सत्यमेव जयते

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
(सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार)
National Highways Authority of India
(Ministry of Road Transport & Highways, Government of India)
क्षेत्रीय कार्यालय, मदुरै / Regional Office, Madurai
दूसरा व तीसरी तल, विजय कृष्ण प्लाज़ा, संख्या-1, लेक एरिया, मेलूर मेन रोड, माट्टुतावनी, मदुरै-625 007
2nd & 3rd Floor, Vijay Krishna Plaza, No.1, Lake Area, Melur Main Road, Mattuthavani, Madurai-625 107
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NHAI/15018/4.3/07/2023/RO Madurai/E:201883/904 07th June, 2023

INVITATION OF PUBLICE COMMENTS

Sub: NHAI - PIU, Karaikudi - Laying of TWAD Water pipeline along the road from Km.9/880 to Km.17/150 (RHS); Km.12/220 to Km.12/860 (LHS); Km.17/150 to Km.17/750 (LHS); Km.25/800 to Km.26/800 (RHS); Km.26/800 to Km.29/000 (LHS); Km.29/000 to Km.31/175 (RHS); Km.31/175 to Km.31/825 (LHS); Km.32/280 to Km.37/020 (RHS); by Open Trench Method & across the road at 13 locations by Trenchless Method on Madurai - Ramanathapuram section of NH 49 - **Invitation of Public Comments - Reg.**

Ref: PD, Karaikudi Lr.No. NHAI/PIU/Karaiudi/11033/TWAD/2023/576 dated. 27.04.2023.

The proposal received from PD, Karaikudi vide letter no. NHAI/PIU/Karaiudi/11033/TWAD/2023/576 dated. 27.04.2023 there by requesting permission for laying along the road from Km.9/880 to Km.17/150 (RHS); Km.12/220 to Km.12/860 (LHS); Km.17/150 to Km.17/750 (LHS); Km.25/800 to Km.26/800 (RHS); Km.26/800 to Km.29/000 (LHS); Km.29/000 to Km.31/175 (RHS); Km.31/175 to Km.31/825 (LHS); Km.32/280 to Km.37/020 (RHS); by Open Trench Method & across the road at 13 locations by Trenchless Method on Madurai - Ramanathapuram section of NH 49 in the State of TamilNadu proposed by, Executive Engineer, TWAD Board, Project Division, Sivagangai.

Accordingly, as per Policy Guidelines issued by Ministry vide letter No. RW/NH-33044/29/2015/S&R(R) dated 22.11.2016 and subsequent amendment dated 17.04.2023, the application is being uploaded on public domain for 30 days for

NHAI/15018/4.3/07/2023/RO Madurai/E:201883/904 07th June, 2023

seeking claims and objections (on grounds of public inconvenience, safety and general public interest).

In view of the above, comments of the public on the above proposal is invited to the below mentioned address:

Regional Officer,
National Highways Authority of India,
No.2nd & 3rd Floor, Vijay Krishna Plaza,
No.1, Lake Area, Melur Main Road, Mattuthavani,
Madurai - 625 007.

Yours Faithfully,

07/06/23

(P.Selva Kumar),
General Manager (Tech.,)

Copy to:

1. The NIC, New Delhi - for uploading in the Ministry's website.
2. The PD, Karaikudi - for information.

TAMILNADU WATER SUPPLY AND DRAINAGE BOARD

PROVIDING WATER SUPPLY TO 8 TOWN PANCHAYATS, 2452 RURAL HABITATIONS IN 11 UNIONS WITH BULK PROVISION TO 3 MUNICIPALITIES IN SIVAGANGAI DISTRICT WITH RIVER CAUVERY AS SOURCE - PACKAGE III

1. Water supply Pipeline along NHAI – 49 from Km.9/880 to Km.17/150 (RHS), Km.12/220 to Km.12/860 (LHS), Km.17/150 to Km.17/750 (LHS), Km.25/800 to Km.26/800 (RHS), Km.26/800 to Km.29/000 (LHS), Km.29/000 to Km. 31/175 (RHS), Km.31/175 to Km.31/825 (LHS), Km.32/280 to Km.37/020 (RHS).

2. Across the road at Km.9/880, Km.12/860, Km.13/300, Km.17/150, Km.19/400, Km.22/650, Km.26/800, Km.29/000, Km.29/970, Km.31/175, Km.31/825, Km.34/200, Km.37/020.

Executive Engineer, TWAD Board,
Project Division, Sivagangai.

Application Details [20230330/1/7/18999/2435]

Highway	NH49 [NH49], NH49 [NH49], NH49 [NH49], NH49 [NH49], NH49 [NH49], NH49 [NH49], NH49 [NH49], NH49 [NH49], NH49 [NH49], NH49 [NH49], NH49 [NH49]
Name of Highway Authority	
Highway Administration Address	
Whether the Fuel Station is part of Rest-area complex	No
Name of Applicant/Oil Company	Saravanan Address: TWAD Board Project Sub Division A 723, Rajendra Nagar SIPCOT, Manamadurai, SIVAGANGA (TAMIL NADU), PIN: 630606 Phn: 9790257598 Email: aeeprojectmnm@gmail.com
Application Category	Public Utility
Utility	Water
State	TAMIL NADU
Type	New
Remarks	CWSS to Sivagangai District
Submitted On	30 Mar 2023 18:05:33

Details

1. Length in Meters *	19275
2. Width of available ROW	
I. Left side from center line towards increasing chainage OR km direction *	22
II. Right side from center line towards increasing chainage OR km direction *	22
3. Proposal to lay the utility	
I. Left side from center line towards increasing chainage OR km direction *	21.5
II. Right side from center line towards increasing chainage OR km direction *	21.5
4. Proposal to acquire the land	
I. Left side from center line *	21.5
II. Right side from center line *	21.5
5. Whether proposal is in the same side where land is not to be acquired *	No
If not then where to lay the cable *	NA
6. Details of already laid services if any along the proposed route *	nil
7. Number of Existing lanes *	4 Lane
8. Proposed number of lanes *	4 Lane
9. Service road Exists *	Yes

10. Proposed Service road	
Left side from center line	0
Right side from center line	0
11. Whether proposal to lay cable is after the service road or between the service road and main carriageway *	N/A
12. Whether carrying OFC Cable has been proposed on highway /bridges, If yes then mention the methodology proposed for the same *	no
13. Is crossing of the road involved? If Yes, is shall be either encased in pipes or through structure of conduits specially built for the purpose at the expense of the agency owing the line *	yes
I. Whether the existing drainage structures are allowed to carry utility pipeline. *	no
II. Is it on a line normal to NH? *	Yes
III. What is the distance of crossing the utility pipelines from the existing structure? Crossings shall not be too near the existing structures on the National Highway, the minimum distance being 15 mtrs. *	30.00

IV. The casing pipe (or conduit pipe in the case of electric cable) line carrying the utility line shall be of steel, cast iron or reinforced concrete and have adequate strength and be large enough to permit ready withdrawal of carrier pipe/cable Mention type of casting. *	Mild steel pipe
V. Ends of the casing/conduit pipe shall be sealed from outside, so that is does not act as a drainage path *	yes
VI. The casing/conduit pipe should be as minimum extend from drain in cuts toe of slope in fills. *	yes
VII. The installation of Casing pipe shall be as per attachment-1 of Ministry's Guidelines dated 22.11.2016 *	yes
VIII. Mention the methodology proposed for crossing of road for the proposed sewerage / gas pipeline crossing shall be boring method (HDD) (Trenchless Technology) specially where the existing road pavement is of cement concrete of dense bituminous concrete type. *	HDD

14. Whether the proposal satisfies the following:

I. Where the ROW is more than 45 M then the duct cable shall be laid at the edge of right of way within the utility corridor of 2 M width, duly keeping in view the future widening. *	NA
II. Where land is yet to be acquired for 4 laning and the position of new carriageway has been decided then the cable shall be laid at the edge of right of way within the utility corridor of 2 M width, on that side of existing carriageway where extra land is not proposed to be acquired for 4 laning. *	NA
III. Where the widening plan for 4 laning is not yet decided and available ROW is around 30 M or less, a judicious decision would need to be taken for permitting the laying of cable/duct. This could be within 1.5 M to 2m of utility corridor at the edge of existing ROW, duly keeping in view the possible widening plans. *	NA
IV. Where ROW is restricted and adequate only to accommodate the carriageway, central verge, shoulders and drains (e.g. Highways in cutting through hilly/rolling terrain), the cable shall be laid clear of the drain. *	NA

V. Where land strip for utility corridor can't be conveniently earmarked (available ROW restricted to the toe of the embankment) for laying of cable/ducts, the permission may be refused. *	NA
15. Document/Drawings enclosed with the proposal *	Yes
I. Cross section showing the size of trench for open trenching method (is it normal size of 1.2m (min.) deep x 0.3 wide) *	1.5m depth & 0.6m width
II. Cross section showing the size of pit and location of cable for HDD method *	yes
III. Strip plan/ Route plan showing the OFC, Chainage width of ROW, distance of proposed, cable from the edge of ROW, important mile stone, intersections, cross drainage works etc. *	yes
IV. Methodology of laying of the Utility Pipeline/OFC *	Along the road by open trench method and across the road by Trenchless method
V. Open trenching method (may be allowed in utility corridor only where pavement is neither cement concrete nor dense bituminous concrete type) If yes what is the Methodology of refilling of trench *	Granular soil

(a) The trench width should be at least 30 cms but not more than 60 cms wider than the outer diameter of the pipe *	60 cms only
(b) For filling of the trench, bedding shall be to a depth of not less than 30 cms. It shall consist of granular material, free of lumps, clods, cobbles and graded to yiled firm surface without sudden change in the bearing value, unsuitable soil and rock edges should be excavated and replaced by selected material *	yes
(c) The backfill shall be completed in two stages, i) Side fill to the level of the top of the pipe and ii) Overfill to the bottom of the road crust *	yes
(d) The side fill shall consist of granular material laid in 15 cms, layers each consolidated by mechanical tampering and controlled addition of moisture to 95% of the proctor density. Overfill shall be compacted to the same density as the material that has been removed. *	yes

(e) The road crust shall be built to the same strength as existing crust on either side of the trench. Care shall be taken to avoid the formation of a dip at the trench. *	yes
(f) The excavation shall be protected by flagman, signs and barricades and red lights during night hours. *	yes
(g) If required, a diversion shall be constructed at the expense of agency owing the utility line. *	yes
VI. Horizontal Directional Drilling (HDD) Method *	yes
VII. Laying OFC through CD Works and Method of laying (Whether to be hung outside parapet). *	NA
16. Draft license Agreement signed by two witnesses. *	yes
I. The license fee estimate as per Ministry's guidelines issued vide circular no. RW/NH/33044/29/2015/S&R dated 22.11.2016. *	yes
17. Whether Performance Bank Guarantee is as per Ministry's guidelines issued vide circular no. RW/NH/33044/29/2015/S&R, dated 22.11.2016. *	No
I. Confirmation of BG has been obtained as per MoRTH guidelines *	No
18. Affidavit/Undertaking from the Applicant for following is to be furnished	

a) Undertaking not to Damage to other utility, if damage then to pay the losses either to NHAI or the concerned agency. *	Yes
b) Undertaking Renewal of Bank Guarantee as and when asked by MoRTH. *	Yes
c) Undertaking Confirming all standard condition of Ministry's guidelines. *	Yes
d) Undertaking for indemnity against all damages and claims *	Yes
e) Undertaking for management of traffic movement during laying of utility line without hampering the traffic *	Yes
f) Undertaking that if any claim is raised by the concessionaire/ contractor then the same has to be paid by the applicant. *	Yes
g) Undertaking that prior approval of the NHAI shall be obtained before undertaking any work of installation, shifting or repairs, or alteration to the utility located in the National Highway Right of Ways. *	Yes

h) Undertaking that expenditure is any incurred by NHAI for repairing any damage cause to the NH by laying, maintenance of shifting of the utility line will be borne by the applicant agency owing the line. *	Yes
i) Undertaking that text of the license deal is as per verbatim of format issued by MoRTH vide circular no. RW/NH/33044/29/2015/S&R dated 22.11.2016 *	Yes
j) Undertaking for shifting of utility as and when asked by MoRTH/ NHAI. *	Yes

k) Certificate from the applicant in the following format

l) We do undertake that I/we will relocate service road/approach road/utilities at my/our own cost not withstanding the permission granted within such time us will be stipulated by NHAI for future six laning or/any other development

19. Who will sign the agreement on behalf of Applicant agency? Power of Attorney to sign the agreement is available or not. *	Executive Engineer
20. The Power of Attorney is in favour of authorized signatory? *	Yes

Locations

Sno	State	District	Highway /Stretch	Start Point	End Point	View
1	TAMIL NADU	MADURAI	NH49 [NH49] (0.000-183.200) From Km: 9.88 To Km: 10.4	Chainage Point: 9.88 Lat: 9.865 Lng: 78.190	Chainage Point: 10.4 Lat: 9.863 Lng: 78.194	View
2	TAMIL NADU	SIVAGANGA	NH49 [NH49] (0.000-183.200) From Km: 10.4 To Km: 11	Chainage Point: 10.4 Lat: 9.863 Lng: 78.194	Chainage Point: 11 Lat: 9.863 Lng: 78.199	View
3	TAMIL NADU	SIVAGANGA	NH49 [NH49] (0.000-183.200) From Km: 11 To Km: 15.3	Chainage Point: 11 Lat: 9.863 Lng: 78.199	Chainage Point: 15.3 Lat: 9.849 Lng: 78.231	View
4	TAMIL NADU	SIVAGANGA	NH49 [NH49] (0.000-183.200) From Km: 15.3 To Km: 17.75	Chainage Point: 15.3 Lat: 9.849 Lng: 78.231	Chainage Point: 17.75 Lat: 9.833 Lng: 78.246	View
5	TAMIL NADU	SIVAGANGA	NH49 [NH49] (0.000-183.200) From Km: 12.22 To Km: 12.86	Chainage Point: 12.22 Lat: 9.866 Lng: 78.210	Chainage Point: 12.86 Lat: 9.864 Lng: 78.215	View
6	TAMIL NADU	SIVAGANGA	NH49 [NH49] (0.000-183.200) From Km: 25.8 To Km: 29	Chainage Point: 25.8 Lat: 9.803 Lng: 78.302	Chainage Point: 29 Lat: 9.789 Lng: 78.327	View
7	TAMIL NADU	SIVAGANGA	NH49 [NH49] (0.000-183.200) From Km: 29 To Km: 31.825	Chainage Point: 29 Lat: 9.789 Lng: 78.327	Chainage Point: 31.825 Lat: 9.776 Lng: 78.348	View
8	TAMIL NADU	SIVAGANGA	NH49 [NH49] (0.000-183.200) From Km: 32.28 To Km: 32.515	Chainage Point: 32.28 Lat: 9.773 Lng: 78.350	Chainage Point: 32.515 Lat: 9.771 Lng: 78.351	View

9	TAMIL NADU	SIVAGANGA	NH49 [NH49] (0.000-183.200) From Km: 32.515 To Km: 34.2	Chainage Point: 32.515 Lat: 9.771 Lng: 78.351	Chainage Point: 34.2 Lat: 9.766 Lng: 78.365	View
10	TAMIL NADU	SIVAGANGA	NH49 [NH49] (0.000-183.200) From Km: 34.2 To Km: 34.8	Chainage Point: 34.2 Lat: 9.766 Lng: 78.365	Chainage Point: 34.8 Lat: 9.764 Lng: 78.370	View
11	TAMIL NADU	SIVAGANGA	NH49 [NH49] (0.000-183.200) From Km: 34.8 To Km: 37.02	Chainage Point: 34.8 Lat: 9.764 Lng: 78.370	Chainage Point: 37.02 Lat: 9.752 Lng: 78.384	View

Documents

Sno	Stage	Document	Mandatory	Action
1	Under Submission	Layout and Drawings	Yes	View
2	Under Submission	Any Other Supporting Document	No	--
3	Under Submission	Any Document to indicate commercial activities are allowed on the land.	No	--
4	Under Submission	Safety Clearance from Directorate of Electricity	No	--
5	Under Submission	Safety Clearance from Chief Controller of Explosives	No	--
6	Under Submission	Safety Clearance from Petroleum and Explosives Safety Organisation	No	--
7	Under Submission	Safety Clearance from Oil Industry Safety Directorate	No	--
8	Under Submission	Safety Clearance from State/Central Pollution Control Board	No	--
9	Under Submission	Any Other Statutory Clearance as applicable	No	--

Applicable Fee Details

Sno	Fee Head	Stage	Fee	Amount	Status
1	Utility Fees	Technical Approval	License Fees	502043.67	

CHECK - LIST

Guidelines for Project Directors for processing the proposal for laying of Water Supply Pipeline in the land along National Highways vested with NHAI.

Relevant Circulars

1) Ministry Circular No.NH-41 (58)/68 dated 31.1.1969
2) Ministry Circular No.NH-III/P/66/76 dated 18/19.11.1976
3) Ministry Circular No.RW/NH-III/P/66/76 dated 11.5.1982
4) Ministry Circular No.RW/NH-11037/1/86-DOI (ii) dated 28.7.1993
5) Ministry Circular No.RW/NH-11037/1/86-DOI dated 19.1.1995
6) Ministry Circular No.RW/NH-34066/2/95 S&R dated 25.10.1999
7) Ministry Circular No.RW/NH-34066/7/2003 S&R(B) dated 17.9.2003
8) Ministry Circular No.RW/NH-33044/29/2015-S&R(R) dated:22.11.2016

Check list for getting approval for laying of Water supply Pipeline

Sl.No	Item	Information /Status	Remarks
1	General Information		
1.1	Name and Address of the Applicant / Agency	EE, TWAD, Project Division,Sivagangai.	
1.2	National Highway Number	NH 49	
1.3	State	Tamil Nadu	
1.4	Location	Madurai to Rameshwaram	
1.5	(Chainage in km)	Along the road from Km.9/880 to 17/150 (RHS), Km.12/220 to 12/860 (LHS), Km.17/150 to Km.17/750 (LHS), Km.25/800 to Km.26/800 (RHS) , Km.26/800 to Km.29/000 (LHS), Km.29/000 to Km. 31/175 (RHS), Km.31/175 to Km.31/825 (LHS), Km.32/280 to Km.37/020 (RHS) & Across the road at Km.9/880, Km.12/860, Km.13/300, Km.17/150, Km.19/400, Km.22/650, Km.26/800, Km.29/000, Km.29/970, Km.31/175, Km.31/825, Km.34/200, Km.37/020 of NH 49.	
1.6	Length in Meters	19275	
1.7	Width of available ROW	45	
	(a) Left side from center line towards increasing chainage / km direction	Various from 15m to 31.7 m	
	(b) Right side from center line towards increasing chainage / km direction		
1.8	Proposal to lay underground Water supply pipeline	Yes	
	(a) Left side from center line towards increasing chainage / km direction	22 meters	
	(b) Right side from center line towards increasing chainage / km direction		
1.9	Proposal to acquire land	—	
	(a) Left side from center line	—	
	(b) Right side from center line		

28/3/2023
AE/PSD/MNM

28/03/2023
ASSISTANT EXECUTIVE ENGINEER
TWAD BOARD
PROJECT SUB DIVISION
MANAMADURAI.

28/03/2023
EXECUTIVE ENGINEER,
TWAD Board, Project Division,
SIVAGANGAI.

B. ARUN PRASAD
DGM(T) & Project Director
National Highways Authority of India
PIU - KARAIKUDI

Sl.No	Item	Information /Status	Remarks
1.10	Whether proposals is in the same side whether land is not to be acquired	-	
	If not then where to lay the cable	extreme edge of ROW	
1.11	Details of already laid services, if any, along the proposed route	NA	
1.12	Number of lanes (2/4/6/8 lanes) existing	Four lane with paved shoulders	
1.13	Proposed Number of lanes (2 lane with paved shoulders /4/6/8 lanes)	—	
1.14	Service road existing or not		
	If yes then which side	-	
	(a) Left side from center line	Yes	
	(b) Right side from center line	Yes	
1.15	Proposed Service center line	Not Applicable	
	(a) Left side from center line	-	
	(b) Right side from center line	-	
1.16	Whether proposals to lay Water Supply Pipeline is after the service road or between the service road and main carriageway.	After service road	
1.17	The permission for laying of Water Supply Pipeline shall be considered for approval / rejection based on the Ministry Circulars mentioned as above.	Yes	
	(a) Carrying of OFC / gas pipelines on highway bridges shall not be permitted as Fumes/gases pipes can accelerate the process of corrosion or may cause explosions, thus, being much more injurious than leakage of water.	Water Pipeline	
	(b) Carrying of water pipe lines on bridges shall also be discouraged. However, if the water supply authorities seem to have no other viable alternative and approach the highway authority well in time before the design of the bridge is finalized, they may be permitted to carry the pipeline on independent superstructures, supported on extended portions of piers and abutemts in such a manner that in the final arrangement enough free spade around the superstructure of the bridge remains available for inspection and repairs, etc.	NA	
	(c) Cost of required extension of the substructure as well as that of the supporting superstructure shall be borne by the agency-in-charge of the utilities.	Not Applicable	
	(d) Services are not being allowed indiscriminately of the parapet/any part of the bridges, Safety of the bridges has to be kept in view while permitting various services along bridge. Approvals are to be accorded in this regard with the concurrence of the **Ministry's Project Chief Engineers only.**	NA	
1.18	**If crossings of the road involved.**	Yes	
	If yes, it shall be either encased in pipes or through structure or conduits specially built for that purpose at the expenses of the agency owning the line.	Encased in MS Pipe 508- 323mm	
	(a) Existing drainage structures shall not be allowed to carry the lines.	Not Used	
	(b) Is it on a line normal to NH	Yes	
	(c) Crossing shall not be too near the existing structures on the National Highway, the minimum distance being 15 meter. What is the distance from the existing structures.	Complied	
	(d) The casing pipe (or conduit pipe In the case of electric cabel) carrying the utility line shall be of steel, cast iron, or reinforced cement concrete and have adequate strength and be large enough to permit ready withdrawal of the carrier pipe/cable.	MS Pipe	

28/3/2023

ASSISTANT EXECUTIVE ENGINEER
TWAD BOARD
PROJECT SUB DIVISION
MANAMADURAI.

28/3/2023

EXECUTIVE ENGINEER,
TWAD Board, Project Division,
SIVAGANGAI.

B. ARUN PRASAD
DGM(T) & Project Director
National Highways Authority of India
PIU - KARAIKUDI

Sl.No	Item	Information /Status	Remarks
	(e) Ends of the casing / conduit pipe shall be sealed from the outside, so that it does not act as a drainage path	Yes	
	(f) The casing / conduit pipe should; as minimum extend from drain to drain in cuts and toe of slope toe in the fills	Yes	
	(g) The top of the casing / conduit pipe should be at least 1.2 meter below the surface of the road subject to being at least 0.3 m below the drain inverts.	1.50m below the ground level.	
	(h) Crossing shall be by boring method (HDD) specially where the existing road pavement is of cement concrete or dense bituminous concrete type	Yes	
2	Document / Drawing enclosed with the proposal	Yes	
2.1	Cross section showing the size of trench for open trenching method (Is it normal size of 1.2m deep X 0.3m wide)	Not Applicable	
	(i) Shoud not be greater than 60 Cm wider than the outer diameter of the pipe	Not Applicable	
	(ii) located as close to the extreme edge of the right-of-way as possible but not less than 15 meter from the centre-lines of the nearest carriageway.	Not Applicable	
	(iii) Shall not be permitted to run along the National Higways when the road formation is situated in double cutting. Nor shall these be laid over the existing culverts and bridges.	-	
	(iv) These should be so laid that their top is at least 0.6 meter below the ground level so as not to obstruct drainage of the road land.	1.50m below the ground level.	
2.2	Cross section showing the size of pit and location of cable for HDD method.	Enclosed	
2.3	Strip plan / Route Plan showing Water pipeline, Chaninage, width of ROW, distance of proposed, cable from the edge of ROW, important mile stone, intersections, cross drainage works etc.,	Yes	
2.4	Methodology for laying of showing Water Supply Pipeline.	Enclosed	
2.4.1	Open trenching method. (May be allowed in utility corridor only where pavement is neither cement concrete nor dense bituminous concrete type. If yes, Methodology of refilling of trench.	Not Applicable	
	(a) The trench width should be at least 30 cm, but not more than 60 cm wider than the outer diameter of the pipe.	Not Applicable	
	(b) For filling of the trench, Bedding shall be to a depth of not less than 30 cm. It shall consist of granular meterial, free of lumps, clods and cobbles and graded to yield a firm surface without sudden change in the brearing value. Unsuitable soil and rock edged be excavated and replaced by selected material.	Yes	
	(c) The backfill shall be completed in two stages (i) side-fill to the level of the top of the pipe and (ii) overfill to the bottom of the road crust.	Yes	
	(d) The sidefill shall consist of granular material laid in 15cm layers each consolidated by mechanical tampering and controlled addition of moisture to 95% of the Proctor's Density. Overfill shall be compacted to the same density as the material that had been removed. Consolidation by saturation or ponding will not be permitted.	Yes	
	(e) The road crust shall be built to the same strength as the existing crust on either side of the trench. Care shall be taken to avoid the formation of a dip at the trench.	Yes	
	(f) The excavation shall be protected by flagman, signs and barricades, and red lights during night hours.	Yes	
	(g) If required, a diversion shall be constructed at the expense of agency owning the utility line.	Not Applicable	

28/3/23

AE/PSD/MNM

28/03/2023

ASSISTANT EXECUTIVE ENGINEER
TWAD BOARD
PROJECT SUB DIVISION
MANAMADURAI.

28-3-2023

EXECUTIVE ENGINEER,
TWAD Board, Project Division,
SIVAGANGAI.

B. ARUN PRASAD
DGM(T) & Project Director
National Highways Authority of India
PIU - KARAIKUDI

Sl.No	Item	Information /Status	Remarks
2.4.2	Horizontal Directional Drilling (HDD) Method.	HDD Method to be adopted.	
2.4.3	Laying of Water Pipeline through CD works and method of laying		
	(a) On approaches, the water mains / cables shall be carried along a line as close to the edge of the right-of way as possible up-to a distance of 30m from the bridge and subject to all other stipulations contained in this Ministry's guidelines issued with letter No.NH-HI/P/66/76 dated 19.11.1976.	Yes	
3	Draft Licnese Agreement signed by two witnessess	Yes	
4	Performance Bank Guarantee in favour of NHAI has to be obtained @ Rs.100/ per running meter (parallel to NH) and Rs.1,00,000/- per crossing of NH, for a period of one year initially (extendable if require till satisfactory completion of work) as a security for ensuring/making good the excavated trench for laying the cables/ducts by proper filling and compaction, clearing debris/loose earth produced due to execution of trenching at least 50m away from the edge of the right of way. No payment shall be payable by the NHAI to the licensee for clearing debris/loose earth.	Will be given after getting approval	
4.1	Performance BG as per above is to be obtained.	Will be given after getting approval	
4.2	Comfirmation of BG has been obtained as per NHAI guidelines.	Will be given after getting approval	
5	**Affidavit / Undertaking from the Applicant for**		
5.1	Indemnity bond	Yes	
5.2	Not to Damage to other utility, if damaged then to pay the losses either to NHAI or to the concerned agency.	Yes	
5.3	Renewal of Bank Guarantee	NA	
5.4	Confirming all standard condition of NHAI's guideline	Yes	
5.5	Shifting of Water Pipeline as and when required by NHAI at their own cost.	Yes	
5.6	Shifting due to 6 laning / widening of NH	Yes	
5.7	Indemnity against all damages and claims clause (xxiv)	Yes	
5.8	Traffic movement during laying of Optical Fibre Cable to be managed by the applicant.	Yes	
5.9	If any claim is raised by the Concessionaire then the same has to be paid by the applicant.	Yes	
5.10	Prior approval of the NHAI shall be obtained before undertaking any work of installation, shifting or repairs, or alterations to the showing Water Pipeline located in the National highway right-of-ways.	Yes	
5.11	Expenditure, if any, incurred by NHAI for repairing any damage caused to the National Highway by the laying, maintenance or shifting of the Water Pipeline will be borne by the agency owning the line.	Yes	
5.12	If the NHAI considers it necessary in future to move the utility line for any work of improvement or repairs to the road, it will be carried out as desired by the NHAI at the cost of the agency owning the utility line within a reasonable time (not exceeding 60 days) of the intimation given.	Yes	
5.13	Certificate from the applicant in the following format		
	(i) Laying of Water Pipeline will not have any deleterious effects on any of the bridge components and roadway safety for traffic.	Yes	
	(ii) for 6-laning "We do undertake that I will relocate service road/approach road/utilities at my own cost notwithstanding the permission granted within such time as will be stipulated by NHAI" for future six-laning or any other development".	Yes	
6	Who will sign the agreement on behalf of Water Supply Pipeline agency.	Executive Engineer, TWAD Board, Project Division,Sivagangai	

28/3/23

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28/03/2023

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28-3-2023

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TWAD Board, Project Division,
SIVAGANGAI.

