

# AAR AT CARTERS DAM

DIFFERENT APPROACHES  
(ONE OLD, ONE NEW)





## Carters Main and Reregulation Dams







A large, light-colored stone sign with the word "Vulcan" in large, blue, 3D block letters. Below it, the words "Materials Company" and "Dalton Quarry" are engraved in a smaller, blue font. The sign is set against a background of trees and a stone wall.

Vulcan

Materials Company  
Dalton Quarry





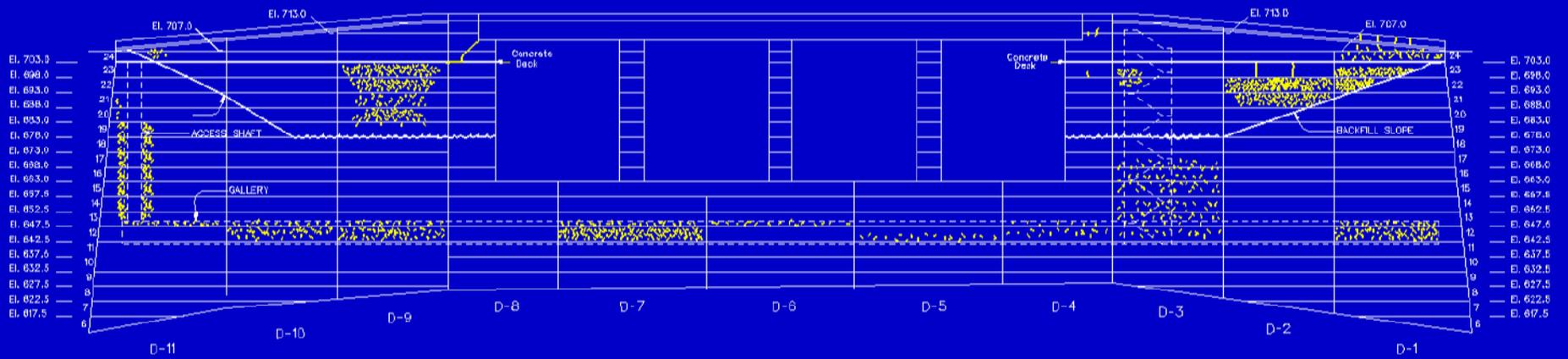












CARTERS REREGULATION DAM - UPSTREAM ELEVATION

LEGEND

 OBSERVED MAP CRACKING





Weather <u>FAIR</u>		U. S. ARMY ENGINEER DISTRICT, MOBILE		
Air <u>70</u> °F to <u>76</u> °F		<b>CONCRETE PLACING CARD</b>		DATE: <u>APRIL 21, 1971</u>
Conc <u>72</u> °F to <u>77</u> °F				
CONCRETE PLACED				LOCATION
TYPE	1ST SHIFT RECEIVED	2ND SHIFT RECEIVED	3RD SHIFT RECEIVED	<u>MONO D-9, LIFT 9</u>
GROUT	<u>2</u>			PAY ITEM NO.
<u>3/4"</u> 3000				<u>15, 11, 19, 12B</u>
<u>1 1/2"</u> 3000				TIME
<u>1 1/2"</u> 4000				STARTED      COMPLETED
<u>3"</u> <del>3000</del> <u>2000</u> 353 <sup>5</sup>				<u>1245</u> <u>2026</u>
<u>3"</u> 4000				ELEVATION
<u>6"</u> EXTERIOR				BOTTOM      TOP
<u>6"</u> INTERIOR				<u>ROCK</u> <u>632 5</u>
REJECTED MATERIAL				<u>CHAS MORGAN</u> INSP    INSP  INSP
TIME	TYPE	QUANTITY	REASON	
		<u>0</u>		

MOB FORM **710**  
APR 67

Use other side for remarks or sketch

Weather P. Cloudy's Warm  
 Air 80 °F to 85 °F  
 Conc 79 °F to 82 °F

U. S. ARMY ENGINEER DISTRICT, MOBILE

**CONCRETE PLACING CARD**

DATE: MAY 19, 1971

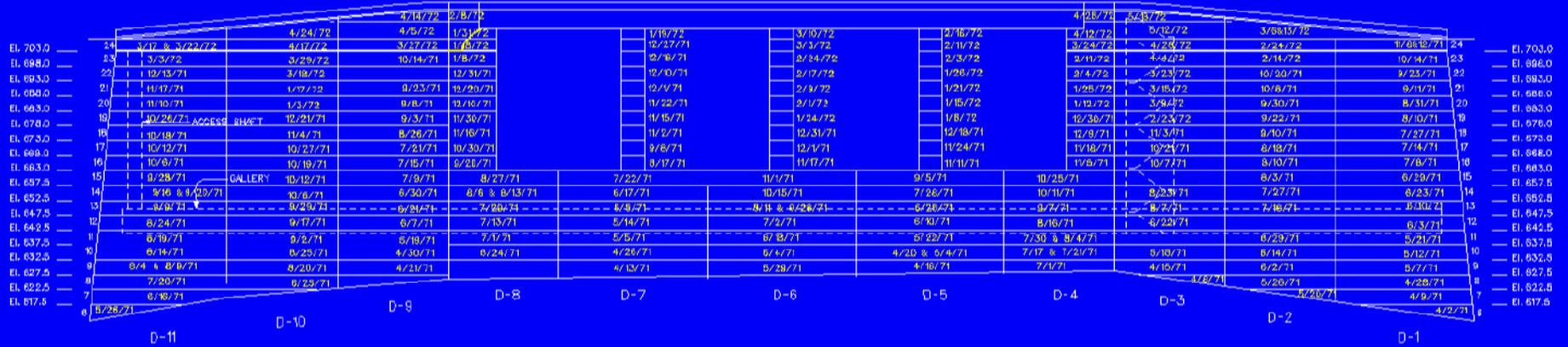
CONCRETE PLACED				LOCATION	
TYPE	1ST SHIFT RECEIVED	2ND SHIFT RECEIVED	3RD SHIFT RECEIVED	MONO D-9, LIFT 11	
GROUT	<u>1cy</u>	<u>0</u>	<u>0</u>	PAY ITEM NO.	
3/4" 3000	<u>0</u>	<u>0</u>	<u>0</u>	<u>15 4 19</u>	
1 1/2" 3000	<u>13cy</u>	<u>0</u>	<u>0</u>	TIME	
1 1/2" 4000	<u>0</u>	<u>0</u>	<u>0</u>	STARTED	COMPLETED
3" 3000	<u>80cy</u>	<u>0</u>	<u>0</u>	<u>0115</u>	<u>1625</u>
3" <del>4000</del> 2000	<u>196</u>	<u>0</u>	<u>0</u>	ELEVATION	
6" EXTERIOR				BOTTOM	TOP
6" INTERIOR				<u>6375</u>	<u>6425</u>

