Democratic Socialist Republic of Sri Lanka

Ministry of Defence

National Building Research Institute (NBRI)

Reduction of Landslide Vulnerability by Mitigation Measures Project (RLVMMP)

funded by Asian Infrastructure Investment Bank (AIIB)

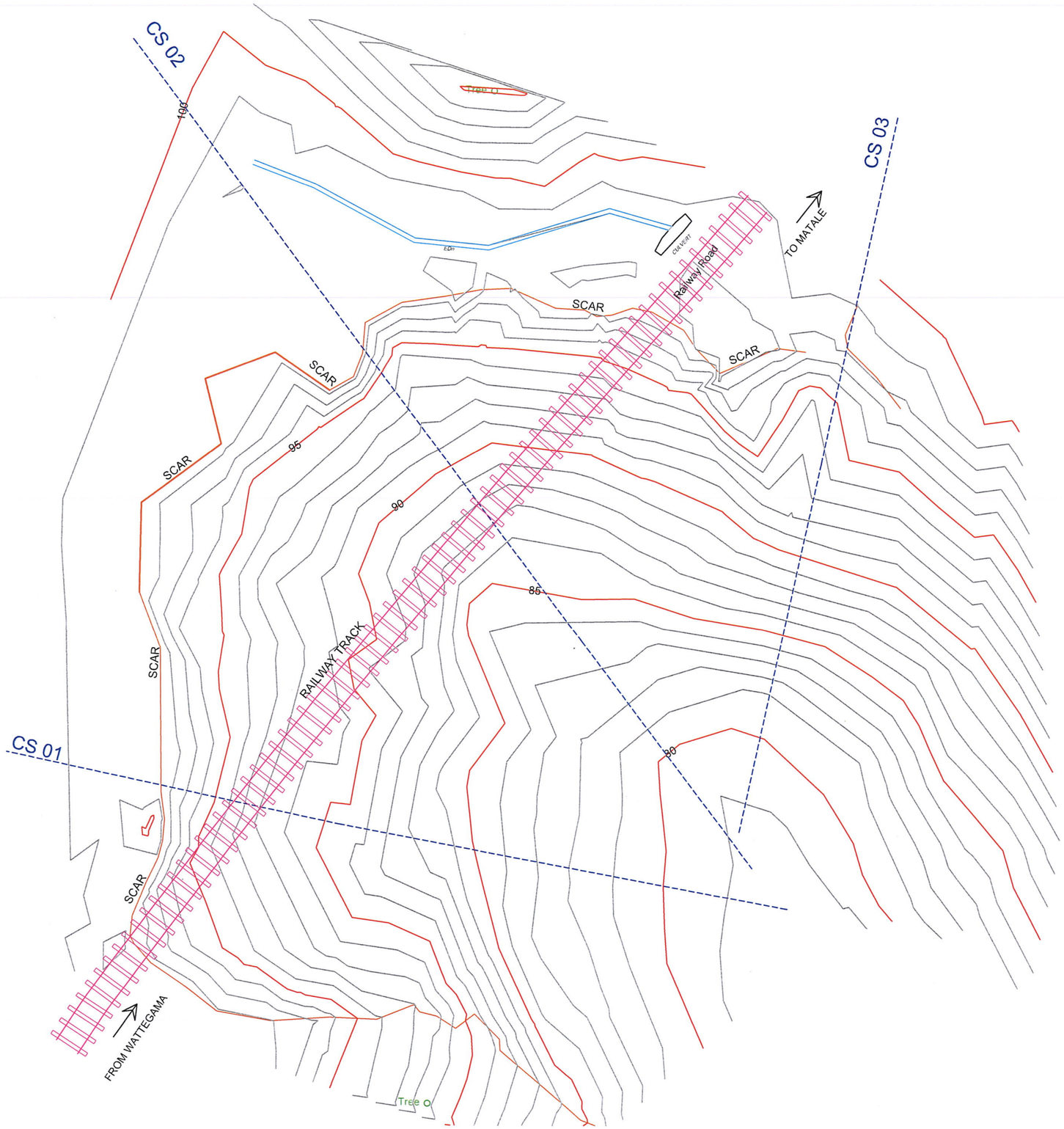
(Loan No: L0124A)

DRAWINGS

Mitigation Design for Failure Locations along Main Line Due To 'Ditwah' Cyclone Line (From Wattegama-to Ukuwela) in Matale District (Site No. 254) under Package 10W of The Reduction of Landslide Vulnerability by Mitigation Measures Project (RLVMMP)

Contract No: RLVMMP/WORKS/10W

October 2026



N	E	Z	PN
956.84	1973.64	99.13	6001
1003.46	2014.95	98.76	6002

REFERENCE

CUL - CULVERT

EDn - EARTH DRAIN

⊕ - REFERANCE POINT

EMPLOYER

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MINISTRY OF TRANSPORT, HIGHWAYS AND URBAN DEVELOPMENT
SRI LANKA RAILWAYS
WAY AND WORKS DEPARTMENT
NO. 01, D. R. WIJEWARDHANA MAWATHA,
COLOMBO 10.

DESIGNER

DESIGN UNIT
NATIONAL BUILDING RESEARCH INSTITUTE
No. 99/1, JAWATTA ROAD,
COLOMBO - 05

REV	DATE	REVISION DESCRIPTION	APPROVAL

PROJECT TITLE

MITIGATION DESIGN FOR
FAILURE LOCATIONS ALONG MATALE LINE
DUE TO 'DITWAH' CYCLONE
MATALE LINE (FROM WATTEGAMA TO UKUWELA)
MILEAGE 13M - 48CH

TITLE

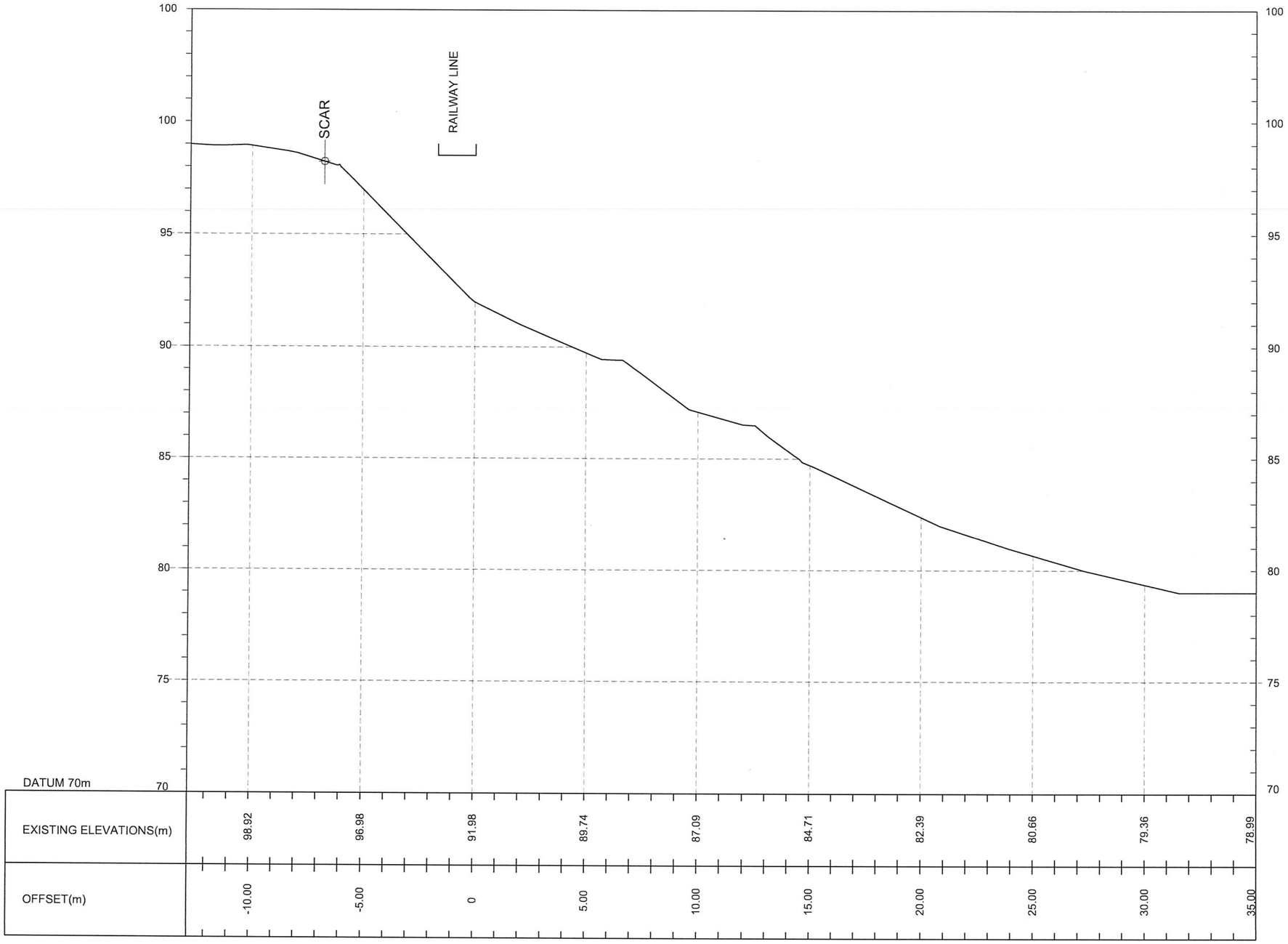
SURVEY PLAN

SCALE N.T.S. DATE 22.07.2026

PROJECT / DRAWING No. NBRI/GED/2026/30/28584/13M-48CH/DR 01

REVISION 00

DESCRIPTION	NAME	SIGNATURE
SURVEYED	NBRI	
CHECKED	ENG.D.S.JAYASINGHE	



CS -01

EMPLOYER

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MINISTRY OF TRANSPORT, HIGHWAYS AND URBAN DEVELOPMENT
SRI LANKA RAILWAYS
WAY AND WORKS DEPARTMENT
NO. 01, D. R. WIJEWARDHANA MAWATHA,
COLOMBO 10.

