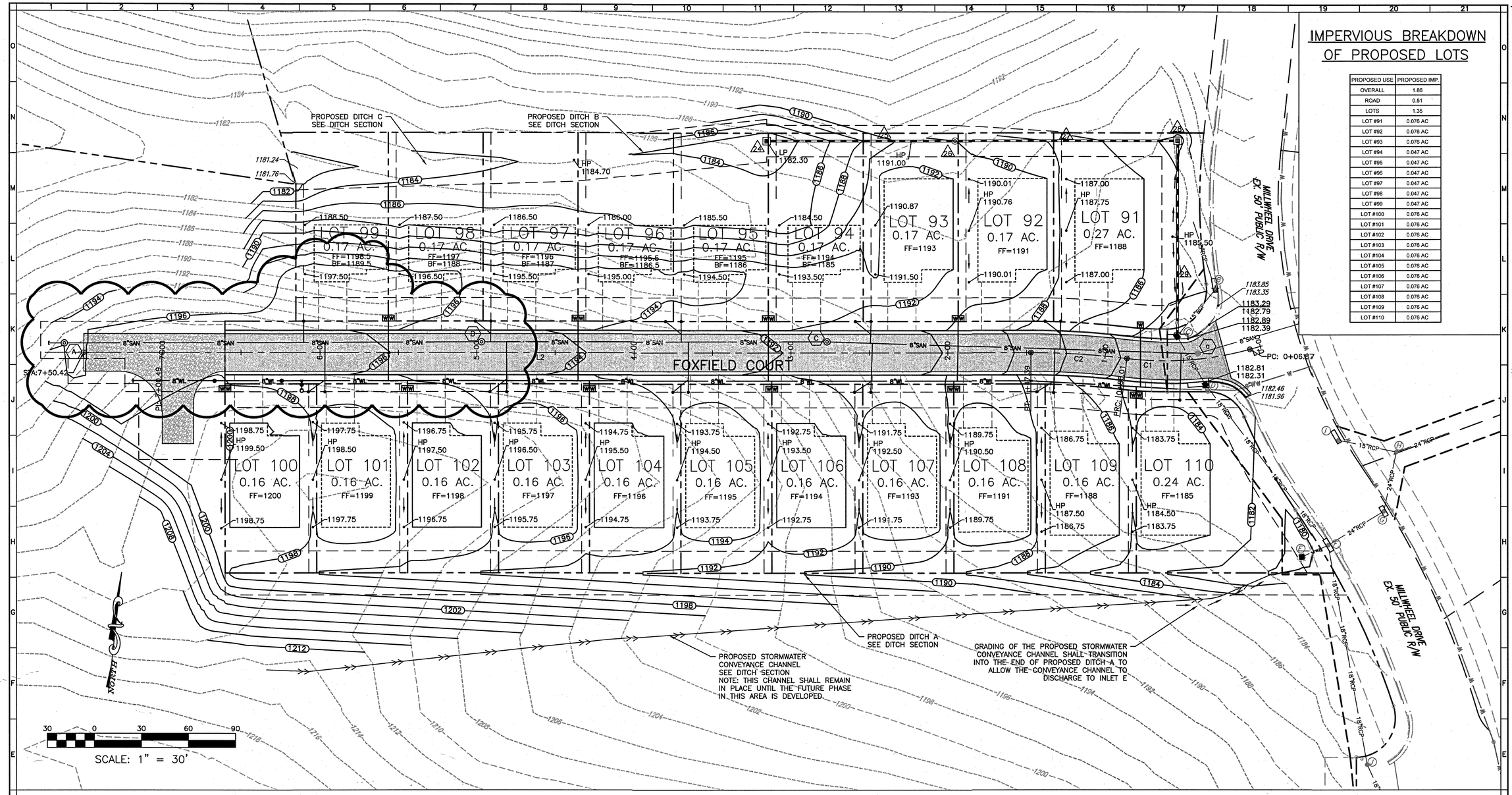


IMPERVIOUS BREAKDOWN OF PROPOSED LOTS

PROPOSED USE	PROPOSED IMP.
OVERALL	1.86
ROAD	0.51
LOTS	1.35
LOT #91	0.076 AC
LOT #92	0.076 AC
LOT #93	0.076 AC
LOT #94	0.047 AC
LOT #95	0.047 AC
LOT #96	0.047 AC
LOT #97	0.047 AC
LOT #98	0.047 AC
LOT #99	0.047 AC
LOT #100	0.076 AC
LOT #101	0.076 AC
LOT #102	0.076 AC
LOT #103	0.076 AC
LOT #104	0.076 AC
LOT #105	0.076 AC
LOT #106	0.076 AC
LOT #107	0.076 AC
LOT #108	0.076 AC
LOT #109	0.076 AC
LOT #110	0.076 AC

SANITARY SEWER SCHEDULE:

ALL S.S. MANHOLES SHALL HAVE STANDARD TOPS*

- (A) S.S. MANHOLE
  TOP=1195.96
  INV. IN=1187.50
  INV. OUT=1187.40
  STUB OUT FOR FUTURE EXTENSION
  10 LF OF 8" SDR-26 @ 1.00%
  TEMP. PLUG AT END OF STUB
  INV.=1187.60
- (A)-(B) 265 LF OF 8" SDR-26
  PVC PIPE @ 1.00%
- (B) S.S. MANHOLE
  5' MANHOLE WITH INSIDE DROP
  TOP=1194.90
  INV. IN=1184.75
  INV. OUT=1180.65
- (B)-(C) 220 LF OF 8" SDR-26
  PVC PIPE @ 1.00%
- (C) S.S. MANHOLE
  TOP=1191.18
  INV. IN=1178.45
  INV. OUT=1178.35
- (C)-(a) 236 LF OF 8" SDR-26
  PVC PIPE @ 2.65%
  INV. OUT=1172.10

STORM SEWER SCHEDULE:

- (24) VDOT STD. DI-7
  WITH TYPE-III GRATE
  TOP=1182.30
  INV. OUT=1179.08 (STR: 26)
- (25) 120 LF 15" TYPE S
  HDPE PIPE @ 0.50%
- (26) VDOT STD. MH-2
  TOP=1190.02
  INV. IN=1178.48 (STR: 24)
  INV. OUT=1178.38 (STR: 28)
- (27) 142 LF 15" TYPE S
  HDPE PIPE @ 0.50%
- (28) VDOT STD. DI-7
  WITH TYPE-III GRATE
  TOP=1183.50
  INV. IN=1177.67 (STR: 26)
