



July 25, 2019

DIVINITY CAMPUS
CITY OF ROCHESTER, MONROE COUNTY
STATE OF NEW YORK

CONCEPTUAL MASS EARTHWORK SUMMARY

The following outlines the conceptual mass earthwork calculations for the proposed redevelopment of the Colgate Divinity School Campus. Earthwork calculations were calculated using the InSite Site Work program, incorporating existing surveyed topography of the site (existing conditions) and the proposed concept grading plan to calculate the total cuts and fills for the proposed site.

Subgrade excavations were included in the modeling and calculations. The parking garage for Building 200 was calculated as subgrade excavations (10' depth cut from the first floor elevation) as well as a 1-ft depth cut for Building 100 (no underground parking/basement) and for all proposed paved areas.

The proposed development has been regraded and has incorporated retaining walls to provide a balanced mass earthwork design. Cuts on the site are located at the Buildings 100 & 200 as well as parking lot areas. Fills on the proposed site occur at the parking lot serving Saunders House & Andrews House, the parking lot expansion at the south east corner of the site and the parking lot expansion adjacent to the Presidents/Montgomery House. The parking lot adjacent to Andrews House, is raised to provide a second floor entrance, limit steep grades of driveway aisles and to balance the cuts & fills for the proposed development. See the attached exhibits for further cut & fill locations.

No Work areas, as seen in the earthwork cut/fill reports, are areas that no construction or earth moving operations will occur. These areas include the existing Saunders & Andrews House to be renovated, the driveway into the existing site, and portions of the parking lot areas that will be milled & repaved.

The below table provides a summary of the Cuts & Fills for subgrade earthwork, for the total work area and the total cuts required for the proposed site. See the attached reports and exhibits for further detail of conceptual cut/fill depths calculated.

| | Subgrade Construction | Total Work Area |
|------------------------------------|------------------------------|------------------------|
| Cut Total (Green) | 8,831 CY | 10,694 CY |
| Fill Total (Red) | 2,776 CY | 5,991 CY |
| Total Cut For Proposed Site | 6,055 CY | 4,703 CY |

The attached InSite Program output provides further detail on earthwork summary calculations.



Divinity School Campus Schematic Grading

Cut and Fill Report

Job: 6702

Section: 02 2019-06-26 6702 Earthwork

07/25/2019 13:19:48

| | | | |
|----------------------|-------------------|----------------------------|-----------------------------|
| Grid/Subgrid | 3.00/1.50 | | |
| Section size (Ft) | 1,212.50 x 603.13 | | |
| Total Work Area (SF) | 207,491 | Cut Area Threshold 0.01 Ft | Fill Area Threshold 0.01 Ft |
| Area of Cut (SF) | 121,142 | | |
| Area of Fill (SF) | 82,287 | | |

All units in Cubic Yards

| | | | | |
|--|------|-----------|----------|----------------|
| | Bank | Compacted | Expanded | Comp / Exp (%) |
|--|------|-----------|----------|----------------|

| |
|------------------|
| Stripping |
|------------------|

/

Stripping Total
Export Stripping

| |
|------------|
| Cut |
|------------|

| | | | | |
|--|--------|--------|--------|---|
| | 10,694 | 10,694 | 10,694 | / |
|--|--------|--------|--------|---|

| | | | | |
|--|---------------|---------------|---------------|--|
| | 10,694 | 10,694 | 10,694 | |
| | | 4,703 | 4,703 | |

| | | | | |
|---|--|--------------|--------------|--|
| Total Export (Stripping and Cut) | | 4,703 | 4,703 | |
|---|--|--------------|--------------|--|

| |
|-------------|
| Fill |
|-------------|

| | | | | |
|-----------------------------------|-------|-------|-------|--|
| In Place Fill Required | | 5,992 | | |
| Stripping and/or Cut Used as Fill | 5,991 | 5,991 | 5,991 | |
| Import Fill | | 1 | | |

| |
|----------------------------|
| Topsoil Replacement |
|----------------------------|







