Monarch Design Manual

Monarch is PCB's premier project, and as such, we have fairly strict guidelines to be followed when building in the Monarch map, or when building in other maps to be moved into Monarch proper. This manual will serve as a guide to ensure everyone involved knows the standards expected, and how the project will come together.

Basic Information

- In Monarch, vehicles drive on the left.
- Monarch, and this document, uses the European floor numbering system. A comparison to the North American system is shown below:

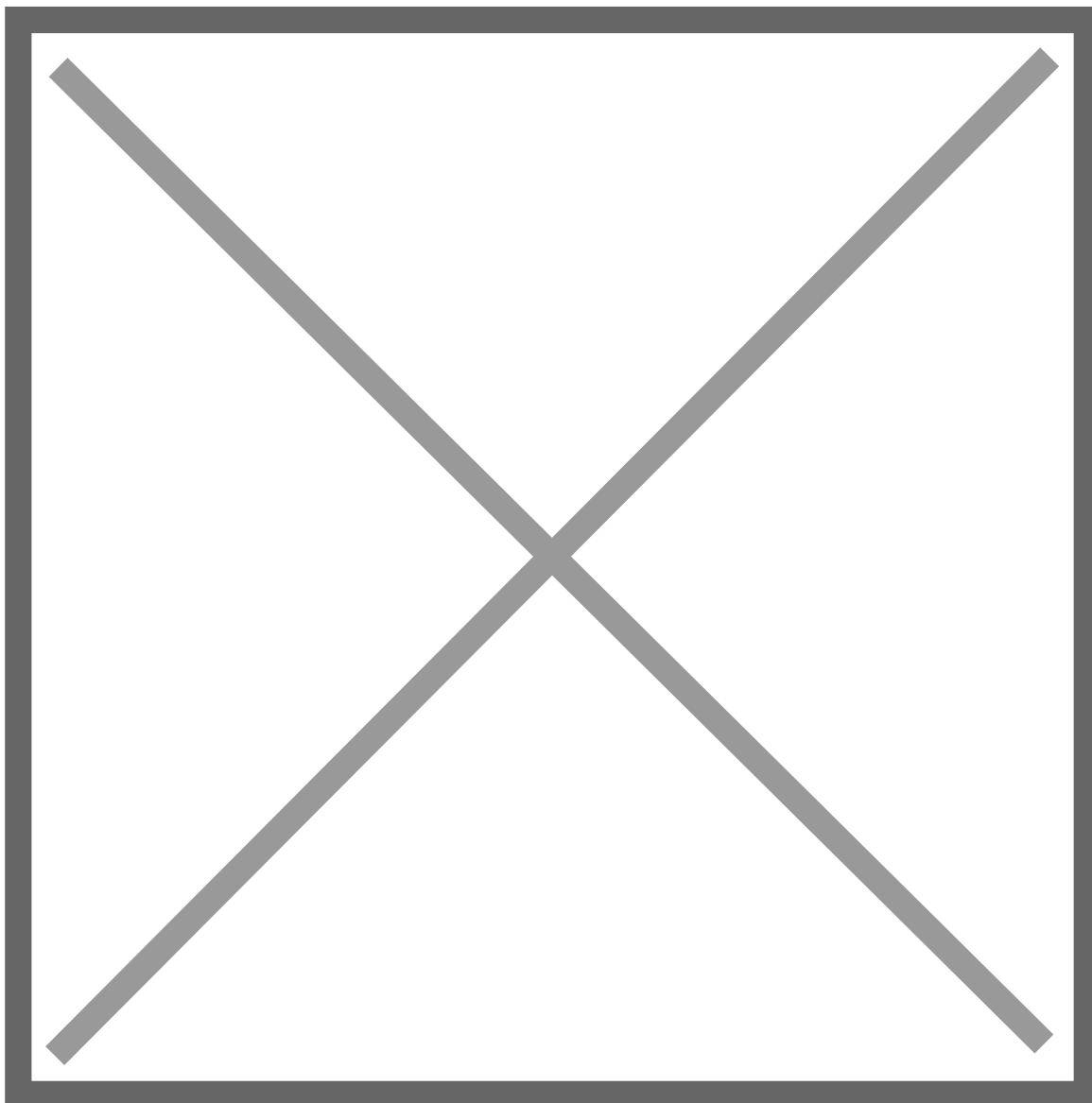| Height relative to ground	European numbering	North American numbering
Ground level	0 or G ("Ground floor")	1 ("1st floor)
1 level above ground	1 ("1st floor")	2 ("2nd floor")
2 levels above ground	2 ("2nd floor")	3 ("3rd floor")
etc.	etc.	etc.
Partially below ground	LG ("Lower ground")	LL ("Lower lobby")
1 level completely below ground	-1 or B1 ("1st basement")	-1 or B1 ("Basement")
2 levels completely below ground	-2 or B2 ("2nd basement")	-2 or B2 ("Sub-basement")
etc.	etc.	etc.

- Monarch uses Dollars ($).
- Builds are often edited and moved around the city. Please don't panic if you can't find your build, it's most likely just been put somewhere else - we avoid deleting things where possible.
- Where city blocks have building outlines, please stick to them.
- The wind is blowing South-East. If your build includes flags, smoke, or other things affected by wind, please bear this in mind.

Theme

Monarch's overall theme is a dense modern city. The city's main influences at present are Berlin (DE), Boston (USA, MA), Brisbane (AU, QLD), Chicago (USA, IL), London (UK), Melbourne (AU, VIC), Montreal (CA, QC) and New York (USA, NY), (the bold ones more than the others) however this doesn't mean you can't take influence from other cities around the world. In fact, we encourage it. The more diversity the better!

The theme of a modern city also doesn't mean we only want modern style buildings. Sure, the cities listed above have plenty of them, but they also have an abundance of older architecture, which we also aim to include in Monarch.

If you're struggling for ideas on what to build, go into Google Street View and drop the little man in a random area of any city. When you see something you like, use it for inspiration to make a similar building.

Any of these would fit great in Monarch.

Historical Builds

Many historical builds in Monarch still need some work doing to them. Builds in Monarch are sometimes colour coded by a ring, spot, etc. above the roof.

- LIME GREEN - Building ready to be moved.
- YELLOW - Building requires interior or roof detail, otherwise ready to move.
- PURPLE - Building will not be moved.
- ORANGE - Building requires re-scaling/rebuilding before it is moved.
- MAGMA BLOCK - Fate undecided.

There are also some informational colour codes.

- BROWN - Building contains underground system.
- DIAMOND BLOCK - Generation 1 Legacy Building (Lobby Builds).
- EMERALD BLOCK - Generation 2 Legacy Building (Late Lobby/Big Build Builds).
- LAPIS BLOCK - Generation 3 Legacy Building (Main Fleet Builds).
- SPONGE BLOCK - Generation 4 Legacy Building (Revival Builds).
- OBSIDIAN - Generation 5 Building (New Builds).
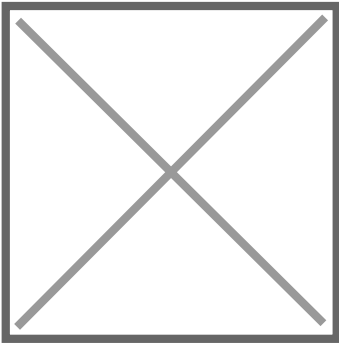- NETHERRACK - Generation 6 Building (Reformed Builds + Builds made for the new map)

