

VOLUME –II

(Additional General Conditions)

ADDITIONAL GENERAL CONDITIONS

1. The work will be carried out according to P.W.D., B&R and Public Health Branch standard specification latest edition which will form a part and parcel of this contract schedule of rates.
2. All classes of work not otherwise described shall be executed in accordance with the principal laid down in the HR. P.W.D. Public Health Branch specification and B& R Branch book of the specification 1990 edition in the cases of the building work.
3. Approximate quantities are given in the contract schedule of rates and these can vary at the time of execution of the work. The payment will be made according to the actual work done by the contractor.
4. All the item in the contract schedule of rates are subject to the foot notes as given in the Haryana P.W.D. schedule of rates, 2021 with latest amendment regarding these items.
5. Only tertiary treated water will be used in the work and the cost for supply & further treatment as per construction purposes will be borne by the contractor / firm. The tertiary treated water is available at STP Dhanwapur& Behrampur, Gurugram, tested and treated before use if required, at his own cost.
6. The contractor shall have to complete the entire scope of work irrespective of the total quantity taken in the DNIT.
7. The items given in the contract schedule of rates can be changed by the Engineer-in –charge and its execution will be binding upon the contractor.
8. Nothing extra shall be paid on account of any damages caused due to rain, flood or any other act of GOD.
9. No. claim will be entertained from the contractor in case any mistake in description or unit occurs in any of the items taken into the contract schedule of rates on account of typing mistake comparing or over sighting, if there will be any mistake, the same will be rectifiable at any stage as per Haryana P.W.D. schedule of rates, 2021 with amendments of the same received from time to time. This mistake, if any shall be rectified even after opening of tender and during execution of the contract agreement which shall be binding upon the contractor.
10. The contractor shall be required to produce samples of all the materials sufficiently in advance to obtain approval of the Engineer-in –charge. Subsequently the materials to be obtained for actual execution of the work shall strictly confirm to the quality of samples approved. In case of variation materials shall be liable to be rejected.
11. Nothing extra shall be paid for any type of jungle clearance which the tenderer may have to carry out it.
12. Nothing extra shall be paid for making and Mtc. of diversion of road and transportation of the material for execution of work.
13. If any damage is done by the contractor to any existing work i.e. sewer line, water supply line, SWD line & other structure during the course of excavation of the work this shall have to be made good by him at his own cost.
14. The contractor shall take all the precaution to avoid the accidents by providing and maintaining necessary caution boards, night signals, speed limit breakers, red flags and red lights and providing barriers as necessary at either end of the locations. All these arrangements will be considered as incidental of the work and contractor's responsibility and nothing shall be payable to him in this.
15. The contractor shall make his own arrangement for obtaining the electric connection, if required and make necessary payment directly to the department concerned.
16. RATES: - Rates includes the cost of all the material labour charges, wastage, temporary works, hiring, and defect liability period as well as the general liabilities/obligations and risks raising out of the conditions of contract making arrangement of diversion traffic of carrying out the work on part width at

night or during non-peak hours etc. complete as per specification. The rates shall have to borne by the contractor directly.

17. Nothing shall be paid for unforeseen delays on account of non-availability of any kinds of material, drawings, or design.
18. Material collected in excess shall not be paid for and if the same is not removed from the site of work within one month from the date of final measurements, the same shall become the property of the authority
19. The contractor shall provide such recessed holes, opening etc. as directed by the Engineer-in –charge as required for electrical/sanitary work and nothing shall be payable on this account.
20. The department reserve the option to take away any item or any part thereof at any time during the execution of contract and re- allot to another contractor with the notice to the contractor without liability of compensation.
21. The Engineer-in –charge reserves the right to make the changes/alternation in specification & design drawing and scope of work on account of the Technical/administrative grounds and this will be accepted by the contractor without any financial obligation except that the change in quantities of different items will be payable in accordance with the amended planning for which written orders will be conveyed by the Engineer –in –charge. In addition, the departmental liability will be limited to the competent authority accepting the tenders.
22. The contractor should take instructions from the Engineer-In –Charge regarding collection and stacking of materials at specified place.
23. In the abstract of cost, if there is any mistake regarding calculations of rates, it shall be rectified at any stage as per HSR 2021 and latest amendment applicable on the contract schedule of rates.
24. Income tax or any other tax/ CESS deduction as notified by the Govt./ time to time shall be deducted from the running bill of the contractor / firm of work done as per Govt. instruction.
25. All material/ in-gradients shall be as per relevant IS codes and Haryana PWD specifications.
26. The workmanship shall also be in accordance with relevant code/ specification.
27. The work including transportation of pipes up to the site of work, road cutting and remarking with fresh material as the existing material could not be stacked to utilize the same in view of space constraint.
28. The rates quoted shall be deemed to be inclusive all cost of materials, transportation, costs of labour, tools and plant for all the operations involved in the completion of the works including the defect liability period.
29. The Contractor / firm is fully responsible for the quality and quantity of materials to be used at site. He is absolutely liable to make the good for any deficiency on this count.
30. The contractor shall be solely responsible for safety and security of manpower at work and public in General. For this purpose, he shall arrange all precautionary arrangements including the steel covers for the work under execution and is required to obtain a comprehensive insurance policy to compensate the aggrieved – party.
31. During the excavation of work if the de –watering is required due to any reason i.e. raised water table raised / seepage of sewer /leakage of water line, will be done by the agency free of cost & no extra payment will be made to the agency.
32. In case samples have been drawn by the state vigilance bureau or by any other authority but the report and test result of samples have not been received, the payment of running bills, final bill & security will be released after the contractor furnished on undertaking in shape of indemnity bound on the following lines: -
“I _____ son of Shri _____ resident of _____ do here by undertake to bear the recoveries if any, invited by GMDA an account of any adverse results for the samples taken

by the State Vigilance Department or any other authority from the work of _____. I further undertake that I will reconstruct the structure if declared unsafe due to result of the samples. I also undertake that in case of any item of work contains defect of nature which do not endanger the structural stability of the work. It may be accepted and the payment thereof shall be made to us at the reduced rates decided by the Engineer –in –Charge which will be final and binding on us. I have no objection if all the recoveries are made from any other contract executed with GMDA as well as with other Organization.

33. No payment will be made for the following problem / incidents involved at site of work: -
- a) Pumping / bailing out / dewatering of water/ waste water from the site area and excavated trenches etc.
 - b) Repairs / Replacement of various other services damaged during construction.
 - c) In case of narrow working space, shifting of excavated soil and again taking to work site for back filling.
 - d) Dismantling of metaled road / Pucca pavement.
 - e) Proper provision of barricading / centering & shuttering /lighting etc.
 - f) Earth filling or earth excavation for execution of work at site.
 - g) Lead, lift, carriage of excavated earth & disposal of the surplus earth.
 - h) The surplus earth after refilling will be spreaded in the available ROW of the tender with the formation level below 500mm of the road level as per site available or as directed by Engineer-In-Charge. It will be included the scope of work and no extra lead, lift and carriage cost will be paid.
 - i) The rate of earth work in excavation in taken for depth up to 1.50 Mtr in the BOQ whereas the same rate shall be applicable for all depth beyond 1.50 mtr and agency/contractor/bidder shall quote the rates after with consideration of all depths and no claim for any increased depth shall be admissible and entertained by the GMDA.
 - j) The contractor should ensure smooth traffic movement at all times.
 - k) The contractor shall ensure inspection of the precast culvert/drain by the Engineer-in-Charge at the factory premises before laying at site.
 - l) The contractor shall ensure that all materials, machineries, accessories, manpower etc. are available at site before execution of work as directed by the Engineer-in-Charge.
34. Prospective bidder shall quote the rates after examining the site conditions as no compensation/payment will be made on the aforesaid conditions and no claim whatsoever will be entertained by GMDA in this regard.
35. The surplus excavated earth shall be disposed off / spread at site as per site requirement or as directed by the Engineer -in -Charge. Nothing extra shall be paid on this account for any lead and lift. If it is found that agency taking the earth site to any other place without permission of the Engineer -in – Charge the recovery @ Rs. 100/- per cum shall be made from the agency.
36. In all items of cement concrete work only Ready-Mix Concrete (RMC) shall be used of approved make of cement i.e. Ambuja, Vikram, ACC, JK, Grasim, Ultratech & prior approval from Engineer –in –charge is must before procuring of concrete. All the record slips/ batch report of the concrete procured from RMC plant shall be kept in proper record in the site office and a copy of the same shall be submitted to the department along with bills.
37. The work will be open to third party inspection arranged by the Deptt. The charges for third party inspection will be borne by the Deptt. However, necessary test of material will be got carried out from Shri Ram institute and the charges will be borne by the contractor.

