

Municipal Corporation of Gurugram (MCG)

Monsoon Preparedness & Flood Hotspot Management

WARD-WISE FLOOD HOTSPOT REPORT

For Use by Junior Engineers (JEs) at Ward Level

Ward Summary

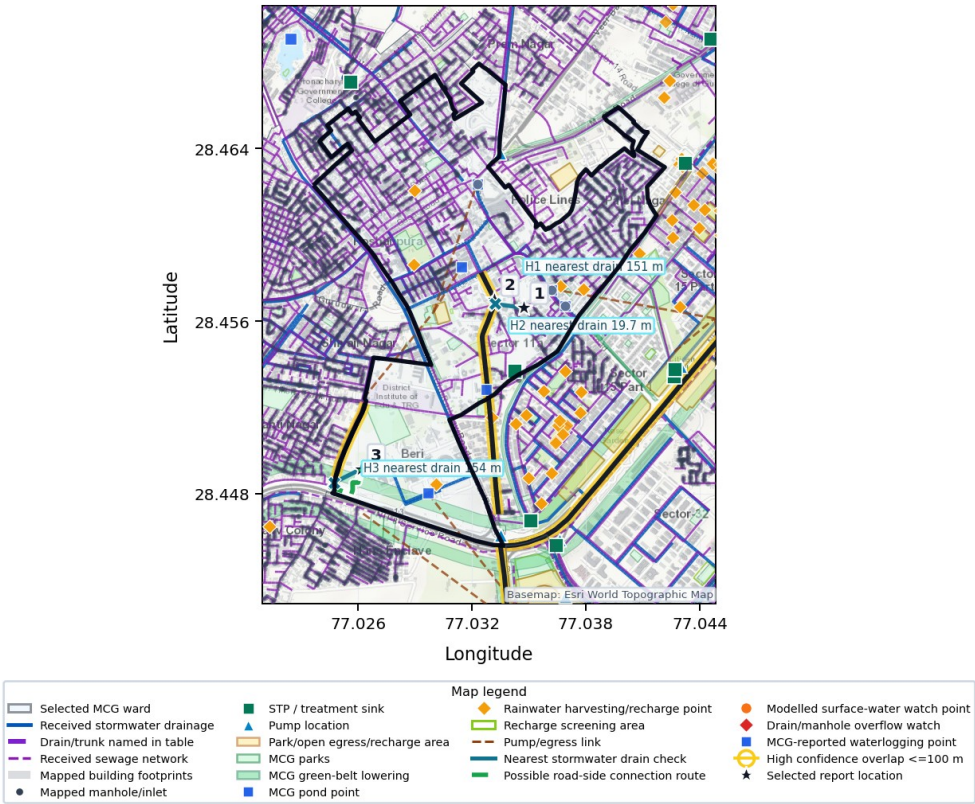
WARD NUMBER	MCG IDENTIFIED LOCATIONS	MODEL IDENTIFIED LOCATIONS
27	6	6
Ward Name / Area Covered	Adarsh Nagar; Baraf Khana; Civil Lines; Friends Colony; Gopal Nagar; Indra Puri; Jacubpura; Jacubpura West; Mini Secretariat; Patel Nagar; Roshanpura; Sadar Bazar	
Zone	Zone VI	
Division	Zone VI	
Assigned JE	Robin JE 8053256873	
Report Date	29 July 2026	
Approved FloodAstra baseline	Approved June 5 current-assets baseline	
Utility assets	MCG/GMDA utility assets supplied up to 5 June 2026	
Rainfall used	July 2025 reported event, 133 mm / 12 h	
Hydraulic model	Apple MLX GPU; continuous city surface; roads, buildings, storm drains, sewers, manholes and recharge structures coupled dynamically	
Published depth range	0 to 1.50 m from field-reportable cells only	
Desilting / work status	1 mapped MCG work-status segments overlap this ward; 1 marked completed; 0 marked in progress. Confirm current completion with MCG field records.	
Priority action	Inspect drain/manhole overflow watch points, inlet condition, desilting status and downstream flow continuity	

Official Ward Contact Roster

Role	Supplied MCG contact
Councillor	Shri Ashish Gupta BJP 9999916991
Executive Engineer (EE)	Sh. Sandeep Kumar Dhundhwal, EE, 9910329207
Assistant Engineer (AE)	Sh. Ashish Chhachhia, AE, 9717104355
JE Development	Robin JE 8053256873
JE Enforcement	Ankit Kapoor 8802588667
JE Horticulture	Gulshan Yadav 9821395258
JE Electrical	Devender 9999397898

Ward Action Map

Ward 27: drainage, sewage and hotspot action map



Blue lines are received stormwater drains. Purple dashed lines are received sewage lines. Green areas are MCG parks/green-belt lowering assets; blue squares are MCG pond points; amber diamonds are rainwater-harvesting/recharge points. Gray building footprints are used only to avoid suggesting routes through buildings. Cyan lines show the hotspot-to-stormwater-drain check. Green dashed lines show a possible road-side route where one was found.

