

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

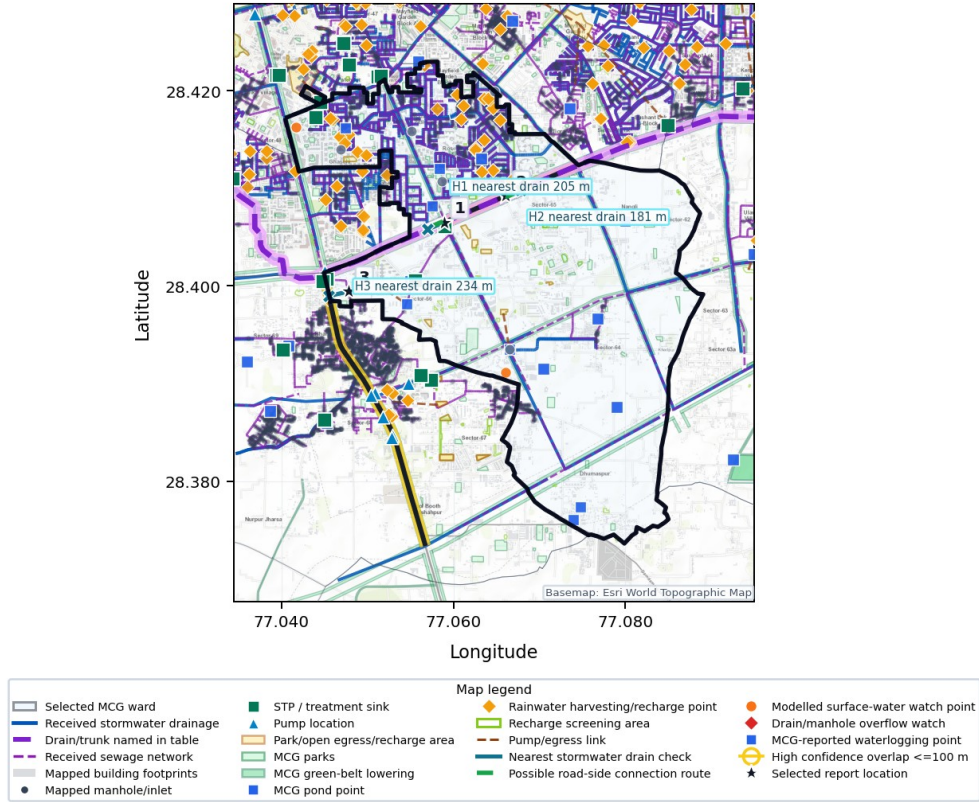
WARD NUMBER	MCG IDENTIFIED LOCATIONS	MODEL IDENTIFIED LOCATIONS
15	11	12
Ward Name / Area Covered	Dhumaspur; Ghasola Village; Maidawas; Nangali Umarpur; Nirvana; Rosewood City; Sector 49; Sector 50; Sector 64; Sector 65; Sector 66; Sector 67A; South City 2	
Zone	Zone II	
Division	Zone II	
Assigned JE	Sumit Chahal JE 9599783198	
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	17 mapped MCG work-status segments overlap this ward; 14 marked completed; 3 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	Smt Bharti Harsana BJP 9999419909
Executive Engineer (EE)	Sh. Pardeep Kumar, EE, 9821395225
Assistant Engineer (AE)	Sh. Manoj Ahlawat, AE, 9999965536
JE Development	Sumit Chahal JE 9599783198
JE Enforcement	Kapil Yadav 9728822849
JE Horticulture	Priyadeep 8684870075
JE Electrical	Mohmmamd Azam 9467395603

Ward Action Map

Ward 15: 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 6,530 stormwater line segments, 12,768 sewage line segments, 2,522 manhole/inlet points, 22 STP/treatment points, 522 MCG park polygons, 18 pond points, 149 green-belt lowering areas and 316 rainwater-harvesting/recharge points from the approved GIS packet.

