

OHS BASELINE RISK ASSESSMENT

FOR

THE CONSTRUCTION OF FREEDOM PARK WELCOME CENTRE AND
SECURITY GATE PROJECT, AT FREEDOM PARK, IN TSHWANE, WITHIN
THE TSHWANE METROPOLITAN MUNICIPALITY

FEBRUARY 2023

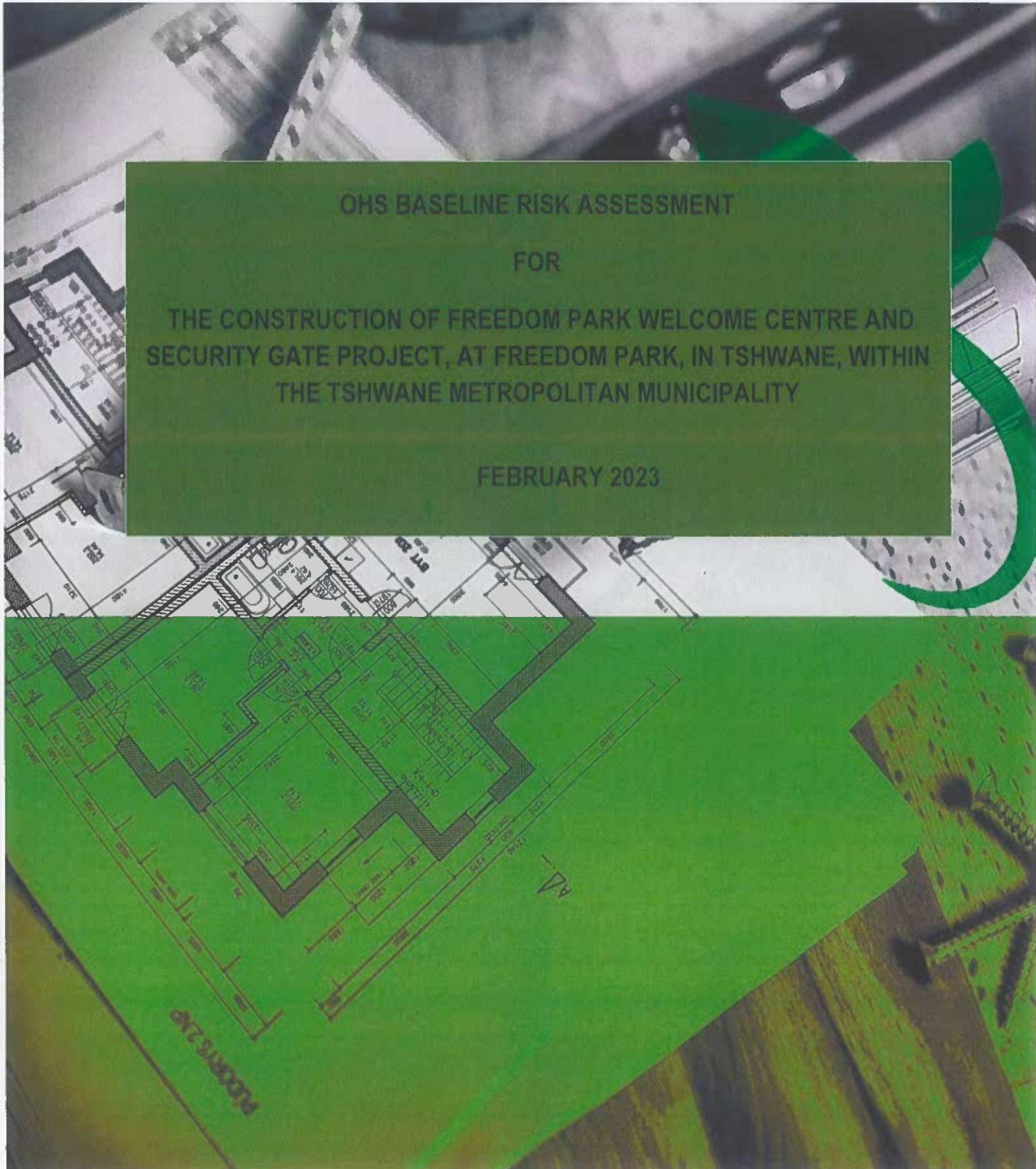


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1 PURPOSE

To identify Occupational Health and Safety (OHS) hazards and assess/evaluate associated OHS risks according to a formal, systematic methodology and holistic approach and to implement necessary control measures to facilitate effective risk reduction.

2 DEFINITIONS

2.1 **AIA**

Approved Inspection Authority, approved by the Department of Labour.

2.2 **Acceptable Risk**

Acceptable risk is a risk that has been reduced to a level that can be tolerated by the organization, taking into account legal obligations, corporate directives and / or guidelines.

2.3 **Competent Person**

A competent person is conversant with theoretical and practical knowledge of the required subject matter.

2.4 **Hazard**

A Hazard is an energy source, situation, object, substance, condition or activity with the potential to cause harm, injury or ill health (and damage).

2.5 **Hazard Identification**

Hazard identification is the process of recognizing hazards and defining its characteristics, in terms of identifying risks.

2.6 **OHS**

Occupational Health and Safety

2.7 **OHS Act**

Occupational Health and Safety Act, Act 85 of 1993

2.8 **Risk**

A risk is a combination of the likelihood/ probability of an occurrence of a hazard or exposure(s) and the severity/ consequence of injury, harm or ill health that can be caused by the hazard.

2.9 **Risk Assessment**

Risk assessment is the process of evaluating risk(s) arising from a hazard(s), taking into consideration the adequacy of any existing control measures, and deciding whether or not the risk(s) is acceptable.

