

PART VIII - STANDARD DETAIL DRAWINGS

SERIES 1 - EROSION CONTROL

1.01	RESERVED FOR FUTURE USE
1.02	EROSION MAT
1.03	RESERVED FOR FUTURE USE
1.04	RESERVED FOR FUTURE USE
1.05	CLEAR STONE BERM FOR EROSION CONTROL
1.06	RESERVED FOR FUTURE USE
1.07	CONSTRUCTION ENTRANCE
1.08	STREET CONSTRUCTION ENTRANCE BERM
1.09	RESERVED FOR FUTURE USE
1.10	STREET CONSTRUCTION STONE BERM
1.11	RIGID FRAME INLET PROTECTION
1.12	SILT SOCK

SERIES 2 - EARTHWORK

2.01	STANDARD PLANTING TECHNIQUE FOR TREES IN TURF AREAS
2.02	STANDARD PLANTING TECHNIQUE FOR TREES IN GRATES
2.03	STANDARD PLANTING TECHNIQUE FOR EVERGREENS
2.04	STANDARD PLANTING TECHNIQUE FOR SHRUBS
2.05	STANDARD PRUNING TECHNIQUES FOR DECIDUOUS AND CONIFEROUS TREES AND SHRUBS
2.06	TYPICAL FIELD STONE RETAINING WALL
2.07	WETLAND PLANTING PODS TYPE #1
2.08	WETLAND PLANTING PODS TYPE #2
2.09	8' TERRACE RAINGARDEN PLAN
2.10	8' TERRACE RAINGARDEN SECTIONS
2.11	10' TERRACE RAINGARDEN PLAN
2.12	10' TERRACE RAINGARDEN SECTIONS
2.13	10' TERRACE BIORETENTION PLAN
2.14	BOUNDARY MARKER
2.16	TERRACE SUPPORT SYSTEM
2.17	TREE ZONE PROTECTION

SERIES 3 - CONCRETE AND CONCRETE STRUCTURES

3.01	STANDARD SPECIAL WATERWAY
3.02	MADISON STANDARD CURB CUT DETAILS
3.03	STANDARD CURB RAMPS TYPES 1 AND 2
3.04	CURB RAMPS GENERAL AND CURB RAMP TYPE 2-A
3.05	CURB & GUTTER DETAIL AT END OF CUL-DE-SAC
3.06	MADISON STANDARD CONCRETE CURB & GUTTER
3.07	MADISON STANDARD CONCRETE CURB & GUTTER
3.08	MADISON STANDARD CONCRETE CURB & GUTTER
3.09	RESERVED FOR FUTURE USE
3.10	LONGITUDINAL JOINTS AND PAVEMENT TIES DETAIL
3.11	DOWELED CONCRETE PAVEMENT DETAIL
3.12	MADISON STANDARD SECTION CORNER MONUMENT DETAIL
3.13	CONCRETE MOUNTABLE MEDIAN ISLAND NOSE DETAILS
3.14	BIKE/PED RAMP DETAIL
3.15	TREE GRATE DETAIL

SERIES 4 - PAVEMENTS

4.01	<u>TYPICAL SECTION 32' STREET</u>
4.02	<u>TYPICAL SECTION VARIOUS WIDTH STREETS</u>
4.03	<u>TYPICAL SECTION BOULEVARD STREET</u>
4.04	<u>TYPICAL SECTION TEMPORARY STREET</u>
4.05	<u>TYPICAL SECTION WITH UNDERDRAINS</u>
4.06	<u>PAVEMENT DESIGN CRITERIA</u>
4.07	<u>TYPICAL ALLEY WITH CURB & GUTTER</u>
4.08	<u>TYPICAL SECTION BIKE PATH</u>
4.09	<u>GRINDING DETAIL</u>
4.10	<u>CONCRETE SPEED HUMP</u>
4.11	<u>CONCRETE SPEED HUMP RAISED GUTTER</u>

