

Changed Pages
Part III, Appendix III-D.2
Landfill Cross Sections

**Part III
Attachment III-D
Appendix III-D.2**

LANDFILL CROSS SECTIONS

**Pescadito Environmental Resource Center
MSW No. 2374
Webb County, Texas**

PESCADITO
ENVIRONMENTAL RESOURCE CENTER

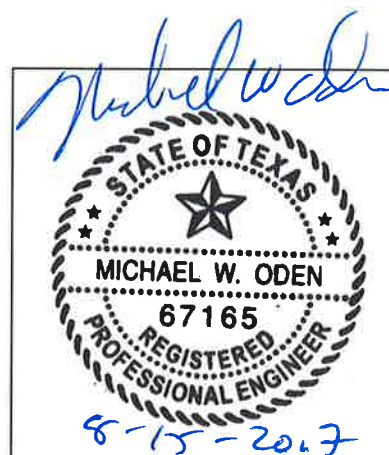
**Initial Submittal March 2015
Revised September 2015
Technically Complete March 11, 2016
Modified August 2017**

**Prepared for:
Rancho Viejo Waste Management, LLC
1116 Calle del Norte
Laredo, TX 78041**

**Prepared by:
APTIM Environmental and
Infrastructure, Inc.
(f/k/a CB&I Environmental &
Infrastructure, Inc.)**



**12005 Ford Rd, Suite 600
Dallas, TX 75234**




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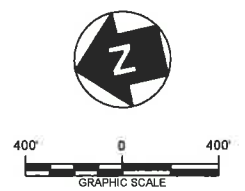
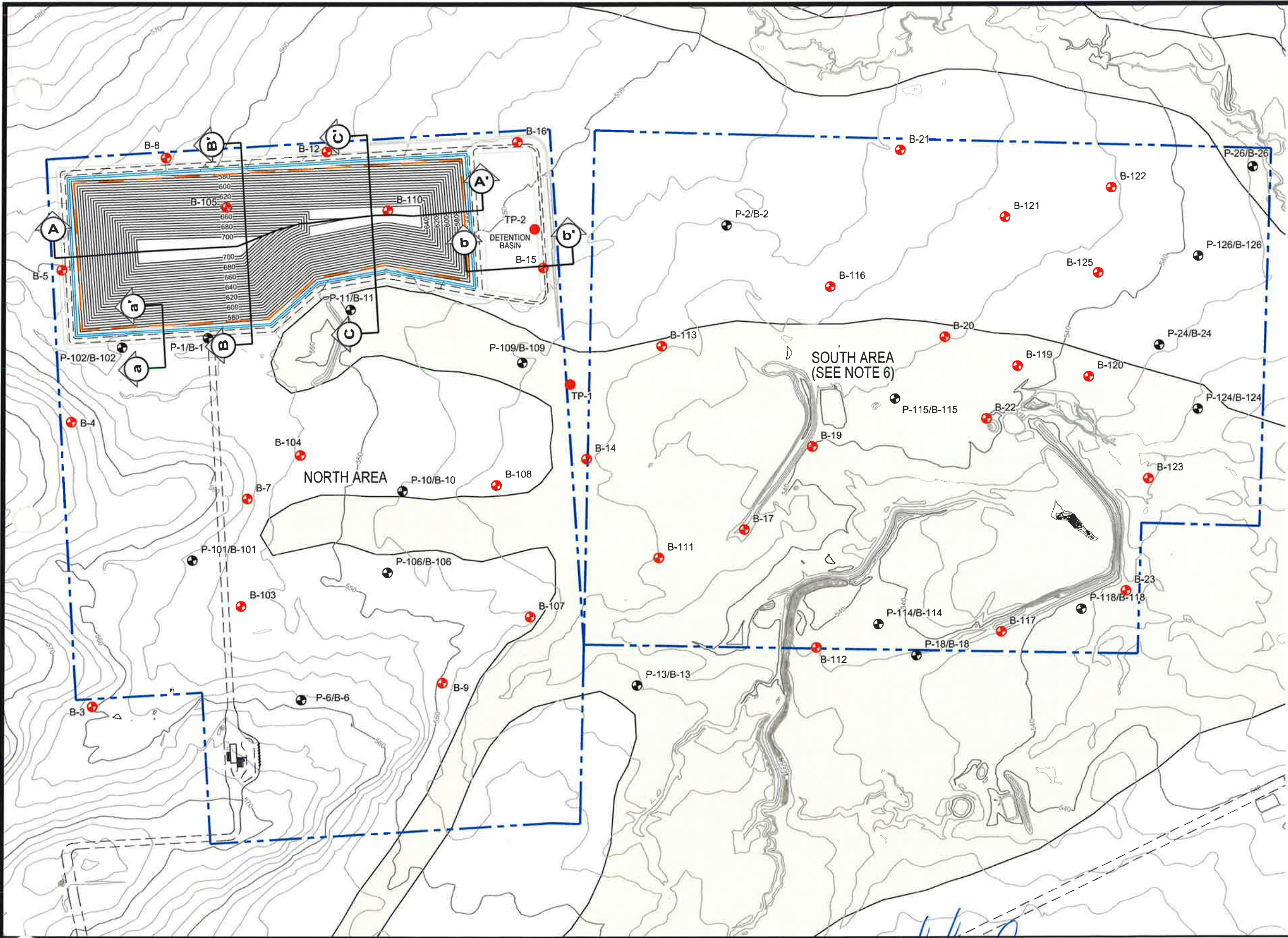
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Michael W. Oden