3 RESPONSIBILITY

All designated Line Management.

4 REFERENCES

- 4.1 Section 8 – Occupational Health and Safety Act, Act 85 of 1993
- 4.2 Construction Regulation 9 – Occupational Health and Safety Act, Act 85 of 1993

5 PROCEDURE

- 5.1 All activities, products and services (including contractors), which may have an impact on operations and activities shall be evaluated. The following shall be considered as a minimum:
 - 5.1.1 Routine, non-routine, abnormal and emergency scenarios/ activities
 - 5.1.2 On and off-site activities, installations and impacts: design, infrastructure, equipment, materials, resources.
 - 5.1.3 New projects, changes and/ or modifications to equipment, operations or systems
 - 5.1.4 Human behaviours, safety culture
 - 5.1.5 Management of change – changes in the organizational structure, activities and/ or operations (prior to such changes)
- 5.2 The following methodology shall be applied:
 - 5.2.1 Formal identification and documentation of process flows for each department and designation – including activities, inputs and outputs, major installations, resources required, contractors used, legal responsibilities, etc. All processes prescribed shall be documented.
 - 5.2.2 Identify and evaluate hazards and risks according to point 6 (Instructions) below.
 - 5.2.3 Determine and document control measures according to the following order of hierarchy (Annexure 3):
 - Elimination
 - Substitution
 - Engineering controls: maintenance, monitoring
 - Administrative Controls: signage, warnings, training, safe work procedures
 - PPE
 - 5.2.4 Compile an OHS risk profile.

6 INSTRUCTIONS

- 6.1 Evaluate each health and safety risk, as applicable, (according to a worst case scenario) against the Risk Criteria descriptions in the Annexure 1 - Consequence and Likelihood.
Note: each hazard may have different risks impacting health and safety respectively.
- 6.2 Select the most appropriate description and record the corresponding numerical value against the specific health and safety risk.
- 6.3 From the allocated consequence level, follow the grid line down to where it meets the allocated likelihood grid line, to obtain a raw risk rating numerical value:
 - 6.3.1 the maximum risk rating that can be derived is 25
 - 6.3.2 the minimum risk rating that can be derived is 1
- 6.4 Record control measures developed and implemented to manage risks.
- 6.5 Sort health and safety risks according to the following ranges to develop a health and safety risk profile:
 - 6.5.1 Low Risks - Values 1 - 5
 - 6.5.2 Medium Risks - Values 6 - 12
 - 6.5.3 High Risks - Value 13 – 20
 - 6.5.4 Major Risks - Value 21 – 25

- 6.6 Identify and record additional control measures to reduce risks to an 'acceptable risk' level. Implement accordingly.

7 **REVIEW**

Assessments shall be documented and reviewed at least annually, and/ or after incidents, non-conformances, change of statutory requirements, audit results, surveys, and management of change.

8 **RECORDS**

- 8.1 OHS hazard identification and risk assessments
- 8.2 Occupational hygiene surveys
- 8.3 Management of change assessments/ evaluations

APPENDIX 1: RISK EVALUATION CRITERIA

		RISK MATRIX				
		1 Minor	2 Low	3 Medium	4 High	5 Major
	Risk Type					
	Harm to People – Safety (S)	First aid injury	Medical treatment injury	Lost time injury	Permanent disability or single fatality	More than one permanent disability or multiple fatalities
	Harm to People – Health (H)	Temporary discomfort	Temporary alterations / limitations (no lost time)	Reversible impact on health (lost time)	Irreversible impact on health with loss of quality of life or single fatality	Irreversible impact on health with loss of quality of life of more than one person or multiple fatalities
	Environmental Impact (E)	Limited to small area (few meters); low sensitivity (industrial area)	Reduced area (hundreds of meters); no sensitive species/habitat	Impact on an extended area (kilometres); sensitive (scarce / valuable environment)	Environmentally sensitive area (endangered species / habitats)	Permanent impact; highly sensitive area (endangered species, wetlands, protected habitats)
	LIKELIHOOD	RISK VALUE				
	Considering exposure to that hazard (number of people and frequency of the tasks)					
5 (Almost Certain)	The unwanted event is almost certain to happen once or more than once in a six month period.	Medium 11	High 16	High 20	High 25	High 30
4 (Likely)	There is a high probability that the unwanted event will occur. The unwanted event has occurred or is likely to occur once per year.	Medium 7	Medium 12	High 17	High 23	High 28
3 (Possible)	It is possible that the unwanted event can occur, less than once a year		Medium 8	High 13	High 18	High 23
2 (Unlikely)	There is a low probability for the unwanted event to occur. The unwanted event has occurred or is likely to occur not more than once every 1 to 5 years.			Medium 9	High 14	High 19
1 (Rare)	There is a very low probability for unwanted event to occur. There are no records of the event occurring or it is highly unlikely that it will occur within the next 5 to 10 years.			Medium 6	Medium 10	High 15

