



HINDUSTAN PETROLEUM CORPORATION

Journey Risk Management Division

Powered by Route Analytics Pro - AI Intelligence Platform

COMPREHENSIVE JOURNEY RISK MANAGEMENT ANALYSIS REPORT

ROUTE ANALYSIS DETAILS

Supply Location: MEERUT DEPOT [1146]

Destination: MOTI FILLING STATION [0041025372]

Total Distance: 131 km

Estimated Duration: 2 hours 27 mins

Analysis Date: June 26, 2025

Report Generated: 09:21 PM

COMPREHENSIVE ROUTE OVERVIEW & STATISTICS

ROUTE INFORMATION

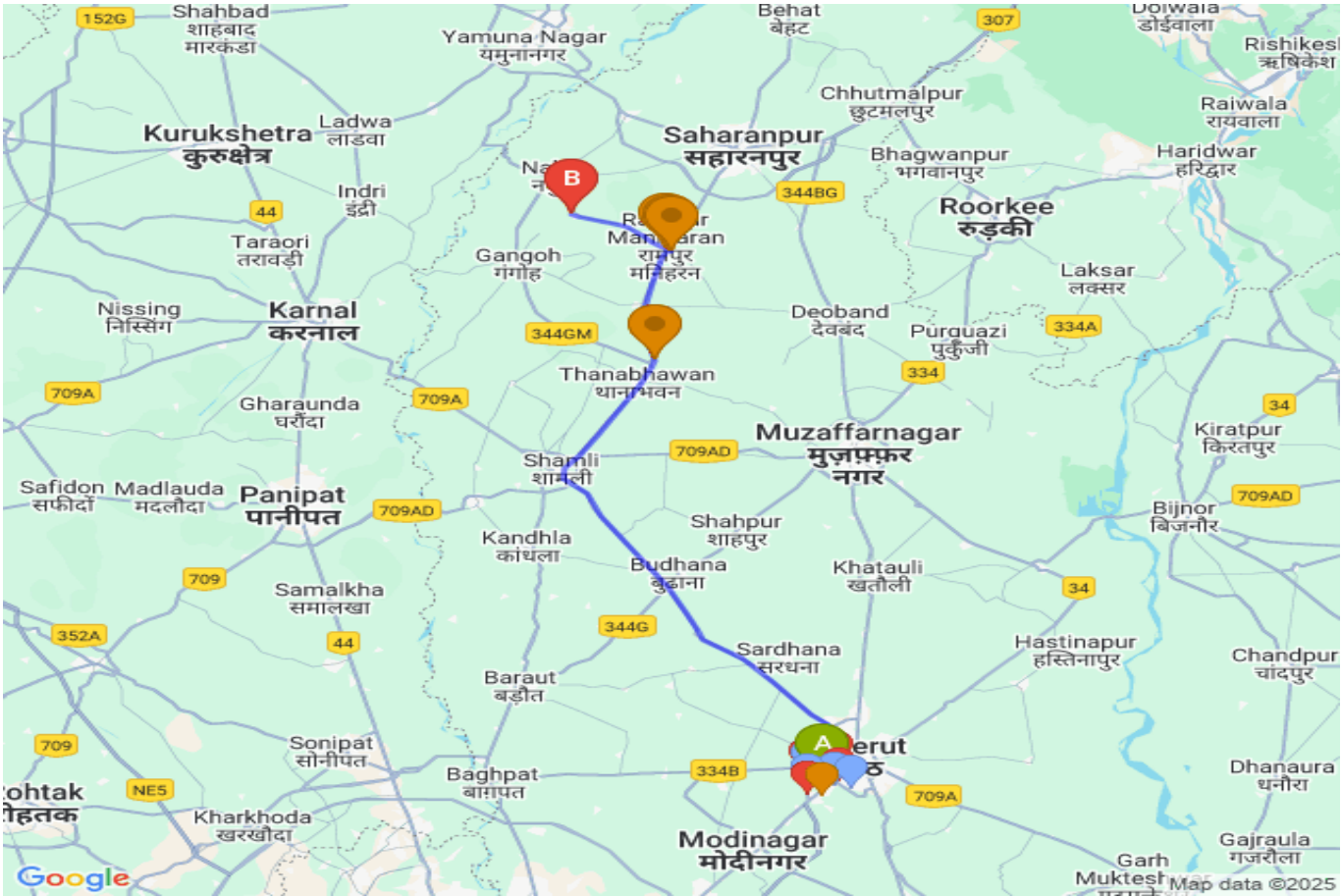
Supply Location	MEERUT DEPOT [1146]
Destination	MOTI FILLING STATION [0041025372]
Distance	131 km
Duration	2 hours 27 mins
Major Highways	NH-344, NH-709
Terrain	Rural Plains

ROUTE ANALYSIS STATISTICS

Sharp Turns Detected	15
Critical Turns (>=70 deg)	7
Major Highways	2
Highway Length	15.08 km

APPROVED ROUTE MAP

Comprehensive route visualization showing start/end points, critical turns, emergency services, highway junctions, and potential hazards.



MAP LEGEND

- | | | | |
|-----------|----------------------|----------|-------------------|
| A | Route Start Point | B | Route End Point |
| T# | Critical Sharp Turns | H | Hospitals |
| P | Police Stations | F | Fire Stations |
| G | Gas Stations | S | Schools/Education |
| * | Highway Junctions | | |

KEY SAFETY MEASURES & REGULATORY COMPLIANCE

Speed Limits	NH: 60 km/h; Rural: 25-30 km/h
Night Driving	Prohibited: 00:00-06:00 hrs
Rest Breaks	Mandatory 15 min every 2 hours; Schedule: 1 breaks of 15
Vehicle Compliance	Check brakes, tires, lights, high-speed capability, emergency
Permits & Documents	Carry valid transport permits, Hazardous vehicle license,
VTs	VTs device shall be functional (Mandatory for NH routes)

Ensure all regulatory requirements are met before journey commencement.
Route includes major highways: NH-344, NH-709. Rural terrain requires
attention to livestock and agricultural vehicles. Speed limits may vary
based on local regulations and road conditions.

HIGH-RISK ZONES & KEY RISK POINTS

Type	From Start	From End	Coordinates	Risk Level	Speed Limit	Driver Action
Sharp Turn #1	96.4 km	14.4 km	29.79971, 77.46206	Critical	10 km/h	Stop, check visibility, proceed slowly
Sharp Turn #2	96.5 km	14.1 km	29.80005, 77.45864	Critical	10 km/h	Stop, check visibility, proceed slowly
Sharp Turn #3	96.5 km	14.1 km	29.80005, 77.45864	Critical	10 km/h	Stop, check visibility, proceed slowly
Sharp Turn #4	96.7 km	14.1 km	29.80176, 77.45924	Critical	10 km/h	Stop, check visibility, proceed slowly
Sharp Turn #5	96.7 km	14.1 km	29.80176, 77.45924	Critical	10 km/h	Stop, check visibility, proceed slowly
Sharp Turn #6	97.1 km	13.6 km	29.80464, 77.45467	Critical	10 km/h	Stop, check visibility, proceed slowly
Sharp Turn #7	78.1 km	28.1 km	29.62532, 77.43918	High	20 km/h	Slow down, cautious turning
Blind Spot #1	2.2 km	104.4 km	28.96025, 77.63995	Medium	30 km/h	Use horn, stay alert
Blind Spot #2	106.1 km	0.5 km	29.86096, 77.33386	Medium	30 km/h	Use horn, stay alert
Wildlife Sanctuary Zone	45.7 km	62.3 km	29.30456, 77.42177	Critical	Normal	Follow environmental guidelines
Communication Dead Zone #1	0.0 km	106.1 km	28.94966, 77.65908	High	--	Use alternative comms device
Communication Dead Zone #2	5.3 km	100.8 km	28.99594, 77.64593	High	--	Use alternative comms device

