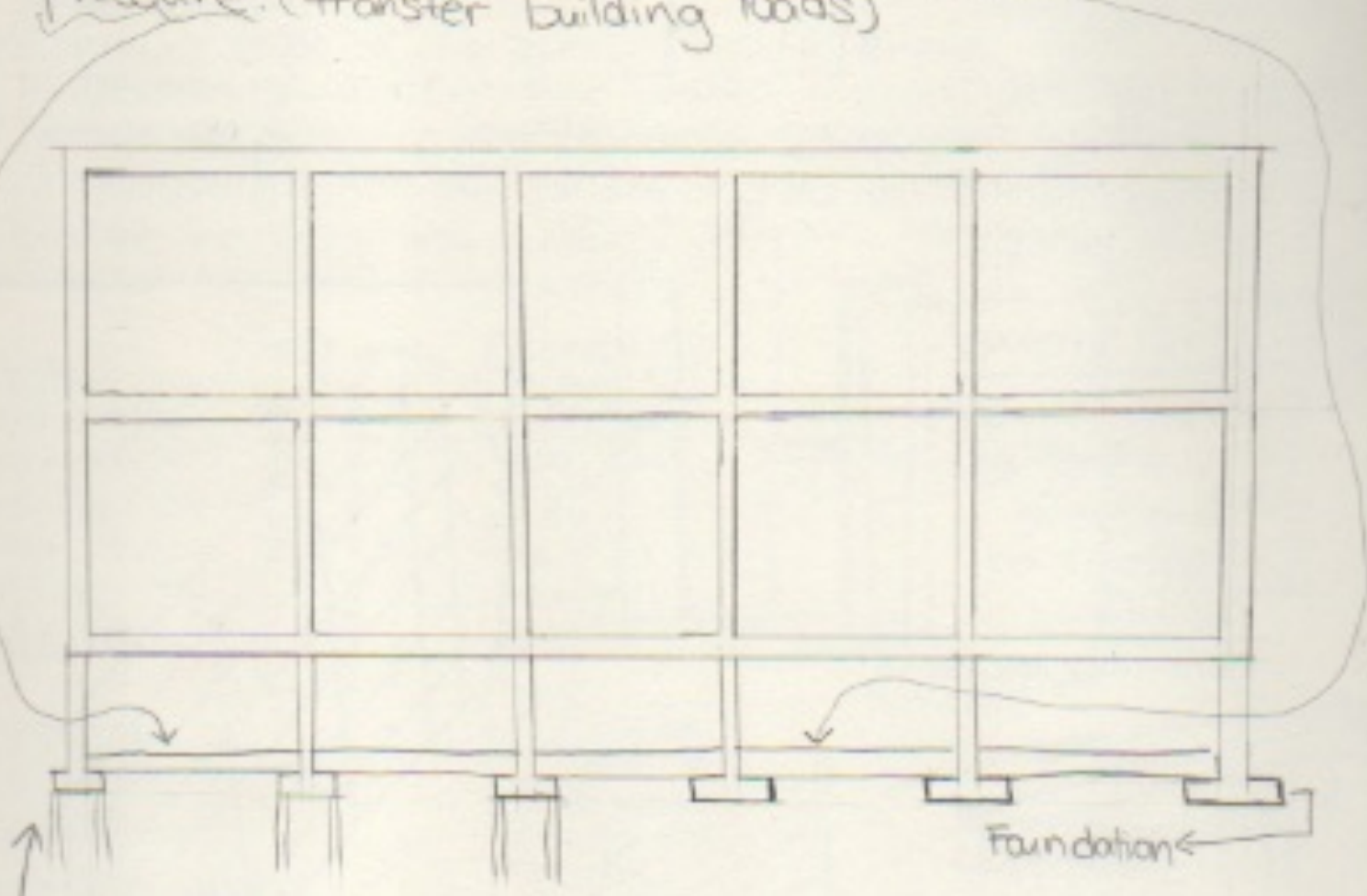


# Structure: Shallow Foundations + Geotechnical Investigation

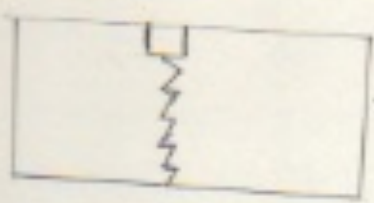
## Shallow Foundations

↳ Shallow or spread foundations are placed directly below the lowest part of a substructure and supports soil by vertical pressure. (transfer building loads)



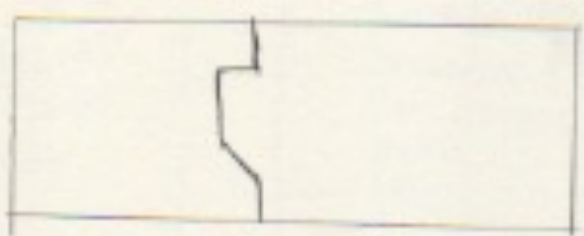
## Deep Foundations

↳ Extend down through unsuitable soil to transfer building loads to a more appropriate bearing.



