U.S. DEPARTMENT OF HOMELAND SECURITY FEDERAL EMERGENCY MANAGEMENT AGENCY

 $National\ Flood\ Insurance\ Program$

ELEVATION CERTIFICATE

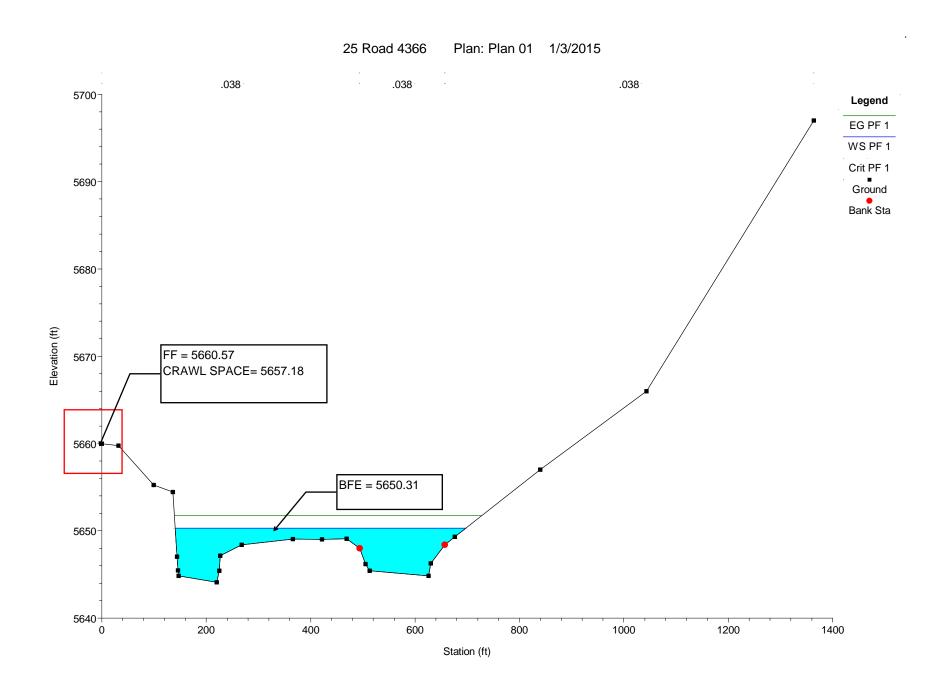
Important: Read the instructions on pages 1-9.