This ward map shows 2,750 stormwater line segments, 17,568 sewage line segments, 5,341 manhole/inlet points, 17 STP/treatment points, 236 MCG park polygons, 2 pond points, 72 green-belt lowering areas and 326 rainwater-harvesting/recharge points from the approved GIS packet.

Field Action Summary

#	Location	Expected water	Mapped drain option	First field action
H1	Jyoti Hospital Near Ganpati Enclave	maximum modelled depth 0.56 m; average within 50 m 0.40 m; water remains above 15 cm for 7.5 h.	mapped stormwater drain near Jyoti Hospital Near Ganpati Enclave is 151 m away. No field-approved connection route is recorded.	Check water backing up at the manhole; verify trunk drain level before pumping.
H2	Baraf Khana	maximum modelled depth 0.50 m; average within 50 m 0.20 m; water remains above 15 cm for 10.6 h.	mapped stormwater drain near Baraf Khana is 19.7 m away. The mapped roadside option is 25.8 m long and is not yet field-approved.	Check water backing up at the manhole; verify trunk drain level before pumping.
H3	Hans Enclave	maximum modelled depth 0.91 m; average within 50 m 0.70 m; water remains above 15 cm for 10.7 h.	mapped stormwater drain near Hans Enclave is 154 m away. The mapped roadside option is 302 m long and is not yet field-approved.	Check inlet continuity to the trunk; keep pump standby if water persists.

Complete Ward Location Register

No.	Source	Location	Lat	Lon	Expected water	How to use this point
R0 1	MCG	Jyoti Hospital Near Ganpati Enclave	28.45745	77.03621	0.33 m; above 15 cm for 36 min	Supported by model within 0 m
R0 2	MCG	Vinayak plaza, Patel Nagar	28.45671	77.03691	0.28 m; above 15 cm for 19 min	Supported by model within 0 m
R0 3	MCG	Maharaja Agrasen Chowk	28.46234	77.03229	0.08 m; above 15 cm for 10 min	Supported by model within 0 m
R0 4	MCG	Baraf Khana	28.45853	77.03144	0.09 m; above 15 cm for 7 min	Confirm at this location
R0 5	MCG	Court road	28.44804	77.02968	0.34 m; above 15 cm for 48 min	Confirm at this location
R0 6	MCG	Women Hostel, Civil Line	28.45285	77.03276	0.26 m; above 15 cm for 28 min	Confirm at this location

No.	Source	Location	Lat	Lon	Expected water	How to use this point
M0 1	Overflow watch	Jyoti Hospital Near Ganpati Enclave	28.45663	77.03473	0.56 m; above 15 cm for 7.5 h	Confirm at this location
M0 2	Overflow watch	Baraf Khana	28.45701	77.03319	0.50 m; above 15 cm for 10.6 h	Confirm at this location
M0 3	Model depth	Hans Enclave	28.44914	77.02615	0.91 m; above 15 cm for 10.7 h	Confirm at this location
M0 4	MCG + model	Jyoti Hospital Near Ganpati Enclave	28.45745	77.03621	0.68 m	Supported by MCG report within 0 m
M0 5	MCG + model	Vinayak plaza, Patel Nagar	28.45671	77.03691	0.68 m	Supported by MCG report within 0 m
M0 6	MCG + model	Maharaja Agrasen Chowk	28.46234	77.03229	0.73 m	Supported by MCG report within 0 m

Hotspot-wise Details

HOTSPOT 1

1. Hotspot Identification

Hotspot Name	Jyoti Hospital Near Ganpati Enclave
Latitude / Longitude	28.45663, 77.03473
Open location	Use the link below to open this point on Google Maps.

Google Map Links for Hotspot and Assets

Use these links for the field pin, nearby drainage/sewage assets and mapped support assets used in this report.