B. ARUN PRASAD
DGM(T) & Project Director
National Highways Authority of India
PIU - KARAIKUDI

Sl.No	Item	Information /Status	Remarks
7	Certificate from the Project Director.		
7.1	Certificate for confirming of all standard condition issued vide Ministry Circular No.Mnistry Circular No.NH-41(58)/68 dated 31.1.1969, Ministry Cirular No.NH-III/P/66/76 dated 18/19.11.1976, Ministry Circular No.RW/NH-III/P/66/76 dated 11.5.1982, Ministry Circular No.RW/NH-11037/1/86-DOI (II) dated 28.7.1993, Ministry Circular No.RW/NH-11037/1/86/DOI dated 19.1.1995, Ministry Circular No.RW/NH-34066/2/95/S&R dated 25.10.1999 and Ministry Circular No.RW/NH-34066/7/2003 S&R (B) dated 17.9.2003	Yes	
7.2	Cerficate from PD in the following format		
	(i) " It is certified that any other location of the Water Pipeline would be extremely difficult and unreasonable costly and the istallation of Optical Fibre Cable within ROW will not adversely affect the design, stability & traffic safety of the highway nor the likely future improvement such as widening of the carriageway, easing of curve etc".	Yes	
	(ii) for 6-laning		
	(a) Where feasibility is available " I do certify that there will be in hindrance to proposed six-laning based on the feasibility report considering proposed structures at the said location"	Yes	
	(b) In case feasibility report is not available "I do certify that sufficient ROW is available at site for accommodating proposed six-laning"	Yes	
8	If NH section proposed to be taken up by NHAI on BOT basis - a clause is to be inserted in the agreement. " The permitted Highway on which Licensee has been granted the right to lay cable/duct has also been granted as a right of way to the concessionaire under the concession agreement for up-gradation of **[Madurai - Rameshwaram section along the road from Km.9/880 to 17/150 (RHS), Km.12/220 to 12/860 (LHS), Km.17/150 to Km.17/750 (LHS), Km.25/800 to Km.26/800 (RHS) , Km.26/800 to Km.29/000 (LHS), Km.29/000 to Km. 31/175 (RHS), Km.31/175 to Km.31/825 (LHS), Km.32/280 to Km.37/020 (RHS) & Across the road at Km.9/880, Km.12/860, Km.13/300, Km.17/150, Km.19/400, Km.22/650, Km.26/800, Km.29/000, Km.29/970, Km.31/175, Km.31/825, Km.34/200, Km.37/020 of NH 49 On Engineering Procurement and Construction Basis]** and therefore, the licensee shall honour the same".	Yes	
9	Who will supervise the work of laying of Water Pipeline.	Executive Engineer, TWAD Board, Project Division,Sivagangai	
10	Who will ensure that the defects in road portion after laying of Water Pipeline are corrected and if not corrected then what action will be taken.	Executive Engineer, TWAD Board, Project Division,Sivagangai	
11	Who will pay claims for damages done / disruption in working of Concessionaire if asked by the Concessioanaire.	Executive Engineer, TWAD Board, Project Division, Sivagangai	
12	A certificate from PD that he will enter the proposed permission in the register of records of the permissions in the prescribed proforma (copy enclosed).	Enclosed	
13	If any previous approval is accorded for laying of underground Water Pipeline then Photocopy of register of records of permissions accorded as maintained by PD then copy be enclosed.	NA	

28/3/23

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28/03/2023

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B. ARUN PRASAD
DGM(T) & Project Director
National Highways Authority of India
PIU - KARAIKUDI

Proposal for Laying of Water supply Pipeline along the road from Km.9/880 to 17/150 (RHS), Km.12/220 to 12/860 (LHS), Km.17/150 to Km.17/750 (LHS), Km.25/800 to Km.26/800 (RHS), Km.26/800 to Km.29/000 (LHS), Km.29/000 to Km. 31/175 (RHS), Km.31/175 to Km.31/825 (LHS), Km.32/280 to Km.37/020 (RHS) & Across the road at Km.9/880, Km.12/860, Km.13/300, Km.17/150, Km.19/400, Km.22/650, Km.26/800, Km.29/000, Km.29/970, Km.31/175, Km.31/825, Km.34/200, Km.37/020 of NH 49.

General to Accompany All Proposals

Check List

General

I. i] whether the site plan is drawn to a scale of I: 5000 or 1: 2500 and enclosed : NTS

ii] Whether the details of 100M on either side of The utilizing laying have been furnished : No.

iii] Does the site plan show in full : Yes.

a] The NH boundary line with distance from center Line of the road marked at salient points where the NH land width is changing and also at 200M intervals : Yes.

b] The berm line and distance from centre line at 200M intervals and also at salient point of change of width of NH land : Yes.

c] Center line of pavement and pavement edge line Marked distinctly. : Yes.

d] Medians, if any, marked to scale. : Yes.

e] The location of the utility line of proposal with drainage; showing exact locations and distance from NH centre line. : Yes.

f] The existing culvert / drainage works with dimensions. : Yes.

2 a] Purpose of the proposal in details : For Laying under Ground Water Pipe line Along & Across NH- 49 Madurai to Rameshwaram of section.

28/8/23

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28/8/2023

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28-8-2023

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b]	Exact location of proposal	:	Laying for under Ground Water Pipe Line along the road from Km.9/880 to 17/150 (RHS), Km.12/220 to 12/860 (LHS), Km.17/150 to Km.17/750 (LHS), Km.25/800 to Km.26/800 (RHS) , Km.26/800 to Km.29/000 (LHS), Km.29/000 to Km. 31/175 (RHS), Km.31/175 to Km.31/825 (LHS), Km.32/280 to Km.37/020 (RHS) & Across the road at Km.9/880, Km.12/860, Km.13/300, Km.17/150, Km.19/400, Km.22/650, Km.26/800, Km.29/000, Km.29/970, Km.31/175, Km.31/825, Km.34/200, Km.37/020 of NH 49.
c]	Whether the applicant if private agency / public sector / Govt. department	:	Govt. Department
d]	Any time schedule fixed for the completion of the proposal made.	:	As early as possible.
e]	Reasons why the proposal could not be Accommodated outside the N.H. Land	:	Not feasible.
f]	Whether any other location other than this not Feasible.	:	No other location is possible.
g]	Whether any other than this would be difficult.	:	Difficult and not possible.
h]	Whether this proposal when implemented now will affect the design, stability and traffic safety of highway.	:	No.
i]	Whether this proposal if implemented now will affect any likely future improvement such as improvements geometric.	:	No.
j]	Is there any proposal for improvements in this Stretch or likely to be sanctioned in near future and whether they will be affected by this Proposal.	:	No
k]	More than 95% of compaction with 300mm layer by layer will be achieved by using granular soils in pipe laying trenches.	:	Yes

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CONDITIONS

1. The pipe lines should not be laid longitudinally for considerable length along National Highways.

2. The crossing of pipe lines shall be square i.e., it should be normal to National Highways.

3. Existing drainage structures shall not be used to carry the pipe lines across unless specially permitted by Govt. of India.

4. Pipe line should be provided with a casting pipe of larger dia and with a 0.30 bedding below the casting pipe, if laid across the road.

The above-mentioned rules have been noted for guidance.

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MANAMADURAI	**MANAMADURAI**	**SIVAGANGAI**

ANNEXURE TO ACCOMPANY PROPOSALS SUCH AS LAYING UTILITY SERVICES LIKE PIPE LINES ACROSS NATIONAL HIGHWAYS

I. LAYING OF UTILITY LINE ACROSS NATIONAL HIGHWAYS:

1. Whether the utility line is as close to the extreme edge of the right of way as possible? It not, the detailed reasons for exceptions. : Yes

2. Whether the utility line is 15M away from the C/L of the nearest carriage way? If not, the Reasons therefore (Distances should be clearly Noted) at salient points and at close intervals. : Yes

3. Does the proposal cover the area where the road formation is in double cutting. : No

4. Does the proposal run over existing culverts and bridges at any place. If so, give reasons why it cannot be avoided. : No

5. Will this proposal interfere with the maintenance of NH at any time by the execution, if permitted. : No

6. Whether the C/S of utility line as it runs along NH is given in the drawings? : Yes

a] Whether the top of pipe line lie at least O.6M below G.L : Yes (2.00 M)

b] Will it obstruct the drainage of road land : No

7. Is there a proposal to lay electric cable carrying H.T. Line? : No

a] If so, the necessary certificate by the proposed that it will not have any deleterious effect on any of the bridge components and High way safety for traffic. : Does not arise

28/3/23

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28/03/23

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B. LAYING OF UTILITY LINE ACROSS NH:

1. Chainage at which it crosses the NH 49 : Along the road from Km.9/880 to 17/150 (RHS), Km.12/220 to 12/860 (LHS), Km.17/150 to Km.17/750 (LHS), Km.25/800 to Km.26/800 (RHS) , Km.26/800 to Km.29/000 (LHS), Km.29/000 to Km. 31/175 (RHS), Km.31/175 to Km.31/825 (LHS), Km.32/280 to Km.37/020 (RHS) & Across the road at Km.9/880, Km.12/860, Km.13/300, Km.17/150, Km.19/400, Km.22/650, Km.26/800, Km.29/000, Km.29/970, Km.31/175, Km.31/825, Km.34/200, Km.37/020 of NH 49.

2. Does the proposal cross the NH on a line normal to it? If not, the reasons thereof, and why it cannot be taken normal to road. : Yes, on a line normal to it

3. If the proposal for irrigation purpose? If so the concurrence of revenue Dept. has been enclosed. : Not Applicable

4. Whether there is any structure existing within 15M from the crossing? If so, the detail of such. : No

5. The reason why the crossing cannot be shifted to more than 15 from the existing structures. : Does not arise.

C. METHOD OF CASING PIPES:

1] Does it pass through special conduits or other structures built for this purpose : Yes

2] Does it use any of the existing drainage structures? : No.

3] Whether the conduit pipes have been encased : Yes. Encased

4] The detail of casing pipes such as its dia, materials etc : MS Encasing 508-323mm dia and 250 - 50 mm dia HDPE pipe for Water Pipeline

5] Whether the ends of casing or conduct pipe are sealed from outside so that it may not act as Drainage path. : Yes

6] Does the casing conduit pipe extent from drain to drain, if this is cut or from the tie or slope to Tie of slop[e in Care, if this is full. : No

28/3/2013

28/03/2013

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7] Whether the tops of casing / conduit pipe is 1.2M below the road level subject to the conditions that it lies at least O.5M below the drain inverts. : Yes

D. METHOD OF LAYING:

1. Will the pipe be installed under road embankment by boring or, trench method. (In case of C.C roads or dense bituminous concrete roads, only boring methods could be adopted) Across the Road. : Trenchless Boring Method
2. If trench method is adopted

a] Are the sides of the trench nearly vertical : Not Applicable

b] What is the width of trench? Is it not less than 30cm and not more than 60cms than the outer dia if the casing pipes. : Not Applicable

c] Whether the bedding is of 30cm thick below the pipe? : Not Applicable

d] Does it consist of granular materials or other Good materials to give a firm surface. : Not Applicable

e] Are the above details shown in the sketch : Not Applicable

f] Whether the back fill shall be completed in 2 Stage : Not Applicable

g] Whether the side fill shall consist of pucca materials and whether will it be completed to 95% of its pro density? : Not Applicable

h] Whether the road will be restored to its original state? : Not Applicable

i] Whether all precautions will be taken during execution? : Not Applicable

j] Whether the party agrees to meet the cost of restoring the road to the original position. : Not Applicable

28/2/23

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CERTIFICATE

1. This proposal when implemented will not affect the design stability and traffic safety of National Highways Authority of India.

2. This proposal implemented now, will not affect any likely future improvements such as Improvements to geometries.

3. There is no proposal for improvements in this stretch likely to be sanctioned near future.

4. The proposal is in accordance with the Government of India's Specifications.

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தமிழ்நாடு तमिलनाडु TAMILNADU 100/-

DA 770095

27/3/2023 Executive Engineer
TWAD Board, Project Division
Sivagangai

M.S.முகம்மது [illegible]
நகர் முத்திரைத்தாள் விற்பனையாளர்
உரிமம்: எண் 204/ஆ1/2015
சிவகங்கை-தமிழ்நாடு.

LICENCE DEED FOR LAYING OF WATER SUPPLY PIPES ON NATIONAL HIGHWAY LAND

Agreement to lay water supply pipe along the road from Km.9/880 to 17/150 (RHS), Km.12/220 to 12/860 (LHS), Km.17/150 to Km.17/750 (LHS), Km.25/800 to Km.26/800 (RHS), Km.26/800 to Km.29/000 (LHS), Km.29/000 to Km. 31/175 (RHS), Km.31/175 to Km.31/825 (LHS), Km.32/280 to Km.37/020 (RHS) & Across the road at Km.9/880, Km.12/860, Km.13/300, Km.17/150, Km.19/400, Km.22/650, Km.26/800, Km.29/000, Km.29/970, Km.31/175, Km.31/825, Km.34/200, Km.37/020 of Madurai to Rameswaram section of NH- 49.

This Agreement made this _____day of _____ (month) of_____ year between_____ acting in his executive capacity through the President of India/National Highways Authority of India (hereinafter referred to as the "Authority" which expression shall unless excluded by or repugnant to the context, include his successors in office and assigns) of the one part and Executive Engineer, TWAD Board, Project Division, Sivagangai District (name of the party). (Hereinafter called the '*Licensee*') which expression shall, unless excluded by or repugnant to the context, include his heirs its successors/administrator assignees on the second part.

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Whereas the Authority is responsible, inter alia, for development and maintenance of lands in along the road from Km.9/880 to 17/150 (RHS), Km.12/220 to 12/860 (LHS), Km.17/150 to Km.17/750 (LHS), Km.25/800 to Km.26/800 (RHS) , Km.26/800 to Km.29/000 (LHS), Km.29/000 to Km. 31/175 (RHS), Km.31/175 to Km.31/825 (LHS), Km.32/280 to Km.37/020 (RHS) & Across the road at Km.9/880, Km.12/860, Km.13/300, Km.17/150, Km.19/400, Km.22/650, Km.26/800, Km.29/000, Km.29/970, Km.31/175, Km.31/825, Km.34/200, Km.37/020 of NH 49 Row.

Whereas the Licensee proposes to lay water pipeline / ducts etc., referred to as utility services in subsequent paras.

Whereas the licensee has applied to the Authority for permission to lay water supply pipes at along the road from Km.9/880 to 17/150 (RHS), Km.12/220 to 12/860 (LHS), Km.17/150 to Km.17/750 (LHS), Km.25/800 to Km.26/800 (RHS), Km.26/800 to Km.29/000 (LHS), Km.29/000 to Km. 31/175 (RHS), Km.31/175 to Km.31/825 (LHS), Km.32/280 to Km.37/020 (RHS) & Across the road at Km.9/880, Km.12/860, Km.13/300, Km.17/150, Km.19/400, Km.22/650, Km.26/800, Km.29/000, Km.29/970, Km.31/175, Km.31/825, Km.34/200, Km.37/020 of NH 49 Row.

And whereas the Authority has agreed to grant such permission for way leave on the NH RoW as per terms and conditions hereinafter mentioned.

Now this Agreement witness that in consideration of the conditions hereinafter, contained and on the part of the Licensee/Licensees to be observed and performed, the Government/NHAI hereby grants to the licensee/licensee's permission to lay water supply pipes as per the approved drawing attached hereto subject to the following condition namely: -

1. RoW permissions are only enabling in nature. The purpose of extending the way leave facility on the National Highway RoW is not for enhancing the scope of activity of a utility service provider, either by content or by intent. Further, enforceability of the permission so granted shall be restricted only to the extent of provisions / scope of activities defined in the license agreement & for the purpose for which it is granted.

2. No licensee shall claim exclusive right on the RoW and any subsequent user will be permitted to use the RoW, either above or below, or by the side of the utilities laid by the first user, subject to technical requirement being fulfilled. Decision of the Authority in relation to fulfillment of technical requirements shall be final and binding on all concerned parties. In case any disruption / damage is cause to any existing user by the subsequent user, the Authority shall not be held accountable or liable in any manner.

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3. The Licensee shall be responsible for undertaking all activities including, but not limited to site identification, survey, design, engineering, arranging finance, project management, obtaining regulatory approvals & necessary clearances, supply of equipments, material, construction, erection, testing and commissioning, maintenance and operation and all other activities essential or required for efficient functioning of their own utility / industrial infrastructure facilities.

4. The licensee shall pay license fees @ Rs ..... /Sq. m/ month to the Authority. The License fee shall become payable from the date of handing over of RoW land to the Licensee, for laying of utilities / cables / conduits / pipelines for infrastructure/service provider. As regards Tariff and Terms and Conditions for Providing Common Utility ducts along National Highways, there shall be a separate agreement regime.

5. Fee shall have to be paid in advance for the period for which permission is granted for entering into a license agreement. In case of renewal, rate prevailing at the time of renewal shall be charged. Delay in deposition of fee shall attract interest @ 15% per annum compounded annually.

6. Present policy of the MoRT& H is to provide a 2.00 m wide utility corridor on either side of the extreme edge of RoW. In case where utility ducts with sufficient space are already available along NH, the Utility services shall be laid in such ducts subject to technical requirements being fulfilled.

7. The utilities services shall be laid at the edge of the RoW. In case of restricted width of RoW, which may be adequate only to accommodate the carriageway, central verge, shoulders, slopes of embankment, drains other roadside furniture etc; the utility services shall be laid beyond the toe line of the embankments and clear of the drain.

8. The Licensee shall make his own arrangement for crossing of cross drainage structure, rivers, etc, below the bed. In case, this is not feasible, the utility services may be carried outside the railings / parapets and the bridge superstructure. The fixing and supporting arrangement with all details shall be required to be approved in advance from the concerned Highway Administration. Additional cost on account of fixing and supporting arrangement as assessed by the Authority shall be payable by the Licensee.

9. In exceptional cases, where RoW is restricted the utility service can be allowed beneath the carriageway of service road, if available, subject to the condition that the utility service be laid in concrete ducts, which will be designed to carry traffic on top. The width of the duct shall not be less than one lane. In such cases, it also needs to ensure that maintenance of the utility service shall not interface with the safe and smooth flow of traffic. The cost of operation and maintenance will have to be borne by the Licensee.

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TWAD Board, Project Division,
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10. It is to be ensured that at no time there is interference with the drainage of the road land and maintenance of the National Highways. Towards this, the top of the utility services shall be at least 0.6 meter below the ground level. However, any structure above ground shall be aesthetically provide for / landscaped with required safety measures as directed by the concerned Authority.

11. The utility service shall be permitted to cross the National Highway either through structure or conduits specially built for that purpose. The casing / conduit pipe should, as minimum, extend from drain to drain in cuts and toe of slope to toe of slop in the fills and shall be designed in accordance with the provision of IRC and executed following the Specifications of the Ministry.

12. Existing drainage structure shall not be allowed to carry the lines across.

13. The top of the casing / conduit pipe containing the utility services to cross the road shall be at least 1.2m below the top of the sub grade or the existing ground level whichever is lower, subject to being at lease 0.3m below the drain inverts. A typical sketch showing the clearances is given in Attachment - 1.

14. The utility service shall cross the National Highway preferable on a line normal to it or as nearly so as practicable.

15. The casing / conduit pipe for crossing the road may be installed under the road embankment either by boring or digging a trench. Installation by boring method shall be preferred.

16. In case of trenching, the sides of the trench should be done as nearly vertical as possible. The trench width should be at least 30 cm. but not more than 60 cms wider than the outer diameter of the pipe. Filling of the trench shall conform to the specifications contained here-in- below or as supplied by the Highway Authority.

    a. Bedding shall be to a depth not less than 30 cm. It shall consist of granular material, free of lumps, colds and cobbles, and graded to yield a firm surface without sudden change in the bearing value. Unsuitable soil and rock edges should be excavated and replaced by selected material.

    b. The backfill shall be completed in two stages (i) side – fill to the level of the top of the pipe (ii) Overfill to the bottom of the road crust.

    c. The side fill shall consist of granular material laid in 15 cm. Layers each consolidated by mechanical tamping and controlled addition of moisture to 95% of the Proctor's Density. Overfill shall be compacted to the same density as the material that had been removed. Consolidation by saturation or bonding will not be permitted.

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d. The road crust shall be built to the same strength as the existing crust on either side of the trench or to thickness and specifications stipulated by the Highway Authority.

17. The licensee shall ensure making good the excavated trench for laying utility services by proper filling and compaction, so as to restore the land into the same condition as it was before digging the trench, clearing debris/loose earth produced due to execution of trenching at least 50m away from the edge of the right of way;

18. All required restoration works subsequent to laying of the cable shall be required to be undertaken by the Licensee at its cost either by itself or through its authorized representative in consultation with the Authority as per predetermined time schedule and quality standards.

19. Prior to commencement of any work on the ground, a performance Bank Guarantee @ Rs. Per route meter / Rs. Per sq m with a validity of one year initially (extendable if required till satisfactory completion of work) shall have to be furnished by the Licensee to the Authority / it's designed agency as a security against improper restoration of ground in terms of filling/unsatisfactory compaction damages caused to other underground installation / utility services & interference, interruption, disruption or failure caused thereof to any service etc. In case of the Licensee failing to discharge the obligation of making good of the excavated trench / other restoration work, the Authority shall have a right to make good the damage caused by excavation, at the cost of the Licensee and recover the amount by forfeiture of the Bank Guarantee.

20. In case, the Performance Bank Guarantee invoked as mentioned above, the Licensee shall be required to replenish and reinstate the required performance Bank Guarantee within one month of such invoking. In case the work contemplated herein is not completed to the satisfaction of the Authority, which has granted the permission, within a period of 11 months from the date of issue of the Bank Guarantee, the Licensee shall either furnish a fresh guarantee or extend the guarantee for a further period of one year. Notwithstanding this, the licensee shall be liable to pay full compensation to the aggrieved Authority / its designated agency for any damage sustained by them by reason of the exercise of the RoW facility.

21. The Licensee shall shift the utility service within 90days (or as specification by the respective Authority) from the date of issues of the notice by the concerned Authority to shift/relocate the utility services, in case it is so require for the purpose of improvement/ widening of the road/route/highway or construction of flyover/bridge and restore the road / land to its original condition at his own cost and risk.

22. The Licensee shall be responsible to ascertain from the respective agency in co–ordination with Authority, regarding the Location of other utilities/underground installation/facilities etc. the Licensee shall ensure the safety and security of already existing underground installations/utilities/facilities etc. before commencement of the excavation/using the existing cable ducts. The licensee shall procure insurance from a reputed insurance company against damages to already existing underground installations /utilities/facilities etc.

EXECUTIVE ENGINEER,
TWAD Board, Project Division,
SIVAGANGAI.

23. The licensee shall be solely responsible/liable for full compensation/indemnification of concerned agency / aggrieved Authority for any direct, indirect or consequential damage caused to them/claims or replacements sought for, at the cost and risk of the licensee. The concerned agency in co–ordination with Authority shall also have a right make good such damages/recover the claims by forfeiture of Bank Guarantee.

24. If the Licensee fails to comply with any condition to the satisfaction of the Authority, the same shall be executed by the Authority at the cost and risk of the Licensee.

25. Grant of Licensee is subject to the Licensee satisfying (a) minimum disruption of traffic and (b) no damage to the highways. As far as possible, the Licensee should avoid cutting of the road for crossing highways, and other roads and try to carry out the work by trenchless technology. In case any damage is caused to the road pavement in this process, the Licensee will be required to restore the road to the original condition at its cost. If due to unavoidable reasons the road needs to be cut for crossing or laying utility services, the Licensee has to execute the restoration work in a time bound manner at its cost either by itself or through its authorized representative in consultation with the Authority as per predetermined time schedule and quality standards. In case of the Licensee failing to discharge the obligation of making good of the excavated trench/other restoration work, the Authority shall have a right to make good the damages caused by excavation, at the cost of the Licensee and recover the amount by forfeiture of the Bank Guarantee.

26. The Licensee shall inform/give a notice to the concerned agency designated by the Authority at least 15 days in advance with route details prior to digging trenches, for fresh or maintenance/repair works. A separate performance Bank Guarantee for maintenance/repair works shall have to be furnished by the Licensee.

27. Each day, the extent of digging the trenches should be strictly regulated so that utility service is laid, and trenches filled up before the close of the work that day. Filling should be completed to the satisfaction of the concerned agency designated by the Authority.

28. The Licensee shall indemnify the concerned agency in co-ordination with Authority, against all damages and claims, if any due to the digging of trenches for laying cables/ ducts.

29. The permission for laying utility services is granted maximum for 5 years at a time, which can thereafter be considered for renewal. On payment of additional fee at the time of renewal, the permission shall automatically be renewed, unless defaults exist. In case of renewal, rate prevailing at the time of renewal shall be charged. Delay in deposition of fee shall attract interest @ 15% per annum compounded annually.

EXECUTIVE ENGINEER,
TWAD Board, Project Division,
SIVAGANGAI.

30. The permission shall be valid only for the period it is issued, and fee deposited. However, the Authority also has a right to terminate the permission or to extend the period of agreement.

31. That the Licensee shall not undertake any work of shifting, repairs or alterations to the utility service without prior written permission of the concerned agency in co-ordination with the Authority.

32. The permission granted shall not in any way be deemed to convey to the Licensee any ownership right or any interest in route/road/highway land/property, other than what is herein expressly granted. No use of NH RoW will be permitted for any purpose other than that specified in the Agreement.

33. During the subsistence of this Agreement, the utility service located in highway land / property shall be deemed to have been constructed and continued only by the consent and permission of the Authority so that the right of the Licensee to the use thereof shall not become absolute and indefeasible by lapse of time.

34. The Licensee shall bear the Stamp Duty Charged on this Agreement.

35. Three copies of ' as laid drawings' of utilities (hard and soft copies) with geo–tagged photographs and geo–tagged video recordings of laying of water pipe line in the trench (with respect to the NH) and after complete restoration shall be submitted to the Authority for verification and record within a month of completion of works.

36. The Licensee shall allow free access to the Set at all times to the authorized representatives of Authority to inspect the Project Facilities and to investigate any matter within their Authority, and upon reasonable notice, shall provide reasonable assistance necessary to carry out their respective duties and functions.

37. The utility services shall not be made operational by the licensee unless a completion certificate to the effect that the utility services has been laid in accordance with the approved specifications and drawings and the trenches have been filled up to the satisfaction of the concerned agency in co–ordination with the Authority has been obtained. Notwithstanding anything contained herein, this Agreement may be cancelled at any time by Authority for breach of any condition for any loss caused to it by such cancellation not shall it be absolved from any liability already incurred.

EXECUTIVE ENGINEER,
TWAD Board, Project Division,
SIVAGANGAI.

38. The Licensee shall ensure adherence to relevant Indian standards and follow best industry practices, methods and standards for the purpose of ensuring the safe, efficient and economic design, construction, commissioning, operation, repair and maintenance of any part of the utility lines/industrial infrastructure facilities and which practices, methods and standards shall be adjusted as necessary, to take account of:
    a. Operation, repair and maintenance guidelines given by the manufacturers,
    b. The requirements of Law.
    c. The physical conditions at the site, and
    d. The safety of operating personnel and human beings.

39. The Licensee shall have to provide safety measure like barricading, danger lighting and other necessary caution boards while executing the work.

40. While laying utility service, at least one lane of road shall be kept open to traffic at all times. In case of single lane roads, a diversion shall be constructed. If any traffic diversion works are found necessary during the working period such diversion shall be provided at the cost Licensee.

41. After the termination/expiry of the agreement, the Licensee shall remove the utility services within 90 days and the site shall be brought back to the original condition failing which the Licensee will lose the right to remove the utility services. However, before taking up the work of removal of utility services the Licensee shall furnish a Bank Guarantee to the Authority for a period of one year for an amount assessed by the Authority as a security for making good the excavated trench by proper filling and compaction, clearing debris, loose earth produced due to excavation of trenching at least 50m away from the edge of the RoW.

42. Any disputes in interpretation of the terms and condition of this agreement or their implementation shall be referred to the redress mechanism prevailing in the Ministry and the decision of the redress mechanism shall be final and binding on all.

43. For PPP Projects, in case of any financial loss incurred by the respective project concessionaires due to such laying/shifting of utility service by the Licensee, compensation for the same shall be required to be borne by the Licensee in mutual agreement with the respective project concessionaries. MoRT & H/ NHAI/ implementing authorities for the project shall not be liable the concessionaire in any way in this regard.

This agreement has been made in duplicate, each on a stamp paper; each party to this Agreement has retained one stamped copy each.

EXECUTIVE ENGINEER,
TWAD Board, Project Division,
SIVAGANGAI.

IN WITNESS WHEREOF THE PARTIES HERETO HAVE CAUSED THIS AGREEMENT TO BE EXECUTED THROUGH THEIR RESPECTIVE AUTHORISED REPRESENATATIVES THE DAY AND THE YEAR FIRST ABOVE WRITTEN.

