

**CAPE FEAR REGIONAL AIRPORT**  
JIMMIE FRANKLIN FIELD

**NEW CORPORATE HANGAR**  
AIRPORT ROAD  
WILMINGTON, NC 28403

ARCHITECT

**THE WILSON GROUP**  
P.O. BOX 3510  
CHARLOTTE, NC 28202  
(704) 331-5747

PROJECT MANAGER / CIVIL ENGINEER

**TALBERT & BRIGHT**  
4019 SHELLEY DRIVE  
WILMINGTON, NC 28405  
(910) 788-4350

STRUCTURAL ENGINEER

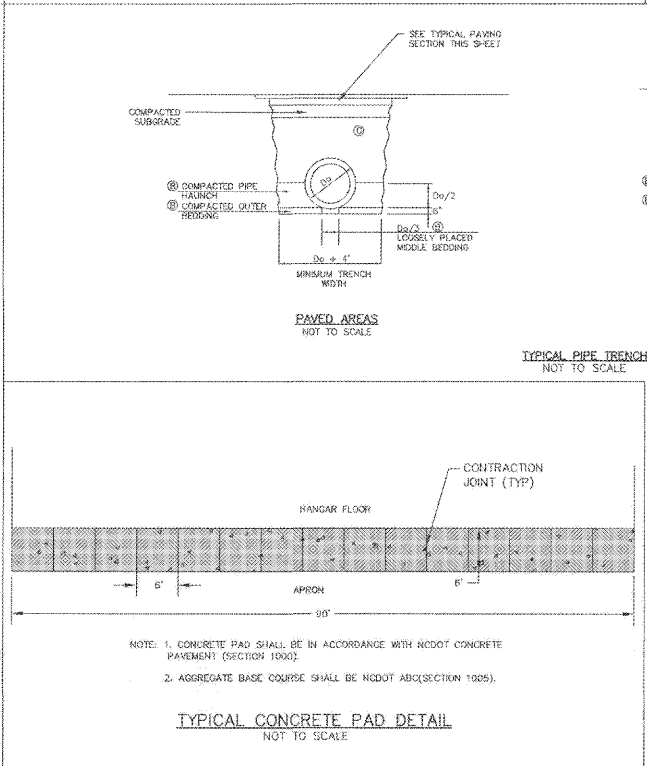
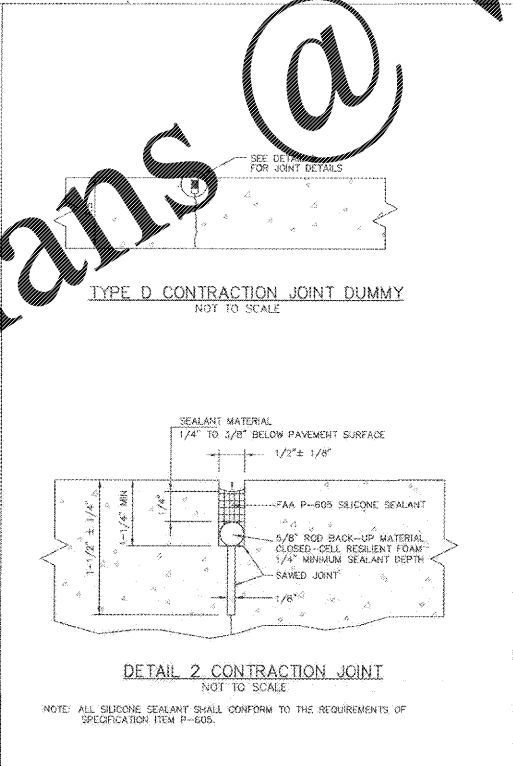
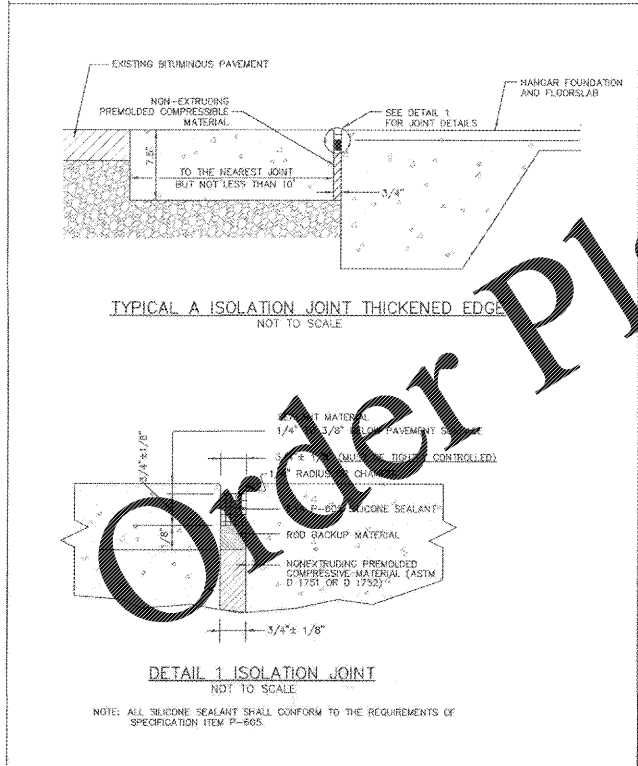
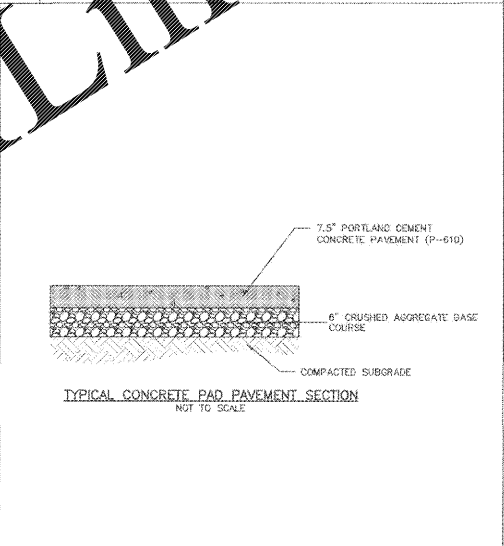
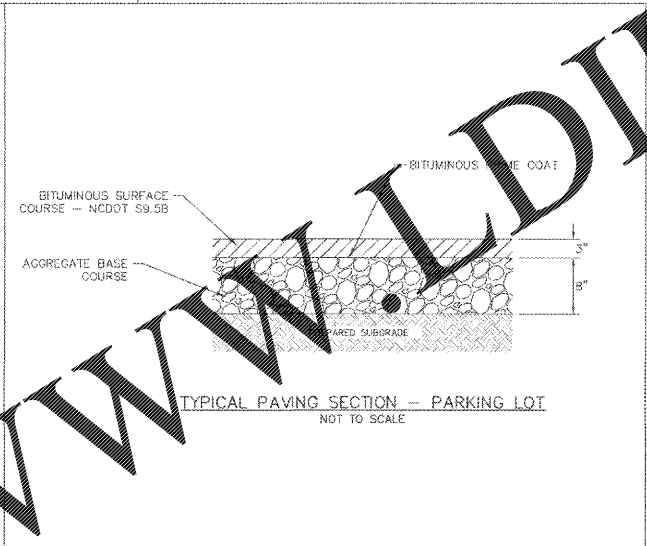
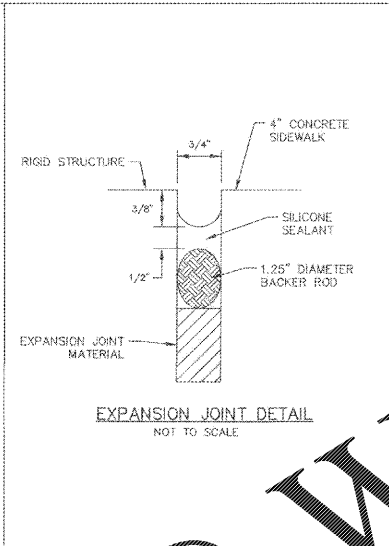
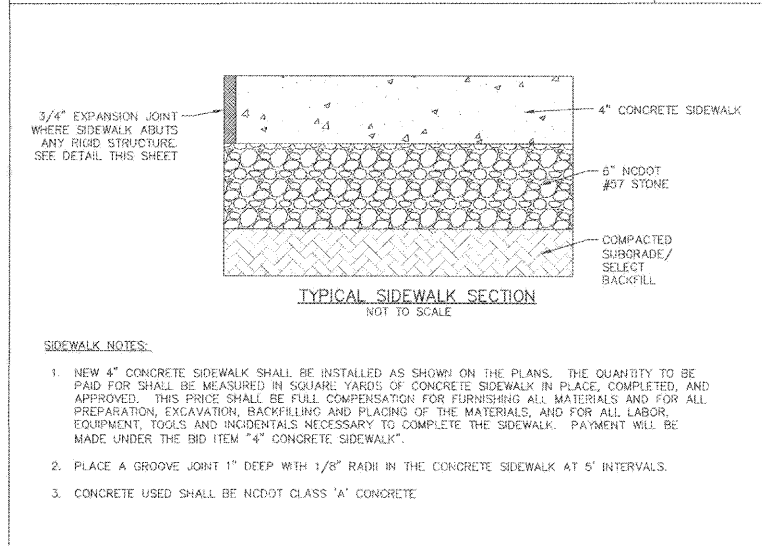
**STEWART**  
101 N. TRYON ST., SUITE 1400  
CHARLOTTE, NC 28202  
(704) 995-3503