8-15-2017

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- LEGEND**
- PERMIT BOUNDARY
 - WASTE BOUNDARY
 - PERIMETER DITCH
 - PERIMETER ACCESS ROAD
 - 100-YEAR FLOODPLAIN (PER FIRM DATED APRIL 2, 2008, SEE NOTE 5)
 - + B-124 BORING LOCATION
 - + B-125/
P-124 BORING/PIEZOMETER LOCATION

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY DALLAS AERIAL SURVEYS ON FEBRUARY 15, 2010.
 2. BOUNDARY AND IMPROVEMENT SURVEY DEVELOPED BY MEJIA ENGINEERING COMPANY ON AUGUST 15, 2011 AND JUNE 9, 2014.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. THE NEED FOR FLEXIBILITY TO ACCOMMODATE ADJUSTMENTS AND MODIFICATIONS IS ANTICIPATED CONSIDERING THE SIZE, COMPLEXITY, AND LIFE OF THE PROJECT.
 5. 100-YEAR FLOODPLAIN FROM FLOOD INSURANCE RATE MAP FOR WEBB COUNTY, TEXAS, MAP NO. 48479C1275C, DATED APRIL 2, 2008. A CLOMR THAT WOULD REMOVE A LARGE AREA OF THE 100-YEAR FLOODPLAIN WITHIN THE PERMIT BOUNDARY WAS APPROVED BY FEMA ON NOVEMBER 21, 2014; HOWEVER, THE CLOMR IMPROVEMENTS HAVE NOT BEEN CONSTRUCTED.
 6. FUTURE WASTE PROCESSING OR DISPOSAL AREA SUBJECT TO PERMIT MODIFICATION OR AMENDMENT.

| REV. NO. | DATE | DESCRIPTION |
|----------|---------|---|
| 1 | 08/2017 | REVISED WASTE UNIT BOUNDARY AND SECTION LOCATIONS |

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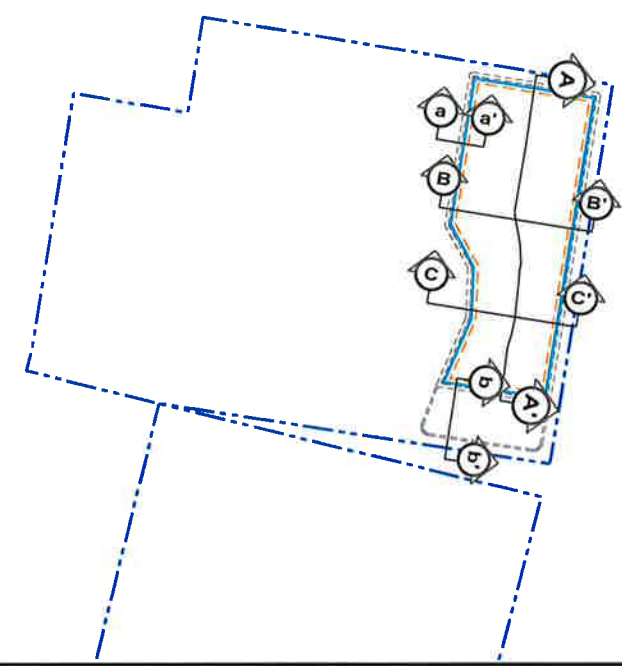
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8-15-2017

**PESCADITO ENVIRONMENTAL RESOURCE CENTER
 WEBB COUNTY, TEXAS
 MSW 2374**

SECTION LAYOUT PLAN

| | | | |
|--------------|--------|-------------|---------------|
| PROJ. NO.: | 148666 | DATE: | AUGUST 2017 |
| DESIGNED BY: | - | DRAWING NO. | III |
| DRAWN BY: | MTE | | D.2-1 |
| CHECKED BY: | RDS | | 1 OF 5 SHEETS |
| APPROVED BY: | MWO | | |