APPENDIX 2: HAZARD IDENTIFICATION AND RISK ASSESSMENT

HAZARD IDENTIFICATION AND RISK ASSESSMENT FORM2										
No.	TASK / ACTIVITY	HAZARD/ ENERGY	UNWANTED EVENT/ RISK	LIKELIHOOD	CONSEQUENCE	RISK VALUE	CONTROLS	LIKELIHOOD	CONSEQUENCE	RISK VALUE
1.	Site establishment.	Blockade of services to the premises.. Public safety. Traffic impact.	Public injuries Vehicle Accidents Disruption of hospital services	2	3	9	<ul style="list-style-type: none"> Maintenance manager to advise the contractor with site establishment. Safety signage to be displayed on the parameters of the site. Road safety signs to be displayed where required. 	1	1	2
2.	Off-loading material and tools - manual	Heavy loads	Handling heavy loads may result in back and other injuries employees	2	3	9	<ul style="list-style-type: none"> Correct manual handling techniques to be promoted through toolbox talks. Mechanical lifting devices must be used where possible. 	1	1	2
3.	Off-loading machinery	Heavy loads	Vehicles and machines may fall over or "run away" causing severe injuries	1	4	10	<ul style="list-style-type: none"> Only an experienced operator may load and off-load machinery. 	1	3	6
4.	Erecting fence/ Barricading construction area	Sharp wire, hand tools, manual labour	Performing manual labour with hand tools in the presence of sharp edges may result in hand finger and possibly lower arm injuries.	1	2	3	<ul style="list-style-type: none"> Sufficient hand protection must be worn when working with wire. Hand tools must be inspected on a monthly basis and defective tools must be destroyed. Hand tools risk assessment to be communicated with employees. 	1	1	1

HAZARD IDENTIFICATION AND RISK ASSESSMENT FORM

		HAZARD IDENTIFICATION AND RISK ASSESSMENT FORM								
No.	TASK / ACTIVITY	HAZARD/ ENERGY	UNWANTED EVENT/ RISK	LIKELIHOOD	CONSEQUENCE	RISK VALUE	CONTROLS	LIKELIHOOD	CONSEQUENCE	RISK VALUE
5.	Stacking of material	Stacks	Stacks may collapse or fall over if not built and maintained correctly	2	3	9	<ul style="list-style-type: none"> Building and breaking of stacks must be done under the supervision of an experienced person. All stacking and storage activities must conform to CR 28. 	2	2	5
6.		Stacking on upper level	Structure may collapse	2	5	19	<ul style="list-style-type: none"> The designers must indicate the safe work load for upper levels and the supervisor must ensure that it is not exceeded. 	2	4	14
7.	Operating mobile construction equipment/vehicles	Moving machinery	Machine may collide with other machines hit pedestrians resulting in severe injuries	3	3	13	<ul style="list-style-type: none"> All construction vehicles must conform to CR 23. 	4	2	8
8.			Fuel and oil spillages may result in ground pollution or polluting existing ground finishes.	4	1	7	<ul style="list-style-type: none"> Pre-used inspections must be conducted on all construction vehicles and any deviations must be rectified as soon as possible. 	2	1	2
9.	Operating generators	Using a generator	Long exposure to noise may result in hearing loss.	1	3	6	<ul style="list-style-type: none"> Generators must be placed in an area away from the labourers. 	1	1	1
10.	Operating lifting machinery	Lifting Operations	Falling material Crushing by materials Hand Injuries Toppling Crane	3	4	18	<ul style="list-style-type: none"> Competent persons (crane driver and banksmen). Inspections and certificates to be in place for all equipment. Materials properly packaged and slung. Access to lifting area to be restricted. 	2	3	9

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No.	TASK / ACTIVITY	HAZARD/ ENERGY	UNWANTED EVENT/ RISK	LIKELIHOOD	CONSEQUENCE	RISK VALUE				
				LIKELIHOOD	CONSEQUENCE	RISK VALUE				
11.	Electrical extension cables, other portable electrical equipment and electrical installations	Electricity	Broken insulation, sub-standard connections and broken plugs may result in electrocution. Electric fire	2	4	14	<p>CONTROLS</p> <ul style="list-style-type: none"> Regular inspections by an appointed person. All electrical tools to be in a good condition. Electrical installations register to be maintained by a competent person All electrical installations to conform to CR 24. 	2	2	5
12.	Bricklaying and plastering	Material, tools and manual labour	Hand and other body injuries, Contact with sharp bladed tools	3	2	8	<ul style="list-style-type: none"> Work to be carried out under supervision of competent person. PPE to be worn. Safe means of access to be provided. 	2	1	2
13.		Working with mortar	Caustic contamination with mortar	3	2	8	<ul style="list-style-type: none"> PPE for mortar to include gloves. Safe working platforms required Safe means of access to be provided. 	1	2	3
14.	Using angle grinder, circular saw, mitre saw	Rotating disc/blade	Incorrect usage and using fractured discs may cause injuries. Noise Induced Hearing Loss	3	3	13	<ul style="list-style-type: none"> The correct discs must be used. Hearing protection must be worn. Monthly inspections on all tools. Trained personnel. 	2	2	5
15.	Using portable electrical equipment/tools	High noise levels	Long exposure to noise may result in hearing loss.	2	2	5	<ul style="list-style-type: none"> Hearing protection to be worn. 	1	1	1
16.	Using electrical tools/equipment	Moving parts	Moving or damaged parts or incorrect usage may result in injuries	2	2	5	<ul style="list-style-type: none"> Appropriate PPE. Regular inspections on all equipment/tools. 	2	2	5

