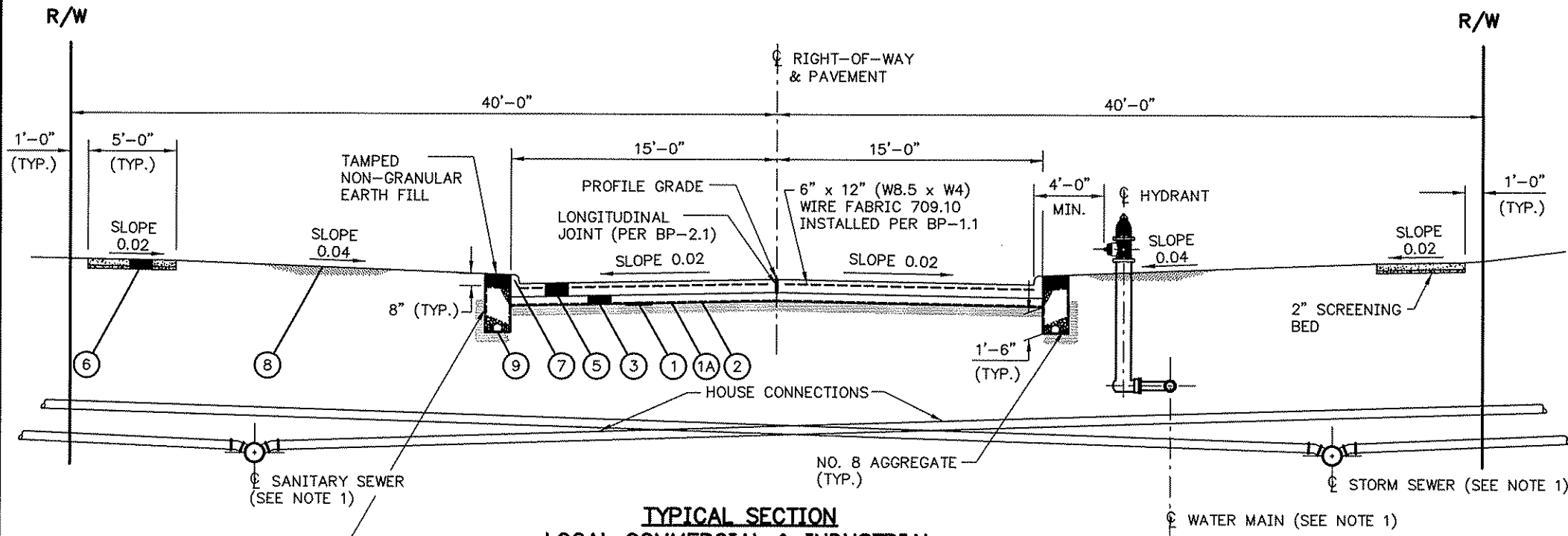


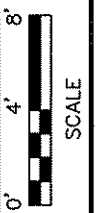
**TYPICAL SECTION
LOCAL RESIDENTIAL**



**TYPICAL SECTION
LOCAL COMMERCIAL & INDUSTRIAL**

NOTES

1. MAIN LINE TRENCHES SHALL BE LOCATED IN THE TREE LAWN AREA, CLEAR FROM BENEATH THE PAVEMENT/UNDERDRAIN TRENCH AND SO THAT MANHOLE CASTINGS ARE KEPT OUT OF THE SIDEWALK. EXACT LOCATIONS AND DEPTHS OF SANITARY SEWERS AND WATER MAINS ARE AS APPROVED BY THE CUYAHOGA COUNTY SANITARY ENGINEER AND THE CITY OF CLEVELAND DIVISION OF WATER (OR OTHER APPLICABLE WATER AUTHORITY) AND AS SHOWN ON THE PLANS. DETAILED MATERIAL AND CONSTRUCTION SPECIFICATIONS FOR ALL STORM AND SANITARY INSTALLATIONS SHALL CONFORM TO "THE UNIFORM STANDARDS FOR SEWERAGE IMPROVEMENTS, DECEMBER, 1998". DETAILED MATERIAL AND CONSTRUCTION SPECIFICATIONS FOR ALL WATERWORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE CLEVELAND DIVISION OF WATER OR OTHER APPLICABLE WATER AUTHORITY. IN ADDITION TO THE ABOVE, THE BEDDING AND BACKFILL FOR STORM SEWERS, SANITARY SEWERS AND WATER MAINS SHALL MINIMALLY CONFORM TO SECTIONS 603.02, 603.06, 603.10 (TYPE "B" CONDUIT BENEATH PAVEMENT OR TYPE "C" CONDUIT WHEN NOT UNDER PAVEMENT) AND 603.11 OF THE O.D.O.T. CONSTRUCTION AND MATERIAL SPECIFICATIONS. STRUCTURAL BACKFILL (703.11) MATERIAL FURNISHED FOR BEDDING AND BACKFILL OPERATIONS SHALL BE LIMITED TO LIMESTONE. GRANULAR EMBANKMENT MATERIAL (203.02.R) FURNISHED FOR NON-STRUCTURAL OPERATIONS SHALL BE LIMITED TO NATURAL GRANULAR MATERIAL PER 703.16.B.
2. CONCRETE DRIVE APRONS (WITHIN THE RIGHT OF WAY) SHALL BE CONSTRUCTED (BY THE BUILDER) IN ACCORDANCE WITH THE CUYAHOGA COUNTY ENGINEER'S CONSTRUCTION DRAWING BP-4.1C.
3. ALL GRADING WITHIN THE PROPOSED RIGHT OF WAY SHALL BE PERFORMED IN ACCORDANCE WITH O.D.O.T. ITEM 203 ROADWAY EXCAVATION AND EMBANKMENT. USE OF SLAG, IN ANY FORM, IS NOT PERMITTED.
4. THE LAST TEN (10) FEET OF EACH RUN OF UNDERDRAIN SHALL BE OUTLETTED WITH O.D.O.T. "ITEM 603 - 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS." THE INVERT OF THE UNDERDRAIN OUTLET STRUCTURE SHALL BE A MINIMUM OF SIX (6) INCHES BELOW THE "TYPE F" OUTLET CONDUIT FLOW LINE.
5. IT IS REQUIRED TO SEAL (705.04) ALL TRANSVERSE JOINTS IN CAST-IN-PLACE CONCRETE CURB. SECTION 609.04(A) IS HEREBY MODIFIED ACCORDINGLY.
6. NOTE TO DESIGNER:
