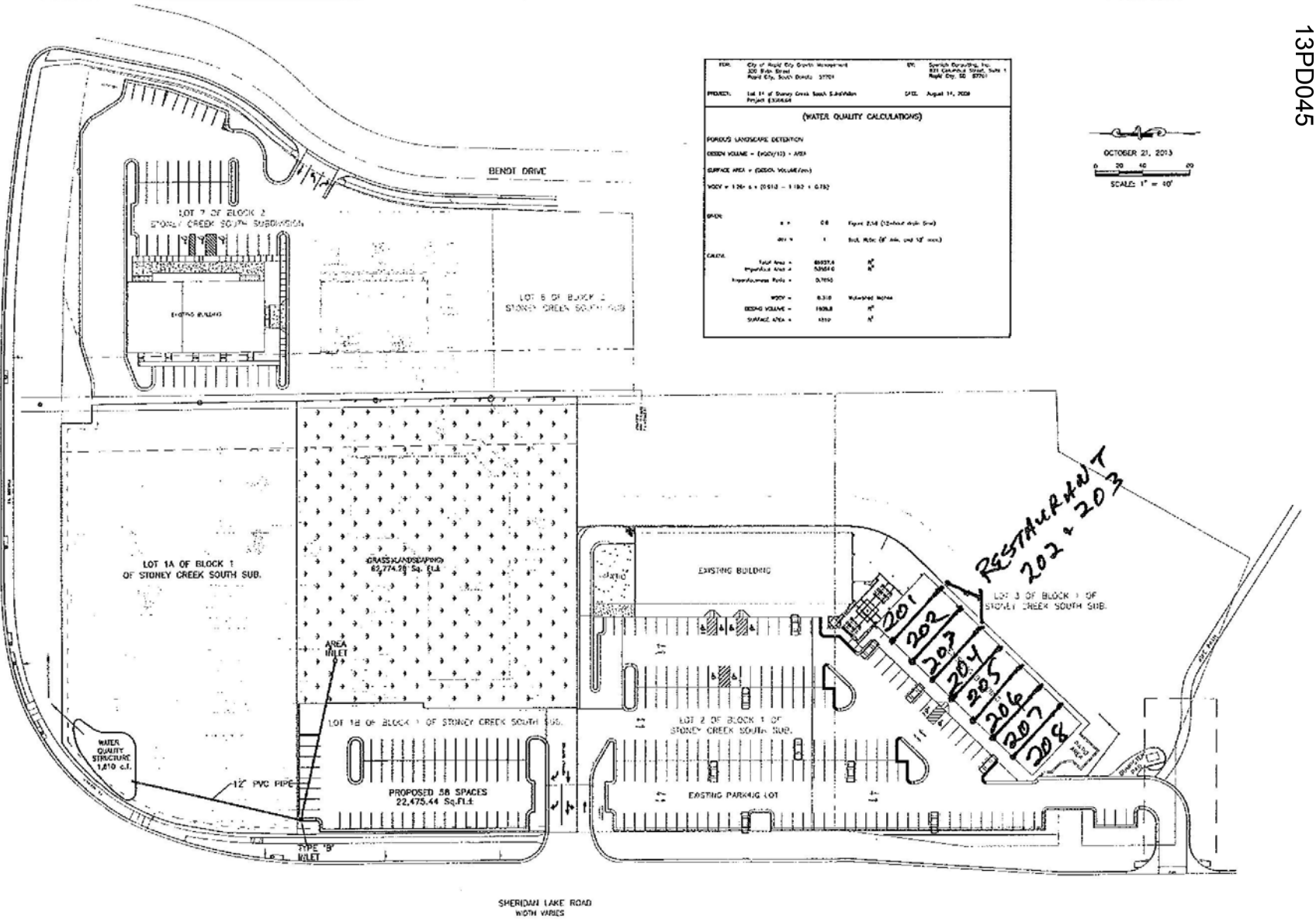
13PD045



(WATER QUALITY CALCULATIONS)
POROUS LANDSCAPE DETENTION
DESIGN VOLUME = (WQCV/12) × AREA
SURFACE AREA = (DESIGN VOLUME/dm)
WQCV = 1.26× s × (0.91i3 − 1.19i2 + 0.78i)
GIVEN:
s = 0.8 Figure 2.14 (12-hour drain time)
dm = 1 Soil Ratio (8" min. and 12" max.)
CALCS:
Total Area = 65937.4 ft²
Impervious Area = 53504.0 ft²
Imperviousness Ratio = 0.7650
WQCV = 0.310 Watershed Inches
DESIGN VOLUME = 1606.8 ft³
SURFACE AREA = 4310 ft²
OCTOBER 21, 2013
SCALE: 1" = 40'
BENOT DRIVE
LOT 7 OF BLOCK 2
STONEY CREEK SOUTH SUBDIVISION
EXISTING BUILDING
LOT 6 OF BLOCK 2
STONEY CREEK SOUTH SUB
LOT 1A OF BLOCK 1
OF STONEY CREEK SOUTH SUB.
GRASS LANDSCAPING
62,774.28 Sq. Ft.±
AREA INLET
LOT 1B OF BLOCK 1 OF STONEY CREEK SOUTH SUB.
PROPOSED 58 SPACES
22,475.44 Sq.Ft.±
WATER QUALITY STRUCTURE 1,810 c.f.
12" PVC PIPE
TYPE "B" INLET
EXISTING BUILDING
LOT 2 OF BLOCK 1 OF
STONEY CREEK SOUTH SUB.
EXISTING PARKING LOT
LOT 3 OF BLOCK 1 OF
STONEY CREEK SOUTH SUB.
RESTAURANT
202 + 203
201
202
203
204
205
206
207
208
SHERIDAN LAKE ROAD
WIDTH VARIES