

Research on construction Technology of subgrade pavement of Urban Road and bridge engineering

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Abstract: in a modern city with traffic in all directions , Subgrade Construction is not only the premise and foundation of Urban Road engineering construction , It also affects the entire road project in this city quality , and then the big say , Road as a city essential infrastructure , its shield will affect the development of the whole city . even affects the development of our overall economy . other , city City Road construction rigor and the technical level of construction greatly affect the robustness and stability of urban road Subgrade Road . so that when the city roads can be successfully developed , , and also for the majority of people's daily life to bring convenience under the conditions , requires that we have a very high requirement for the roadbed of the city Road . in this article , main City Road Road The construction techniques for the base are analyzed and discussed , On this basis, also proposed some related needs to improve the place and suggestions , hope to be able to the next urban road construction a little bit of power , the lets city roads be improved and developed .

Keywords: City Roads ; Road Surface ; Construction Technology ; Research

1. Introduction

Road Construction for a city road to be carried out smoothly and with high road quality , that's bound to be his road. The roadbed has a very high requirement . Subgrade as the foundation of Urban Road construction , The relationship between the construction quality of the whole road engineering system and the stability of the municipal engineering structure . with our country now generation of processes _ step faster , on the whole the quality of road roadbed construction is also improved , to ensure that the entire city's road traffic network is The big requirements for the entire city's modernization process .

1.1 Necessity of Urban road Subgrade Road construction

Urban Road Subgrade is the basic work of urban roads , is equivalent to the foundation of the house , wants the house to be strong , does not collapse , The foundation is deterministic effect , subgrade same reason , He sustains the entire city road daily ultrahigh pressure , So not only provides a for road stability after completion A certain amount of protection , Better to achieve the goal of urban road construction laid a solid foundation . in order to achieve these goals better, you need to be able to strengthen and improve the construction technology of the road surface with the . , to guarantee the construction quality of the Roadbed Road Foundation for the quality of the whole city road barrier . If the quality of road construction across the city is poor , Will affect people's daily life and safe travel to a certain ex-

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tent . , bad condition verymuch to potentially cause significant traffic accidents . These things will not only affect the normal use of urban roads , also shorten the duration of road use and bring the foundation to water sinking , For the city's road construction system to bring great obstacles .

to ensure effective improvement of construction quality of urban road Subgrade Roads , and better adapted to modern urban construction , requires that we to club the original technology better in line with the Times , introduce new theory and new technology . in addition to , We also have to enforce on the road Construction Technology in process , key construction objects and key construction links for detailed confirmation and protection , So it can be road Subgrade road construction The problems that occur during Setup can be resolved effectively .

2. problems existing in the construction of urban road Subgrade roads

typically , due to factors such as natural environment and improper construction process , A few parties will appear in the construction of Urban road subgrade. problems with the face .

2.1 problems with soft soil subgrade

In the course of construction of road Subgrade roads , because of regional differences , and the impact of the physical geography environment , Comparison of surface soil in some areas lax , so the ground often cracks and collapses . , and this soil is less capable of external forces , If you have an external force on it , and will jingxing some degree of contraction , so he's very low on the load of external forces . . Therefore, the problem of encountering this kind of soft roadbed in engineering will give a great obstacle to the the construction. . So in order to ensure smooth road works , We must take effective solutions to the problems of soft soil foundation so that the construction quality of the road is as consistent as possible with the engineering standards , In order to better serve the common People's Daily travel , to further enable theUrban Road construction and the modernization of the city goes Hand-in-hand .

2.2 problems with slope land base

as described above , is also the result of terrain and the effects of natural weather , The foundation of the slope soil is very susceptible to heavy rain. brushes affect , andto some extent cause instability in the foundation , So when this happens , , To ensure that the project works as smoothly as the

Construction Technology Period Completion , the must take appropriate action to remedy the . on the other hand , based on special construction conditions and terrain , in construction of Roadbed road will have a certain gradient , This forms a slope soil , Only in this way will not let the straight slope under the influence of gravity so that the roadbed road subsidence problem , Although this avoids the effects of gravitational force . , But sometimes some areas may have a sliding slope. , which in turn causes a great deal for the road security vulnerabilities . so , Only the problems that arise in the slope land base can be reasonably resolved on the basis of the , to better serve the road worker The quality of process construction goes hand in hand with modern city construction .

2.3 Settlement of roadbed

to achieve effective avoidance of road subgrade settlement problems , so , During construction , Construction units and staff must be strict To comply with national standards of Construction Code of conduct construction , This is the only way to avoid a delay due to unexpected problems . the case based on an unexpected event differs from the first two questions , The first two can be done in the construction process to do the corresponding measures can be avoided , and unexpected problems are unpredictable , In the professional troubleshooting is also likely to cause the omission of the . so , in the construction process strictly in accordance with the requirements of the country Construction Specifications for construction are extremely important ..

3. measures to solve problems in construction of urban road Subgrade roads

3.1 do a field survey

to ensure that unpredictable bursts occur during construction and other unnecessary problems , We must have some tools on the construction site Body conditions for detailed and truthful measurements , and annotate some key measurements in different colors , to ensure that during concrete construction , To get a more detailed representation of the , more convenient for builders to work for better , To some extent, it also benefits the planning of the middle line of the construction road , To The ensures a more accurate placement of the road during construction . other , for further assurance the construction process is accurate. , on the drawing test After the volume is plotted, be sure to perform strict auditing and proofreading , Once you find deviations or errors, you must troubleshoot , and to make further adjustments .

3.2 Fill and excavation work on road Subgrade roads

In General, it is necessary to backfill the ground using the original natural soil . , and the natural soil must be detected before backfilling , to ensure that the various metrics of the natural map can be used to meet the construction standard of the roadbed road . also pay attention to the number of backfill , use multiple backfill as many times as possible to tamp .

in the excavation of the roadbed , The first thing to notice is his depth , to ensure that the roadbed cannot be lower than the actual base height . on the basis of the seepage work , to accurately calculate and set the gutter in advance , to avoid unnecessary security risks . Another is the subgrade earthwork the excavation , must do a layered operation , Relative excavation operation method should be adopted for specific terrain environment , Avoid large number of , Batch operation .

3.3 do a good job of subgrade drainage

do a good job of subgrade drainage , The also mentions the above , now in detail . based on roadbed strength extremely susceptible to water flow , to effectively avoid a cut the safety hazard caused by the flow problem, which seriously affects the quality of urban road subgrade pavement , So in the construction process to do the row of the roadbed the water problem is very important . Specific measures for subgrade drainage include the following . One is the use of the pump to implement the related trench operation , enter drain work , This allows the flow to be discharged in large areas . two Set Rapids slot , So as to achieve effective surface drainage purposes . three is using Mining silos or blind ditch to achieve drainage purposes , This is for groundwater in the roadbed , But this should be noted when mining with transparency implementation , for the purpose of ensuring drainage fluency .

4. Conclusion

Urban Road Traffic system and its quality and technical level directly affect the development of urban modernization in China , However, Urban road SubgradeRoads The construction quality of affects the quality of road works throughout the city , Therefore, to strengthen the construction quality of urban road SubgradeRoad , only better Services to People's daily lives , to better serve the city's economic development and serve the socialist modernization drive . i

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