

TRAPEZOIDAL CHANNEL ANALYSIS
NORMAL DEPTH COMPUTATION

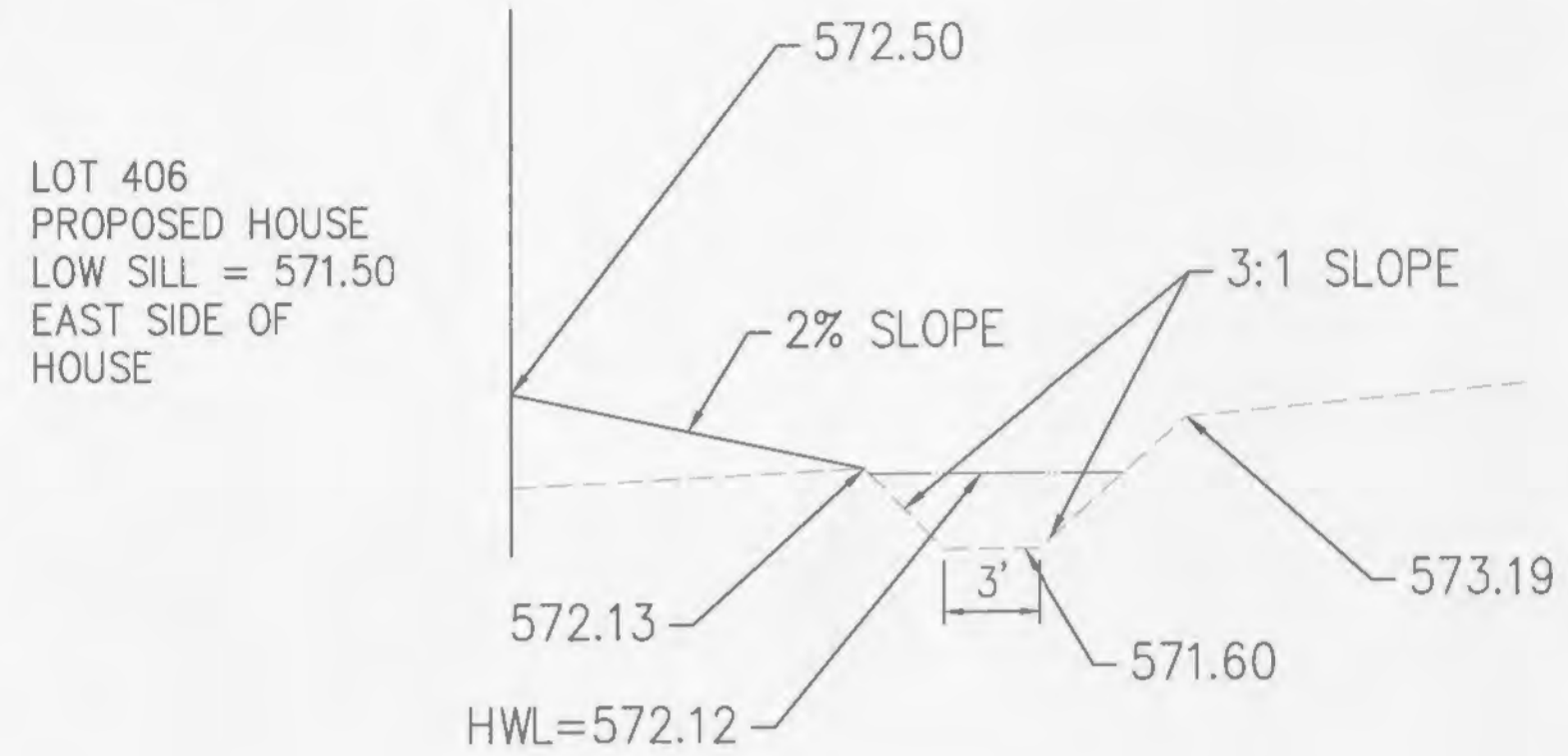
February 5, 2014

PROGRAM INPUT DATA	
DESCRIPTION	VALUE
Flow Rate (cfs)	9.65
Channel Bottom Slope (ft/ft)	0.02
Manning's Roughness Coefficient (n-value)	0.027
Channel Left Side Slope (horizontal/vertical)	3.0
Channel Right Side Slope (horizontal/vertical)	3.0
Channel Bottom Width (ft)	3.0

COMPUTATION RESULTS	
DESCRIPTION	VALUE
Normal Depth (ft)	0.52
Flow Velocity (fps)	4.07
Froude Number	1.152
Velocity Head (ft)	0.26
Energy Head (ft)	0.78
Cross-Sectional Area of Flow (sq ft)	2.37
Top Width of Flow (ft)	6.12

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Dodson & Associates, Inc., 5629 FM 1960 West, Suite 314, Houston, TX 77069
Phone: (281)440-3787, Fax: (281)440-4742, Email: software@dodson-hydro.com
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6 CHANNEL ANALYSIS LOT 406
SCALE: N.T.S. REF. DWG.



NOTE: WINDOW WELLS
MAY BE REQUIRED.