Build Guidelines

While the word 'guidelines' is used throughout this section, the following are rules to be adhered to. Anything which does not fit within the guidelines will be removed from Monarch. If you are unsure if your build will fit the guidelines, or guidelines don't exist for what you want to work on, please contact either Ouhai_Ruby, Wairoa, or Mannriah.
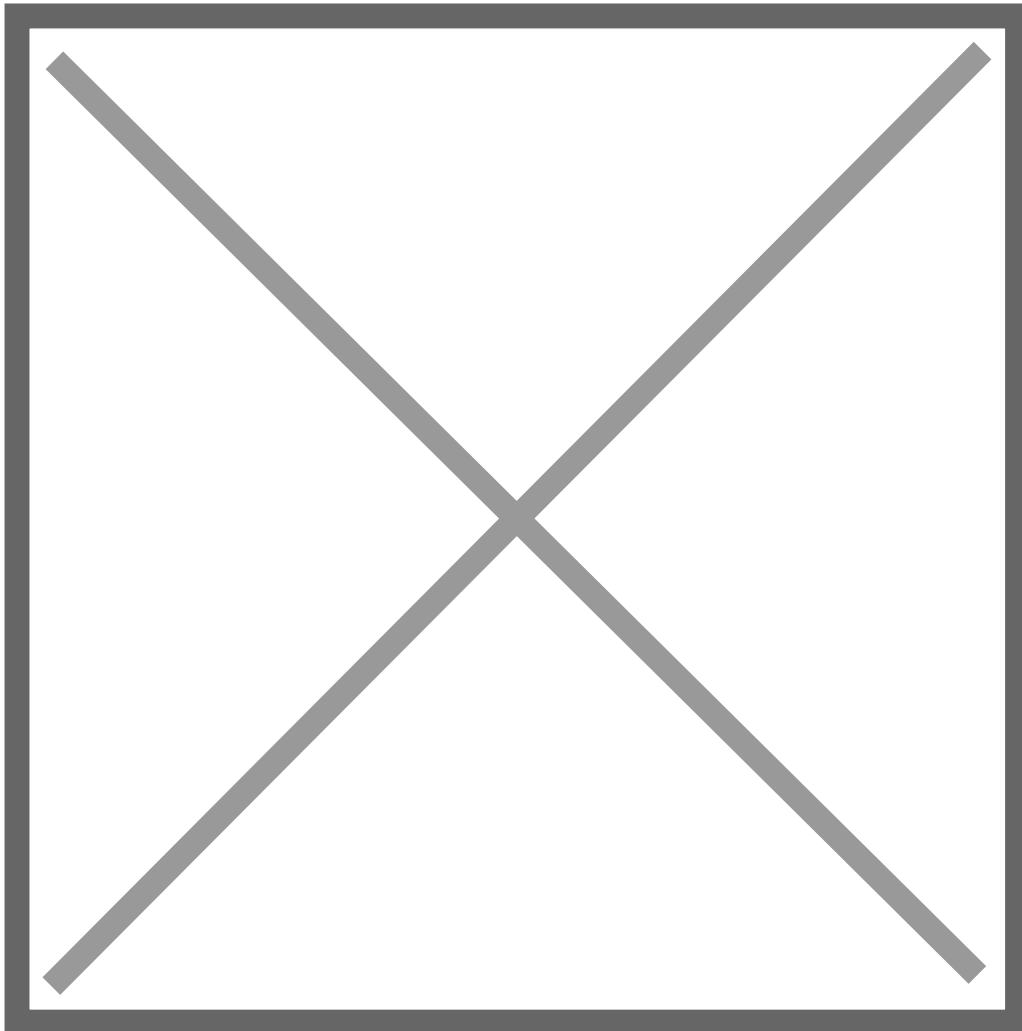
General

So you know what the theme is, and you've got a design that fits. Now you just need to make sure it fits the scale. Scale basically means how big things are compared to other things around them, and getting it right makes the city look infinitely better. For example, you don't want a small family house to end up being the same size as a hospital. So to avoid that, follow these simple guidelines:
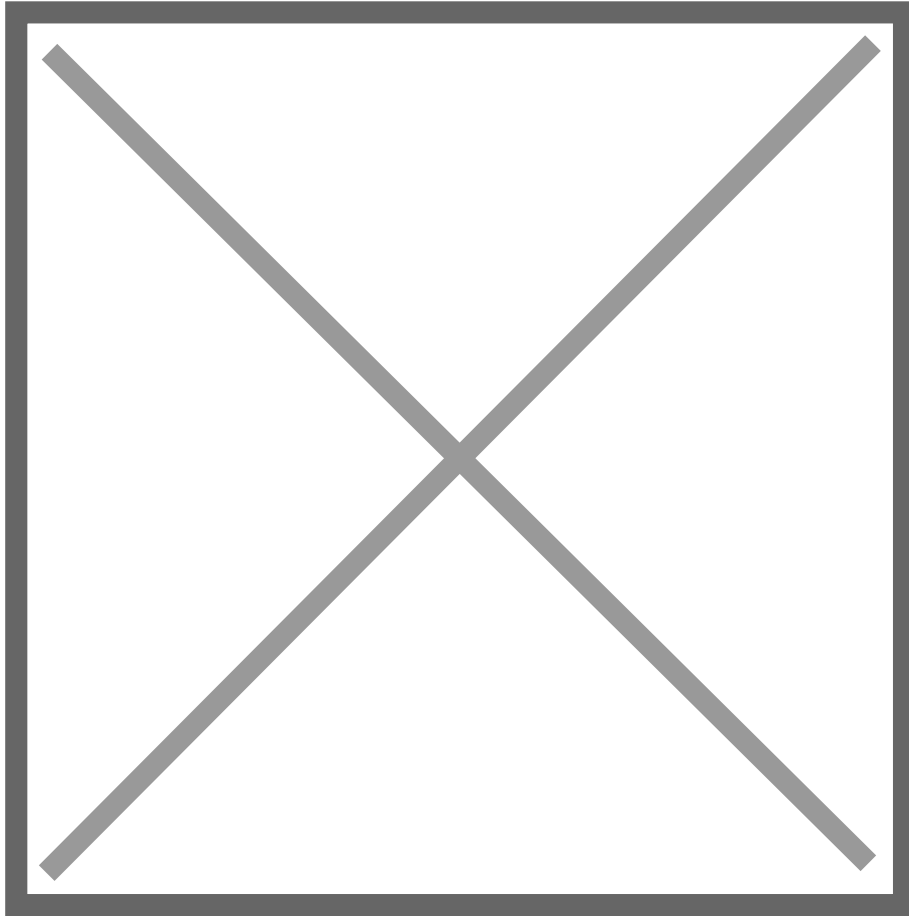
1. Floors should have a headroom of 5 blocks. Depending on the style, more is fine, but try not to go less than this. 4 blocks headroom is the absolute minimum within Monarch, and should ONLY be used where similar buildings in real life have low headroom.

2. Floors/ceilings should ideally be 2 blocks thick - one block for the ceiling of the lower level, and another block for the floor of the upper level. Other thicknesses only where appropriate.
3. Make sure you build right the way up to the sidewalk/pavement, or extend the sidewalk to your build if it doesn't reach. You can, of course, put gardens or other features in front of buildings, but empty grass areas should not be left between your build and the sidewalk.

4. Avoid using unappealing blocks or block combinations as main materials in your build. For example: sponge, melon, pumpkin, emerald, gold, diamond etc.

