

**EMERGENCY EVACUATION PLAN  
FOR  
SOLSTICE**

Located in Section 13, Township 6 South, Range 69 West,  
Township 6 South, Range 68 West  
of the 6<sup>th</sup> Principal Meridian  
Douglas County, CO

**Prepared For:**

**Mirabelle Metropolitan District No. 1**  
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June 26, 2020

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# I. INTRODUCTION

## A. Purpose

The purpose of this document is to outline the emergency evacuation plan and procedures for the Solstice Subdivision in the event of a catastrophic rainfall and flood event. The subsequent sections within this report identify the appropriate time for evacuation actions, the standard procedures that must be implemented in the event such situation arises, and the Solstice evacuation routes.

## B. Site Location

The proposed development henceforth referred to as “Solstice” is located in Section 13, Township 6 South, Range 69 West of the 6<sup>th</sup> Principal Meridian. The Solstice site is bound by Chatfield State Park on its north, east, and west sides. Solstice is bounded to the south by two existing subdivisions: Braley and Sunshine Acres. The property lies north of West Titan Road and west of U.S. Highway 85 (South Santa Fe Drive).

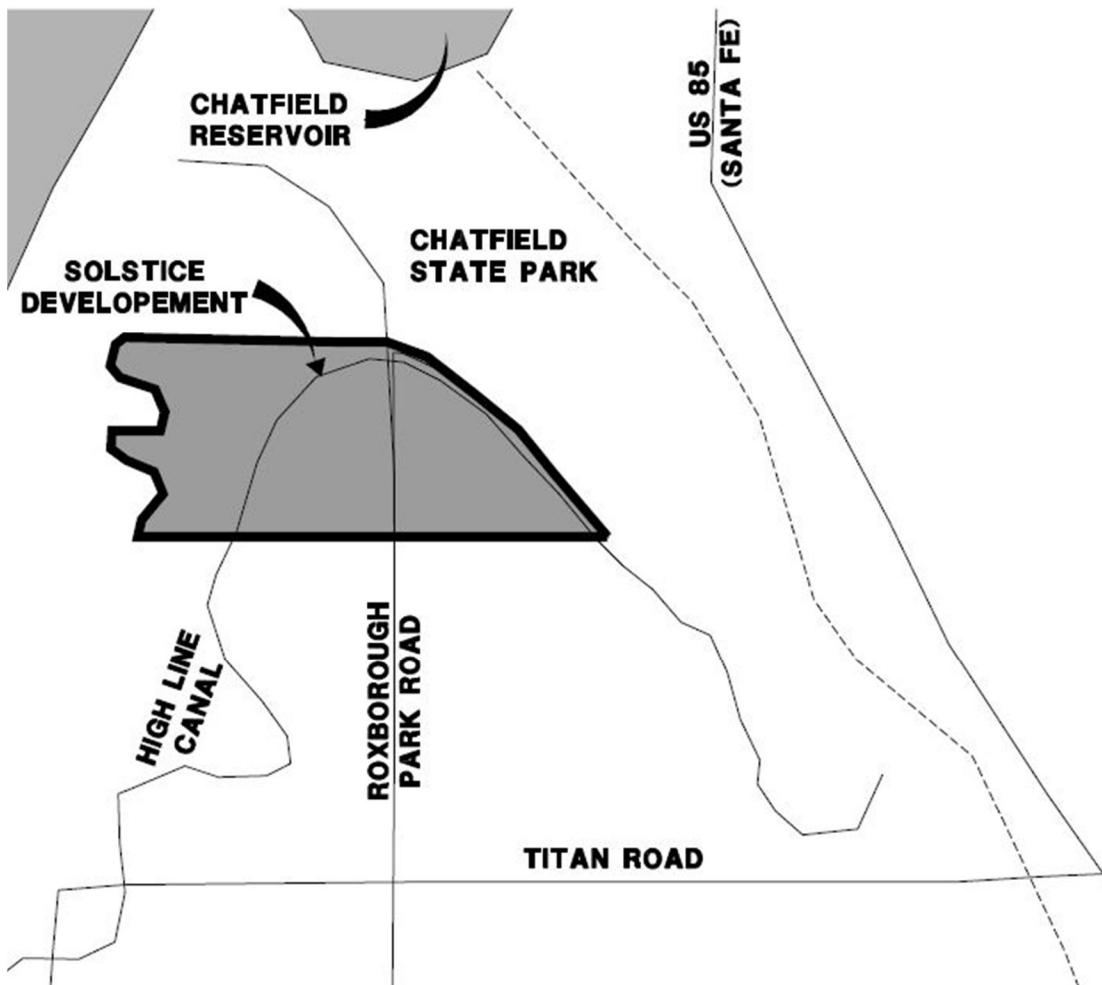


Figure 1. Vicinity Map

### C. **Description of Property**

The Solstice subdivision consists (or will consist of) of 1,100 single family detached homes, two amenity facilities, a Douglas County School, and a sanitary sewer lift station managed by Centennial Water and Sanitation District.