[H1: hotspot pin](#)

[H1: mapped receiving stormwater drain \(151 m\)](#)

[H1: nearest mapped stormwater line \(151 m\)](#)

[H1: mapped action drain - map label SWD-LINE-899 \(151 m\)](#)

[H1: mapped main stormwater drain \(877 m\)](#)

[H1: nearest mapped sewage line \(0.00 m\)](#)

[H1: mapped pump - Mahavir Chowk; capacity 11.7 L/s \(804 m\)](#)

[H1: open/green receptor or park \(386 m\)](#)

[H1: MCG park - Friends Colony; ward 27 \(136 m\)](#)

[H1: MCG green-belt lowering area - Existing \(176 m\)](#)

[H1: rainwater-harvesting/recharge point - Jyoti Hospital, Patel Nagar \(recorded as functional\) \(222 m\)](#)

[H1: groundwater recharge screening area \(285 m\)](#)

[H1: nearest STP/treatment point - MICRO-STP DC CAMP OFFICE; capacity 25.0 KLD \(332 m\)](#)

[H1: nearest manhole/inlet \(0.00 m\)](#)

Scan QR code to open this hotspot on phone maps.



Hotspot Action Card

Go to	28.45663, 77.03473
Water concern	maximum modelled depth 0.56 m; average within 50 m 0.40 m; water remains above 15 cm for 7.5 h.
Nearest stormwater drain	mapped stormwater drain near Jyoti Hospital Near Ganpati Enclave is 151 m away. No field-approved connection route is recorded.
Roadside connection checks	No roadside connection route has been mapped without crossing a building. Before proposing work, survey a road alignment, measure the level at both ends, mark utilities and confirm continuous fall toward a stormwater drain that can accept flow.
Nearby MCG sewage line	MCG sewage line is at this point. Check the nearest manhole for rising water. Do not discharge stormwater into this line.
First action at site	Check water backing up at the manhole; verify trunk drain level before pumping.
Before monsoon	Inspect and desilt mapped stormwater drain near Jyoti Hospital Near Ganpati Enclave (151 m) if silt/choking is seen.
Escalate if	Escalate if manhole overflow continues, trunk water level is high, or pumping has no safe discharge route.

2. Source

☐ MCG record	☒ Model-selected point
-------------------------------------	--

3. Field Priority Level

☐ LOW	☐ MEDIUM	☐ HIGH	☒ VERY HIGH
------------------------------	---------------------------------	-------------------------------	---

4. Flood Timing and Depth

At H1, record observed water depth, time, inlet condition and receiving-drain level. Compare these with the model estimate before work begins.

Field measure	Unit	Model estimate	Selected rainfall
Ponded water within 50 m	m³	2,216 m³	July 2025 rain
Time water remains above 15 cm	hours	7.5	July 2025 rain
Time to exceed 15 cm after rain starts	hours	9.4	July 2025 rain
Maximum depth at this point	m	0.56 m	July 2025 rain
Average depth within 50 m	m	0.40 m	July 2025 rain
Maximum modelled flow speed	m/s	0.01 m/s	July 2025 rain

H1: record observed water depth and time, then photograph the inlet and receiving-drain level before work starts.

5. Recommendations

a. Drainage and Sewage Checks

Stormwater check: mapped stormwater drain near Jyoti Hospital Near Ganpati Enclave is about 151 m away, but no roadside connection is mapped. Trace the inlet to the drain and record any missing, crushed or blocked reach before scheduling work. Sewage check: an MCG sewage line is at this point. Inspect the nearest manhole for rising water, but never use the sewage line as a stormwater or pump outlet.

b. Possible New Stormwater Connection

mapped stormwater drain near Jyoti Hospital Near Ganpati Enclave is about 151 m away, but no building-free roadside route is mapped. Do not mark a new link construction-ready until the JE traces the alignment, measures levels at both ends, marks utilities, checks frontage/access and confirms that the receiving drain can accept flow.

c. When to Desilt

Inspect the inlet, first upstream access point and first downstream access point leading to mapped stormwater drain near Jyoti Hospital Near Ganpati Enclave. Record silt depth and the free opening at each point. Desilt only where silt narrows the waterway or a clean-water flow test shows restriction; clear the full restricted reach and take before/after photographs.

d. Temporary Pump Decision

S.No.	Pump Location	Discharge Point	Pump Capacity / Type
1	H1 / local low point	Nearest mapped pump: Mahavir Chowk; capacity 11.7 L/s; likely discharge: MCG-DESILT-STORM-09801.	Confirm at site
2	Alternate discharge check for H1	Do not discharge to the nearby sewage line (0.00 m from H1); check safe storm drain/open area after checking route to mapped stormwater drain near Jyoti Hospital Near Ganpati Enclave (151 m).	Use only if site access and discharge permission are clear for H1.

