SITE PREPARATION REQUIREMENTS

STRUCTURAL FILL UNDER BUILDING AREAS SHOULD BE SELECTED WITH RESPECT TO PLASTICITY CHARACTERISTICS. SANDY CLAY WITH A LIQUID LIMIT NOT GREATER THAN 40 AND PLASTICITY INDEX BETWEEN 8 AND 20 WILL BE SUITABLE FOR SELECT IMPERVIOUS FILL. THE RECOMMENDED EARTHWORK CONSTRUCTION PROCEDURES UNDER BUILDING AND PAVING AREAS ARE AS FOLLOWS:

1- REMOVE ALL CONSTRUCTION DEBRIS AND ORGANIC SOILS TO A DEPTH OF AT LEAST SIX INCHES.

2- PROOFROLL STRUCTURAL AND PAVEMENT AREAS WITH A LOADED DUMP TRUCK OR HEAVY ROLLER IN THE PRESENCE OF AN ENGINEERING TECHNICIAN FROM PROFESSIONAL GEOTECH COOMPANY. IF NO PUMPING IS ENCOUNTERED AND PROOFROLL INSPECTION PASSES, SKIP ITEM 3 AND GO DIRECTLY TO ITEM 4 OF THIS SECTION.

3- ONLY IF PUMPING IS ENCOUNTERED DURING PROOFROLL INSPECTION, THE UPPER TWO TO FOUR FEET (2'-4') OF SOIL MAY BE REMOVED FIRST, FOLLOWED BY MIXING OF UPPER TWELVE INCHES (12") OF EXPOSED SUBGRADE WITH FLYASH, LIME, PORTLAND CEMENT AND/OR TRU-BLEND TO ABSORB EXCESS MOISTURE IN THE EXISTING SOIL AND IMPROVE STRENGTH OF THE SOIL. ONCE THE SUBGRADE IS RESISTANT TO YIELDING, SELECT FILL CAN BE PLACED LIFT BY LIFT AND COMPACTED TO 95% OF STANDARD PROCTOR DENSITY. OTHER OPTIONS INCLUDE DRYING THE UPPER TWO TO FOUR FEET (2'-4') SOIL BY NATURAL MEANS (AERATION AND SCARIFICATION) IF THE SCHEDULE AND WEATHER ALLOWS OR REPLACEMENT OF WET SILTY SOIL WITH DRY SELECT FILL.

4- PLACE FILL IN LOOSE LIFTS NOT EXCEEDING NINE INCHES AND COMPACT TO NOT LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY DETERMINED BY ASTM SPECIFICATION D-698 (STANDARD PROCTOR). THE MOISTURE CONTENT OF THE FILL SHOULD NOT BE LESS THAN TWO POINTS BELOW OPTIMUM VALUE NOR MORE THAN THREE POINTS ABOVE THE OPTIMUM VALUE.

5- EXCAVATE THE SOIL IN CUT AREAS TO GRADE AND PROOFROLL THE SURFACE SOIL.

6- COMPACT STABILIZED SOIL IN PARKING AND DRIVEWAY AREAS TO NOT LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY OF STABILIZED SOIL.

7- PERFORM FIELD DENSITY TESTS TO VERIFY COMPACTION AT A FREQUENCY OF ONE TEST PER LIFT OF FILL FOR EVERY 2,000 SQUARE FEET OF COMPACTED AREA IN BUILDING PAD. ALSO, PERFORM FIELD DENSITY TESTS ON STABILIZED SOIL IN PARKING AND DRIVEWAY AREAS AT A FREQUENCY OF ONE TEST FOR EVERY 2,000 SQUARE FEET OF COMPACTED AREA.

8- MAINTAIN THE MOISTURE CONTENT OF BOTH FILL AND NATURAL SOIL UNTIL IT IS PERMANENTLY SEALED WITH THE FLOOR SLAB OR PAVEMENT.