The site is shown on the Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map (FIRM) Community Panel No. 08035C0015F & 08035C0018F, revised September 30, 2005 for Douglas County. The site lies within Zone X which is the flood insurance rate zone that corresponds to areas outside the one percent annual chance floodplain (100-yr storm).

A portion of Solstice west of the High Line Canal lies above the Chatfield Reservoir dam spillway elevation (elevation 5500.0), and beneath the Maximum Reservoir Level elevation (elevation 5521.6 NGVD29). This range of elevations correlates to Zone 5 of Chatfield Reservoir. This evacuation plan has been created as a precautionary plan for those homes located within Zone 5. However, in the community interest, the plan shall apply to all homes within the entire Solstice development.

## II. EMERGENCY EVACUATION PLAN

### A. Warning Notification System & Process

The Solstice development is a flood warning plan participant within the ALERT automated flood detection network. The Alert System (Flash Flood Prediction Program – F2P2) provides notification to the Douglas County Office of Emergency Management regarding potential flood threats. In the event that the Douglas County Office of Emergency Management determines the need for either a Pre-Evacuation Message or an Evacuation Order, the Douglas County Office of Emergency Management will notify residents within the affected area in accordance with its current policies and procedures for such emergency events.

The *Evacuation Route Map* located within the Appendix of this report has been developed to outline the evacuation route to be used by Solstice residents in the event an evacuation of the Solstice development is ordered. The District shall maintain a copy of the Evacuation Route Map on its website.

### B. Pre-Evacuation - Procedures & Responsibilities

The following procedures shall be implemented by their respective personnel when the Douglas County Office of Emergency Management determines that the Solstice area is subject to pre-evacuation, as determined in accordance with its current policies and procedures for such emergency events.

#### Douglas County

- The Douglas County Office of Emergency Management shall be responsible for notifying Solstice residents of any pre-evacuation determination or procedures, in accordance with its current policies and procedures for such emergency events.

#### Mirabelle Metropolitan District No. 1

- The District shall provide notice to utility providers of the issuance of the pre-evacuation so that such utility providers can be ready for a potential utility shutoff in the event an evacuation is ordered.

Utility	Provider Contact
Electric	Xcel Energy
	Rep, Christopher Major: 303-913-0086
Gas	Xcel Energy
	Katie Fuhr: 303-571-3365
Sanitary Lift Station	Centennial Water & Sewer District
	Ryan Edwards: 303-791-0430 x(4907)

#### Solstice Residents

- Tie down any floatables on their property
- Remove all vehicles from their property.

- Turning off main gas and electricity connections to house

It is strongly advised individual households develop an emergency plan that aligns with the Douglas County Office of Emergency Management planning. These plans can be found on their website: <http://www.dcsheriff.net/sheriffs-office/divisions/emergency-management/>

### **C. Evacuation Warning - Procedures & Responsibilities**

The following procedures shall be implemented when an evacuation has been ordered by the Douglas County Office of Emergency Management, in accordance with its current policies and procedures for such emergency events:

#### **Douglas County**

- Douglas County shall be responsible for notifying Solstice residents of any evacuation order that is issued, in accordance with its current policies and procedures for such emergency events.
- Direct traffic as necessary to facilitate the evacuation.
- Provide any updates to the recommended evacuation routes as changes in circumstances or conditions warrant.
- Open shelters and provide necessary needs as required.

#### **Mirabelle Metropolitan District No. 1**

- Contact utility providers and request utility and facility shutdown to evacuated areas.

Utility	Provider Contact
Electric	Xcel Energy
	Rep, Christopher Major: 303-913-0086
Gas	Xcel Energy
	Katie Fuhr: 303-571-3365
Sanitary Lift Station	Centennial Water & Sewer District
	Ryan Edwards: 303-791-0430 x(4907)

#### **Solstice Residents**

- Evacuate the Solstice development as outlined on the *Evacuation Route Map* located within the Appendix of this report.

