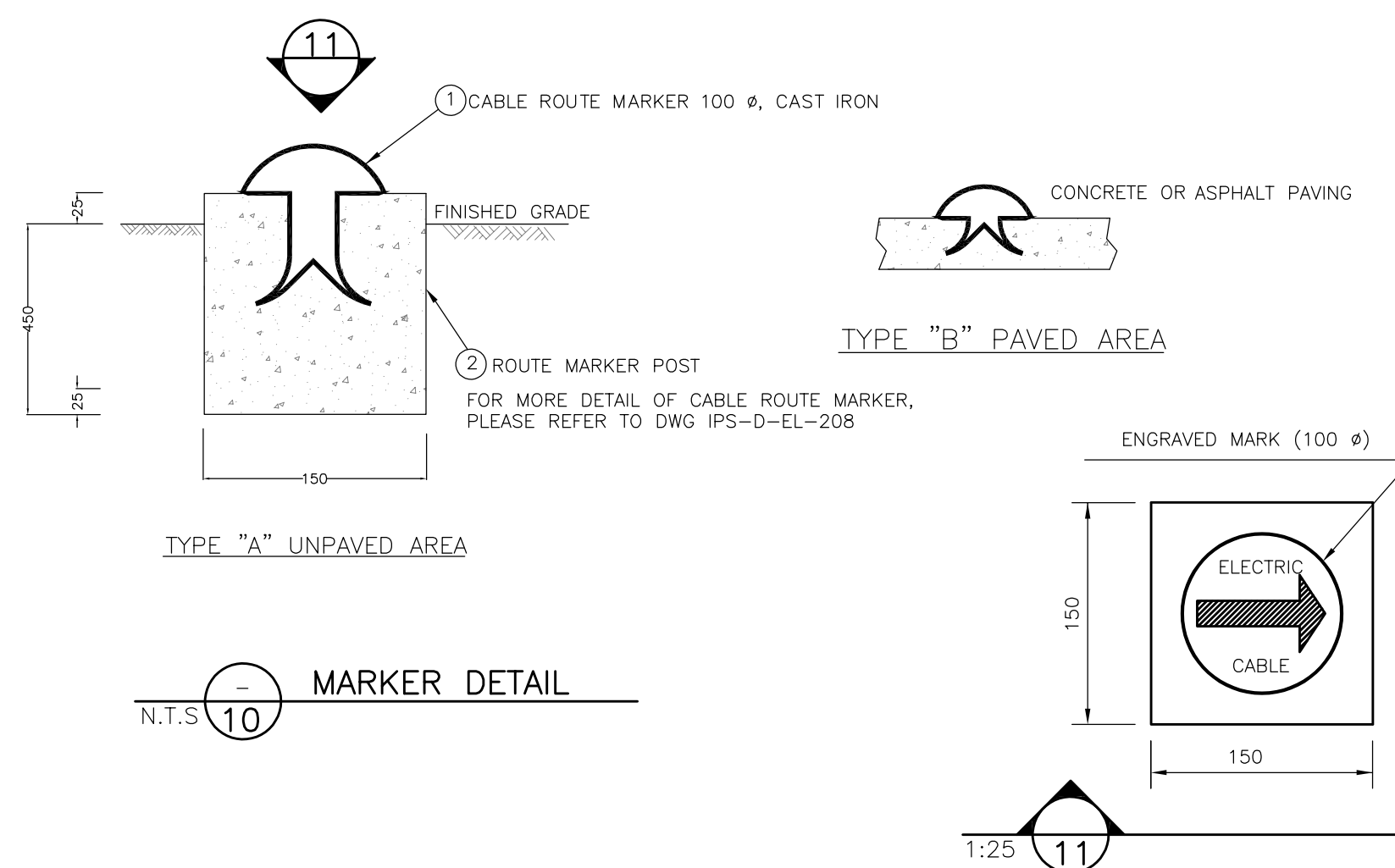
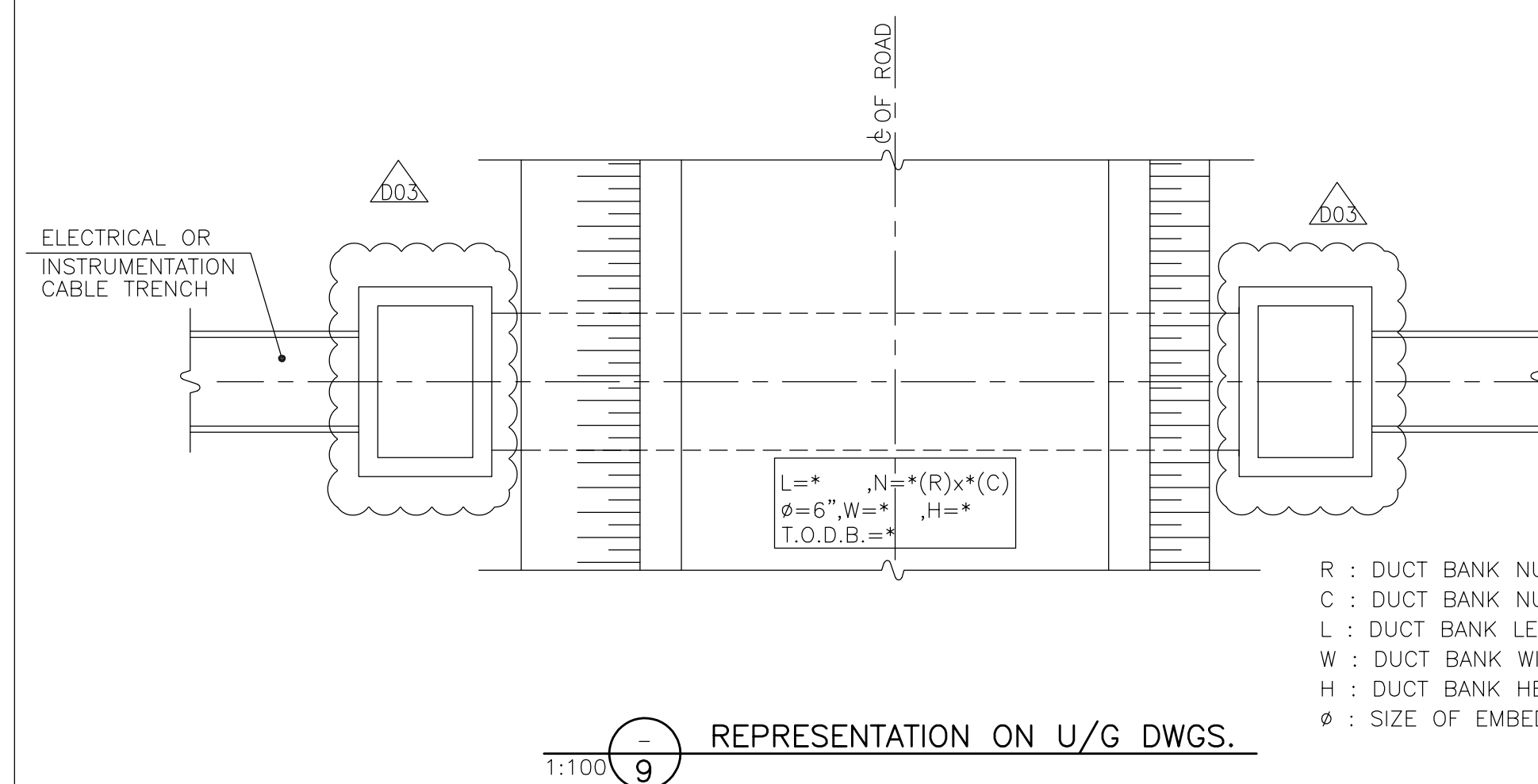
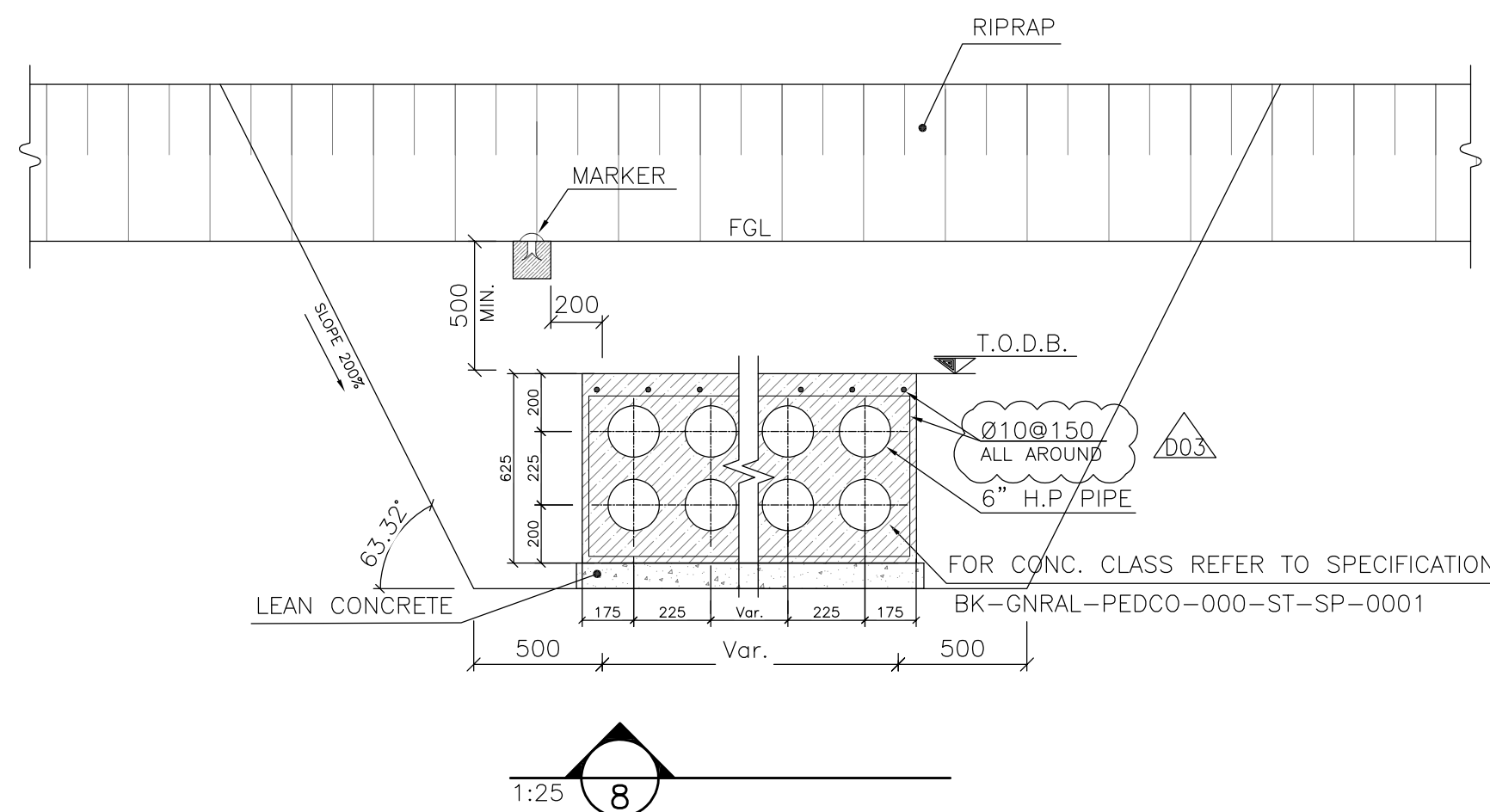
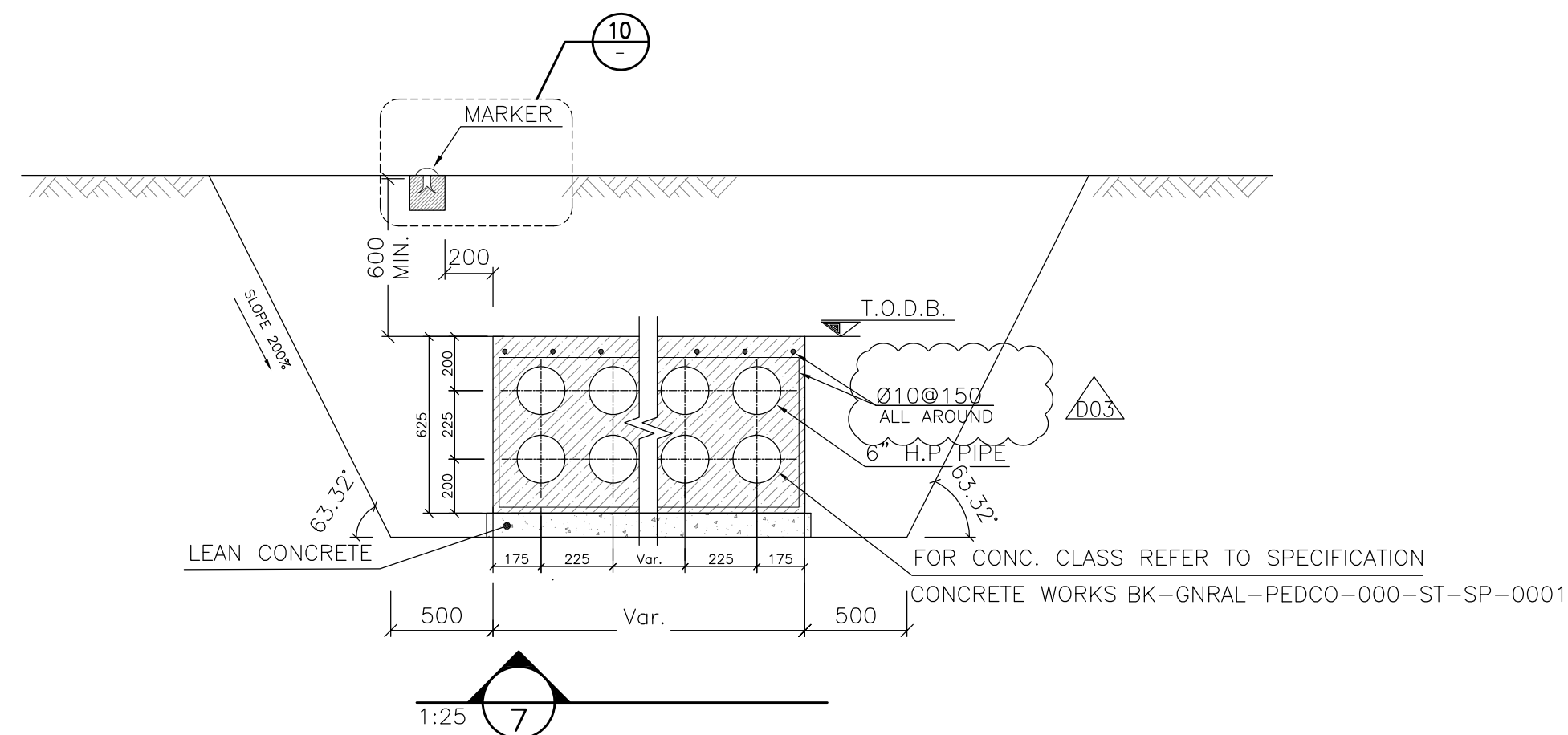
