# SECTION 4

# PERMIT MODIFICATION

# PLAN SET

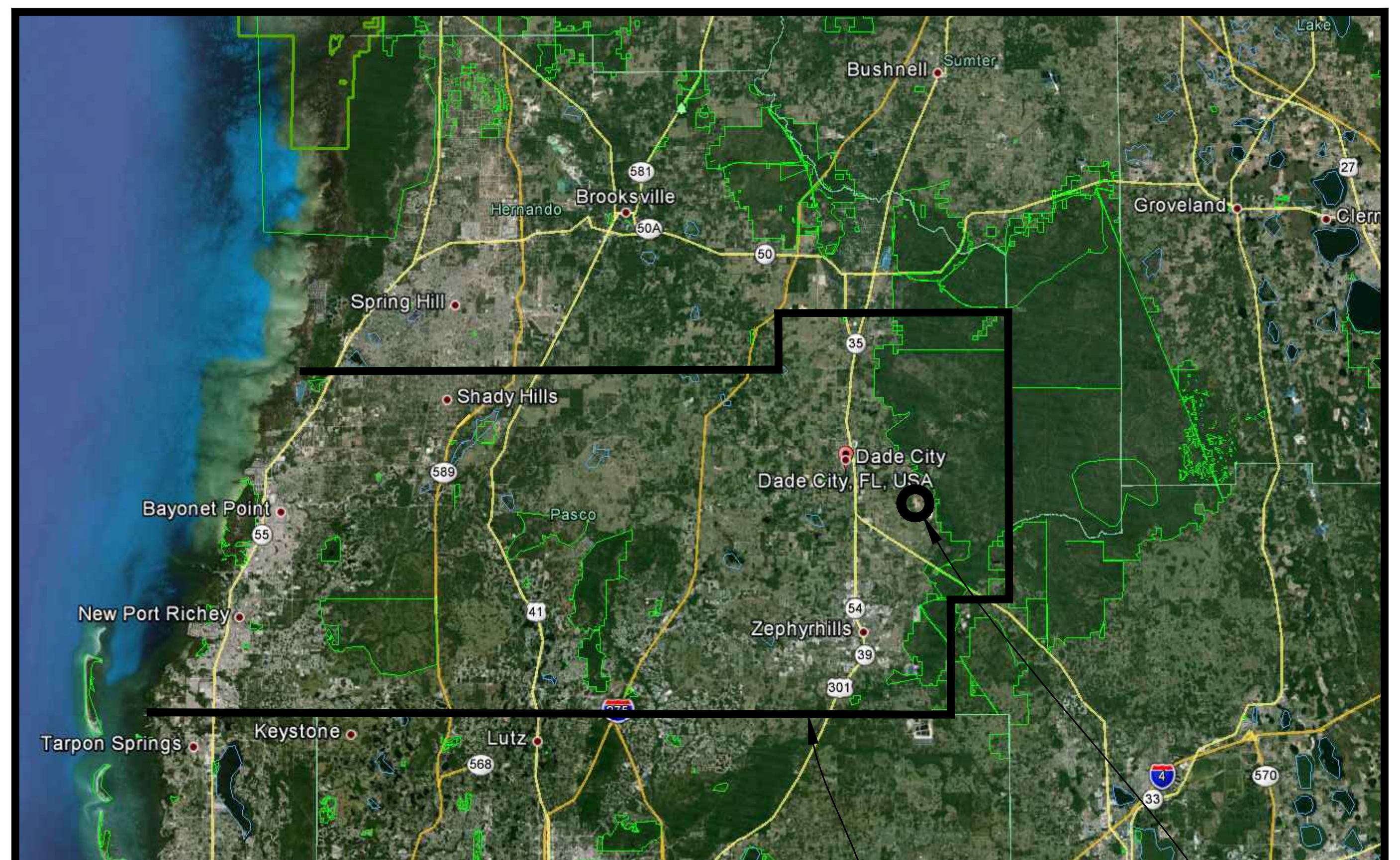
# ENTERPRISE ROAD CLASS III LANDFILL
# RECYCLING & DISPOSAL FACILITY
# PERMIT MODIFICATION-VERTICAL EXPANSION

