A Study on House Lifting by Jacking

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Abstract: This project gives knowledge on the advancement of structures. Lifting a structure is to raise a structure above its existing foundation and build a new foundation. House lifting projects are common along the east United States coast, especially in the wake of a natural disaster such as a hurricane. This is to raise the house to the required flood protection height [FPE]. House lifting can also be done to add a new first story or to expand the basement [including "excavation service".By lifting your home, add value and usable space to your home, and avoid future damage.

If your house is below street level and the sewer flows regularly, rehab is not the best solution. With today's technology you can easily raise the level of your home. And it is also without any accidents. It's time to save money and live in the same house you used to live in. More specifically, houses placed in inland areas often face a bigger problem. This problem never ends during the cloudburst seasons when there is deep rainfall and heavy flooding into the lowlands. Now the rise and fall of the earlier tides will exacerbate the problems for such houses, with the incessant rains exacerbating the problem. As a result, there is a solution to this problem and it becomes house lifting. Masonry houses are very difficult to lift, mainly due to their design, construction and weight, but it is possible to lift these houses. Lifting the use of the building is less than rebuilding the building.

There are a lot to lift the house. There are a few steps we need to follow before lifting any structure and they are crucial to any home moving project. There are some companies that lift houses, buildings… etc. of small irrigation projects, they use different materials to lift houses. Lifting the use of the building is less than rebuilding the building. Lifting of building is cheaper than the reconstruction of the building

KEYWORDS: buildings, weight lifter (jock technology), downstream areas and flood zone areas.

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INTRODUCTION

This method was first introduced in Philadelphia, Pennsylvania in 1799 with the intention of moving the building. London's famous monumental arch, built in 1847, is the gateway to the first newly rebuilt Buckingham Palace. It was found narrow to the state coach and in 1851 was moved to the present Hyde Park. And to solve this kind of problem at East Godavari (dist.), Anaparthi in our state on July 1, 2019

Building a house is one of the greatest assets that anyone can have and it is a very tricky and difficult task to build one's dream home. Building a house is very complex and puts us through a lot of problems and responsibilities; Construction planning is such a complex task that if you are building a dream home, you need to consider several factors to build a safe and secure home that will be tall in the years to come.

Reconstruction will take more time and equipment. This is not possible for everyone. People have an emotional attachment to their buildings. With this scientific technology, this project has helped a lot of people. By choosing this cheap and effective method, they have saved millions of rupees and their precious time.

Citizens today face various problems such as lowering of road levels and entry into sewage during rains. Rainwater enters the house directly and destroys the property while shopping and creates great frustration. If your house is lower than the road level and you have no clue how to raise its level without rebuilding it.

It specializes in lifting and changing houses without any damage and raising their level with the help of a jack.

HISTORY

Constructing foundations is one of the oldest of human activities. Foundations provide support for structures by transferring their load to layers of soil or rock beneath them. Over 12,000 years ago, Neolithic inhabitants of Switzerland built houses on long, wooden piles that were driven into the soft beds of shallow lakes, keeping people high up above dangerous animals and hostile neighbors. A few thousand years later, the Babylonians raised their monuments on mats made from reed, and the ancient Egyptians supported the pyramids on stone blocks which rested on the bedrock. It was in ancient Rome that foundation engineering really leapt forwards, with rules created and concrete used. In the first of a series of posts that chart the history of modern building elements in the UK, we look at how foundation engineering has changed over the past century

Fig: rise of house in olden days

NEED FOR THE STUDY

Many people still live in the backward area. House lifting is the best technique in this case. So, the reasons to lift the house to prevent water loss are to fix the already damaged foundation with water loss or to build an extra floor. Lifting a house is a challenging project that requires precise skill, measurements, manpower and equipment. Although there are many reasons why we have to lift a house, the main reasons are generally maintaining the road level and the house level should be the same so that we can keep our house dry and protect it from erosion and water damage.

