

Construction of concrete drainage in KUMMUR village of KUMMUR GP

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ABSTRACT:

The district of Haveri is exactly in the centre of Karnataka with equidistant from all directions. **Haveri** is a town in Karnataka, India, It is the administrative headquarters of Haveri District.

The name **Haveri** is derived from the Kannada words *havu* and *keri*, which means place of snake. Haveri is famous for its *cardamom* garlands. It is said that Haveri had around 1000 maths (sacred religious places) in ancient days. One of the famous maths is Hukkeri Math.

Haveri is also famous for marketing Byadagi red chillies, which are well known all over India. Around 43 kilometers away, there is a place called Bada which is the birthplace of the poet Kanakadasa..

Keywords:- Haveri, Karnataka, India, snake, havu, keri, Maths, Hukkeri.

INTRODUCTION:

The district of Haveri is exactly in the centre of Karnataka with equidistant from all directions. **Haveri** is a town in Karnataka, India, It is the administrative headquarters of Haveri District.

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Haveri District has seven taluk places. BYADGI taluk is one among them. BYADGI taluk consists of 21 gram panchayaths, the geo coordinate of the KUMMUR are latitude 14.661729 and longitude 75.360405.

There are 11 members in the KUMMUR Gram Panchayat. Many of them are young and educated. Most of them are interested to listen the problems of the people and find out ways to solve them. They are strongly committed to redress the problems of the villagers. There are 1353 families in this Gram panchayat with a total population of 4753 out of which 1814 are women and 3739 are men. Most of them belong to Sadar lingavanta, kuruba muslims lingayats and many more communities. In that some people belonging to scheduled castes and scheduled tribes in the village.

Some of them are agriculturists and some depend upon casual labour for their livelihood and some of them working as Government servants and private employees. this Government servants and private employees category is not need to give attention for there stabilization . Moreover, we need to concentrate on poor labors , BPL families , Land less labors, SC ST Population and women. In this regard MGNREGA Help the Gram Panchayath Kummur To attend there problems by giving them 100 Man days un skilled work to the population what we mentioned above and earlier which makes them live stagnantly in there own habitat and prevent migration in very crucial draught condition. And also this told population get facilitated with

personal benefits such as cattle shed, Bore well recharge pits and so on. by this there HDI improved as it is major goal of the MGNREGA.

TOTAL NO OF JOB CARDS FAMILIES : 720

TOTAL NO OF SC JOB CARDS FAMILIES : 122

TOTAL NO OF ST JOB CARD FAMILIES : 177

TOTAL NO OF MINORITY JOB CARD FAMILIES : 6

who TOTAL NO OF OTHERS JOB CARD FAMILIES : 415

The people
attended the
Gram Sabha

meeting, the Employment Guarantee Scheme looked like a boon for them . The Gram Panchayat outlined the objective of the scheme and the opportunities open for the public in an open meeting. It gave a call to take the best advantage of the scheme. The officers also assured all help and support for this program which intended to help people.

The villagers, who always waited for a solution, could find an answer to their long standing question in Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). The seventh point in the priority of assignments under MGNREGA is construction of drainages under the title 'floods control and prevention'. Thanks to the officials, who oriented and directed the villagers to utilize the services of MGNREGA.

The villagers understood the importance of this Scheme and immediately got registered to initiate activities for the benefit of all. Further initiatives... The villagers immediately prepared an action plan for the construction of drainage and presented it in the Gram Sabha. The Gram Sabha approved this plan without any delay. The dwellers waited only for the rains to stop and then immediately they took up the **work and constructed concrete drainage** to find a solution for their long lasting problem. Like this, the Scheme, not only helped the villagers, but could also get the wages for the activities that they undertook for their personal benefits (**construction of drainages**).