SERIES 5 - SEWER AND SEWER STRUCTURES

5.1	GENERAL
5.1.1	<u>MANDREL DETAIL</u>
5.1.2	<u>RCBC REPAIR TYPE I & TYPE II</u>
5.1.3	<u>TYPICAL SECTION SAS ACCESS ROAD TEMPORARY</u>
5.1.4	<u>TYPICAL SECTION SAS ACCESS ROAD PERMANENT</u>
5.1.4A	<u>TYPICAL SECTION SAS ACCESS ROAD PERMANENT - FARM</u>
5.1.5	<u>TYPICAL SECTION SAS ACCESS ROAD PERMANENT- GRAVEL</u>
5.2	TRENCH EXCAVATION, BEDDING AND BACKFILL
5.2.1	<u>PIPE BEDDING AND BACKFILL</u>
5.2.1A	<u>STORM PIPE BEDDING AND BACKFILL</u>
5.2.2	<u>TYPICAL TRENCH COMPACTION</u>
5.2.3	<u>TYPICAL TRENCH COMPACTION (GREENWAY/PARK)</u>
5.2.4	<u>TYPICAL PAVEMENT PATCH SECTIONS</u>
5.3	SANITARY SEWER PIPES
5.3.1	<u>RISER DETAIL</u>
5.3.2	<u>LOCATION OF SANITARY LATERALS</u>
5.3.3	<u>COUPLING DETAILS</u>
5.4	STORM SEWER PIPES, APRON ENDWALLS AND OTHER STORM WATER CHANNELS
5.4.1	<u>APRON ENDWALLS FOR PIPES AND PIPE ARCHES</u>
5.4.2	<u>MULTIPLE RCP AE</u>
5.4.3	<u>MULTIPLE HERCP AE</u>
5.4.4	<u>RIPRAP AT APRON END WALLS</u>
5.4.5	<u>CONCRETE COLLAR</u>
5.4.6	<u>CONCRETE PIPE JOINT TIES</u>
5.4.7	<u>DRAINAGE FLUME DETAIL</u>
5.4.8	<u>DRAINAGE FLUME DETAIL</u>
5.4.9	<u>SIDEWALK FLUME DETAIL</u>
5.4.10	<u>CURB TO DITCH TRANSITION ASPHALT FLUME</u>
5.4.11	<u>TYPICAL GREENWAY SECTION (GRASSED-FLOWLINE)</u>
5.4.12	<u>TYPICAL GREENWAY SECTION (STABILIZED-FLOWLINE)</u>
5.4.13	RESERVED FOR FUTURE USE
5.5	BOX CULVERTS AND WINGWALLS
5.5.1	<u>BOX CULVERT WINGWALL</u>
5.5.1A	<u>BOX CULVERT WINGWALL - 1</u>
5.5.1B	<u>BOX CULVERT WINGWALL - 2</u>
5.5.2	<u>RIPRAP AT BOX CULVERT WINGWALLS</u>
5.5.3	<u>CULVERT WINGWALL RAILINGS</u>
5.6	STORM SEWER GATES
5.6.1	<u>RCP AE GATE</u>
5.6.2	<u>BOX CULVERT INLET GATE (UPSTREAM)</u>
5.6.3	<u>BOX CULVERT OUTLET GATE (DOWNSTREAM)</u>