5. Central Monarch should feel quite dense. We do want to have some open space such as parks, plazas, and avenues, but there shouldn't be a huge amount of 'dead space' (parking lots, empty yards etc.) between buildings. Look at the central areas of New York, Boston, London, Paris, and Melbourne, just outside the main downtown areas, and you will see what we are aiming for. Buildings are mostly packed in very close together, and most of the off-street parking you see is either a multi-storey parking structure, or the basement level of another building.
6. Hallways and staircases should be a minimum of 2 blocks wide. Building entrances should be a minimum of 2 blocks wide and 3 blocks high.
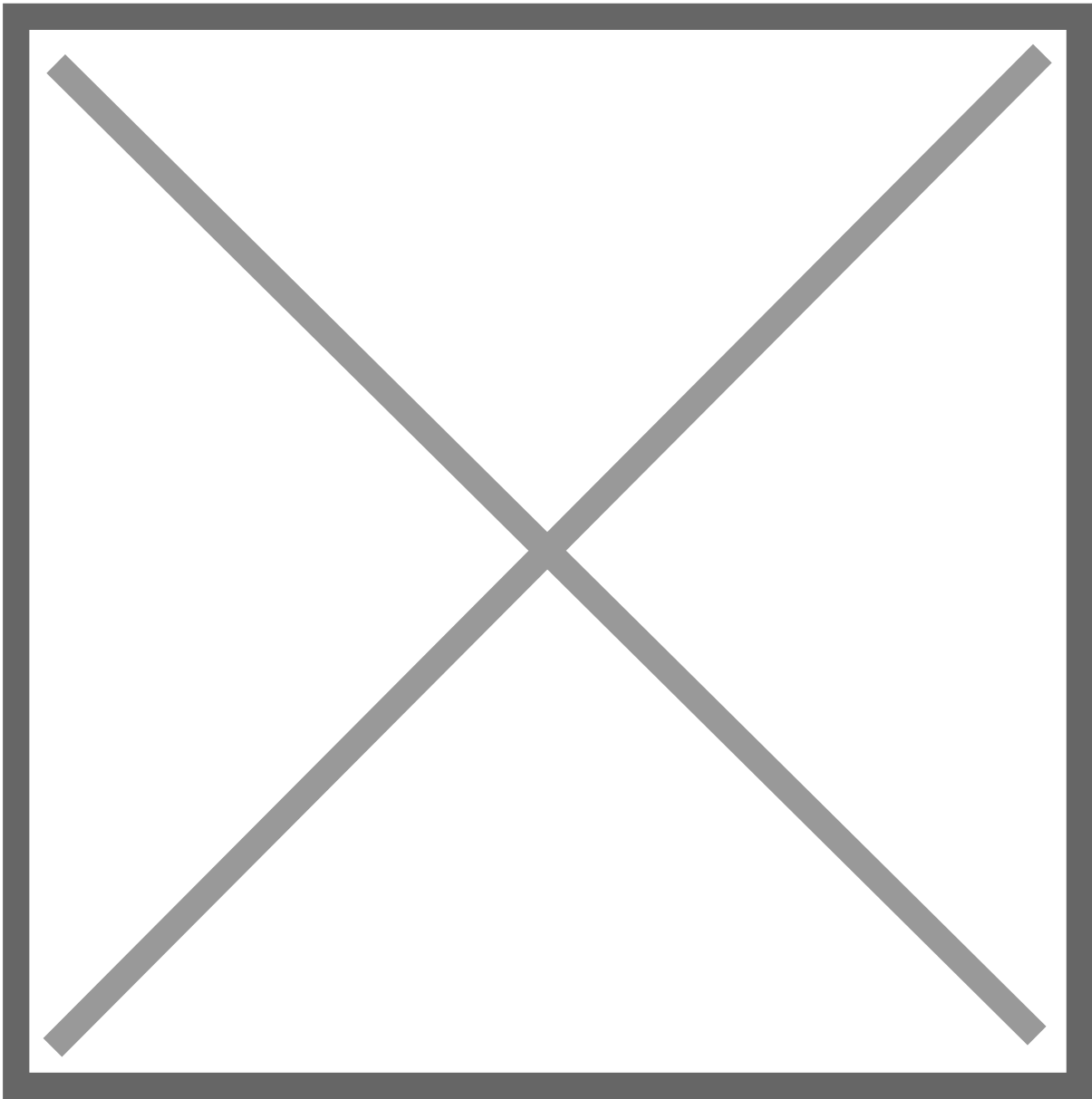
Below are build guidelines for specific areas of Monarch.

Infrastructure

In order to keep Monarch to scale, we need to make sure all our infrastructure matches. Below are guidelines for different forms of infrastructure.
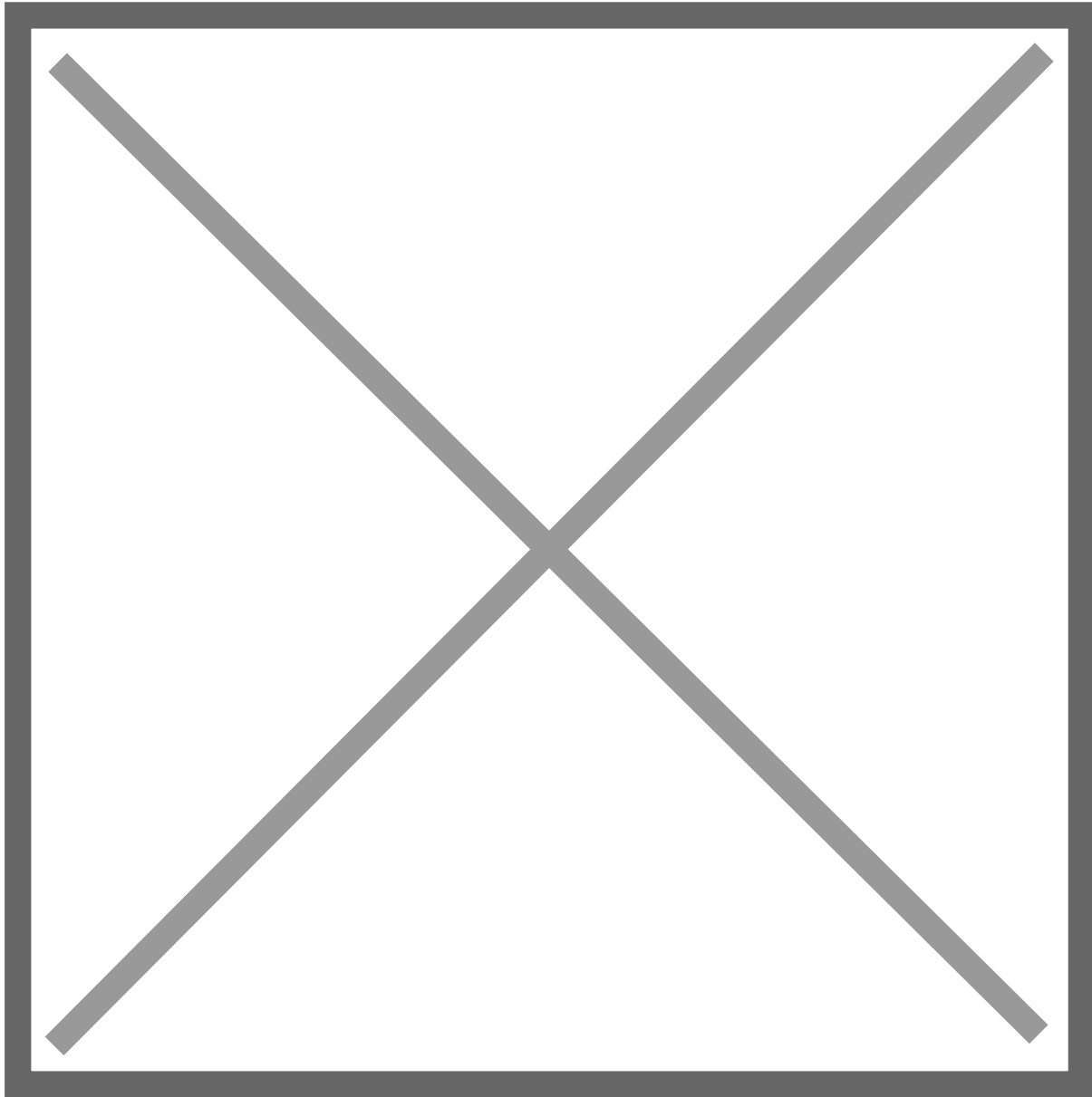
Trains, Railways, and Subways

1. Tracks are to be a total of 7 blocks wide, with the actual rails being on blocks 2 and 6. The rails are to be constructed from anvils, and the sleepers are to be either wooden slabs and stairs, or stone slabs and stone brick stairs. Sleepers should be placed every 2nd block along the rails.

All of these combinations are acceptable. The dark oak wood may also be substituted for any other type of wood, except acacia, crimson, and warped. Where a 3rd electrified rail is used, this should be an iron fence running down the centre of the track. Blocks used for sleepers should be placed underneath this fence where it cuts through them.

