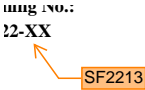














ENG-SF22013-R1-FDR.pdf Markup Summary

1 (5)		
	Subject: SW - Textbox with Arrow Page Index: 1 Date: 5/11/2022 6:05:04 PM Author: Glenn Reese - EPC Stormwater Color:  Layer: Space: Page Label: 1	SF2213
	Subject: Stamp - Stormwater Comment Legend Page Index: 1 Date: 5/12/2022 5:01:25 PM Author: Glenn Reese - EPC Stormwater Color:  Layer: Space: Page Label: 1	
	Subject: EPC ENG Review Page Index: 1 Date: 5/16/2022 1:31:12 PM Author: dsdrice Color:  Layer: Space: Page Label: 1	
	Subject: PCD Comment Legend Page Index: 1 Date: 5/16/2022 1:31:14 PM Author: dsdrice Color:  Layer: Space: Page Label: 1	
	Subject: Text Box Page Index: 1 Date: 5/16/2022 1:31:31 PM Author: dsdrice Color:  Layer: Space: Page Label: 1	See comment letter also.

4 (2)		
	Subject: Page Index: 4 Date: 5/16/2022 1:32:50 PM Author: dsdrice Color:  Layer: Space: Page Label: 4	n




Subject: Callout
Page Index: 4
Date: 5/16/2022 1:36:21 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 4

Reference PCD project No CDR-20-004 -
<https://epcdevplanreview.com/Public/ProjectDetails/152502>

5 (4)




Subject: Callout
Page Index: 5
Date: 5/16/2022 1:38:37 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 5

State that this plat is anticipated to be recorded prior to a LOMR for channel improvements, but the floodplain elevations will not be raised with channel improvements, if that is the case.


There are a few stock ponds within the
ing is performing studies and plans to

E1-E6.2
H2, and H3) and one offsite basin (2).
own in the Historic Drainage Map in
being developed called "Retreat at

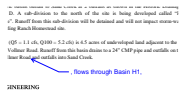
Subject: Callout
Page Index: 5
Date: 5/16/2022 2:23:58 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 5


E1-E6.2

) and one offsite basin (2).
Historic Drainage Map in
loped called "Retreat at
mnsact storm-water runoff

Subject:
Page Index: 5
Date: 5/16/2022 2:12:39 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 5

one offsite basin (2)




Subject: Callout
Page Index: 5
Date: 5/16/2022 2:13:57 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 5

, flows through Basin H1,

6 (10)




Subject: Callout
Page Index: 6
Date: 5/16/2022 2:23:18 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 6

flowing through Basin H3 to DP 3h

70.5 ac1


1 1

Subject:
Page Index: 6
Date: 5/16/2022 2:24:42 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 6

5

= 192.9 c

Runoff f

Subject:
Page Index: 6
Date: 5/16/2022 2:25:06 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 6

192.


FROM INDEX 1870 TO THE SOUTH AND ULTIMATELY
E-4.

4 cfs) is 124.9 acres of undeveloped land that
at 6.1a.

[Show on plan](#)

49.61 acres of undeveloped land that drains
point 6.2a. Runoff from this basin then c

a confluence with runoff from E-6.1.

Subject: Callout
Page Index: 6
Date: 5/16/2022 2:26:23 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 6


Show on plan

cfs) is 18.8 acres of undeveloped land adjacent to t
is basin sheet flow to the south and ultimately drain
in E-4.

[at DP...](#)

90.4 cfs) is 124.9 acres of undeveloped land that dr
point 6.1a.