Field Action Summary

#	Location	Expected water	Mapped drain option	First field action
H1	Rosewood City C Block	maximum modelled depth 0.52 m; average within 50 m 0.20 m; water remains above 15 cm for 12.0 h.	map label 630 (storm) near Rosewood City C Block is 205 m away. The mapped roadside option is 248 m long and is not yet field-approved.	Check roadside overflow point; clear inlet and manage traffic.
H2	Rosewood City D Block	maximum modelled depth 0.57 m; average within 50 m 0.30 m; water remains above 15 cm for 5.5 h.	map label 629 (storm) near Rosewood City D Block is 181 m away. The mapped roadside option is 203 m long and is not yet field-approved.	Check water backing up at the manhole; verify trunk drain level before pumping.
H3	Vatika Chowk	maximum modelled depth 0.43 m; average within 50 m 0.40 m; water remains above 15 cm for 5.1 h.	map label 558 (storm) near Vatika Chowk is 234 m away. No field-approved connection route is recorded.	Check water backing up at the manhole; verify trunk drain level before pumping.

Complete Ward Location Register

No.	Source	Location	Lat	Lon	Expected water	How to use this point
R0 1	MCG	Rosewood City D Block	28.41200	77.05841	0.25 m; above 15 cm for 29 min	Confirm at this location
R0 2	MCG	M R Land Sec 65	28.40055	77.05495	0.45 m; above 15 cm for 2.7 h	Confirm at this location
R0 3	MCG	Dhumaspur Village, Near By Jail Road	28.37603	77.07395	0.18 m; above 15 cm for 40 min	Confirm at this location
R0 4	MCG	Dhumaspur Village, Near Water supply	28.37735	77.07478	0.80 m; above 15 cm for 2.4 h	Confirm at this location
R0 5	MCG	Maidawas Village	28.39346	77.06652	0.17 m; above 15 cm for 32 min	Supported by model within 0 m
R0 6	MCG	Umarpur Nangli Nial School	28.40663	77.07996	0.73 m; above 15 cm for 74 min	Confirm at this location

No.	Source	Location	Lat	Lon	Expected water	How to use this point
R07	MCG	Tyagiwada	28.39816	77.05453	0.59 m; above 15 cm for 4.3 h	Confirm at this location
R08	MCG	Rosewood City C Block	28.40821	77.05753	0.15 m; above 15 cm for 15 min	Confirm at this location
R09	MCG	South City A Block	28.41736	77.04403	0.13 m; above 15 cm for 12 min	Confirm at this location
R10	MCG	South City A1 Block	28.41881	77.04461	0.07 m; above 15 cm for 3 min	Confirm at this location
R11	MCG	South City C Block	28.41617	77.04739	0.11 m; above 15 cm for 10 min	Confirm at this location
M01	Overflow watch	Rosewood City C Block	28.40651	77.05892	0.52 m; above 15 cm for 12.0 h	Confirm at this location
M02	Overflow watch	Rosewood City D Block	28.40921	77.06609	0.57 m; above 15 cm for 5.5 h	Confirm at this location
M03	Overflow watch	Vatika Chowk	28.39943	77.04783	0.43 m; above 15 cm for 5.1 h	Confirm at this location
M04	Overflow watch	Rosewood City D Block	28.41586	77.05510	0.53 m; above 15 cm for 11.4 h	Confirm at this location
M05	Overflow watch	South City A1 Block	28.41952	77.04285	0.34 m; above 15 cm for 10.1 h	Confirm at this location
M06	Overflow watch	South City C Block	28.41398	77.04684	0.92 m; above 15 cm for 7.9 h	Confirm at this location
M07	Model depth	South City A Block	28.41624	77.04165	0.86 m; above 15 cm for 9.4 h	Confirm at this location
M08	Overflow watch	Rosewood City D Block	28.41075	77.05861	0.38 m; above 15 cm for 4.8 h	Confirm at this location
M09	Overflow watch	Rosewood City D Block	28.42124	77.06217	0.55 m; above 15 cm for 9.1 h	Confirm at this location
M10	Overflow watch	Sector 57 part 1	28.41989	77.06474	0.44 m; above 15 cm for 4.5 h	Confirm at this location

No.	Source	Location	Lat	Lon	Expected water	How to use this point
M1 1	MCG + model	Maidawas Village	28.39346	77.06652	1.22 m	Supported by MCG report within 0 m
M1 2	Model depth	Maidawas Village	28.39115	77.06606	1.03 m; above 15 cm for 10.8 h	Confirm at this location

Hotspot-wise Details

HOTSPOT 1

1. Hotspot Identification

Hotspot Name	Rosewood City C Block
Latitude / Longitude	28.40651, 77.05892
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 - map label 630 \(205 m\)](#)

[H1: nearest mapped stormwater line - map label 629 \(0.10 m\)](#)

[H1: mapped action drain \(0.10 m\)](#)