RISK SUMMARY: 13 high-risk zones identified

SEASONAL ROAD CONDITIONS & TRAFFIC PATTERNS

Season/Condition	Critical Stretches	Typical Challenges	Driver Caution
Summer	NH-344 (29.3, 77.5 to 29.3, 77.4)	High temperatures -> vehicle overheating, tire blowouts	Pre-check cooling systems, carry extra water
Summer	NH-709 (29.4, 77.4 to 29.5, 77.3)	High temperatures -> vehicle overheating, tire blowouts	Pre-check cooling systems, carry extra water
Summer	Rural plains section (28.9, 77.7 to 29.9, 77.3)	Extreme heat exposure, limited shade, dust storms	Plan travel during cooler hours, carry sun protection
Monsoon	NH-344 (29.3, 77.5 to 29.3, 77.4)	Waterlogging, reduced visibility, flooding	Slow down, use wipers, headlights on, plan for delays
Monsoon	NH-709 (29.4, 77.4 to 29.5, 77.3)	Waterlogging, reduced visibility, flooding	Slow down, use wipers, headlights on, plan for delays
Schools	Dewan Public School International.. (28.9, 77.7)	Children crossing, school vehicles, increased pedestrian activity	Slow down, watch for pedestrian crossings, school timings: 7-9 AM, 2-4 PM
Schools	Bhai Joga Singh Public School (28.9, 77.7)	Children crossing, school vehicles, increased pedestrian activity	Slow down, watch for pedestrian crossings, school timings: 7-9 AM, 2-4 PM
Schools	METRO PUBLIC SCHOOL (28.9, 77.7)	Children crossing, school vehicles, increased pedestrian activity	Slow down, watch for pedestrian crossings, school timings: 7-9 AM, 2-4 PM
Toll Plazas	NH-344 - Estimated toll plaza (29.3, 77.4)	Buildup of queues during peak times, payment delays	Plan breaks before toll, ensure lane discipline, keep exact change/FASTag ready
Toll Plazas	NH-709 - Estimated toll plaza (29.4, 77.3)	Buildup of queues during peak times, payment delays	Plan breaks before toll, ensure lane discipline, keep exact change/FASTag ready

SEASONAL ANALYSIS: 10 conditions identified for route

ENVIRONMENTAL & LOCAL CONSIDERATIONS

Zone / Area	Location	Coordinates	Located On/Near	Environmental Risk
Eco-sensitive Zone	Pollution Sensitive Area near route section 1	28.9, 77.7	NH-344 near eco-sensitive area	Increased wildlife movement, no littering, noise restrictions
Eco-sensitive Zone	Wildlife Sanctuary near route section 2	29.3, 77.4	NH-344 near eco-sensitive area	Increased wildlife movement, no littering, noise restrictions
School Zone	Dewan Public School International..	28.9, 77.7	Near NH-344	Pedestrian activity, reduced speed required (25 km/h), school timings awareness
School Zone	Bhai Joga Singh Public School	28.9, 77.7	Near NH-344	Pedestrian activity, reduced speed required (25 km/h), school timings awareness
School Zone	METRO PUBLIC SCHOOL	28.9, 77.7	Near NH-344	Pedestrian activity, reduced speed required (25 km/h), school timings awareness
School Zone	PRESIDENCY PUBLIC SCHOOL	28.9, 77.7	Near NH-344	Pedestrian activity, reduced speed required (25 km/h), school timings awareness
Market Area	Commercial zone 1 (3 establishments)	28.9, 77.7	City centre area, local roads	High foot traffic, unpredictable congestion, parking challenges
Market Area	Commercial zone 2 (5 establishments)	29.3, 77.5	City centre area, local roads	High foot traffic, unpredictable congestion, parking challenges
Market Area	Commercial zone 3 (3 establishments)	29.4, 77.3	City centre area, local roads	High foot traffic, unpredictable congestion, parking challenges

ENVIRONMENTAL SUMMARY: 9 zones requiring special attention

NOTES - GENERAL ENVIRONMENTAL & LOCAL DRIVING GUIDELINES FOR PETROL

Aspect	Guidelines / Actions
Eco-sensitive Areas	Drive slowly, avoid honking unnecessarily, do not stop for breaks or cleaning in these areas.
Waterbody Crossings	Inspect for leaks before entering bridges, no refuelling or repairs on or near bridges.
School & Market Areas	Maintain speed limits (25-30 km/h), stay alert for children and pedestrians, avoid peak school/market hours.
Festivals & Local Events	Expect road diversions or closures, confirm route with local authorities or control room.
Littering & Pollution Prevention	Never discard trash or spill fuel; carry spill kits and clean-up materials as per SOP.
Noise & Cultural Sensitivity	Avoid honking in populated areas and during religious or cultural gatherings.
Local Road Regulations	Follow local traffic signage and any state-specific restrictions for hazardous cargo.
Coordination with Locals	Be courteous to local communities; stop only at designated points for rest, food, or refuelling.

Note: These guidelines are mandatory for all petroleum tanker operations. Compliance ensures safety and environmental protection.

DEFENSIVE DRIVING & DRIVER WELL-BEING

Checklist Item	Detailed Guidelines / Actions
Maintain safe distance, use indicators	Keep a minimum 3-second following distance from the vehicle ahead, adjust for heavy loads; always signal turns or lane changes well in advance.
Stay hydrated: carry water bottles	Carry at least 2 liters of drinking water. Avoid dehydration, especially in summer. Drink at rest stops every 1-2 hours.
Avoid heavy/oily meals before journey	Eat light, balanced meals to avoid drowsiness and discomfort. Avoid spicy, fried, or heavy foods before and during the trip.
Get at least 8 hours of sleep before starting	A good night's sleep is essential to reduce fatigue and maintain focus. Never start a trip when tired or drowsy.
Wear weather-appropriate protective gear	Use sun protection (caps, sunglasses) in summer; layered clothing in winter; always wear safety shoes and reflective vests.
Control speed based on road conditions	Adjust speed for weather, road curves, and heavy vehicle braking distances. Never exceed posted speed limits.
Plan rest breaks every 3 hours	Stop for at least 30 minutes to stretch, refresh, and check vehicle condition. Avoid continuous driving for more than 3 hours.
Defensive driving mindset	Stay calm, anticipate road users' actions, avoid aggression. Use mirrors frequently and watch for potential hazards ahead.
Emergency readiness	Keep fire extinguisher, first-aid kit, and communication device within easy reach. Be aware of nearest emergency services along the route.

Note: These guidelines are mandatory for all petroleum tanker operations. Compliance ensures safety and environmental protection.

SHARP TURNS ANALYSIS WITH DUAL VISUAL EVIDENCE

Total Sharp Turns Detected	15
Extreme Danger Turns (>=90 deg)	6
High-Risk Blind Spots (80-90 deg)	0
Sharp Danger Zones (70-80 deg)	1
Moderate Risk Turns (45-70 deg)	8
Most Dangerous Turn Angle	180.0 deg
Average Turn Angle	88.4 deg
Street View Images Available	7
Satellite Images Available	7
Route Map Images Available	1
Total Visual Evidence Files	15

[OK] VISUAL EVIDENCE STATUS: EXCELLENT VISUAL EVIDENCE (14 images)

TURN CLASSIFICATION SYSTEM

Angle Range	Classification	Risk Level	Max Speed	Safety Requirement
>=90 deg	EXTREME BLIND S	CRITICAL	15 km/h	Full stop may be requ
80-90 de	HIGH-RISK BLIND	EXTREME	20 km/h	Extreme caution requi
70-80 de	BLIND SPOT	HIGH	25 km/h	High caution required
60-70 de	HIGH-ANGLE TURN	MEDIUM	30 km/h	Moderate caution requ
45-60 de	SHARP TURN	LOW	40 km/h	Normal caution requir

CRITICAL TURNS WITH DUAL VISUAL EVIDENCE ANALYSIS

CRITICAL TURN #1: 180.0 deg - EXTREME BLIND SPOT - CRITICAL RISK

GPS Coordinates	29.799710, 77.462060
Turn Angle	180.0 deg (Deviation from straight path)
Risk Classification	EXTREME BLIND SPOT - CRITICAL Risk Level
Recommended Maximum Speed	15 km/h
Safety Distance Required	Minimum 50m approach visibility
Driver Action Required	Reduce speed, check mirrors, signal early
Street View Images	1 images available
Satellite Images	1 images available
Total Visual Evidence	2 images for analysis

VISUAL EVIDENCE FOR TURN #1:

STREET VIEW ANALYSIS:



STREET VIEW DATA:
File: streetview_af7c8826-2d03-4239-aceb-0c329bbf2064_turn_1_h0.jpg
Size: 8.6 KB
GPS: 29.7997, 77.4621