38. All the Designs and Drawings shall be vetted by IIT Delhi/ IIT Roorkee or any IIT shall be arranged by the agency at his own expenses. Safe bearing capacity of soil for design purposes will be carried out by contractor at his own expenses. The approved & vetted structural design and drawing will be followed at site.

39. Necessary tests will be carried out from Shri Ram Institute on at least monthly basis or as directed by Engineer-in-charge of work or any authority and the charges will be borne by the contractual agency.

40. Special Conditions (National Green Tribunal)

In order to implement the directions given by National Green Tribunal dated 26.11.14, 04.12.14 and 19.01.2015 in Original Application No. 21 of 2014 in the matter of Vardhman Kaushik V/s Union of India and Others, the directions have been received from the Chief Engineer-I GMDA Panchkula vide letter No. 2613 Dt. 05.03.2015 / other similar cases instructions will be part of DNIT/

Agreement of the contractual public works in GMDA so that the directions given by National Green Tribunal on various dates are implemented.

- a) There should be no hot mixing on the road side. During construction and maintenance of road, it shall also ensure that coal tar, bitumen and asphalt is brought in molten condition and same is neither burnt nor fire is put to melt these substances on open roads.
- b) The demolition material and construction material or transported by contractor with proper coverage and precautions, in order not to cause serious air pollution.
- c) No Govt. authority, contractor, builders would be permitted to store and dump construction material or debris on the metalled road.
- d) Such storage does not cause any obstruction to the free flow of traffic and/or inconvenience to the pedestrians. Every builder, contractor or person shall ensure that the construction material is completely covered by tarpaulin. To ensure that no dust particles are permitted to pollute the air quality as a result of such storage.
- e) The builder/contractor will be responsible and ensure that their activity does not cause any air pollution during the course of the construction and/or storage of material or construction activity shall be liable to be prosecuted under the law in force.
- f) All trucks or vehicles of any kind which are used for construction purposes and/or are carrying construction materials like cement sand and other allied material shall be fully covered dust free and/or other precautions would be taken to ensure that en-route their destination, the dust, sand or other particles are not permitted to be released in the air and/or contaminate air. Any truck which is not complying with these directions would not be permitted to enter in the NCR region.
- g) All other arrangement as per enclosed check sheet:- (Annexure A)

CHECK LIST FOR COMPLIANCE TO THE INSTRUCTIONS ISSUED BY NATIONAL GREEN TRIBUNAL:

S. No.	Directions / Orders
1	Arrangement for tarpaulin on scaffolding around the area of construction
2	Arrangement for covering stacked material to prevent dispersion in the air.
3	Arrangement to avoid dispersion of construction material during transportation.
4	Arrangement for dust omission during construction at site.
5	Arrangement of cleaning vehicle used for transportation of construction material after

	unloading
6	Arrangement of masks for the workers at construction site involved in loading, unloading, carriage of material and construction debris.
7	Arrangement of medical help and treatment for workers involved at construction site.
8	Arrangement for disposal of debris waste of the construction site to the designated dumping site.
9	Arrangement of use of wet jet in grinding and stone cutting
10	Arrangement of providing wind breaking wall around the construction site.
11	Undertaking from the contractual agency that during construction and maintenance of roads, coal tar and bitumen shall not be burnt to melt the substances on open roads
12	Undertaking from the contractor not to store and dump construction material / debris on metaled road.
13	Undertaking from the contractor that construction activity will not cause in air pollution during construction storage of material or construction activity.
14	Undertaking from the contractual agency that the work will be carried out as per the Ministry of Environment, guidelines and NGT directions and in case of violation, he shall liable to punishment as per the provision in the Law.

41. Before quoting the rates, the agency / firm will visit the site, the rates are including refilling of earth, shifting of surplus earth to suitable place as directed by Engineer -in charge including dewatering if required as per site condition etc. Nothing extra will be paid to agency.
42. Payment of shuttering / open timbering will be made as per actual work done after producing the photograph of site of work.
43. The laid Storm water will be got checked with CCTV camera for checking the levels, straightness, jointing of pipes & debris. Nothing shall be paid extra on this account.
44. The agency shall survey the project area in detail before quoting their rates for encountering the water table in the laying of pipe line & construction of manholes etc. The dewatering shall be done by the agency at his own cost. Nothing shall be paid extra. The agency shall quote their rates considering the cost of dewatering, if required at any stretch of the project area.
45. Ten percent (10%) of the agency's payment shall be withheld until complete clearance of silt, C&D waste, excess soil and any foreign material generated during execution of works from all sites. ATP/DTP shall carry out inspection of site where infrastructure works have been executed. Upon verification by the Planning and Monitoring & Inspection (M&I) team that the agency has cleared the site of all debris and restored it to proper condition, the Chief Engineer shall record in the noting that the work, including GIS tagging, has been completed satisfactorily. Only thereafter shall the balance 10% payment be released to the agency.

46. Installation of all safety measures at construction sites such as barricading, reflective lights, signages, among others, must be included in the scope of work of the contractor. If safety protocol is not followed, the agency must be blacklisted.
47. Contractors whose performance is found unsatisfactory in ongoing works shall not be technically qualified for future GMDA projects.
48. No extension of time shall be granted to agencies on account of GRAP restrictions or monsoon – related reasons. Agencies are required to plan execution schedules accordingly.