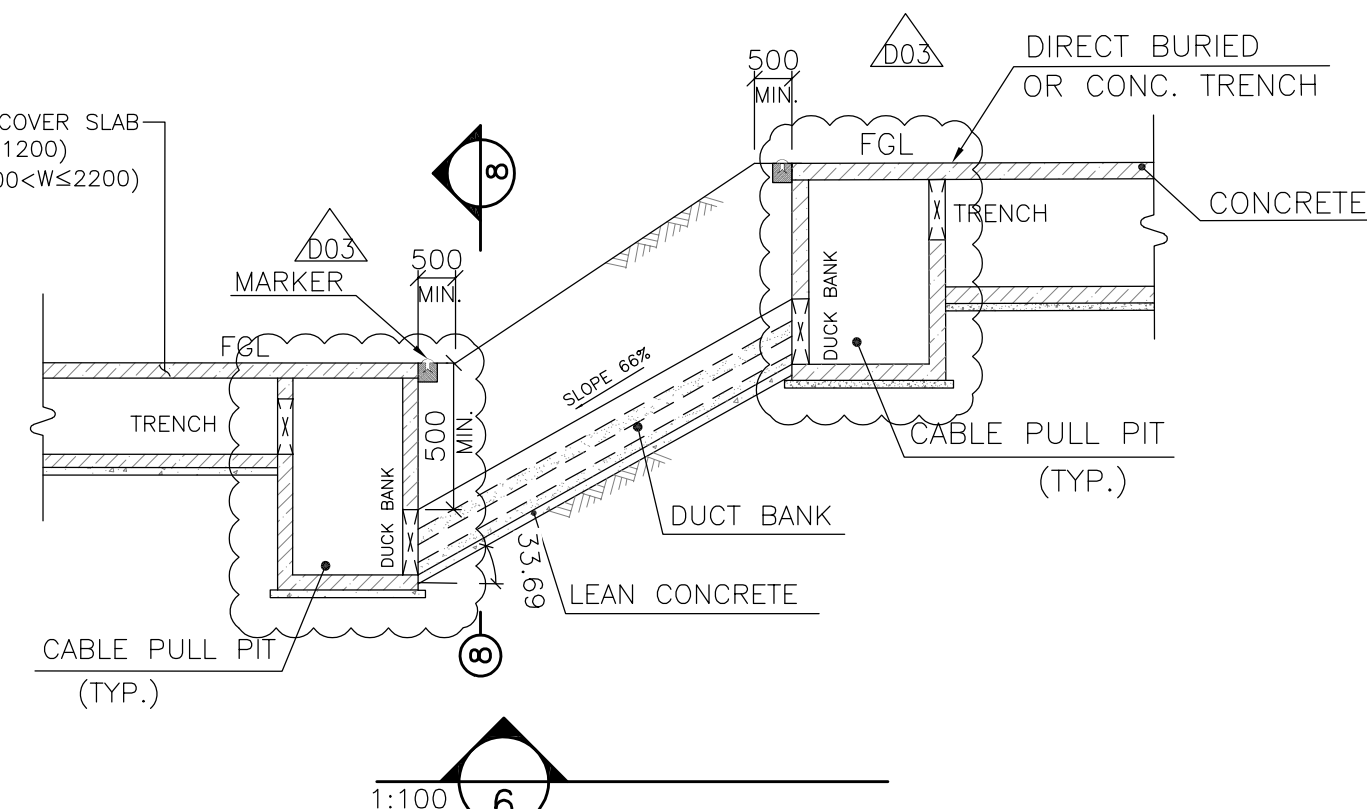
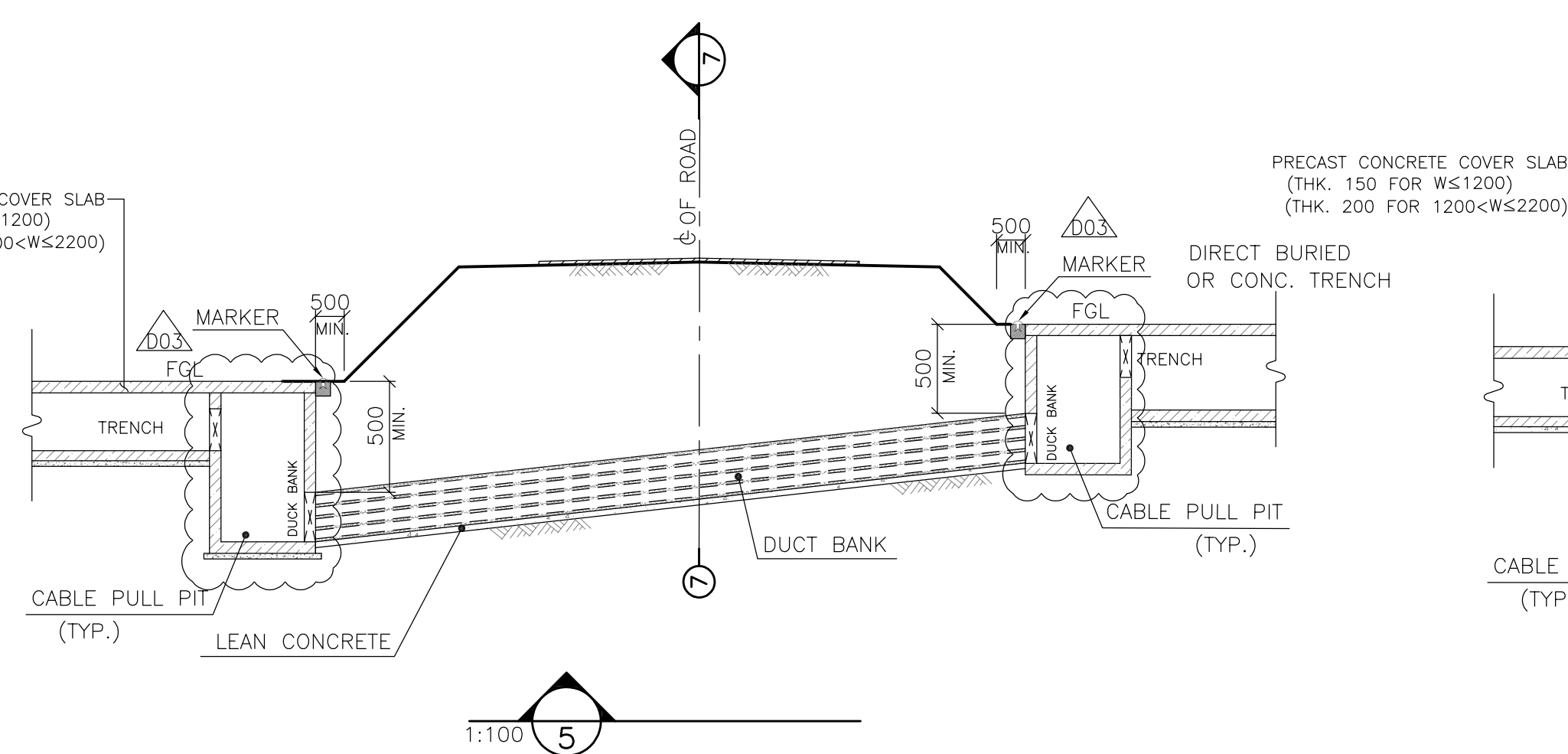
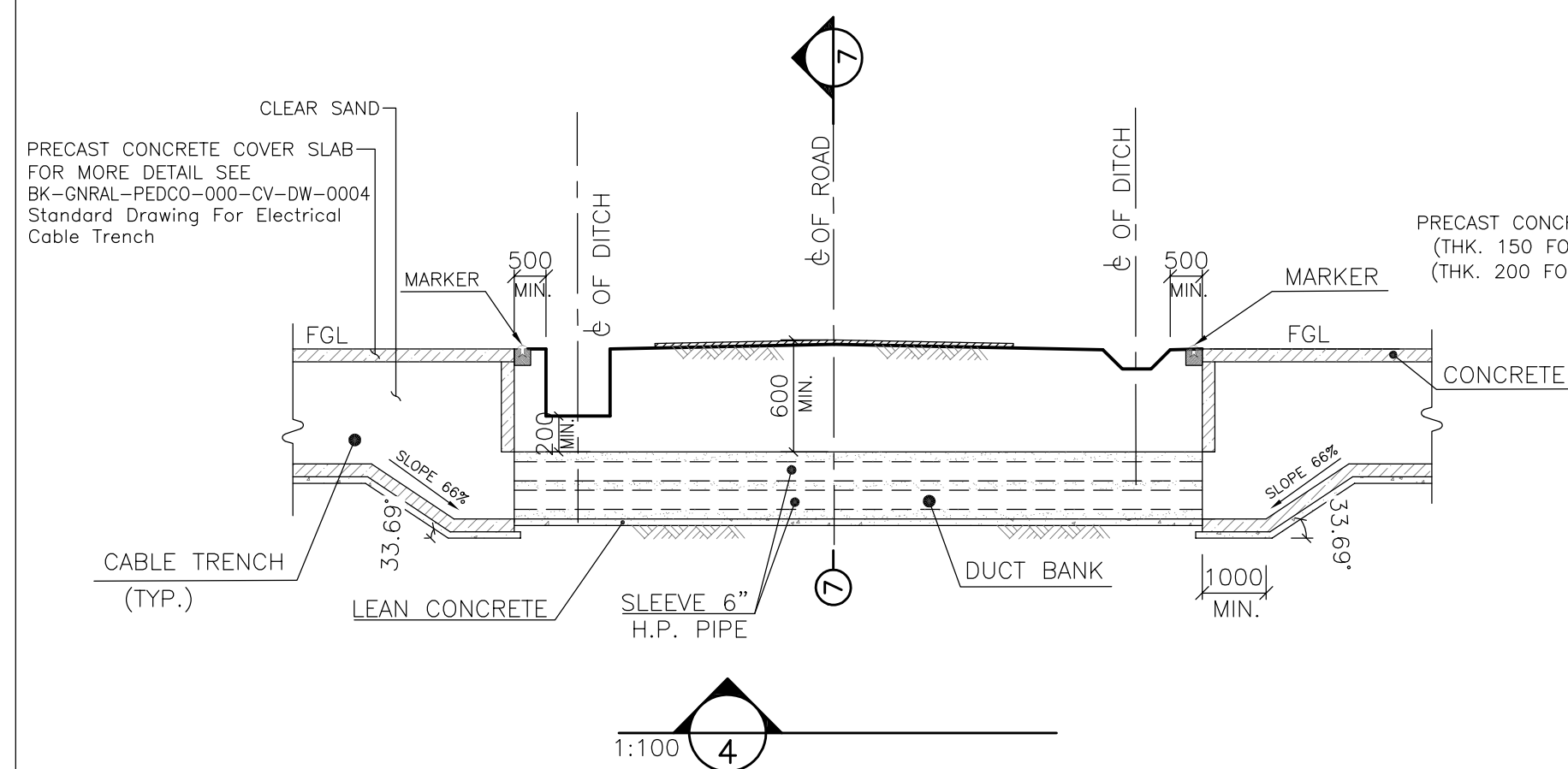
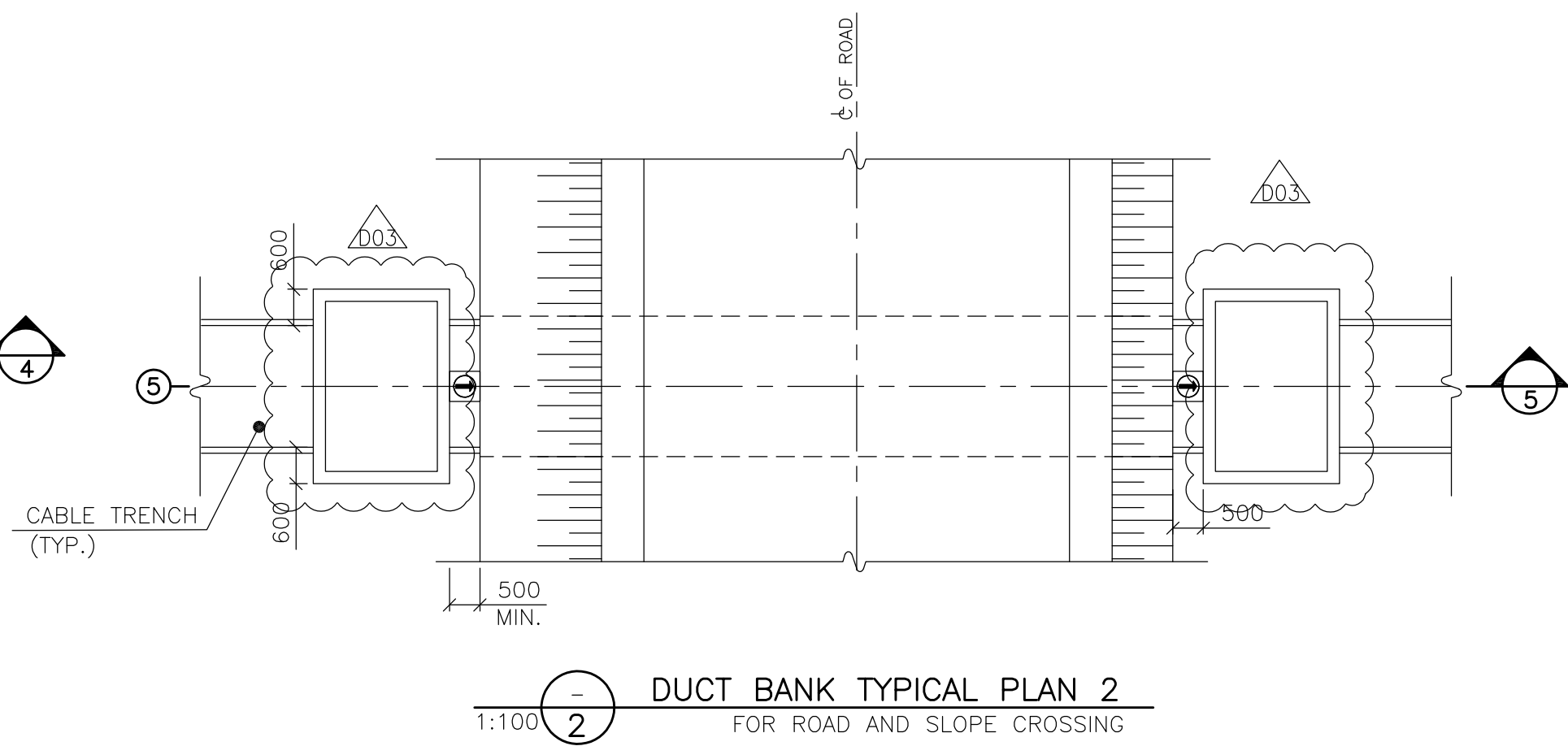