5.6.4	<u>STANDARD BASIN OUTLET STRUCTURE</u>
5.6.5	<u>STANDARD-BASIN OUTLET PIPE GATE DETAIL</u>
5.7	<u>SEWER STRUCTURES</u>
5.7.1	<u>SANITARY SEWER CAST-IN-PLACE SAS</u>
5.7.2	<u>SANITARY SEWER PRECAST SAS</u>
5.7.3	<u>STORM SEWER FIELD POURED SAS</u>
5.7.3A	<u>STORM SEWER FIELD POURED CATCH BASINS</u>
5.7.4	<u>STORM SEWER 6'X6' CATCH BASIN</u>
5.7.4A	<u>STORM SEWER 6'X8' CATCH BASIN</u>
5.7.5	<u>STORM SEWER PRECAST SAS (THROUGH SECTION VIEW)</u>
5.7.6	<u>STORM SEWER PRECAST SAS (TOP VIEW)</u>
5.7.7	<u>TYPE "H" INLET</u>
5.7.7A	<u>PVC DRAIN PIPE AT LOW POINTS WITHOUT SURFACE PAVEMENT</u>
5.7.8	<u>SADDLED INLET TYPE I</u>
5.7.9	<u>SADDLED INLET TYPE II</u>
5.7.9A	<u>STORM SEWER FIELD POURED SADDLED SAS</u>
5.7.10	<u>STORM SEWER PRECAST SADDLED INLET</u>
5.7.10A	<u>STORM SEWER PRECAST SADDLED SAS</u>
5.7.11	<u>ADJUST TUB INLET</u>
5.7.12	<u>TERRACE INLET TYPE 1</u>
5.7.12A	<u>TERRACE INLET TYPE 2</u>
5.7.12B	<u>TERRACE INLET TYPE 3</u>
5.7.12C	<u>TERRACE INLET TYPE 4</u>
5.7.12D	<u>TERRACE INLET TYPE 5</u>
5.7.12E	<u>TERRACE INLET TYPE 6</u>
5.7.13	<u>CURB OUTLET STRUCTURE SOLID FLOOR</u>
5.7.13A	<u>CURB OUTLET STRUCTURE NO FLOOR</u>
5.7.14	<u>UNDERDRAIN</u>
5.7.15	<u>SAS CHIMNEY AND CASTING</u>
5.7.16	<u>SAS FRAME AND COVER</u>
5.7.16A	<u>SAS LOCKING FRAME & LOGO COVER</u>
5.7.17	<u>SAS INTERNAL CHIMNEY SEAL</u>
5.7.18	<u>R-3067 FRAME</u>
5.7.20	<u>R-3067 TYPE R GRATE</u>
5.7.21	<u>R-3067 TYPE V GRATE (VANE)</u>
5.7.22	<u>R-3067 EL CURB BOX</u>
5.7.24	<u>R-3067 CDS CURB BOX</u>
5.7.25	<u>TYPE "S" INLET & R-3281 CASTING</u>
5.7.26	<u>CONSTRUCTION STORM STAKING LAYOUT</u>
5.7.27	<u>H INLET LOCATIONS IN DIFFERENT CURB TYPES</u>
5.7.28	<u>INLET IN TYPE "H" CURB AND GUTTER WITH CONCRETE PAVEMENT</u>
5.7.29	<u>INLET CASTING OFFSET CRITERIA FOR H INLETS</u>
5.7.30	<u>INSIDE DROP FOR SANITARY MAIN & LATERAL</u>
5.7.31	<u>FLEXIBLE PIPE TO SAS CONNECTOR</u>
5.7.32	<u>STORM SEWER TAP DETAIL</u>
5.7.33	<u>H INLET ALLEY CURB</u>
5.7.34	<u>DITCH INLET STRUCTURE</u>
5.7.35	<u>TERRACE FLUME</u>
5.7.36	<u>SIDEWALK DRAIN</u>
5.7.37	<u>RIBBON CURB CASTING R-3382</u>
5.7.38	<u>CURB HEAD PLATE FOR DRIVEWAY R-3067-7000</u>
5.7.39A	<u>SCREEN TREATMENT DEVICE – TYPE A PLAN</u>
5.7.39B	<u>SCREEN TREATMENT DEVICE – TYPE A DETAILS</u>
5.7.39C	<u>SCREEN TREATMENT DEVICE – TYPE B PLAN</u>
5.7.39D	<u>SCREEN TREATMENT DEVICE – TYPE B DETAILS</u>
5.7.40	<u>SEWER BACKWATER VALVE</u>
5.7.41	<u>LATERAL CLEANOUT</u>

