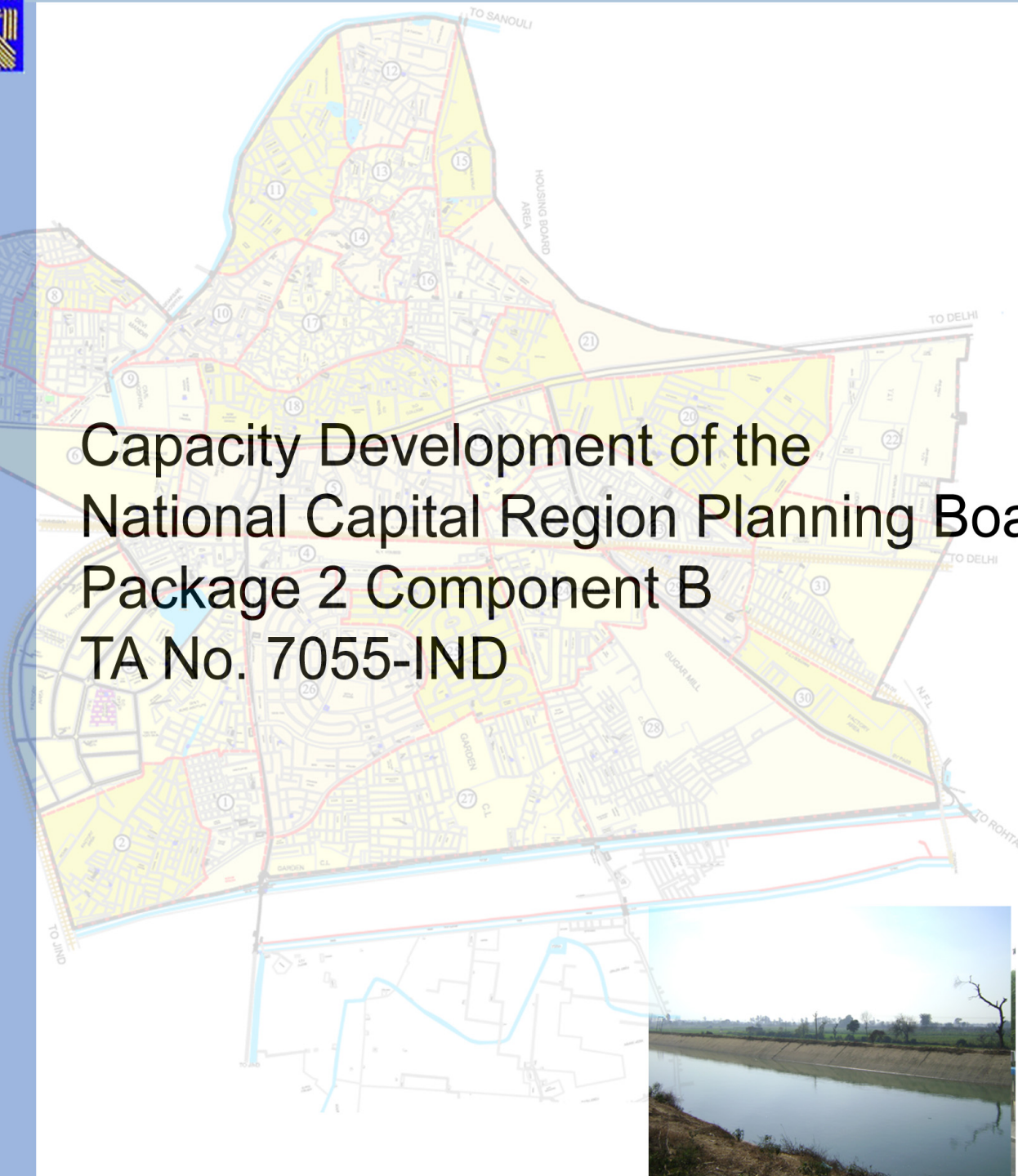


ADB



Asian Development Bank
National Capital Region Planning Board

Capacity Development of the
National Capital Region Planning Board
Package 2 Component B
TA No. 7055-IND



FINAL REPORT

Volume I-E : Detailed Drawings

**Detailed Project Report for
Water Supply System in Panipat**

WilburSmith
ASSOCIATES

July 2010

NCR Planning Board
Asian Development Bank

**Capacity Development of the National
Capital Region Planning Board
(NCRPB) – Component B**
(TA No. 7055-IND)

FINAL REPORT

Volume I-E: Detailed Project Report for Panipat Water Supply
Detailed Drawings

July 2010



Vol I-E DPR for Panipat Water Supply
Detailed Drawings

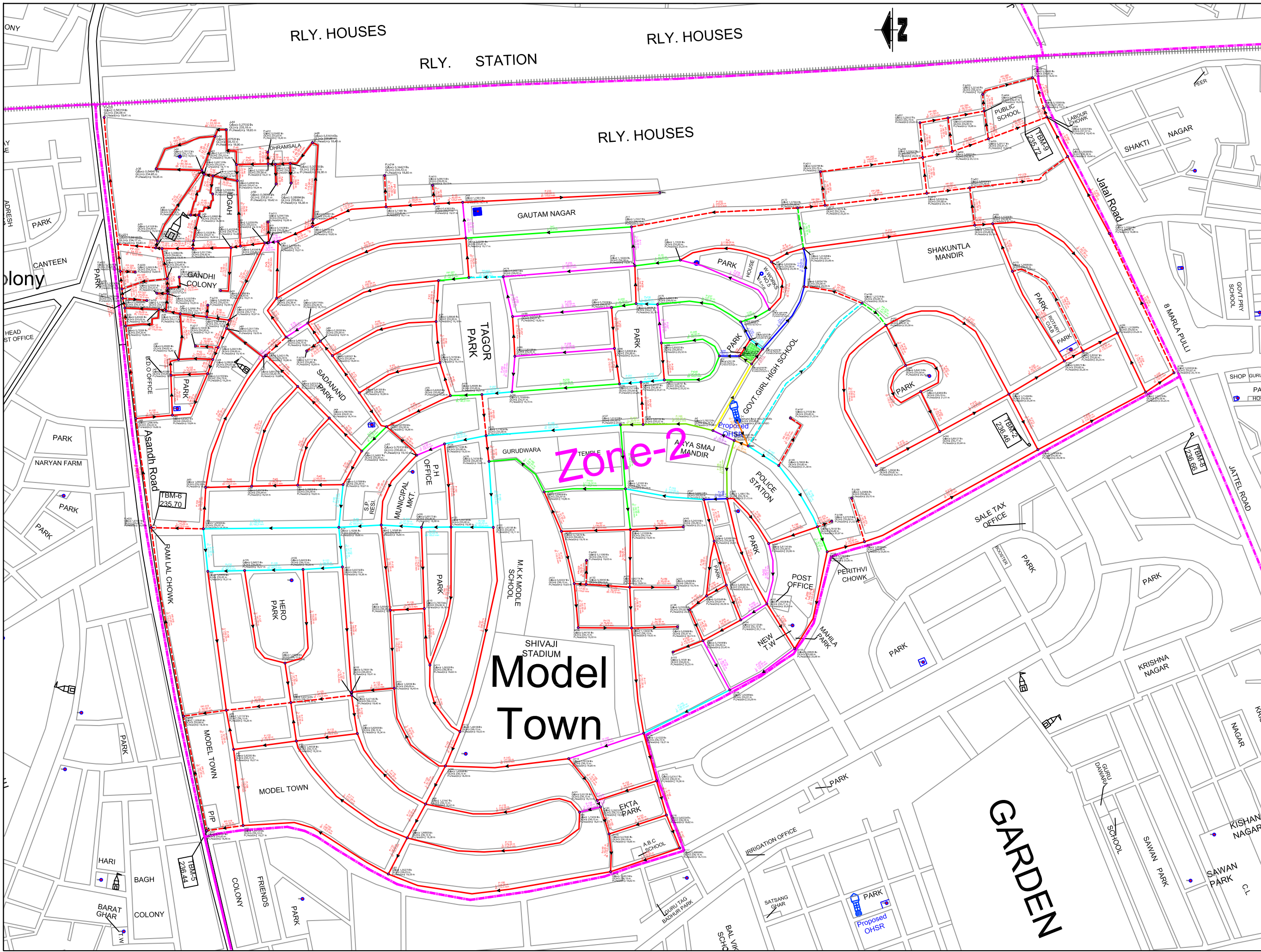
Contents

SI No.	Drawing No.	Title of the Drawing
1	Drg. No.NCRPB-PANIPAT-WS-NW-01	Detailed Water Supply Network in Zone -01
2	Drg. No.NCRPB-PANIPAT-WS-NW-02	Detailed Water Supply Network in Zone -02
3	Drg. No.NCRPB-PANIPAT-WS-NW-03	Detailed Water Supply Network in Zone -03
4	Drg. No.NCRPB-PANIPAT-WS-NW-04	Detailed Water Supply Network in Zone -04
5	Drg. No.NCRPB-PANIPAT-WS-NW-05	Detailed Water Supply Network in Zone -05
6	Drg. No.NCRPB-PANIPAT-WS-NW-06	Detailed Water Supply Network in Zone -06
7	Drg. No.NCRPB-PANIPAT-WS-NW-07	Detailed Water Supply Network in Zone -07
8	Drg. No.NCRPB-PANIPAT-WS-NW-08	Detailed Water Supply Network in Zone -08
9	Drg. No.NCRPB-PANIPAT-WS-NW-09	Detailed Water Supply Network in Zone -09
10	Drg. No.NCRPB-PANIPAT-WS-NW-10	Detailed Water Supply Network in Zone -10
11	Drg. No.NCRPB-PANIPAT-WS-NW-11	Detailed Water Supply Network in Zone -11
12	Drg. No.NCRPB-PANIPAT-WS-NW-12	Detailed Water Supply Network in Zone -12
13	Drg. No.NCRPB-PANIPAT-WS-NW-13	Detailed Water Supply Network in Zone -13
14	Drg. No.NCRPB-PANIPAT-WS-NW-14	Detailed Water Supply Network in Zone -14
15	Drg. No.NCRPB-PANIPAT-WS-NW-15	Detailed Water Supply Network in Zone -15
16	Drg. No.NCRPB-PANIPAT-WS-NW-16	Detailed Water Supply Network in Zone -16
17	Drg. No.NCRPB-PANIPAT-WS-NW-17	Detailed Water Supply Network in Zone -17
18	Drg. No.NCRPB-PANIPAT-WS-NW-18	Detailed Water Supply Network in Zone -18

Vol I-E DPR for Panipat Water Supply Detailed Drawings

Contents

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2	Drg. No.NCRPB-PANIPAT-WS-NW-02	Detailed Water Supply Network in Zone -02
3	Drg. No.NCRPB-PANIPAT-WS-NW-03	Detailed Water Supply Network in Zone -03
4	Drg. No.NCRPB-PANIPAT-WS-NW-04	Detailed Water Supply Network in Zone -04
5	Drg. No.NCRPB-PANIPAT-WS-NW-05	Detailed Water Supply Network in Zone -05
6	Drg. No.NCRPB-PANIPAT-WS-NW-06	Detailed Water Supply Network in Zone -06
7	Drg. No.NCRPB-PANIPAT-WS-NW-07	Detailed Water Supply Network in Zone -07
8	Drg. No.NCRPB-PANIPAT-WS-NW-08	Detailed Water Supply Network in Zone -08
9	Drg. No.NCRPB-PANIPAT-WS-NW-09	Detailed Water Supply Network in Zone -09
10	Drg. No.NCRPB-PANIPAT-WS-NW-10	Detailed Water Supply Network in Zone -10
11	Drg. No.NCRPB-PANIPAT-WS-NW-11	Detailed Water Supply Network in Zone -11
12	Drg. No.NCRPB-PANIPAT-WS-NW-12	Detailed Water Supply Network in Zone -12
13	Drg. No.NCRPB-PANIPAT-WS-NW-13	Detailed Water Supply Network in Zone -13
14	Drg. No.NCRPB-PANIPAT-WS-NW-14	Detailed Water Supply Network in Zone -14
15	Drg. No.NCRPB-PANIPAT-WS-NW-15	Detailed Water Supply Network in Zone -15
16	Drg. No.NCRPB-PANIPAT-WS-NW-16	Detailed Water Supply Network in Zone -16
17	Drg. No.NCRPB-PANIPAT-WS-NW-17	Detailed Water Supply Network in Zone -17
18	Drg. No.NCRPB-PANIPAT-WS-NW-18	Detailed Water Supply Network in Zone -18



Capacity Development of the NCRPB: Component B (ADB TA-7055)

Panipat Detailed Water Supply Network in Zone-2

Legend

- Roads
- Railway Line
- Canal
- Drain
- Existing Tube Well
- Hand Pump
- Culvert
- Manhole
- Transformer
- Electricpole
- Lampost
- Telephonepole
- GPS
- TBM
- Tree
- OFC
- Ditch

Overlay Legend

- Zone Boundary
- Zone Number
- Proposed OHSR
- 110 mm Ø Existing Pipe
- 110 mm Ø Proposed Pipe
- 125 mm Ø Existing Pipe
- 125 mm Ø Proposed Pipe
- 140 mm Ø Existing Pipe
- 140 mm Ø Proposed Pipe
- 160 mm Ø Existing Pipe
- 160 mm Ø Proposed Pipe
- 180 mm Ø Existing Pipe
- 180 mm Ø Proposed Pipe
- 200 mm Ø Existing Pipe
- 200 mm Ø Proposed Pipe
- 225 mm Ø Existing Pipe
- 225 mm Ø Proposed Pipe
- 280 mm Ø Existing Pipe
- 280 mm Ø Proposed Pipe
- 315 mm Ø Existing Pipe
- 315 mm Ø Proposed Pipe
- 355 mm Ø Proposed Pipe
- J-4 Existing Junction with no.
- P-J-323 Proposed Junction with no.
- P-69 Existing Pipe Line with no.
- PP-398 Proposed Pipe Line with no.
- l/s Litre/Second
- GL Ground Level
- RP Residual Pressure

