

Detailed Justifications for
Filling and Excavation of Land for Vehicular Access Road on Government Land in D.D. 112,
Shek Kong, Yuen Long

The Application Site and Zoning

1. The Application Site (the Site) is located at the western fringe of Nam Hing Lei. It falls within an area zoned mainly zoned Village Type Development” (“V”) (about 99.7%) with a very small portion zoned “Agriculture” (“AGR”) (about 0.3%) on the Shek Kong Outline Zoning Plan (OZP) (**Plan 1**). According to the Notes of the “V” zone, filling and excavation of land require planning permission from the Town Planning Board (the Board).
2. The Site is currently vacant, partly covered with weeds and partly fenced off (**Plan 5a**).

The Proposal

3. The applicant seeks planning permission for filling/excavation of land for provision of a vehicular access to facilitate the construction of Small Houses within the subject “V” zone. The road proposal is as follows:
 - (a) The proposed vehicular access includes an east-bound section of 6m wide and a south-bound section varying in width from about 3.5m to 4m (**Plan 3**). The gradient is about 1:60 to 1:70. The Site will be filled with concrete to a maximum of about 0.8m to form the road surface. The depth of excavation works is about 0.225m to 0.375m to cater for the provision of surface u-shaped channels along the periphery of the Site.
 - (b) The Site is accessible via Ko Sheung Road. A temporary run-in/run-out of 8m wide was already approved in-principle by TD in late August 2024 (**Appendix Ia**). A new run-in/run-out will be provided to the satisfaction of TD and HyD in accordance with the latest version of Highways Standard Drawings No. H1113 and H1114 (**Appendices Ib and Ic**). No modification works of street furniture would be implemented prior to approval on the modification proposal by TD and HyD. Similar run-in/run-out in the vicinity has been constructed under application no. A/YL-SK/306, which was approved by RNTPC on 11.6.2021 (**Appendix II & Photo 3 of Plan 5b**). The existing 525mm U-channel underneath the access road would not be affected as sufficient headroom would be provided.
 - (c) Upon completion, the vehicular access would be handed over to the Government. The applicant would maintain and repair such paved way and everything forming portion of or pertaining to it to the satisfaction of LandsD.

Justifications

4. The justifications are summarized as follows:

- (a) One of the planning intention of “V” zone is to concentrate village type development within this zone for a more orderly development pattern, efficient use of land and provision of infrastructures and services. The provision of vehicular access as an essential supporting infrastructure is generally not in conflict with such planning intention.
- (b) According to past aerial photos (**Plan 2**), the Site was provided with footway access and should not be blocked upon completion of the public drainage channel to the north. Vehicular access should be allowed to serve the village type developments within the “V” zone.
- (c) The proposed vehicular access can also serve as an emergency vehicular access to enhance the fire safety of the adjoining Small House developments.
- (d) The proposed vehicular access is to serve a few Small House developments and the traffic generated is not significant, as revealed in **Appendix III**.
- (e) Similar application (A/YL-SK/346) for filling and excavation of land for site formation of Small Houses in the vicinity of the Site was approved by RNTPC on 24.11.2023.
- (f) In commenting the application no. A/YL-SK/346, C for T advises that construction of Small Houses in the later stage might result in forming roads and/or run-ins permanently on unallocated Government land without approvals from any departments (unauthorized run-ins), which could lead to public complaints and traffic concerns. The proposal can provide a proper vehicular access under the scrutiny of relevant Government departments via the planning application system and serves to deter the proliferation of unauthorized run-ins.
- (g) The excavation of land is for the provision of surface u-shaped drainage channels and other drainage facilities around the periphery of the Site by following the gradient of the proposed access road in general.
- (h) The drainage proposal in **Appendix IV** demonstrates that there would be no adverse drainage impact arising from the development.

5. To conclude, the proposed vehicular access is generally not in conflict with the planning intention of the “V” zone, and no traffic, environmental, drainage, visual and landscape impacts are envisaged. In view that it can facilitate the proposed Small House developments in the subject “V” zone, favourable consideration may be given to the application.



Fax, Agreed on 28 Aug 2024

Our reference : NL/OTH/011468
Date: 16 Aug 2024

Transport Department
NT Regional Office
Traffic Engineering (NTW) Division
Boundary Section
7/F, Mongkok Government Offices,
30 Luen Wan Street,
Mongkok, Kowloon

② PTO/W1
③ SE/SD 2
① E/VL/E
PTO/W1

Attn: Mr. [REDACTED] (Prin. Tech Offr (Traffic)/W1)

Temporary Traffic Arrangement for Temporary Run-In Out for Construction Works at Ko Sheung Road near Nam Hing West Road

