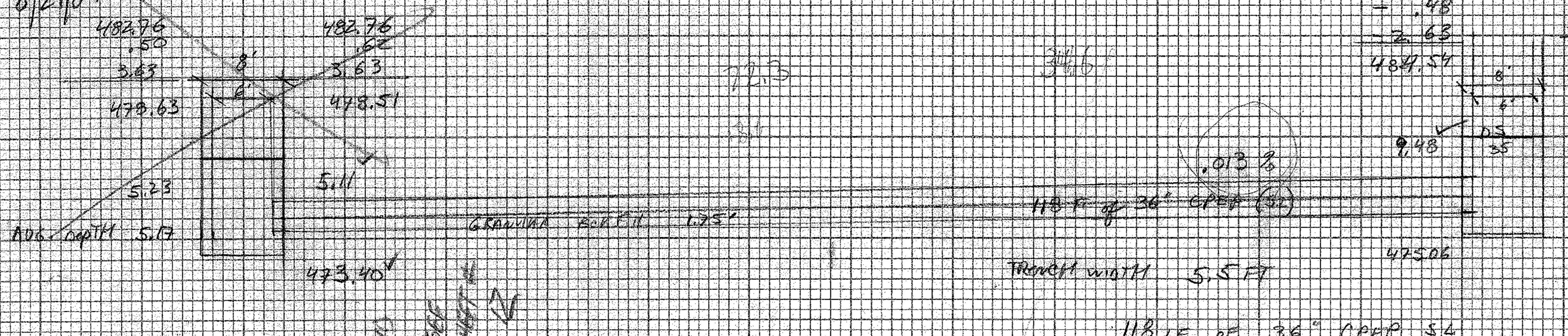
cp
8/24/07

~~D S-31~~ STRUCTURE

DS-35
Pipe + STRUCTURE


482.76
.50
3.63
479.63
482.76
.62
3.63
478.51
8'
6'
5.23
5.11
AVG. depTH 5.17
473.40
GRANULAR BCKFILL 1.75'
118 F of 36" CPEP (SL)
.013 %
487.65
− .48
− 2.63
484.54
487.65
− .65
− 2.63
484.37
8'
6'
DS 35
9.48
9.31
475.06
AVG DepTH 9.395 FT
NEW
SEE SHEET 4

TRENCH WIDTH 5.5 FT

118 LF of 36" CPEP SL

← 20 scale

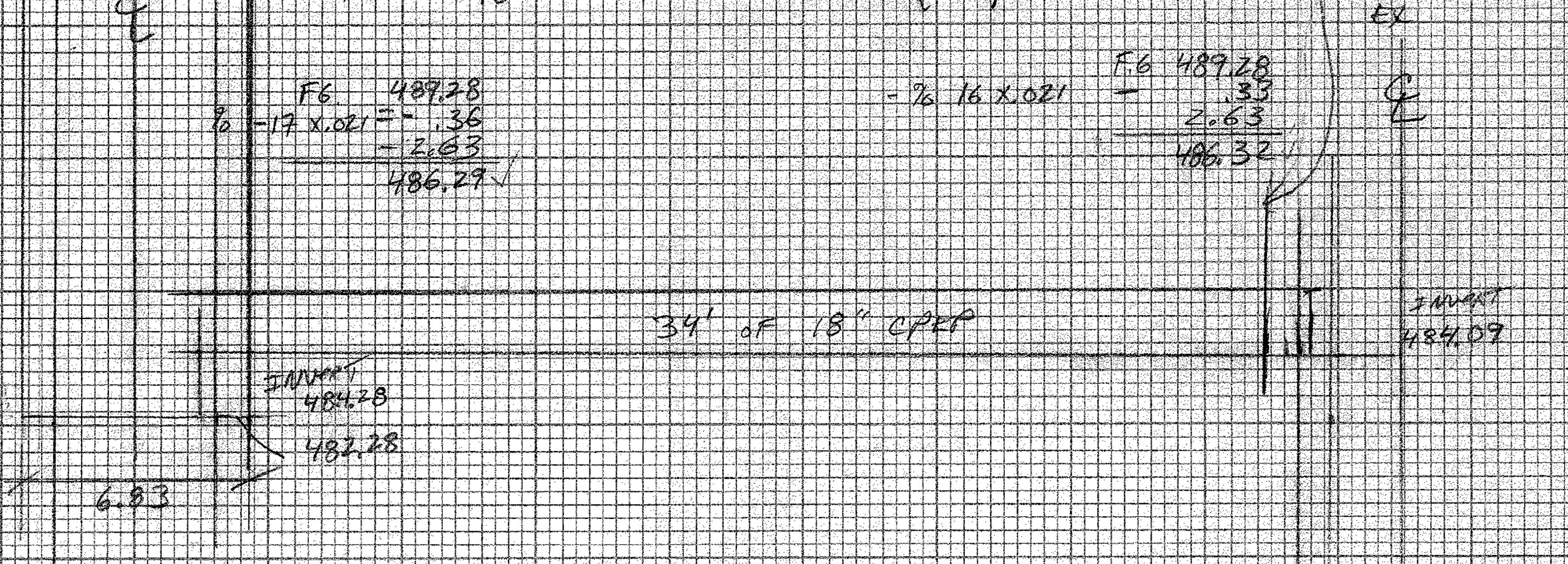
~~T.E. STRUCTURE 5.17 (π 4²) = 259.7/27 = 9.6 cy~~
~~Time ½ .17 (π 4²) = 8.5/27 = .32~~
~~9.92 cy T.E~~