KEY PLAN

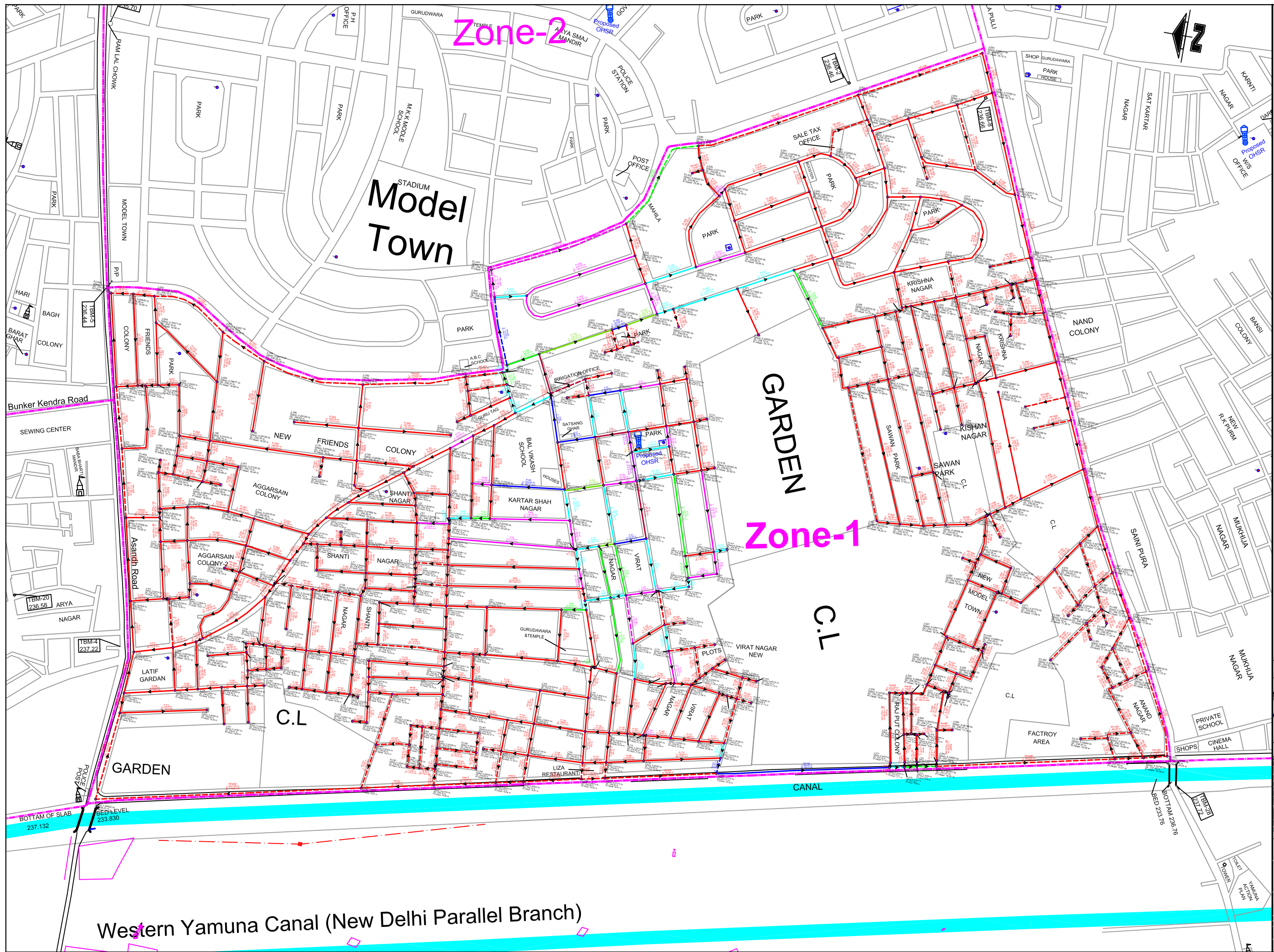
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National Capital Region Planning Board

Consultant: Wilbur Smith Associates

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Date: July 2010
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Approved: NSB

Drg. No. NCRPB-PANIPAT-WS-NW-02



Capacity Development of the NCRPB: Component B (ADB TA-7055)

Panipat
Detailed Water Supply Network in Zone-1

Legend

- Roads
- Railway Line
- Canal
- Drain
- Existing Tube Well
- Hand Pump
- Culvert
- Manhole
- Transformer
- Electricpole
- Lampost
- Telephonepole
- GPS
- TBM
- Tree
- OFC
- Ditch

Overlay Legend

- Zone Boundary
- Zone Number
- Proposed OHSR
- 110 mm Ø Existing Pipe
- 110 mm Ø Proposed Pipe
- 125 mm Ø Existing Pipe
- 125 mm Ø Proposed Pipe
- 140 mm Ø Existing Pipe
- 140 mm Ø Proposed Pipe
- 160 mm Ø Existing Pipe
- 160 mm Ø Proposed Pipe
- 180 mm Ø Existing Pipe
- 180 mm Ø Proposed Pipe
- 225 mm Ø Existing Pipe
- 225 mm Ø Proposed Pipe
- 250 mm Ø Existing Pipe
- 250 mm Ø Proposed Pipe
- 315 mm Ø Existing Pipe
- 315 mm Ø Proposed Pipe
- 355 mm Ø Proposed Pipe
- J-4 Proposed Junction with no.
- P-J-323 Existing Pipe Line with no.
- P-69 Existing Pipe Line with no.
- PP-398 Proposed Pipe Line with no.
- l/s Litre/Second
- GL Ground Level
- RP Residual Pressure

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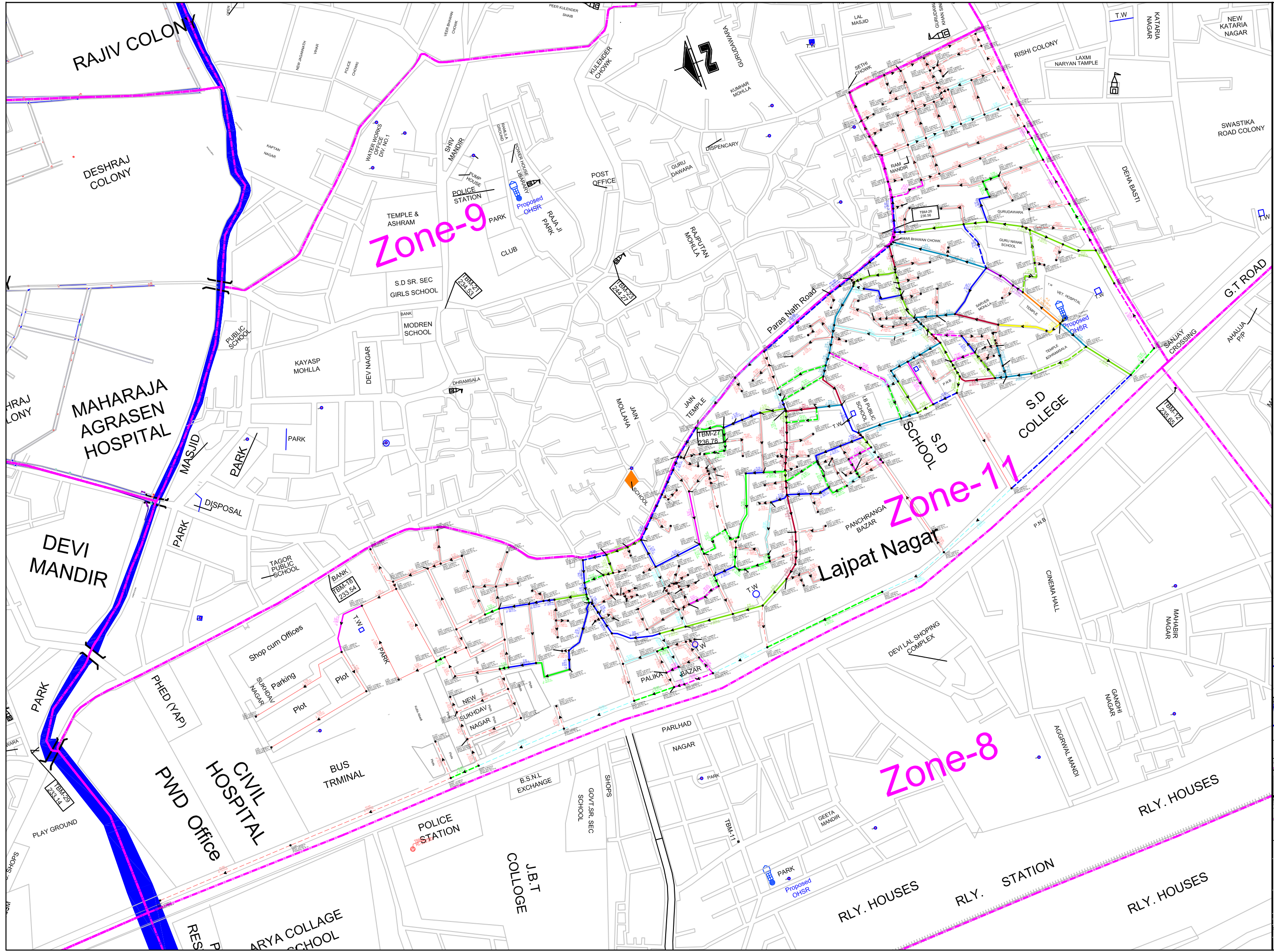
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Consultant:
Wilbur Smith Associates

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Org. No. NCRPB-PANIPAT-WS-NW-01



Capacity Development of the NCRPB: Component B (ADB TA-7055)

Panipat
Detailed Water Supply Network in Zone-11

Legend

- Roads
- Railway Line
- Canal
- Drain
- Existing Tube Well
- Hand Pump
- Culvert
- Manhole
- Transformer
- Electricpole
- Lampost
- Telephonepole
- GPS
- TBM
- Tree
- OFC
- Ditch

Overlay Legend

- Zone Boundary
- Zone Number
- Proposed OHSR
- 110 mm Ø Proposed Pipe
- 110 mm Ø Existing Pipe
- 125 mm Ø Proposed Pipe
- 125 mm Ø Existing Pipe
- 140 mm Ø Proposed Pipe
- 140 mm Ø Existing Pipe
- 160 mm Ø Proposed Pipe
- 160 mm Ø Existing Pipe
- 180 mm Ø Proposed Pipe
- 180 mm Ø Existing Pipe
- 200 mm Ø Existing Pipe
- 200 mm Ø Proposed Pipe
- 225 mm Ø Proposed Pipe
- 250 mm Existing Pipe
- 250 mm Ø Proposed Pipe
- 280 mm Ø Existing Pipe
- 280 mm Ø Proposed Pipe
- 315 mm Existing Pipe
- 315 mm Ø Proposed Pipe
- 355 mm Ø Proposed Pipe
- 450 mm Existing Pipe

J-4 Existing Junction with no.
 P-J-323 Proposed Junction with no.
 P-69 Existing Pipe Line with no.
 PP-398 Proposed Pipe Line with no.
 l/s Litre/Second
 GL Ground Level
 RP Residual Pressure

KEY PLAN

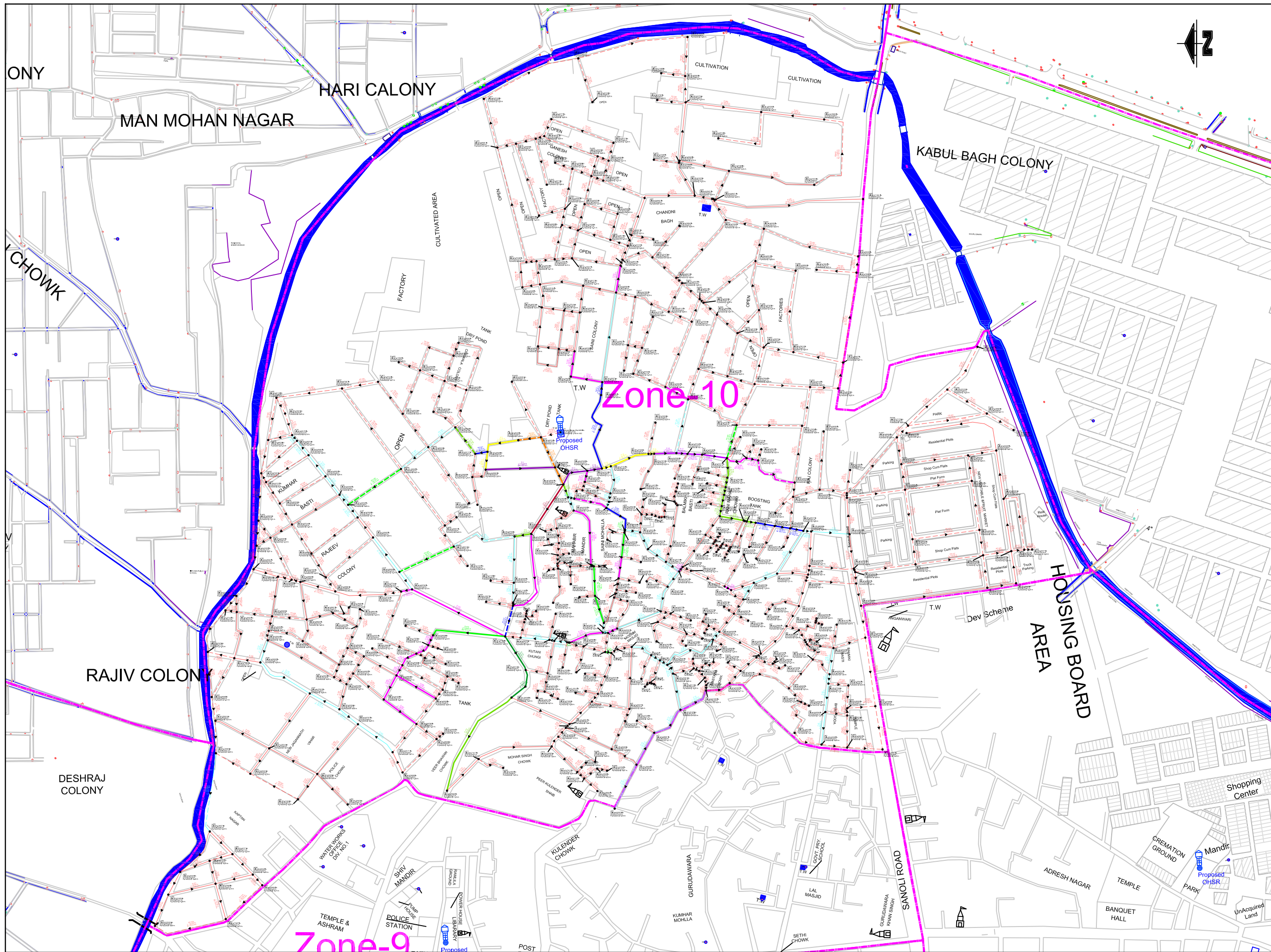
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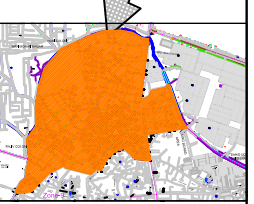
Org. No. NCRPB-PANIPAT-WS-NW-11