S.No.	Pump Location	Discharge Point	Pump Capacity / Type
3	Gravity route to mapped stormwater drain near Jyoti Hospital Near Ganpati Enclave (151 m)	Use gravity only if water from H1 can visibly enter mapped stormwater drain near Jyoti Hospital Near Ganpati Enclave (151 m) after inlet and drain-level check.	No pump needed only if flow into mapped stormwater drain near Jyoti Hospital Near Ganpati Enclave (151 m) is confirmed at site.

e. New Drain or Inlet Decision

For H1, no screened pump/open receptor or main-drain drainage relief route within 50 m; field team should check a safe pump route. Map screening used depth/persistence/drain return, 50 m local flood-volume estimate, screened park/open receptors, storm-drain proximity, sewer proximity caution, and site visit constraints. H1: mapped stormwater drain near Jyoti Hospital Near Ganpati Enclave is 151 m away, but no building-free roadside route is mapped. Trace a road alignment, measure levels at both ends, mark utilities and confirm receiving-drain capacity before proposing construction.

f. Rainwater Harvesting Check

Nearby open/receptor area: distance 386 m; possible temporary storage 1,179 m³; class site visit. Use only after checking groundwater, water quality and ownership.

g. Temporary Diversion to Park or Pond

Possible nearby storage: 1,179 m³; Check slope, access, permission and overflow route.

6. Site Visit Checklist for H1

Site check	Yes	No	Notes
Waterlogging seen at this pin	☐	☐	H1: 28.45663, 77.03473
Nearest drain/trunk visible	☐	☐	mapped stormwater drain near Jyoti Hospital Near Ganpati Enclave (151 m)
Roadside connection route surveyed	☐	☐	No roadside connection route has been mapped without crossing a building. Before proposing work, survey a road alignment, measure the level at both ends, mark utilities and confirm continuous fall toward a stormwater drain that can accept flow.
Levels at both ends measured	☐	☐	Record source and receiving-drain levels; confirm continuous fall and a lower downstream water level.
Inlet/manhole blockage checked	☐	☐	Check water backing up at the manhole; verify trunk drain level before pumping.
Silt visible in drain	☐	☐	Check mapped stormwater drain near Jyoti Hospital Near Ganpati Enclave (151 m).
Sewage manhole overflow checked	☐	☐	MCG sewage line is at this point. Check the nearest manhole for rising water. Do not discharge stormwater into this line.
Safe pump discharge route available	☐	☐	Keep pump ready only after checking manhole/trunk level; pump capacity to be checked at site.
Road/access safety checked	☐	☐	153 m from Shaheed Major Vikas Yadav Marg (secondary)
Photos taken and attached	☐	☐	Photo label should include H1.
Needs escalation to senior engineer	☐	☐	Escalate if manhole overflow continues, trunk water level is high, or pumping has no safe discharge route.

7. Field Decision Box for H1

Decision	Select	Field note
Clean inlet/blockage immediately	☐	Check water backing up at the manhole; verify trunk drain level before pumping.
Inspect/desilt stormwater drain	☐	Inspect and desilt mapped stormwater drain near Jyoti Hospital Near Ganpati Enclave (151 m) if silt/choking is seen.
Survey a new roadside connection	☐	H1: mapped stormwater drain near Jyoti Hospital Near Ganpati Enclave is 151 m away, but no building-free roadside route is mapped. Trace a road alignment, measure levels at both ends, mark utilities and confirm receiving-drain capacity before proposing construction.
Use a temporary pump	☐	Keep pump ready only after checking manhole/trunk level; pump capacity to be checked at site.
Escalate or restrict access	☐	Escalate if manhole overflow continues, trunk water level is high, or pumping has no safe discharge route.

HOTSPOT 2

1. Hotspot Identification

Hotspot Name	Baraf Khana
Latitude / Longitude	28.45701, 77.03319
Open location	Use the link below to open this point on Google Maps.

Google Map Links for Hotspot and Assets

Use these links for the field pin, nearby drainage/sewage assets and mapped support assets used in this report.