- ROAD ANALYSIS:
- * Turn angle: 180.0 degrees
 - * Visibility: Limited due to sharp curve
 - * Hazard level: CRITICAL
 - * Max speed: 15 km/h

SATELLITE VIEW ANALYSIS:



SATELLITE VIEW DATA:
File: satellite_af7c8826-2d03-4239-aceb-0c329bbf2064_turn_1.png
Size: 317.6 KB
GPS: 29.7997, 77.4621

- AERIAL ANALYSIS:
- * Turn geometry: 180.0 deg curve
 - * Road curvature: Sharp bend visible
 - * Terrain context: Aerial perspective
 - * Traffic flow impact: Potential bottleneck

CRITICAL TURN #2: 159.6 deg - EXTREME BLIND SPOT - CRITICAL RISK

GPS Coordinates	29.800050, 77.458640
Turn Angle	159.6 deg (Deviation from straight path)
Risk Classification	EXTREME BLIND SPOT - CRITICAL Risk Level
Recommended Maximum Speed	15 km/h
Safety Distance Required	Minimum 50m approach visibility
Driver Action Required	Reduce speed, check mirrors, signal early
Street View Images	2 images available
Satellite Images	2 images available
Total Visual Evidence	4 images for analysis

VISUAL EVIDENCE FOR TURN #2:

STREET VIEW ANALYSIS:



STREET VIEW DATA:
File: streetview_af7c8826-2d03-4239-aceb-0c329bbf2064_turn_2_h0.jpg
Size: 59.0 KB
GPS: 29.8000, 77.4586

- ROAD ANALYSIS:
- * Turn angle: 159.6 degrees
 - * Visibility: Limited due to sharp curve
 - * Hazard level: CRITICAL
 - * Max speed: 15 km/h

SATELLITE VIEW ANALYSIS:



SATELLITE VIEW DATA:
File: satellite_af7c8826-2d03-4239-aceb-0c329bbf2064_turn_2.png
Size: 308.2 KB
GPS: 29.8000, 77.4586

- AERIAL ANALYSIS:
- * Turn geometry: 159.6 deg curve
 - * Road curvature: Sharp bend visible
 - * Terrain context: Aerial perspective
 - * Traffic flow impact: Potential bottleneck

CRITICAL TURN #3: 159.6 deg - EXTREME BLIND SPOT - CRITICAL RISK

GPS Coordinates	29.800050, 77.458640
Turn Angle	159.6 deg (Deviation from straight path)
Risk Classification	EXTREME BLIND SPOT - CRITICAL Risk Level
Recommended Maximum Speed	15 km/h
Safety Distance Required	Minimum 50m approach visibility
Driver Action Required	Reduce speed, check mirrors, signal early
Street View Images	2 images available
Satellite Images	2 images available
Total Visual Evidence	4 images for analysis

VISUAL EVIDENCE FOR TURN #3:

STREET VIEW ANALYSIS:



STREET VIEW DATA:
File: streetview_af7c8826-2d03-4239-aceb-0c329bbf2064_turn_2_h0.jpg
Size: 59.0 KB
GPS: 29.8000, 77.4586

- ROAD ANALYSIS:
- * Turn angle: 159.6 degrees
 - * Visibility: Limited due to sharp curve
 - * Hazard level: CRITICAL
 - * Max speed: 15 km/h

SATELLITE VIEW ANALYSIS:



SATELLITE VIEW DATA:
File: satellite_af7c8826-2d03-4239-aceb-0c329bbf2064_turn_2.png
Size: 308.2 KB
GPS: 29.8000, 77.4586

- AERIAL ANALYSIS:
- * Turn geometry: 159.6 deg curve
 - * Road curvature: Sharp bend visible
 - * Terrain context: Aerial perspective
 - * Traffic flow impact: Potential bottleneck

CRITICAL TURN #4: 113.0 deg - EXTREME BLIND SPOT - CRITICAL RISK

GPS Coordinates	29.801760, 77.459240
Turn Angle	113.0 deg (Deviation from straight path)
Risk Classification	EXTREME BLIND SPOT - CRITICAL Risk Level
Recommended Maximum Speed	15 km/h
Safety Distance Required	Minimum 50m approach visibility
Driver Action Required	Reduce speed, check mirrors, signal early
Street View Images	2 images available
Satellite Images	2 images available
Total Visual Evidence	4 images for analysis

VISUAL EVIDENCE FOR TURN #4:

STREET VIEW ANALYSIS:



STREET VIEW DATA:
File: streetview_af7c8826-2d03-4239-aceb-0c329bbf2064_turn_4_h0.jpg
Size: 59.5 KB
GPS: 29.8018, 77.4592

- ROAD ANALYSIS:
- * Turn angle: 113.0 degrees
 - * Visibility: Limited due to sharp curve
 - * Hazard level: CRITICAL
 - * Max speed: 15 km/h

SATELLITE VIEW ANALYSIS:



SATELLITE VIEW DATA:
File: satellite_af7c8826-2d03-4239-aceb-0c329bbf2064_turn_4.png
Size: 342.8 KB
GPS: 29.8018, 77.4592

- AERIAL ANALYSIS:
- * Turn geometry: 113.0 deg curve
 - * Road curvature: Sharp bend visible
 - * Terrain context: Aerial perspective
 - * Traffic flow impact: Potential bottleneck

CRITICAL TURN #5: 113.0 deg - EXTREME BLIND SPOT - CRITICAL RISK

GPS Coordinates	29.801760, 77.459240
Turn Angle	113.0 deg (Deviation from straight path)
Risk Classification	EXTREME BLIND SPOT - CRITICAL Risk Level
Recommended Maximum Speed	15 km/h
Safety Distance Required	Minimum 50m approach visibility
Driver Action Required	Reduce speed, check mirrors, signal early
Street View Images	2 images available
Satellite Images	2 images available
Total Visual Evidence	4 images for analysis

VISUAL EVIDENCE FOR TURN #5:

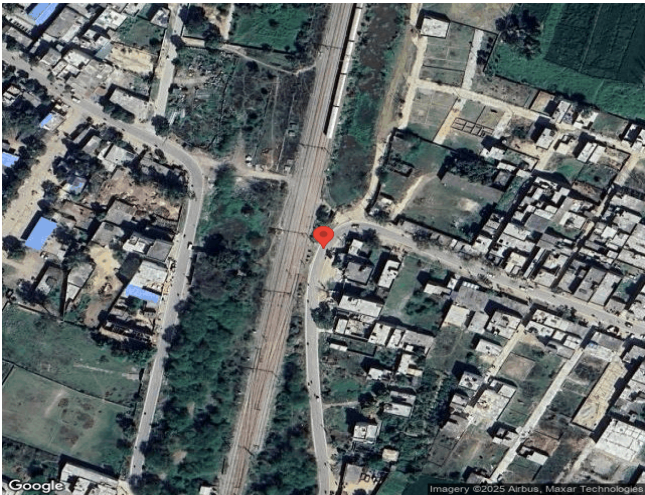
STREET VIEW ANALYSIS:



STREET VIEW DATA:
File: streetview_af7c8826-2d03-4239-aceb-0c329bbf2064_turn_4_h0.jpg
Size: 59.5 KB
GPS: 29.8018, 77.4592

- ROAD ANALYSIS:
- * Turn angle: 113.0 degrees
 - * Visibility: Limited due to sharp curve
 - * Hazard level: CRITICAL
 - * Max speed: 15 km/h

SATELLITE VIEW ANALYSIS:



SATELLITE VIEW DATA:
File: satellite_af7c8826-2d03-4239-aceb-0c329bbf2064_turn_4.png
Size: 342.8 KB
GPS: 29.8018, 77.4592

- AERIAL ANALYSIS:
- * Turn geometry: 113.0 deg curve
 - * Road curvature: Sharp bend visible
 - * Terrain context: Aerial perspective
 - * Traffic flow impact: Potential bottleneck

CRITICAL TURN #6: 97.4 deg - EXTREME BLIND SPOT - CRITICAL RISK

GPS Coordinates	29.804640, 77.454670
Turn Angle	97.4 deg (Deviation from straight path)
Risk Classification	EXTREME BLIND SPOT - CRITICAL Risk Level
Recommended Maximum Speed	15 km/h
Safety Distance Required	Minimum 50m approach visibility
Driver Action Required	Reduce speed, check mirrors, signal early
Street View Images	1 images available
Satellite Images	1 images available
Total Visual Evidence	2 images for analysis