OMB No. 1660-0008

Expiration Date: July 31, 2015

	SEC	TION A - PROPER	TY INFORMATION	FOR	INSURANCE COMPANY USE
A1. Building Owner's Name Dougl	as and Carol Lutz			Polic	y Number:
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. Company NAIC Number:					pany NAIC Number:
City Blanco		State NM	ZIP Code 87412	-	
A3. Property Description (Lot and E Lot 5 Perfect Drift Estates Subdivisi		Number, Legal Descri	otion, etc.)		
A4. Building Use (e.g., Residential, A5. Latitude/Longitude: Lat. 36.784 A6. Attach at least 2 photographs of A7. Building Diagram Number 2 A8. For a building with a crawlspace	1 Long. 107.7179 He of the building if the Certificate or enclosure(s):	orizontal Datum:	IAD 1927 ⊠ NAD 198 tain flood insurance. A9. For a building w	rith an attached g	
 a) Square footage of crawlspa b) Number of permanent flood or enclosure(s) within 1.0 fc c) Total net area of flood open d) Engineered flood openings 	openings in the crawlspace not above adjacent grade lings in A8.b	1546 sq ft e sq in	b) Number of p within 1.0 fo c) Total net are	age of attached of the commanent flood of above adjaced are of flood openiflood openings?	openings in the attached garage nt grade ngs in A9.b sq in
	SECTION B – FLOOE	INSURANCE RAT	E MAP (FIRM) INFO	RMATION	
B1. NFIP Community Name & Com SAN JUAN 350064	munity Number	B2. County Name SAN JUAN		B3. S NM	itate
'	Suffix B6. FIRM Index 8-5-2010		evised Date Zo	. Flood Benne(s)	9. Base Flood Elevation(s) (Zone AO, use base flood depth) 5,650.31
B10. Indicate the source of the Base FIS Profile FIS B11. Indicate elevation datum used B12. Is the building located in a Coa Designation Date: Designation Date:	RM	etermined	other/Source: AVD 1988	· · ·	- □ Yes ⊠ No
S	ECTION C – BUILDING	ELEVATION INFO	RMATION (SURVE)	REQUIRED)	
 C1. Building elevations are based or *A new Elevation Certificate will C2. Elevations – Zones A1–A30, AE below according to the building of Benchmark Utilized: Basin Surve 	be required when construct , AH, A (with BFE), VE, V1- diagram specified in Item A	ion of the building is c -V30, V (with BFE), Al	R, AR/A, AR/AE, AR/A1 enter meters.		Finished Construction R/AO. Complete Items C2.a-h
Indicate elevation datum used for Datum used for building elevation	or the elevations in items a)		NGVD 1929 □ NAVD	1988 □ Other/S	Source: NOAA OPUS
G				Check the n	neasurement used.
 a) Top of bottom floor (including b) Top of the next higher floor c) Bottom of the lowest horizont d) Attached garage (top of slab) e) Lowest elevation of machiner 	al structural member (V Zor	nes only)	5657.18 5660.57 	⊠ fer ⊠ fer □ fer □ fer	et
(Describe type of equipment a f) Lowest adjacent (finished) gra g) Highest adjacent (finished) gr h) Lowest adjacent grade at low	ade next to building (LAG) ade next to building (HAG)	rs, including structural	5658.37 5659.74 support	⊠ fer ⊠ fer □ fer	et meters
SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation					
Inis certification is to be signed and information. I certify that the informat I understand that any false stateme. Check here if comments are proceed the Check here if attachments. Certifier's Name Daniel T Flack	ation on this Certificate repr nt may be punishable by fin	esents my best efforts e or imprisonment und Were latitude and lo licensed land surve	to interpret the data ava ler 18 U.S. Code, Section Ingitude in Section A pri	ailable. on 1001.	TEGISTER 14850
Title Engineer	Company Name	DTF Engineering			19 15
Address PO Box 1063	City Kirtland		e NM ZIP Code 87	417	
Signature A. O. C.	Date 1-3-15	Tele	ephone 505-598-5163		AROFESSTOR

ELEVATION CERTIFICATE , page 2			
IMPORTANT: In these spaces, copy t	he corresponding information from	m Section A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, 25 Road 4366	Suite, and/or Bldg. No.) or P.O. Route ar	nd Box No.	Policy Number:
City Blanco	State NM	ZIP Code 87412	Company NAIC Number:
SECTION D - S	SURVEYOR, ENGINEER, OR ARCH	IITECT CERTIFICATION (CONTINUED)
Copy both sides of this Elevation Certificate f	or (1) community official, (2) insurance a	gent/company, and (3) buildin	g owner.
Comments Base flood elevation was calcula BFE. No flood vents are required.	aed to be 5650.31. The crawl space elev	ation is 5657.18. The home is	s more than 10 feet above the calculated
Signature Acul TV		1–3–15	
Signature	Date		
SECTION E – BUILDING ELEVATION	ON INFORMATION (SURVEY NOT	REQUIRED) FOR ZONE A	AO AND ZONE A (WITHOUT BFE)
 b) Top of bottom floor (including basem E2. For Building Diagrams 6–9 with permai (elevation C2.b in the diagrams) of the E3. Attached garage (top of slab) is E4. Top of platform of machinery and/or eq E5. Zone AO only: If no flood depth number 	if available. Check the measurement use flowing and check the appropriate boxes grade (LAG). ment, crawlspace, or enclosure) is 5657.2 ment, crawlspace, or enclosure) is 5657.2 ment flood openings provided in Section A building is feet retermined from the feet meters about the different servicing the building is	ad. In Puerto Rico only, enter reto show whether the elevation 8	neters. In is above or below the highest adjacent above or ⊠ below the HAG. above or ⊠ below the LAG. 8–9 of Instructions), the next higher floor or the HAG. In above or □ below the HAG.
	PROPERTY OWNER (OR OWNER'S		RTIFICATION
The property owner or owner's authorized repor Zone AO must sign here. The statements in Property Owner's or Owner's Authorized Rep	n Sections A, B, and E are correct to the	•	FEMA-issued or community-issued BFE)
Address PO Box 1063	Kirtlaityd	N _M a	te 8747-Gode
Signature April 17/h		505.598.516	
Comments			☐ Check here if attachments.
	SECTION G – COMMUNITY INFO	· , ,	
is authorized by law to certify elevati G2. A community official completed Sect	able item(s) and sign below. Check the m	easurement used in Items G8- een signed and sealed by a lic date of the elevation data in t thout a FEMA-issued or comn	G10. In Puerto Rico only, enter meters. ensed surveyor, engineer, or architect who he Comments area below.)
G4. Permit Number G5.	Date Permit Issued	G6. Date Certificate Of 0	Compliance/Occupancy Issued
G8. Elevation of as-built lowest floor (includin G9. BFE or (in Zone AO) depth of flooding at G10. Community's design flood elevation: Local Official's Name Michele Truby-T Community Name San Juan County	the building site: Cillen, CFM	☐ feet ☐ meters ☐ feet ☐ meters ☐ feet ☐ meters ☐ feet ☐ meters	Datum Datum Datum Floodplain Manager
	•		☐ Check here if attachments.



