

TRAPEZOIDAL CHANNEL ANALYSIS
NORMAL DEPTH COMPUTATION

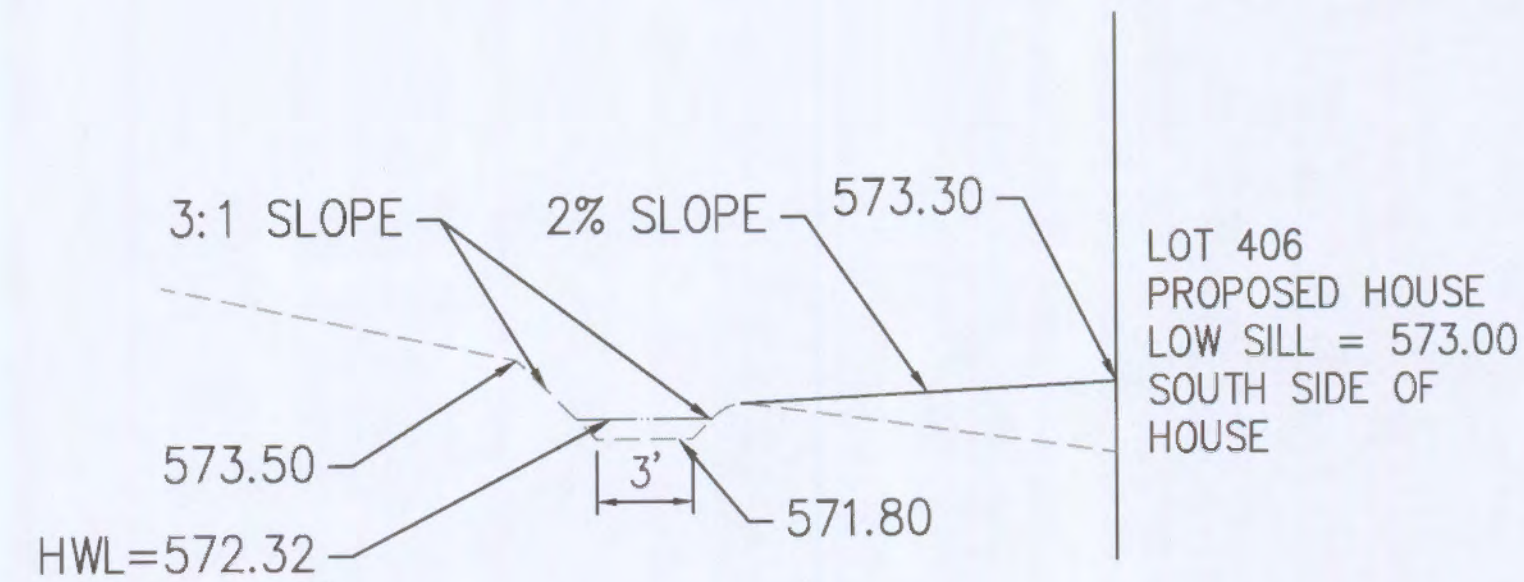
November 6, 2013

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

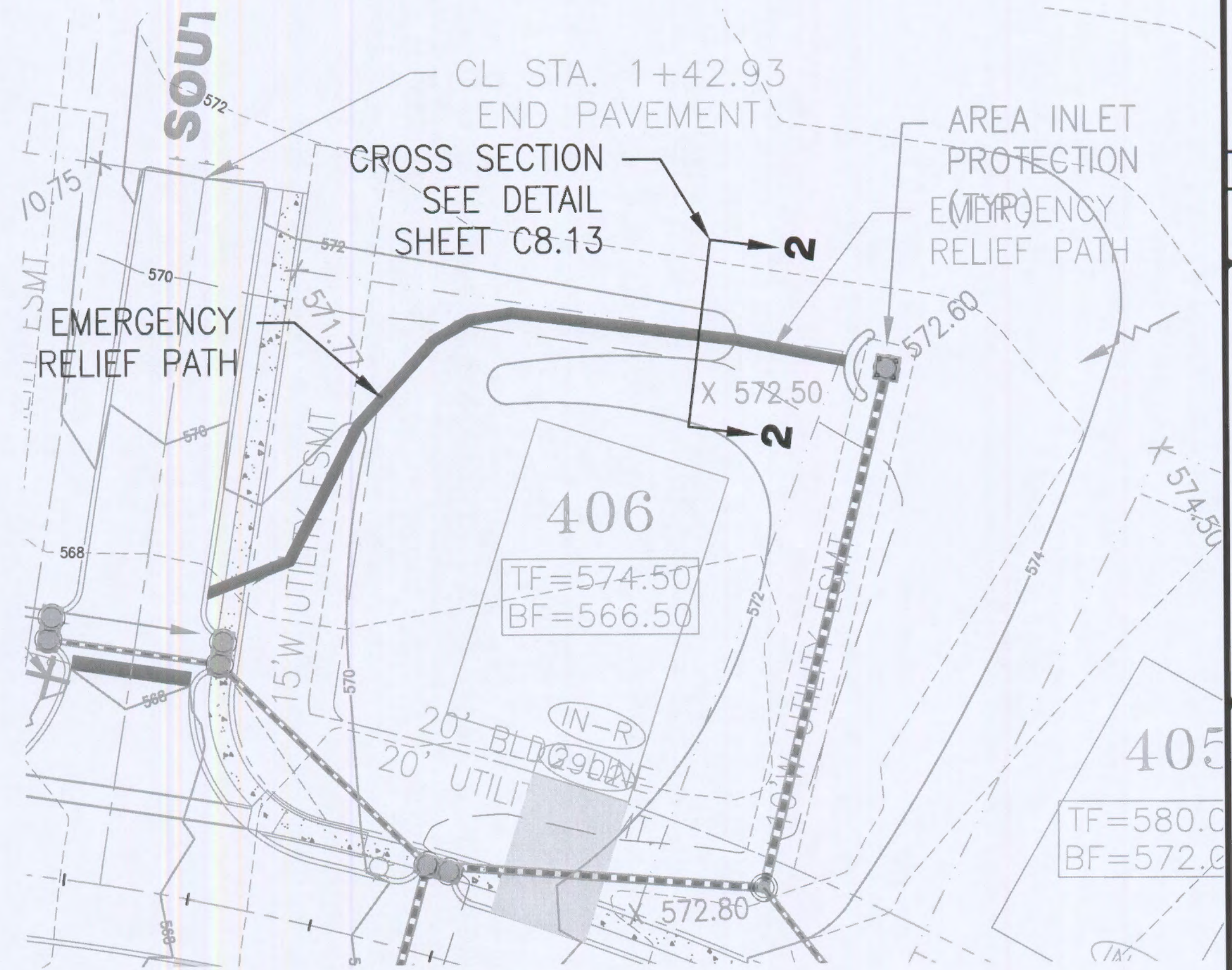
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Dodson & Associates, Inc., 5629 FM 1960 West, Suite 314, Houston, TX 77069
Phone: (281) 440-3787, Fax: (281) 440-4742, Email: software@dodson-hydro.com
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6 CHANNEL ANALYSIS LOT 355
SCALE: N.T.S. REF. 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

