed construction period based on providing by-weekly meeting?

#### **RESPONSE:**

Assume a construction completion date of 2022-12-31. Provide a price per site visit for any additional site visits that may be required.

### 4. QUESTION:

It is our understanding that AutoCAD drawings for the African Pavilion are available. However, only PDFs with limited AutoCAD drawings are available for the Indo Malayan Pavilion. Please confirm.

#### **RESPONSE:**

This is correct. All drawings can be made available to the successful proponent.

#### 5. QUESTION:

Please confirm the following drawings are available:

- a. Mechanical drawings for African and Indo Malayan Pavilions
- b. Site plan drawings indicating incoming water mains for African and Indo Malayan Pavilions

#### **RESPONSE:**

See additional drawings below.

#### 6. QUESTION:

Please confirm the following documentation is available:

- a. Fire hydrants flow tests for African and Indo Malayan Pavilions
- b. Structural roof load data for African and Indo Malayan Pavilions

#### **RESPONSE:**

See attached fire hydrant flow tests.

See attached structural notes from a glazing feasibility study previously completed for the African Rainforest Pavilion. The successful proponent shall be responsible for determining the ability for the pavilions to structurally support the new sprinkler system.

## 7. QUESTION:

The RFP requests that a Cost Consultant be retained to provide a Class D and Class A cost estimate. Is it acceptable that the Consultant use internal forces to generate the cost estimate, or does it need to be an independent vendor?

#### **RESPONSE:**

The successful proponent shall retain an external cost consultant to provide the cost estimates.

### 8. QUESTION:

It is our understanding the requirements to sprinkler the two buildings is being initiated by the Zoo's Insurance Provider. Please identify if the Insurance provider has any design requirements for this project or if the design only needs to comply with Ontario Building Code.

#### **RESPONSE:**

The insurance provider has no special design requirements. It is our understanding that the design needs to comply with the Ontario Building Code.

### 9. QUESTION:

Please identify if the Insurance provider has any commissioning requirements for this project or if commissioning only needs to comply with Ontario Building Code.

#### **RESPONSE:**

The insurance provider has no special design requirements. It is our understanding that the commissioning needs to comply with the Ontario Building Code.

#### 10. QUESTION:

Per 2.2 and 2.3 of the RFP it is our understanding that a design of a new fire sprinkler system for the African Rainforest and Indo Malaya Pavilion is to be provided. Based on the site review and documentation provided it is unknow if the existing pressure and water (gpm) is sufficient for a new sprinkler system. As such, a new fire pump may be required (per building). Is it the intent of the RFP that if a fire pump is required that the engineering effort required to generate a new fire pump design be included in this bid? Please clarify.

#### **RESPONSE:**

It is the successful proponent's responsibility to determine the incoming water pressure and volume. If the incoming water supply is not sufficient to support a sprinkler system, it is the successful proponent's responsibility to design all supporting infrastructure required to provide a fully functioning sprinkler system including a fire pump.

#### 11. QUESTION:

Will the consultant be responsible for issuing drawings for construction and completing hydraulic calculations or will the successful sprinkler contractor be responsible for detailed sprinkler design, hydraulic calculations and issuing the drawings for permit?

## **RESPONSE:**

The successful proponent will be responsible for issuing tender-ready drawings & specifications, permit drawings & specifications, and issued-for-construction drawings & specifications. The successful proponent is responsible for detailed sprinkler design, hydraulic calculations, and is responsible for obtaining all required permits.

### 12. QUESTION:

Are drawing files of the building and reflected ceiling plan available in CAD format?

#### **RESPONSE:**

Drawings for the African Rainforest Pavilion are available in CAD format. They will be made available to the successful proponent. These drawings are for reference only and all measurements shall be verified on site.

### 13. QUESTION:

Are water servicing plans available for this site?

#### RESPONSE:

Yes. See attached drawing.

#### 14. QUESTION:

It is not anticipated that the existing 4" incoming water service observed in the buildings will be sufficient to serve a new sprinkler system. Has a proposed connection location to the facilities water services been established?

#### RESPONSE:

No, this has not been established. It will be the successful proponent's responsibility to determine suitability of the incoming water service, and design any changes required to provide adequate water supply for the sprinkler system.

#### 15. QUESTION:

Is there existing hydrant flow test data available for this site? If no data exists, we suggest that a cash allowance of \$7,500 be included in the contract for water supply testing.

### **RESPONSE:**

See attached hydrant flow tests.

#### 16. QUESTION:

Is the installation of a fire pump explicitly excluded from the design work being tendered as it is not known at this point in time if it will be required?

### **RESPONSE:**

No, the design of a fire pump is included if a fire pump is required. This will be up to the successful proponent to determine.

### 17. QUESTION:

Is a full set of architectural drawings available for each building? The drawings shared with the RFP package appear incomplete.

#### RESPONSE:

The Toronto Zoo has the full set of architectural drawings from the original building construction. There are also some drawings available from renovations. All available drawings will be made available to the successful proponent. And additional drawings that are required and any site measurements will be the responsibility of the successful proponent.

#### 18. QUESTION:

Are structural drawings available for each building? Alternatively, will these plans need to be generated by a structural engineer as part of the scope of work for this project to verify that the existing structure can support the new sprinkler system? If the structural engineering survey is required, we suggest a \$5,000 cash allowance for engaging a lift operator to assist with the survey of the structure.

## **RESPONSE:**

The Toronto Zoo has the full set of structural drawings from the original building construction. These drawings can be made available to the successful proponent. Any structural analysis required to determine if the building can support the sprinkler system is the responsibility of the successful proponent. Access to most areas of the pavilion is not possible with a lift given the slope & width of the pathways.

#### 19. QUESTION:

Will access to animal areas be possible during design for survey purposes?

#### RESPONSE:

Access to animal areas will be possible on a case-by-case basis. Access cannot be provided to all areas simultaneously. The successful proponent will be required to work with the Zoo to determine how and when various areas can be accessed as required.

#### 20. QUESTION:

Will the proposed new sprinkler system devices be connected to the existing building fire alarm system?

#### RESPONSE:

The sprinkler system is to be designed to all applicable codes. If connection to the fire alarm system is not a code requirement, this will need to be discussed with the Toronto Zoo during the design process to determine whether or not it should be connected.

#### 21. ADD DRAWINGS:

SHEET NUMBER	SHEET NAME
M-1	AFRICA & INDO-MALAYAN PAVILIONS SITE PLAN & LEGENDS
M-2	AFRICAN PAVILION SOUTH HALF LOWER LEVEL PLUMBING
M-3	AFRICAN PAVILION SOUTH HALF UPPER LEVEL PLUMBING
M-4	AFRICAN PAVILION NORTH HALF LOWER LEVEL PLUMBING
M-5	AFRICAN PAVILION NORTH HALF UPPER LEVEL PLUMBING
M-6	INDO MALAYA PAVILION LOWER LEVELS PLUMBING
M-7	INDO MALAYA PAVILION UPPER LEVEL PLUMBING
M-8	AFRICAN PAVILION SOUTH HALF LOWER LEVEL HEAT & VENT
M-9	AFRICAN PAVILION SOUTH HALF UPPER LEVEL HEAT & VENT
M-10	AFRICAN PAVILION NORTH HALF LOWER LEVEL HEAT & VENT
M-11	AFRICAN PAVILION NORTH HALF UPPER LEVEL HEAT & VENT
M-12	INDO MALAYA PAVILION LOWER LEVEL HEAT & VENT
M-13	INDO MALAYA PAVILION UPPER LEVEL HEAT & VENT
M-14	AFRICA & INDO MALAYA PAVILION SCHEDULE SHEET
A-3.07	SITE PLAN - WATER

Receipt of the addendum shall be acknowledged as part of your submission.

The Board of Management of the Toronto Zoo reserves the right to reject any or all quotations or to accept any quotation, should it deem such action to be in its interests.

If you have any queries regarding this matter, please contact Mr. Peter Vasilopoulos, Supervisor, Purchasing & Supply, at 416-392-5916.

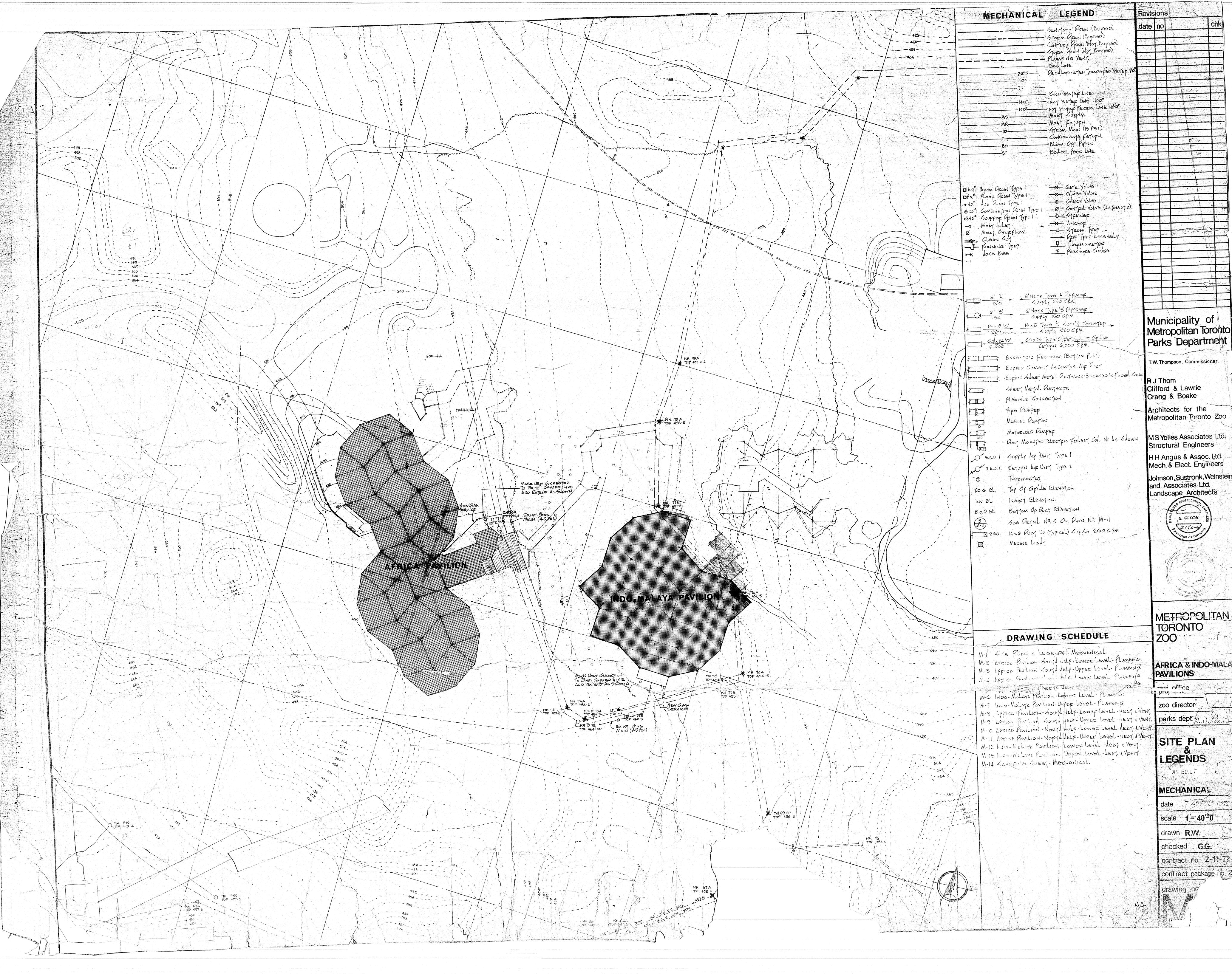
Yours truly,

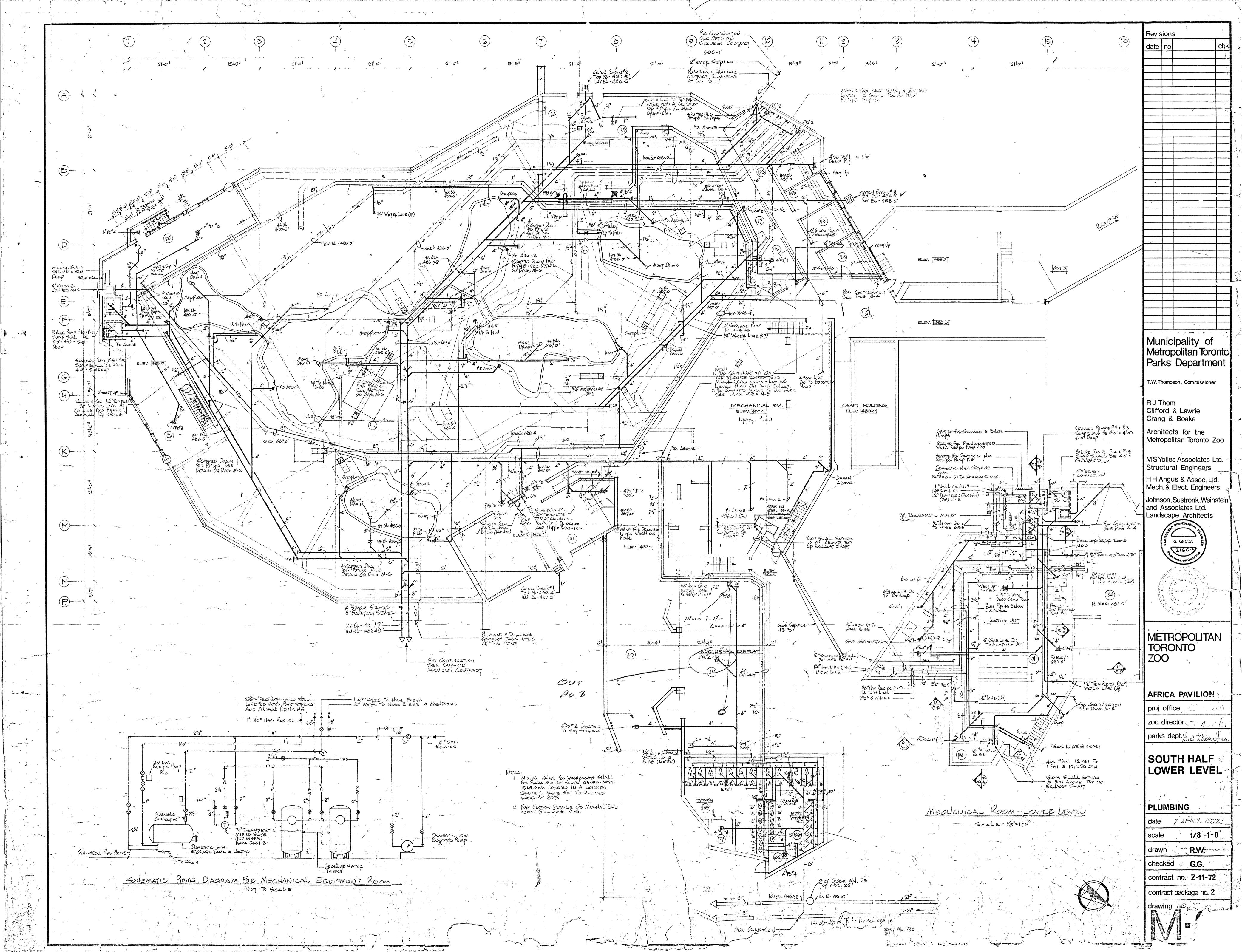
Peter Vasilopoulos Supervisor, Purchasing & Supply

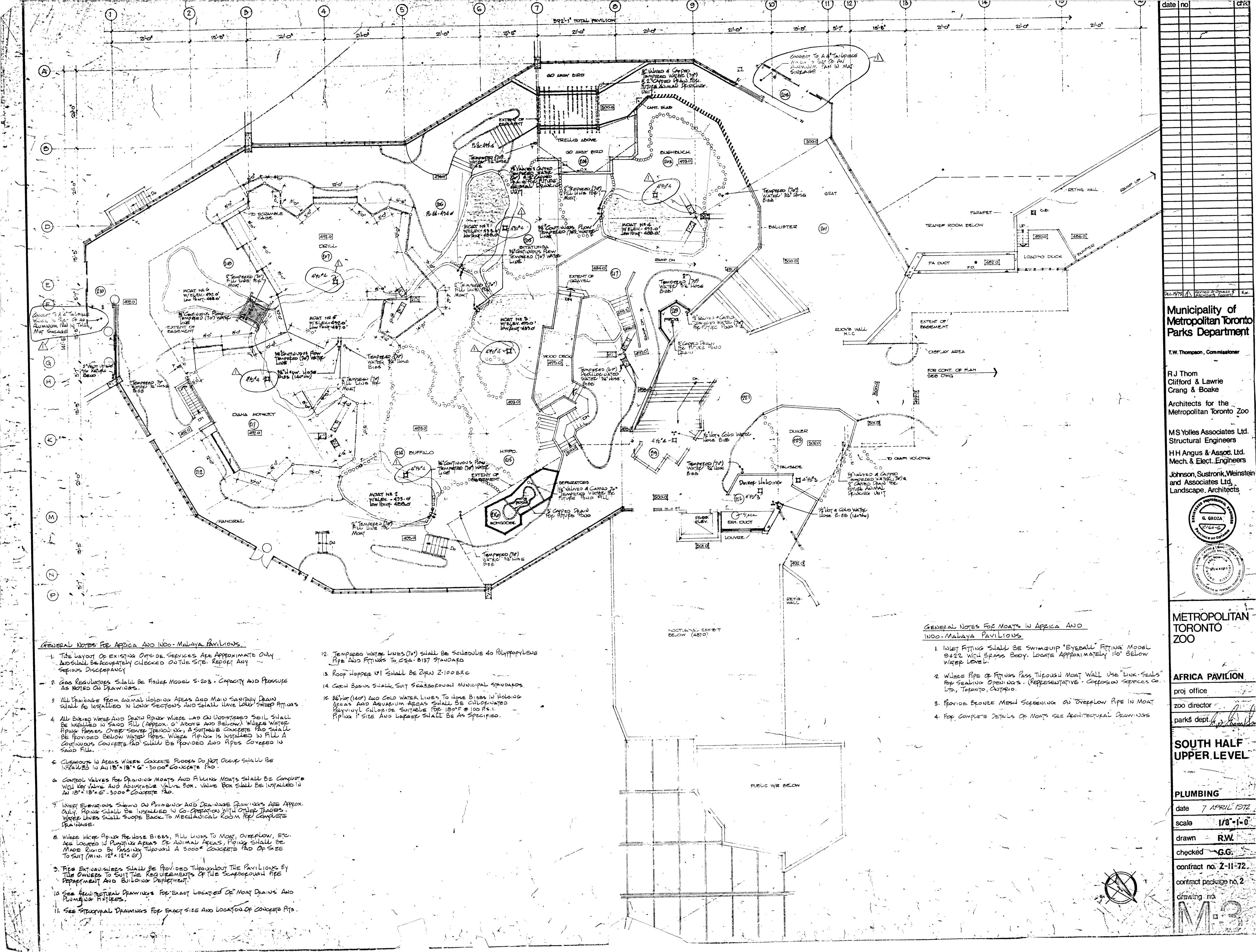
I/we hereby acknowledge receipt of this addendum and make allowance in my bid.