HAZARD IDENTIFICATION AND RISK ASSESSMENT FORM

		HAZARD IDENTIFICATION AND RISK ASSESSMENT FORM							
No.	TASK / ACTIVITY	HAZARD/ ENERGY	UNWANTED EVENT/ RISK	LIKELIHOOD	CONSEQUENCE	RISK VALUE	LIKELIHOOD	CONSEQUENCE	RISK VALUE
17.	Noise and dust from site activity	Noise and dust	Long-term exposure to high levels of dust can result in lung disease; Long-term exposure to high levels of noise may result in hearing loss; Damage to property and equipment nuisance to surrounding property users	1	3	6	1	1	1
							CONTROLS <ul style="list-style-type: none"> Hearing protection to be worn where applicable. Respiratory protection must be worn where there is a high level of dust and/or when working with tools creating dust. Areas to be dampened down to minimize dust. Property and equipment to be removed from construction areas Noise to be kept to acceptable levels 		
18.	Using ladders	Working at heights	Ladder may collapse or person may fall resulting in injuries	2	3	9	1	1	1
							<ul style="list-style-type: none"> Ladders to be inspected regularly. Correct usage of ladders to be promoted. 		
19.	Using hand tools	Hand tools	Improper usage or unsafe condition of tools may result in injuries	3	1	4	1	1	1
							<ul style="list-style-type: none"> Regular inspections of tools. Tools to be maintained in a good condition. Awareness of the correct usage of tools to be promoted. 		
20.	Welding	Bright light, hot surfaces, fumes,	Exposure to bright light may result in damage to the eyes, Hot surfaces may result in burn wounds, and Inhalation of fumes may cause health problems	3	2	8	2	2	5
							<ul style="list-style-type: none"> Welder and assistants to wear appropriate PPE (eye, skin and hearing protection). Respiratory protection to be worn where necessary. Good ventilation to be ensured. 		

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21.	Hot work	Heat and flammable substances	Hot surfaces may cause burn wounds and flammable substances may cause fire	2	4	14	<ul style="list-style-type: none"> • Appropriate PPE to be worn. • Fire extinguishers always kept in close proximity to hot work being performed. 	2	1	2
22.	Installing floor tiles	Floor tiles, manual labour and tools	Back and knee injuries, Hand injuries	2	2	8	<ul style="list-style-type: none"> • Knee pads/kneelers must be worn. • Appropriate PPE to be worn. 	1	2	3
23.	Glazing	Glass	Hand and other injuries	3	2	8	<ul style="list-style-type: none"> • Hand protection. • Appropriate PPE to be worn. 	2	1	2
24.	Painting	Paint fumes, contact with paint	Dizziness resulting in fainting and/or falling from heights	3	2	8	<ul style="list-style-type: none"> • Respiratory protection must be worn. • Areas to be well ventilated. • Always refer to MSDS for instructions on usage, hazards and precautions. 	2	1	2
25.	Handling Hazardous Chemical Substances (HCS)	Hazardous chemicals	Flammable and combustible chemicals may cause fires, Chemicals may be consumed if kept in unlabeled containers.	3	3	13	<ul style="list-style-type: none"> • Always refer to MSDS for instructions on usage, hazards and precautions. • Appropriate PPE to be worn. • Create awareness through toolbox talks. • Labelling all Hazardous Chemical Substance containers. 	2	2	5

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27.	Noise and dust from site activity	Noise and dust	Long-term exposure to high levels of dust can result in lung disease; Long-term exposure to high levels of noise may result in hearing loss.	1	3	6	<ul style="list-style-type: none"> Hearing protection to be worn where applicable. Respiratory protection must be worn where there is a high level of dust and/or when working with tools creating dust. Areas to be dampened down to minimize dust. 	2	1	2
28.	Working at heights	Working at heights	Person may fall off resulting in major injuries	2	3	9	<ul style="list-style-type: none"> Working at heights to be carried out according to specifications of the fall protection plan. Appropriate PPE to be worn. Access equipment to be properly constructed – inspection records to be maintained. Trained personnel construct, dismantle, inspect and control the access equipment. 	2	2	5
29.		Material and tools	Material and tools may fall injuring persons below	3	2	8	<ul style="list-style-type: none"> Working at heights to be carried out according to specifications of the fall protection plan. Appropriate PPE to be worn. 	1	2	3
30.	Scaffolding and Formwork	Scaffold Formwork	Scaffold may collapse, Formwork may collapse	3	3	13	<ul style="list-style-type: none"> Scaffolding and formwork to be erected, inspected, used and maintained in accordance with legal requirements by competent persons. 	2	2	5

HAZARD IDENTIFICATION AND RISK ASSESSMENT FORM												
No.	TASK / ACTIVITY	HAZARD/ ENERGY	UNWANTED EVENT/ RISK	LIKELIHOOD	CONSEQUENCE	RISK VALUE	CONTROLS			LIKELIHOOD	CONSEQUENCE	RISK VALUE
31.	Scaffolding Erection/Dismantling	Scaffold erection and/or dismantling	Person falling from heights, Items of scaffolding falling onto persons, scaffolding collapsing onto others below	4	3	17	<ul style="list-style-type: none"> Scaffolding should be designed to take the imposed loads. Appropriate PPE to be worn, including fall arrest PPE. Scaffolding and formwork to be erected, inspected, used and maintained in accordance with legal requirements by competent persons. 	3	2	8		
32.	Ceiling and insulation	Material, tools and manual labour	Material and tools may fall injuring persons below	2	2	5	<ul style="list-style-type: none"> No person may work underneath people working on a scaffold or ladders. 	2	1	2		
33.	Tiling walls and floors	Tiles, manual labour and tools	Back and knee injuries, Hand injuries	2	2	8	<ul style="list-style-type: none"> Knee pads must be worn. Tilers must take regular breaks. Appropriate PPE to be worn. 	1	2	3		
34.	Installing cupboards	Manual labour and tools	Hand and other injuries	2	2	5	<ul style="list-style-type: none"> Appropriate gloves to be worn where necessary. 	2	1	2		
35.	Plumbing	Lifting and installing geysers and pipes	Back sprains, property damage from burst pipes	1	2	3	<ul style="list-style-type: none"> Enough personnel to assist with lifting. All plumbing to be carried out by competent persons. 	1	1	1		
36.	Plumbing	Plumbing	Falling material, falling from heights, fire, burns, exposure to lead fumes.	2	2	9	<ul style="list-style-type: none"> Appropriate PPE to be worn. Trained and competent personnel. Safe means of access and egress. Emergency procedures must be in place. 	2	1	2		