2. The minimum gap between 2 tracks is 2 blocks for tracks going in the same direction, and 3 blocks for tracks going in opposite directions. There should be a minimum 2 block gap between the outer edge of the track and the boundary wall/fence.
3. While railway inclines are strongly discouraged within Monarch, the maximum grade for railway hills is 1 in 20 - in other words, for every 1 block of ascent/descent, there must be 20 blocks of track.
4. Train station platforms are to be a minimum of 280 blocks long so they can properly accommodate the train designs to be used in Monarch. All platforms are to be equipped with platform screen doors.
5. The clearance for trains in Monarch is 10 blocks between the track and the overhead powerline.
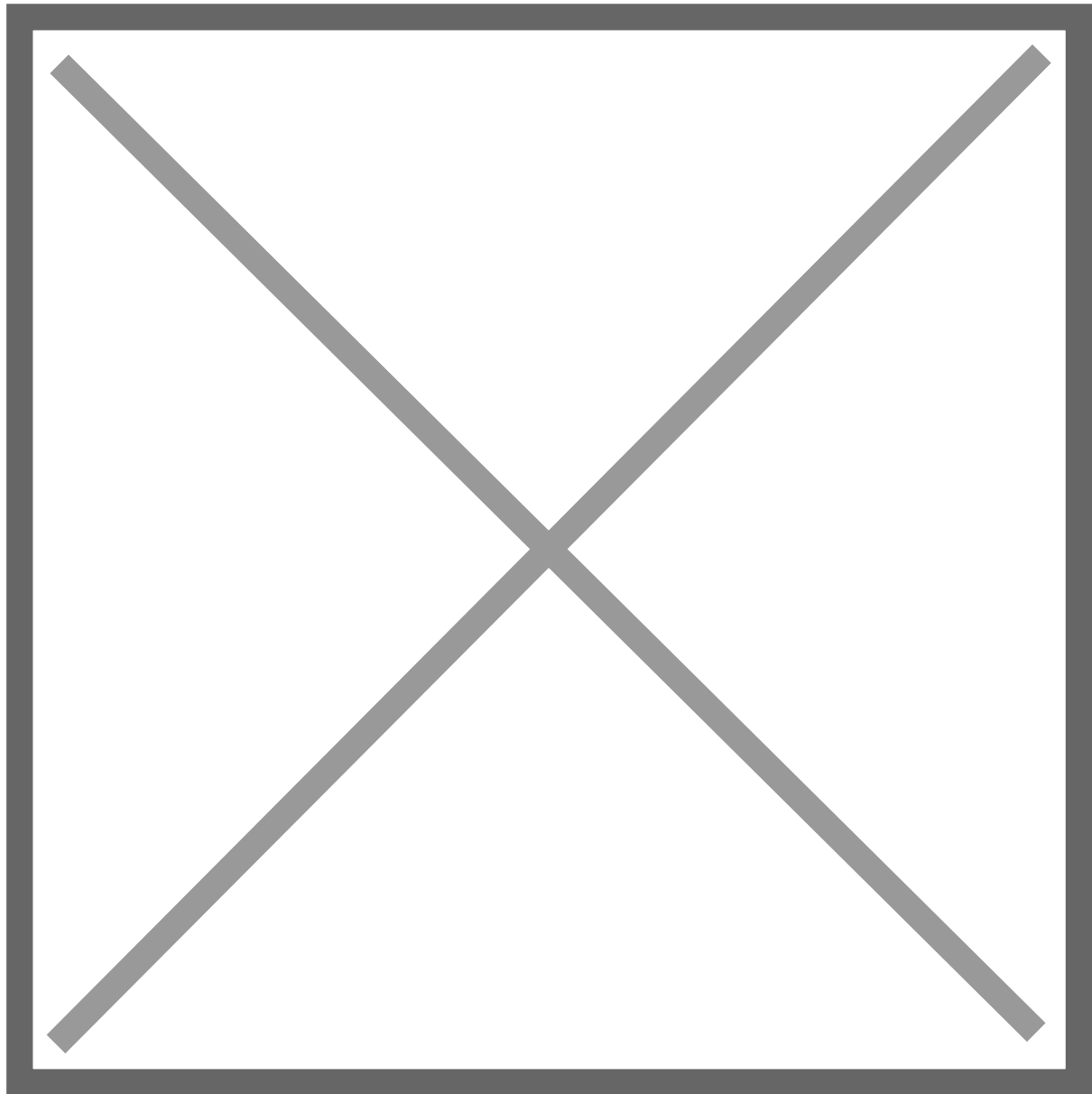
Example:

Roads

These guidelines are for normal city roads, not highways.

1. Lanes should generally be 5 blocks wide. 3 or 4 block wide lanes are acceptable in limited situations, such as laneways, and where older tunnels and bridges are repurposed and can't accomodate 5 block wide lanes.
   - Shared bus/bike lanes should be 7 blocks wide, and marked with a double chevron pattern periodically (recommended 100 blocks).
2. Lane markings should generally be 5 blocks long and 5 blocks apart, but 4/4 is also acceptable in some edge cases.
3. Sidewalks should be at a full block height (no slabs)where possible.
   1. In urban areas, there doesn't need to be any lane edge markings. Along the edge of a road there should be a 1 block wide half slab, before the sidewalk. Sidewalks
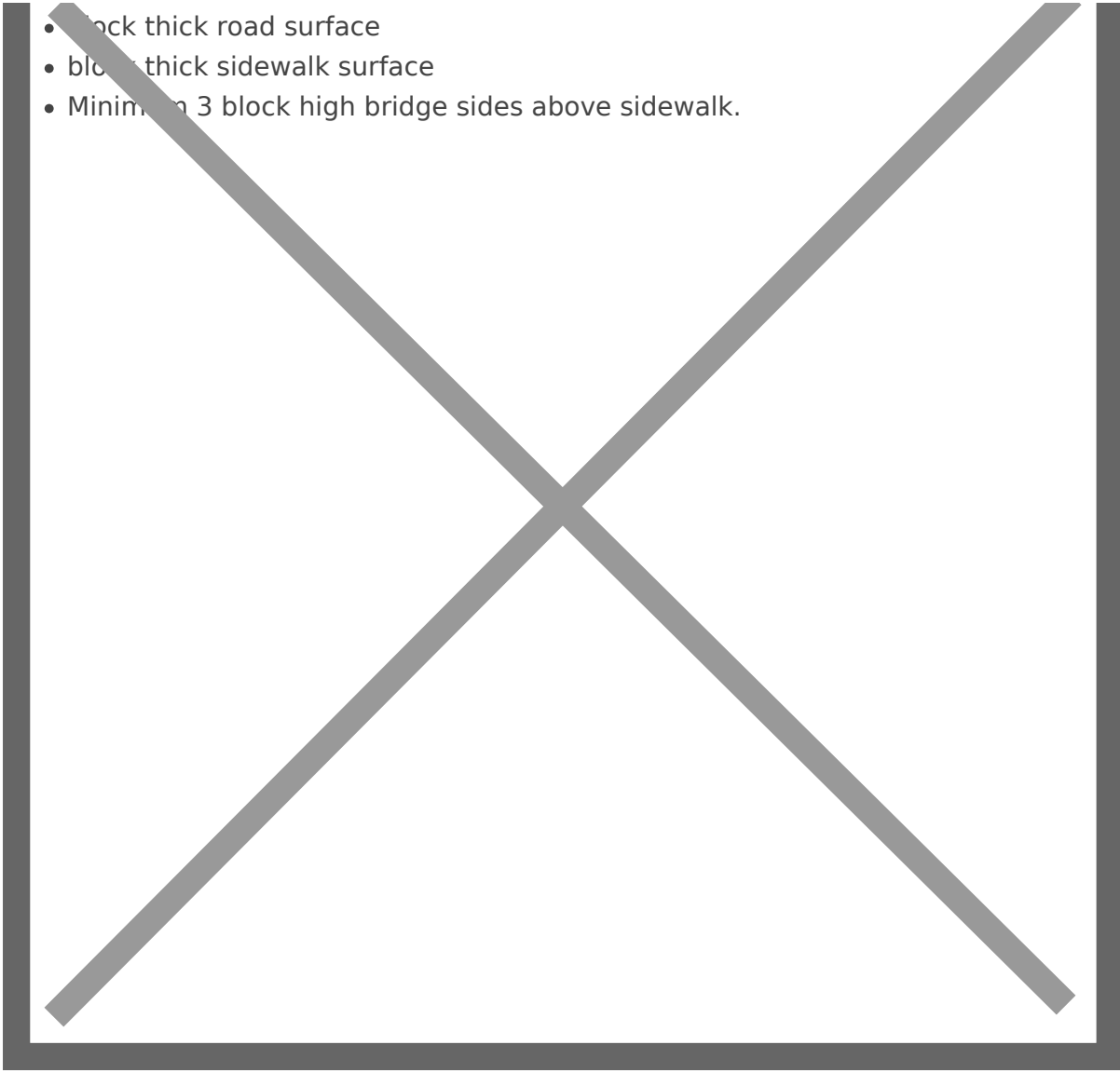
should be a full block above the road level.

2. In rural areas, outside the outer lane should be a solid white(?) line 1 block thick, followed by another block of road surface. There should be at least 1 block of grass between the edge of the road and any sidewalk. Sidewalks can be the same level as the road.

4. Normal width vehicles, such as cars and vans, should be 3 blocks wide (excluding mirrors) and placed in the centre of the lane. Wide vehicles, such as buses and lorries/semi-trucks, should be 3-4 blocks wide (excluding mirrors) and placed on the outside edge of the lane to avoid connecting with other wide vehicles.