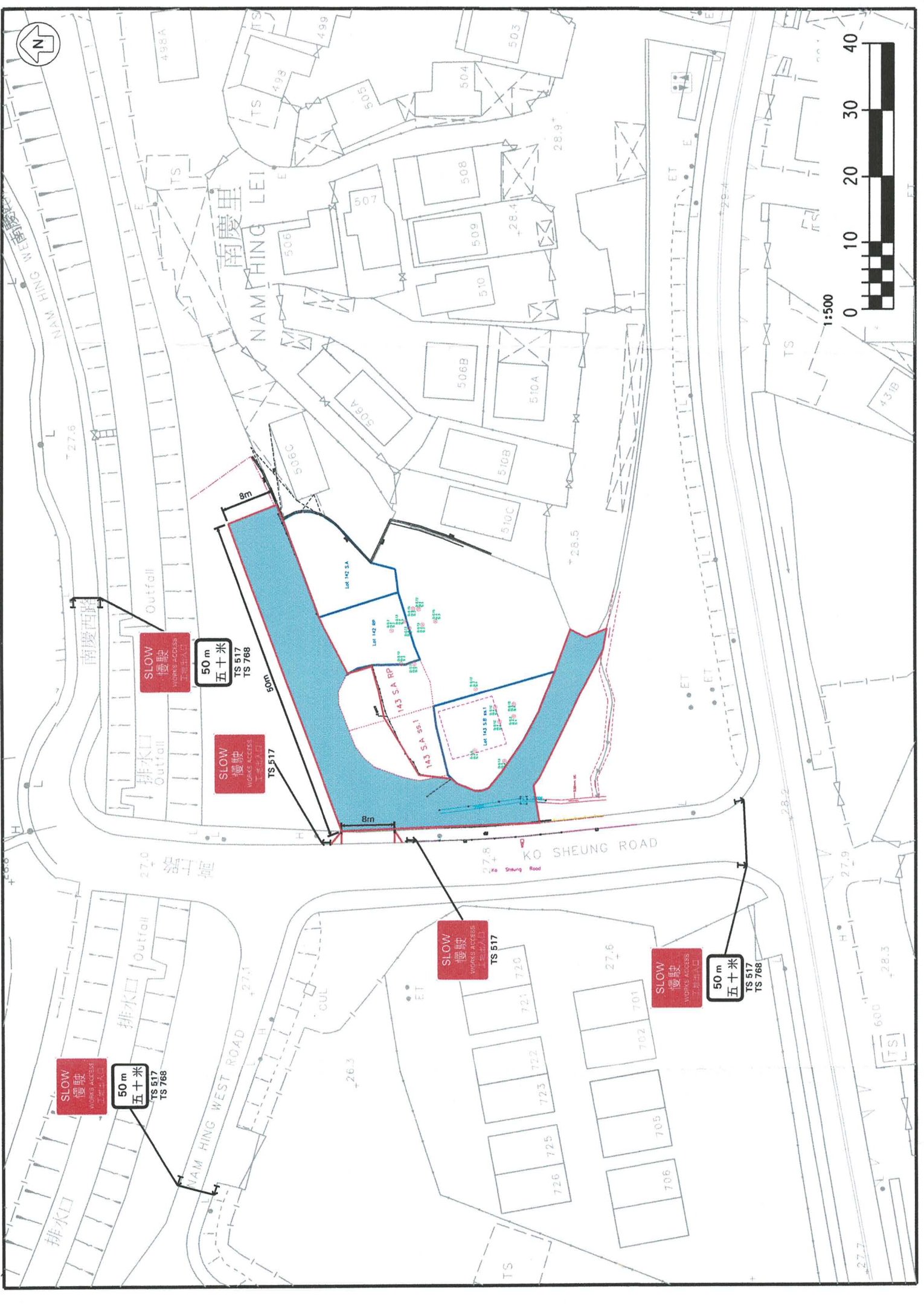
Agreed on condition that all temporary traffic arrangements should comply with the Code of Practice for the Lighting, Signing and Guarding of Road Works (9th issue 2017) issued by Highways Department.

[Signature]
28 AUG 2024
PTO/W1 / NTW TD

Applicant's letter ref. no. NL/OTH/011468 dated 16 Aug 2024

Agreed via fax (3747 3221) on 28 Aug 2024 with the following Approval Conditions :

- 1) Please liaise with locals and affected stakeholders before commencement of the proposed works.
- 2) As the works area as shown is outside the purview of TD, please verify the road/land status, seek prior comments and obtain consents from relevant managerial departments/affected parties/stakeholders.
- 3) Please provide the purpose of works area in detail.
- 4) As the proposed vehicular access/run-in/out is temporarily implemented on a footpath, please submit relevant drawing in detail to lay out the TTA for implementation of such vehicular access and pedestrian traffic control on footpath during implementation.
- 5) Please also liaise with district maintenance division of Highways Department beforehand for any removal of existing street furniture such as type II railings on the back of footpath. Such railings shall be immediately reinstated upon completion of works.
- 6) The plastic barriers as shown shall be provided with flashing lanterns for 24-hour TTA/works and shall be specified on the legend.
- 7) Water-filled barriers rather than plastic barriers shall be provided along the back of footpath when there is an adjoining slope or retaining wall underneath, please verify on site accordingly.
- 8) The both sides of vehicular access/run-in/out shall be provided with amber revolving lanterns.
- 9) Banksman shall be deployed at the vehicular access/run-in/out for manual traffic control when necessary.
- 10) Swept path analysis of construction/works vehicle for ingress/egress at the vehicular access/run-in/out shall be demonstrated.
- 11) Adequate and unobstructed sightlines shall be maintained at/near the vehicular access/run-in/out.
- 12) Please seek prior comments and obtain consent from Traffic Police.
- 13) Please ensure no other concurrent TTA scheme nearby unless prior approvals/consents granted by TD and Traffic Police.
- 14) Please revise the anticipated programme of works for six months maximum and submit application for re-endorsement every six months.



