

NOTES:-

1. ALL EXISTING SEWER LINES AND MANHOLES SHALL BE RECONSTRUCTED TO MATCH THE TOP OF THE FINISHED GROUND LEVEL.
2. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NOT TO DAMAGE ANY UNDERGROUND UTILITIES DURING EXCAVATION. IF ANY DAMAGE OCCURS, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIX THE DAMAGE AT HIS OWN EXPENSE. ANY UNDERGROUND UTILITIES FOUND SHALL BE PROPERLY PROTECTED OR DIVERTED, IN COORDINATION WITH RELEVANT AUTHORITIES.
3. IT IS THE CONTRACTOR RESPONSIBILITY TO OBTAIN THE EXACT POSITION OF THE DIFFERENT UTILITIES IN ORDER TO AVOID DAMAGE DURING CONSTRUCTION.

LEGEND:-

- EXISTING STORMWATER PIPELINE
- EXISTING WASTEWATER PIPELINE
- PROPOSED WASTEWATER PIPELINE
- PROPOSED WASTEWATER MANHOLE
- EXISTING STORM WATER INLET
- EXISTING WASTEWATER OR STORM WATER MANHOLE

Purpose Of Issue	Rev.	Date	Approved
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Client:



GREATER AMMAN MUNICIPALITY

Project:

STRUCTURAL DESIGN SERVICES FOR
AMMAN BRT

Package:

PRESS TUNNEL

Title:

WASTEWATER LAYOUT PLAN

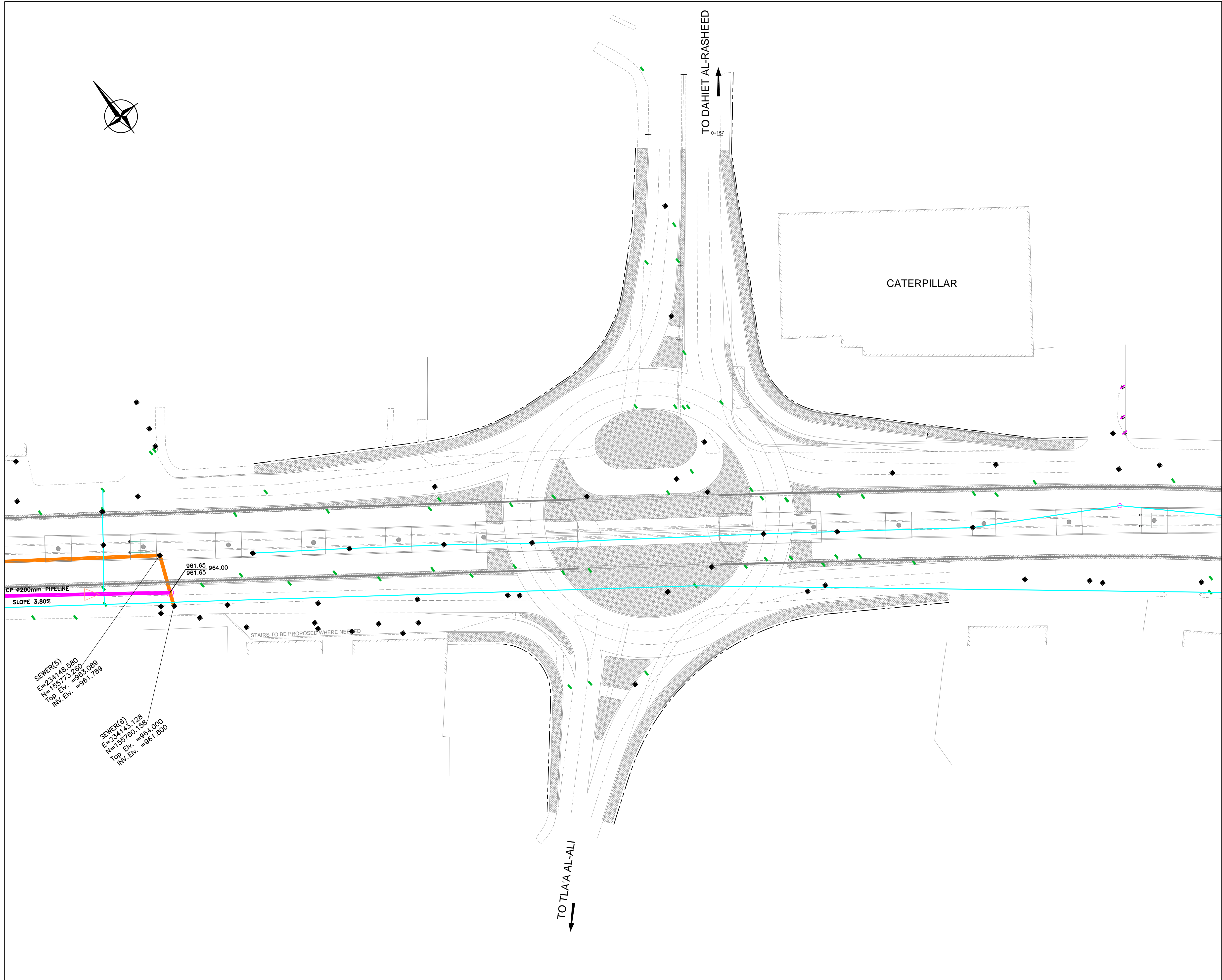
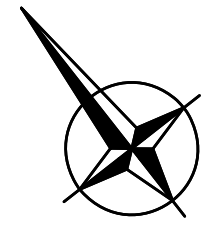
Consultant:



Design:	W.H.	Drawn by:	CAD	Checked:	H.A.
Scale:	1:500	Date:	NOV. 2016	Approved:	W.Z.




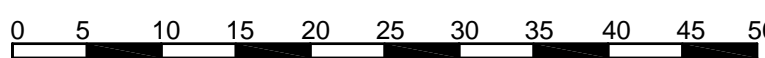


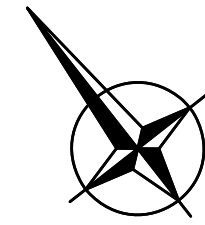
Drawing Number:	W-600	Rev.:	0
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Purpose Of Issue	Rev.	Date	Approved
Client:			
<div></div> <div>GREATER AMMAN MUNICIPALITY</div>			
Project:			
STRUCTURAL DESIGN SERVICES FOR AMMAN BRT			
Package:			
PRESS TUNNEL			
Title:			
WASTEWATER LAYOUT PLAN			
Consultant:			
<div> steer davis gleave</div> <div> engjicon</div>			
Design:	Drawn by:		Checked:
W.H.	CAD		H.A.
Scale:	Date:	Approved:	
1:500	NOV. 2016	W.Z.	
<div></div> <div>M E T E R S</div>			
Drawing Number:			Rev.:
W-601			0



