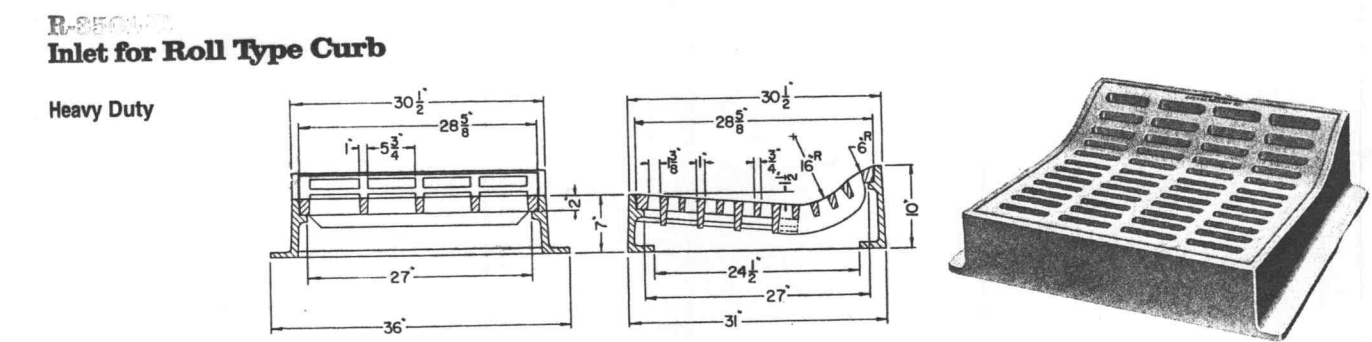


# MAGNOLIA VILLAGE A STORM SEWER ADDENDUM

PART OF SECTION 30, TOWNSHIP 47 NORTH, RANGE 3 EAST  