EXECUTIVE ENGINEER,
TWAD Board,Project Division
SIVAGANGA

Signature (Name in full) of the licensee
The Constituted attorney of the licensee

Signature (Name in Full)
National Highways Authority of India
For and on behalf of the President of India

In the presence of

1. Name in full (Signature) with designation
J. SARAVANAN
AEE, TWAD Board
Project Sub Div, Manamadurai

1.Name in full (Signature) with designation

2. Name in full (Signature) with designation
V. SRIDHAR,
AE, TWAD BOARD,
PROJECT SUB DIVISION, MANAMADURAI

2.Name in full (Signature) with designation

भारतीय गैर न्यायिक

एक सौ रुपये Rs. 100

रु. 100 ONE HUNDRED RUPEES

सत्यमेव जयते

भारत INDIA

INDIA NON JUDICIAL

தமிழ்நாடு तमिलनाडु TAMILNADU 100/-

DA 770092

27/3/2023 Executive Engineer

TWAD Board, project Division

Sivagangai

M.S.முகம்மது இப்ராஹிம்

நகர் முத்திரைத்தாள் விற்பனையாளர்

உரிமம்: எண் 204/ஆ1/2015

சிவகங்கை-தமிழ்நாடு.

Sub : Proposed for laying of Water Pipe Line along the road from Km.9/880 to 17/150 (RHS), Km.12/220 to 12/860 (LHS), Km.17/150 to Km.17/750 (LHS), Km.25/800 to Km.26/800 (RHS), Km.26/800 to Km.29/000 (LHS), Km.29/000 to Km. 31/175 (RHS), Km.31/175 to Km.31/825 (LHS), Km.32/280 to Km.37/020 (RHS) & Across the road at Km.9/880, Km.12/860, Km.13/300, Km.17/150, Km.19/400, Km.22/650, Km.26/800, Km.29/000, Km.29/970, Km.31/175, Km.31/825, Km.34/200, Km.37/020 of Madurai to Rameshwaram section of NH-49.

Undertaking

1) We Undertake not to Damage any other utility, if damaged, we will pay the losses either to NHAI or to the concerned agency

2) We undertake to renew the Bank Guarantee if required.

3) We Undertake to confirm all standard conditions of NHAI's guidelines.

4) We Undertake to Shift of water supply pipeline as and when required by NHAI at our own cost.

5) We Undertake to Shift the water supply pipeline due to 4 Lanning / widening of NH at a later date.

V. Arun

EXECUTIVE ENGINEER,
TWAD Board, Project Division,
SIVAGANGAI.

6) We Undertake and Indemnify against all damages and claims as per clause (xxiv)

7) We undertake to manage the Traffic movement during laying of new water supply pipeline.

8) We undertake to accept any claims raised by the Concessionaire if any and the same will be paid by us.

9) We undertake to obtain Prior approval of the NHAI before undertaking any work of installation to the showing water supply pipeline located in the National highway right-of-ways.

10) We undertake to bear the Expenditure, if any, incurred by NHAI for repairing any damage caused to the National Highway by laying of new water supply pipeline.

11) We undertake to move the utility line for any work of improvement or repairs to the road If the NHAI considers, if necessary, in future, it will be carried out as desired by the NHAI at my cost within a reasonable time (not exceeding 60 days) of the intimation given.

12) We undertake to pay the fee /rent as mentioned in the Ministry's Guidelines Lr. No. RW/NH-33044/29/2015–S&R (R) dated 22.11.2016 as and when asked by NHAI.

Certificate

(i) I certify that Laying of Water Supply pipeline will not have any deleterious effects on any of the bridge components and roadway safety for traffic.

(ii) For 4/6 – Lanning "we do undertake that I will relocate service road/approach road/utilities at my own cost notwithstanding the permission granted within such time as will be stipulated by NHAI" for future 4/6 – Lanning or any other development.

EXECUTIVE ENGINEER,
TWAD Board, Project Division,
SIVAGANGAI.

भारतीय गैर न्यायिक

एक सौ रुपये Rs. 100

रु. 100 ONE HUNDRED RUPEES

सत्यमेव जयते

भारत INDIA

INDIA NON JUDICIAL

தமிழ்நாடு तमिलनाडु TAMILNADU 100/-

DA 770098

27/3/2023 Executive Engineer

TWAD Board, project Division

Sivagangai

M.S.முகம்மது இப்ராஹிம்
நகர் முத்திரைத்தாள் விற்பனையாளர்
உரிமம்: எண் 204/அ1/2015
சிவகங்கை-தமிழ்நாடு.

INDEMNITY BOND

Name of the work: Permission for Laying of water pipe line Along NHAI - 49 (Madurai - Ramaeswaram) from Km.9/880 to Km.17/150 (RHS), Km.12/220 to Km.12/860 (LHS), Km.17/150 to Km.17/750 (LHS), Km.25/800 to Km.26/800 (RHS) , Km.26/800 to Km.29/000 (LHS), Km.29/000 to Km. 31/175 (RHS), Km.31/175 to Km.31/825 (LHS), Km.32/280 to Km.37/020 (RHS) & Across the road at Km.9/880, Km.12/860, Km.13/300, Km.17/150, Km.19/400, Km.22/650, Km.26/800, Km.29/000, Km.29/970, Km.31/175, Km.31/825, Km.34/200, Km.37/020 trenchless method.

Indemnity against all damages and claims of SI No 5 & 6 of checklist.

We the Executive Engineer TWAD Board, Project Division, Sivagangai or in do hereby Indemnity Project Director. NHAI, PIU, binding ourselves to pay all the losses and claims in respect of Laying of water pipe lineAlong NHAI - 49 (Madurai - Ramaeswaram) from Km.9/880 to Km.17/150 (RHS), Km.12/220 to Km.12/860 (LHS), Km.17/150 to Km.17/750 (LHS), Km.25/800 to Km.26/800 (RHS) , Km.26/800 to Km.29/000 (LHS), Km.29/000 to Km. 31/175 (RHS), Km.31/175 to Km.31/825 (LHS), Km.32/280 to Km.37/020 (RHS) & Across the road at Km.9/880, Km.12/860, Km.13/300, Km.17/150, Km.19/400, Km.22/650, Km.26/800, Km.29/000, Km.29/970, Km.31/175, Km.31/825, Km.34/200, Km.37/020 by trenchless method.

Or maintenance, thereof and against all claims, proceeding, damages, costs, charges and expenses or maintenance thereof and against all claims, proceedings damages, costs, charges and expenses whatsoever in respect thereof, in relation there to failing such payment of claims in the above work, we abide in accepting for recovery of such claims affected from any of our assets.

The Executive Engineer, TWAD Board, Project Division, Sivagangai.

EXECUTIVE ENGINEER,
TWAD Board, Project Division,
SIVAGANGAI.

Annexure-I

Conditions to be enclosed/incorporated in the approval letter for permission for laying of Water Supply pipeline

1. The Water Supply pipeline shall be located as close to the extreme edge of the right-of-way as possible but not less than 15 meters from the centre lines of the nearest carriageway.
2. The Water Supply pipeline shall not be permitted to run along the National Highways when the road formation is situated in double cutting. Nor shall these be laid over the existing culverts and bridges without the prior approval of NHAI/Government of India.
3. The Water Supply pipeline shall be so placed that at no time there is interference with the maintenance of the National Highways.
4. These should be so laid that their top is at least 0.6 meter below the ground level so as not to obstruct drainage of the road land.
5. The authority/ owner of the underground utility shall ensure that laying Water Supply pipeline should not have any deleterious effects on any of the bridge components and roadway safety for traffic.
6. The lines shall cross the National Highways preferably on a line normal to it or as nearly so as practicable.
7. Crossings shall not be too near the existing structures on the National Highway, the minimum distance being 15 meters.
8. The Water Supply pipeline is permitted to cross the National Highway, either encased in pipes or through structure of conduits specially built for that purpose at the expense of the agency owning the line. Existing drainage structures shall not be allowed to carry the lines across.
9. The casing pipe (or conduit pipe in the case of electric cable) carrying the Water Supply pipeline shall be of steel, cast iron, or reinforced cement concrete and have adequate strength and be large enough to permit ready withdrawal of the carrier pipe/cable. Ends of the casing/conduit pipe shall be sealed from the outside, so that it does not act as a drainage path.
10. The casing/conduit pipe should, as minimum extend from drain to drain in cuts and toe of slope toe of slope in the fills.
11. The top pf the casing/conduit pipe should be at least 1.2 meter below the surface of the road subject to being at least 0.3 m below the drain inverts.
12. The casing/conduit pipe may be installed under the road embankment either by boring or digging a trench. Installation by boring method shall only be permitted where the existing road pavement is of cement concrete or dense bituminous concrete type.
13. The casing/conduit pipe shall be installed with an even bearing throughout its length and in such a manner as to prevent the formation of a waterway along it.
14. Open trenching method. (May be allowed in utility corridor only where pavement is neither cement concrete nor dense bituminous concrete type
    (a) The sides of the trench should be done as nearly vertical as possible. The trench width should be at least 30 cm, but not more than 60 cm wider than the outer diameter of the pipe.
    (b) Filling of the trench shall conform to the specifications contained herein below.

28/3/23

28/03/2023

ASSISTANT EXECUTIVE ENGINEER
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PROJECT SUB DIVISION
MANAMADURAI.

28/03/2023

EXECUTIVE ENGINEER,
TWAD Board, Project Division,
SIVAGANGAI.

(c) Bedding shall be to a depth of not less than 30 cm. It shall consist of granular material, free of lumps, clods and cobbles and graded to yield a firm surface without sudden change in the bearing value. Unsuitable soil and rock edged should be excavated and replaced by selected material.

(d) The backfill shall be completed in two stages (i) side – fill to the level of the top of the pipe and (ii) overfill to the bottom of the road crust.

(e) The side fill shall consist of granular material laid in 15 cm layers each consolidated by mechanical tampering and controlled addition of moisture to 95% of the Proctor's Density. Overfill shall be compacted to the same density as the material that had been removed. Consolidation by saturation or ponding will not be permitted.

(f) The road crust shall be built to the same strength as the existing crust on either side of the trench or to thickness and specifications stipulated by the Highways Authority. Care shall be taken to avoid the formation of a dip at the trench.

(g) The excavation shall be protected by flagman, signs and barricades, and red lights during night hours.

15. If needed, a diversion shall be constructed at the expense of agency owning the Water Supply pipeline.

16. Prior approval of the NHAI shall be obtained before undertaking any work of installation, shifting or repairs, or alterations to the Water Supply pipeline located in the National highway right-of-ways.

17. Expenditure, if any, incurred by the Highway Authority for repairing any damage caused to the National Highway by the laying, maintenance or shifting of the Water Supply pipeline will be borne by the agency owning the Water Supply pipeline.

18. If the NHAI considers it necessary in future to move the Water Supply pipeline for any work of improvement of repairs to the road, it will be carried out as desired by the Highway Authority at the cost of the agency owning the Water Supply pipeline within a reasonable time (not exceeding 60 days) of the intimation given.

19. The licensee shall ensure making good the excavated trench for laying Water Supply pipeline by proper filling and compaction, so as to restore the land into the same conditions as it was before digging the trench, clearing debris/loose earth produced due to execution of trenching at least 50m away from the edge of the right of way.

20. The licensee shall furnish a Bank Guarantee to the NHAI @ Rs50/- per running meter (parallel to NH) and Rs1,00,000/- per crossing of NH, for a period of one year initially (extendable if required till satisfactory completion of work) as a security for ensuring/making good the excavated trench for laying the cables/ducts by proper filling and compaction, clearing debris/loose earth produced due to execution of trenching at least 50m away from the edge of the right of way. No payment shall be payable by the NHAI to the licensee for clearing debris/loose earth.

21. In case the work contemplated herewith is not completed to the satisfaction of the NHAI, which has granted the permission, within a period of 11 months from the date of issue of the bank guarantee, the licensee shall either furnish a fresh guarantee or extend the guarantee for a further period of one year. In case of the licensee failing to discharge the obligation of making good the excavated trench, the NHAI shall have a right to make good the damages caused by excavation, at the cost of the licensee and recover the amount by invoking the bank guarantee furnished by the licensee.

28/3/23

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28/03/2023

ASSISTANT EXECUTIVE ENGINEER
TWAD BOARD
PROJECT SUB DIVISION
MANAMADURAI.

28/03/2023

EXECUTIVE ENGINEER,
TWAD Board, Project Division,
SIVAGANGAI.

22. The licensee shall shift the Water Supply pipeline within 60 days (or as specified by the respective agency/owner) from the date of issue of the notice by the NHAI, Govt. of India to shift/relocate the Water Supply pipe line, in case it is so required for the purpose of improvement/widening of the road/route/highway or construction of flyover/bridges and restore the road/land to its original condition at his own cost and risk.

23. Regarding the location of other cables, underground installation/utilities etc, the licensee shall be responsible to ascertain from the respective agency in coordination with NHAI. The licensee shall ensure the safety and security of already existing cables/underground installation/utilities facilities etc. before commencement of the excavation.

24. The licensee shall be solely responsible/ liable for full compensation/indemnification of concerned agency/aggrieved owner for any direct, indirect or consequential damage caused to them/claims or replacement sought for, at the cost and risk of the licensee. The concerned agency in co-ordination with NHAI shall also have a right to make good such damages/recover the claims by way of invoking of Bank Guarantee furnished by the licensee.

25. If the licensee fails to comply with the condition 22 and 23 above to the satisfaction of the NHAI, the same shall be got executed by the NHAI at the risk and cost of the licensee.

26. The licensee shall procure insurance from reputed insurance company against damages to already existing cables/underground installation/utilities/facilities etc during trenching.

27. The licensee has to cross the NH by horizontal drilling method (trenchless technology only). In case any damage is caused to the road pavement in this process, the licensee will be required to restore the same to the original condition at his own cost.

28. No trenching will be done on pucca road, boring method will be used in pucca road and Water Supply pipeline will be laid at the extreme edge of the road in the non-BT surface only.

29. The licensee shall inform/give a notice to the NHAI, Govt. of India or its authorized agency at least 15 days in advance with route details prior to digging trenches for fresh or maintenance/repair work. A separate work plan and a separate performance Bank Guarantee @ Rs50/- per meter length for maintenance/ repair work shall have to be furnished by the licensee.

30. Each day, the extent of digging the trenches should be strictly regulated so that cables are laid, and trenches filled up before the close of the work that day. Filling should be completed to the satisfaction of the concerned agency designated by the NHAI.

31. The licensee shall indemnify the concerned agency in co-ordination with NHAI, against all damages and claims, if any, due to the digging of trenches for laying Water Supply pipeline.

32. The NHAI has a right to terminate the permission or to extend the period of agreement. In case the licensee wants shifting, repairs or alteration to Water Supply pipeline, he will have to furnish a separate bank guarantee.

33. The licensee shall not without prior permission in writing from the NHAI Govt. of India or its authorized agency undertake any work of shifting, repairs or alterations to the said Water Supply pipeline.

34. The permission granted shall not in any way be deemed to convey to the licensee any ownership right or any interest in route/road/highway/ land/ property, other than what is herein expressly granted.

28/3/23

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28/03/2023

ASSISTANT EXECUTIVE ENGINEER
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PROJECT SUB DIVISION
MANAMADURAI.

28/03/2023

EXECUTIVE ENGINEER,
TWAD Board, Project Division,
SIVAGANGAI.

35. During the subsistence of this agreement, the laying of Water Supply Pipeline /ducts located in highway land/property shall be deemed to have been constructed and continued only by the consent and permission of the NHAI so that the right of the licensee to the use thereof shall not become absolute and indefeasible by laps of time.

36. The licensee shall bear the stamp duty charged for the agreement.

37. The Water Supply pipeline shall not be brought in to use by the licensee unless a completion certificate to the effect that the laying of Water Supply Pipeline has been laid in accordance with the approved specifications and drawings and the trenches have been filled up to the satisfactions of the concerned agency in co-ordination with the owner has been obtained.

38. Not withstanding anything NHAI contained herein this agreement may be cancelled at any time by the or breach of any condition of the same and the licensee shall neither be entitled to any compensation for any loss caused to it by such cancellation nor shall it be absolved from any liability already incurred.

39. The licensee shall have to provide barricading, danger lighting and other necessary caution boards while executing the work and during maintenance.

40. If any traffic diversion works are found necessary during the working period such diversion shall be provided at the cost of licensee.

41. After the termination/expiry of the agreement, the licensee shall remove the Water Supply pipeline within 60 days and the site shall be brought back to the original condition failing which the licensee will lose the right to remove the cables/ducts. However, before taking up the work of removal of Water Supply pipeline the licensee shall furnish a bank guarantee to the owner for a period of one year for an amount assessed by the owner for making good the excavated trench by proper filling and compaction, clearing debris, loose earth produced due to excavation of trenching at least 50m away from the edge of the right of way.

42. If NHAI is required to do some emergent work the licensee will provide an observer within 24 hours. NHAI will not be responsible for any damage of any kind by whatsoever means natural or otherwise.

43. The enforceability of the Right-of Way permission granted here in shall be restricted to the extent of provisions/scope of service contained/defined in the license agreement and for the purpose for which it is granted. Either by content or by intent, the purpose extending this Right-of Way facility is not to enhance the scope.

44. Strict compliance of the following by the Project Director:

a) If the licensee fails to inform the commencement of laying of Water Supply pipeline 15 days before the actual start of the work at site the agreement should be null and void.

b) It is to be intimated to the HQ that, actual work has already been started at the site as per the provision of the agreement and the conditions stipulated in the Ministry Circular No.Ministry Circular No. NH-41 (58)/68 dated 31.1.1969, Ministry Circular No. NH-III/P/66/76 dated 18/19.11.1976, Ministry Circular No. RW/NH-III/P/66/76 dated 11.5.1982, Ministry Circular No. RW/NH-11037/1/86-DOI (ii) dated 28.7.1993, Ministry Circular No. RW/NH-11037/1/86/DOI dated 19.1.1995, Ministry Circular No. RW/NH-34066/2/95/ S&R dated 25.10.1999 and Ministry Circular No. RW/NH-34066/7/2003 S&R (B) dated 17.9.2003.

28/3/23

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28/2/2023

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28/3/2023

EXECUTIVE ENGINEER,
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SIVAGANGAI.

c) An interim execution progress report /status report shall be submitted to NHAI HQ after one month of the start of the work at site, regarding the satisfactory progress of the laying of Water Supply pipe, as per the specification/stipulation and the alignment as approved.

d) The final completion certificate shall be issued/submitted by PD to the HQ to the effect that, the work has been completed to the entire satisfaction of the Project Director and there were no violation of any condition / stipulation contained in the agreement, Ministry Circular No. NH-III/P/66/76 dated 18/19.11.1976, Ministry Circular No. RW/NH-III/P/66/76 dated 11.5.1982, Ministry Circular No. RW/NH-11037/1/86-DOI (ii) dated 28.7.1993, Ministry Circular No. RW/NH-11037/1/86/DOI dated 19.1.1995, Ministry Circular No. RW/NH-34066/2/95/ S&R dated 25.10.1999 and Ministry Circular No. RW/NH-34066/7/2003 S&R (B) dated 17.9.2003. and the approved plan.

e) To obtain a performance bank guaranty @ Rs. 50/- per running meter of NH and Rs.1,00,000/- per crossing of NH from the licensee to safeguard the interest of NHAI.

f) A register of records of the permissions accorded has to be maintained by the PD in the prescribed proforma (copy enclosed).

g) Project Director is authorized to sign an agreement (IN ACCORDANCE WITH THE MODEL AGREEMENT) with the applicant, on behalf of NHAI.

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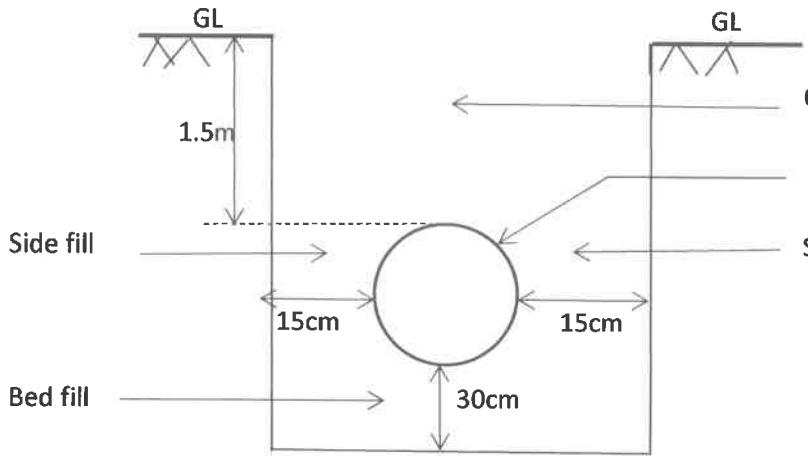
MANAMADURAI	**MANAMADURAI**	**SIVAGANGAI**

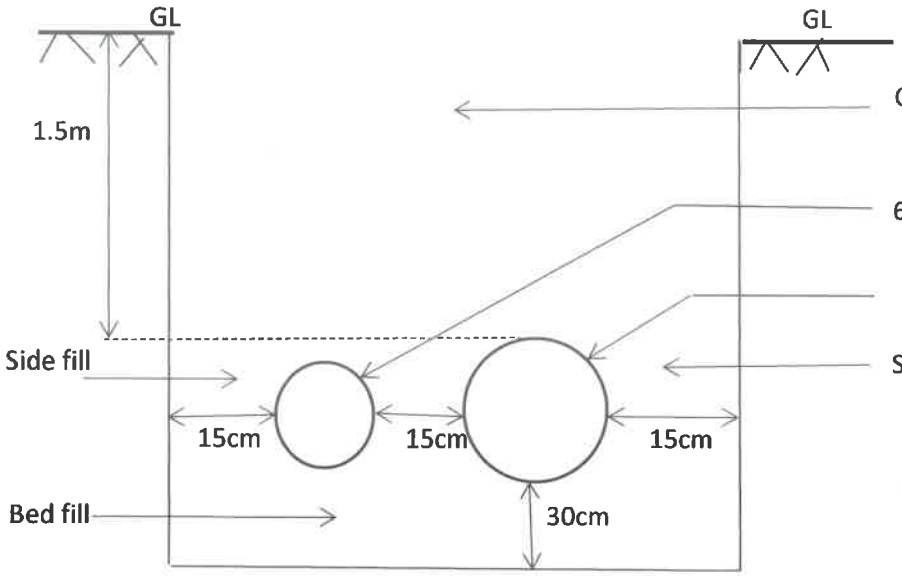
HDPE PIPE LAYING BY TRENCH METHOD

Water supply Pipeline along the road NHAI – 49 from Km 9/880 to 12/880 (RHS)



Granular material in layers not greater than 15cm in each layer free from lumps, colds and cabbles.

Water supply Pipeline along the road NHAI – 49 from Km 12/880 to 13/300 (RHS)



Granular material in layers not greater than 15cm in each layer free from lumps, colds and cabbles.

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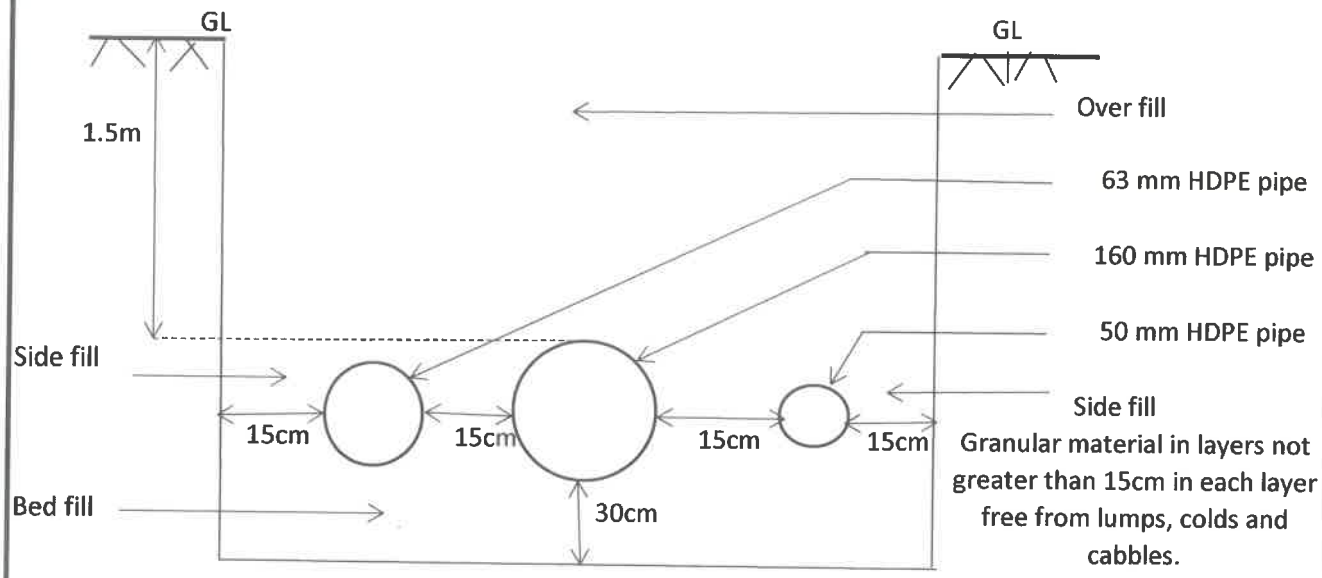
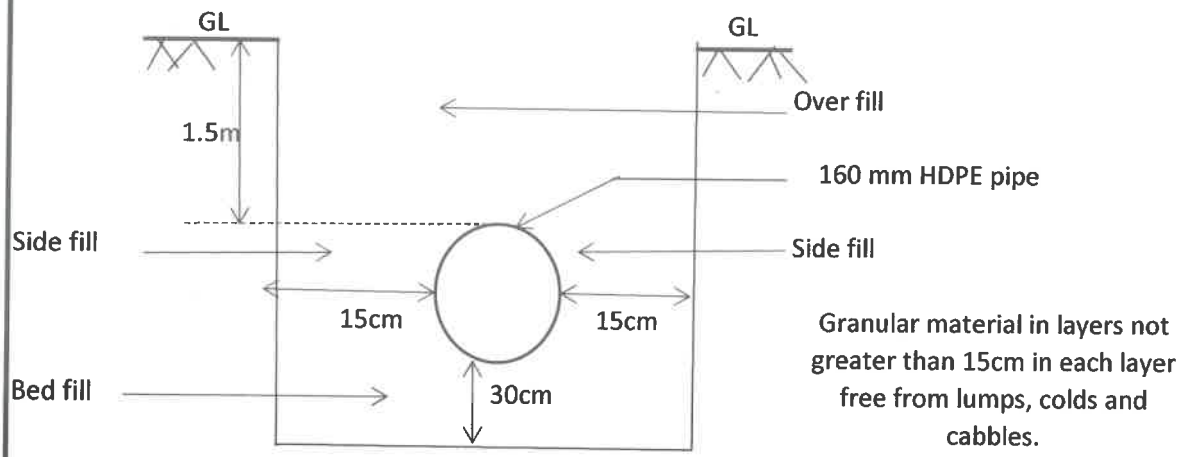
HDPE PIPE LAYING BY TRENCH METHOD

Water supply Pipeline along the road NHAI – 49 from Km 13/300 to 14/800 (RHS)



Water supply Pipeline along the road NHAI – 49 from Km 14/800 to 17/150 (RHS)



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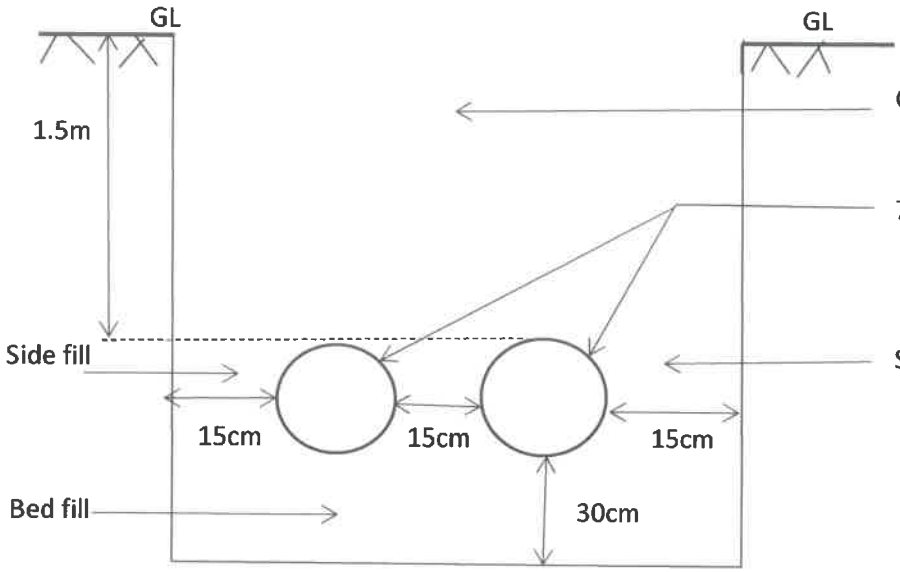
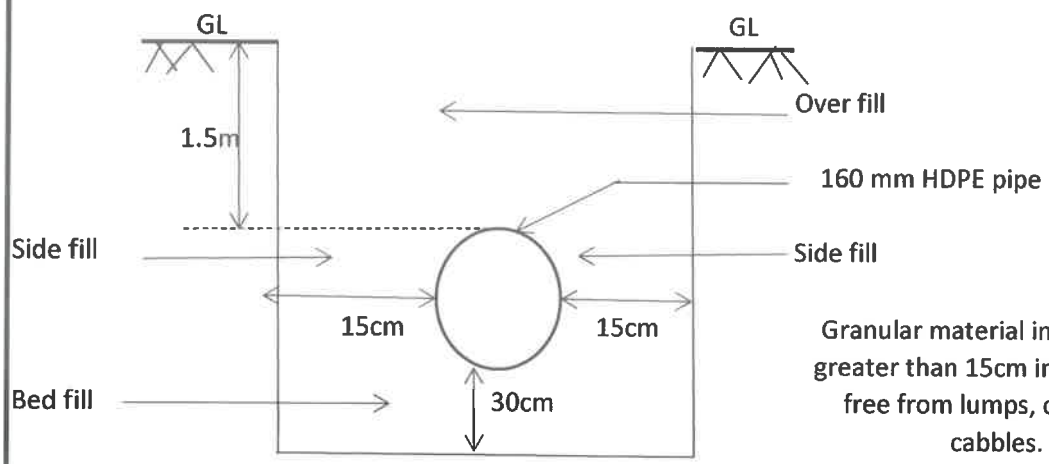
HDPE PIPE LAYING BY TRENCH METHOD

Water supply Pipeline along the road NHAI – 49 from Km 12/220 to 12/860 (LHS)



Granular material in layers not greater than 15cm in each layer free from lumps, colds and cabbles.

