Module 4: The Build

Risk Reduction & Delivery

What You'll Learn

- Lessons learnt from real projects (including failures)
- How to reduce build risk before starting
- Contractor selection and procurement strategies
- Managing timelines and avoiding delays
- Quality control systems
- Dealing with variations and scope creep
- Health & safety essentials
- Practical completion and snagging
- Exit strategies: Sell or hold for rental

What You'll Get

- Contractor evaluation framework
- Build timeline templates
- Quality control checklists
- Variation management system
- Practical completion checklist
- Lessons learnt

Introduction: Why the Build Phase Makes or Breaks Your Project

You've found the site, run your numbers, secured your finance and got planning permission. Now comes the part that most developers fear the most — actually building it.

The truth is, the build phase is where many developers lose their profits. Not because they made bad decisions at the start, but because they weren't prepared for what happens once the diggers are on site. Delays, unexpected costs, contractor issues, quality failures — these are the things that turn a promising project into a painful one.

This module is designed to give you the knowledge, systems and tools to manage the build phase properly. We're not going to turn you into a construction expert — you don't need to be one. What you need is to understand the process, ask the right questions, build the right team and have the right controls in place.

> **Key Principle**
> Your job as a developer is not to build the houses — it is to manage the process of building the houses. There is a very important difference. The moment you pick up a trowel, you've stopped being a developer and started being a labourer. Stay in your lane.

Lessons Learnt — Real Projects, Real Lessons

This is the section that no training course usually includes, the honest account of what went wrong and what we learnt from it. Every experienced developer has made expensive mistakes. The ones who survive are the ones who learned from them.

This guide is designed to help you mitigate and navigate the issues we have encountered such as -

Planning condition issues - Contaminated soil - Foundations design issues

Japanese knotweed - Party wall issues - Tree preservation orders (TPO's)

Utilities that needed relocating - Neighbours hedges that affected viability of the scheme

Logistical constraints - Ecology issues - Adopting footpaths- Subcontractors going out of business.

These are just some of the problems we have come across but we have consistently managed and over come these issues to make the schemes work. We have become very experienced in understanding these issues and how to navigate them so there is minimal delays and financial impact on the sites. These issues may sound minor but can make or break a development and ultimately affect if you make a profit or loss!

Section 1: Reducing Build Risk Before You Start

The best time to reduce risk is before a single piece of ground is broken. Most build problems are caused by poor preparation, not bad luck. Here is what you need to get right before you start on site.

1.1 Pre-Start Due Diligence

Before your contractor mobilises, you should have absolute clarity on the following:

Ground Conditions

A Phase 1 and Phase 2 ground investigation report should already have been carried out during your due diligence period. If it hasn't, do it now. Ground conditions affect your foundation design and therefore your build cost. Surprises underground are expensive.

Common ground issues that catch developers out:

- Unexpected made ground or fill material requiring deeper foundations
- Contamination requiring remediation
- High water table affecting drainage design
- Tree root protection zones affecting where you can build
- Unstable or running sand conditions

Real Talk

On a few of our projects, the ground investigations have revealed contaminated soil. We knew about it before we started, budgeted for removal and remediation, and factored it into our land purchase price. The vendor who sold us the sites weren't aware of them or chose not to disclose it. Either way, we were protected because we did our homework.

Design & Technical Sign-Off

Before starting on site you need to ensure the following are in place:

- Planning permission is granted (with no pre-commencement conditions outstanding)
- Full working drawings are complete and approved by Building Control
- Structural calculations are signed off by your structural engineer
- Party Wall Agreements are in place (if applicable)
- All S278 or highway agreements are agreed with the local authority
- Utility connections are designed and orders placed (these have very long lead times)

Many developers start on site before all of this is in place. The logic is 'we'll get it sorted as we go'. This is a false economy. Every day your contractor is on site and waiting for information costs you money in prelims, finance charges and programme overrun.

Pre-Start Meetings

Before your contractor starts, hold a pre-start meeting on site with your contractor, your project manager (if you have one), and your building control officer. Walk the site together. Agree where materials will be stored, where welfare facilities will go, how deliveries will be managed, and what the phasing of works will be. This meeting sounds basic but it prevents a huge number of misunderstandings.

Section 2: Contractor Selection & Procurement

Your main contractor will be the single most important relationship you have during the build phase. Getting this right is absolutely critical. A bad contractor can destroy your project. A good one can make it.