Capacity Development of the NCRPB: Component B (ADB TA-7055)

Panipat
Detailed Water Supply Network in Zone-10

- Legend**
- Roads
 - Railway Line
 - Canal
 - Drain
 - Existing Tube Well
 - Hand Pump
 - Culvert
 - Manhole
 - Transformer
 - Electricpole
 - Lampost
 - Telephonepole
 - GPS
 - TBM
 - Tree
 - OFC
 - Ditch
- Overlay Legend**
- Zone Boundary
 - Zone Number
 - Proposed OHSR
 - 110 mm Ø Existing Pipe
 - 110 mm Ø Proposed Pipe
 - 125 mm Ø Existing Pipe
 - 125 mm Ø Proposed Pipe
 - 140 mm Ø Existing Pipe
 - 140 mm Ø Proposed Pipe
 - 160 mm Ø Existing Pipe
 - 160 mm Ø Proposed Pipe
 - 180 mm Ø Existing Pipe
 - 180 mm Ø Proposed Pipe
 - 200 mm Ø Existing Pipe
 - 200 mm Ø Proposed Pipe
 - 225 mm Ø Existing Pipe
 - 225 mm Ø Proposed Pipe
 - 250 mm Ø Existing Pipe
 - 250 mm Ø Proposed Pipe
 - 280 mm Ø Existing Pipe
 - 280 mm Ø Proposed Pipe
 - 300 mm Ø Existing Pipe
 - 315 mm Ø Existing Pipe
 - 315 mm Ø Proposed Pipe
 - 355 mm Ø Proposed Pipe
 - 400 mm Ø Proposed Pipe
 - J-4 Existing Junction with no.
 - PJ-323 Proposed Junction with no.
 - P-69 Existing Pipe Line with no.
 - PP-398 Proposed Pipe Line with no.
 - l/s Litre/Second
 - GL Ground Level
 - RP Residual Pressure



Client:
Asian Development Bank
National Capital Region Planning Board

Consultant:
Wilbur Smith Associates

Drawn: SK
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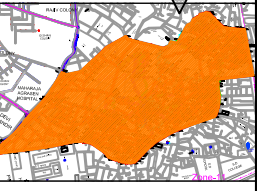
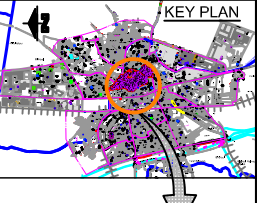
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Drg. No. NCRPB-PANIPAT-WS-NW-10

Capacity Development of the NCRPB: Component B (ADB TA-7055)

Panipat Detailed Water Supply Network in Zone-9

- Legend**
- Roads
 - Railway Line
 - Canal
 - Drain
 - Existing Tube Well
 - Hand Pump
 - Culvert
 - Manhole
 - Transformer
 - Electricpole
 - Lampost
 - Telephonepole
 - GPS
 - TBM
 - Tree
 - OFC
 - Ditch
- Overlay Legend**
- Zone Boundary
 - Zone Number
 - Proposed OHSR
 - 110 mm Dia Existing Pipe
 - 110 mm Dia Proposed Pipe
 - 125 mm Dia Existing Pipe
 - 125 mm Dia Proposed Pipe
 - 140 mm Dia Existing Pipe
 - 140 mm Dia Proposed Pipe
 - 160 mm Dia Existing Pipe
 - 160 mm Dia Proposed Pipe
 - 180 mm Dia Existing Pipe
 - 180 mm Dia Proposed Pipe
 - 200 mm Dia Existing Pipe
 - 200 mm Dia Proposed Pipe
 - 225 mm Dia Existing Pipe
 - 225 mm Dia Proposed Pipe
 - 250 mm Dia Existing Pipe
 - 250 mm Dia Proposed Pipe
 - 315 mm Dia Existing Pipe
 - 315 mm Dia Proposed Pipe
 - 355 mm Dia Proposed Pipe
 - J-4 Existing Junction with no.
 - PJ-323 Proposed Junction with no.
 - P-69 Existing Pipe Line with no.
 - PP-398 Proposed Pipe Line with no.
 - I/s Litre/Second
 - GL Ground Level
 - RP Residual Pressure



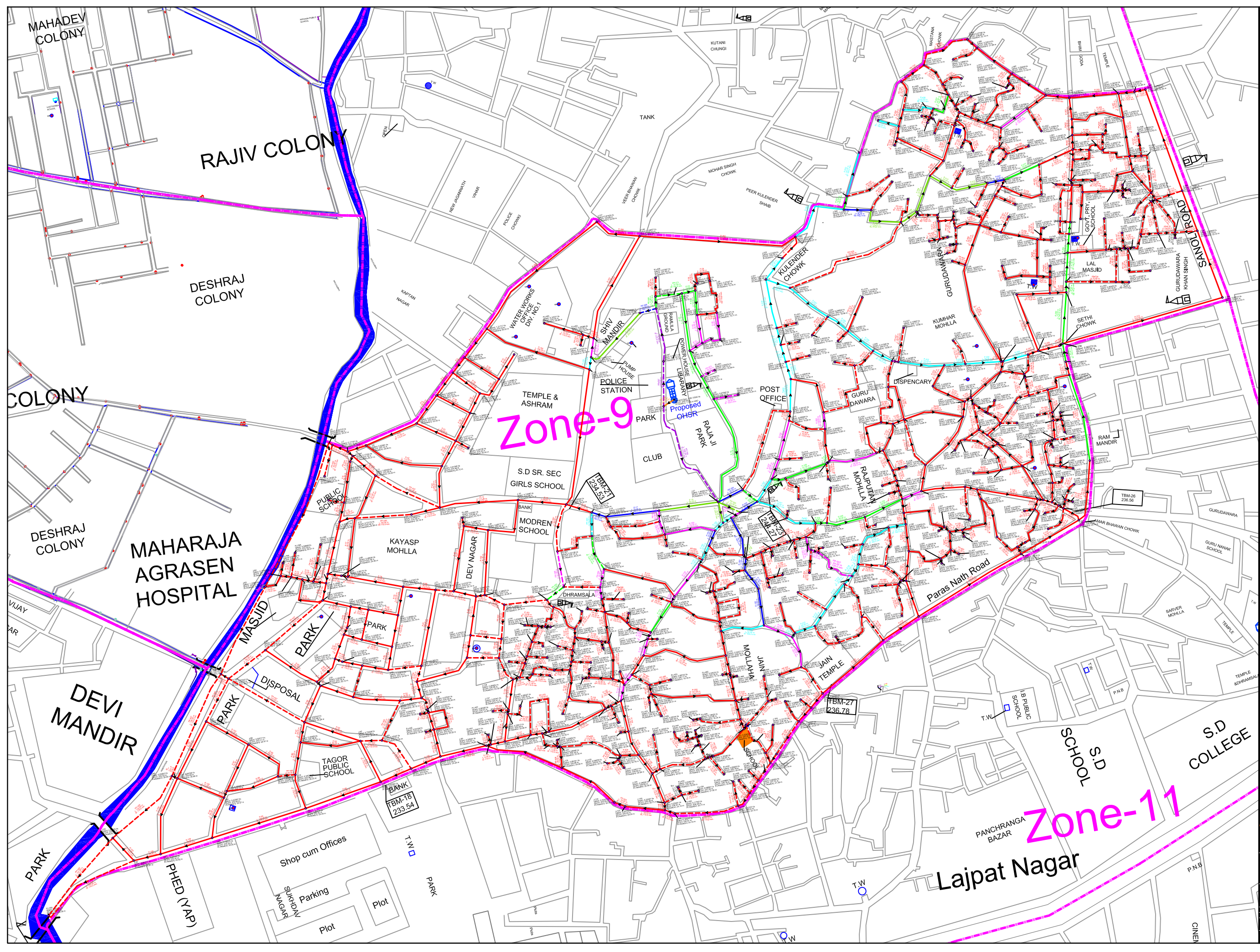
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National Capital Region Planning Board**

Consultant:
Wilbur Smith Associates

Drawn: SK
Date: July 2010
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Drg. No. NCRPB-PANIPAT-WS-NW-09



Capacity Development of the NCRPB: Component B (ADB TA-7055)

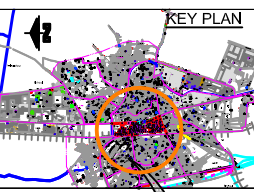
Panipat
Detailed Water Supply Network in Zone-8

Legend

- Roads
- Railway Line
- Canal
- Drain
- Existing Tube Well
- Hand Pump
- Culvert
- Manhole
- Transformer
- Electric pole
- Lamp post
- Telephone pole
- GPS
- TBM
- Tree
- OFC
- Ditch

Overlay Legend

- Zone Boundary
- Zone Number
- Proposed OHSR
- 110 mm Ø Existing Pipe
- 110 mm Ø Proposed Pipe
- 125 mm Ø Existing Pipe
- 125 mm Ø Proposed Pipe
- 140 mm Ø Existing Pipe
- 140 mm Ø Proposed Pipe
- 160 mm Ø Existing Pipe
- 160 mm Ø Proposed Pipe
- 180 mm Ø Existing Pipe
- 180 mm Ø Proposed Pipe
- 200 mm Ø Existing Pipe
- 200 mm Ø Proposed Pipe
- 225 mm Ø Existing Pipe
- 225 mm Ø Proposed Pipe
- 250 mm Ø Existing Pipe
- 250 mm Ø Proposed Pipe
- 315 mm Ø Existing Pipe
- 315 mm Ø Proposed Pipe
- 355 mm Ø Proposed Pipe
- J-4 Existing Junction with no.
- PJ-323 Proposed Junction with no.
- P-69 Existing Pipe Line with no.
- PP-398 Proposed Pipe Line with no.
- l/s Litre/Second
- GL Ground Level
- RP Residual Pressure

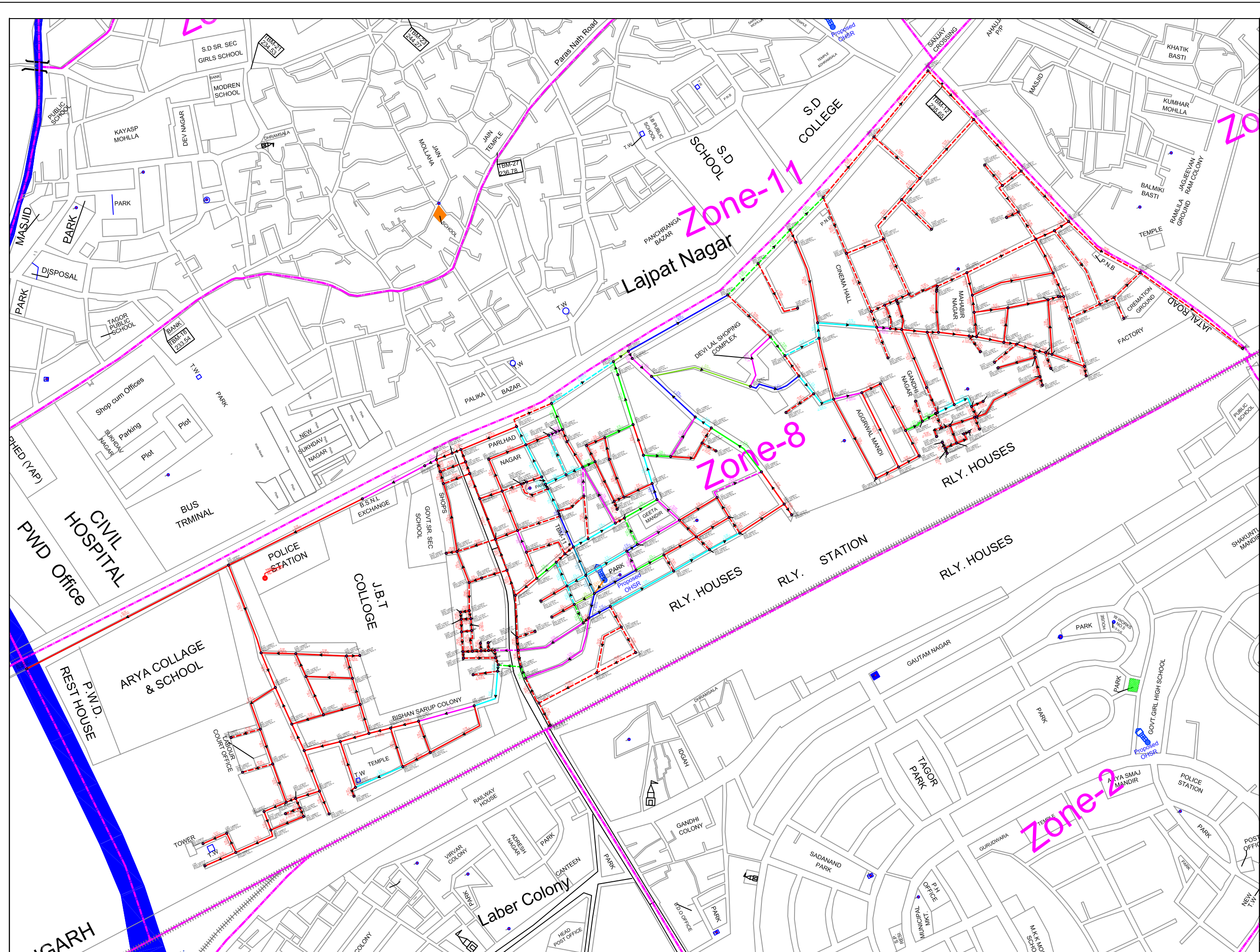


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Asian Development Bank
National Capital Region Planning Board