JERUSALEM HOTEL

QUEEN RANIA AL-ABDULLAH STREET

MINISTRY OF AGRICULTURE

TO SPORT CITY R




THE CONTRACTOR SHALL RELOCATE THE
EXISTING SEWER LINES THAT CONFLICT
WITH STRUCTURE OF BRIDGE OR
RETAINING WALL

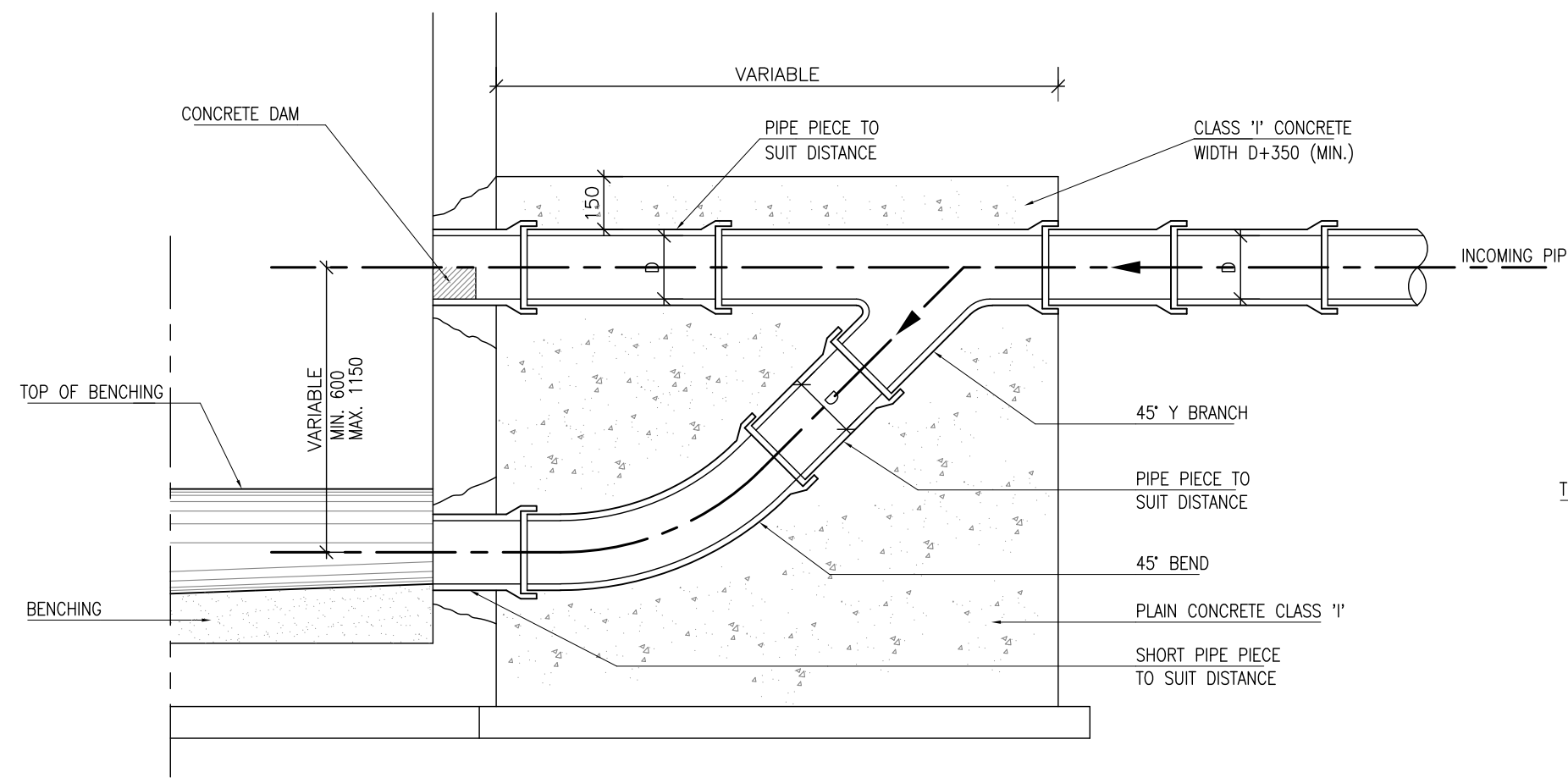
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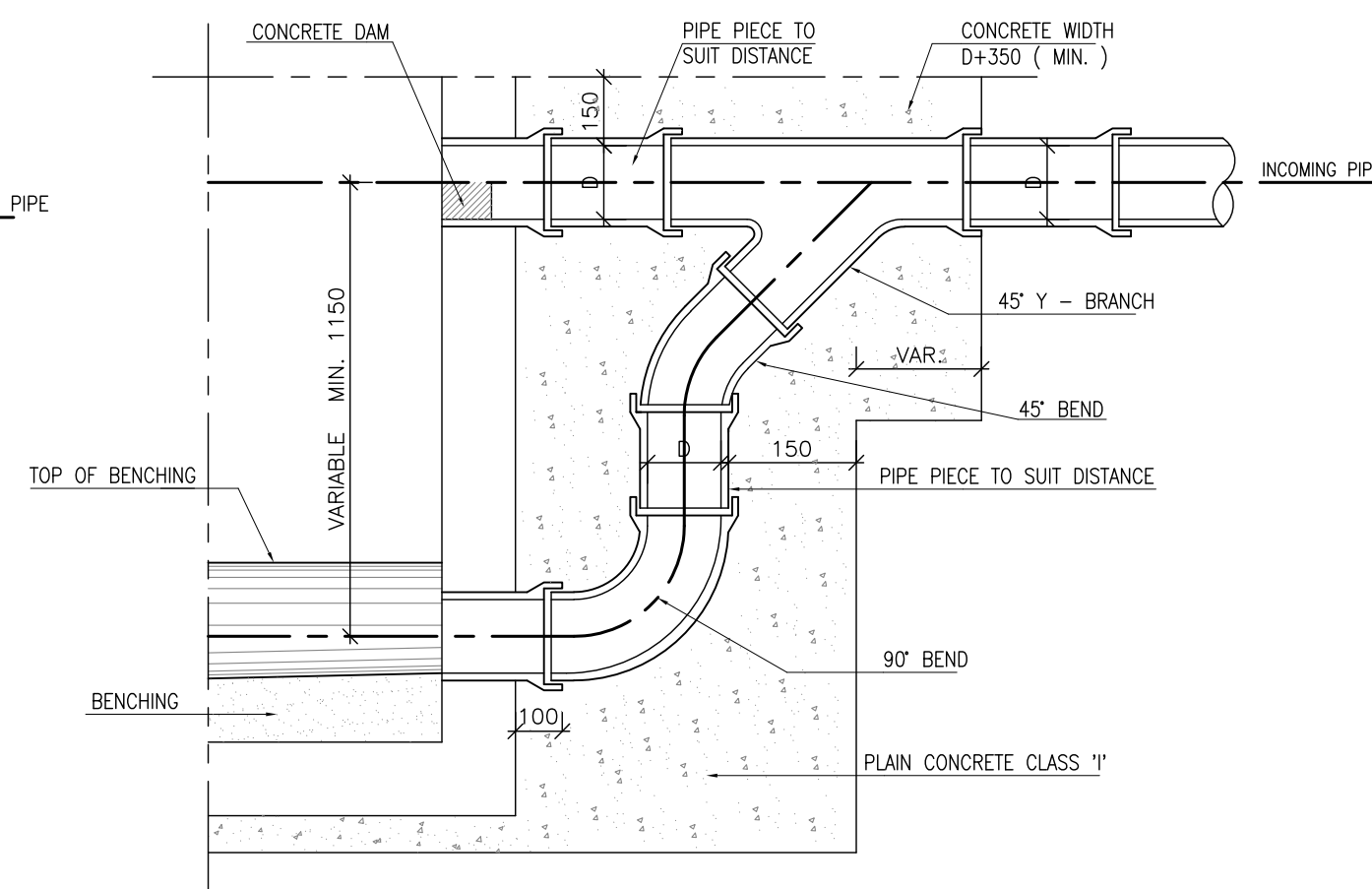
- EXISTING STORMWATER PIPELINE
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- PROPOSED WASTEWATER MANHOLE
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Purpose Of Issue	Rev.	Date	Approved
Client: <div> GREATER AMMAN MUNICIPALITY</div>			
Project: STRUCTURAL DESIGN SERVICES FOR AMMAN BRT			
Package: PRESS TUNNEL			
Title: WASTEWATER LAYOUT PLAN			
Consultant: <div> </div>			
Design: W.H.	Drawn by: CAD	Checked: H.A.	
Scale: 1:500	Date: NOV. 2016	Approved: W.Z.	
<div> M E T E R S</div>			
Drawing Number: W-602			Rev.: 0



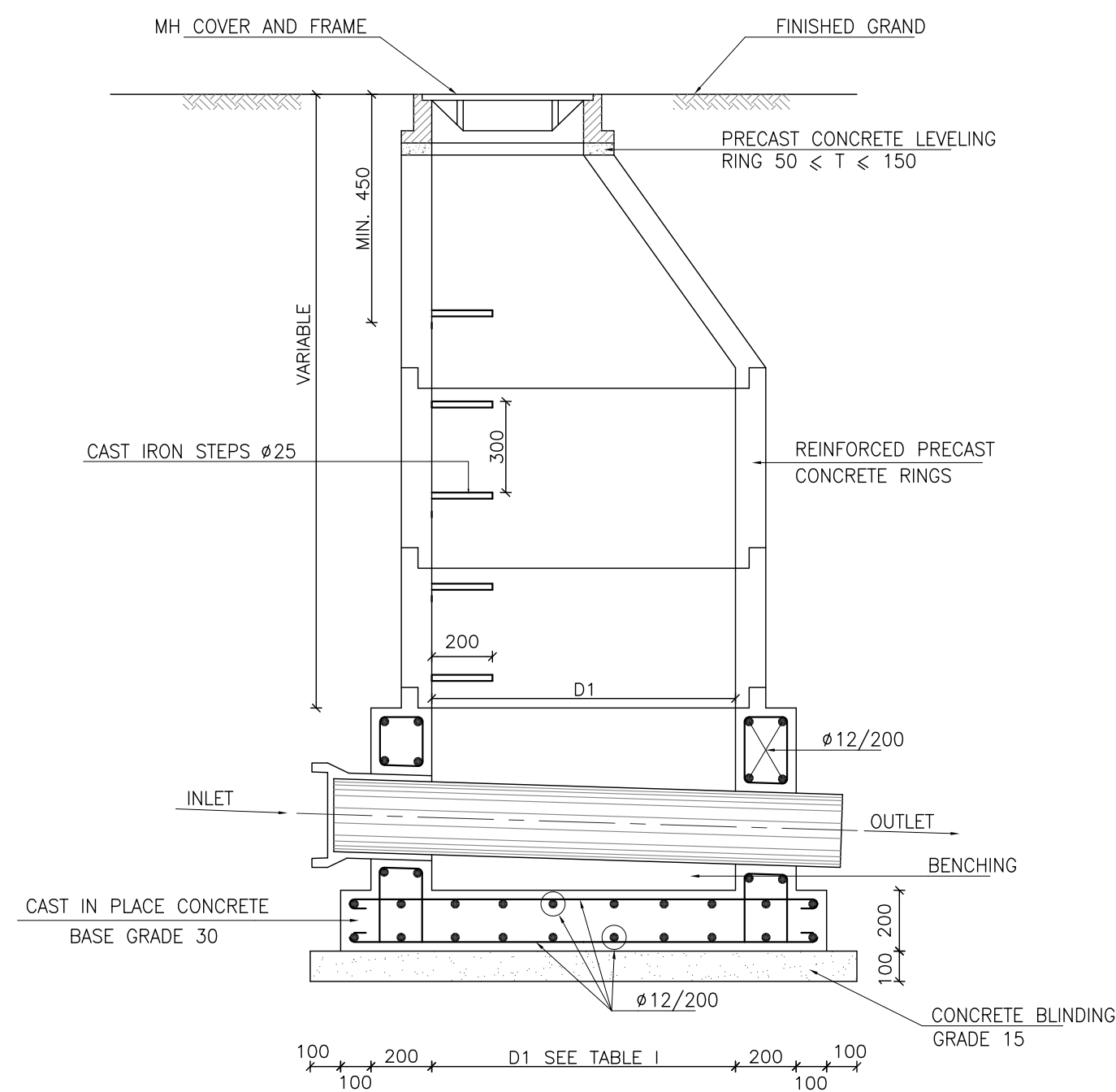
TYPICAL DROP INLET DETAIL (TYPE 1)

N.T.S.



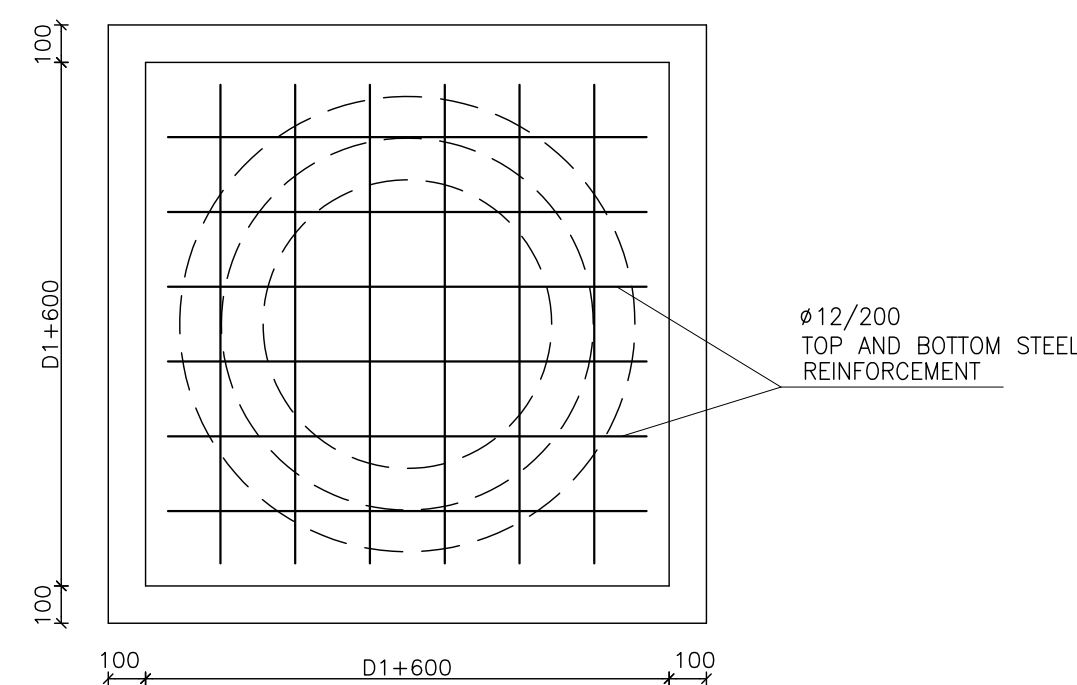
TYPICAL DROP INLET DETAIL (TYPE 2)