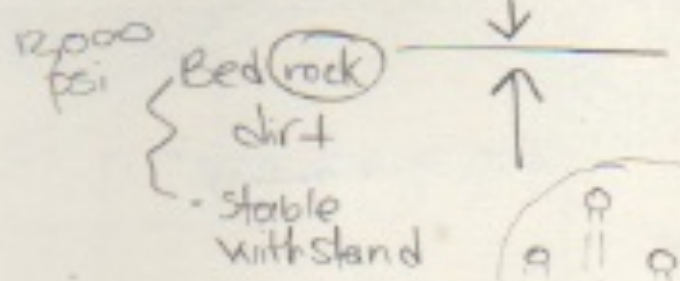
→ Sawn joint

prevent bond by using metal or plastic joint material or by applying curing compound to one side before the other side.



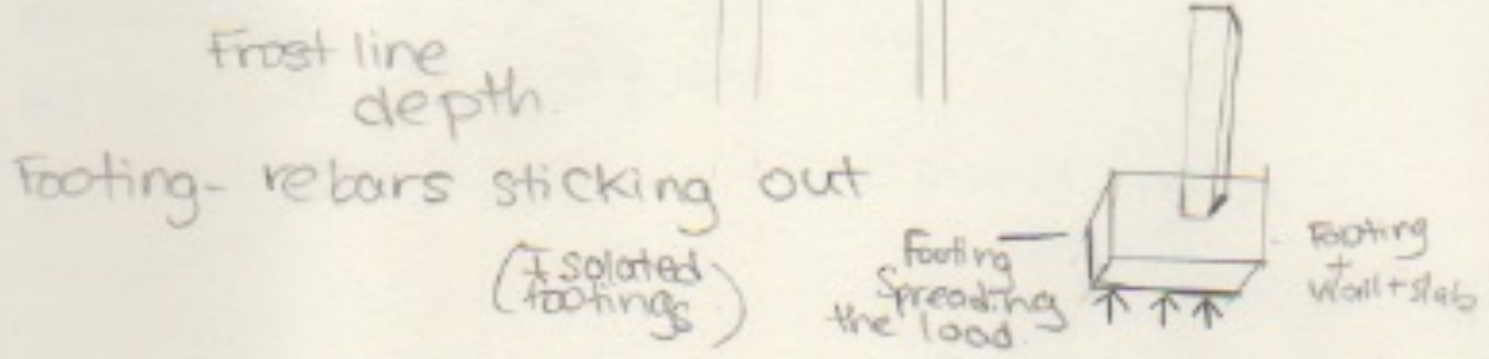
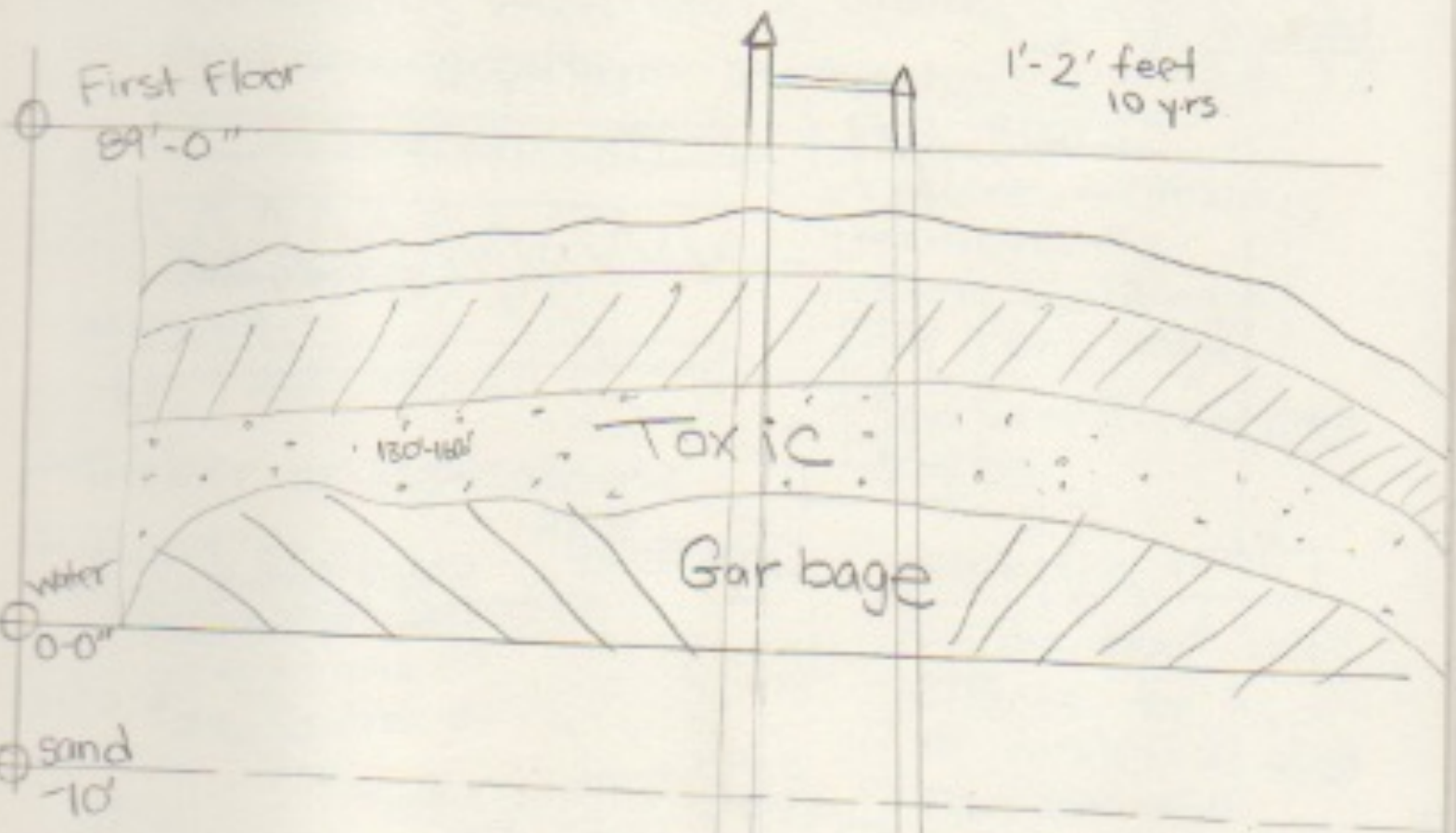
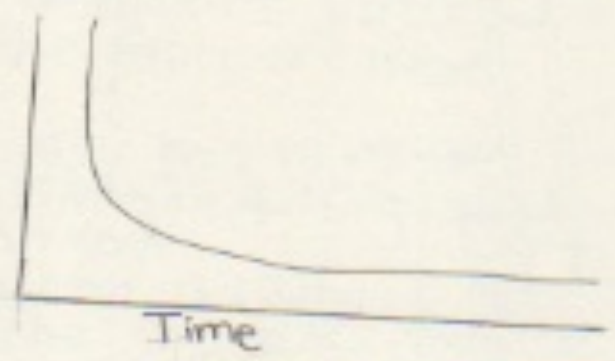
↳ Keyed joint

