p.464, 24:1a) -- In the Chou-li, the official called the Chang-ku(掌固) was in charge of the construction and making strong of walls, (cheng-kuo城郭、moats, the digging of ditches, planting of trees, and digging of ditches, and he assigned the maintenance of these places to the sons of officials (Pyongyang, 4, p.250, sa sọja士庶子) and the common people (chungs庶) (note: Cheng Hsūan(鄭胡) says:...the chungs are the people who take turns defending them)(end note). (The Chang-ku) provides their equipment (note: such things as weapons and armor) end note) and divides up property (materiel) and provides equally in an equal fashion for their food (and necessities); he employs all the people and utilizes their goods and utensils. (note:...the materiel and utensils of the people are what are used to dig moats (壕), construct walls and fences)(end note)

Indented section: Liu Yi(劉彝) said: The Book of Changes says: "Walls (sòng 壁) are made from the earth dug out from the moats.(障) And kuo(郭) are made from the earth dug out from ditches (ponds 池). If the moats and ditches are deep on the outside, then the walls and ramparts are strong on the inside, and you use the depth in order to increase the height.

-2- The Ssu-hsien(司傅) official in charge of the maps of the 9 chou (entire country) so that one can know about the places that can be used for defense (because they are precipitous) in the mountains, forests, rivers and marshes. (note: These are the defensive places that protect the country. If they are located in the feudatories (kuo国), they are called ku(國); if they are in the ye(野) fields, they are called hsien(縣). The Chang-ku(掌固) is in charge of building walls and digging moats, planting trees, and digging ditches in the kuo(國), and in all cases these are based in the kuo. The Ssu-hsien know about all the strategic places in the mts., forests, rivers and marshes, and all of these are found in the fields (野)(end note).
Chang Nan-hsien says: "When you divide up the people, you do not use boundaries to do it (城民不以封疆), and when you strengthen the state's defenses you do not use mountains and valleys to do it (固國不以山谿). And when you overawe the world (威天下不以兵革), you do not use military force to do it."

The kings of former times in their systems of establishing boundaries (feng-ch'iang 封疆), these are described in great detail in the Chou-kuan (Chou-li). The way in which they established defensive forts in strategic areas (söihom 設險) to defend the country and provided good weapons (to the soldiers) are both described in the Book of Changes. What kind of thing was this?

In general the kings of former times shared their worries over good fortune and bad fortune with the people, and in terms of government both with regard to fundamentals and utility (t'í-yung 體用) they made preparation with respect to both what was basic and what was peripheral. If they could hold up the way (act in moral fashion) in terms of their own selves, they were then able to unify (apply it uniformly) to the minds of (all people) in the world. And yet they very detailed in their enactment of laws and institutions, which was also because they were concerned about (the people) of all the world. This was the reason their rule lasted for such a long time in security and strength. What Mencius has to say about this is an extension of the basic problem, and that is all.

In the Ta-ya (大雅) section of the Shih-ching (Book of Poetry) at the end of the Han I (韓奕) subsection, it states: "Great were the walls of Han 韓奕; the armies of Yen 完) completed them. Our former ancestor (progenitor) received the mandate and (pacified?) the 100 southern barbarian (tribes)? (因是百蠻). The king granted the title of marquis to Han (to rule over) the states of Ch'u and Maek.
walls and moats -3- pyŏngje hurok kosŏl

p.464, 24:2a) Also (the king gave him) the northern countries and in accordance with his command as earl (p'o), he built strong walls, dug deep moats, cultivated the land well, and collected full taxes. (寶塲,寶堅,寶御,實籍). And they also presented (as tribute to him) the skins and furs of the bear, the red leopard (tiger) and the yellow bear."

(note: Chu Hsi says: ... Han was the name of a state, and since (its ruler) was given the title of marquis, they were the descendants of King Wu. Yen was the state of Duke Shao (召公). "Shih" (師) means "chung(家)". Ch'u and Me (夷猶) are the states of the eastern and northern barbarians (夷狄). (塲) means sŏng(城). (池) means moat (池), chŏk(籍) means to tax (稅)...)(end note)

Indented section: Chu Hsi says: At the time when the state of Han was first enfoeﬀed, Duke Shao (召公) was the Ssu-kung (司空). The king ordered him to have the masses of people construct this wall. This was like such cases of Earl Shao (召伯) managing She (訾), Shan P'ŭ (山甫) building walls in Ch'i (齊), the feudal lords of the Spring and Autumn period building walls in (邢) and Ch'ŭ-chiu (楚丘). The king, because the Marquis of Han's ancestor had (pacified) the hundred southern barbarians and ruled over them as chief, gave him the state of Ch'ŭ and Me and made him an earl so that he would build walls and moats and cultivate the land and make correct the taxes and laws and offer as tribute what he possessed to the king.