DESIGNER

DESIGN UNIT
NATIONAL BUILDING RESEARCH INSTITUTE
No. 99/1, JAWATTA ROAD,
COLOMBO - 05

REV	DATE	REVISION DESCRIPTION	APPROVAL

PROJECT TITLE

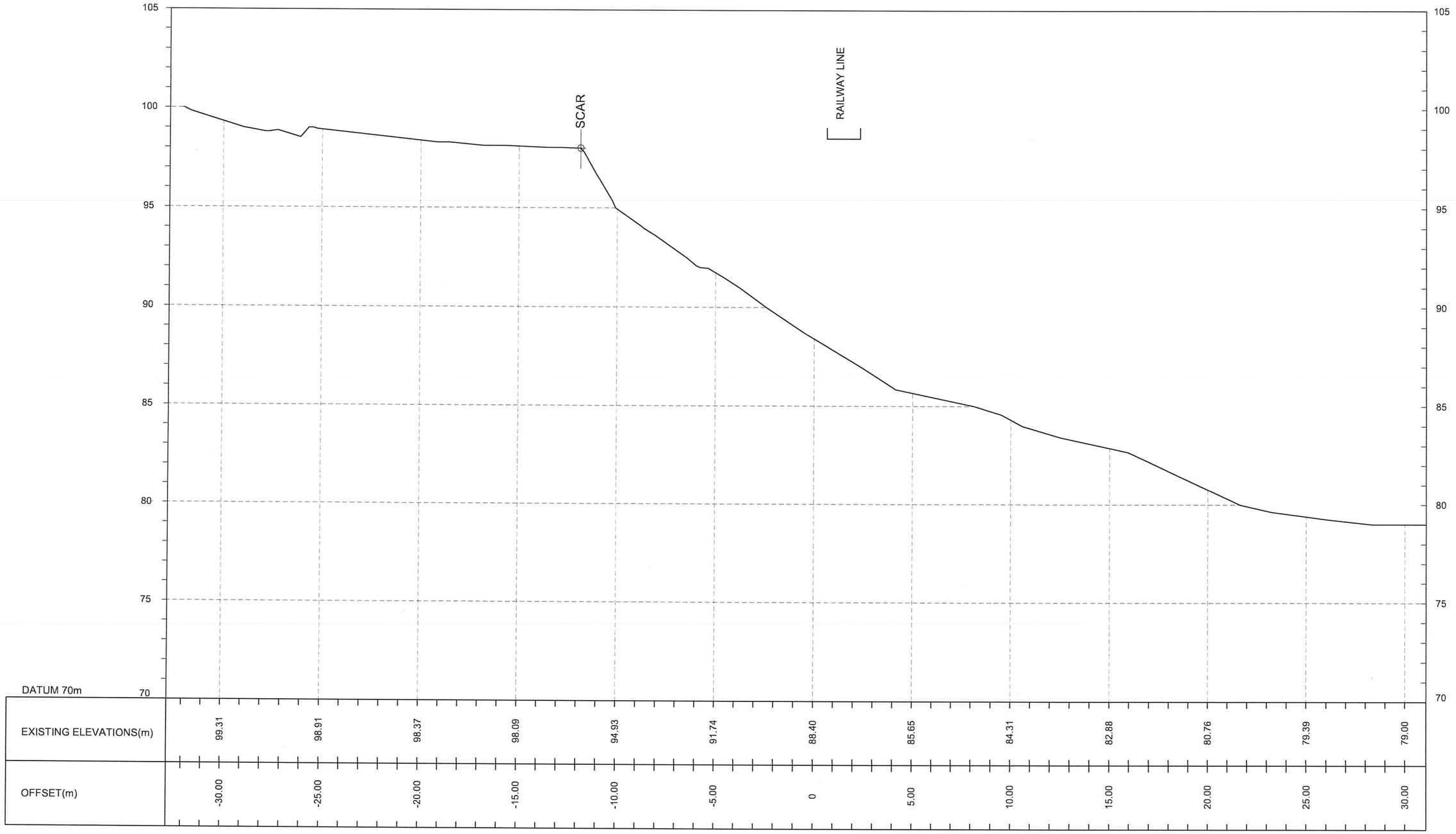
MITIGATION DESIGN FOR
FAILURE LOCATIONS ALONG MATALE LINE
DUE TO 'DITWAH' CYCLONE
MATALE LINE (FROM KANDY TO MATALE)
MILEAGE 13M - 48CH

TITLE

CROSS SECTIONAL VIEW
AT CS - 01

SCALE	N.T.S.	DATE	22.07.2026
PROJECT / DRAWING No.	NBRI/GED/2026/30/28584/13M-48CH/DR 02a		REVISION 00

DESCRIPTION	NAME	SIGNATURE
SURVEYED	NBRI	
CHECKED	ENG.D.S.JAYASINGHE	



CS -02

EMPLOYER

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MINISTRY OF TRANSPORT, HIGHWAYS AND URBAN DEVELOPMENT
SRI LANKA RAILWAYS
WAY AND WORKS DEPARTMENT
NO. 01, D. R. WIJEWARDHANA MAWATHA,
COLOMBO 10.

DESIGNER

DESIGN UNIT
NATIONAL BUILDING RESEARCH INSTITUTE
No. 99/1, JAWATTA ROAD,
COLOMBO - 05

REV	DATE	REVISION DESCRIPTION	APPROVAL

PROJECT TITLE

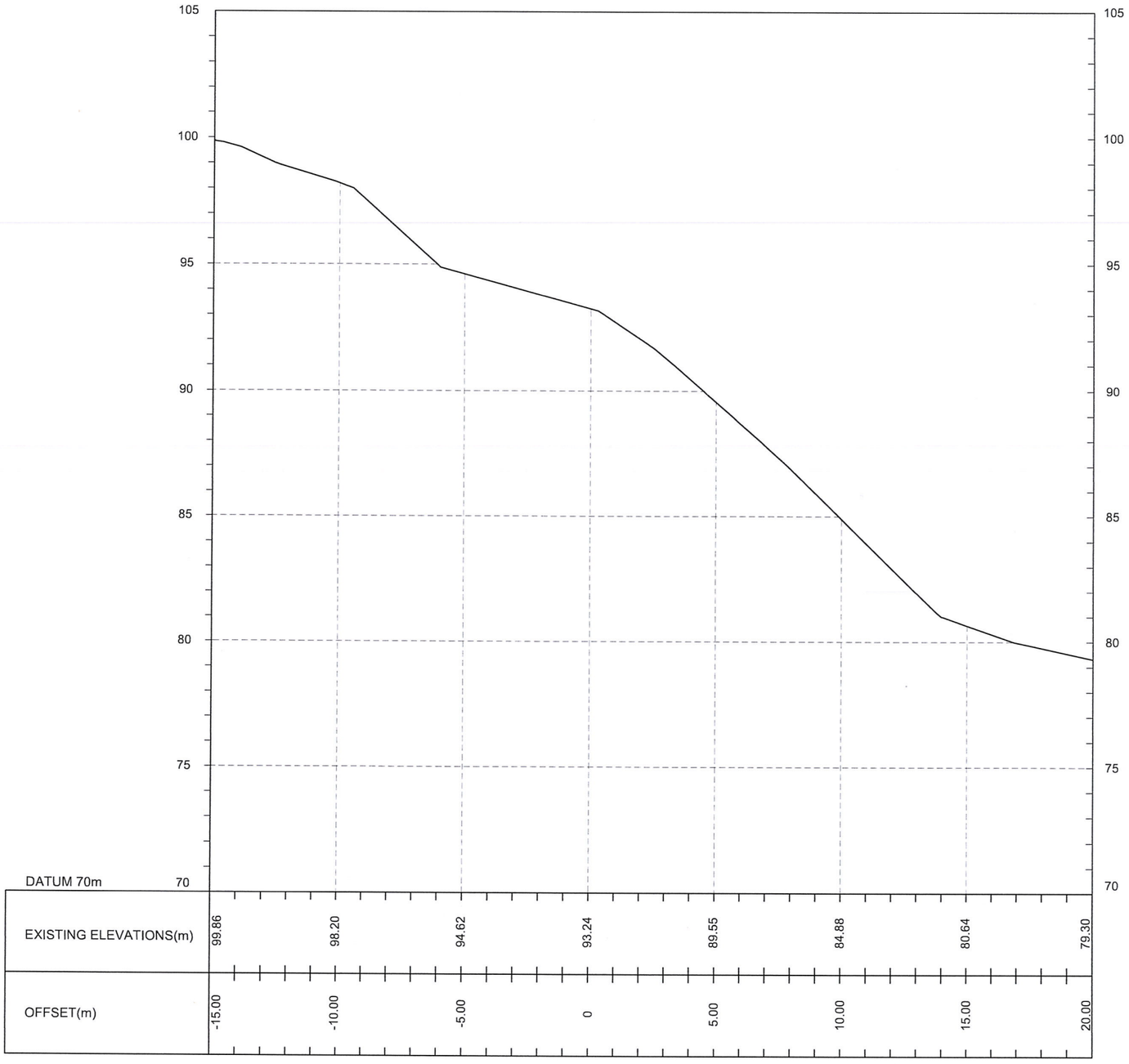
MITIGATION DESIGN FOR
FAILURE LOCATIONS ALONG MATALE LINE
DUE TO 'DITWAH' CYCLONE
MATALE LINE (FROM KANDY TO MATALE)
MILEAGE 13M - 48CH

TITLE

CROSS SECTIONAL VIEW
AT CS -02

SCALE	N.T.S.	DATE	22.07.2026
PROJECT / DRAWING No.	NBRI/GED/2026/30/28584/13M-48CH/DR 02b	REVISION	00

DESCRIPTION	NAME	SIGNATURE
SURVEYED	NBRI	
CHECKED	ENG.D.S.JAYASINGHE	



CS -03

EMPLOYER

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MINISTRY OF TRANSPORT, HIGHWAYS AND URBAN DEVELOPMENT
SRI LANKA RAILWAYS
WAY AND WORKS DEPARTMENT
NO. 01, D. R. WIJEWARDHANA MAWATHA,
COLOMBO 10.