5 EMERGENCY SPILLWAY DETAIL
SCALE: N.T.S. REF. DWG.



4 EMERGENCY SPILLWAY
SCALE: 1"=20' REF. DWG.

TRAPEZOIDAL CHANNEL ANALYSIS
NORMAL DEPTH COMPUTATION

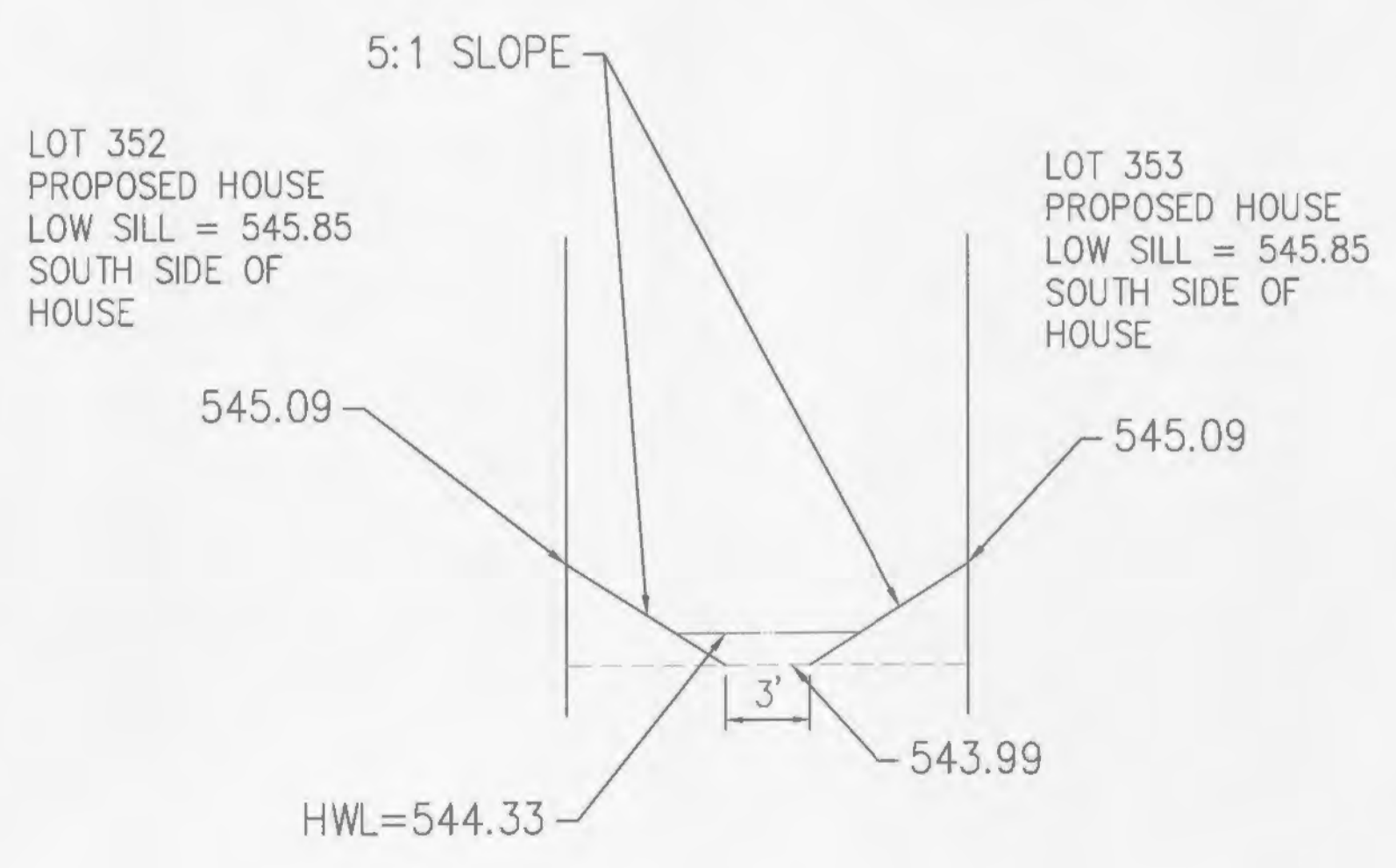
March 25, 2014

PROGRAM INPUT DATA	
DESCRIPTION	VALUE
Flow Rate (cfs)	4.72
Channel Bottom Slope (ft/ft)	0.019
Manning's Roughness Coefficient (n-value)	0.027
Channel Left Side Slope (horizontal/vertical)	5.0
Channel Right Side Slope (horizontal/vertical)	5.0
Channel Bottom Width (ft)	3.0