VISUAL EVIDENCE FOR TURN #6:

STREET VIEW ANALYSIS:



STREET VIEW DATA:
File: streetview_af7c8826-2d03-4239-aceb-0c329bbf2064_turn_6_h0.jpg
Size: 48.4 KB
GPS: 29.8046, 77.4547

- ROAD ANALYSIS:
- * Turn angle: 97.4 degrees
 - * Visibility: Limited due to sharp curve
 - * Hazard level: CRITICAL
 - * Max speed: 15 km/h

SATELLITE VIEW ANALYSIS:



SATELLITE VIEW DATA:
File: satellite_af7c8826-2d03-4239-aceb-0c329bbf2064_turn_6.png
Size: 353.5 KB
GPS: 29.8046, 77.4547

- AERIAL ANALYSIS:
- * Turn geometry: 97.4 deg curve
 - * Road curvature: Sharp bend visible
 - * Terrain context: Aerial perspective
 - * Traffic flow impact: Potential bottleneck

CRITICAL TURN #7: 75.7 deg - BLIND SPOT - HIGH RISK

GPS Coordinates	29.625320, 77.439180
Turn Angle	75.7 deg (Deviation from straight path)
Risk Classification	BLIND SPOT - HIGH Risk Level
Recommended Maximum Speed	25 km/h
Safety Distance Required	Minimum 50m approach visibility
Driver Action Required	Reduce speed, check mirrors, signal early
Street View Images	1 images available
Satellite Images	1 images available
Total Visual Evidence	2 images for analysis

VISUAL EVIDENCE FOR TURN #7:

STREET VIEW ANALYSIS:



STREET VIEW DATA:
File: streetview_af7c8826-2d03-4239-aceb-0c329bbf2064_turn_7_h0.jpg
Size: 50.9 KB
GPS: 29.6253, 77.4392

- ROAD ANALYSIS:
- * Turn angle: 75.7 degrees
 - * Visibility: Limited due to sharp curve
 - * Hazard level: HIGH
 - * Max speed: 25 km/h

SATELLITE VIEW ANALYSIS:



SATELLITE VIEW DATA:
File: satellite_af7c8826-2d03-4239-aceb-0c329bbf2064_turn_7.png
Size: 299.5 KB
GPS: 29.6253, 77.4392

- AERIAL ANALYSIS:
- * Turn geometry: 75.7 deg curve
 - * Road curvature: Sharp bend visible
 - * Terrain context: Aerial perspective
 - * Traffic flow impact: Potential bottleneck

CRITICAL TURN #8: 68.3 deg - HIGH-ANGLE TURN - MEDIUM RISK

GPS Coordinates	28.960250, 77.639950
Turn Angle	68.3 deg (Deviation from straight path)
Risk Classification	HIGH-ANGLE TURN - MEDIUM Risk Level
Recommended Maximum Speed	30 km/h
Safety Distance Required	Minimum 50m approach visibility
Driver Action Required	Reduce speed, check mirrors, signal early
Street View Images	0 images available
Satellite Images	0 images available
Total Visual Evidence	0 images for analysis

No visual evidence available for Turn #8

Images may be available at nearby coordinates: 28.9602, 77.6399

COMPREHENSIVE POINTS OF INTEREST - FULL DETAILS

Total POIs Identified	119
Emergency Services	44
Essential Services	25
Other Services	50
Coverage Score	100/100

MEDICAL FACILITIES - Emergency Healthcare Services (25 found)

Facility Name	Full Address	Dist from Start	Dist from End	GPS Coordinates	Phone Number
Sanjeevani Yoga And Nature Cure Hospital - Kidney Specialist in Meerut Liver Specialist in Meerut Skin	Unnamed Road, Surya Palace Colony, Meerut	2.3 km	107.1 km	28.946442, 77.682769	Phone number not available
Chhatrapati Shivaji Subharti	Swami Vivekanand Subharti University	2.3 km	104.3 km	28.960460, 77.638502	Phone number not available
Dr Lal PathLabs - Patient Service Centre	Shop No 17, Khana Plaza, Flyover, near Malyana, Baghpat Road,	2.6 km	104.0 km	28.971431, 77.668891	Phone number not available
Kalka Dental College	near Partapur Flyover, By Pass,	3.4 km	108.2 km	28.924582, 77.639411	Phone number not
Davki Nandan Hospital	Devkinandan hospital, near transport Nagar, Baghpat Road,	3.1 km	104.4 km	28.971272, 77.679234	Phone number not available
kailashi super speciality hospital &	C-2 Shardhapuri Phase 2 Kankerkheda,	9.0 km	98.0 km	29.029889, 77.671054	Phone number not available
Hans Multispeciality Hospital	512, Sardhana Road, Om Nagar, Kanker Khera, Meerut Cantt,	9.2 km	98.1 km	29.030877, 77.678053	Phone number not available

Facility Name	Full Address	Dist from Start	Dist from End	GPS Coordinates	Phone Number
Prakash Hospital	1/108, Dantal Jatoli Road, Sector 1, Shradhapuri Phase	9.0 km	98.8 km	29.027019, 77.686053	Phone number not available
Omnibus Healthcare	1H, NH58, Ansal City, Meerut	11.9 km	96.9 km	29.050114, 77.700718	Phone number not
G.M. Modi Hospital	3P75+J72, Modipuram, Meerut	13.6 km	95.7 km	29.064021, 77.708142	Phone number not
Government Hospital-PHC	4GMR+XV2	23.5 km	83.1 km	29.134889, 77.542140	Phone number not
Community health centre, Saroorpur	4GMR+QWG, Meerut	23.5 km	83.2 km	29.134449, 77.542317	Phone number not available
medical store	4GWP+9HQ, Dahar	24.9 km	81.8 km	29.145971, 77.536487	Phone number not
Aadi Medical Store	Jasar Sultannagar	25.3 km	81.9 km	29.140995, 77.519055	Phone number not
Panwar Medical Store	5G49+MVV, Gotka	26.7 km	80.2 km	29.156735, 77.519674	Phone number not
Seva Charitable	Muzaffarnagar Road, pulpaar,	41.1 km	65.8 km	29.280551, 77.470459	Phone number not
life line clinic	2, Budhana	41.1 km	65.8 km	29.280561, 77.470466	Phone number not
Dr aatma ram eye hospital	Baraut Road, Budhana	41.0 km	65.8 km	29.280530, 77.471898	Phone number not
Rafikan Physio Clinic,	satheri road, Budhana	41.2 km	65.6 km	29.281761, 77.470383	Phone number not

Facility Name	Full Address	Dist from Start	Dist from End	GPS Coordinates	Phone Number
Ayushman arogye mandir	6FJP+C6R, Kurthal	40.9 km	65.9 km	29.280251, 77.473738	Phone number not
Get Well Hospital and Ultrasound	Karnal - Shamli Road, Subashnagar, Shamli	63.9 km	46.6 km	29.439844, 77.316208	Phone number not available
Ayushman Arogya Mandir	C83X+279, Kabraut	58.7 km	50.8 km	29.402542, 77.348224	Phone number not
bansal hospital	C83Q+V9C, Jhal	59.4 km	50.5 km	29.404680, 77.338399	Phone number not
Ayushman arogya mandir	C83P+4PW, Jhal	59.3 km	50.7 km	29.402852, 77.336842	Phone number not
Arvind I owner	C9F9+XQJ, Kudana	59.9 km	48.4 km	29.424951, 77.369401	Phone number not

NOTE: Click on map links in digital PDF to open live navigation. All 25 facilities shown with complete information.