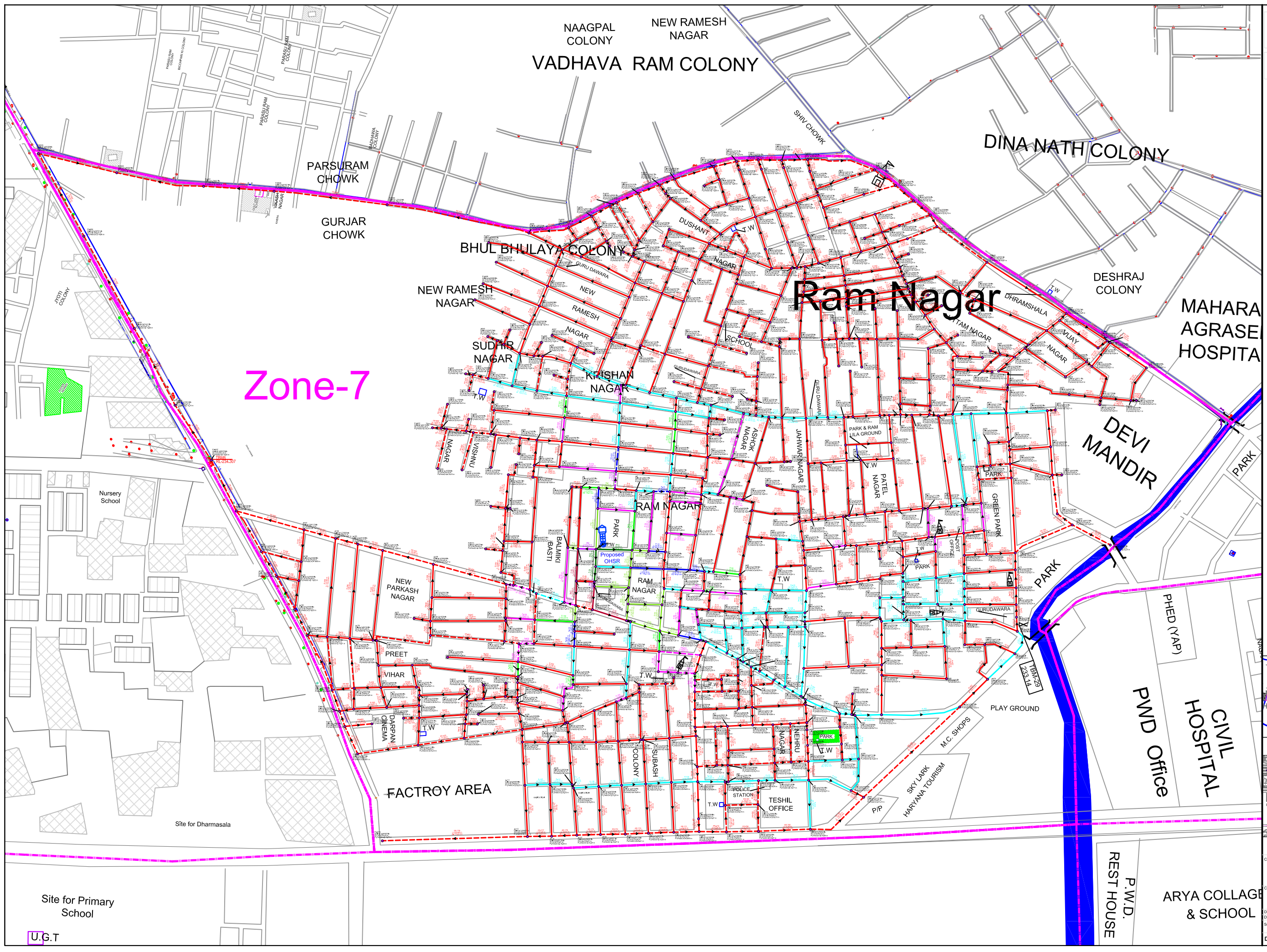
Consultant:
Wilbur Smith Associates

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Drg. No. NCRPB-PANIPAT-WS-NW-08



NAAGPAL COLONY NEW RAMESH NAGAR
VADHAVA RAM COLONY

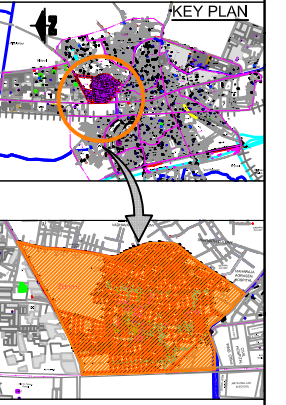


Zone-7

Capacity Development of the NCRPB: Component B (ADB TA-7055)

Panipat Detailed Water Supply Network in Zone-7

- Legend**
- Roads
 - Railway Line
 - Canal
 - Drain
 - Existing Tube Well
 - Hand Pump
 - Culvert
 - Manhole
 - Transformer
 - Electricpole
 - Lampost
 - Telephonepole
 - GPS
 - TBM
 - Tree
 - OFC
 - Ditch
- Overlay Legend**
- Zone Boundary
 - Zone Number
 - Proposed OHSR
 - 110 mm Ø Existing Pipe
 - 110 mm Ø Proposed Pipe
 - 125 mm Ø Existing Pipe
 - 125 mm Ø Proposed Pipe
 - 140 mm Ø Existing Pipe
 - 140 mm Ø Proposed Pipe
 - 160 mm Ø Existing Pipe
 - 160 mm Ø Proposed Pipe
 - 180 mm Ø Existing Pipe
 - 180 mm Ø Proposed Pipe
 - 200 mm Ø Existing Pipe
 - 200 mm Ø Proposed Pipe
 - 225 mm Ø Existing Pipe
 - 225 mm Ø Proposed Pipe
 - 250 mm Ø Existing Pipe
 - 250 mm Ø Proposed Pipe
 - 315 mm Ø Existing Pipe
 - 315 mm Ø Proposed Pipe
 - 355 mm Ø Proposed Pipe
 - J-4 Existing Junction with no.
 - PJ-323 Proposed Junction with no.
 - P-69 Existing Pipe Line with no.
 - PP-398 Proposed Pipe Line with no.
 - l/s Litre/Second
 - GL Ground Level
 - RP Residual Pressure



Client: Asian Development Bank
 National Capital Region Planning Board

Consultant: Wilbur Smith Associates

Drawn: SK
 Date: July 2010

Checked: NSS
 Approved: NSS

Scale: 0 30 60 90 120 Meters

Drg. No. NCRPB-PANIPAT-WS-NW-07

Site for Primary School

U.G.T

Nursery School

Site for Dharmasala

FACTROY AREA

POLICE STATION

TESHIL OFFICE

SKY LARK HARYANA TOURISM

M.C. SHOPS

PLAY GROUND

P.W.D. REST HOUSE

PMD Office

CIVIL HOSPITAL

ARYA COLLEGE & SCHOOL

DEVI MANDIR

MAHARA AGRASE HOSPITA

DESHRAJ COLONY

DINA NATH COLONY

Ram Nagar

BHUL BHULAYA COLONY

NEW RAMESH NAGAR

GURJAR CHOWK

PARSURAM CHOWK

NAAGPAL COLONY

NEW RAMESH NAGAR

VADHAVA RAM COLONY

SHIV CHOWK

NEW RAMESH NAGAR

NEW RAMESH NAGAR

RAMESH NAGAR

NAGAR

SUDHIR NAGAR

INSHU NAGAR

KRISHAN NAGAR

NAGAR

GURUDAWARA

SCHOOL

ASHOK NAGAR

NAGAR

JAHNAR NAGAR

NAGAR

PARK & RAM LILA GROUND

T.W

PATIL NAGAR

NAGAR

PARK

GREEN PARK

PARK

GURUDAWARA

PARK

T.W

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Capacity Development of the NCRPB: Component B (ADB TA-7055)

Panipat
Detailed Water Supply Network in Zone-6

- Legend**
- Roads
 - Railway Line
 - Canal
 - Drain
 - Existing Tube Well
 - Hand Pump
 - Culvert
 - Manhole
 - Transformer
 - Electricpole
 - Lamppost
 - Telephonepole
 - GPS
 - TBM
 - Tree
 - OFC
 - Ditch

- Overlay Legend**
- Zone Boundary
 - Zone Number
 - Proposed OHSR
 - 110 mm Dia Existing Pipe
 - 110 mm Dia Proposed Pipe
 - 125 mm Dia Existing Pipe
 - 125 mm Dia Proposed Pipe
 - 140 mm Dia Existing Pipe
 - 140 mm Dia Proposed Pipe
 - 160 mm Dia Existing Pipe
 - 160 mm Dia Proposed Pipe
 - 180 mm Dia Existing Pipe
 - 180 mm Dia Proposed Pipe
 - 225 mm Dia Existing Pipe
 - 225 mm Dia Proposed Pipe
 - 250 mm Dia Existing Pipe
 - 250 mm Dia Proposed Pipe
 - 315 mm Dia Existing Pipe
 - 315 mm Dia Proposed Pipe
 - 355 mm Dia Proposed Pipe
 - J-4 Existing Junction with no.
 - PJ-323 Proposed Junction with no.
 - P-69 Existing Pipe Line with no.
 - PP-398 Proposed Pipe Line with no.
 - l/s Litre/Second
 - GL Ground Level
 - RP Residual Pressure



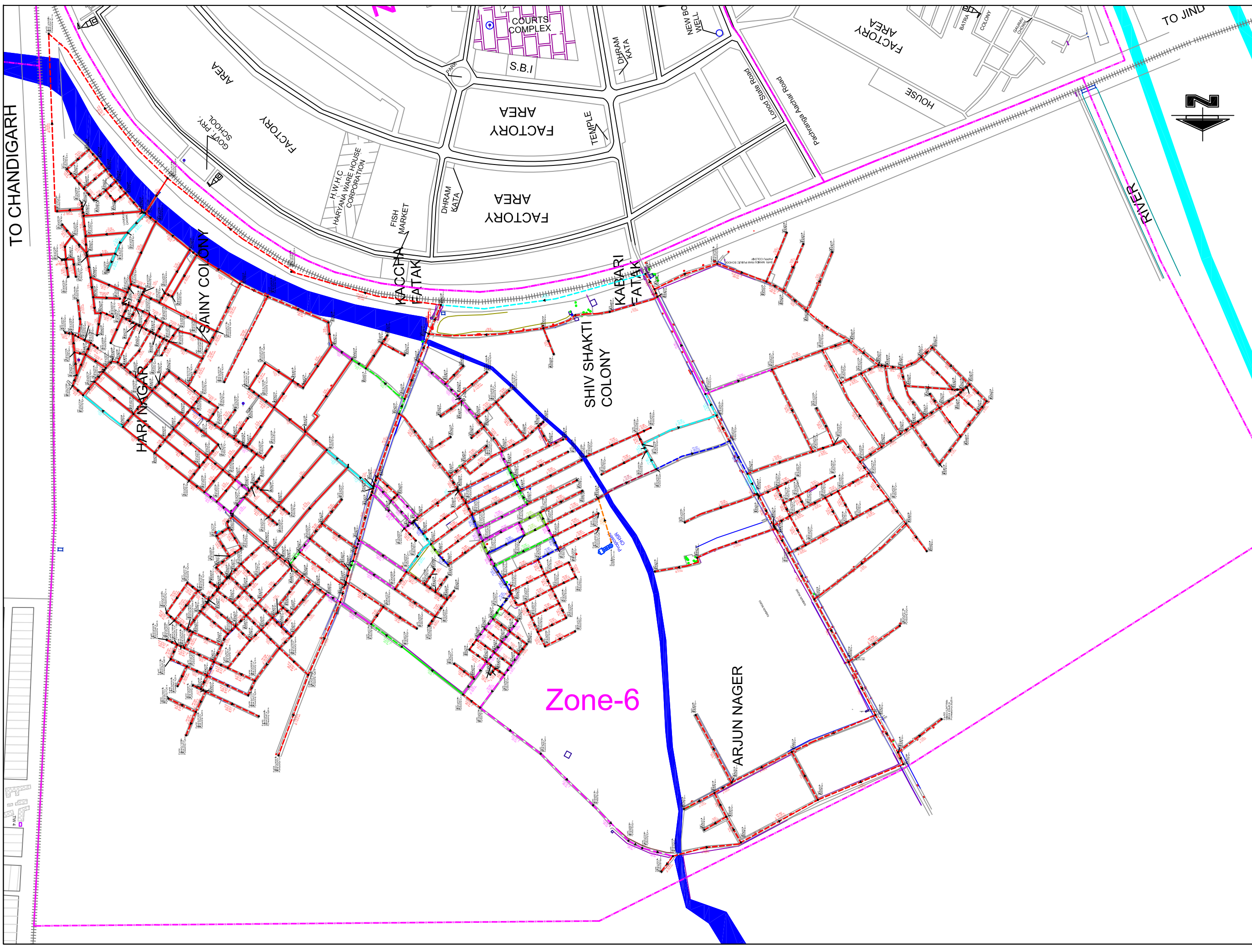
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**Asian Development Bank
National Capital Region Planning Board**

Consultant:
Wilbur Smith Associates

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Drg. No. NCRPB-PANIPAT-WS-NW-06

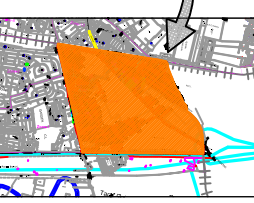
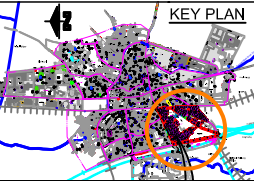


Capacity Development of the NCRPB: Component B (ADB TA-7055)

Panipat
Detailed Water Supply Network in Zone-5

- Legend**
- Roads
 - Railway Line
 - Canal
 - Drain
 - Existing Tube Well
 - Hand Pump
 - Culvert
 - Manhole
 - Transformer
 - Electricpole
 - Lampost
 - Telephonepole
 - GPS
 - TBM
 - Tree
 - OFC
 - Ditch