[H2: hotspot pin](#)

[H2: mapped receiving stormwater drain \(19.7 m\)](#)

[H2: nearest mapped stormwater line \(0.00 m\)](#)

[H2: mapped action drain - map label SWD-LINE-899 \(0.00 m\)](#)

[H2: mapped main stormwater drain \(1,019 m\)](#)

[H2: nearest mapped sewage line \(1.90 m\)](#)

[H2: possible roadside connection route](#)

[H2: mapped pump - Mahavir Chowk; capacity 11.7 L/s \(753 m\)](#)

[H2: open/green receptor or park \(250 m\)](#)

[H2: MCG park - Civil Lines; ward 27 \(273 m\)](#)

[H2: MCG pond - Subhas Nagar Pond \(1,707 m\)](#)

[H2: MCG green-belt lowering area - Existing \(143 m\)](#)

[H2: rainwater-harvesting/recharge point - Jyoti Hospital, Patel Nagar \(recorded as functional\) \(349 m\)](#)

[H2: groundwater recharge screening area \(224 m\)](#)

[H2: nearest STP/treatment point - MICRO-STP DC CAMP OFFICE; capacity 25.0 KLD \(384 m\)](#)

[H2: nearest manhole/inlet \(60.9 m\)](#)

Scan QR code to open this hotspot on phone maps.



Hotspot Action Card

Go to	28.45701, 77.03319
Water concern	maximum modelled depth 0.50 m; average within 50 m 0.20 m; water remains above 15 cm for 10.6 h.

Nearest stormwater drain	mapped stormwater drain near Baraf Khana is 19.7 m away. The mapped roadside option is 25.8 m long and is not yet field-approved.
Roadside connection checks	Mapped roadside option: approximately 25.8 m from this point to the receiving stormwater drain. The map follows roads and avoids mapped buildings. The route starts and ends at the nearest road points, about 8.00 m and 4.50 m from the mapped locations. Before approval, survey the level at both ends, confirm continuous fall toward the drain, mark every utility crossing and check that the receiving drain can accept flow. Do not construct if any check fails.
Nearby MCG sewage line	MCG sewage line is about 1.90 m away. Check the nearest manhole for rising water. Do not discharge stormwater into this line.
First action at site	Check water backing up at the manhole; verify trunk drain level before pumping.
Before monsoon	Inspect and desilt mapped stormwater drain near Baraf Khana (19.7 m) if silt/choking is seen.
Escalate if	Escalate if manhole overflow continues, trunk water level is high, or pumping has no safe discharge route.

2. Source

☐ MCG record	☒ Model-selected point
-------------------------------------	--

3. Field Priority Level

☐ LOW	☐ MEDIUM	☐ HIGH	☒ VERY HIGH
------------------------------	---------------------------------	-------------------------------	---

4. Flood Timing and Depth

At H2, record observed water depth, time, inlet condition and receiving-drain level. Compare these with the model estimate before work begins.

Field measure	Unit	Model estimate	Selected rainfall
Ponded water within 50 m	m³	1,819 m³	July 2025 rain
Time water remains above 15 cm	hours	10.6	July 2025 rain
Time to exceed 15 cm after rain starts	hours	9.5	July 2025 rain
Maximum depth at this point	m	0.50 m	July 2025 rain
Average depth within 50 m	m	0.20 m	July 2025 rain
Maximum modelled flow speed	m/s	0.01 m/s	July 2025 rain

H2: record observed water depth and time, then photograph the inlet and receiving-drain level before work starts.

5. Recommendations

a. Drainage and Sewage Checks

Stormwater check: mapped stormwater drain near Baraf Khana is about 19.7 m away and the mapped roadside option is about 25.8 m long. Open the inlet and receiving-drain access point, then use a clean-

water flow test or observe the next rainfall to confirm that water reaches the drain without backing up. Sewage check: an MCG sewage line is about 1.90 m away. Inspect the nearest manhole for rising water, but never use the sewage line as a stormwater or pump outlet.

b. Possible New Stormwater Connection

Mapped option: approximately 25.8 m of roadside connection to mapped stormwater drain near Baraf Khana, which is 19.7 m away directly. Before sanctioning work, measure the source and receiving-drain levels, confirm continuous fall toward the drain, mark utility crossings and check that the receiving drain can accept the added flow. Do not construct if any one of these checks fails.

c. When to Desilt

Inspect the inlet, first upstream access point and first downstream access point leading to mapped stormwater drain near Baraf Khana. Record silt depth and the free opening at each point. Desilt only where silt narrows the waterway or a clean-water flow test shows restriction; clear the full restricted reach and take before/after photographs.