LOCATED:

## DADE CITY, PASCO COUNTY, FLORIDA

SUBMITTED TO:

## FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION




PASCO COUNTY, FLORIDA

ENTERPRISE ROAD RECYCLING & DISPOSAL FACILITY
CLASS III LANDFILL

N

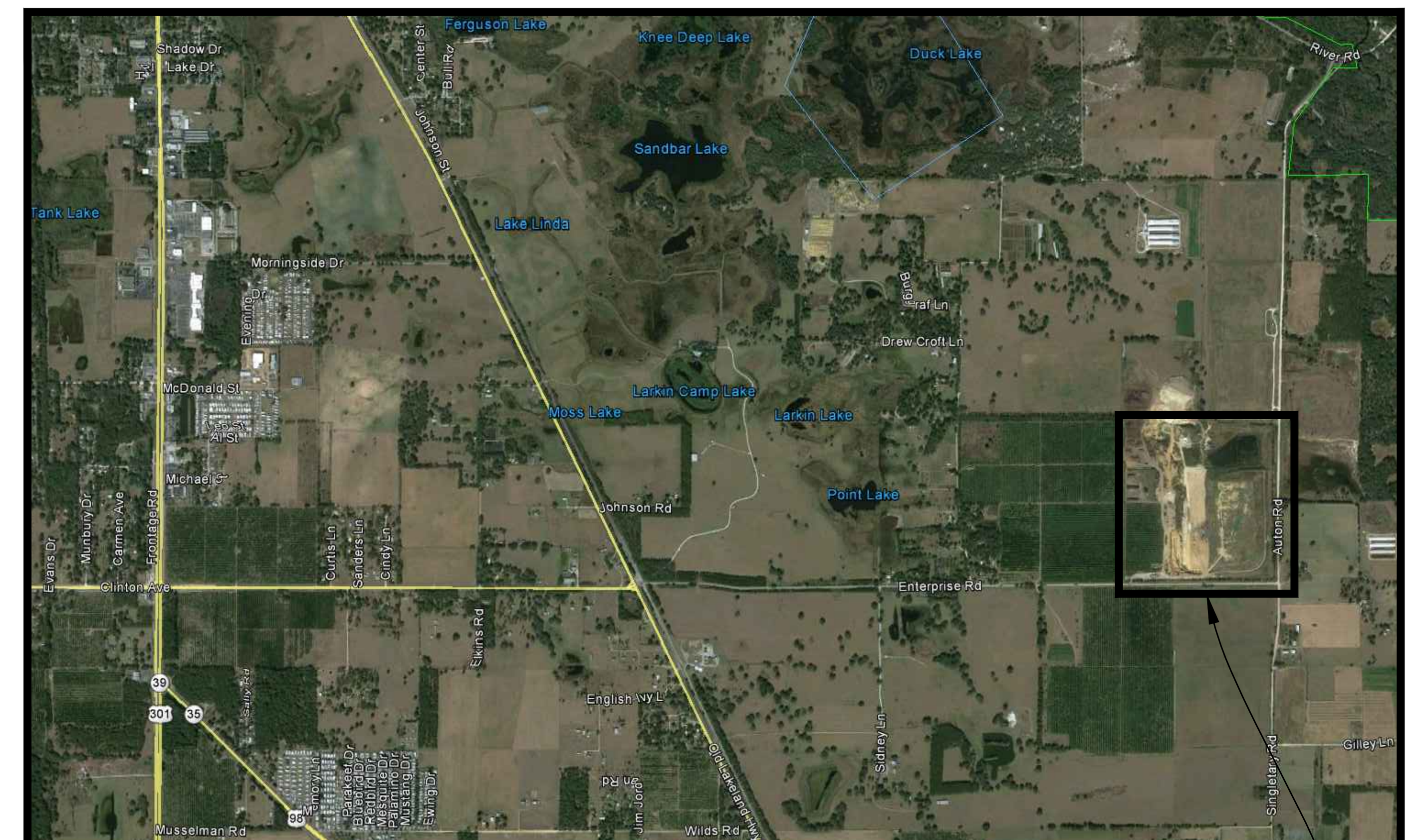
COUNTY LOCATION MAP

**Sheet List Table**

| Sheet Number | Sheet Title |
|---|---|
| C0.00 | COVER SHEET |
| C0.01 | GENERAL NOTES AND ABBREVIATIONS |
| C0.02 | AERIAL SITE PLAN |
| C0.03 | SITE PLAN |
| C0.04 | EXISTING CELL FLOOR GRADING PLAN |
| C1.00 | OVERALL LANDFILL GRADING AND VERTICAL EXPANSION |
| C1.10 | OVERALL LANDFILL GRADING AND VERTICAL EXPANSION SECTIONS |
| C2.00 | CONCEPTUAL CLOSURE |
| C2.10 | CONCEPTUAL CLOSURE SECTIONS |
| C3.00 | CLOSURE DETAILS |
| C3.01 | CLOSURE DETAILS |
| SHEET 1 of 2 | TOPOGRAPHIC SURVEY (BY PICKETT SURVEYING & PHOTOGRAMMETRY) |
| SHEET 2 of 2 | TOPOGRAPHIC SURVEY (BY PICKETT SURVEYING & PHOTOGRAMMETRY) |

**CONSULTANTS**

| Sheet Number | Sheet Title |
|---|---|
| SHEETS 1-16 | LEACHATE AERATION POND DESIGN DRAWINGS" PREPARED FOR ANGELO'S AGGREGATE MATERIALS, LTD BY INNOVATIVE WASTE CONSULTING SERVICES LLC. |



