

SITE PREPARATION AND DRAINAGE

1. AT A MINIMUM, WHERE SITE SURFACE SOILS CONSIST OF CLAY OR CLAYEY MATERIALS, A MINIMUM OF 6 INCHES OF SURFACE SOILS SHALL BE EXCAVATED. IN THE CASE OF HEAVY BLACK OR BROWN CLAYS, THE MINIMUM DEPTH OF SOILS REMOVAL IS RECOMMENDED AT 8 INCHES, PROOF ROLLING, SOILS CONSOLIDATION, AND COMPACTING ARE RECOMMENDED. IN THE ABSENCE OF ANY GEOTECHNICAL REPORT, SELECT STRUCTURAL FILLS ARE TO BE PROVIDED AT THE LOCATION OF THE DRIVEWAY FOUNDATION. A MINIMUM DEPTH OF FILL MATERIAL SHALL BE SPECIFIED IN THE GEOTECHNICAL REPORT, OR EQUAL TO THE DEPTH OF SURFACE SOILS EXCAVATION. THEREAFTER, ADDITIONAL FILL MATERIAL SHALL BE PROVIDED TO FORM A STRUCTURAL BASED AT THE GREATER OF A MINIMUM OF 12 INCHES IN HEIGHT, OR AS REQUIRED FOR PROPER FOUNDATION EXPOSURE. THE STRUCTURAL FILL SHALL CONSIST OF TYPE A CRUSHED LIMESTONE, OR TYPE B CLAYEY CRUSHED GRAVEL, IN ACCORDANCE WITH TXDOT SPECIFICATION ITEM 247 FOR GRADE 1 FILL MATERIALS. STRUCTURAL FILL SHALL BE PLACED IN LIFTS OF 8 INCHES, AND COMPACTED ACCORDANCE WITH TXDOT SPECIFICATION TEX-113-E, WITH MOISTURE CONTENT CONTROLLED TO CONFORM TO TXDOT SPECIFICATION ITEM 204 "SPRINKLING".
2. TREES WITH A DISTANCE TO THE SLAB OF ONE TIMES THE MATURE TREE HEIGHT MAY DAMAGE THE FOUNDATION. TREE REMOVAL SHALL BE REQUIRED AT THE DIRECTION OF THE COUNTY ROAD ADMINISTRATOR.
3. VOIDS (HOLES) CREATED AS A RESULT OF DEMOLITION AND REMOVAL OF EXISTING STRUCTURES, TREES, AND OTHER EXISTING OBJECTS SHALL BE FILLED WITH WELL COMPACTED SELECT FILL MATERIAL.
4. SITE SURFACE DRAINAGE DURING CONSTRUCTION SHALL BE CONTROLLED BY PROVIDING POSITIVE DRAINAGE AWAY FROM THE DRIVEWAY SLAB. THE APPLICANT IS RESPONSIBLE FOR THE INSTALLATION OF BERMS OR SWALES ON THE UPHILL SIDE OF THE CONSTRUCTION AREA TO DIVERT SURFACE RUNOFF AWAY FROM THE SLAB DURING CONSTRUCTION.