2.1 The Types of Contractor

There are broadly three types of contractor you will encounter:

Type	What to Expect
Main Contractor	Responsible for the entire build. They manage all subcontractors and take on most of the risk. Ideal for larger schemes (5+ units). More expensive but more accountability.
Principal Contractor / PM Model	You appoint a project manager who manages individual subcontractors directly. Can be cheaper but requires more involvement and management from you.
Direct Labour	You manage every trade yourself. The cheapest in theory but the most risk, most time and most headaches. Not recommended for beginners.

For your first few projects, we strongly recommend using a main contractor or a trusted project manager. The additional cost buys you accountability, a single point of contact and someone who knows what they're doing. As you gain experience and start to understand the build process, you can explore more cost-effective procurement models.

2.2 How to Find Good Contractors

This is one of the most common questions we get asked and the honest answer is that there is no magic database. The best contractors come from:

- Personal recommendations from other developers and architects
- Your architect or structural engineer – they work with contractors regularly and know who is reliable
- Site visits to other local developments – knock on the door and ask who's building it
- Local trade associations (Federation of Master Builders, NHBC registered builders)
- Referrals from other members of this Academy

What you want to avoid is picking a contractor from a website or directory without any personal recommendation. It's not impossible that you'll find a good one this way, but the risk is much higher.

2.3 Tendering: How to Get Quotes Right

Never accept one quote. Always get a minimum of three, ideally from contractors of similar size and capability. When going out to tender:

1. Issue the same tender pack to all contractors — drawings, specification, schedule of works and any ground investigation reports
2. Set a clear return date and require quotes to be itemised, not just a lump sum
3. Ask them to confirm what is included AND excluded in their price
4. Ask for their programme (how long they plan to take and in what phases)
5. Ask for references from the last three projects of a similar size — and call them

> **Important**
> The cheapest quote is almost never the right choice. Contractors that buy work by submitting unrealistically low prices invariably make their money back through variations, claims and poor quality. You want the contractor who understands the job, has priced it properly, and can demonstrate they've delivered similar schemes successfully.

2.4 The Contractor Evaluation Framework

Use the following scoring framework when evaluating contractors. Score each criterion 1–5 and select the contractor with the highest overall score.

Evaluation Criterion	What to Look For
Track Record	Have they built similar schemes? Ask for examples and visit completed projects if possible.
References	Speak to previous clients. Were they easy to work with? Did they finish on time and on budget?
Financial Stability	Ask for evidence they have trade credit and can fund the project. An insolvent contractor mid-build is catastrophic.
Programme	Is their programme realistic? Does it reflect a proper understanding of the works?
Price Confidence	Is their price detailed and itemised? Do they understand what they're pricing?
Communication	Are they responsive? Clear? Do they return calls and emails promptly?
H&S Competence	Do they have a current RAMS? Are they CDM compliant? Is their team CSCS carded?

2.5 The Contract

Always, always, always use a written contract. We use a JCT Minor Works contract for smaller schemes and a JCT Intermediate Form for larger ones. These are industry-standard contracts that protect both parties and set out clearly what is expected.

Key things your contract must address:

- The contract sum and what it includes
- The programme and completion date
- Payment terms (we recommend monthly valuations, not lump sum stage payments)
- The process for valuing and agreeing variations
- Retention (typically 3–5% held back until practical completion, half released at final account)
- Liquidated and ascertained damages (LADs) — a daily or weekly penalty if the contractor overruns
- Defects liability period (typically 12 months after practical completion)

Do not rely on a contractor's own 'Terms and Conditions'. They are written in the contractor's interest, not yours. If you're spending more than £200k on a build, it is worth having a solicitor review the contract before signing.

Section 3: Managing Timelines & Avoiding Delays

Time is money in development. Every extra week on site is another week of finance charges, another week of your own time, and another week before you see any profit. Programme management is one of the most underestimated skills in property development.