ENTERPRISE ROAD RECYCLING & DISPOSAL FACILITY
CLASS III LANDFILL

N

VICINITY MAP

| NO. | DATE | REVISION DESCRIPTION | BY |
|---|---|---|---|
| | | | |

Locklear & Associates


4140 NW 37th Place, Suite A
Gainesville, Florida 32606
Phone: 352.672.6867 Fax: 352.692.5390
Certificate of Authorization No. 30066


PROJECT TITLE:

PERMIT PLANS
ENTERPRISE ROAD CLASS III
RECYCLING & DISPOSAL FACILITY
PERMIT MODIFICATION-VERTICAL EXPANSION
DADE CITY, PASCO COUNTY, FLORIDA

LISA J BAKER
LICENSE
No. 74652
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Digitally signed by Lisa J Baker
DN: cn=Lisa J Baker, o=Locklear & Associates, Inc., ou, email=lisa@locklearconsulting.com, c=US
Date: 2021.07.02 07:55:01 -04'00'

| | |
|---|---|
| DESIGNED BY | LJB |
| DRAWN BY | MAF |
| CHECKED BY | JDL |
| APPROVED BY | LJB |

SHEET TITLE:

COVER SHEET

| | |
|---|---|
| PROJECT NO.: | 02000-217-17_03 |
| SCALE: | AS SHOWN |
| DATE: | SEPTEMBER 2020 |
| DRAWING: | C0.00 |

**REVIEW ONLY-NOT FOR CONSTRUCTION**

C:\Civil 3D Projects\02000-217-17_03\CADD\Sheet_List\C0.00.dwg PLOT DATE 4/23/2021 11:30 AM BY MAF