- ### LEGEND AND ABBREVIATION

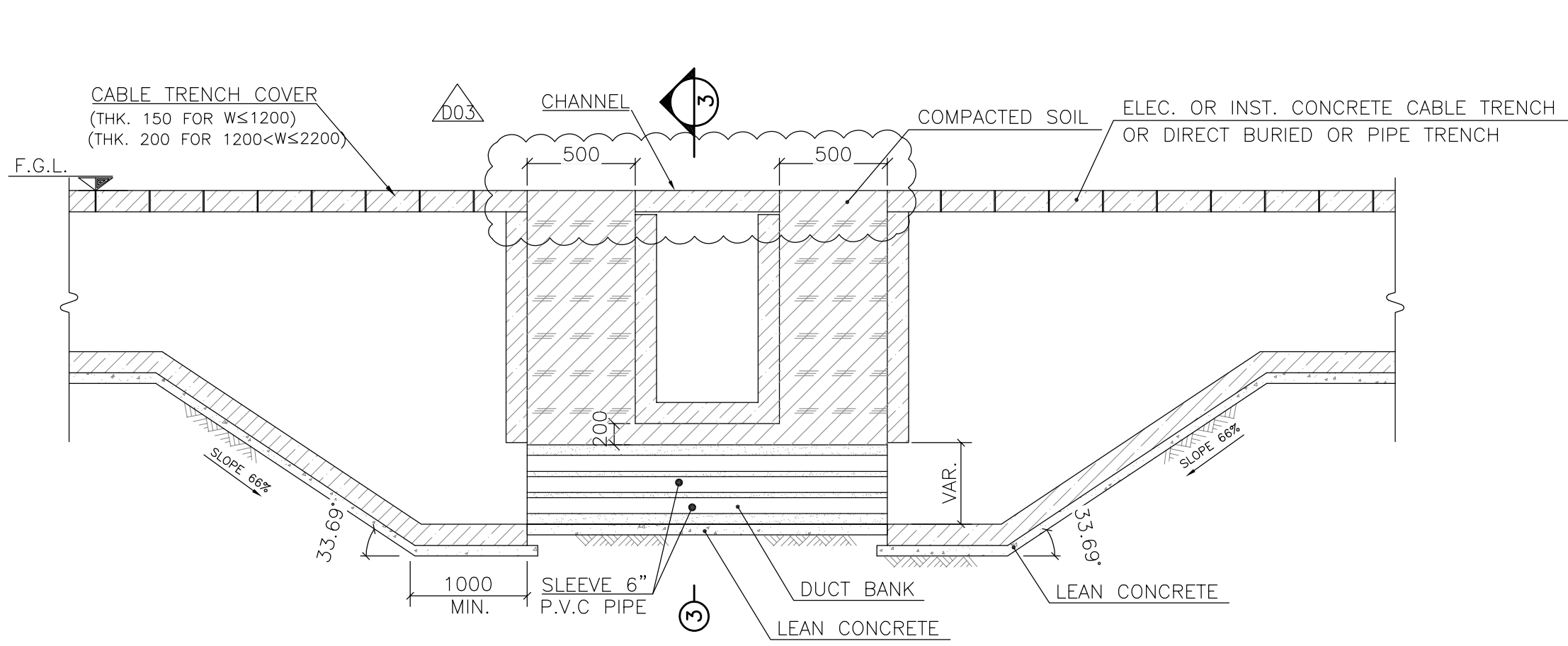
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	LEAN CONCRETE		BASE
	BACKFILL		SUB BASE
	GRAVEL		COMPACTED SOIL
	SUB GRADE		SOFT SOIL
	SLOPE		

U/G	UNDERGROUND	T.O.R.	TOP OF ROAD
T.O.D.B.	TOP OF DUCT BANK		
F.G.L.	FINISHED GRADING LEVEL		
CL	CENTER LINE		
W	WIDTH OF TRENCH		
OD	OUTER DIAMETER		