FOUNDATION CONSTRUCTION

1. FILL MATERIAL PLACED BENEATH THE SLAB SHALL BE WELL GRADED GRANULAR LOW PLASTICITY SELECT FILL MATERIAL HAVING A PI OF 5 TO 20 WITH A LIQUID LIMIT NOT EXCEEDING 40 PERCENT. THE FILL MATERIAL SHALL BE FREE OF ORGANICS, TRASH, RUBBLE, OR OTHER DELETERIOUS MATERIALS AND SHALL HAVE NO PARTICLE SIZE GREATER THAN 3 INCHES IN DIAMETER. CRUSHED LIMESTONE OR CRUSHED AND UNCRUSHED GRAVEL FMATERIAL MEETING THE REQUIREMENTS OF TXDOT ITEM 247, TYPE A OR B, GRADE 1 OR 2 IS REQUIRED.
2. SLAB FILL MATERIAL SHALL BE A MINIMUM OF 12 INCHES THICK BENEATH ALL SLAB AREAS AND PLACED TO FINISH GRADE ELEVATION EQUAL TO THE GRADE ELEVATION AT THE BOTTOM OF THE SLAB. THE SLAB FILL MATERIAL SHALL BE PLACED IN 6 INCH LIFTS AND MACHINE TAMPED TO REDUCE FILL SETTLEMENT.
3. ALL CONCRETE SHALL BE PLACED IN ACCORDANCE WITH ACI 302.1R.
4. PROPER CURING OF ALL CONCRETE SURFACES SHALL BE PROVIDED BY THE APPLICANT AND IN ACCORDANCE WITH THE LATEST EDITION OF ACI 308.
5. DO NOT PLACE CONCRETE WHEN TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT UNLESS COLD WEATHER CONCRETE PROCEDURES ARE FOLLOWED. CALCIUM CHLORIDE SHALL NOT BE USED. PROVIDE SPECIAL CARE TO PREVENT HIGH TEMPERATURES DURING HOT WEATHER CONDITIONS IN FRESH CONCRETE, USE WATER REDUCING SET RETARDING ADMIXTURES IN SUCH QUANTITIES AS SPECIFICALLY RECOMMENDED BY THE MANUFACTURER TO ASSURE THE CONCRETE REMAINS WORKABLE.
6. NO HORIZONTAL JOINTS WILL BE PERMITTED IN THE CONCRETE EXCEPT AS NOTED.

CONCRETE AND REINFORCING STEEL

1. ALL CONCRETE AND REINFORCING STEEL SHALL MEET THE LATEST EDITION OF ASTM A615 AND ACI 117 "STANDARD TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS".
2. TESTING SHALL BE THE SOLE RESPONSIBILITY OF THE APPLICANT.
3. CONCRETE COMPRESSIBLE STRENGTH SHALL BE 4,000 PSI MINIMUM STRENGTH AT 28 DAYS.
4. CEMENT SHALL BE TYPE 1 (GRAY) PORTLAND. MAXIMUM WATER CEMENT RATIO SHALL BE 0.5 AND A SLUMP RANGE OF 2 TO 5 INCHES. THE APPLICANT SHALL SATISFY FOR THEMSELVES THAT THE MIX DESIGN IS ACCEPTABLE FOR ITS INTENDED PURPOSE.
5. REINFORCING STEEL SHALL MEET LATEST EDITION OF A-615, GRADE 60 DEFORMED BARS.
6. ALL REINFORCEMENT SHALL BE SECURELY SUPPORTED AT 48 INCHES ON CENTER TO PREVENT VERTICAL AND HORIZONTAL MOVEMENT DURING THE PLACEMENT OF CONCRETE. METAL, PLASTIC, CONCRETE, OR MASONRY CHAIRS MAY BE USED TO SUPPORT REINFORCEMENT. SLAB REINFORCEMENT SHALL BE CENTERED IN CONCRETE SLAB THICKNESS.
7. SLAB REINFORCING BARS SHALL BE TIED AT EVERY OTHER INTERSECTION AND SUPPORTED AT 48 INCHES ON CENTER WITH METAL, PLASTIC, CONCRETE, OR MASONRY CHAIRS. WOOD OR OTHER ORGANIC MATERIAL IS PROHIBITED. EVERY STIRRUP BAR SHALL BE TIED AT BOTH TOP AND BOTTOM BEAM REINFORCING BAR LOCATION. STIRRUPS ARE TO INSTALLED VERTICALLY. ANGLED STIRRUPS ARE NOT PERMITTED.
8. ALL BEAM REINFORCING BARS SHALL HAVE A MINIMUM CLEAR COVER OF 3 INCHES FROM THE BOTTOM OF THE BEAM AND 2 INCHES FROM THE TOP AND SIDES OF THE BEAM.
9. REINFORCING STEEL LAPS AND SPLICES SHALL BE A MINIMUM OF 30 BAR DIAMETERS, BUT NO LESS THAN 12 INCHES, SPLICES OF THE TOP AND BOTTOM BEAM REINFORCEMENT SHALL BE PER TXDOT SPECIFICATION ITEM 440, TABLE 6.



CONCRETE DRIVEWAY DETAIL NOTES

GUADALUPE COUNTY STANDARD DETAILS

SCALE:	N.T.S.	DATE:	02/20/2023
DSGN. BY:	ENG.	DRAWN BY:	JRS
		SHEET NO.: 2 OF 2	