No.	TASK / ACTIVITY	HAZARD/ ENERGY	UNWANTED EVENT/ RISK	LIKELIHOOD	CONSEQUENCE	RISK VALUE	CONTROLS	LIKELIHOOD	CONSEQUENCE	RISK VALUE
37.	Manual labour and ergonomics	Heavy loads and uncomfortable positions.	Muscle and other injuries	3	2	8	<ul style="list-style-type: none"> • Safe manual handling techniques to be applied. • Create awareness for safe manual handling through tool box talks. • Appropriate PPE to be worn. 	1	1	1
38.	Supply of welfare facilities	Dirty facilities, Unhygienic conditions	Illness and disease may be contracted	4	2	12	<ul style="list-style-type: none"> • Regular inspections to be conducted. • Rules to keep facilities hygienic to be enforced. • Awareness through toolbox talks. 	2	1	2
39.	Underground services.	Key services disrupted to the facility. Delay to project. Loss of amenity.	Disruption of key services to hospital. Personal injury	3	5	22	<ul style="list-style-type: none"> • Underground services to be identified on the drawing. • Dig/work permit to be obtained from the facilities maintenance manager. • Appropriate PPE to be worn. • Trained and competent personnel. 	3	4	18
40.	Excavations	Employee/Plant falling into the excavations. Employees working close to mobile plant. Interruptions of underground	Head injuries Back injuries Disabling injuries Foot injuries Electrocution Property damage	4	4	21	<ul style="list-style-type: none"> • Personnel to be competent. • Excavations to be inspected by the competent person • Ensure all emergency procedures are in place. • Safety signage to be displayed where required. • Appropriate PPE to be worn 	3	3	13

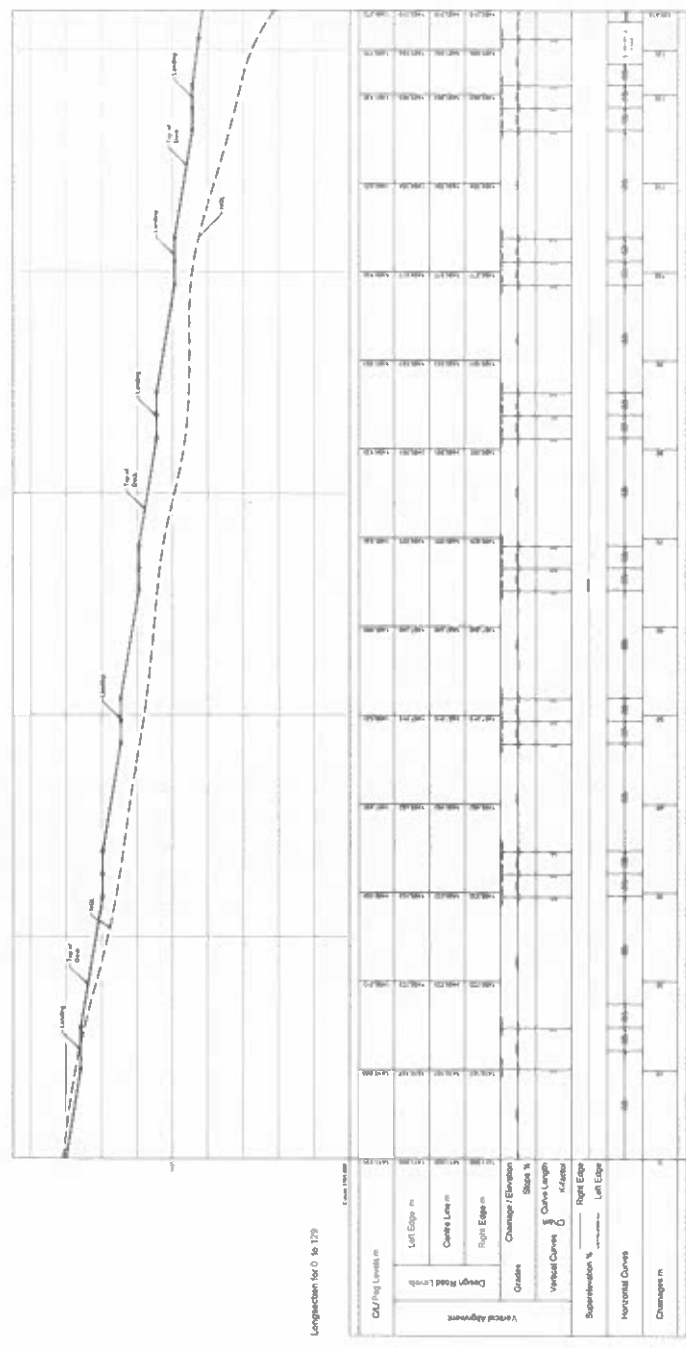
41.	Vehicular access to the work site	Height restrictions	Possible damage to vehicles and entrance tunnels	3	3	13	<ul style="list-style-type: none"> Height restriction requirements signage must be clearly displayed at all entrance points and where overhead heights are altered. Vehicle operators entering to observe and adhere to overhead restrictions. 	2	2	5
42.	Vehicle movement and interfacing	Haulage vehicles	Vehicle collision Pedestrian collision Damage to property	3	3	13	<ul style="list-style-type: none"> Vehicle operators to observe a speed limit of 20 at all entrance and exit points. Operators to observe lanes provided and all directional signage. Vehicles to be parked only at designated parking areas. No parking at exit and entrance points 	2	2	5
43.	Working at heights, including roof work	Working at heights	Person may fall off resulting in major injuries	2	3	9	<ul style="list-style-type: none"> Working at heights to be carried out according to the CR 10 of the fall protection plan CR 10. Roof works to conform with CR 10 (5). Appropriate PPE to be worn. A Method Statement to be compiled 	2	2	5
44.	Public Safety	Unauthorized entry	The public accessing the site without authorization, exposing them to dangerous activities on site.	4	3	13	<ul style="list-style-type: none"> Security personnel to control access on site. All safety signs to be visible and to be monitored continuously. Appropriate hoarding, netting, barriers to be installed as necessary to protect the public. Overhead gantries and platforms to protect walkways from falling objects. 	2	2	5