5. The lowest position for the bottom block of a bridge deck above roads is to be on the 11th block above the road surface. All bridges with measured minimum vertical clearances of less than 5m (10 blocks) must be signposted.

6. On a road bridge, the bridge itself should be at least 5.5 blocks from the bottom of the deck to the highest point in the following configuration:
   - 0.5 block thick bottom of deck (top half of block)

- block thick road surface
- block thick sidewalk surface
- Minimum 3 block high bridge sides above sidewalk.

7. Road inclines should be no steeper than 1 in 5 - in other words, for every 1 block of ascent/descent, there must be 5 blocks of road.

Road Surfaces

- CBD/Downtown:
  - black_concrete, or;
  - a combination of: 80%black_concrete,10%black_wool,10%black_concrete_powder
- South Bank:
  - gray_concrete, or;
  - a combination of: 80%gray_concrete,10%gray_concrete_powder,10%cyan_terracotta
- Eora

- black_concrete, or;
- cobbled_deepslate (shared zones)
- East Shores -?
- Soho - ?
- Unnamed Area 1 - ?
- Something Quays - ?

Road Suffixes

Road suffixes should follow the following format in Monarch

Type	Suffix	Abbr.	Alternative/s	Abbr.
North-South	Street	St	Avenue (If divided by a nature strip)	Av
East-West	Road	Rd	Boulevard (If divided by a nature strip)	Blvd
Winding	Drive	Dr	Way	Way
Single Lane One way	Lane	Ln		
Loop	Circle	Ci	Cove (if loop is relatively short, e.g. only encircling a small park)	Cv
Dead-end	Close (optional, can still use road/street etc if preferred)	Cl	Court	Ct
			Place	Pl

Signs

Street Name Signs

Street name signs should be formatted in the following way:

&l<ROADNAME> (spaces to end of line)

&l<SUFFIX> (spaces to end of line)

(spaces to fill line) &4<1st half of postal code>
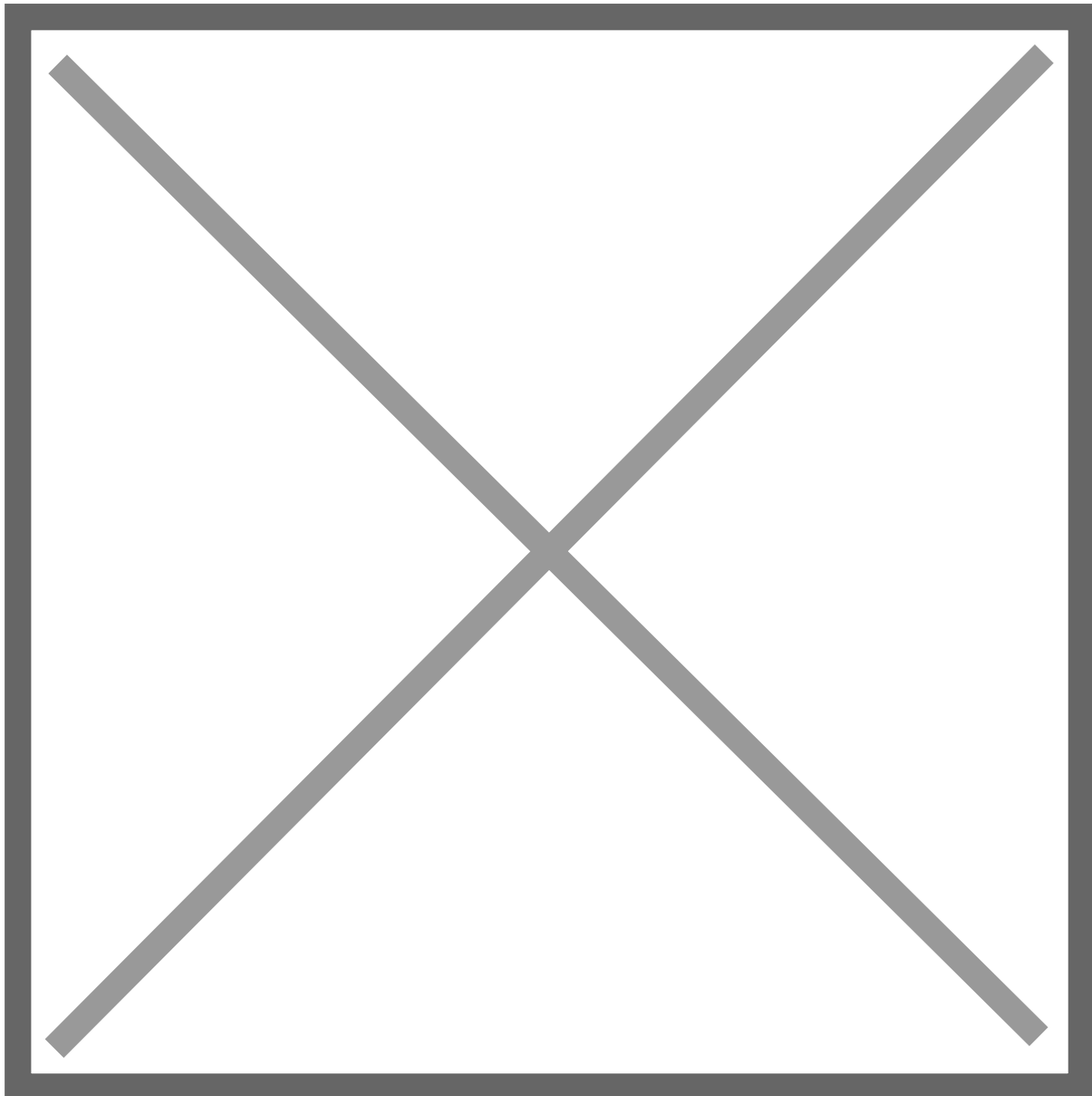
City of Monarch

For example:

&lLONDON

&lROAD

&4C1

City of Monarch

Which displays as in the image below:

Parking

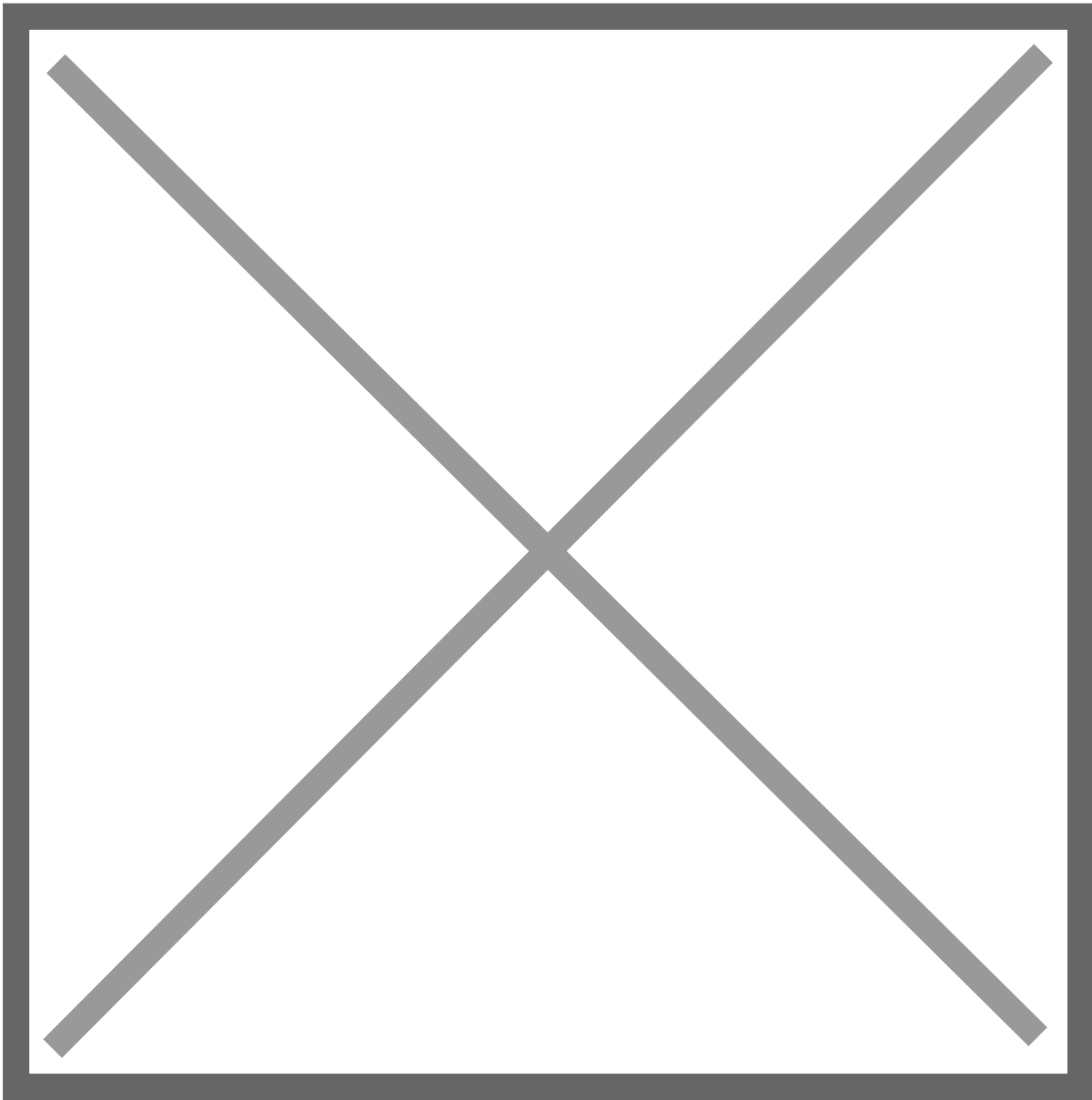All parking spaces for normal cars are to be minimum 4 blocks wide, and 8-10 blocks long.

