







Company: Project :	HANDSHIP ENGINEEING CO.LTD Temporary Public Vehicle Park (Excluding Container Vehicle) for a Period of 5 Years at Lots 1422 RP(Part) in DD83 2020/7/9								
Date:									
Calculation for channels:									
Catchment Area of site									
Site Catchment Area A including outside catchment area									
Area	=	445 0.000445	m^2 km^2						
Total Peak runoff in m^3/s	= = =	0.278 0.029381 1763	x m^3/s liter/min	0.95	x	250	mm/hr	x 0.000445	km^2
According to (Figure 8.7 - Chart for the Rapid Design of C For gradient 1:100, 225UC will be suitable for the site A	hannels),								
Site Catchment Area B including outside catchment area									
Area	=	683 0.000683	m^2 km^2						
Total Peak runoff in m^3/s	= = =	0.278 0.045095 2706	x m^3/s liter/min	0.95	x	250	mm/hr	x 0.000683	km^2
Total Peak runoff in m^3/s of A and B	=	0.074476	m^3/s	=	4469	liter/min			
According to (Figure 8.7 - Chart for the Rapid Design of C For gradient 1:100, 300UC will be suitable for the site B	hannels),								
Site Catchment Area C including outside catchment area									
Area	=	332 0.000332	m^2 km^2						
Total Peak runoff in m^3/s	= = =	0.278 0.02192 1315	x m^3/s liter/min	0.95	x	250	mm/hr	x 0.000332	km^2
Total Peak runoff in m^3/s of A to C	=	0.096397	m^3/s	=	5784	liter/min			
According to (Figure 8.7 - Chart for the Rapid Design of C For gradient 1:100, 300UC will be suitable for the site C	hannels),								
Site Catchment Area D including outside catchment area									
Area	=	883 0.000883	m^2 km^2						
Total Peak runoff in m^3/s	=	0.278 0.0583	x m^3/s	0.95	x	250	mm/hr	x 0.000883	km^2
According to (Figure 8.7 - Chart for the Rapid Design of C	= hannels),	3498	liter/min						
Site Catchment Area E including outside catchment area									
	_	719	m^2						
Alea	=	0.000719	km^2						
Total Peak runoff in m^3/s	= = =	0.278 0.047472 2848	x m^3/s liter/min	0.95	x	250	mm/hr	x 0.000719	km^2
Total Peak runoff in m^3/s of D and E	=	0.105772	m^3/s	=	6346	liter/min			
According to (Figure 8.7 - Chart for the Rapid Design of C For gradient 1:100, 300UC will be suitable for the site E	hannels),								
Site Catchment Area F including outside catchment area									
Area	=	1032 0.001032	m^2 km^2						
Total Peak runoff in m^3/s	= =	0.278 0.068138 4088	x m^3/s liter/min	0.95	x	250	mm/hr	x 0.001032	km^2
Total Peak runoff in m^3/s of D to F	=	0.17391	m^3/s	=	10435	liter/min			
According to (Figure 8.7 - Chart for the Rapid Design of C For gradient 1:100, 375UC will be suitable for the site F	hannels),								
Total Peak runoff in m^3/s of whole site	=	0.270306	m^3/s	=	16218	liter/min			
According to (Figure 8.7 - Chart for the Rapid Design of C	hannels),								

For gradient 1:100, 450UC will be suitable for the site



Figure 8.7 - Chart for the Rapid Design of Channels

Checking Existing 600UC

Catchment Area of site

Outside Catchment area (Hard-paved)

outside catchinent area (nard-paved)										
Area	=	4376	m^2							
	=	0.004376	km^2							
Peak runoff in m^3/s	=	0.278	х	0.95	х	250	mm/hr	х	0.004376	km^2
	=	0.288925	m^3/s							
	=	17336	liter/mir	ı						
Outside Catchment area (Seil naved)										
outside catchinent area (son-paved)										
Area	=	1253	m^2							
	=	0.001253	km^2							
Peak runoff in m^3/s	=	0.278	x	0.25	х	250	mm/hr	х	0.001253	km^2
	=	0.021771	m^3/s							
	=	1306	liter/mir	n						
Outside Catalanant and (Eviation Classe)										
Outside Catchment area (Existing Slope)										
Area	=	3200	m^2							
7100	=	0.0032	km^2							
Peak runoff in m^3/s	=	0.278	x	0.25	х	250	mm/hr	х	0.0032	km^2
	=	0.0556	m^3/s							
	=	3336	liter/mir	ı						
		0 (2((02			20107					
600UC	= 10	0.036603	mn3/s	=	38196	iiter/min				