Water supply Pipeline along the road NHAI – 49 from Km 17/150 to 17/750 (LHS)



Granular material in layers not greater than 15cm in each layer free from lumps, colds and cabbles.

28/3/23

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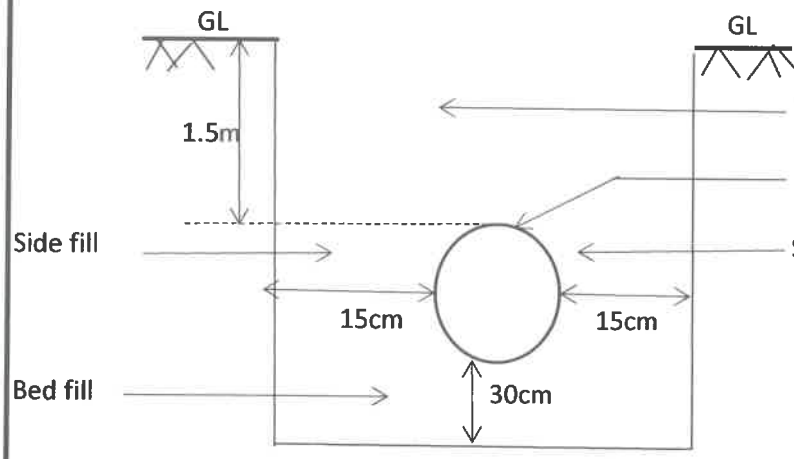
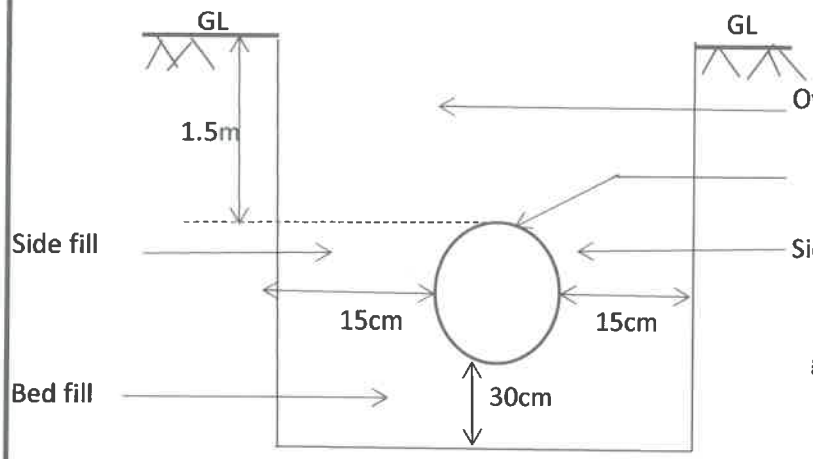
HDPE PIPE LAYING BY TRENCH METHOD

Water supply Pipeline along the road NHAI – 49 from Km 25/800 to 26/800 (RHS)



Granular material in layers not greater than 15cm in each layer free from lumps, colds and cabbles.

Water supply Pipeline along the road NHAI – 49 from Km 26/800 to 27/260 (LHS)



Granular material in layers not greater than 15cm in each layer free from lumps, colds and cabbles.

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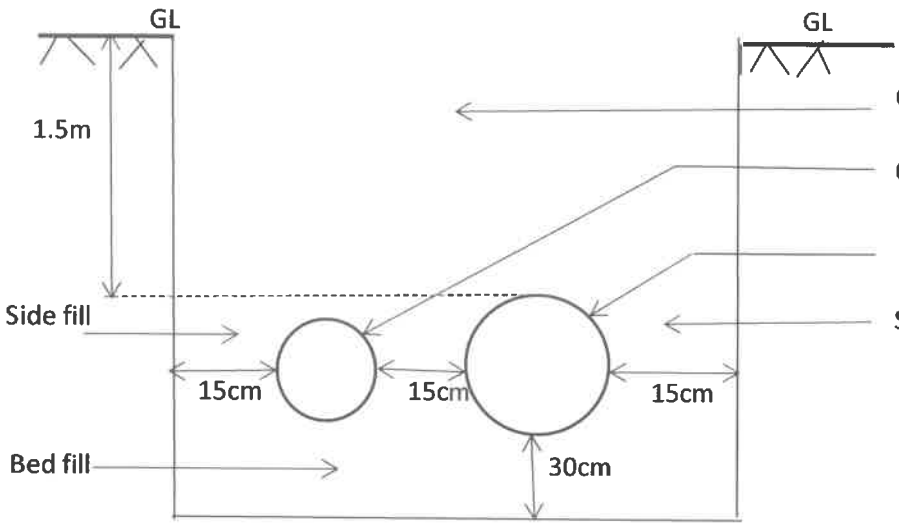
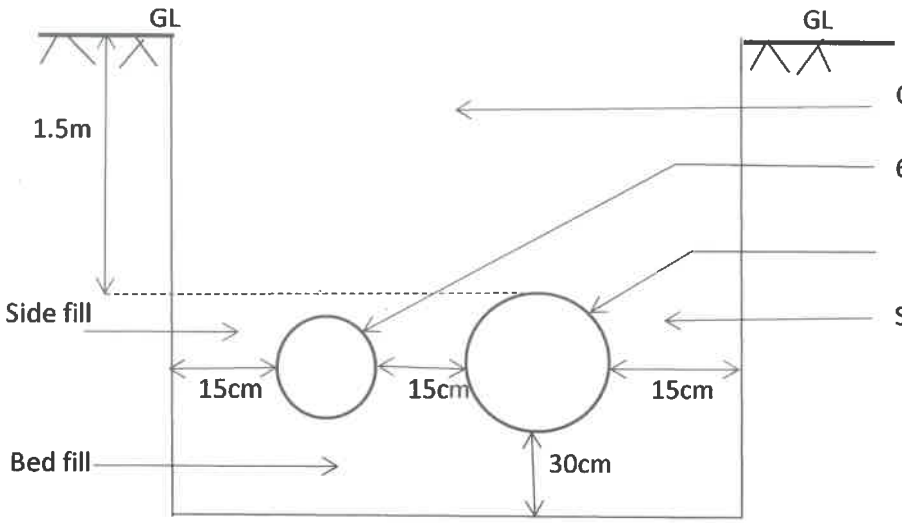
HDPE PIPE LAYING BY TRENCH METHOD

Water supply Pipeline along the road NHAI – 49 from Km 27/260 to 29/000 (LHS)



Granular material in layers not greater than 15cm in each layer free from lumps, colds and cabbles.

Water supply Pipeline along the road NHAI – 49 from Km 29/000 to 29/440 (RHS)



Granular material in layers not greater than 15cm in each layer free from lumps, colds and cabbles.

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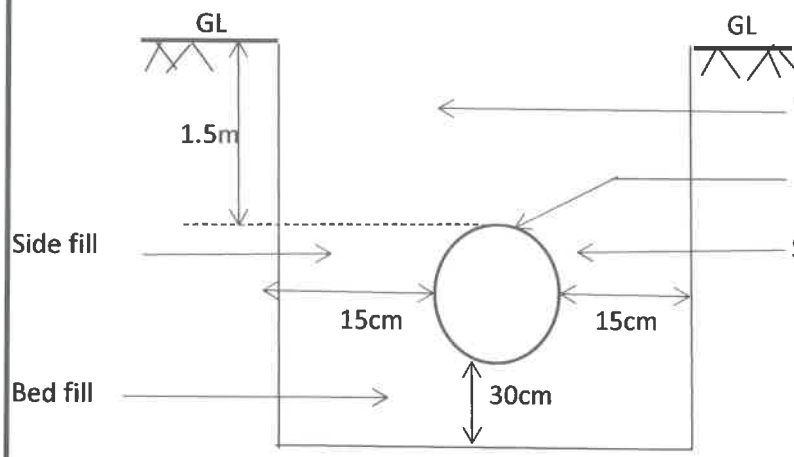
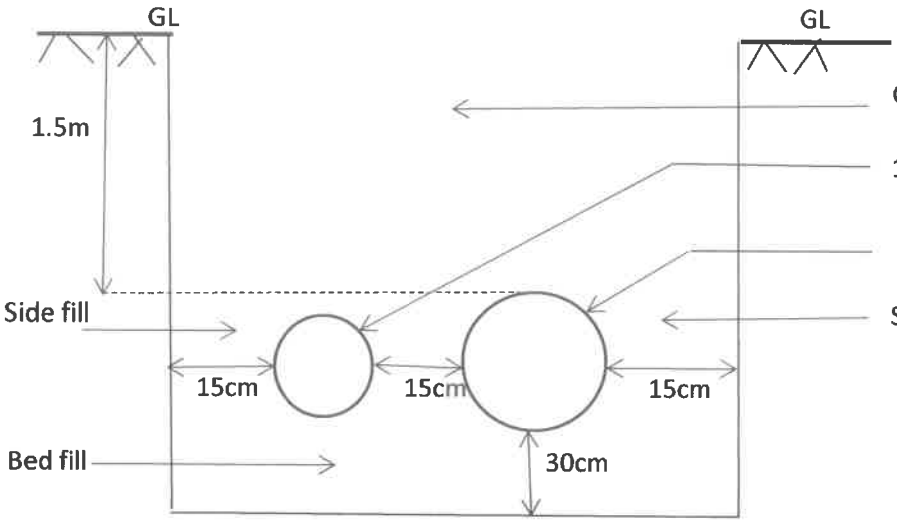
HDPE PIPE LAYING BY TRENCH METHOD

Water supply Pipeline along the road NHAI - 49 from Km 29/440 to 29/970 (RHS)



Granular material in layers not greater than 15cm in each layer free from lumps, colds and cabbles.

Water supply Pipeline along the road NHAI – 49 from Km 29/970 to 30/500 (RHS)



Granular material in layers not greater than 15cm in each layer free from lumps, colds and cabbles.

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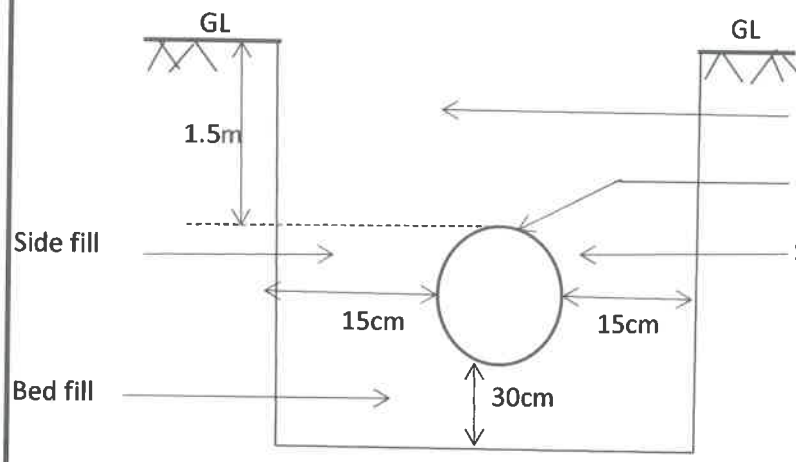
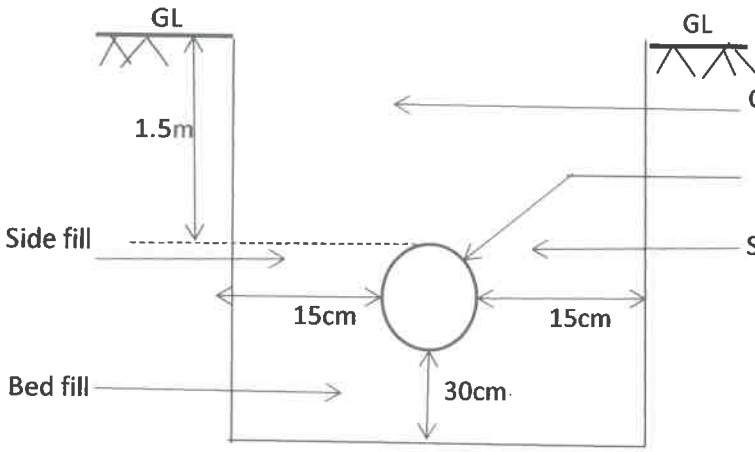
HDPE PIPE LAYING BY TRENCH METHOD

Water supply Pipeline along the road NHAI – 49 from Km 30/500 to 31/175 (RHS)



Granular material in layers not greater than 15cm in each layer free from lumps, colds and cabbles.

Water supply Pipeline along the road NHAI – 49 from Km 31/175 to 31/825(LHS)



Granular material in layers not greater than 15cm in each layer free from lumps, colds and cabbles.

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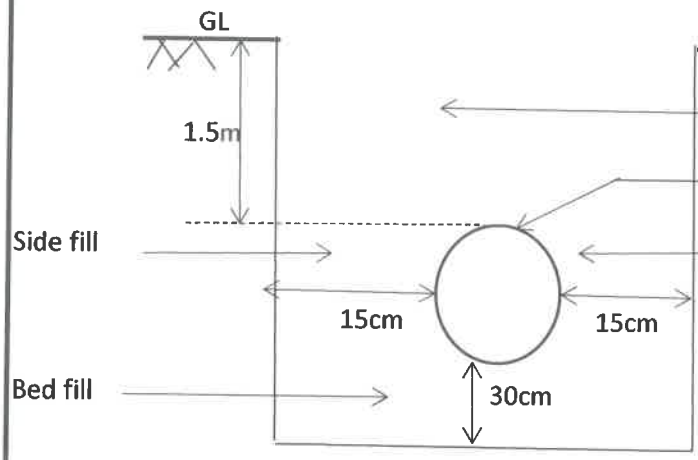
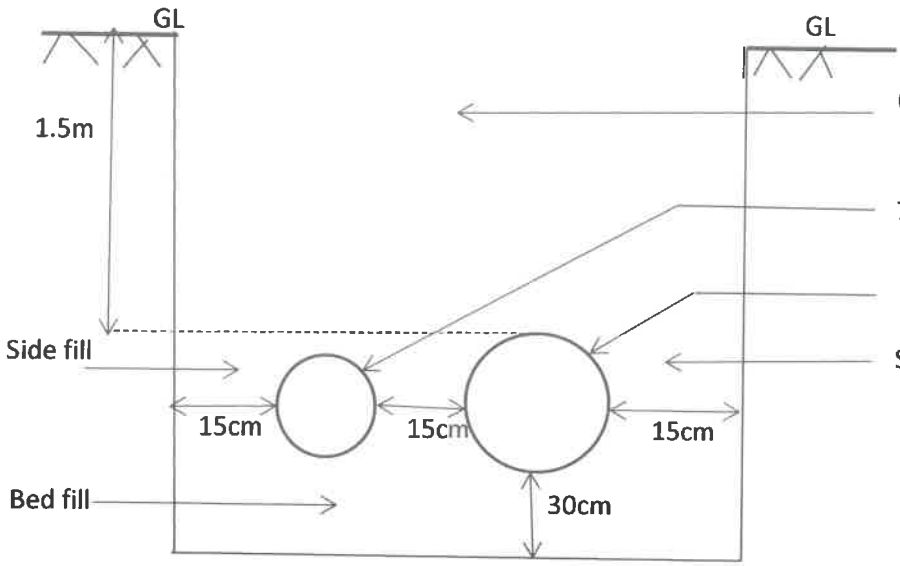
HDPE PIPE LAYING BY TRENCH METHOD

Water supply Pipeline along the road NHAI – 49 from Km 32/280 to 34/060 (RHS)



Granular material in layers not greater than 15cm in each layer free from lumps, colds and cabbles.

Water supply Pipeline along the road NHAI – 49 from Km 34/060 to 34/200 (RHS)



Granular material in layers not greater than 15cm in each layer free from lumps, colds and cabbles.

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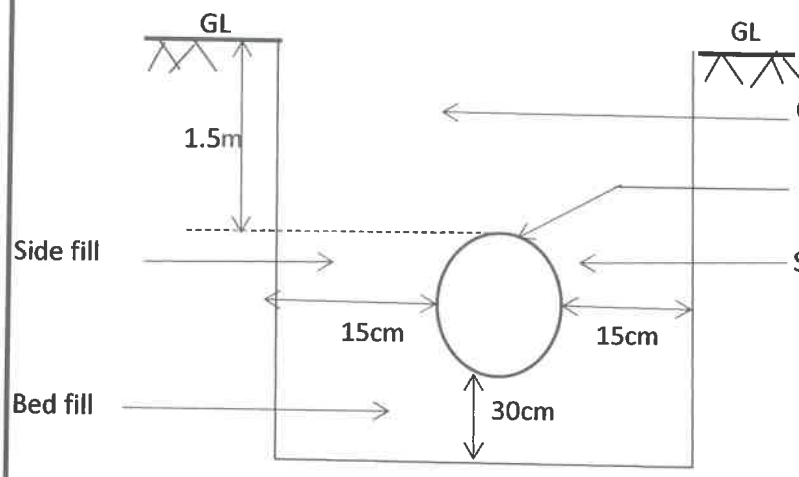
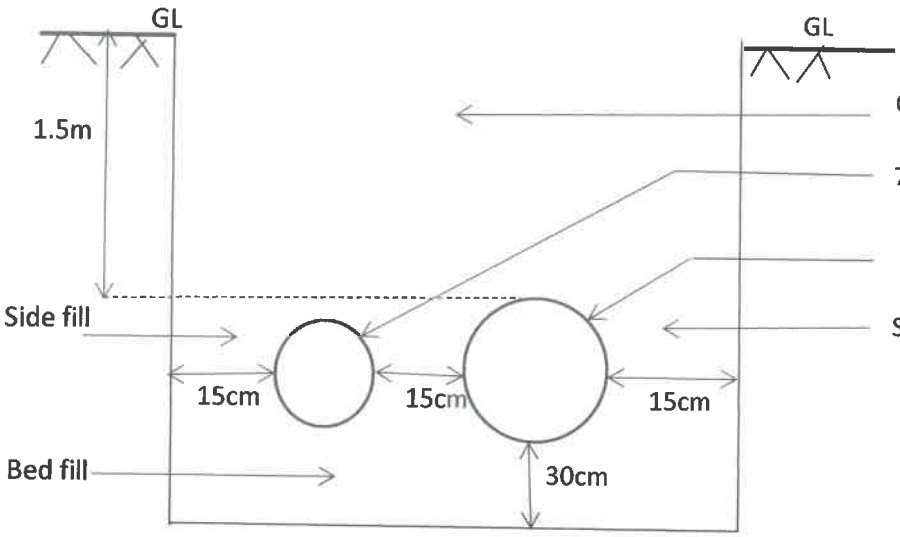
HDPE PIPE LAYING BY TRENCH METHOD

Water supply Pipeline along the road NHAI – 49 from Km 34/200 to 35/700 (RHS)



Granular material in layers not greater than 15cm in each layer free from lumps, colds and cabbles.

Water supply Pipeline along the road NHAI – 49 from Km 35/700 to 36/600 (RHS)



Granular material in layers not greater than 15cm in each layer free from lumps, colds and cabbles.

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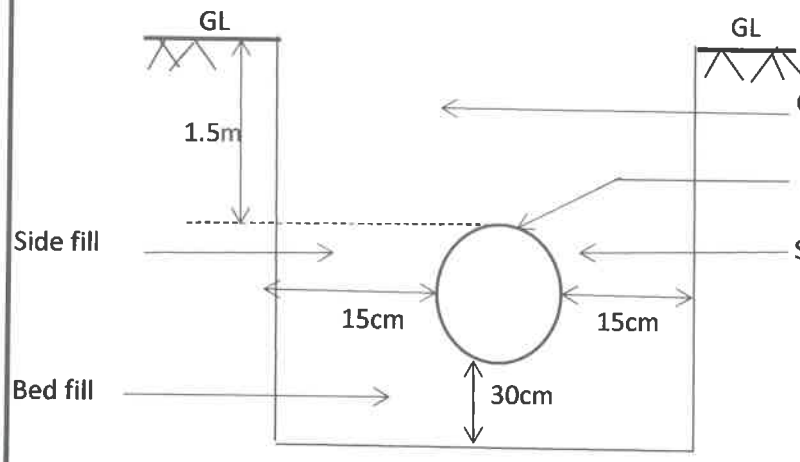
HDPE PIPE LAYING BY TRENCH METHOD

Water supply Pipeline along the road NHAI – 49 from Km 36/600 to 37/020 (RHS)



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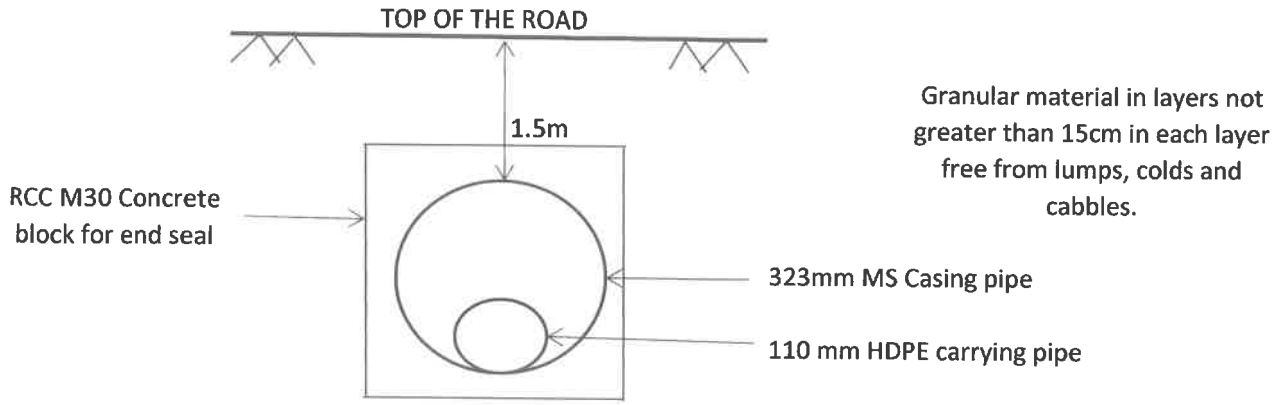
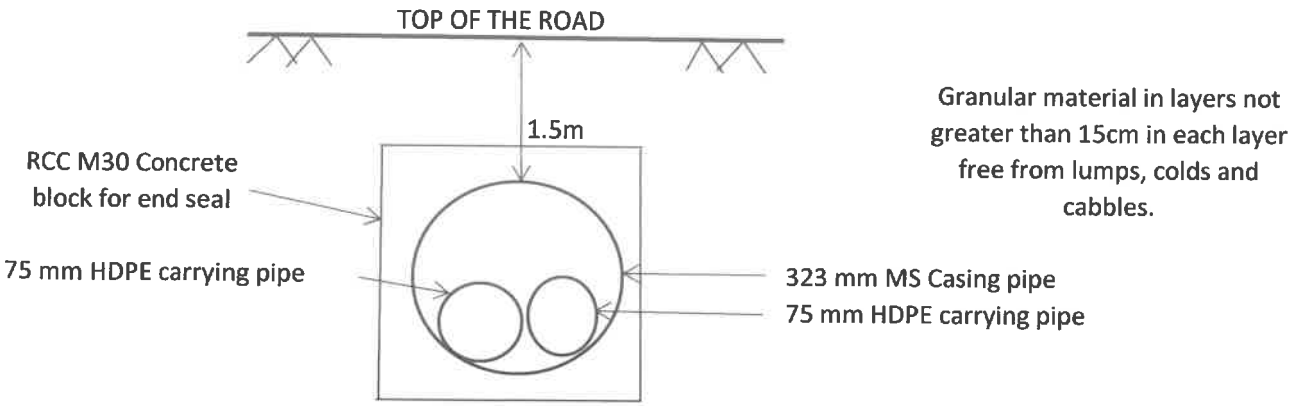
HDPE PIPE LAYING BY TRENCHLESS METHOD

Water supply Pipeline across the road at Km 9/880 of Madurai to Rameshwaram road (NHAI-49)



Water supply Pipeline across the road at Km 12/860 of Madurai to Rameshwaram road (NHAI-49)



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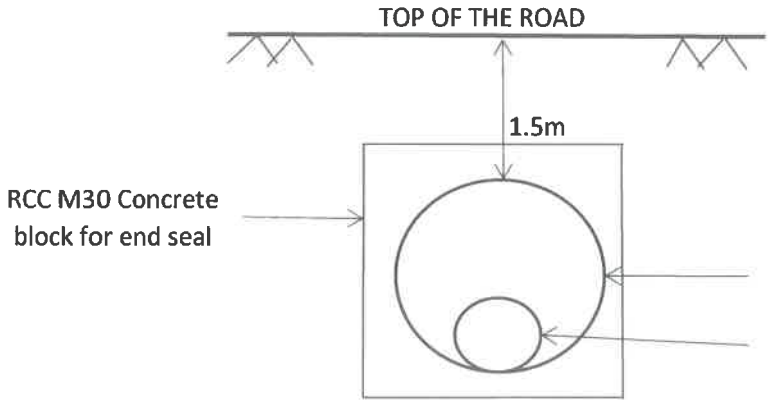
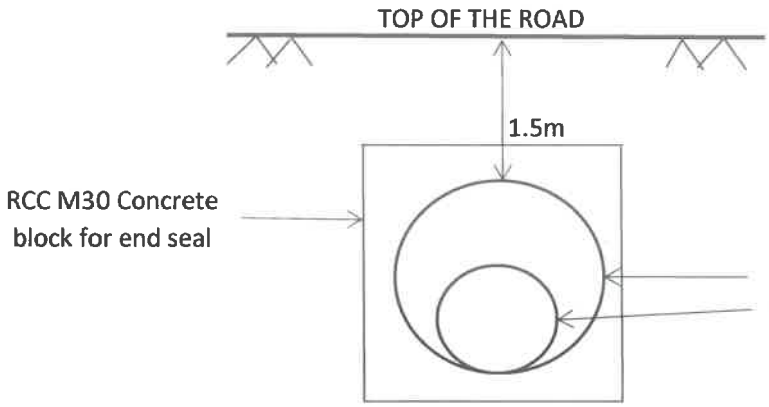
HDPE PIPE LAYING BY TRENCHLESS METHOD

Water supply Pipeline across the road at Km 13/300 of Madurai to Rameshwaram road (NHAI-49)



Granular material in layers not greater than 15cm in each layer free from lumps, colds and cabbles.

Water supply Pipeline across the road at Km 17/150 of Madurai to Rameshwaram road (NHAI-49)



Granular material in layers not greater than 15cm in each layer free from lumps, colds and cabbles.