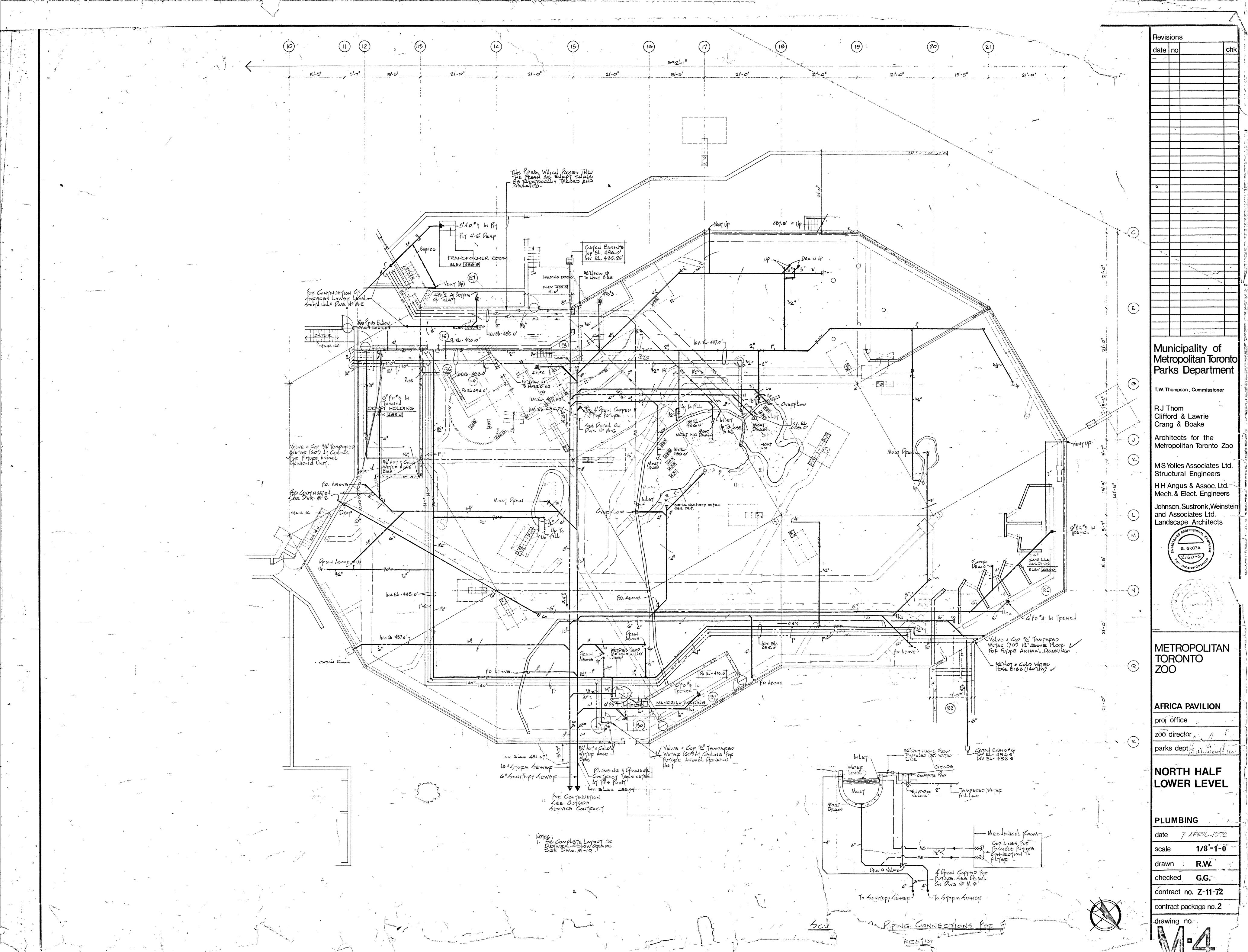
Signed (Must be Signing Officer of Firm)
Name of Firm
Date