Work Specifications

a) Setup for testing of material at site

1. The contractor shall install the laboratory at site work having following machines equipment's for day tests:
(i) Machine for testing of compressive strength of cement, concrete cubes (ii) Slump test apparatus (iii) Digital weighing machines of 2kg/10kg capacity (iv) Oven (v) I.S. sieves (vi) Cube frames of size 150mm (vii) F.M. testing machine (ix) Equipment for any other routine test as directed by Engineer-in-charge.
2. All lab equipment's for field testing at site for concrete & concrete ingredient to ensure the desired results.
3. Frequency of sampling will be as per IS Code / latest PWD specification.
4. 80% test to be made at site lab and 20% test from Shri Ram Institute Delhi/ I.I.T. Delhi/ Central Building, Roorkee/ NCCB, Ballabgarh/ NIT Kurukshetra/ PEC Chandigarh/ Thapar Engineering College, Patiala or authorized 3rd party agency appointed by Engineer-In-Charge. The samples will be taken in the presence of GMDA representative and contractor representative. The material for testing will be supplied by the contractor free of cost. In case the test is failed, the test charges of all such tests will be borne by the contractor.
5. The entire work shall be open for inspection all times by the Engineer-in-charge. The contractor shall carry out all instruction given during inspection and shall ensure that the work is being carried out according to the technical specification of this tenders and technical documents furnished to him during the performance of work.
6. The contractor shall from time-to-time clear away debris and excess materials accumulated at the site.
7. The preparation of new approach road, entrance or repair existing approach road and its maintenance during the execution of the work including restoration for transportation of material etc. shall be carried out by the contractor nothing extra shall be payable on this account.
8. The surplus earth will be disposed of as desired by the Engineer-in-charge irrespective of all lead and lift. No extra pavement shall be made on this account.
9. Proper record and register will be maintained in divisional office for monitoring, execution and control on maintenance. Work as provided in the contract agreement and regular check will be done on the maintenance. Work. Monthly physical and financial report will be submitted for all such maintenance. Works for every month before the 10th day.
10. The importance of the above records, such as site order book, visual material inspection registers and register of records of tests carried out during execution by Third Party Inspection as well as department shall be bound with the contract agreement after the execution of the project. No final bill shall be finalized without maintaining records as mentioned above. Executive Engineer will be fully responsible to ensure that the above instructions are implemented strictly before making payments to the contractor failing which strict action shall be initiated in case of any breach in this regard.
11. Work shall be supervised as per latest instructions confirmed in PWD code 2009 / IS codes.

**Executive Engineer -III
Drainage Division, Infra –II,
GMDA, Gurugram**

b) SPECIAL CONDITIONS FOR THE CEMENT

1. The Cement, is in the scope of contractor & no cement will be issued by GMDA.
2. The tested cement will be arranged by the contractor / society / Agency / Firm at his own level. The cement shall be ordinary Portland – 43 grades or 53/63 as applicable duly ISI marked & confirming to ISI – 8112 with latest amendments. The contractor will have to produce all test certificates for the cement tested at manufacturer premises as per relevant IS codes by authorized representative of GMDA, before dispatch for the project of GMDA where the cement is to be used by the contractor.
3. The cement manufactured by mini cement plants shall not be used.
4. The cement shall be purchased from Authorized Distributor or Manufacturer or Authorized Dealer.
5. The tested cement arranged by the contractor / Agency will be brought at site & shall be kept in the store maintained at site.
6. The contractor / agency will inform the Executive Engineer / Sub Divisional Engineer for the quantity of the cement brought at site with bill / challan in the name of that agency before using that cement & Executive Engineer –in –charge or his authorized representative may check the actual receipt of cement at site.
7. The Engineer – in – charge or his authorized representative may, if need be, also send the cement for testing to any Government Lab / reputed Lab. The samples of the cement will be collected as per BIS specifications in the presence of the contractor / agency or his authorized representative. In case the cement is found as per specifications then the cost of testing will be borne by the GMDA, but in case the cement sample fails to meet the BIS requirements, then appropriate action as per Contract Agreement will be taken. The cost on the testing of cement along with any loss caused to GMDA shall also be recovered from the contractor / Agency & no claim in this respect will be entertained.
8. The stock of cement at site shall not be more than one month consumption & only sufficient quantities shall be kept to ensure continuity of the work.
9. The cement consumption register showing date of cement brought at site by the Contractor / Agency & its day-to-day utilization will be maintained. The said register shall be open to inspection by representatives of the Engineer –in – Charge during his visit at site. The said register will be issued by office of concerned Sub Divisional Engineer under his dated signature for each agreement separately. The register will also contain the columns for work executed against the cement issued.
10. Quality check register will be maintained at site & regular sampling of work executed every month shall be recorded in the same.
11. Cement required for the use on the work will have to be arranged by the contractor / firm out of his own sources & no condition will be quoted & entertained in this respect.
12. The contractor shall make suitable arrangements of storage of the cement, required and Engineer –in – Charge or his representative shall have the authority, at all times to inspect the storage arrangement & to suggest modifications & improvements if any, & the contractor shall comply with the same.

**Executive Engineer -III
Drainage Division, Infra –II,
GMDA, Gurugram**

CEMENT REGISTER

(to be maintained jointly by the department & contractor)

Date	Qty. Recd.	Source of receipt indent/ permit / gate pass no.	Progressive total	Qty. Issued	Item of work	Qty. returned at the end of day	Actual consumption	Daily balance	J.E's initials	Signature of contractor / bidder / representative	Check SDE / EE
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12

**Executive Engineer -III
Drainage Division, Infra –II,
GMDA, Gurugram**

c) SPECIAL CONDITIONS FOR THE STEEL

- i) Steel will be procured by the contractor and following condition must be fulfilled while arranging the steel.
- ii) The steel Fe-500 to be purchased confirming to IS 1786:2000 and mild steel shall be confirming to IS 432 (Part-1) 1766 with latest amendments (for HYSD basis, TMT basis will be used)
- iii) The steel shall be purchased from those firms which are authorized manufacture of steel as per HSR
- iv) The contractor/ firms will give a documentary proof showing the detail of manufacture. The appropriate sample of the consignment of steel procured by the contractor / firms shall be got tested from any approved laboratory. The cost of the test shall be borne by the contractor.
- v) The contractor/ firm will submit a documentary proof showing the test report of the manufacturer of the lot purchased by him.

IMPORTANT NOTE:-

Steel required for the use on the work will have to be arranged by the contractor / firm out of his own sources and no condition will be quoted and entertained in this respect.

Charge or his Representative shall have the authority, at all times to inspect the storage arrangements and to suggest modifications and improvements if any, and the contractor shall comply with the same.

All steel used in the reinforcement shall be designed in accordance with IS 456-2000 and IS 3370 (Part-I &II) 2009 and up to the date amendments for steel as per IS 1786-2000 (with up to date amendments)

All used in the reinforcement shall be tested and test report submitted for examination to the Engineer-in-charge.

The steel used shall be rolled reformed bars, FE-500 D grade, confirming to IS No. 1786-2000 of appropriate permissible stresses.

**Executive Engineer -III
Drainage Division, Infra –II,
GMDA, Gurugram**

STEEL REGISTER

(To be maintained jointly by the department & contractor)

Date	Qty. Recd.	Source of receipt indent/ permit / gate pass no.	Progressive total	Qty. Issued	Item of work	Qty. returned at the end of day	Actual consumption	Daily balance	J.E's initials	Signatur e of contracto r / bidder / represent ative	Check SDE / EE
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12

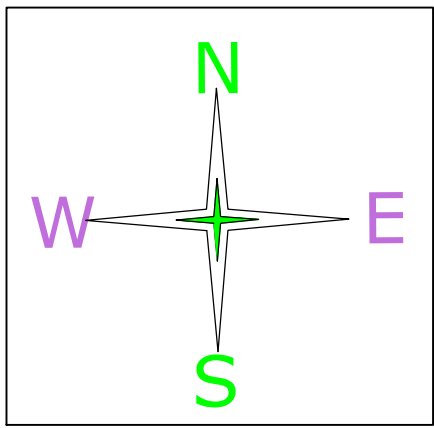
**Executive Engineer -III
Drainage Division, Infra –II,
GMDA, Gurugram**