ASSISTANT ENGINEER	ASSISTANT EXECUTIVE ENGINEER	EXECUTIVE ENGINEER
TWAD BOARD	TWAD BOARD	TWAD BOARD
PROJECT SUBDIVISION	PROJECT SUBDIVISION	PROJECT DIVISION
MANAMADURAI	MANAMADURAI	SIVAGANGAI

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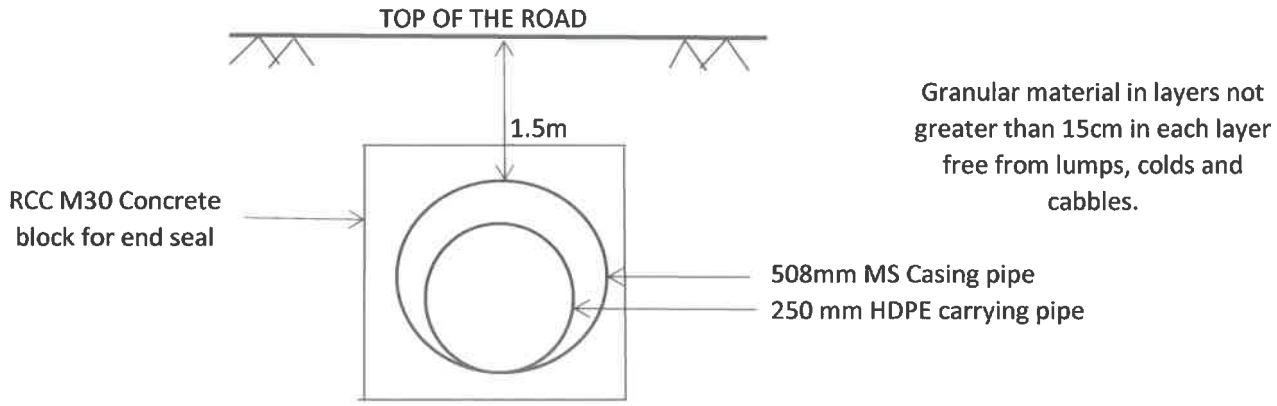
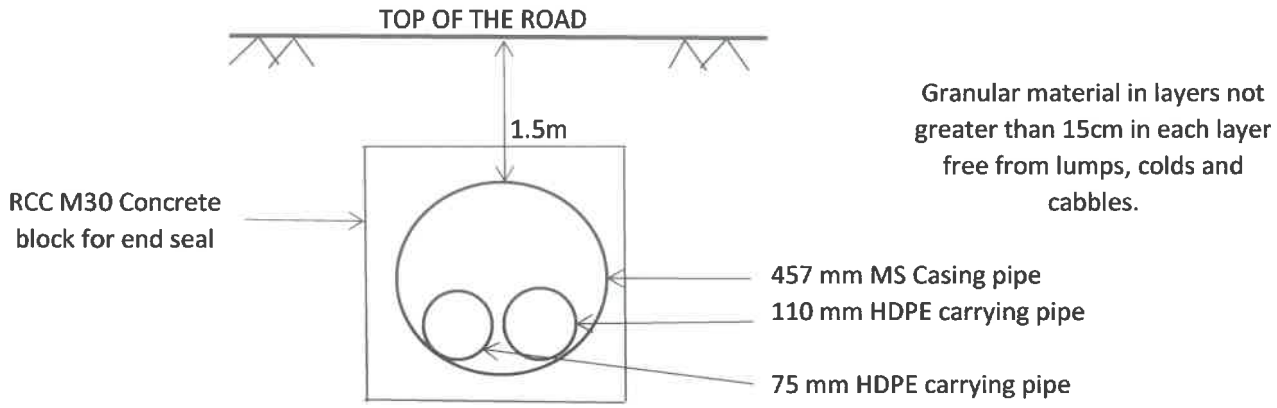
HDPE PIPE LAYING BY TRENCHLESS METHOD

Water supply Pipeline across the road at Km 19/400 of Madurai to Rameshwaram road (NHAI-49)



Water supply Pipeline across the road at Km 22/650 of Madurai to Rameshwaram road (NHAI-49)



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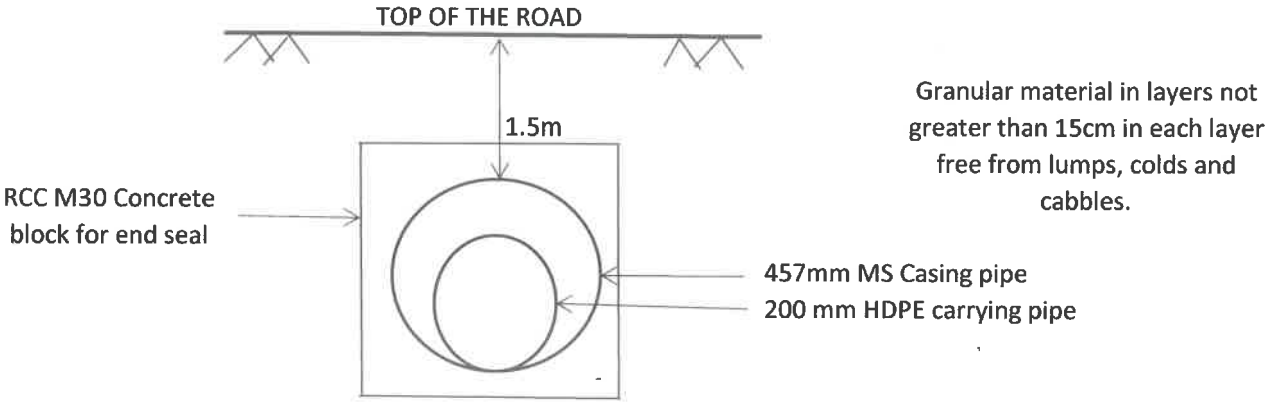
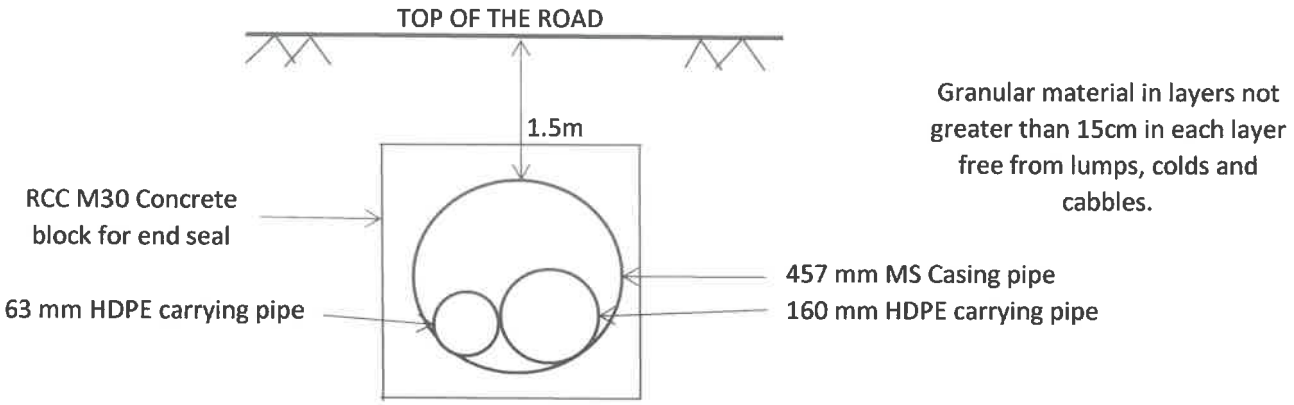
HDPE PIPE LAYING BY TRENCHLESS METHOD

Water supply Pipeline across the road at Km 26/800 of Madurai to Rameshwaram road (NHAI-49)



Water supply Pipeline across the road at Km 29/000 of Madurai to Rameshwaram road (NHAI-49)



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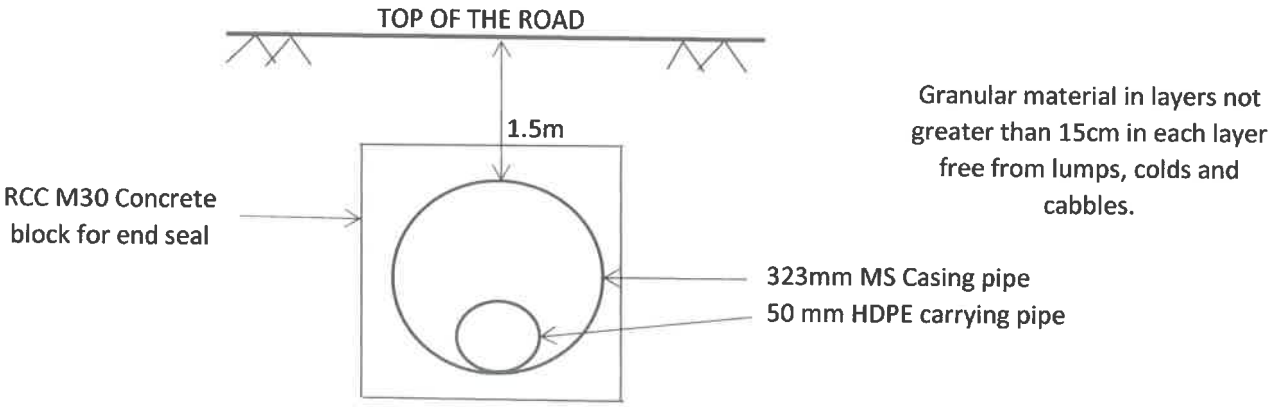
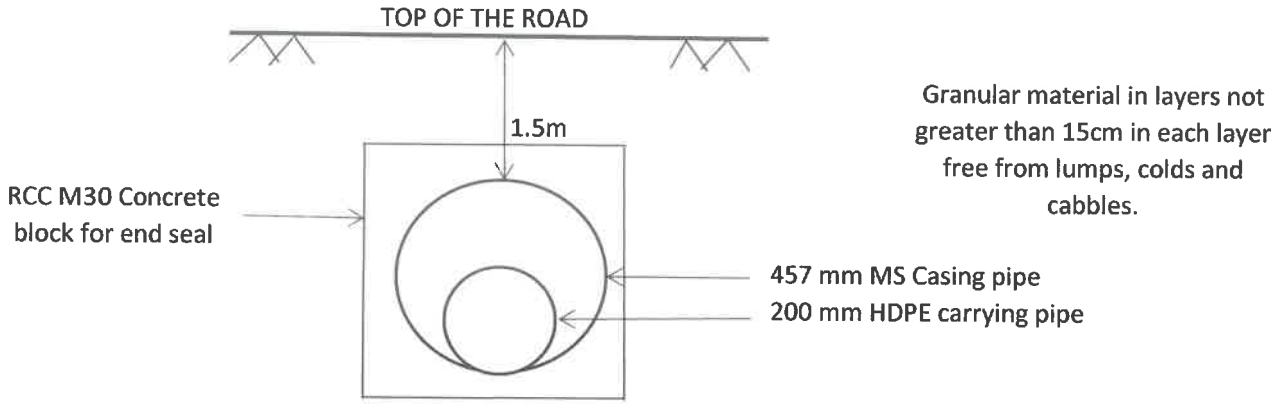
HDPE PIPE LAYING BY TRENCHLESS METHOD

Water supply Pipeline across the road at Km 29/970 of Madurai to Rameshwaram road (NHAI-49)



Water supply Pipeline across the road at Km 31/175 of Madurai to Rameshwaram road (NHAI-49)



28/3/23

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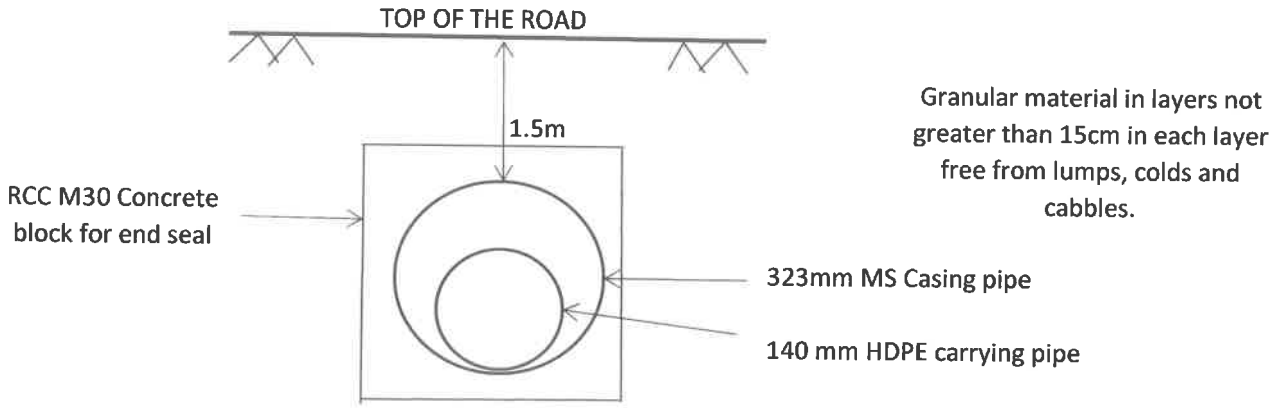
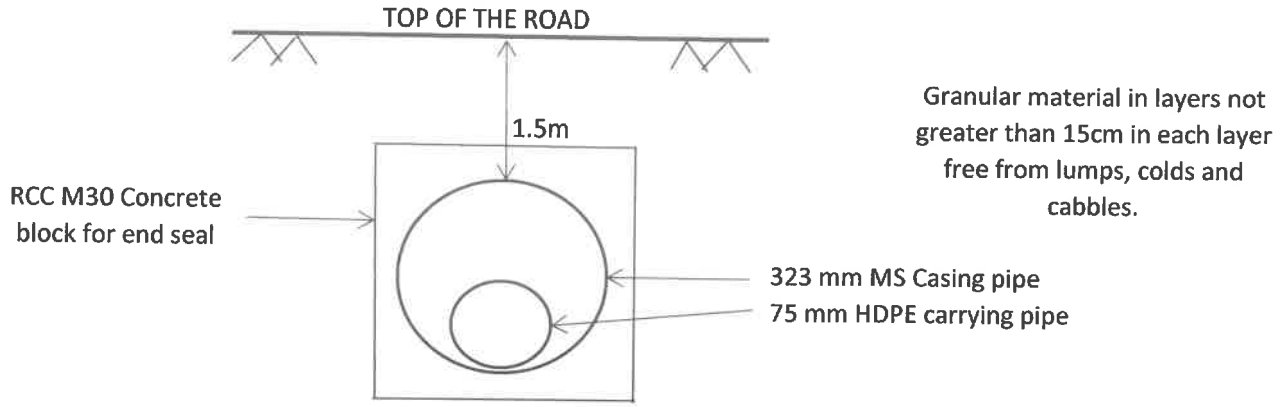
HDPE PIPE LAYING BY TRENCHLESS METHOD

Water supply Pipeline across the road at Km 31/825 of Madurai to Rameshwaram road (NHAI-49)



Water supply Pipeline across the road at Km 34/200 of Madurai to Rameshwaram road (NHAI-49)



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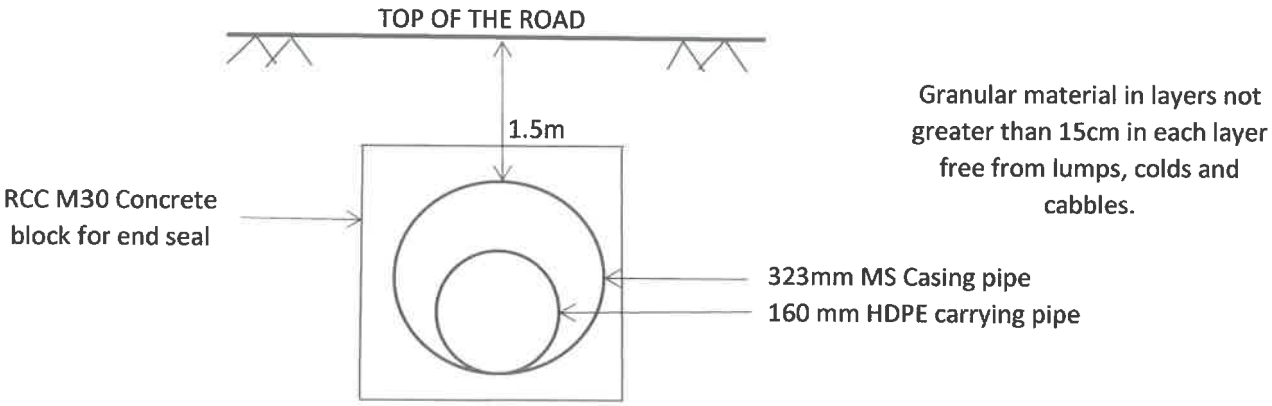
HDPE PIPE LAYING BY TRENCHLESS METHOD

Water supply Pipeline across the road at Km 37/020 of Madurai to Rameshwaram road (NHAI-49)



Granular material in layers not greater than 15cm in each layer free from lumps, colds and cabbles.

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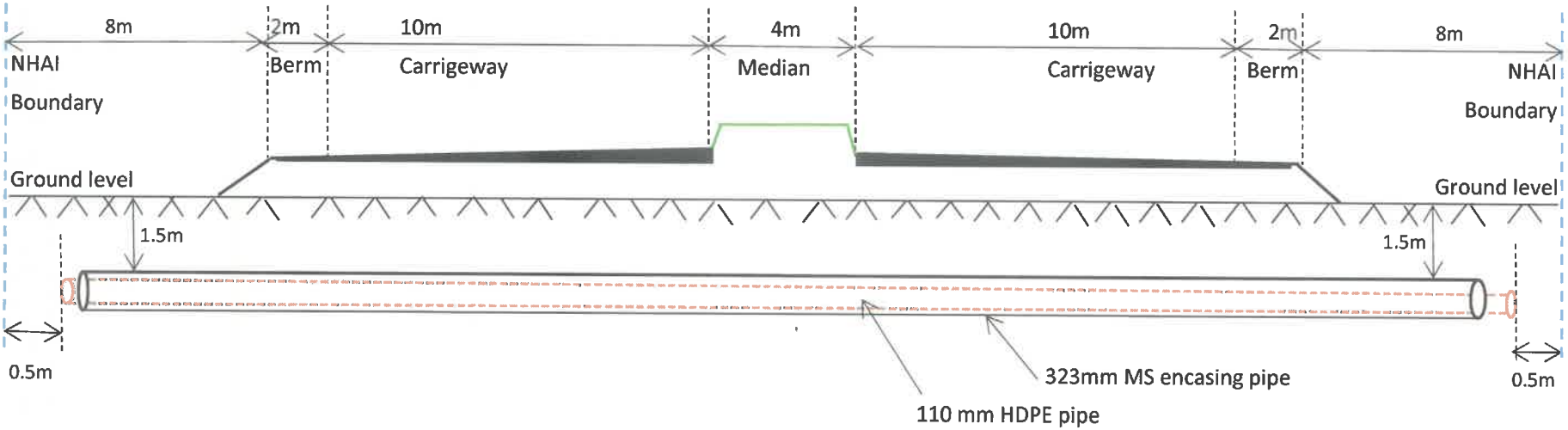
HDPE PIPE LAYING BY TRENCHLESS METHOD

Water supply Pipeline across the road at Km 9/880 of Madurai to Rameshwaram road (NHAI-49)



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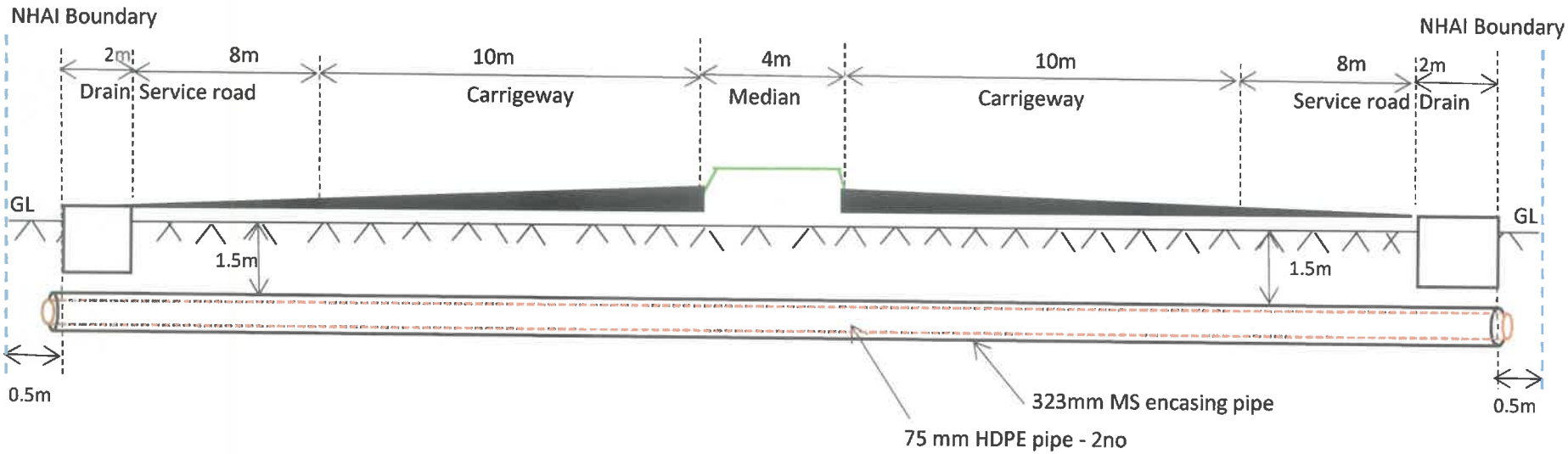
HDPE PIPE LAYING BY TRENCHLESS METHOD

Water supply Pipeline across the road at Km 12/860 of Madurai to Rameshwaram road (NHAI-49)



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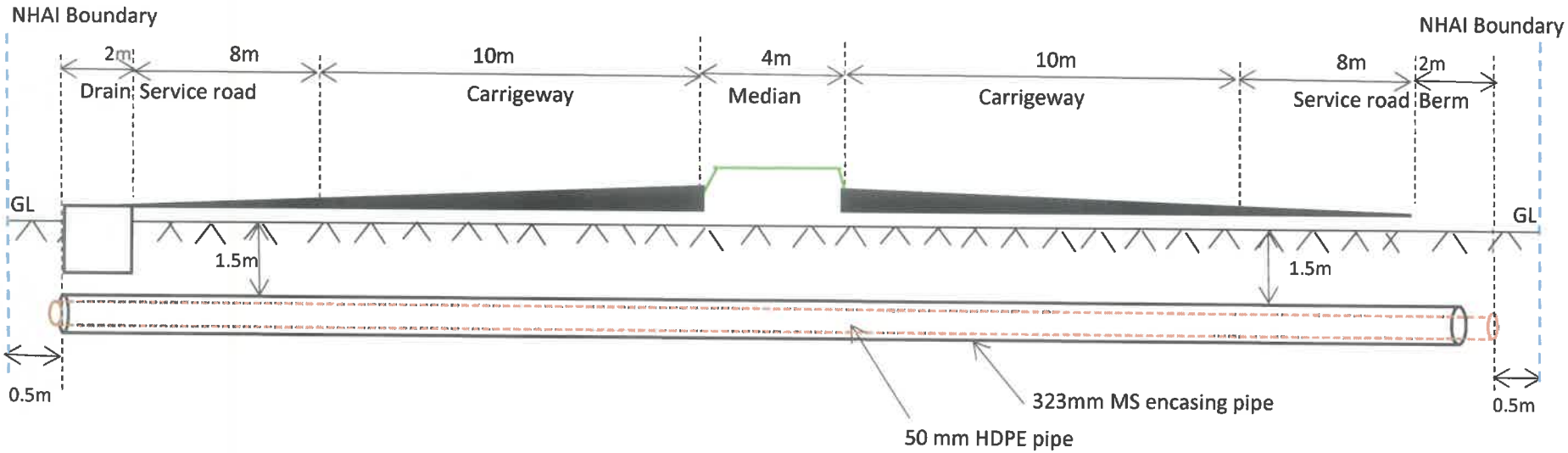
HDPE PIPE LAYING BY TRENCHLESS METHOD

Water supply Pipeline across the road at Km 13/300 of Madurai to Rameshwaram road (NHAI-49)



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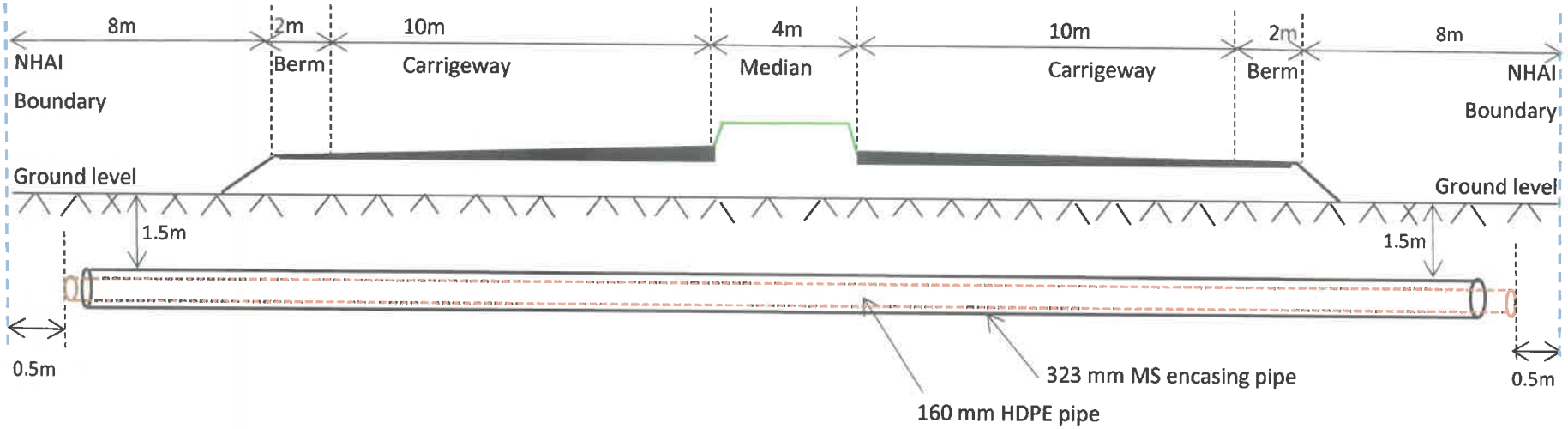
HDPE PIPE LAYING BY TRENCHLESS METHOD

Water supply Pipeline across the road at Km 17/150 of Madurai to Rameshwaram road (NHAI-49)



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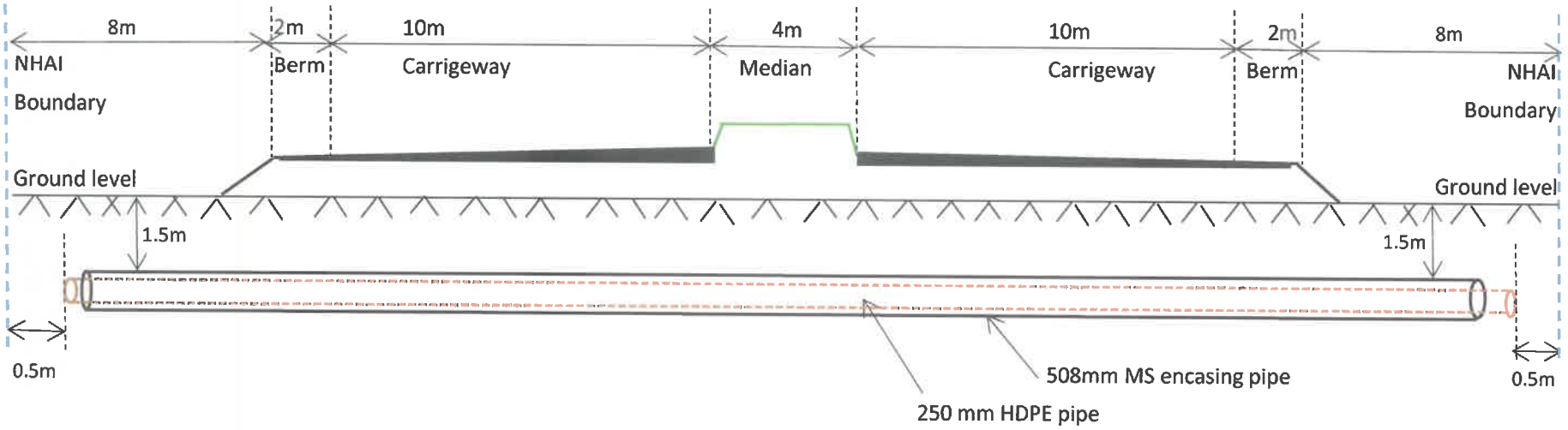
HDPE PIPE LAYING BY TRENCHLESS METHOD

Water supply Pipeline across the road at Km 19/400 of Madurai to Rameshwaram road (NHAI-49)