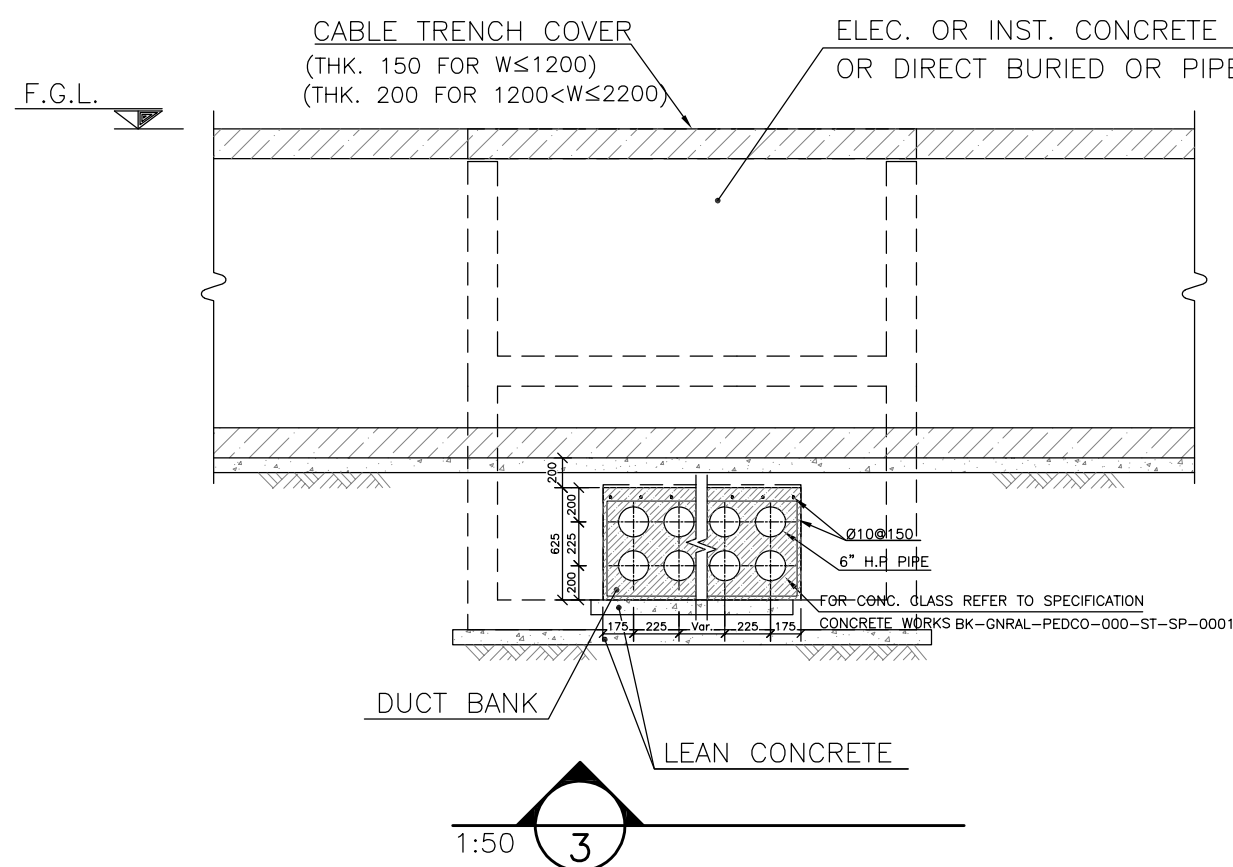
REFERENCE: DRAWING	DRG. No.
GENERAL NOTES - REINFORCED CONCRETE STRUCTURES	BK-GRNAL-PEDCO-000-ST-DW-0012
Standard Drawing For Electrical Cable Trench	BK-GRNAL-PEDCO-000-CV-DW-0004
Standard Details of Miscellaneous Items	BK-GRNAL-PEDCO-000-CV-DW-0040
Standard Drawing For Cable Pull Pit	BK-GRNAL-PEDCO-000-CV-DW-0020
Road, Paving And Plant Finish Grading Layout & Sections	BK-GCS-PEDCO-120-CV-PY-0005
Plant Underground Composite Layout	BK-GCS-PEDCO-120-CV-PY-0006

KEY PLAN

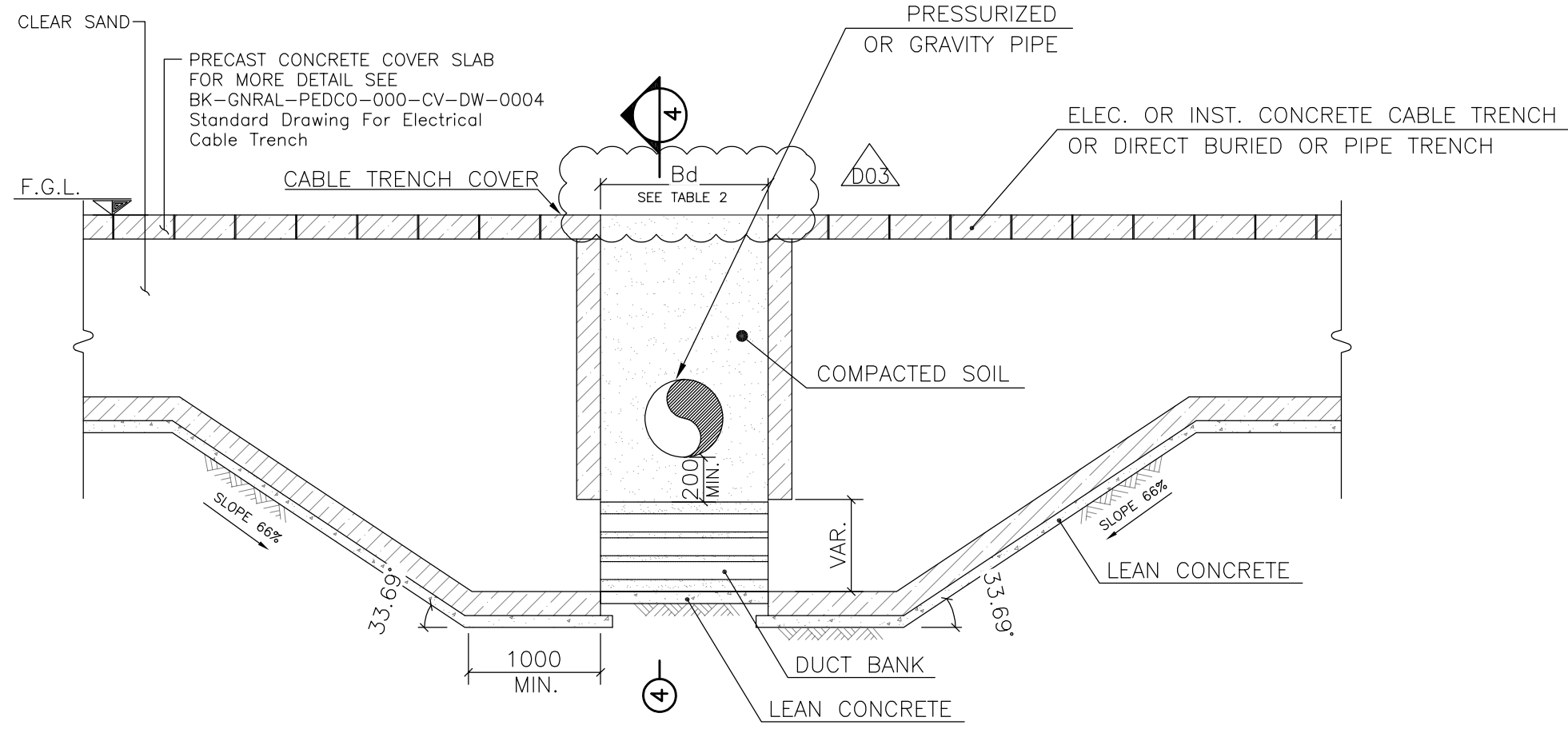
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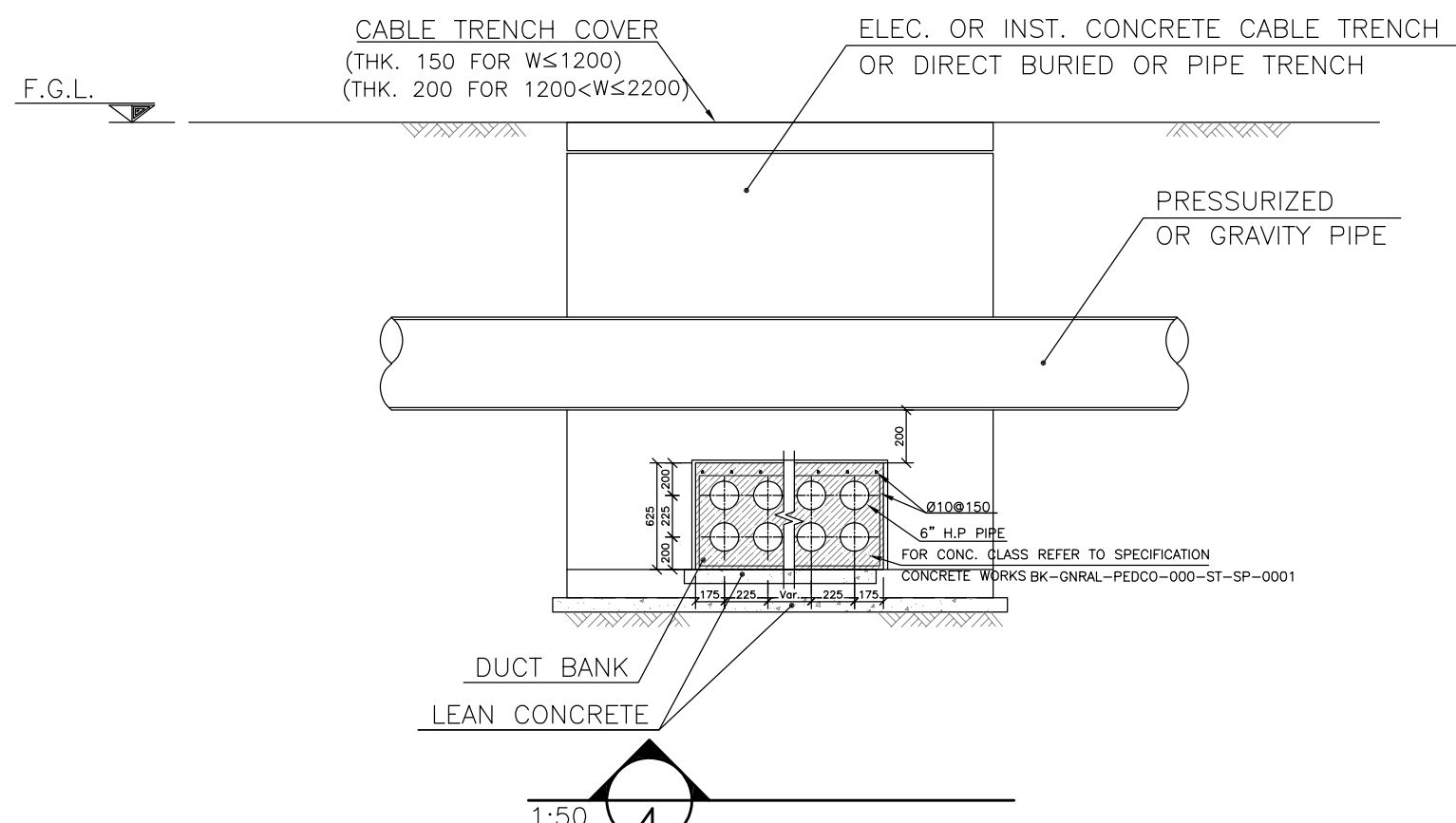
1:50 **1** TYPICAL CROSSING SECTION FOR TRENCH CROSSING