d. Temporary Pump Decision

S.No.	Pump Location	Discharge Point	Pump Capacity / Type
1	H2 / local low point	Nearest mapped pump: Mahavir Chowk; capacity 11.7 L/s; likely discharge: MCG-DESILT-STORM-09801.	Confirm at site
2	Alternate discharge check for H2	Do not discharge to the nearby sewage line (1.90 m from H2); check safe storm drain/open area after checking route to mapped stormwater drain near Baraf Khana (19.7 m).	Use only if site access and discharge permission are clear for H2.
3	Gravity route to mapped stormwater drain near Baraf Khana (19.7 m)	Use gravity only if water from H2 can visibly enter mapped stormwater drain near Baraf Khana (19.7 m) after inlet and drain-level check.	No pump needed only if flow into mapped stormwater drain near Baraf Khana (19.7 m) is confirmed at site.

e. New Drain or Inlet Decision

For H2, inspect the nearest stormwater drain, inlet blockage, silt and downstream continuity. Use a pump route only if flow into mapped stormwater drain near Baraf Khana (19.7 m) cannot be restored. H2: survey the mapped 25.8 m roadside option to mapped stormwater drain near Baraf Khana, which is 19.7 m away directly. Measure levels at the source and receiving drain, confirm continuous fall, mark utilities and verify that the drain has capacity. Approve construction only when all four checks pass.

f. Rainwater Harvesting Check

Nearby open/receptor area: distance 250 m; possible temporary storage 1,179 m³; class site visit. Use only after checking groundwater, water quality and ownership.

g. Temporary Diversion to Park or Pond

Possible nearby storage: 1,179 m³; Check slope, access, permission and overflow route.

6. Site Visit Checklist for H2

Site check	Yes	No	Notes
Waterlogging seen at this pin	☐	☐	H2: 28.45701, 77.03319
Nearest drain/trunk visible	☐	☐	mapped stormwater drain near Baraf Khana (19.7 m)
Roadside connection route surveyed	☐	☐	Mapped roadside option: approximately 25.8 m from this point to the receiving stormwater drain. The map follows roads and avoids mapped buildings. The route starts and ends at the nearest road points, about 8.00 m and 4.50 m from the mapped locations. Before approval, survey the level at both ends, confirm continuous fall toward the drain, mark every utility crossing and check that the receiving drain can accept flow. Do not construct if any check fails.
Levels at both ends measured	☐	☐	Record source and receiving-drain levels; confirm continuous fall and a lower downstream water level.
Inlet/manhole blockage checked	☐	☐	Check water backing up at the manhole; verify trunk drain level before pumping.
Silt visible in drain	☐	☐	Check mapped stormwater drain near Baraf Khana (19.7 m).
Sewage manhole overflow checked	☐	☐	MCG sewage line is about 1.90 m away. Check the nearest manhole for rising water. Do not discharge stormwater into this line.
Safe pump discharge route available	☐	☐	Keep pump ready only after checking manhole/trunk level; pump capacity to be checked at site.
Road/access safety checked	☐	☐	152 m from Shaheed Major Vikas Yadav Marg (secondary)
Photos taken and attached	☐	☐	Photo label should include H2.
Needs escalation to senior engineer	☐	☐	Escalate if manhole overflow continues, trunk water level is high, or pumping has no safe discharge route.

7. Field Decision Box for H2

Decision	Select	Field note
Clean inlet/blockage immediately	☐	Check water backing up at the manhole; verify trunk drain level before pumping.
Inspect/desilt stormwater drain	☐	Inspect and desilt mapped stormwater drain near Baraf Khana (19.7 m) if silt/choking is seen.
Survey a new roadside connection	☐	H2: survey the mapped 25.8 m roadside option to mapped stormwater drain near Baraf Khana, which is 19.7 m away directly. Measure levels at the source and receiving drain, confirm continuous fall, mark utilities and verify that the drain has capacity. Approve construction only when all four checks pass.
Use a temporary pump	☐	Keep pump ready only after checking manhole/trunk level; pump capacity to be checked at site.
Escalate or restrict access	☐	Escalate if manhole overflow continues, trunk water level is high, or pumping has no safe discharge route.

HOTSPOT 3

1. Hotspot Identification

Hotspot Name	Hans Enclave
Latitude / Longitude	28.44914, 77.02615
Open location	Use the link below to open this point on Google Maps.