- 5.7.47 [DRILLED UNDERDRAIN](#)
- 5.8 [UTILITY CROSSINGS](#)
- 5.8.1 [CONCRETE SUPPORTS](#)
- 5.8.2 [REINFORCED CONCRETE BEAM SUPPORT](#)

SERIES 6 - TRAFFIC ENGINEERING

- 6.01 [TYPICAL ELEVATIONS FOR BASES](#)
- 6.02 [TYPICAL PLAN VIEW OF DUCT INSTALLATION & DUCT IMPRINT LOCATION](#)
- 6.03 [DUCT TERMINATION DETAIL](#)
- 6.04 [LOOP LEAD DUCT DETAIL](#)
- 6.05 [CONCRETE POLE BURIAL DETAIL](#)
- 6.06 [POLE MOUNTED STREET LIGHT CONTROL PANEL](#)
- 6.07 [PEDESTAL MOUNTED STREET LIGHT CONTROL PANEL](#)
- 6.08 [120V STREET LIGHT CONTROL PANEL ELECTRICAL SERVICE DETAIL](#)
- 6.09 [CONDUIT PLACEMENT DETAILS FOR COMMERCIAL DRIVE APPROACH](#)
- 6.10 [TYPE "P" CONTROLLER BASE DETAIL](#)
- 6.11 [TYPE "G" BASE DETAIL](#)
- 6.11A [TYPE "GR" BASE DETAIL](#)
- 6.12 [LB-1 BASE DETAIL](#)
- 6.13 [LB-2 DETAIL](#)
- 6.14 [LB-3 BASE DETAIL](#)
- 6.14A [LB-3R BASE DETAIL](#)
- 6.15 [LB-4 DETAIL](#)
- 6.17 [LB-6 DETAIL](#)
- 6.18 [LB-7 BASE DETAIL](#)
- 6.19 [LB-8 BASE DETAIL](#)
- 6.19A [LB-8R BASE DETAIL](#)
- 6.20 [OFFSET BASE DETAIL](#)
- 6.21 [TYPICAL DETAIL FOR AUGERING A HOLE\(S\) IN EXISTING BASE FOR DUCT ENTRANCE](#)
- 6.22 [TYPE I HANDHOLE DETAIL](#)
- 6.23 [TYPE II HANDHOLE DETAIL](#)
- 6.24 [TYPE III HANDHOLE DETAIL](#)
- 6.25 [TYPE IV HANDHOLE DETAIL](#)
- 6.26 [TYPE V HANDHOLE DETAIL](#)
- 6.26A [TYPE VII HANDHOLE DETAIL](#)
- 6.27 [ELECTRICAL UTILITY ACCESS STRUCTURE DETAIL](#)
- 6.28 [ELECTRICAL CONDUIT BOX-OUT DETAIL](#)
- 6.29 [STREET BARRICADE DETAILS](#)
- 6.29A [END-OF-ROADWAY SIGNING DETAILS](#)
- 6.30 [SUPPLEMENTAL TRAFFIC CONTROLS FOR BIKEWAY CLOSURES](#)
- 6.31 [BARRICADES AND SIGNS FOR MAINLINE CLOSURES](#)
- 6.32 [BARRICADES AND SIGNS FOR SIDEROAD CLOSURES](#)
- 6.33 [TRAFFIC CONTROL, SINGLE LANE CLOSURE NON-FREEWAY/EXPRESSWAY](#)
- 6.34 [TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE](#)
- 6.35 [TRAFFIC CONTROL FOR LANE CLOSURE \(SUITABLE FOR MOVING OPERATIONS\)](#)
- 6.36 [TRAFFIC CONTROL, SIDEWALK CLOSURE](#)
- 6.37 [PAVEMENT MARKING DETAILS, PAGE 1](#)
- 6.38 [PAVEMENT MARKING DETAILS, PAGE 2](#)
- 6.39 [PAVEMENT MARKING DETAILS, PAGE 3](#)
- 6.40 [PAVEMENT MARKING DETAILS, PAGE 4](#)
- 6.41 [PIPE INSERT IN CONCRETE FOR SIGNING](#)
- 6.42 [PRECAST SIGN POST BASE DETAILS](#)
- 6.43 [SIGN POST DETAIL](#)
- 6.44 [ALTERNATE BUSINESS ACCESS SIGN](#)
- 6.45 [LB-9 BASE DETAIL](#)