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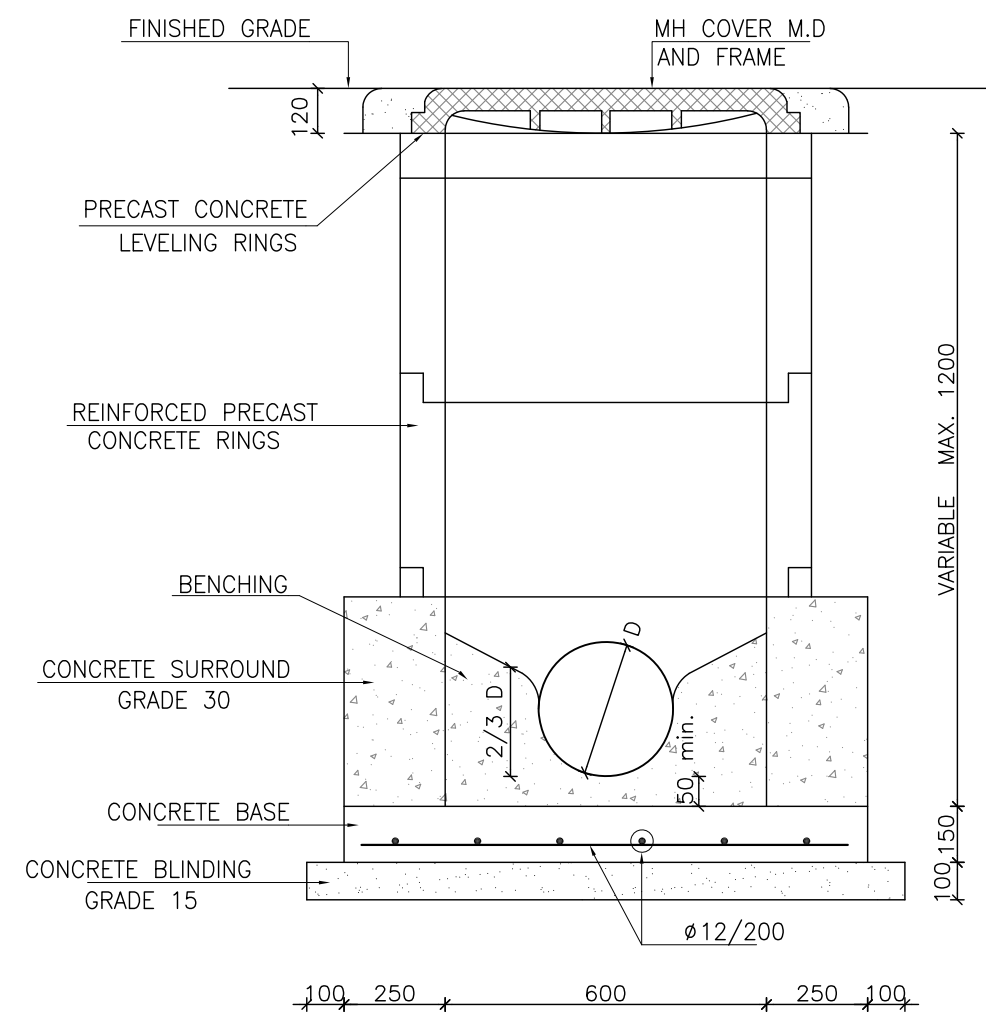
TYPICAL PRECAST MANHOLE DETAIL

N.T.S.



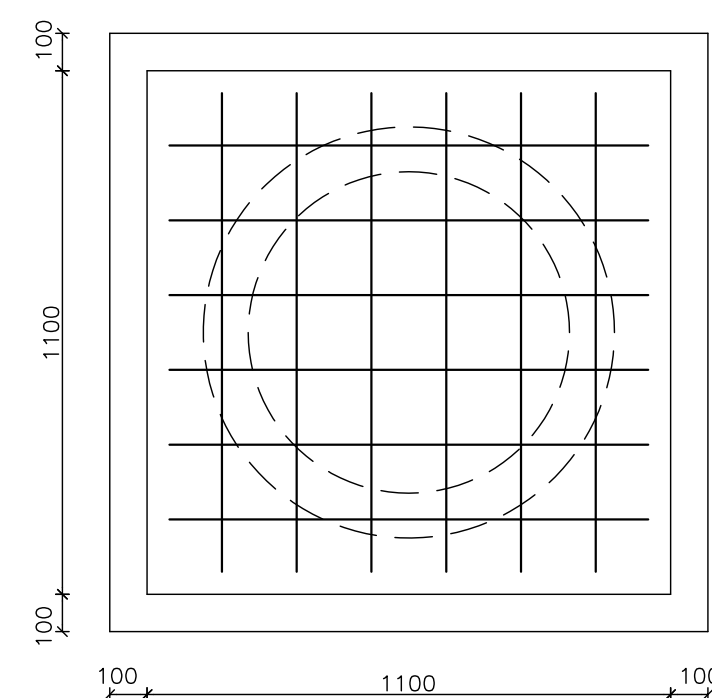
PLAN
CAST IN SITU BASE

N.T.S.



PRECAST MANHOLE (Ø600)

N.T.S.

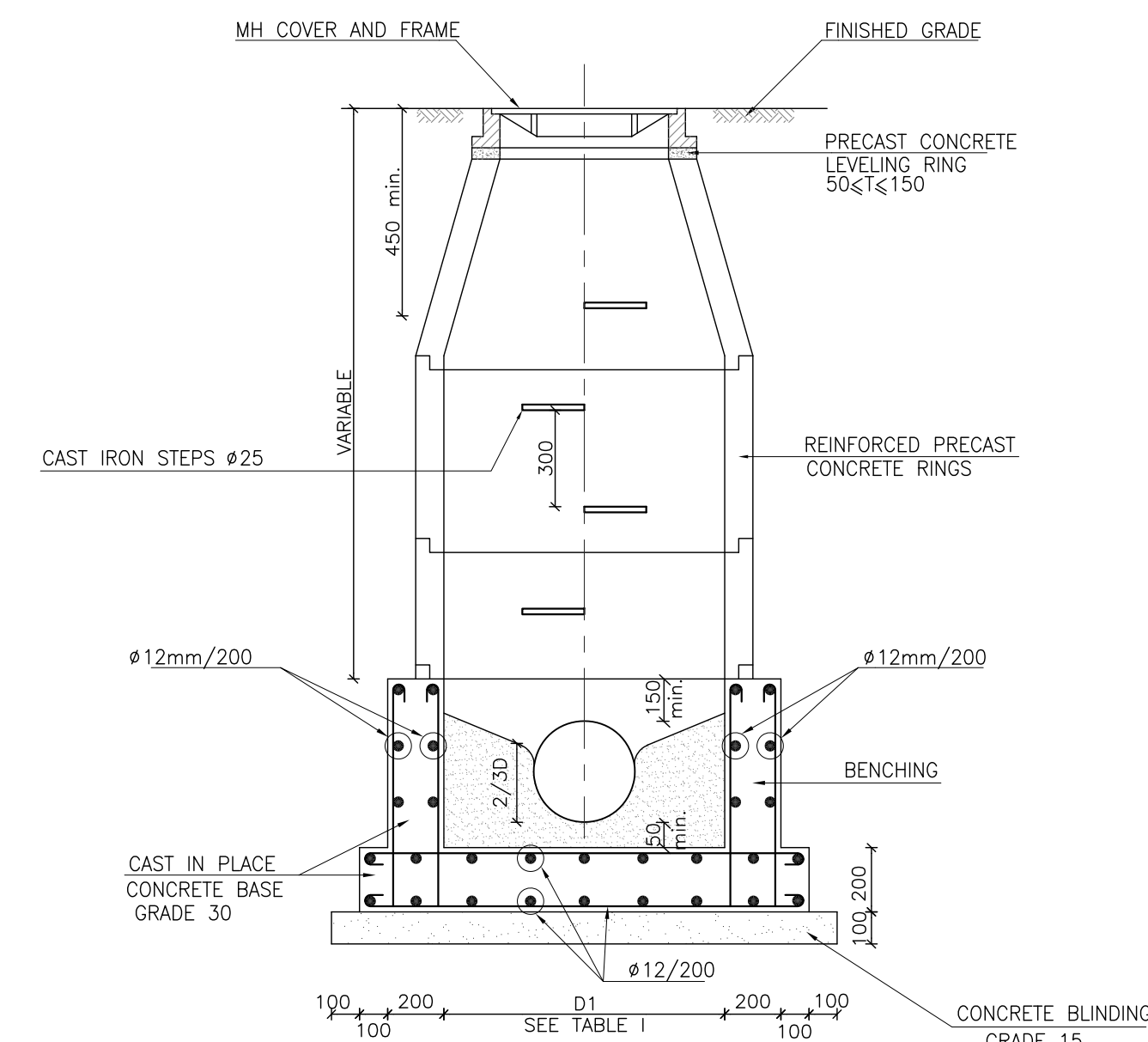


PLAN
CAST IN SITU BASE

N.T.S.

TABLE I :

PIPE DIAMETER (D) (mm)	INTERNAL MANHOLE DIAMETER (D1) (mm)
200	900 PRE-CAST
300	900 PRE-CAST
400	1000 PRE-CAST
500	1200 PRE-CAST
600	1200 PRE-CAST
700	1200 PRE-CAST
>700	D+600 CAST IN SITU CIRCULAR OR AS SPECIFIED



TYPICAL PRECAST MANHOLE DETAIL

N.T.S.

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- MINIMUM WASTEWATER MANHOLE DIAMETER SHOULD BE INCREASED 100mm FOR EACH CONNECTION INCREASE ABOVE THE THREE INLETS CONNECTED TO THE MANHOLE .
- ALL REINFORCED CONCRETE SHALL BE OF GRADE 30
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- GENERAL NOTES:-
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Purpose Of Issue	Rev.	Date	Approved
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Client:



GREATER AMMAN MUNICIPALITY

Project:

STRUCTURAL DESIGN SERVICES FOR
AMMAN BRT

Package:

PRESS TUNNEL

Title:

TYPICAL MANHOLES DETAILS

Consultant:



Design:

W.H.

Scale:

N.T.S.

Drawn by:

CAD

Checked:

H.A.

Approved:

W.Z.