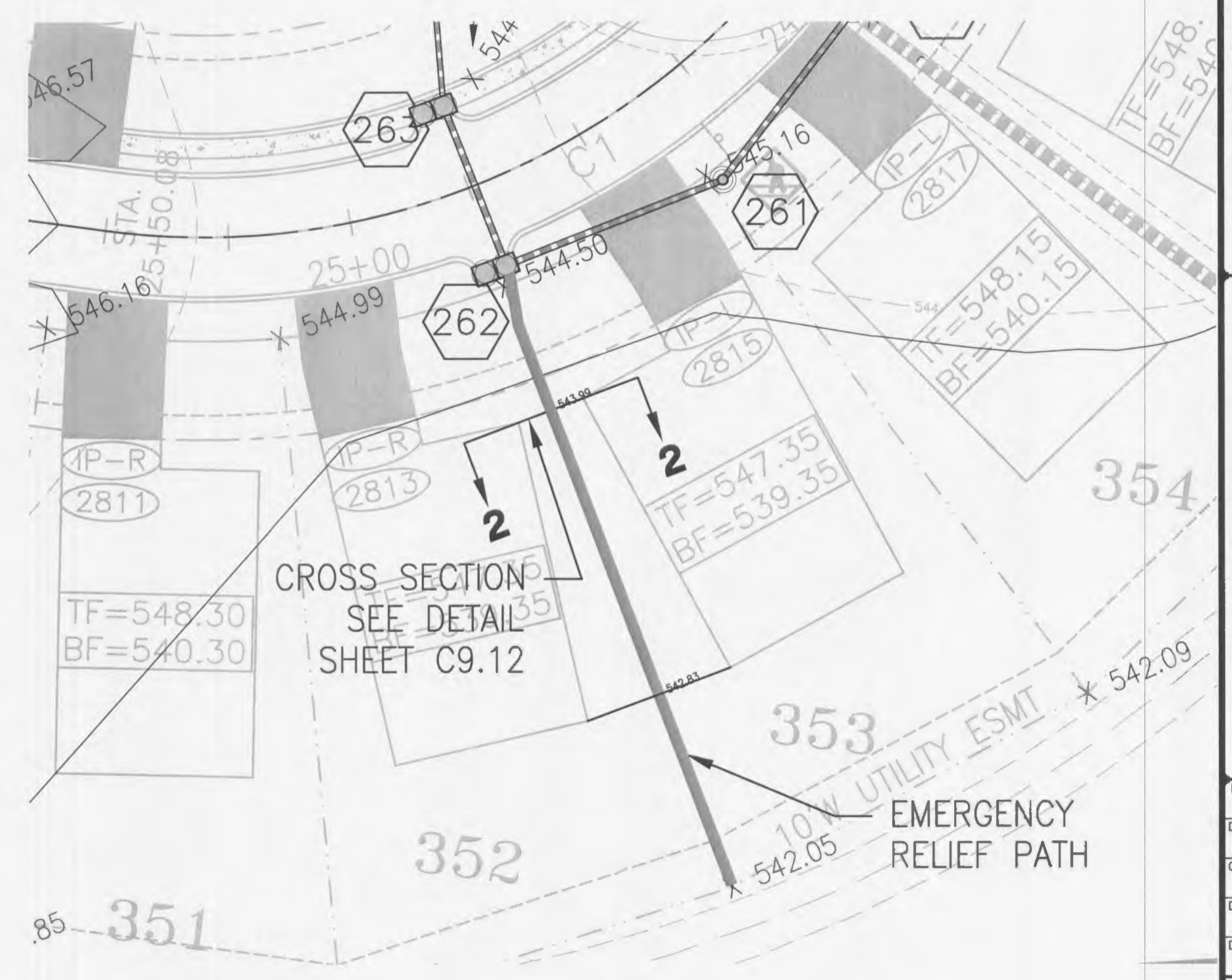
COMPUTATION RESULTS	
DESCRIPTION	VALUE
Normal Depth (ft)	0.34
Flow Velocity (fps)	2.97
Froude Number	1.051
Velocity Head (ft)	0.14
Energy Head (ft)	0.48
Cross-Sectional Area of Flow (sq ft)	1.59
Top Width of Flow (ft)	6.38

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2 CHANNEL ANALYSIS LOTS 352-353
SCALE: N.T.S. REF. DWG.



2 EMERGENCY SPILLWAY DETAIL
SCALE: N.T.S. REF. DWG.



1 EMERGENCY SPILLWAY
SCALE: 1"=20' REF. DWG.

REVELOPER/OWNER PULTE GROUP 1707 CHESTERFIELD AIRPORT RD, STE 120 CHESTERFIELD, MO 63005 PHONE: (636) 537-7129	DATE 5/27/14
DESIGNER/ENGINEER COLE 1520 S. Fifth Street Suite 307 St. Charles, MO 63303 636.978.2068 Cole & Associates, Inc.	DATE 01/07/2013
PROJECT PRESTON WOODS PHASE 7 IMPROVEMENT PLANS PRESTON WOODS LANE O'FALLON, MO 63366	Job Number 13-0109
EMERGENCY SPILLWAY	Sheet Number C9.12
CITY COMMENTS 3 CITY DESIG & WATER COMMENTS 2 CITY DESIGN REVIEW & PRE COMMENTS 1 DATE 5/27/14	REVISION DESCRIPTION NO

USER: Taylor, Stuart TAB: DETAILS 12
DATE: May 22, 2014 - 2:31:48 PM
DRAWING: S:\JOBS\130109\C9-DWG_C-Dwg-IP-Phase7-0_P-Details.dwg