MECHANICAL, ELECTRICAL, PLUMBING & FIRE PROTECTION ENGINEER

**SABER ENGINEERING**  
2522 S. TRYON ST., SUITE 200  
CHARLOTTE, NC 28203  
(704) 373-0088

WATER & SEWER ENGINEER

**MCGILL ASSOCIATES**  
7120 LACE ROAD, SUITE 100  
SMYRNA, NC 28170  
(910) 756-8872



**TYPICAL PIPE TRENCH**  
NOT TO SCALE

4" TOPSOIL SEED AND MULCH IN TURFED AREAS

COMPACTED PIPE THINCH

COMPACTED OUTER BEDDING

Loosely Placed Middle Bedding

MINIMUM TRENCH WIDTH

**TRENCH MATERIALS:**

① SELECT MATERIAL: MATERIAL TAKEN FROM THE EXCAVATION (AS AVAILABLE) OR FROM OFF-SITE SOURCES AND CONFORMING TO THE REQUIREMENTS FOR USCS CLASSIFICATIONS SW, SM, SP, SC OR BETTER WITH NO MORE THAN 20% PASSING THE #200 SIEVE. COMPACT TO 95% OR 100% OF ASTM D 1557 MODIFIED PROCTOR DENSITY (EXCEPT MIDDLE BEDDING).

② GENERAL TRENCH BACKFILL MATERIAL: MATERIAL TAKEN FROM THE EXCAVATION (AS AVAILABLE) OR FROM OFF-SITE SOURCES AND CONFORMING TO THE REQUIREMENTS FOR USCS CLASSIFICATIONS OL, MH, OH, CH AND PT SHALL BE EXCLUDED. COMPACT TO 95% OR 100% OF ASTM D 1557 MODIFIED PROCTOR DENSITY.

**NOTES:**

- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MANIPULATE WET SOILS FOR DRYING OR TO ADD WATER AS NECESSARY TO ACHIEVE THE SPECIFIED DENSITY.
- ALL MATERIALS SHALL BE COMPACTED IN 6" MAXIMUM LOOSE LIFTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATION SUPPORT AND DEWATERING.
- ALL EXCAVATION, BEDDING & BACKFILL (WHETHER FROM THE EXCAVATION OR FROM OFF-SITE SOURCES), DEWATERING, EXCAVATION SUPPORT, PIPE MATERIALS, FABRIC FOR WRAPPING JOINTS, INCIDENTALS AND LABOR SHALL BE INCLUDED IN THE UNIT PRICE PER LINEAL FOOT OF PIPE.
- PIPE JOINTS SHALL HAVE BASKETS AND SHALL BE WRAPPED IN GEOTEXTILE FABRIC. FABRIC SHALL EXTEND 2 FEET EITHER SIDE OF THE JOINT AND SHALL BE TIED DOWN WITH WIRE TO HOLD IT IN PLACE UNTIL BACKFILL IS PLACED ABOVE PIPE.

REVISIONS

DATE: AUGUST 2019

PROJECT NUMBER: 2102-1801

SHEET TITLE: TYPICAL SECTIONS, MISCELLANEOUS AND DRAINAGE DETAILS

SHEET NUMBER: C5.01