In Gram sabha every works are being Approved And Implemented when the Workers demand the job. Around 15 Dwellers from 14 families struggled Hard for about a 04 months to help Themselves. As a result of this concrete Drainages are visible, which will Convert the rains into a bonus. The relaxation and happiness of the people

residing there, is un imaginable. The rainy Season can be enjoyed to the fullest now as the flowing Water is neither brining any uninvited guests nor disturbing the normal life. The children can walk to the schools and enjoy their childhood without any fear.

PROJECT AT A GLANCE

Name of the work	Construction of concrete drainage in GP
Work ID	1517001006/FP/93393042892012690
Technical no & Date	106/2015-16 Dt:03-05-2016
Administrative no & date	15/2015-16 Dt: 04-05-2016
Work order date	06-05-2016
Estimated amount	3.50.In lakhs
Wage Payment	2.08
Material payment	1.10
Mandays	1017

- The aged and the people with special needs express ‘it would have been better if this scheme was implemented earlier. We could survive for some more days. Whatever it may be, the children should be happy and comfortable’
- The vehicle drivers and owners say; ‘we can buy new vehicles now. The road is guaranteed now’.
- The members of Panchayath said ‘it is a good Scheme by the government. Officials should cooperate a little. They should look into the problems of the people. It will not be appropriate every time to talk about rules’.
- Surface profile is not critical with pervious concrete—you're not going to get any bird baths—and a typical specification will call for a maximum 3/8-inch deviation in 10 feet. “Flatness is more important for the bottom of the subbase than for the pavement,” Fisher points out. “The flatter the ground is, the more water the pavement and sub-base will hold. Even a 2% slope would allow the water to run out fairly quickly and defeat some of the purpose.” On sloping sites, the soil surface is sometimes terraced to help the system retain water. At a recent Atlanta parking lot project for the city library, PCI installed a 4000-cubic-foot “pond” within the subbase (a system of slotted and solid PVC pipe). The water stored within this system will be used for irrigation of the library's landscaping



Most people consider concrete to be impervious—after all, it's HHI used to make swimming pools and kitchen sinks. And most concrete is, indeed, nearly watertight. But a new kind of concrete that allows water to flow through virtually unimpeded is gaining popularity. Pervious concrete is being used mostly in the construction of parking lots, but also for sidewalks, bike paths, playgrounds, and erosion control. Pervious concrete pavement is not, however, suitable for areas subject to high traffic volumes or speeds.

Pervious concrete is a pretty simple material—typically pea gravel, portland cement, and water (heavy on the cement, light on the water, and no fine aggregate). A typical cubic yard of pervious concrete would have 2650 pounds of #89 gravel, 600 pounds of portland cement, and a water-cement ratio of about 0.30. This mix will provide a compressive strength of around 2500 psi and an effective void ratio of 20%. That will allow water to

drain into the base course at rates of 2 to 18 gallons per minute per square foot—275 to 400 inches of rain per hour—much more than you are ever likely to experience. n a jobsite, though, things are seldom that simple. Various admixtures are used based on the aggregate and environmental conditions. “We use air entraining agents, water reducers, some retarders, and sometimes a viscosity modifier,” says Dale Fisher, PCI Systems, Alpharetta, Ga., a contractor who specializes in pervious concrete pavements. “The mix design is everything. We often have to tweak it a bit in the field. We specify the concrete by unit weight, which tells us the void structure. We use 15% to 20% voids for parking lots. But on a recent bus stop, with heavier loads, we went to a higher unit weight and about 12% voids for higher strength.” Using a small amount of fines is a common way to increase compressive strength, but doing so will reduce the drainage rate. Often the fines are fly ash or slag cement. “We run unit weight tests because they tell us what's going on with the mix,” says Fisher. “If it's heavy, that can mean more fines, so we change the mix to keep it a little drier. If it's light, then we can pour it slightly wetter.”