3.1 Setting the Programme

Before works start, your contractor should provide a detailed programme showing every key activity and its duration. A good programme will show:

- The start date and planned completion date
- Key phases (groundworks, frame, weathertight, first fix, second fix, external works)
- Key milestones (Building Control inspections, utility connections, NHBC stage inspections)
- Dependencies — what can't start until something else is finished
- Any float — built-in contingency in the programme

For a typical 4–6 unit residential scheme, you should expect the following indicative timescales:

Phase	Indicative Duration
Site setup & groundworks	4–6 weeks
Substructure (foundations, slab)	3–5 weeks
Superstructure (walls, roof)	6–10 weeks
Weathertight (windows, roof complete)	2–4 weeks

First fix (mechanical, electrical, carpentry)	4–6 weeks
Plastering & screeds	3–4 weeks (+ drying time)
Second fix & finishes	4–6 weeks
External works, landscaping, utilities	3–5 weeks
Snagging & practical completion	1–2 weeks
TOTAL (typical 4-unit scheme)	30–45 weeks

Important Note
These are indicative figures only. Your actual programme will depend on the complexity of the scheme, ground conditions, contractor resources and the time of year. Always build contingency into your appraisal — we use a minimum of 8 weeks on any scheme.

3.2 Common Causes of Delay (and How to Avoid Them)

In our experience, the following are the most common causes of programme overrun:

- Planning pre commencement conditions – don't under estimate how long it can take to get pre-commencement conditions discharged before you can actually start.
- Information not available on time — drawings, specifications or instructions not issued to the contractor when needed. Set up an information required schedule before works start.
- Delayed utility connections — water, gas, electricity and telecoms all have long lead times. Order them as early as possible, sometimes before planning is even granted.
- Slow decision making by the developer — yes, this is on you. When your contractor asks you to make a decision, make it quickly. Delays cost money.
- Weather — groundworks and external works are weather dependent. Build contingency into your programme for winter months.
- Subcontractor availability — good subbies are in demand. Your contractor needs to book them in advance. Check this is happening.
- Scope changes mid-build — see Section 5 on variations and scope creep.
- Building Control and warranty inspections — these must be booked in advance and the works must be ready. Failing an inspection loses days or weeks.

3.3 Monitoring Progress

We recommend weekly site visits during the build. Not to interfere, but to observe, ask questions and make decisions. During your site visit, you should:

- Walk every plot and note what has been completed since your last visit
- Review progress against the programme
- Identify any issues that could cause delay
- Deal with any decisions or instructions that the contractor needs from you

- Take photographs — before any works are covered up, photograph everything. Drains, foundations, frame, insulation. You will thank yourself later.

If the programme is slipping, address it immediately. Don't let a 2-week delay turn into a 6-week delay by ignoring it. Have a frank conversation with your contractor about what is causing the delay and what they are going to do to recover the programme.

Section 4: Quality Control Systems

Quality control is not the same as snagging. Snagging happens at the end when it's too late and expensive to fix. Quality control happens throughout the build, before problems are covered up and become permanent.

4.1 Building Control & Warranty

Building Control is a statutory requirement. An approved inspector (or your local authority Building Control) must inspect key stages of the build to ensure compliance with Building Regulations. Key inspection stages include:

- Commencement (48 hours' notice required)
- Foundation excavations (before any concrete is poured)
- DPC level (damp proof course)
- Structural frame at eaves level
- Before any drains are covered
- Insulation installation
- Completion inspection

If you are selling to mortgage buyers (which you will be), you also need a structural warranty. The most well known is NHBC Buildmark. NHBC have their own inspection regime which runs alongside Building Control and must be planned into your programme. There are alternative warranty providers (e.g. Premier Guarantee, LABC Warranty, ICW among others) which typically don't charge you the same fee as NHBC. So we would recommend getting quotes from these alternatives. Whilst NHBC is the most widely recognised and easiest for buyers' solicitors and lenders you will pay a large premium for this which ultimately isn't going to really affect someone buying your properties.

4.2 SAP's and TM059

Along with Building Control there are SAP's (Standard Assessment Procedures) and TM059 requirements. These are the official government calculations used to measure the energy performance and carbon emissions of a new home. Simply put, it's a "grade" that proves the building is energy-efficient enough to be legal. TM59 (often referred to with its technical code) is a specific regulation from CIBSE designed to prevent overheating in well-insulated modern homes. While SAP makes sure the house stays warm in the winter, TM59 uses thermal modelling to ensure the house doesn't turn into an oven during the summer, protecting the health of the people living inside. Together, they act as the thermal "checks and balances" for any new build.

However the requirements and recording of this data has become more stringent and certain GPS photos need to be taken of specific elements, so you need to be clear that someone on

site has the responsibility to take these. Without them, you may not get the SAP's signed off which means you won't get building control sign off. Therefore whilst you may end up with nice looking houses once completed at the end but without this evidence submitted you won't be able to sell them.