**LIST OF APPROVED MAKES
CIVIL WORK**

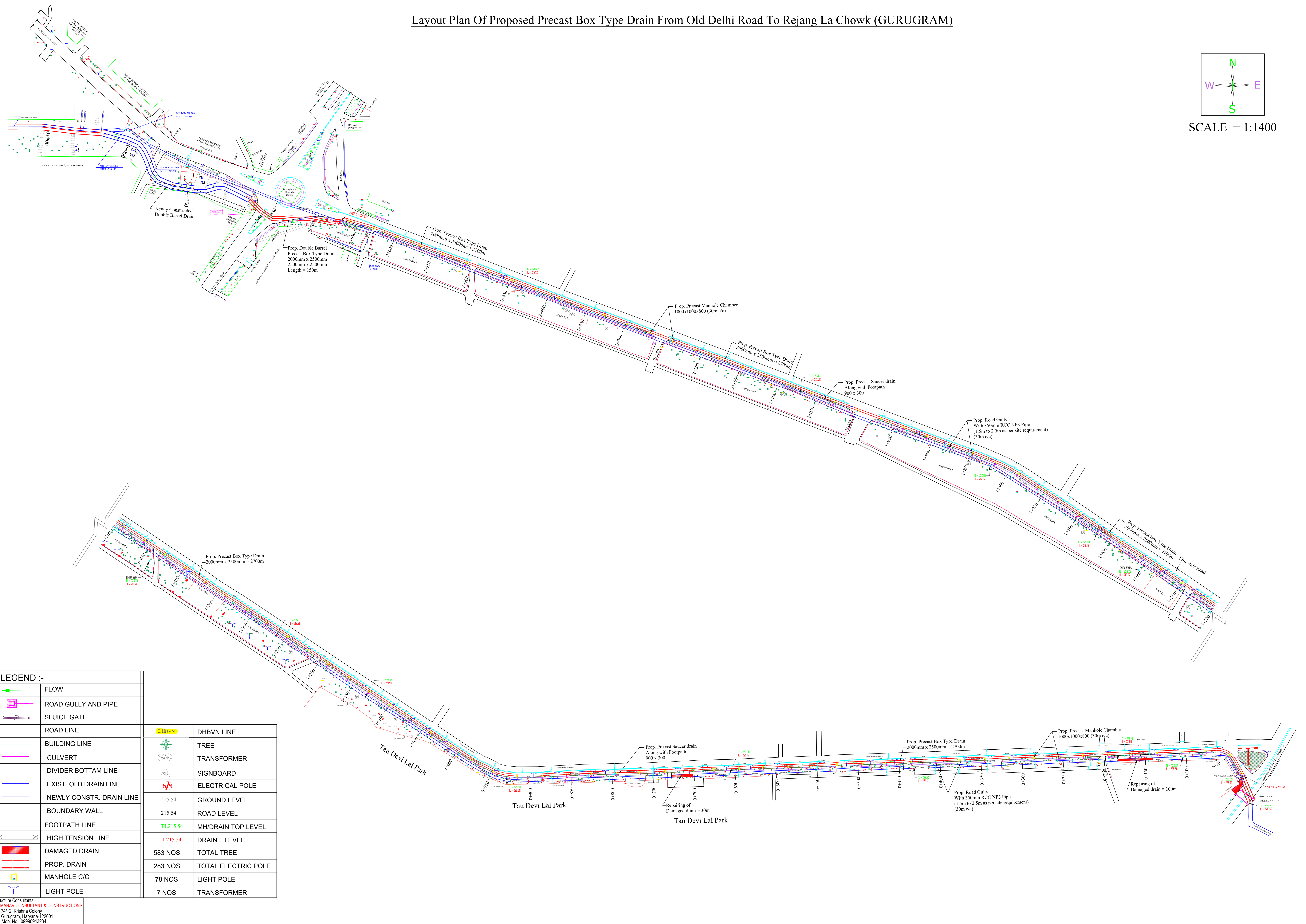
Sr, No.	Materials	Approved Makes
1	Structural Steel Sections	SAIL, TISCON, RINI, Electro Steels, JWS Steel and Jindal Steel.
2	Ordinary Portland Cement (Grey) Grade-43	Ambuja, Vikram, ACC, JK, Grasim, Ultratech
3	Reinforcement Steel Fe-500	SAIL, TISCO, RINL, Electro Steels, JSW Steel and Jindal Steel.
4	RCC NP-3/NP-4 Class pipes 200mm - 1800mm i/d	IS 458-1980 with latest amendments ISI marked.
5	SFRC Manhole cover & frame extra heavy duty	IS 12592-1991 with latest amendments ISI marked
6	MS pipe	SAIL/TATA/WELSPUN/JINDAL

**Executive Engineer -III
Drainage Division, Infra –II,
GMDA, Gurugram**

Layout Plan Of Proposed Precast Box Type Drain From Old Delhi Road To Rejang La Chowk (GURUGRAM)



SCALE = 1:1400

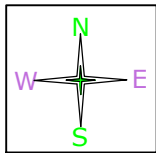


LEGEND :-	
	FLOW
	ROAD GULLY AND PIPE
	SLUICE GATE
	ROAD LINE
	BUILDING LINE
	CULVERT
	DIVIDER BOTTAM LINE
	EXIST. OLD DRAIN LINE
	NEWLY CONSTR. DRAIN LINE
	BOUNDARY WALL
	FOOTPATH LINE
	HIGH TENSION LINE
	DAMAGED DRAIN
	PROP. DRAIN
	MANHOLE C/C
	LIGHT POLE

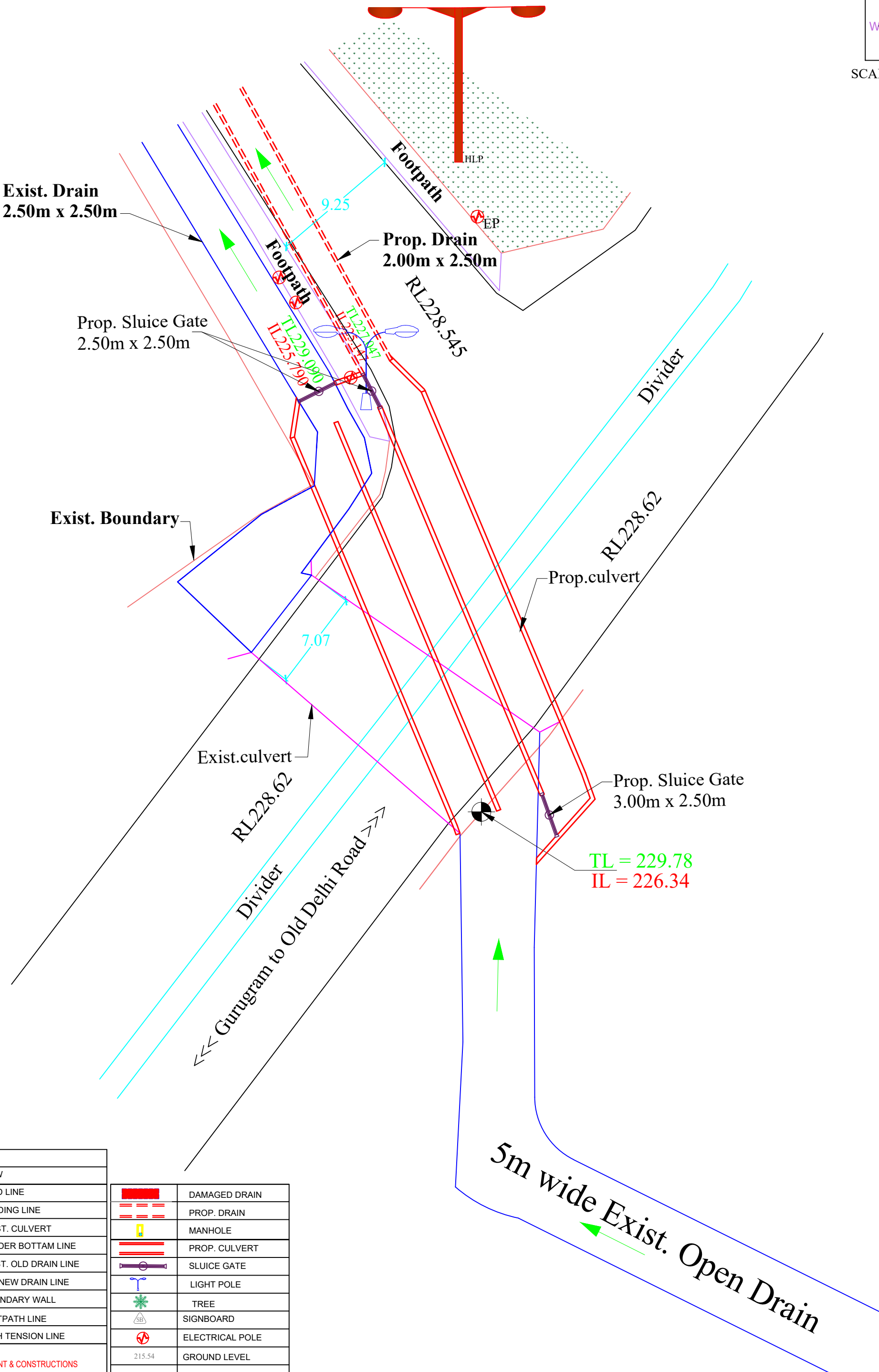
	DHBNV LINE
	TREE
	TRANSFORMER
	SIGNBOARD
	ELECTRICAL POLE
215.54	GROUND LEVEL
215.54	ROAD LEVEL
TL215.54	MH/DRAIN TOP LEVEL
IL215.54	DRAIN I. LEVEL
583 NOS	TOTAL TREE
283 NOS	TOTAL ELECTRIC POLE
78 NOS	LIGHT POLE
7 NOS	TRANSFORMER

