1. **Infrastructure (4)**

**Epic 2:** As a player I want to build infrastructure, so that I can improve my faction’s resource health

2.1 - As a player, I want to build and level up/create chains of a troop production building, so that I can recruit different categories of soldiers. (MEDIUM) SP: 5

* Can only build building in friendly province, if no other building is in progress for that province
* Base level troop production building requires X gold. If the required amount of gold is not available, the build request will be rejected.
* Building a higher level building will require Y > X gold, which will increase the higher the chain of the building. If the required amount of gold is not available, the build request will be rejected.
* Building a higher level of the troop production building will replace the previous building in the chain
* Soldiers will require chain level: heavy infantry = ?, spearmen = ?, missile infantry = ?, melee cavalry = ?, horse archers =?, elephants = ?, chariots = ?, and artillery = ?
* If the province with the building is conquered whilst constructing the building, construction of the building ceases with no refunds to the player who paid for building construction
* Scalar wealth and before-tax rate growth increases are only added when a building is built

2.2 - As a player, I want to build and upgrade wealth generation buildings, to add scalar value of wealth to the region and reduce the various faction costs (MEDIUM) SP: 5

* Can only build buildings in friendly provinces, if no other building is in progress for that province. Ports can only be built in provinces bordering the sea
* Constructing a building requires X gold. If the required amount of gold is not available, the build request will be rejected.
* Building a higher level building will require Y > X gold, which will increase the higher the chain of the building
* If the province with the building is conquered whilst constructing the building, construction of the building ceases with no refunds to the player who paid for building construction
* Higher level buildings will have greater effects to scalar value of wealth added to region as well as that building’s respective percentage savings/growth rate
* Scalar wealth and before-tax rate growth increases are only added when a building is built not when under construction
* Effects of multiple markets and mines will be applied in a multiplicative fashion.
* Markets reduce construction costs by a greater percentage across the faction
* Farms increase the percentage rate at which troops are produced in a turn for the province it is in
* Ports increase the before-tax rate growth of the sea region province
* Mines reduce the cost of all soldiers in the province by a given percentage
* Building reduction time of 1 turn will only be applied when a mine is at its highest level. This will be applied to all buildings in a faction. However, the minimum number of turns to build a building will not drop below 1. Can be applied multiple times with multiple mines at the highest level.

2.3 - As a player, I want to be able to build walls, so that I can further defend the province against enemy attacks. (LOW)

SP: 5

* Can only build walls in friendly province, if no other building is in progress for that province
* Building a wall requires X gold. If the required amount of gold is not available, a build request will be rejected.
* Building a higher level wall will require Y > X gold, which will increase the higher the chain of the wall. If the required amount of gold is not available, a build request will be rejected.
* Building a higher level of the wall will replace the previous wall in the chain
* Walls have a random chance of inflicting damage on invading troops only if the walls are archer or ballista towers
* Only towers have infinite morale, and can only take damage from artillery
* Only towers type walls are instantly repaired after a battle at no cost
* Scalar wealth and before-tax rate growth increases are only added when the wall is built
* Walls will multiply melee defence of all troops by 2 when guarding a province against enemy units except for artillery units. Enemy missile damage of archers is reduced by 50%. Minimum reduction of missile damage is 1. Further missile attack damage of attacking horse archers changes to 1.

2.4 - As a player, I want to be able to build smiths, so that I can provide battle bonuses to the troops produced in the smith’s region. (LOW)

SP: 5

* Can only build smiths in friendly province, if no other building is in progress for that province
* Building a smith requires X gold. If the required amount of gold is not available, a build request will be rejected.
* Building a higher level smith will require Y > X gold, which will increase the higher the chain of the smith. If the required amount of gold is not available, a build request will be rejected.
* Building a higher level of the smith will replace the previous smith in the chain
* Scalar bonuses will precede multiplicative bonuses for units after receiving armour
* Such bonuses can stack with one upgrade in each of the following upgrade section
* Upgraded helmets reduce enemy unit attack damage 1. Minimum enemy damage will be 1
* Upgraded armour suit will reduce enemy ranged and melee damage by 50%. Minimum enemy damage will be 1. The speed of the soldiers will decrease by 20%
* Upgraded weapon, increases attack by 20% and morale by 10% of the welding unit
* Fire arrows are specific to archers. This upgrade reduces morale of enemy soldiers by 20%, however 10% of missile attack damage is reduced. Minimum missile damage will be 1