  INV. OUT=1177.57 (STR: C)
- (29) 125 LF 15" TYPE S
  HDPE PIPE @ 0.50%

EXISTING STORM SEWER STRUCTURES

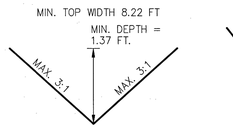
- (A) *Ex. grate inlet* ***T.B.R.***
  Top=1183.60'
  15" rcp inv. out=1180.10'
- (B) *Ex. curb inlet*
  Top=1184.36'
  15" rcp inv. in=1179.04'
  15" rcp inv. out=1178.91'
- (C) *Ex. grate inlet*
  TOP TO BE CONVERTED TO VDOT STD. DI-3B (12' THROAT)
  Top=1180.60'
  NEW TOP=1182.89'
  15" rcp inv. in=1177.35'
  NEW 15" INV. IN=1176.95'
  15" rcp inv. out=1176.85'
- (D) *Ex. grate inlet*
  TOP TO BE CONVERTED TO VDOT STD. DI-3BB (12' THROAT)
  Top=1180.30'
  NEW TOP=1182.81'
  15" rcp inv. in=1174.75'
  18" rcp inv. out=1174.57'
- (E) *Ex. grate inlet*
  Top=1179.00'
  15" rcp inv. out=1174.58'
- (F) *Ex. curb inlet*
  Top=1180.06'
  15" rcp inv. in=1172.74'
  15" rcp inv. in=1172.74'
  18" rcp inv. in=1172.68'
  24" rcp inv. out=1172.41''
- (G) *Ex. curb inlet*
  Top=1180.25'
  24" rcp inv. in=1171.35'
  24" rcp inv. out=1171.20'
- (H) *Ex. storm manhole*
  Top=1179.82'
  15" rcp inv. in=1170.35'
  24" rcp inv. in=1169.54'
  24" rcp inv. out=1169.44'
- (I) *Ex. curb inlet*
  Top=1180.76'
  15" rcp inv. out=1173.00'
- (J) *Ex. storm manhole*
  Top=1186.26'
  18" rcp inv. in=1177.06'
  18" rcp inv. out=1177.06
- (K) *Ex. grate inlet*
  Top=1180.60'
  15" rcp inv. in=1177.35'
  15" rcp inv. out=1176.85'
- (L) *Ex. curb inlet*
  Top=1192.52'
  15" rcp inv. out=1185.92'