) is 49.61 acres of undeveloped land that drains to a
sign point 6.2a. Runoff from this basin then drain

Subject: Callout
Page Index: 6
Date: 5/16/2022 3:13:57 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 6

at DP...


ectly adjacent

ek directly so

Subject:
Page Index: 6
Date: 5/16/2022 3:14:19 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 6

directl

45.3 ac1

Subject:
Page Index: 6
Date: 5/16/2022 3:14:44 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 6

3

is 15.9 acr
Creek. The

Subject:

Page Index: 6

Date: 5/16/2022 3:14:53 PM

Author: dsdrice

Color:

Layer:

Space:

Page Label: 6

15.9

is 21.9 acr
Creek at T

Subject:

Page Index: 6

Date: 5/16/2022 3:15:03 PM

Author: dsdrice

Color:

Layer:

Space:

Page Label: 6

21.9

highlighted values
don't match
drainage plan

Subject: Callout

Page Index: 6

Date: 5/16/2022 3:15:32 PM

Author: dsdrice

Color:

Layer:

Space:

Page Label: 6

highlighted values don't match drainage plan

7 (8)

DITIONS

superior is comprised of single-family lots, and the
sub Texas Jack Drive and Harvey Logan Drive. Runoff
uses to design point 1C at Wheatland Drive.
southeastern?
services is comprised of single-family lots, and the sub
ack Drive. Runoff (Q₁₀=0.8 cfs, Q₁₀₀=1.6 cfs) from basin
to type B inlet.

previous is comprised of local roads, single-family lots,
1 east Wheatland Drive. Runoff (Q₁₀=0.9 cfs, Q₁₀₀=20.3
cfs) from point 1C at Wheatland Drive to type B inlet.

Subject: Callout

Page Index: 7

Date: 5/17/2022 4:33:19 PM

Author: dsdrice

Color:

Layer:

Space:

Page Label: 7

southeastern?

The total runoff from basins

roads Tom Ketchum Drive
north western side of the
basin C2.3 drains to design
se R inlet.

Subject:

Page Index: 7

Date: 5/17/2022 4:36:28 PM

Author: dsdrice

Color:

Layer:

Space:

Page Label: 7

Tom Ketchum Drive

Basin C2.3 0.83 acres
Jack Helm Drive and
residential road Wheat
point 2.3C in confluenc

Subject:

Page Index: 7

Date: 5/17/2022 4:36:51 PM

Author: dsdrice

Color:


Layer:

Space:


Page Label: 7

Jack Helm Drive




Subject:
Page Index: 7 north
Date: 5/17/2022 4:38:11 PM western
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 7


Basin C4.1 6.35
northwestern side
Runoff (Q₅=12.1
inlet. The total ru

Subject:
Page Index: 7 northwestern
Date: 5/17/2022 4:40:19 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 7

d of local roads, single-family loc
e and Tom Ketchum Drive. Run
3.2C.
in 4.2?
ised of single-family lots, and t
a right in lane and Nat Love Driv
design point 4C a 20' type R su

Subject: Callout
Page Index: 7 in 4.2?
Date: 5/17/2022 4:40:56 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 7

the northwestern side
m basin C5 drains to


Subject:
Page Index: 7 northwestern
Date: 5/17/2022 4:43:07 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 7

comprised of single-fam
Drive, a right in lane and
as to design point 4C a
C4.1 is collected within


Subject:
Page Index: 7 , a right in lane
Date: 5/19/2022 9:32:59 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 7

8 (5)

C6 2.48 ac
tial area. R


Subject:
Page Index: 8 2.48
Date: 5/17/2022 4:43:46 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 8

been conceptually
ond will be built in
ency spillway will

Subject:
Page Index: 8
Date: 5/17/2022 4:45:07 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 8

n conceptually

43.8


Subject:
Page Index: 8
Date: 5/17/2022 4:46:32 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 8

43.8

pervious. Basin D1 consists of the
unoff from basin D1 ($Q_1=2.4$ cfs,
to a type C inlet at design point 1D.
n OSI into the Vollmer storm sewer


to then 1D?

pervious. Basin D2 consists of the
from basin D2 ($Q_2=2.5$ cfs, $Q_{100}=6.1$
* inlet at elevation minor 7D. From here