According to (Figure 8.7 - Chart for the Rapid Design of Channels), For gradient 1:100, Existing 600UC will be suitable for the site



Figure 8.7 - Chart for the Rapid Design of Channels





Figure 8.11 - Typical U-channel Details



Figure 8.10 - Typical Details of Catchpits





ALTERNATIVE TOP SECTION FOR PRECAST CONCRETE COVERS / GRATINGS

NOTES:

- 1. ALL DIMENSIONS ARE IN MILLIMETRES.
- 2. ALL CONCRETE SHALL BE GRADE 20 /20.
- 3. CONCRETE SURFACE FINISH SHALL BE CLASS U2 OR F2 AS APPROPRIATE.
- 4. FOR DETAILS OF JOINT, REFER TO STD. DRG. NO. C2413.
- 5. CONCRETE TO BE COLOURED AS SPECIFIED.
- UNLESS REQUESTED BY THE MAINTENANCE PARTY AND AS DIRECTED BY THE ENGINEER, CATCHPIT WITH TRAP IS NORMALLY NOT PREFERRED DUE TO PONDING PROBLEM.
- 7. UPON THE REQUEST FROM MAINTENANCE PARTY, DRAIN PIPES AT CATCHPIT BASE CAN BE USED BUT THIS IS FOR CATCHPITS LOCATED AT SLOPE TOE ONLY AND AS DIRECTED BY THE ENGINEER.
- 8. FOR CATCHPITS CONSTRUCTED ON OR ADJACENT TO A FOOTPATH, STEEL GRATINGS (SEE DETAIL 'A' ON STD. DRG. NO. C2405) OR CONCRETE COVERS (SEE STD. DRG. NO. C2407) SHALL BE PROVIDED AS DIRECTED BY THE ENGINEER.
- 9. IF INSTRUCTED BY THE ENGINEER, HANDRAILING (SEE DETAIL 'G' ON STD. DRG. NO. C2405; EXCEPT ON THE UPSLOPE SIDE) IN LIEU OF STEEL GRATINGS OR CONCRETE COVERS CAN BE ACCEPTED AS AN ALTERNATIVE SAFETY MEASURE FOR CATCHPITS NOT ON A FOOTPATH NOR ADJACENT TO IT. TOP OF THE HANDRAILING SHALL BE 1 000 mm MIN. MEASURED FROM THE ADJACENT GROUND LEVEL.
- 10. MINIMUM INTERNAL CATCHPIT WIDTH SHALL BE 1 000 mm FOR CATCHPITS WITH A HEIGHT EXCEEDING 1 000 mm MEASURED FROM THE INVERT LEVEL TO THE ADJACENT GROUND LEVEL. AND, STEP IRONS (SEE DSD STD. DRG. NO. DS1043) AT 300 ¢ STAGGERED SHALL BE PROVIDED. THICKNESS OF CATCHPIT WALL FOR INSTALLATION OF STEP IRONS SHALL BE INCREASED TO 150 mm.
- 11. FOR RETROFITTING AN EXISTING CATCHPIT WITH STEEL GRATING, SEE DETAIL 'F' ON STD. DRG. NO. C2405.
- 12. SUBJECT TO THE APPROVAL OF THE ENGINEER, OTHER MATERIALS CAN ALSO BE USED AS COVERS / GRATINGS.

	– FORMER DRG.	. NO. C2406J. Original Signed 03.2015
	REF. F	REVISION SIGNATURE DATE
CATCHPIT WITH TRAP	CEDD CI DEV	IVIL ENGINEERING AND /Elopment department
(SHEET 2 OF 2)	SCALE 1:20	DRAWING NO.
	DATE JAN 19	091 C2406 /2
卓越工程 建設香港	We Enginee	er Hong Kong's Development

APPENDIX SITE PHOTO













G CONSULTANT	TEMPORARY PUBLIC VEHI	ICLE PARK	LOT 1422 RP (PART) IN D.D. 83, LUNG YEUK	1 : 500 @ A4		FSIs PROPOS	AL
	(EXCLUDING CONTAINER VEHICLE) FOR A TAU, FANLING, NEW TERRITORIES	DRAWN BY MN	DATE 10.1.2024				
				REVISED BY	DATE	DWG NO. APP I	ver. 001