REJECTED MATERIAL			
TIME	TYPE	QUANTITY	REASON
	<u>NONE</u>		

CHARLES MORGAN INSP  
KANON INC, DAKW01-71-C-0014  
 \_\_\_\_\_ INSP  
 \_\_\_\_\_ INSP

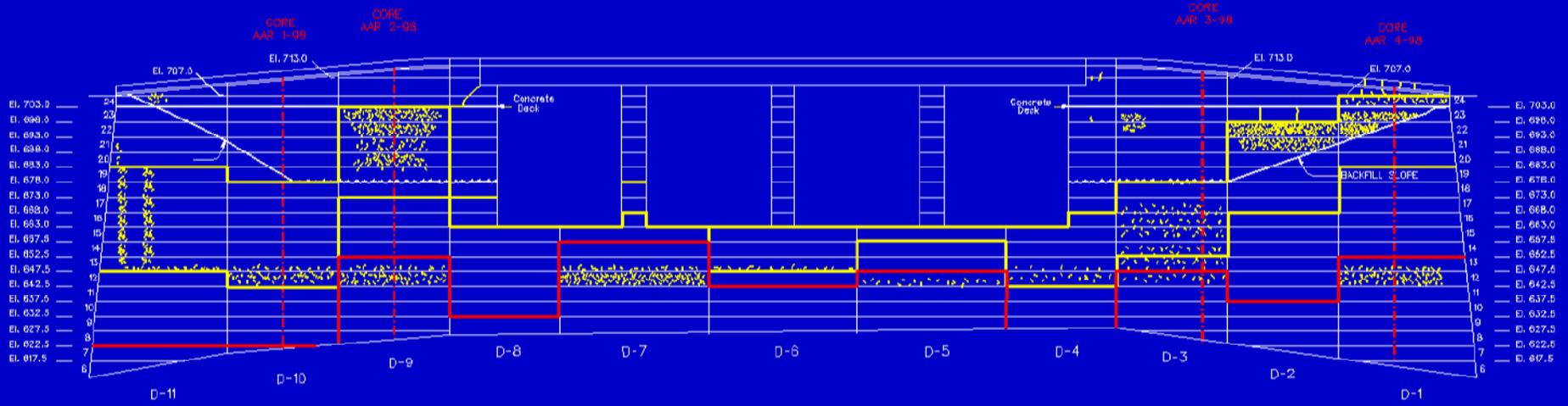
MOB FORM 710  
 APR 67

Use other side for remarks or sketch



CARTERS REREGULATION DAM - UPSTREAM ELEVATION

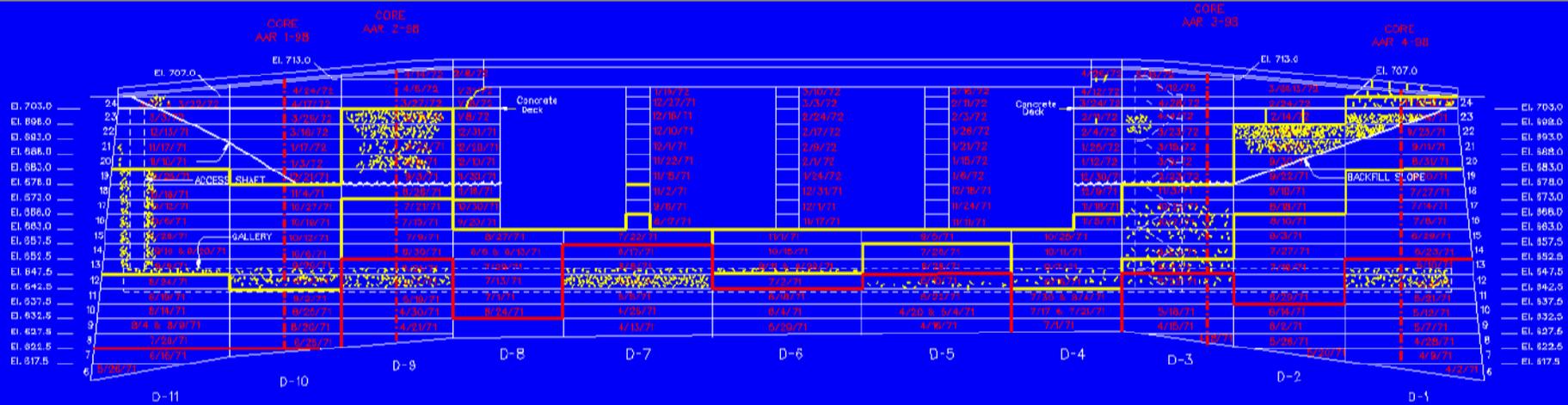
LEGEND



CARTERS REREGULATION DAM - UPSTREAM ELEVATION

LEGEND