Drawing Number:

W-650



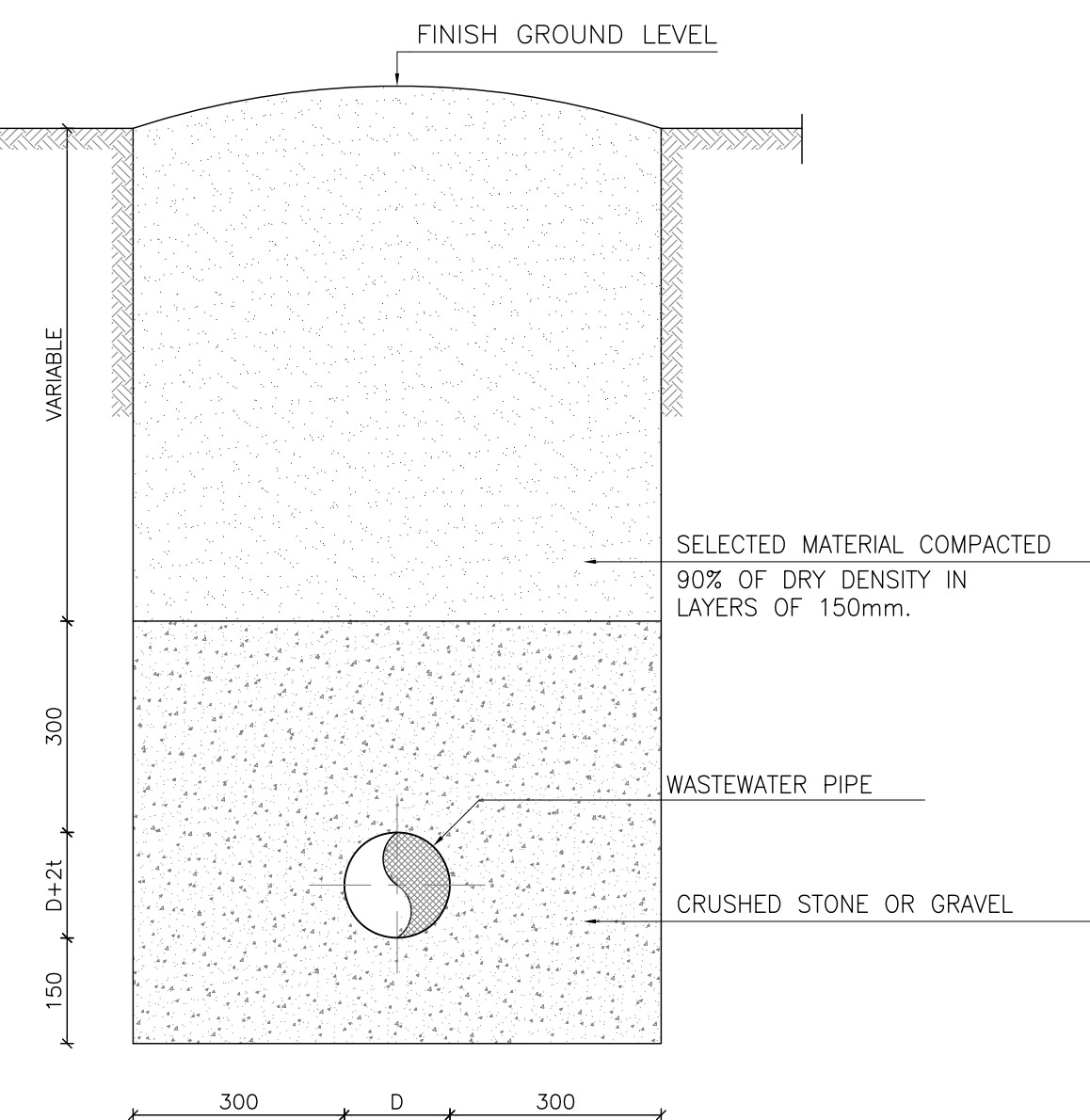
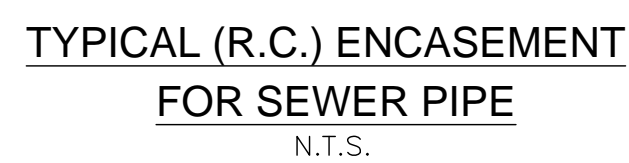
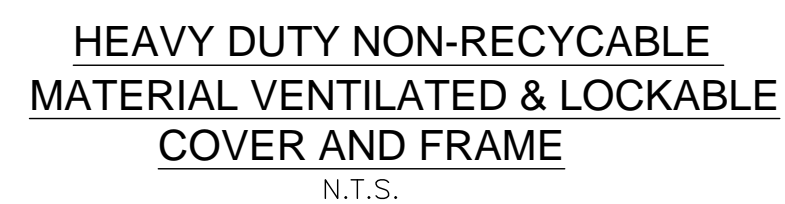
METERS

Drawing Number:

W-650

Rev.:

0



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Client:



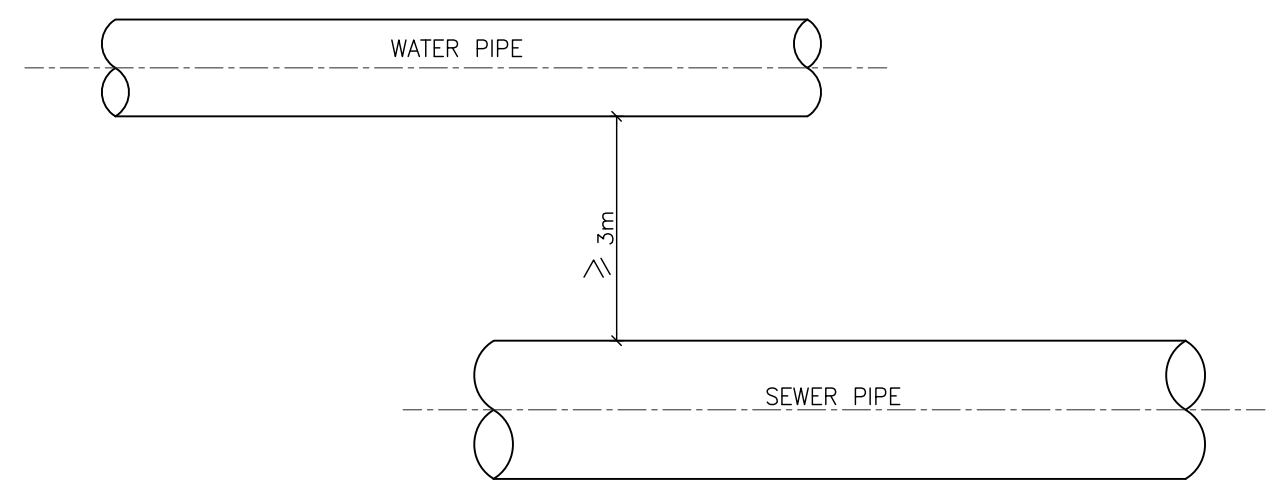
Project:

STRUCTURAL DESIGN SERVICES FOR
AMMAN BRT

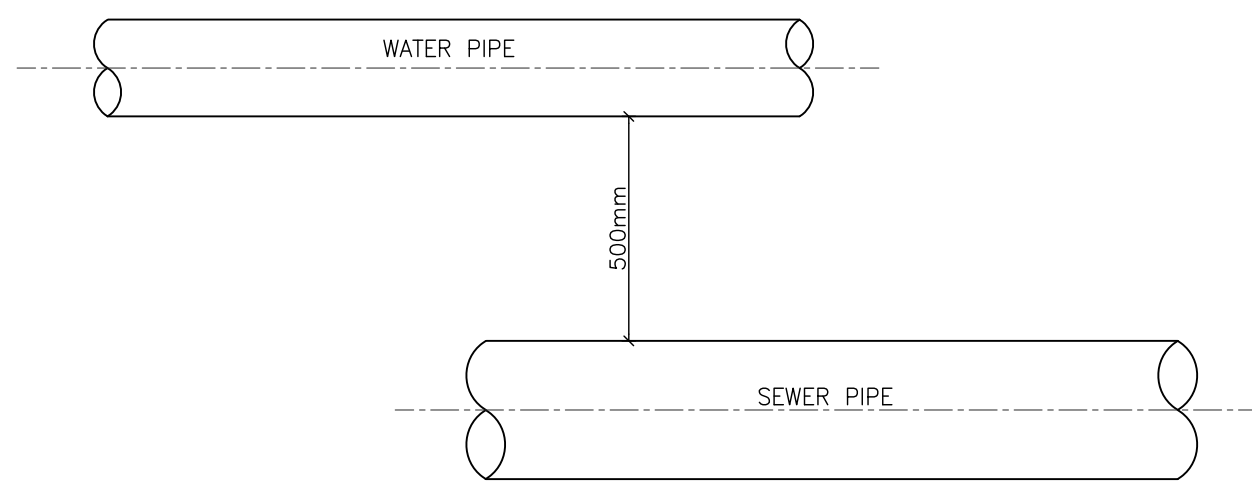
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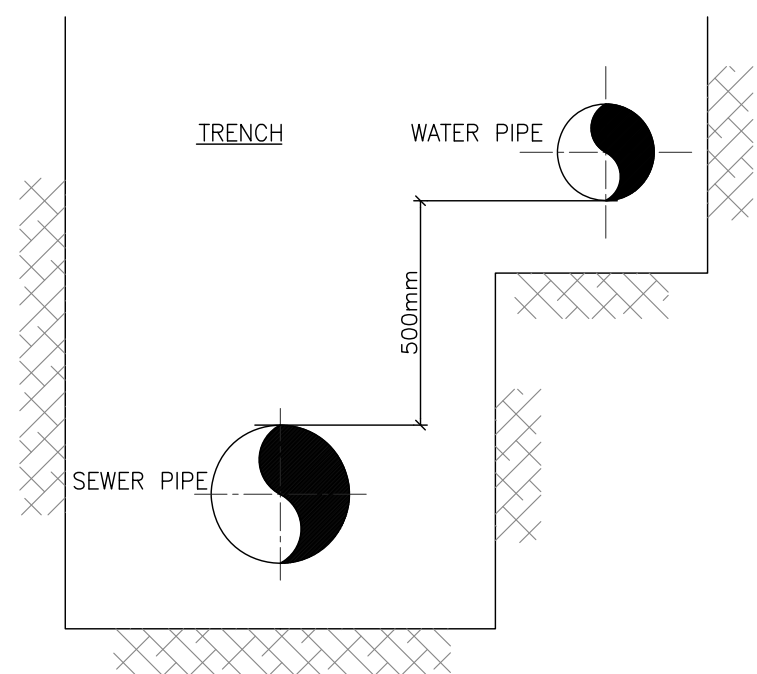
Drawing Number:	Rev.:
W-651	0



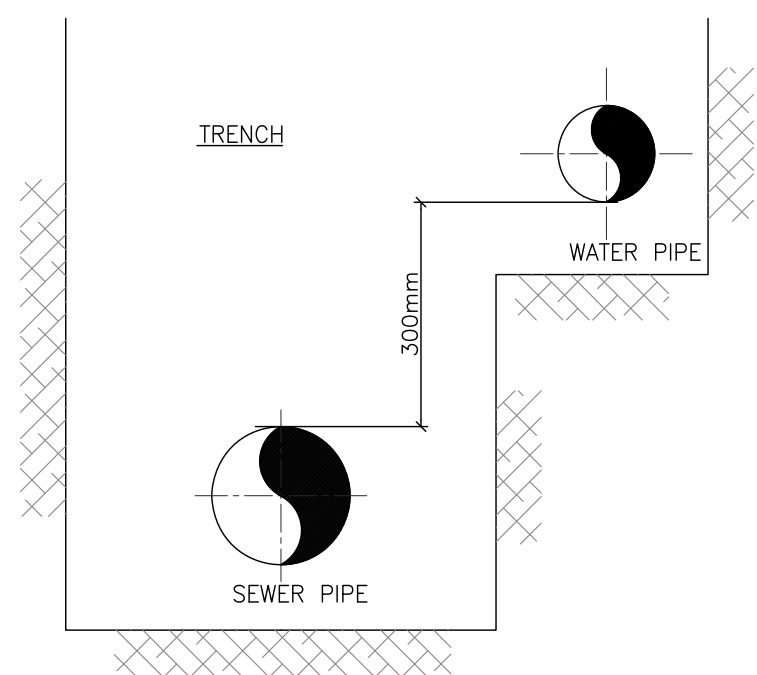
PLAN VIEW-TYPICAL HORIZONTAL SEPARATION
BETWEEN WATER AND SEWER PIPES (LOCAL CONDITION)
N.T.S.