Structure Consultants:-
MANAV CONSULTANT & CONSTRUCTIONS
74/12, Krishna Colony
Gurugram, Haryana-122001
Mob. No.: 09950943234
Email id: vssain1957@gmail.com

Layout Plan of Proposed Culvert on Gurugram to Old Delhi Road



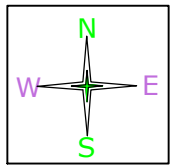
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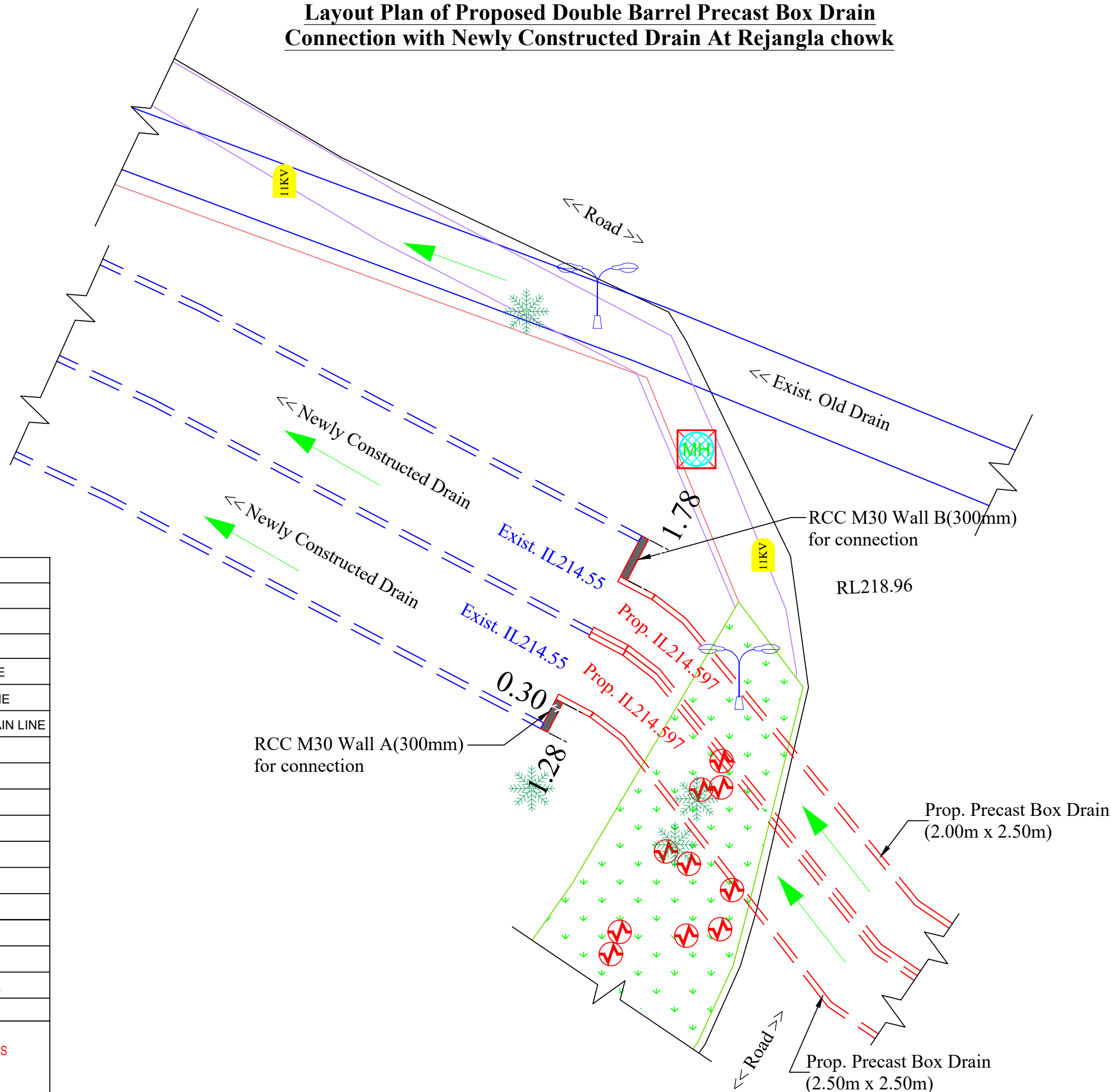
LEGEND :-	
	FLOW
	ROAD LINE
	BUILDING LINE
	EXIST. CULVERT
	DIVIDER BOTTAM LINE
	EXIST. OLD DRAIN LINE
	U/C NEW DRAIN LINE
	BOUNDARY WALL
	FOOTPATH LINE
	HIGH TENSION LINE
Structure Consultants:- MANAV CONSULTANT & CONSTRUCTIONS 74/12, Krishna Colony Gurugram, Haryana-122001 Mob. No.: 09990943234 Email Id: vssaini1957@gmail.com	

	DAMAGED DRAIN
	PROP. DRAIN
	MANHOLE
	PROP. CULVERT
	SLUICE GATE
	LIGHT POLE
	TREE
	SIGNBOARD
	ELECTRICAL POLE
215.54	GROUND LEVEL
215.54	ROAD LEVEL
TL215.54	MH/DRAIN TOP LEVEL
IL215.54	DRAIN I. LEVEL