November 7, 2013

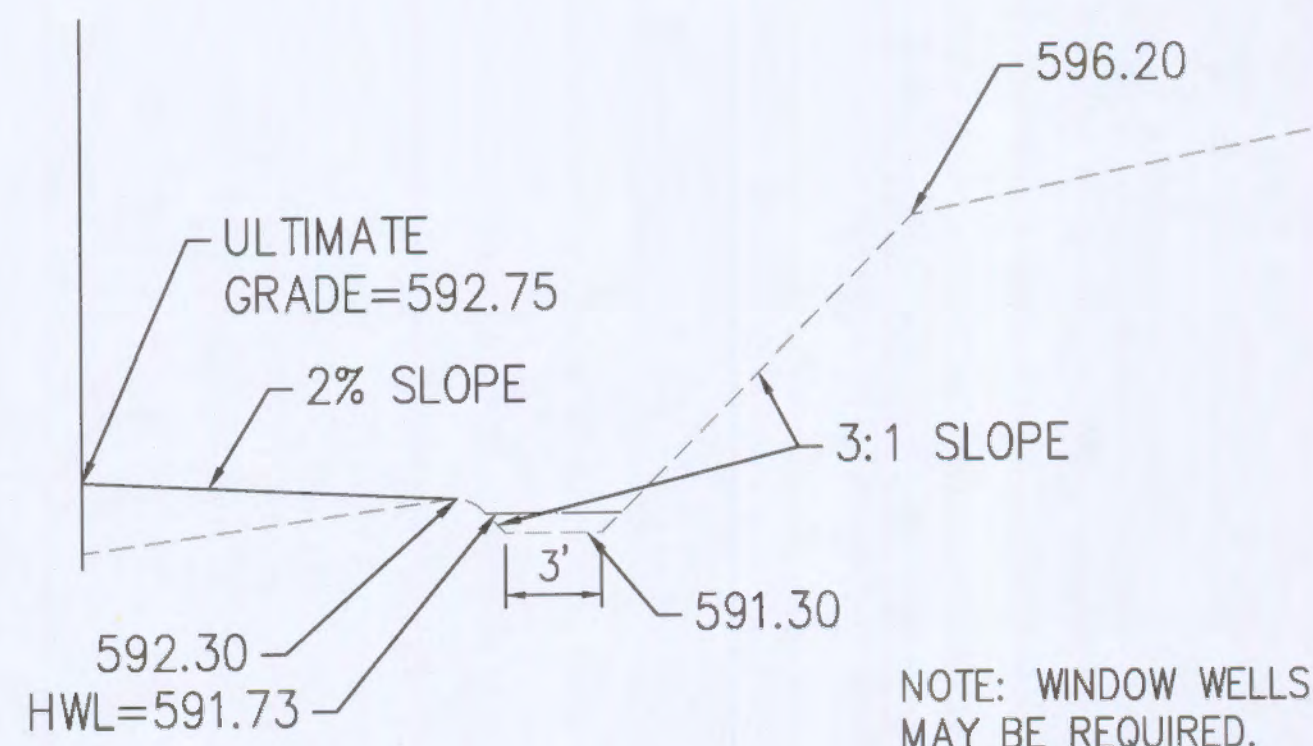
PROGRAM INPUT DATA	
DESCRIPTION	VALUE
Flow Rate (cfs)	5.91
Channel Bottom Slope (ft/ft)	0.01
Manning's Roughness Coefficient (n-value)	0.027
Channel Left Side Slope (horizontal/vertical)	3.0
Channel Right Side Slope (horizontal/vertical)	3.0
Channel Bottom Width (ft)	3.0

COMPUTATION RESULTS	
DESCRIPTION	VALUE
Normal Depth (ft)	0.48
Flow Velocity (fps)	2.76
Froude Number	0.807
Velocity Head (ft)	0.12
Energy Head (ft)	0.6
Cross-Sectional Area of Flow (sq ft)	2.14
Top Width of Flow (ft)	5.89