PLAN SUBGRADES. THE DEVELOPER'S DESIGN ENGINEER AND GEOTECHNICAL ENGINEER ARE RESPONSIBLE FOR IDENTIFYING THE METHOD(S), LOCATION(S) AND DIMENSIONS, INCLUDING DEPTH(S), OF ANY SUBGRADE STABILIZATION REQUIRED; ALL IN ACCORDANCE WITH ODOT'S JANUARY 18, 2007 "GEOTECHNICAL BULLETIN GB1" FOR "PLAN SUBGRADES" AND TO THE SATISFACTION OF THE PROJECT ENGINEER. WHERE PERMISSIBLE PER THE "GB1" BULLETIN GUIDELINES, LIME OR CEMENT STABILIZATION MAY BE USED IN LIEU OF UNDERCUTTING IN ORDER TO PROVIDE THE REQUIRED COMPACTED STABLE SUBGRADE. WHERE CEMENT STABILIZATION IS USED/DESIGNED IN ACCORDANCE WITH THE "GB1" BULLETIN GUIDELINES, THE DEPTH OF THE SUBBASE (ITEM 304) MAY BE REDUCED TO FOUR (4) INCHES AND THE SUBGRADE GEOTEXTILE FABRIC (ITEM SPECIAL) SHALL BE DELETED. THE DEVELOPER'S ENGINEER SHALL APPROPRIATELY MODIFY THE PLAN DETAILS/NOTES TO REFLECT THE ACTUAL PLAN SUBGRADE TREATMENTS/DESIGNS INTENDED.
7. PROVIDE PAVEMENT THICKNESS DESIGN CALCULATIONS TO CERTIFY ACTUAL THICKNESS REQUIRED.
8. ANY DEVIATION FROM THESE MINIMUM STANDARDS MUST BE APPROVED IN WRITING BY THE CUYAHOGA COUNTY ENGINEER AND SHOWN ON THE PLANS.



TYPICAL SECTIONS

NONWOVEN OR MONOFILAMENT WOVEN FABRIC WRAP PER AASHTO M 288, TABLE 1 (CLASS 3) AND TABLE 2. (TYP.)

NONWOVEN OR MONOFILAMENT WOVEN FABRIC WRAP PER AASHTO M 288, TABLE 1 (CLASS 3) AND TABLE 2. (TYP.)

LEGEND

- | | |
|---|---|
| ① ITEM 204 - SUBGRADE COMPACTION (SEE NOTE 6) | ⑥ ITEM 608 - 4" CONCRETE WALK, AS PER PLAN |
| ①A ITEM 204 - PROOF ROLLING (SEE NOTE 6) | ⑦ ITEM 609 - CURB, TYPE 2-A, AS PER PLAN - OR WHEN APPROVED - CURB, TYPE 3-A, AS PER PLAN (RESIDENTIAL USE ONLY) (SEE NOTE 5) |
| ② ITEM SPECIAL - SUBGRADE GEOTEXTILE FABRIC (SEE NOTE 6) | ⑧ ITEM 659 - SEEDING AND MULCHING, AS PER PLAN -OR- ITEM 660 - SODDING, AS PER PLAN |
| ③ ITEM 304 - 6" AGGREGATE BASE, AS PER PLAN (SEE NOTE 6) | ⑨ ITEM 605 - 6" BASE PIPE UNDERDRAINS WITH FABRIC WRAP, AS PER PLAN (SEE NOTE 4) |
| ④ ITEM 451 - 7" REINFORCED CONCRETE PAVEMENT, AS PER PLAN | |
| ⑤ ITEM 451 - 9" (MIN.) REINFORCED CONCRETE PAVEMENT, AS PER PLAN (SEE NOTE 7) | |

SUPPLEMENTAL CONSTRUCTION DRAWINGS			
STATE (O.D.O.T.) STANDARD		COUNTY CONSTRUCTION	
DWG. NO.	DATE	DWG. NO.	DATE
BP-1.1	07-28-00	BP-2.6C	10-10-08
BP-2.1	07-18-08	BP-2.7C	10-10-08
BP-2.2	07-18-08	BP-4.1C	10-10-08
BP-5.1	07-28-00		
BP-7.1	01-19-07	MB-2C	10-10-08
DM-4.3	07-19-02	MD-1C	10-10-08
DM-4.4	07-19-02		

CUYAHOGA COUNTY ENGINEER	
MINIMUM CONSTRUCTION STANDARDS FOR TOWNSHIP SUBDIVISION STREETS (LOCAL) TYPE 451 PAVEMENT	DATE
	08-07-97
	05-18-00
	06-28-00
	08-15-00
	11-05-01
	09-29-03
	12-05-05
	08-28-07
	10-10-08
STANDARD CONSTRUCTION DRAWING	DWG. NO. 1 OF 4