SLOW
慢駛
WORKS ACCESS

50 m
五十米
TS 517
TS 768

SLOW
慢駛
WORKS ACCESS

TS 517

SLOW
慢駛
WORKS ACCESS

50 m
五十米
TS 517
TS 768

SLOW
慢駛
WORKS ACCESS

TS 517

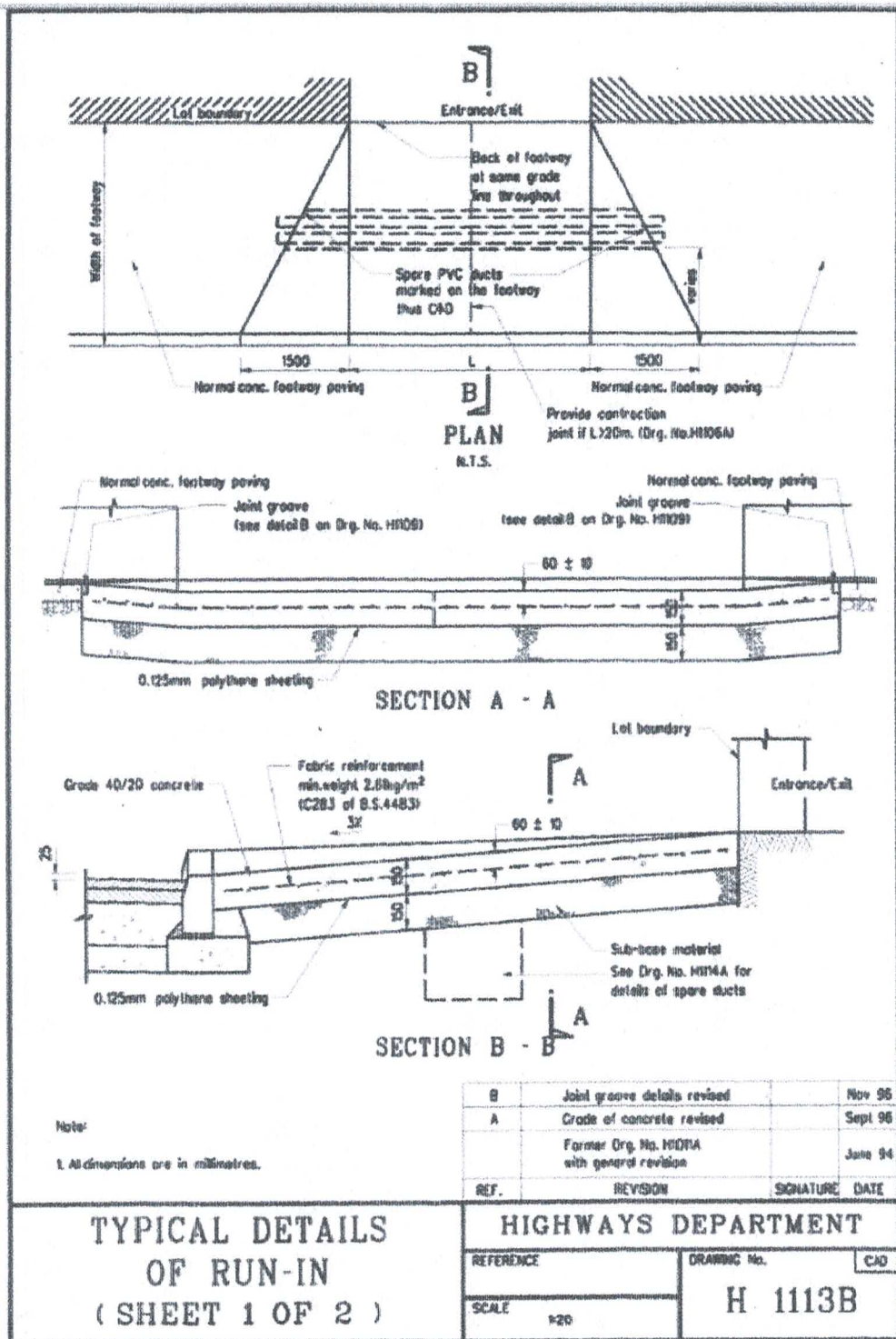
SLOW
慢駛
WORKS ACCESS

50 m
五十米
TS 517
TS 768

1:500



Appendix Ib



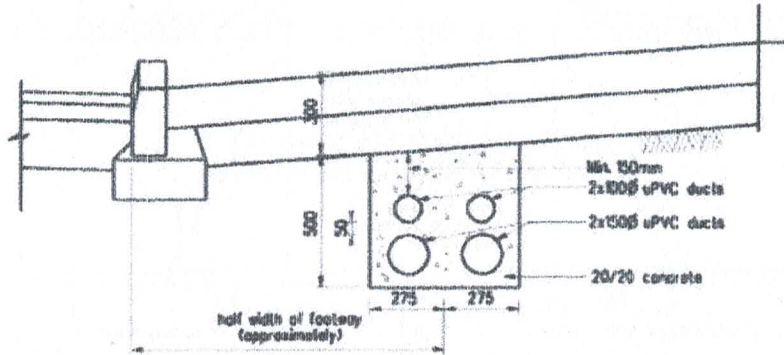
B	Joint groove details revised	Nov 96
A	Grade of concrete revised	Sept 96
	Former Drg. No. H107A with general revision	June 94
REF.	REVISION	SIGNATURE DATE

**TYPICAL DETAILS
OF RUN-IN
(SHEET 1 OF 2)**

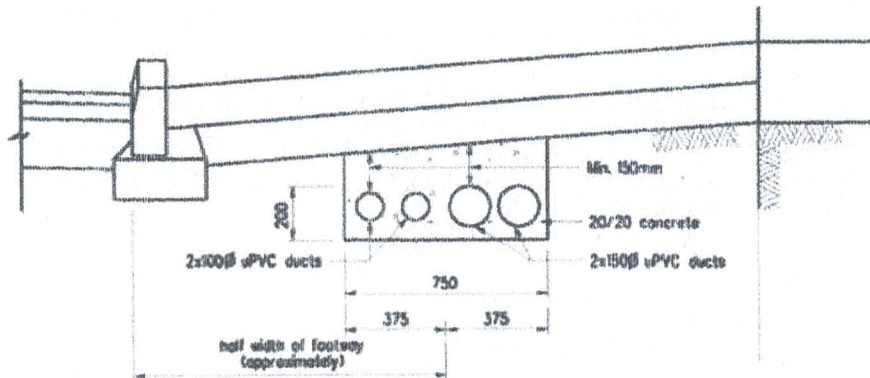
HIGHWAYS DEPARTMENT

REFERENCE	DRAWING No.	CAO
SCALE	H 1113B	
1:20		

Appendix Ic



OPTION A



OPTION B

Notes:

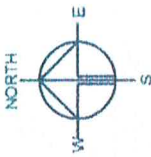
1. 100 diameter ducts are provided for cables of ATC or CCTV.
150 diameter ducts are provided for power cables.
2. The choice of option depends on the site situations (e.g. width of footway, existing underground utilities).
3. Position of both ends of the duct bank to be marked on footway thru CAD.