Topsoil Replacement Required
Topsoil Replacement Obtained On Site
Import Topsoil



Job: 6702

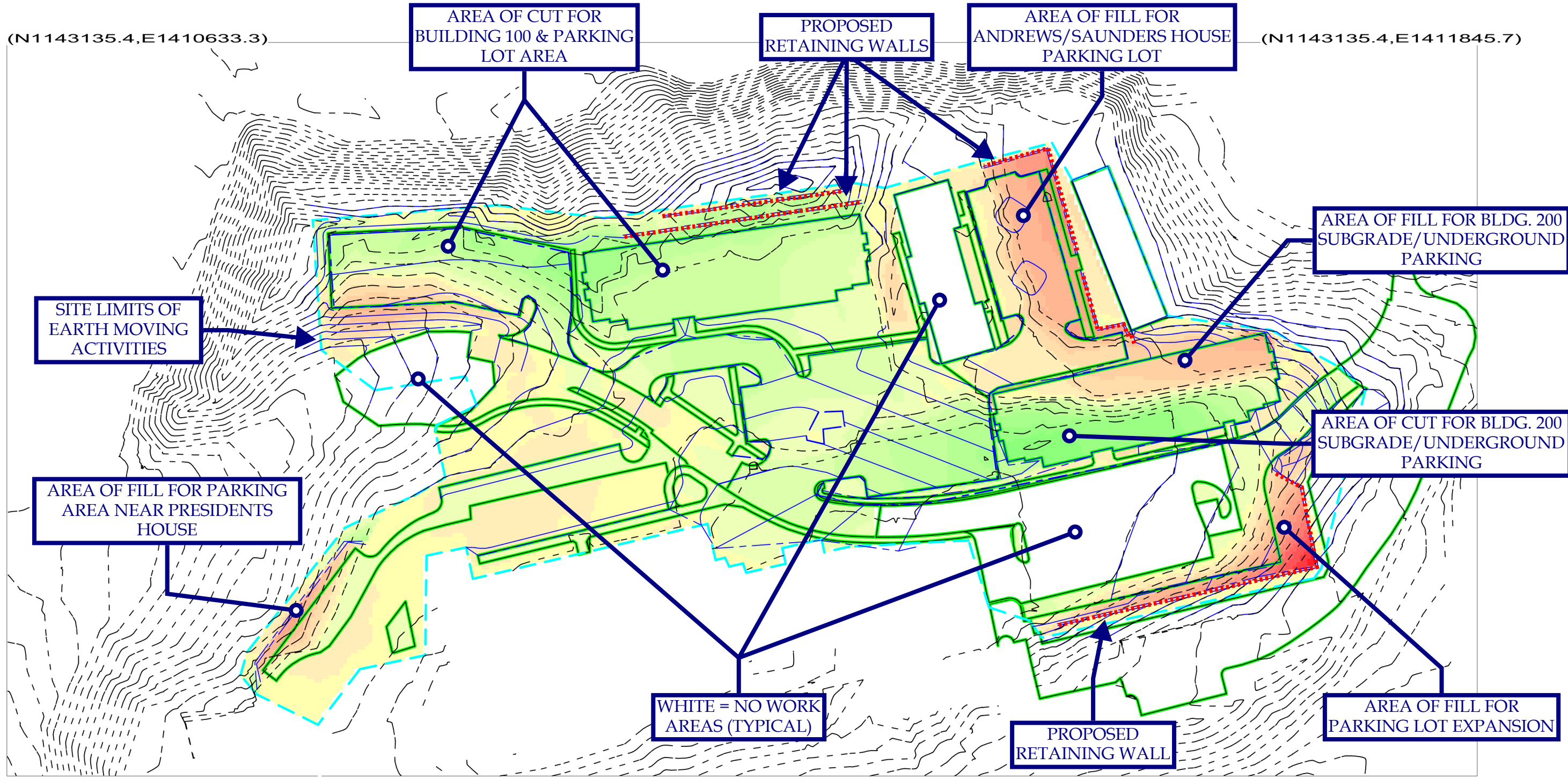
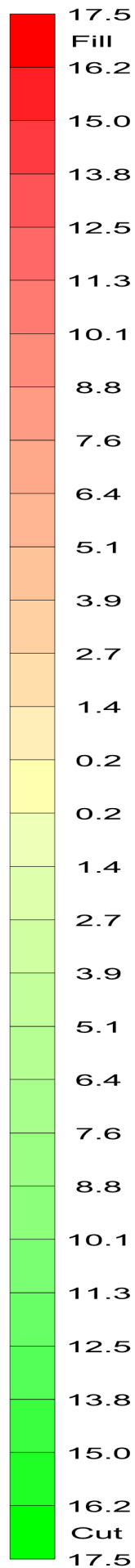
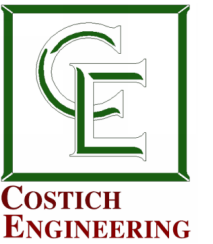
Section: 02 2019-06-26 6702 Earthwork