- Overlay Legend**
- Zone Boundary
 - Zone Number
 - Proposed OHSR
 - 110 mm Ø Existing Pipe
 - 110 mm Ø Proposed Pipe
 - 125 mm Ø Existing Pipe
 - 125 mm Ø Proposed Pipe
 - 140 mm Ø Existing Pipe
 - 140 mm Ø Proposed Pipe
 - 160 mm Ø Existing Pipe
 - 160 mm Ø Proposed Pipe
 - 180 mm Ø Existing Pipe
 - 180 mm Ø Proposed Pipe
 - 225 mm Ø Existing Pipe
 - 225 mm Ø Proposed Pipe
 - 250 mm Ø Existing Pipe
 - 250 mm Ø Proposed Pipe
 - 315 mm Ø Existing Pipe
 - 315 mm Ø Proposed Pipe
 - 355 mm Ø Existing Pipe
 - 355 mm Ø Proposed Pipe
 - J-4 Existing Junction with no.
 - PJ-323 Proposed Junction with no.
 - P-69 Existing Pipe Line with no.
 - PP-398 Proposed Pipe Line with no.
 - l/s Litre/Second
 - GL Ground Level
 - RP Residual Pressure

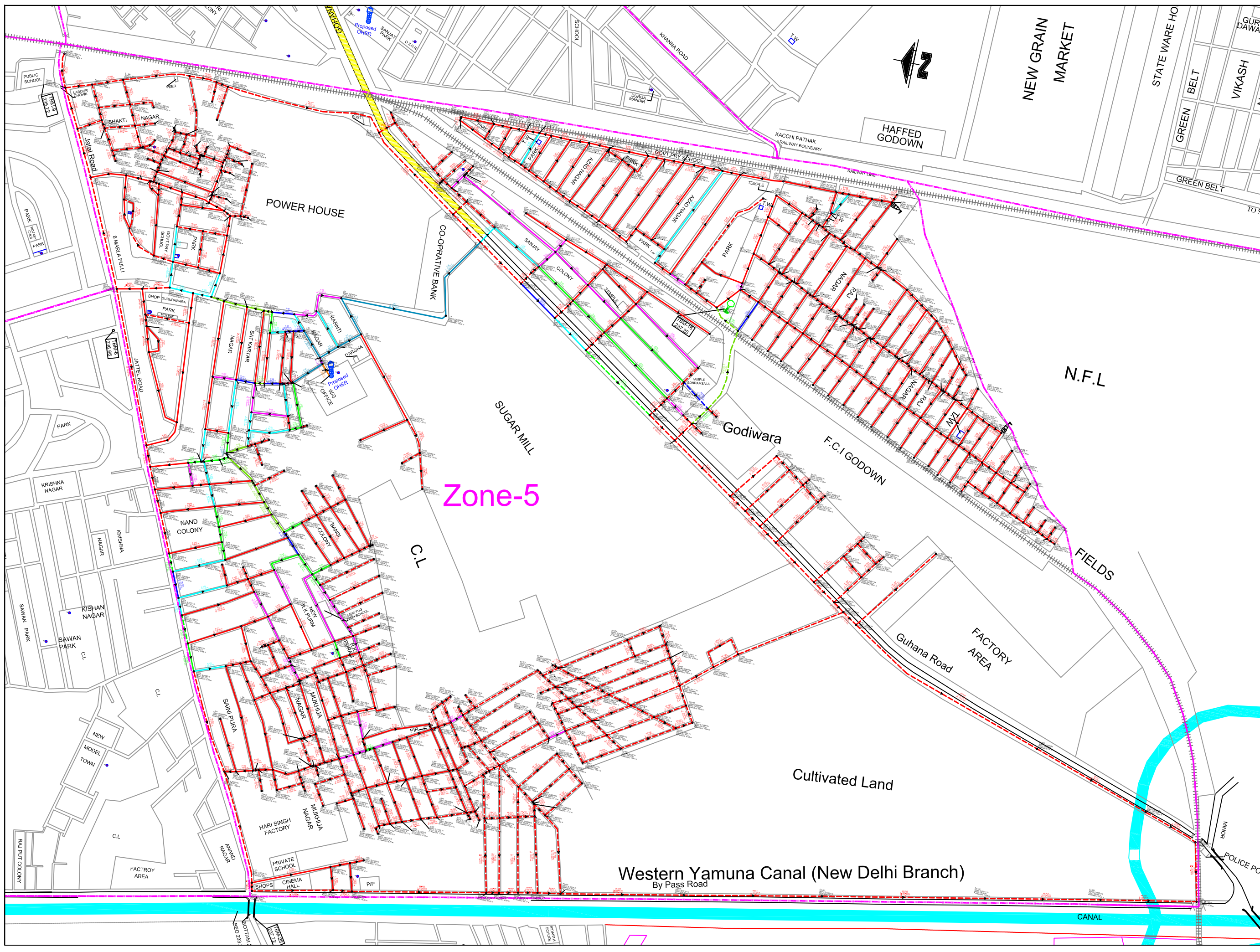


Client:
Asian Development Bank
National Capital Region Planning Board

Consultant:
Wilbur Smith Associates

Drawn: SK
Date: July, 2010
Checked: HSS
Approved: HSS

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Drg. No. NCRPB-PANIPAT-WS-NW-05

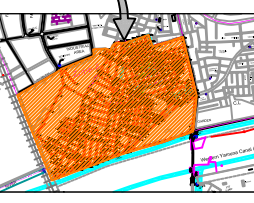
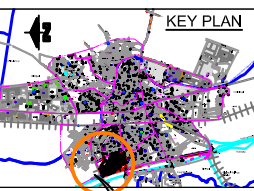


Capacity Development of the NCRPB: Component B (ADB TA-7055)

Panipat Detailed Water Supply Network in Zone-4

- Legend**
- Roads
 - Railway Line
 - Canal
 - Drain
 - Existing Tube Well
 - Hand Pump
 - Culvert
 - Manhole
 - Transformer
 - Electricpole
 - Lampost
 - Telephonepole
 - GPS
 - TBM
 - Tree
 - OFC
 - Ditch

- Overlay Legend**
- Zone Boundary
 - Zone Number
 - Proposed OHSR
 - 110 mm Ø Existing Pipe
 - 110 mm Ø Proposed Pipe
 - 125 mm Ø Existing Pipe
 - 125 mm Ø Proposed Pipe
 - 140 mm Ø Existing Pipe
 - 140 mm Ø Proposed Pipe
 - 160 mm Ø Existing Pipe
 - 160 mm Ø Proposed Pipe
 - 180 mm Ø Existing Pipe
 - 180 mm Ø Proposed Pipe
 - 200 mm Ø Existing Pipe
 - 200 mm Ø Proposed Pipe
 - 250 mm Ø Existing Pipe
 - 250 mm Ø Proposed Pipe
 - 315 mm Ø Existing Pipe
 - 315 mm Ø Proposed Pipe
 - 355 mm Ø Proposed Pipe
 - J-4 Existing Junction with no.
 - PJ-323 Proposed Junction with no.
 - P-69 Existing Pipe Line with no.
 - PP-398 Proposed Pipe Line with no.
 - l/s Litre/Second
 - GL Ground Level
 - RP Residual Pressure



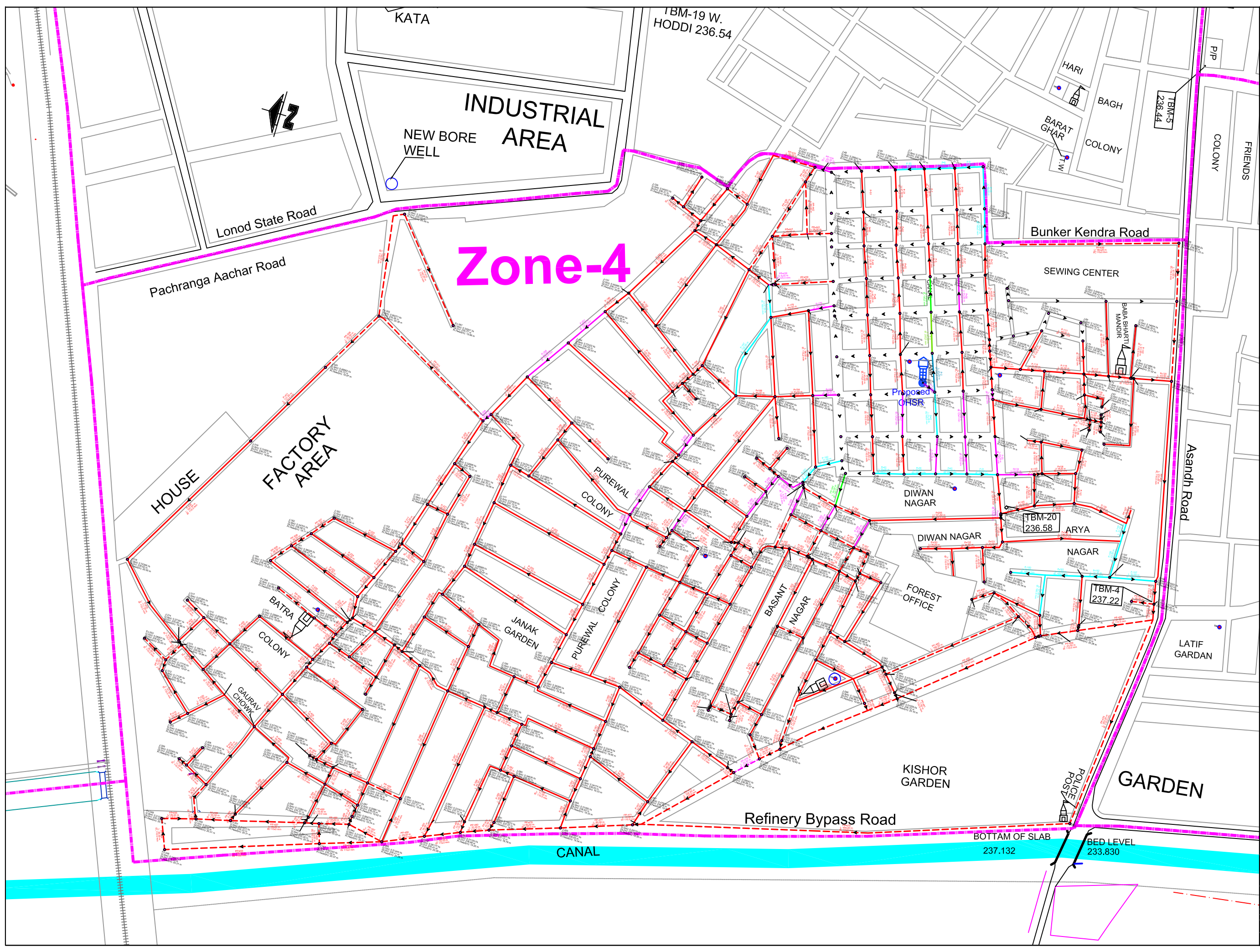
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Asian Development Bank
National Capital Region Planning Board

Consultant:
Wilbur Smith Associates

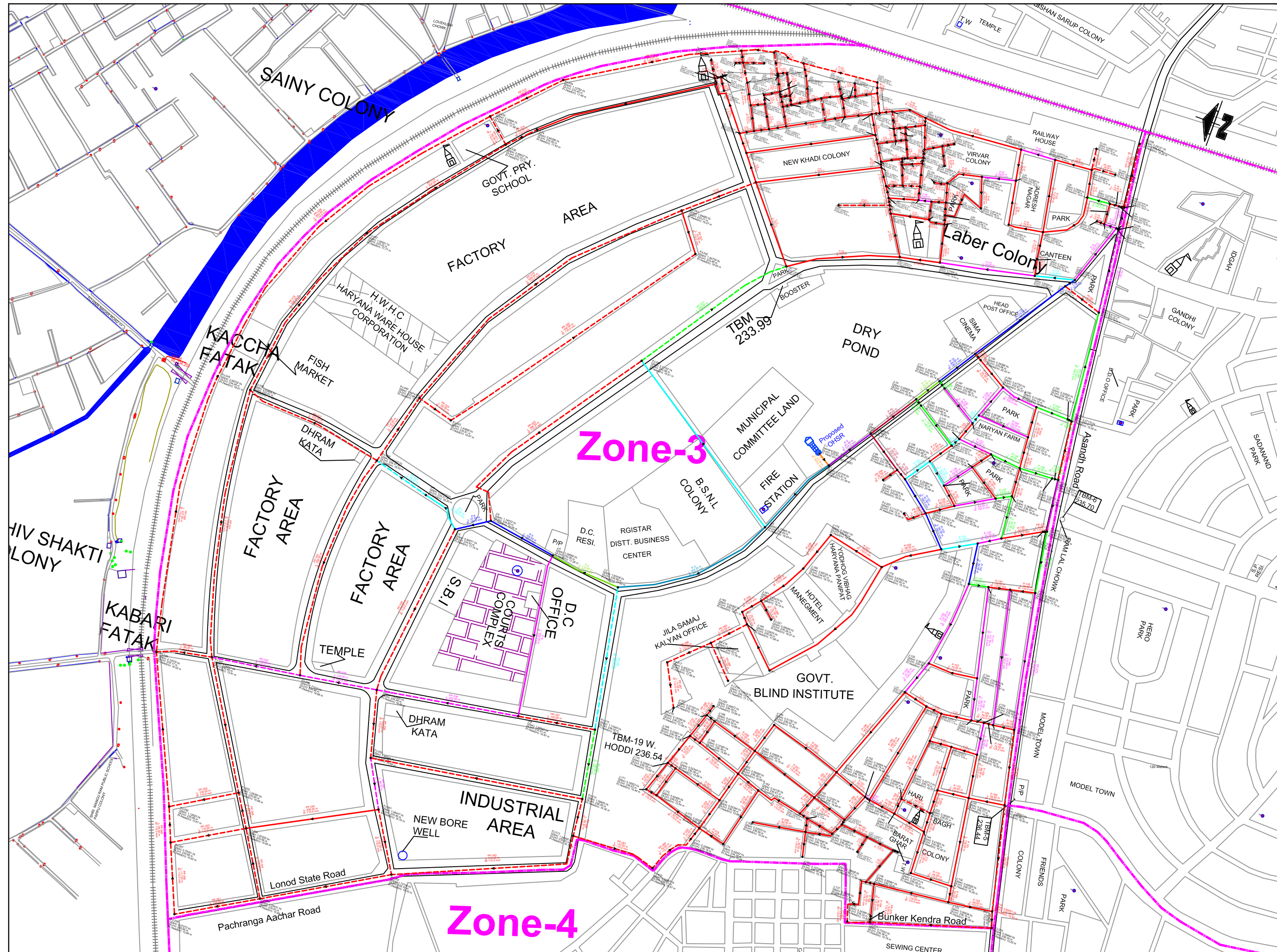
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Scale: 1:10,000