A	Concrete cover revised		Sept 98
	Former Drg. No. H1071A with general revision		June 94
REF.	REVISION	SIGNATURE	DATE

**TYPICAL DETAILS
OF RUN-IN
(SHEET 2 OF 2)**

HIGHWAYS DEPARTMENT

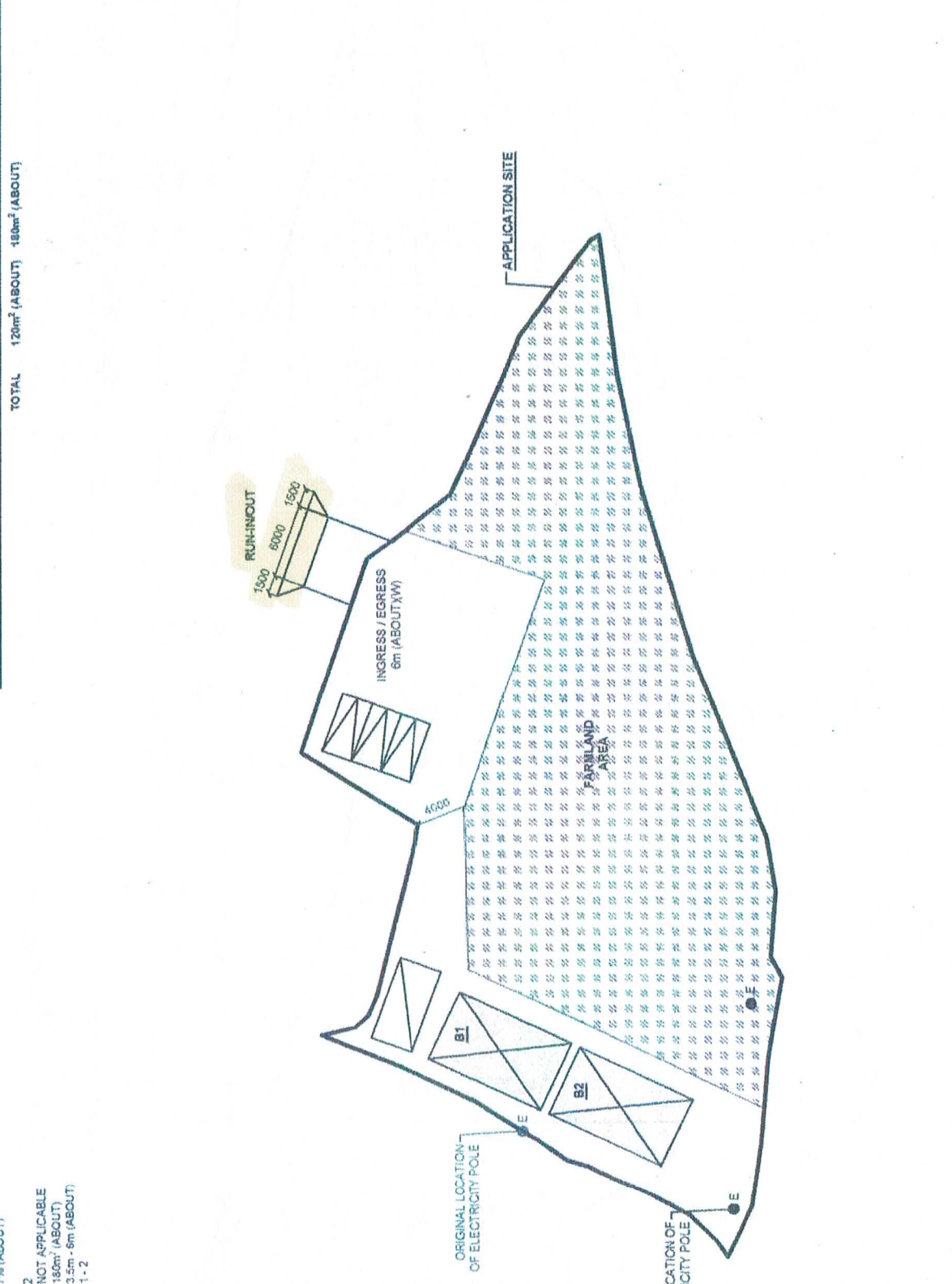
REFERENCE	DRAWING No.	CAD
SCALE	H 1114A	
1:20		



STRUCTURE	USE	COVERED AREA GFA	BUILDING HEIGHT
B1	AGRICULTURAL LEARNING CENTRE AND STORAGE OF SEED AND FARM TOOLS	60m ² (ABOUT)	3.5m (ABOUT) (1-STOREY)
B2 (GF) (1/F)	RECEPTION, TOILET CHANGING ROOM	60m ² (ABOUT)	6m (ABOUT) (2-STOREY)
TOTAL		120m² (ABOUT)	180m² (ABOUT)

DEVELOPMENT PARAMETERS OF THE APPLICATION SITE

APPLICATION SITE AREA	1,769m ² (ABOUT)
COVERED AREA	120m ² (ABOUT)
UNCOVERED AREA	1,649m ² (ABOUT)
PLOT RATIO	0.1 (ABOUT)
SITE COVERAGE	7% (ABOUT)
NO. OF STRUCTURE	2
DOMESTIC GFA	NOT APPLICABLE
NON-DOMESTIC GFA	180m ² (ABOUT)
BUILDING HEIGHT	3.5m - 6m (ABOUT)
NO. OF STOREY	1 - 2



LEGEND

[Symbol]	STRUCTURE
[Symbol]	FARMLAND
[Symbol]	LOADING/UNLOADING SPACE
[Symbol]	PARKING SPACE

PARKING PROVISION

NO. OF PRIVATE CAR PARKING SPACE	: 3
DIMENSION OF PARKING SPACE	: 2.5m (W) X 5m (L)
NO. OF LULU SPACE FOR LGV	: 1
DIMENSION OF LULU SPACE	: 3.5m (W) X 7m (L)

Appendix II

Drawing No.	PLAN 3	Scale	1:500
Project	PROPOSED TEMPORARY PLACE OF RECREATION, SPORTS OR CULTURE (HOBBY FARM) FOR A PERIOD OF 5 YEARS AND LAND FILLING		
Location	VARIOUS LOTS IN D.D. 112 SHEK KONG, YUEN LONG, NEW TERRITORIES		
Case No.	8.4.2021	Date	3.6.2021

Drawing Title	LAYOUT PLAN
Scale of Plot	1:500
Case No.	8.4.2021
Date	3.6.2021

Estimated Traffic Generation

1. The proposed vehicular access is via Ko Sheung Road and is assumed to serve 5 Small Houses (including Lots 142 S.A/142 RP, 143 S.A RP/143 S.A ss.1, 143 S.B ss.1, 143 S.B ss.2 and 143 S.B RP). The run-in/run-out point is 6m wide. As the proposed Small Houses are within walking distance from public transport facilities at Kam Sheung Road, the traffic generated by them is not significant.
2. It is assumed that there will be one parking space for private car (5m x 2.5m) and one loading/unloading bay for light goods vehicle (7m x 3.5m) for each Small House. The estimated traffic generation/attraction rate is shown as follows:

Type of Vehicle	<u>Average</u> Traffic Generation Rate (pcu/hr)	<u>Average</u> Traffic Attraction Rate (pcu/hr)	Traffic Generation Rate at <u>Peak Hours</u> (pcu/hr)	Traffic Attraction Rate at <u>Peak Hours</u> (pcu/hr)
Private car	0.5	0.5	5	5
Light Goods Vehicle	0.75	0.75	0	0
Total	1.25	1.25	5	5

Note:

- a) The loading/unloading bay would only be used very infrequently and no such activity would be carried out at peak hours;
 - b) The pcu of private car and light goods vehicle are taken as 1 and 1.5 respectively; and
 - c) Morning peak is defined as 7:00 a.m. to 9:00 a.m. whereas afternoon peak is defined as 5:00 p.m. to 7:00 p.m.
 - d) Lots 139 and 145 S.A ss.2 has level difference with the proposed vehicular access and are not assumed to use it. Future connection to this access is subject to additional land filling works under separate planning application.
3. In view of the size of the Small House sites, adequate space for manoeuvring could be provided within the Small House sites such that no queueing up of vehicles onto the proposed vehicular access would be occurred. The negligible increase in traffic would not aggravate the traffic condition of Ko Sheung Road and nearby road networks.

Drainage Proposal

A. Existing Situation

1. The application site (the Site), a proposed vehicular access, includes an east-bound section of 6m wide and a south-bound section varying in width from about 3.5m to 4m. The gradient is between 1:60 to 1:70. The Site will be filled with concrete to a maximum of about 0.8m to form the road surface. The depth of excavation works is about 0.225m to 0.30m to cater for the provision of surface u-shaped channels along the periphery of the Site.

B. Level and Gradient of Site

2. The proposed road levels would range from 27.3mPD to 28.0mPD (**Plan 3**). The gradient is between 1:60 to 1:70. U-channels would be provided following the gradient of the road. As demonstrated in Section E below, 225mm surface U-channels will be capable to drain surface runoff accrued at the Site and those from adjacent areas.

C. Catchment Areas (Plan 4)

3. The proposed drainage facilities would mainly drain surface runoff from the road surface. According to the direction of flow, the east-bound section forms **Catchment 1 (C1)** and the south-bound section forms **Catchment 2 (C2)**.
4. Lots 142 S.A, 142 RP and 143 S.B.ss.1 have their own drainage facilities and site formation works for proposed Small House developments have been approved under planning application no. A/YL-SK/346, while those of Lot 143 S.B RP would be considered under application no. A/YL-SK/376. Taking into account the site topography, Lot 143 S.B ss.2 is included as an external catchment (**Catchment 3 (C3)**) and considered in the calculation.

D. Existing Drainage Facilities

5. There is a public catchpit to the north of the proposed run-in (**Plan 4 and Photo 4 of Plan 5b**). A 375mm U-channel would drain into it according to application no. A/YL-SK/346.
6. The areas near the eastern part of the Site are generally of a higher elevation. With part of the original surface runoff intercepted by the proposed vehicular access, the westward storm water flow into the 525mm surface U-channel below the roadside slope of Ko Sheung Road and the existing stream within Lot 139 would become less (**Plan 4 and Photos of Plan 5c**). Hence, the drainage circulation would be improved in general.

E. Calculation for Channels

Catchment 1

$$\begin{aligned}\text{Site Area} &= 295 \text{ m}^2 \\ \text{(concrete-paved)} &= 0.000295 \text{ km}^2\end{aligned}$$

$$\begin{aligned}\text{Peak runoff in m}^3 &= 0.278 \times 0.95 \times 250\text{mm/hr} \times 0.000295 \text{ km}^2 \\ &= 0.019477 \text{ m}^3/\text{s} \\ &= 1168 \text{ liter/min}\end{aligned}$$

Catchment 2

$$\begin{aligned}\text{Site Area} &= 178 \text{ m}^2 \\ \text{(concrete-paved)} &= 0.000178 \text{ km}^2\end{aligned}$$

$$\begin{aligned}\text{Peak runoff in m}^3 &= 0.278 \times 0.95 \times 250\text{mm/hr} \times 0.000178 \text{ km}^2 \\ &= 0.011752 \text{ m}^3/\text{s} \\ &= 705 \text{ liter/min}\end{aligned}$$

Catchment 3 (External)

$$\begin{aligned}\text{Site Area} &= 188 \text{ m}^2 \\ \text{(soil-paved)} &= 0.00018 \text{ km}^2\end{aligned}$$