EXISTING SANITARY SEWER STRUCTURES

- (a) *Ex. s.s. manhole*
  Top=1182.57'
  Shelf=1172.40'
  8" rcp inv. in=1171.62'
  8" rcp inv. out=1171.52'
- (a) *Ex. s.s. manhole*
  Top=1173.50'
  Shelf=1169.00'
  8" inv. in=1168.40'
  8" inv. out=1168.30'

GRADING NOTES:

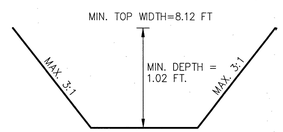
1. G.C. SHALL ENSURE POSITIVE DRAINAGE AWAY FROM ALL PROPOSED DWELLINGS.
2. OVERLOT GRADING, HOUSE LOCATIONS AND FINISHED FLOOR ELEVATIONS SHOWN SHALL BE GENERALLY ADHERED TO REGARDING GENERAL DRAINAGE PATTERNS. A SEPARATE BPPP WILL NEED TO BE SUBMITTED TO ROANOKE COUNTY PRIOR TO HOUSE CONSTRUCTION FOR EACH LOT TO ENSURE THAT THE LOTS ARE IN GENERAL COMPLIANCE WITH THIS OVERLOT GRADING PLAN.
3. WATERPROOFING SHALL BE PROVIDED AS NECESSARY FOR ALL BASEMENT WALLS WHERE THE FINISHED FLOOR WILL BE LOCATED BELOW FINISHED GRADE.
4. SEE TABLE ON SHEET C15 FOR MINIMUM SEWERABLE ELEVATIONS FOR DWELLINGS.



*NOTE: VDOT STD. EC-3 TYPE-1 LINING REQUIRED

STORMWATER CONVEYANCE CHANNEL SECTION

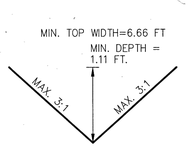
NTS



*NOTE: NO LINING REQ'D

DITCH SECTION A

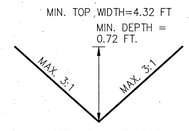
NTS



*NOTE: NO LINING REQ'D

DITCH SECTION B/C

NTS



*NOTE: NO LINING REQ'D

YARD SWALE SECTION

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ENVIRONMENTAL & SOIL SCIENCE
WETLAND DELINEATIONS & STREAM EVALUATIONS
Balzer and Associates, Inc.
1208 Corporate Circle
Roanoke, VA 24018
540-772-9580
FAX 540-772-8050

COMMONWEALTH OF VIRGINIA
CHRISTOPHER P. BURNS
Lic. No.047338
10/19/17
PROFESSIONAL ENGINEER

FOXFIELD - SECTION 6

GRADING PLAN

CATAWBA DISTRICT
ROANOKE COUNTY, VIRGINIA

DRAWN BY	LAR
DESIGNED BY	LAR
CHECKED BY	CPB
DATE	8/18/2016
SCALE	1"=30'

REVISIONS:
10/20/2016
11/10/2016
10/19/2017 – PR#1

SHEET NO.
C5

JOB NO. R1400109.00