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Approved: NSS

Drg. No. NCRPB-PANIPAT-JWS-NW-04



Zone-4



Capacity Development of the NCRPB: Component B (ADB TA-7055)

Panipat
Detailed Water Supply Network in Zone-3

Legend

- Roads
- Railway Line
- Canal
- Drain
- Existing Tube Well
- Hand Pump
- Culvert
- Manhole
- Transformer
- Electricpole
- Lamppost
- Telephonepole
- GPS
- TBM
- Tree
- OFC
- Ditch

Overlay Legend

- Zone Boundary
- Zone Number
- Proposed OHSR
- 110 mm Ø Existing Pipe
- 110 mm Ø Proposed Pipe
- 125 mm Ø Existing Pipe
- 125 mm Ø Proposed Pipe
- 140 mm Ø Existing Pipe
- 140 mm Ø Proposed Pipe
- 160 mm Ø Existing Pipe
- 160 mm Ø Proposed Pipe
- 180 mm Ø Existing Pipe
- 180 mm Ø Proposed Pipe
- 200 mm Ø Existing Pipe
- 200 mm Ø Proposed Pipe
- 225 mm Ø Existing Pipe
- 225 mm Ø Proposed Pipe
- 250 mm Ø Existing Pipe
- 250 mm Ø Proposed Pipe
- 315 mm Ø Existing Pipe
- 315 mm Ø Proposed Pipe
- 355 mm Ø Proposed Pipe
- J-4 Existing Junction with no.
- PJ-323 Proposed Junction with no.
- P-69 Existing Pipe Line with no.
- PP-398 Proposed Pipe Line with no.
- l/s Litre/Second
- GL Ground Level
- RP Residual Pressure

KEY PLAN

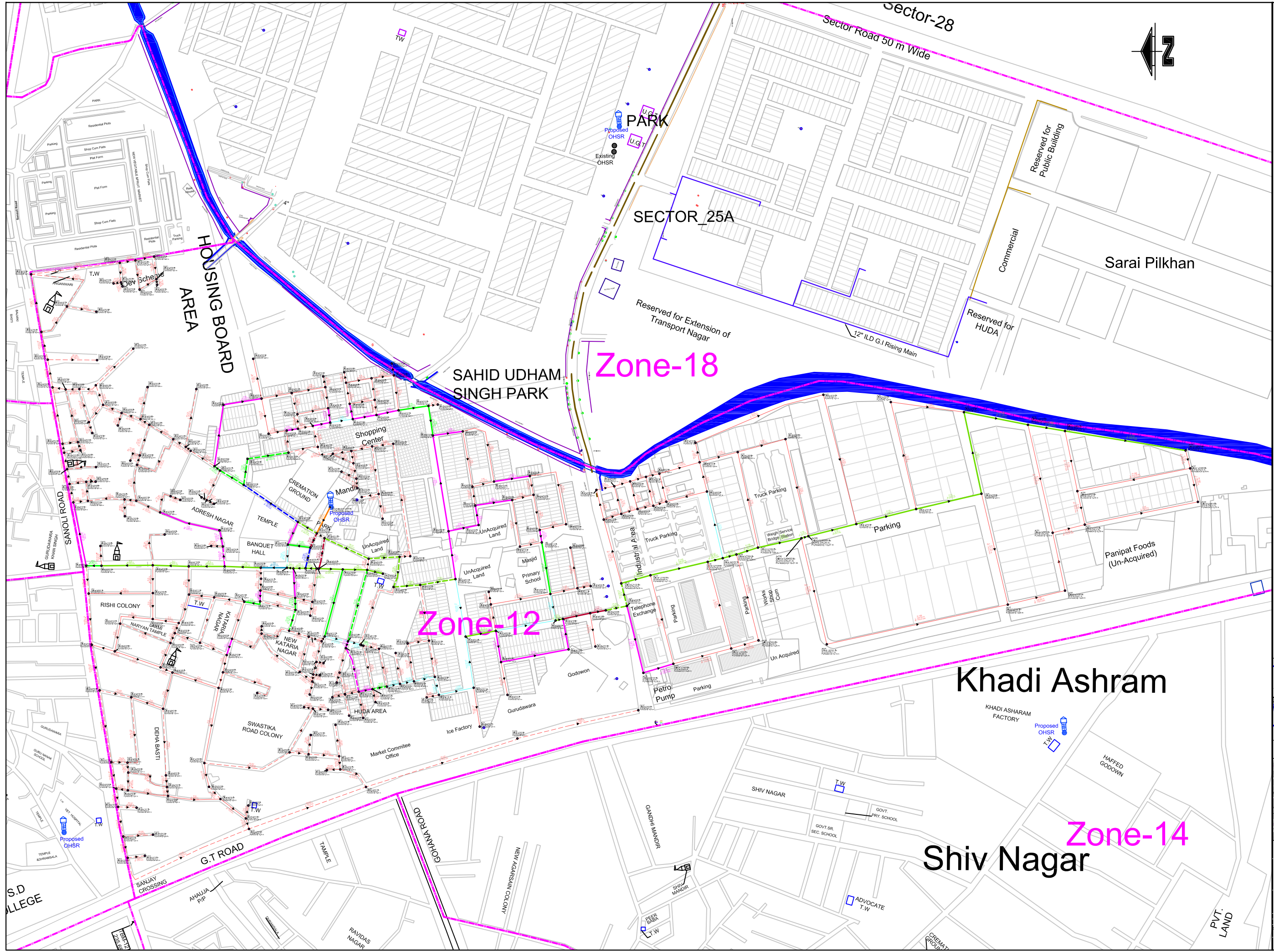
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National Capital Region Planning Board

Consultant: Wilbur Smith Associates

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Approved: NSS

Drg. No. NCRPB-PANIPAT-WS-NW-03



Capacity Development of the NCRPB: Component B (ADB TA-7055)

Panipat Detailed Water Supply Network in Zone-12

Legend

- Roads
- Railway Line
- Canal
- Drain
- Existing Tube Well
- Hand Pump
- Culvert
- Manhole
- Transformer
- Electricpole
- Lampost
- Telephonepole
- GPS
- TBM
- Tree
- OFC
- Ditch

Overlay Legend

- Zone Boundary
- Zone Number
- Proposed OHSR
- 110 mm Ø Existing Pipe
- 110 mm Ø Proposed Pipe
- 125 mm Ø Existing Pipe
- 125 mm Ø Proposed Pipe
- 140 mm Ø Existing Pipe
- 140 mm Ø Proposed Pipe
- 160 mm Ø Existing Pipe
- 160 mm Ø Proposed Pipe
- 180 mm Ø Existing Pipe
- 180 mm Ø Proposed Pipe
- 225 mm Ø Existing Pipe
- 225 mm Ø Proposed Pipe
- 250 mm Ø Existing Pipe
- 250 mm Ø Proposed Pipe
- 315 mm Ø Existing Pipe
- 315 mm Ø Proposed Pipe
- 355 mm Ø Proposed Pipe
- J-4 Existing Junction with no.
- PJ-323 Proposed Junction with no.
- P-69 Existing Pipe Line with no.
- PP-398 Proposed Pipe Line with no.
- l/s Litre/Second
- GL Ground Level
- RP Residual Pressure

KEY PLAN

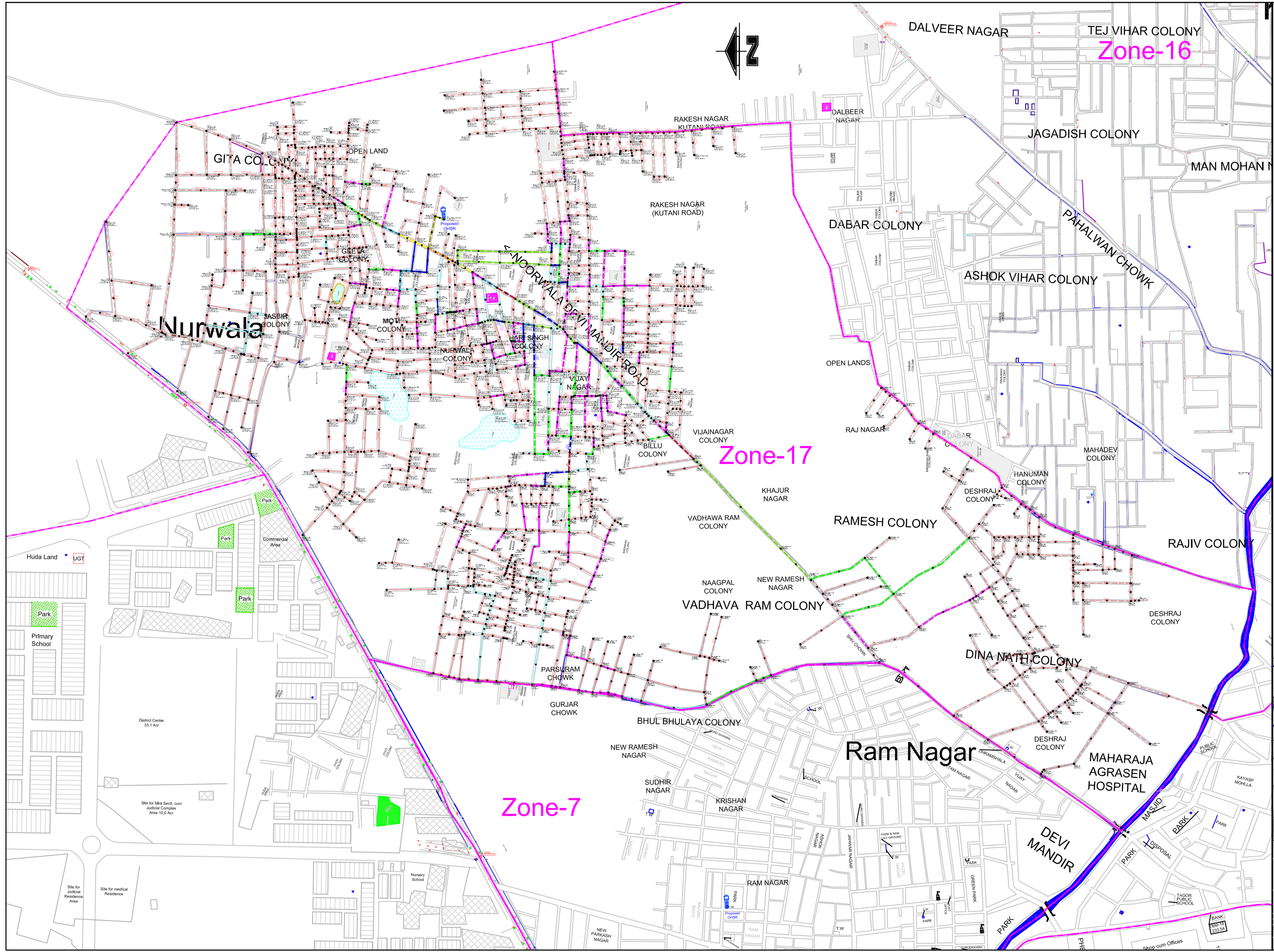
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National Capital Region Planning Board

Consultant: Wilbur Smith Associates

Drawn: SK
Date: July, 2010
Scale: 1:10,000

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Drng. No. NCRPB-PANIPAT-WS-NW-12



Capacity Development of the NCRPB: Component B (ADB TA-7055)

Panipat Detailed Water Supply Network in Zone-17

Legend

- Roads
- Railway Line
- Canal
- Drain
- Existing Tube Well
- Hand Pump
- Culvert
- Manhole
- Transformer
- Electricpole
- Lampost
- Telephonepole
- GPS
- TBM
- Tree
- OFC
- Ditch

Overlay Legend

- Zone Boundary
- Zone Number
- Proposed OHSR
- 110 mm Ø Existing Pipe
- 110 mm Ø Proposed Pipe
- 125 mm Ø Existing Pipe
- 125 mm Ø Proposed Pipe
- 140 mm Ø Existing Pipe
- 140 mm Ø Proposed Pipe
- 160 mm Ø Existing Pipe
- 160 mm Ø Proposed Pipe
- 180 mm Ø Existing Pipe
- 180 mm Ø Proposed Pipe
- 200 mm Ø Existing Pipe
- 200 mm Ø Proposed Pipe
- 225 mm Ø Existing Pipe
- 225 mm Ø Proposed Pipe
- 250 mm Ø Existing Pipe
- 250 mm Ø Proposed Pipe
- 280 mm Ø Existing Pipe
- 315 mm Ø Existing Pipe
- 315 mm Ø Proposed Pipe
- 355 mm Ø Existing Pipe
- 355 mm Ø Proposed Pipe
- 400mm Ø Existing Pipe
- 400mm Ø Proposed Pipe

J-4 Existing Junction with no.
 PJ-323 Proposed Junction with no.
 P-69 Existing Pipe Line with no.
 PP-398 Proposed Pipe Line with no.
 l/s Litre/Second
 GL Ground Level
 RP Residual Pressure

KEY PLAN

Client: Asian Development Bank
 National Capital Region Planning Board

Consultant: Wilbur Smith Associates

Drawn: Roopa
 Date: July, 2010
 Scale: 0 30 60 90 120 Meters

Checked: NSS
 Approved: NSS

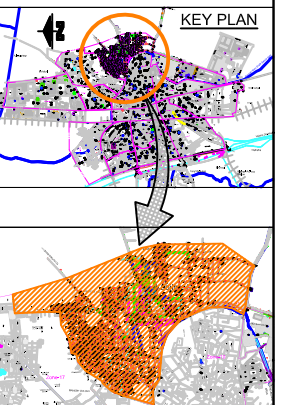
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Capacity Development of the NCRPB: Component B (ADB TA-7055)

Panipat
Detailed Water Supply Network in Zone-16

- Legend**
- Roads
 - Railway Line
 - Canal
 - Drain
 - Existing Tube Well
 - Hand Pump
 - Culvert
 - Manhole
 - Transformer
 - Electricpole
 - Lampost
 - Telephonepole
 - GPS
 - TBM
 - Tree
 - OFC
 - Ditch

