



# LANDFILL DRONES

HOW TO IMPROVE LANDFILL CAPACITIES

# EARLY DRONES



# DJI PHANTON 4 PRO

A COST EFFECTIVE PLATFORM





# DRONE USES

- AERIAL PHOTOS
  - TOPOGRAPHIC MAPPING
  - VOLUMETRICS
  - CONSTRUCTION INSPECTION
  - HISTORICAL DOCUMENTATION
- 

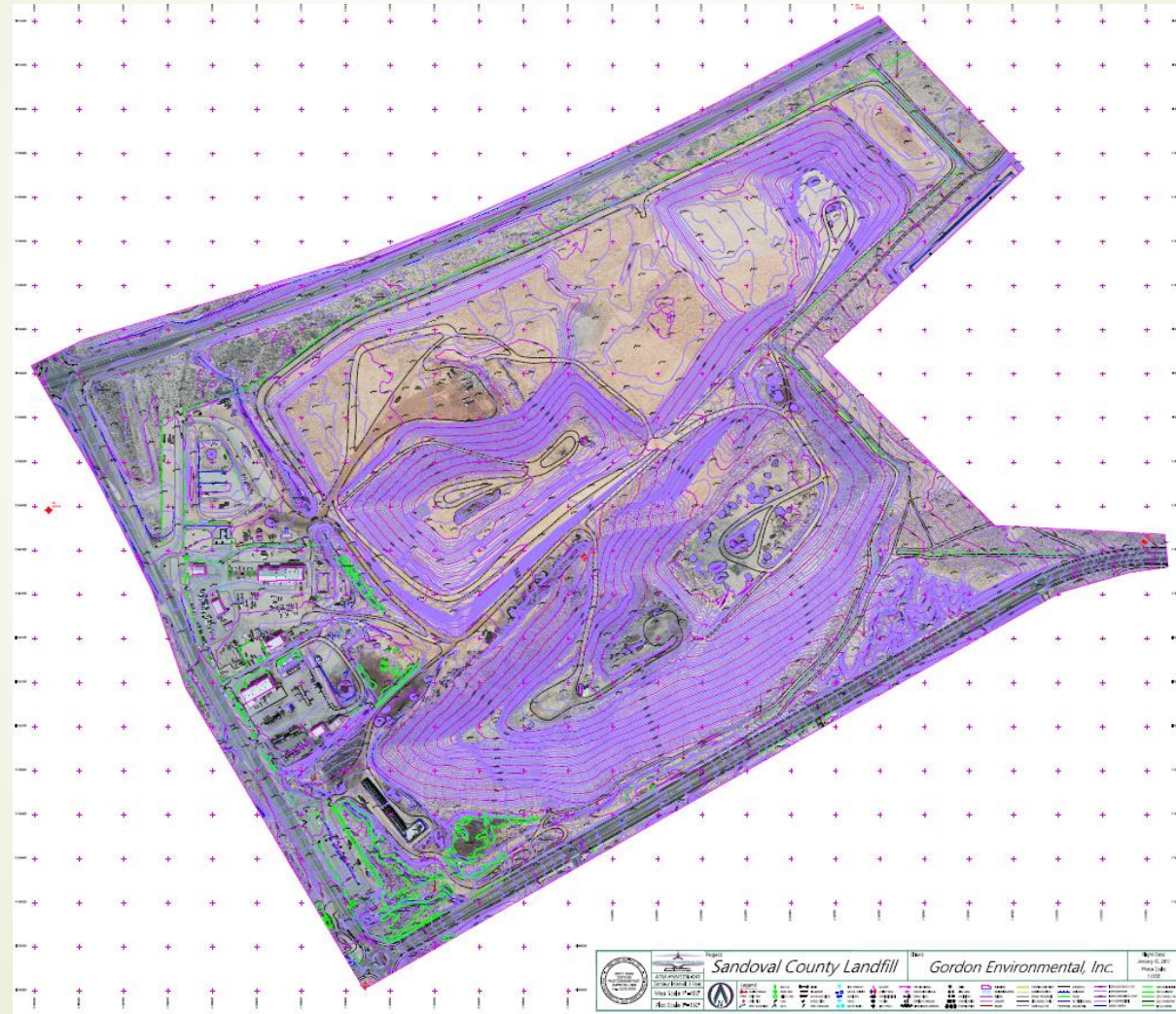
# AERIAL PHOTOS

A PICTURE IS WORTH A THOUSAND WORDS