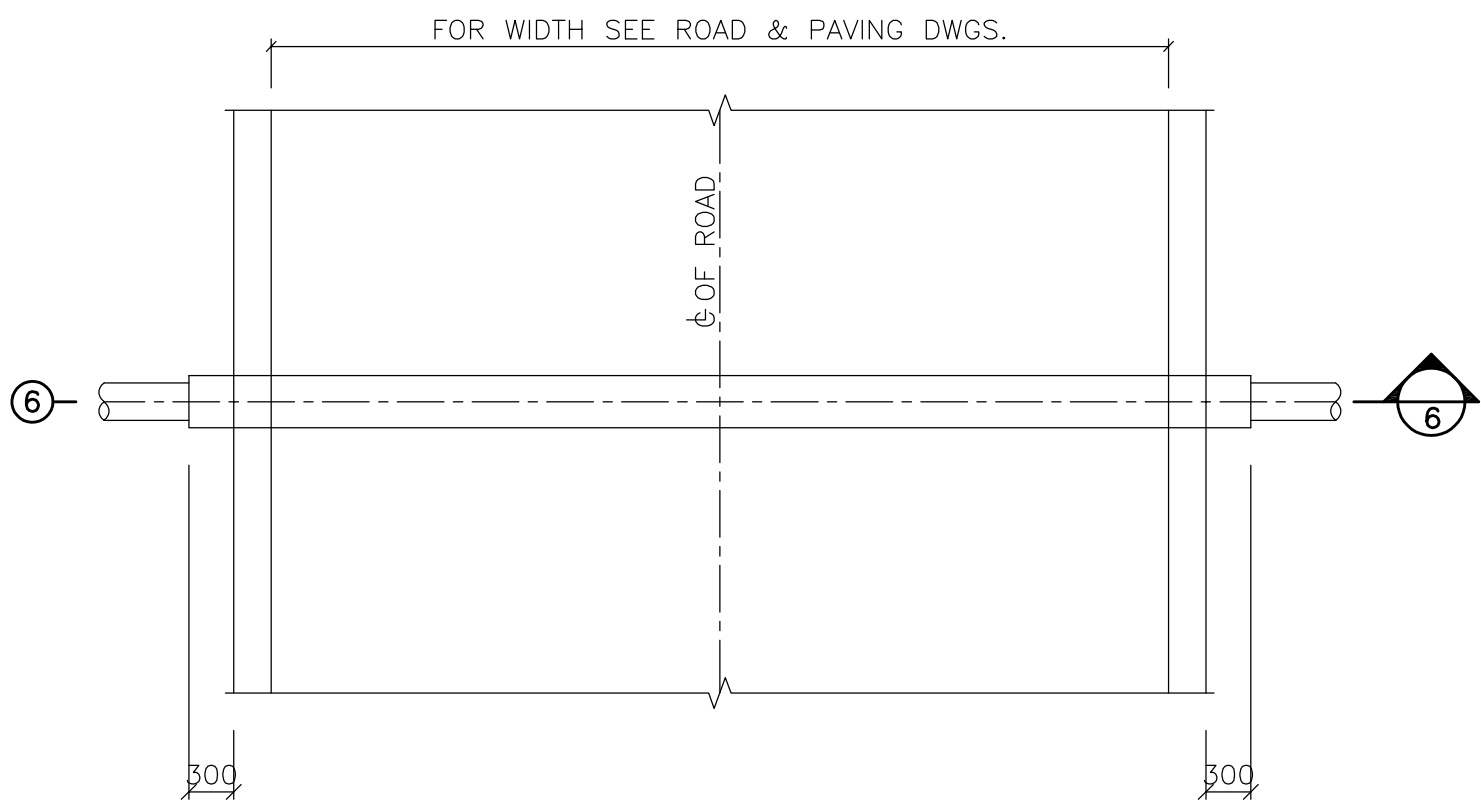
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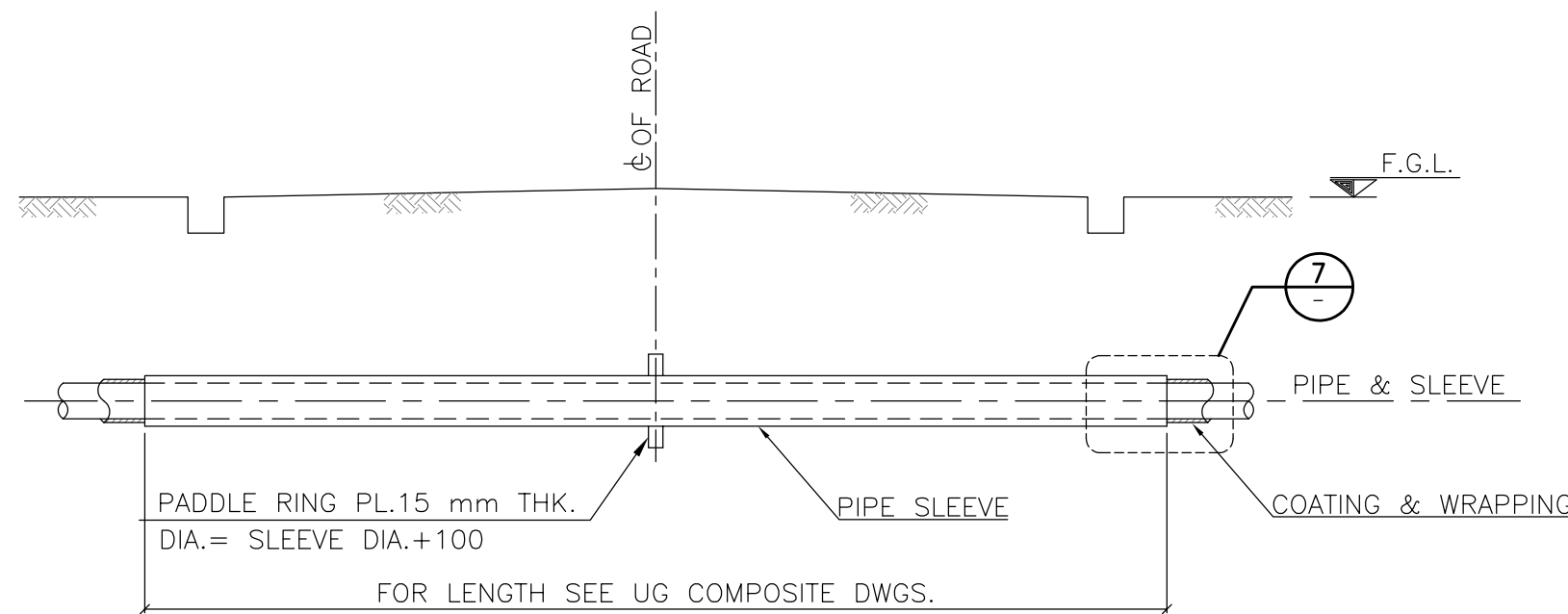
1:50 **2** TYPICAL CROSSING SECTION FOR PIPE CROSSING



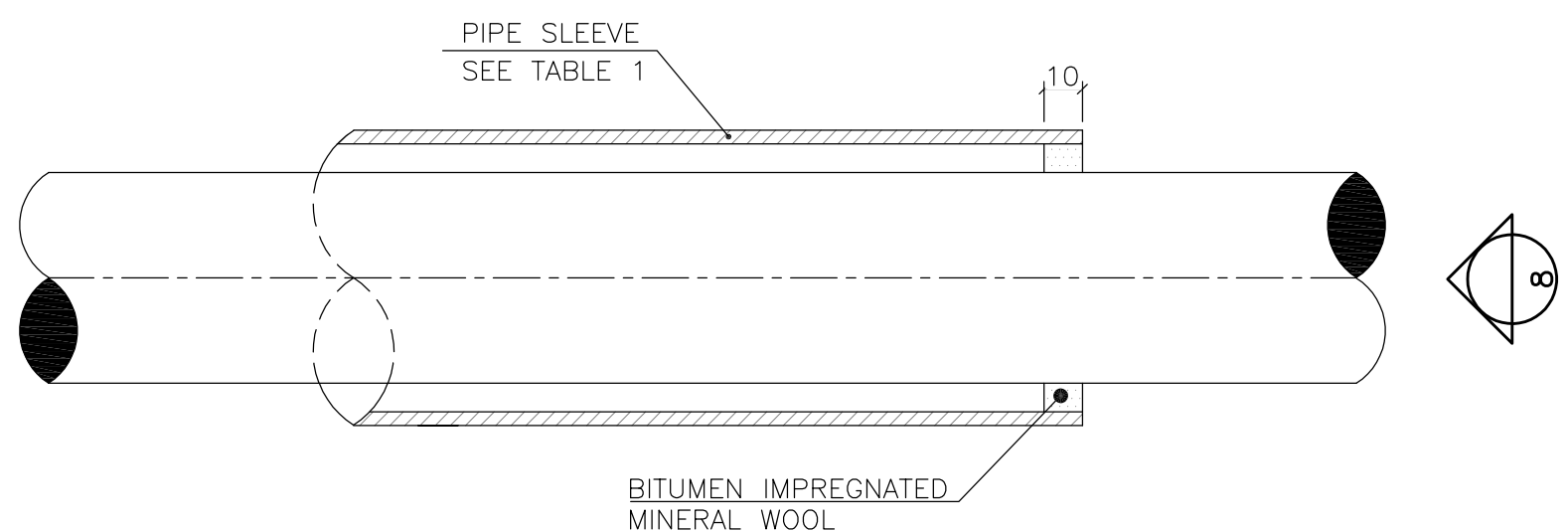
1:50 **4**



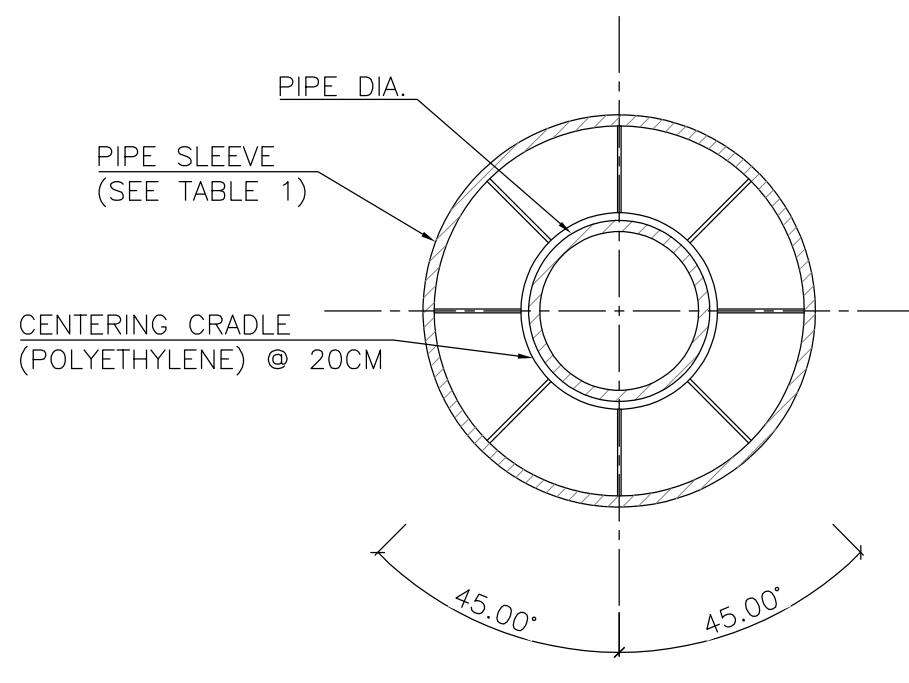
N.T.S. **5** PIPE & STREET CROSSING TYPE A PIPE SLEEVE PROTECTION



N.T.S. **6**



N.T.S. **7**



N.T.S. **8**

TABLE 1					
CARRIER PIPE			CASING PIPE (SEE NOTE 12)		
NPS	DN		NPS	DN	THK.
4"	100		8"	200	8.18
6"	150		10"	250	9.27
8"	200		12"	300	9.53
10"	250		14"	350	9.53
12"	300		16"	400	9.53
14"	350		18"	450	9.53
16"	400		20"	500	9.53
18"	450		24"	600	9.53
20"	500		24"	600	9.53
22"	550		26"	650	9.53
24"	600		30"	750	9.53
30"	750		36"	900	9.53
36"	900		42"	1050	9.53
40"	1000		48"	1200	9.53
42"	1050		48"	1200	9.53