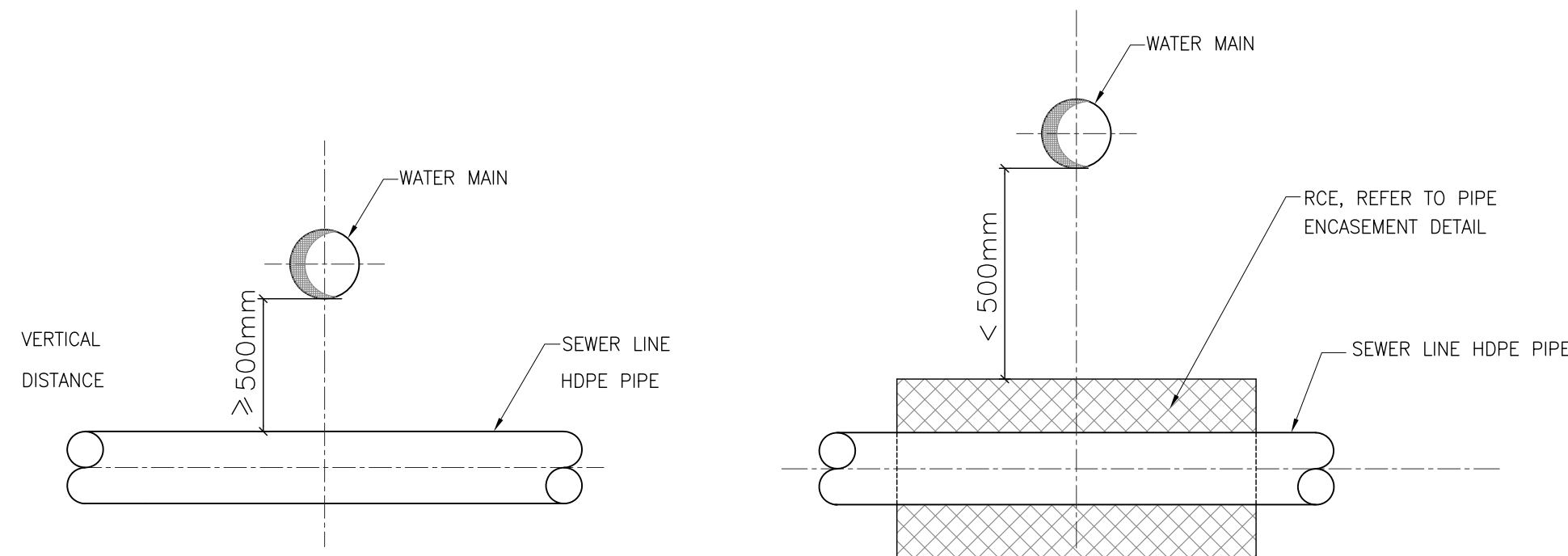
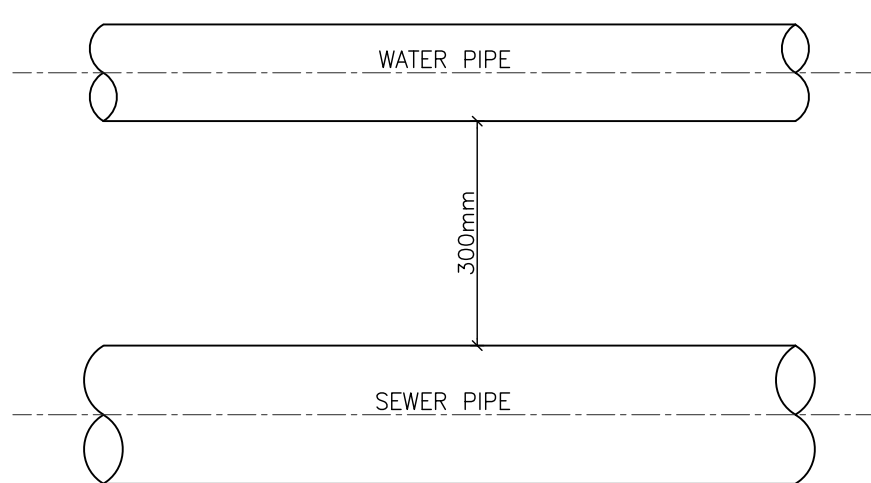
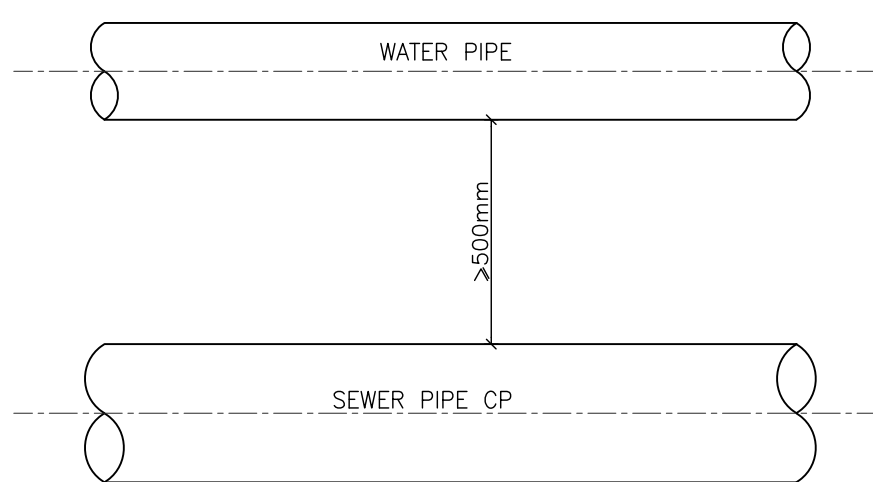
PLAN VIEW-TYPICAL min. HORIZONTAL SEPARATION
BETWEEN WATER AND SEWER PIPES (NARROW STREETS)
N.T.S.



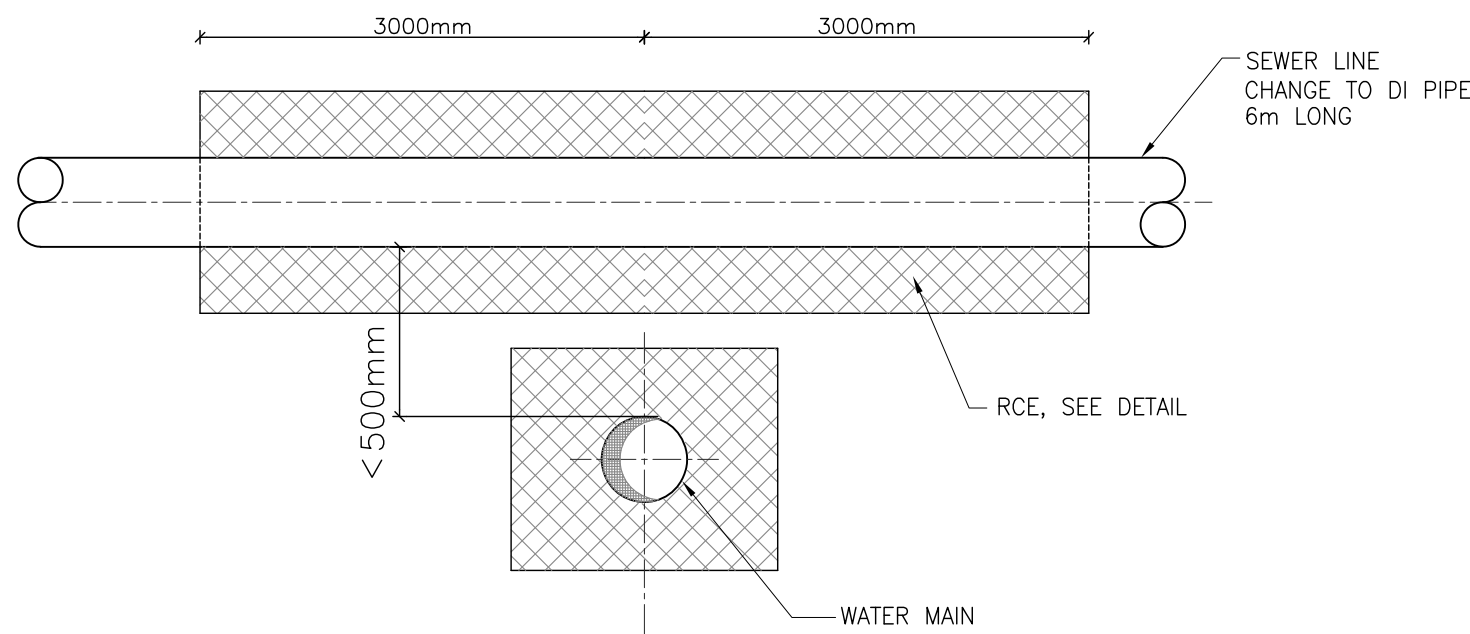
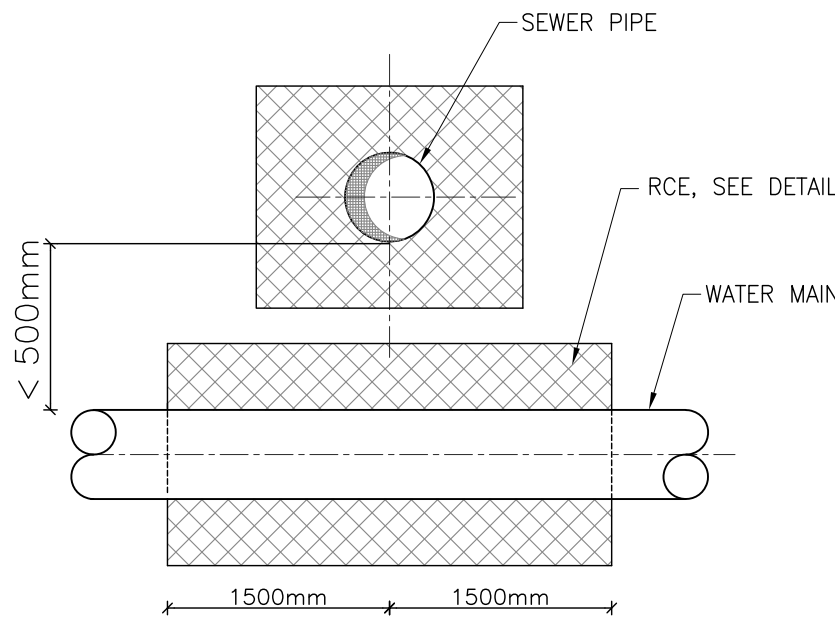
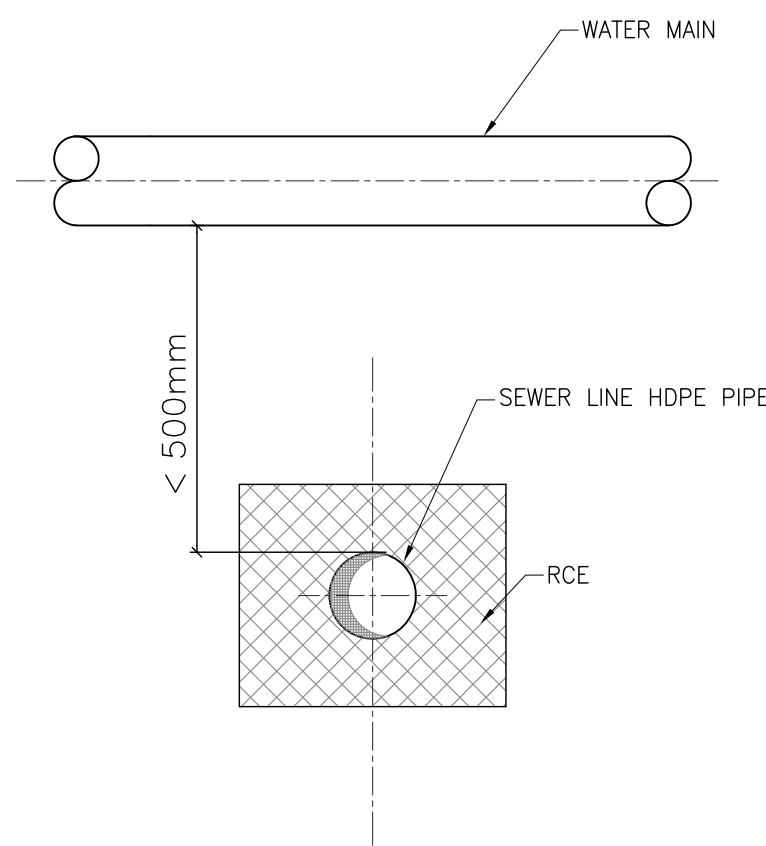
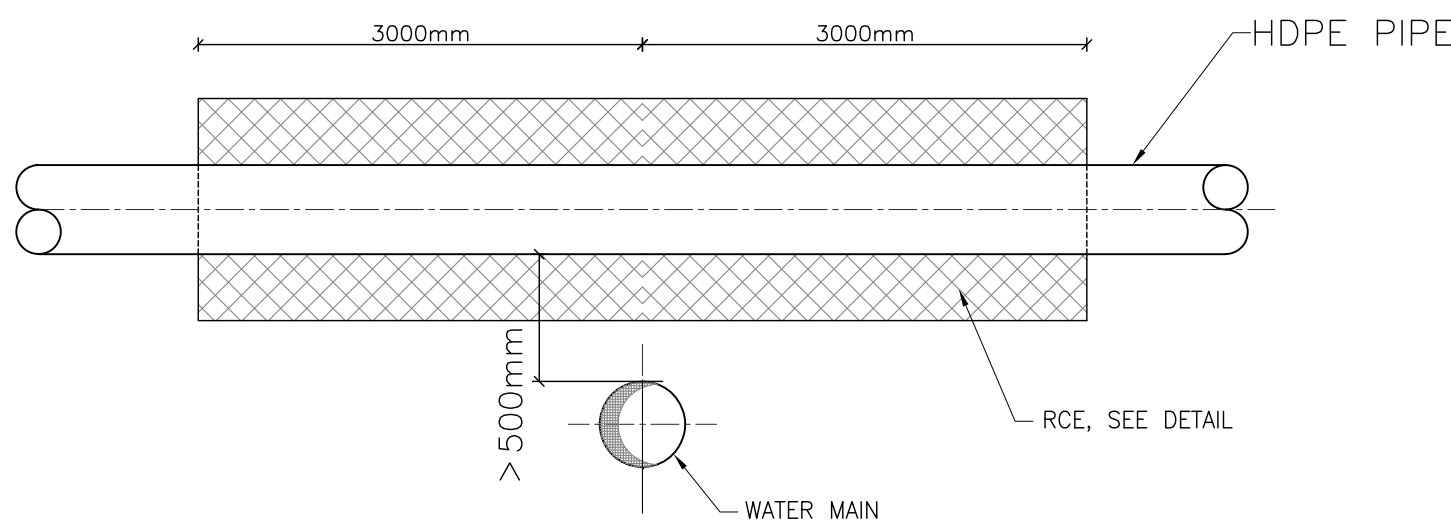
SECTIONAL VIEW-TYPICAL VERTICAL SEPARATION BETWEEN WATER AND SEWER PIPES
N.T.S.