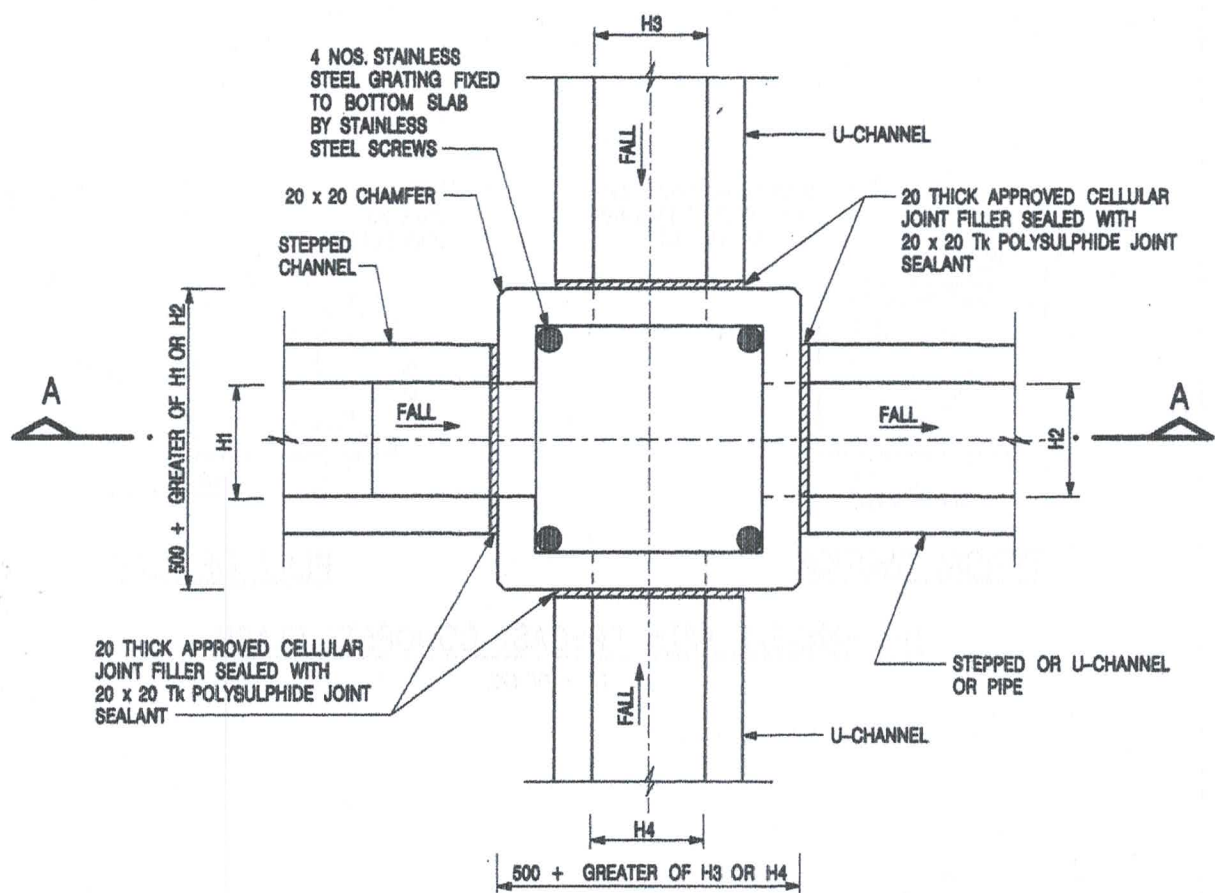
$$\begin{aligned}\text{Peak runoff in m}^3 &= 0.278 \times 0.25 \times 250\text{mm/hr} \times 0.000188 \text{ km}^2 \\ &= 0.003266 \text{ m}^3/\text{s} \\ &= 196 \text{ liter/min}\end{aligned}$$

$$\begin{aligned}\text{Total Peak Runoff for Site} &= 0.034495 \\ &= 2070 \text{ liter/min}\end{aligned}$$

According to Figure 8.7 – Chart for the Rapid Design of Channels,
For gradient 1: 70, 225UC will be suitable.

F. Proposed Drainage Facilities

7. Based on the above calculations, it is considered that the proposed 225mm surface u-channels for Catchments 1, Catchment 2 and the external catchment would be adequate to intercept storm water passing through and generated at the Site (**Plan 4**).
8. All the proposed drainage facilities will be constructed and maintained at the applicant's own cost.
9. The provision of the proposed surface channels will generally follow the gradient of the proposed vehicular access. All u-channels are to be covered by precast concrete slabs or cast iron gratings (see **CEDD's Drawing No. C2412E**).
10. The proposed drainage facilities may be modified to tie in with those in connection with the approval condition on drainage under planning application no. A/YL-SK/346.
11. The proposed drainage works, mainly at the fringe of the Site, are detailed below:
 - (a) In view that soil excavation may be continued for several working days, surface channel would be dug in short sections and all soil excavated would be cleared before the excavation of another short section.
 - (b) The proposed development would neither obstruct overland flow nor adversely affect existing natural streams, village drains, ditches and the adjacent areas.
 - (c) Adequate openings of about 100mm would be provided at the bottom of walls or hoarding to intercept the existing overland flow passing through the Site.



20 THICK APPROVED CELLULAR JOINT FILLER SEALED WITH 20 x 20 Tk POLYSULPHIDE JOINT SEALANT

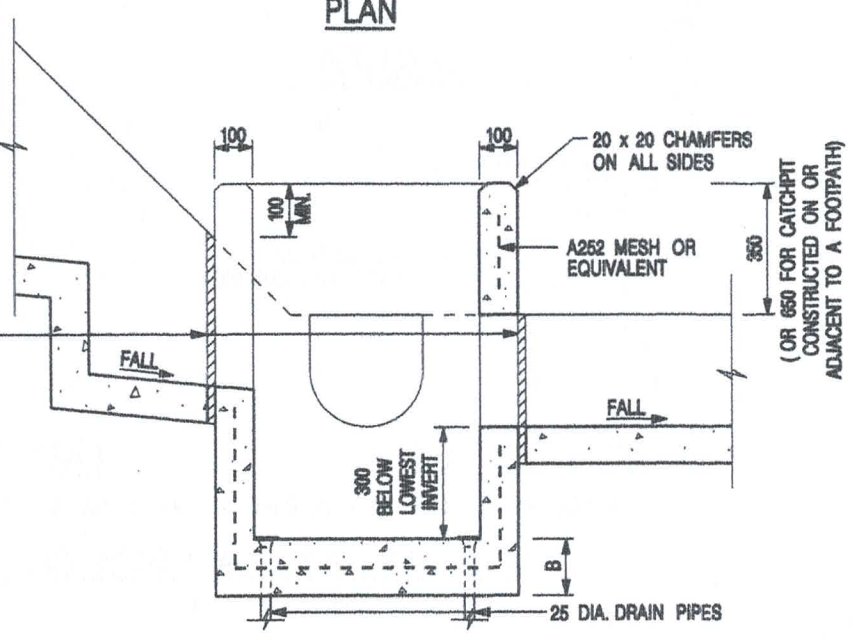
STEPPED OR U-CHANNEL OR PIPE

500 + GREATER OF H3 OR H4

PLAN

NOMINAL SIZE (LARGEST OF H1, H2, H3 & H4)	B
300 - 800	150
675 - 900	175

20 THICK APPROVED CELLULAR JOINT FILLER SEALED WITH 20 x 20 Tk POLYSULPHIDE JOINT SEALANT



SECTION A - A

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. REFER TO SHEET 2 FOR OTHER NOTES.