KEYMAP



KEYMAP LEGEND

- PERMIT BOUNDARY
- PERIMETER ROAD
- PERIMETER DITCH

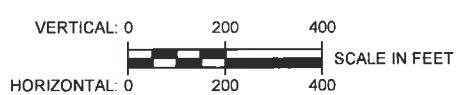
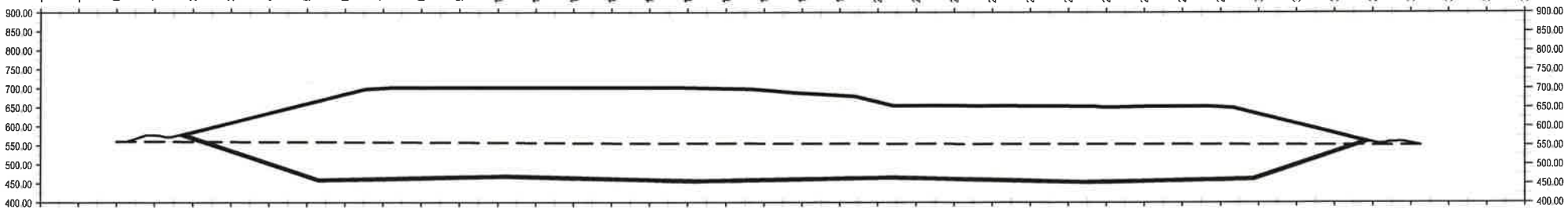
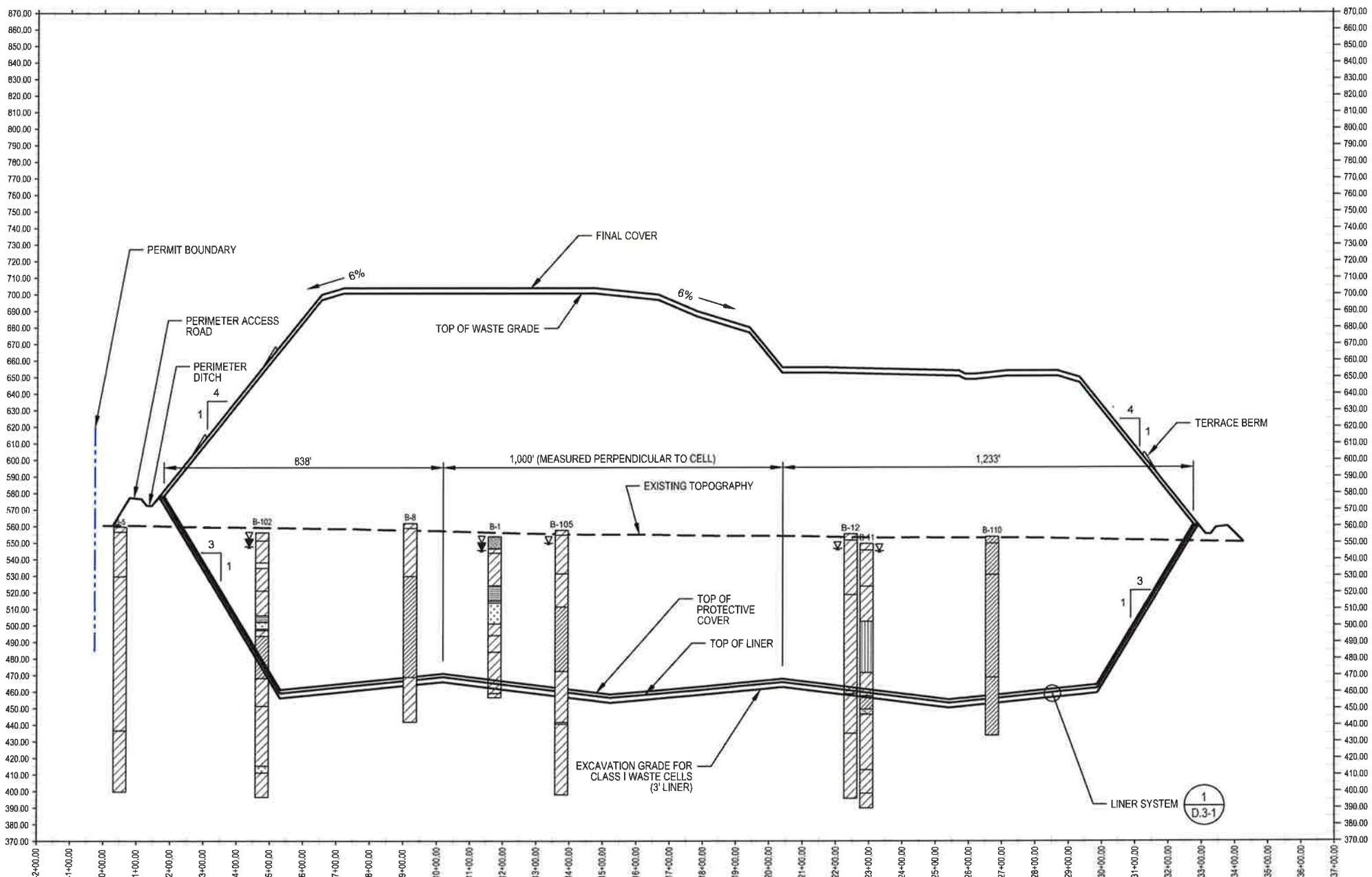
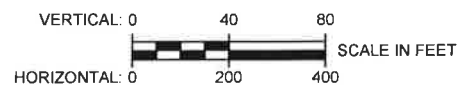
LEGEND

- | | | | |
|--|-----------------|--|--------------------------|
| | FAT CLAY (CH) | | SANDY FAT CLAY (CH) |
| | LEAN CLAY (CL) | | SANDY LEAN CLAY (CL) |
| | SILT (ML) | | POORLY GRADED SAND (SP) |
| | ELASTIC SILT | | SILTSTONE |
| | CLAYEY SAND | | SANDSTONE |
| | SANDY SILT (ML) | | CLAYSHALE |
| | SILTY SAND (SM) | | SANDY SILTY CLAY (CL-ML) |

NOTES

1. REFER TO DRAWING III-D.1-3 FOR EXCAVATION PLAN. REFER TO DRAWING III-D.1-4 FOR LANDFILL COMPLETION PLAN.
2. REFER TO PART III, ATTACHMENT D.3 FOR LINER, LEACHATE COLLECTION SYSTEM, AND FINAL COVER DETAILS.
3. REFER TO DRAWING III-D.1-1 FOR BUFFER DISTANCES.
4. REFER TO PART III, ATTACHMENT III-E FOR SUBSURFACE CHARACTERIZATION AND GROUNDWATER ELEVATIONS.
5. MAXIMUM NORTHEAST UNIT FINAL COVER ELEVATION: 704 FT-MSL. MAXIMUM NORTHEAST UNIT ELEVATION OF WASTE: 701 FT-MSL. DEEPEST EXCAVATION OF NORTHEAST UNIT AT LEACHATE SUMP NE-3: 446 FT-MSL FOR 3-FT LINER THICKNESS.
6. SOME BORINGS ARE PROJECTED ON THE CROSS SECTIONS FROM THEIR ACTUAL LOCATIONS.