- 11/9/71  
Zone of most intense AAR
- OBSERVED MAP CRACKING



CARTERS REREGULATION DAM - UPSTREAM ELEVATION

LEGEND

8/4/71  
Zone of most intense AAR  
8/3/71 8/4/71

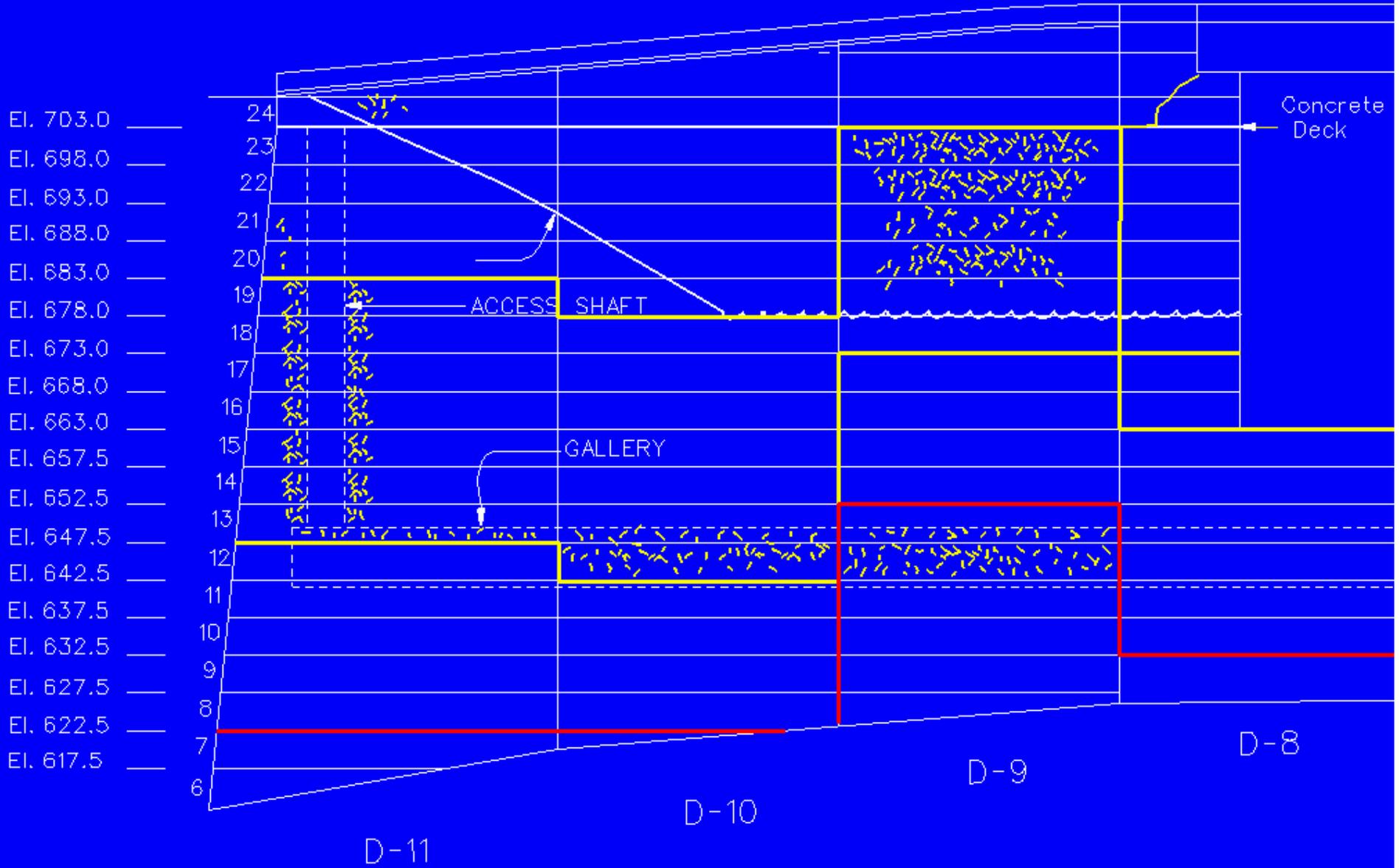
8/4/71 CONCRETE PLACEMENT DATE  
OBSERVED MAP CRACKING

STRUCTURAL CRACKS  
AGGREGATE CONCRETE

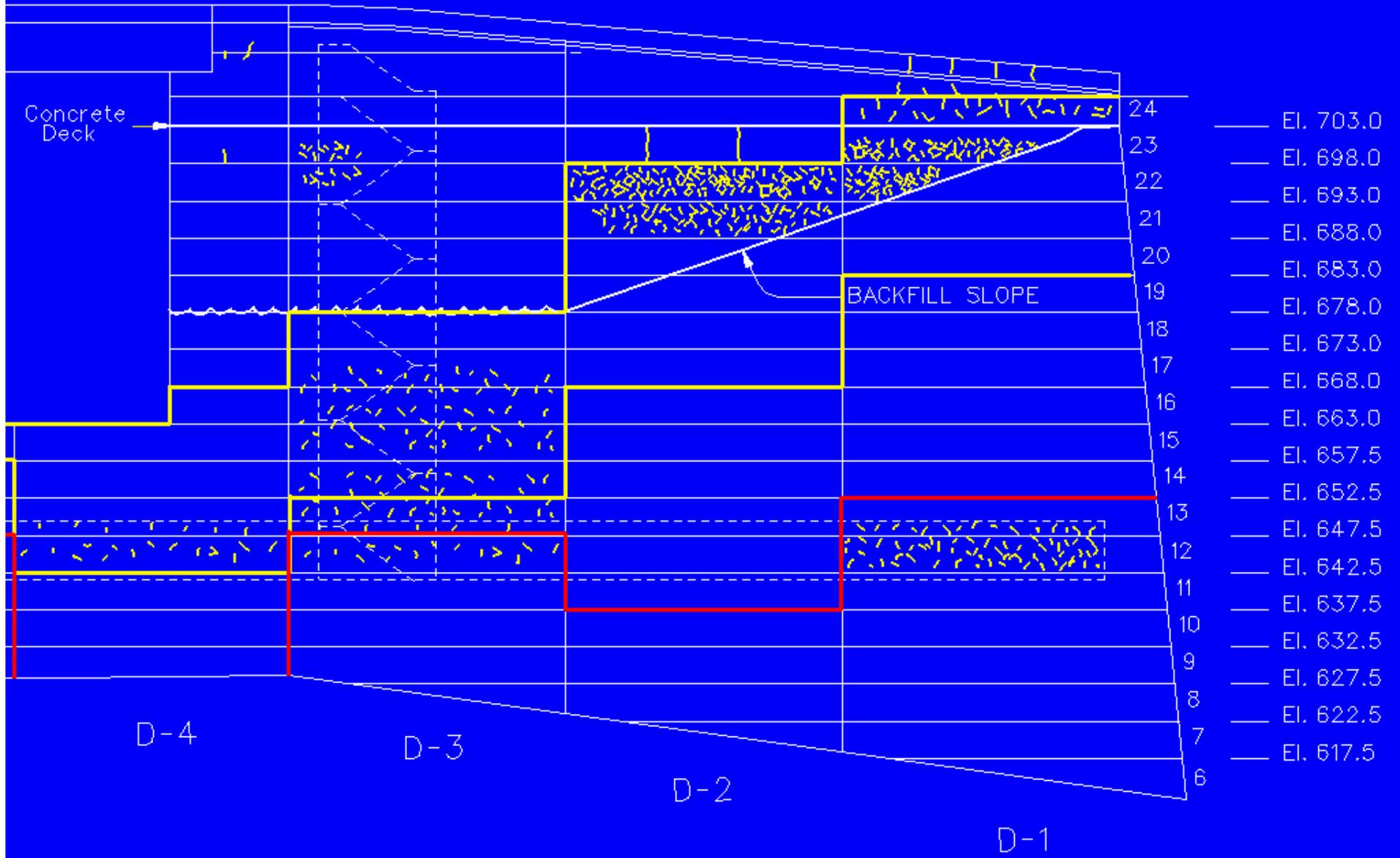
Note: AAR data points in concrete placed prior to 8/22/71