OF THE FIFTH PRINCIPAL MERIDIAN

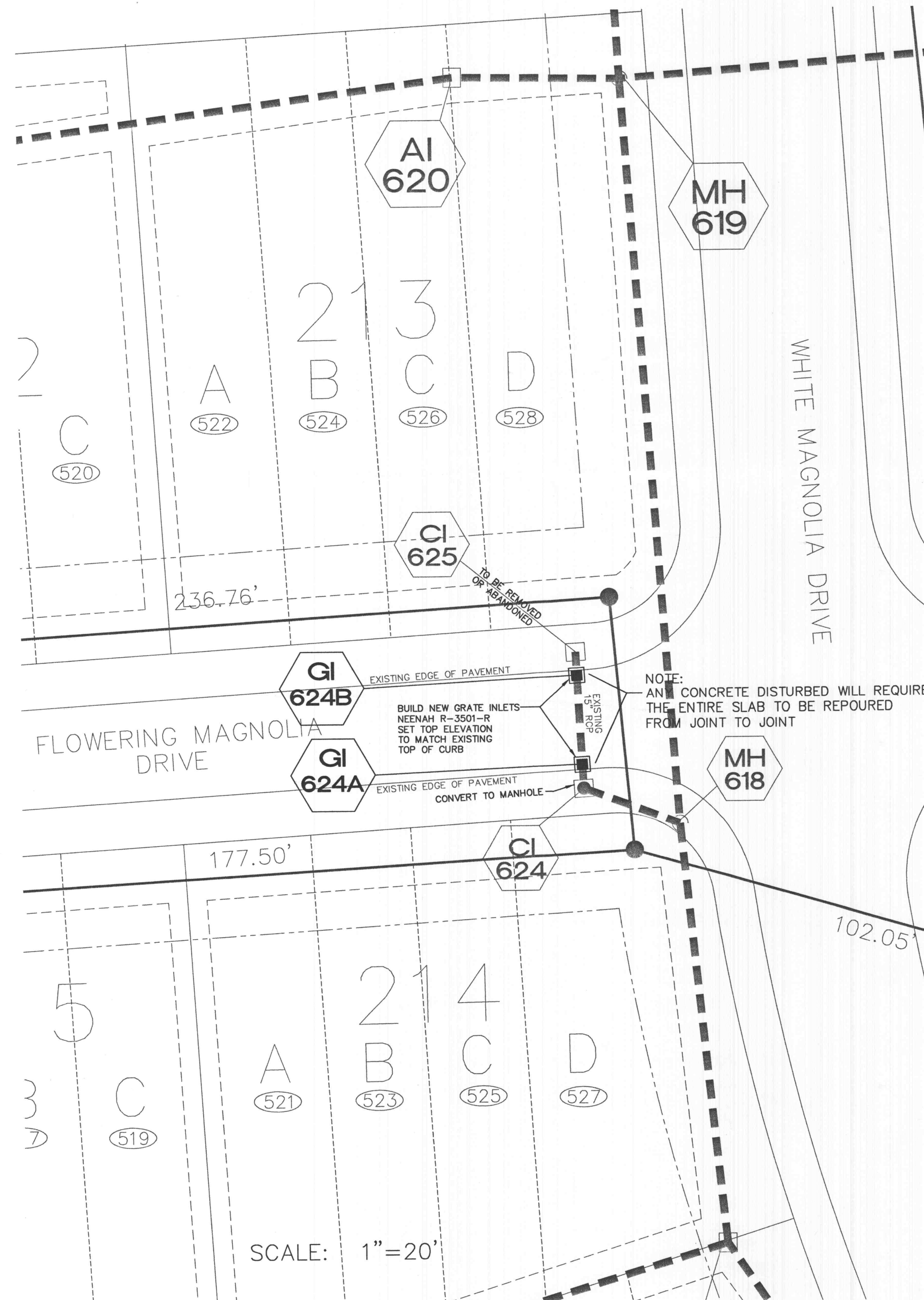
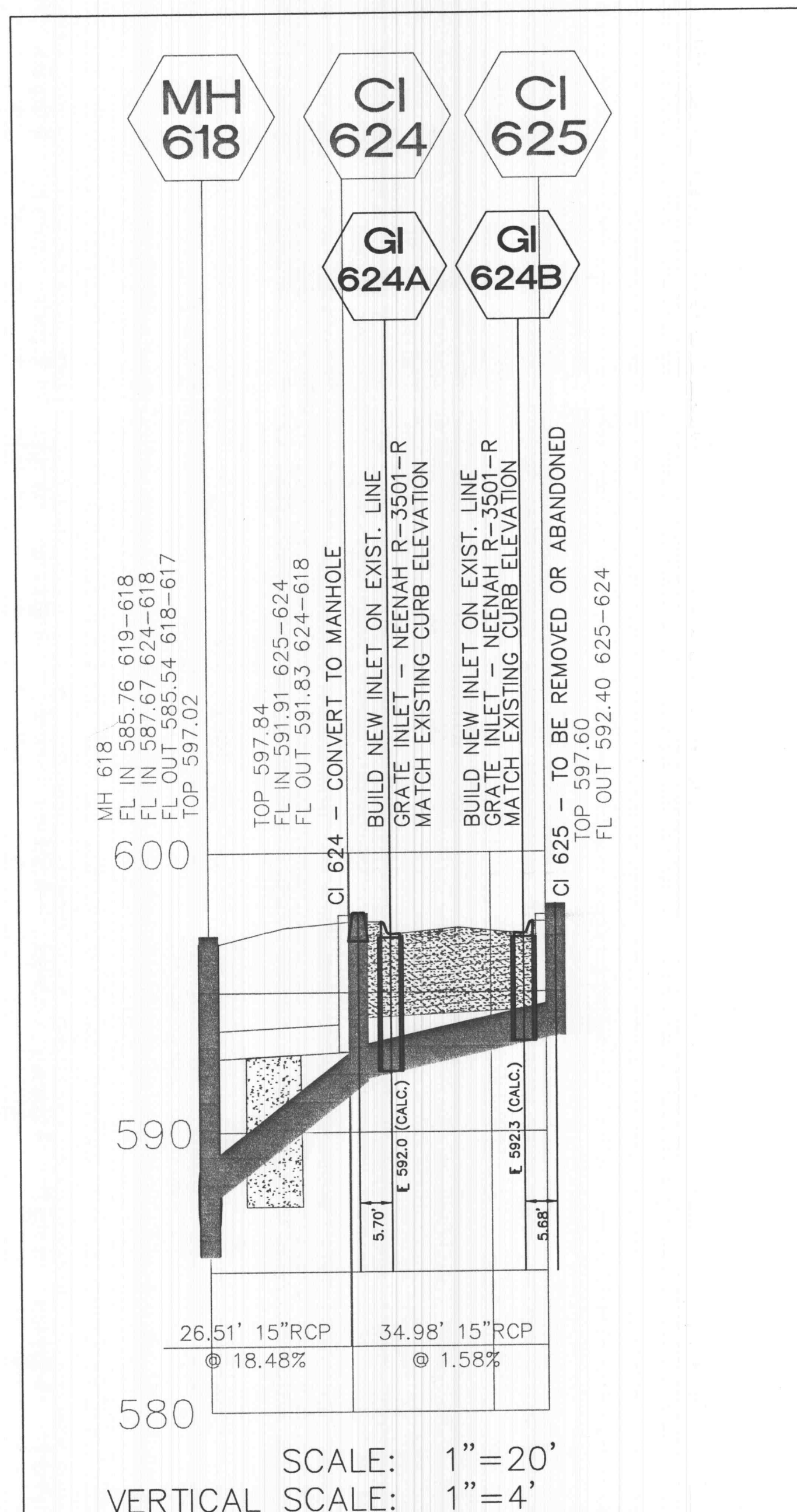