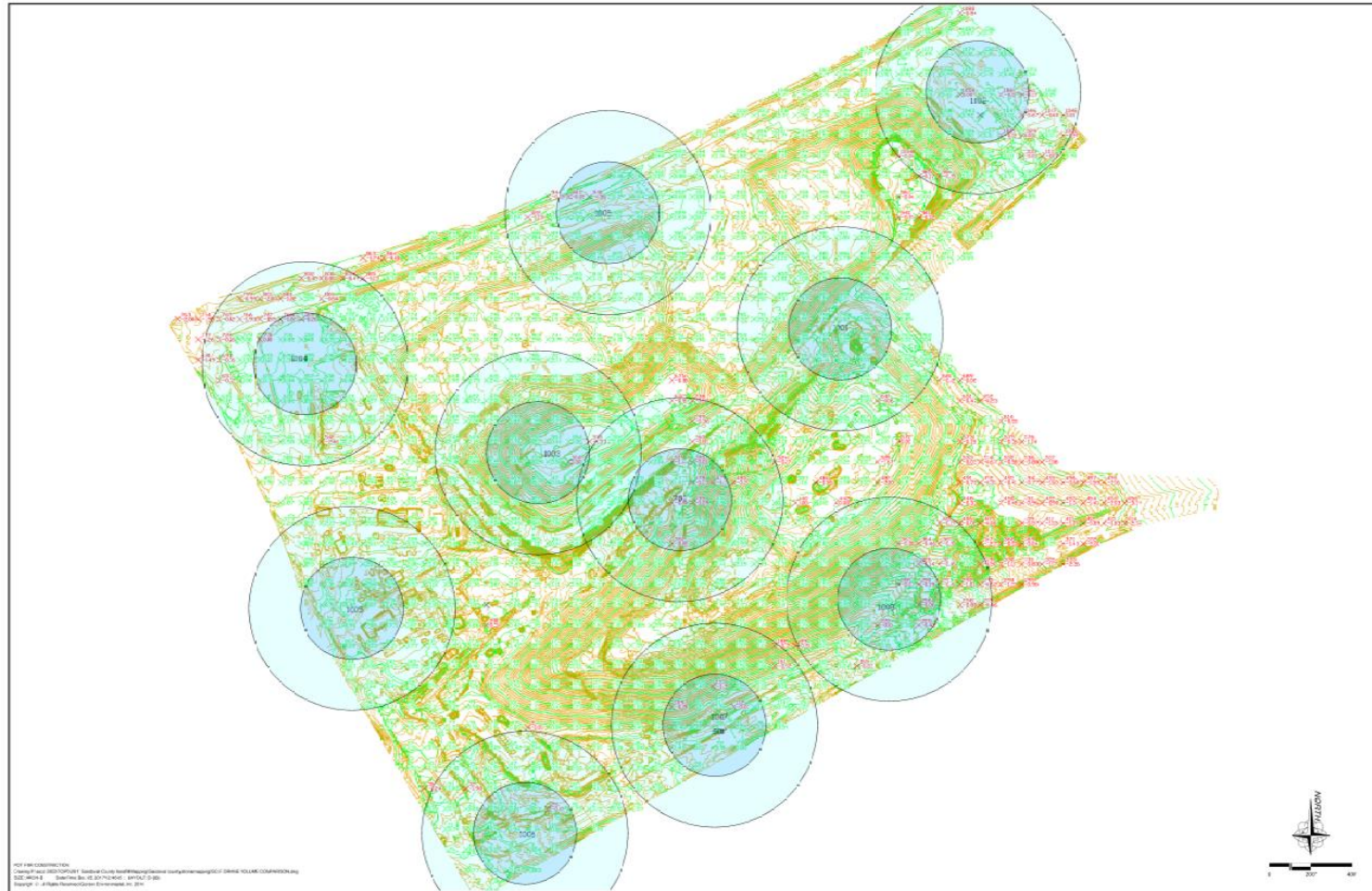
# TOPOGRAPHIC MAPPING

AS A ROUTINE TOOL

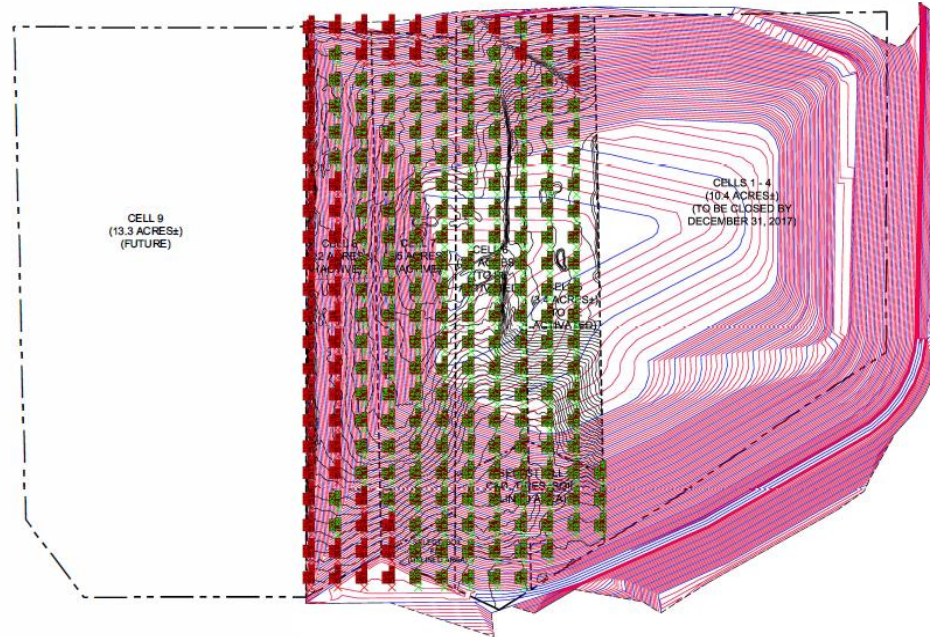


# TOPOGRAPHIC MAPPING

A CONFIRMATION OF NATIONAL MAP ACCURACY STANDARDS

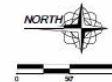


# Volumetrics



Volume

Base Surface	10-17-2017 DRONE FLIGHT (1) (1)
Comparison Surface	REVISED FINAL COVER
10-30-2017	
Cut Factor	1.000
Fill Factor	1.000
Cut volume (adjusted)	23445.73 Cu. Yd.
Fill volume (adjusted)	450526.65 Cu. Yd.
Net volume (adjusted)	427080.92 Cu. Yd.<Fill>
Cut volume (unadjusted)	23445.73 Cu. Yd.
Fill volume (unadjusted)	450526.65 Cu. Yd.
Net volume (unadjusted)	427080.92 Cu. Yd.<Fill>