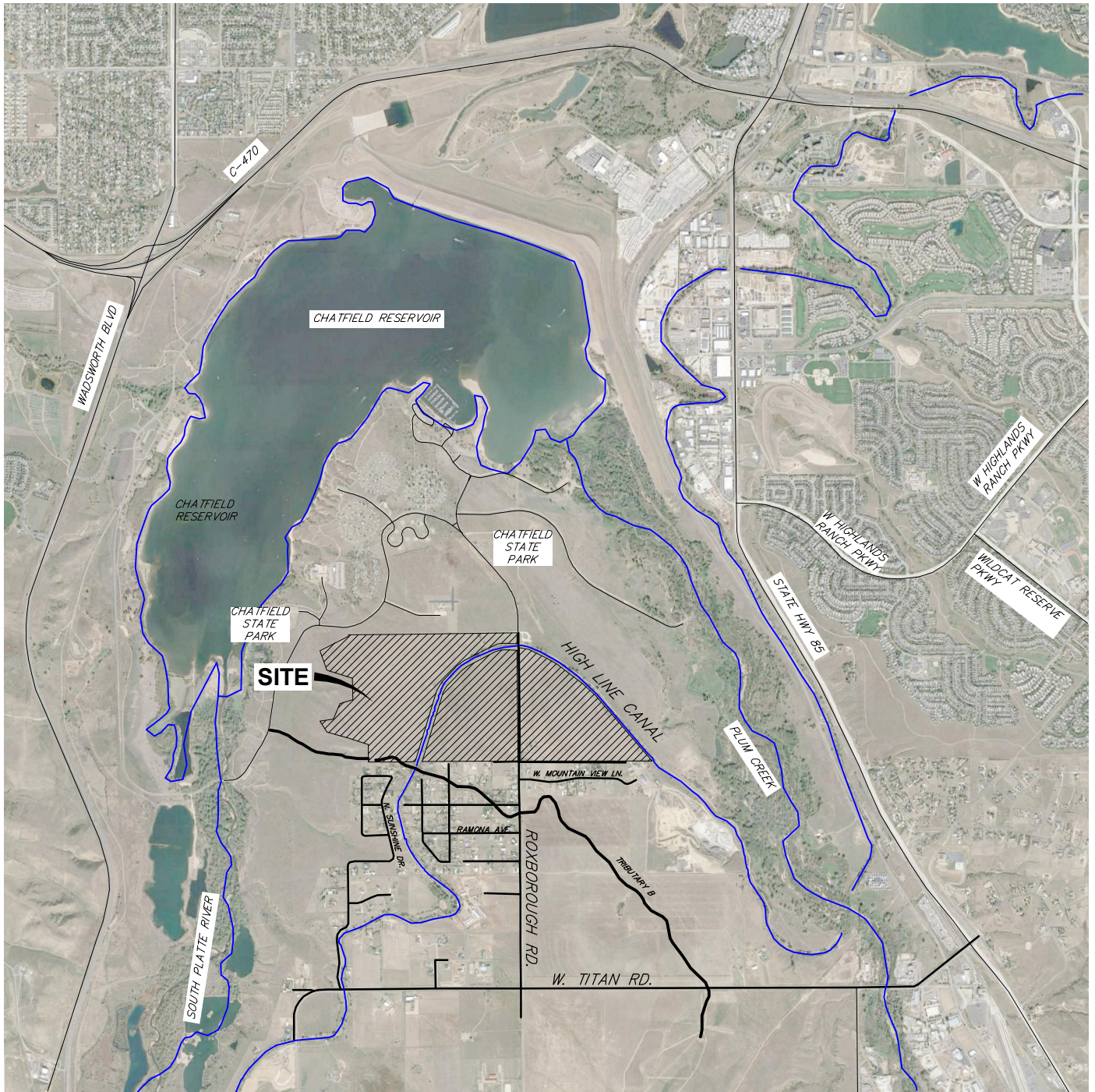
## REFERENCES

1. CENWD-MT-E Regulation No. NWDR 1110-2-5 Land Development Guidance at Corps Reservoir Projects; U.S. Army Corps of Engineers, April 30, 2004.
2. Chatfield Dam and Lake Antecedent Flood Study Final Report, Tri-Lakes Reallocation Feasibility Study; U.S. Army Corps of Engineers, December 2005.
3. Chatfield Dam and Reservoir Feasibility Study; U.S. Army Corps of Engineers, December 2006, updated December 2008.
4. Chatfield Reservoir Storage Reallocation Final Integrated Feasibility Report and Environmental Impact Statement; U.S. Army Corps of Engineers, July 2013.
5. Flood Insurance Rate Map 08035C0018F; Federal Emergency Management Agency, September 30, 2005.
6. Flood Insurance Study, Arapahoe County, Colorado, and Incorporated Areas; Federal Emergency Management Agency, February 17, 2017.
7. Flood Insurance Study, Douglas County, Colorado, and Incorporated Areas; Federal Emergency Management Agency, February 17, 2017.
8. Phase II Drainage Report for Solstice; JR Engineering, LLC, May 2, 2017.
9. Storm Drainage Design and Technical Criteria Manual; Douglas County, July 2008.
10. Urban Storm Drainage Criteria Manual; Urban Drainage and Flood Control District, Latest Revision.