Pervious concrete typically is produced in a ready-mix plant and delivered with mixer trucks, but it is not pumpable. Ohio Concrete, published by the Ohio Ready Mixed Concrete Association, sponsored a demonstration pervious pavement job recently that was installed by Ball Brothers Foundations, Monroe, Ohio. Moraine Materials provided the concrete. Ohio Concrete reports that, “For batching a maximum 8-cubic-yard load, they added air-entraining admixtures up front with half of the water, then the coarse aggregate, then the cement, and then the balance of the water.” T Pervious pavements have been used in Florida for many years, and Charger has gained a lot of experience. It noted that an important first consideration is the soil beneath the subbase—some may be unsuitable since the soil must be able to support the subbase, the pavement, and the loads that will be applied. Get a geo-technical engineer to evaluate the soil.

The first layer against the soil is typically a nonwoven geotextile fabric (one that drains easily). This is topped with a subbase constructed with a minimum of 6 inches of No. 57 stone, well-compacted so that it “will not be rutted by a fully-loaded ready-mix truck,” according to Charger's Web site.

The thickness of the pavement will vary according to its design load and how much water the pavement and subbase are expected to store, but 6 inches is a typical parking lot thickness. The contractor sets the screed rails or side forms, often shimming them during strike-off 1/2 to 3/4 inch higher than the final surface elevation to allow for compaction later with rollers.

his produced a successful mix. During a recent PCI project constructing a Safeway parking lot in Denver (see sidebar), one worker directed the chute and pushed the nearly zero-slump concrete down with his hand. Others moved the concrete into position with come-alongs. When a new truckload arrived, workers sprayed the 15-minute cold joint with water. Once the concrete was in place and roughly struck off, the surface was compacted and finished with a truss screed followed by a hand-operated steel pipe roller that was sprayed regularly with form release oil to prevent sticking. Finally, workers popped chalk lines and cut contraction joints at a standard spacing using a roller with a 1 1/2-inch fin. The edges were then tooled, and final troweling was completed.

Vibration is not effective for pervious concrete. “As vibration contacts normal concrete, it ‘melts,’ or sinks into a consolidated mass caused by both push and pull from the vibration energy,” says David Mitchell with Bunyan. “In perv, the energy delivered by vibration has only push and builds a crumbling mass rather than consolidating it. A roller screed* uses shear applied to the surface from the face of a spinning tube. This compresses the material, consolidating it as it advances over the surface. The spinning tube travels easily in both directions, enabling operators to seed [Durability in service](#)

There have been pervious installations that did not perform as expected due to lack of experience in the design, materials, or construction. If there are too many fines and too much water, the paste can settle out and form an impermeable layer at the bottom of the pavement. If the mix is too dry, it can be unworkable. If the contractor over-finishes the surface, an impermeable layer can form. If curing isn't done properly, the concrete won't gain strength. But all of these problems are easily overcome with experience.

Objections typically raised about pervious concrete in service are that it will be destroyed by freeze/thaw action or that it will clog with dirt. The National Ready Mixed Concrete Association (www.nrmca.org) has produced an excellent brochure on pervious that responds to these charges. The bottom line on freeze/thaw is that there have been many successful pervious pavements placed in cold climates. NRMCA states that these pavements “have two common design features—the cement paste is air-entrained and the pervious concrete is placed on 6 to 12 inches of drainable aggregate base.”

Plugging is also not really an issue, as long as soil isn't actually eroding onto the pavement surface. “Plugging shouldn't be a problem with a good pervious pavement,” says Fisher. “You can power wash and vacuum it if you need to, and that will restore 90% of the original drainage. If it won't drain, it's more likely that it's a bad pavement than that it's plugged.”

Pervious concrete pavement is on its way to a parking lot near you. “There aren't too many good pervious contractors out there right now,” says Fisher, “simply because they don't have the experience. It will come as more is placed. NRMCA is creating a craftsman certification for pervious that should help a lot.”

CONCLUSION:

The project is ongoing now. The rain water is flowing smoothly in the drainages. The soil is not eroded with the flow of water. The houses have become safe and secured destinations. The women, children, aged, people with special needs walk confidently. The vehicle riders can safely drive on... the roads. The nights are being enjoyed with dreams a prosperous future...

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