A **A'**



| REV. NO. | DATE | DESCRIPTION |
|----------|---------|-----------------------|
| 1 | 08/2017 | NEW SECTION LOCATIONS |

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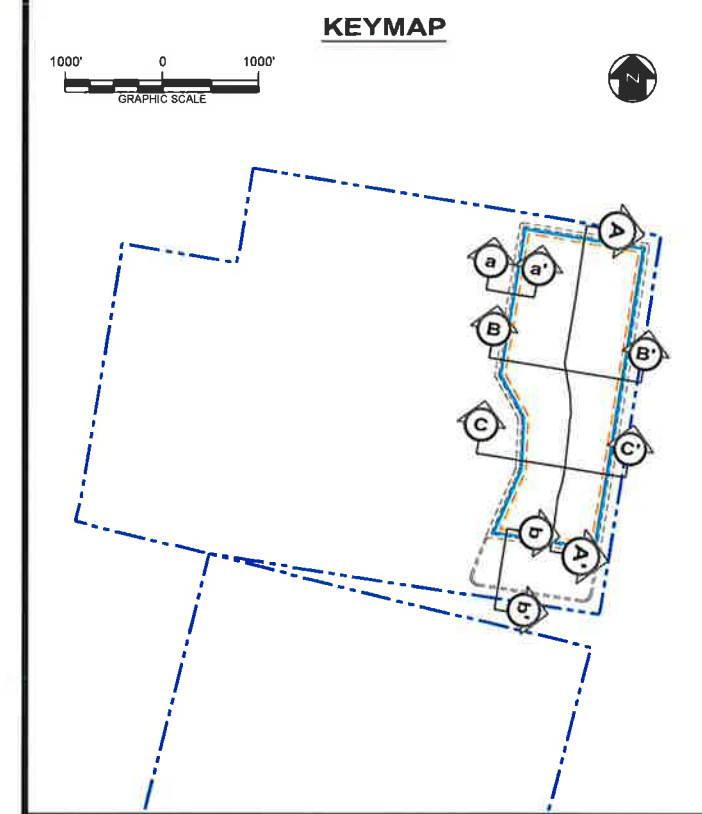
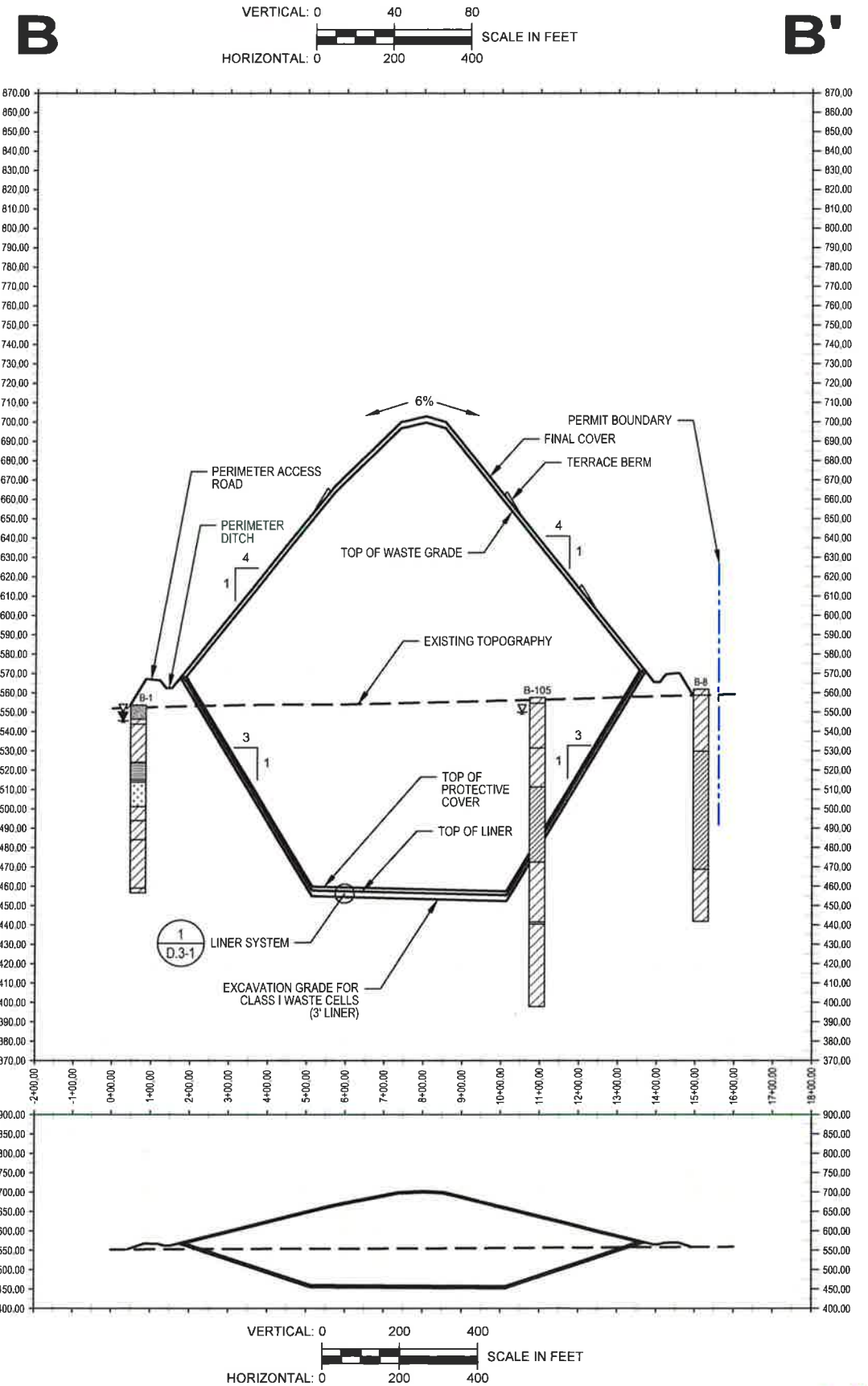
STATE OF TEXAS
 MICHAEL W. ODEN
 67165
 REGISTERED PROFESSIONAL ENGINEER