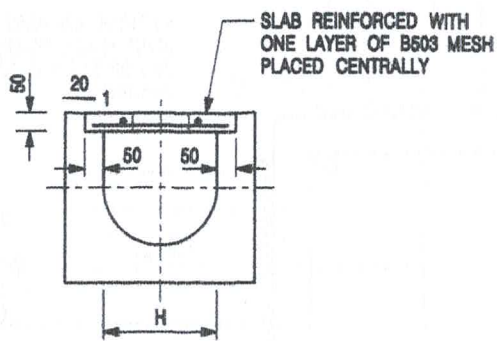
CATCHPIT WITH TRAP
(SHEET 1 OF 2)

-	FORMER DRG. NO. C2406J.	Original Signed	03.2015
REF.	REVISION	SIGNATURE	DATE

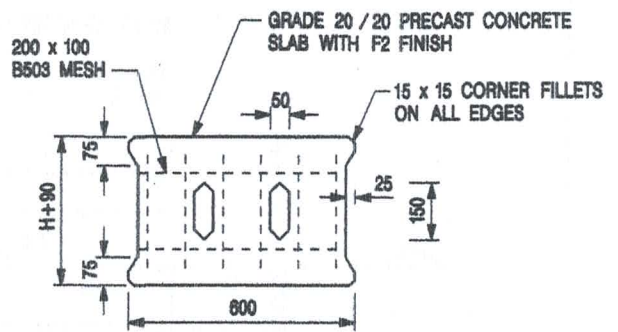
CEDD **CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT**

SCALE 1 : 20 **DRAWING NO. C2406 /1**

DATE JAN 1991



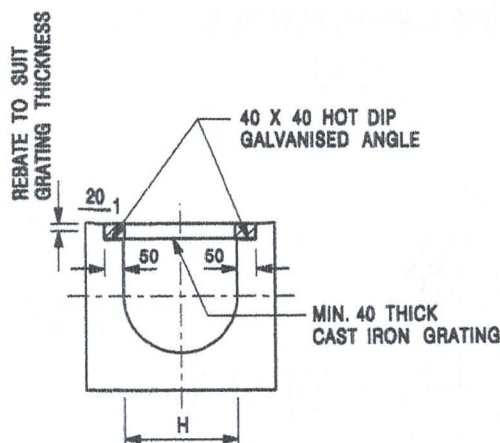
TYPICAL SECTION



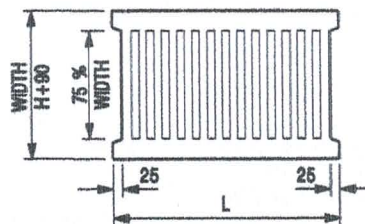
PLAN OF SLAB

U-CHANNELS WITH PRECAST CONCRETE SLABS

(UP TO H OF 525)



TYPICAL SECTION



L = 600mm FOR H ≤ 375mm
L = 400mm FOR H > 375mm

CAST IRON GRATING

(DIMENSIONS ARE FOR GUIDANCE ONLY, CONTRACTOR MAY SUBMIT EQUIVALENT TYPE)

U-CHANNEL WITH CAST IRON GRATING

(UP TO H OF 525)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. H=NOMINAL CHANNEL SIZE.
3. ALL CAST IRON FOR GRATINGS SHALL BE GRADE EN-GJL-150 COMPLYING WITH BS EN 1561.
4. FOR COVERED CHANNELS TO BE HANDED OVER TO HIGHWAYS DEPARTMENT FOR MAINTENANCE, THE GRATING DETAILS SHALL FOLLOW THOSE AS SHOWN ON HyD STD. DRG. NO. H3156.

REF.	REVISION	SIGNATURE	DATE
E	NOTES 3 & 4 AMENDED.	Original Signed	12.2014
D	NOTE 4 ADDED.	Original Signed	06.2009
C	MINOR AMENDMENT. NOTE 3 ADDED.	Original Signed	12.2005
B	NAME OF DEPARTMENT AMENDED.	Original Signed	01.2005
A	CAST IRON GRATING AMENDED.	Original Signed	12.2002

**COVER SLAB AND CAST IRON
GRATING FOR CHANNELS**



**CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT**

SCALE 1 : 20

DATE JAN 1991

DRAWING NO.