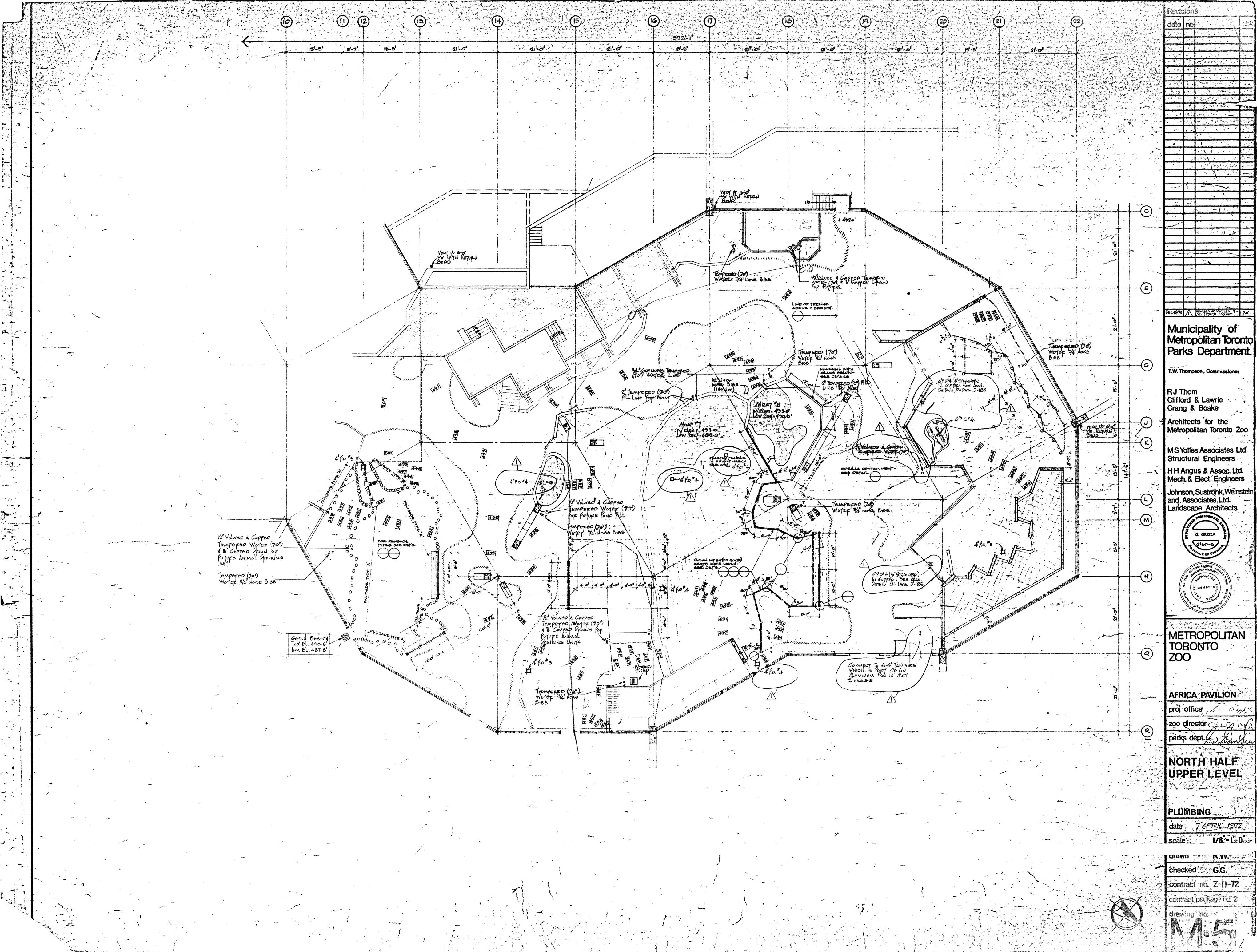
**END OF ADDENDUM 3** 

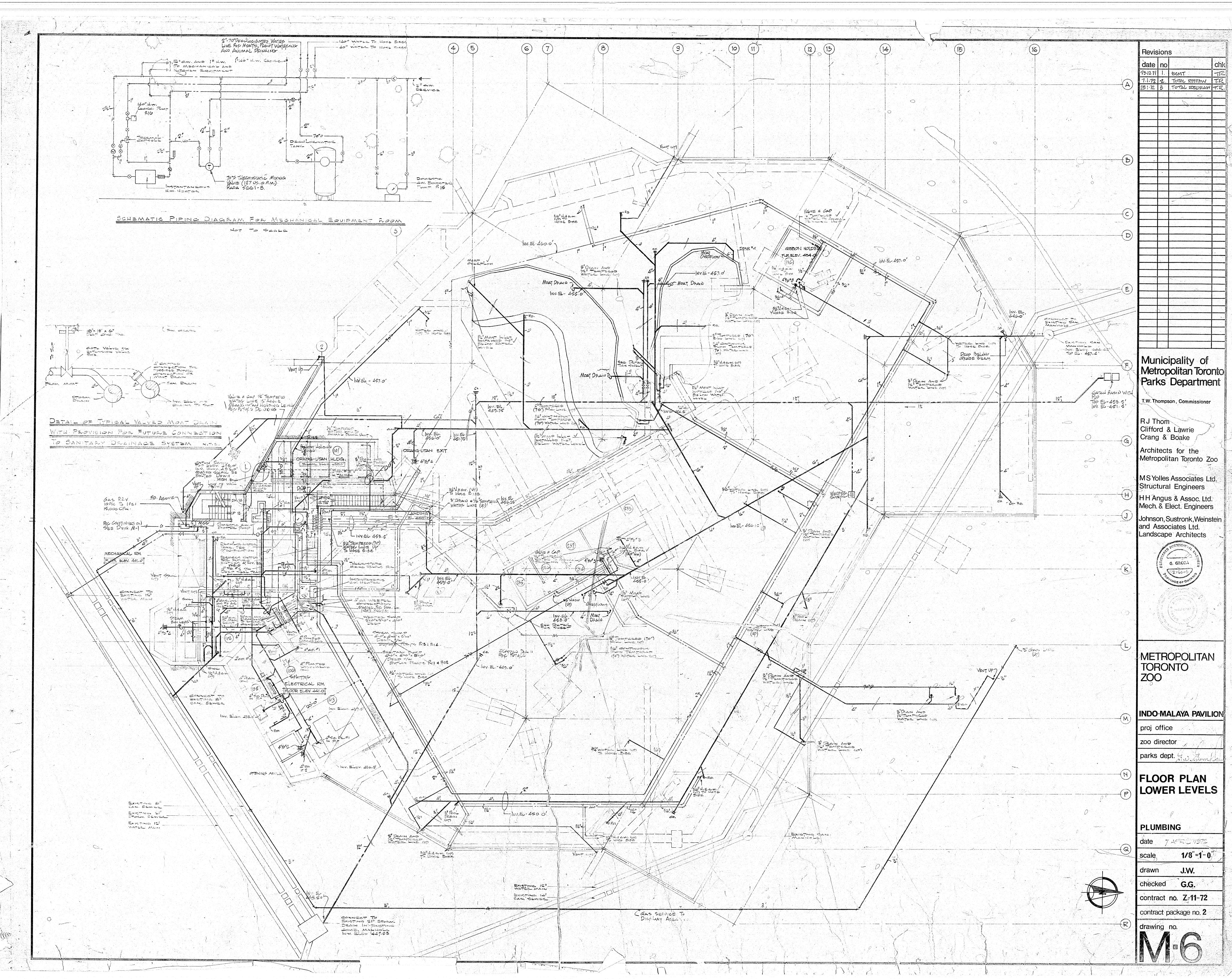


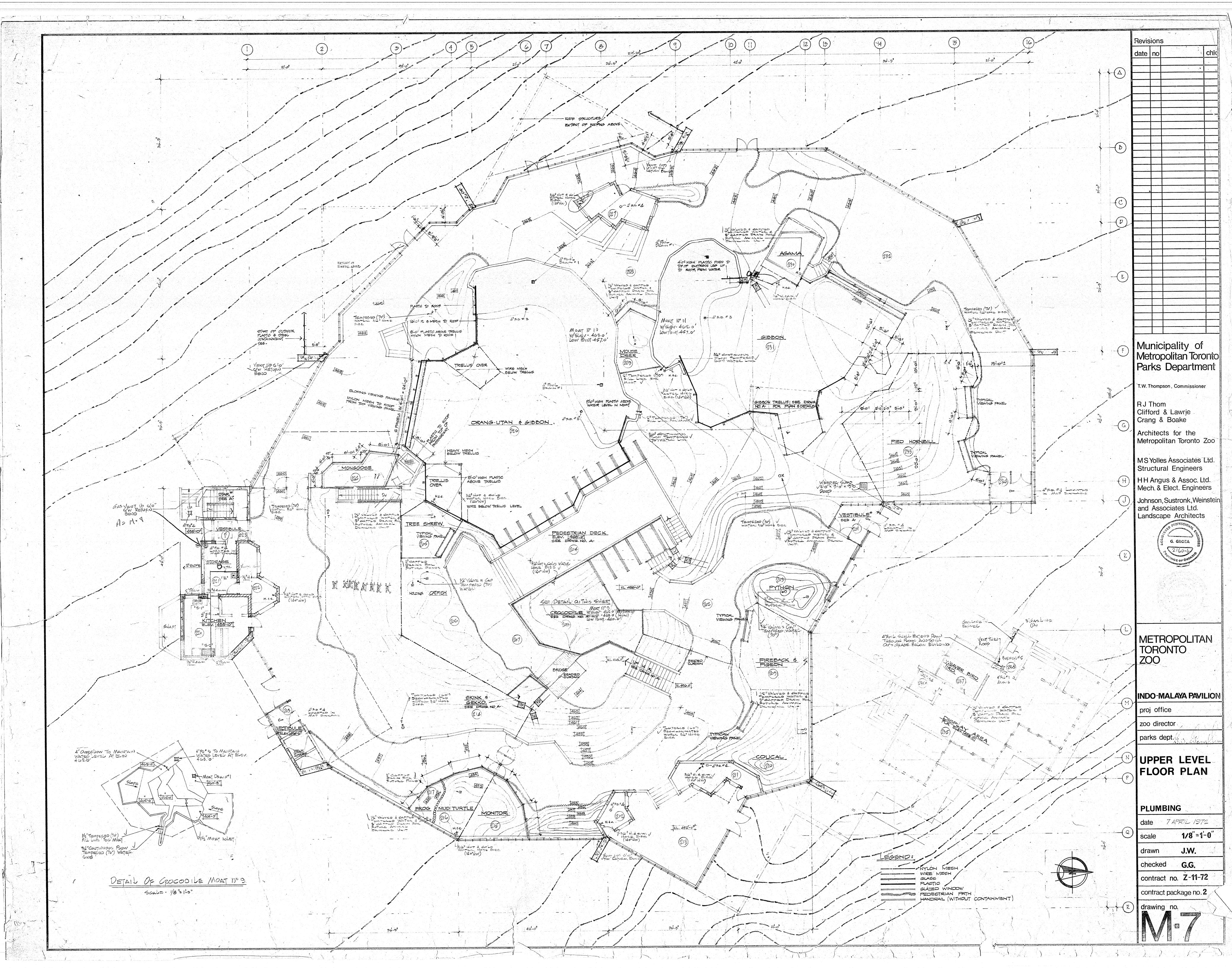


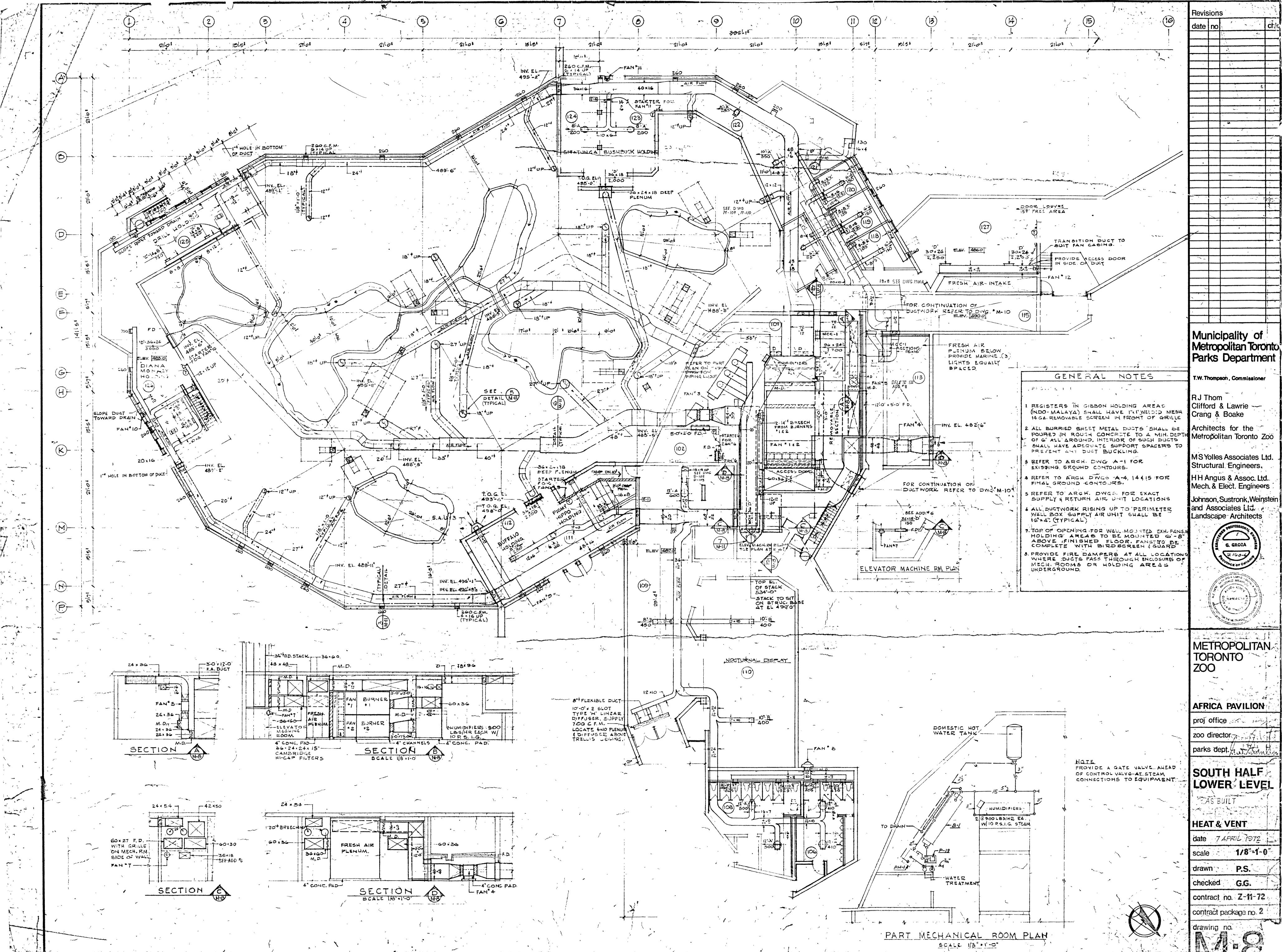


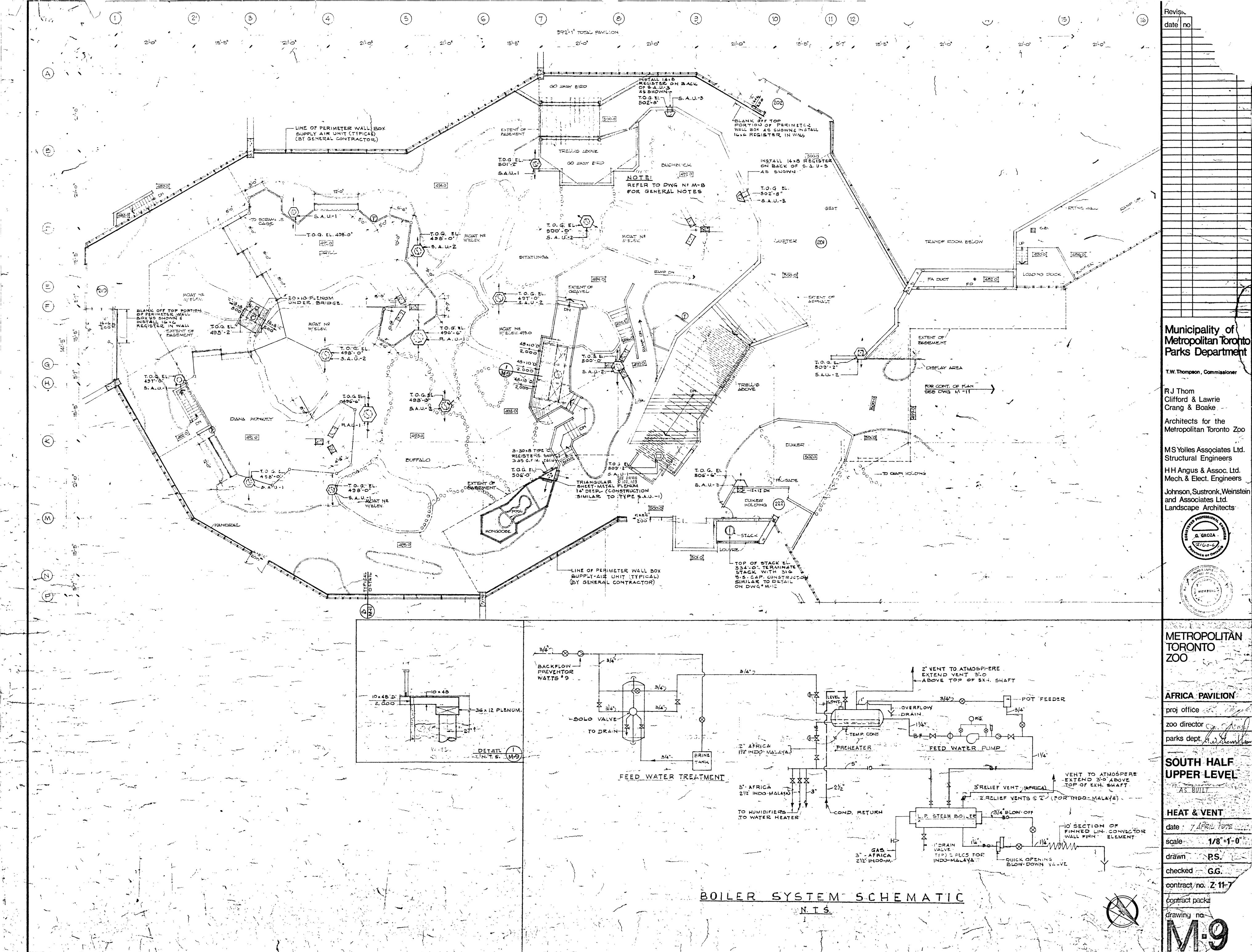


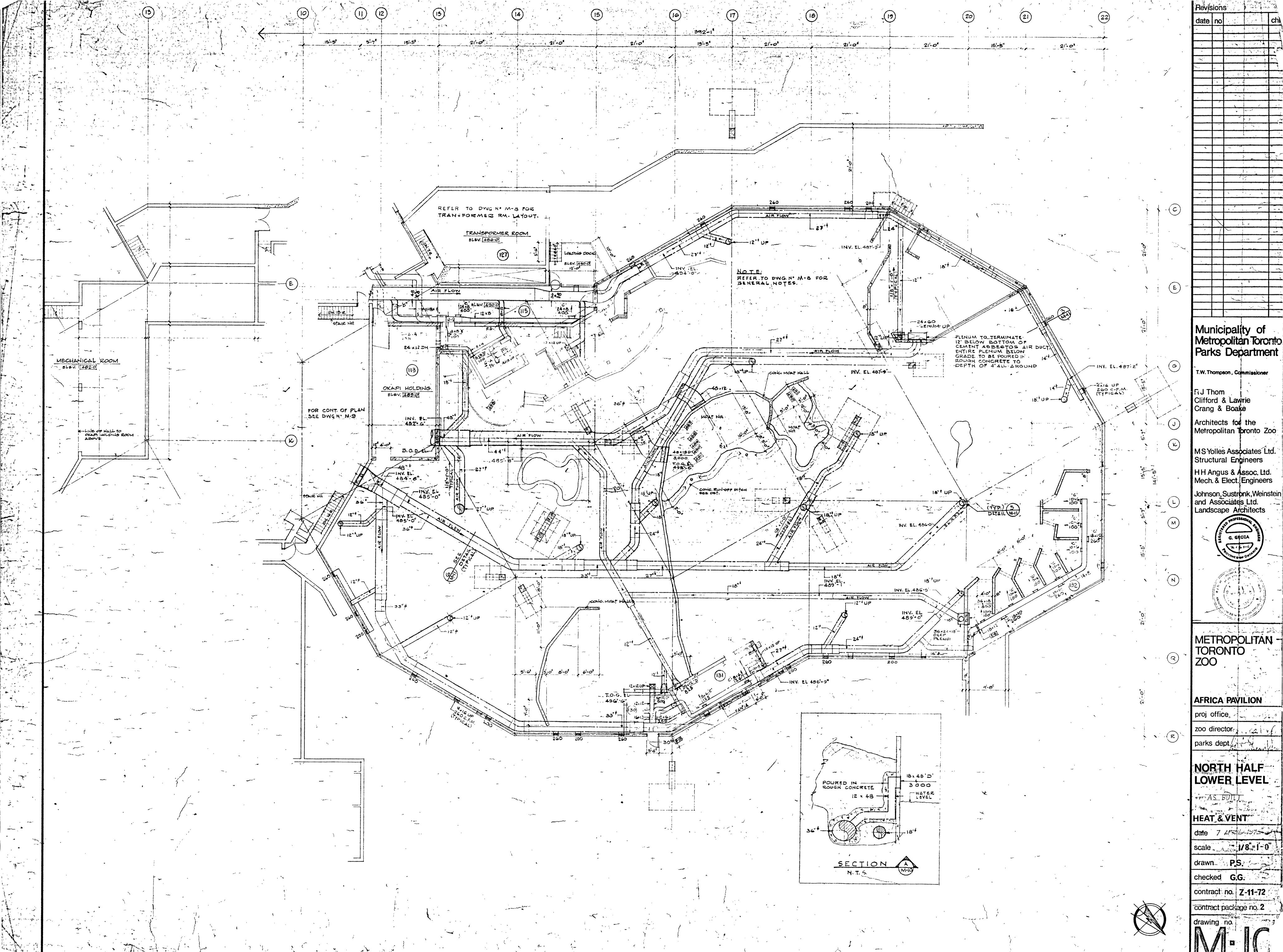


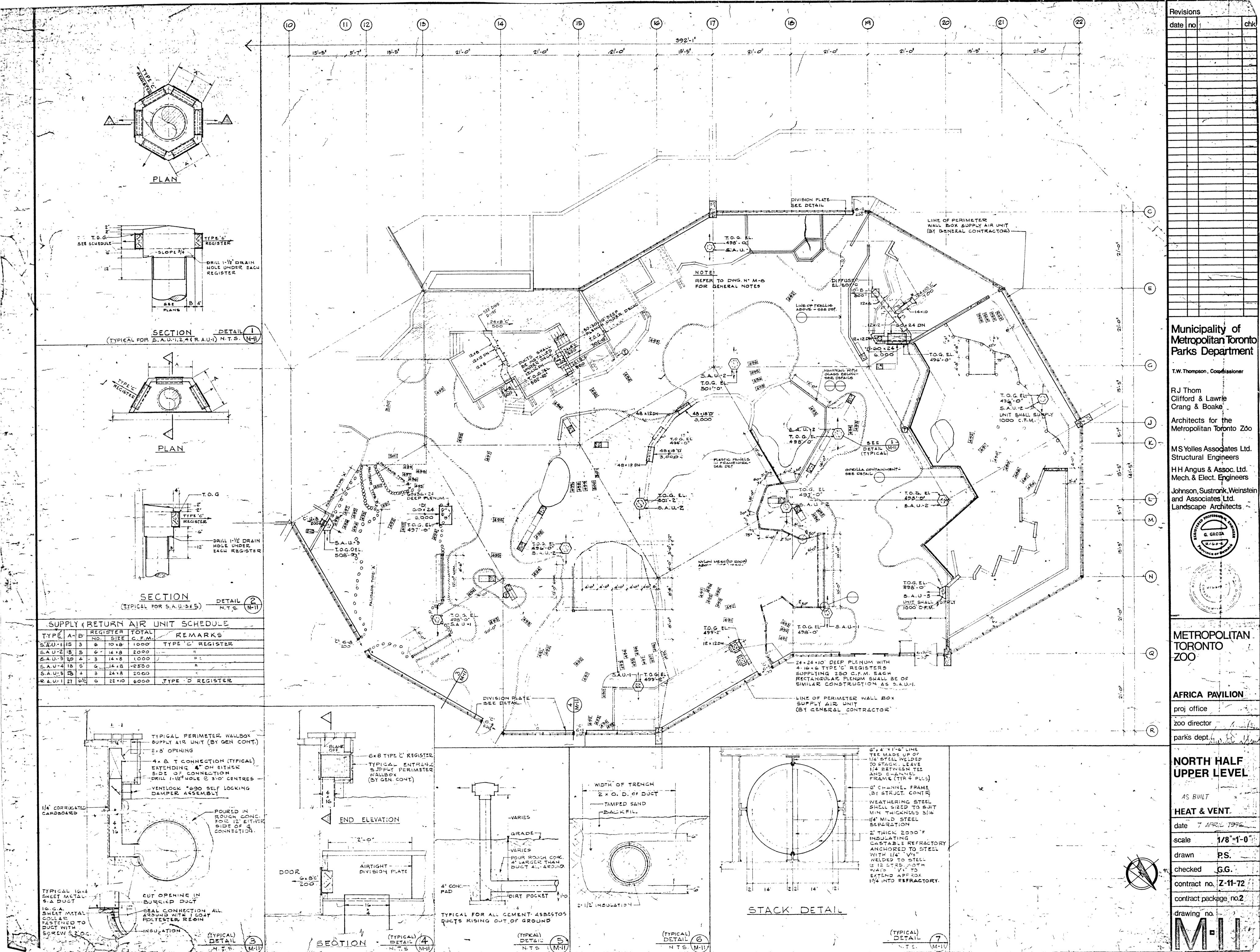


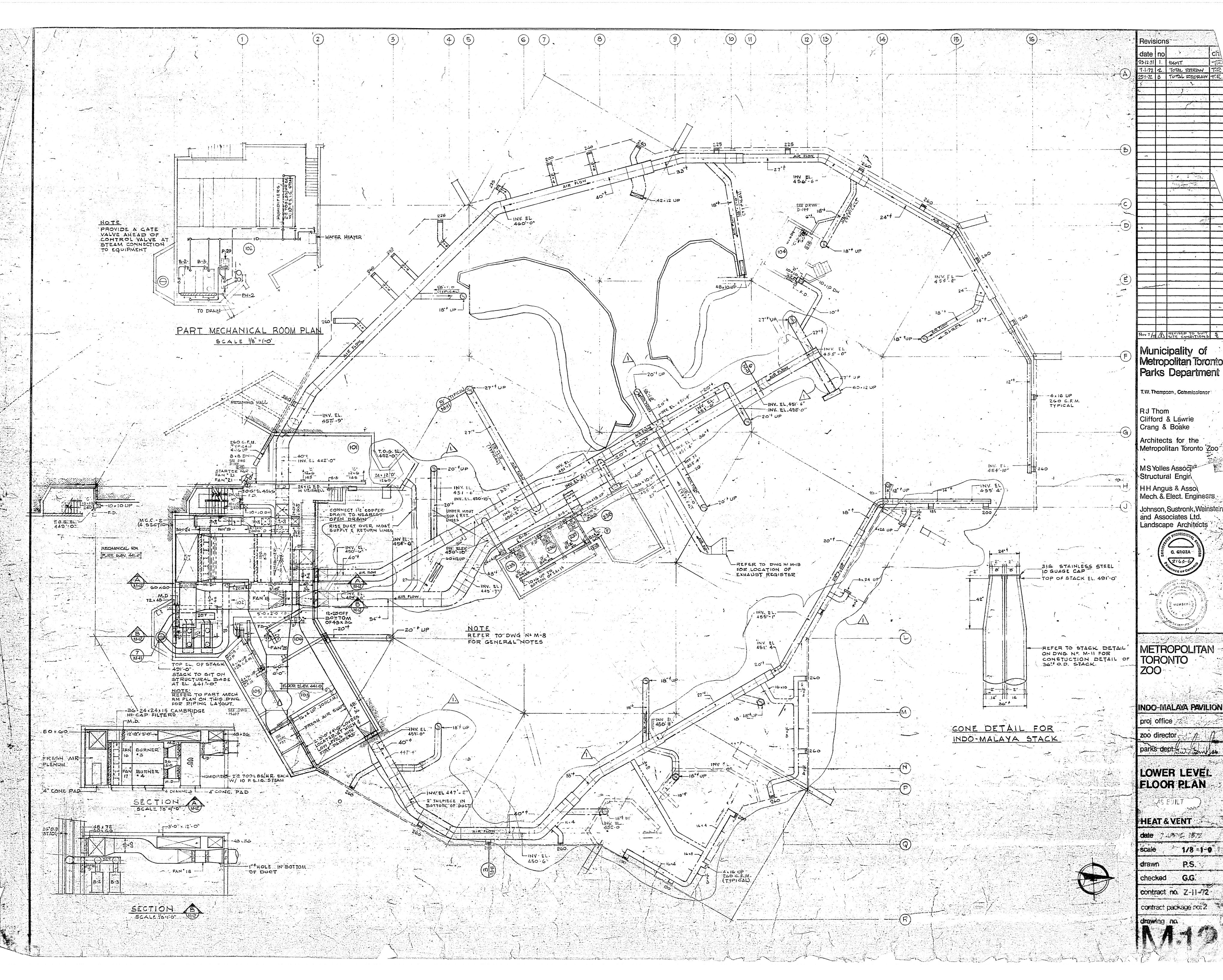


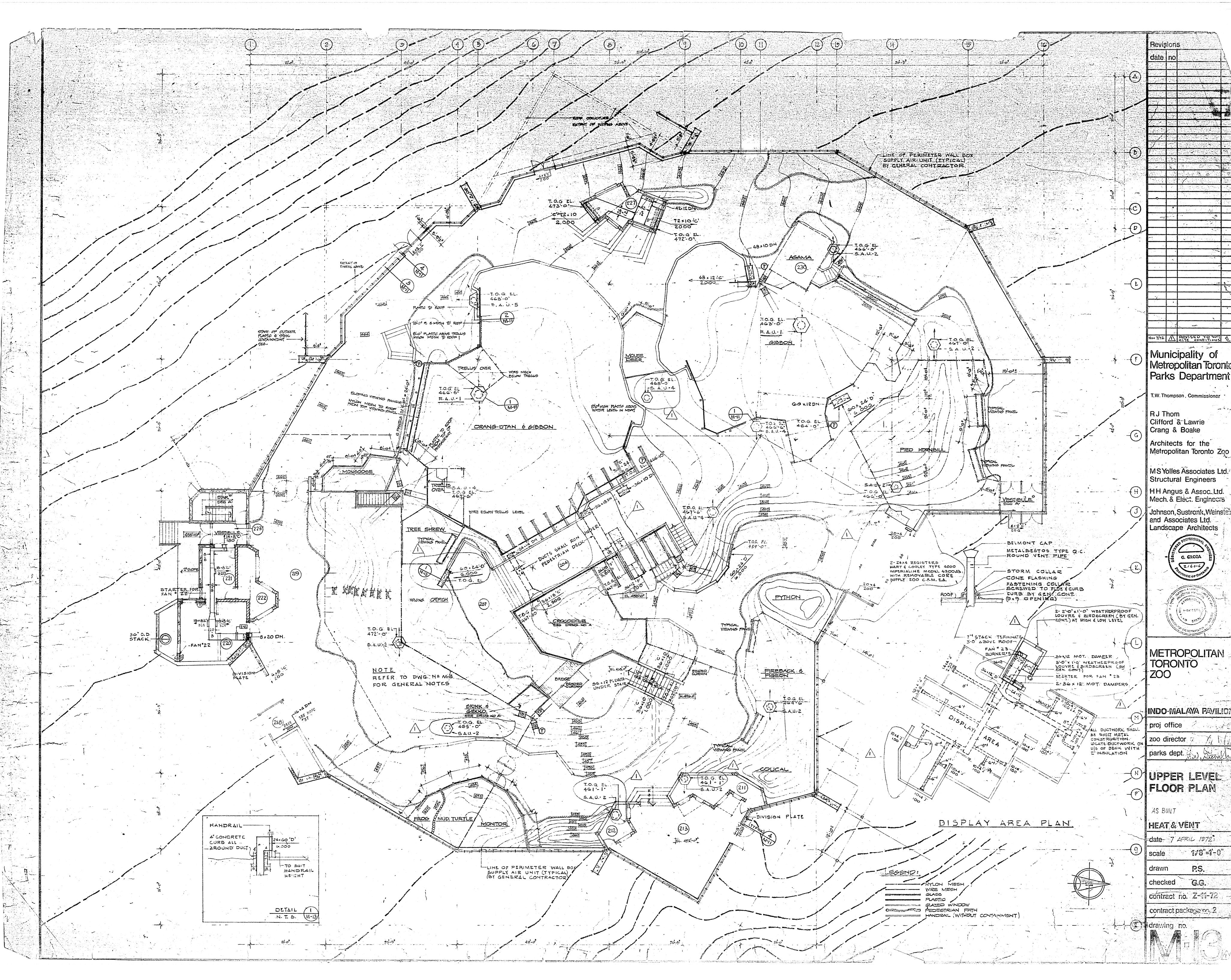












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E-2	A	M-8	RM 126	325	10.8	2.0	60	80		<b>V</b>	
E-3	A	M-8	DIANA MONKEY HOLDING	440	12 . 8	3.0	60	80		V	
E-4	A	M-8	SITATUNGA BUSHBUCK HOLD	400	14×6	2.5	60	80		V	
E-5	A	M-8	OFFICE 120	150	8 × 6	1.0	60	80	V		
E-6	A	M-8	OFFICE 113	150	8 × 6	1.0	60	80	V		
E-7	A	N-8	OKAPI	300	14 × 8	3.0	60	90	<b>V</b>	·	
E-8	4	M-10	GORILLA HOLDING	1480	18 × 12	10.0	60	80		V	
E-9	A	M-10	MANDRILL HOLDING	250	8 × 8	1.5	60	80			
E-10	A	M-10	DUIKER HOLDING	200	8 × 8	1.5	60	80	V		
E-11	A	M-10	OVERSEER	100	8 * 4	10	60	80	V		
E-12	A	11-11	DUIKER HOLDING	200	12 = 8	1.5	60	80	V		
E-13	1.M	N-12	GIBBON HOLDING	60	10-0	1.0	60	80	V		
E-14	IM	11-12	GIBBON HOLDING	60	6×6	1.0	60	100	V		
E-15	1M	M-12	ORANG-UTAN HOLDING	230	8 × 8	2.5	60	90		V	
5-16	/M	M-13	KITCHEN	1150	20 × 8	7.5	60	80		V	

FAN NO.	BURNER	DESIGNATION	NO.		T BTU/HR OUTPUT MBH	MODEL			MARH		
1	1	GEN. SUPPLY AFRICA	M-8	5000	4000	704 400	MIN-	PRIMARY	HTG.5	URFACE SURFACE	2640
2	2	GEN SUPPLY AFRICA	M-8	5000	4000	TDM-400	11	11	Į1	tl	tì
16	3	BEN SUPPLY (I M)	M-12	4375	3500	TON-350	n'	ļi .	ţţ.	n	#
17.	4	GEN. SUPPLY (IM)	M-12	4375	3500	TOM-358	11	ļi	ţl	¥	þ
23	5	GEN. SUPPLY (IM DISPL)	M-13	1370	1086	G82-137T	LEN	INOX			

			8	OILER S	SOHEDULE			
	INPUT	/5PSIG STEAM OUTPUT #/H3	_}	· ·	LOCATION		REMAN	
B-/	4500	3600	3	18"	AFRICA	•		MOD WTS-4500 SERIES 3
8-2	2000	1600	2	14"	INOO-MALAYA	OLEAVER	BROOKS	MOD W75- 2000 SERIES 3
8-3	2000	1600	2	14"	INDO-MALAYA	ļ	?!	II .

		DRAIN	SCHE	DULE	
<b>~0</b> .	TYPE	GENERAL APPLICATION	ZURNNO	FINISH	REMARKS
F.D. HI	FLOOR DRAIN	WASHROOMS, KITCHEN	ZN - 415	NICKEL BRONZE	VANDAU PROOF STRAINER
F.O. #2	FLOOR DRAIN	MECHANICAL ROOMS	Z - 520	CAST IRON	
FO. #3	FLOOR DRAIN	HOLDING AREAS &	Z-675	DURA GOATED C	VANDAL PROOF, BUCKET HEAVY DUTY
F0 #4	FLOOR DRAIN	NAT SINKAGE	Z-530	DURA COATED CI	WITH BUCKET VANDAL PROSE
		and the control of th			•
0.0"/	COMBINATION DRA'N	MECHANICAL ROOMS	Z - 3/7-2	CAST IRON	
000	COMBINATION DRAIN	KITCHEN	Z3-3/7-2	POLISHED BRONZE	·
4041	HUB DRAIN	MECHANICAL ROOMS	z - 3/7-3	CAST IRON	
print a transport representative and the second					
	The second secon		•		•
50 4/	SCUPPER DRAIN	ELECTRICAL PIT	Z-8091	5022 604750 61	
50"2	SCUPPER DRAIN	EXHAUST SHAFT	Z-/87	502A C047ED @/	
110"/	MOAT DRAIN	110475	Z-//3	DURA COATED CI	WITH BRONZE MESH SCREEN

DIFFUSER & REGISTER SCHEDULE  BASED ON HART & COOLEY MANUFACTURE.  REFERENCE TYPE REUND SUPPLY DIFFUSER WITH FIXED PATTERN  B DF RECTANGULAR SUPPLY DIFFUSER WITH FIXED PATTERN  C ANSST STANDARD SUPPLY DIFFUSER  D AN 17D RETURN AIR REGISTER WITH 40° DEFLECTION  E CRSOO GRID CORE GRILLE  F AN 78 RETURN AIR REGISTER WITH O' DEFLECTION  G 731 SIDEWALU REGISTER  H GOOD 3/4" SLOT DINEAR DIFFUSER  J 411 FLOOR DIFFUSER			
REFERENCE TYPE  REMARKS  A PF ROUND SUPPLY DIFFUSER WITH FIXED PATTERN  B DF RECTANGULAR SUPPLY DIFFUSER WITH FIXED PATTERN  C ANSST STANDARD SUPPLY DIFFUSER  D AN 17D RETURN AIR REGISTER WITH 40° DEFLECTION  E CRSOO GRID CORE GRILLE  F AN 18 RETURN AIR REGISTER WITH 0° DEFLECTION  G 731 SIDEWALL REGISTER  H GOOD 3/4" SLOT LINEAR DIFFUSER		D	IFFUSER & REGISTER SCHEDULE
A PF ROUND SUPPLY DIFFUSER WITH FIXED PATTERN  B DF RECTANGULAR SUPPLY DIFFUSER WITH FIXED PATTERN  C AN 557 STANDARD SUPPLY DIFFUSER  D AN 17D RETURN AIR REGISTER WITH 40° DEFLECTION  E CR500 GRID CORE GRILLE  F AN 18 RETURN AIR REGISTER WITH 0° DEFLECTION  G 731 SIDEWALU REGISTER  H G000 3/4" SLOT LINEAR DIFFUSER		BASEL	ON HART & COOLEY MANUFACTURE
B DF RECTANGULAR SUPPLY DIFFUSER WITH FIXED PATTERN  O ANSST STANDARD SUPPLY DIFFUSER  D AN 17D RETURN AIR REGISTER WITH 40° DEFLECTION  E CR 500 GRID CORE GRILLE  F AN 18 RETURN AIR REGISTER WITH 0° DEFLECTION  G 731 SIDEWALL REGISTER  H G000 3/4" SLOT LINEAR DIFFUSER	REFERENCE	TYPS	REMARKS
O ANSST STANDARD SUPPLY DIFFUSER  D AN 17D RETURN AIR REGISTER WITH 40° DEFLECTION  E CR 500 GRID CORE GRILLE  F AN 18 RETURN AIR REGISTER WITH 0° DEFLECTION  G 731 SIDEWALD REGISTER  H G000 3/2" SLOT LINEAR DIFFUSER	A	PF	ROUND SUPPLY DIFFUSER WITH FIXED PATTERN
D AN 17D RETURN AIR REGISTER WITH 40° DEFLECTION  E CR. 500 GRID CORE GRILLE  F AN 18 RETURN AIR REGISTER WITH 0° DEFLECTION  G 731 SIDEWALL REGISTER  H G000 3/4" SLOT LINEAR DIFFUSER	8	OF	RECTANGULAR SUPPLY DIFFUSER WITH FIXED PATTERN
E CR500 GRID CORE GRILLE  F AN 18 RETURN AIR REGISTER WITH 0° DEFLECTION  G 731 SIDEWALL REGISTER  H G000 3/4" SLOT LINEAR DIFFUSER	0	AN 557	STANDARD SUPPLY DIFFUSER
F AN 78 RETURN AIR REGISTER WITH O' DEFLECTION  6 731 SIDEWALD REGISTER  H 6000 3/4" SLOT LINEAR DIFFUSER	D	AN 770	RETURN AIR REGISTER WITH 40° DEFLECTION
G 731 SIDEWALU REGISTER  H GOOD 3/4" SLOT LINEAR DIFFUSER	E .	CR 500	GRID CORE GRILLE
H GOOD 3/4" SLOT LINEAR DIFFUSER	F	4N 78	RETURN AIR REGISTER WITH O' DEFLECTION
	6	731	SIDEWALL REGISTER
J 411 FLOOR DIFFUSER	14	6000	3/4" SLOT LINEAR DIFFUSER
	J	411	FLOOR DIFFUSER