[H1: mapped main stormwater drain \(0.10 m\)](#)

[H1: nearest mapped sewage line - GMDA Network \(12.9 m\)](#)

[H1: possible roadside connection route](#)

[H1: mapped pump - Vatika Chowk, Ch. 5+033 Vatika Chowk underpass; capacity 23.3 L/s \(1,474 m\)](#)

[H1: open/green receptor or park \(196 m\)](#)

[H1: MCG park - Rosewood City; ward 15 \(159 m\)](#)

[H1: MCG pond - Badshahpur Pond in Nirvana Country \(841 m\)](#)

[H1: MCG green-belt lowering area - Proposed \(13.0 m\)](#)

[H1: rainwater-harvesting/recharge point - ES-0156 \(recorded as non-functional\) \(718 m\)](#)

[H1: groundwater recharge screening area \(159 m\)](#)

[H1: nearest STP/treatment point - GMDA DISPOSAL \(47.8 m\)](#)

[H1: nearest manhole/inlet \(282 m\)](#)

Scan QR code to open this hotspot on phone maps.



Hotspot Action Card

Go to	28.40651, 77.05892
Water concern	maximum modelled depth 0.52 m; average within 50 m 0.20 m; water remains above 15 cm for 12.0 h.
Nearest stormwater drain	map label 630 (storm) near Rosewood City C Block is 205 m away. The mapped roadside option is 248 m long and is not yet field-approved.
Roadside connection checks	Mapped roadside option: approximately 248 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 9.90 m and 14.4 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 12.9 m away. Check the nearest manhole for rising water. Do not discharge stormwater into this line.
First action at site	Check roadside overflow point; clear inlet and manage traffic.
Before monsoon	Inspect and desilt map label 630 (storm) near Rosewood City C Block (205 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
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3. Field Priority Level

☐ LOW	☐ MEDIUM	☐ HIGH	☒ VERY HIGH
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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	1,717 m³	July 2025 rain
Time water remains above 15 cm	hours	12.0	July 2025 rain
Time to exceed 15 cm after rain starts	hours	11.0	July 2025 rain

Field measure	Unit	Model estimate	Selected rainfall
Maximum depth at this point	m	0.52 m	July 2025 rain
Average depth within 50 m	m	0.20 m	July 2025 rain
Maximum modelled flow speed	m/s	0.29 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: map label 630 (storm) near Rosewood City C Block is about 205 m away and the mapped roadside option is about 248 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 12.9 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 248 m of roadside connection to map label 630 (storm) near Rosewood City C Block, which is 205 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 map label 630 (storm) near Rosewood City C Block. 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	No mapped pump is shown near H1. If water remains after inlet clearing, use a temporary pump only toward map label 630 (storm) near Rosewood City C Block (205 m) or a verified open/green area; do not use the nearby sewage line (12.9 m from H1) as discharge.	238 L/s for 2-hour clearing; 119 L/s for 4-hour clearing; confirm pump head and hose route at H1.
2	Alternate discharge check for H1	Do not discharge to the nearby sewage line (12.9 m from H1); check safe storm drain/open area after checking route to map label 630 (storm) near Rosewood City C Block (205 m).	Use only if site access and discharge permission are clear for H1.
3	Gravity route to map label 630 (storm) near Rosewood City C Block (205 m)	Use gravity only if water from H1 can visibly enter map label 630 (storm) near Rosewood City C Block (205 m) after inlet and drain-level check.	No pump needed only if flow into map label 630 (storm) near Rosewood City C Block (205 m) is confirmed at site.

e. New Drain or Inlet Decision

For H1, nearest main stormwater drain is 0 m away; check road inlet level, drain level and downstream discharge before routing or pumping. 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: survey the mapped 248 m roadside option to map label 630 (storm) near Rosewood City C Block, which is 205 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 196 m; possible temporary storage 1,564 m³; class site visit. Use only after checking groundwater, water quality and ownership.