C2412E

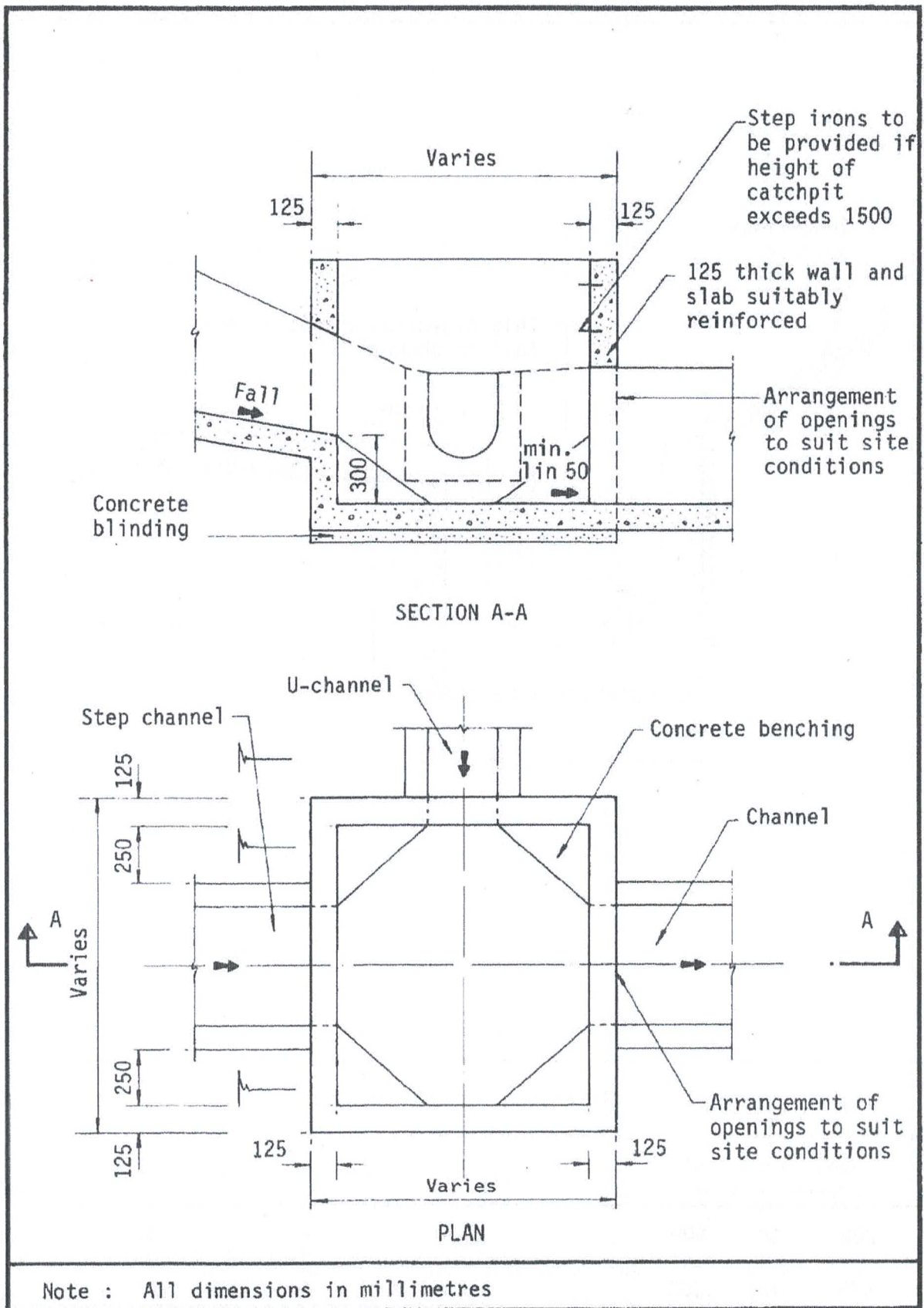
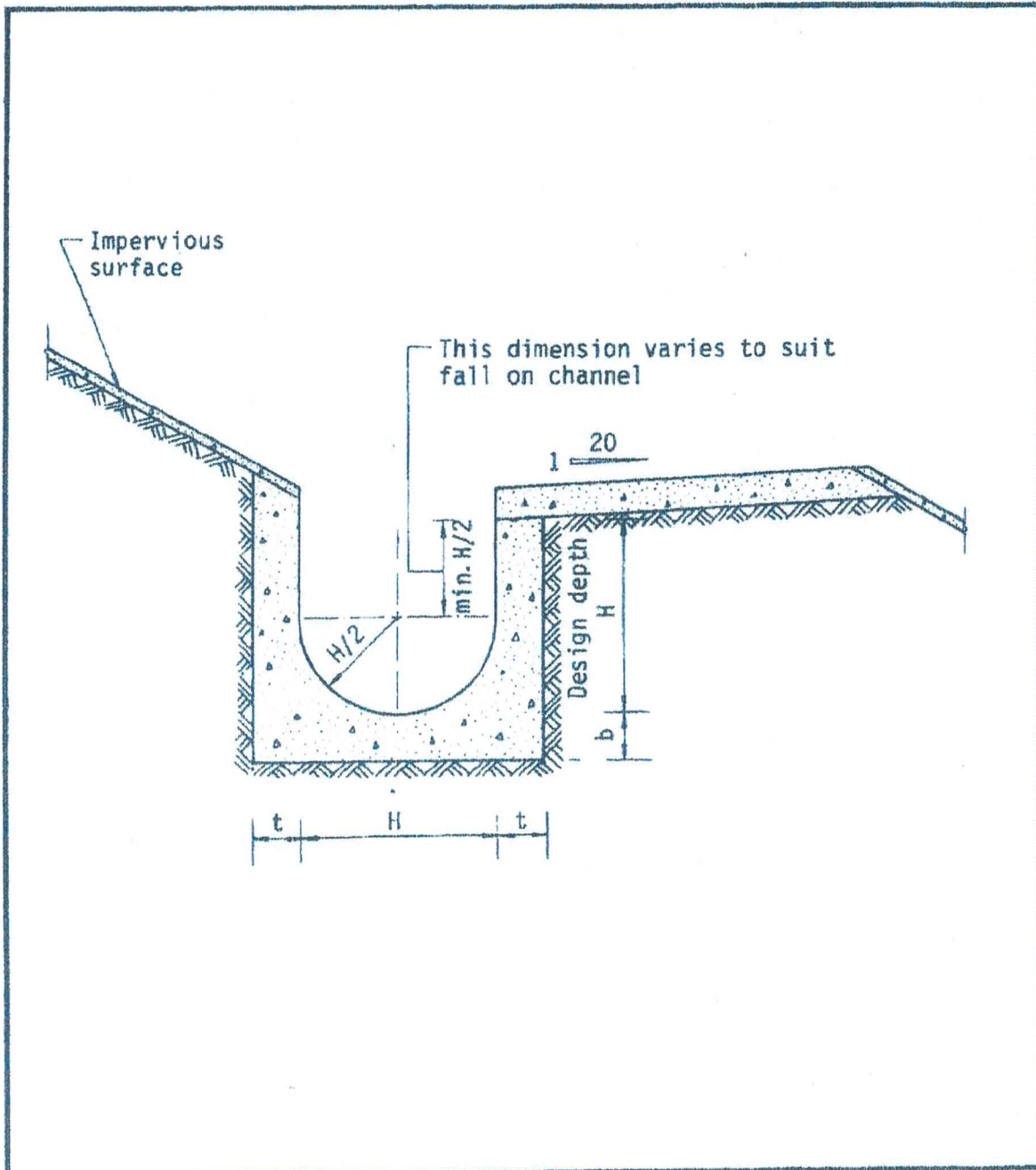


Figure 8.10 - Typical Details of Catchpits



Dimensions of U - channel

Nominal size of channel H (mm)	Thickness t (mm)	Thickness b (mm)
225 to 600	150	150
675 to 1200	175	225

Figure 8.11 - Typical U-channel Details