Parking spaces for buses/trucks are to be minimum 5 blocks wide, and a length based on the vehicles which will be parking there.

Within the Downtown/CBD area, Soho, and East Shores (more areas to come), all parking lots must either be in a dedicated parking garage structure, part of another building, underground, or a combination. Off street surface parking lots with no building above them are prohibited within these areas of the city, with the exception of small lots on back streets for residents/workers.

We recommend provisioning space for on street parking on quieter streets if there is sufficient space. These spaces should not impede the footpath and ideally incorporate tree cover.

Street Numbering

Street names must change, or have the South suffix added in brackets to them when they cross to the south side of the river (e.g. Berlin Street would become Berlin Street (South).

Suburbs/districts

Downtown/CBD

This is the most dense area of the city, and where the majority of skyscrapers are located. The downtown of Monarch is to be more like those of London, New York City, and Brisbane, than those of Houston, Denver, or St. Louis - that is to say, densely packed buildings with little to no surface parking lots.
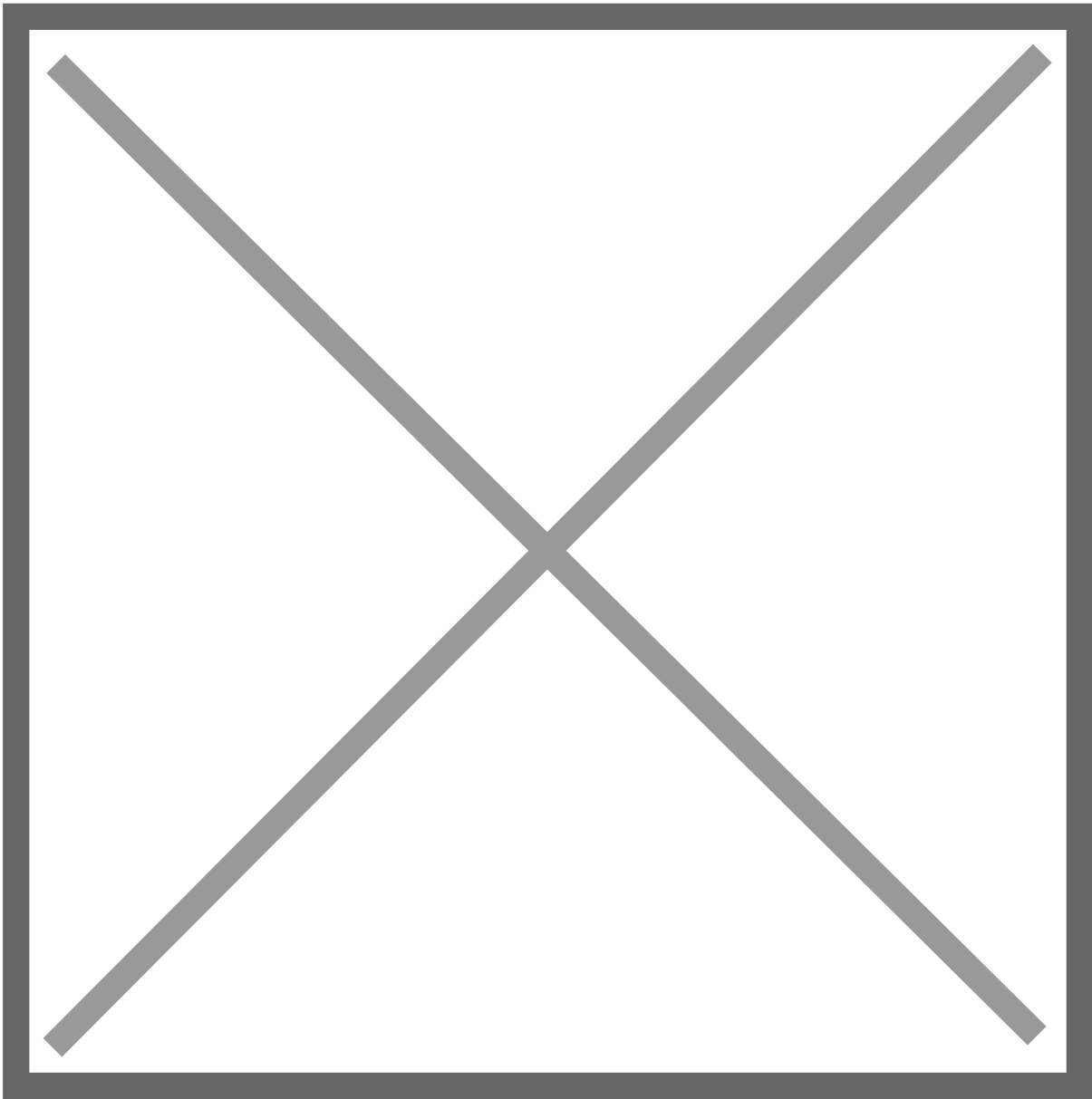
1. The minimum height for buildings is 3 storeys.
2. There is no maximum build height, apart from the build limit. We would like to keep the tallest buildings clustered together, but not immediately adjacent to each other.