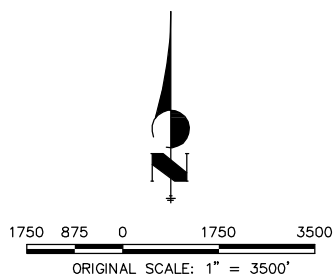
## **APPENDIX**

- 1. VICINITY MAP**
- 2. EVACUATION ROUTE MAP**
- 3. EMERGENCY CONTACT NUMBERS AND FREQUENCIES**
- 4. FIRM MAP**
- 5. SOLSTICE DEVELOPMENT MAP**
- 6. CHATFIELD RESERVOIR POOLS AND FLOODPLAINS**
- 7. SOLSTICE INDUNDATED LOT COUNT EXHIBIT**





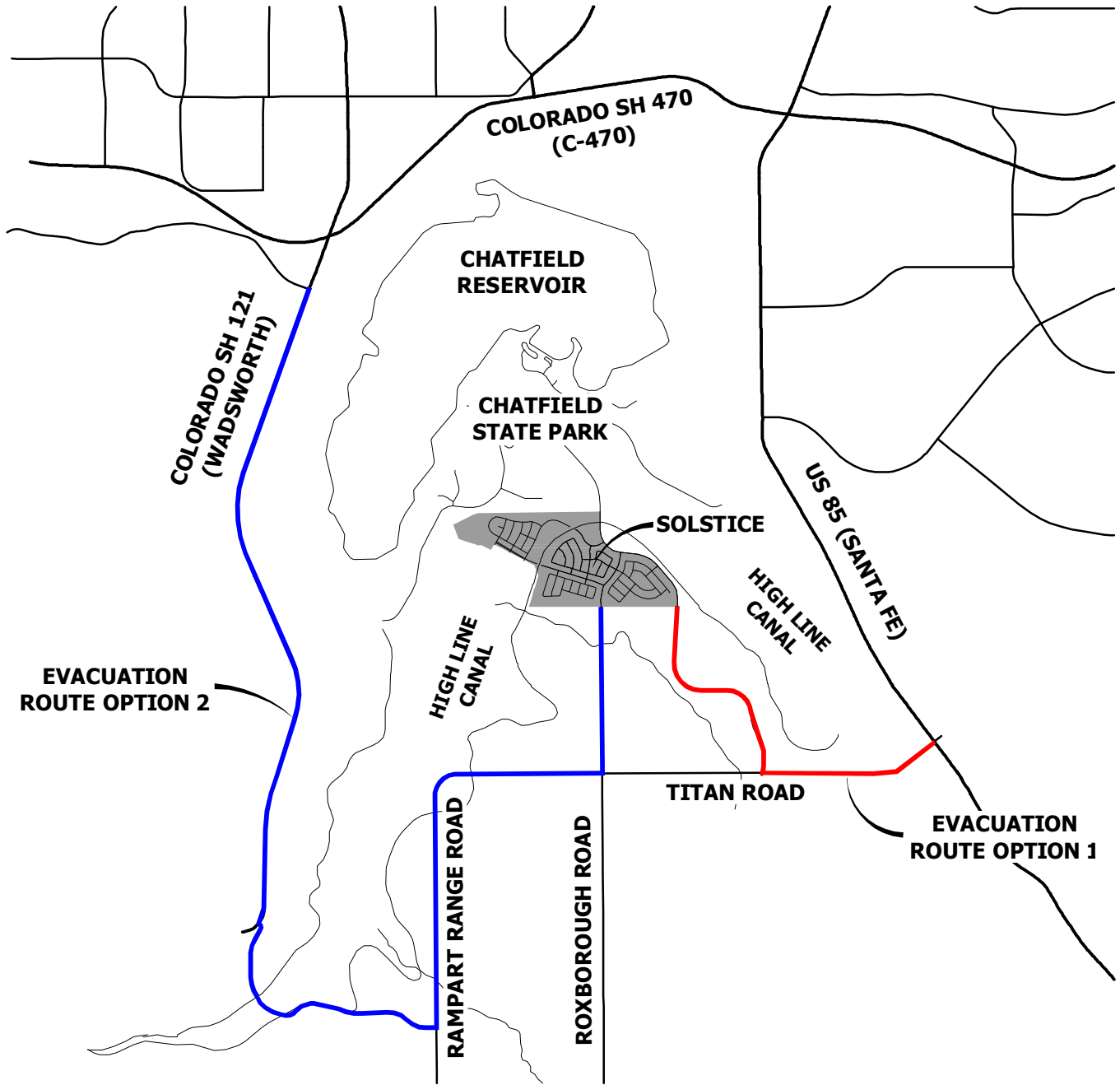
VICINITY MAP  
SOLSTICE  
LAND DEVELOPMENT PROPOSAL  
JOB NO. 15504.01  
JULY 28, 2017  
SHEET 1 OF 1