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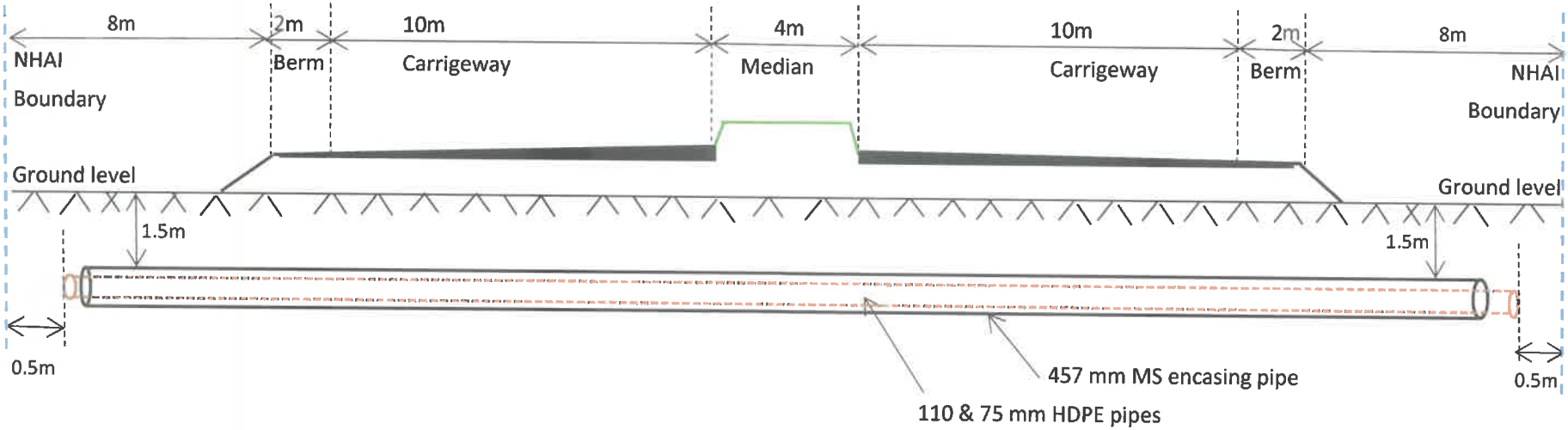
HDPE PIPE LAYING BY TRENCHLESS METHOD

Water supply Pipeline across the road at Km 22/650 of Madurai to Rameshwaram road (NHAI-49)



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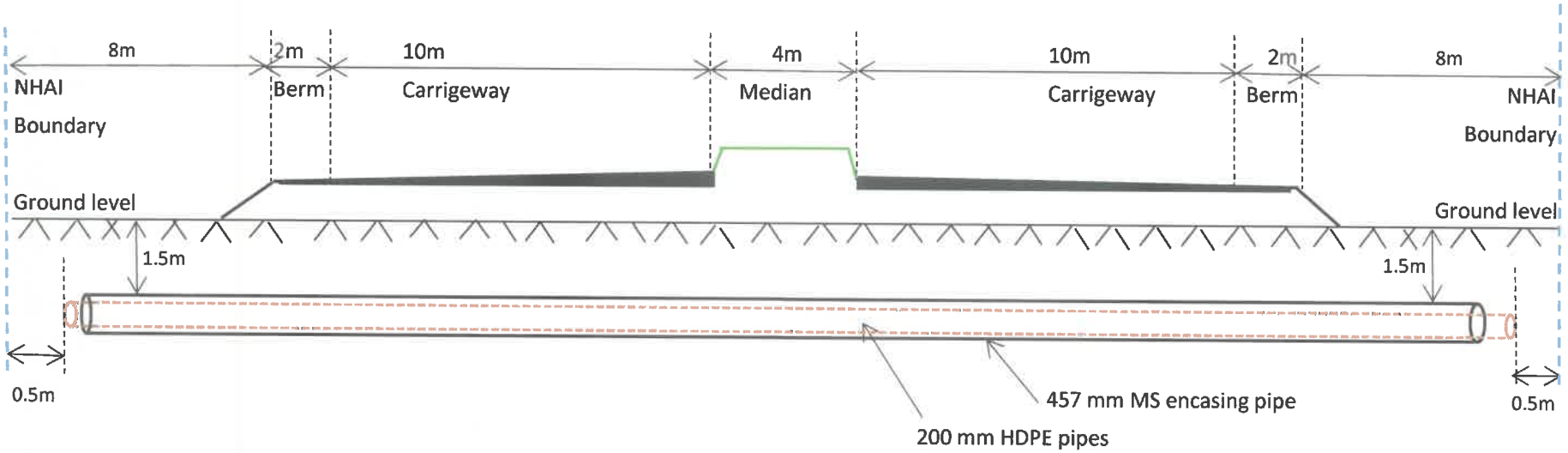
HDPE PIPE LAYING BY TRENCHLESS METHOD

Water supply Pipeline across the road at Km 26/800 of Madurai to Rameshwaram road (NHAI-49)



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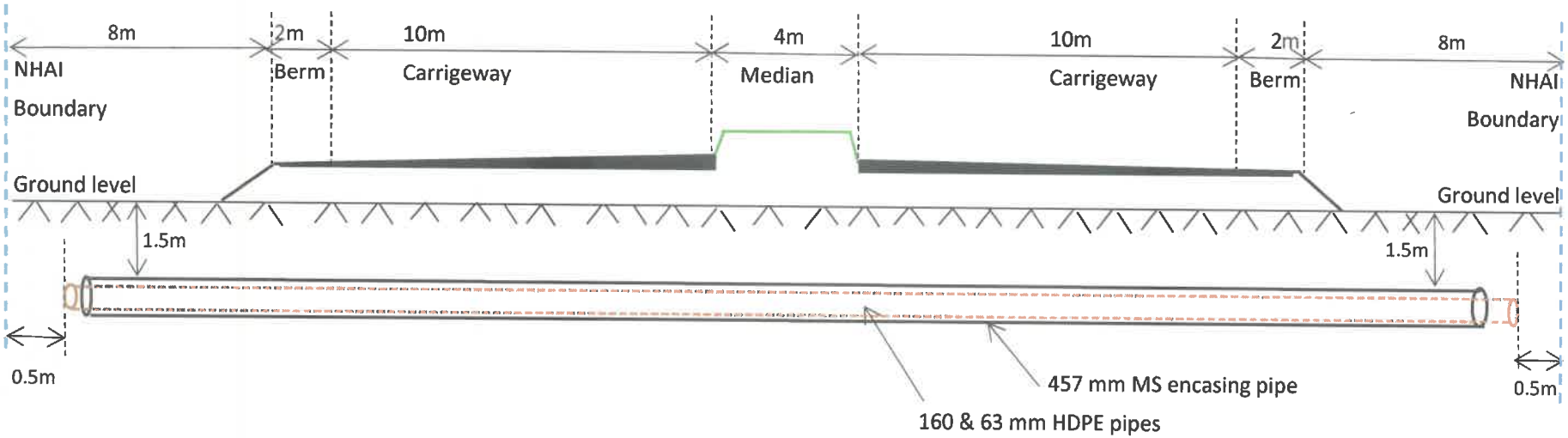
HDPE PIPE LAYING BY TRENCHLESS METHOD

Water supply Pipeline across the road at Km 29/000 of Madurai to Rameshwaram road (NHAI-49)



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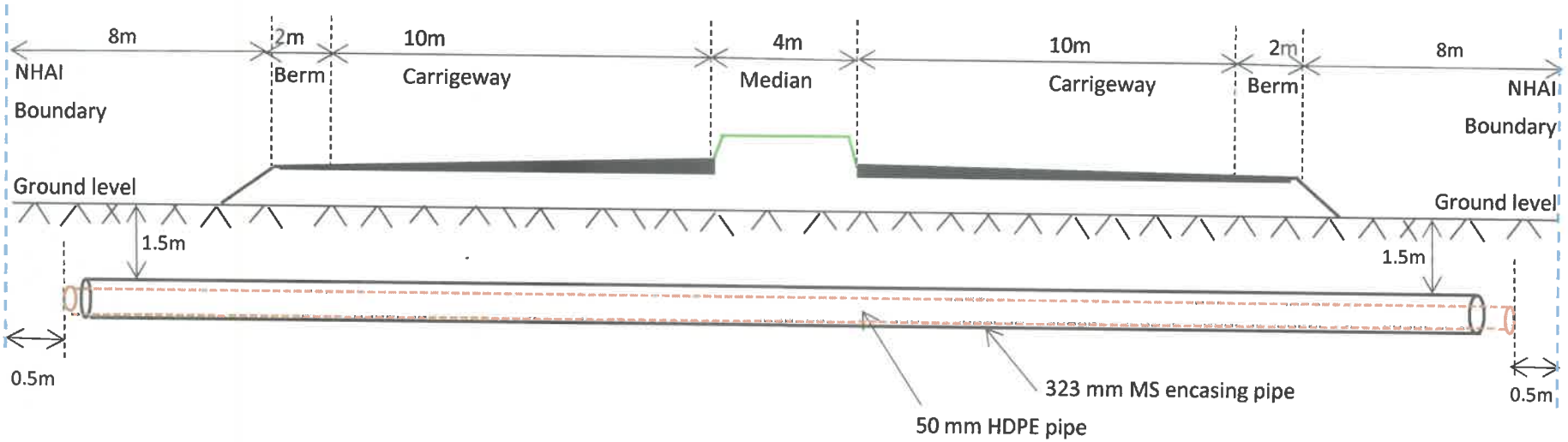
Water supply Pipeline across the road at Km 29/970 of Madurai to Rameshwaram road (NHAI-49)



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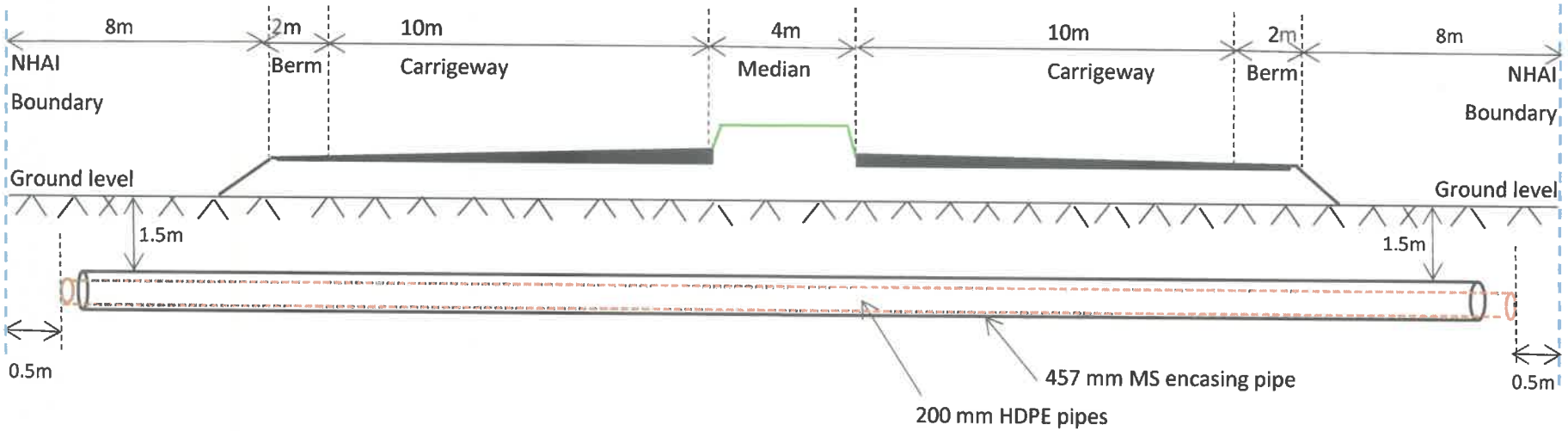
HDPE PIPE LAYING BY TRENCHLESS METHOD

Water supply Pipeline across the road at Km 31/175 of Madurai to Rameshwaram road (NHAI-49)



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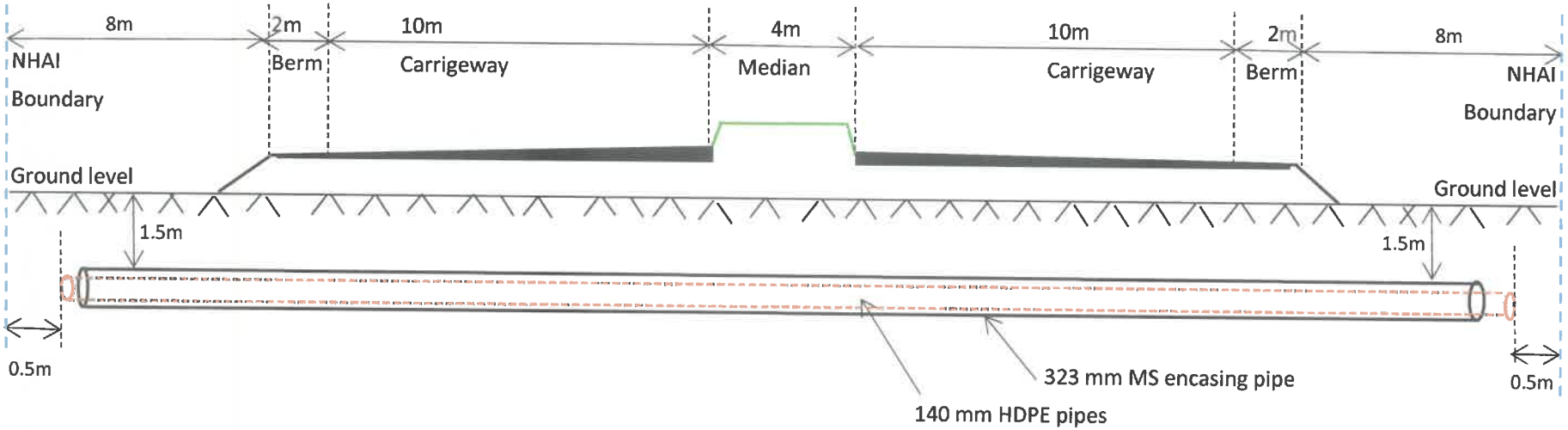
HDPE PIPE LAYING BY TRENCHLESS METHOD

Water supply Pipeline across the road at Km 31/825 of Madurai to Rameshwaram road (NHAI-49)



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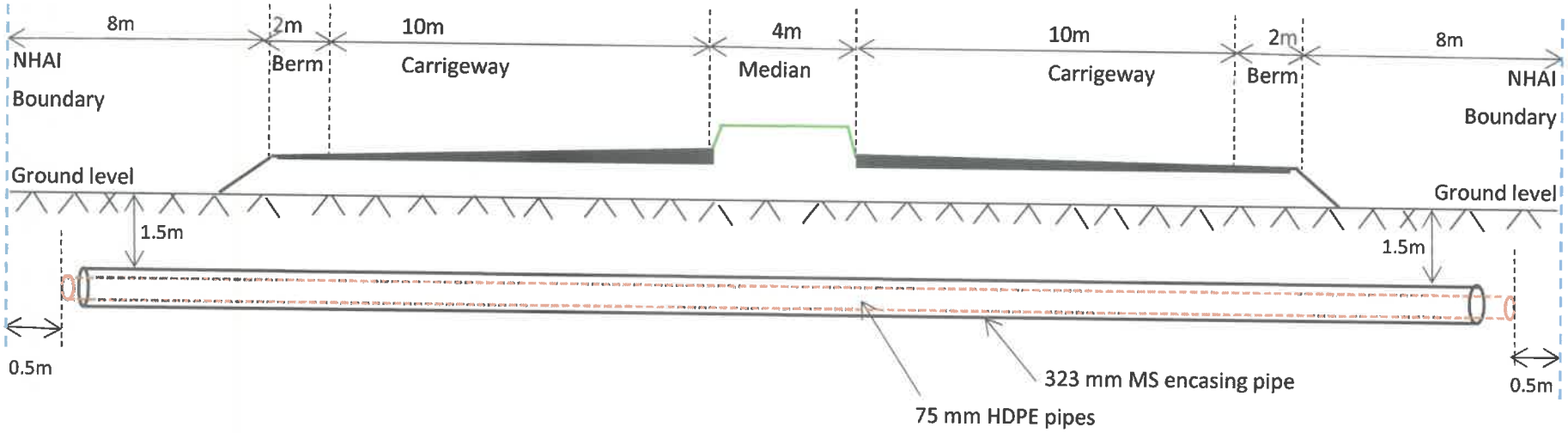
Water supply Pipeline across the road at Km 34/200 of Madurai to Rameshwaram road (NHAI-49)



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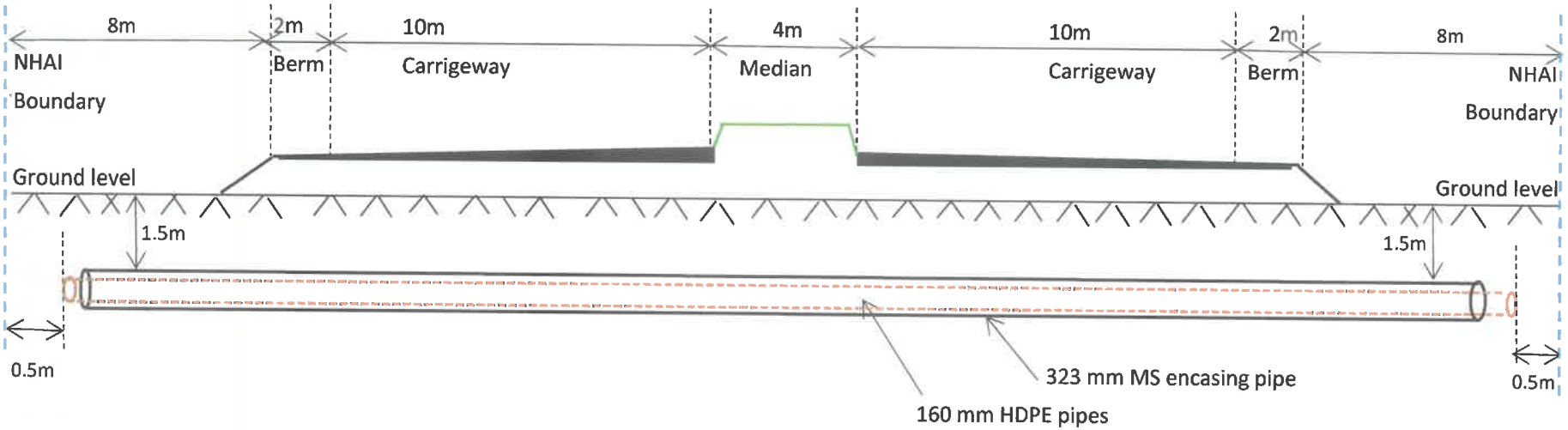
Water supply Pipeline across the road at Km 37/020 of Madurai to Rameshwaram road (NHAI-49)



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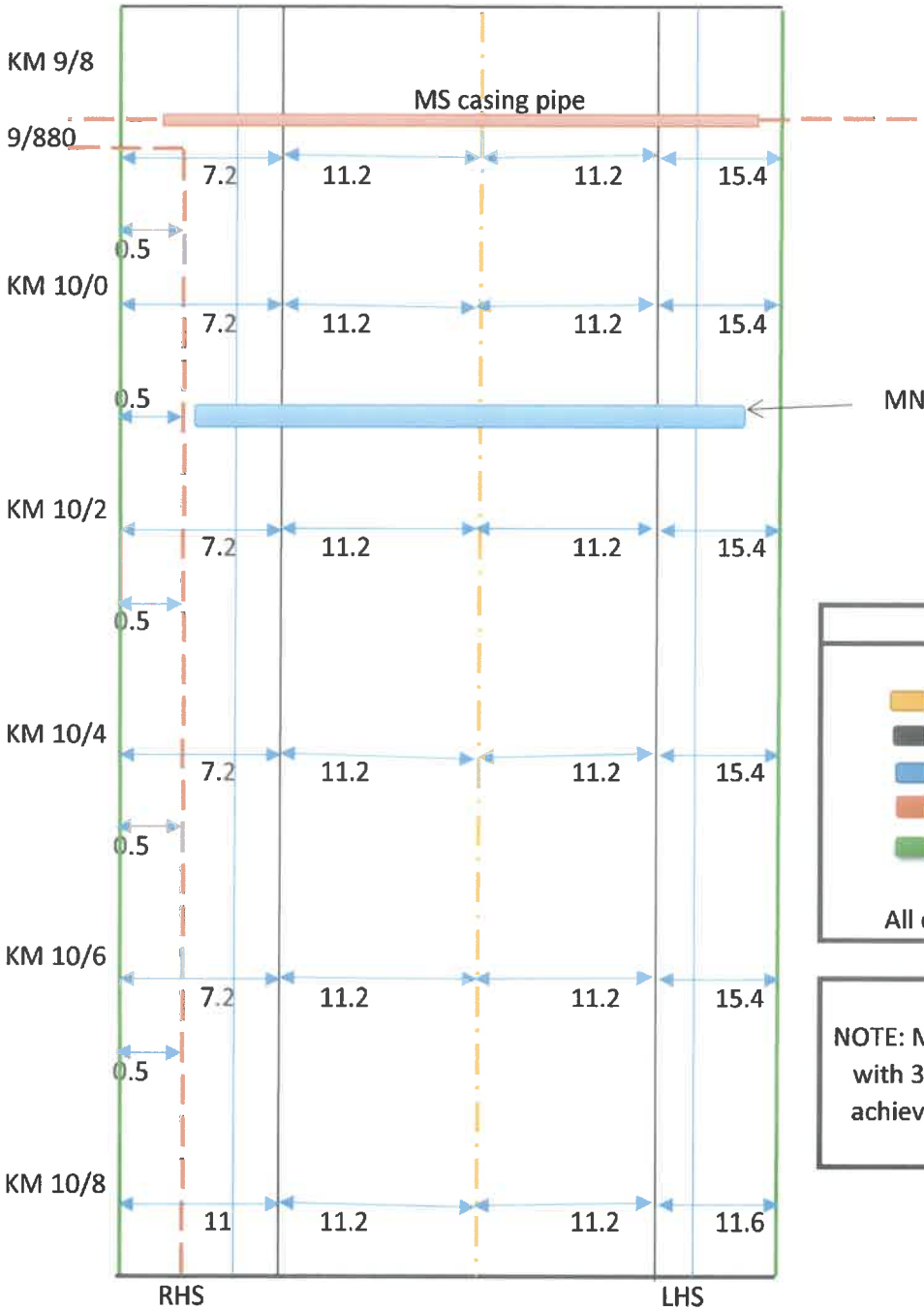
MADURAI TO RAMESHWARAM NHAI 49

ALONG THE ROAD FROM KM 9/880 TO KM 10/800 & ACROSS THE ROAD AT KM 9/880



LEGENDS

- Divider
- BT edge
- Road burm
- Proposed pipeline
- NH boundry

All dimensions are in meters

NOTE: More than 95% of compaction with 300mm layer by layer will be achieved by using granular soils in pipe laying trenches.

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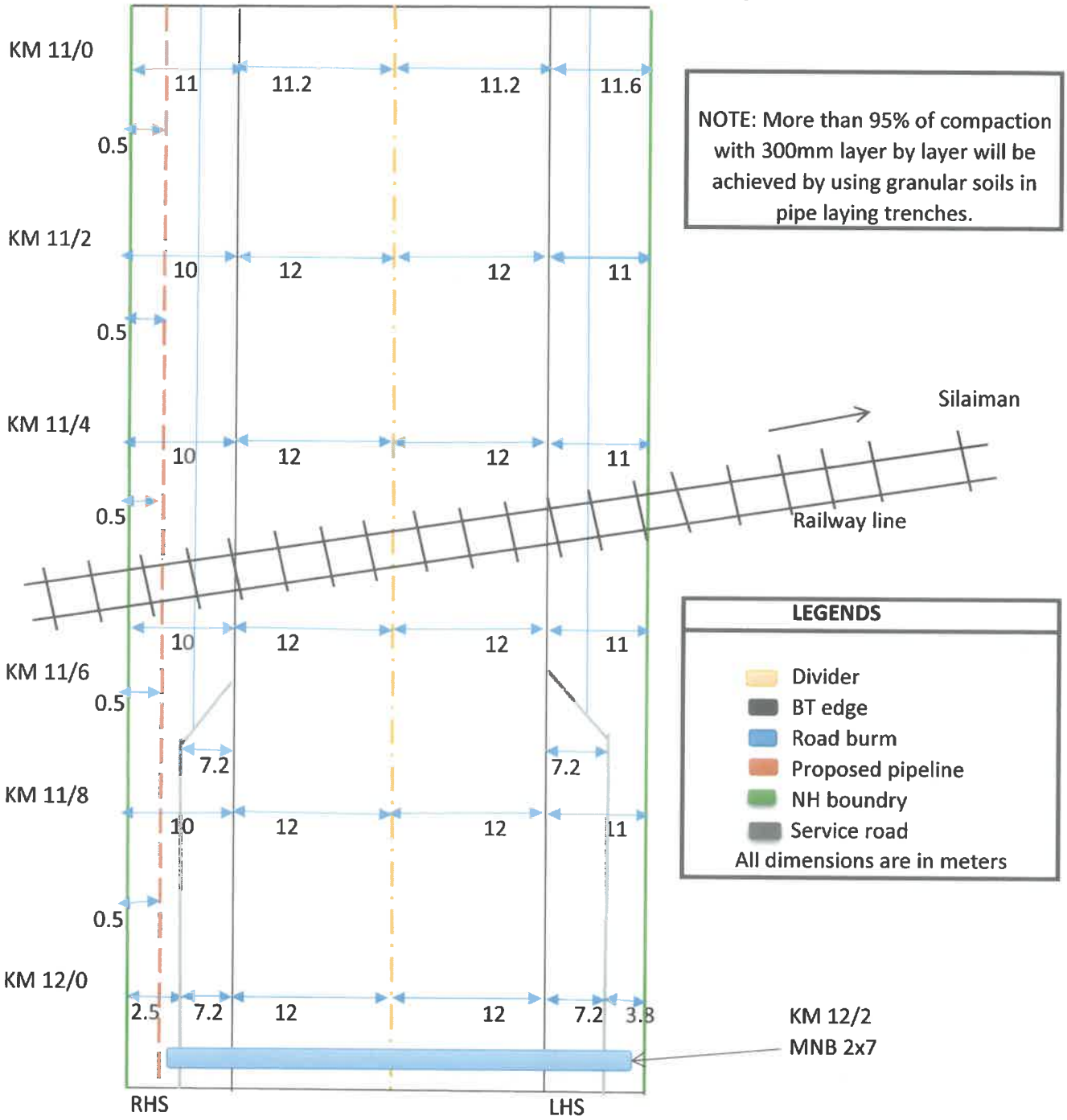
MADURAI TO RAMESHWARAM NHAI 49

ALONG THE ROAD FROM KM 10/800 TO KM 12/000



NOTE: More than 95% of compaction with 300mm layer by layer will be achieved by using granular soils in pipe laying trenches.

LEGENDS

- Divider
- BT edge
- Road burm
- Proposed pipeline
- NH boundry
- Service road

All dimensions are in meters

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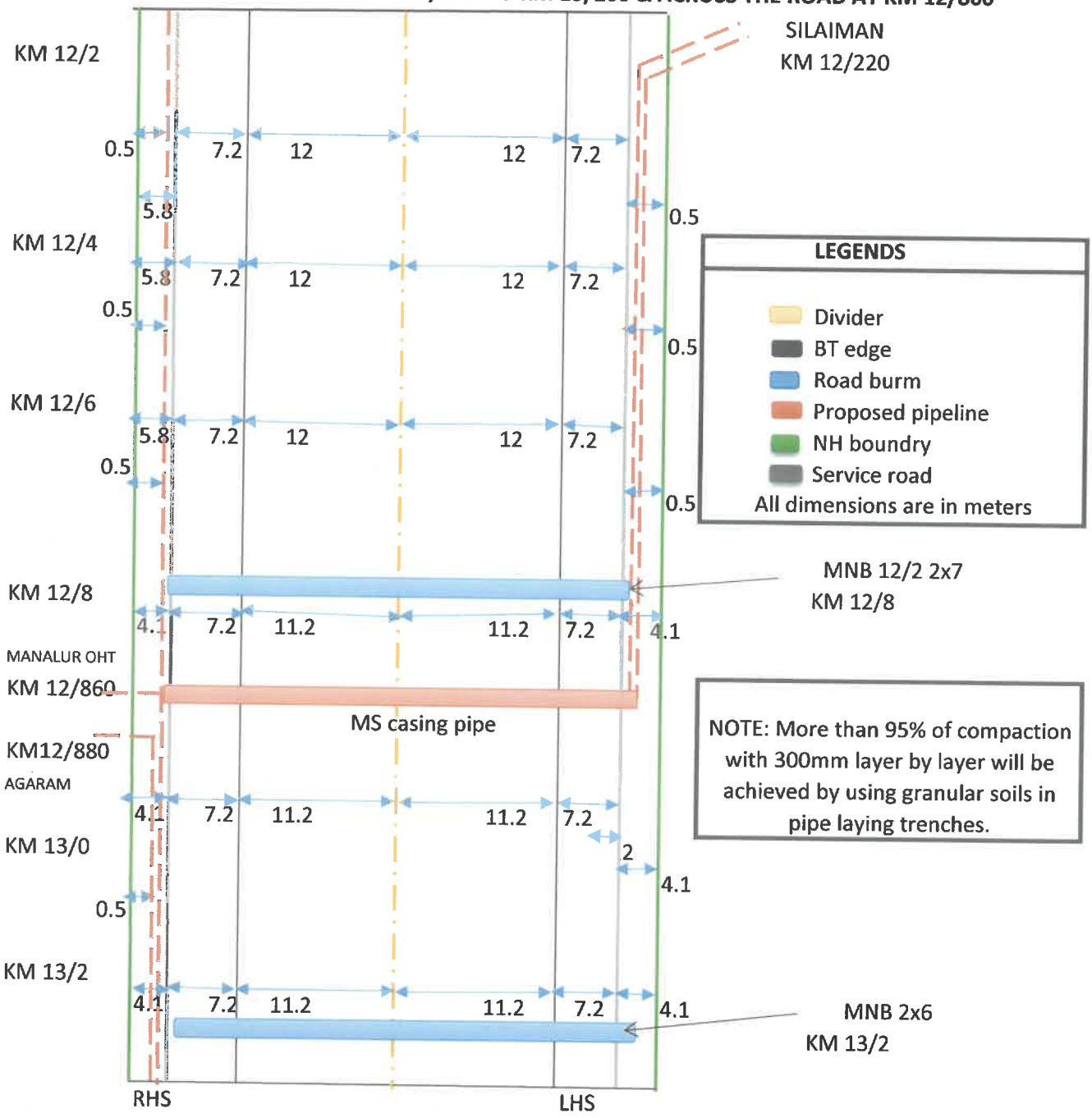
MADURAI TO RAMESHWARAM NHAI 49

ALONG THE ROAD FROM KM 12/000 TO KM 13/200 & ACROSS THE ROAD AT KM 12/860



NOTE: More than 95% of compaction with 300mm layer by layer will be achieved by using granular soils in pipe laying trenches.