DESIGNER

DESIGN UNIT
NATIONAL BUILDING RESEARCH INSTITUTE
No. 99/1, JAWATTA ROAD,
COLOMBO - 05

REV	DATE	REVISION DESCRIPTION	APPROVAL

PROJECT TITLE

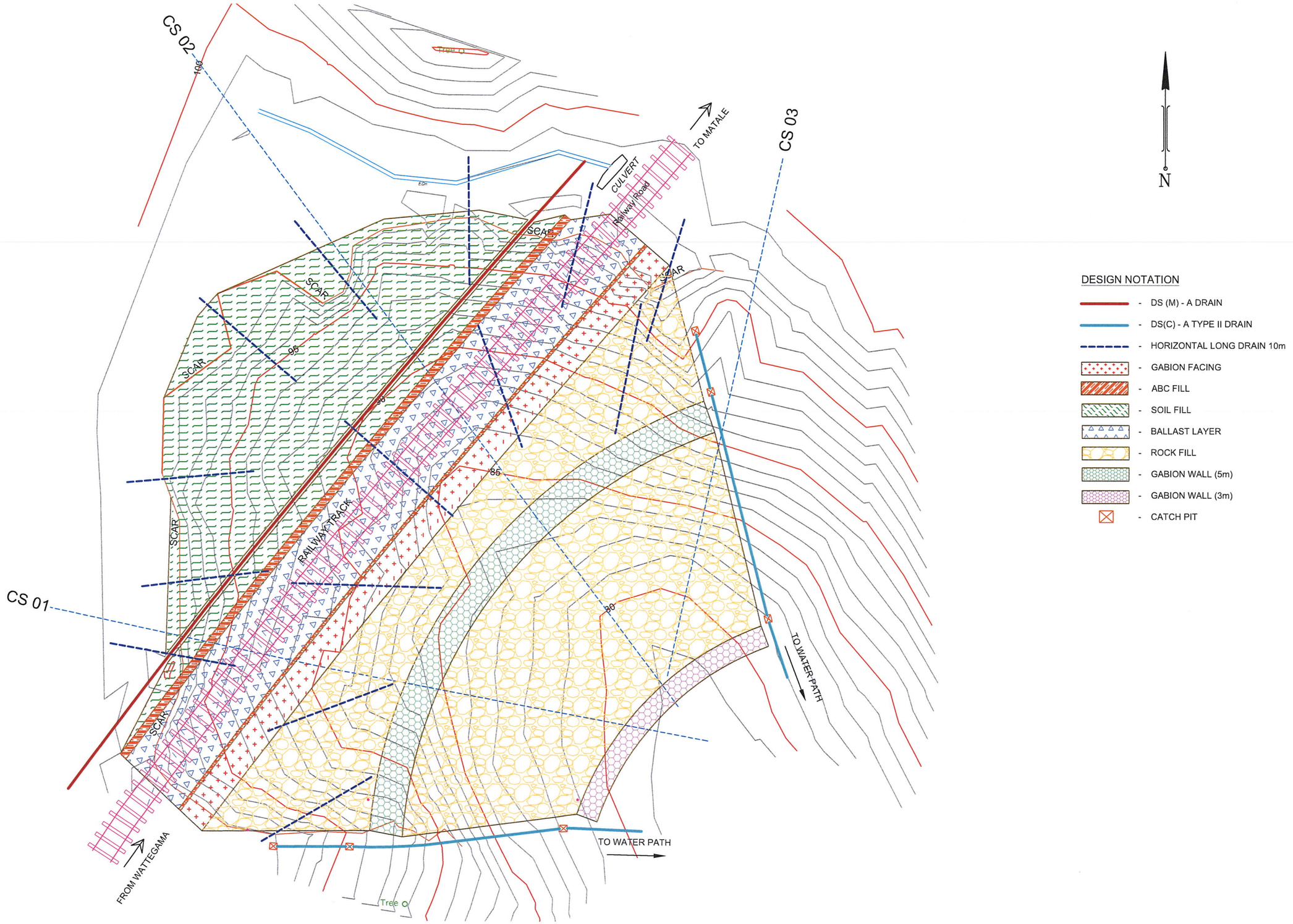
MITIGATION DESIGN FOR
FAILURE LOCATIONS ALONG MATALE LINE
DUE TO 'DITWAH' CYCLONE
MATALE LINE (FROM KANDY TO MATALE)
MILEAGE 13M - 48CH

TITLE

CROSS SECTIONAL VIEW
AT CS -03

SCALE	N.T.S.	DATE	22.07.2026
PROJECT / DRAWING No.	NBRI/GED/2026/30/28584/13M-48CH/DR 02c	REVISION	00

DESCRIPTION	NAME	SIGNATURE
SURVEYED	NBRI	
CHECKED	ENG.D.S.JAYASINGHE	



EMPLOYER

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MINISTRY OF TRANSPORT, HIGHWAYS AND URBAN DEVELOPMENT
SRI LANKA RAILWAYS
WAY AND WORKS DEPARTMENT
NO. 01, D. R. WIJEWARDHANA MAWATHA,
COLOMBO 10.

DESIGNER

DESIGN UNIT
NATIONAL BUILDING RESEARCH INSTITUTE
No. 99/1, JAWATTA ROAD,
COLOMBO - 05

REV	DATE	REVISION DESCRIPTION	APPROVAL

PROJECT TITLE

MITIGATION DESIGN FOR
FAILURE LOCATIONS ALONG MATALE LINE
DUE TO 'DITWAH' CYCLONE
MATALE LINE (FROM KANDY TO MATALE)
MILEAGE 13M - 48CH