3. All parking is to either be underground, in a parking garage, incorporated into another building, or a combination of these. There are to be no standalone surface level parking lots. Small amounts of on-street parking are acceptable if space allows for it.
4. As this is the area nearest the spawn, builds may be moved or edited more in this area of the city than others, in order to achieve the best possible impression to visitors.
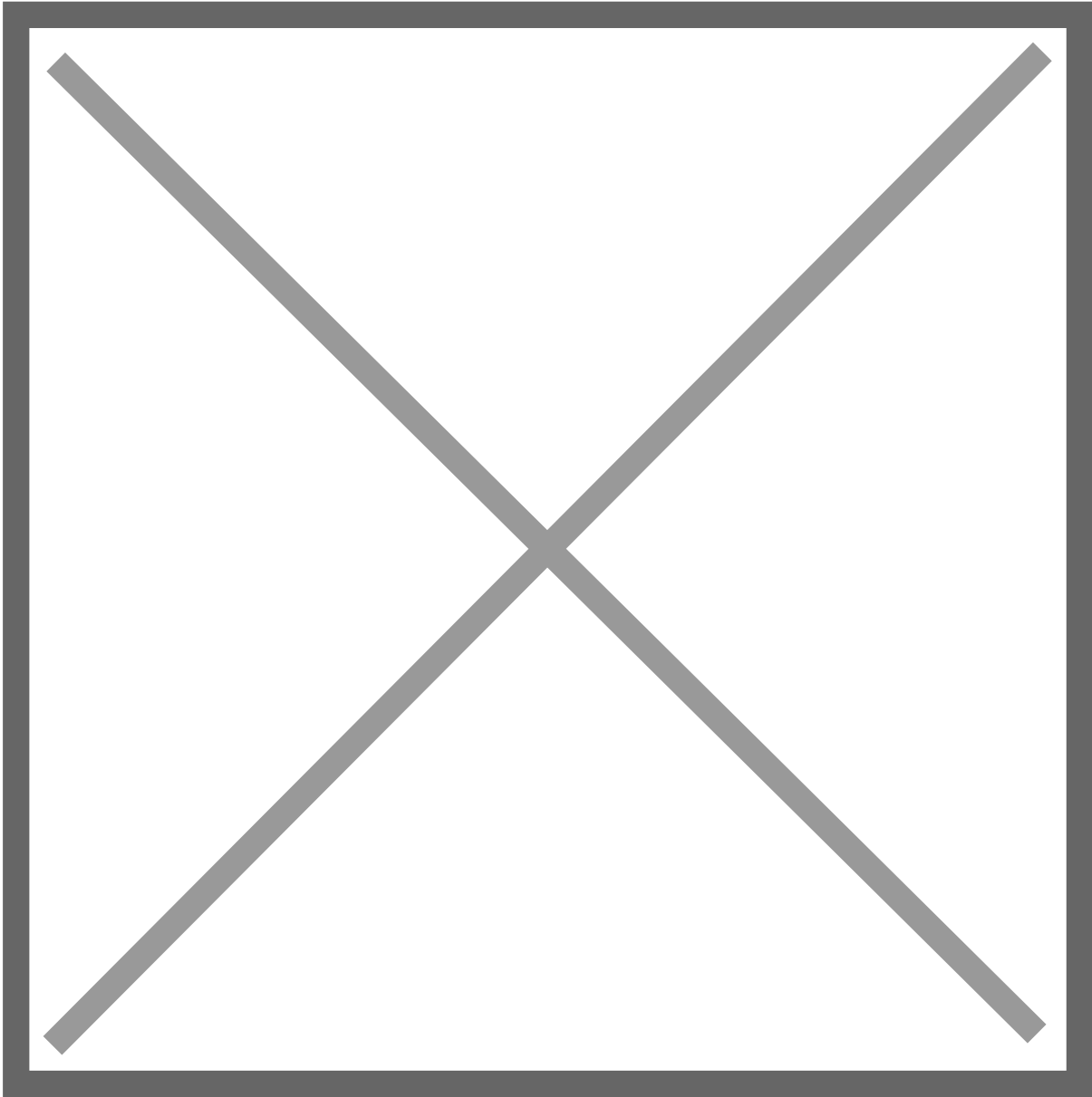
Albrose

This area is to be primarily up-market row houses. This is similar to real life areas, such as Chelsea in London, parts of Brooklyn in New York, and Back Bay in Boston.

1. Buildings should be row houses. Exceptions may only be made with permission from Ouhai_Ruby or Wairoa.

2. Buildings in this area are to have steps up to the Ground level of the building, and have a half underground floor below. See the image below for an example:

3. Buildings should ideally be 3 storeys high, plus the half underground storey. The absolute maximum is 4 storeys high, plus the half underground storey. Example below:
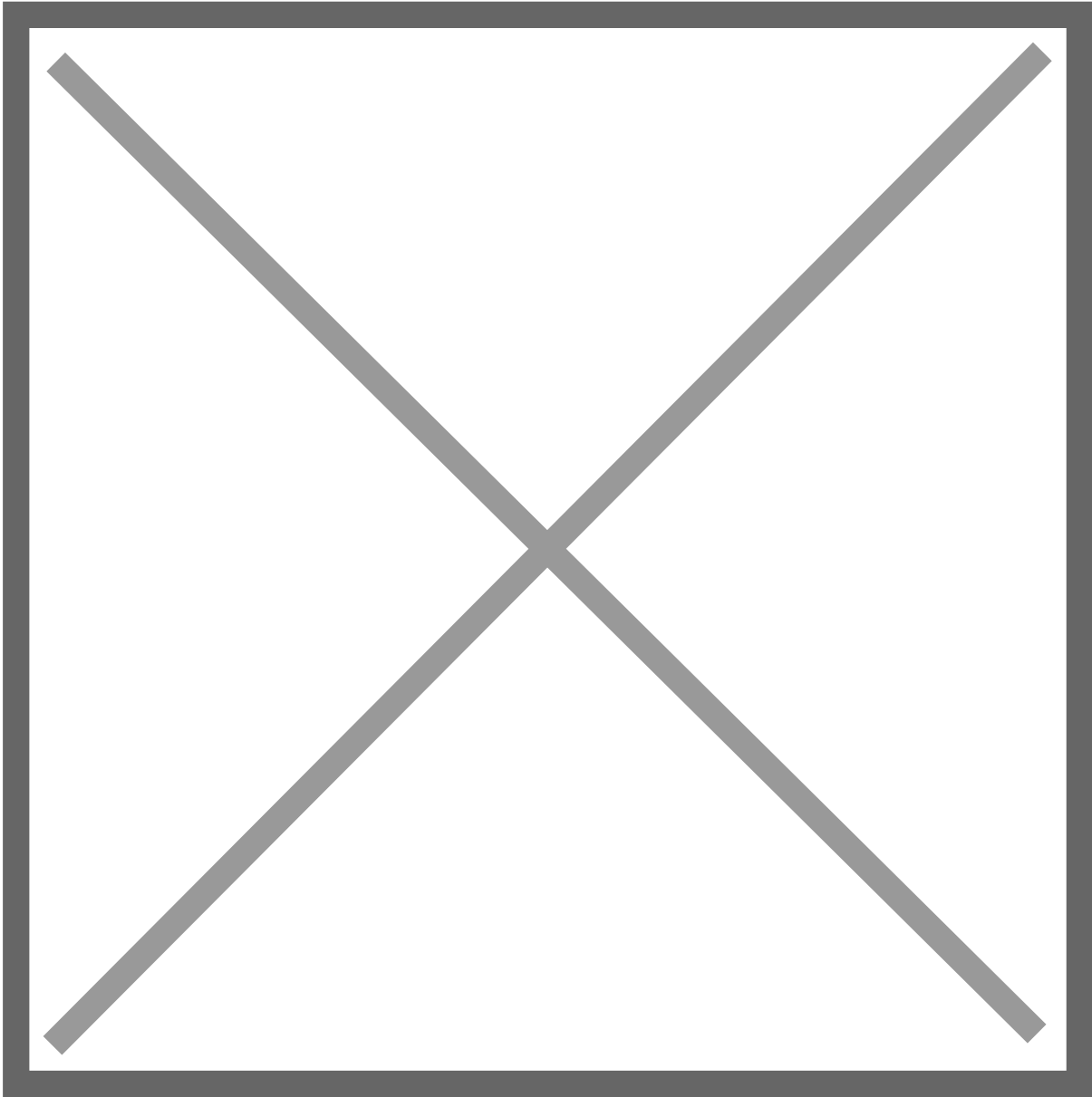
4. Buildings should have a flat or shallow roof, unless the roof space is also used as liveable space with dormer windows.

East Shores

The coastal area of central Monarch, this area is to be medium-high density, comprising mostly retail units, hotels, food outlets, and luxury residential. Real life examples include Benidorm - Spain, Gold Coast - Australia, and Monaco.

Eora (ee-oar-uh)

