

**EMERGENCY RELIEF PATH
CALCULATIONS SECTION 6-6
BETWEEN LOTS 45 & 46**

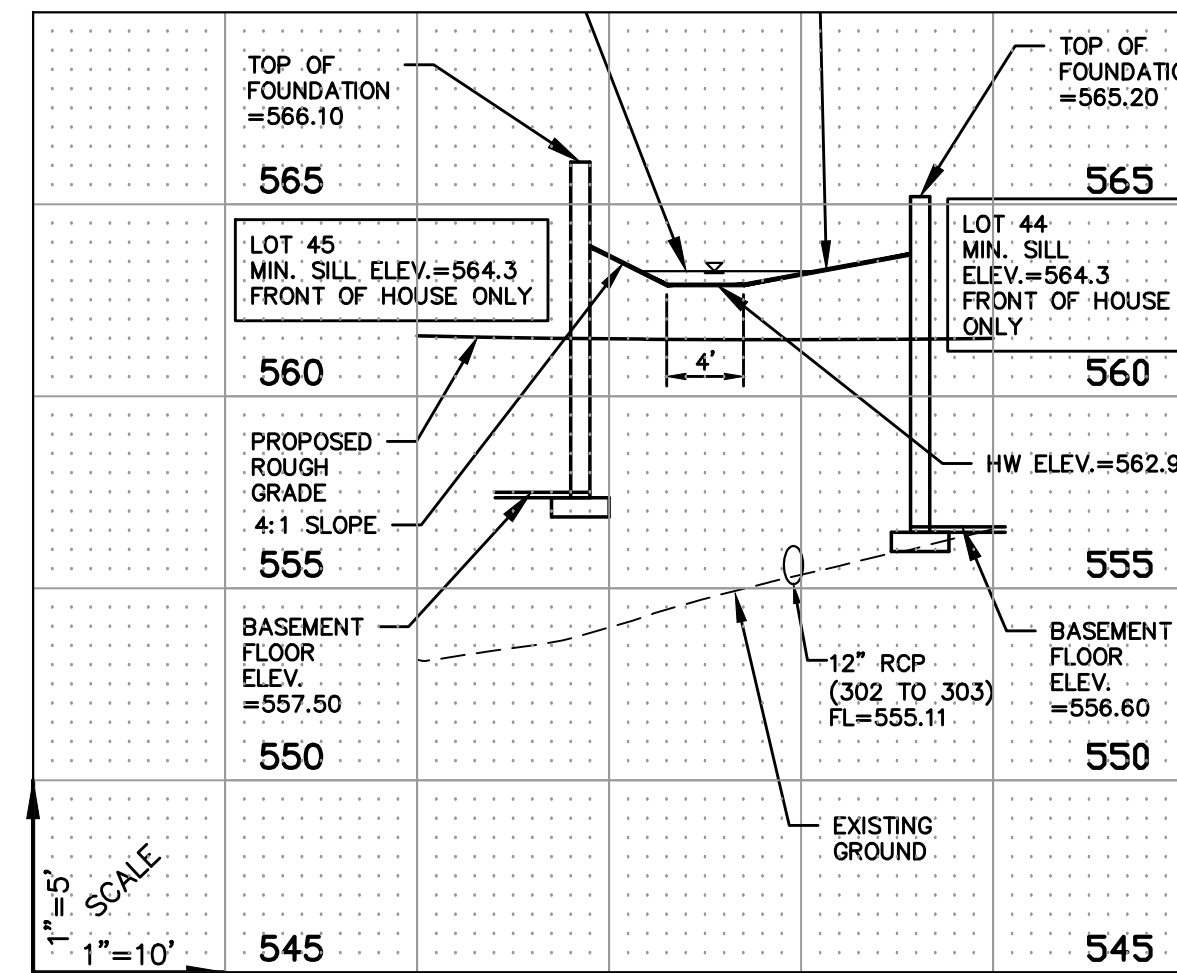
TOTAL 15 YEAR, 20 MINUTE Q = 2.73 C.F.S.

EMERGENCY RELEASE BETWEEN LOTS 45 & 46 IS CONTROLLED BY A HIGH POINT.