07/25/2019 13:20:22

| # | Desc | Type | Value | Area (SF) | Fill (CY) | Cut (CY) | Bank | Compacted | Expanded | Chg/.1 Ft |
|-----|--|------|-------|-----------|-----------|----------|-------|-----------|----------|-----------|
| 1 |  Pavement | DPT | 1 | 71,149 | 1,885 | | 4,298 | 4,298 | 4,298 | 264 |
| 2 |  Sidewalk | DPT | 1 | 11,471 | 301 | | 504 | 504 | 504 | 42 |
| 10 |  à | DPT | 1 | 15,074 | 0 | | 1,893 | 1,893 | 1,893 | 56 |
| 11 |  à | DPT | 10 | 15,045 | 590 | | 2,136 | 2,136 | 2,136 | 56 |
| | | | | | | | 2,136 | 2,136 | 2,136 | |
| 20 |  No Work | NW | | 61,162 | 0 | | 0 | 0 | 0 | 227 |
| 21 |  à | NW | | 10,718 | 0 | | 0 | 0 | 0 | 40 |
| All | | | | 184,618 | 2,776 | | 8,831 | 8,831 | 8,831 | 684 |

CONCEPTUAL MASS EARTHWORK SUMMARY SHEET

Divinity Campus CE#6702
07/25/2019 ~ N.T.S.

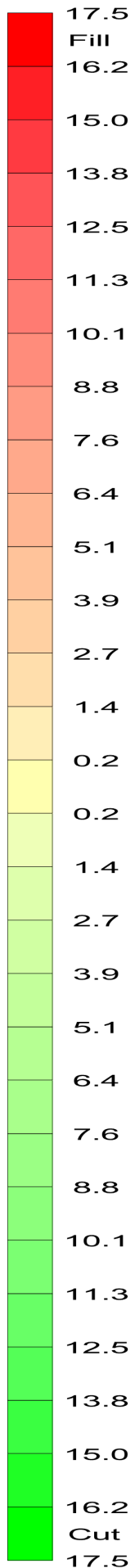
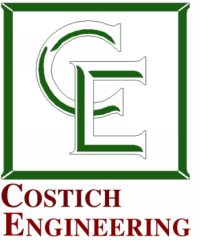


Existing
Proposed

JOB: 6702 Divinity School Campus Schematic Grading
SECTION: 02 2019-06-26 6702 Earthwork
X-SCALE: 81.24 ft/in (Auto)
Y-SCALE: 81.24 ft/in (Auto)
RUN DATE: 07-25-2019 RUN TIME: 13:23:54
COMPANY: Costich Engineering, DPC
ESTIMATOR: C.R.A

CONCEPTUAL MASS EARTHWORK CUT & FILL DEPTHS

Divinity Campus CE#6702
07/25/2019 ~ N.T.S.



GRIDS:
Existing Cut & Fill Depth
Proposed

JOB: 6702 Divinity School Campus Schematic Grading
SECTION: 02 2019-06-26 6702 Earthwork
X-SCALE: 81.24 ft/in (Auto)
Y-SCALE: 81.24 ft/in (Auto)
RUN DATE: 07-25-2019 RUN TIME: 13:25:34
COMPANY: Costich Engineering, DPC
ESTIMATOR: C.R.A