STRUCTURAL DRAWINGS

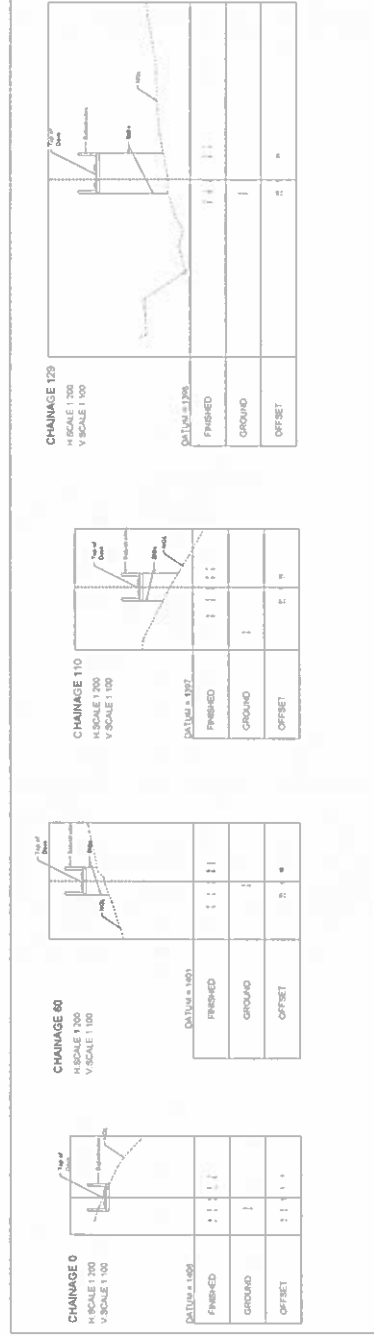
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WALKWAY LAYOUT
SCALE 1:100



WALKWAY LONGITUDINAL SECTIONS
SCALE 1:200

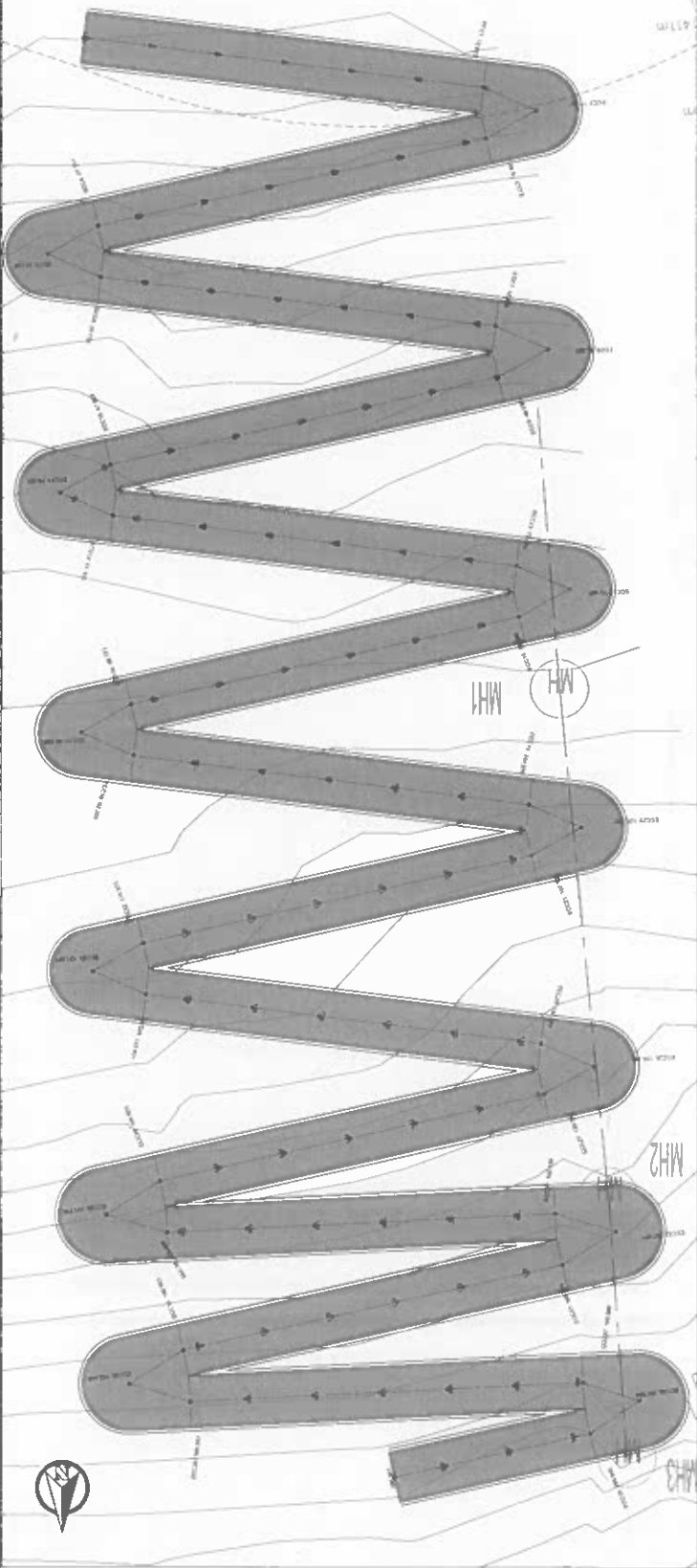


WALKWAY CROSS SECTIONS
SCALE 1:200

ISSUED FOR INFORMATION

PROJECT NO. 21007-RDM-ST5-300 DRAWING NO. 00 DATE 10/11/11		PROJECT NAME WALKWAY LAYOUT AND DETAILS		DRAWN BY P. J. BROWN		CHECKED BY J. J. BROWN		APPROVED BY P. J. BROWN	
FREEDOM PARK PARKING GARAGE PRETORIA									
21007-RDM-ST5-300 00									