3" AGGREGATE, 3000 PSI CONCRETE  
PQ CORE HOLE  
3" AGGREGATE, 2000 PSI CONCRETE

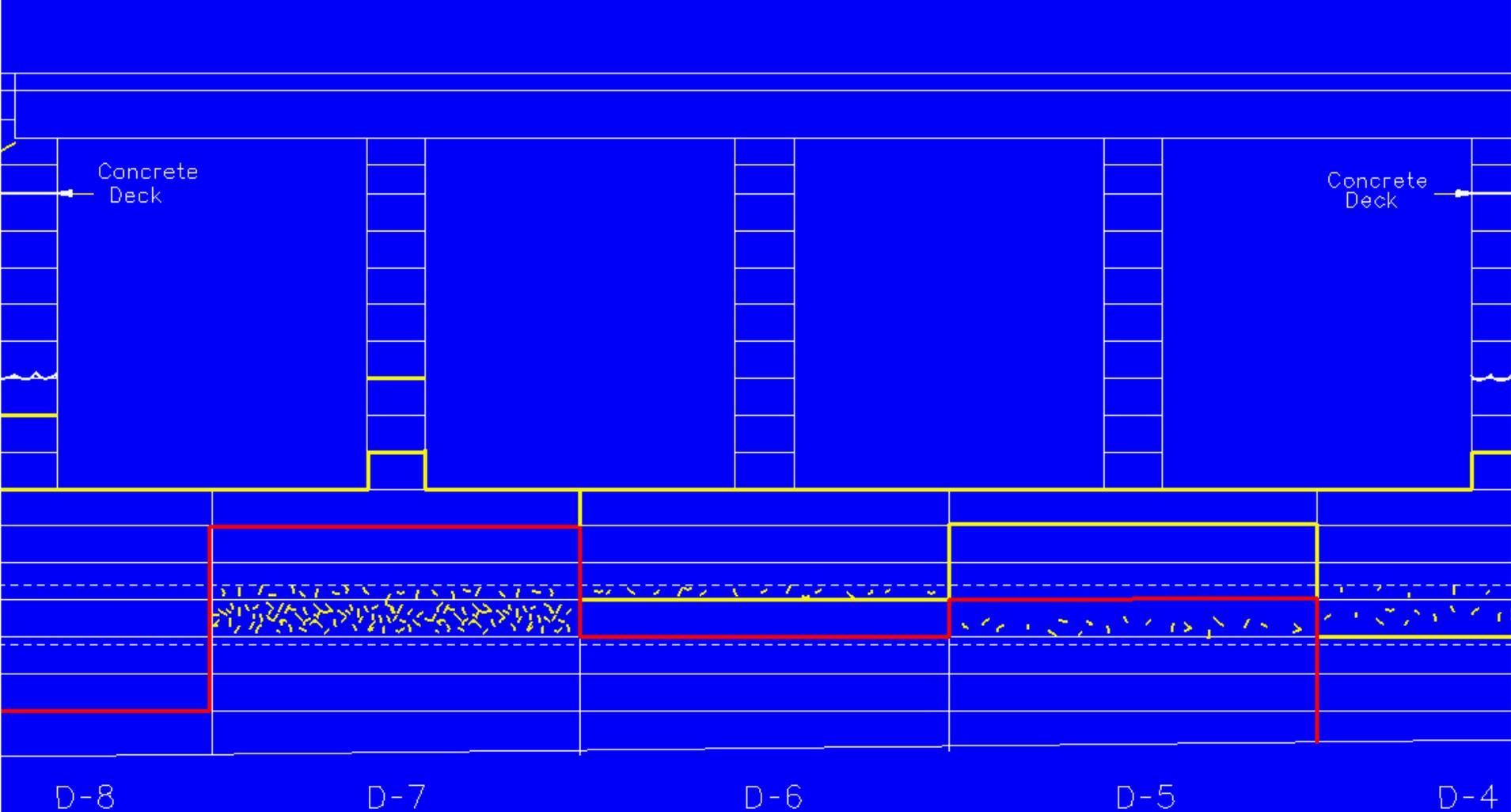
# Left Abutment



# Right Abutment



# Gate Area



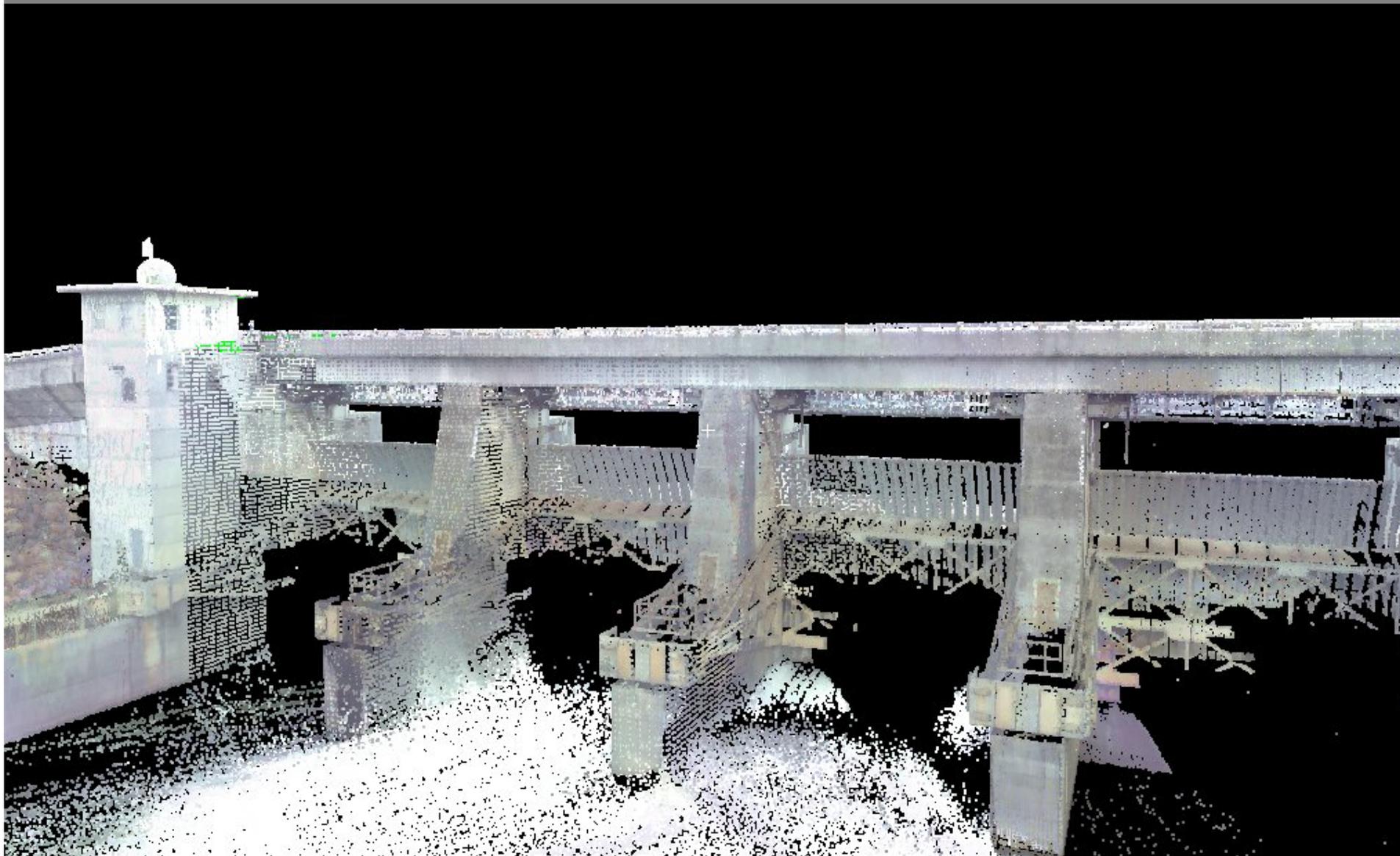