Geo-technical investigation  
En

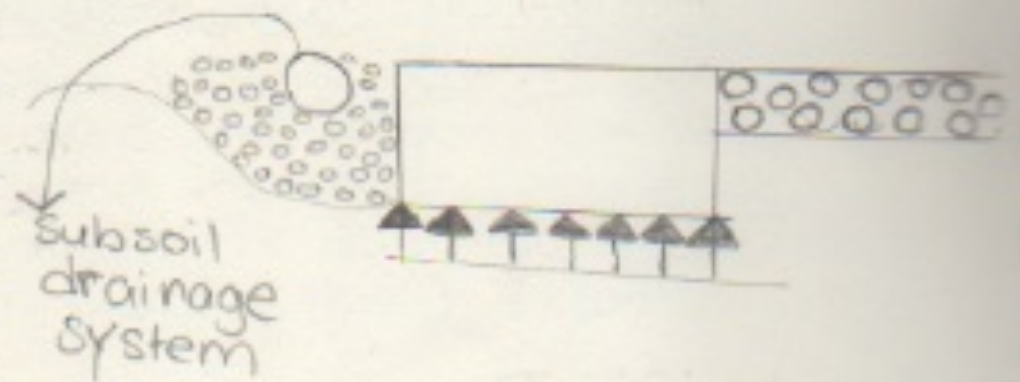


spread the load into the earth.

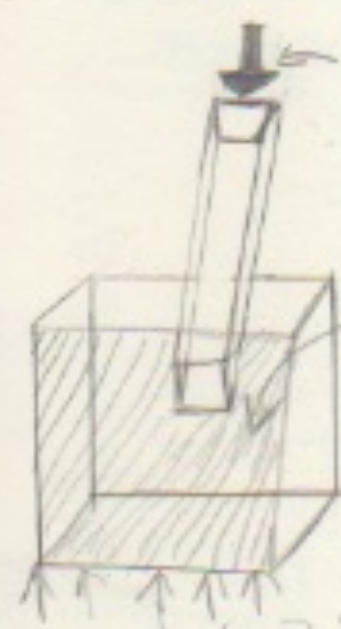
- safe against structural damage
- not settle = would risk damage of structure.
- Practical, economical feasible



- water proofing
- rigid form insuln
- drain mat



A = P/s where  
P = Column load



A = Contact area of footing

S = Soil bearing capacity in  
psf; 1 psf = 0.04799 kPa