Google Map Links for Hotspot and Assets

Use these links for the field pin, nearby drainage/sewage assets and mapped support assets used in this report.

[H3: hotspot pin](#)

[H3: mapped receiving stormwater drain \(154 m\)](#)

[H3: nearest mapped stormwater line \(114 m\)](#)

[H3: mapped action drain - map label SWD-LINE-768 \(114 m\)](#)

[H3: mapped main stormwater drain \(820 m\)](#)

[H3: nearest mapped sewage line \(126 m\)](#)

[H3: possible roadside connection route](#)

[H3: mapped pump - Rajeev Chowk NMT Court to Shona road; capacity 3.33 L/s \(799 m\)](#)

[H3: open/green receptor or park \(845 m\)](#)

[H3: MCG park - Civil Lines; ward 27 \(160 m\)](#)

[H3: MCG pond - 11 \(1,183 m\)](#)

[H3: MCG green-belt lowering area - Proposed \(30.8 m\)](#)

[H3: rainwater-harvesting/recharge point - Mini Secretariat- Ist \(recorded as non-functional\) \(242 m\)](#)

[H3: groundwater recharge screening area \(790 m\)](#)

[H3: nearest STP/treatment point - DISPOSAL 15 PART-1 \(917 m\)](#)

[H3: nearest manhole/inlet \(128 m\)](#)

Scan QR code to open this hotspot on phone maps.



Hotspot Action Card

Go to	28.44914, 77.02615
Water concern	maximum modelled depth 0.91 m; average within 50 m 0.70 m; water remains above 15 cm for 10.7 h.

Nearest stormwater drain	mapped stormwater drain near Hans Enclave is 154 m away. The mapped roadside option is 302 m long and is not yet field-approved.
Roadside connection checks	Mapped roadside option: approximately 302 m from this point to the receiving stormwater drain. The map follows roads and avoids mapped buildings. The route starts and ends at the nearest road points, about 69.8 m and 31.1 m from the mapped locations. Before approval, survey the level at both ends, confirm continuous fall toward the drain, mark every utility crossing and check that the receiving drain can accept flow. Do not construct if any check fails.
Nearby MCG sewage line	MCG sewage line is about 126 m away. Check the nearest manhole for rising water. Do not discharge stormwater into this line.
First action at site	Check inlet continuity to the trunk; keep pump standby if water persists.
Before monsoon	Inspect and desilt mapped stormwater drain near Hans Enclave (154 m) if silt/choking is seen.
Escalate if	Escalate if no working inlet is found or the temporary pump route cannot reach a safe drain/open area.

2. Source

☐ MCG record	☒ Model-selected point
-------------------------------------	--

3. Field Priority Level

☐ LOW	☐ MEDIUM	☐ HIGH	☒ VERY HIGH
------------------------------	---------------------------------	-------------------------------	---

4. Flood Timing and Depth

At H3, record observed water depth, time, inlet condition and receiving-drain level. Compare these with the model estimate before work begins.

Field measure	Unit	Model estimate	Selected rainfall
Ponded water within 50 m	m³	5,118 m³	July 2025 rain
Time water remains above 15 cm	hours	10.7	July 2025 rain
Time to exceed 15 cm after rain starts		Not resolved for this point	July 2025 rain
Maximum depth at this point	m	0.91 m	July 2025 rain
Average depth within 50 m	m	0.70 m	July 2025 rain
Maximum modelled flow speed	m/s	0.01 m/s	July 2025 rain

H3: record observed water depth and time, then photograph the inlet and receiving-drain level before work starts.

5. Recommendations

a. Drainage and Sewage Checks

Stormwater check: mapped stormwater drain near Hans Enclave is about 154 m away and the mapped roadside option is about 302 m long. Open the inlet and receiving-drain access point, then use a clean-water

flow test or observe the next rainfall to confirm that water reaches the drain without backing up. Sewage check: an MCG sewage line is about 126 m away. Inspect the nearest manhole for rising water, but never use the sewage line as a stormwater or pump outlet.

b. Possible New Stormwater Connection

Mapped option: approximately 302 m of roadside connection to mapped stormwater drain near Hans Enclave, which is 154 m away directly. Before sanctioning work, measure the source and receiving-drain levels, confirm continuous fall toward the drain, mark utility crossings and check that the receiving drain can accept the added flow. Do not construct if any one of these checks fails.