NECESSITY

When the road level is raised above the building level, this technique is used to lift buildings. Many mistakes were made during the construction of a house or building. The employer thinks many times to correct the mistakes made, but it took a lot of money and time. Previously unresolved. But now the solution here is the building lifting technique. There is a solution to this problem and it becomes house lifting. If your house is below street level and the sewer flows regularly, rehab is not the best solution

SCOPE

Building a house is one of the greatest assets that anyone can have and it is a very tricky and difficult task to build one's dream home. Building a house is very complex and puts us through a lot of problems and responsibilities; Construction planning is such a

complex task that if you are building a dream home, you need to consider several factors to build the tallest safe and secure home in the coming years. Reconstruction will take more time and equipment. This is not possible for everyone. Also, people have an emotional attachment to their buildings. Citizens today face various problems such as lowering of road levels and entry into sewage during rains. House lifting is the best and most effective technique for this problem. This significantly reduces the risk of flooding to the home and its contents. It does not require additional land for the work process. It can reduce loss of life, economy and environment.

PROCESS LIFTING OF HOUSE:

Explains that all the processes for this project will take place for this stage.

1. Assess the existing foundation to see if it will support an extended home.
2. Disable utility services and disconnect utility lines.
3. Dig around the foundation to install a network of lifting beams.
4. Raise the house with jacks.
5. Opening for flood water.
6. Extend the foundation wall to the desired height.
7. Removal of jack and back filling.
8. Reconnect floor termination and utility services.

6.1. Assess the existing foundation to see if it will support an extended home:

A survey of the residential building should be done before starting the house lifting process. It is important to study the existing foundation and weak members and members of the building, which require support before the lift.

6.2. Disable utility services and disconnect utility lines:

Before starting to lift the building, it is very necessary to disconnect the equipment such as electricity, gas connection, drainage connection in the building and to ensure uninterrupted work and safety of the working people.

Fig: Remove of utility items

6.3. Dig around the foundation to install a network of lifting beams:

Support is provided to vulnerable members to prevent members from falling during the lifting process as safety precautions to ensure the safety of the building and workers. First excavation is done for the application of jacks near the walls; the jacks are applied under the ground beam or with the support of steel beams.

Fig: Remove of soil under the foundation

6.4. Raise the house with jacks:

Jacks are applied to the excavation site and jacks are applied and the house is lifted by jacking the jacks at once. The jacks are removed and the horizontal brick masonry contributes to the lifting of the building.

Fig: Raise house with jacks

6.5. Opening for flood water:

An important part of the project is to install openings in the foundation walls, not higher than 1 foot above the ground, so that flood waters can enter and equalize internal and external hydrostatic pressures. We can create these openings by partially filling the I-beam holes.

6.6. Extend the foundation wall to the desired height:

Brick masonry must serve as the foundation of the building, which will support the entire building and eventually increase the height of the building.

Fig: Rise of house

6.7 Removal of jack and back filling:

Once the brick masonry is finished the jacks are removed and can continue or bear the load of the building. The foundation area of the building is covered with pebbles. The backfilling of the sand should be well compacted to support the floor load of the building.

Fig: Remove of jack

6.8 Reconnect floor termination and utility services:

Flooring is done after filling the compact soil. Supply connections will be connected once the flooring is complete. After the house is lifted the cracks are filled with cement grouting.

Advantages of House Lifting

1. When your house is below the level of the road, it can be easily lifted and replaced without any damage and their level can be raised at once with the help of jacks.
2. Through house lifting technology, the building is protected from all kinds of natural disasters.
3. Indirectly saves construction materials that help the natural resources of the environment.
4. Stay at your current facility. Rehabilitation is not required.
5. Improve the market potential of existing industrial buildings. House lifting technologies are cheap and effective and save millions of rupees and valuable time.
6. New construction of any building takes time, so it can be used to work faster.

CONCLUSION

Finally, the house is raised by using hydraulic jacks without any damage to the structure. Then the level of the house will be higher than the level of the street. It is therefore safe against future floods. House lifting technologies are cheap and effective and save millions of rupees and valuable time. A team of certified professionals who know how to use the equipment and have experience in managing such a project will complete the house lifting work. Construction by the house lifting method is less than the conventional construction method and saves time. Therefore, it is preferred to use house lifting method to repair and enhance the foundation. Height for residential building. This method also helps to save a construction material which indirectly helps in conserving the natural resources of the environment.

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