DS-35
T.E pipe 116' × 5.5 × (5.11 + 9.48)/2 [7.295] = 4654.2/27 = 172.38 cy TBG 11/20/7
Time ½ (.5) 116 × 5.5 × 2.295 = 732.1/27 = 27.12 cy
199.50 cy T.E

T.E STRUCTURE (9.48 + 9.31)/2 [9.395] (π 4²) = 472/27 = 17.48 cy
Time ½ .5 (4.395) π (4²) = = 110.4/27 = 4.09 cy
21.56 cy T.E. TBG 1/25/08

Granular BCK Fill 5.5 5.5 × 1.75 × 116 = 1116.5/27 = 41.35 cy
−½ pipe − πr² 3.14(1.75²)/2 = 4.80 × 116 = 557.7/27 = −20.66 cy
20.69 cy G.B. TBG 11.26.7

DS-57
STA 44+00 LT − 44+00 RT
NEW 18" × 34' of CPEP (SL)

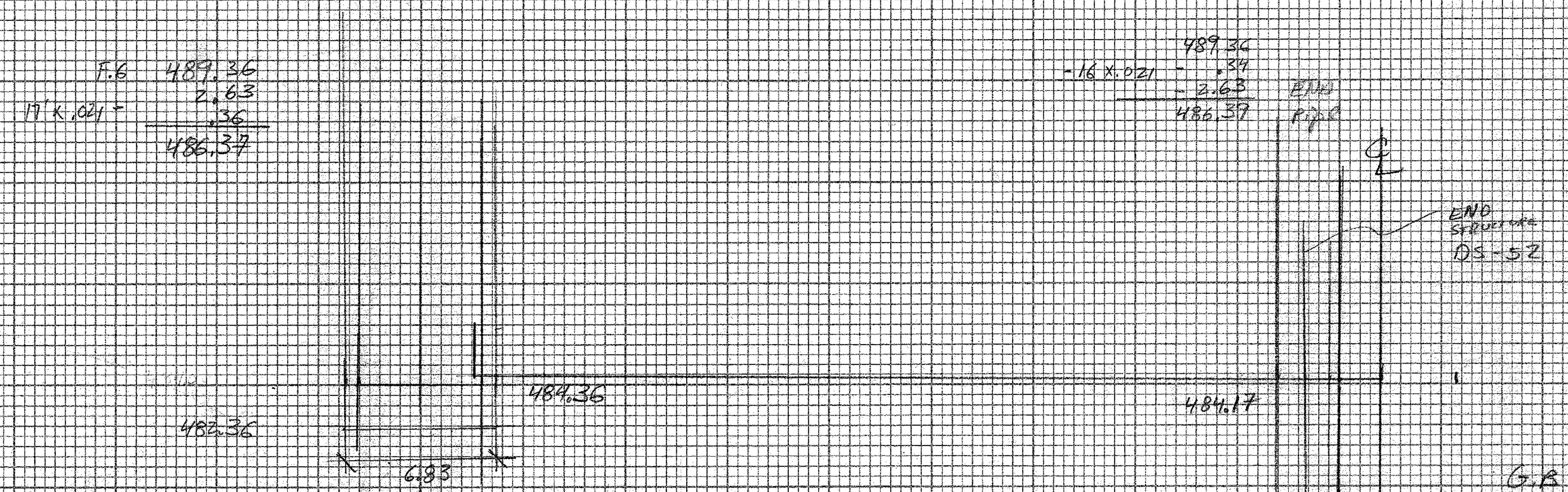

℄
F6 487.28
% −17 x.021 = − .36
− 2.63
486.29
−% 16 X.021
F.6 489.28
− .33
2.63
486.32
DS-56
STRUCTURE
EX
℄
34' of 18" CPEP
INVERT
484.28
482.28
INVERT
484.09
6.83

T.E. STRUCTURE DS-57
486.29 − 482.28 = 4.01 × 3.14 (3.415)² [πr²] = 146.8/27 = 5.44 cy
pipe EX (486.29 − 484.28 = 2.01 + 486.32 − 484.09 = 2.23)/2 = 2.12 × 30.5 × 3.83 = 247.~~86~~ 65/27 = 9.172
14.612 cy T.E.