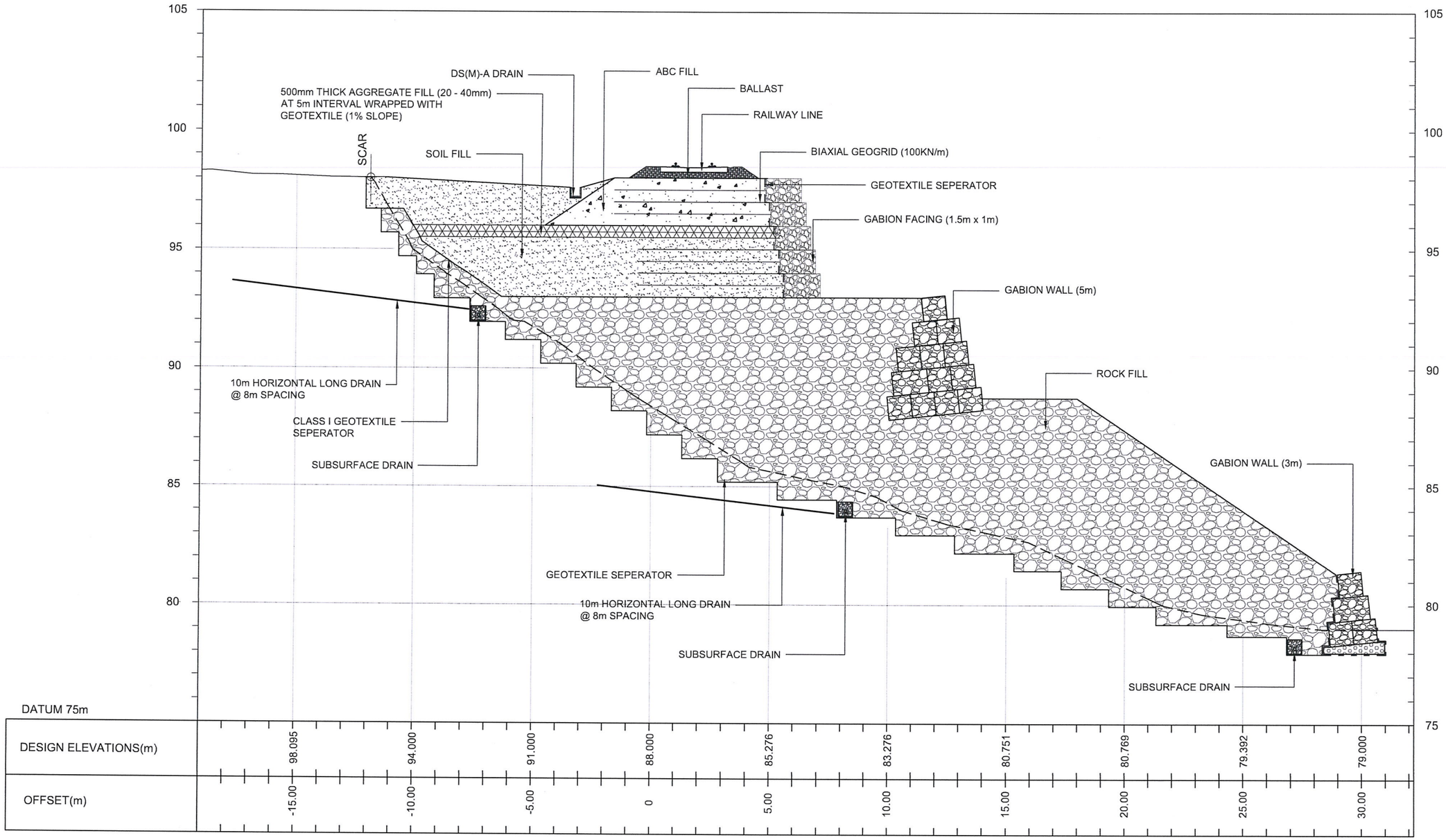
TITLE

DESIGN PLAN

SCALE N.T.S. | DATE 22.07.2026

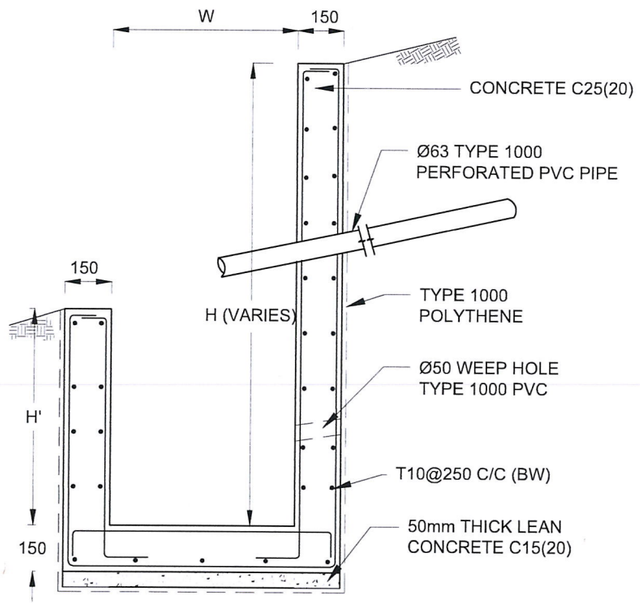
PROJECT / DRAWING No. NBRI/GED/2026/30/28584/13M-48CH/DR 03 | REVISION 00

DESCRIPTION	NAME	SIGNATURE
DRAWN	G.H.R.YASAPALA	
DESIGNER	ENG.D.S.JAYASINGHE	
CHECKED	ENG. (DR.) SANCHITHA JAYAKODY	
RECOMMENDED	PROF. S.A.S. KULATHILAKA	
APPROVED	ENG. (DR.) ASIRI KARUNAWARDENA	



CS -02

EMPLOYER DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA MINISTRY OF TRANSPORT, HIGHWAYS AND URBAN DEVELOPMENT SRI LANKA RAILWAYS WAY AND WORKS DEPARTMENT NO. 01, D. R. WIJEWARDHANA MAWATHA, COLOMBO 10.	DESIGNER DESIGN UNIT NATIONAL BUILDING RESEARCH INSTITUTE No. 99/1, JAWATTA ROAD, COLOMBO - 05	REV	DATE	REVISION DESCRIPTION	APPROVAL	PROJECT TITLE MITIGATION DESIGN FOR FAILURE LOCATIONS ALONG MATALE LINE DUE TO 'DITWAH' CYCLONE MATALE LINE (FROM KANDY TO MATALE) MILEAGE 13M - 48CH	TITLE DESIGN SECTION AT CS - 02 SCALE N.T.S. DATE 22.07.2026 PROJECT / DRAWING No. NBRI/GED/2026/30/28584/13M-48CH/DR 04 REVISION 00	DESCRIPTION	NAME	SIGNATURE
								DRAWN	G.H.R.YASAPALA	
								DESIGNER	ENG.D.S.JAYASINGHE	
								CHECKED	ENG. (DR.) SANCHITHA JAYAKODY	
								RECOMMENDED	PROF. S.A.S. KULATHILAKA	
								APPROVED	ENG. (DR.) ASIRI KARUNAWARDENA	



DS (M) - L

DS(M) - L	W (mm)	H' (mm)
TYPE I	600	600
TYPE II	800	800

DRAIN TYPE	W (mm)	H (mm)	t (mm)
DS (M) - A /P	300	300	100
DS (M) - B/R	450	450	100
DS (M) - C/Q	600	600	100
DS (M) - D	750	750	125
DS (M) - E	900	900	150
DS (M) - F	1000	1000	150

NOTES

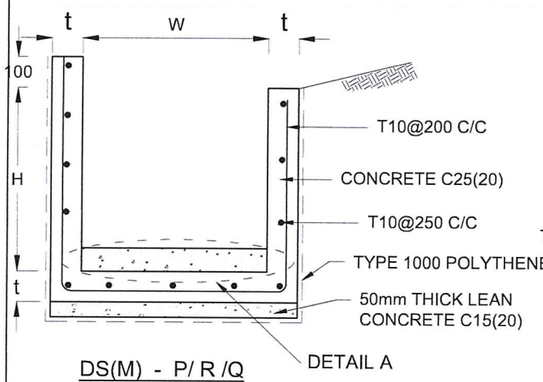
1. DEPTH OF EXCAVATION MAY VARY ACCORDING TO SITE CONDITIONS.
2. STEPS SHALL BE CONSTRUCTED AT SURFACE DRAIN ON SLOPING GROUND ACCORDING TO THE SITE CONDITIONS AS INSTRUCTED BY THE ENGINEER.
3. ENERGY BREAKERS SHALL BE CONSTRUCTED AT THE STEEP DRAIN SEGMENTS AS PER THE INSTRUCTIONS OF THE ENGINEER.
4. DOWELS SHALL BE INSTALLED ACCORDING TO THE GROUND CONDITIONS AS INSTRUCTED BY THE ENGINEER.
5. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
6. 10 mm THICK EXPANSION JOINT SHALL BE INTRODUCED IN EVERY 5m INTERVAL.

CONCRETE

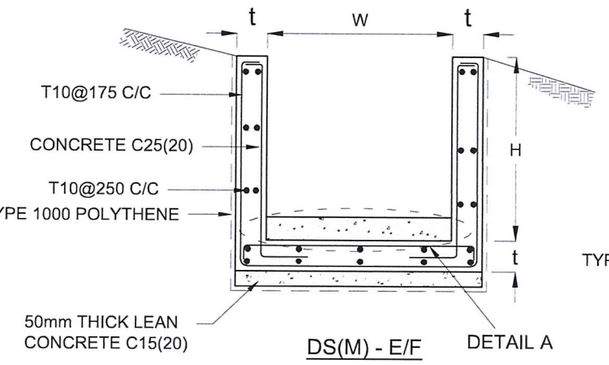
7. USE FOLLOWING CONCRETE GRADES FOR STRUCTURE
   [a] SCREED - C15(20)
   [b] WALLS / BASE / ENERGY BREAKERS - C25(20)

REINFORCEMENT

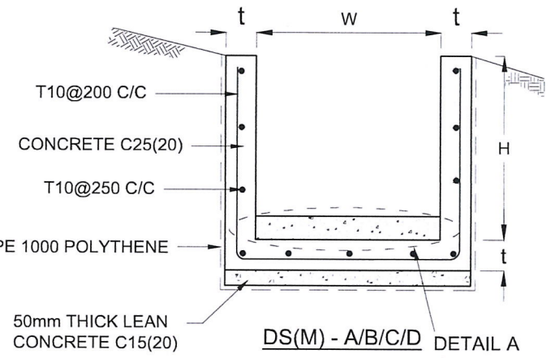
8. HIGH YIELD REINFORCEMENT BARS DENOTED BY "T" SHALL CONFORM TO THE REQUIREMENTS OF TYPE 2 OF BS 4449 AND HAVE A CHARACTERISTIC TENSILE STRENGTH OF 460N/mm².
9. BARS OF CUT LENGTH LARGER THAN THE SUPPLIED LENGTH TO BE LAPPED FOR A LENGTH OF 40 x BAR DIA. AND LAPPING SHOULD BE STAGGERED.
10. ANCHORAGE LENGTH SHOULD BE 40X BAR DIA.
11. REINFORCEMENT BARS SHALL BE BENT IN ACCORDANCE WITH STANDARD SPECIFICATIONS.
12. COVER TO REINFORCEMENT
    [a] BURIED FACES AND DRAIN INVERTS - 40 mm
    [b] ALL OTHER FACES - 25 mm