4.3 Your Own Quality Inspections

In addition to statutory inspections, you should carry out your own quality inspections at each key stage. This is not about being an expert in construction — it is about being a diligent client. Use your build quality checklist at each of the following stages:

- After groundworks and drainage installation
- After superstructure is complete and before roof is finished
- After first fix mechanical and electrical works
- After plastering
- Before second fix commences
- Before practical completion

If you are not confident in your own ability to assess quality at a technical level, appoint a project manager or clerk of works to do this on your behalf. The cost is well worth it.

4.4 Specification Compliance

One of the most common quality failures we see is the contractor substituting specified materials or products with cheaper alternatives without telling the developer. This is sometimes done with good intentions ('we couldn't get the specified product') but it should never happen without your approval. Your contract should require the contractor to seek written approval for any substitution. Your specification forms part of the contract. Deviations from it without approval are a breach of contract.

Section 5: Dealing with Variations & Scope Creep

Variations changes to the agreed scope of works are one of the biggest sources of financial loss on a development project. They come from two directions: you instruct changes to the design or specification, or the contractor claims that something is additional to their original scope.

5.1 Developer-Instructed Variations

These are changes you make to the design or specification during the build. Common examples include upgrading the kitchen specification, changing the bathroom layout, adding an additional socket here and there, or changing the front door design. Every single one of these has a cost.

The discipline you must develop is this: before you instruct any change, you must get a written price from your contractor. Agree the cost before the work is done, not after. Never, ever say 'yes, go ahead' to a change without knowing what it costs.

The Golden Rule
Every variation must be in writing, agreed before the work is done, with a clear price. If you can't operate by this rule, you will find that your project runs over budget and you won't know why until it's too late.

5.2 Contractor-Claimed Variations

These are more contentious. The contractor claims that something they have done is additional to their original contract scope and submits a price for it. Sometimes these claims are legitimate and are genuinely unforeseen or genuine omissions from the tender information. Sometimes they are not.

How to manage this:

6. Maintain a variation log from day one. Every time a variation is raised — by you or by the contractor — it goes in the log.
7. Respond to every variation claim promptly. Don't let them build up. The longer you leave them, the harder they are to resolve.
8. Challenge claims robustly but fairly. Ask the contractor to point to exactly where in the tender documents the item was excluded.
9. If you agree a variation, confirm it in writing with the agreed price. If you dispute it, confirm the dispute in writing.
10. Never allow a contractor to proceed with additional work they claim is a variation without your written instruction. If they do the work without your instruction, you may not be contractually obliged to pay for it.

5.3 The Variation Management System

Use a simple variation log to track all variations throughout the project. The log should record:

- Variation number and date raised
- Description of the variation
- Who raised it (developer or contractor)
- Contractor's quoted price
- Status (agreed / disputed / pending)
- Running total impact on contract sum

Review your variation log at every site meeting. Know your running total at all times. If your variations are mounting up and eating into your contingency, you need to know about it early, not at final account.

Section 6: Health & Safety Essentials

Health and safety is not a bureaucratic box-ticking exercise. People are seriously injured and killed on construction sites every year. As the developer, you have legal duties under the Construction (Design and Management) Regulations 2015 ('CDM 2015') that you cannot ignore or delegate away.

6.1 Your Duties as Client

Under CDM 2015, as the developer/client on a notifiable project (which most residential schemes of more than one unit will be), you are legally required to:

- Appoint a Principal Designer — responsible for coordinating health and safety during the design phase
- Appoint a Principal Contractor — responsible for managing health and safety on site
- Notify the HSE of the project (F10 notification) before work begins
- Ensure sufficient time and resources are allocated for each stage
- Ensure the pre-construction information pack is prepared and provided to designers and contractors
- Ensure a construction phase plan is in place before work starts on site
- Ensure the health and safety file is compiled and handed over at project completion

Your Principal Contractor takes on the day-to-day responsibility for managing health and safety on site. But you, as client, have an overarching duty to ensure they are doing this properly. Ignorance is not a defence.