Lî Tung-lai (呂氏東萊) said: In the Spring and Autumn period the construction of walls in (邢), in Ch'ŭ-chiu (楚丘), in Yuan-ling (產陵) and in (杞) were cases where they gathered together all the feudal lords to do it. Since the orders of the hegemons were like this, then at the height of the Chou dynasty, when they ordered Yen to build walls and Han to build strong (walls), these were standard administrative practices.
walls and moats

I (Yu) note that the Marquisates of ancient times are equivalent to the kun-mp (kun: districts) of the present time, and the construction of walls was a great task. The people of one kuo (feudatory, state) was not sufficient to build them by themselves, so it was necessary for the (king's) court to issue orders to neighboring states to combine forces to do the job. Generally speaking, the defense of walls and outer walls (ch'eng, kuo 城郭) was not only the task of one territory (fang 邦); in fact this matter was connected to the (king's) court.

The springmaimianxán xán springmaimianxán X'un-ch'iu shuo (阳关, 4, p.400, Sung dynasty commentary by Hung Tz'u-ch'i) states: In ancient times 1 tu (堵) consisted of 5 p'an (板) (note: 8 feet made a p'an) (end note). And 5 tu made a ch'ii (短) (note: 200 feet). 100 ch'ii made a ch'eng (城: wall) (note: 20,000 feet). 6 feet made a pace (po 步), 300 paces made a li (里). In circumference it was 11 li, 33 paces 2 feet. 100 ch'ii was the system of the kung-hou (dukes and marquises) (end note).

The Son of Heaven had 1,000 ch'ii (雉) (note: in general he received 10 ch'eng walls of 100 ch'ii each) (end note). The Dukes and Marquises had 100 ch'ii; the earls had 70 ch'ii (note: in circumference over 7 li) (end note). The viscounts and barons 50 ch'ii (in circ. more than 5 li) (end note).

(indent: I note that this system held that the chi-nei (畿内) area of the Son of Heaven was 1,000 li square; that of the dukes and marquises was 100 li square; that of the earls 70 li, and that of the viscounts and barons, 50 li.

In the K'ao-kung-chi (考工記) (chapter of the Chou-li) it says that the chang-jen (百人) built a capital (ying-kuo) that was 9 li square (note: They built a capital (chien-pang) and calculated the size of the walls of the kuo. The so Commentary
p.465, 24:3a) says that the walls of the Son of Heaven were 12 li square (end note)

indented: Ch'eng Hsüan said: The walls of dukes were 9 li square (in circumference, 36 li). The walls of the marquises and earls were 7 li square (28 li in circ.); the walls of the viscounts and barons were 5 li square (20 li in circ.)

double indent: I note that this is a description of the Chou system. The territory of the dukes was 500 li square; that of the marquises was 400 li square; that of the earls, 300 li square; the viscounts that of the marquises 200 li square, and that of the barons, 100 li square.

- In the Spring and Autumn annals, in the 9th year of Yin-kung (Duke Yin), in the summer they built walls (ch'eng) in the (territory) of the lang.

indented: The Hu-shih ch'ian (Trim. Ch') says: The ch'eng (walled forts) were places used to defend against enemy invasion and protect the people, and there was a system to the ch'eng walls and proper times for conducting labor service (to build them). The walls of a large capital (ta-tu) could not be larger than 1/3 the size of a capital wall (kuo), and the wall of an i would not be more than 100 ch'i. The construction (began) when the Dragon star was first seen (in the 9th month); in the beginning of the 10th month when fire star first appeared, they prepared the implements to be used; in the middle of the 10th month when the water star was "dark and correct" (昏正), they set up the planks for the wall, and when the sun reached its limit in the south in the 11th month, the work was completed. This was the time (set aside for construction). Duke Yin built his walls (forts) in Chung-chiu and in Lang, and both were built during the summer so that it interfered with agricultural work and was not done at the proper time. The height of the walls should not exceed limits and the construction should not be done at the wrong time (season).
Also you ought to divide up the materials equally and make the walls even, and in setting regulations for the construction, the earth, the distance, the base of the walls, the thickness, the deepness of the moats, the provision of food, the yu-ssu (officials in charge) should calculate the amount of work and see that there are no delays, and only then can it be done right. How much worse is it if you miss the right time for building or make an error (in the dimensions) and arbitrarily undertake a big construction project with considering the needs of the people; one can see how serious a crime this is.

(In the Spring and Autumn Annals) in the 2nd year of Duke Yang Jang (襄公) they built a wall in Hu-lu (虎牢).

The Hu-shih-chüan (Han An-kuo) states: Hu-lu was in the territory of Ch'eng (鄭), in ancient times it was called chih-i (制邑). In Han times it was called Ch'eng-ku (成皋), and at the present time it is Sasuhyóng (汜水県). It is known throughout the world for its steep cliffs. It is like (a number of other places in other ancient states, listed here), and for this reason it has places that must be used for defense and its walls must be defended and not abandoned. If you have such a steep place as this but are not able to defend it, it cannot be under Ch'eng's jurisdiction. However, to build walls in strategic places is an important matter. The term t'ien-hsien (天險) refers to places that cannot be climed. Ti-hsien (地險) are hilly areas in the mountains and rivers of the land. The great book of Changes instructs us that the kings and dukes should build (walls) in steep places in order to defend their countries (territories, kuo). Even a princely man (chün-tzu) must be careful that walls and moats are made strong.