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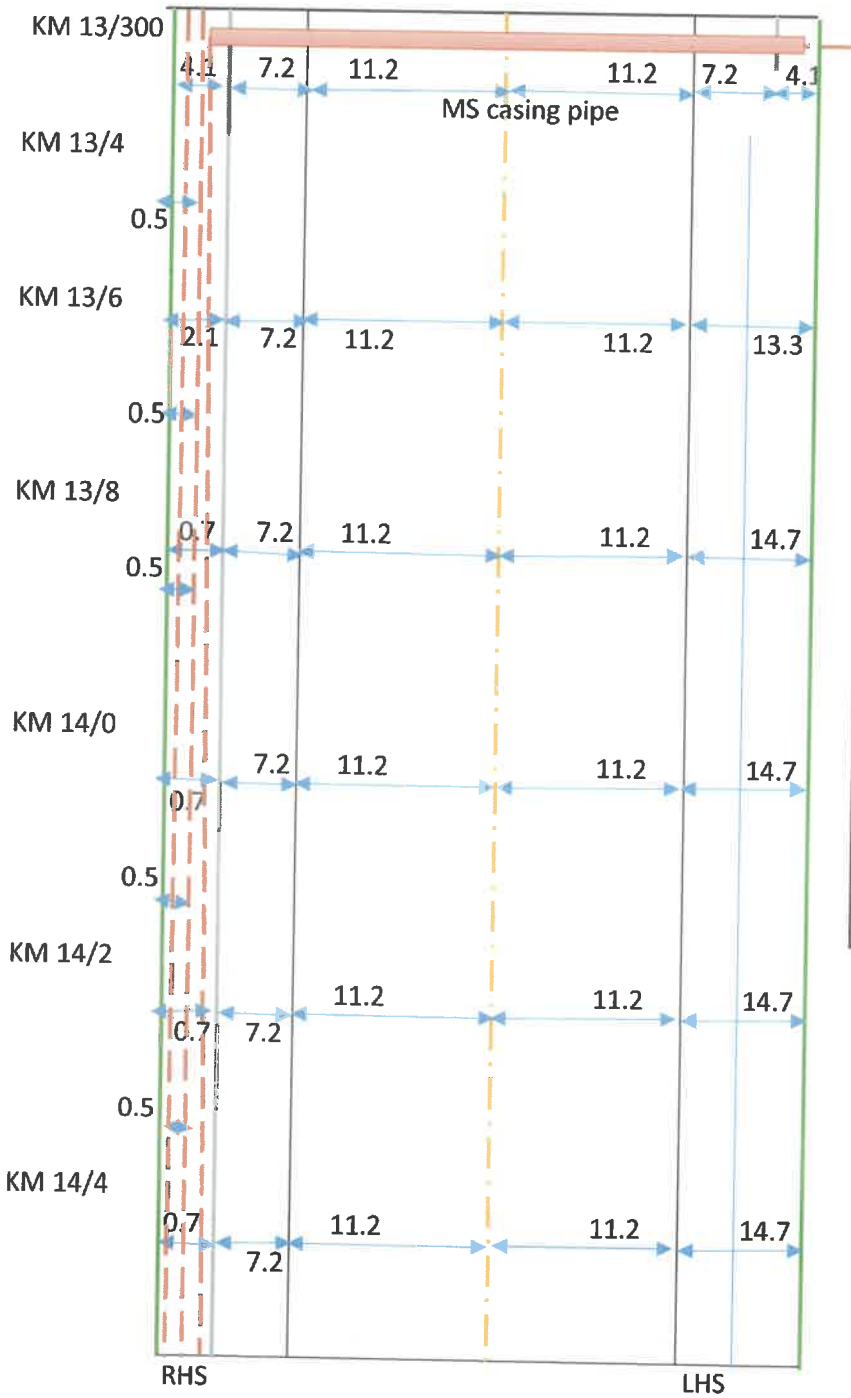
MADURAI TO RAMESHWARAM NHAI 49

ALONG THE ROAD FROM KM 13/200 TO KM 14/400 & ACROSS THE ROAD AT KM 13/300



NOTE: More than 95% of compaction with 300mm layer by layer will be achieved by using granular soils in pipe laying trenches.

LEGENDS

- Divider
- BT edge
- Road burm
- Proposed pipeline
- NH boundry
- Service road

All dimensions are in meters

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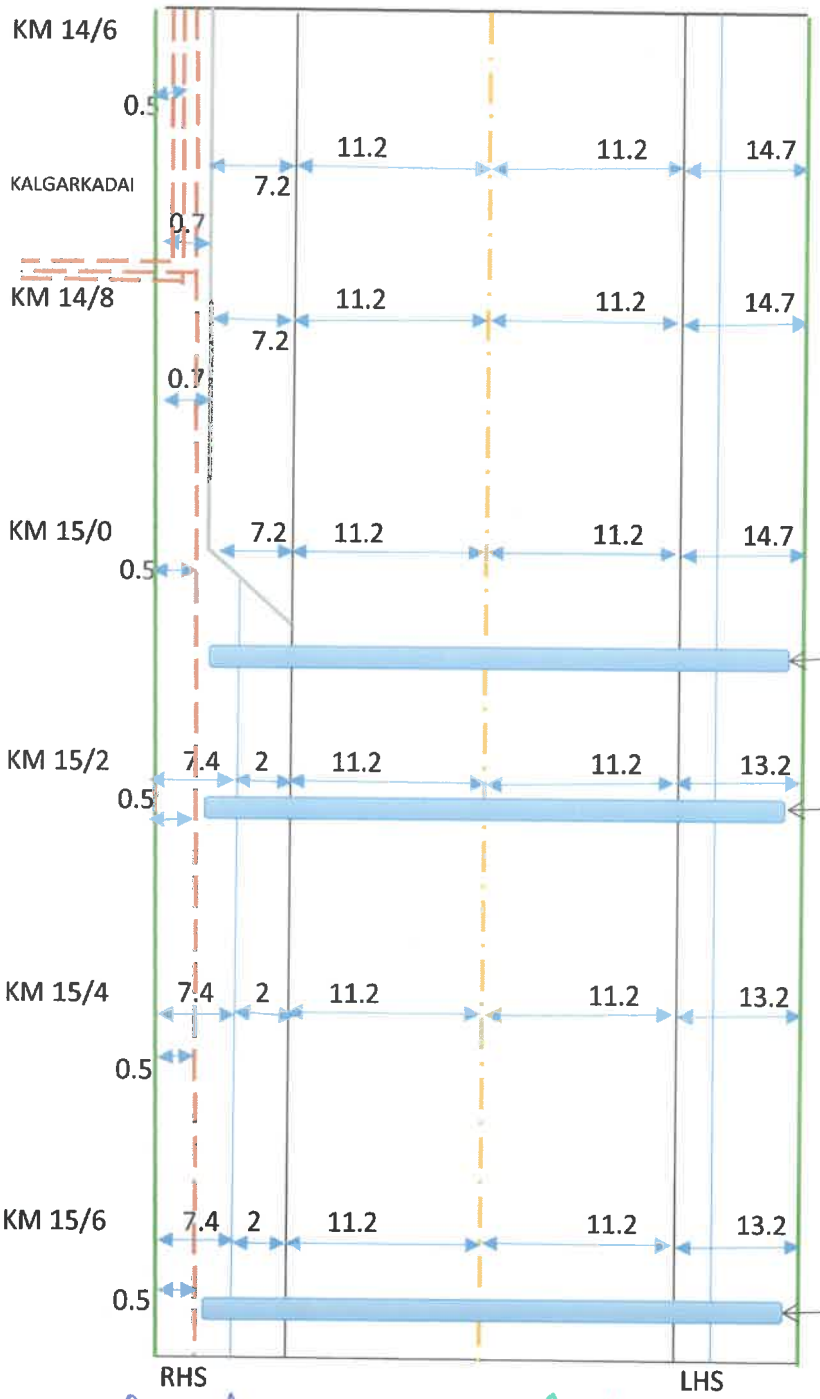
MADURAI TO RAMESHWARAM NHAI 49
ALONG THE ROAD FROM KM 14/400 TO KM 15/600



NOTE: More than 95% of compaction with 300mm layer by layer will be achieved by using granular soils in pipe laying trenches.

LEGENDS

- Divider
- BT edge
- Road burm
- Proposed pipeline
- NH boundry
- Service road

All dimensions are in meters

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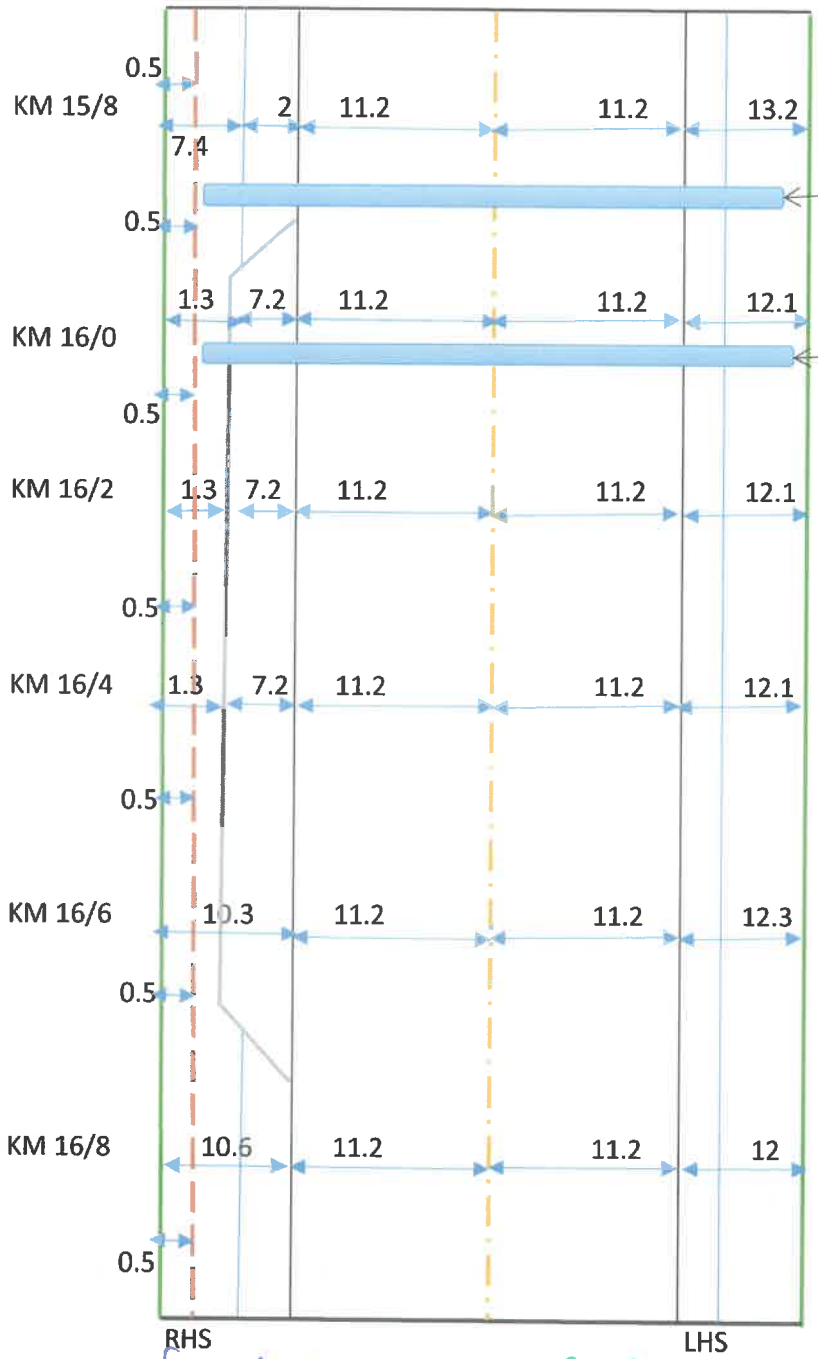
MADURAI TO RAMESHWARAM NHAI 49
ALONG THE ROAD FROM KM 15/600 TO KM 16/800



LEGENDS

- Divider
- BT edge
- Road burm
- Proposed pipeline
- NH boundry
- Service road

All dimensions are in meters

NOTE: More than 95% of compaction with 300mm layer by layer will be achieved by using granular soils in pipe laying trenches.

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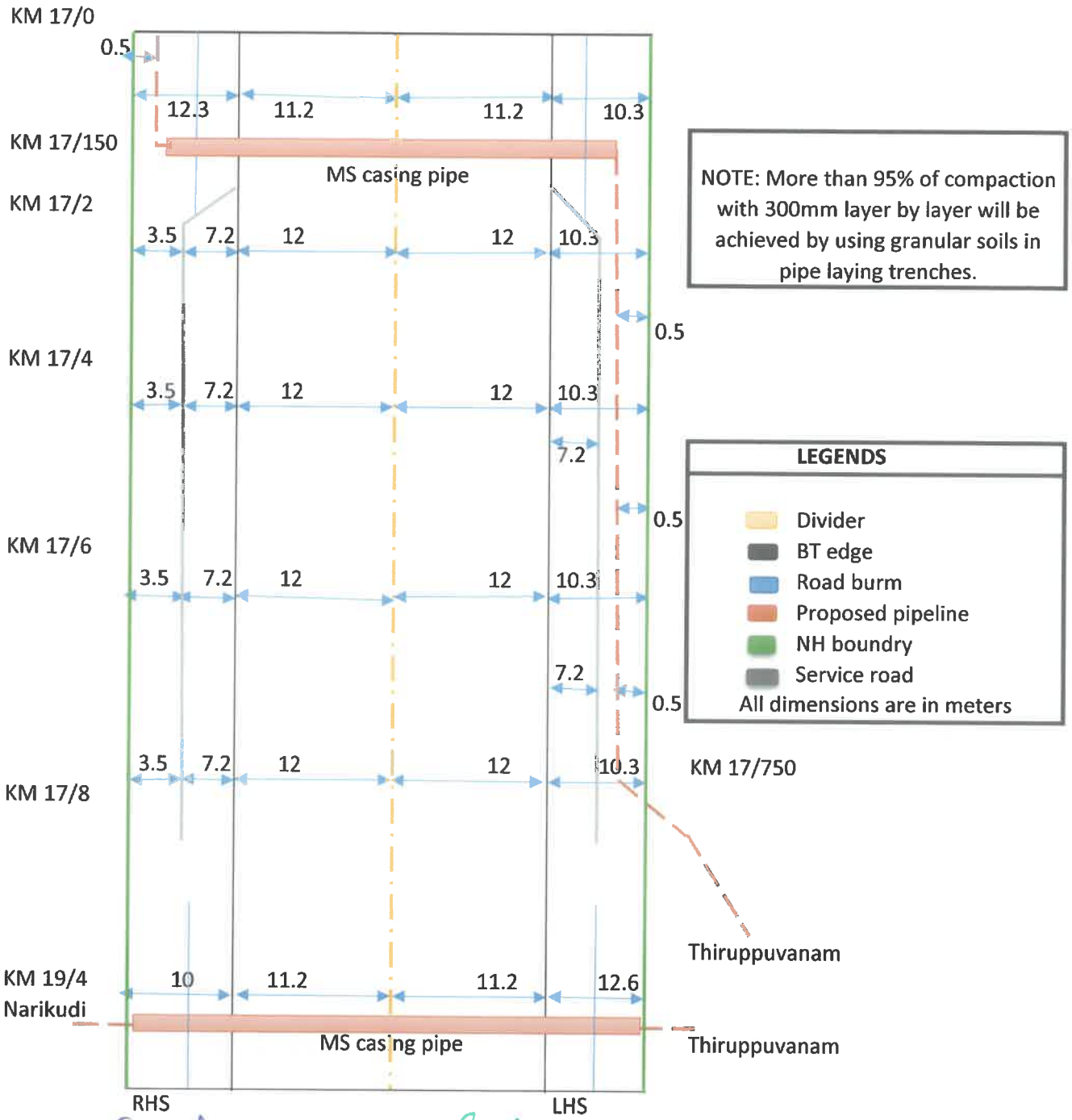
MADURAI TO RAMESHWARAM NHAI 49

ALONG THE ROAD FROM KM 16/800 TO KM 17/750 & ACROSS THE ROAD AT KM 17/150 & 19/400



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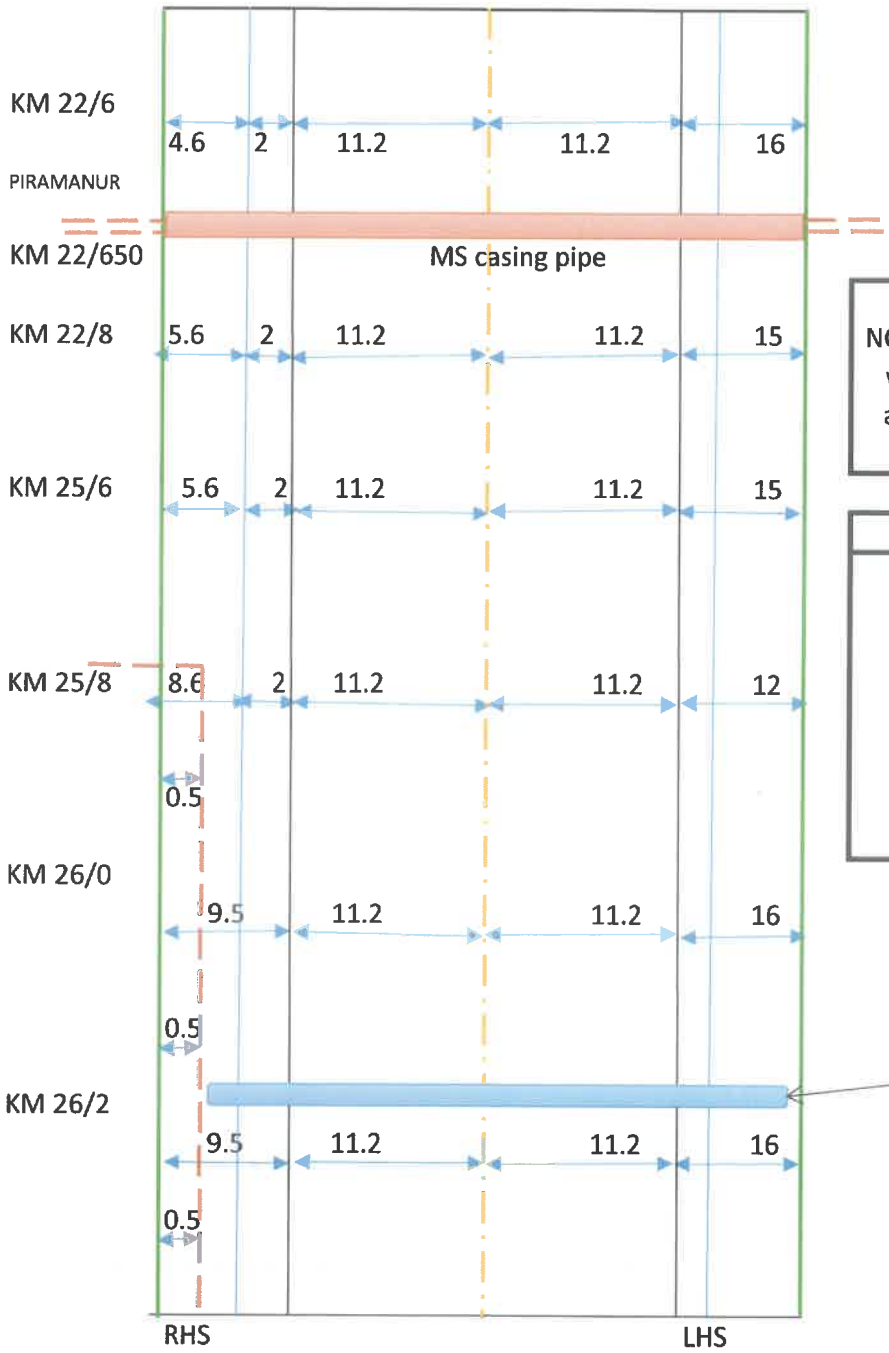
MADURAI TO RAMESHWARAM NHAI 49

ALONG THE ROAD FROM KM 22/650 TO KM 23/110, KM 25/800 TO 26/200 & ACROSS THE ROAD AT KM 22/650



26/2 MNB 1x7
KM 26/150

NOTE: More than 95% of compaction with 300mm layer by layer will be achieved by using granular soils in pipe laying trenches.

LEGENDS

- Divider
- BT edge
- Road burm
- Proposed pipeline
- NH boundry

All dimensions are in meters

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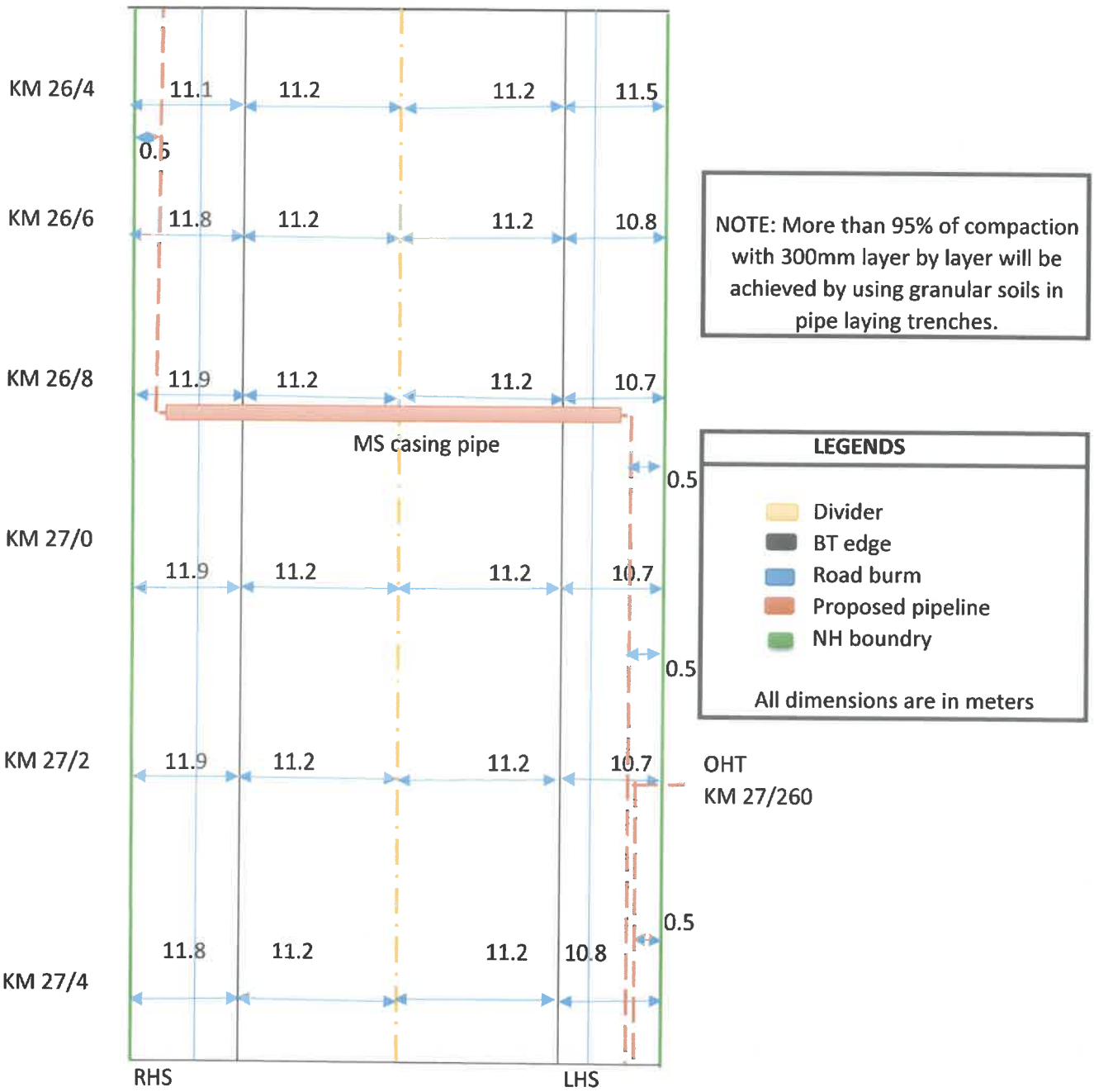
MADURAI TO RAMESHWARAM NHAI 49

ALONG THE ROAD FROM KM 26/200 TO KM 27/400 & ACROSS THE ROAD AT KM 26/800



NOTE: More than 95% of compaction with 300mm layer by layer will be achieved by using granular soils in pipe laying trenches.