Michael W. Oden
 8-15-2017

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WEBB COUNTY, TEXAS
MSW 2374

NORTHEAST UNIT
LANDFILL SECTION A - A'

| | | | |
|--------------|--------|--------------|---------------|
| PROJ. NO.: | 148866 | DATE: | AUGUST 2017 |
| DESIGNED BY: | -- | DRAWING NO.: | III |
| DRAWN BY: | MTE | | D.2-2 |
| CHECKED BY: | RDS | | |
| APPROVED BY: | MWO | | 2 OF 5 SHEETS |



KEYMAP LEGEND

- PERMIT BOUNDARY
- PERIMETER ROAD
- PERIMETER DITCH

LEGEND

- | | | | |
|--|-----------------|--|--------------------------|
| | FAT CLAY (CH) | | SANDY FAT CLAY (CH) |
| | LEAN CLAY (CL) | | SANDY LEAN CLAY (CL) |
| | SILT (ML) | | POORLY GRADED SAND (SP) |
| | ELASTIC SILT | | SILTSTONE |
| | CLAYEY SAND | | SANDSTONE |
| | SANDY SILT (ML) | | CLAYSHALE |
| | SILTY SAND (SM) | | SANDY SILTY CLAY (CL-ML) |

NOTES

1. REFER TO DRAWING III-D.1-3 FOR EXCAVATION PLAN. REFER TO DRAWING III-D.1-4 FOR LANDFILL COMPLETION PLAN.
2. REFER TO PART III, ATTACHMENT D.3 FOR LINER, LEACHATE COLLECTION SYSTEM, AND FINAL COVER DETAILS.
3. REFER TO DRAWING III-D.1-1 FOR BUFFER DISTANCES.
4. REFER TO PART III, ATTACHMENT III-E FOR SUBSURFACE CHARACTERIZATION AND GROUNDWATER ELEVATIONS
5. MAXIMUM NORTHEAST UNIT FINAL COVER ELEVATION: 704 FT-MSL. MAXIMUM NORTHEAST UNIT ELEVATION OF WASTE: 701 FT-MSL. DEEPEST EXCAVATION OF NORTHEAST UNIT AT LEACHATE SUMP NE-3: 446 FT-MSL FOR 3-FT LINER THICKNESS.
6. SOME BORINGS ARE PROJECTED ON THE CROSS SECTIONS FROM THEIR ACTUAL LOCATIONS.