LAW ENFORCEMENT - Security & Emergency Response (18 found)

Facility Name	Full Address	Dist from Start	Dist from End	GPS Coordinates	Phone Number
Nauchandi Police Station	Mohsin Bagh, Manzoor Nagar,	4.3 km	109.1 km	28.932659, 77.698791	Phone number not
Shatabdi Nagar Police Choki	WMPG+W37, Shatabdi Nagar, Sector 5,	2.1 km	107.8 km	28.937291, 77.675171	Phone number not
Police Choki Shubharti University	XJ5Q+9R6, NH58, Meerut	2.1 km	104.6 km	28.958414, 77.639524	Phone number not available
Pari Chowk	WJPR+VG3, Pari Chowk, NRI City, Omega II, Greater	2.2 km	106.9 km	28.937133, 77.641289	Phone number not available
Police Choki VedVyasPuri Thana:- Transport	XJ7R+37V, NH58, Ved Vyas Puri -Phase 1, Meerut	2.3 km	104.1 km	28.962737, 77.640663	Phone number not available
Police chawki	2MMF+C6W, Unnamed Road, Shradhapuri	9.4 km	97.6 km	29.033622, 77.673071	Phone number not
Police Station, Kankarkheda	B30 Sardhana Road, Kankar Khara Road, Shradhapuri Phase	8.9 km	98.7 km	29.026453, 77.683659	Phone number not available
Police Chowki kasba	1/126, Shradha Puri Road, Sector 1, Shradhapuri	8.8 km	98.9 km	29.025348, 77.685811	Phone number not available
Police Choki	2PP4+QH4, Krishna Nagar, Daurli,	10.7 km	98.5 km	29.036898, 77.706458	Phone number not
Police post Modipuram	Bus Station, 2PX4+JVG Low Floor, NH 58,	12.0 km	97.2 km	29.049080, 77.707205	Phone number not available

Facility Name	Full Address	Dist from Start	Dist from End	GPS Coordinates	Phone Number
Police check post	4HP8+GG5, Karnal - Meerut Road	22.6 km	83.6 km	29.136274, 77.566349	Phone number not
Police Station SaroorPur	4GMR+54G	23.4 km	83.3 km	29.132937, 77.540315	Phone number not
Diwan ji	4GR9+GX, Jasar Sultannagar	25.2 km	81.9 km	29.141256, 77.519889	Phone number not
Police Station	7FR9+29Q, Budhana	42.1 km	64.7 km	29.290086, 77.468494	Phone number not
Bai wala police station	7F54+GM5, Budhana Road	39.6 km	67.9 km	29.258760, 77.456743	Phone number not
Police chunki	7CMP+WW3, Vigyana	43.0 km	64.7 km	29.284754, 77.437300	Phone number not
????? ???? ?????? ???	7FRG+6H8, MDR 22W, Budhana	41.8 km	64.8 km	29.290540, 77.476463	Phone number not
Police Chowki Lank	99F9+GCP, National Highway 709A	55.0 km	54.1 km	29.373825, 77.368590	Phone number not

NOTE: Click on map links in digital PDF to open live navigation. All 18 facilities shown with complete information.

FIRE & RESCUE - Emergency Response Services (1 found)

Facility Name	Full Address	Dist from Start	Dist from End	GPS Coordinates	Phone Number
Fire Station Partapur	WMC5+X9P, Sector 2, MDA, Meerut	3.0 km	108.9 km	28.922465, 77.658456	Phone number not

NOTE: Click on map links in digital PDF to open live navigation. All 1 facilities shown with complete information.

FUEL STATIONS - Vehicle Refueling Points (25 found)

Facility Name	Full Address	Dist from Start	Dist from End	GPS Coordinates	Phone Number
IndianOil	Rithani, Delhi - Meerut Expressway,	1.8 km	107.8 km	28.934349, 77.663528	Phone number not
cng pump meerut	WMJ5+6X6, Block 4A, Sector 2,	2.1 km	108.1 km	28.930529, 77.659897	Phone number not
Hindustan Petroleum Corporation	Ground Floor, Crossing Meerut, near Mevla Phatak,	2.2 km	106.2 km	28.954517, 77.680880	Phone number not available
Allen Oil	WMG5+4FP, Sector 2, MDA, Meerut	2.7 km	108.6 km	28.925326, 77.658716	Phone number not
Raj Service Station Bharat	Bhoor Baral, NH 58, Meerut	3.0 km	108.0 km	28.927021, 77.642158	Phone number not
IndianOil	Sardhana Road, Kanker Khera,	9.2 km	98.0 km	29.031174, 77.677200	Phone number not
Nayara Filling Station - Kanker khera Filling Station	279/1, Shradha Puri Road, Sant Vihar, Sector 4, Shradhapuri Phase 1, 6/209, Sector 6, Shradhapuri	9.3 km	98.2 km	29.031384, 77.681507	Phone number not available
IndianOil	Ground Floor,NH 58, Haridwar Bypass, Shobhapur,	6.3 km	99.8 km	29.006255, 77.651389	Phone number not available
IndianOil	Roorkee Road, Vivek Vihar,	10.6 km	98.7 km	29.035088, 77.707191	Phone number not
IndianOil	Ground Floor, Roorkee Road,	11.3 km	98.0 km	29.041826, 77.707101	Phone number not

Facility Name	Full Address	Dist from Start	Dist from End	GPS Coordinates	Phone Number
RDML Energy Services Indian Oil Petrol Pump	Bhuni Crossing Binoli-Sardhana Road, 200 Mtr Away from, Karnal -	22.7 km	83.5 km	29.137506, 77.568768	Phone number not available
Petrol Pump	Meerut	23.3 km	82.8 km	29.153583, 77.602590	Phone number not
Shiv Kailash Fuel Point HPCL Petrol	Meerut Karnal, National Highway 709A, Bhuni	23.5 km	82.8 km	29.141739, 77.559163	Phone number not available
Hindustan Petroleum Corporation	Khasra No 29 NH 709A, Shamli Rd, Sardhana, Meerut	23.1 km	83.1 km	29.139225, 77.561151	Phone number not available
IndianOil	Ground Floor, Julhera, Sardhana	22.6 km	83.5 km	29.139378, 77.575224	Phone number not
Hindustan Petroleum Corporation	Ground Floor, Baraut Road, Budhana	41.0 km	65.8 km	29.280096, 77.471974	Phone number not available
Hp Petrol Pump - Mamta Humara	Budhana Bagar	41.9 km	64.6 km	29.293826, 77.484294	Phone number not
IndianOil	Ground Floor, Budhana Bangar,Bitawada, near Charan Singh,	40.8 km	66.1 km	29.277487, 77.471202	Phone number not available
Shaheed Rizwan gas godown	7FM5+8FG, Budhana Bagar	41.9 km	65.2 km	29.283318, 77.458709	Phone number not
Manya Garg	Budhana-Muzaffarnagar Rd, Kandhla - Budhana Road,	41.9 km	64.8 km	29.289510, 77.473197	Phone number not available

Facility Name	Full Address	Dist from Start	Dist from End	GPS Coordinates	Phone Number
IndianOil	Ground Floor, Shamli Budhana Rd,	63.3 km	47.2 km	29.434698, 77.318206	Phone number not
HP Petrol Pump - Ganga Filling	C84X+9WF, Kabraut	58.9 km	50.5 km	29.405623, 77.350728	Phone number not available
My Eco Energy	India	58.6 km	50.7 km	29.403880, 77.352039	Phone number not
HPCL Petrol Pump- M K Energy Station (Online CNG, Petrol, Diesel, EV Charger, Lubricants, Air/Water,	NH709A, Meerut, to, Karnal - Meerut Road, Shamli	60.9 km	48.8 km	29.419908, 77.338364	Phone number not available
BPCL petrol pump Malik filling	Kudana Road, Shamli	61.5 km	47.2 km	29.435072, 77.355948	Phone number not available

NOTE: Click on map links in digital PDF to open live navigation. All 25 facilities shown with complete information.