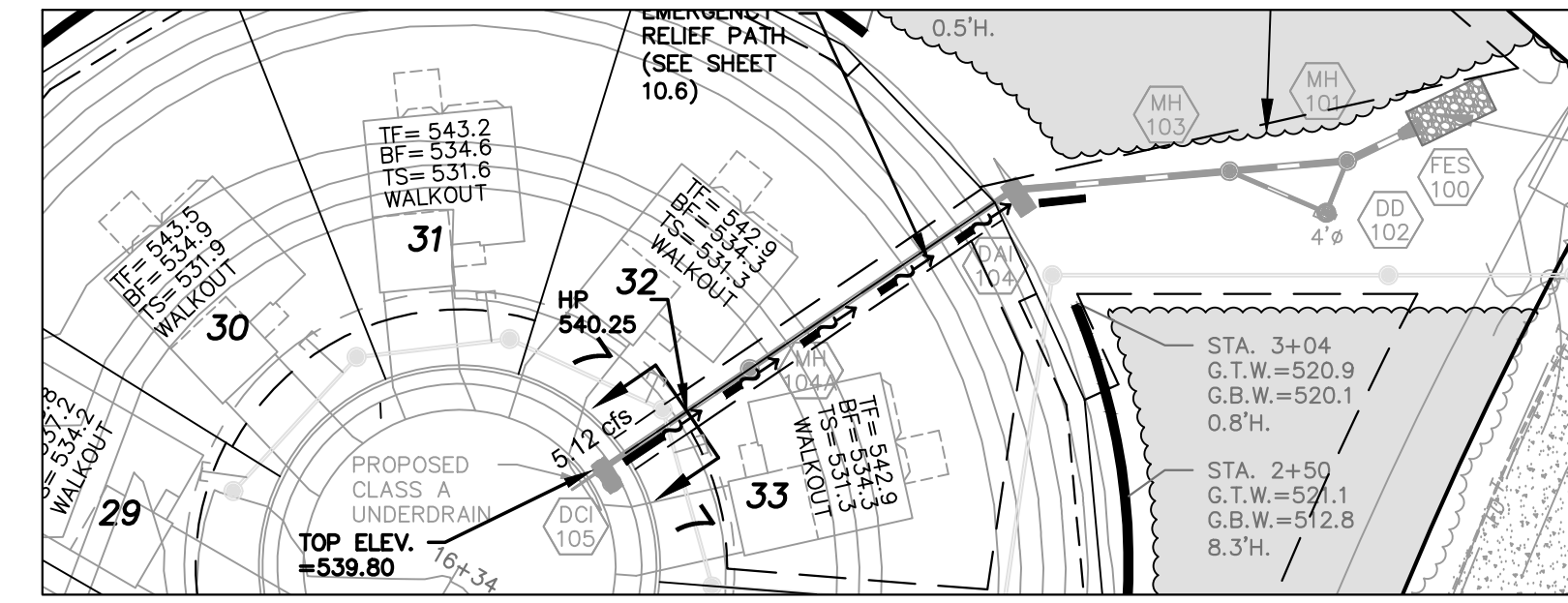
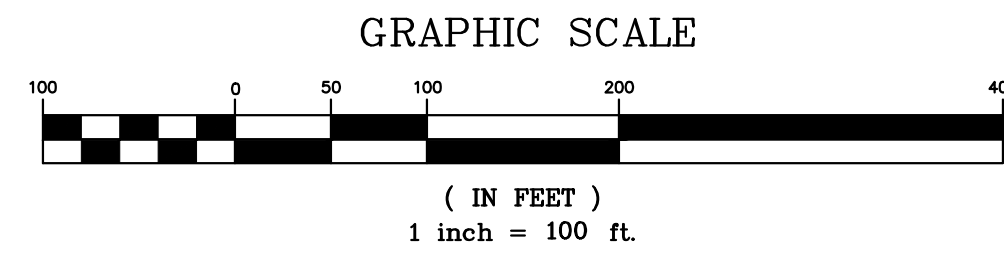
THE WEIR EQUATION IS APPLIED AT THE HIGH POINT:
 $Q = CLH^{3/2}$

WHERE:
C = 3.10
TOTAL LENGTH (L) = 4 FT.
Q15 = 2.73 C.F.S.
H = $(Q/CL)^{2/3}$
= $((2.73/(3.1*4))^{2/3})$
= 0.36 FT.
HW ELEV. = 562.9 + 0.36'
HW ELEV. = 563.26'

THE MINIMUM SILL ELEVATIONS OF THE RESIDENCES ON LOT 45 & 46 TO BE 564.3. FRONT OF HOUSE ONLY.