LEGENDS

- Divider
- BT edge
- Road burm
- Proposed pipeline
- NH boundry

All dimensions are in meters

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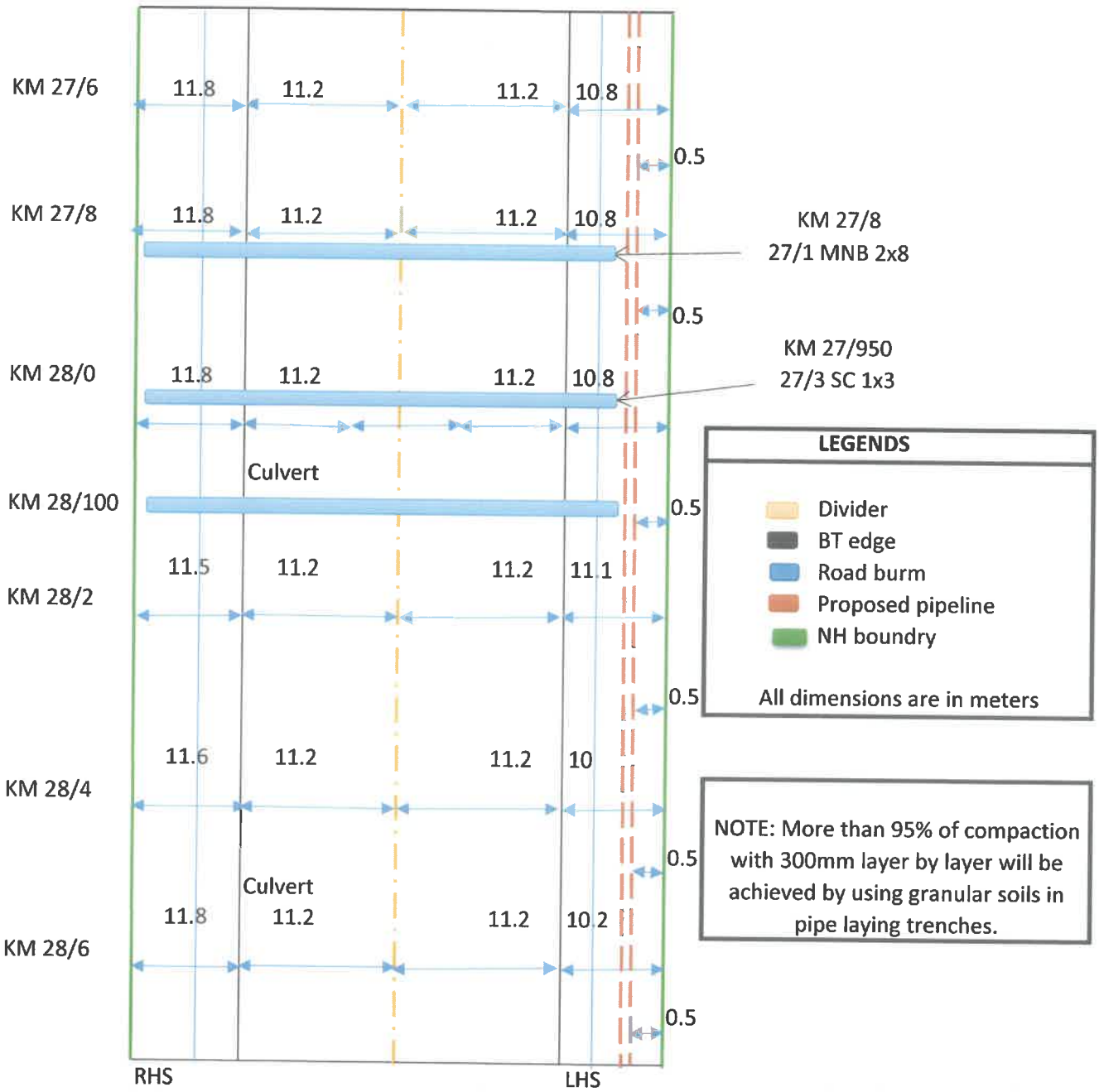
National Highways Authority of India
PIU - KARAIKUDI

MADURAI TO RAMESHWARAM NHAI 49
ALONG THE ROAD FROM KM 27/400 TO KM 28/600



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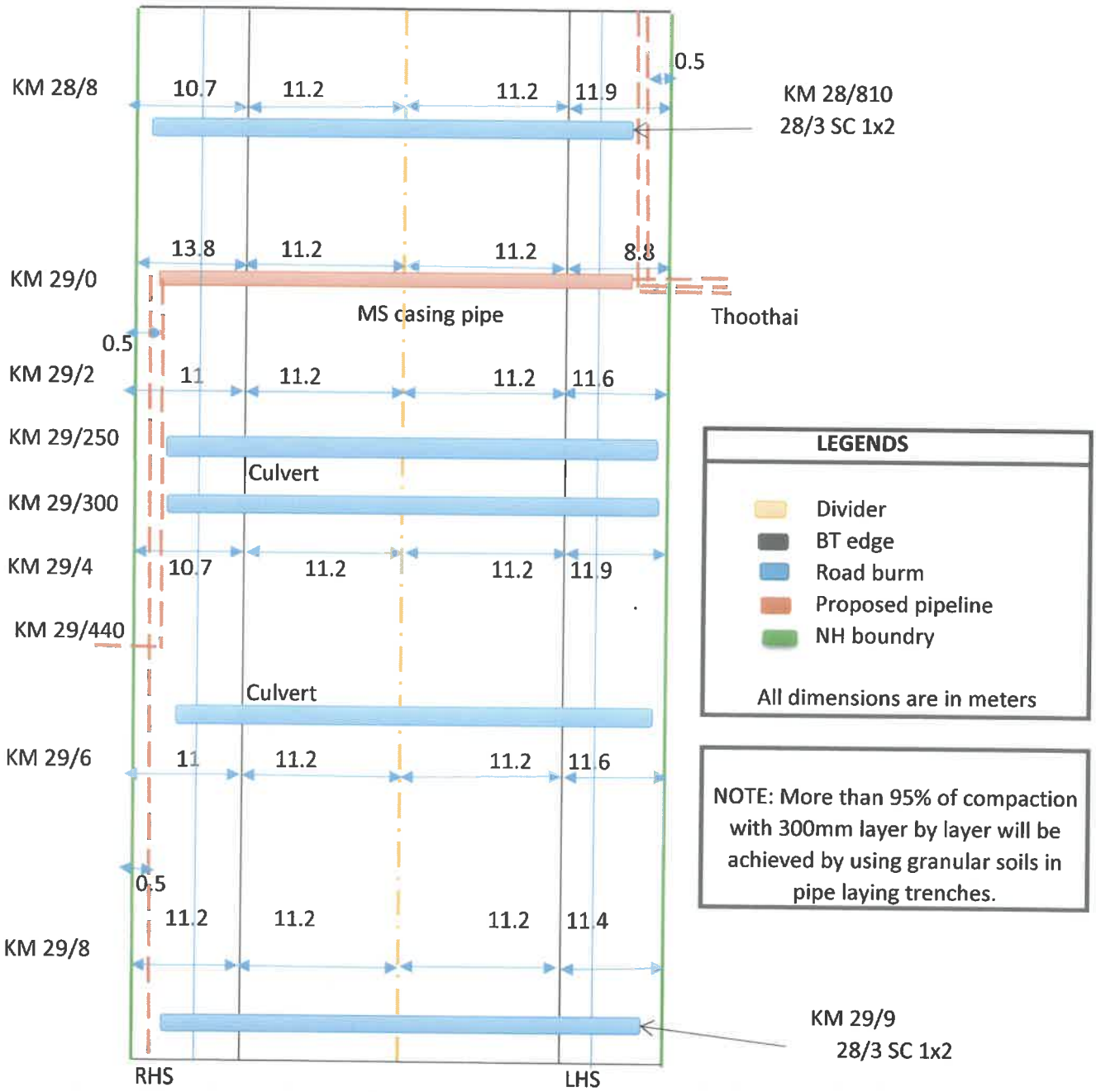
MADURAI TO RAMESHWARAM NHAI 49

ALONG THE ROAD FROM KM 28/600 TO KM 29/800 & ACROSS THE ROAD AT KM 29/000



LEGENDS

- Divider
- BT edge
- Road burm
- Proposed pipeline
- NH boundry

All dimensions are in meters

NOTE: More than 95% of compaction with 300mm layer by layer will be achieved by using granular soils in pipe laying trenches.

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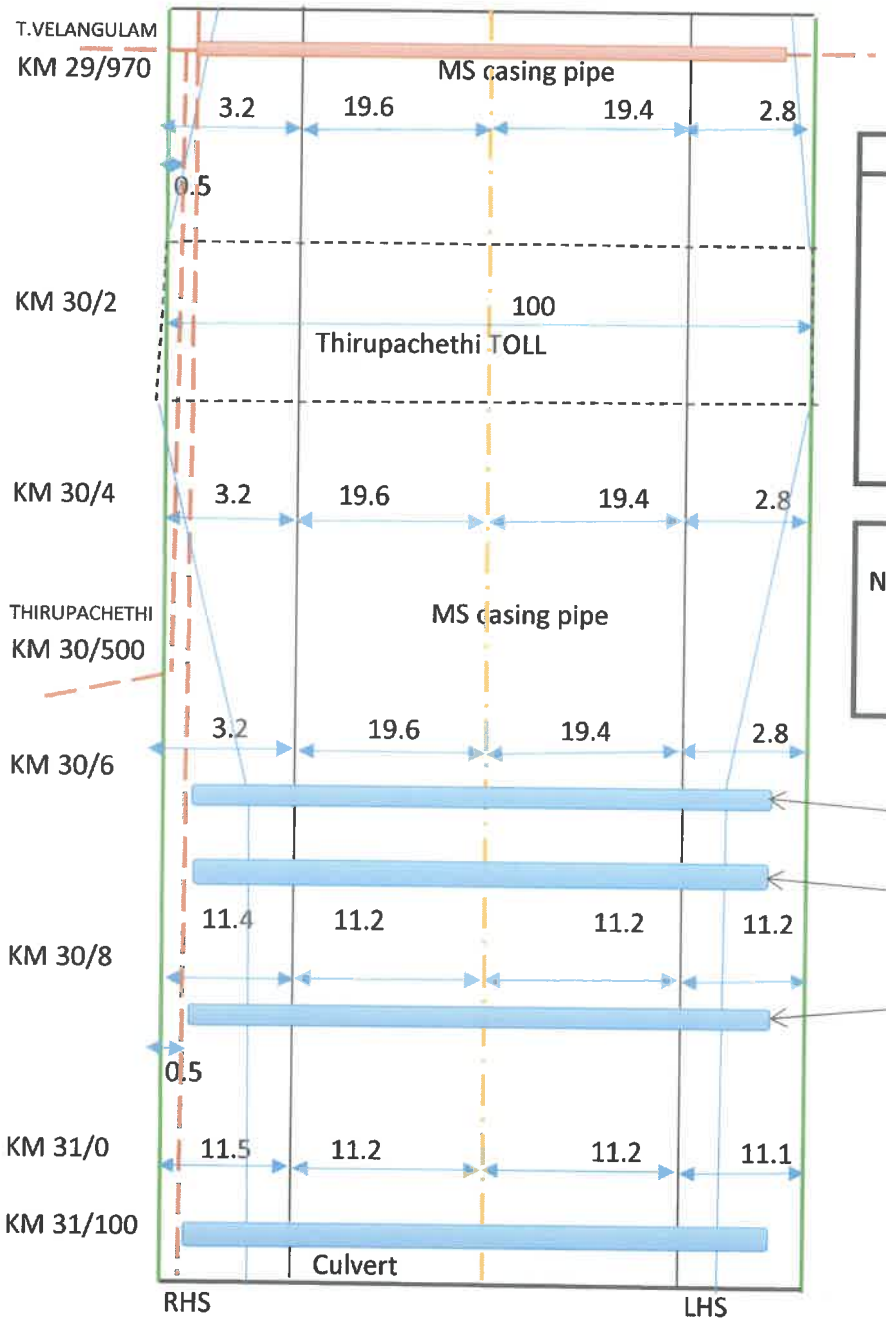
MADURAI TO RAMESHWARAM NHAI 49 - ALONG THE ROAD FROM KM 29/800 TO KM 31/000 & ACROSS THE ROAD AT KM 29/970



LEGENDS

- Divider
- BT edge
- Road burm
- Proposed pipeline
- NH boundry

All dimensions are in meters

NOTE: More than 95% of compaction with 300mm layer by layer will be achieved by using granular soils in pipe laying trenches.

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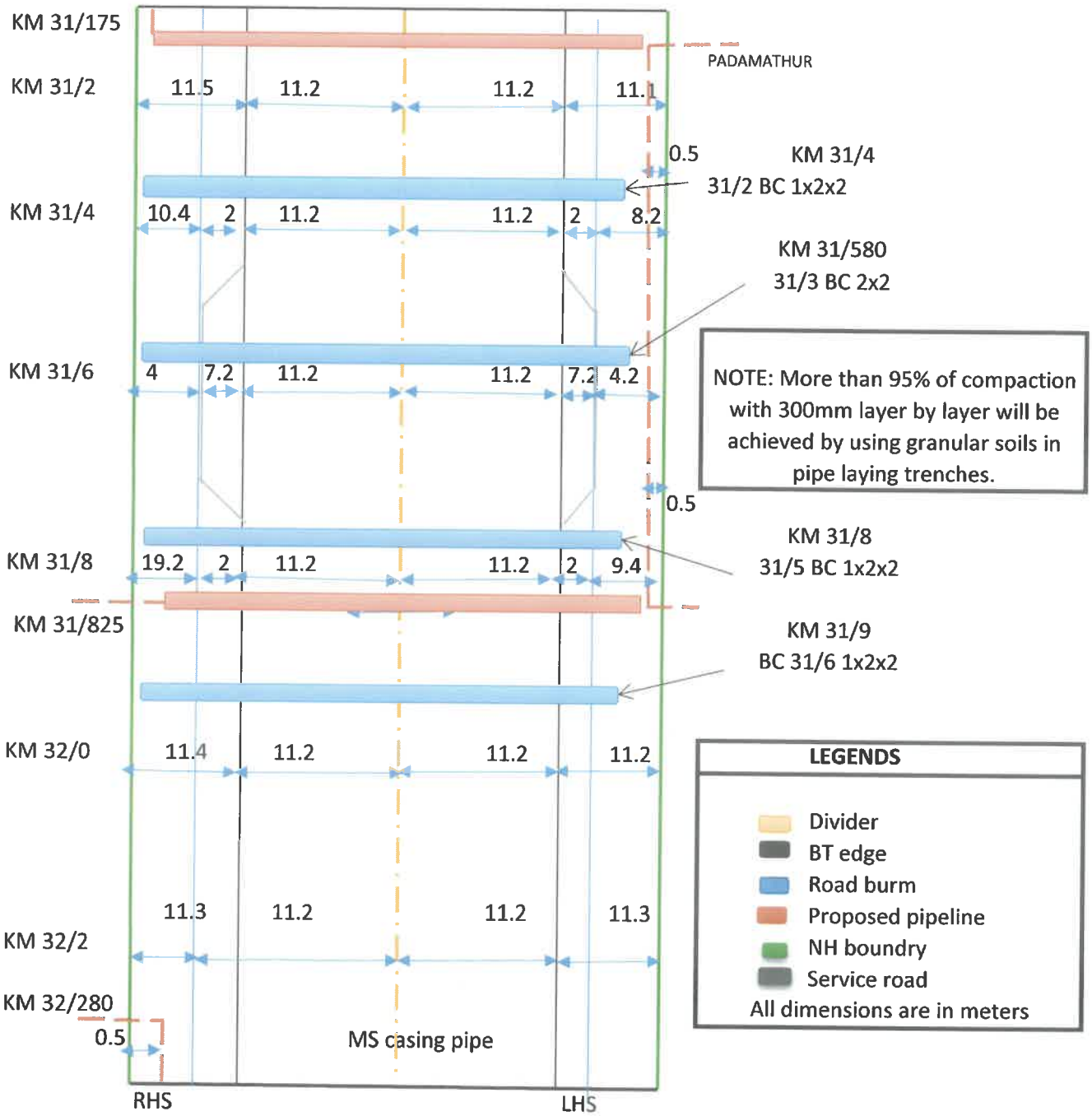
MADURAI TO RAMESHWARAM NHAI 49

ALONG THE ROAD FROM KM 31/000 TO KM 31/825 & ACROSS THE ROAD AT KM 31/175 & KM 31/825



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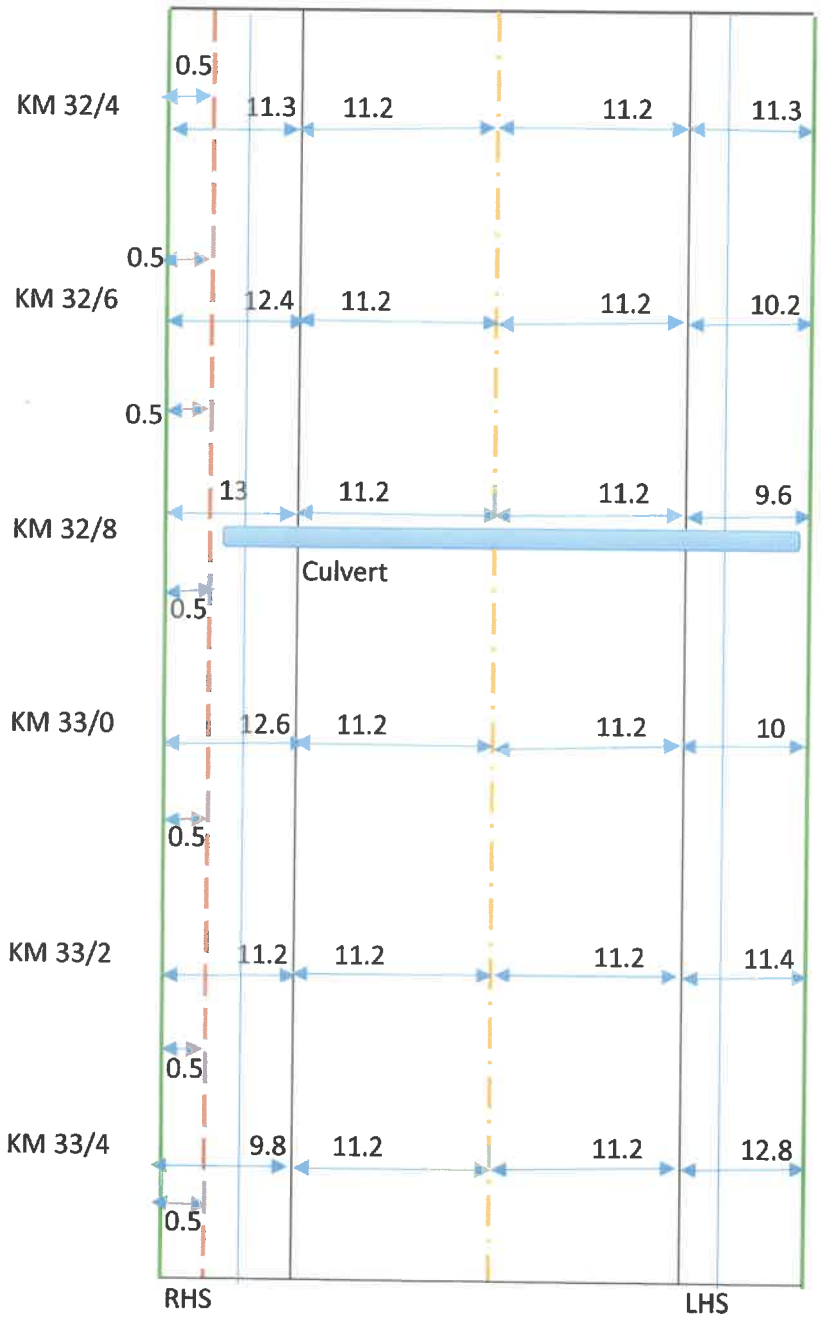
MADURAI TO RAMESHWARAM NHAI 49
ALONG THE ROAD FROM KM 32/280 TO KM 33/400



NOTE: More than 95% of compaction with 300mm layer by layer will be achieved by using granular soils in pipe laying trenches.

LEGENDS

- Divider
- BT edge
- Road burm
- Proposed pipeline
- NH boundry
- Drainage

All dimensions are in meters

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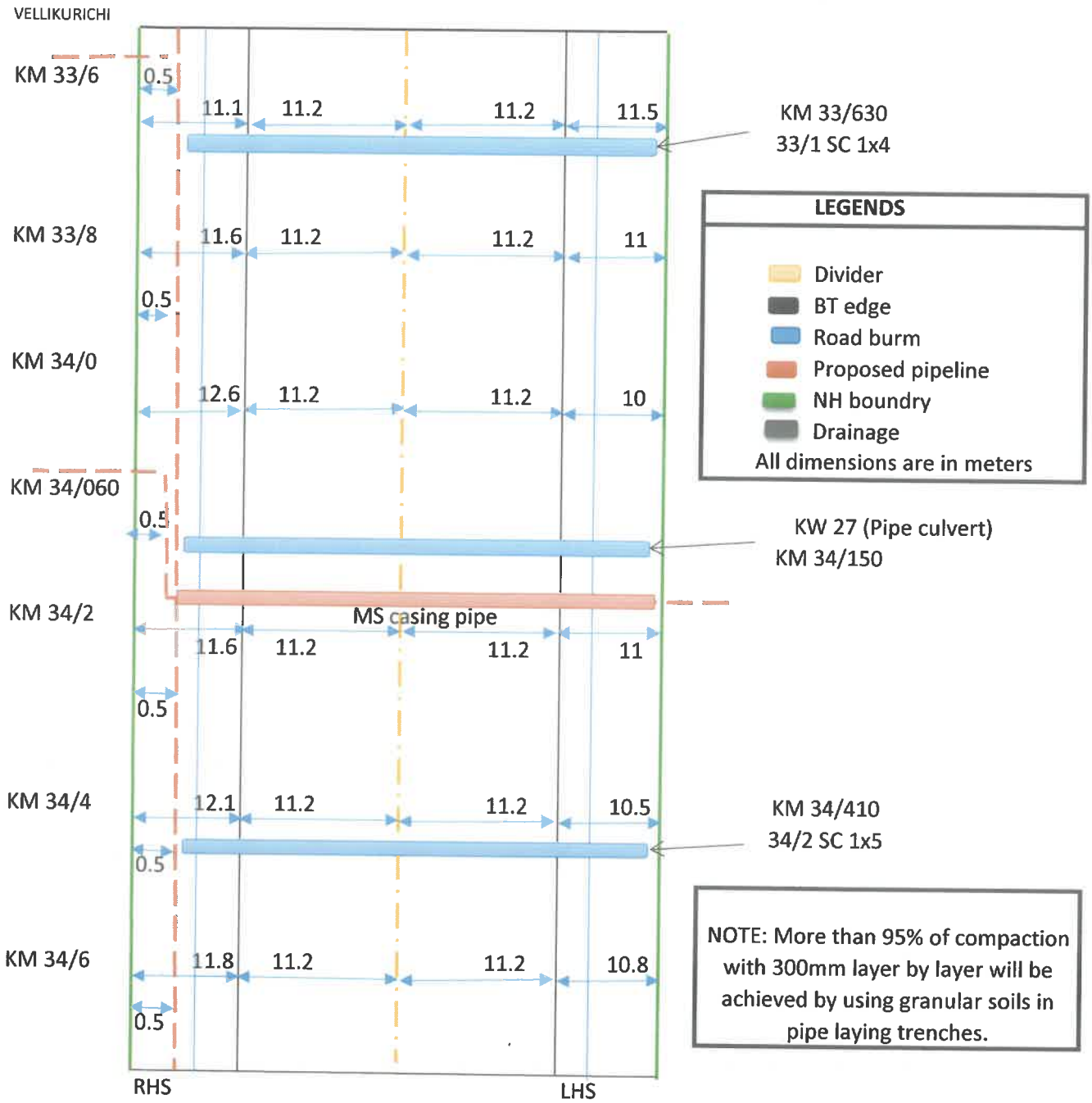
MADURAI TO RAMESHWARAM NHAI 49
ALONG THE ROAD FROM KM 33/400 TO KM 34/600 & ACROSS THE ROAD AT KM 34/200



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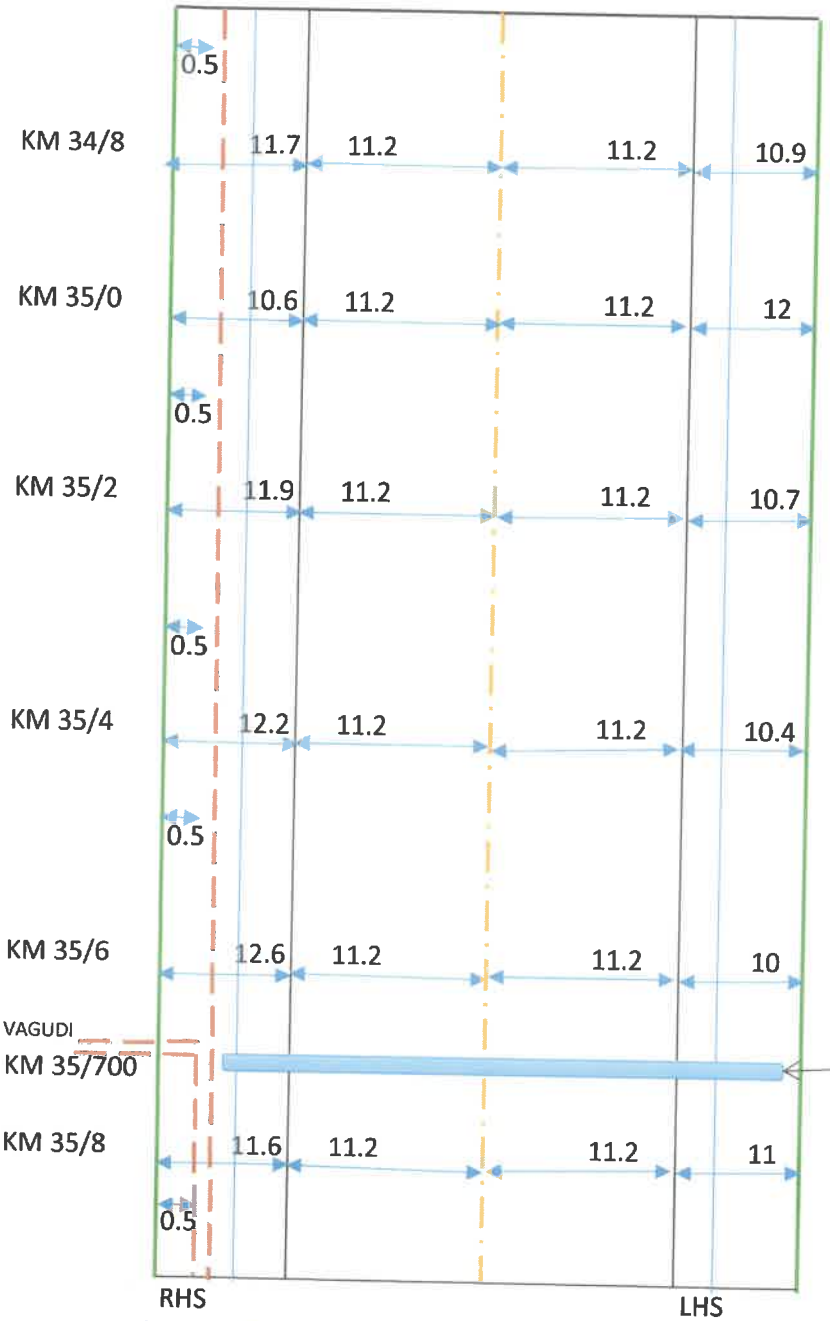
MADURAI TO RAMESHWARAM NHAI 49
ALONG THE ROAD FROM KM 34/600 TO KM 35/800



NOTE: More than 95% of compaction with 300mm layer by layer will be achieved by using granular soils in pipe laying trenches.

LEGENDS

- Divider
- BT edge
- Road burm
- Proposed pipeline
- NH boundry

All dimensions are in meters

KM 35/710
MNB 35/1 1x6

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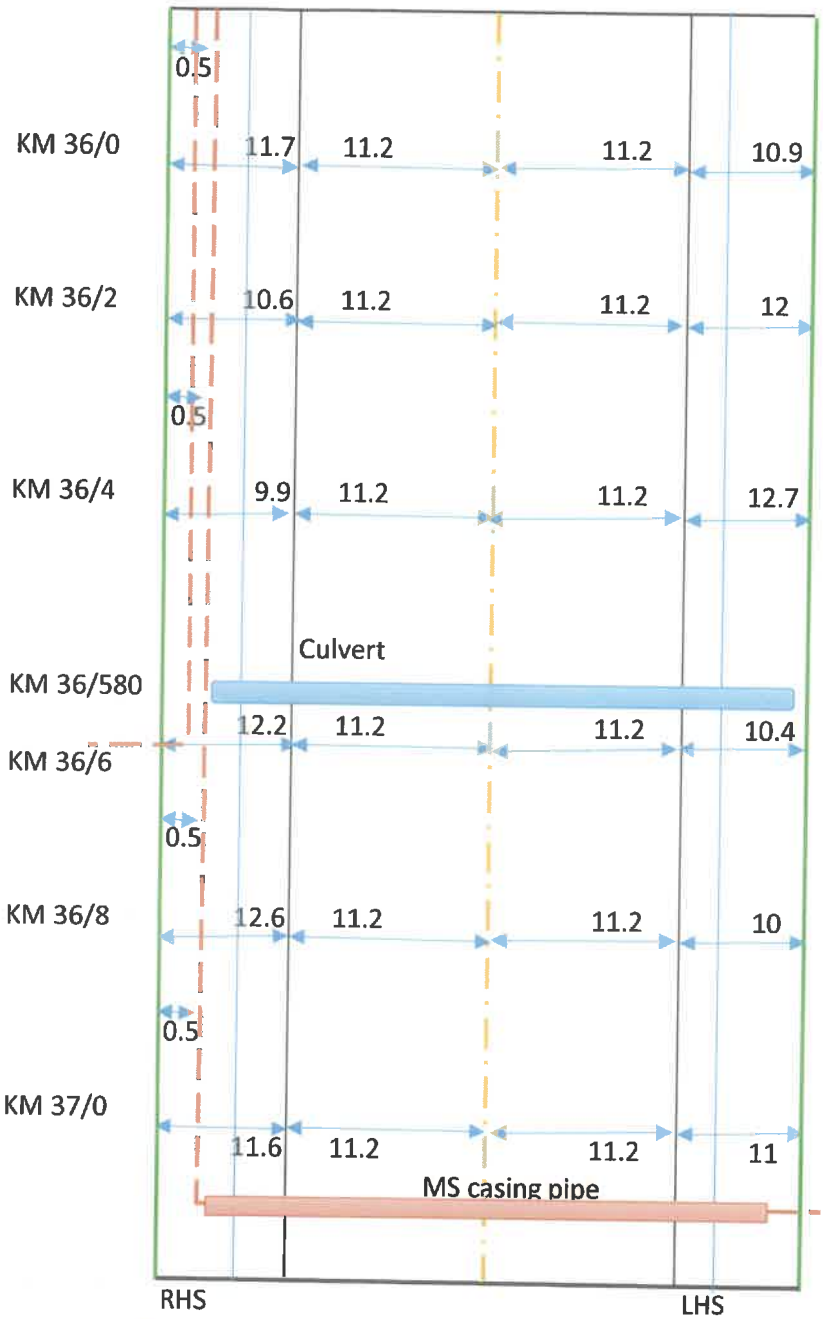
MADURAI TO RAMESHWARAM NHAI 49

ALONG THE ROAD FROM KM 35/800 TO KM 37/020 & ACROSS THE ROAD AT KM 37/020



NOTE: More than 95% of compaction with 300mm layer by layer will be achieved by using granular soils in pipe laying trenches.

LEGENDS

- Divider
- BT edge
- Road burm
- Proposed pipeline
- NH boundry

All dimensions are in meters

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