And Mencius instructs that you should dig moats and build walls and share their defense with the common people.
walls and moats -7- pyŏngje hurok kosŏl

But ambitious men think of ways to expand their territory (open up their boundaries) and compete for territory so that the bodies of those killed in fighting fill up the fields, and they compete for ch'eng (walled towns) so that the bodies of the dead fill up the walled towns. This is definitely not what the Spring and Autumn annals regards as precious (great). (夫狡焉思僣封疆而爭地以戰殺人盈野，)

Those who defend the land of the Son of Heaven and continue the line of the forefathers, if they cannot build forts in the steep places to defend the country, they will be chased out or destroyed; these men, too are not those with whom sages would associate (this is not what the sages have taught).

--- the Tso-ch'uan says: Generally with regard to construction work, only when the Dragon star appears in the Heavens do you then send out admonitions (to start) the work. (note... says that this indicates the wintertime, when the people have left off their cultivation) And when the fire star appears in the heavens, then do you prepare the equipment (note...) And when the water star is at , then you cut the wood to make planks (10th month...), and when the sun reaches its height, do you finish the work (note...)

--- In the 32nd year, in the winter of Duke Shao, Shih Mi-mo? ordered (a wall) built in the state of Chou (note: this guy was a ta-fu in the state of Chin; he managed the construction of the wall at Lo-i in the state of Chou) He calculated the dimensions of the wall...its height and thickness, the depth of the moat, the place where the construction was to take place, the distance from which the workers were to be brought, and how much time it would take to do the job, and how many men it would require, and how much materiel, and recorded the amount of food and provisions needed, and he ordered the feudal lords to join in the work and made them responsible for obtaining workers and give the places to build walls. He wrote this out and gave it to the chief
p.466, 24:5a) officials of the lords (note...) And he gave it to Liu-tzu (劉 子) (note: He sent the correct method (plan) to the ching-shih (minister) of the Chou state, Liu Wen-kung (劉文公) (end note). And Han Chien-tzu (韓見子) went to take charge of the work in order to carry out the orders. (Han Chien-tzu was the ta-fu of the state of Chin. Because he did not trust that the work was done, he himself went to see the work and to command the feudal lords) (end note)

--- In the (state of Lu), in the 11th year of Hsüan-kung (Duke Hsüan), Wi Ae (萬巖) the Ling-yin (令尹) of the state of Ch'ü went out to conduct the (winter?) hunt (Wi Ae was Sun Shu-o? 孫叔敖). He built a wall at ki (箇: an i in Ch'ü) and he made the enfeoffed people there give thought to (planning the) work (note...) He appointed them to the post of Ssu-tu (師(大)) (note: means superintendnet of labor or construction), and he calculated how much work had to be done and the time required (note...) and divided up materiel and tools (note...) and set regulations or limits on the materials to be used in the construction, determined how far the workers would have to come from (...), determined the site of construction (and how wide it would be), prepared food for the workers, determined the officials in charge. And the work was completed in 3 weeks (of 10 days) (note: took about 30 days to complete) and the work did not exceed the original deadline (note...The Tso-chuan is saying that Sun really was able to use men for work) (end note)

24:5b) --- Kao-tzu of the Han dynasty in the 10th month of his 6th year (201 BC) ordered walls built at the hsien district towns throughout the empire.

Mr. LI (李) says: Ch'in Shih-huang ti combined all the feudal lords and destroyed their walls (ch'eng and kuo). Then Kao-tzu pacified the empire and ordered walls to be built in the hsien towns. One can see from this which of the two was broader in thought (foresight) and which of the two (dynasties) would last the longest.

(indented note; Chiu Chün (of Ming) said: Whether the district towns are
large or small or whether the number of people is large or small, in all cases none of them can be without protection. And the means by which this protection is afforded against enemy attacks, is it not walls? Ch'in shih-huang-ti regarded the officials and people of the empire as if they were the enemy and was only afraid that defensive preparations might become the means of launching an attack on him. Kao-tsu, on the other hand, regarded the officials and people of the empire as one family and was only afraid that they might not have places in which to defend themselves against the enemy, and was afraid that perhaps he might have to attend the funeral of people who had lost their lives. This spirit marks the difference between public and private (spirit) and is the dividing point between the preservation and loss (of a kingdom). (end note)

In the 2nd year of the hsien-te period of Shih-tsung of the Chou (955) and edict was issued ordering the expansion of walled towns markers in the provinces. At first milestones and banners were to be put up to await the coming winter season when there would be slack time from agriculture, when the planks would be put up and construction begun in the eastern portion. Then the work was suspended and they waited for the next year to gradually complete it. It was also ordered that all burials would take place 7 li outside the markers, and inside the markers the hsien magistrate divided the territory to be streets (of the city) and marketplaces and shops, and the people were allowed to build their homes outside these areas at their will.

I note that this act of Shih-tsung's can be regarded as a system used in later ages to expand walls and moats. The construction was done gradually and in such a manner so that the people would not be worn out, and in terms of using their labor, they were informed in advance, and knew what they could avoid and what they had to do. All construction was done according to these standards, and they became methods not just for expanding the construction of walls.