c. When to Desilt

Inspect the inlet, first upstream access point and first downstream access point leading to mapped stormwater drain near Hans Enclave. Record silt depth and the free opening at each point. Desilt only where silt narrows the waterway or a clean-water flow test shows restriction; clear the full restricted reach and take before/after photographs.

d. Temporary Pump Decision

S.No.	Pump Location	Discharge Point	Pump Capacity / Type
1	H3 / local low point	Nearest mapped pump: Rajeev Chowk NMT Court to Shona road; capacity 3.33 L/s; discharge point to be confirmed at site.	Confirm at site
2	Alternate discharge check for H3	Check a second safe discharge route from H3 to a storm drain/open area if mapped stormwater drain near Hans Enclave (154 m) cannot receive flow.	Use only if site access and discharge permission are clear for H3.
3	Gravity route to mapped stormwater drain near Hans Enclave (154 m)	Use gravity only if water from H3 can visibly enter mapped stormwater drain near Hans Enclave (154 m) after inlet and drain-level check.	No pump needed only if flow into mapped stormwater drain near Hans Enclave (154 m) is confirmed at site.

e. New Drain or Inlet Decision

For H3, no screened pump/open receptor or main-drain drainage relief route within 50 m; field team should check a safe pump route. Map screening used depth/persistence/drain return, 50 m local flood-volume estimate, screened park/open receptors, storm-drain proximity, sewer proximity caution, and site visit constraints. H3: survey the mapped 302 m roadside option to mapped stormwater drain near Hans Enclave, which is 154 m away directly. Measure levels at the source and receiving drain, confirm continuous fall, mark utilities and verify that the drain has capacity. Approve construction only when all four checks pass.

f. Rainwater Harvesting Check

Nearby open/receptor area: distance 845 m; possible temporary storage 1,179 m³; class site visit. Use only after checking groundwater, water quality and ownership.

g. Temporary Diversion to Park or Pond

Possible nearby storage: 1,179 m³; Check slope, access, permission and overflow route.

6. Site Visit Checklist for H3

Site check	Yes	No	Notes
Waterlogging seen at this pin	☐	☐	H3: 28.44914, 77.02615
Nearest drain/trunk visible	☐	☐	mapped stormwater drain near Hans Enclave (154 m)
Roadside connection route surveyed	☐	☐	Mapped roadside option: approximately 302 m from this point to the receiving stormwater drain. The map follows roads and avoids mapped buildings. The route starts and ends at the nearest road points, about 69.8 m and 31.1 m from the mapped locations. Before approval, survey the level at both ends, confirm continuous fall toward the drain, mark every utility crossing and check that the receiving drain can accept flow. Do not construct if any check fails.
Levels at both ends measured	☐	☐	Record source and receiving-drain levels; confirm continuous fall and a lower downstream water level.
Inlet/manhole blockage checked	☐	☐	Check inlet continuity to the trunk; keep pump standby if water persists.
Silt visible in drain	☐	☐	Check mapped stormwater drain near Hans Enclave (154 m).
Sewage manhole overflow checked	☐	☐	MCG sewage line is about 126 m away. Check the nearest manhole for rising water. Do not discharge stormwater into this line.
Safe pump discharge route available	☐	☐	Keep pump ready because mapped drain/trunk is 154 m away; pump capacity to be checked at site.
Road/access safety checked	☐	☐	136 m from secondary
Photos taken and attached	☐	☐	Photo label should include H3.
Needs escalation to senior engineer	☐	☐	Escalate if no working inlet is found or the temporary pump route cannot reach a safe drain/open area.

7. Field Decision Box for H3

Decision	Select	Field note
Clean inlet/blockage immediately	[]	Check inlet continuity to the trunk; keep pump standby if water persists.
Inspect/desilt stormwater drain	[]	Inspect and desilt mapped stormwater drain near Hans Enclave (154 m) if silt/choking is seen.
Survey a new roadside connection	[]	H3: survey the mapped 302 m roadside option to mapped stormwater drain near Hans Enclave, which is 154 m away directly. Measure levels at the source and receiving drain, confirm continuous fall, mark utilities and verify that the drain has capacity. Approve construction only when all four checks pass.
Use a temporary pump	[]	Keep pump ready because mapped drain/trunk is 154 m away; pump capacity to be checked at site.
Escalate or restrict access	[]	Escalate if no working inlet is found or the temporary pump route cannot reach a safe drain/open area.