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# EVACUATION ROUTES



5000 2500 0 5000

ORIGINAL SCALE: 1" = 5000'



EVACUATION ROUTES  
SOLSTICE  
JOB NO. 15504.08  
11/7/19  
SHEET 1 OF 1



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## TELEPHONE NUMBERS AND RADIO FREQUENCIES

The following page contains pertinent telephone numbers and radio frequencies in the event of an emergency

Organization	Phone Number	Frequency
* Douglas County Communications and Public Affairs.....	303-660-7401	
Douglas County Emergency Management .....	303-660-7589	
Douglas County Sheriff's Office .....	303-660-7505	
emergency line .....	303-660-7500	
South Metro Fire Protection District.....	720-258-8911.....	151.302
West Metro Fire Protection District .....	303-969-0245 .....	154.190
* Skyview Weather (for relay to Lakewood) .....	303-688-9175	
* National Weather Service (NWS)		
coordination (duty forecaster) .....	303-494-4479	
severe weather reports .....	303-494-2884	
administration .....	303-494-3210	
public weather information .....	303-494-4221	
* Urban Drainage and Flood Control District (UDFCD) .....	303-455-6277	
UDFCD Private Meteorological Service (PMS)		
UDFCD Flood Prediction Center (FPC) .....	303-458-0789	
Skyview Weather .....	303-688-9175	
Genesis Weather Solutions .....	303-927-6522	

### Commonly Shared Emergency Radio Frequencies

CLEER "Colorado Law Enforcement Emergency Radio" .....	460.425
FERN "Fire Emergency Radio Network" .....	154.280
NLEC "National Law Enforcement Channel" .....	155.475

### Other Radio Frequencies

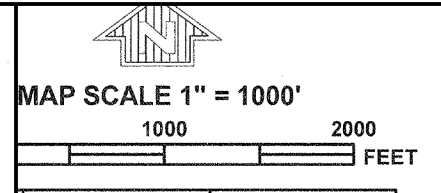
NOAA Weather Radio (Denver) .....	162.550
NWR alternate 1 (Longmont/Mead) .....	162.475
NWR alternate 2 (Fort Collins) .....	162.450
Ham severe weather spotter network .....	146.940
Alternate .....	147.120

### Websites

ALERT System (public use) <http://alert.udfcd.org>  
ALERT System (public safety agency use only) <http://alert2.udfcd.org>

\* Principle contact for PMS (*Genesis Weather Solutions with Skyview Weather is the PMS for 2009*)