(½ pipe depth)
G.B 32.5 × .92 × 3.83 = 114.1 5/27 = 4.23 4
−G.B pipe 32.5 × 3.14(.92)²/2 = 43.1/27 = −1.60
2.63 cy G.B 2.64

TBG 12.6.7 cp 12/05/07

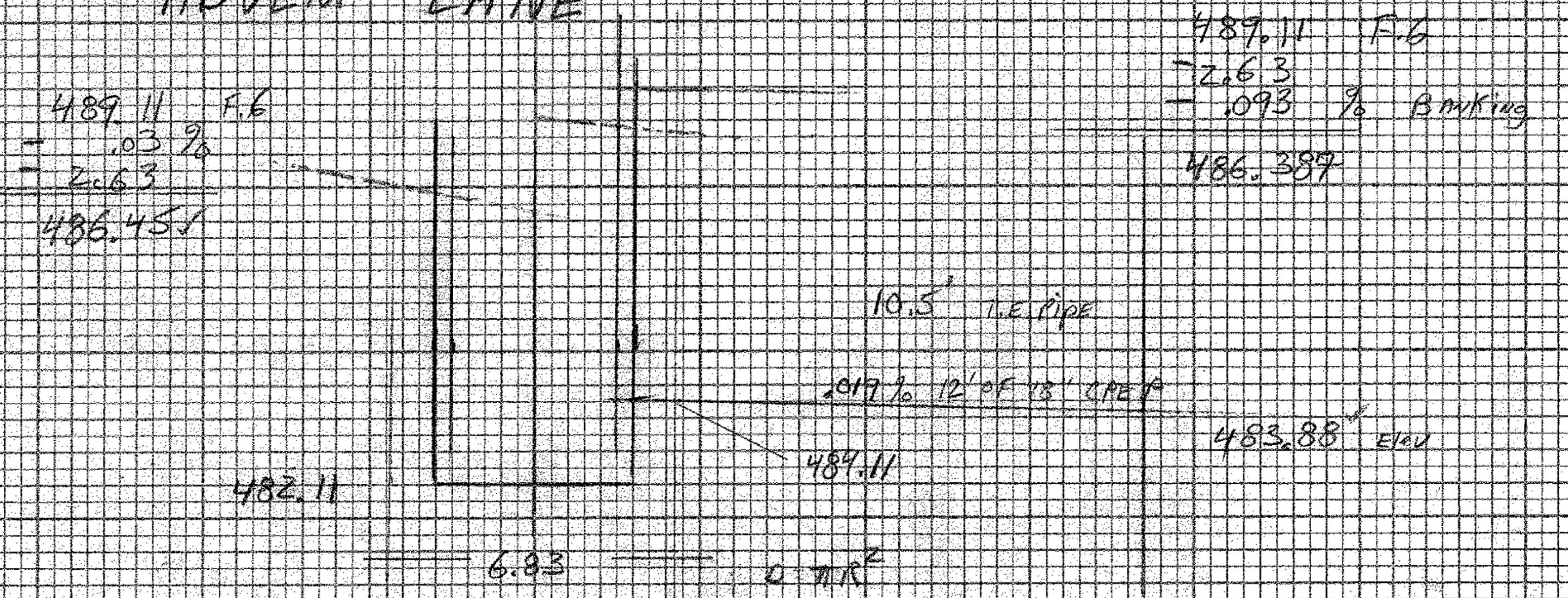
DS-55
STA 43+50 LT − 43+50 RT
NEW 18" × 34' of CPEP (SL)


F.6 489.36
17' x .021 =
2.63
.36
486.37
489.36
−16 x.021 − .34
− 2.63
486.37
END pipe
℄
END STRUCTURE DS-52
484.36
482.36
6.83
484.17

T.E STRUCTURE 486.37 − 482.36 = 4.01 × (3.14)(3.415²) = 146.84/27 = 5.43 cy
T.E Pipe AVG DepTH 486.37 − 484.36 = 2.01 + 486.39 − 484.17 = 2.22
2.12 × 3.83 × 30.8' = 250.3 [250.08]/27 = 9.27 cy
14.70 cy T.E TBG 12.6.7 cp 12/05/07

(½ pipe)
G.B 32.5 × 3.83 × .92 = 114.5/27 = 4.24 cy
−pipe G.B = 32.5 × 3.14(.92)²/2 = 43.18/27 = 1.60 cy
G.B. 2.64 cy

DS 89
STA 45+35.2 RT ~ 45 + 37.3 LT
ADVENT LANE


489.11 F.6
− .03 %
− 2.63
486.45
489.11 F.6
− 2.63
− .093 % Banking
486.387
10.5' T.E pipe
.019 % 12' of 18" CPEP
483.88' Elev
484.11
482.11
6.83
D πR²

T.E STRUCTURE 486.45 − 482.11 = (4.34) 3.14 (3.415)² = 158.93/27 = 5.88 cy
T.E Pipe (486.387 − 483.88 = 2.507 + 486.45 − 484.11 = 2.34)/2 = (2.424 [Depth] × 10.5 [Length] × 3.84 [Width])/27 = 3.62 cy
9.5 cy T.E.
G.B 12.5 × 3.83 × (½ pipe depth .92) = ~~43.89~~ 44.05/27 = 1.63 cy
−GB ½ pipe − 12.5 × 3.14(.92)²/2 [πr²] = 16.6/27 = .61
1.02 cy G.B TBG 12.6.7 cp 12/04/07

HARTFORD RS0113 (40)
DRAINAGE

SHEET #15