- Overlay Legend**
- Zone Boundary
 - Zone Number
 - Proposed OHSR
 - 110 mm Ø Existing Pipe
 - 110 mm Ø Proposed Pipe
 - 125 mm Ø Existing Pipe
 - 125 mm Ø Proposed Pipe
 - 140 mm Ø Existing Pipe
 - 140 mm Ø Proposed Pipe
 - 160 mm Ø Existing Pipe
 - 160 mm Ø Proposed Pipe
 - 180 mm Ø Existing Pipe
 - 180 mm Ø Proposed Pipe
 - 200 mm Ø Existing Pipe
 - 200 mm Ø Proposed Pipe
 - 225 mm Ø Existing Pipe
 - 225 mm Ø Proposed Pipe
 - 250 mm Ø Existing Pipe
 - 250 mm Ø Proposed Pipe
 - 280 mm Ø Existing Pipe
 - 280 mm Ø Proposed Pipe
 - 315 mm Ø Existing Pipe
 - 315 mm Ø Proposed Pipe
 - 355 mm Ø Existing Pipe
 - 355 mm Ø Proposed Pipe
 - 400mm Ø Existing Pipe
 - 400mm Ø Proposed Pipe
 - J-4 Existing Junction with no.
 - PJ-323 Proposed Junction with no.
 - P-69 Existing Pipe Line with no.
 - PP-398 Proposed Pipe Line with no.
 - l/s Litre/Second
 - GL Ground Level
 - RP Residual Pressure



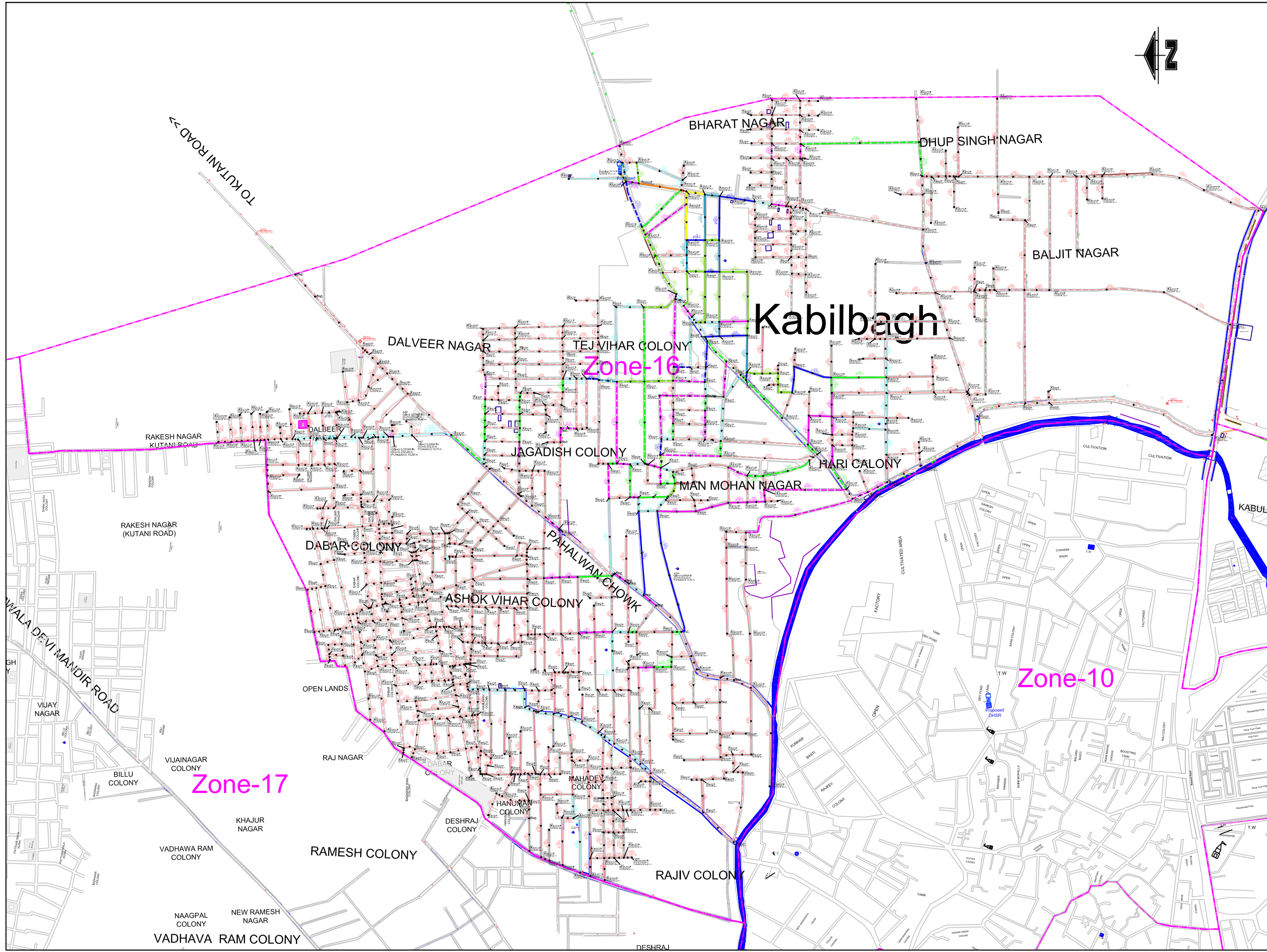
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Consultant:
Wilbur Smith Associates

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Date: July 2010
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Approved: NNS

Drg. No. NCRPB-PANIPAT-WS-16



TO KUTANI ROAD >

WALA DEVI MANDIR ROAD

Zone-17

Zone-16

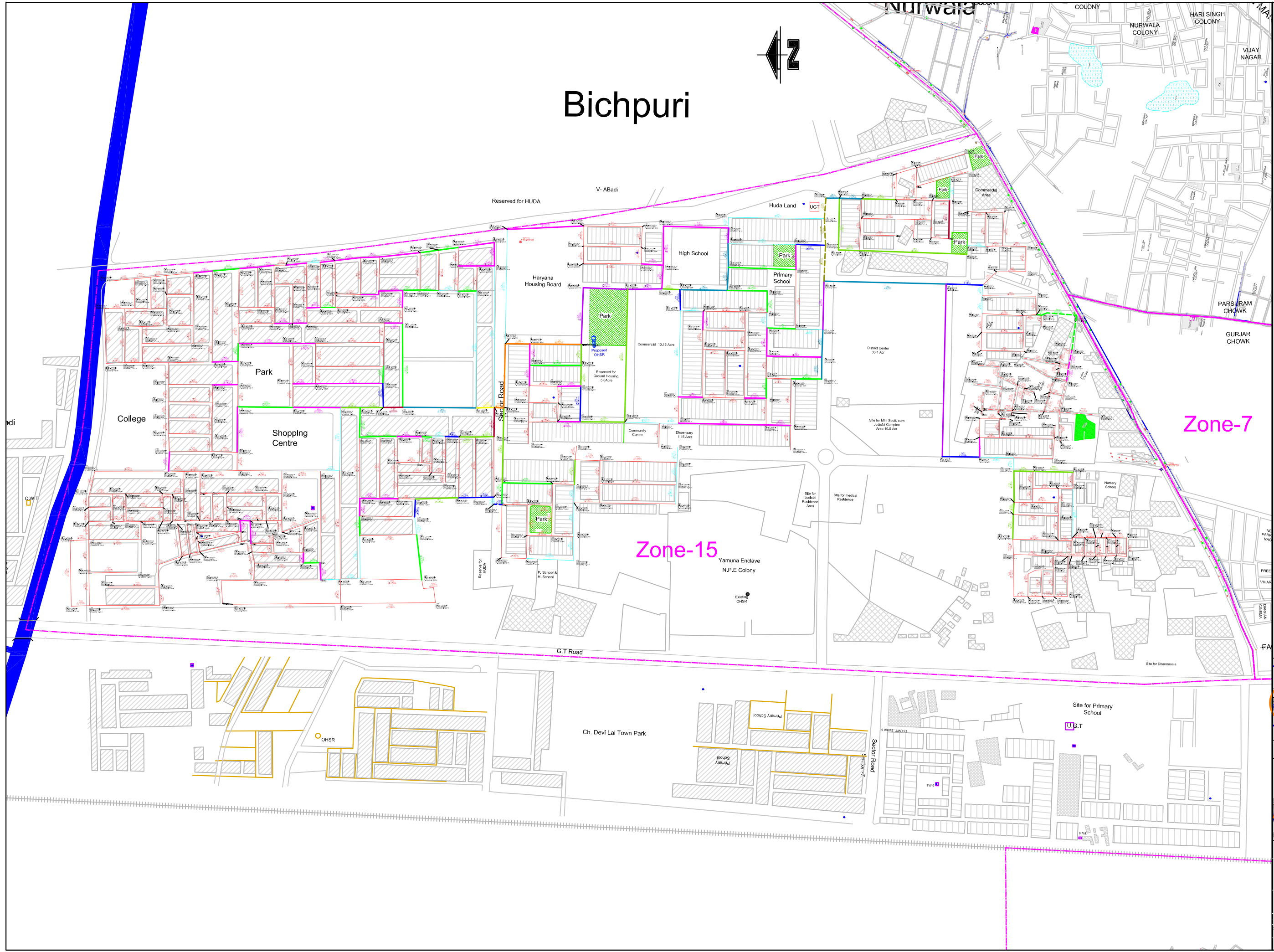
Kabilbagh

Zone-10

DESHRAJ

DESHRAJ

Bichpuri

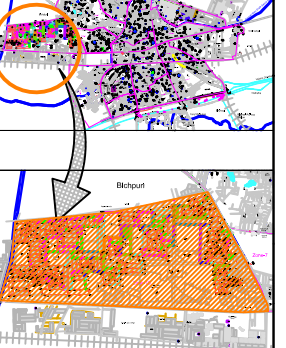


Capacity Development of the NCRPB: Component B (ADB TA-7055)

Panipat
Detailed Water Supply Network in Zone-15

- Legend**
- Roads
 - Railway Line
 - Canal
 - Drain
 - Existing Tube Well
 - Hand Pump
 - Culvert
 - Manhole
 - Transformer
 - Electricpole
 - Lamppost
 - Telephonepole
 - GPS
 - TBM
 - Tree
 - OFC
 - Ditch
- Overlay Legend**
- Zone Boundary
 - Zone Number
 - Proposed OHSR
 - 110 mm Ø Existing Pipe
 - 110 mm Ø Proposed Pipe
 - 125 mm Ø Existing Pipe
 - 125 mm Ø Proposed Pipe
 - 140 mm Ø Existing Pipe
 - 140 mm Ø Proposed Pipe
 - 160 mm Ø Existing Pipe
 - 160 mm Ø Proposed Pipe
 - 180 mm Ø Existing Pipe
 - 180 mm Ø Proposed Pipe
 - 200 mm Ø Existing Pipe
 - 200 mm Ø Proposed Pipe
 - 225 mm Ø Existing Pipe
 - 225 mm Ø Proposed Pipe
 - 250 mm Ø Existing Pipe
 - 250 mm Ø Proposed Pipe
 - 280 mm Ø Existing Pipe
 - 280 mm Ø Proposed Pipe
 - 315 mm Ø Existing Pipe
 - 315 mm Ø Proposed Pipe
 - 355 mm Ø Existing Pipe
 - 355 mm Ø Proposed Pipe
 - 400mm Ø Existing Pipe
 - 400mm Ø Proposed Pipe
 - Existing Junction with no.
 - P-J-323 Proposed Junction with no.
 - P-69 Existing Pipe Line with no.
 - PP-398 Proposed Pipe Line with no.
 - I/s Litre/Second
 - GL Ground Level
 - RP Residual Pressure

KEY PLAN



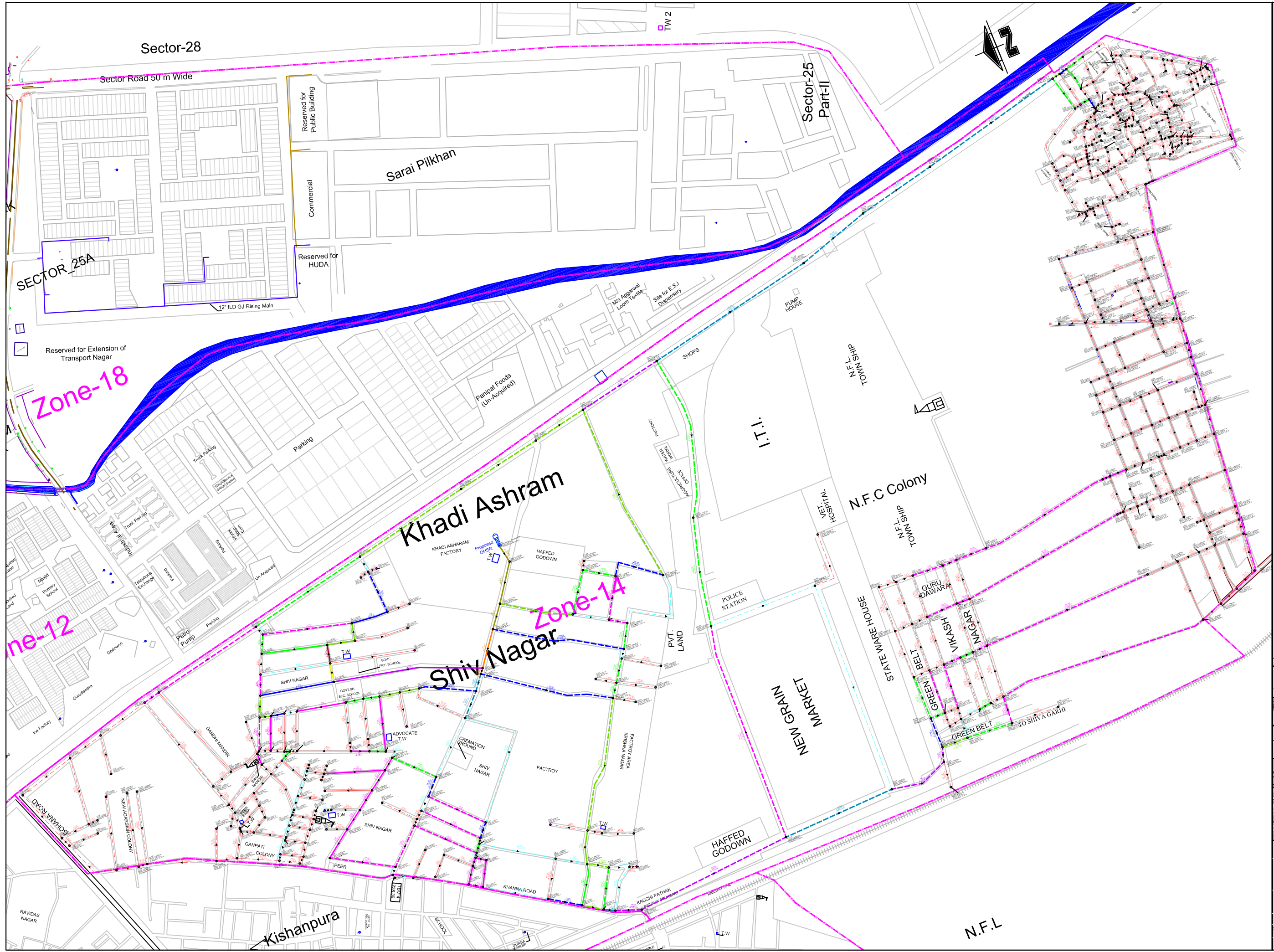
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Date: Dec. 2009
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Approved: NSS