D03	FEB.2023	AFC	R.BERLOUE	M.PAKHARIAN	M.MEHRSHAD	***												
D02	JAN.2023	IFA	R.BERLOUE	M.PAKHARIAN	M.MEHRSHAD	**	***	*****	***	*****	**	*****	***	*****	***			
D01	JUL.2022	IFA	R.BERLOUE	M.PAKHARIAN	M.MEHRSHAD	***	REV.	DESCRIPTION	BY	DATE	BY	DATE	BY	DATE	BY			
D00	FEB.2022	IFC	R.BERLOUE	M.PAKHARIAN	M.MEHRSHAD	***			CHECKED			REV. APPR.						
REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.			احمل و کلیه نسخ این نقشه و حق انقیاس متعلق به شرکت ملی مناطق نفت خیز جنوب می باشد.									
PROJECT NAME:			BINAK OILFIELD DEVELOPMENT GENERAL			 THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS												
PROJECT NO.:			971020															
EPC CONTRACTOR:			EPD/EPC CONTRACTOR(GC):															
 HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES			 PEDCO			BINAK OILFIELD DEVELOPMENT GENERAL												
						DATE					SCALE		DRAWING BY		CHECKED BY		PROJECT ENG.	
DRAWING TITLE: STANDARD DRAWING FOR CIVIL UNDERGROUND CROSSINGS						NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED												
						APPROVED FOR CONSTRUCTION					BY:		DATE:					
SCALE	SIZE	DRAWING NO.			SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	SHEET	REVISION				
AS SHOWN	A1	BK-GNRL-PEDCO-000-CV-DW-0008			02 OF 03	D03	053-073-9184	F	4	2	707254	2		D03				

NOTES

- ALL DIMENSIONS ARE IN MILLIMETER UNLESS OTHERWISE STATED.
- ACCORDING TO THE SPECIFICATION OF CONCRETE WORKS: "BK-GNRL-PEDCO-000-ST-SP-0001", 28 DAYS CHARACTERISTIC COMPRESSIVE STRENGTH OF MAIN CONCRETE IS 30 MPa (ON CYLINDRICAL SPECIMEN).
- ACCORDING TO THE SPECIFICATION OF CONCRETE WORKS: "BK-GNRL-PEDCO-000-ST-SP-0001", 28 DAYS CHARACTERISTIC COMPRESSIVE STRENGTH OF LEAN CONCRETE IS 10 MPa (ON CYLINDRICAL SPECIMEN).
- REINFORCING BARS SHALL BE S400 ACCORDING TO: ISIRI3132 AND INB9 - WITH MINIMUM TENSILE YIELD STRENGTH 400 N/mm².
- ALL REINFORCEMENT TO HAVE MIN. 50 mm COVER.
- PORTLAND CEMENT TYPE II SHALL BE USED. THE TYPE OF CEMENT SHALL BE REFERRED TO GEOTECHNICAL INVESTIGATION REPORT.
- THE EDGES OF REINFORCED CONCRETE SLAB SHALL BE BEARED BY VIRGIN GROUND WHEREVER PRACTICALLY POSSIBLE.
- PIPE BURIED DEPTH "H" SHALL BE MIN. 1200 FOR ROAD CROSSING. FOR "H" GREATER THAN 1800, LOAD BEARING SLAB IS NOT REQUIRED AND WARNING SLAB SHALL BE LOCATED OVER CHANNEL.
- TOP OF SLAB SHALL BE MARKED AFTER CASTING & WHEN PLACED IN POSITION THE MARK SHALL FACE UPWARD.
- PIPE SLEEVES SHALL BE COATED & WRAPPED FROM OUTSIDE.
- SLEEVES SHOULD BE FABRICATED FROM CARBON STEEL.
- CASING PIPE SHALL BE CARBON STEEL API 5LX-52.
- SEE FOLLOWING TABLE:

GROUND NATURE	T _g θ	θ
VERY SOFT SOIL	2:3	MAX. 33.7
SOFT SOIL	1:1	MAX. 45
SEMI HARD SOIL	3:2	MAX. 56.3
HARD SOIL	3:1	MAX. 71.6
ROCKS	4:1	MAX. 76
- THE NUMBER OF SLEEVES (DRAWN IN DWG) IS FOR INFORMATION & THE EXACT NUMBER WILL BE FINALIZED DURING EXECUTIVE OPERATION WITH APPROVAL OF EMPLOYER REPRESENTATIVE.
- COVER OF REINFORCEMENT BARS TO BE 75mm

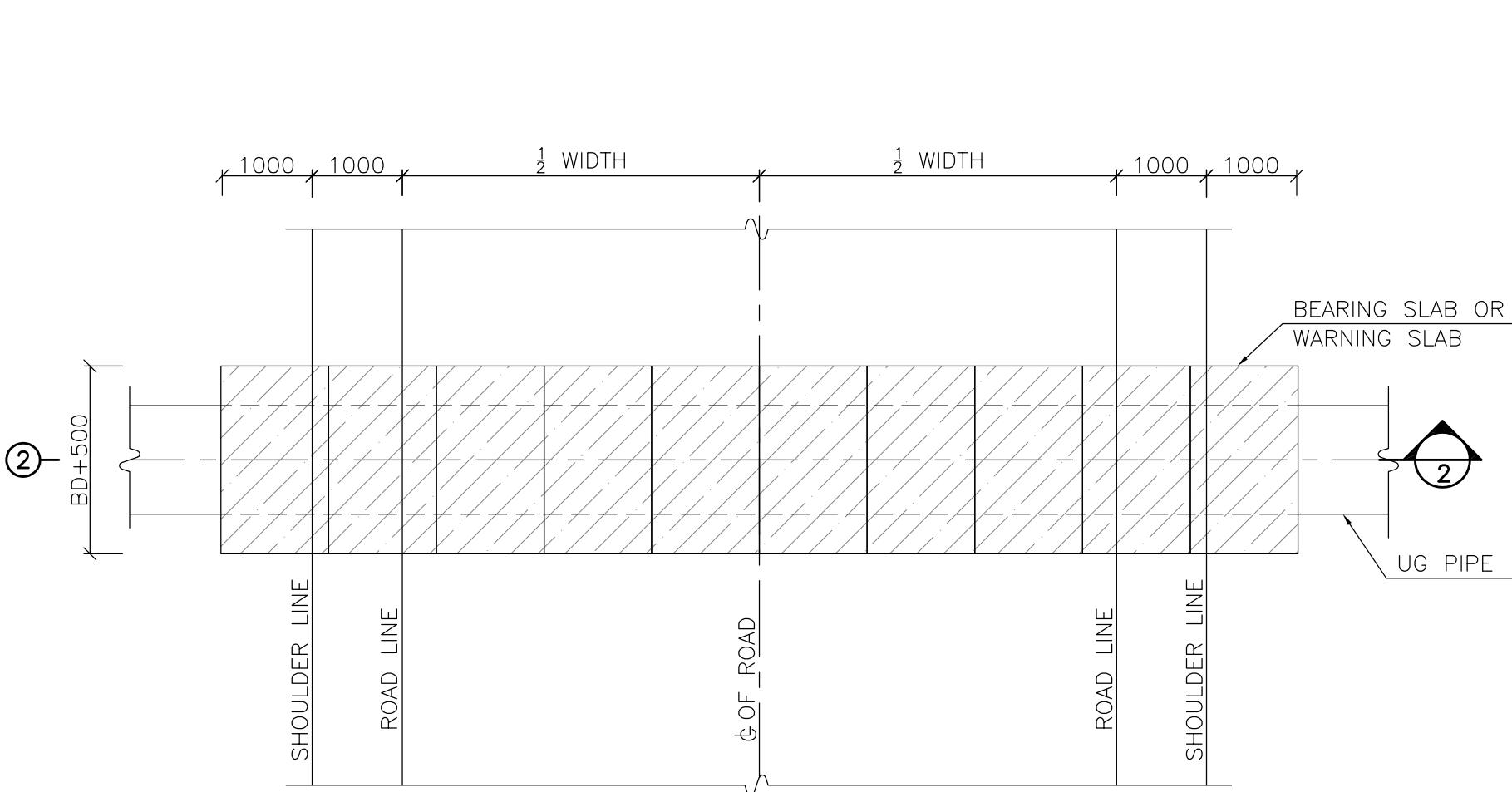
LEGEND AND ABBREVIATION

	REINFORCED CONCRETE		BINDER
	LEAN CONCRETE		BASE
	BACKFILL		SUB BASE
	GRAVEL		COMPACTED SOIL
	SUB GRADE		SOFT SOIL
	SLOPE		

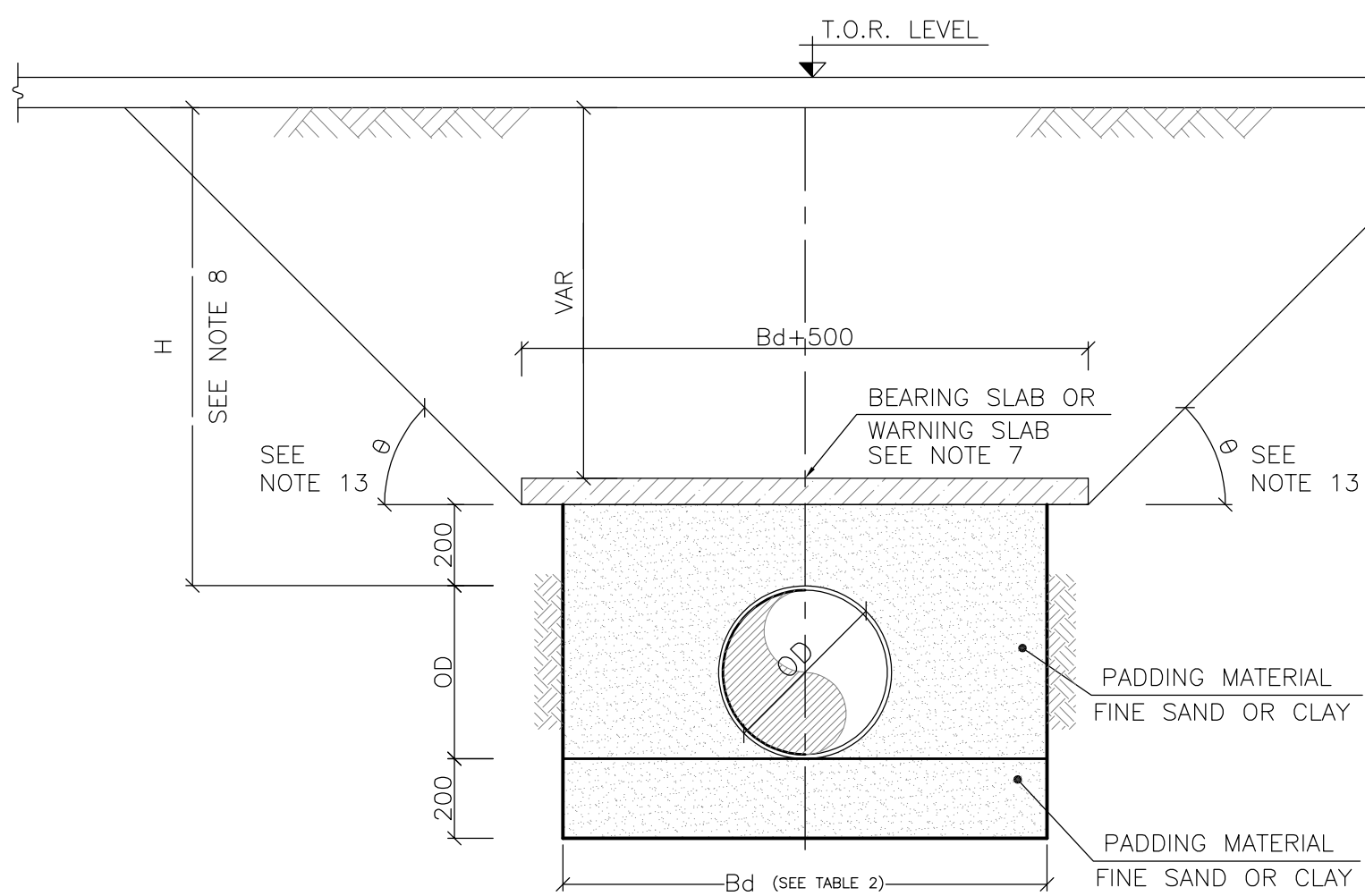
U/G	UNDERGROUND	T.O.R.	TOP OF ROAD
T.O.D.B.	TOP OF DUCT BANK		
F.G.L.	FINISHED GRADING LEVEL		
CL	CENTER LINE		
W	WIDTH OF TRENCH		
OD	OUTER DIAMETER		