6.2 What Good H&S Looks Like on Site

When you visit your site, look out for the following as basic indicators of a contractor managing health and safety properly:

- Site is securely fenced and access is controlled
- Welfare facilities are in place (toilets, hand washing, mess room)
- CSCS cards visible / available for all operatives
- Signage is in place — PPE requirements, emergency contacts, site rules
- Scaffold has been erected by a competent contractor and inspection tags are current
- Hazardous materials (fuels, chemicals) are stored correctly
- There is a current construction phase plan on site

Practical Advice

Don't be embarrassed to ask your contractor about their health and safety management. A good contractor will welcome the question and will be able to show you their documentation clearly. A contractor who is evasive or dismissive about H&S is a contractor you should be concerned about. Ultimately the site will have your development company name on it and if the contractor is not working safely, people will just focus on your company name and not the contractors, thus affecting your reputation.

Section 7 : Practical Completion & Snagging

Practical completion is the formal milestone at which the contractor hands the project over to you. It is not when the last piece of carpet is laid — it is a legal event with significant contractual consequences. At practical completion:

- Risk in the building passes to you
- The defects liability period begins

- The first half of retention is released to the contractor
- LADs (Liquidated Ascertained Damages) cease to accrue
- You take possession of the building

7.1 What is Snagging?

Snagging is the process of identifying defects or incomplete works before or at the point of practical completion. A snag list is a formal record of items that need to be rectified.

The key principle is this: do not certify practical completion until you are satisfied that the building is substantially complete and fit for occupation. Minor defects can be included on a snag list and rectified after practical completion, but major defects should prevent practical completion from being certified.

7.2 How to Snag Effectively

Snagging is a skill that improves with experience. Walk every room of every unit systematically. Take your time. Look for:

- Paintwork defects — drips, thin patches, missed areas, poor cutting in
- Joinery defects — doors that don't hang or latch correctly, scratched ironmongery
- Plasterwork — cracks, hollows, uneven surfaces
- Tiling — cracked tiles, uneven grout lines, missing grout
- Sanitary ware — scratches, chips, sealant quality
- Flooring — gaps, squeaks, lippage between tiles
- External works — dropped kerbs, block paving levels, landscaping
- All mechanical and electrical items tested and working — sockets, switches, boiler, MVHR

Many developers use a professional snagging company for this — particularly on their first few projects. The cost is typically £300–£600 per unit and it is money well spent. A professional snagger will identify defects that you would miss.

> **Tip**
> Never complete your legal sale without all snags being rectified or a clear written programme from the contractor for their rectification. A buyer who moves into a property with outstanding snags will become a very difficult buyer to manage.

Section 8: Exit Strategies — Sell or Hold for Rental

Long before practical completion, you should have decided on your exit strategy. The two main options are to sell the completed units or to hold them as rental properties. Both have their merits and both have their implications for how you structure the project financially.

8.1 Selling

Selling is the most common exit strategy for smaller developers. The advantages are clear: you crystallise your profit, repay your development finance, and free up capital for the next project.

Key considerations:

- Start marketing before practical completion — typically 3–4 months out. Appoint your selling agent early and work with them on pricing and presentation.
- Ensure you have a Building Regulations completion certificate and all warranties (NHBC / structural warranty) in place before legal completion.
- Budget for selling costs — estate agent fees (typically 1–1.5% of GDV), solicitor's fees, and any marketing or show home costs.
- Consider the timing of your sale relative to the market. If the market is slow, it may be worth holding briefly rather than selling at a discount.
- If you are selling to Help to Buy buyers, be aware of the additional compliance requirements and timescales.

8.2 Holding for Rental

Holding completed units as rental properties can be an attractive strategy if you want to build a long-term income-producing portfolio. However, it requires a different financial model.

Key considerations:

- You will need to refinance from your development finance onto a buy-to-let mortgage. Plan this well in advance — lenders have different criteria and the process takes time.
- The rental yield needs to stack up. On a development with a high GDV, the yield on cost may be lower than you expect. Run the numbers carefully.
- Holding units means your capital is tied up for longer. This affects how quickly you can move onto your next project.
- You will need to comply with all landlord obligations — EPC ratings, gas safety, electrical safety, deposit protection, licensing (if applicable).
- Consider whether to manage the properties yourself or appoint a managing agent. For new developers, we recommend a managing agent for the first year at least.

8.3 The Decision Framework

There is no universally right answer. The decision depends on:

- Your personal financial position and liquidity requirements
- The yield available relative to the capital required
- Your ambition — do you want a trading business or a portfolio?
- Market conditions at the time of completion

Many successful developers do a combination: sell some units to repay finance and bank profit, and retain one or two as long-term investments. This is a sensible approach and one we'd encourage you to consider as you progress.