

Resident Engineer/Survey Collaboration

Maximize the Value of Both
Services

Maximize the Value of Both Services

- ▶ Reasons to have surveyors more involved in construction projects
- ▶ Survey capabilities
- ▶ Technical support



Reasons to have surveyors more involved in construction projects

- ▶ Maximize the mobilization of survey crews
 - If the surveyors have a few hours of staking they can be used to measure quantities or for inspection for the rest of the day
- ▶ Increase productivity and efficiency of surveyors and engineers
 - Use technology to increase efficiency and accuracy for measuring quantities
- ▶ Increase existing staff's workload through workshare and cross training
- ▶ Machine control grading



Survey Capabilities

► Control networks

- Set horizontal and vertical control for inspectors
- Check other surveyors' control

► Measure quantities

- Concrete quantities for roundabouts
- Emat and topsoil
- Earthwork volumes



Survey Capabilities

► Check grades/layout

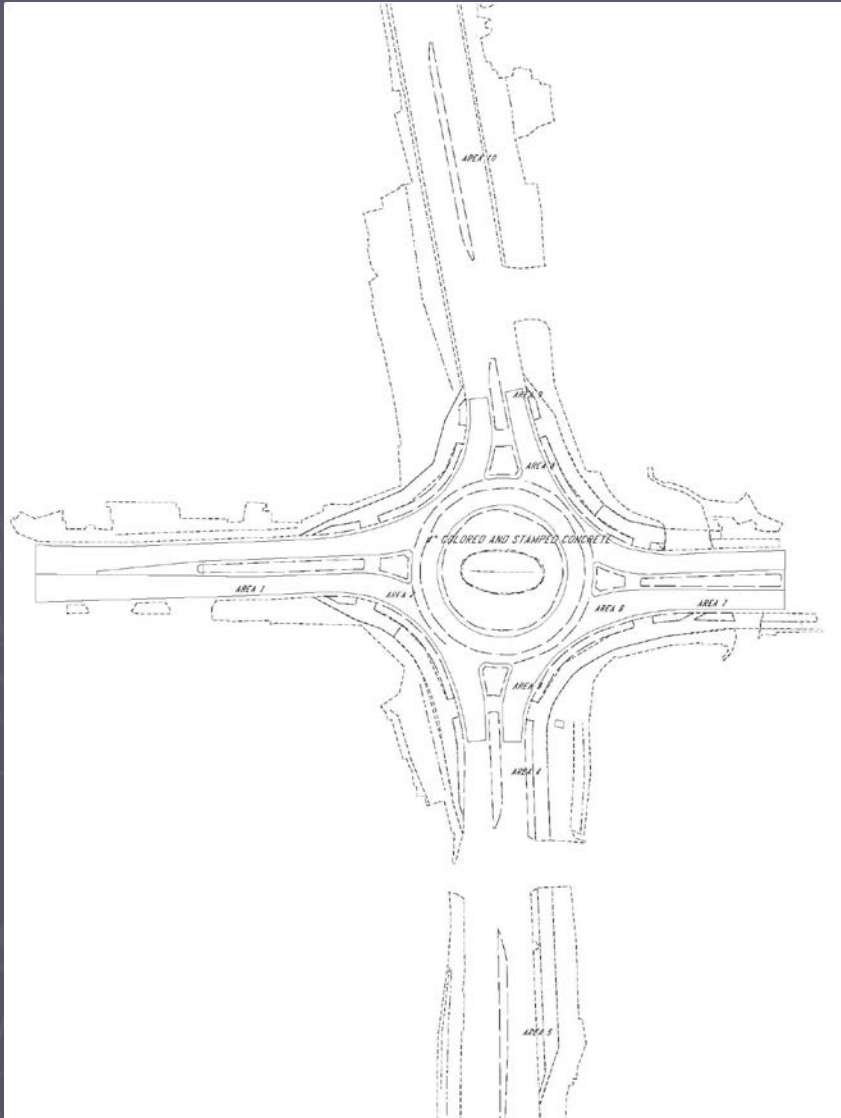
- Match lines
- Subgrade and curb grades
- Bridge layout
- Utilities

► As-built

- Water main and sanitary sewer
- Locate utilities to help prevent potential conflicts.



Survey Capabilities



4IN COLORED AND STAMPED CONCRETE ISLANDE.rpt
4" COLORED AND STAMPED CONCRETE ISLANDS

AREA 1
Volume and Area Computations Tue Nov 23 12:41:43 2010
Surface Name : ZONE3
Ref Elev : 0.0

	HORIZONTAL AREA	SLOPE AREA	
CUT	0.00	0.00	sq.ft.
FILL	708.40	709.58	sq.ft.
ZONE3	708.40	709.58	sq.ft.

AREA 2
Volume and Area Computations Tue Nov 23 12:41:48 2010
Surface Name : ZONE3
Ref Elev : 0.0

	HORIZONTAL AREA	SLOPE AREA	
CUT	0.00	0.00	sq.ft.
FILL	231.47	231.63	sq.ft.
ZONE3	231.47	231.63	sq.ft.

AREA 3
Volume and Area Computations Tue Nov 23 12:41:53 2010
Surface Name : ZONE3
Ref Elev : 0.0

	HORIZONTAL AREA	SLOPE AREA	
CUT	0.00	0.00	sq.ft.
FILL	253.73	253.98	sq.ft.
ZONE3	253.73	253.98	sq.ft.

AREA 4
Volume and Area Computations Tue Nov 23 12:41:59 2010
Surface Name : ZONE3
Ref Elev : 0.0

	HORIZONTAL AREA	SLOPE AREA	
CUT	0.00	0.00	sq.ft.
FILL	501.82	502.40	sq.ft.
ZONE3	501.82	502.40	sq.ft.

AREA 5
Volume and Area Computations Tue Nov 23 13:27:29 2010
Surface Name : ZONE3
Ref Elev : 0.0

	HORIZONTAL AREA	SLOPE AREA	
CUT	0.00	0.00	sq.ft.
FILL	769.73	770.81	sq.ft.
ZONE3	769.73	770.81	sq.ft.

ZONE 6
Volume and Area Computations Tue Nov 23 12:42:04 2010
Surface Name : ZONE3
Ref Elev : 0.0

	HORIZONTAL AREA	SLOPE AREA	
CUT	0.00	0.00	sq.ft.
FILL	223.26	223.63	sq.ft.
ZONE3	223.26	223.63	sq.ft.

Technical Support

- ▶ Train inspectors to use survey equipment
- ▶ Set up alignments/profiles
- ▶ Process data