ZONE D BOUNDARY COINCIDENT WITH RECREATION AREA BOUNDARY



PANEL 0015F

**FIRM**  
FLOOD INSURANCE RATE MAP  
DOUGLAS COUNTY,  
COLORADO  
AND INCORPORATED AREAS

PANEL 15 OF 495  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS

COMMUNITY	NUMBER	PANEL	SUFFIX
DOUGLAS COUNTY	080049	0015	F

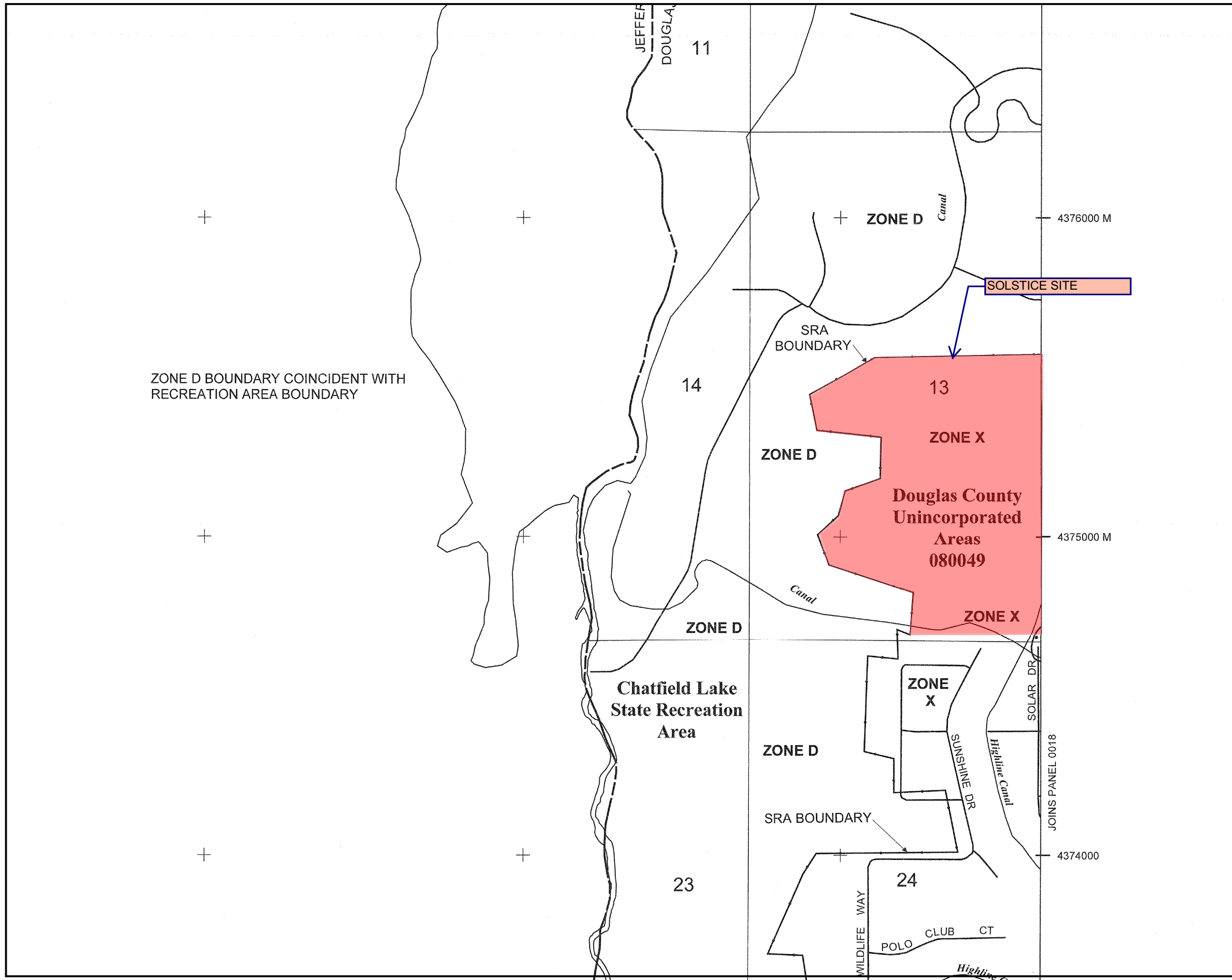
Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.



MAP NUMBER  
08035C0015F  
EFFECTIVE DATE  
SEPTEMBER 30, 2005

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)