# Lidar Survey



# Lidar Survey

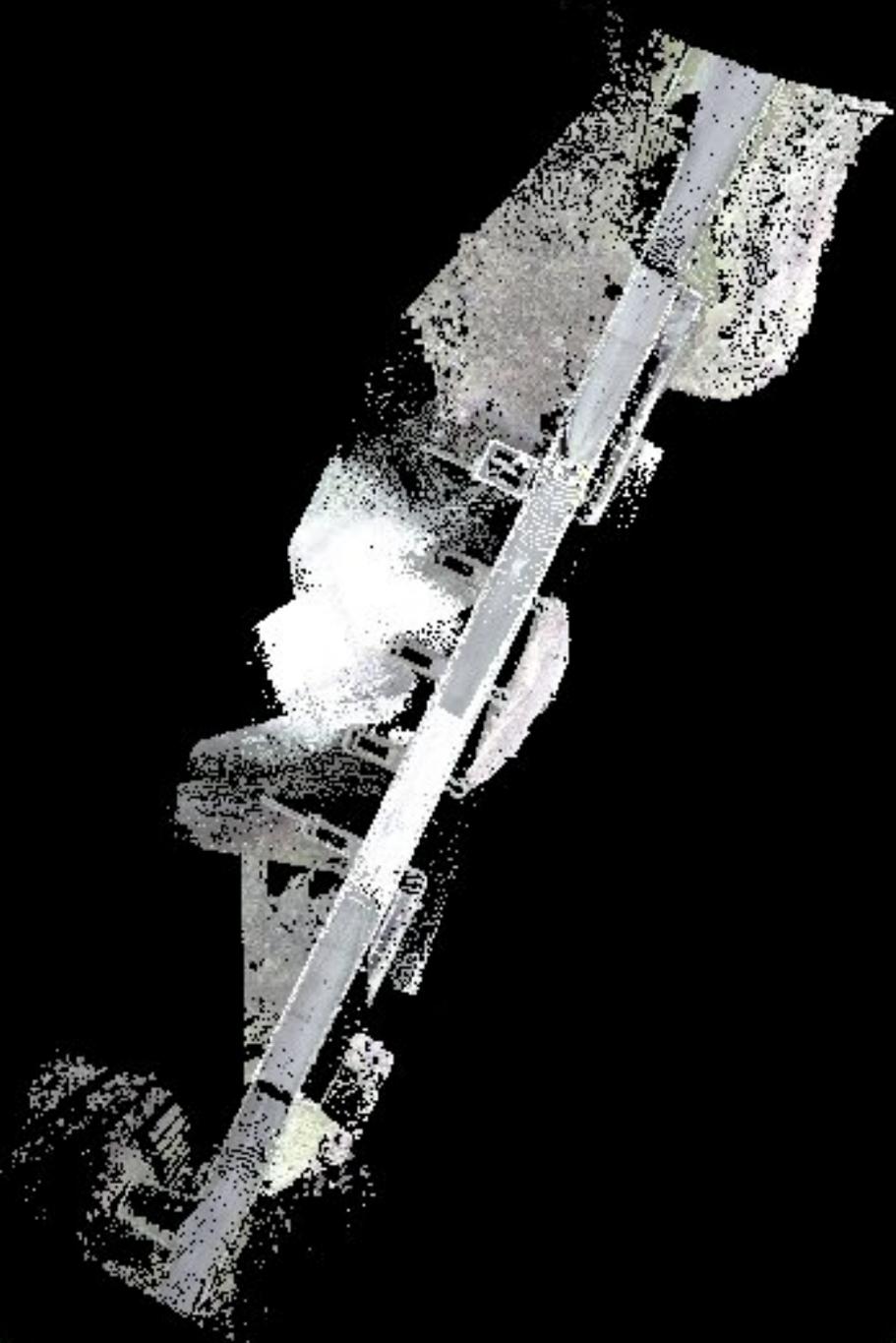


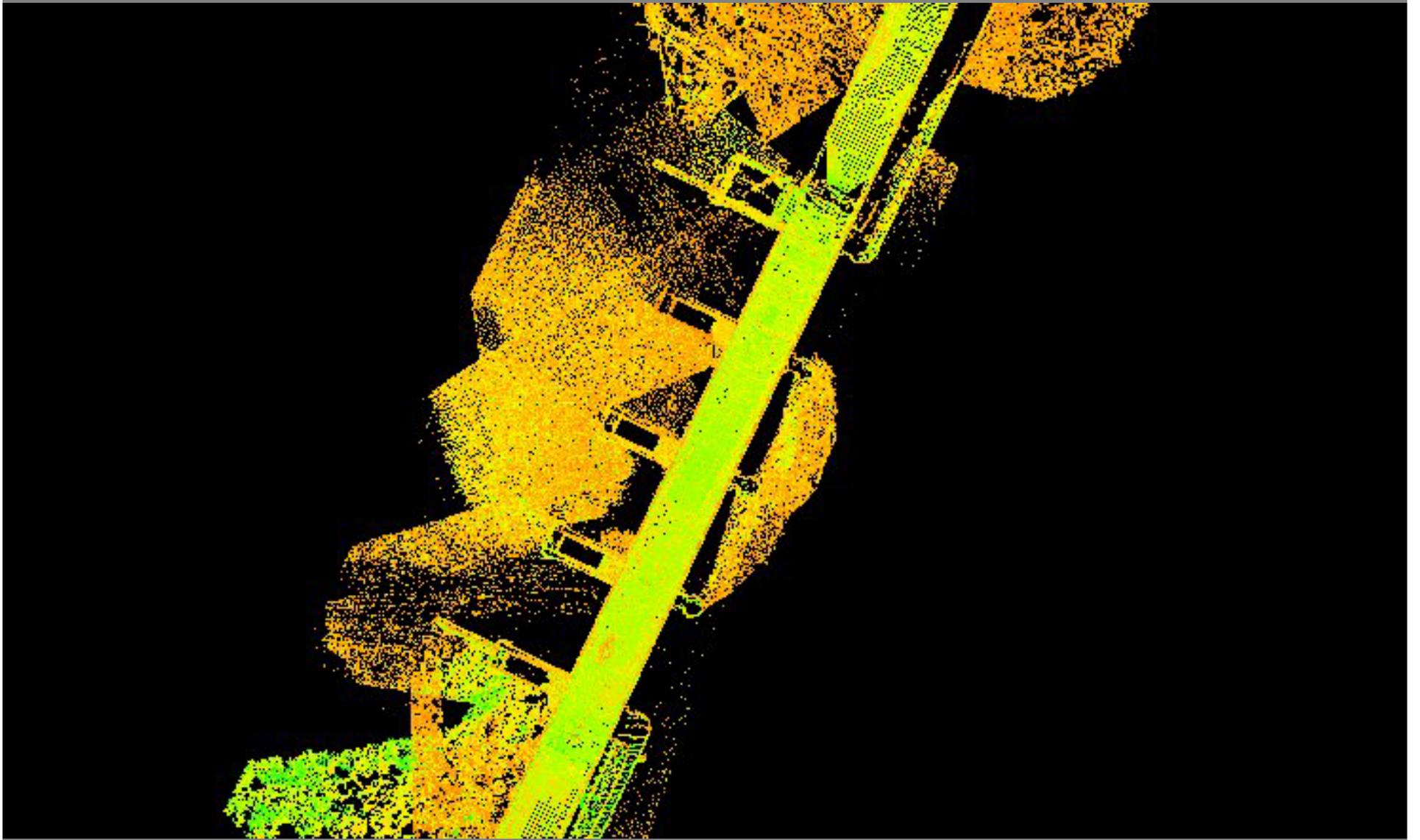
# Cyclone oblique view



# CloudWorx

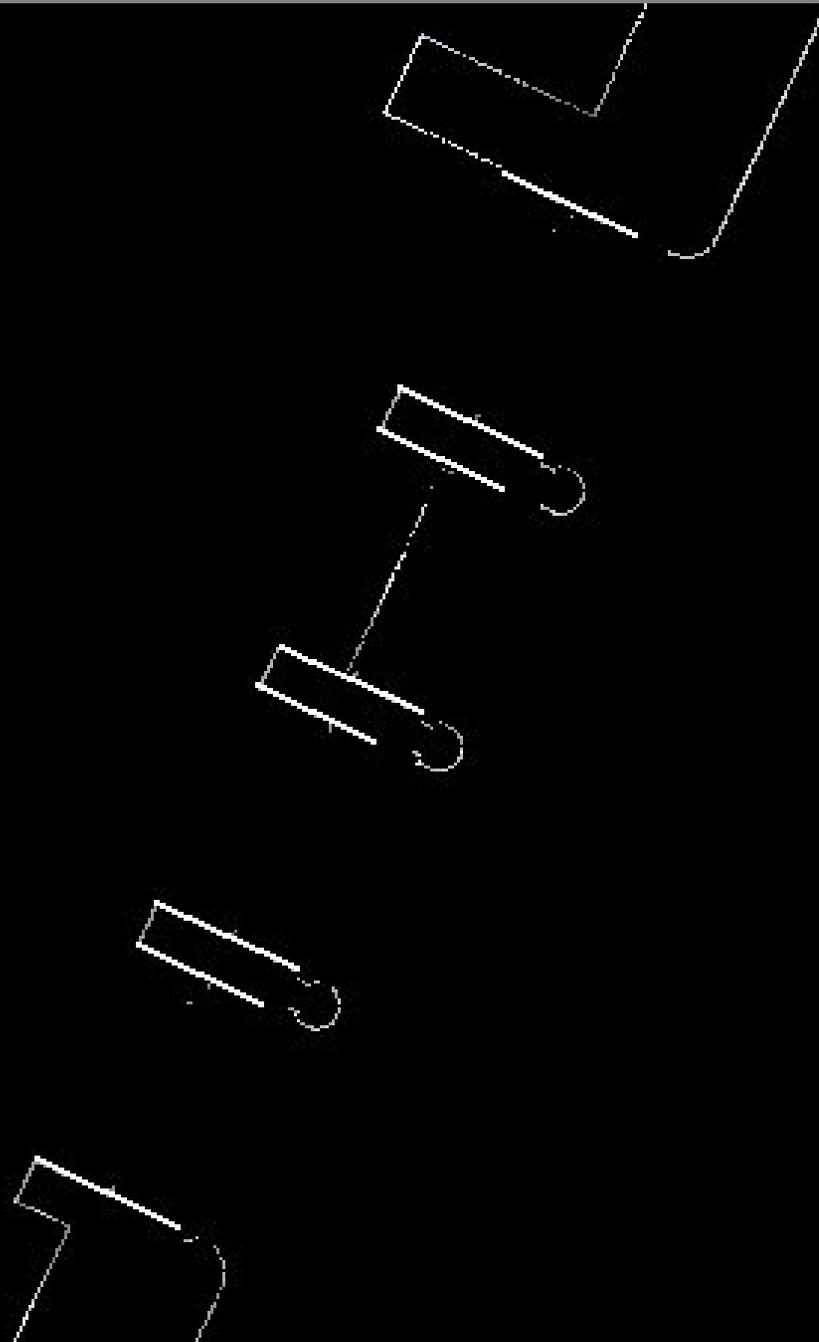