9- SAND SHOULD NOT BE USED AS A LEVELING COURSE UNDER FLOOR SLAB AND PAVEMENT, SINCE IT PROVIDES READY PATH FOR MOISTURE TO GET IN.

10- UNLESS OTHERWISE STATED, EARTHWORK AND CONCRETE CONSTRUCTION MUST FOLLOW THE FOLLOWING

TEXAS DOT SPECIFICATIONS:
ITEM 1 10: EXCAVATION
ITEM 216: PROOF ROLLING
ITEM 260: LIME TREATMENT
ITEM 275. CEMENT TREATMENT
ITEM 360: CONCRETE PAVEMENT

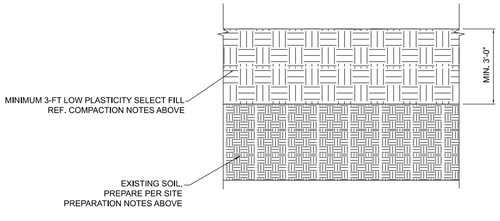
FOUNDATIONS GENERAL NOTES

EXPOSURE TO ENVIRONMENT MAY WEAKEN THE SOILS AT THE FOOTING BEARING LEVEL IF THE FOUNDATION EXCAVATION REMAINS OPEN FOR LONG PERIODS OF TIME. THEREFORE, IT IS RECOMMENDED THAT ALL FOOTING EXCAVATIONS BE EXTENDED TO FINAL GRADE AND THE FOOTINGS CONSTRUCTED AS SOON AS POSSIBLE TO MINIMIZE POTENTIAL DAMAGE TO BEARING SOILS. THE FOUNDATION BEARING LEVEL SHOULD BE FREE OF LOOSE SOIL, POND WATER AND DEBRIS.

THE SIDE SLOPES OF SHALLOW EXCAVATIONS WILL PROBABLY STAND NEAR VERTICAL FOR LIMITED PERIODS. WE RECOMMEND, HOWEVER, THAT VERTICAL-SIDED EXCAVATIONS BE LIMITED TO A DEPTH OF ABOUT FOUR FEET. SIDES OF TEMPORARY EXCAVATIONS DEEPER THAN ABOUT FOUR FEET SHOULD BE BRACED OR SLOPED BACK TO AT LEAST I-VERTICAL ON I .5-HORIZONTAL. BRACING REQUIREMENTS FOR EXCAVATIONS DEEPER THAN FOUR FEET SHOULD CONFONN TO APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS.

FOUNDATION CONCRETE SHOULD NOT BE PLACED ON SOILS THAT HAVE BEEN DISTURBED BY RAINFALL OR SEEPAGE. IF THE BEARING SOILS ARE SOFTENED BY SURFACE WATER INTRUSION DURING EXPOSURE OR BY DESICCATION, THE UNSUITABLE SOILS MUST BE REMOVED FROM THE FOUNDATION EXCAVATION AND REPLACED PRIOR TO PLACEMENT OF CONCRETE.

IF THE EXCAVATION MUST REMAIN OPEN OVERNIGHT, OR IF RAINFALL BECOMES IMMINENT, WHILE THE BEARING SOILS ARE EXPOSED, WE RECOMMEND THAT A TWO-INCH MUD MAT OF LEAN CONCRETE (1, 000 PSI) BE PLACED ON THE BEARING SOILS BEFORE PLACEMENT OF REINFORCEMENT STEEL OR CONCRETE.



A S0.2 **Site Preparation Soil Profile**
NTS

288 ENGINEERING LLC
TBPE FIRM NO 14418
PH#: 832-656-3552
2715 NOBLE OAK LN.
PEARLAND, TX-77584

Project:

SINGLE FAMILY RESIDENCE
320 TURNING BAYOU TRAIL
ANGLETON, TX-77515

Seal:

Revisions:

Sheet Title:

SITE DEVELOPMENT
&
FOUNDATION NOTES

Drawn By: RR
Checked By: NS
Project No.: 100031
Project Phase: NOT FOR CONSTRUCTION
Date: 01/13/2022
Sheet No.: S0.2