GRATE INLET DETAIL

Not to Scale

### INLET CAPACITY CALCULATIONS

GI 624B	GI 624A
Q = 1.39 cfs	Q = 1.22 cfs
S = 2%	S = 2%
Z = 1/.02 = 50	Z = 1/cross slope = 1/.02 = 50
n = 0.016	n = 0.016
$d = \left[ \frac{nQ}{K Z S^{1/2}} \right]^{3/8}$	$d = \left[ \frac{nQ}{K Z S^{1/2}} \right]^{3/8}$
$d = \left[ \frac{.016 \times 1.39}{.56 \times 50 \times \sqrt{.02}} \right]^{3/8}$	$d = \left[ \frac{.016 \times 1.22}{.56 \times 50 \times \sqrt{.02}} \right]^{3/8}$
$d = \left[ \frac{.02224}{3.9598} \right]^{.375}$	$d = \left[ \frac{.01952}{3.9598} \right]^{.375}$
d = 0.1432"	d = (.00493) <sup>.375</sup> = 0.1364"
Width of Spread = Zd = (50)(0.1432") = 7.16"	Width of Spread = Zd = (50)(0.1364") = 6.82"
Grate Width = 27"	Grate Width = 27"
∴ Intercept = ALL	∴ Intercept = ALL



CITY OF FALLON  
COMMUNITY DEVELOPMENT DEPARTMENT  
ACCEPTED FOR CONSTRUCTION  
BY: *[Signature]* DATE: 2/20/09  
PROFESSIONAL ENGINEER'S SEAL  
INDICATES RESPONSIBILITY FOR DESIGN

PREPARED FOR:  
MR. JEREMY ROTH  
VANTAGE HOMES  
#1 MCBRIDE AND SON CENTER DRIVE  
CHESTERFIELD, MISSOURI 63305  
PHONE: (636) 240-7662

FEB. 09   1	PER CITY COMMENTS
DATE: NO.:	
LOT 213 & 214 OF MAGNOLIA VILLAGE A ST. PETERS, MISSOURI	
<b>MUSLER ENGINEERING COMPANY</b>	
CIVIL ENGINEERING - PLANNING - LAND SURVEYING	
32 Portwest Court, St. Charles, Missouri 63303 Telephone: (636) 916-0444 Fax (636) 916-3444	
CERTIFICATE OF AUTHORITY: ENGINEERING: E-1230-D, LAND SURVEYING: LS-284-D	
DATE: jan 09	DRAWN: MWN
CHECKED: RSM	PROJECT NO.: 09-1133
SHEET NO.: 1 OF 1	