DRAFT

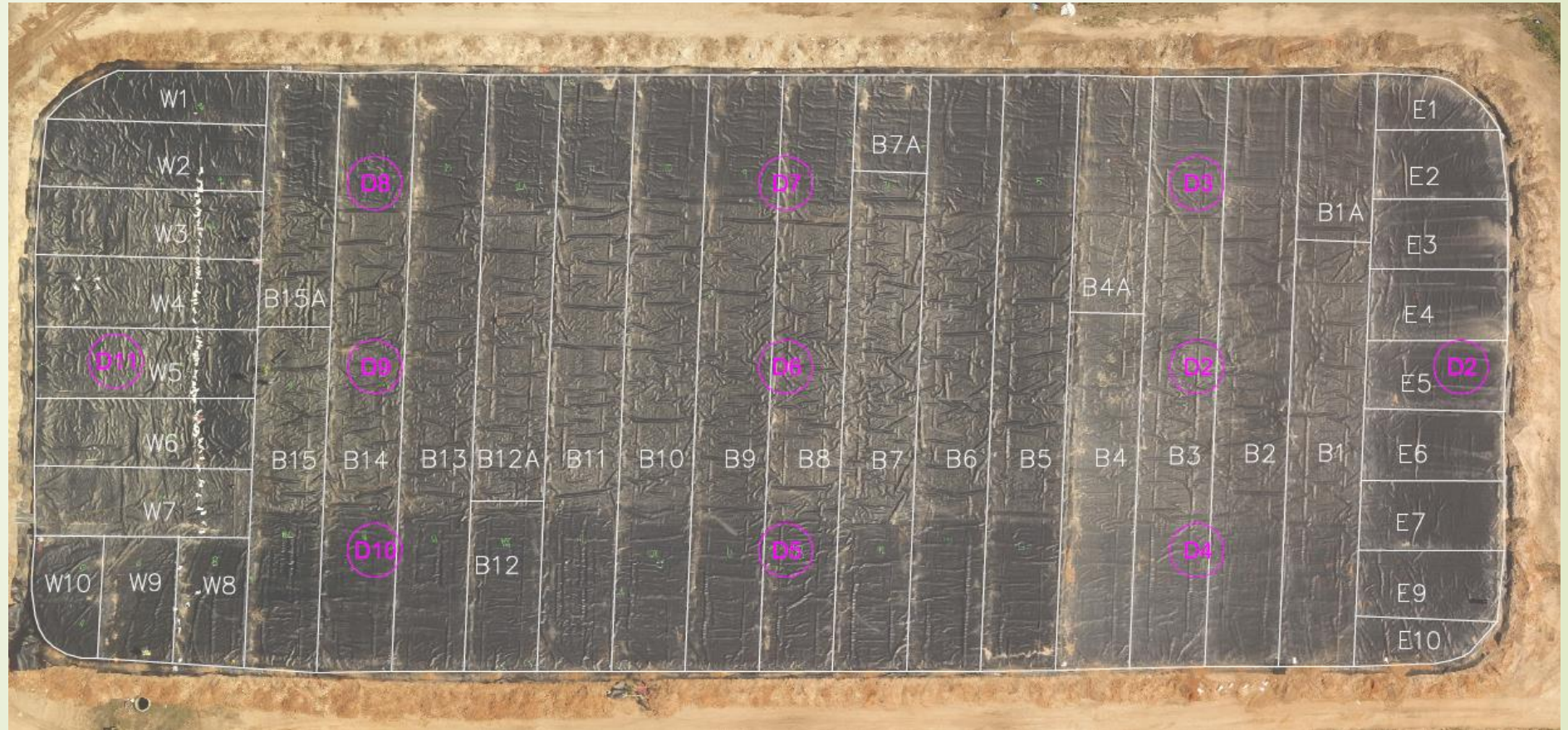
## Cut/Fill Tick Map

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		DATE: 10/30/17 DRAWN BY: DMJ APPROVED BY: TRG	Client/Reference: deg PROJECT #: 867-01-06 REVIEWED BY: CRB www.gordonpco.com



# CONSTRUCTION INSPECTION

## IDENTIFYING PANEL INSTALLATION AND TESTING



# HISTORICAL DOCUMENTATION

WHERE WE STARTED



# HISTORICAL DOCUMENTATION

## CONSTRUCTION PROGRESS



# HISTORICAL DOCUMENTATION

PROJECT COMPLETION





WHAT ARE YOUR EXPERIENCES?