Plan View





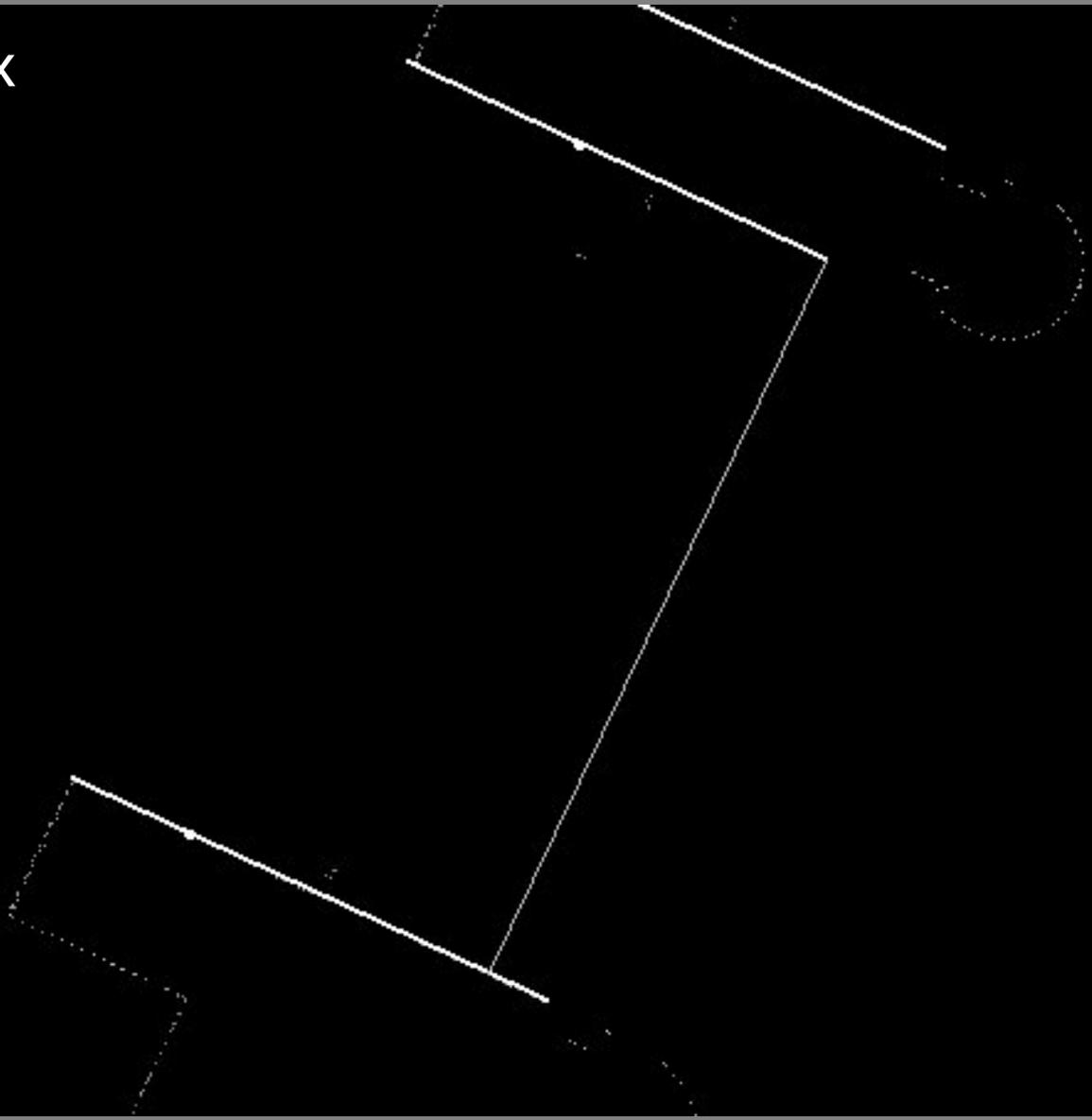
CloudWorx

Horizontal Slice

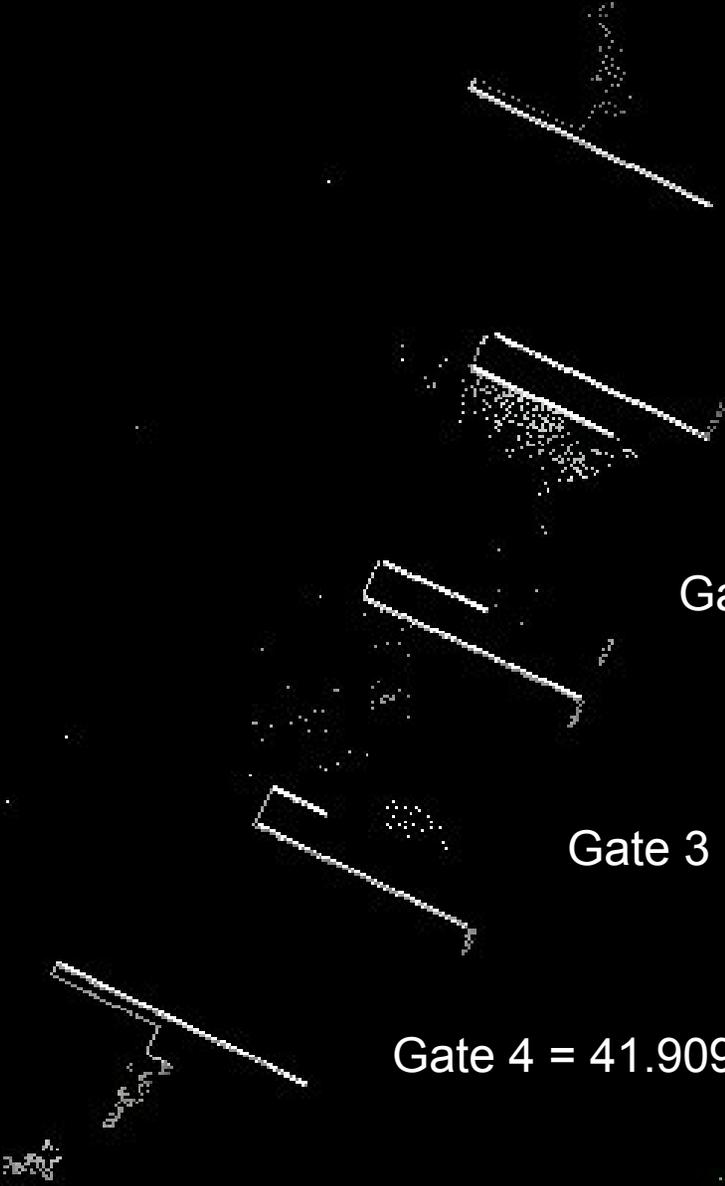


# CloudWorx

## Fit Line



Horizontal Slice  
