



Detailed Construction Project Report

Project Title:

Riverside Heights Residential Development

Section Covered:

Complete Structural Construction – Block A (Basement to Roof)

Project Code:

RH-FULL-BLOCKA-STRUCT-004

Location:

Plot No. 34-56, Sector 7, Riverside Township, Springfield

Client:

GreenBuild Developers Ltd.

Contractor:

Skyline Infrastructures Pvt. Ltd.

Project Manager:

Mr. Anil Verma

Report Date:

March 21, 2025

1. Executive Summary

This report covers the complete structural development of **Block A**, from **basement foundation** to **roof slab**. The work was initiated on **March 10, 2025**, and is currently in progress with 60% of structural work completed. Key construction activities include **earthwork**, **RCC framework**, **slab casting**, **column erection**, **waterproofing**, and **service duct layout**.

The project is broadly on schedule with slight delays due to material delivery issues during week 2. The structural phase is expected to be completed by **May 25, 2025**, allowing the finishing stage to commence.

2. Project Objectives

- Develop a structurally sound multi-storey residential Block (G+4 floors)
 - Ensure full compliance with IS codes and Springfield Municipal Regulations
 - Incorporate disaster-resilient construction methods (earthquake-resistant)
 - Maintain environmental and safety standards at every stage
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3. Scope of Work

- **Basement Construction:** Excavation, RCC footing, retaining walls, drainage
 - **Ground to 4th Floor RCC Works:** Slabs, beams, columns, staircases
 - **Service Integration:** Embedded electrical, plumbing conduits, shafts
 - **Roof Slab Casting:** Final RCC slab, staircase headroom, and tank slab
 - **Waterproofing:** Basements, roof, toilets, balconies
 - **Liaising:** Quality inspections, lab testing, authority sign-offs
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4. Timeline & Milestones

Phase	Start Date	End Date	Status
Excavation & Earthwork	Mar 10, 2025	Mar 20, 2025	✅ Completed
Basement RCC Work	Mar 21, 2025	Mar 31, 2025	🔄 Ongoing
Ground Floor RCC	Apr 01, 2025	Apr 10, 2025	🕒 Planned
1st – 4th Floor RCC	Apr 11, 2025	May 10, 2025	🕒 Planned
Roof Slab Casting	May 11, 2025	May 15, 2025	🕒 Planned
Waterproofing & QA Checks	May 16, 2025	May 25, 2025	🕒 Planned

5. Budget Breakdown

Category	Allocated Budget (USD)
Excavation & Earthwork	\$14,000
Reinforced Cement Concrete	\$70,000
Reinforcement Steel	\$48,000
Labor & Subcontractors	\$38,000
Formwork & Shuttering	\$22,000
Waterproofing	\$10,000
Machinery & Equipment Rental	\$6,500
Site Safety & PPE	\$2,500

Category	Allocated Budget (USD)
Contingency (5%)	\$10,500
Total Project Budget	\$221,500

6. Manpower Deployment

Role	No. of Workers
Civil Engineers	2
Site Supervisors	3
Foremen (Structural & Safety)	2
Skilled Laborers (Steel/RCC)	16
General Laborers	22
Electricians/Plumbers	3
QA/QC Staff	1
Safety Officer	1
Daily attendance tracking and contractor billing are integrated with a digital site management system (SiteMan 360).	

7. Machinery & Tools

- Excavator (JCB) – 2 Units
 - Concrete Mixers – 2 Units
 - Concrete Vibrators – 4 Units
 - Tower Crane – 1 Unit
 - Steel Bending Machines – 2 Sets
 - Cutting Tools – 5 Sets
 - Scaffolding & Props – 300+ sets
 - Water Curing Pumps – 2 Units
 - PPE Kits – Full coverage for all staff (helmets, harnesses, gloves, etc.)
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8. Material Usage & Inventory

Material	Quantity Used	Quantity Remaining	Vendor
Cement (43 Grade OPC)	750 bags	1200 bags	Springfield Cements
TMT Steel (Fe500)	60 tons	30 tons	SteelWorks Ltd.
Ready-Mix Concrete (M25)	800 m³	700 m³	QuickMix Concrete
Shuttering Plywood	300 panels	150 panels	FormTech
Waterproofing Membrane	1200 m²	600 m²	BuildTight Systems

9. Quality Assurance

- Slump test conducted for every concrete batch
 - 7-day and 28-day cube strength test for each floor slab
 - Steel bar bend testing and lab report maintained
 - Shuttering inspection prior to every pour
 - Waterproofing layer test using flood method
 - QA sign-offs mandatory before progressing to next floor
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10. Safety & Compliance

- Daily safety briefings & site toolbox talks
 - Site first-aid center with trained medical assistant
 - Emergency fire extinguisher zones at all levels
 - Guardrails and netting installed on upper slabs
 - Safety PPE compliance above 98% in last audit
 - Safety audit by third-party team scheduled on April 10, 2025
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11. Challenges & Risk Management

Challenge	Action Taken / Mitigation Plan
Material delivery delay	Engaged secondary supplier to avoid gaps
Rain forecast (Week 3)	Waterproof storage, tarpaulin sheets ready
Labor absenteeism	Floating pool of contract labor maintained
RCC cold joints risk	Shift overlaps + backup vibrator equipment
Overlap with plumbing layout	Coordination meeting scheduled weekly

12. Current Status Snapshot (March 21, 2025)

- **Overall Structural Work:** 60% complete
 - **Quality Compliance Score:** 92%
 - **Health & Safety Compliance:** 98%
 - **Time Variance:** +2 days delay (due to rebar delivery)
 - **Budget Variance:** Within range (3.5% under target so far)
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13. Next Steps (Planned Activities – Next 2 Weeks)

- Complete basement slab waterproofing
- Begin RCC works on Ground Floor
- QA tests for first slab cube samples
- Finish column shuttering for GF
- Mobilize scaffolding for 1st Floor work

- Submit updated schedule to Project Steering Committee
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14. Appendices

- A. Progress Photos
 - B. Cube Test Reports
 - C. Safety Audit Log
 - D. Daily Labor Log (Week 2 & 3)
 - E. Material Delivery Receipts
 - F. Revised Gantt Chart
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15. Conclusion

Block A's structural construction is progressing steadily with high compliance to design, safety, and quality standards. Minor delays have been addressed with proactive planning. The team remains on track to complete the structural phase by the projected date, setting a strong foundation for finishing and service integration work.