Subject: Callout
Page Index: 8
Date: 5/17/2022 4:49:59 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 8


to then 1D?

of 224.34
- 1 - - - - -

Subject: Highlight
Page Index: 8
Date: 5/19/2022 12:03:34 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 8


9 (5)

area and is 60% impervious. Basin D1 ($Q_1=0.1$ cfs, $Q_{100}=1.1$
Vollmer road, 100' from the basin drain to the inlet point
area and is 75% impervious. Basin D2 ($Q_2=0.1$ cfs, $Q_{100}=1.1$
of Vollmer road, 100' from the basin drain to the inlet
is to be paved with 10" DP 40. Road is paved from basin
drain to the inlet
Area and is 75% impervious. Basin D3 ($Q_3=1.1$ cfs, $Q_{100}=6.1$
of Vollmer road, 100' from the basin drain to the inlet
drain and a 4" pipe, 100' from the basin drain to the inlet
DP 40 road.
Area and is 60% impervious. Basin D4 ($Q_4=1.1$ cfs, $Q_{100}=6.1$
of Vollmer road and the runoff drain to a 10" DP 40 road

Subject: Callout
Page Index: 9
Date: 5/19/2022 9:40:00 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 9


(with curb and gutter)

inlet at the intersection
n to design point D7 in
7D?
has a tributary area of 0
is of the northwestern i


Subject: Callout
Page Index: 9
Date: 5/19/2022 9:41:19 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 9

7D?


of 0.52 A
theast port

Subject: 0.52
Page Index: 9
Date: 5/19/2022 9:41:57 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 9

of 0.66 A
ern portior

Subject: 0.66
Page Index: 9
Date: 5/19/2022 9:42:19 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 9

s and is 2.0 % impervious. The runoff from
d depression at DP 2o near the northwest
d within Vollmer Road and outfalls directl
into Pond C

Subject: Callout into Pond C
Page Index: 9
Date: 5/19/2022 11:47:37 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 9

10 (2)

RT FOR
RTH AT STERLING RANCH FILING NO. 1
ributary area of 11.99 Acres is 2.0 % imperv
2.6 cfs sheet flows onto Vollmer road and is c
corresponds to design point 8D.

DESIGN CRITERIA

Subject: sheet flows onto Vollmer road
Page Index: 10
Date: 5/19/2022 11:48:45 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 10

Plans show a
ditch. How is flow
captured? March, 2022
NCH FILING NO. 1
uses is 2.0 % impervious. The runoff from this basin
Vollmer Road and is captured within a 20" type R inlet
in 8D.

IA


Subject: Callout Plans show a ditch. How is flow captured?
Page Index: 10
Date: 5/19/2022 11:49:43 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 10

12 (1)

78 FILING NO. 1 March, 2022
Provide design point, routing,
inlet, pipe... discussion.

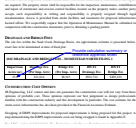
we designed to convey the developed Sterling Ranch
pond full spectrum water quality and detention pond
all to detain and treat large portion of offsite area
from the pond to the inlet to the pond.

Subject: Text Box Provide design point, routing, inlet, pipe...
Page Index: 12 discussion.
Date: 5/17/2022 4:56:30 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 12

Subject: Highlight
Page Index: 14
Date: 5/19/2022 1:32:43 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 14

\$8,923

Color: 



Color:

Page Label: 14

1,722

Color:

5,229

Color:

0.45	0.54	0.00	0.0%	0.08	0.35	2.85	2.0%
0.45	0.54	0.00	0.0%	0.08	0.35	178.71	2.0%
0.45	0.54	0.00	0.0%	0.08	0.35	31.99	2.0%

Also provide a version of this sheet for fee calculations

Color:

Page Label: 30

Provide calculations for the Type D inlets

Color:

Provide calculations for the Type D inlets

Check this elev on Sht 12 of CD's

Internal note to check these values against the requested missing spillway details with R2.