EDUCATIONAL INSTITUTIONS - Speed Limit Zones (40 km/h) (25 found)

Facility Name	Full Address	Dist from Start	Dist from End	GPS Coordinates	Phone Number
Dewan Public School International..	143, Delhi Road, Phase-II, Industrial Area,	1.2 km	107.0 km	28.944049, 77.669808	Phone number not available
Bhai Joga Singh Public	WMXM+H76, Surya Palace Colony,	2.3 km	106.9 km	28.948902, 77.683139	Phone number not available
METRO PUBLIC SCHOOL	Shatabdi Nagar, Rithani, Meerut	2.0 km	108.0 km	28.933198, 77.666332	Phone number not available
PRESIDENCY PUBLIC SCHOOL	WMPF+Q99, Delhi Road, Shatabdi Nagar, Sector 1,	2.0 km	107.8 km	28.936917, 77.673481	Phone number not available
SHEMROCK Smart Learners Play School in	Pocket B, NS-2, Shatabdi Nagar, Sector 1, Rithani,	2.2 km	108.2 km	28.932607, 77.669779	Phone number not available
St. Francis' Convent School	Sardhana Road, Kanker Khera,	9.0 km	98.3 km	29.028522, 77.677963	Phone number not available
St Mary's Academy	2M4X+H44, Cariappa Rd, Meerut Cantt,	7.2 km	101.6 km	29.004068, 77.699162	Phone number not available
K.D. International School	National Highway 58, Shardha Puri Phase 2, Shradhapuri Phase	9.3 km	97.6 km	29.032892, 77.670502	Phone number not available
J.P. International School	opposite grand opera, N.H.- 58, Khirwa Road, opposite grand opera, Bypass, Kanker Khera,	10.5 km	96.7 km	29.043257, 77.674937	Phone number not available

Facility Name	Full Address	Dist from Start	Dist from End	GPS Coordinates	Phone Number
American Kidz Play School	Ark city D Block, Laxmi Vihar, Shastri Nagar,	9.1 km	97.5 km	29.031048, 77.660846	Phone number not available
J.N.Public School	5GGW+WXW, Meerut	27.5 km	78.7 km	29.177359, 77.547441	Phone number not
Chaudhary Amar Singh ITI	4HQ6+VMQ, Gotka	23.2 km	83.1 km	29.139708, 77.561689	Phone number not
Kadam Public School	Bhooni Chauraha, Shamli Road,	22.7 km	83.6 km	29.136055, 77.564573	Phone number not
Guljaridishi	4HP8+GG3, Road, Ranchhar, Jiwana	22.6 km	83.6 km	29.136273, 77.566311	Phone number not
saraswati shishu mandir, school dahar	4GWP+HM9, Dahar	24.9 km	81.8 km	29.146408, 77.536735	Phone number not available
Balwanti Devi Kanya Inter	Baraut, Budhana Road, Budhana	39.5 km	68.0 km	29.257118, 77.454560	Phone number not
Shaheed Rizwan Tyagi Government	7CFV+CGF, State Highway 82, Vigyana	41.6 km	66.0 km	29.273569, 77.443791	Phone number not available
Maples Academy	7CPV+2C2, Kandhla - Budhana Road,	42.8 km	64.8 km	29.285007, 77.443529	Phone number not
RASHTRIYA INTER COLLEGE	7FQ9+4F3, teacher colony, Budhana	41.9 km	64.9 km	29.287766, 77.468666	Phone number not
Indian Public School	7CJ7+WM3, Jaula	44.0 km	64.7 km	29.282266, 77.414157	Phone number not
Vedantam Public School	Kudana Main Road, Jamalpur Nagli	60.9 km	47.6 km	29.432029, 77.361423	Phone number not

Facility Name	Full Address	Dist from Start	Dist from End	GPS Coordinates	Phone Number
BrainZone Junior High	Karnal - Meerut Road, Shamli	56.2 km	53.0 km	29.383019, 77.361901	Phone number not
KVM High School Kabraut	C942+XFG, Karnal - Meerut Road,	59.0 km	50.3 km	29.407449, 77.351215	Phone number not
UPS BARLA JAT COMPOSITE	C89X+RXW, Barla Jatt Road, Barla	60.3 km	48.9 km	29.419611, 77.349965	Phone number not
Sahib,s home	C83Q+8WP, Jhal	59.2 km	50.7 km	29.403317, 77.339669	Phone number not

NOTE: Click on map links in digital PDF to open live navigation. All 25 facilities shown with complete information.

FOOD & REST - Meal Stops & Driver Rest Areas (25 found)

Facility Name	Full Address	Dist from Start	Dist from End	GPS Coordinates	Phone Number
Hotel Bravura Gold Resort	Delhi Roorkee, Bypass, National Highway 58,	3.3 km	108.3 km	28.923952, 77.641838	Phone number not available
CROWN Hotel & Restaurant	Ved Vyas Puri -Phase 1, Meerut	2.0 km	104.7 km	28.957438, 77.640010	Phone number not
Domino's Pizza Shopprix Mall, Meerut	Shop No. 7A, Upper Ground Floor Shopprix Mall Major Dhyan Chand Nagar Near Sanjay Van, Sports Goods Complex Hapur Bypass, Delhi	1.6 km	106.7 km	28.947876, 77.674961	Phone number not available
KFC	Sports Goods Complex, Shopprix Mall, near Sanjay Van, Delhi Road, Major Dhyanchand Nagar, Hapur	1.6 km	106.8 km	28.947647, 77.675441	Phone number not available
SF Food Pure Veg Pizza & Burger	3rd Floor, Food Court, Shopprix Mall, Surya Palace	1.6 km	106.8 km	28.947600, 77.675505	Phone number not available
Biggies Restaurant	NH-58, NH58, Meerut	10.2 km	97.4 km	29.039129, 77.682855	Phone number not
Meera's Bistro Amoroso Cafe	2MF8+M9, Kanker Khera, NH#58,	7.9 km	98.7 km	29.020790, 77.662973	Phone number not
Anupam Fast Food Centre	2PX4+HRP, Meerut Bypass Road,	12.0 km	97.2 km	29.048964, 77.707086	Phone number not

Facility Name	Full Address	Dist from Start	Dist from End	GPS Coordinates	Phone Number
Aangan restaurant	160, opposite Hotel De Rose, 160-A, Cariappa Road, Meerut	7.3 km	101.6 km	29.004389, 77.699872	Phone number not available
Veera deluxe Restaurant	2MQ8+9Q5, Sardhana Bypass Road, Nangla Tashi,	9.9 km	96.9 km	29.038387, 77.666995	Phone number not available
Sunny restaurant	4HQ7+R7X, Bhuni	23.1 km	83.2 km	29.139613, 77.563249	Phone number not
Fauji Restaurant &	4HP8+83G, Bhuni Chowk, Meerut	22.6 km	83.6 km	29.135811, 77.565210	Phone number not
CHAUDHARY DHABA	4HP9+XJJ, Sardhana - Binauli Road	22.6 km	83.5 km	29.137468, 77.569021	Phone number not
Akki fast food	India	25.6 km	80.9 km	29.154553, 77.538238	Phone number not
Green Vatika Restaurant	4HQC+5GH, Sardhana - Binauli Road,	22.6 km	83.5 km	29.137931, 77.571347	Phone number not
Ashok Maggie Point	Ashok Maggie Point, Baiwala,	39.7 km	67.7 km	29.260395, 77.457469	Phone number not
Mahadev Maggie Point	Karnal - Meerut Road, Bitawadha	39.3 km	68.2 km	29.256506, 77.458472	Phone number not
Sadda Adda	Baiwala chowk, Budhana	39.3 km	68.2 km	29.256129, 77.458493	Phone number not
VINAYAK ENTERPRISES	near Baiwala, Baraut Rd, near	39.8 km	67.6 km	29.261558, 77.459011	Phone number not
Madhav Dhaba No.	India	39.8 km	67.6 km	29.262112, 77.460010	Phone number not

Facility Name	Full Address	Dist from Start	Dist from End	GPS Coordinates	Phone Number
Mid-Way Point Family	NH 709A, Karnal - Meerut Road, Barla	59.8 km	49.6 km	29.413244, 77.346351	Phone number not
Amritsari Truck Dhaba	C87W+F9F, Shamli	59.9 km	49.6 km	29.413677, 77.345908	Phone number not
Highway family dhaba	C87W+R5G, Barla Jatt	60.0 km	49.5 km	29.414570, 77.345452	Phone number not
Shiva pure vegetarian	Village and post, Kabraut	58.7 km	50.6 km	29.404253, 77.351667	Phone number not
hotel midway guest house	C82X+W83, Kabraut	58.7 km	50.8 km	29.402273, 77.348287	Phone number not

NOTE: Click on map links in digital PDF to open live navigation. All 25 facilities shown with complete information.