| REV. NO. | DATE | DESCRIPTION |
|----------|---------|-----------------------|
| 1 | 08/2017 | NEW SECTION LOCATIONS |

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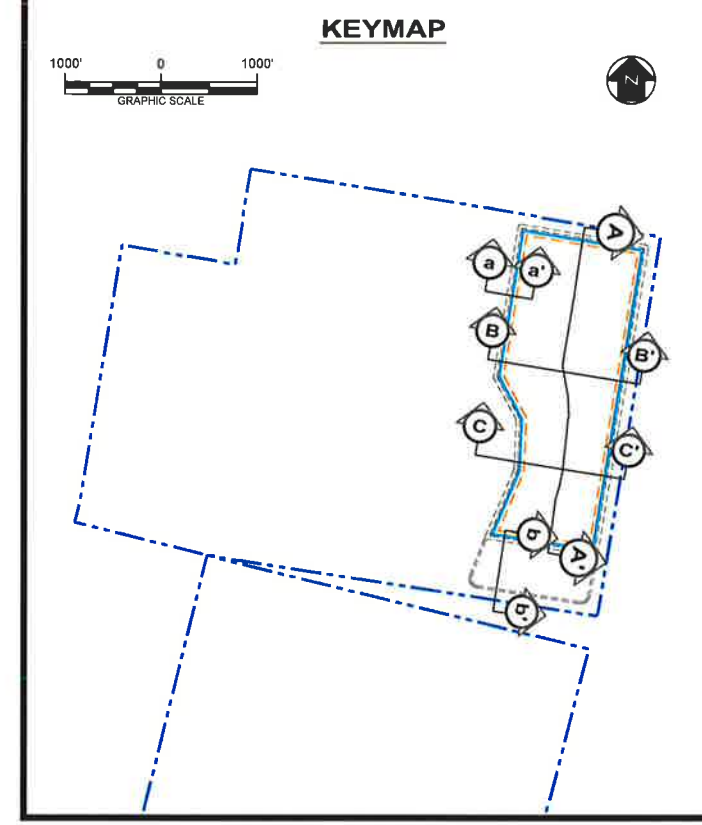
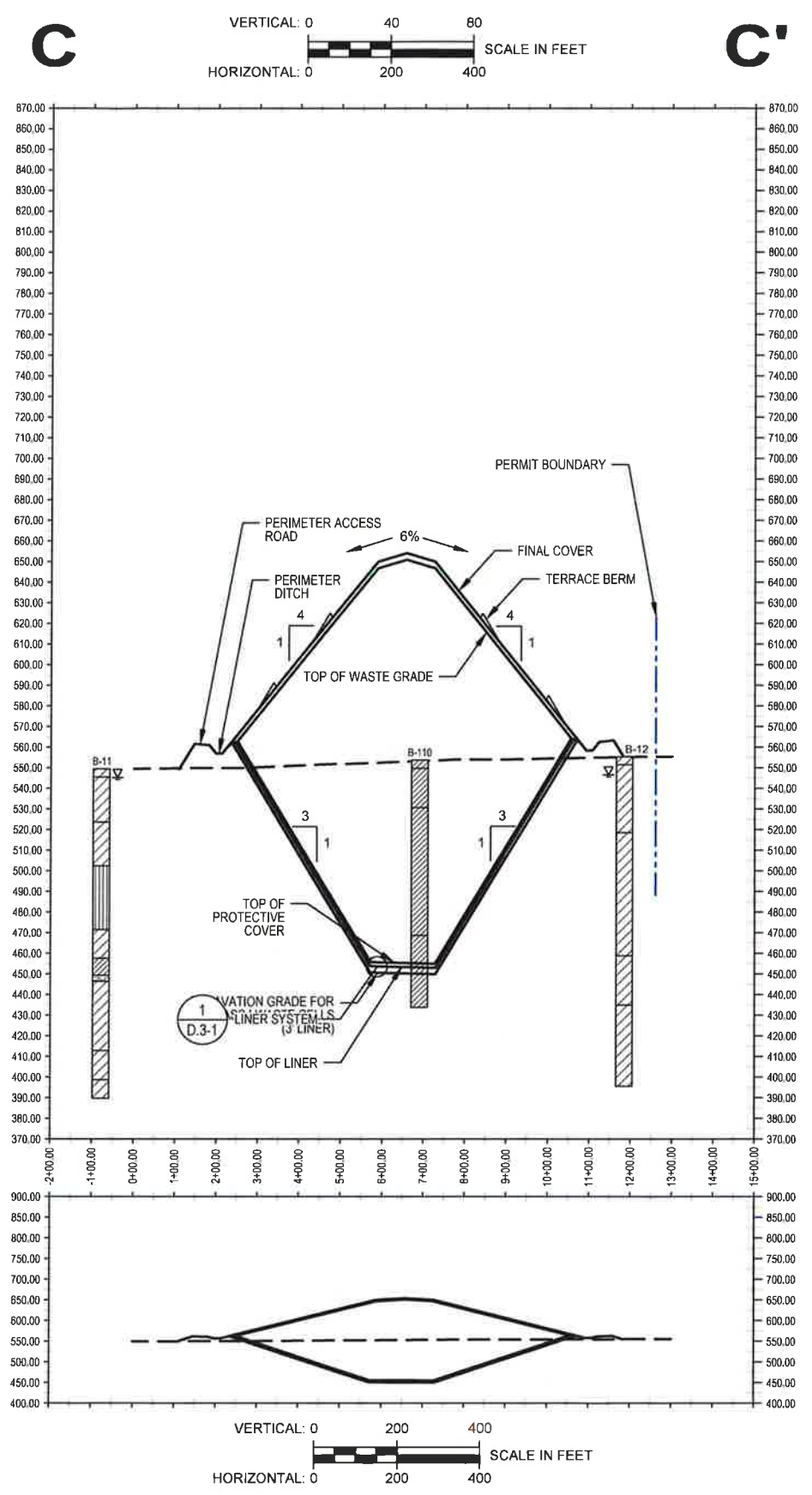
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 REGISTERED PROFESSIONAL ENGINEER
 MICHAEL W. ODEN
 67165

Michael W. Oden
 8-15-2017

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MSW 2374

NORTHEAST UNIT
LANDFILL SECTION B - B'

| | | | |
|--------------|--------|--------------|---------------|
| PROJ. NO.: | 148868 | DATE: | AUGUST 2017 |
| DESIGNED BY: | -- | DRAWING NO.: | III |
| DRAWN BY: | MTE | | D.2-3 |
| CHECKED BY: | RDS | | |
| APPROVED BY: | MWO | | 3 OF 5 SHEETS |



KEYMAP LEGEND

- APPROXIMATE FACILITY BOUNDARY
- PERIMETER ROAD
- PERIMETER DITCH

LEGEND

- | | |
|-----------------|--------------------------|
| FAT CLAY (CH) | SANDY FAT CLAY (CH) |
| LEAN CLAY (CL) | SANDY LEAN CLAY (CL) |
| SILT (ML) | POORLY GRADED SAND (SP) |
| ELASTIC SILT | SILTSTONE |
| CLAYEY SAND | SANDSTONE |
| SANDY SILT (ML) | CLAYSHALE |
| SILTY SAND (SM) | SANDY SILTY CLAY (CL-ML) |