Municipality of Metropolitan Toronto Parks Department

T.W. Thompson, Commissioner

RJ Thom Clifford & Lawrie Crang & Boake Architects for the Metropolitan Toronto Zoo

MS Yolles Associates Ltd. Structural Engineers HH Angus & Assoc. Ltd Mech. & Elect. Engineers Johnson, Sustronk, Weinster and Associates Ltd.
Landscape Architects

G. GROZA

A 2/60-6

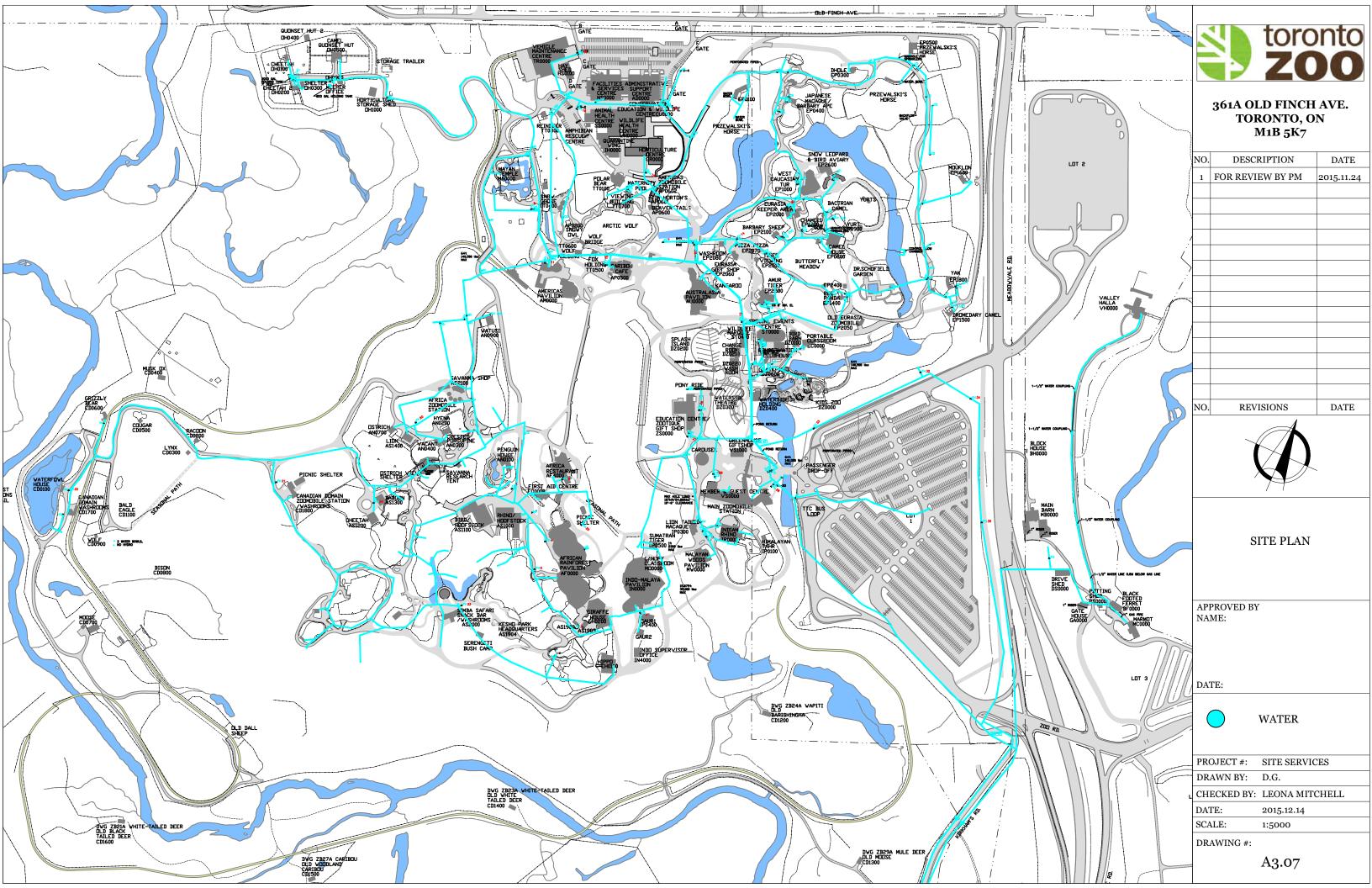
A C. JANCE OF ONTARIO

METROPOLITAN TORONTO ZOO

AFRICA & INDO-MALAYA PAVILION proj office

R.W. P.S. checked contract no. Z-II-72

contract package no. 2



<u> </u>	FIRE HYDRANT INSPEC	TION JUNE 2020	T
HYDRANT #	LOCATION	REPAIRS REQUIRED	COMPLETE
1	INDIAN RHINO FLOWER BED		V
2	SOUTH OF INDO		V
3	GIRAFFE VIEWING		V
4	OUTSIDE GORILLA HOLDING		V
5	WEST SIDE AFRICA LOOKOUT		V
6	AFRICA RESTAURANT		V
7	PENGUINS		V
8	MAYAN TEMPLE PICNIC AREA		٧
9	OUTDOOR HOLDING		V
10	AMERICAS RESTAURANT		V
11	AMERICAS PAVILION	And the second of the second o	V
12	NORTHEAST SPLASH ISLAND		V
13	AUSTRALASIA PAVILION		V
14	EURASIA SNACKBAR		V
15	GROUNDSKEEPING	the transfer of the transfer o	
16	SOUTHEAST NORTH SERVICE	***************************************	V
17	NORTHEAST NORTH SERVICE	·	V
18	NORTHWEST NORTH SERVICE	***************************************	V
19	WEST NORTH SERVICE		
20	NEW LION	to the state of th	V
21	MADAGASCAR RESTAURANT		V
22	WESTON STATION		V
23	SAVANNAH RESUARANT		- V
24	NORTH CHEETAH		v
25	EAST AFRICA NEW GORILLA ENTRANCE		
26	EAST EDUCATION		V
27	SOUTH EDUCATION	***************************************	V
28	MEMBERSHIP	· · · · · · · · · · · · · · · · · · ·	V
29	WEST PARROT FRONT ENTRANCE	SEIZED SHAFT	-
30	SNOW LEAPORD HOLDING ENTRANCE		
31	WATERWAY FILL	DO NOT INSPECT	N/A
32	1ST HYDRANT DROP OFF LOOP NORTH		
33	2ND HYDRANT DROP OFF LOOP NORTH		
34	1ST HYDRANT DROP OFF LOOP SOUTH		V
35	PARKING LOT SECTION A ON BIKE PATH  NEAR CHAMBER		v
36	PANDA PLAZA		

	171 M	IARYCROFT	AVENUE U	NIT 3A WC	OODBRIDGE, Of	N. L4L 5Y3 T: 905- 669-295	50 F: 905-738	-6818	
DATE:			-			MAP #:		5:	1
CUSTOMER	TORONTO ZOO								
STREET:	MEADOWVALE ROA	.D							
CITY:	TORONTO								
NOTE:									]
	Λ		***************************************						_
VALVE OPENS		AND IS	LOCATED				OF HYDRA	NT.	
HYDRANT TYPI	E	MODEL	: <u>M6</u>	7					
LOCATION:	#1								
SECONDÁRY V	ALVE FOUND:	OPEN	V CLC	SED	LEAKING	INOPERABLE			
SECONDARY V		ок		REQ	SIZE	GRASS	ASPH	ALT	
	ALVE BOX LOCATION:			-	3W				_
	L FOR DRAINING			YES (	/ NO	SLOW			
CHECK BARREI	L FOR LEAKS		ОК	L	LEAKS @				
OPERATE HYD	RANT	OK	HARI Z OPEF	D TO RATE		INOPERAB	N F		<del></del>
WATER IN BAR		YES	NO		# OF INCHES	INOI ENAL	, LL		
CHECK CAP GA		OK		PLACE		NUMBER			
NOZZLE CAP C		ОК		MOVE		REPLACE	<del></del>	N/A	レ
LUBRICATE HY		YES	NO NO	***********	nimentair		inimateria	.,,	***************************************
NOZZLE SEAL		ОК		KING					
BARREL COLO	UR		<del></del>	/ -		PAINT REQUIRED	YES	NO	1/
BONNET & HO	SE NOZZLE CAP COLO	UR	/	$ \checkmark$	•				
				/		PAINT REQUIRED	YES	✓ NO	
PUMP HYDRAI	NT IF PLUGGED	YES	NO	<u></u>					
PRESSURE TES	T-STATIC	PSI			57	BLACKBANDED	YES	NO	
	1-2 1/2" NOZZLE (NFPA		PIT	ОТ	BH	EQUAL /0	88	USGP	M
	GHT FROM CENTER HO					2 I INCHE	_ <i> U</i> :S	2001	
	E MAINTENANCE OVER					YES	NO		
COMMENTS:		,							7
QUANTITY	CODE		NON CON	TRACTED F	PARTS:		PRICE		
	,				A z				
DATE SERVICE	D /8/	06/6	<i>ૄ                                    </i>	6	<b>b</b>				_
CUCTOMER	CNIATURE	1		-P			<del></del>		
CUSTOMER SIG	GNATUKE			11					

	171 M	ARYCROFT A	VENU	JE UNIT 3A V	VOODBRIDGE, ON	N. L4L 5Y3 T: 905- 669-295	0 F: 905-7	38-6818	
DATE:						MAP #:		5:	1_
CUSTOMER	TORONTO ZOO								
STREET:	MEADOWVALE ROAL	)							
CITY:	TORONTO								
NOTE:					***************************************				7
									7
					***************************************				1
VALVE OPENS	L	_AND IS LO	CATE	D			OF HYD	RANT.	
HYDRANT TYPE	<b>=</b>	MODEL:		AVK					
LOCATION:	#2								
			*						
SECONDARY V		OPEN _	V	CLOSED EXT REQ	LEAKING	INOPERABLE		DUALT	
SECONDARY V	ALVE BOX; ALVE BOX LOCATION:	ок	*	EAT KEQ _	SIZE	GRASS	AS	PHALT	
	FOR DRAINING			YES	V 7 // NO	SLOW			
CHECK BARREL				ок	LEAKS @				
OPERATE HYDI	RANT	ОК	Q.	HARD TO OPERATE	•	INOPERAB	LE		
WATER IN BAR		YES		NO -	# OF INCHES	WOT ETWO			
CHECK CAP GA	SKETS	ок -	ر ا	REPLACE	•	NUMBER			
NOZZLE CAP CI	HAINS	ок _		REMOVE		REPLACE		N/A	V
LUBRICATE HY	DRANT	YES	V	NO			_		
NOZZLE SEAL		ок	V	LEAKING					
BARREL COLOU	JR			<del>\</del>		PAINT REQUIRED	YES .	NO	4
BONNET & HO	SE NOZZLE CAP COLOU	IR		$\longrightarrow$	/				
211142111122	IT IS DIVISOSED	VE0		/	. /	PAINT REQUIRED	YES .	No	
PUMP HYDRAN	NT IF PLUGGED	YES		- <sup>NO</sup> -	<del>V</del>	BI ACKBANDED	YES	NO	1/
PRESSURE TES	T-STATIC	PSI			56	,BLACKBANDED	, 13		
	l-2 1/2" NOZZLE (NFPA			PITOT	21	, EQUAL //	(9	USGF	PM
	SHT FROM CENTER HO		CAP TO	O GRADE LEV	/EL	32 INCHE	<del></del> /		
PREVENTATIVE	MAINTENANCE OVER	HAUL (PMO)	) REQ	UIRED:		YES	NO		
COMMENTS:						·			7
QUANTITY	CODE		NON (	CONTRACTED	PARTS:		PRICE		
									]
DATE SERVICE	D <u>/8/</u>	06/2	0	BY:					
CUSTOMER SIG	GNATURE			<u> </u>					

	171 M	ARYCROFT	AVENU	JE UNIT 3A	woot	OBRIDGE, OF	N. L4L 5Y3 T: 905- 669-2950	F: 905-7	738-6818	
DATE:	***************************************		-				MAP #:			51
CUSTOMER	TORONTO ZOO									
STREET:	MEADOWVALE ROAI	)								
CITY:	TORONTO								•	
NOTE:										
VALVE OPENS		_ AND IS I	LOCATE	:D				OF HY	DRANT.	
HYDRANT TYPE		MODEL:	:	CENTURY						
LOCATION:	#3								•	
SECONDARY V	ALVE FOUND:	OPEN		CLOSED		LEAKING	INOPERABLE			
SECONDARY V		OK		EXT REQ		SIZE	GRASS	Α.	SPHALT	
	ALVE BOX LOCATION:					. /V.L		- 1-		
	FOR DRAINING			YES	V	NO	SLOW			
CHECK BARREL				ок	V	LEAKS @		-		
OPERATE HYDI	RANT	ок	W	HARD TO OPERATE			INOPERABL	E		
WATER IN BAR		YES		NO .	W	# OF INCHES			•	
CHECK CAP GA	SKETS	ок		REPLACE		•	NUMBER			
NOZZLE CAP CI	HAINS	ок		REMOVE		•	REPLACE		N/A	
LUBRICATE HY	DRANT	YES	V	NO .		•				
NOZZLE SEAL		ок	1	LEAKING		•				
BARREL COLOU	JR			/		•	PAINT REQUIRED	YES	NO	1/
BONNET & HO	SE NOZZLE CAP COLOL	JR	- /	,	$\checkmark$					
				/			PAINT REQUIRED	YES	No	
PUMP HYDRAN	IT IF PLUGGED	YES		NO .	V	•				
DDECOURE TES	T CTATIC	001				110	BLACKBANDED	YES	NO	<u></u>
PRESSURE TEST		PSI		DITOT		HX.	50UM C//	. 1		2014
	-2 1/2" NOZZLE (NFPA		CART	PITOT	F) (F)	X 17	EQUAL ///	7	USC	SPM .
	HT FROM CENTER HO				EVEL		INCHES			
	MAINTENANCE OVER	HAUL (PM	O) REQ	UIRED:			YES	_NO	***************************************	
COMMENTS:										
QUANTITY	CODE		NON (	CONTRACTI	ED PAR	TS:		PRICE		
						7/1	***************************************	1		
		1			1	1/				
DATE SERVICE	18/0	6/2	0	BY:	1	<b>1</b> 5		=		
CUSTOMER SIG	SNATURE /	/			<u>/</u>					

	171 N	MARYCROFT	AVENU	JE UNIT 3A	WOODBRIDGE, ON	N. L4L 5Y3 T: 905- 669-29	50 F: 905-73	88-6818	
DATE:						MAP #:		5:	<u> </u>
CUSTOMER	TORONTO ZOO								
STREET:	MEADOWVALE ROA	\D							
CITY:	TORONTO				· .				
NOTE:									7
VALVE OPENS		AND IS I	.OCATE	D			OF HYDI	RANT.	_
HYDRANT TYP	E	MODEL:	<u> </u>	B50B					
LOCATION:	#4-REAR OF GORILL	A							
SECONDARY V	ALVE FOUND:	OPEN		CLOSED	LEAKING	INOPERABLE			
SECONDARY V	ALVE BOX;	ок		EXT REQ	SIZE	GRASS	ASF	HALT	_
SECONDARY V	ALVE BOX LOCATION:				NL		-	·	-
CHECK BARRE	L FOR DRAINING			YES	✓ NO	SLOW			
CHECK BARRE	L FOR LEAKS			ок	LEAKS @				
OPERATE HYD	RANT	ОК	12	HARD TO OPERATE		INOPERA	BLE		_
WATER IN BAI		YES		NO .	# OF INCHES				
CHECK CAP GA		OK	17	REPLACE	<del></del> .	NUMBER			
NOZZLE CAP C	CHAINS	ОК	-A-Feb	REMOVE		REPLACE		N/A	L
LUBRICATE HY	/DRANT	YES	V	NO .					
NOZZLE SEAL		ОК	V	LEAKING					
BARREL COLO	UR			· 🗸 ·		PAINT REQUIRED	YES	NO	l
BONNET & HO	OSE NOZZLE CAP COLO	UR		1	$\vee$		_		
					/	PAINT REQUIRED	YES	✓ NO	
PUMP HYDRA	NT IF PLUGGED	YES		NO			-		
				-	., ,1	BLACKBANDED	YES _	NONO	L
PRESSURE TES	ST-STATIC	PSI			44				
FLOW CHECK	1-2 1/2" NOZZLE (NFP.	A24)		PITOT	22	EQUAL X	75	USGF	M
HYDRANT HEI	GHT FROM CENTER H	OSE NOZZLE	CAP T	O GRADE L	EVEL		ES		
PREVENTATIV	E MAINTENANCE OVE	RHAUL (PM	O) REQ	UIRED:		YES	NO		
COMMENTS:	<u> </u>								٦
QUANTITY	CODE	<del></del>	NON (	CONTRACT	ED PARTS:		PRICE		
					$\triangle$				
					H				
DATE SERVICE	:D <u>/9</u> /	06/1	20	BY:	XI				
	/ <del>-//</del>	10	- 0	: 					
CUSTOMER SI	GNATURE	<i>r</i>	***************************************						

### ANNUAL PREVENTATIVE MAINTENANCE REPORT

171 MARYCROFT AVENUE UNIT 3A WOODBRIDGE, ON. L4L 5Y3 T: 905- 669-2950 F: 905-738-6818 DATE: MAP #: 51 **CUSTOMER** TORONTO ZOO STREET: MEADOWVALE ROAD CITY: TORONTO NOTE: **VALVE OPENS** AND IS LOCATED OF HYDRANT. **HYDRANT TYPE** MODEL: **CENTURY** LOCATION: #5 SECONDARY VALVE FOUND: **OPEN** CLOSED LEAKING **INOPERABLE** SECONDARY VALVE BOX; OK **EXT REQ** SIZE **GRASS** ASPHALT SECONDARY VALVE BOX LOCATION: CHECK BARREL FOR DRAINING NO **SLOW CHECK BARREL FOR LEAKS** LEAKS @ OK HARD TO **OPERATE HYDRANT** OK OPERATE **INOPERABLE** WATER IN BARREL YES NO # OF INCHES **CHECK CAP GASKETS** ОК NUMBER **REPLACE NOZZLE CAP CHAINS** ОК REMOVE REPLACE LUBRICATE HYDRANT YES NO **NOZZLE SEAL** OK **LEAKING BARREL COLOUR PAINT REQUIRED BONNET & HOSE NOZZLE CAP COLOUR PAINT REQUIRED** PUMP HYDRANT IF PLUGGED YES NO **BLACKBANDED** YES PRESSURE TEST-STATIC **PSI** FLOW CHECK 1-2 1/2" NOZZLE (NFPA24) **PITOT EQUAL USGPM** HYDRANT HEIGHT FROM CENTER HOSE NOZZLE CAP TO GRADE LEVEL INCHES PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED: YES **COMMENTS:** QUANTITY CODE NON CONTRACTED PARTS: PRICE **DATE SERVICED CUSTOMER SIGNATURE** 

	171	MARYCROFT	AVENU	JE UNIT 3A	woo	DBRIDGE, OI	N. L4L 5Y3 T: 905- 669-295	0 F: 905	-738-6818	
DATE:	-						MAP #:			51
CUSTOMER	TORONTO ZOO									
STREET:	MEADOWVALE RO	AD								
CITY:	TORONTO					u <sup>z</sup>				
NOTE:	<u></u>									
NOTE.										
							***************************************		***************************************	
WALLE OPENS	L	AND 16.1								
VALVE OPENS HYDRANT TYPE	•	AND IS L  MODEL:						OF H	YDRANT.	
LOCATION:	#6	MODEL		M67	·				_	
tocanon.									-	
SECONDARY V	ALVE FOUND:	OPEN		CLOSED		LEAKING	INOPERABLE			
SECONDARY V	ALVE BOX;	ок		EXT REQ		SIZE	GRASS		ASPHALT	
SECONDARY VA	ALVE BOX LOCATION	l:				NL				
CHECK BARREL	FOR DRAINING			YES	V	NO.	SLOW			
CHECK BARREL	FOR LEAKS			OK HARD TO	V	LEAKS @				
OPERATE HYDE	RANT	ОК	U	OPERATE		_	INOPERAB	LE		
WATER IN BAR	REL	YES		NO	U	# OF INCHES				
CHECK CAP GA	SKETS	ок	V	REPLACE		-	NUMBER			
NOZZLE CAP C	HAINS	ОК		REMOVE		_	REPLACE		N	/A <u>L</u>
LUBRICATE HY	DRANT	YES	V	NO		<u>.</u>				
NOZZLE SEAL		OK	V	LEAKING		-				
BARREL COLOU	JR			У	. /		PAINT REQUIRED	YES	N	o
BONNET & HO	SE NOZZLE CAP COL	OUR			<u>y</u> _					
D. 18.40 LIV.00 A.A.	T IF DI LICCED				1		PAINT REQUIRED	YES	N	° <u> </u>
PUMP HYDRAN	IT IF PLUGGED	YES		NO	V_	-	DIACKDANDED	VEC		•
PRESSURE TEST	Γ-STATIC	PSI				42	BLACKBANDED	YES	N	· <u> </u>
FLOW CHECK 1	-2 1/2" NOZZLE (NFI	PA24)		PITOT		34	EQUAL //	88	<del></del> υ	SGPM
HYDRANT HEIG	HT FROM CENTER H	IOSE NOZZLE	CAP TO	O GRADE L	EVEL		19" INCHES	<del>-</del>		
PREVENTATIVE	MAINTENANCE OVI	ERHAUL (PMO	O) REQ	UIRED:			YES	NO		
COMMENTS:						·····				
QUANTITY	CODE		NON C	CONTRACT	ED PAF	RTS:		PRICE		
						<u>,/</u>				
	l	10. 10	<u>,,                                   </u>	(	4	And the second s				
DATE SERVICE	· <u>/ / /</u>	106/2	.0	BY:	$\frac{\sum_{i}^{\mu}}{\sqrt{2}}$					
CUSTOMER SIG	/ INATURE	/		المرابع	7					
-55.5771211 510										