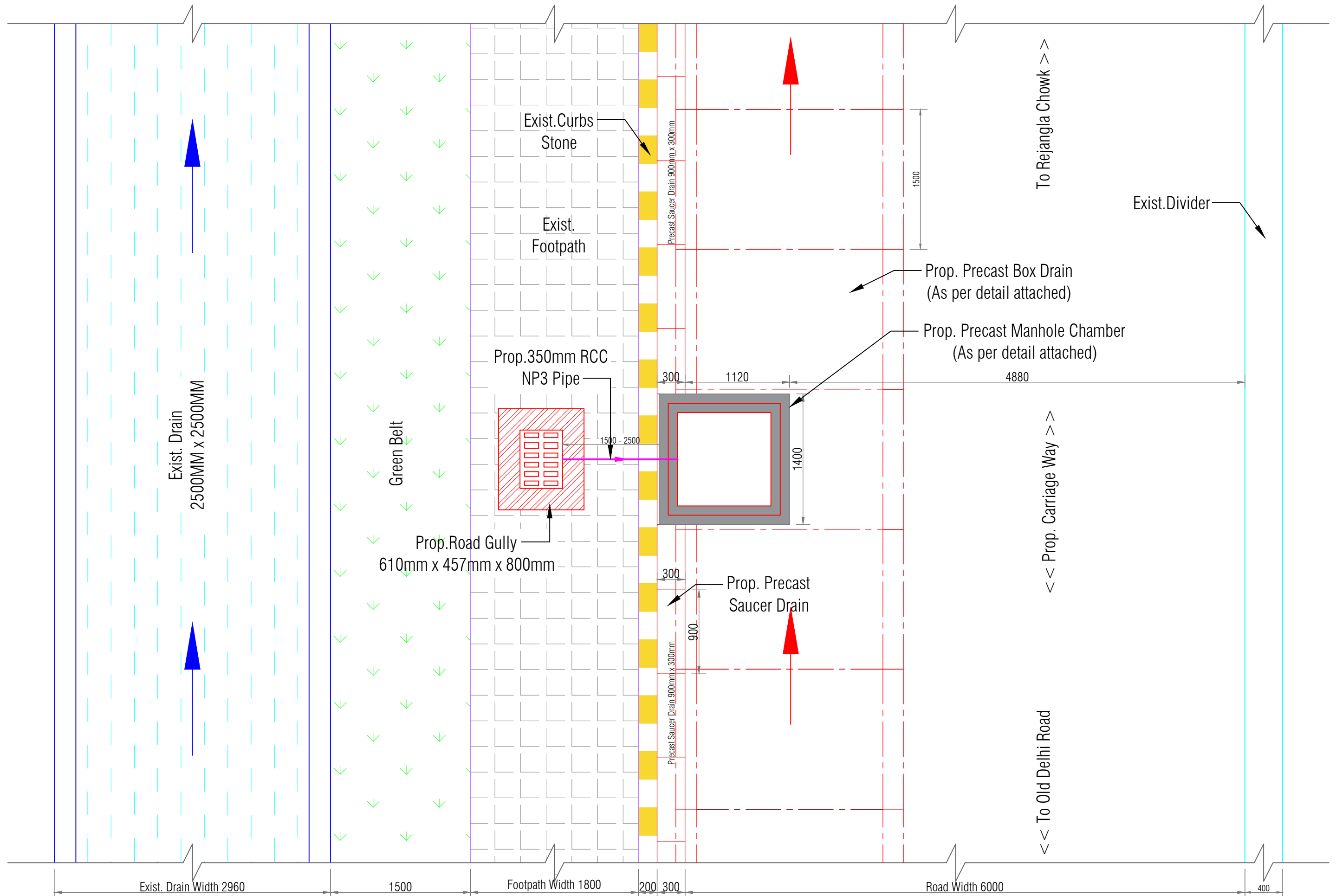
**Layout Plan of Proposed Double Barrel Precast Box Drain
Connection with Newly Constructed Drain At Rejangla chowk**



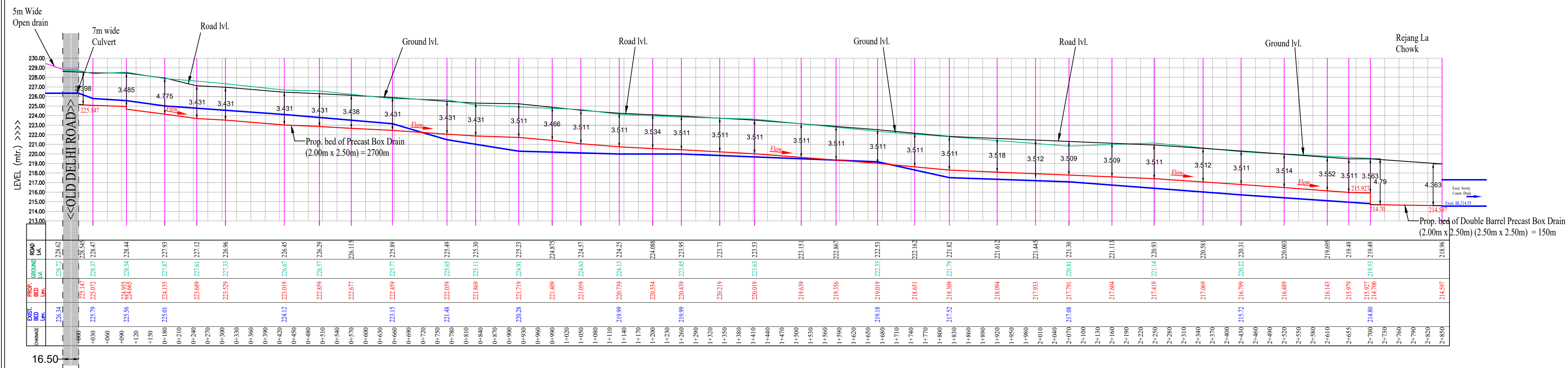
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LAYOUT PLAN OF PROPOSED PRECAST BOX DRAIN SHOWING PROPOSED UTILITY (FROM OLD DELHI ROAD TO REJANGLA CHOWK)



L- section of Prop. Box type drain from Old Delhi road to Rejang La Chowk (Gurugram)