25Road4366.rep

HEC-RAS Version 4.1.0 Jan 2010 U.S. Army Corps of Engineers Hydrologic Engineering Center 609 Second Street Davis, California

X	X	XXXXXX	XX	XX		XX	XX	X	X	XXXX
X	Х	Χ	Χ	X		Χ	Χ	X		X
X	Х	Χ	Χ			Χ	Χ	X	Χ	X
XXXX	XXXX	XXXX	Χ		XXX	XX	XX	XXX	XXX	XXXX
Χ	X	Χ	X			Χ	Χ	X	X	X
X	X	Χ	Χ	X		Χ		X		X
Χ	X	XXXXXX	XX	XX		Χ	X	X	Х	XXXXX

PROJECT DATA

Project Title: 25 Road 4366 Project File: 25Road4366.prj

Run Date and Time: 1/3/2015 10:51:20 AM

Project in English units

PLAN DATA

Plan Title: Plan 01

Plan File : C:\Users\Dan\Documents\1 DTF Engineering\Flood Plain\25 Road

4366\25Road4366.p01

Geometry Title: xsection

Geometry File: C:\Users\Dan\Documents\1 DTF Engineering\Flood Plain\25

Road 4366\25Road4366.g01

Flow Title : 100 yr 15510 cfs

: C:\Users\Dan\Documents\1 DTF Engineering\Flood Plain\25 Flow File

Road 4366\25Road4366.f01

Plan Summary Information:

Number of: Cross Sections = Multiple Openings = 0 Culverts 0 Inline Structures = 0 = 0 Lateral Structures = Bridges =

Computational Information
Water surface calculation tolerance = 0.01 Critical depth calculation tolerance = 0.01 Maximum number of iterations 20 Maximum difference tolerance 0.3 Flow tolerance factor 0.001

Computation Options

Critical depth computed only where necessary

Conveyance Calculation Method: At breaks in n values only

Friction Slope Method: Average Conveyance Computational Flow Regime: Subcritical Flow

25Road4366.rep

FLOW DATA

Flow Title: 100 yr 15510 cfs Flow File : C:\Users\Dan\Documents\1 DTF Engineering\Flood Plain\25 Road $4366\25$ Road4366.f01

Flow Data (cfs)

River	Reach	RS	PF 1
San Juan	1	110	15510
San Juan	1	100	15510

Boundary Conditions

River Downstream	Reach	Profile	Upstream
San Juan Critical	1	PF 1	Critical

GEOMETRY DATA

Geometry Title: xsection Geometry File: C:\Users\Dan\Documents\1 DTF Engineering\Flood Plain\25 Road $4366\25$ Road4366.g01

CROSS SECTION

RIVER: San Juan

REACH: 1 RS: 110

INPUT

Description:

Station Elevation	Data num=	24		
Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
0 5659.98	325659.739	995655.263	1365654.442	1445647.048
1465645.473	1475644.829	2205644.096	2255645.435	2275647.163
2685648.404	3665649.035	4225649.007	4695649.101	4945647.983
505 5646.19	5135645.429	6265644.853	6305646.257	6575648.408
6765649.298	840 5657	1043 5666	1364 5697	
Manning's n Values		3 Sta n Val		