19.8

0.022


7,127.27 7,121.27

7,120.77


0.044
0.022
0.025
0.019
0.000

Subject:
Page Index: 75 0.025
Date: 5/19/2022 2:24:48 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 75

0.029
0.010
0.025
0.012
0.017

Subject:
Page Index: 75 0.025
Date: 5/19/2022 2:25:56 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 75


0.020
0.089
0.029
0.010
0.005

Subject:
Page Index: 75 0.029
Date: 5/19/2022 2:26:13 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 75


113 7,108.20 7,117.83
113 7,171.83 7,170.13
113 7,168.08 7,167.61
113 7,136.58 7,135.96
113 7,123.72 7,122.94
113 7,170.03 7,169.21
113 7,122.81 7,121.27
113 7,169.04 7,167.11
113 7,130.01 7,128.89
113 7,145.92 7,140.00

Subject:
Page Index: 75 7,123.72 7,122.94
Date: 5/19/2022 2:26:41 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 75


,134.01
,108.87
,166.06

Subject:
Page Index: 75 .87
Date: 5/19/2022 2:27:31 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 75


7,120.77
7,135.86
7,111.18
7,167.01
7,166.06

Subject:
Page Index: 75 111.18
Date: 5/19/2022 2:27:50 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 75


0.019
0.026
0.035
0.028
0.030

Subject:
Page Index: 75
Date: 5/19/2022 2:28:09 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 75


340.1
325.2
341.3
173.7
10.6

Subject:
Page Index: 75
Date: 5/19/2022 2:28:51 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 75

330.0
340.1
325.2
344.3


Subject:
Page Index: 75
Date: 5/19/2022 2:29:07 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 75

330.0
340.1
325.2
341.3
173.7

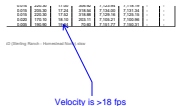
Subject:
Page Index: 75
Date: 5/19/2022 2:29:34 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 75




Verify that all of these match the CDs - only a few spot checks were done.

Subject: Callout
Page Index: 75
Date: 5/19/2022 2:30:36 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 75

Verify that all of these match the CDs - only a few spot checks were done.




Velocity is >18 fps

Subject: Callout
Page Index: 75
Date: 5/19/2022 2:31:00 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 75


Velocity is >18 fps

0.070
0.020
0.020
0.012
0.000

Subject:
Page Index: 75
Date: 5/19/2022 2:36:22 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 75


0.020

0.012
0.009
0.020
0.089
0.000

Subject:
Page Index: 75
Date: 5/19/2022 2:36:57 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 75

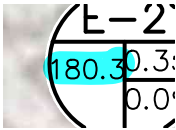
0.020




Subject: Callout
Page Index: 75
Date: 5/19/2022 2:38:07 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 75

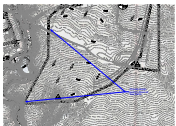
Please sort by label


80 (1)



Subject:
Page Index: 80
Date: 5/16/2022 2:25:11 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 80

81 (1)




Subject: Callout
Page Index: 81
Date: 5/16/2022 2:45:05 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 81

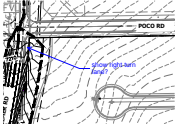
Provide design points? Show all flow paths.

82 (6)



Subject: Callout
Page Index: 82
Date: 5/17/2022 2:37:46 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 82

Don't show future lots and roads

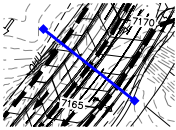


Subject: Callout
Page Index: 82
Date: 5/19/2022 9:34:45 AM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: 82

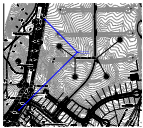
show right turn lane?