# SOLSTICE SITE MAP



SOLSTICE  
15504.08  
11/7/19  
SHEET 1 OF 1

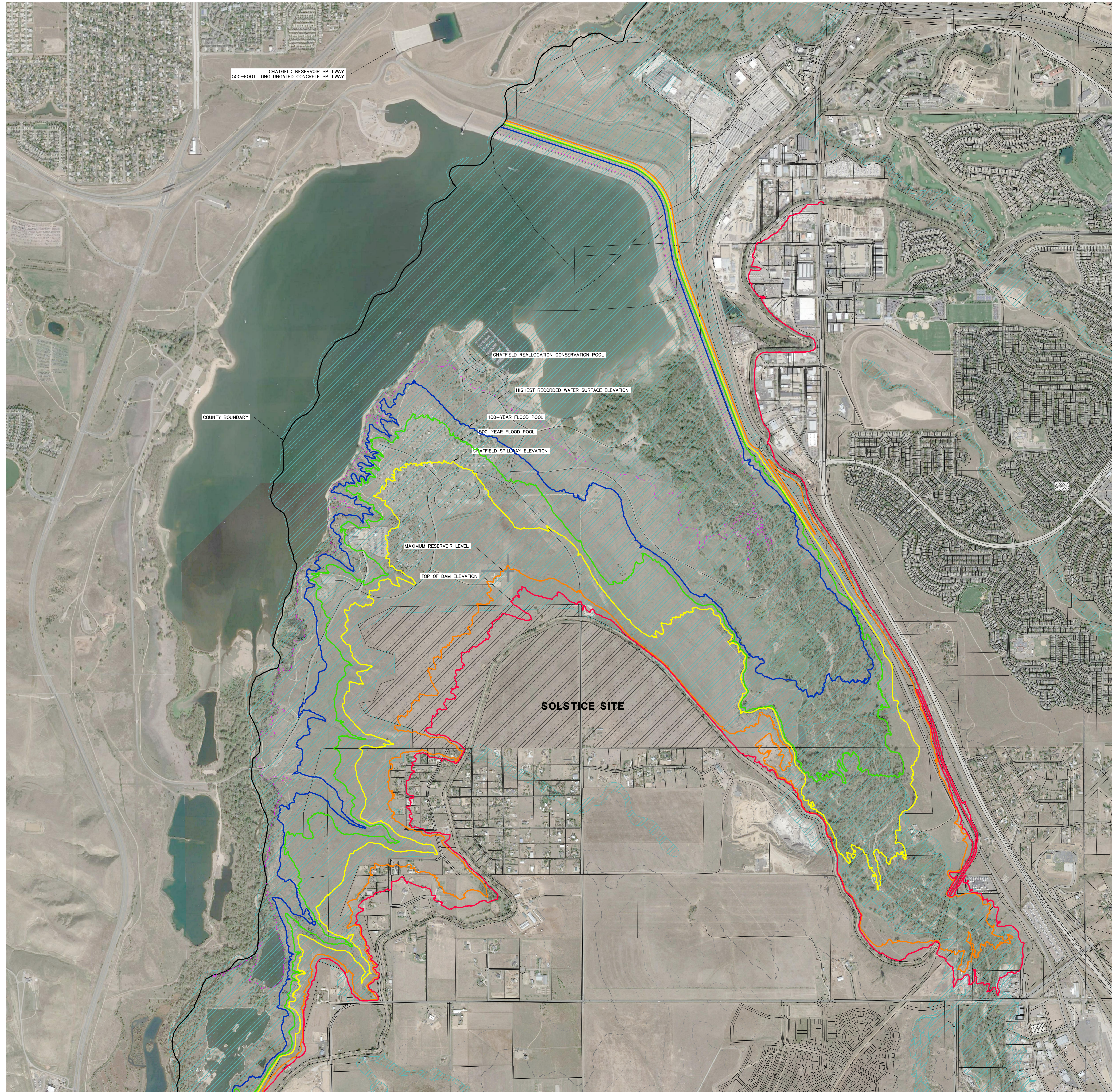


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X:\155000\ant1550408\Drawings\Presentations\Evacuation Plan\2019-11-7 Evacuation.sldwg, 24x36 Title Landscape, 11/7/2019 11:14:57 AM, KuyertB

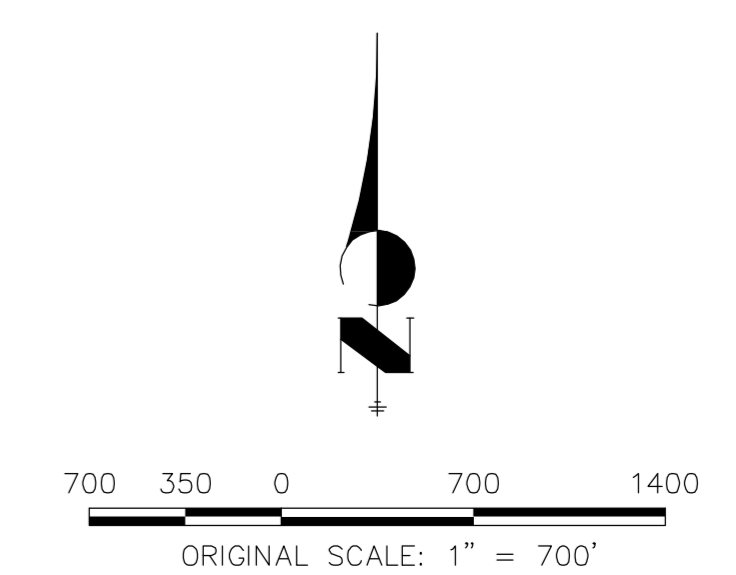
# CHATFIELD RESERVOIR POOLS AND FLOODPLAINS

## SOLSTICE DEVELOPMENT



### LEGEND

-  CHATFIELD REALLOCATION CONSERVATION POOL (5444.00)
-  100-YEAR (1% ANNUAL CHANCE) CHATFIELD FLOOD POOL (5474.30)
-  500-YEAR (0.2% ANNUAL CHANCE) CHATFIELD FLOOD POOL (5488.50)
-  SPILLWAY ELEVATION (5500.00)
-  MAXIMUM RESERVOIR LEVEL (MRL) (5521.60)
-  TOP OF DAM ELEVATION (5527.00)
-  HIGHEST RECORDED WATER SURFACE ELEVATION, 6/19/2015 (5448.50)
-  DOUGLAS COUNTY MAPPED FLOODPLAIN
-  SOLSTICE SITE