WALKWAY LAYOUT
SCALE 1:50



WALKWAY LONGITUDINAL SECTION
SCALE 1:250



Long section for 0 to 205

Drawn 13th 2003

Station	C&G Pav Levels m		Design Road Levels	Vertical Alignment		Horizontal Curves	Changes in
	Left Edge	Centre Line		Grades	Changes		
0+00	1.20	1.20	1.20	0.00	0.00		
0+10	1.20	1.20	1.20	0.00	0.00		
0+20	1.20	1.20	1.20	0.00	0.00		
0+30	1.20	1.20	1.20	0.00	0.00		
0+40	1.20	1.20	1.20	0.00	0.00		
0+50	1.20	1.20	1.20	0.00	0.00		
0+60	1.20	1.20	1.20	0.00	0.00		
0+70	1.20	1.20	1.20	0.00	0.00		
0+80	1.20	1.20	1.20	0.00	0.00		
0+90	1.20	1.20	1.20	0.00	0.00		
0+100	1.20	1.20	1.20	0.00	0.00		
0+110	1.20	1.20	1.20	0.00	0.00		
0+120	1.20	1.20	1.20	0.00	0.00		
0+130	1.20	1.20	1.20	0.00	0.00		
0+140	1.20	1.20	1.20	0.00	0.00		
0+150	1.20	1.20	1.20	0.00	0.00		
0+160	1.20	1.20	1.20	0.00	0.00		
0+170	1.20	1.20	1.20	0.00	0.00		
0+180	1.20	1.20	1.20	0.00	0.00		
0+190	1.20	1.20	1.20	0.00	0.00		
0+200	1.20	1.20	1.20	0.00	0.00		

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DATE	NOVEMBER 2002
SCALE	1:50
PROJECT NO.	2.1007-RDM-ST5-300
REV	00

FREEDOM PARK
7TH FLOOR SANITARY GROUP
WALKWAY LAYOUT AND DETAILS

NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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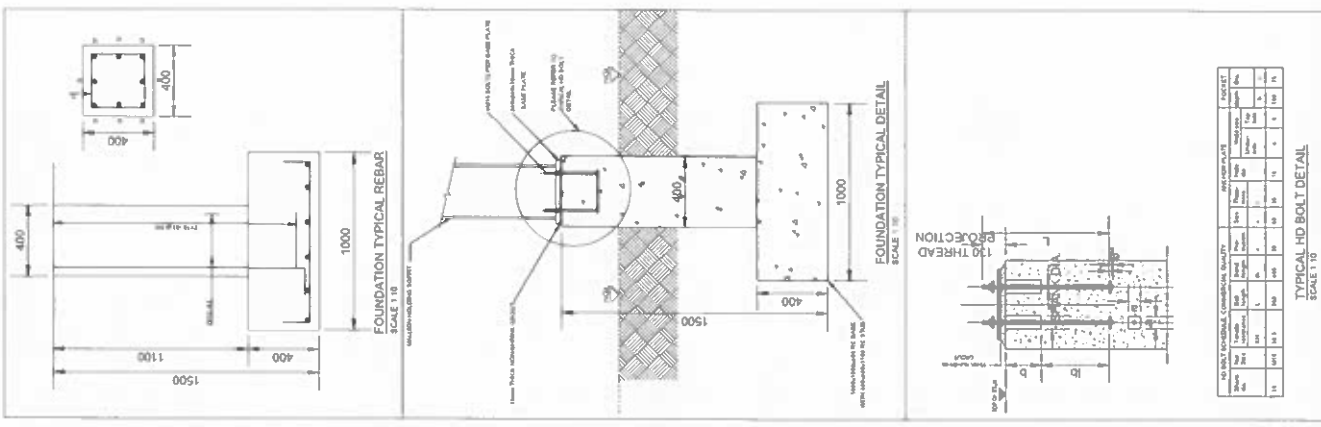
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NO.	REV.	DATE	BY	CHKD.	DESCRIPTION
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WALKWAY CROSS SECTIONS AND FOUNDATION DETAILS