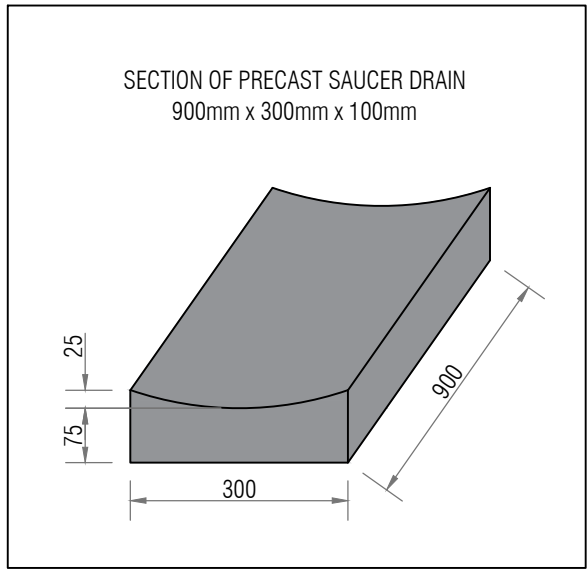


	ROAD LEVEL
	GROUND LEVEL
	EXIST. INVERT LEVEL
	PROP. INVERT LEVEL

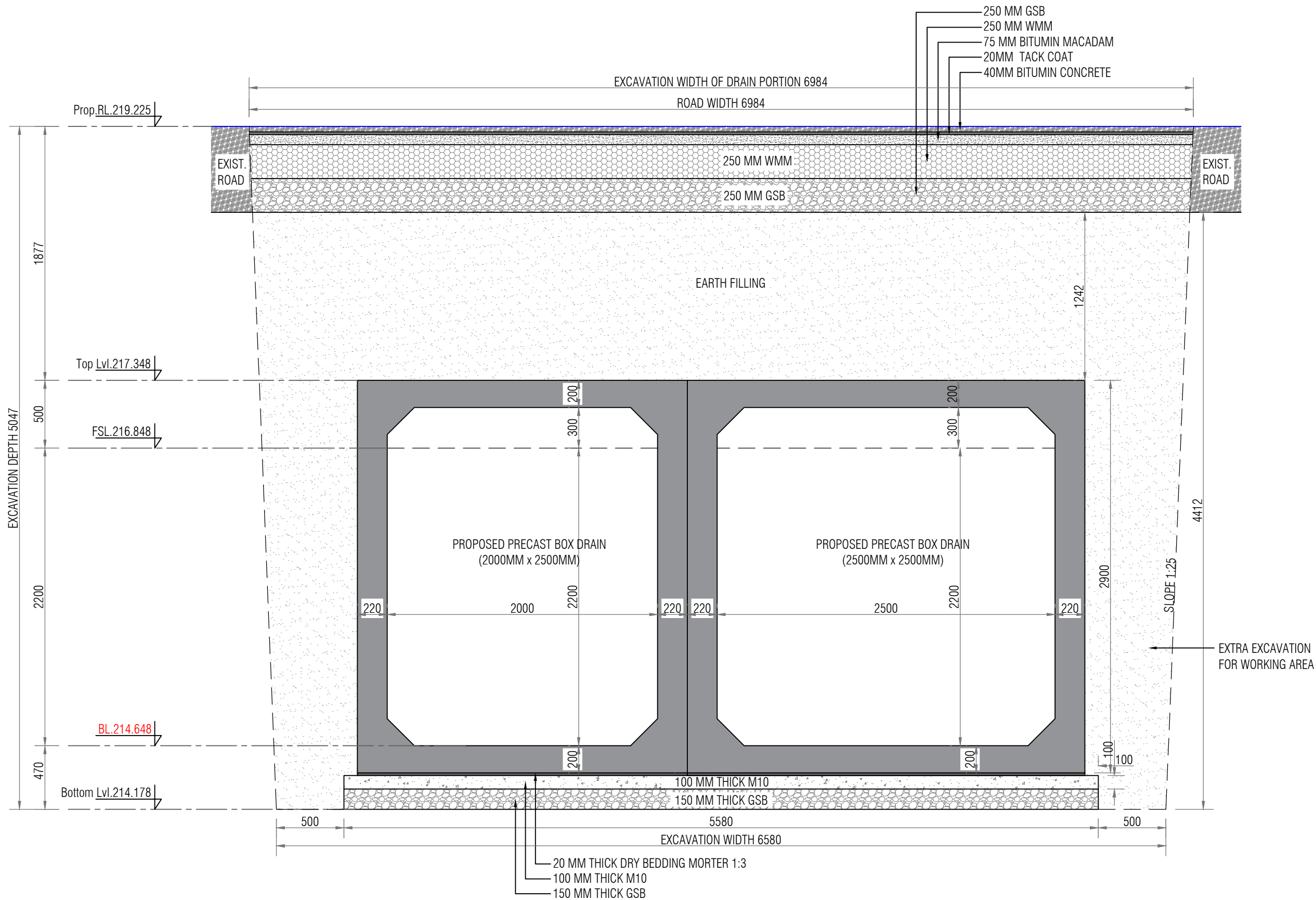
Size of Prop. Drain	2.00m x 2.20m + 0.30FB
Length	2700m
Capacity	12.72m ³ /s (449.20cusec)
Location	Old Delhi road to Rejangla chowk under road

Size of Prop. Drain	Double Barrel (2.00m x 2.20m + 0.30FB) (2.50m x 2.20m + 0.30FB)
Length	150m
Capacity	25.37m ³ /s (896.10cusec)
Location	At Rejangla chowk under road

Structure Consultants:-
MANAV CONSULTANT & CONSTRUCTIONS
 74/12, Krishna Colony
 Gurugram, Haryana-122001
 Mob. No.: 09990943234
 Email Id: vssaini1957@gmail.com



1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED.
2. ALL CONCRETE WILL BE PRECAST AT PLANT UNDER SPECIFIED MIXING AND CURING CONDITION.
3. GRADE OF CONCRETE IS M50.



NOTES

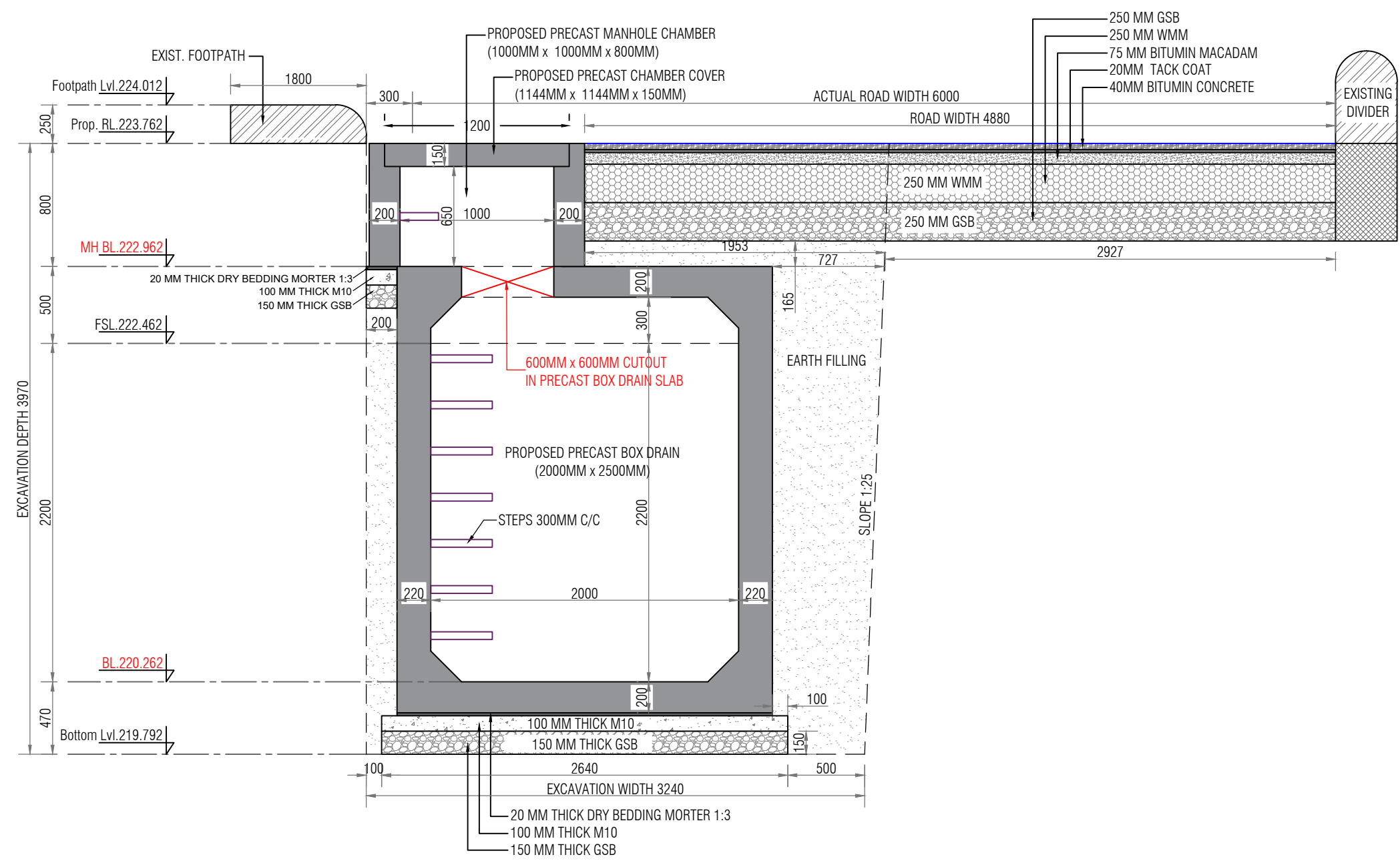
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED.
2. ALL CONCRETE WILL BE PRECAST AT PLANT UNDER SPECIFIED MIXING AND CURING CONDITION.
3. GRADE OF CONCRETE IS M50.