Drg. No. NCRPB-PANIPAT-WS-NW-15



Capacity Development of the NCRPB: Component B (ADB TA-7055)

Panipat
Detailed Water Supply Network in Zone-14

Legend

- Roads
- Railway Line
- Canal
- Drain
- Existing Tube Well
- Hand Pump
- Culvert
- Manhole
- Transformer
- Electricpole
- Lampost
- Telephonepole
- GPS
- TBM
- Tree
- OFC
- Ditch

Overlay Legend

- Zone Boundary
- Zone Number
- Proposed OHSR
- 110 mm Ø Existing Pipe
- 110 mm Ø Proposed Pipe
- 125 mm Ø Existing Pipe
- 125 mm Ø Proposed Pipe
- 140 mm Ø Existing Pipe
- 140 mm Ø Proposed Pipe
- 160 mm Ø Existing Pipe
- 160 mm Ø Proposed Pipe
- 180 mm Ø Existing Pipe
- 180 mm Ø Proposed Pipe
- 200 mm Ø Existing Pipe
- 200 mm Ø Proposed Pipe
- 225 mm Ø Existing Pipe
- 225 mm Ø Proposed Pipe
- 250 mm Ø Existing Pipe
- 250 mm Ø Proposed Pipe
- 280 mm Ø Existing Pipe
- 315 mm Ø Existing Pipe
- 315 mm Ø Proposed Pipe
- 355 mm Ø Proposed Pipe
- 400mm Ø Existing Pipe
- J-4 Existing Junction with no.
- PJ-323 Proposed Junction with no.
- P-69 Existing Pipe Line with no.
- PP-398 Proposed Pipe Line with no.
- I/s Litre/Second
- GL Ground Level
- RP Residual Pressure

KEY PLAN

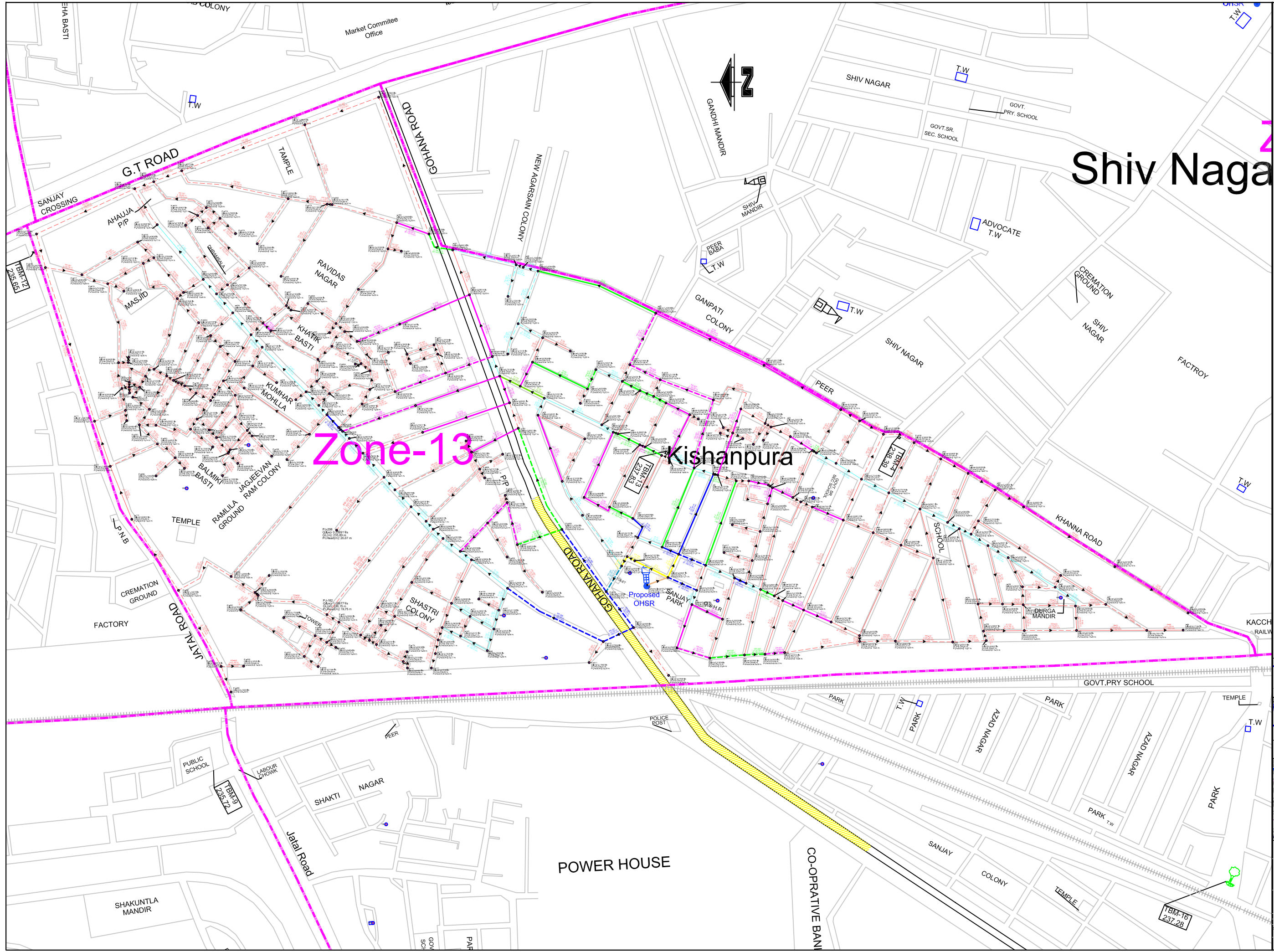
Client: Asian Development Bank
National Capital Region Planning Board

Consultant: Wilbur Smith Associates

Drawn: SK
Date: July, 2010
Scale: 0 30 60 90 120 Meters

Checked: NSS
Approved: NSS

Drg. No. NCRPB-PANIPAT-WS-NW-14



Capacity Development of the NCRPB: Component B (ADB TA-7055)

Panipat
Detailed Water Supply Network in Zone-13

Legend

- Roads
- Railway Line
- Canal
- Drain
- Existing Tube Well
- Hand Pump
- Culvert
- Manhole
- Transformer
- Electricpole
- Lampost
- Telephonepole
- GPS
- TBM
- Tree
- OFC
- Ditch

Overlay Legend

- Zone Boundary
- Zone Number
- Proposed OHSR
- 110 mm Ø Existing Pipe
- 110 mm Ø Proposed Pipe
- 125 mm Ø Existing Pipe
- 125 mm Ø Proposed Pipe
- 140 mm Ø Existing Pipe
- 140 mm Ø Proposed Pipe
- 160 mm Ø Existing Pipe
- 160 mm Ø Proposed Pipe
- 180 mm Ø Existing Pipe
- 180 mm Ø Proposed Pipe
- 200 mm Ø Existing Pipe
- 200 mm Ø Proposed Pipe
- 225 mm Ø Existing Pipe
- 225 mm Ø Proposed Pipe
- 250 mm Ø Existing Pipe
- 250 mm Ø Proposed Pipe
- 280 mm Ø Existing Pipe
- 280 mm Ø Proposed Pipe
- 315 mm Ø Existing Pipe
- 315 mm Ø Proposed Pipe
- 355 mm Ø Proposed Pipe
- 400 mm Ø Existing Pipe
- J-4 Existing Junction with no.
- PJ-323 Proposed Junction with no.
- P-69 Existing Pipe Line with no.
- PP-398 Proposed Pipe Line with no.
- l/s Litre/Second
- GL Ground Level
- RP Residual Pressure

KEY PLAN

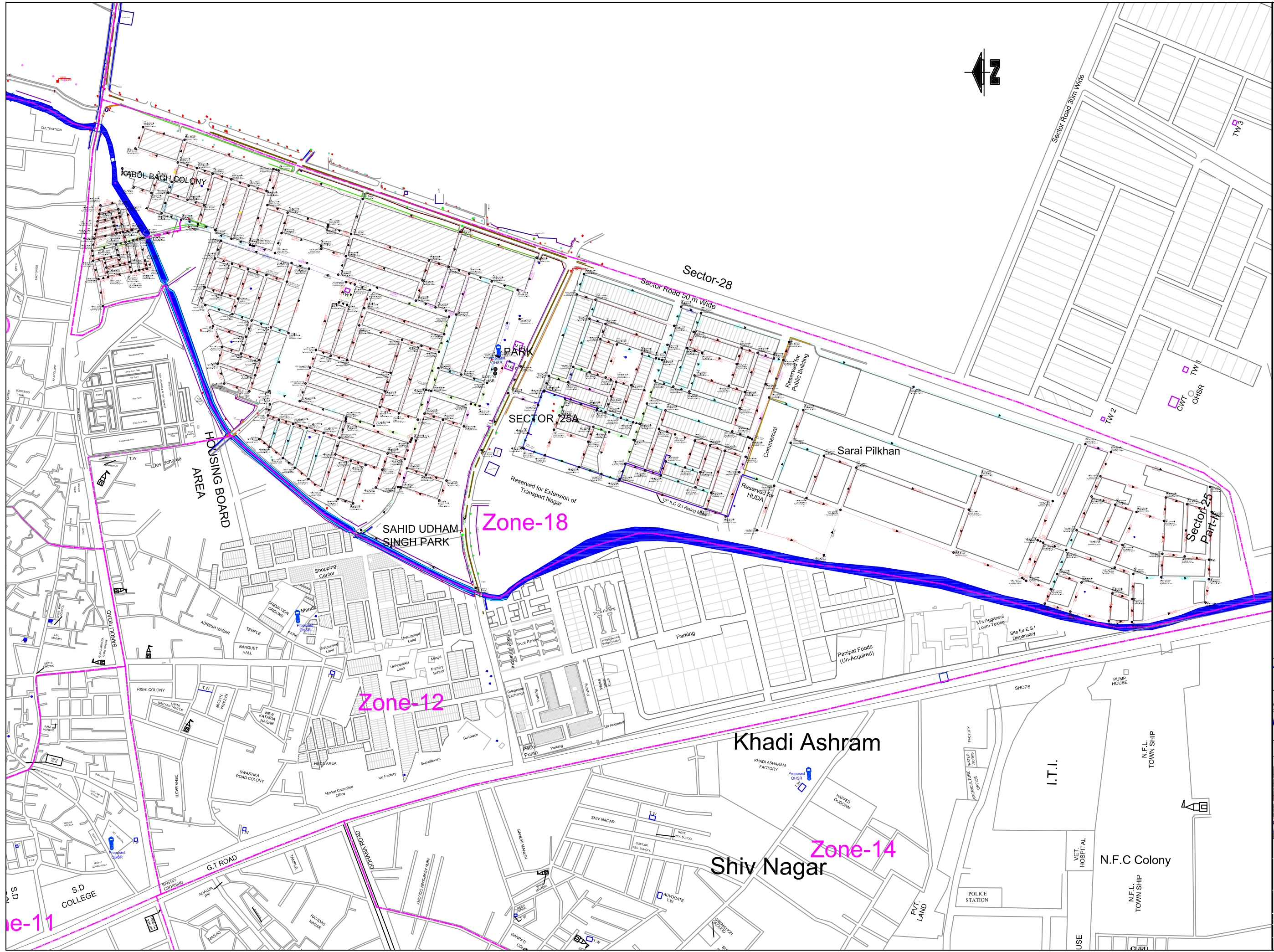
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Capacity Development of the NCRPB: Component B (ADB TA-7055)

Panipat
Detailed Water Supply Network in Zone-18

Legend

- Roads
- Railway Line
- Canal
- Drain
- Existing Tube Well
- Hand Pump
- Culvert
- Manhole
- Transformer
- Electricpole
- Lampost
- Telephonepole
- GPS
- TBM
- Tree
- OFC
- Ditch

Overlay Legend

- Zone Boundary
- Zone Number
- Proposed OHSR
- 110 mm Dia Existing Pipe
- 110 mm Dia Proposed Pipe
- 125 mm Dia Existing Pipe
- 125 mm Dia Proposed Pipe
- 140 mm Dia Existing Pipe
- 140 mm Dia Proposed Pipe
- 160 mm Dia Existing Pipe
- 160 mm Dia Proposed Pipe
- 180 mm Dia Existing Pipe
- 180 mm Dia Proposed Pipe
- 200 mm Dia Existing Pipe
- 200 mm Dia Proposed Pipe
- 225 mm Dia Existing Pipe
- 225 mm Dia Proposed Pipe
- 250 mm Dia Existing Pipe
- 250 mm Dia Proposed Pipe
- 280 mm Dia Existing Pipe
- 280 mm Dia Proposed Pipe
- 315 mm Dia Existing Pipe
- 315 mm Dia Proposed Pipe
- 355 mm Dia Proposed Pipe
- J-4 Existing Junction with no.
- PJ-323 Proposed Junction with no.
- P-69 Existing Pipe Line with no.
- PP-398 Proposed Pipe Line with no.
- I/s Litre/Second
- GL Ground Level
- RP Residual Pressure

KEY PLAN

Client: Asian Development Bank
National Capital Region Planning Board

Consultant: Wilbur Smith Associates

Drawn: Roopa
Date: July, 2010
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