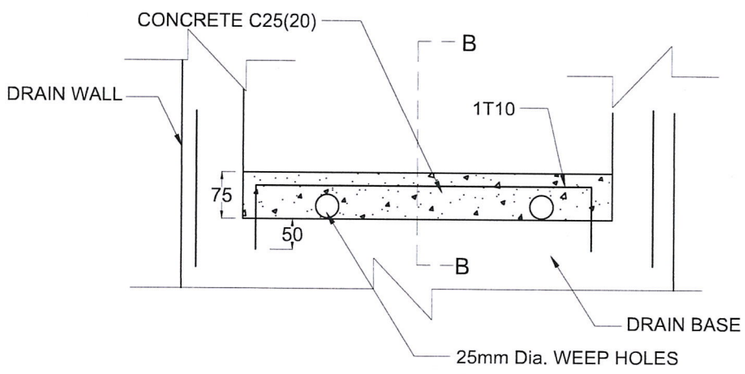
DS(M) - P/ R /Q



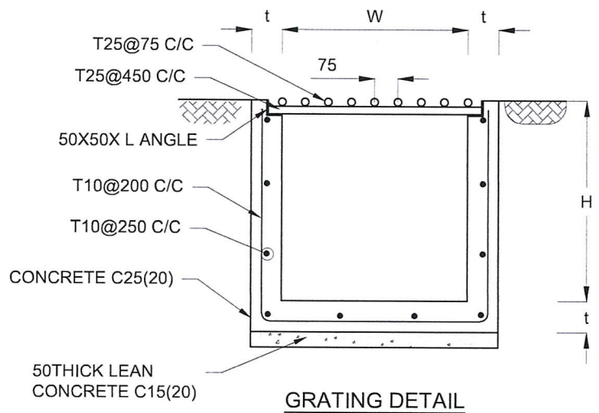
DS(M) - E/F



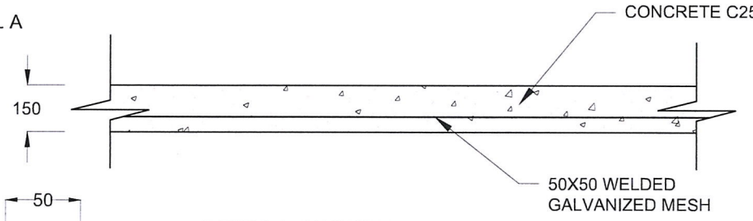
DS(M) - A/B/C/D



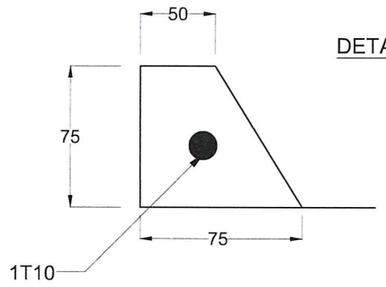
DETAIL A - (ENERGY BREAKER AT 3M)



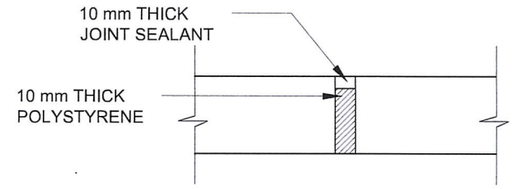
GRATING DETAIL



DETAILS OF BERM SEALING



SECTION B-B



EXPANTION JOINT DETAIL

EMPLOYER

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MINISTRY OF TRANSPORT, HIGHWAYS AND URBAN DEVELOPMENT
SRI LANKA RAILWAYS
WAY AND WORKS DEPARTMENT
NO. 01, D. R. WIJEWARDHANA MAWATHA,
COLOMBO 10.

DESIGNER

DESIGN UNIT
NATIONAL BUILDING RESEARCH INSTITUTE
No. 99/1, JAWATTA ROAD,
COLOMBO - 05

REV	DATE	REVISION DESCRIPTION	APPROVAL

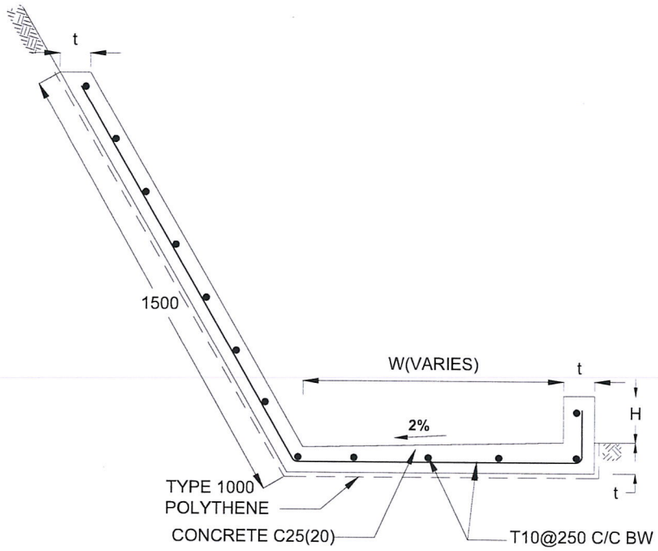
MITIGATION DESIGN FOR
FAILURE LOCATIONS ALONG MATALE LINE
DUE TO 'DITWAH' CYCLONE
MATALE LINE (FROM KANDY TO MATALE)
MILEAGE 13M - 48CH

DETAILS OF DRAINS
(SURFACE DRAIN -1 OF 2)

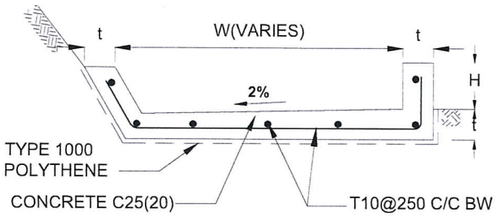
SCALE N.T.S. | DATE 22.07.2026 | REVISION 00

PROJECT / DRAWING No. NBRI/GED/2026/30/28584/13M-48CH/DR 05a

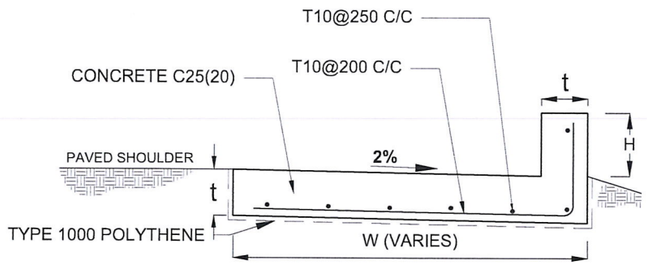
DESCRIPTION	NAME	SIGNATURE
DRAWN	G.H.R.YASAPALA	
DESIGNER	ENG.D.S.JAYASINGHE	
CHECKED	ENG. (DR.) SANCHITHA JAYAKODY	
RECOMMENDED	PROF. S.A.S. KULATHILAKA	
APPROVED	ENG. (DR.) ASIRI KARUNAWARDENA	



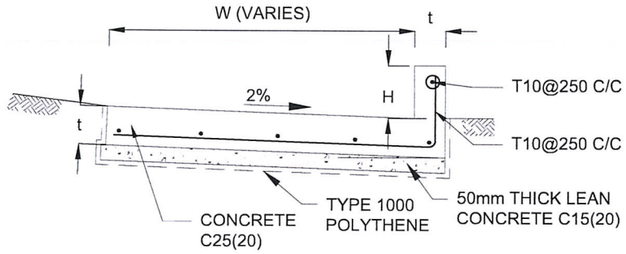
DS (B) - (TYPE I)



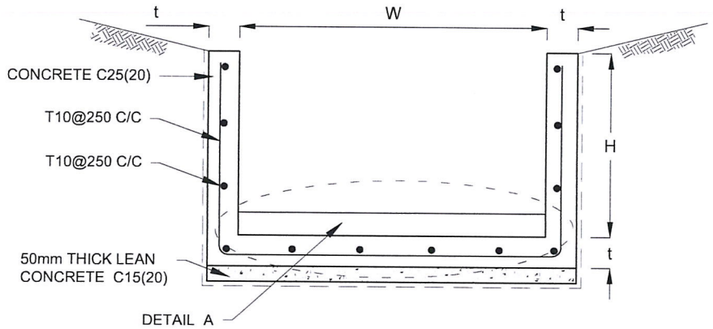
DS (B) - (TYPE II)



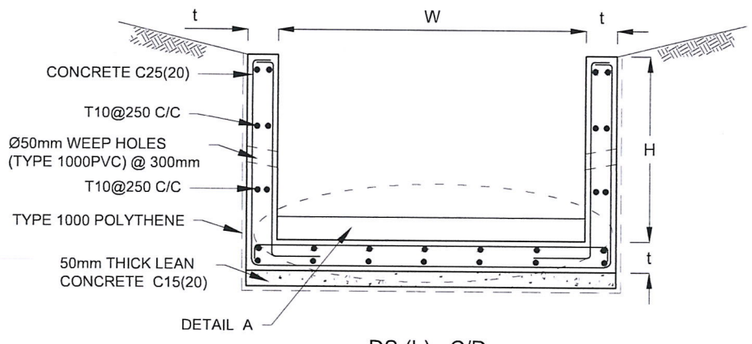
DS (K) - TYPE II



DS (K) - TYPE I



DS (L) - A/B



DS (L) - C/D

DRAIN TYPE	W (mm)	H (mm)	t (mm)
DS (B) - A	500	150	100
DS (B) - B	1000	150	100
DS (B) - C	1500	150	100
DS (B) - D	2000	150	100

DRAIN TYPE	W (mm)	H (mm)	t (mm)
DS (K) - A	1000	200	100
DS (K) - B	1000	300	100
DS (K) - C	1150	200	200

DRAIN TYPE	W (mm)	H (mm)	t (mm)
DS (L) - A	1000	600	100
DS (L) - B	1000	800	125
DS (L) - C	1000	1000	125
DS (L) - D	2000	2000	150

NOTES

1. DEPTH OF EXCAVATION MAY VARY ACCORDING TO SITE CONDITIONS.
2. STEPS SHALL BE CONSTRUCTED AT SURFACE DRAIN ON SLOPING GROUND ACCORDING TO THE SITE CONDITIONS AS INSTRUCTED BY THE ENGINEER.
3. ENERGY BREAKERS SHALL BE CONSTRUCTED IN STAGGERED PATTERN AT THE STEEP DRAIN SEGMENTS AS PER THE INSTRUCTIONS OF THE ENGINEER.
4. DOWELS SHALL BE INSTALLED ACCORDING TO THE GROUND CONDITIONS AS INSTRUCTED BY THE ENGINEER.
5. COVER SLABS NEED TO BE PROVIDED ONLY FOR THE REGIONS AS INSTRUCTED BY THE ENGINEER.
6. COVER SLAB WIDTH (W_C) SHOULD BE TAKEN AS THE SUM OF DRAIN WIDTH AND 2x DRAIN WALL THICKNESS. [W_C = W+2xt]
7. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
8. 10 mm THICK EXPANSION JOINT SHALL BE INTRODUCED IN EVERY 5m INTERVAL.