FREEDOM PARK
1714 AVENUE SAUNDERS
PISCATAWAY, NJ 08854

SCALE 1:10

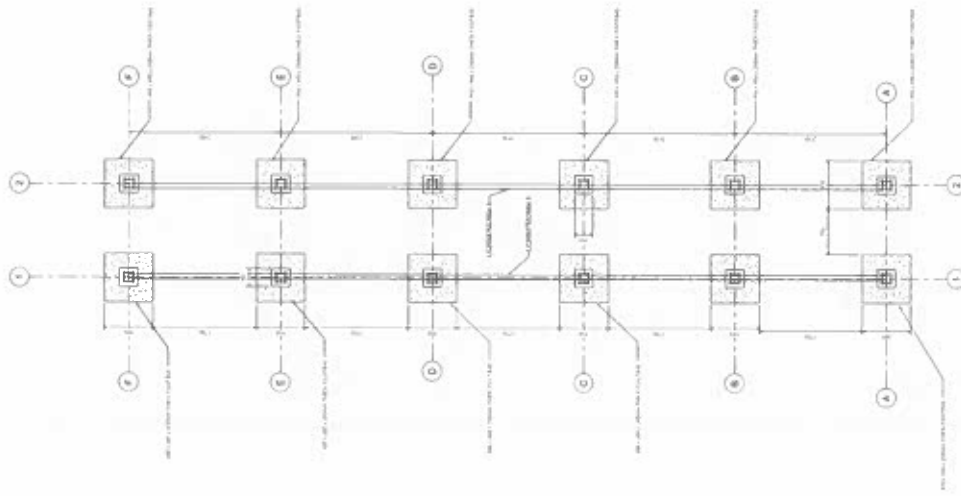


NO.	REBAR	CONCRETE	SPACING	DEPTH	WIDTH	LENGTH	OFFSET
1	4	150	100	150	400	1500	400
2	4	150	100	150	400	1500	400
3	4	150	100	150	400	1500	400
4	4	150	100	150	400	1500	400
5	4	150	100	150	400	1500	400
6	4	150	100	150	400	1500	400
7	4	150	100	150	400	1500	400
8	4	150	100	150	400	1500	400
9	4	150	100	150	400	1500	400
10	4	150	100	150	400	1500	400

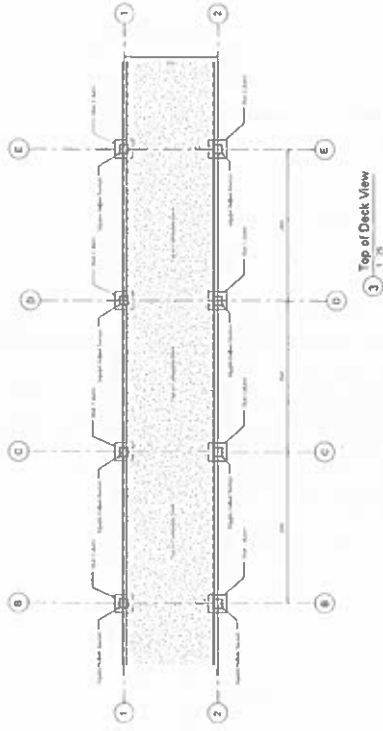
CHAINAGE	H SCALE 1:100	V SCALE 1:100	FINISHED	GROUND	OFFSET
CHAINAGE 100		100	100	100	100
CHAINAGE 90		90	90	90	90
CHAINAGE 80		80	80	80	80
CHAINAGE 70		70	70	70	70
CHAINAGE 60		60	60	60	60
CHAINAGE 50		50	50	50	50
CHAINAGE 40		40	40	40	40
CHAINAGE 30		30	30	30	30
CHAINAGE 20		20	20	20	20
CHAINAGE 10		10	10	10	10
CHAINAGE 0		0	0	0	0
CHAINAGE 208		208	208	208	208
CHAINAGE 200		200	200	200	200
CHAINAGE 190		190	190	190	190
CHAINAGE 180		180	180	180	180
CHAINAGE 170		170	170	170	170
CHAINAGE 160		160	160	160	160
CHAINAGE 150		150	150	150	150
CHAINAGE 140		140	140	140	140
CHAINAGE 130		130	130	130	130
CHAINAGE 120		120	120	120	120
CHAINAGE 110		110	110	110	110

WALKWAY CROSS SECTIONS
SCALE 1:100

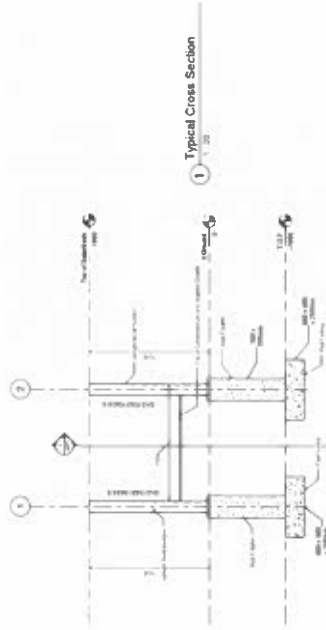
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
2. FINISHED SURFACE IS TO BE AS SHOWN.
3. GROUND SURFACE IS TO BE AS SHOWN.
4. OFFSET IS TO BE AS SHOWN.
5. ALL DIMENSIONS ARE TO BE AS SHOWN.
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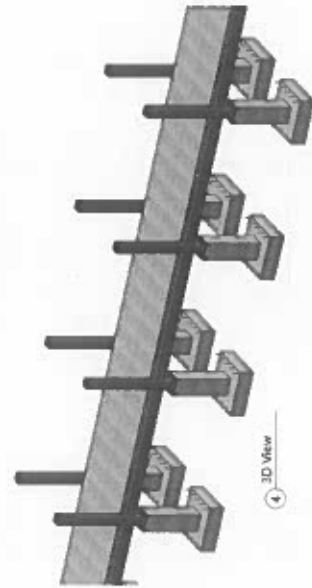
2 Foundation Layout
1/16" = 1'-0"



3 Top of Deck View
1/16" = 1'-0"



1 Typical Cross Section
1/16" = 1'-0"



4 3D View

Rev	Description	Date

STATUS:
 PURPOSE OF ISSUE:

PROJECT: **Freedom Park**
 TITLE: **Proposed Walkway**
 CLIENT:
 DESIGNER:
 SCALE: 1/16" = 1'-0"
 PROJECT NUMBER:
 SHEET NUMBER:
 3001

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 11/25/2010 10:55:00 AM
 1/16" = 1'-0"