Eora is a cosmopolitan suburb, with a mixture of older and newer mid-rise apartment buildings; as well as modern, integrated developments. Inspiration includes areas such as Chatswood in Sydney.
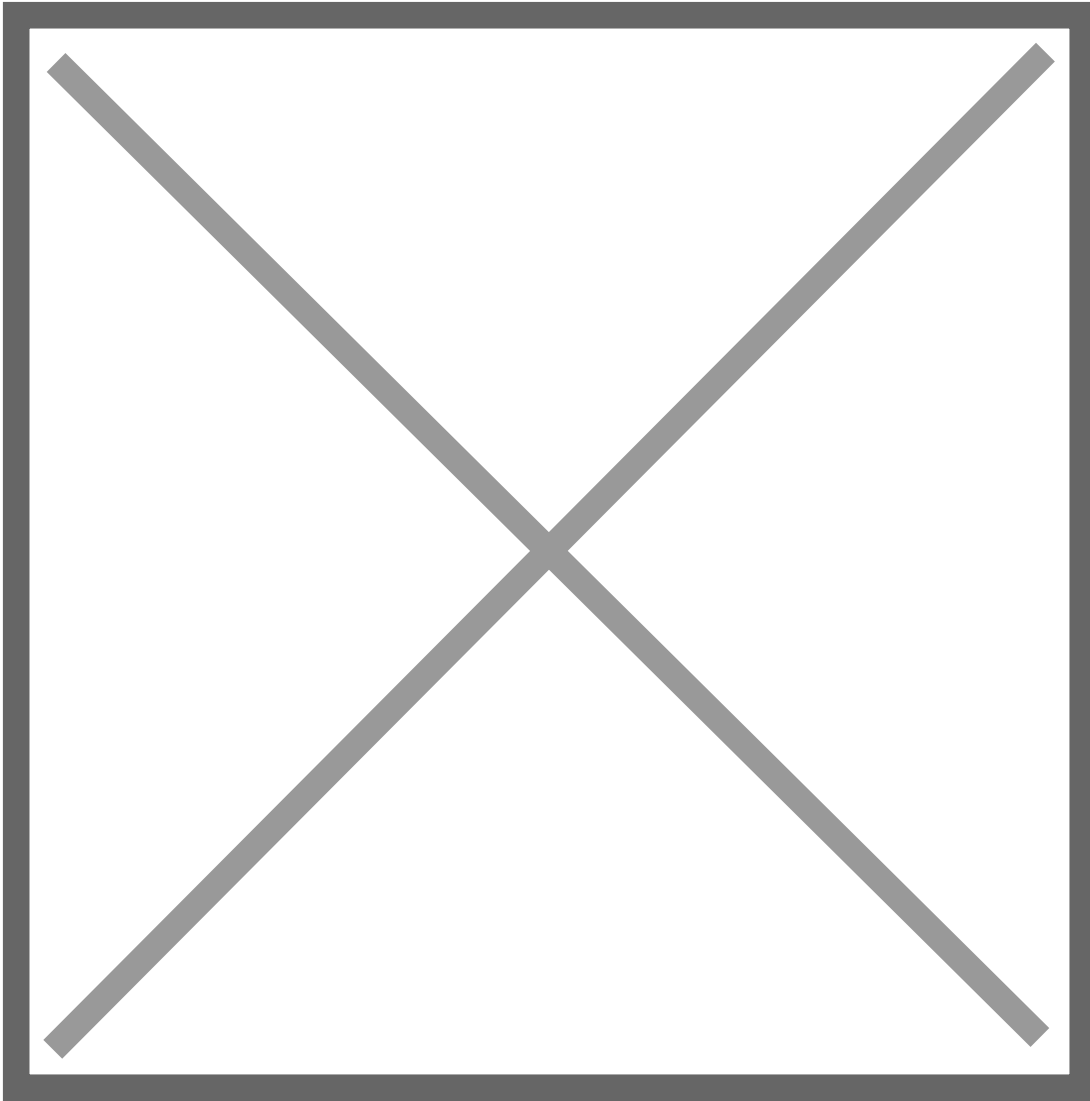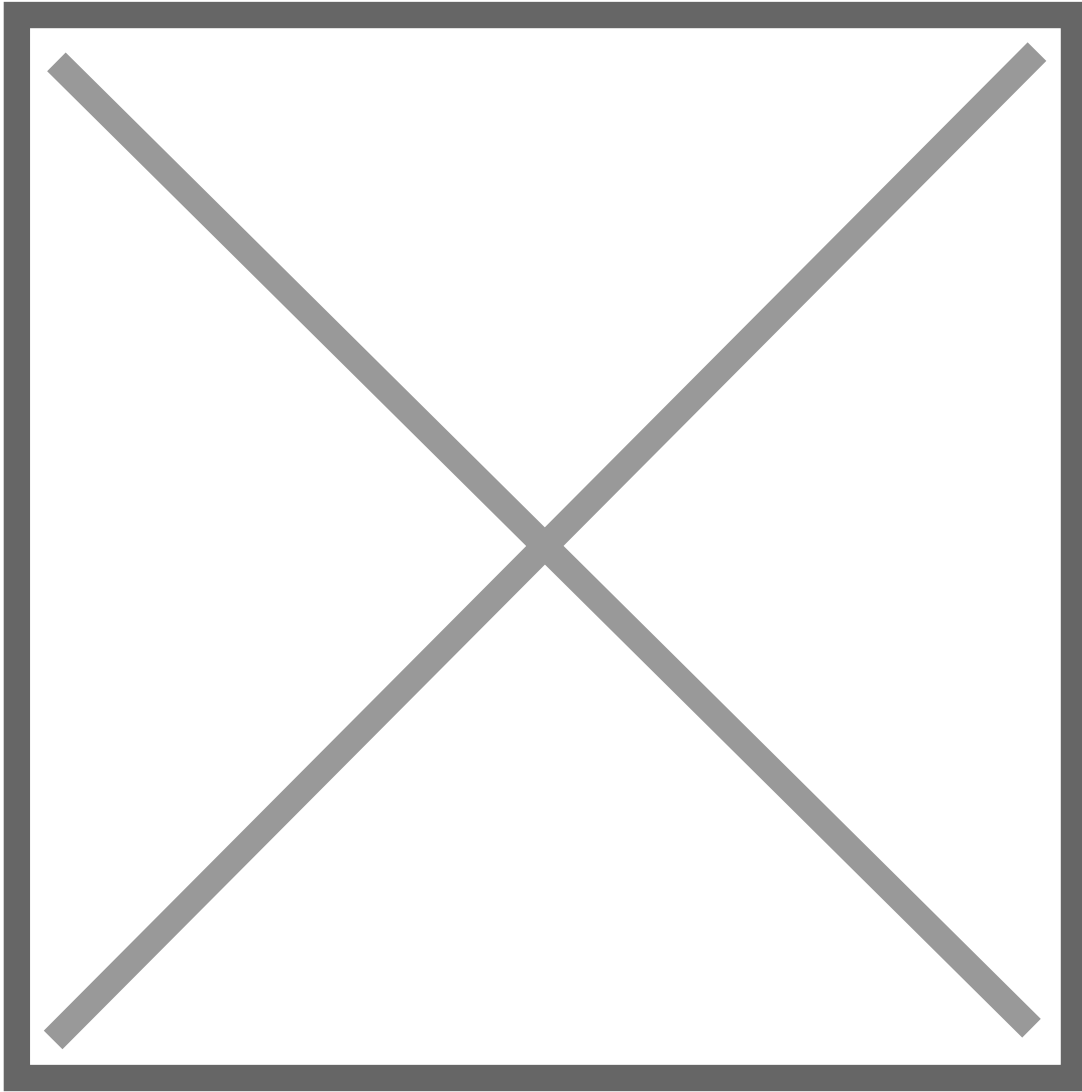
Soho

Builds in this area are to be based off of the Soho area of London, UK, and SoHo in New York, NY. Both of these areas are formed of mostly medium density buildings constructed in the 1800s, with small parks throughout. Soho in London is a major entertainment district, with a variety of restaurants, pubs, theatres etc. SoHo in New York is primarily a trendy retail area.

Soho is a highly pedestrianised district of Monarch, with shared zones and narrow lanes. When building for this area in Monarch, you should follow these guidelines:

1. Building height should ideally be 4 or 5 floors tall, with an absolute minimum of 3 floors, and an absolute maximum of 7 floors.
2. The building style for this area of Monarch is strictly 1820s - 1920s, as this is the primary building style in the real life Soho in London and SoHo in New York. Examples can be seen below.

Soho - London

SoHo - New York

3. The ground floor of builds should have a shop front facing the street. The ONLY exception to this is where the front of the build is along a dead end road, or designated back street. Upper floors should either be residential, offices, or extensions to ground floor businesses, such as a 1st floor seating area in a restaurant.
4. As is the case in the real life Sohos, buildings should generally be constructed right next to each other. Some gaps between front faces of buildings are acceptable for access alleyways, but no more than 4 on any block, and no more than 2 on one side of a block. Walls between buildings should not have any windows, even when they rise above adjacent buildings.
5. While the front facings of streets should be dense, most blocks should have some sort of courtyard or other open space in the centre. This is to allow sunlight to get to more rooms in each building, and provide some outside space for residents.

Kowloon Bay

Based on the Isle of Dogs in London, Queen's Quay in Toronto, Barangaroo in Sydney and other rejuvenated docklands. Builds in this area should be mostly modern and a select few older buildings, such as converted industrial facilities, with a focus on the waterfront. This area will be made up of former docks and canals. Builds should be primarily retail and residential, with marinas spaced throughout.

Carnaby

Carnaby is considered complete - no changes to be made without express permission.

United Nations (UN)

The United Nations district is a special administrative area of Monarch, dedicated to recognising and including the diverse backgrounds of all the players of the world that contribute to Project City Build. The area includes the UN complex, international flag display and waterfront promenade.