Subject: Arrow
Page Index: 82
Date: 5/19/2022 9:35:17 AM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: 82



Subject: Arrow
Page Index: 82
Date: 5/19/2022 9:35:55 AM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: 82



Subject: Callout
Page Index: 82
Date: 5/19/2022 9:36:32 AM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: 82

Provide road cross-sections



Subject: Callout
Page Index: 82
Date: 5/19/2022 9:39:29 AM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: 82

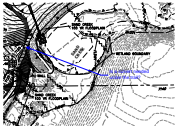
Label end of curb and gutter


83 (19)



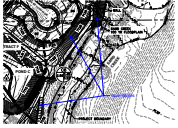
Subject: SW - Textbox with Arrow
Page Index: 83
Date: 5/16/2022 10:49:32 AM
Author: Glenn Reese - EPC Stormwater
Color: ■
Layer:
Space:
Page Label: 83


Why is this off-map area of Briargate Pkwy shown on the GEC Plans but not on FDR or CD's? If nothing else, somewhere in this FDR (in text above and/or on this map) referenced that the drainage for Briargate Pkwy is analyzed with CDR221



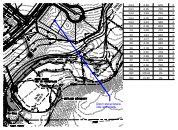
Subject: Callout
Page Index: 83
Date: 5/17/2022 2:44:51 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 83


Is a culvert needed under the trail?



Subject: Callout
Page Index: 83
Date: 5/16/2022 2:09:44 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 83


label slopes



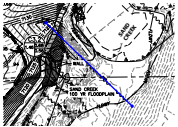
Subject: Callout
Page Index: 83
Date: 5/17/2022 2:37:59 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 83


Don't show future lots and roads

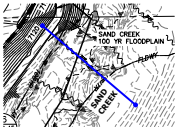



Subject: Arrow
Page Index: 83
Date: 5/17/2022 2:42:56 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 83

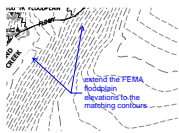
Flow Arrow



Subject: Arrow
Page Index: 83
Date: 5/17/2022 2:42:36 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 83



Subject: Arrow
Page Index: 83
Date: 5/17/2022 2:43:51 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 83

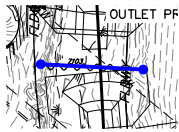


Subject: Callout
Page Index: 83
Date: 5/17/2022 2:45:00 PM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: 83

extend the FEMA floodplain elevations to the matching contours



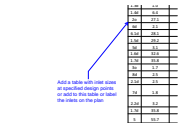
Subject: Arrow
Page Index: 83
Date: 5/17/2022 2:45:44 PM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: 83



Subject: Arrow
Page Index: 83
Date: 5/17/2022 2:47:48 PM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: 83

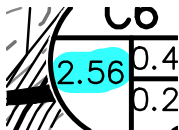


Subject: Arrow
Page Index: 83
Date: 5/17/2022 2:48:54 PM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: 83

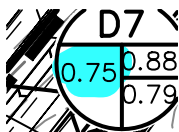



Subject: Callout
Page Index: 83
Date: 5/19/2022 2:13:09 PM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: 83

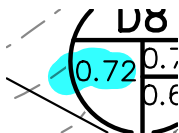
Add a table with inlet sizes at specified design points or add to this table or label the inlets on the plan




Subject:
Page Index: 83
Date: 5/17/2022 4:43:50 PM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: 83




Subject:
Page Index: 83
Date: 5/19/2022 9:42:04 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 83

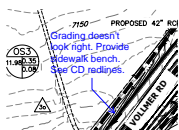



Subject:
Page Index: 83
Date: 5/19/2022 9:42:13 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 83



Subject: Callout
Page Index: 83
Date: 5/19/2022 11:47:11 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 83


Show and label manhole



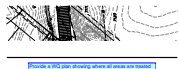
Subject: Callout
Page Index: 83
Date: 5/19/2022 11:57:42 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 83


Grading doesn't look right. Provide sidewalk bench. See CD redlines.



Subject: Callout
Page Index: 83
Date: 5/19/2022 1:57:20 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 83

Does any flow from Briargate go in here?



Subject: Text Box
Page Index: 83
Date: 5/19/2022 2:38:56 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 83

Provide a WQ plan showing where all areas are treated