COMPREHENSIVE NETWORK COVERAGE ANALYSIS

Analysis Points Tested	20
Overall Coverage Score	57.0/100
Coverage Status	MODERATE
Dead Zones Identified	3
Poor Coverage Areas	4
Good Coverage Areas	35.0%
Network Reliability Rating	LOW

NETWORK RELIABILITY: MODERATE (57.0/100)

SIGNAL QUALITY DISTRIBUTION ANALYSIS

Signal Quality Level	Points Count	Route %	Status
No Signal (Dead Zone)	3	15.0%	Critical
Fair Signal (2-3 bar)	6	30.0%	Good
Poor Signal (1-2 bar)	4	20.0%	Attentio
Good Signal (3-4 bar)	4	20.0%	Good
Excellent Signal (4-	3	15.0%	Good

CRITICAL COMMUNICATION PROBLEMS (7 areas)

DEAD ZONES - NO CELLULAR SERVICE (3 locations):

Zone #	GPS Coordinates	Impact Level	Recommendation
1	28.9497, 77.6591	CRITICAL	Use satellite phone or emerg
2	28.9959, 77.6459	CRITICAL	Use satellite phone or emerg
3	29.7682, 77.4412	CRITICAL	Use satellite phone or emerg

POOR COVERAGE AREAS (4 locations):

Area #	GPS Coordinates	Signal Level	Recommendation
1	29.1456, 77.5534	WEAK	Download offline maps, carry
2	29.1900, 77.4955	WEAK	Download offline maps, carry
3	29.8073, 77.4475	WEAK	Download offline maps, carry
4	29.8417, 77.3956	WEAK	Download offline maps, carry

NETWORK COVERAGE RECOMMENDATIONS

1. Route has 3 dead zones - consider satellite communication device
2. Multiple poor coverage areas - download offline maps before travel
3. Inform someone of your route and expected arrival time

EMERGENCY COMMUNICATION PLAN

- * Download offline maps before travel (Google Maps, Maps.me)
- * Inform someone of your route and expected arrival time
- * Carry a satellite communication device for dead zones
- * Keep emergency numbers saved: 112 (Emergency), 100 (Police), 108 (Ambulance)
- * Consider two-way radios for convoy travel
- * Identify nearest towers and repeater locations along route

COMPREHENSIVE WEATHER CONDITIONS ANALYSIS

Weather Analysis Points	10
Average Temperature	32.7 deg C
Temperature Range	32.1 deg C to 33.5 deg C
Average Humidity	52.1%
Average Wind Speed	2.9 km/h
Weather Conditions Detected	2 different types
Weather Risk Assessment	LOW

TEMPERATURE STATUS: MODERATE TEMPERATURE CONDITIONS (32.7 deg C)

WEATHER CONDITIONS BREAKDOWN

Weather Condition	Frequency	Route %	Risk Level	Driver Impact
Clouds	7	70.0%	MODERATE	Reduced visibility, lower
Clear	3	30.0%	LOW	Good driving conditions

WEATHER-BASED VEHICLE PREPARATION

- * Standard vehicle maintenance check recommended
- * Ensure all fluid levels are adequate
- * Check tire condition and pressure
- * Verify all lights are functioning properly

COMPREHENSIVE REGULATORY COMPLIANCE ANALYSIS

COMPLIANCE STATUS: NEEDS ATTENTION (Score: 70/100)

VEHICLE & ROUTE COMPLIANCE DETAILS

Vehicle Type	Heavy Goods Vehicle
Vehicle Category	Heavy Goods Vehicle
Vehicle Weight Classification	18,000 kg
AIS-140 GPS Tracking Required	YES (Mandatory)
Route Origin	Unnamed Road, Oil Industry Terminals, Partapur, Me
Route Destination	V85H+WR5, Saharanpur Rd, Ambehata Dehat, Ambheta,
Total Route Distance	131 km
Estimated Travel Duration	2 hours 27 mins
Interstate Travel	NO

MANDATORY COMPLIANCE REQUIREMENTS

Requirement Category	Compliance Status	Action Required
Valid Driving Licens	REQUIRED	Verify license category matc
Vehicle Registration	REQUIRED	Ensure current registration
Vehicle Insurance	REQUIRED	Valid comprehensive insuranc
Route Permits	CONDITIONAL	Required for interstate/heav
AIS-140 GPS Device	REQUIRED	Install certified GPS tracki
Driving Time Limits	REQUIRED	Maximum 10 hours continuous
Vehicle Fitness Cert	REQUIRED	Valid pollution and fitness
Driver Medical Certi	REQUIRED	Valid medical fitness certif

COMPLIANCE ISSUES REQUIRING IMMEDIATE ATTENTION (2)

- 1. AIS-140 GPS tracking device required - Address before travel
- 2. Heavy vehicle - weight restrictions may apply - Address before travel

APPLICABLE REGULATORY FRAMEWORK

- * Motor Vehicles Act, 1988 - Vehicle registration and licensing requirements
- * Central Motor Vehicles Rules, 1989 - Technical specifications and safety
- * AIS-140 Standards - GPS tracking and panic button requirements
- * Road Transport and Safety Policy (RTSP) - Driver working hours
- * Interstate Transport Permits - Required for commercial interstate travel
- * Pollution Control Board Norms - Emission standards compliance
- * Goods and Services Tax (GST) - Tax compliance for commercial transport
- * Road Safety and Transport Authority - State-specific requirements

COMPLIANCE RECOMMENDATIONS

- 1. Ensure all vehicle documents are current and accessible
- 2. Verify driver license category matches vehicle type
- 3. Check route-specific permits and restrictions
- 4. Install AIS-140 compliant GPS tracking device

NON-COMPLIANCE PENALTIES & CONSEQUENCES

- * Driving without valid license: Fine up to Rs 5,000 + imprisonment
- * Vehicle without registration: Fine up to Rs 10,000 + vehicle seizure
- * No insurance: Fine up to Rs 2,000 + vehicle seizure
- * AIS-140 non-compliance: Permit cancellation + heavy fines
- * Overloading violations: Fine Rs 20,000 + per excess ton
- * Driving time violations: License suspension + fines
- * Interstate without permits: Vehicle seizure + penalty
- * Environmental violations: Fine up to Rs 10,000 + registration cancellation

COMPREHENSIVE ELEVATION & TERRAIN ANALYSIS

Data Source	Google Elevation API (Live Data)
Total Analysis Points	20 coordinates
Minimum Elevation	244.9 meters above sea level
Maximum Elevation	284.0 meters above sea level
Average Elevation	264.0 meters above sea level
Total Elevation Range	39.1 meters
Terrain Classification	PLAINS
Driving Difficulty Level	LOW
Fuel Consumption Impact	LOW - Minimal impact on fuel consumption
Significant Changes Detected	0 elevation changes > 50m

TERRAIN ASSESSMENT: PLAINS TERRAIN - EASY CONDITIONS

ELEVATION-BASED DRIVING CHALLENGES

- * Minimal elevation changes with flat terrain
- * Normal fuel consumption expected
- * Standard vehicle performance throughout
- * No significant gradient-related challenges

ELEVATION-SPECIFIC VEHICLE PREPARATION

- * Standard vehicle maintenance check sufficient
- * Normal fuel planning adequate
- * Standard tire and brake inspection

FUEL CONSUMPTION IMPACT ANALYSIS

- * Normal fuel consumption expected
- * Standard fuel planning adequate
- * Total ascent sections identified: 0
- * Total descent sections identified: 0

COMPREHENSIVE TRAFFIC ANALYSIS

Route Segments Analyzed	10
Overall Traffic Score	97.5/100
Traffic Condition	EXCELLENT
Average Travel Time Index	1.03
Average Current Speed	50.7 km/h
Average Free Flow Speed	51.8 km/h
Heavy Traffic Segments	0
Moderate Traffic Segments	0
Free Flow Segments	9
Worst Congestion Areas	0.0% of route

TRAFFIC STATUS: EXCELLENT TRAFFIC CONDITIONS (97.5/100)

TRAFFIC-BASED RECOMMENDATIONS

- Check current traffic conditions before departure
- Consider public transportation alternatives for heavily congested routes
- Plan rest stops during low-traffic segments

COMPREHENSIVE ROAD QUALITY & SURFACE CONDITIONS

Total Analysis Points	21
Road Quality Issues Detected	21
Critical Condition Areas	2
High Risk Areas	19
Medium Risk Areas	0
API Sources Used	google_roads, mapbox
Analysis Confidence	Medium
Overall Road Quality Score	3.8/10

ROAD QUALITY STATUS: POOR ROAD CONDITIONS (3.8/10)

IDENTIFIED ROAD QUALITY ISSUES (21 locations)