Elevation 664-665



Gate 1 = 42.000'

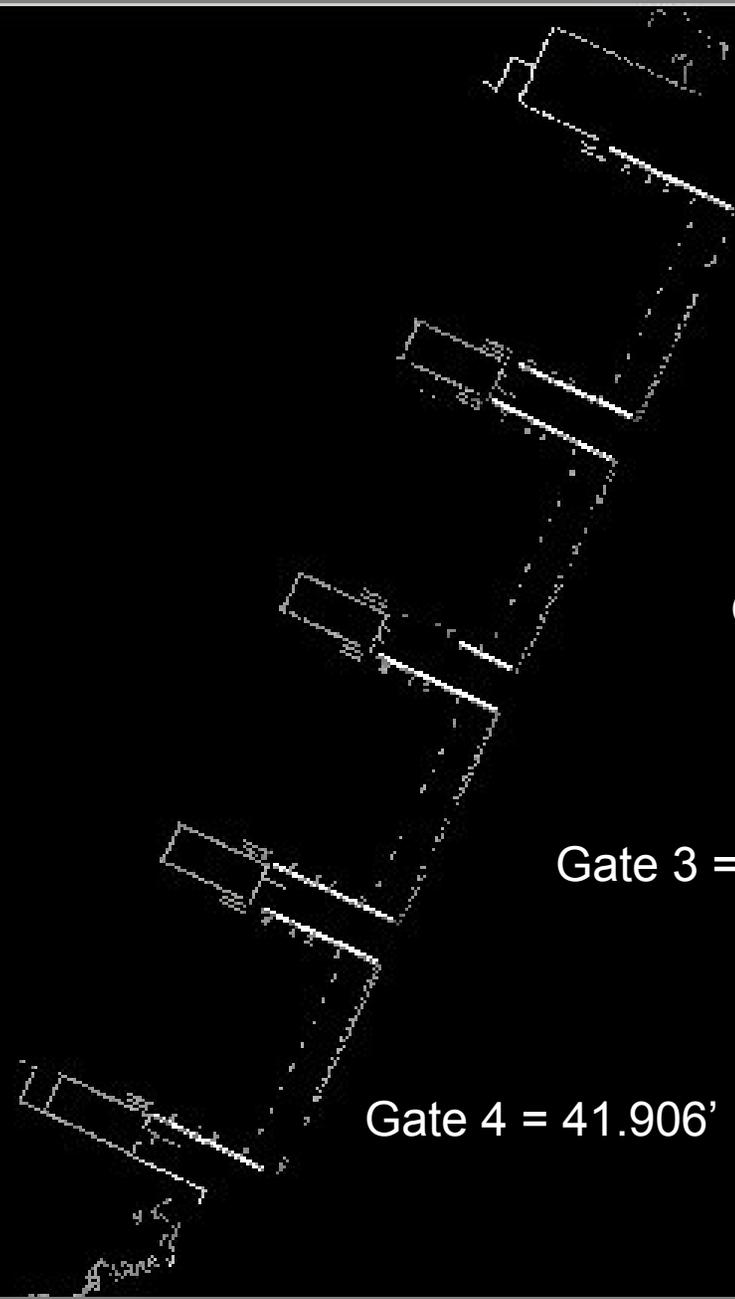
Gate 2 = 42.004'

Gate 3 = 42.000'

Gate 4 = 41.909'

Horizontal Slice

Elevation 679-680



Gate 1 = 41.945'