SECTION 6-6 AT HIGH/CONTROL POINT



**EMERGENCY RELIEF PATH
CALCULATIONS SECTION 7-7
BETWEEN LOTS 32 & 33**

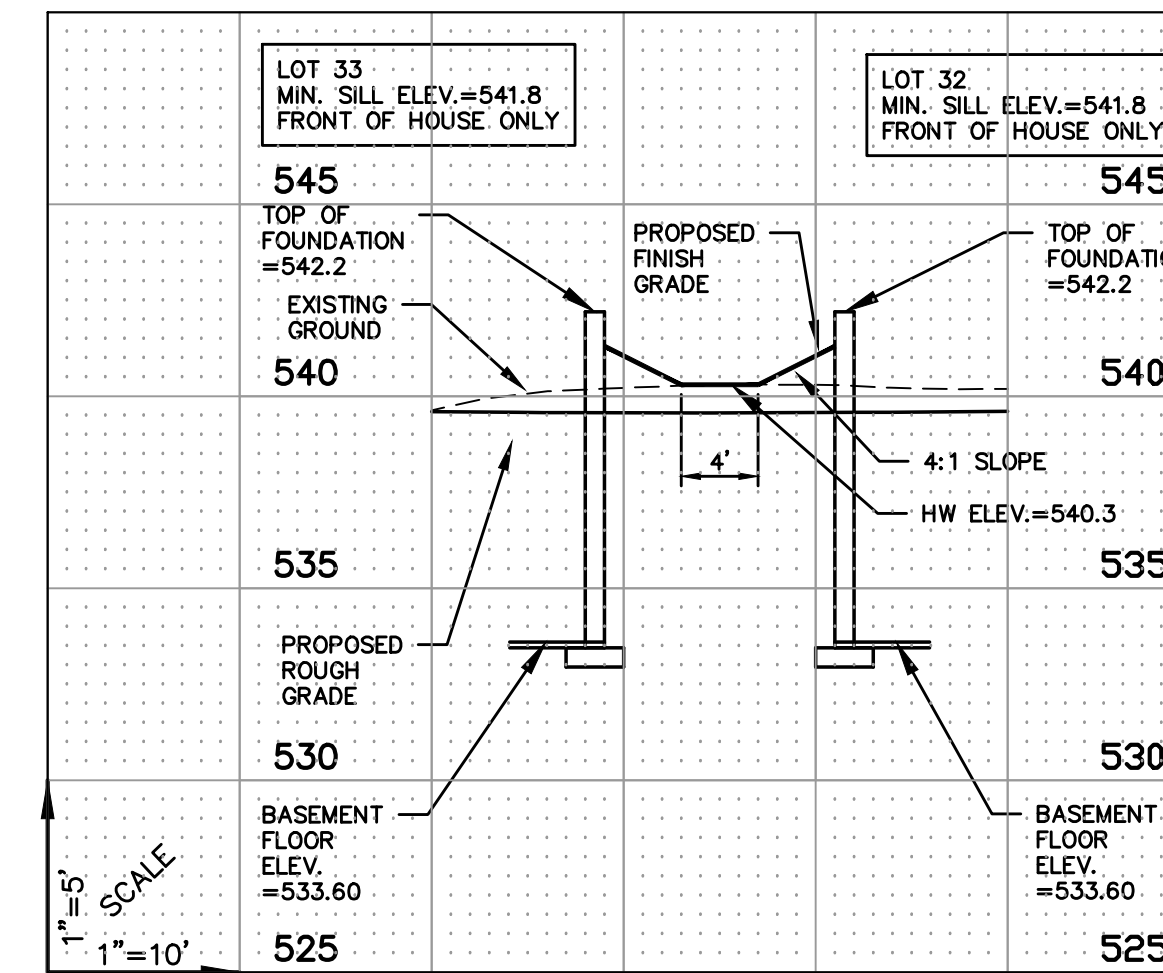
TOTAL 15 YEAR, 20 MINUTE Q = 5.12 C.F.S.

EMERGENCY RELEASE BETWEEN LOTS 32 & 33 IS CONTROLLED BY A HIGH POINT.

THE WEIR EQUATION IS APPLIED AT THE HIGH POINT:
 $Q = CLH^{3/2}$

WHERE:
C = 3.10
TOTAL LENGTH (L) = 4 FT.
Q15 = 5.12 C.F.S.
H = $(Q/CL)^{2/3}$
= $((5.12/(3.1*4))^{2/3})$
= 0.55 FT.
HW ELEV. = 540.25 + 0.55'
HW ELEV. = 540.8'

THE MINIMUM SILL ELEVATIONS OF THE RESIDENCES ON LOT 32 & 33 TO BE 541.8. FRONT OF HOUSE ONLY.



SECTION 7-7 AT HIGH/CONTROL POINT

ISSUE	DATE	REMARKS
1	06/20/2017	Final Submittal
2	10/06/2017	City Comments
3	11/10/2017	City Comments
4	12/16/2017	City Comments
5	01/11/2018	City Resubmittal

PROJECT TITLE

Brookview

OFFALLON, MISSOURI

THE STERLING CO.
ENGINEERS & SURVEYORS

5055 New Baumgartner Road
St. Louis, Missouri 63129
Ph. 314-487-0440 Fax. 314-487-8944
www.sterling-eng-sur.com
Corporate Certificate of Authority #001348



Date: 01/11/18
SEAN ACKLEY
LICENSE # PE-2009018679
Civil Engineer

McBride Guthrie, LLC
16091 Swingley Ridge Road, Suite 300
Chesterfield, Missouri 63017
Ph. (636) 537-2000
Fax (636) 537-2546

EMERGENCY RELIEF PATH SECTIONS

P+Z No. 17-005894
City No. 17-008288
Date: 01/11/18
Job No. 17-02-041

Page No.

10.7

IMP