CONCRETE

9. USE FOLLOWING CONCRETE GRADES FOR STRUCTURE
   [a] SCREED - C15(20)
   [b] WALLS / BASE / ENERGY BREAKERS - C25(20)

REINFORCEMENT

10. HIGH YIELD REINFORCEMENT BARS DENOTED BY "T" SHALL CONFORM TO THE REQUIREMENTS OF TYPE 2 OF BS 4449 AND HAVE A CHARACTERISTIC TENSILE STRENGTH OF 460N/mm².
11. BARS OF CUT LENGTH LARGER THAN THE SUPPLIED LENGTH TO BE LAPPED FOR A LENGTH OF 40 x BAR DIA. AND LAPPING SHOULD BE STAGGERED.
12. ANCHORAGE LENGTH SHOULD BE 40X BAR DIA.
13. REINFORCEMENT BARS SHALL BE BENT IN ACCORDANCE WITH STANDARD SPECIFICATIONS.
14. COVER TO REINFORCEMENT
    [a] BURIED FACES AND DRAIN INVERTS - 40 mm
    [b] ALL OTHER FACES - 25 mm

EMPLOYER

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MINISTRY OF TRANSPORT, HIGHWAYS AND URBAN DEVELOPMENT
SRI LANKA RAILWAYS
WAY AND WORKS DEPARTMENT
NO. 01, D. R. WIJEWARDHANA MAWATHA,
COLOMBO 10.

DESIGNER

DESIGN UNIT
NATIONAL BUILDING RESEARCH INSTITUTE
No. 99/1, JAWATTA ROAD,
COLOMBO - 05

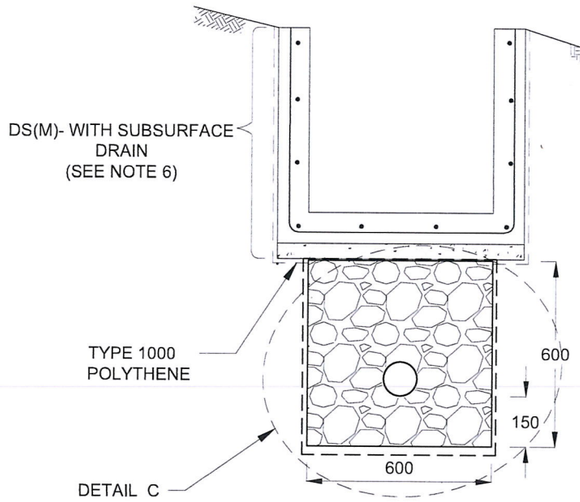
REV	DATE	REVISION DESCRIPTION	APPROVAL

MITIGATION DESIGN FOR
FAILURE LOCATIONS ALONG MATALE LINE
DUE TO 'DITWAH' CYCLONE
MATALE LINE (FROM KANDY TO MATALE)
MILEAGE 13M - 48CH

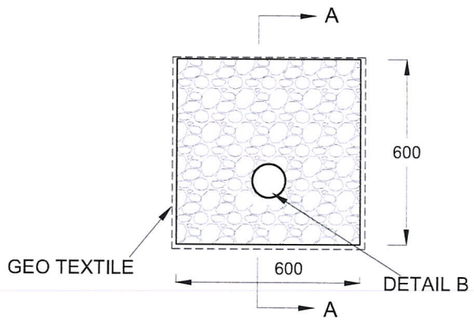
DETAILS OF DRAINS
(SURFACE DRAIN -2 OF 2)

SCALE N.T.S. | DATE 22.07.2026
PROJECT / DRAWING No. NBRI/GED/2026/30/28584/13M-48CH/DR 05b | REVISION 00

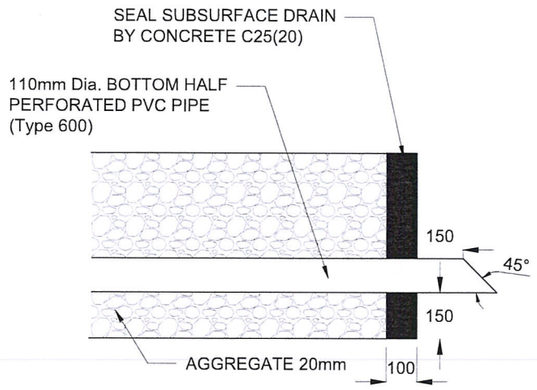
DESCRIPTION	NAME	SIGNATURE
DRAWN	G.H.R.YASAPALA	
DESIGNER	ENG.D.S.JAYASINGHE	
CHECKED	ENG. (DR.) SANCHITHA JAYAKODY	
RECOMMENDED	PROF. S.A.S. KULATHILAKA	
APPROVED	ENG. (DR.) ASIRI KARUNAWARDENA	



SUBSURFACE DRAIN
[DS (S) -A]



DETAIL C / DS (S)-A



SECTION A-A
(OUTLET DETAIL SUBSURFACE DRAIN)

NOTES

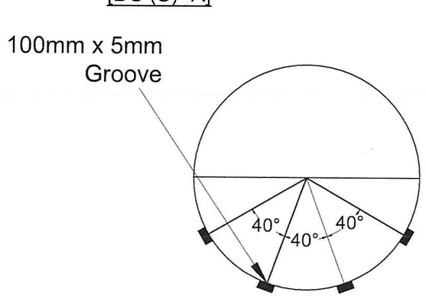
1. W,H,t ; SHALL BE THE SAME AS RESPECTIVE DRAIN SECTION.
2. CP - R SHALL BE USED WHERE H > = 900mm
3. DEPTH OF EXCAVATION MAY VARY ACCORDING TO SITE CONDITIONS.
4. DOWELS SHALL BE INSTALLED ACCORDING TO THE GROUND CONDITIONS AS INSTRUCTED BY THE ENGINEER.
5. 10 mm THICK EXPANSION JOINT SHALL BE INTRODUCED IN EVERY 5m INTERVAL.
6. DETAILS OF SURFACE DRAIN PORTION OF THE SUBSURFACE DRAINS SHALL BE AS PER DS(M), DS(B), DS(K) OR DS(C) SECTIONS ACCORDINGLY.
7. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.

CONCRETE

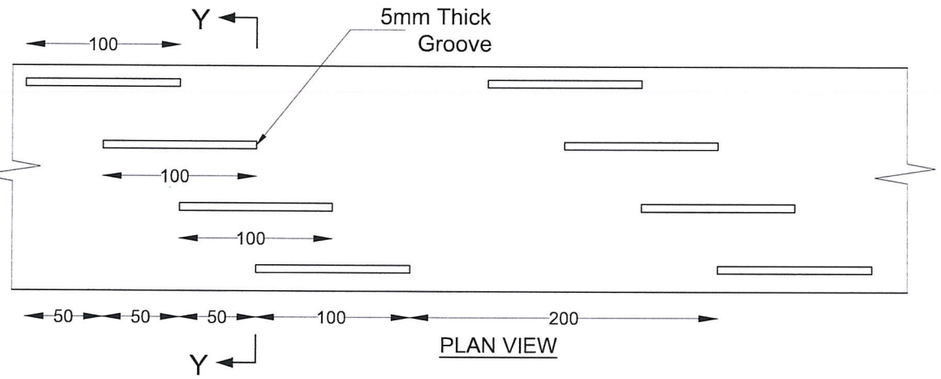
8. USE FOLLOWING CONCRETE GRADES FOR STRUCTURE
   [a] SCREED - C15(20)
   [b] WALLS / BASE / ENERGY BREAKERS - C25(20)

REINFORCEMENT

9. HIGH YIELD REINFORCEMENT BARS DENOTED BY "T" SHALL CONFORM TO THE REQUIREMENTS OF TYPE 2 OF BS 4449 AND HAVE A CHARACTERISTIC TENSILE STRENGTH OF 460N/mm².
10. BARS OF CUT LENGTH LARGER THAN THE SUPPLIED LENGTH TO BE LAPPED FOR A LENGTH OF 40 x BAR DIA. AND LAPPING SHOULD BE STAGGERED.
11. ANCHORAGE LENGTH SHOULD BE 40X BAR DIA.
12. REINFORCEMENT BARS SHALL BE BENT IN ACCORDANCE WITH STANDARD SPECIFICATIONS.
13. COVER TO REINFORCEMENT
    [a] BURIED FACES AND DRAIN INVERTS - 40 mm
    [b] ALL OTHER FACES - 25 mm