	171 M	ARYCROF	r aveni	JE UNIT 3A W	OODBRIDGE, Of	N. L4L 5Y3 T: 905- 669	9-2950 F	: 905-7	38-6818	
DATE:						MAP#:			51	<u>.</u>
CUSTOMER	TORONTO ZOO									
STREET:	MEADOWVALE ROA	D								
CITY:	TORONTO									
NOTE:										]
VALVE OPENS	V	AND IS	LOCATE	ED .				OF HYD	RANT.	J
HYDRANT TYPE		 MODEL	.:	AVK						
LOCATION:	#7							-		
SECONDARY VA	ALVE FOUND:	OPEN		CLOSED	LEAKING	INOPERA	BLE			
SECONDARY VA	ALVE BOX;	ок	~	EXT REQ	SIZE	GRASS		AS	PHALT	_
SECONDARY VA	ALVE BOX LOCATION:				# E					
CHECK BARREL	FOR DRAINING			YES	NO	SLOW				
CHECK BARREL	FOR LEAKS			ок	LEAKS @					_
OPERATE HYDE	RANT	ОК	V	HARD TO OPERATE		INOP	ERABLE			
WATER IN BAR	REL	YES		NO L	# OF INCHES					
CHECK CAP GA	SKETS	ОК	<u>.                                    </u>	REPLACE		NUMBER				. 7
NOZZLE CAP C	HAINS	ОК		REMOVE		REPLACE			N/A	
LUBRICATE HY	DRANT	YES		NO						
NOZZLE SEAL		OK		LEAKING						1/
BARREL COLOL	JR			<del></del>		PAINT REQUIRED		YES .	NO NO	
BONNET & HO	SE NOZZLE CAP COLOL	JR								
PUMP HYDRAN	IT IE DI LIGGED	YES		NO (	/	PAINT REQUIRED		YES .	No	
FOWE TIDINAL	II II FLOOGED	11.3				BLACKBANDED		YES	NO	V
PRESSURE TEST	Γ-STATIC	PSI			40		00			
FLOW CHECK 1	-2 1/2" NOZZLE (NFPA	(24)		PITOT	20	EQUAL	89'	7	USGP	М
HYDRANT HEIG	HT FROM CENTER HO	SE NOZZL	E CAP T	O GRADE LEVI	EL	<u> 18</u> IN	NCHES			
PREVENTATIVE	MAINTENANCE OVER	RHAUL (PN	10) REC	UIRED:		YES		NO		
COMMENTS:		<del></del>								1
QUANTITY	CODE	····	NON	CONTRACTED	PARTS:			PRICE		
1			1							1
	/	I 1			7/				<del></del>	1
DATE SERVICE	19/0	6/20	2//	ВҮ:	HI.			:		1
CUSTOMER SIG	SNATURE		<u> </u>	<u> </u>						
		/	//					•		

	171 M	ARYCROFT	AVENU	JE UNIT 3A	WOODBRIDGE, ON	N. L4L 5Y3 T: 905- 669-295	0 F: 905-738-6818	3
DATE:	•		•			MAP#:		51
CUSTOMER	TORONTO ZOO							
STREET:	MEADOWVALE ROA	D						
CITY:	TORONTO							
NOTE:								
VALVE OPENS	<u></u>	AND IS	LOCATE	:D			ÓF HYDRANT.	
HYDRANT TYP	E	MODEL		M67				
LOCATION:	#8							
CECONE LECT	111 (F FOLUE	0.5	1.7	0.00		W		
SECONDARY V		OPEN		CLOSED	LEAKING	INOPERABLE	ACDUAL T	
SECONDARY V		OK	*ox*	EXT REQ	SIZE.	GRASS	ASPHALT_	
	ALVE BOX LOCATION: L FOR DRAINING			VEC	) /- NO	SLOW		
CHECK BARREI				YES OK	LEAKS @	SLOVV		
			. /	HARD TO	- LLANS @			
OPERATE HYD		OK		OPERATE	A DE MONTE	INOPERAB	LE	
WATER IN BAF		YES		NO DEDITOR	# OF INCHES			
CHECK CAP GA		OK		REPLACE		NUMBER		\$1/A \$
NOZZLE CAP C		OK		REMOVE		REPLACE	<del></del> '	N/A
LUBRICATE HY	DRANT	YES	12	NO				
NOZZLE SEAL	HD	OK		- LEAKING		DAINT REQUIRED	VEC	NO É
BARREL COLO	OSE NOZZLE CAP COLO	ID			/	PAINT REQUIRED	YES	NO _
BONNET & HC	SE NOZZLE CAP COLO	, n			<del></del>	PAINT REQUIRED	YES 🕼	NO
PUMP HYDRAI	NT IF PLUGGED	YES		NO	V	TAINT REQUIRED		
			•	-		BLACKBANDED	YES	NO /
PRESSURE TES	T-STATIC	PSI			50			-4-6
FLOW CHECK	1-2 1/2" NOZZLE (NFPA	(24)		PITOT	24	EQUAL 9	14	USGPM
	GHT FROM CENTER HO		CAP T	O GRADE L	EVEL	20 INCHES	S	
PREVENTATIV	E MAINTENANCE OVER	RHAUL (PM	O) REQ	UIRED:		YES	NO	
COMMENTS:								
QUANTITY	CODE		NON	CONTRACT	ED PARTS:		PRICE	
DATE SERVICE	D / 3 /	06/8	20	BY:	Stell			
	7	7	<b></b>	4	- V		-	
CUSTOMER SI	GNATURE				<del>,/</del>			

## ANNUAL PREVENTATIVE MAINTENANCE REPORT

171 MARYCROFT AVENUE UNIT 3A WOODBRIDGE, ON. L4L 5Y3 T: 905- 669-2950 F: 905-738-6818 DATE: MAP #: 51 **CUSTOMER TORONTO ZOO** STREET: MEADOWVALE ROAD CITY: TORONTO NOTE: **VALVE OPENS** AND IS LOCATED OF HYDRANT. **HYDRANT TYPE** MODEL: B50B LOCATION: #9 SECONDARY VALVE FOUND: OPEN CLOSED **LEAKING** INOPERABLE SECONDARY VALVE BOX: OK **EXT REQ** ASPHALT SIZE **GRASS** SECONDARY VALVE BOX LOCATION: CHECK BARREL FOR DRAINING YES NO SLOW **CHECK BARREL FOR LEAKS** LEAKS @ OK HARD TO **OPERATE HYDRANT** OK **OPERATE INOPERABLE** # OF INCHES WATER IN BARREL YES NO **CHECK CAP GASKETS** ОК REPLACE **NUMBER NOZZLE CAP CHAINS** ОК **REMOVE** REPLACE LUBRICATE HYDRANT YES NO **NOZZLE SEAL** OK **LEAKING BARREL COLOUR PAINT REQUIRED BONNET & HOSE NOZZLE CAP COLOUR PAINT REQUIRED** NO YES PUMP HYDRANT IF PLUGGED YES NO BLACKBANDED NO PRESSURE TEST-STATIC PSI FLOW CHECK 1-2 1/2" NOZZLE (NFPA24) PITOT **EQUAL USGPM** HYDRANT HEIGHT FROM CENTER HOSE NOZZLE CAP TO GRADE LEVEL PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED: YES **COMMENTS:** CODE QUANTITY NON CONTRACTED PARTS: PRICE **DATE SERVICED** BY: **CUSTOMER SIGNATURE** 

### ANNUAL PREVENTATIVE MAINTENANCE REPORT

171 MARYCROFT AVENUE UNIT 3A WOODBRIDGE, ON. L4L 5Y3 T: 905- 669-2950 F: 905-738-6818 DATE: MAP #: 51 **CUSTOMER** TORONTO ZOO STREET: MEADOWVALE ROAD CITY: TORONTO NOTE: **VALVE OPENS** AND IS LOCATED OF HYDRANT. **HYDRANT TYPE** MODEL: M67 LOCATION: #10 SECONDARY VALVE FOUND: **OPEN** CLOSED **LEAKING INOPERABLE** SECONDARY VALVE BOX; **EXT REQ** OK ASPHALT SIZE **GRASS** SECONDARY VALVE BOX LOCATION: CHECK BARREL FOR DRAINING NO **SLOW CHECK BARREL FOR LEAKS** OK LEAKS@ HARD TO **OPERATE HYDRANT** OK **OPERATE INOPERABLE** WATER IN BARREL YES NO **CHECK CAP GASKETS** NUMBER OK REPLACE **NOZZLE CAP CHAINS** REMOVE REPLACE OK LUBRICATE HYDRANT YES NO **NOZZLE SEAL** OK **LEAKING BARREL COLOUR** PAINT REQUIRED YES NO **BONNET & HOSE NOZZLE CAP COLOUR PAINT REQUIRED** PUMP HYDRANT IF PLUGGED YES NO BLACKBANDED NO PRESSURE TEST-STATIC PSI FLOW CHECK 1-2 1/2" NOZZLE (NFPA24) PITOT **EQUAL** USGPM HYDRANT HEIGHT FROM CENTER HOSE NOZZLE CAP TO GRADE LEVEL **INCHES** PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED: YES NO COMMENTS: QUANTITY CODE NON CONTRACTED PARTS: PRICE **DATE SERVICED** BY: **CUSTOMER SIGNATURE** 

#### ANNUAL PREVENTATIVE MAINTENANCE REPORT

171 MARYCROFT AVENUE UNIT 3A WOODBRIDGE, ON. L4L 5Y3 T: 905- 669-2950 F: 905-738-6818 DATE: MAP #: 51 **CUSTOMER** TORONTO ZOO STREET: **MEADOWVALE ROAD** CITY: TORONTO NOTE: **VALVE OPENS** AND IS LOCATED OF HYDRANT. **HYDRANT TYPE** MODEL: **CENTURY** LOCATION: #11 SECONDARY VALVE FOUND: OPEN ✓ CLOSED LEAKING **INOPERABLE** SECONDARY VALVE BOX; **EXT REQ** ASPHALT OK SIZE **GRASS** SECONDARY VALVE BOX LOCATION: **CHECK BARREL FOR DRAINING** NO **SLOW CHECK BARREL FOR LEAKS** ОК LEAKS @ HARD TO **OPERATE HYDRANT** OK **OPERATE INOPERABLE** WATER IN BARREL YES NO # OF INCHES **CHECK CAP GASKETS** OK **REPLACE** NUMBER **NOZZLE CAP CHAINS** REPLACE OK **REMOVE** LUBRICATE HYDRANT NO YES **NOZZLE SEAL** OK **LEAKING BARREL COLOUR** PAINT REQUIRED YES NO **BONNET & HOSE NOZZLE CAP COLOUR** PAINT REQUIRED PUMP HYDRANT IF PLUGGED YES NO **BLACKBANDED** PRESSURE TEST-STATIC PSI FLOW CHECK 1-2 1/2" NOZZLE (NFPA24) PITOT **EQUAL USGPM** HYDRANT HEIGHT FROM CENTER HOSE NOZZLE CAP TO GRADE LEVEL **INCHES** PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED: YES NO COMMENTS: QUANTITY CODE NON CONTRACTED PARTS: PRICE DATE SERVICED BY: **CUSTOMER SIGNATURE** 