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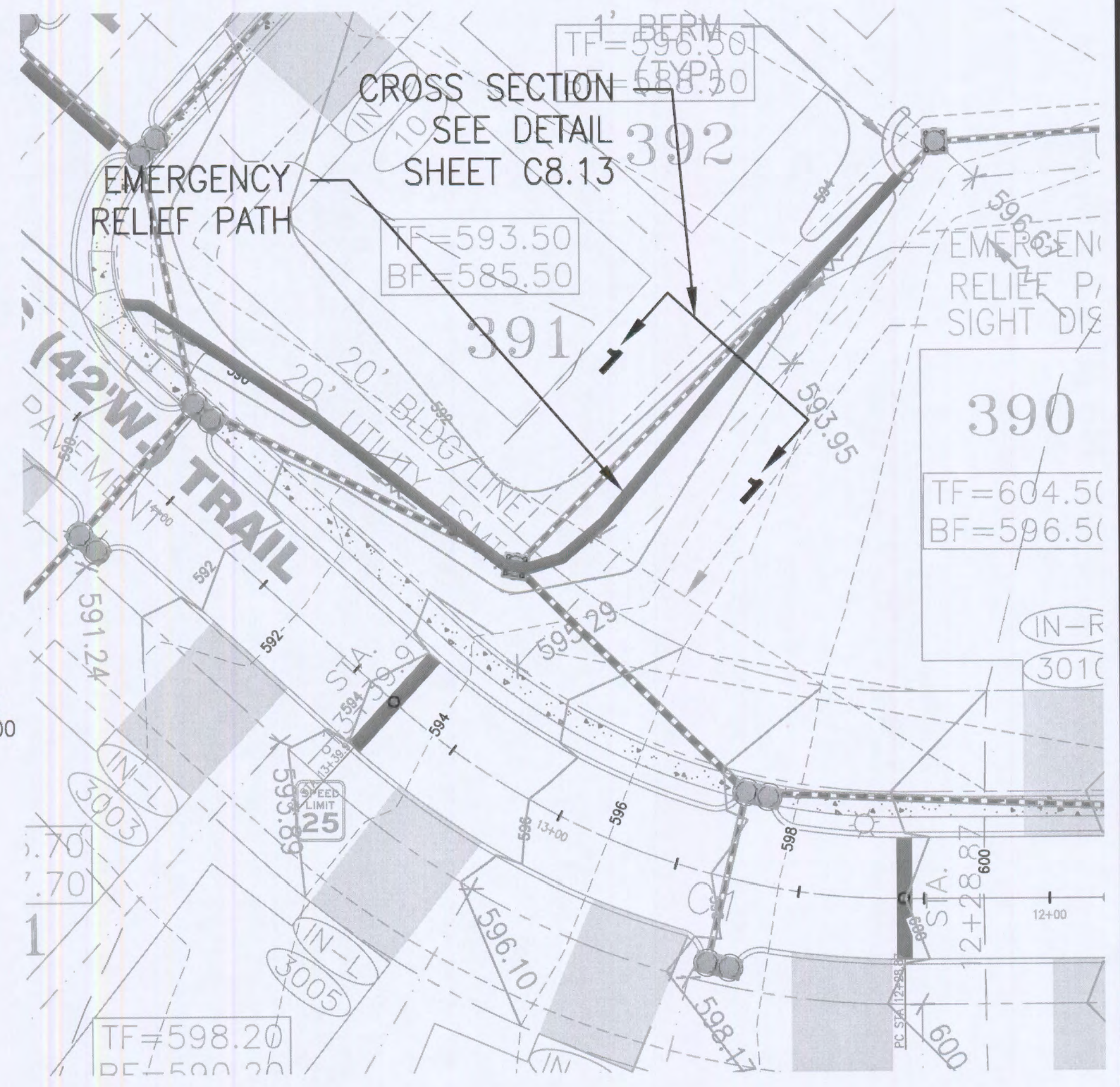
2 CHANNEL ANALYSIS LOT 370
SCALE: N.T.S. REF. DWG.

LOT 371
PROPOSED HOUSE
LOW SILL = 592.00
EAST SIDE OF
HOUSE



NOTE: WINDOW WELLS
MAY BE REQUIRED.

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



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

DEVELOPER/OWNER:
PULTE GROUP
16640 CHESTERFIELD GROVE STE 200
CHESTERFIELD, MO 63005
PHONE: (636) 537-7129

CIVIL ENGINEERS
CORPORATE
CERTIFICATE
#001165
JOHN F. HARSHBARGER
NUMBER
E-28716
HARSHBARGER
PROFESSIONAL REGISTERED
DATE: 11/25/13

11/25/2013
10/18/2013
1
1
CHANGE LOT NUMBERS
CITY, DSSD, FINED COMMENTS
REVISION DESCRIPTION

PRESTON WOODS PHASE 6 IMPROVEMENT PLANS
PRESTON WOODS LANE
O'FALLON, MO 63366

RELIEF PATH SECTIONS

ST. CHARLES
1520 S. Fifth Street
Suite 307
St. Charles, MO 63303
636.978.7508 tel
636.978.7508 fax

COLE
CIVIL ENGINEERING / SURVEYING / PLANNING / LANDSCAPE ARCHITECTURE
Cole & Associates, Inc.

DESIGN/CALC BY: R/JG
DRAWN BY: R/JG
CHECKED BY: TCA
DRAWING SCALE: NOT TO SCALE
DATE: 09/04/2013
Job Number: 13-0054
Sheet Number: C8.13