- 6.46 [TYPICAL CONDUIT INSTALLATION PARALLEL TO CURB AND GUTTER](#)
- 6.47 [MULTISPACE PARKING METER BASE DETAIL](#)

SERIES 7 - WATER MAINS AND SERVICE LATERALS

- 7.01 [TYPICAL WATER PIPE TRENCH](#)
- 7.02 [FIELD INSTALLATION POLYETHYLENE WRAP / TAPPING POLYETHYLENE WRAP](#)
- 7.03 [TYPICAL STYROFOAM INSTALLATION](#)
- 7.04 [TYPICAL HYDRANT INSTALLATION](#)
- 7.05 [WATER MAIN VALVE ACCESS STRUCTURE](#)
- 7.05A [WATER MAIN VALVE ACCESS STRUCTURE](#)
- 7.05B [PRESSURE REDUCING VALVE DETAIL](#)
- 7.06 [WATER VALVE BOX ALIGNMENT](#)
- 7.07 [2-IN TEMPORARY FLUSHING / BLOW-OFF FOR 8-IN PIPE AND SMALLER](#)
- 7.08 [TYPICAL VALVE & BOX INSTALLATION](#)
- 7.09 [LOCATION OF WATER SERVICES](#)
- 7.10 [SERVICE LATERAL INSTALLATION](#)
- 7.13 [STANDARD CONCRETE BLOCK THRUST RESTRAINT](#)
- 7.14 [GRAVITY BLOCK THRUST RESTRAINT FOR VERTICAL BENDS](#)
- 7.15 [ROD & CONCRETE BLOCK THRUST RESTRAINT FOR VERTICAL BENDS](#)
- 7.16 [JOINT RESTRAINT LENGTHS FOR VERTICAL BENDS](#)
- 7.17 [THREADED ROD – JOINT RESTRAINT](#)
- 7.20 [STANDARD HDPE TRACER WIRE VALVE BOX](#)
- 7.21 [CASING SPACERS](#)
- 7.22 [OFFSETTING EXISTING WATER MAIN OVER/UNDER UTILITY CONFLICTS](#)
- 7.23 [CLAY TRENCH PLUG](#)
- 7.28 [2" SENSUS OMNI T2 TURBINE METER STANDARD INSTALLATION](#)
- 7.29 [2" BADGER RECORDALL TURBO SERIES METER STANDARD INSTALLATION](#)
- 7.30 [WATER METER PIT CONSTRUCTION](#)
- 7.31 [WATER METER PIT DIMENSIONS](#)
- 7.32 [WATER METER PIT CONSTRUCTION NOTES](#)
- 7.33 [WATER METER ENCLOSURE](#)
- 7.34 [YARD HYDRANT/DRINKING FOUNTAIN STANDARD INSTALLATION](#)
- 7.35 [STANDARD 5/8", 3/4", 1" METER INSTALLATION](#)
- 7.36 [STANDARD 1-1/2" – 2" METER INSTALLATION](#)
- 7.37 [BADGER RECORDALL COMPOUND METER STANDARD INSTALLATION](#)
- 7.38 [SENSUS OMNI COMPOUND METER STANDARD INSTALLATION](#)
- 7.39 [STANDARD MAG METER INSTALLATION BADGER M2000 ELECTROMAGNETIC FLOW METER](#)
- 7.40 [BADGER RECORDALL TURBO SERIES METER STANDARD INSTALLATION](#)
- 7.41 [SENSUS OMNI METER STANDARD INSTALLATION](#)
- 7.42 [SEWER DEDUCT METER/WATER ONLY STANDARD INSTALLATION](#)