Location (GPS)	Issue Type	Severity	Speed Limit	Description
28.9497, 77.6	Critical Co	Critical	30 km/h	Critical road conditi
28.9959, 77.6	Poor Surfac	Critical	30 km/h	Critical road conditi
29.0382, 77.6	Minor Issue	High	40 km/h	Poor road surface con
29.0892, 77.6	Minor Issue	High	40 km/h	Poor road surface con
29.1456, 77.5	Poor Surfac	High	40 km/h	Poor road surface con
29.1900, 77.4	Minor Issue	High	40 km/h	Poor road surface con
29.2587, 77.4	Minor Issue	High	40 km/h	Poor road surface con
29.3313, 77.4	Poor Surfac	High	40 km/h	Poor road surface con
29.4109, 77.3	Poor Surfac	High	40 km/h	Poor road surface con
29.4514, 77.3	Poor Surfac	High	40 km/h	Poor road surface con

VEHICLE-SPECIFIC ROAD QUALITY RECOMMENDATIONS

- * Heavy vehicles: Reduce speed by 20% in areas with road quality scores below 6/10
- * Check tire pressure more frequently when traveling through poor surface areas
- * Increase following distance by 50% in road quality risk zones
- * Plan additional maintenance checks after routes with multiple road quality issues
- * Consider alternative routes for high-value or sensitive cargo in critical condition areas
- * Carry emergency repair kit for tire damage in poor road surface zones

COMPREHENSIVE ENVIRONMENTAL RISK ASSESSMENT

Total Analysis Points	7
Eco-Sensitive Zones	2
Air Quality Risk Areas	0
Weather Hazard Zones	5
Seasonal Risk Areas	0
Overall Environmental Score	3.0/10
Primary Risk Level	High
API Sources Used	OpenWeather, Visual Crossing, Tomorrow.io, Google Places

ENVIRONMENTAL STATUS: CRITICAL ENVIRONMENTAL RISKS (3.0/10)

ENVIRONMENTAL RISKS IDENTIFIED (7 locations)

Risk Type	GPS Location	Severity	Category	Description
Pollution S	28.9497, 77.6	Medium	Ecologic	
Wildlife Sa	29.3046, 77.4	Critical	Ecologic	
Poor Visibi	28.9497, 77.6	High	Weather	Reduced visibility co
Poor Visibi	29.0099, 77.6	High	Weather	Reduced visibility co
Poor Visibi	29.0613, 77.6	High	Weather	Reduced visibility co
Poor Visibi	29.1442, 77.5	High	Weather	Reduced visibility co
Poor Visibi	29.2017, 77.4	High	Weather	Reduced visibility co

ENVIRONMENTAL COMPLIANCE & BEST PRACTICES

- * Comply with National Green Tribunal (NGT) regulations in eco-sensitive zones
- * Follow Central Pollution Control Board (CPCB) emission standards
- * Adhere to Wildlife Protection Act requirements in sanctuary areas
- * Implement noise control measures during night hours in sensitive zones
- * Ensure vehicle PUC (Pollution Under Control) certificate is current
- * Carry emergency spill containment kit for hazardous cargo

COMPREHENSIVE EMERGENCY PREPAREDNESS ANALYSIS

EMERGENCY PREPAREDNESS: EXCELLENT PREPAREDNESS (Score: 100/100)

EMERGENCY SERVICES AVAILABILITY ASSESSMENT

Medical Facilities (Hospitals)	20 facilities identified
Law Enforcement (Police)	20 stations identified
Fire & Rescue Services	4 stations identified
Emergency Clinics	20 clinics identified
Pharmacies (24hr)	20 pharmacies identified
Communication Reliability	100%
Coverage Gaps	0 areas
Overall Service Coverage	EXCELLENT

CRITICAL EMERGENCY CONTACT NUMBERS - MEMORIZE OR SAVE

Emergency Service	Contact Number	When to Call	Response Type
National Emerge	112	Any life-threateni	Police/Fire/Medica
Police Emergenc	100	Crime, accidents,	Law enforcement
Fire Services	101	Fire, rescue, hazm	Fire & rescue team
Medical Emergen	108	Medical emergencie	Ambulance service
Highway Patrol	1033	Highway accidents,	Traffic police
Tourist Helplin	1363	Tourist emergencie	Tourist support
Women Helpline	1091	Women in distress,	Women safety
Disaster Manage	1078	Natural disasters,	Disaster response

EMERGENCY FACILITIES ALONG ROUTE WITH CONTACT DETAILS

MEDICAL FACILITIES (40 identified):

#	Facility Name	Address	Phone Number	Distance
1	G.M. Modi Hospit	3P75+J72, Modipu	0121 257 5597	Along rout
2	Jindal Hospital	Eves Crossing, H	0121 400 0444	Along rout
3	Siddhi Vinayaka	Opp. Medical Col	092580 63686	Along rout
4	Eye Hospital Nur	Meerut, K-1252,	0121 276 0991	Along rout
5	Kalka Dental Col	By Pass, near Pa	093191 80111	Along rout
6	Meerut Kidney Ho	Surya Nagar, Pra	0121 267 2022	Along rout
7	PGI	2P25+QVG, Medha		Along rout
8	Madhu Nursing Ho	Nai Sarak, Secto	091051 07070	Along rout
9	Meerut	Meerut, Uttar Pr		Along rout
10	Krome	Delhi Rd, opposi	075002 44525	Along rout

POLICE STATIONS (20 identified):

#	Police Station	Address	Phone Number	Distance
1	Nauchandi Police	Mohsin Bagh, Man	073472 59199	Along rout
2	Police Chowki L-	near, Budhana Rd	094577 53092	Along rout
3	Lalkurti Police	Mall Road, 2P35+	0121 264 2610	Along rout
4	HP Petrol Pump	XP7R+CPP, Ramgar		Along rout
5	Shatabdi Nagar P	WMPG+W37, Shatab		Along rout
6	Police Choki Shu	XJ5Q+9R6, NH58,		Along rout
7	Pari Chowk	Pari Chowk, NRI		Along rout
8	Police Choki Ved	XJ7R+37V, NH58,		Along rout

FIRE STATIONS (4 identified):

#	Fire Station	Address	Phone Number	Distance
1	Fire Station Par	WMC5+X9P, Sector		Along rout
2	Fire station pol	693, Subhash Nag		Along rout

3	Police fire stat	7GQ2+PP5, Budhan		Along rout
4	Fire Station Sha	C8W6+8Q6, Shamli		Along rout

COMPREHENSIVE EMERGENCY PREPAREDNESS CHECKLIST

- ☐ First aid kit with bandages, antiseptic, pain relievers, emergency medications
- ☐ Emergency contact numbers saved in phone and written backup copy
- ☐ Vehicle emergency kit - tools, spare tire, jumper cables, tow rope
- ☐ Emergency water supply (minimum 2 liters per person for 24 hours)
- ☐ Non-perishable emergency food (energy bars, nuts, dried fruits)
- ☐ Flashlight with extra batteries or hand-crank/solar powered model
- ☐ Emergency blanket, warm clothing, and weatherproof gear
- ☐ Portable phone charger/power bank with multiple cables
- ☐ Emergency cash in small denominations (ATMs may be unavailable)
- ☐ Vehicle documents in waterproof container (registration, insurance)
- ☐ Road atlas or offline maps as backup to GPS navigation
- ☐ Emergency whistle, signal mirror, or flares for signaling help
- ☐ Multi-tool or knife, duct tape, and basic repair supplies
- ☐ Personal medications for at least 3 days
- ☐ Important documents (ID, medical info, emergency contacts)
- ☐ Fire extinguisher (small vehicle type) and basic safety equipment

EMERGENCY RESPONSE ACTION PLAN

- ASSESS THE SITUATION - Ensure personal safety first, then assess severity
- CALL FOR HELP - Dial appropriate emergency number (112 for general emergencies)
- PROVIDE LOCATION - Give precise GPS coordinates or landmark descriptions
- STAY CALM - Speak clearly and provide requested information to operators
- FOLLOW INSTRUCTIONS - Emergency operators are trained to guide you
- SIGNAL FOR HELP - Use emergency signals if phone coverage is unavailable
- STAY WITH VEHICLE - Unless immediate danger, stay near your vehicle
- CONSERVE RESOURCES - Ration water, food, and phone battery if stranded
- MAINTAIN COMMUNICATION - Update emergency contacts on your status
- DOCUMENT INCIDENT - Take photos/notes for insurance and authorities