SECTIONAL VIEW-TYPICAL SEPARATION = 300mm
N.T.S.



WATER LINE CROSSING OVER SEWERS
N.T.S.



WATER LINE CROSSING BELOW SEWERS
N.T.S.

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Purpose Of Issue Rev. Date Approved

Client:



GREATER AMMAN MUNICIPALITY

Project:

STRUCTURAL DESIGN SERVICES FOR
AMMAN BRT

Package:

PRESS TUNNEL

Title:

WATER & SEWER PIPES
CROSSING CASES DETAILS

Consultant:



Design:

W.H.

Drawn by:

CAD

Checked:

H.A.

Scale:

N.T.S.

Date:

NOV. 2016

Approved:

W.Z.

Drawing Number:

W-652

Rev.:

0



DEPTH FROM N.G.L. (h)	T "THICKNESS" mm	R1	R2	R3
<5m	300	ø12@200	ø12@200	ø12@200
5-10m	350	ø12@200	ø12@150	ø12@150

1. REINFORCEMENT COVER 40mm CLEAR
2. $f_{cu} = 30 \text{ MPa}$ (CONCRETE CUBE CRUSHING STRENGTH)
3. $f_y = 420 \text{ MPa}$ (GRADE 60 STEEL DEFORMED BARS)
4. ALL SUB-STRUCTURAL CONCRETE SHALL BE WATER PROOFED BY 2 COATS HOT-APPLIED ASPHALT .

DEPTH OF INVERT OF MANHOLE (m)	DIAMETERS D2 (mm)
5.0–6.0m	1200
6.0–8.0m	1500
>8.0m	1800



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STRUCTURAL DESIGN SERVICES FOR
AMMAN BRT

Package:

PRESS TUNNEL

Title:

TYPICAL DEEP MANHOLE DETAILS

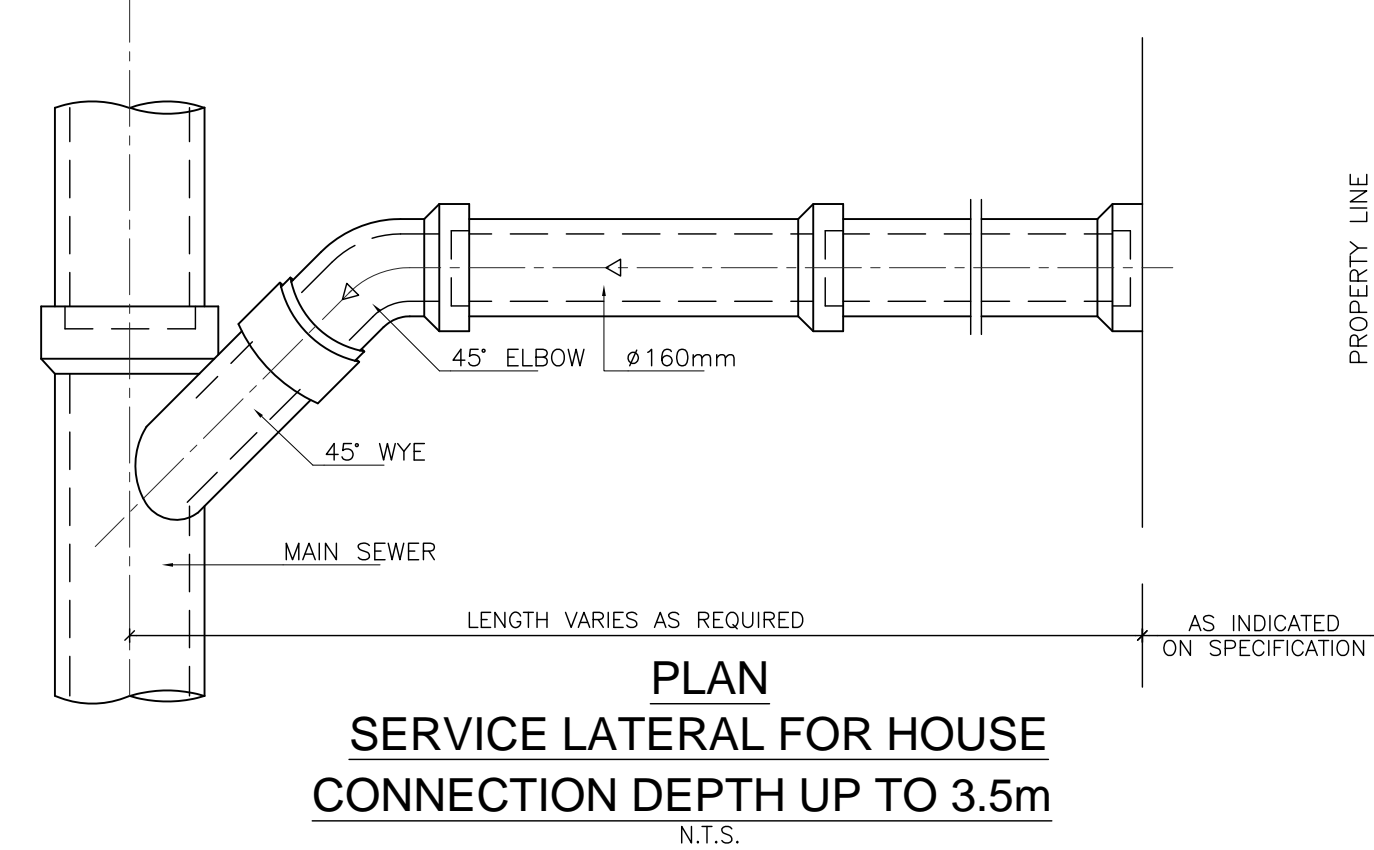
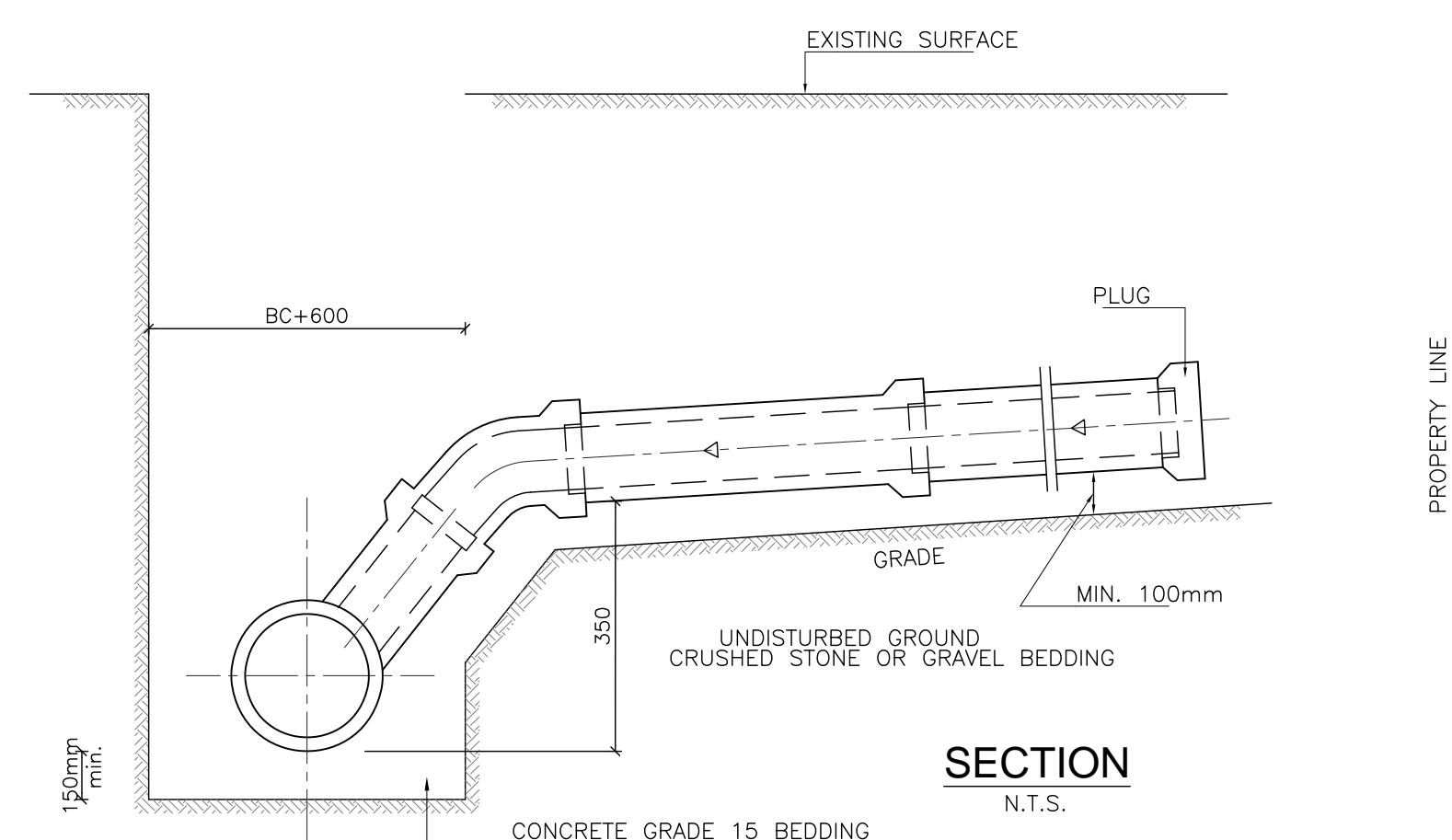
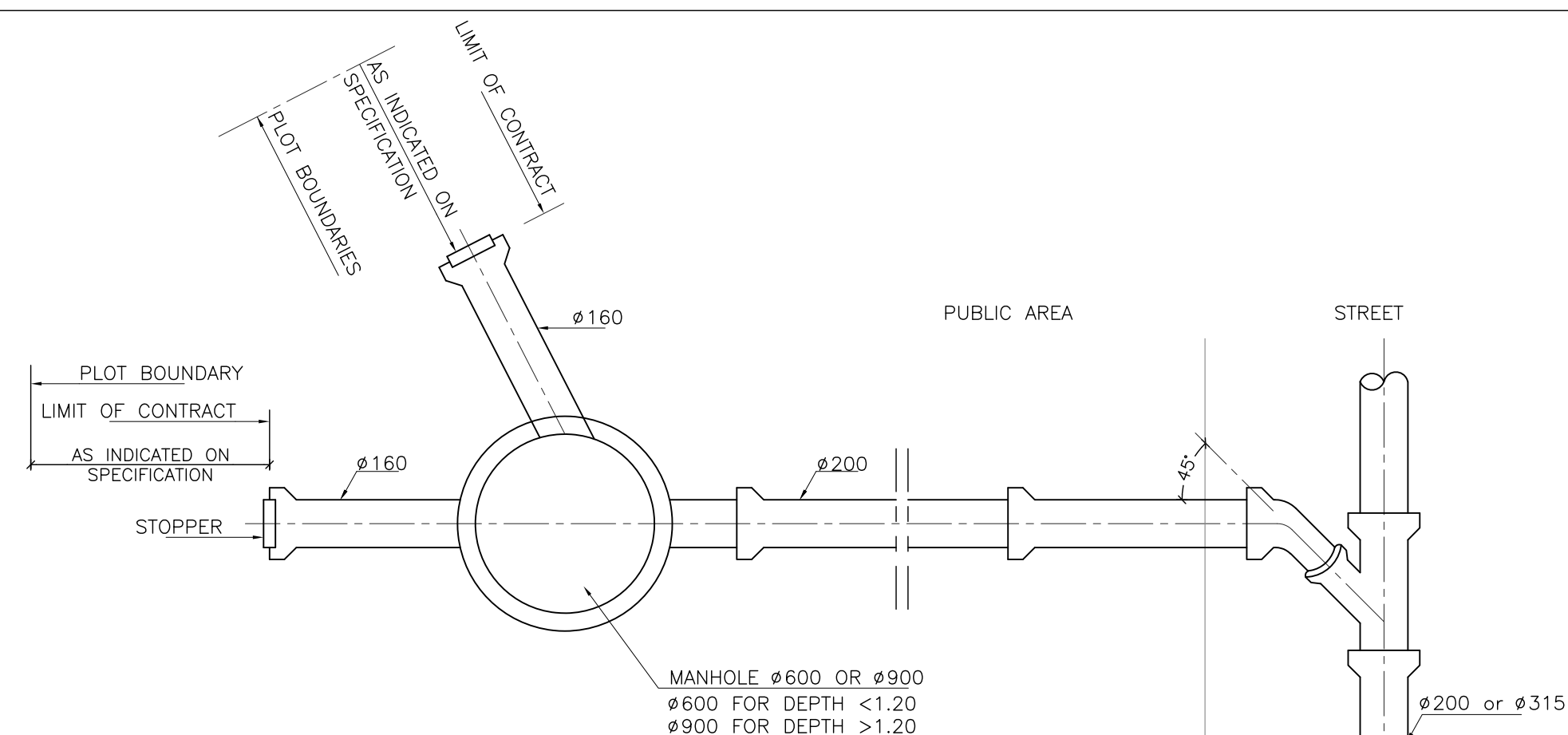
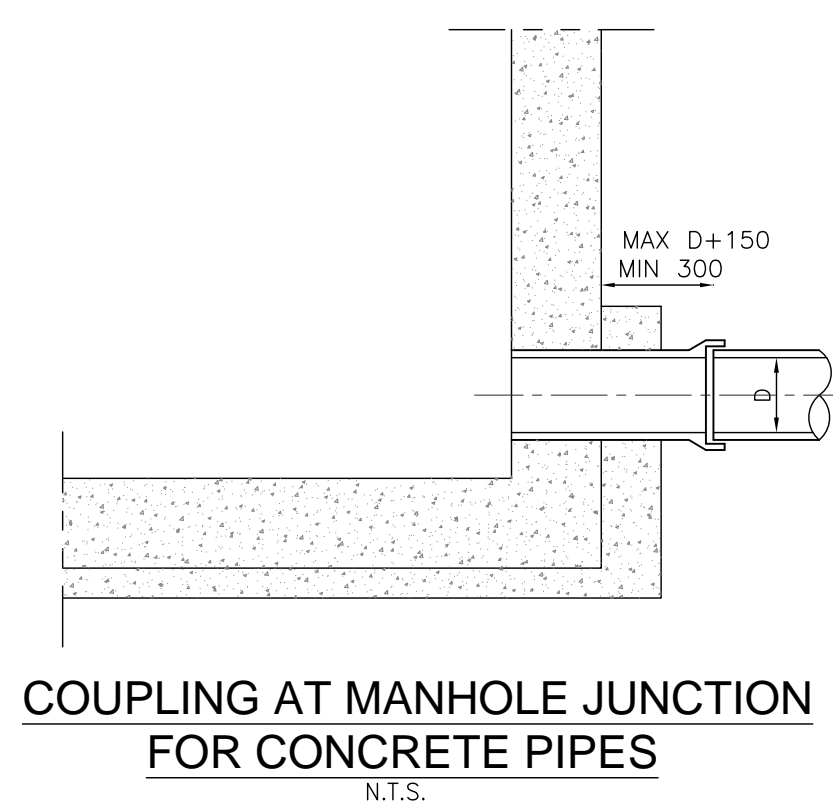
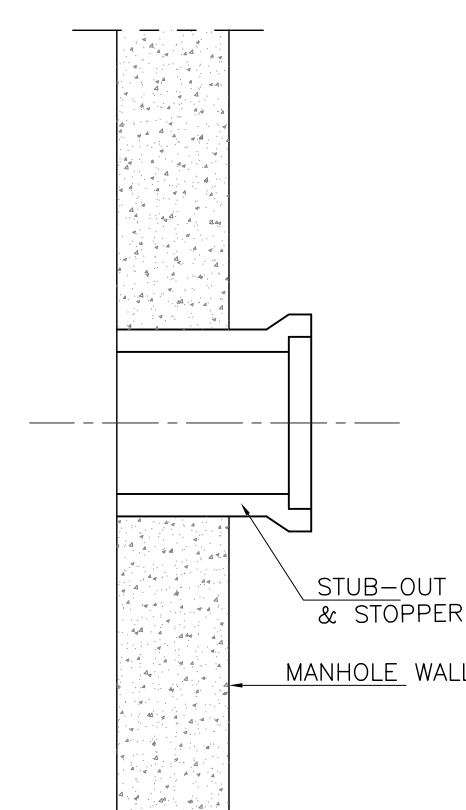
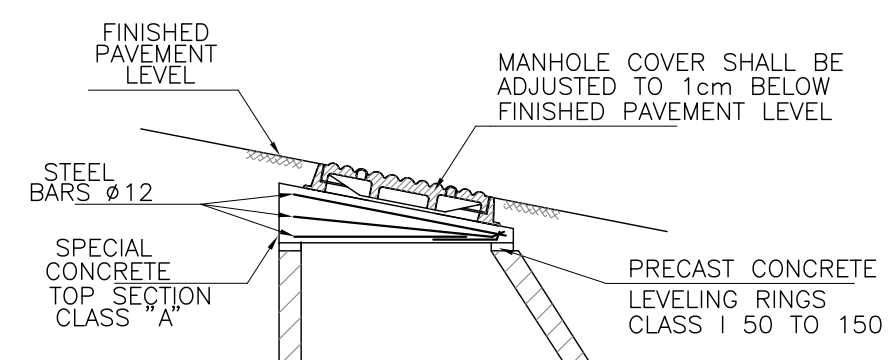
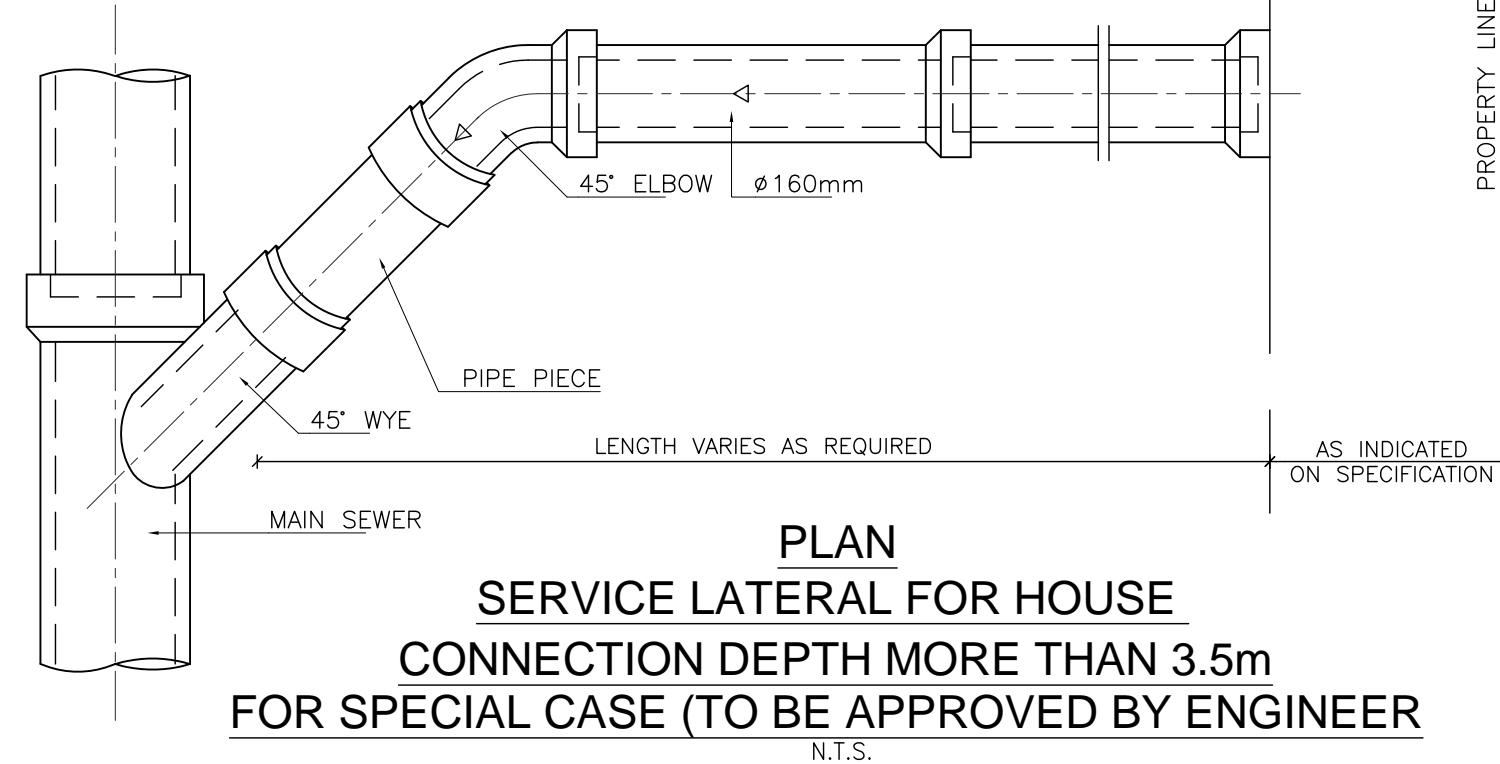
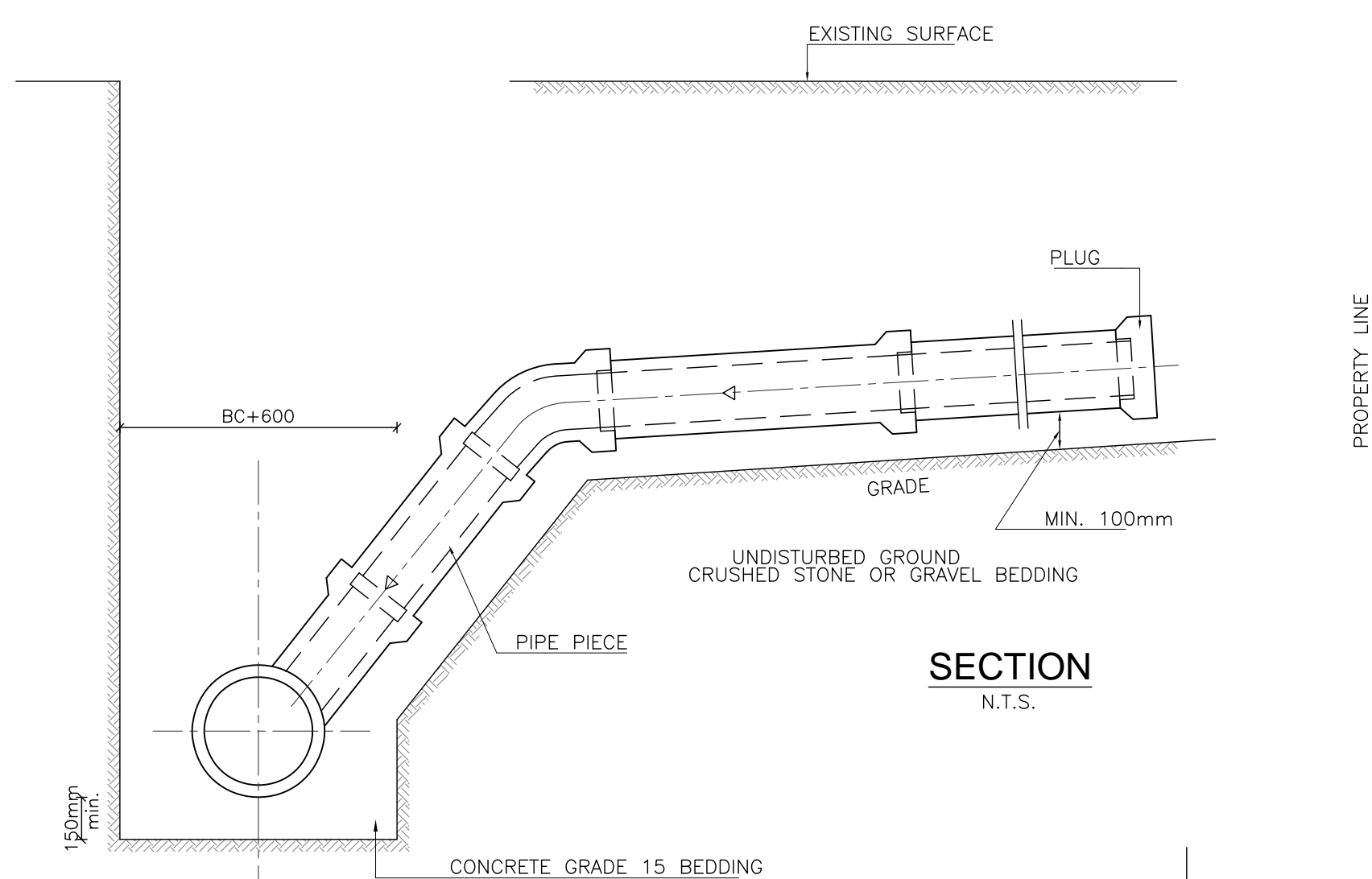
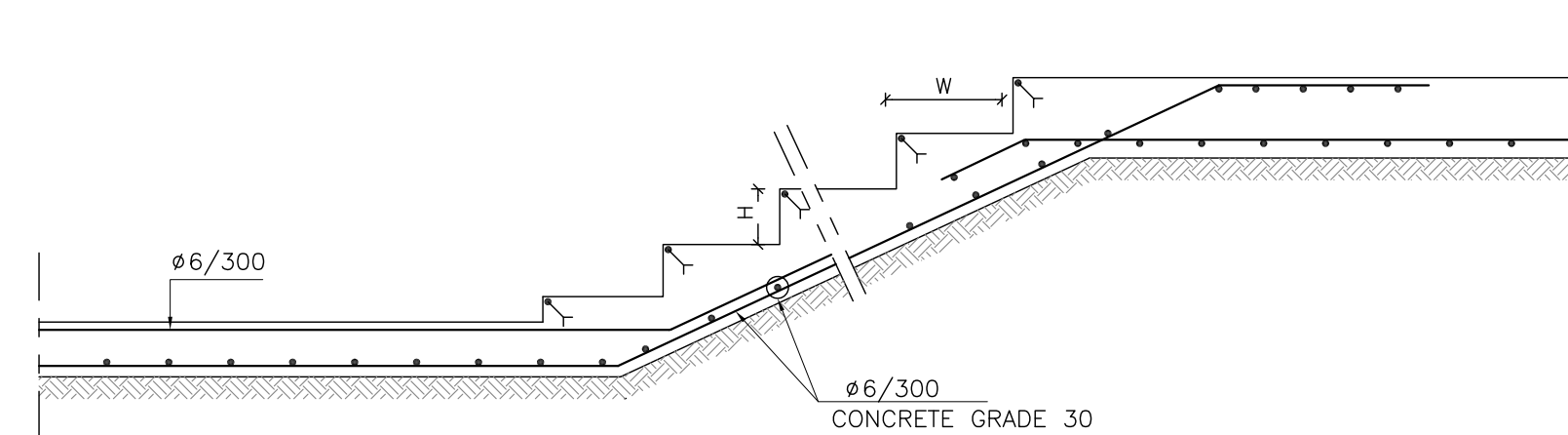
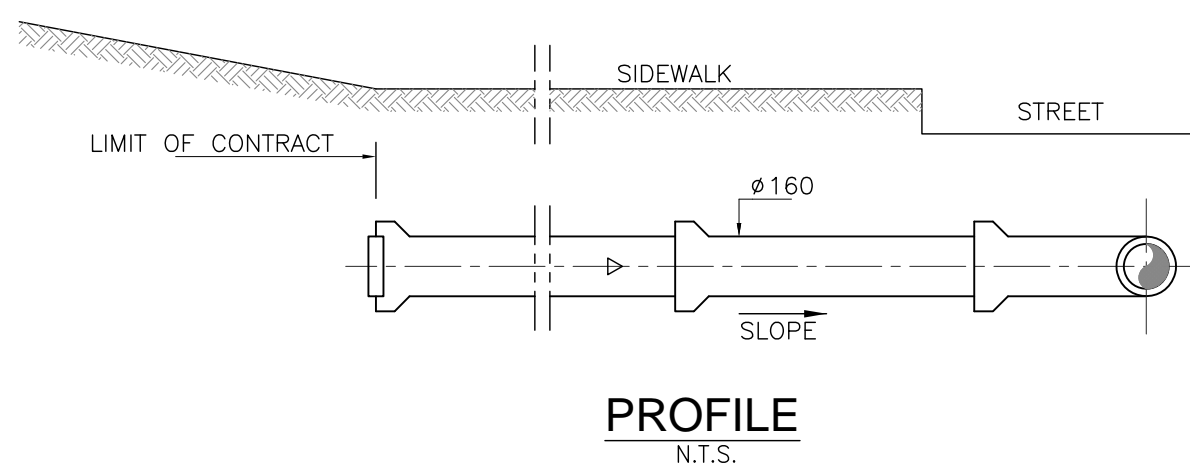
Consultant:



Design: W.H.	Drawn by: CAD	Checked: H.A.
Scale: N.T.S.	Date: NOV. 2016	Approved: W.Z.



Drawing Number:	Rev.:
W-653	0



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Client:



GREATER AMMAN MUNICIPALITY

Project:

STRUCTURAL DESIGN SERVICES FOR
AMMAN BRT

Package:

PRESS TUNNEL

Title:

HOUSE CONNECTION & DETAILS

Consultant:



Design: W.H.	Drawn by: CAD	Checked: H.A.
Scale: N.T.S.	Date: NOV. 2016	Approved: W.Z.



Drawing Number:	Rev.:
W-654	0