STREET: MEADOWVALE ROAD		171 N	MARYCROFT	AVEN	JE UNIT 3A	WOODBRIDGE, OF	N. L4L 5Y3 T: 905- 669-295	60 F: 905-	738-6818	
STREET: MEADOWVALE ROAD CITY: TORONTO  NOTE:  VALVE OPENS AND IS LOCATED OF HYDRANT. HYDRANT TYPE MODEL: CENTURY  LOCATION: #12  SECONDARY VALVE FOUND: OPEN CLOSED LEAKING INOPERABLE SECONDARY VALVE BOX LOCATION: CHECK BARREL FOR DRAINING YES NO LEAKS @ SIZE GRASS ASPHALT SECONDARY VALVE BOX LOCATION: CHECK BARREL FOR LEAKS OK LEAKS @ INOPERABLE SECONDARY VALVE BOX LOCATION: CHECK BARREL FOR DRAINING YES NO LEAKS @ INOPERABLE  WATER IN BARREL VES NO LOFENCHES  NOTERATE HYDRANT OK OFENATE INOPERABLE WATER IN BARREL YES NO NO NOTINCHES  NOZZLE CAP CHAINS OK REPHACE NUMBER NOZZLE CAP CHAINS OK REMOVE REPLACE NIMBER NOZZLE CAP CHAINS OK LEAKING BARREL COLOUR PAINT REQUIRED YES NO DEBACKBANT OF SIZE BARREL COLOUR PAINT REQUIRED YES NO DEBACKBANDED YES NO DEBACK	DATE:	***************************************		-			MAP #:		5	1
CITY: TORONTO  NOTE:	CUSTOMER	TORONTO ZOO								
NOTE:  VALVE OPENS AND IS LOCATED OF HYDRANT.  HYDRANT TYPE MODE: CENTURY  LOCATION: #12  SECONDARY VALVE FOUND: OPEN CLOSED LEAKING INOPERABLE  SECONDARY VALVE BOX, OK EXT REQ SIZE GRASS ASPHALT  SECONDARY VALVE BOX LOCATION:  CHECK BARREL FOR DRAINING YES NO SLOW  CHECK BARREL FOR LEAKS  OK LEAKS @ NO SLOW  OPERATE HYDRANT  WATER IN BARREL YES NO BOY BOY BOY BOY BOY BOY BOY BOY BOY BO	STREET:	MEADOWVALE ROA	<b>ND</b>						_	
VALVE OPENS AND IS LOCATED OF HYDRANT. HYDRANT TYPE	CITY:	TORONTO							-	
HYDRANT TYPE  LOCATION: #12  SECONDARY VALVE FOUND: OPEN CLOSED LEAKING INOPERABLE SECONDARY VALVE BOX; OK EXT REQ SIZE GRASS ASPHALT  SECONDARY VALVE BOX LOCATION: CHECK BARREL FOR DRAINING YES NO SLOW  CHECK BARREL FOR LEAKS OK LEAKS OF HARD TO OPERATE INOPERABLE WATER IN BARREL YES NO SOF INCHES CHECK CAP GASKETS OK REPLACE NUMBER NOZZIE CAP CHAINS OK REMOVE REPLACE NAMBER  NOZZIE CAP CHAINS OK LEAKING BARREL COLOUR  PAINT REQUIRED YES NO  PAINT REQUIRED YES NO  PAINT REQUIRED YES NO  PRESSURE TEST-STATIC PSI FLOW CHECK 1-2 1/2" NOZZIE (NFPA24) PYORANT HEIGHT FROM CENTER HOOSE NOZZIE CAP TO GRADE LEVEL PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED:  DATE SERVICED  DATE SERVICED  BY:  PAINT SEQUAL //S NO  USGPM  HYDRANT HEIGHT FROM CENTER HOOSE NOZZIE CAP TO GRADE LEVEL  PRICE  DATE SERVICED  DATE SERVICED  BY:	NOTE:									1
HYDRANT TYPE  LOCATION: #12  SECONDARY VALVE FOUND: OPEN CLOSED LEAKING INOPERABLE SECONDARY VALVE BOX; OK EXT REQ SIZE GRASS ASPHALT  SECONDARY VALVE BOX LOCATION: CHECK BARREL FOR DRAINING YES NO SLOW  CHECK BARREL FOR LEAKS OK LEAKS OF HARD TO OPERATE INOPERABLE WATER IN BARREL YES NO SOF INCHES CHECK CAP GASKETS OK REPLACE NUMBER NOZZIE CAP CHAINS OK REMOVE REPLACE NAMBER  NOZZIE CAP CHAINS OK LEAKING BARREL COLOUR  PAINT REQUIRED YES NO  PAINT REQUIRED YES NO  PAINT REQUIRED YES NO  PRESSURE TEST-STATIC PSI FLOW CHECK 1-2 1/2" NOZZIE (NFPA24) PYORANT HEIGHT FROM CENTER HOOSE NOZZIE CAP TO GRADE LEVEL PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED:  DATE SERVICED  DATE SERVICED  BY:  PAINT SEQUAL //S NO  USGPM  HYDRANT HEIGHT FROM CENTER HOOSE NOZZIE CAP TO GRADE LEVEL  PRICE  DATE SERVICED  DATE SERVICED  BY:										
SECONDARY VALVE FOUND: OPEN CLOSED LEAKING INOPERABLE SECONDARY VALVE BOX; OK EXT REQ SIZE GRASS ASPHALT SECONDARY VALVE BOX LOCATION:  CHECK BARREL FOR DRAINING YES NO SLOW  CHECK BARREL FOR DRAINING  OPERATE HYDRANT OK OPERATE INOPERABLE  WATER IN BARREL  WATER IN BARREL  VES NO FINCHES  NOZILE CAP CHAINS OK REMOVE REPLACE NUMBER  NOZZLE CAP CHAINS OK REMOVE REPLACE NO NO LEAKING  BARREL COLOUR  PAINT REQUIRED YES NO  BLACKBANDED YES NO  POPERABLE  PRESSURE TEST-STATIC  PSI FLOW CHECK 1-2 1/2" NOZZLE (NFPA24)  HYDRANT HEIGHT FROM CENTER HOSE NOZZLE CAP TO GRADE LEVEL  PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED:  DATE SERVICED  DATE SERVICED  PAINT AND INCHES  PRICE  DATE SERVICED  PRICE  PRICE  PRICE  DATE SERVICED  DATE SERVICED  SLOW  S	VALVE OPENS		AND IS	LOCATE	ED			OF HY	DRANT.	
SECONDARY VALVE FOUND: OPEN CLOSED LEAKING INOPERABLE SECONDARY VALVE BOX; OK EXT REQ SIZE GRASS ASPHALT  SECONDARY VALVE BOX LOCATION:  CHECK BARREL FOR DRAINING YES NO SLOW  OPERATE HYDRANT OK OPERATE INOPERABLE  WATER IN BARREL YES NO FORMATION OK OPERATE INOPERABLE  WATER IN BARREL YES NO FORMATION OK REMOVE REPLACE NUMBER  NOZZLE CAP CHAINS OK REMOVE REPLACE NUMBER  NOZZLE CAP CHAINS OK LEAKING  BARREL COLOUR  PAINT REQUIRED YES NO  BUNNET & HOSE NOZZLE CAP COLOUR  PAINT REQUIRED YES NO  BLACKBANDED YES NO  COMMENTS:  DATE SERVICED  DATE SERVICED  DATE SERVICED  DATE SERVICED  DATE SERVICED  SLOW  INOPERABLE  INOPERAB	HYDRANT TYPE		MODEL	:	CENTURY					
SECONDARY VALVE BOX; OK EXT REQ SIZE GRASS ASPHALT  SECONDARY VALVE BOX LOCATION:  CHECK BARREL FOR DRAINING  CHECK BARREL FOR LEAKS  OK LEAKS @ HARD TO OPERATE  OPERATE HYDRANT  OK OPERATE  WATER IN BARREL  VES NO NO NOMERS  CHECK CAP GASKETS  OK REPLACE  NOZIZE CAP CHAINS  OK REMOVE  REPLACE  NOZIZE SEAL  OK LEAKING  BARREL COLOUR  PAINT REQUIRED  YES NO  PUMP HYDRANT IF PLUGGED  PRESSURE TEST-STATIC  PSI  FLOW CHECK 1-2 1/2" NOZIZE (NFPA24)  HYDRANT HEIGHT FROM CENTER HOSE NOZIZE CAP TO GRADE LEVEL  PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED:  QUANTITY  CODE  NON CONTRACTED PARTS:  PRICE  DATE SERVICED  PAINT REQUIRED  PRICE  PRICE	LOCATION:	#12							- -	
SECONDARY VALVE BOX; OK EXT REQ SIZE GRASS ASPHALT  SECONDARY VALVE BOX LOCATION:  CHECK BARREL FOR DRAINING  CHECK BARREL FOR LEAKS  OK LEAKS @ HARD TO OPERATE  OPERATE HYDRANT  OK OPERATE  WATER IN BARREL  VES NO NO NOMERS  CHECK CAP GASKETS  OK REPLACE  NOZIZE CAP CHAINS  OK REMOVE  REPLACE  NOZIZE SEAL  OK LEAKING  BARREL COLOUR  PAINT REQUIRED  YES NO  PUMP HYDRANT IF PLUGGED  PRESSURE TEST-STATIC  PSI  FLOW CHECK 1-2 1/2" NOZIZE (NFPA24)  HYDRANT HEIGHT FROM CENTER HOSE NOZIZE CAP TO GRADE LEVEL  PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED:  QUANTITY  CODE  NON CONTRACTED PARTS:  PRICE  DATE SERVICED  PAINT REQUIRED  PRICE  PRICE	SECONDARY V	ALVE FOLIND.	ODEN		CLOSED	LEAVING	INODERADIE			
SECONDARY VALVE BOX LOCATION:  CHECK BARREL FOR DRAINING  CHECK BARREL FOR DRAINING  CHECK BARREL FOR LEAKS  OK   LEAKS @    OPERATE   MARD TO    OPERATE   MARD TO    OPERATE   INOPERABLE    WATER IN BARREL   YES   NO   # OF INCHES    CHECK CAP GASKETS   OK   REPLACE   NUMBER    NOZZLE CAP CHAINS   OK   REMOVE   REPLACE   N/A   LUBRICATE HYDRANT   YES   NO    NOZZLE SEAL   OK   LEAKING    BARREL COLOUR   PAINT REQUIRED   YES   NO    PUMP HYDRANT IF PLUGGED   YES   NO    PRESSURE TEST-STATIC   PSI    FLOW CHECK 1-2 1/2" NOZZLE (NFPA24)   PITOT   37   EQUAL   1/5   D    FREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED:   YES   NO    QUANTITY   CODE   NON CONTRACTED PARTS:   PRICE    DATE SERVICED   9Y:								Δ.	- Sphait	
CHECK BARREL FOR DRAINING  YES  NO  SLOW  CHECK BARREL FOR LEAKS  OK  HARD TO  OPERATE  OPERATE  WATER IN BARREL  VES  NO  REPLACE  NUMBER  NOZZLE CAP GASKETS  OK  REPLACE  NUMBER  NOZZLE CAP CHAINS  OK  REMOVE  REPLACE  NUMBER  NOZZLE SEAL  OK  LEAKING  BARREL COLOUR  PAINT REQUIRED  PAINT REQUIRED  YES  NO  PRESSURE TEST-STATIC  PSI  FLOW CHECK 1-2 1/2" NOZZLE (APFA24)  HYDRANT HEIGHT FROM CENTER HOSE NOZZLE CAP TO GRADE LEVEL  PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED:  QUANTITY  CODE  NON CONTRACTED PARTS:  PRICE  PRICE  DATE SERVICED  PRICE					NEQ	1/4	anas minimum	^	o. iriti	
CHECK BARREL FOR LEAKS  OK HARD TO OPERATE  WATER IN BARREL  VES NO HOF INCHES  CHECK CAP GASKETS  OK REPLACE  NOZZLE CAP CHAINS  OK REMOVE  REPLACE  NOZZLE CAP CHAINS  OK LEAKING  BARREL COLOUR  PAINT REQUIRED  PAINT REQUIRED  PAINT REQUIRED  VES NO  PUMP HYDRANT IF PLUGGED  PESSURE TEST-STATIC  PSI  FLOW CHECK 1-2 1/2" NOZZLE (NFPA24)  PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED:  OUANNITY  CODE  NON CONTRACTED PARTS:  PRICE  PRICE  PRICE  DATE SERVICED  PRICE					YES	NO	SLOW			
OPERATE HYDRANT  OK OPERATE WATER IN BARREL YES NO OF INCHES  NUMBER NUMBER NUMBER NOZZLE CAP CASKETS OK REMOVE REPLACE NUMBER NUMBER NOZZLE CAP CHAINS OK REMOVE REPLACE N/A  LUBRICATE HYDRANT YES NO NO NOZZLE SEAL OK LEAKING BARREL COLOUR PAINT REQUIRED YES NO PUMP HYDRANT IF PLUGGED YES NO BLACKBANDED YES NO PRESSURE TEST-STATIC PSI FLOW CHECK 1-2 1/2" NOZZLE (NFPA24) PITOT BLACKBANDED YES NO COMMENTS:  QUANTITY CODE  NON CONTRACTED PARTS: PRICE  DATE SERVICED  DATE SERVICED  PSI  QUANTITY DATE SERVICED  PSI  QUANTITY DATE SERVICED  PSI  QUANTITY DATE SERVICED  NO  OFFRATE INOPERABLE  NUMBER NUM	CHECK BARREL	FOR LEAKS			ок	LEAKS @		<del></del> .		
WATER IN BARREL  VES  NO  REPLACE  NUMBER  NUMBER  NOZZLE CAP CHAINS  OK  REMOVE  REPLACE  NUMBER  NUMBER  NOZZLE CAP CHAINS  OK  REMOVE  REPLACE  N/A  LUBRICATE HYDRANT  YES  NO  NOZZLE SEAL  OK  LEAKING  BARREL COLOUR  PAINT REQUIRED  YES  NO  PAINT REQUIRED  YES  NO  PRESSURE TEST-STATIC  PSI  FLOW CHECK 1-2 1/2" NOZZLE (NFPA24)  HYDRANT HEIGHT FROM CENTER HOSE NOZZLE CAP TO GRADE LEVEL  PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED:  QUANTITY  CODE  NON CONTRACTED PARTS:  PRICE  DATE SERVICED  PYES  NO  DATE SERVICED  PYES  NO  DATE SERVICED  PRICE	OPERATE HYDI	RANT	ОК	1/		•	INOPERAB	LE		
NOZZLE CAP CHAINS  OK  REMOVE  REPLACE  N/A  LUBRICATE HYDRANT  YES  NO  NOZZLE SEAL  OK  LEAKING  BARREL COLOUR  PAINT REQUIRED  PAINT REQUIRED  YES  NO  PUMP HYDRANT IF PLUGGED  PESSURE TEST-STATIC  PSI  FLOW CHECK 1-2 1/2" NOZZLE (NFPA24)  PITOT  BLACKBANDED  YES  NO  USGPM  HYDRANT HEIGHT FROM CENTER HOSE NOZZLE CAP TO GRADE LEVEL  PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED:  QUANTITY  CODE  NON CONTRACTED PARTS:  PRICE  DATE SERVICED  PRICE					NO .	# OF INCHES			-	
LUBRICATE HYDRANT  NO NOZZLE SEAL  OK  LEAKING  BARREL COLOUR  PAINT REQUIRED	CHECK CAP GA	SKETS	ок	V	REPLACE		NUMBER			
NOZZLE SEAL  BARREL COLOUR  BONNET & HOSE NOZZLE CAP COLOUR  PAINT REQUIRED  PAINT REQUIRED  PAINT REQUIRED  PAINT REQUIRED  YES  NO  PAINT REQUIRED  PAINT RE	NOZZLE CAP CI	HAINS	ОК		REMOVE		REPLACE		N/A	L
BARREL COLOUR  BONNET & HOSE NOZZLE CAP COLOUR  PAINT REQUIRED  PAINT REQUIRED	LUBRICATE HY	DRANT	YES	V	NO					
BONNET & HOSE NOZZLE CAP COLOUR  PAINT REQUIRED  PAINT REQUIRED  PAINT REQUIRED  PESSURE TEST-STATIC  PSI  FLOW CHECK 1-2 1/2" NOZZLE (NFPA24)  PITOT  BLACKBANDED  YES  NO  USGPM  HYDRANT HEIGHT FROM CENTER HOSE NOZZLE CAP TO GRADE LEVEL  PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED:  YES  NO  USGPM  OUANTITY  CODE  NON CONTRACTED PARTS:  PRICE  DATE SERVICED  PAINT REQUIRED  YES  NO  DATE SERVICED  PAINT REQUIRED  YES  NO  DATE SERVICED  PAINT REQUIRED  YES  NO  DATE SERVICED  PRICE	NOZZLE SEAL		OK	V	LEAKING					
PAINT REQUIRED  YES  NO  BLACKBANDED  YES  NO  BLACKBANDED  YES  NO  PRESSURE TEST-STATIC  PSI  FLOW CHECK 1-2 1/2" NOZZLE (NFPA24)  HYDRANT HEIGHT FROM CENTER HOSE NOZZLE CAP TO GRADE LEVEL  PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED:  COMMENTS:  QUANTITY  CODE  NON CONTRACTED PARTS:  PRICE  DATE SERVICED  PAINT REQUIRED  YES  NO  USGPM  HYDRANT REQUIRED  PESSURE TEST-STATIC  PSI  BLACKBANDED  YES  NO  DATE SERVICED  PRICE  PAINT REQUIRED  PESSURE TEST-STATIC  BLACKBANDED  YES  NO  DATE SERVICED  PRICE  PRICE	BARREL COLOU	JR			У	,	PAINT REQUIRED	YES	NO	_0
PUMP HYDRANT IF PLUGGED  YES  NO  BLACKBANDED  YES  NO  PRESSURE TEST-STATIC  PSI  FLOW CHECK 1-2 1/2" NOZZLE (NFPA24)  PITOT  38  EQUAL  1/50  USGPM  HYDRANT HEIGHT FROM CENTER HOSE NOZZLE CAP TO GRADE LEVEL  PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED:  YES  NO  COMMENTS:  PRICE  DATE SERVICED  PSI  BLACKBANDED  YES  NO  DATE SERVICED  BY:	BONNET & HO	SE NOZZLE CAP COLO	UR	*	$\stackrel{'}{}$	/				
PRESSURE TEST-STATIC PSI FLOW CHECK 1-2 1/2" NOZZLE (NFPA24) PITOT PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED:  QUANTITY CODE NON CONTRACTED PARTS: PRICE  DATE SERVICED  BLACKBANDED YES NO USGPM USGPM USGPM PROZZLE CAP TO GRADE LEVEL PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED: PRICE  DATE SERVICED  BLACKBANDED YES NO USGPM PRICE					/		PAINT REQUIRED	YES	NO	
PRESSURE TEST-STATIC PSI  FLOW CHECK 1-2 1/2" NOZZLE (NFPA24) PITOT 38 EQUAL //5 D INCHES  HYDRANT HEIGHT FROM CENTER HOSE NOZZLE CAP TO GRADE LEVEL  PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED:  COMMENTS:  QUANTITY CODE NON CONTRACTED PARTS:  PRICE  DATE SERVICED / 1/06/10 BY:	PUMP HYDRAN	NT IF PLUGGED	YES		_NO .					
FLOW CHECK 1-2 1/2" NOZZLE (NFPA24)  PITOT  38  EQUAL  1/5  INCHES  PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED:  YES  NO  QUANTITY  CODE  NON CONTRACTED PARTS:  PRICE  DATE SERVICED  PRICE	PRESSURF TES	T-STATIC	PSI			60	BLACKBANDED	YES	NO	_
HYDRANT HEIGHT FROM CENTER HOSE NOZZLE CAP TO GRADE LEVEL  PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED:  QUANTITY  CODE  NON CONTRACTED PARTS:  PRICE  DATE SERVICED  PRICE					PITOT	22	EQUAL //5	50	- USGI	PM
PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED:  COMMENTS:  QUANTITY CODE NON CONTRACTED PARTS:  PRICE  DATE SERVICED / 4/06/20 BY:		•	-	CAP T		EVEL	^ ^ <del></del>	<u></u>		
QUANTITY CODE NON CONTRACTED PARTS: PRICE  DATE SERVICED /9/06/20 BY:	PREVENTATIVE	MAINTENANCE OVE	RHAUL (PM	O) REQ	UIRED:		YES	NO		
QUANTITY CODE NON CONTRACTED PARTS: PRICE  DATE SERVICED /9/06/20 BY:										7
DATE SERVICED /9/06/20 BY:								,		
	QUANTITY	CODE		NON (	CONTRACTI	ED PARTS:		PRICE		<b>-</b>
						$\sim$ $^{\prime}$				
			/			()/				
CUSTOMER SIGNATURE	DATE SERVICE	p / <u>9/0</u>	6/2	Q	BY:	XW				_
	CHSTOMED SIG	SNATURE	/		-	J. J				

	171 N	IARYCROFT AVE	NUE UNIT 3A WO	ODBRIDGE, OI	N. L4L 5Y3 T: 905- 669-2950	) F: 905-738-6818	
DATE:	<del></del>				MAP #:	51	
CUSTOMER	TORONTO ZOO						
STREET:	MEADOWVALE ROA	D					
CITY:	TORONTO						
NOTE:	<u> </u>			T			
NOTE.							
				***************************************			
VALVE OPENS		AND IS LOCA	TFD			OF HYDRANT.	
HYDRANT TYP	E	MODEL:	M67			or monate.	
LOCATION:	#13						
SECONDARY V		OPEN	CLOSED	LEAKING	INOPERABLE		
SECONDARY V	•	ок	EXT REQ	SIZE	GRASS	ASPHALT	
	'ALVE BOX LOCATION: L FOR DRAINING			/ NO	SLOW		
CHECK BARREI			OK 6	LEAKS @	31000		
		01/	, HARD TO			_	
WATER IN BAR		OK YES	OPERATE NO	# OF INCHES	INOPERABL	.Ł	
CHECK CAP GA		OK 1/	REPLACE	# Of INCITES	NUMBER		
NOZZLE CAP C		OK	REMOVE		REPLACE	 N/A	0
LUBRICATE HY		YES V	NO				
NOZZLE SEAL		ok $\nu$	LEAKING				
BARREL COLO	UR				PAINT REQUIRED	YES NO	L
BONNET & HO	SE NOZZLE CAP COLO	JR /	$\overline{}$				
			/		PAINT REQUIRED	YESNO	
PUMP HYDRAI	NT IF PLUGGED	YES	_NO 💆				
PRESSURE TES	T-STATIC	PSI		68	BLACKBANDED	YES NO	V
	1-2 1/2" NOZZLE (NFPA		PITOT	120	EQUAL //?	USGPM	1
	GHT FROM CENTER HO	•		<del></del>	INCHES	<b>-</b>	
PREVENTATIVI	E MAINTENANCE OVER	RHAUL (PMO) RE	QUIRED:		YES	NO	
COMMENTS:			***************************************				
QUANTITY	CODE	иои	I CONTRACTED PA	ARTS:		PRICE	
			· · · · · · · · · · · · · · · · · · ·	<u>~ // _</u>			
		//		¥			
DATE SERVICE	D <u>19</u> ,	46/10	BY:	4		=	
CUSTOMER SIG	GNATURE	10	- 1 T	<i>F</i>			
	_						

## ANNUAL PREVENTATIVE MAINTENANCE REPORT

171 MARYCROFT AVENUE UNIT 3A WOODBRIDGE, ON. L4L 5Y3 T: 905- 669-2950 F: 905-738-6818 DATE: MAP #: 51 **CUSTOMER** TORONTO ZOO STREET: MEADOWVALE ROAD CITY: TORONTO NOTE: **VALVE OPENS** AND IS LOCATED OF HYDRANT. **HYDRANT TYPE** MODEL: M67 LOCATION: #14 SECONDARY VALVE FOUND: OPEN LEAKING **INOPERABLE** SECONDARY VALVE BOX; OK **EXT REQ** ASPHALT SIZE **GRASS** SECONDARY VALVE BOX LOCATION: CHECK BARREL FOR DRAINING NO **SLOW CHECK BARREL FOR LEAKS** LEAKS @ OK HARD TO **OPERATE HYDRANT** OK OPERATE **INOPERABLE** # OF INCHES WATER IN BARREL YES NO REPLACE CHECK CAP GASKETS OK NUMBER **NOZZLE CAP CHAINS** ОК REMOVE REPLACE LUBRICATE HYDRANT YES NO **NOZZLE SEAL** OK **LEAKING BARREL COLOUR PAINT REQUIRED BONNET & HOSE NOZZLE CAP COLOUR PAINT REQUIRED** NO PUMP HYDRANT IF PLUGGED YES NO BLACKBANDED YES NO PRESSURE TEST-STATIC PSI FLOW CHECK 1-2 1/2" NOZZLE (NFPA24) PITOT **EQUAL** USGPM HYDRANT HEIGHT FROM CENTER HOSE NOZZLE CAP TO GRADE LEVEL 30 inches PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED: YES NO **COMMENTS:** QUANTITY CODE NON CONTRACTED PARTS: PRICE **DATE SERVICED** BY: **CUSTOMER SIGNATURE** 

### ANNUAL PREVENTATIVE MAINTENANCE REPORT

171 MARYCROFT AVENUE UNIT 3A WOODBRIDGE, ON. L4L 5Y3 T: 905- 669-2950 F: 905-738-6818 DATE: MAP #: 51 **CUSTOMER** TORONTO ZOO STREET: MEADOWVALE ROAD CITY: TORONTO NOTE: **VALVE OPENS** AND IS LOCATED OF HYDRANT. HYDRANT TYPE MODEL: M67 LOCATION: #15 SECONDARY VALVE FOUND: OPEN CLOSED **LEAKING INOPERABLE** SECONDARY VALVE BOX; OK **EXT REQ ASPHALT** SIZE **GRASS** SECONDARY VALVE BOX LOCATION: **CHECK BARREL FOR DRAINING** NO SLOW LEAKS @ **CHECK BARREL FOR LEAKS** OK HARD TO **OPERATE HYDRANT** OK **OPERATE INOPERABLE** WATER IN BARREL YES NO # OF INCHES **CHECK CAP GASKETS** OK **REPLACE** NUMBER **NOZZLE CAP CHAINS** REPLACE OK REMOVE **LUBRICATE HYDRANT** YES NO **NOZZLE SEAL** OK **LEAKING** BARREL COLOUR PAINT REQUIRED YES NO **BONNET & HOSE NOZZLE CAP COLOUR PAINT REQUIRED** YES NO PUMP HYDRANT IF PLUGGED YES NO BLACKBANDED PRESSURE TEST-STATIC PSI FLOW CHECK 1-2 1/2" NOZZLE (NFPA24) **PITOT EQUAL USGPM** HYDRANT HEIGHT FROM CENTER HOSE NOZZLE CAP TO GRADE LEVEL **INCHES** PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED: YES NO **COMMENTS:** QUANTITY CODE NON CONTRACTED PARTS: PRICE **DATE SERVICED** BY: **CUSTOMER SIGNATURE** 

### ANNUAL PREVENTATIVE MAINTENANCE REPORT

171 MARYCROFT AVENUE UNIT 3A WOODBRIDGE, ON. L4L 5Y3 T: 905- 669-2950 F: 905-738-6818 DATE: MAP #: 51 **CUSTOMER** TORONTO ZOO STREET: MEADOWVALE ROAD CITY: TORONTO NOTE: **VALVE OPENS** AND IS LOCATED OF HYDRANT. **HYDRANT TYPE** MODEL: M67 LOCATION: #16 SECONDARY VALVE FOUND: CLOSED **OPEN** LEAKING **INOPERABLE** SECONDARY VALVE BOX; **EXT REQ** OK SIZE **GRASS ASPHALT** SECONDARY VALVE BOX LOCATION: **CHECK BARREL FOR DRAINING** NO **SLOW CHECK BARREL FOR LEAKS** OK LEAKS@ HARD TO **OPERATE HYDRANT** ОК OPERATE **INOPERABLE** WATER IN BARREL YES NO NUMBER **CHECK CAP GASKETS** OK **₩** REPLACE **NOZZLE CAP CHAINS** OK REMOVE REPLACE **LUBRICATE HYDRANT** YES NO **NOZZLE SEAL** OK LEAKING BARREL COLOUR PAINT REQUIRED YES NO **BONNET & HOSE NOZZLE CAP COLOUR PAINT REQUIRED** PUMP HYDRANT IF PLUGGED NO YES **BLACKBANDED** YES NO PRESSURE TEST-STATIC PSI FLOW CHECK 1-2 1/2" NOZZLE (NFPA24) PITOT **EQUAL USGPM** HYDRANT HEIGHT FROM CENTER HOSE NOZZLE CAP TO GRADE LEVEL **INCHES** PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED: YES NO **COMMENTS:** QUANTITY CODE NON CONTRACTED PARTS: PRICE **DATE SERVICED** BY: **CUSTOMER SIGNATURE** 