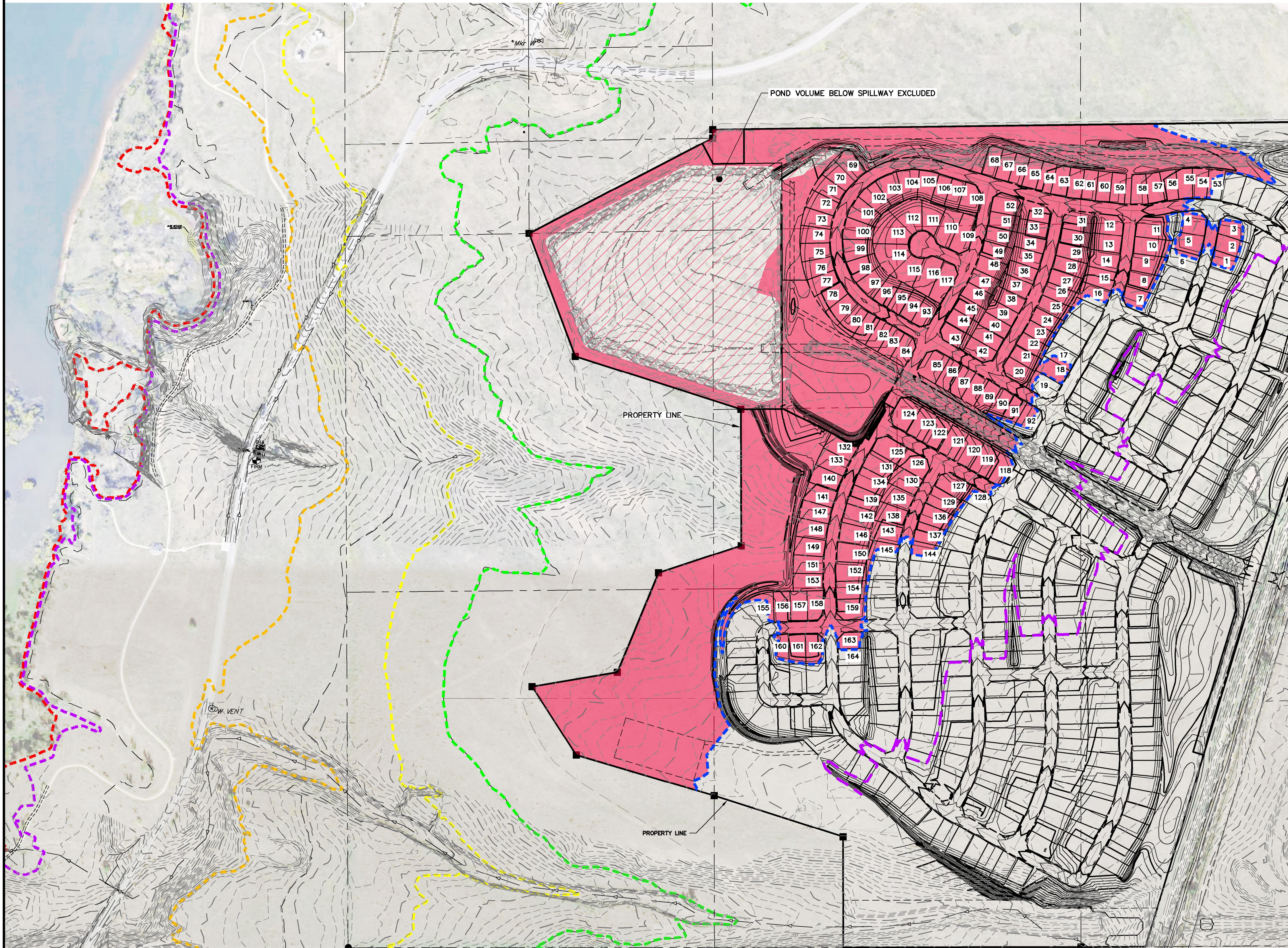
CHATFIELD FLOOD POOLS  
 SOLSTICE  
 JOB NO. 15504.01  
 10/4/2017  
 SHEET 1 OF 1



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# SOLSTICE

## ZONE 5 INUNDATION EXHIBIT



### LEGEND

- - - - - TOP OF ZONE 1 - EL: 5444.50
- - - - - TOP OF ZONE 2 - EL: 5456.00
- - - - - TOP OF ZONE 3 - EL: 5481.00
- - - - - TOP OF ZONE 4 - EL: 5500.00
- - - - - TOP OF ZONE 5 - EL: 5521.60
- - - - - TOP OF DAM - EL: 5527.00
- - - - - LIMITS OF GRADING
- ONSITE AREAS INUNDATED BY FLOWAGE VOLUME AT MRL AND BELOW

ZONE 5 FLOWAGE VOLUME UNDER MRL			
	VOLUME		
	(CY)	(Ac-Ft)	Δ* (Ac-Ft)
[1] EXISTING GRADE	887,173	549.9	---
[2] PROPOSED GRADE (EXCLUDING HOUSES AND POND)	1,089,226	675.1	+125.4

\*Comparison of Proposed Conditions Flowage to Existing Flowage Volume, Row [1]

ONSITE EARTHWORK COMPARISON				
	VOLUME			
	CUT (CY)	FILL (CY)	NET (CY)	Δ* (CY)
[1] EXISTING GRADE VS. PROPOSED GRADE	433,364	165,726	267,638 (CUT)	---

TOTAL LOTS INUNDATED UNDER MRL: 164



200 100 0 200 400  
ORIGINAL SCALE: 1" = 200'

FLOWAGE VOLUME  
SOLSTICE  
JOB NO. 15504.08  
11/7/2019  
SHEET 8 OF 8

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