REFERENCE DRAWING	DRG. No.
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Standard Details of Miscellaneous Items	BK-GNRL-PEDCO-000-CV-DW-0040
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Road, Paving And Plant Finish Grading Layout & Sections	BK-GCS-PEDCO-120-CV-PY-0005
Plant Underground Composite Layout	BK-GCS-PEDCO-120-CV-PY-0006

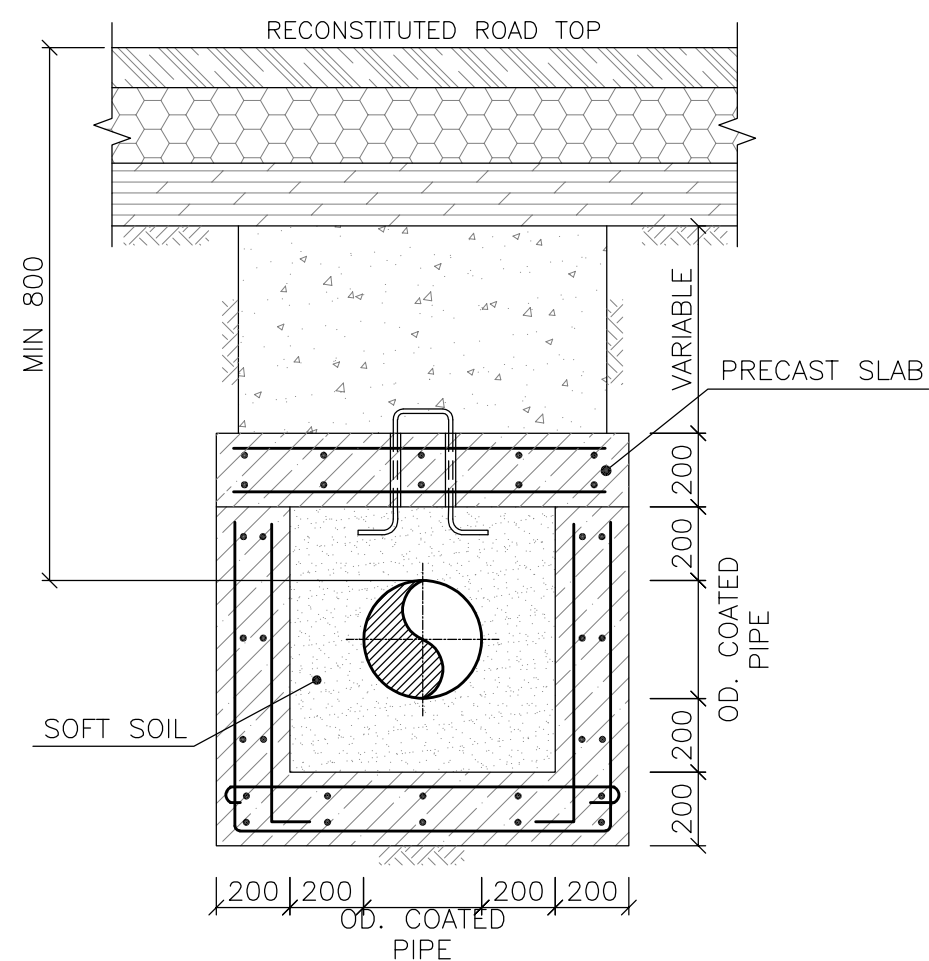
KEY PLAN



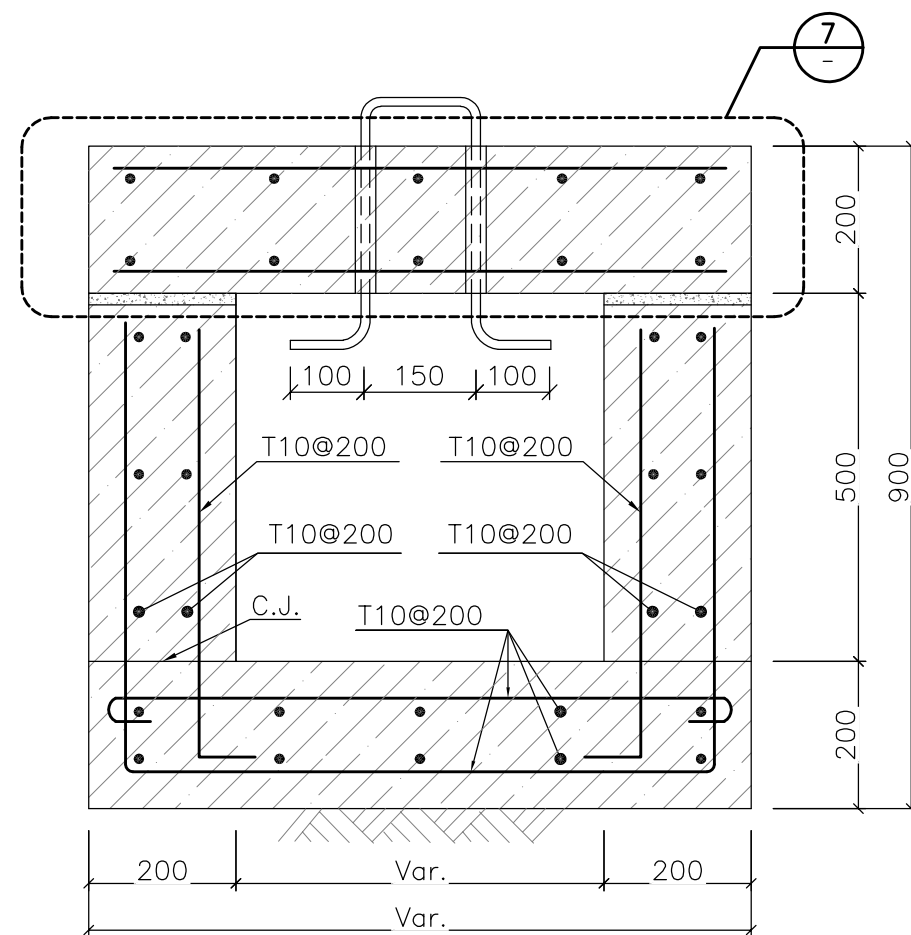
1 PIPE & STREET CROSSING TYPE B
N.T.S.