Ν n vai .038 Sta n Vai 494 .038 657 .038

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan. 494 657 10 10 10 .1 . 3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	5651.88	Element	Left OB	Channel
Right OB Vel Head (ft) 0.038	1.01	Wt. n-Val.	0.038	0.038

		25Road4366.rep		
W.S. Elev (ft) 10.00	5650.87		10.00	10.00
Crit W.S. (ft) 64.82	5650.32	Flow Area (sq ft)	1115.89	846.82
E.G. Slope (ft/ft) 64.82	0.006309	Area (sq ft)	1115.89	846.82
Q Total (cfs) 231.39	15510.00	Flow (cfs)	7405.78	7872.83
Top Width (ft) 52.55	569.69	Top Width (ft)	354.14	163.00
Vel Total (ft/s) 3.57	7.65	Avg. Vel. (ft/s)	6.64	9.30
Max Chl Dpth (ft) 1.23	6.78	Hydr. Depth (ft)	3.15	5.20
Conv. Total (cfs) 2913.3	195275.9	Conv. (cfs)	93241.2	99121.5
Length Wtd. (ft)	10.00	Wetted Per. (ft)	357.24	163.51
52.61 Min Ch El (ft)	5644.85	Shear (lb/sq ft)	1.23	2.04
0.49 Alpha	1.11	Stream Power (lb/ft s)	1364.00	0.00
0.00 Frctn Loss (ft)	0.08	Cum Volume (acre-ft)	0.23	0.18
0.01 C & E Loss (ft)	0.04	Cum SA (acres)	0.08	0.04
0.01				
CROSS SECTION				
RIVER: San Juan REACH: 1	RS: 100			
0 5659.98 1465645.473 1 2685648.404 3 505 5646.19 5	num= ta Elev 325659.739 475644.829 665649.035 135645.429 40 5657	995655.263 1365654. 2205644.096 2255645. 4225649.007 4695649. 6265644.853 6305646.	435 227 101 494	Elev 5647.048 5647.163 5647.983 5648.408
	num= ta n Val 94 .038	3 Sta n Val 657 .038		
Bank Sta: Left Right 494 657		Left Channel Right C 10 10 10	oeff Contr. .1	Expan. .3
CROSS SECTION OUTPUT	Profile #PF 1	L		
E.G. Elev (ft)	5651.76	Element	Left OB	Channel
Right OB Vel Head (ft)	1.45	Wt. n-Val.	0.038	0.038
0.038 W.S. Elev (ft)	5650.31	Reach Len. (ft)		
Crit W.S. (ft) 38.69	5650.31	Flow Area (sq ft)	917.38	755.37

E.G. Slope (ft/ft)	0.010583	25Road4366.rep Area (sg ft)	917.38	755.37
38.69				
Q Total (cfs) 150.60	15510.00	flow (cfs)	6930.90	8428.51
Top Width (ft) 40.60	557.14	Top Width (ft)	353.53	163.00
Vel Total (ft/s) 3.89	9.06	Avg. Vel. (ft/s)	7.56	11.16
Max Chl Dpth (ft) 0.95	6.22	Hydr. Depth (ft)	2.59	4.63
Conv. Total (cfs)	150768.6	Conv. (cfs)	67373.4	81931.3
1463.9 Length Wtd. (ft) 40.65		Wetted Per. (ft)	356.41	163.51
Min Ch El (ft)	5644.85	Shear (lb/sq ft)	1.70	3.05
0.63 Alpha 0.00	1.14	Stream Power (lb/ft s)	1364.00	0.00
Frctn Loss (ft)		Cum Volume (acre-ft)		
C & E Loss (ft)		Cum SA (acres)		

SUMMARY OF MANNING'S N VALUES

River:San Juan

Reach	River Sta.	n1	n2	n3
1	110	.038	.038	.038
1	100	.038	.038	.038

SUMMARY OF REACH LENGTHS

River: San Juan

Reach	River Sta.	Left	Channel	Right
1	110	10	10	10
1	100	10	10	10