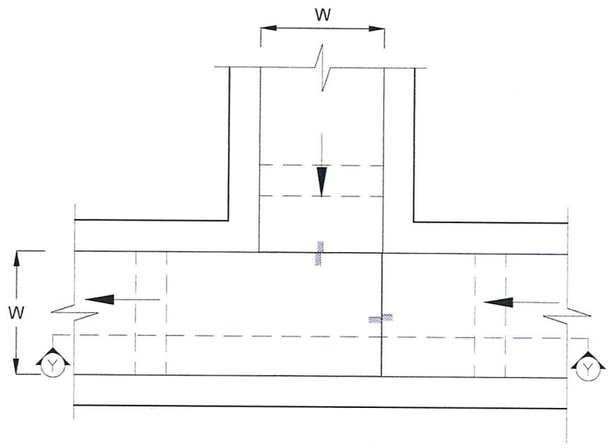


SECTION Y - Y

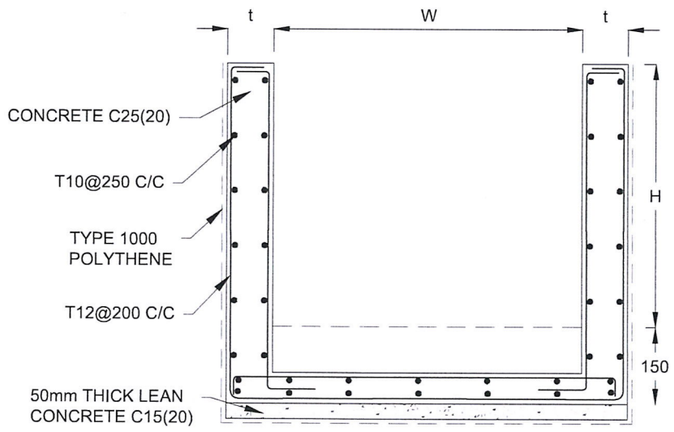


PLAN VIEW

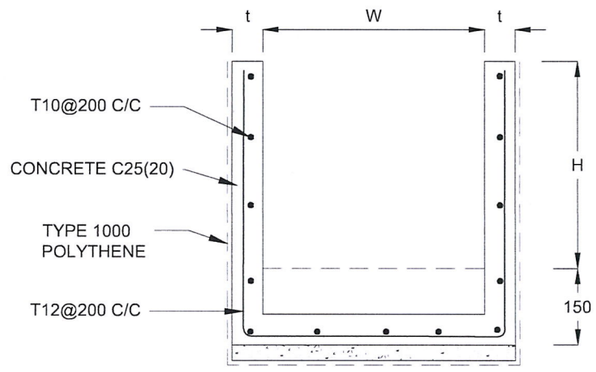
DETAIL - B (PERFORATED PIPE FOR SUB-SURFACE DRAINS)



PLAN VIEW OF CATCH PIT (CP)



SECTION Y-Y (CP- R)



SECTION Y - Y

EMPLOYER

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MINISTRY OF TRANSPORT, HIGHWAYS AND URBAN DEVELOPMENT
SRI LANKA RAILWAYS
WAY AND WORKS DEPARTMENT
NO. 01, D. R. WIJEWARDHANA MAWATHA,
COLOMBO 10.

DESIGNER

DESIGN UNIT
NATIONAL BUILDING RESEARCH INSTITUTE
No. 99/1, JAWATTA ROAD,
COLOMBO - 05

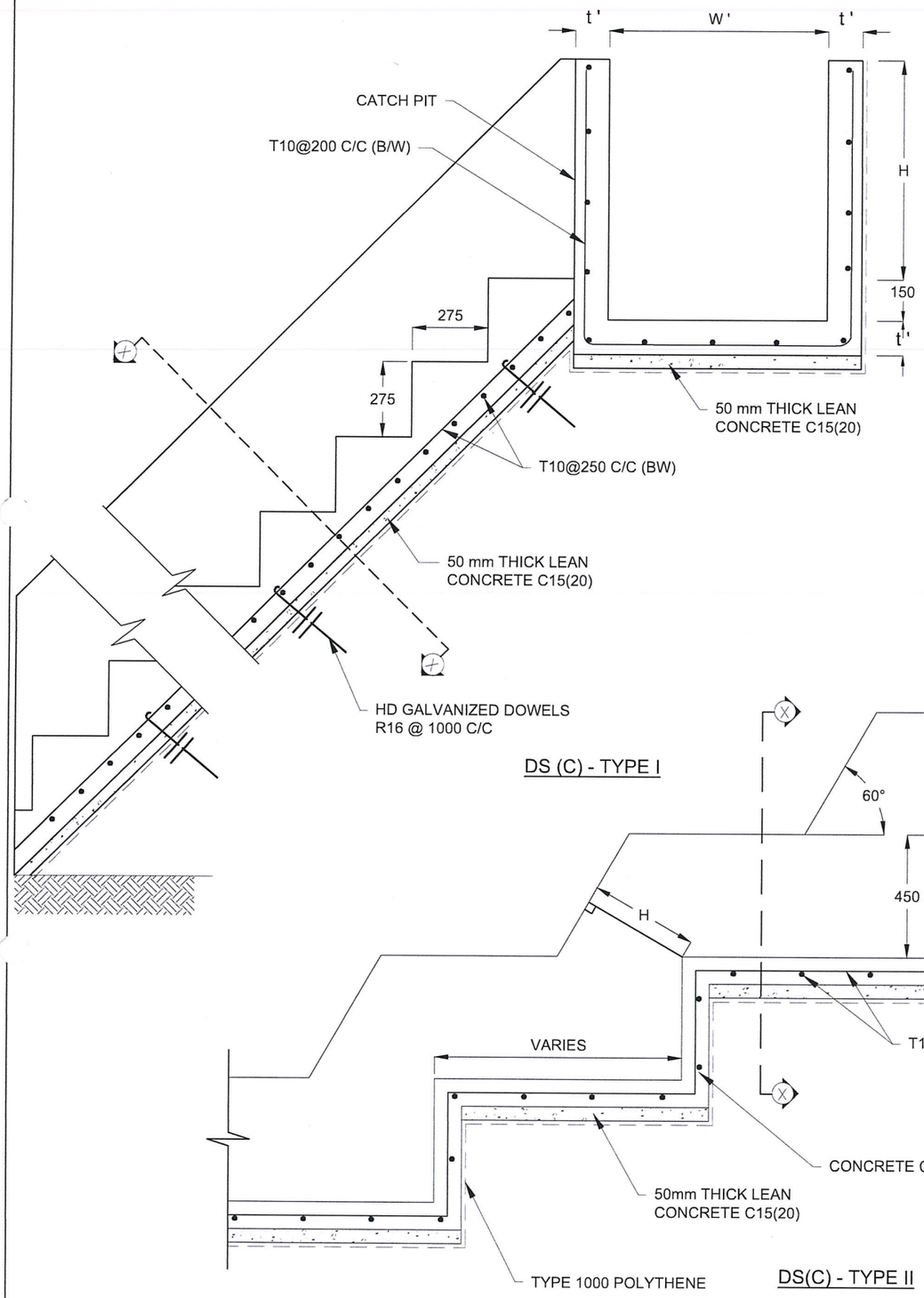
REV	DATE	REVISION DESCRIPTION	APPROVAL

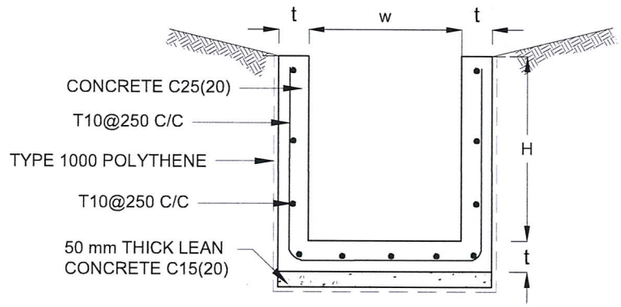
MITIGATION DESIGN FOR
FAILURE LOCATIONS ALONG MATALE LINE
DUE TO 'DITWAH' CYCLONE
MATALE LINE (FROM KANDY TO MATALE)
MILEAGE 13M - 48CH

DETAILS OF DRAINS
(SUBSURFACE DRAIN AND CATCHPIT)

SCALE N.T.S. | DATE 22.07.2026
PROJECT / DRAWING No. NBRI/GED/2026/30/28584/13M-48CH/DR 05c | REVISION 00

DESCRIPTION	NAME	SIGNATURE
DRAWN	G.H.R.YASAPALA	
DESIGNER	ENG.D.S.JAYASINGHE	
CHECKED	ENG. (DR.) SANCHITHA JAYAKODY	
RECOMMENDED	PROF. S.A.S. KULATHILAKA	
APPROVED	ENG. (DR.) ASIRI KARUNAWARDENA	





SECTION X-X

DS(C) - TYPE II

NOTES

1. USE EITHER TYPE I OR TYPE II CASCADE DRAIN ACCORDING TO THE ACTUAL GROUND CONDITION AS INSTRUCTED BY THE ENGINEER.
2. LENGTH OF THE STEPS OF CASCADE WILL BE VARIED ACCORDING TO THE SITE CONDITIONS.
3. DEPTH OF EXCAVATION SHALL BE VARIED ACCORDING TO SITE CONDITIONS.
4. DOWELS SHALL BE INSTALLED ACCORDING TO THE GROUND CONDITIONS AS INSTRUCTED BY THE ENGINEER.
5. 10 mm THICK EXPANSION JOINT SHALL BE INTRODUCED IN EVERY 5m INTERVAL.
6. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.