3
N.T.S.

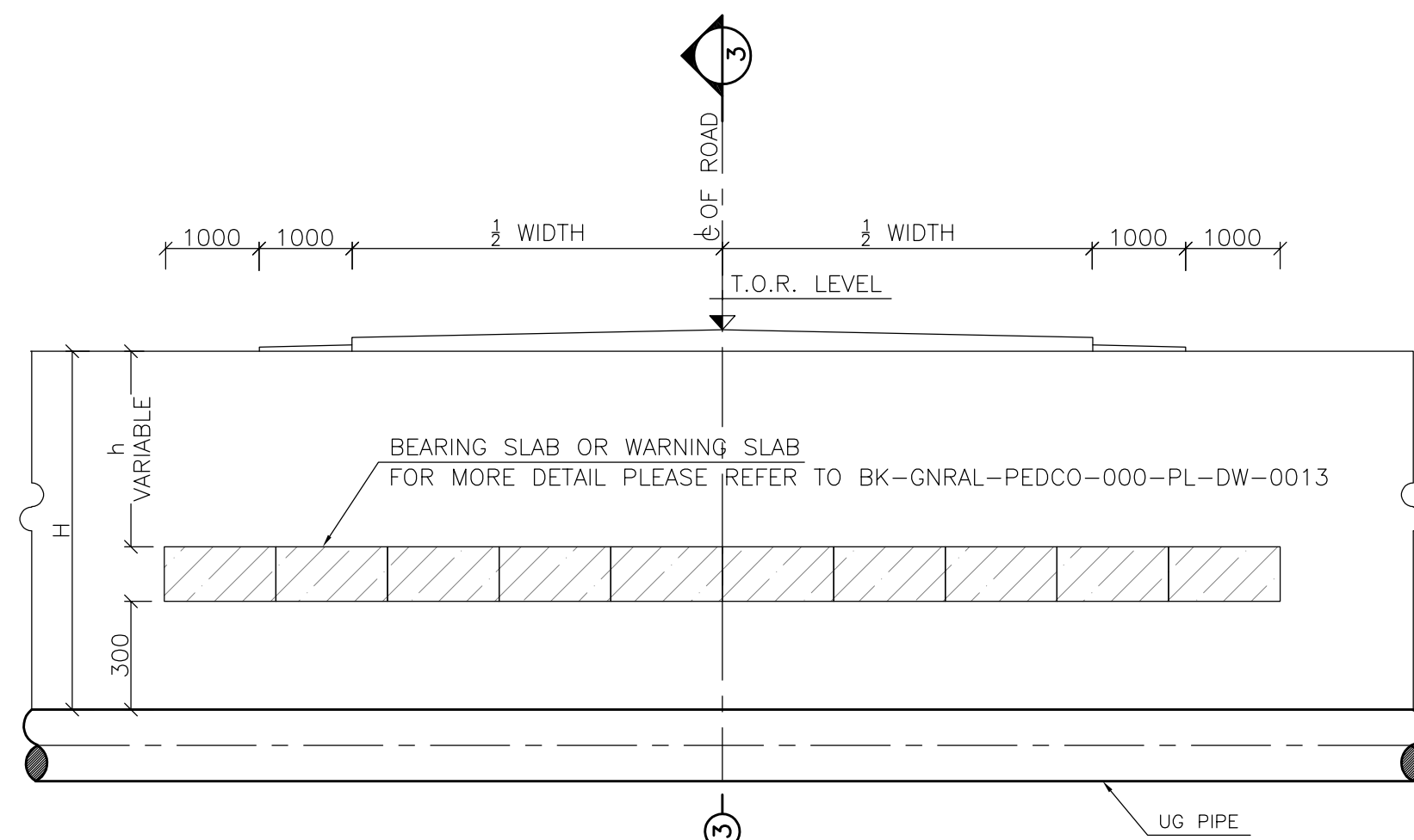


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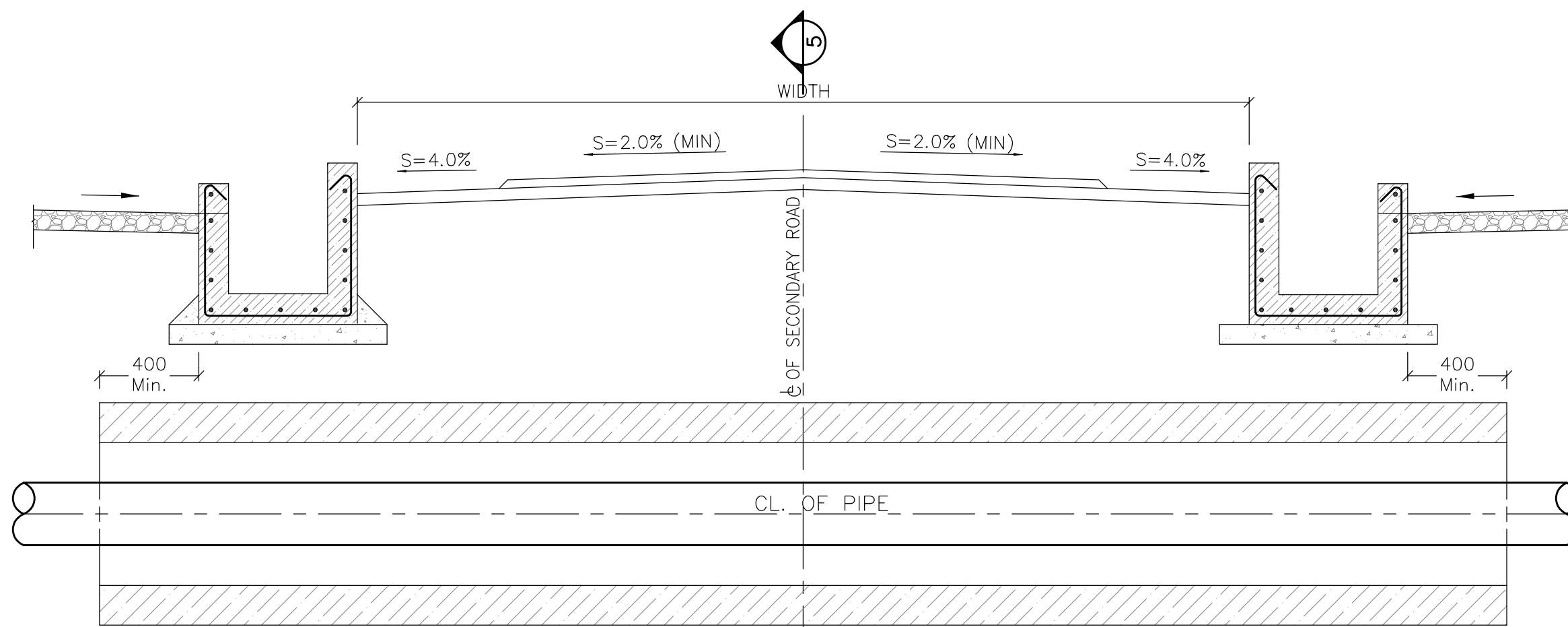


6 TYPICAL REINFORCEMENT
1:10

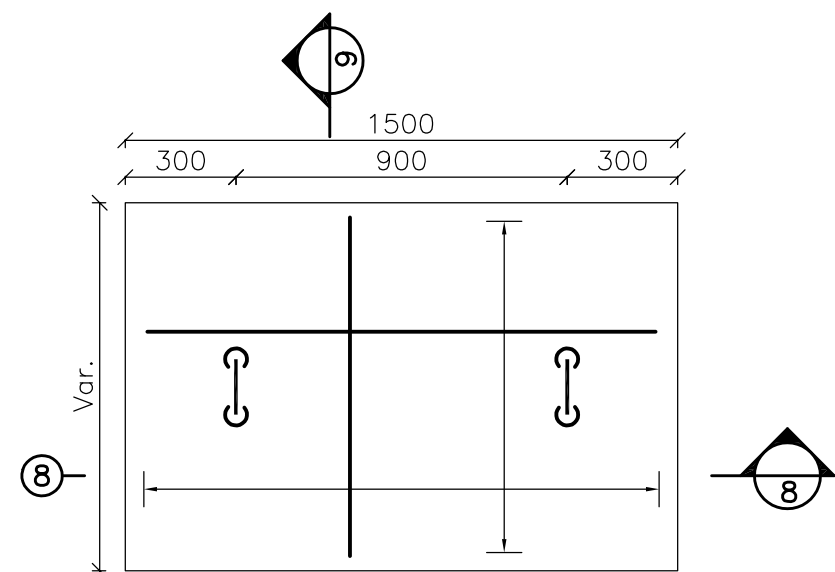
TABLE 2 PIPE BEDDING DIMENSIONS	
NOMINAL PIPE SIZE (mm)	Bd (mm)
LESS THAN 200 (OR 8")	D+400
200 TO 300 (OR 8" TO 12")	D+600
300 TO 900 (OR 12" TO 36")	D+800
MORE THAN 900 (OR 36")	D+1000



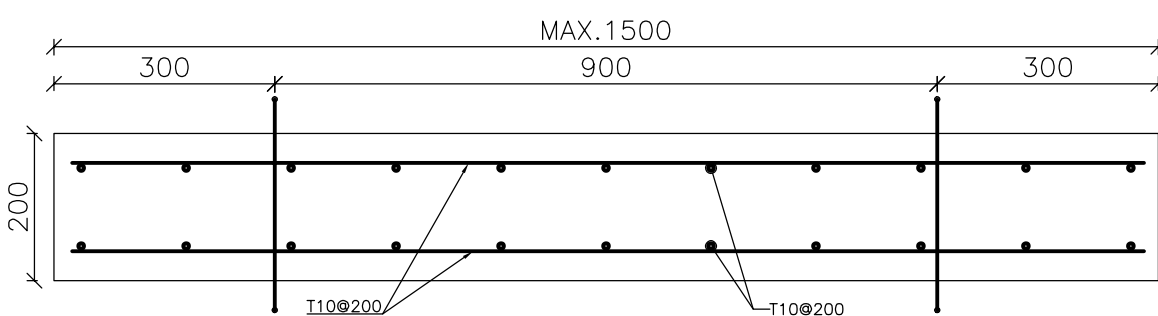
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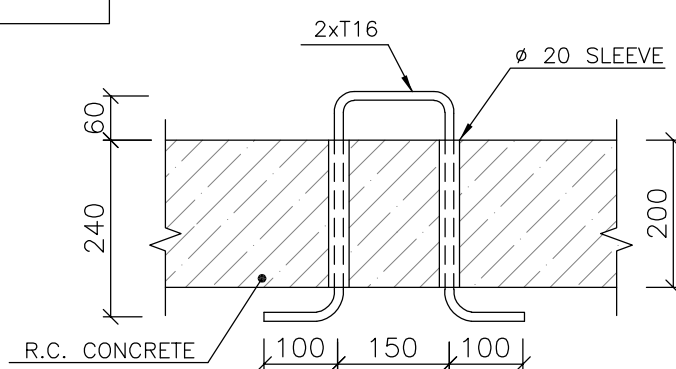
4 PIPE & STREET CROSSING TYPE C
N.T.S.



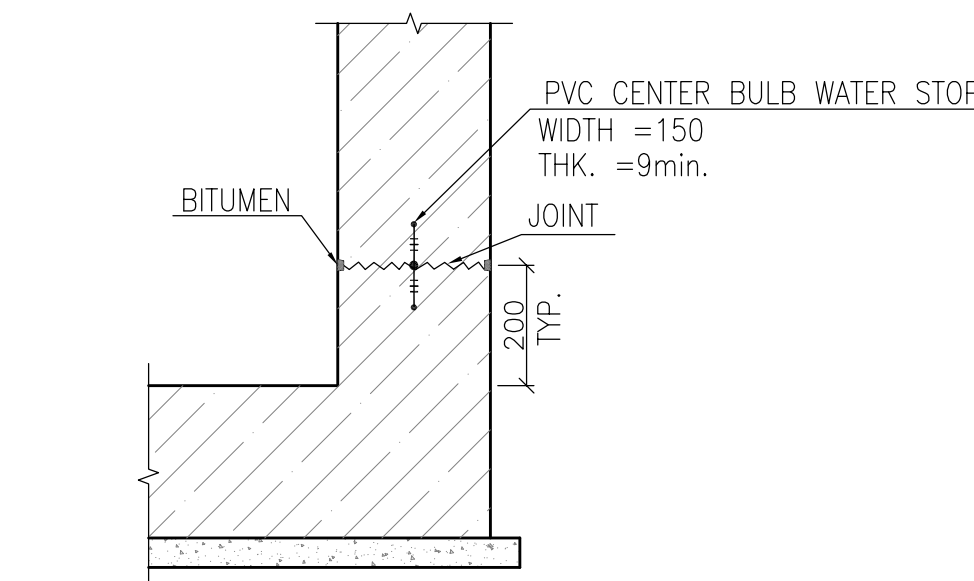
7 SLAB PLAN
1:20



8
1:10



9
1:10



10 TYPICAL DETAIL OF WATER STOP
N.T.S.

NOTES

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- COVER OF REINFORCEMENT BARS TO BE 75mm

LEGEND AND ABBREVIATION

	REINFORCED CONCRETE		BINDER
	LEAN CONCRETE		BASE
	BACKFILL		SUB BASE
	GRAVEL		COMPACTED SOIL
	SUB GRADE		SOFT SOIL
	SLOPE		
U/G	UNDERGROUND	T.O.R.	TOP OF ROAD
T.O.D.B.	TOP OF DUCT BANK		
F.G.L.	FINISHED GRADING LEVEL		
CL	CENTER LINE		
W	WIDTH OF TRENCH		
OD	OUTER DIAMETER		

REFERENCE DRAWING	DRG. No.
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Road, Paving And Plant Finish Grading Layout & Sections	BK-GCS-PEDCO-120-CV-PY-0005
Plant Underground Composite Layout	BK-GCS-PEDCO-120-CV-PY-0006

KEY PLAN

D03	FEB.2023	APC	R.BERLOUIE	M.FAKHARIAN	M.MEHRSHAD	**															
D02	JAN.2023	IFA	R.BERLOUIE	M.FAKHARIAN	M.MEHRSHAD	**	***	*****	**	***	**	***									
D01	JUL.2022	IFA	R.BERLOUIE	M.FAKHARIAN	M.MEHRSHAD	**	REV.	DESCRIPTION	BY	DATE	BY	DATE									
D00	FEB.2022	IPC	R.BERLOUIE	M.FAKHARIAN	M.MEHRSHAD	**			CHECKED		REV. APPR.										
REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.	اصل و کليه نسخ اين نقشه و حق اقتباس متعلق به شرکت مایلی مناطق نفت خیز جنوب میباشد.														
PROJECT NAME:							 THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS														
PROJECT NO.:							971020														
EPC CONTRACTOR:			EPD/EPC CONTRACTOR(GC):																		
 HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES			 PETROIRAN DEVELOPMENT COMPANY													BINAK OILFIELD DEVELOPMENT GENERAL					
							DATE	SCALE	DRAWING BY	CHECKED BY	PROJECT EN										
DRAWING TITLE:							NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED														
							APPROVED FOR CONSTRUCTION					BY:		DATE:							
SCALE	SIZE	DRAWING NO.			SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION								
AS SHOWN	A1	BK-GNRL-PEDCO-000-CV-DW-0008			03 OF 03	D03	053-073-9184	F	4	2	707254	3	D03								