		171 MARYCROFT	AVENUE UNIT 3A	WOODBRIDGE, ON	N. L4L 5Y3 T: 905- 669-29	50 F: 905-738-	6818
DATE:					MAP #:		51
CUSTOMER	TORONTO Z	00					
STREET:	MEADOWVA	ALE ROAD					
CITY:	TORONTO						
NOTE:							
VALVE OPENS		AND IS L	OCATED			OF HYDRAI	NT.
HYDRANT TYPE		MODEL:	M67				
LOCATION:	#17						
SECONDARY VA	ALVE FOUND:	OPEN		LEAKING	INOPERABLE		
SECONDARY VA		OK	EXT REQ	SIZE	GRASS	ASPHA	ALT
SECONDARY VA	ALVE BOX LOC	ATION:		3/V			<del></del>
CHECK BARREL	FOR DRAININ	G	YES	<u> </u>	SLOW		
CHECK BARREL	FOR LEAKS		OK HARD TO	LEAKS @			
OPERATE HYDR	RANT	ОК	OPERATE		INOPERA	BLE	
WATER IN BAR	REL	YES	NO	# OF INCHES			
CHECK CAP GAS	SKETS	OK	REPLACE		NUMBER		
NOZZLE CAP CH	IAINS	ОК	REMOVE		REPLACE		N/A
LUBRICATE HYD	DRANT	YES	No		,		
NOZZLE SEAL		OK	LEAKING				
BARREL COLOU	JR		<u> </u>	•	PAINT REQUIRED	YES	<u></u> no
BONNET & HOS	SE NOZZLE CA	P COLOUR		<u> </u>			
DUMAD HVDDAN	IT IF DUUCCE	. Vrc	NO		PAINT REQUIRED	YES L	NO
PUMP HYDRAN	II IF PLUGGEL	YES	NO		BLACKBANDED	YES	NO /
PRESSURE TEST	Γ-STATIC	PSI		58.			
FLOW CHECK 1	-2 1/2" NOZZL	E (NFPA24)	PITOT	32	EQUAL /0	55	USGPM
HYDRANT HEIG	HT FROM CEN	NTER HOSE NOZZLE	CAP TO GRADE L	.EVEL	2 C INCHE	ES .	
PREVENTATIVE	MAINTENAN	CE OVERHAUL (PM	O) REQUIRED:		YES	NO	
COMMENTS:	Γ						
QUANTITY	CODE		NON CONTRACT	ED PARTS:		PRICE	
				<u></u>			
***************************************		-///		1//2	VI-144-04-04-04-04-04-04-04-04-04-04-04-04-0		
DATE SERVICED	) /_	9/09/3	ВУ:	<u> </u>			
CUSTOMER SIG	SNATURE	/					

### ANNUAL PREVENTATIVE MAINTENANCE REPORT

171 MARYCROFT AVENUE UNIT 3A WOODBRIDGE, ON. L4L 5Y3 T: 905- 669-2950 F: 905-738-6818 DATE: MAP #: 51 **CUSTOMER TORONTO ZOO** STREET: **MEADOWVALE ROAD** CITY: TORONTO NOTE: **VALVE OPENS** AND IS LOCATED OF HYDRANT. HYDRANT TYPE MODEL: CT LOCATION: #18 SECONDARY VALVE FOUND: OPEN CLOSED **LEAKING INOPERABLE** SECONDARY VALVE BOX; EXT REQ OK SIZE **ASPHALT GRASS** SECONDARY VALVE BOX LOCATION: **CHECK BARREL FOR DRAINING** NO V SLOW LEAKS @ CHECK BARREL FOR LEAKS OK HARD TO **OPERATE HYDRANT** OK **OPERATE INOPERABLE** WATER IN BARREL YES NO **CHECK CAP GASKETS** OK REPLACE NUMBER **NOZZLE CAP CHAINS** REPLACE OK REMOVE **LUBRICATE HYDRANT** YES NO **NOZZLE SEAL** OK **LEAKING BARREL COLOUR** PAINT REQUIRED YES NO **BONNET & HOSE NOZZLE CAP COLOUR PAINT REQUIRED** PUMP HYDRANT IF PLUGGED YES NO **BLACKBANDED** NO PRESSURE TEST-STATIC PSI FLOW CHECK 1-2 1/2" NOZZLE (NFPA24) PITOT **EQUAL USGPM** HYDRANT HEIGHT FROM CENTER HOSE NOZZLE CAP TO GRADE LEVEL **INCHES** PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED: YES NO **COMMENTS:** QUANTITY CODE NON CONTRACTED PARTS: PRICE DATE SERVICED BY: **CUSTOMER SIGNATURE** 

### ANNUAL PREVENTATIVE MAINTENANCE REPORT

171 MARYCROFT AVENUE UNIT 3A WOODBRIDGE, ON. L4L 5Y3 T: 905- 669-2950 F: 905-738-6818 DATE: MAP #: 51 **CUSTOMER** TORONTO ZOO STREET: **MEADOWVALE ROAD** CITY: TORONTO NOTE: **VALVE OPENS** AND IS LOCATED OF HYDRANT. **HYDRANT TYPE** MODEL: **CENTURY** LOCATION: #19 SECONDARY VALVE FOUND: **OPEN** CLOSED LEAKING **INOPERABLE** SECONDARY VALVE BOX; EXT REQ OK SIZE **GRASS ASPHALT** SECONDARY VALVE BOX LOCATION: **CHECK BARREL FOR DRAINING SLOW CHECK BARREL FOR LEAKS** OK LEAKS @ HARD TO **OPERATE HYDRANT** OK **OPERATE INOPERABLE** WATER IN BARREL YES NO **CHECK CAP GASKETS** OK REPLACE NUMBER **NOZZLE CAP CHAINS** REPLACE OK **REMOVE** LUBRICATE HYDRANT NO YES **NOZZLE SEAL** ОК **LEAKING BARREL COLOUR** PAINT REQUIRED YES NO **BONNET & HOSE NOZZLE CAP COLOUR** PAINT REQUIRED PUMP HYDRANT IF PLUGGED YES NO **BLACKBANDED** NO PRESSURE TEST-STATIC PSI FLOW CHECK 1-2 1/2" NOZZLE (NFPA24) **PITOT EQUAL USGPM** HYDRANT HEIGHT FROM CENTER HOSE NOZZLE CAP TO GRADE LEVEL INCHES PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED: YES NO **COMMENTS:** QUANTITY CODE NON CONTRACTED PARTS: PRICE **DATE SERVICED** BY: **CUSTOMER SIGNATURE** 

### ANNUAL PREVENTATIVE MAINTENANCE REPORT

171 MARYCROFT AVENUE UNIT 3A WOODBRIDGE, ON. L4L 5Y3 T: 905- 669-2950 F: 905-738-6818 DATE: MAP #: 51 **CUSTOMER** TORONTO ZOO STREET: MEADOWVALE ROAD CITY: **TORONTO** NOTE: **VALVE OPENS** AND IS LOCATED OF HYDRANT. **HYDRANT TYPE** MODEL: **AVK** LOCATION: #20 SECONDARY VALVE FOUND: OPEN CLOSED **LEAKING INOPERABLE** SECONDARY VALVE BOX; **EXT REQ** OK SIZE **GRASS** ASPHALT SECONDARY VALVE BOX LOCATION: **CHECK BARREL FOR DRAINING** NO SLOW CHECK BARREL FOR LEAKS LEAKS @ OK HARD TO **OPERATE HYDRANT** OPERATE OK **INOPERABLE** WATER IN BARREL YES NO **CHECK CAP GASKETS** OK **REPLACE** NUMBER **NOZZLE CAP CHAINS** ОК **REMOVE** REPLACE **LUBRICATE HYDRANT** YES NO **NOZZLE SEAL** OK **LEAKING** BARREL COLOUR **PAINT REQUIRED** YES NO **BONNET & HOSE NOZZLE CAP COLOUR** PAINT REQUIRED PUMP HYDRANT IF PLUGGED YES NO **BLACKBANDED** YES NO PRESSURE TEST-STATIC PSI FLOW CHECK 1-2 1/2" NOZZLE (NFPA24) **PITOT EQUAL USGPM** HYDRANT HEIGHT FROM CENTER HOSE NOZZLE CAP TO GRADE LEVEL **INCHES** PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED: YES COMMENTS: QUANTITY CODE NON CONTRACTED PARTS: PRICE DATE SERVICED **CUSTOMER SIGNATURE** 

### ANNUAL PREVENTATIVE MAINTENANCE REPORT

171 MARYCROFT AVENUE UNIT 3A WOODBRIDGE, ON. L4L 5Y3 T: 905- 669-2950 F: 905-738-6818 DATE: MAP #: 51 **CUSTOMER** TORONTO ZOO STREET: MEADOWVALE ROAD CITY: TORONTO NOTE: **VALVE OPENS** AND IS LOCATED OF HYDRANT. **HYDRANT TYPE** MODEL: M67 LOCATION: #21 SECONDARY VALVE FOUND: OPEN CLOSED **LEAKING INOPERABLE** SECONDARY VALVE BOX: OK **EXT REQ** ASPHALT SIZE GRASS SECONDARY VALVE BOX LOCATION: **CHECK BARREL FOR DRAINING** NO **SLOW CHECK BARREL FOR LEAKS** OK LEAKS@ HARD TO **OPERATE HYDRANT** OK **OPERATE INOPERABLE** WATER IN BARREL YES NO # OF INCHES **CHECK CAP GASKETS** OK REPLACE NUMBER **NOZZLE CAP CHAINS** ОК REMOVE REPLACE LUBRICATE HYDRANT NO YES **NOZZLE SEAL** OK **LEAKING BARREL COLOUR PAINT REQUIRED** YES NO **BONNET & HOSE NOZZLE CAP COLOUR PAINT REQUIRED** PUMP HYDRANT IF PLUGGED YES NO BLACKBANDED PRESSURE TEST-STATIC **PSI** FLOW CHECK 1-2 1/2" NOZZLE (NFPA24) **PITOT EQUAL USGPM** HYDRANT HEIGHT FROM CENTER HOSE NOZZLE CAP TO GRADE LEVEL **INCHES** PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED: YES NO COMMENTS: QUANTITY CODE NON CONTRACTED PARTS: P.RICE **DATE SERVICED CUSTOMER SIGNATURE** 

### ANNUAL PREVENTATIVE MAINTENANCE REPORT

171 MARYCROFT AVENUE UNIT 3A WOODBRIDGE, ON. L4L 5Y3 T: 905- 669-2950 F: 905-738-6818 DATE: MAP #: 51 CUSTOMER **TORONTO ZOO** STREET: **MEADOWVALE ROAD** CITY: TORONTO NOTE: **VALVE OPENS** AND IS LOCATED OF HYDRANT. **HYDRANT TYPE** MODEL: M67 LOCATION: #22 SECONDARY VALVE FOUND: **OPEN** CLOSED **LEAKING INOPERABLE** SECONDARY VALVE BOX; **EXT REQ** OK SIZE **GRASS ASPHALT** SECONDARY VALVE BOX LOCATION: CHECK BARREL FOR DRAINING **SLOW CHECK BARREL FOR LEAKS** LEAKS @ ОК HARD TO **OPERATE HYDRANT** OK **OPERATE INOPERABLE** WATER IN BARREL YES NO # OF INCHES **CHECK CAP GASKETS** OK **REPLACE** NUMBER **NOZZLE CAP CHAINS** OK **REMOVE** REPLACE **LUBRICATE HYDRANT** YES NO **NOZZLE SEAL** OK **LEAKING BARREL COLOUR** PAINT REQUIRED YES NO **BONNET & HOSE NOZZLE CAP COLOUR** PAINT REQUIRED PUMP HYDRANT IF PLUGGED YES NO **BLACKBANDED** PRESSURE TEST-STATIC PSI FLOW CHECK 1-2 1/2" NOZZLE (NFPA24) PITOT **EQUAL** USGPM HYDRANT HEIGHT FROM CENTER HOSE NOZZLE CAP TO GRADE LEVEL **INCHES** PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED: YES NO COMMENTS: QUANTITY CODE NON CONTRACTED PARTS: PRICE BY: **DATE SERVICED CUSTOMER SIGNATURE** 

	171 M	ARYCROFT AVE	ENUE UNIT 3A WO	ODBRIDGE, ON	N. L4L 5Y3 T: 905- 669-2950	) F: 905-738-6818
DATE:					MAP #:	51
CUSTOMER	TORONTO ZOO			-		
STREET:	MEADOWVALE ROAI	D				
CITY:	TORONTO					**************************************
NOTE:						
VALVE OPENS	****	AND IS LOCA	ATED			OF HYDRANT.
HYDRANT TYPE		MODEL:	AVK			
LOCATION:	#23					
SECONDARY VA	VIVE EUIND.	OPEN	CLOSED	LEAKING	INOPERABLE	
SECONDARY VA		OK	EXT REQ	SIZE	GRASS	ASPHALT
SECONDARY VA	ALVE BOX LOCATION:			NL		
CHECK BARREL	FOR DRAINING		YES 🗸	NO	SLOW	
CHECK BARREL	FOR LEAKS		ок 🗸	LEAKS @		
OPERATE HYDR	RANT	OK į	HARD TO OPERATE		INOPERABL	E
WATER IN BAR		YES	NO /	# OF INCHES		
CHECK CAP GAS	SKETS	ок	REPLACE	-	NUMBER	
NOZZLE CAP CH	HAINS	ок	REMOVE		REPLACE	
LUBRICATE HYD	DRANT	YES U	NO	_	-	
NOZZLE SEAL		ок <u></u>	LEAKING			
BARREL COLOU	JR				PAINT REQUIRED	YES NO
BONNET & HOS	SE NOZZLE CAP COLOU	IR	<u> </u>			
			1		PAINT REQUIRED	YES NO
PUMP HYDRAN	IT IF PLUGGED	YES	NO/			
PRESSURE TEST	r-static	PSI		H2	BLACKBANDED	YES NO
	-2 1/2" NOZZLE (NFPA	24)	PITOT	16	EQUAL 77	USGPM
HYDRANT HEIG	HT FROM CENTER HO	SE NOZZLE CAF	TO GRADE LEVEL	<del></del>	// INCHES	nin `
PREVENTATIVE	MAINTENANCE OVER	HAUL (PMO) R	EQUIRED:		YES	NO
COMMENTS:						
QUANTITY	CODE	NO	N CONTRACTED PA	RTS:		PRICE
				<u> </u>		
DATE CED 4CC	1 /0 /	n/ 10 n	- A	4		
DATE SERVICED	, <del>18/</del>	26/70	BY:			_
CUSTOMER SIG	INATURE			/		

### ANNUAL PREVENTATIVE MAINTENANCE REPORT

171 MARYCROFT AVENUE UNIT 3A WOODBRIDGE, ON. L4L 5Y3 T: 905- 669-2950 F: 905-738-6818 DATE: MAP #: 51 **CUSTOMER** TORONTO ZOO STREET: **MEADOWVALE ROAD** CITY: TORONTO NOTE: **VALVE OPENS** AND IS LOCATED OF HYDRANT. **HYDRANT TYPE** MODEL: **AVK** LOCATION: #24 SECONDARY VALVE FOUND: OPEN CLOSED **LEAKING INOPERABLE** SECONDARY VALVE BOX; **EXT REQ** OK **ASPHALT GRASS** SECONDARY VALVE BOX LOCATION: **CHECK BARREL FOR DRAINING** LEAKS @ **CHECK BARREL FOR LEAKS** ОК HARD TO **OPERATE HYDRANT** OK **OPERATE INOPERABLE** WATER IN BARREL YES NO # OF INCHES **CHECK CAP GASKETS** OK REPLACE NUMBER **NOZZLE CAP CHAINS** OK **REMOVE** REPLACE **LUBRICATE HYDRANT** NO YES **NOZZLE SEAL** OK **LEAKING** BARREL COLOUR PAINT REQUIRED YES **BONNET & HOSE NOZZLE CAP COLOUR PAINT REQUIRED** PUMP HYDRANT IF PLUGGED YES NO **BLACKBANDED** YES NO PRESSURE TEST-STATIC PSI FLOW CHECK 1-2 1/2" NOZZLE (NFPA24) **PITOT EQUAL USGPM** HYDRANT HEIGHT FROM CENTER HOSE NOZZLE CAP TO GRADE LEVEL **INCHES** PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED: YES NO COMMENTS: QUANTITY CODE NON CONTRACTED PARTS: **PRICE DATE SERVICED** BY: **CUSTOMER SIGNATURE** 

	171 M	ARYCROFT AV	ENUE UNIT 3A WOO	DBRIDGE, ON	N. L4L 5Y3 T: 905- 669-2950	F: 905-738-6818	
DATE:					MAP #:	5	<u>1</u>
CUSTOMER	TORONTO ZOO						
STREET:	MEADOWVALE ROA	D				<del></del>	
CITY:	TORONTO		With the second				
NOTE:	r						7
NOTE.							-
	<u>L</u>						
VALVE OPENS		AND IS LOC	ATED	-		OF HYDRANT.	
HYDRANT TYPE		MODEL:	CENTURY				
LOCATION:	#25						
SECONDARY VA	NIVE EQUIND:	OPEN	CLOSED	LEAKING	INOPERABLE		
SECONDARY VA		OK	EXT REQ	SIZE	GRASS	ASPHALT	
	ALVE BOX LOCATION:	-		NL.			
CHECK BARREL	FOR DRAINING		YES V	NO	SLOW		
CHECK BARREL	FOR LEAKS		ок <u>/</u>	LEAKS @			
OPERATE HYDR	ANT	OK (	HARD TO OPERATE	-	INOPERABL	E	
WATER IN BAR	REL	YES	NO V	# OF INCHES		CAMPANIAN IN COLUMN IN COL	
CHECK CAP GAS	SKETS	ОК	REPLACE	<b>-</b>	NUMBER		
NOZZLE CAP CH	IAINS	ок	REMOVE	_	REPLACE	N/A	$\underline{V}$
LUBRICATE HYD	DRANT	YES _{	<u></u> NO	·			
NOZZLE SEAL		ок <u></u>	LEAKING	-			,
BARREL COLOU			<del></del>	/	PAINT REQUIRED	YES NO	V
BONNET & HOS	SE NOZZLE CAP COLOU	JR				à.	
PUMP HYDRAN	IT IE BUUCCED	VEC	No.		PAINT REQUIRED	YESNO	
PUIVIP HTDRAIN	II IF PLOGGED	YES	NO	-	BLACKBANDED	YES NO	1/
PRESSURE TEST	Γ-STATIC	PSI		44	BEACKBANDED	11.5	
	-2 1/2" NOZZLE (NFPA		PITOT	21	EQUAL 9/1	USGF	PM
	HT FROM CENTER HO		P TO GRADE LEVEL	<del></del>	12 INCHES	<i>†</i>	
PREVENTATIVE	MAINTENANCE OVER	HAUL (PMO) F	REQUIRED:		YES A	NO	
COMMENTS:			31777 - 121		1		٦
					*		
QUANTITY	CODE	NC	ON CONTRACTED PAI	RTS: <sub>//</sub>		PRICE	
				T			
	L ,,,,						
DATE SERVICED	) /4/	<u>06/2</u> 0	BY:			-	
CUSTOMER SIG	INATURE	/	Same J				

### ANNUAL PREVENTATIVE MAINTENANCE REPORT

171 MARYCROFT AVENUE UNIT 3A WOODBRIDGE, ON. L4L 5Y3 T: 905- 669-2950 F: 905-738-6818 DATE: MAP #: 51 **CUSTOMER TORONTO ZOO** STREET: MEADOWVALE ROAD CITY: TORONTO NOTE: PLEASE GO TO OFFICE OFF FINCH AVE AND ASK FOR KYLE REKKER. PLEASE START AT 6AM. 416-392-5989 MUST CALL 3 DAYS PRIOR TO SCH DATE OF INSPS. **VALVE OPENS** AND IS LOCATED OF HYDRANT. **HYDRANT TYPE** MODEL: M67 LOCATION: #26 SECONDARY VALVE FOUND: OPEN CLOSED **LEAKING INOPERABLE** SECONDARY VALVE BOX: OK **EXT REQ ASPHALT** SIZE **GRASS** SECONDARY VALVE BOX LOCATION: **CHECK BARREL FOR DRAINING** NO **SLOW CHECK BARREL FOR LEAKS** LEAKS @ OK HARD TO **OPERATE HYDRANT** OK OPERATE **INOPERABLE** WATER IN BARREL YES # OF INCHES **CHECK CAP GASKETS** REPLACE OK NUMBER **NOZZLE CAP CHAINS** OK REMOVE REPLACE LUBRICATE HYDRANT NO YES **NOZZLE SEAL** OK **LEAKING BARREL COLOUR PAINT REQUIRED** YES NO **BONNET & HOSE NOZZLE CAP COLOUR PAINT REQUIRED** PUMP HYDRANT IF PLUGGED YES NO **BLACKBANDED** YES NO PRESSURE TEST-STATIC PSI FLOW CHECK 1-2 1/2" NOZZLE (NFPA24) **PITOT EQUAL USGPM** HYDRANT HEIGHT FROM CENTER HOSE NOZZLE CAP TO GRADE LEVEL INCHES YES PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED: COMMENTS: QUANTITY CODE NON CONTRACTED PARTS: PRICE **DATE SERVICED** BY: **CUSTOMER SIGNATURE** 