REV.	DATE	DESCRIPTION	APPROVED
CLIENT			
GURUGRAM METROPOLITAN DEVELOPMENT AUTHORITY (GMDA)			
PROJECT			
Construction of RCC Box Type Master Strom water Drain (with Precast Box) and renovation of existing Drain from old Delhi Road to Rezangla Chowk Gurugram,under GMDA.			
DESIGN CONSULTANT:-			
MANAV CONSULTANT & CONSTRUCTIONS			
74/12, Krishna Colony Gurugram, Haryana-122001 Mob. No.: 09990943234 Email Id: vssaini1957@gmail.com			
DRAWING TITLE:			
SECTION OF PROPOSED DOUBLE BARREL PRECAST BOX DRAIN AT REJANGLA CHOWK (SIZE = 2000MM x 2500MM) AND (SIZE = 2500MM x 2500MM)= 150M LENGTH			
DRAWN:		CHECKED:	
DATE:		APPROVED:	
SIZE :		SCALE : NOT TO SCALE	
DRAWING NO:			

PROPOSED PRECAST MANHOLE CHAMBER
(1000MM x 1000MM x 800MM)

PROPOSED PRECAST BOX DRAIN
(2000MM x 2500MM) UNDER ROAD

PLAN OF MANHOLE

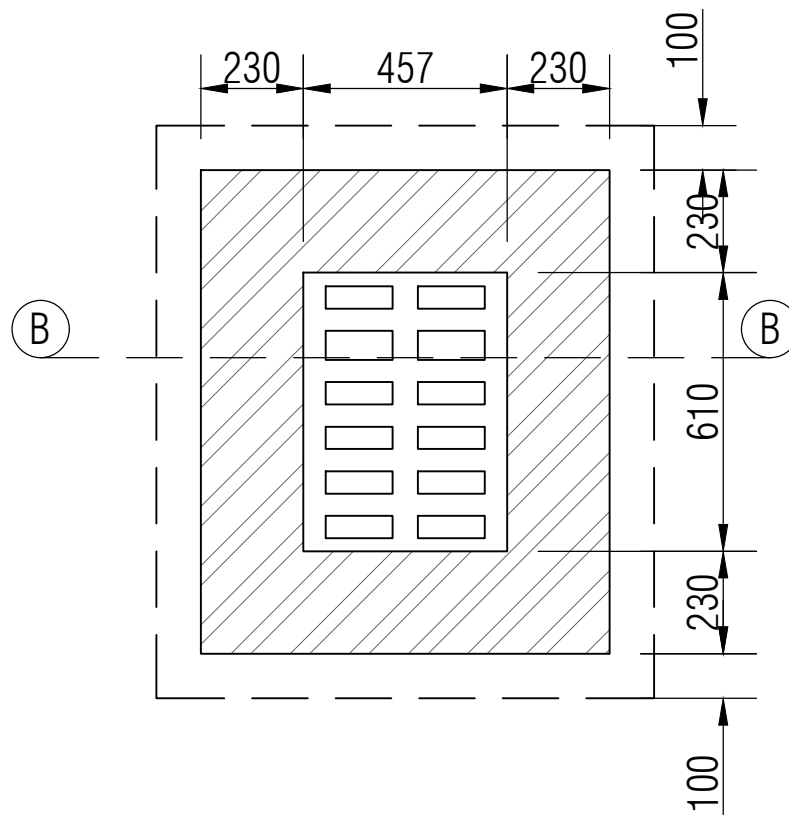


SECTION A-A

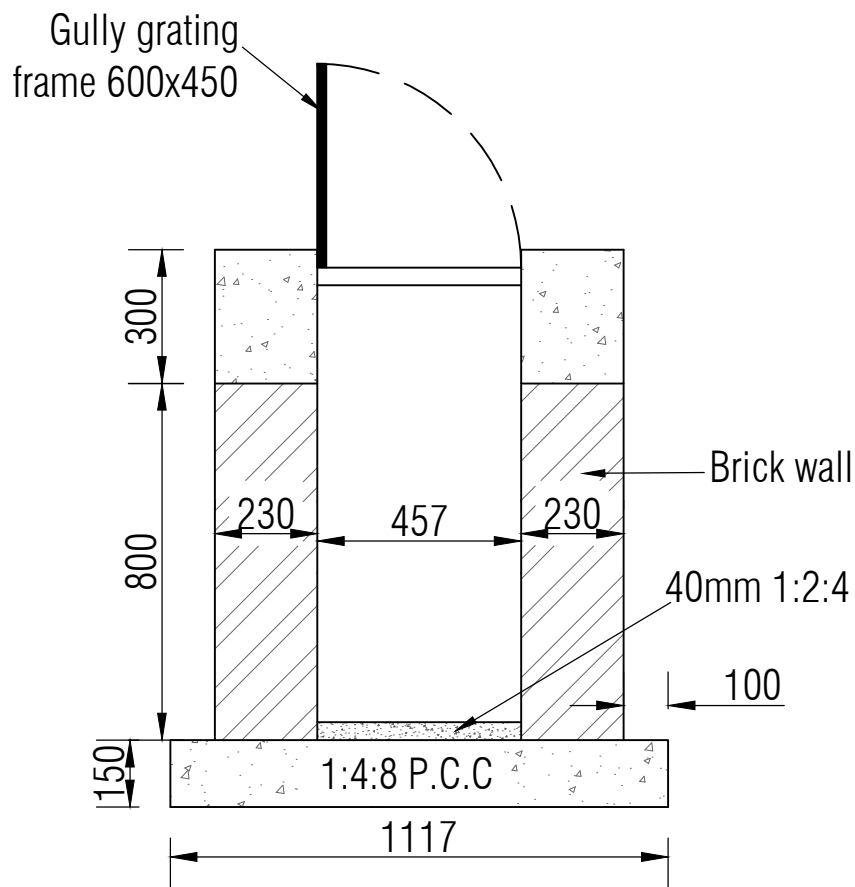
NOTES

1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED.
2. ALL CONCRETE WILL BE PRECAST AT PLANT UNDER SPECIFIED MIXING AND CURING CONDITION.
3. GRADE OF CONCRETE IS M50.

REV.	DATE	DESCRIPTION	APPROVED
CLIENT			
GURUGRAM METROPOLITAN DEVELOPMENT AUTHORITY (GMDA)			
PROJECT			
Construction of RCC Box Type Master Strom water Drain (with Precast Box) and renovation of existing Drain from old Delhi Road to Rezangla Chowk Gurugram,under GMDA.			
DESIGN CONSULTANT:-			
MANAV CONSULTANT & CONSTRUCTIONS			
74/12, Krishna Colony Gurugram, Haryana-122001 Mob. No.: 09990943234 Email Id: vssaini1957@gmail.com			
DRAWING TITLE:			
PLAN AND SECTION OF PROPOSED PRECAST MANHOLE CHAMBER ON PROPOSED PRECAST BOX DRAIN (SIZE - 1000MM x 1000MM x 800MM) = 90 NOS.			
DRAWN:		CHECKED:	
DATE:		APPROVED:	
SIZE :		SCALE : NOT TO SCALE	
DRAWING NO:			



ROAD GULLY PLAN 610x457



SECTION A-A