NOTES

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2. REFER TO PART III, ATTACHMENT D.3 FOR LINER, LEACHATE COLLECTION SYSTEM, AND FINAL COVER DETAILS.
3. REFER TO DRAWING III-D.1-1 FOR BUFFER DISTANCES.
4. REFER TO PART III, ATTACHMENT III-E FOR SUBSURFACE CHARACTERIZATION AND GROUNDWATER ELEVATIONS
5. MAXIMUM NORTHEAST UNIT FINAL COVER ELEVATION: 704 FT-MSL. MAXIMUM NORTHEAST UNIT ELEVATION OF WASTE: 701 FT-MSL. DEEPEST EXCAVATION OF NORTHEAST UNIT AT LEACHATE SUMP NE-3: 446 FT-MSL FOR 3-FT LINER THICKNESS.
6. SOME BORINGS ARE PROJECTED ON THE CROSS SECTIONS FROM THEIR ACTUAL LOCATIONS.

| REV. NO. | DATE | DESCRIPTION |
|----------|---------|-----------------------|
| 1 | 08/2017 | NEW SECTION LOCATIONS |

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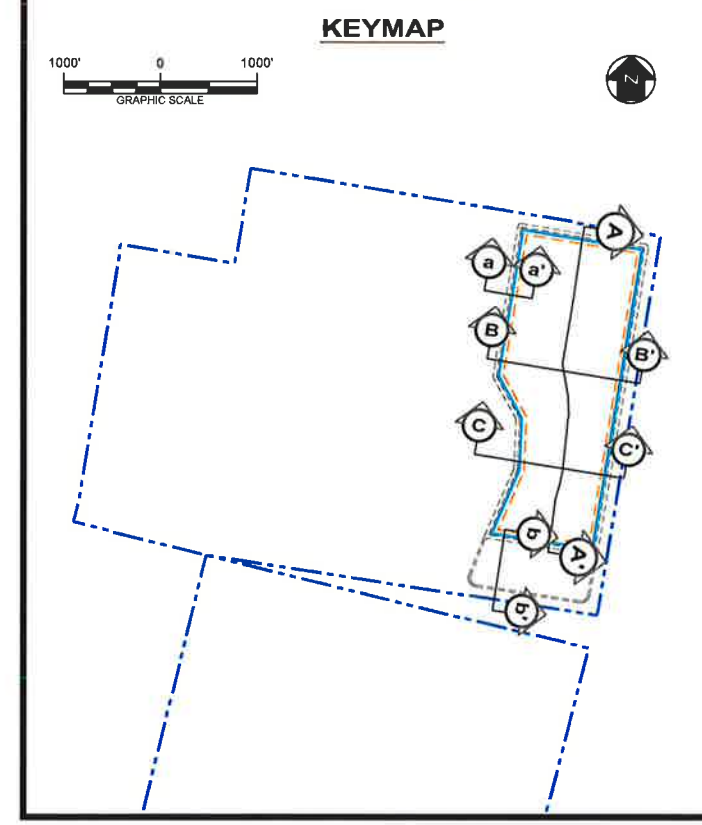
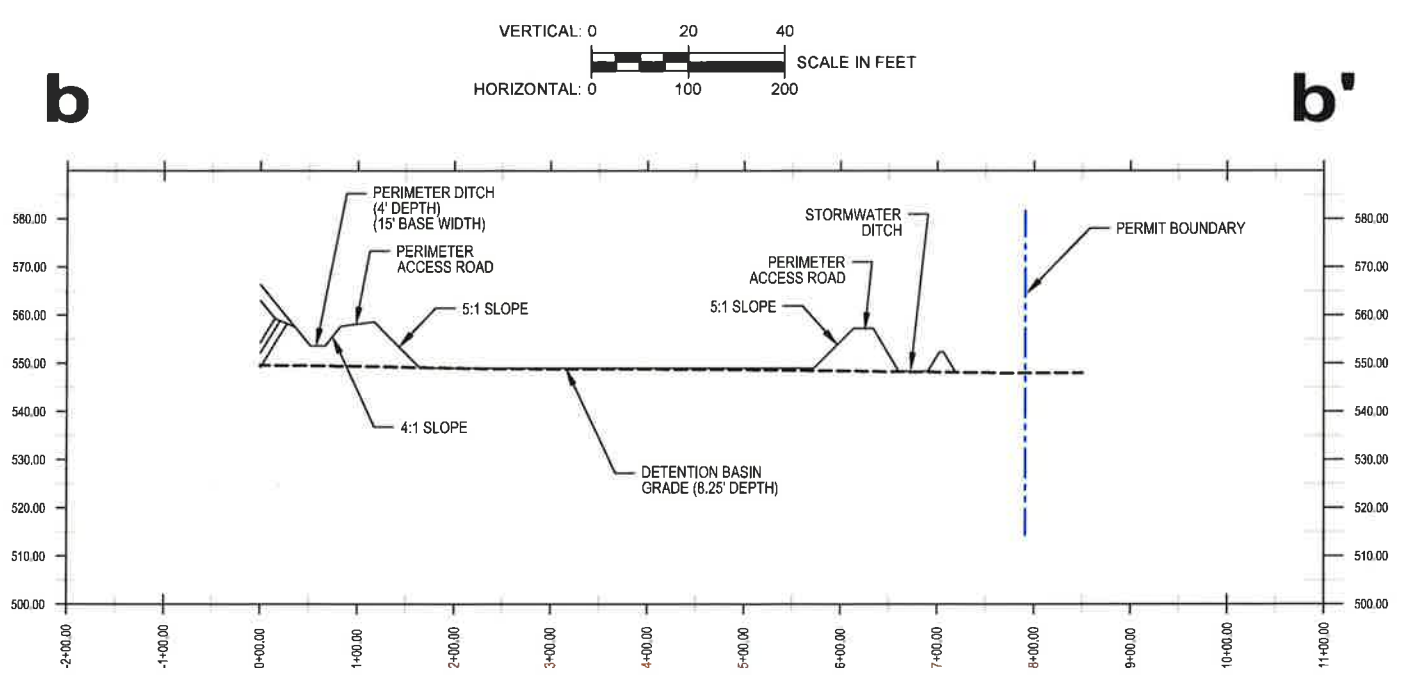
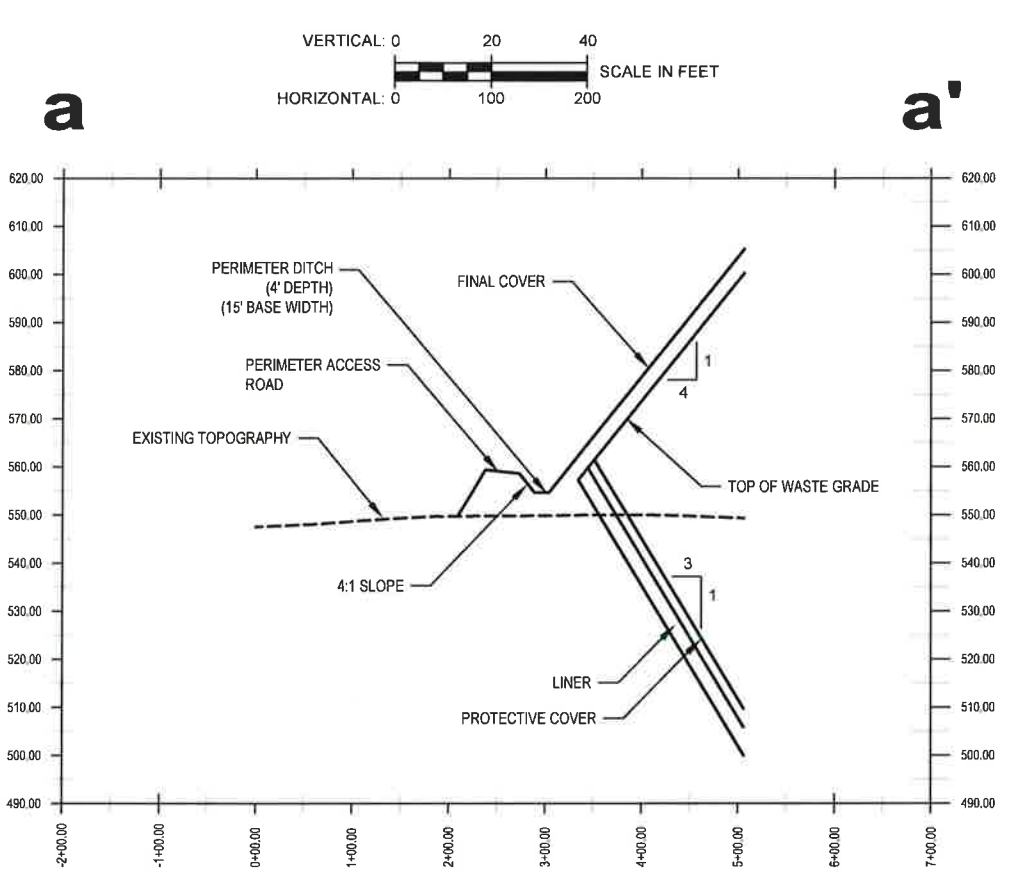
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 REGISTERED PROFESSIONAL ENGINEER
 MICHAEL W. ODEN
 67165

