



Recommended Construction Material Sources for District Bagh

Sr.No	District	Sand sources		Coarse Aggregate Source		Stone for masonry		Clay deposits for Brick masonry		Stone soling of roads		Coarse Aggregate for Asphalt/premix used in roads	
		Local sources have marginal use (<2000psi strength)	out of district	Local	out of district	Local	Local	Local	out of district	Local	Local	Local	out of district
1		.....	Dulai river sand deposit (marginal use)	Bakot Nathia Gali road Sari locality (10km from Kohala)	Malal Bagla sandstone	Bhont Chowk sandstone	Local	Local	out of district	Local	Bhont Chowk sandstone	.....	Bakot Nathia Gali road Sari locality (10km from Kohala)
		
2		.....	.....	Khurshidabad limestone	Danah sandstone	Dull sandstone	Local	Local	Rawalpindi Peshawar	Danah sandstone	Dull sandstone	.....	Khurshidabad limestone
3		Lawrencepur / Qibla bandi sand deposit		Chaman Kot sandstone	Lasdana sandstone				Local	Local	
4	Bagh	.....	.....	Dolorite	Bees Bagle sandstone	Arja-nahl river gravel	Local	Local	Nil	Bees Bagle sandstone	Arja-nahl river gravel	.....	Dolorite
5		Barsala river sand deposit (marginal use)		Shujaabad sandstone	Dhal Qazian - Malwani Kas gravel				Local	Local	
6		.....	.....	Patrara sandstone	Patrara sandstone	.....	Local	Local	.....	Patrara sandstone	.....	.....	.....

Note:

- Sandstone of Murree Formation is widely distributed in Bagh, Dherkot and its adjoining area its characteristics may be correlated with approved sandstone quarries like Eran sandstone. It can be used with the consultation of Material Engineer or Geologist for mega projects.
- Ordinary Portland Cement (OPC) available in local market consist of 0.5 to 0.8% alkalies.
- To avoid the Alkali Silica Reaction OPC can be replaced with Pozolon, slag or low alkali cement which should meet the 10000psi strength (BS-12, ASTM C150).
- (i). Steel testing on each consignment is required to meet the ASTM 615A where for grade 40 steel required yield strength is 40,000psi and for grade 60 required yield strength is 60,000psi.
(ii) Chemical tests of the steel should meet the ASTM 706A.
- Other local quarries material should be evaluated as per ranges provided in Table 4.1
- Material of fine & coarse aggregate not fulfill the evaluation criteria mentioned in Table 4.1 should be treated as rejected.
- For more detail visit our website www.pndajk.gov.pk

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Rate Analysis Section



Minimum Required Parameters for Brick Selection

S.No.	Class Of Brick	Weight Of Brick (lbs) (Bone Dry)	Size Of Brick (inch X inch X inch)	Water Absorption Ratio	Strength Of Brick (psi)
1	1 st Class	7	9 X 4-1/2 X 3	1/6 th of its dry Weight	1200 to 1500
2	2 nd Class	7	9 X 4-1/2 X 3	1/4 th of its dry Weight	900 to 1200
3	3 rd Class	6.75	9 X 4-1/2 X 3	1/3 rd of its dry Weight	500 to 900
4	4 th Class	7.2	9 X 4-1/2 X 3	1/2.5 of its dry Weight	Less than 500

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Chief Rate Analysis 22/7/2011

Planning And Dev. Deptt

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