	171 M	ARYCROFT AVEN	UE UNIT 3A WOO	DBRIDGE, ON	. L4L 5Y3 T: 905- 669-2950	F: 905-738-6818
DATE:	•				MAP #:	51
CUSTOMER	TORONTO ZOO					
STREET:	MEADOWVALE ROAD	)				
CITY:	TORONTO					
	processor and a second					
NOTE:	PLEASE GO TO OFFICE		***************************************	LE REKKER. PI	LEASE START AT 6AM. 416-	392-5989
	Widor Green Strong	MION TO SCIT DA	12 07 1101 0.			
		***************************************				
VALVE OPENS		AND IS LOCATI	ED			OF HYDRANT.
HYDRANT TYPE		MODEL:	M67			
LOCATION:	#27	_				<del>alia de del de la constanta de</del>
						ACTIVITIES AND ADDRESS AND ADD
SECONDARY VA	ALVE FOUND:	OPEN	CLOSED	LEAKING _	INOPERABLE	
SECONDARY VA	ALVE BOX;	ок	EXT REQ	SIZE	GRASS	ASPHALT
SECONDARY VA	ALVE BOX LOCATION:		NI			
CHECK BARREL	FOR DRAINING		YES	NO_	SLOW	•
CHECK BARREL	FOR LEAKS		OK V	LEAKS @_		
OPERATE HYDR	RANT	ок	OPERATE	_	INOPERABLE	<u></u>
WATER IN BAR	REL	YES	NO 🗸	# OF INCHES		
CHECK CAP GA	SKETS	ок	REPLACE	_	NUMBER	_
NOZZLE CAP CH	HAINS	ОК	REMOVE	_	REPLACE	N/A <u>:/</u>
LUBRICATE HY	DRANT	YES 1	_NO	_		
NOZZLE SEAL		OK	LEAKING	_		/
BARREL COLOU			<del></del>		PAINT REQUIRED	YES NO
BONNET & HOS	SE NOZZLE CAP COLOU	R	<del></del>			
DUBAD HVDDAA	IT IF DI UCCED	VEC	No /		PAINT REQUIRED	YES NO
PUMP HYDRAN	II IF PLUGGED	YES	NO V	<b>-</b>	N ACKDANIDED	VES NO
PRESSURE TEST	Γ-STATIC	PSI		- 5 8	JLACKBANDED	TES NO U
FLOW CHECK 1	-2 1/2" NOZZLE (NFPA2	24)	PITOT	36	EQUAL //(	USGPM
HYDRANT HEIG	HT FROM CENTER HOS	SE NOZZLE CAP T	O GRADE LEVEL		2 INCHES	,
PREVENTATIVE	MAINTENANCE OVERH	HAUL (PMO) REC	UIRED:		YES	NO
COMMENTS:		<u> </u>				
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STREET:	MEADOWVALE ROAD							
CITY:	TORONTO							
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NOTE:			<del></del>			***************************************		
VALVE OPENS		AND IS LO	CATE	D			OF HYDRANT.	
HYDRANT TYPE		MODEL:		M67				
LOCATION:	#28 -MEMBERSHIP O	FICE						
SECONDARY VA	ALVE FOUND:	OPEN		CLOSED	LEAKING	INOPERABLE		
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WATER IN BAR	REL	YES	************	NO 🗸	# OF INCHES			
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LUBRICATE HY	DRANT	YES		NO	-			
NOZZLE SEAL		OK _		LEAKING	_			
BARREL COLOU	JR			<del>/ / /</del> / ·		PAINT REQUIRED	YES	NO 1/
BONNET & HOS	SE NOZZLE CAP COLOUI	₹		$\longrightarrow\!$				
						PAINT REQUIRED	YES	NO
PUMP HYDRAN	IT IF PLUGGED	YES		NO V	-			
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FLOW CHECK 1	-2 1/2" NOZZLE (NFPA2	4)		PITOT	~ 0	EQUAL / C	<u> </u>	JSGPM
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VALVE OPENS		AND IS L	OCATE	ED.			OF HYDR	ANT.
HYDRANT TYPE		MODEL:		M67				
LOCATION:	#29							
SECONDARY VA	LVE FOUND:	OPEN		CLOSED	LEAKING	INOPERABLI	E	
SECONDARY VA	LVE BOX;	OK	<u></u>	EXT REQ	SIZE	GRASS	ASPI	HALT
SECONDARY VA	LVE BOX LOCATION	:			4NE			
CHECK BARREL	FOR DRAINING			YES	NO	slow		
CHECK BARREL	FOR LEAKS			OK	LEAKS @			
OPERATE HYDR	ANT	ОК		HARD TO OPERATE		INOPERA	BLE	
WATER IN BARF	REL	YES		NO	# OF INCHES			
CHECK CAP GAS	SKETS	ОК		REPLACE		NUMBER		
NOZZLE CAP CH	IAINS	ОК		REMOVE		REPLACE		N/A
LUBRICATE HYD	PRANT	YES		NO			<del></del>	
NOZZLE SEAL		ок		LEAKING				
BARREL COLOU	R					PAINT REQUIRED	YES	NO
BONNET & HOS	E NOZZLE CAP COLC	UR						
						PAINT REQUIRED	YES	NO _
PUMP HYDRAN	T IF PLUGGED	YES		NO	<del></del>			
						BLACKBANDED	YES	NO
PRESSURE TEST	-STATIC	PSI						
	2 1/2" NOZZLE (NFP	•		PITOT		EQUAL		USGPM
HYDRANT HEIG	HT FROM CENTER H	OSE NOZZLE	CAP T	O GRADE LEV	/EL	INCH	ES	
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STREET:	MEADOWVALE ROA	D								
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VALVE OPENS	L	AND IS	LOCATE	ED				OF HYDI	RANT.	
HYDRANT TYPE		MODEL	.:	CENTURY	,					
LOCATION:	#32-MAIN ENTRANC	E NORTHE	AST							
SECONDARY VA	ALVE FOUND:	OPEN		CLOSED		LEAKING	INOPERABLE			
SECONDARY VA	ALVE BOX;	OK	4	EXT REQ		SIZE	GRASS	ASP	HALT	_
SECONDARY V	ALVE BOX LOCATION:					110				
CHECK BARREL	FOR DRAINING			YES	V	NO.	slow			
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OPERATE HYDE	RANT	ОК	استا	HARD TO OPERATE		_	INOPERABL	.E		
WATER IN BAR	REL	YES		NO NO	U	# OF INCHES				
CHECK CAP GA	SKETS	OK	V	REPLACE		<u>.</u>	NUMBER			
NOZZLE CAP CH	HAINS	ок	V	_ REMOVE		_	REPLACE		N/A	1 Town
LUBRICATE HY	DRANT	YES	U	NO		-				
NOZZLE SEAL		ОК	المسيا	LEAKING		_				
BARREL COLOU	JR				_	_	PAINT REQUIRED	YES _	NO	1/
BONNET & HO	SE NOZZLE CAP COLOL	JR			V					
					1		PAINT REQUIRED	YES	NO	
PUMP HYDRAN	IT IF PLUGGED	YES		NO NO	1/	■			•	
DDECC					*"	ril	BLACKBANDED	YES _	NO	1
PRESSURE TEST		PSI				57	~)	C,		
	2 1/2" NOZZLE (NFPA	-	- can -	PITOT	C) /C'		EQUAL ///	7	USGP	M
	SHT FROM CENTER HO				.cveL		<u> </u>			
	MAINTENANCE OVER	HAUL (PN	IO) REQ	UIKED:			YES	NO _		7
COMMENTS:			* *							
QUANTITY	CODE	<del></del>	NON	CONTRACT	ED PAR	RTS:		PRICE		_
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CUSTOMER	TORONTO ZOO									
STREET:	MEADOWVALE ROA	D								
CITY:	TORONTO									
NOTE:										1
VALVE OPENS	<u> </u>	_ AND IS	LOCATI	ED .				OF HYD	RANT.	
HYDRANT TYPE		MODEL	.:	CENTURY						
LOCATION:	#33-MAIN ENTRANC	E LOOP N	ORTHW	'EST						
SECONDARY V	ALVE FOUND:	OPEN	1/	CLOSED		LEAKING	INOPERABLE			
SECONDARY VA		ОК	1/	EXT REQ		SIZE	GRASS	AS	PHALT	
SECONDARY V	ALVE BOX LOCATION:			•	14	٠ .		***		-
CHECK BARREL	FOR DRAINING			YES	V	NO	SLOW			
CHECK BARREL	FOR LEAKS			ОК	V	LEAKS @				
OPERATE HYDR	RANT	ОК		HARD TO OPERATE			INOPERABLI	E		
WATER IN BAR		YES		- NO	V	# OF INCHES				
CHECK CAP GA	SKETS	OK		REPLACE	***************************************	•	NUMBER			
NOZZLE CAP CI	HAINS	ОК	/	REMOVE		•	REPLACE		N/A	
LUBRICATE HY	DRANT	YES	V	_ NO		'		-		
NOZZLE SEAL		ОК	V	LEAKING						,
BARREL COLOU	JR			<u> </u>		•	PAINT REQUIRED	YES	NO	
BONNET & HO	SE NOZZLE CAP COLOU	JR			<u> </u>			•		-
PUMP HYDRAN	IT IE DILIGGED	YES		NO		·	PAINT REQUIRED	YES .	NO	
TOWN THUMAN		163					BLACKBANDED	YES	NO	V
PRESSURE TEST	T-STATIC	PSI				55		· ·		
FLOW CHECK 1	2 1/2" NOZZLE (NFPA	24)		PITOT		36	EQUAL ///	7	USGP	M
HYDRANT HEIG	HT FROM CENTER HO	SE NOZZL	E CAP T	O GRADE L	EVEL.		2 INCHES			
PREVENTATIVE	MAINTENANCE OVER	HAUL (PM	10) REC	UIRED:			YES	NO		
COMMENTS:	Γ							-		7
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STREET:	MEADOWVALE ROA	D						
CITY:	TORONTO							
NOTE:								]
						***************************************		-
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VALVE OPENS		AND IS LO	CATED			OF HYD	DRANT.	
HYDRANT TYPE		MODEL:	CENTURY					
LOCATION:	#34-MAIN ENTRANC	E LOOP SOUT	THEAST SIDE					
SECONDARY VA	MVE EQUIND:	OPEN	CLOSED	LEAVING	INODERABLE			
SECONDARY VA		OK —	EXT REQ	LEAKING SIZE	INOPERABLE GRASS	AS	PHALT	
	ALVE BOX LOCATION:	_		NL		. 10		
CHECK BARREL	FOR DRAINING		YES F	NO	SLOW			
CHECK BARREL	FOR LEAKS		ОК	LEAKS @				<del></del>
OPERATE HYDR	ANT	ок	HARD TO OPERATE		INOPERAB	LE		
WATER IN BAR	REL	YES	NO V	# OF INCHES				
CHECK CAP GAS	SKETS	ок	REPLACE		NUMBER			Norman or
NOZZLE CAP CH	IAINS	ОК	REMOVE		REPLACE		N/A	la company
LUBRICATE HYD	DRANT	YES	NO					
NOZZLE SEAL		ок _	LEAKING					
BARREL COLOU	enterview description		<del></del>		PAINT REQUIRED	YES	NO NO	
BONNET & HOS	SE NOZZLE CAP COLOU	JR		<u> </u>			V	
PUMP HYDRAN	IT IF PLUGGED	YES	NO V		PAINT REQUIRED	YES	NO	
		-	· ·	-55	BLACKBANDED	YES	NO NO	V
PRESSURE TEST		PSI		~		21 77		
	-2 1/2" NOZZLE (NFPA	·	PITOT	30	EQUAL 10	22	USGP	M
	HT FROM CENTER HO			•	<u> 20</u> INCHE	S		
PREVENTATIVE	MAINTENANCE OVER	HAUL (PMO)	REQUIRED:		YES	NO	<del></del>	
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STREET:	MEADOWVALE ROA	AD.								
CITY:	TORONTO									
NOTE:										]
VALVE OPENS		AND IS	LOCATE	:D				OF HYD	ORANT	
HYDRANT TYP	F	MODEL		CENTURY	,			01 1111	210-1141.	
LOCATION:	#35- SOUTHEAST CO			CLITTOIL						
EGOATION.	1133 300 III 2731 C	DAITER EOT								
SECONDARY V	ALVE FOUND:	OPEN	-	CLOSED	***************************************	LEAKING	INOPERABLE			
SECONDARY V	ALVE BOX;	ОК		EXT REQ		SIZE	GRASS	AS	PHALT	
SECONDARY V	ALVE BOX LOCATION:					NL	-			
CHECK BARRE	L FOR DRAINING			YES	W	NO	SLOW			
CHECK BARREI	L FOR LEAKS			OK	V	LEAKS @				
OPERATE HYD	RANT	ок	£	HARD TO OPERATE		_	INOPERABI	.E		
WATER IN BAF	RREL	YES		NO	V	# OF INCHES				
CHECK CAP GA	ASKETS	ОК	\$ (	REPLACE			NUMBER			
NOZZLE CAP C	HAINS	ОК	V	REMOVE		-	REPLACE		N/A	
LUBRICATE HY	DRANT	YES	V	_NO		-				
NOZZLE SEAL		ОК	V	LEAKING		-				
BARREL COLO	UR			<u> </u>	. ,		PAINT REQUIRED	YES	NONO	V
BONNET & HC	SE NOZZLE CAP COLO	UR			<u> </u>					
PUMP HYDRA	NT IF PLUGGED	YES		_NO	<u> </u>	_	PAINT REQUIRED	YES	NO	<del></del>
						1 mg	BLACKBANDED	YES	NO	V
PRESSURE TES		PSI				3, <u>1</u>		7)		
	1-2 1/2" NOZZLE (NFP			PITOT	E1 /E1	58	EQUAL //S	_	USGI	νM
	GHT FROM CENTER H				.EVEL		<u># ()</u> INCHES			
	E MAINTENANCE OVE	RHAUL (PN	IO) REC	UIRED:			YES	NO NO		
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CITY:	TORONTO								
NOTE:									]
VALVE OPENS		AND IS	LOCATE	:D			OF HYD	RANT.	
HYDRANT TYPI		MODEL	.:	AVK					
LOCATION:	#36-PANDA								
SECONDARY V	ALVE FOUND:	OPEN	1Z	CLOSED	LEAKING	INOPERABL	E		
SECONDARY V		ОК	-5/	EXT REQ	SIZE	GRASS		PHALT	
	ALVE BOX LOCATION:		<del></del>	•	D III			<del></del>	
CHECK BARREL	FOR DRAINING			YES	, NO	SLOW			
CHECK BARREI				ОК	LEAKS @				
OPERATE HYD	RANT	ОК	1/	HARD TO OPERATE		INOPERA	ABLE		
WATER IN BAR	RREL	YES		NO	# OF INCHES		***************************************		
CHECK CAP GA	SKETS	ОК		REPLACE		NUMBER			
NOZZLE CAP C	HAINS	ОК		REMOVE		REPLACE		N/A	L
LUBRICATE HY	DRANT	YES	V	NO					-
NOZZLE SEAL		ОК	1/	LEAKING					
BARREL COLO	JR					PAINT REQUIRED	YES	NO	(
BONNET & HO	SE NOZZLE CAP COLO	UR		/ ,			-		-
					/	PAINT REQUIRED	YES	NO	6
PUMP HYDRAI	NT IF PLUGGED	YES		NO			_	<del></del>	
						BLACKBANDED	YES	NO	_(
PRESSURE TES		PSI			<u> </u>		17. 11.18		
	1-2 1/2" NOZZLE (NFP.			PITOT	30	EQUAL //	22L	USGF	M
HYDRANT HEI	SHT FROM CENTER H	OSE NOZZL	E CAP T	O GRADE L	EVEL	2 / INCH	HES		
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### ANNUAL PREVENTATIVE MAINTENANCE REPORT

171 MARYCROFT AVENUE UNIT 3A WOODBRIDGE, ON. L4L 5Y3 T: 905- 669-2950 F: 905-738-6818 DATE: MAP #: 51 **CUSTOMER TORONTO ZOO** STREET: MEADOWVALE ROAD CITY: **TORONTO** NOTE: **VALVE OPENS** AND IS LOCATED OF HYDRANT. HYDRANT TYPE MODEL: **CENTURY** LOCATION: #37- SNOW LEOPARD SECONDARY VALVE FOUND: **OPEN** CLOSED LEAKING **INOPERABLE** SECONDARY VALVE BOX; OK **EXT REQ** SIZE GRASS **ASPHALT** SECONDARY VALVE BOX LOCATION: CHECK BARREL FOR DRAINING **SLOW** YES NO **CHECK BARREL FOR LEAKS** OK LEAKS @ HARD TO **OPERATE HYDRANT** OK OPERATE **INOPERABLE** WATER IN BARREL YES NO **CHECK CAP GASKETS** OK REPLACE **NUMBER NOZZLE CAP CHAINS** REPLACE OK **REMOVE** LUBRICATE HYDRANT YES NO **NOZZLE SEAL** OK **LEAKING BARREL COLOUR** PAINT REQUIRED YES NO **BONNET & HOSE NOZZLE CAP COLOUR PAINT REQUIRED** PUMP HYDRANT IF PLUGGED YES NO **BLACKBANDED** YES NO PRESSURE TEST-STATIC PSI FLOW CHECK 1-2 1/2" NOZZLE (NFPA24) PITOT **EQUAL USGPM** HYDRANT HEIGHT FROM CENTER HOSE NOZZLE CAP TO GRADE LEVEL INCHES YES PREVENTATIVE MAINTENANCE OVERHAUL (PMO) REQUIRED: NO COMMENTS: QUANTITY CODE NON CONTRACTED PARTS: PRICE DATE SERVICED BY: **CUSTOMER SIGNATURE** 

purlins that support the glazing bars have been determined adequate for the increased loads and do not require changing.

The second step in the Code analysis is:

- determine if the changes that were made to the Ontario Building Code adversely affect design conditions by increasing the design load related to snow piling and drifting design loading considerations
  - Calculate any increased loads that new glazing would impose on the structure and determine if the existing structure is capable of taking

the existing steel structures assuming increased dead loads of 4 psf, (single To accomplish this, Blackwell Bowick Engineering analysed the capacity of glazed systems based on new glazing bars and laminated glass) and of 7 psf, (double glazed insulated glass units or inflated plastic systems) and taking current OBC snow loading requirements into account.

## Review of OBC loading and Structural Considerations Blackwell Bowick Engineers 5.2

# 5.2.1 Structural Considerations

existing glazing. As a result, it was necessary to check the existing structure weight of 4 psf for the single glazed system and 7 psf for the double glazed system. The two upgraded glazing systems have been estimated to have to ensure that it has the structural capacity to accept a heavier glazing The proposed replacement glazing systems are each heavier than the system. The original glazing system weight is estimated to be 2.5 psf.

Our approach to this investigation involved 2 components:

- A comparison of the current snow load with the original design snow load.
- A check of selected members of the existing structure to determine whether they were able to support additional load.

The structures of the buildings being investigated comprise conventional steel structure as well as structures which incorporate hyperbolic parabaloid pipe grids. We have carried out our investigation on two representative buildings, the Australasia Pavilion (conventional) and the Africa Pavilion (hyperbolic parabaloid).

Since we have copies of the existing structural drawings, information about the existing structure was available to us for use in carrying out these investigations. The results follow.

## Snow Load Discussion

On both the Africa Pavilion and the Australasia Pavilion, snow build-up of 40 Notes on the roof framing plans for both buildings indicate that the glazed areas have been designed for a horizontally projected snow load of 20psf psf has been indicated in the valleys.

Using the current building code, the applicable roof snow load on a flat roof would be 28 psf. This snow load is then applied to the roof in the following manner:

- can be applied which brings the snow load to 19.5 psf, which is marginally For areas where the snow can slide completely off the roof, a slope factor less than the original design load.
- additional snow in the bottom half of the roof surfaces. The third scenario three cases, the total snow applied to the roofs is less than the total snow distributes the snow uniformly over the roof. The second scenario piles For areas were the sloped glazing surfaces meet in a valley, the code piles additional snow in the bottom quarter of the roof surfaces. In all gives three scenarios which must be checked. The first scenario for which the roofs were originally designed. r

Based on the above discussion, we find that the current snow loads are generally about the same or less than the original design snow loads.

# 5.2.2 Selected Member Check Discussion

# .1 Australasia Pavilion

snow build-up, one at the light end and one supporting purlins without snow members to check. We selected 2 purlin members, one with snow build-up and one without, and 3 main beams, one at the heavy end of purlins with Since the structure is conventional, it was possible to select a number of onild-up.

normal deflection criterion for a glazed surface. Further, the added dead load Our calculations indicate that the original design of these structural members installation, the only relative movement which may occur in the structure will deflections proportionately, our calculations indicate the total load deflection for the members checked was always within a deflection limit of L/360, our Generally, upgrading to a single glazing system increases the overall total overall total load by about 13%. While this increased load increases the load by about 3%. Upgrading to a double glazed system increases the deflection will be built into the structure as the glazing is added. After be due to snow loading which, as discussed above, has not changed was based on stiffness, since they all have ample strength capacity. significantly since the original design. As a result of the above, it is our opinion that the conventional structures are capable of supporting either of the upgraded glazing options.

### .2 Africa Pavilion

representative portion of the roof to model, in total representing about one structure using a finite element analysis program ETABS. We selected a support the hyperbolic parabaloid pipe grids, so we elected to model this While the glazed structure is conventionally framed, edge members also quarter of the entire roof.

before, it was found that the deflections for the two upgraded glazing options were based on stiffness, as they all have ample strength capacity. Also as Again, our calculations indicate that the original design of these structures fell within an overall deflection limit of L/360.

Australasia Pavilion, it is our opinion that the structures which incorporate Based on these results, and also referring to the discussion above for the hyperbolic parabaloid are capable of supporting either of the upgraded glazing options.

# 5.2.3 STRUCTURAL SUMMARY

It is our opinion that our review of the original and current snow loads, as well structure types are capable of supporting either of the upgraded glazing as our sampling analysis of the existing structures has shown that both

### 5.2.4 CONCLUSION

Vision Engineering has determined that the glazing bars are inadequate, but the purlins are structurally capable of increased loads.

existing purlins and structure. The optimum solution will accomplish this at the Simply put, this would mean replacement of the glass and glazing bars on the lowest cost without adversely affecting the levels of natural light in the buildings.

Our analysis has reviewed replacing the existing glazing system with glazing bars on the same 2'-0" spacing with 24"x + /-60" laminated glass or film reinforced glass vs. eliminating every other glazing bar and glazing with 48"x +/- 60" glass sizes. The latter is both less expensive and has a better impact on the building natural light levels.