Michael W. Oden
 8-15-2017

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WEBB COUNTY, TEXAS
MSW 2374

NORTHEAST UNIT
LANDFILL SECTION C - C'

| | |
|-------------------|-------------------|
| PROJ. NO.: 148868 | DATE: AUGUST 2017 |
| DESIGNED BY: - | DRAWING NO. III |
| DRAWN BY: MTE | D.2-4 |
| CHECKED BY: RDS | |
| APPROVED BY: MWO | 4 OF 5 SHEETS |



KEYMAP LEGEND

- APPROXIMATE FACILITY BOUNDARY
- PERIMETER ROAD
- PERIMETER DITCH

| REV. NO. | DATE | DESCRIPTION |
|----------|---------|-----------------------|
| 1 | 08/2017 | NEW SECTION LOCATIONS |

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 WEBB COUNTY, TEXAS
 MSW 2374**

LANDFILL SECTIONS a - a' & b - b'

| | | | |
|--------------|--------|--------------|---------------|
| PROJ. NO.: | 148866 | DATE: | AUGUST 2017 |
| DESIGNED BY: | - | DRAWING NO.: | III |
| DRAWN BY: | MTE | | D.2-5 |
| CHECKED BY: | RDS | | 5 OF 5 SHEETS |
| APPROVED BY: | MWO | | |