CONCRETE

7. USE FOLLOWING CONCRETE GRADES FOR STRUCTURE
   [a] SCREED - C15(20)
   [b] WALLS / BASE / ENERGY BREAKERS - C25(20)

REINFORCEMENT

8. HIGH YIELD REINFORCEMENT BARS DENOTED BY "T" SHALL CONFORM TO THE REQUIREMENTS OF TYPE 2 OF BS 4449 AND HAVE A CHARACTERISTIC TENSILE STRENGTH OF 460N/mm².
9. BARS OF CUT LENGTH LARGER THAN THE SUPPLIED LENGTH TO BE LAPPED FOR A LENGTH OF 40 x BAR DIA. AND LAPPING SHOULD BE STAGGERED.
10. ANCHORAGE LENGTH SHOULD BE 40X BAR DIA.
11. REINFORCEMENT BARS SHALL BE BENT IN ACCORDANCE WITH STANDARD SPECIFICATIONS.
12. COVER TO REINFORCEMENT
    [a] BURIED FACES AND DRAIN INVERTS - 40 mm
    [b] ALL OTHER FACES - 25 mm

DRAIN TYPE	W (mm)	H (mm)	t (mm)	W ' (mm)	t ' (mm)
DS (C) - A	450	450	100	600	100
DS (C) - B	450	600	100	750	100
DS (C) - C	600	600	100	800	100
DS (C) - D	750	750	100	800	100
DS (C) - E	800	800	125	1000	125
DS (C) - F	1000	750	125	1200	125

EMPLOYER

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MINISTRY OF TRANSPORT, HIGHWAYS AND URBAN DEVELOPMENT
SRI LANKA RAILWAYS
WAY AND WORKS DEPARTMENT
NO. 01, D. R. WIJEWARDHANA MAWATHA,
COLOMBO 10.

DESIGNER

DESIGN UNIT
NATIONAL BUILDING RESEARCH INSTITUTE
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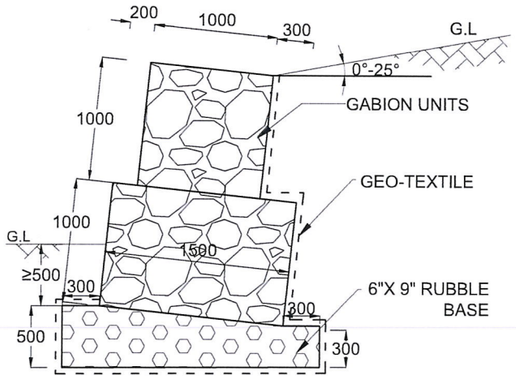
REV	DATE	REVISION DESCRIPTION	APPROVAL

MITIGATION DESIGN FOR
FAILURE LOCATIONS ALONG MATALE LINE
DUE TO 'DITWAH' CYCLONE
MATALE LINE (FROM KANDY TO MATALE)
MILEAGE 13M - 48CH

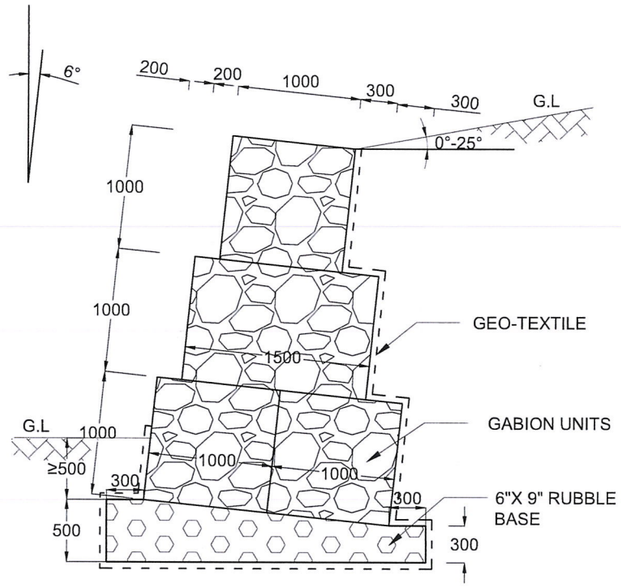
DETAILS OF DRAINS
(CASCADE DRAIN)

SCALE N.T.S. DATE 22.07.2026
PROJECT / DRAWING No. NBRI/GED/2026/30/28584/13M-48CH/DR 05d
REVISION 00

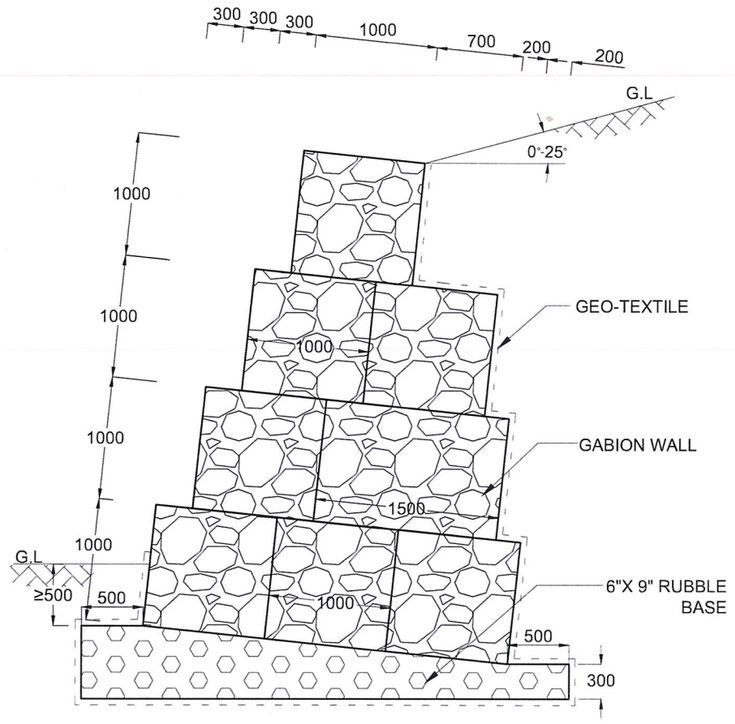
DESCRIPTION	NAME	SIGNATURE
DRAWN	G.H.R.YASAPALA	
DESIGNER	ENG.D.S.JAYASINGHE	
CHECKED	ENG. (DR.) SANCHITHA JAYAKODY	
RECOMMENDED	PROF. S.A.S. KULATHILAKA	
APPROVED	ENG. (DR.) ASIRI KARUNAWARDENA	



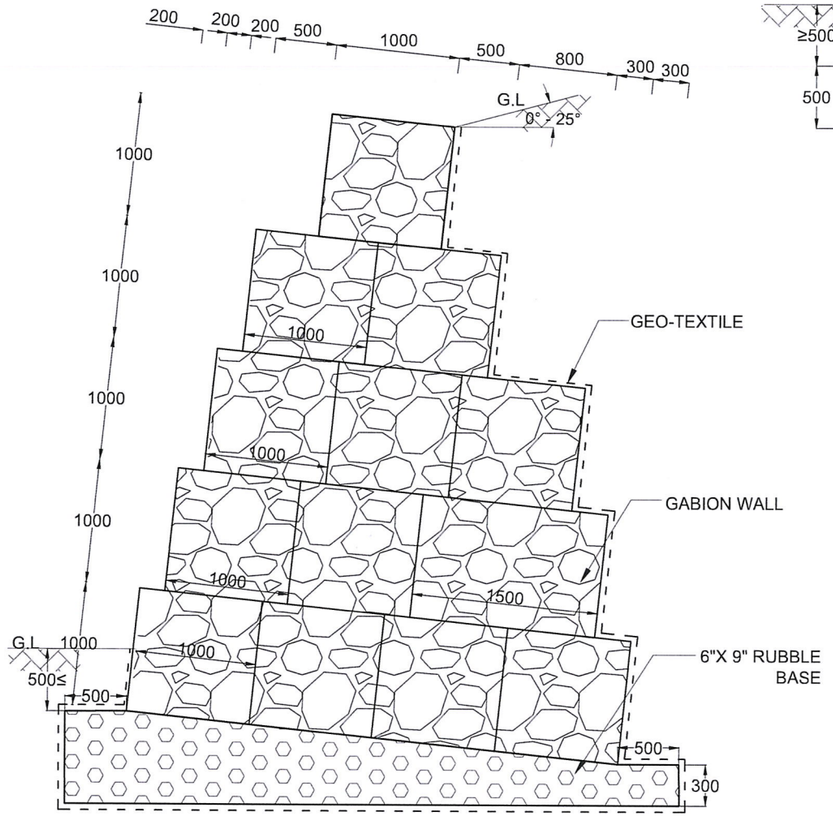
GABION WALL
2m



GABION WALL
3m



GABION WALL
4m



GABION WALL
5m

NOTES

1. ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
2. BACKSLOPE ANGLE, LEVEL AND FORM MAY VARY AS PER THE DESIGN AT EACH SITE.

EMPLOYER

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MINISTRY OF TRANSPORT, HIGHWAYS AND URBAN DEVELOPMENT
SRI LANKA RAILWAYS
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NO. 01, D. R. WIJEWARDHANA MAWATHA,
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DESIGNER

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COLOMBO - 05

REV	DATE	REVISION DESCRIPTION	APPROVAL

MITIGATION DESIGN FOR
FAILURE LOCATIONS ALONG MATALE LINE
DUE TO 'DITWAH' CYCLONE
MATALE LINE (FROM KANDY TO MATALE)
MILEAGE 13M - 48CH

TITLE

DETAILS OF GABION WALL

SCALE	N.T.S.	DATE	22.07.2026

PROJECT / DRAWING No. NBRI/GED/2026/30/28584/13M-48CH/DR 05e

REVISION 00

DESCRIPTION	NAME	SIGNATURE
DRAWN	G.H.R.YASAPALA	
DESIGNER	ENG.D.S.JAYASINGHE	
CHECKED	ENG. (DR.) SANCHITHA JAYAKODY	
RECOMMENDED	PROF. S.A.S. KULATHILAKA	
APPROVED	ENG. (DR.) ASIRI KARUNAWARDENA	