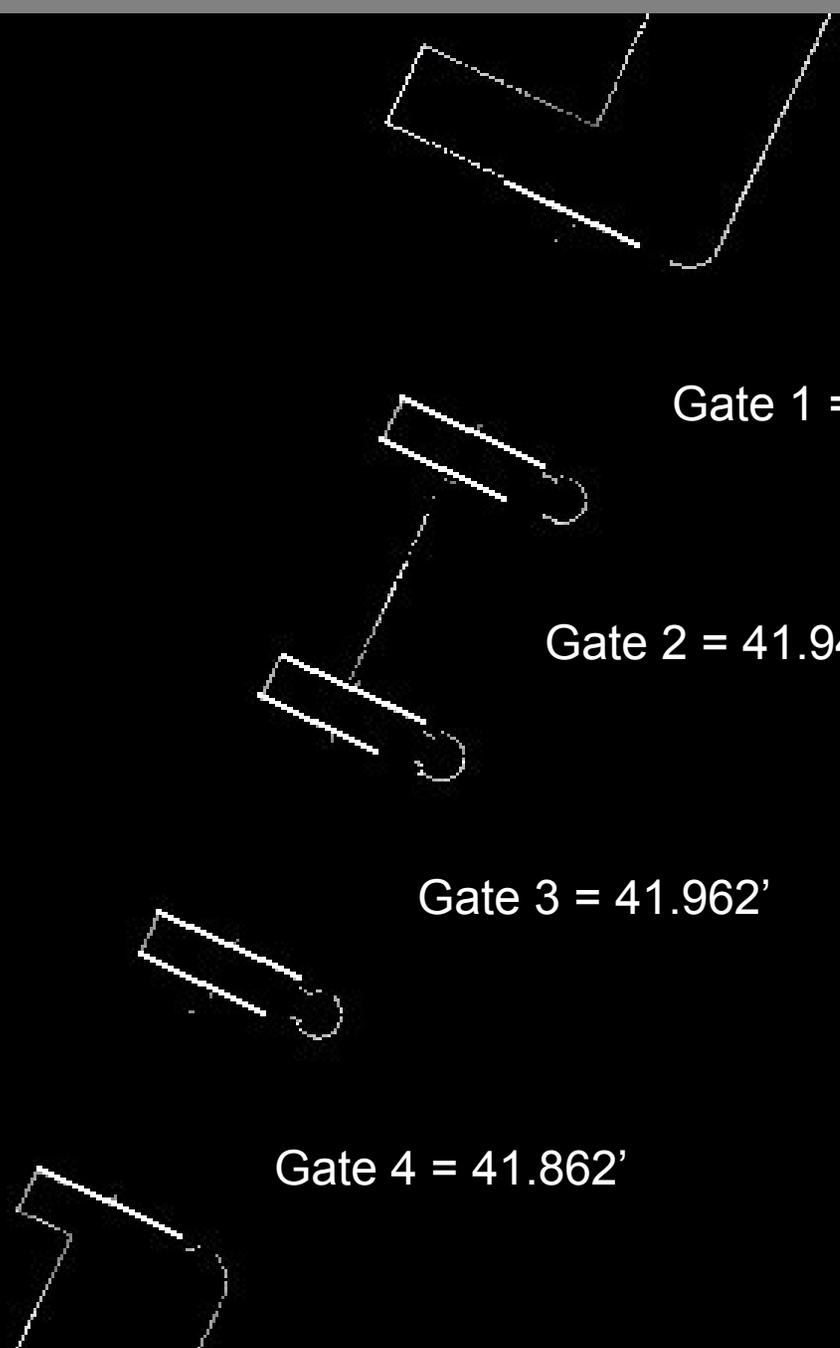
Gate 2 = 41.914'

Gate 3 = 41.969'

Gate 4 = 41.906'

Horizontal Slice

Elevation 699-700



Gate 1 = 41.875'

Gate 2 = 41.942'

Gate 3 = 41.962'

Gate 4 = 41.862'

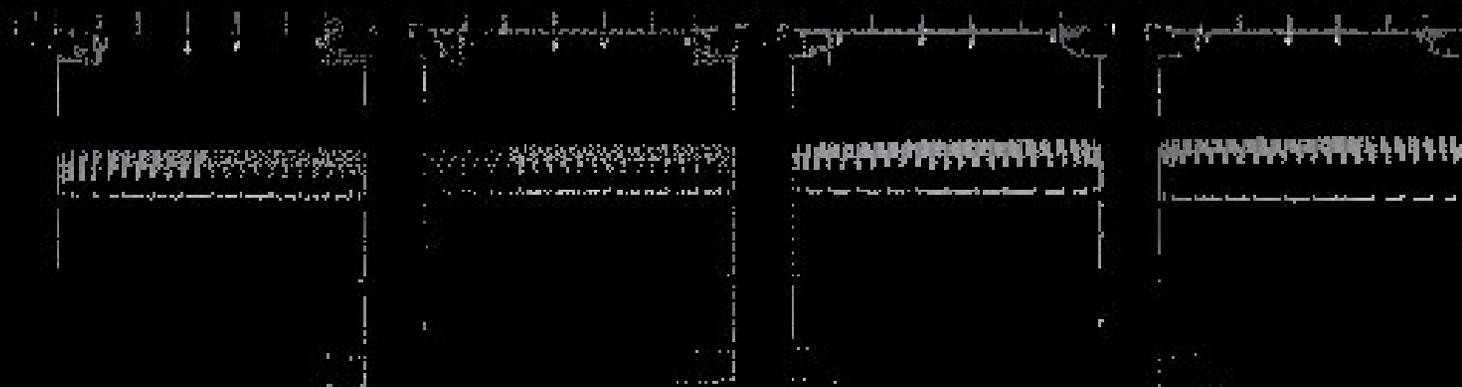
# CloudWorx

Front View



# CloudWorx

## Vertical Slice



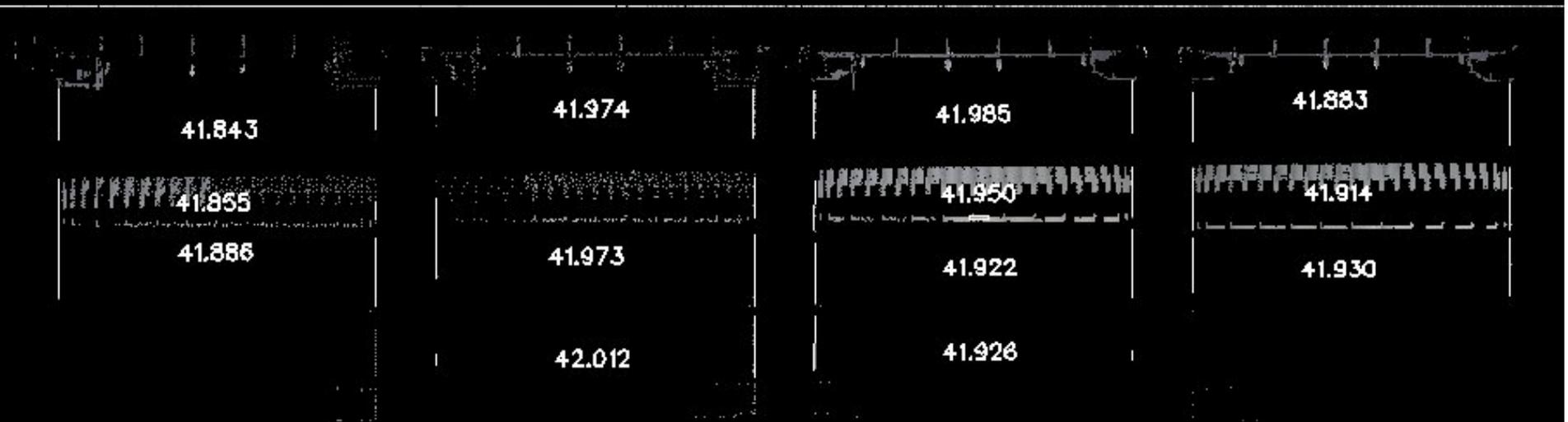
## Vertical Slice - downstream piers

GATE 4

GATE 3

GATE 2

GATE 1



41.924

41.881

41.896

41.876

41.867

41.867

41.885

41.892

41.893

41.911

# Vertical Slice - upstream piers

Gate 4

Gate 3

Gate 2

Gate 1