g. Temporary Diversion to Park or Pond

Possible nearby storage: 1,564 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: 28.40651, 77.05892
Nearest drain/trunk visible	☐	☐	map label 630 (storm) near Rosewood City C Block (205 m)
Roadside connection route surveyed	☐	☐	Mapped roadside option: approximately 248 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 9.90 m and 14.4 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 roadside overflow point; clear inlet and manage traffic.
Silt visible in drain	☐	☐	Check map label 630 (storm) near Rosewood City C Block (205 m).
Sewage manhole overflow checked	☐	☐	MCG sewage line is about 12.9 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; estimated 2 h pump need is about 238 L/s.
Road/access safety checked	☐	☐	5 m from 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 roadside overflow point; clear inlet and manage traffic.
Inspect/desilt stormwater drain	☐	Inspect and desilt map label 630 (storm) near Rosewood City C Block (205 m) if silt/choking is seen.
Survey a new roadside connection	☐	H1: survey the mapped 248 m roadside option to map label 630 (storm) near Rosewood City C Block, which is 205 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; estimated 2 h pump need is about 238 L/s.
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	Rosewood City D Block
Latitude / Longitude	28.40921, 77.06609
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 - map label 629 \(181 m\)](#)

[H2: nearest mapped stormwater line - map label 629 \(0.00 m\)](#)

[H2: mapped action drain \(0.00 m\)](#)

[H2: mapped main stormwater drain \(0.00 m\)](#)

[H2: nearest mapped sewage line - GMDA Network \(6.30 m\)](#)

[H2: possible roadside connection route](#)

[H2: open/green receptor or park \(561 m\)](#)

[H2: MCG park - Nirvana; ward 15 \(103 m\)](#)

[H2: MCG pond - Badshahpur Pond in Nirvana Country \(510 m\)](#)

[H2: MCG green-belt lowering area - Existing 2 \(45.0 m\)](#)

[H2: rainwater-harvesting/recharge point - ES- Gate \(recorded as non-functional\) \(186 m\)](#)

[H2: groundwater recharge screening area \(23.3 m\)](#)

[H2: nearest STP/treatment point - GMDA DISPOSAL \(772 m\)](#)

[H2: nearest manhole/inlet \(180 m\)](#)

Scan QR code to open this hotspot on phone maps.



Hotspot Action Card

Go to	28.40921, 77.06609
Water concern	maximum modelled depth 0.57 m; average within 50 m 0.30 m; water remains above 15 cm for 5.5 h.
Nearest stormwater drain	map label 629 (storm) near Rosewood City D Block is 181 m away. The mapped roadside option is 203 m long and is not yet field-approved.

Roadside connection checks	Mapped roadside option: approximately 203 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 15.6 m and 12.8 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 6.30 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 map label 629 (storm) near Rosewood City D Block (181 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
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3. Field Priority Level

☐ LOW	☐ MEDIUM	☐ HIGH	☒ VERY HIGH
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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	2,360 m³	July 2025 rain
Time water remains above 15 cm	hours	5.5	July 2025 rain
Time to exceed 15 cm after rain starts	minutes	2	July 2025 rain
Maximum depth at this point	m	0.57 m	July 2025 rain
Average depth within 50 m	m	0.30 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: map label 629 (storm) near Rosewood City D Block is about 181 m away and the mapped roadside option is about 203 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 6.30 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 203 m of roadside connection to map label 629 (storm) near Rosewood City D Block, which is 181 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 map label 629 (storm) near Rosewood City D Block. 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	No mapped pump is shown near H2. If water remains after inlet clearing, use a temporary pump only toward map label 629 (storm) near Rosewood City D Block (181 m) or a verified open/green area; do not use the nearby sewage line (6.30 m from H2) as discharge.	328 L/s for 2-hour clearing; 164 L/s for 4-hour clearing; confirm pump head and hose route at H2.
2	Alternate discharge check for H2	Do not discharge to the nearby sewage line (6.30 m from H2); check safe storm drain/open area after checking route to map label 629 (storm) near Rosewood City D Block (181 m).	Use only if site access and discharge permission are clear for H2.
3	Gravity route to map label 629 (storm) near Rosewood City D Block (181 m)	Use gravity only if water from H2 can visibly enter map label 629 (storm) near Rosewood City D Block (181 m) after inlet and drain-level check.	No pump needed only if flow into map label 629 (storm) near Rosewood City D Block (181 m) is confirmed at site.

e. New Drain or Inlet Decision

For H2, nearest main stormwater drain is 0 m away; check road inlet level, drain level and downstream discharge before routing or pumping. 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. H2: survey the mapped 203 m roadside option to map label 629 (storm) near Rosewood City D Block, which is 181 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 561 m; possible temporary storage 1,564 m³; class site visit. Use only after checking groundwater, water quality and ownership.

g. Temporary Diversion to Park or Pond

Possible nearby storage: 1,564 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: 28.40921, 77.06609
Nearest drain/trunk visible	☐	☐	map label 629 (storm) near Rosewood City D Block (181 m)
Roadside connection route surveyed	☐	☐	Mapped roadside option: approximately 203 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 15.6 m and 12.8 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 map label 629 (storm) near Rosewood City D Block (181 m).
Sewage manhole overflow checked	☐	☐	MCG sewage line is about 6.30 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; estimated 2 h pump need is about 328 L/s.
Road/access safety checked	☐	☐	9 m from Golf Course Extension Road (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 map label 629 (storm) near Rosewood City D Block (181 m) if silt/choking is seen.
Survey a new roadside connection	☐	H2: survey the mapped 203 m roadside option to map label 629 (storm) near Rosewood City D Block, which is 181 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; estimated 2 h pump need is about 328 L/s.
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	Vatika Chowk
Latitude / Longitude	28.39943, 77.04783
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 - map label 558 \(234 m\)](#)

[H3: nearest mapped stormwater line - map label 558 \(234 m\)](#)

[H3: mapped action drain \(234 m\)](#)

[H3: mapped main stormwater drain \(234 m\)](#)

[H3: nearest mapped sewage line \(0.00 m\)](#)

[H3: mapped pump - Vatika Chowk, Ch. 5+033 Vatika Chowk underpass; capacity 23.3 L/s \(360 m\)](#)

[H3: open/green receptor or park \(367 m\)](#)

[H3: MCG park - Sector 66; ward 15-18 \(109 m\)](#)

[H3: MCG pond - Badshahpur Pond Darbaripur Road \(925 m\)](#)

[H3: MCG green-belt lowering area - Proposed \(174 m\)](#)

[H3: rainwater-harvesting/recharge point - Badshapur Community Center \(recorded as non-functional\) \(259 m\)](#)

[H3: groundwater recharge screening area \(367 m\)](#)

[H3: nearest STP/treatment point - DISPOSAL LHS BADHSAPUR \(282 m\)](#)

[H3: nearest manhole/inlet \(0.10 m\)](#)

Scan QR code to open this hotspot on phone maps.



Hotspot Action Card

Go to	28.39943, 77.04783
Water concern	maximum modelled depth 0.43 m; average within 50 m 0.40 m; water remains above 15 cm for 5.1 h.

Nearest stormwater drain	map label 558 (storm) near Vatika Chowk is 234 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 map label 558 (storm) near Vatika Chowk (234 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
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3. Field Priority Level

☐ LOW	☐ MEDIUM	☐ HIGH	☒ VERY HIGH
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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	m ³	2,843 m ³	July 2025 rain
Time water remains above 15 cm	hours	5.1	July 2025 rain
Time to exceed 15 cm after rain starts	hours	5.6	July 2025 rain
Maximum depth at this point	m	0.43 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

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: map label 558 (storm) near Vatika Chowk is about 234 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

map label 558 (storm) near Vatika Chowk is about 234 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 map label 558 (storm) near Vatika Chowk. 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: Vatika Chowk, Ch. 5+033 Vatika Chowk underpass; capacity 23.3 L/s; discharge point to be confirmed at site.	Confirm at site
2	Alternate discharge check for H3	Do not discharge to the nearby sewage line (0.00 m from H3); check safe storm drain/open area after checking route to map label 558 (storm) near Vatika Chowk (234 m).	Use only if site access and discharge permission are clear for H3.
3	Gravity route to map label 558 (storm) near Vatika Chowk (234 m)	Use gravity only if water from H3 can visibly enter map label 558 (storm) near Vatika Chowk (234 m) after inlet and drain-level check.	No pump needed only if flow into map label 558 (storm) near Vatika Chowk (234 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: map label 558 (storm) near Vatika Chowk is 234 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 367 m; possible temporary storage 1,175 m³; class site visit. Use only after checking groundwater, water quality and ownership.

g. Temporary Diversion to Park or Pond

Possible nearby storage: 1,175 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: 28.39943, 77.04783
Nearest drain/trunk visible	☐	☐	map label 558 (storm) near Vatika Chowk (234 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 map label 558 (storm) near Vatika Chowk (234 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	☐	☐	221 m from secondary
Photos taken and attached	☐	☐	Photo label should include H3.
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 H3

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 map label 558 (storm) near Vatika Chowk (234 m) if silt/choking is seen.
Survey a new roadside connection	☐	H3: map label 558 (storm) near Vatika Chowk is 234 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.