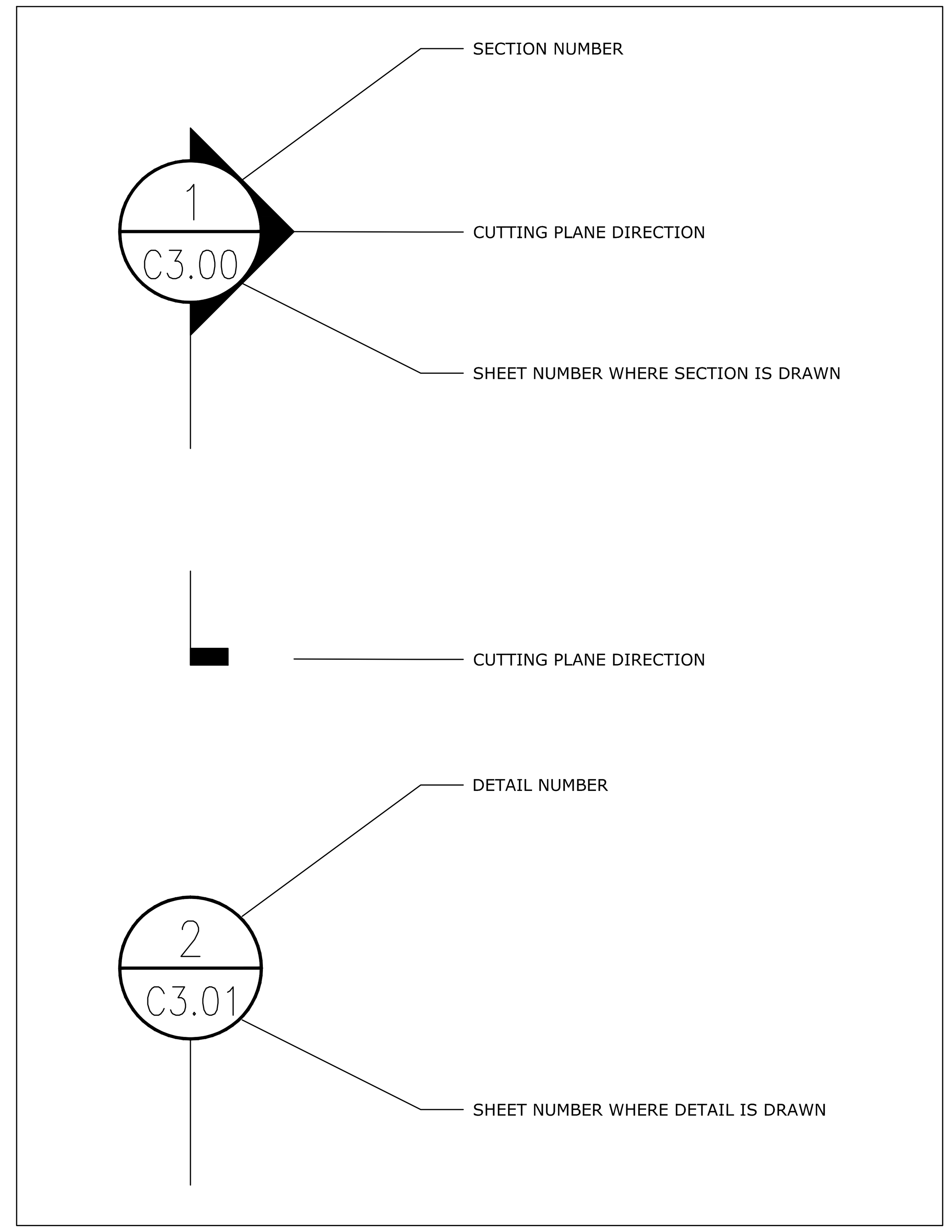
## GENERAL NOTES

1. ALL ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929, UNLESS OTHERWISE NOTED.
2. THE INFORMATION PROVIDED IN THESE PLANS IS SOLELY TO ASSIST THE PERMITTING AGENCY IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED AT THE SITE.
3. CONTRACTOR SHALL CERTIFY IN WRITING TO THE ENGINEER OF RECORD THE ACCURACY OF ALL SURVEY AND OTHER GRADING DATA PRIOR TO BEGINNING WORK.
4. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THERE MAY BE OTHER IMPROVEMENTS, UTILITIES, ETC. WHICH ARE WITHIN THE PROJECT AREA. THE CONTRACTOR SHALL VERIFY, PRIOR TO CONSTRUCTION, THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES AFFECTING THE WORK (WHETHER OR NOT SHOWN ON THE PLANS).
5. CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO PROTECT EXISTING PIPING, MONITORING WELLS/PIEZOMETERS FROM DAMAGE DURING CONSTRUCTION. CONTRACTOR SHALL REPAIR OR REPLACE PIPING, MONITORING WELLS/PIEZOMETERS DAMAGED DURING CONSTRUCTION WITH EQUIVALENT MATERIALS AND CONSTRUCTION METHODS AS APPROVED BY FACILITY OWNER AT NO ADDITIONAL COST TO THE OWNER.
6. FIELD CONDITIONS MAY NECESSITATE SLIGHT ALIGNMENT AND GRADE DEVIATION OF THE PROPOSED CONSTRUCTION TO AVOID OBSTACLES, AS ORDERED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
7. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH EXISTING PASCO COUNTY DESIGN AND CONSTRUCTION STANDARDS UNLESS THOSE STANDARDS CONFLICT WITH THESE CONTRACT DOCUMENTS IN WHICH CASE THESE CONTRACT DOCUMENTS SHALL GOVERN. SUCH CONFLICTS SHALL BE BROUGHT TO THE PROFESSIONAL'S ATTENTION IMMEDIATELY.
8. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH PREVAILING FEDERAL, STATE, LOCAL AND OTHER APPLICABLE REGULATIONS.
9. CONSTRUCTION MONUMENTS FOR VERTICAL AND HORIZONTAL CONTROL HAVE BEEN PROVIDED AT THE PROJECT SITE.
10. PRIOR TO BEGINNING EARTHWORK, THE CONTRACTOR SHALL PROVIDE STORMWATER AND EROSION CONTROL PLANS TO PREVENT PONDING AND CONTROL EROSION AND RUNOFF. NO PONDING OF WATER SHALL BE ALLOWED. THE CONTRACTOR SHALL USE WHATEVER MEANS NECESSARY TO PREVENT EROSION AND SHALL BE RESPONSIBLE FOR ALL WORK, INCLUDING PROVIDING EQUIPMENT, LABOR, FILL, ETC NECESSARY TO REMEDIATE AND/OR RESTORE ALL AREAS IMPACTED BY EROSION.
11. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BECOME FAMILIAR WITH THE OSHA EXCAVATION SAFETY STANDARDS AND TO ABIDE BY THEM.
12. THE CONTRACTOR SHALL PROVIDE ALL WARNING SIGNALS, SIGNS, LIGHTS, AND FLAG PERSON AS REQUIRED BY DOT IN THE "MANUAL ON TRAFFIC CONTROL & SAFE PRACTICES."
13. ALL PIPING SHALL HAVE MINIMUM COVER OF 24" UNLESS OTHERWISE NOTED.
14. WHERE IT IS NECESSARY TO DEFLECT PIPE EITHER HORIZONTALLY OR VERTICALLY, PIPE DEFLECTION SHALL NOT EXCEED 75% OF THE MANUFACTURER'S RECOMMENDED DEFLECTION ANGLE. MINIMUM PIPE RADIUS SHALL BE A MINIMUM OF 25% GREATER THAN THE MANUFACTURER'S RECOMMENDED MINIMUM RADIUS.
15. CONTAMINATED STORMWATER, DEWATERING DISCHARGE, LEACHATE, CONTAMINATED SOILS, OR EXCAVATED WASTE SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE LANDFILL OPERATIONS.
16. CONTRACTOR SHALL VERIFY ALL CLEARANCES PRIOR TO CONSTRUCTION.
17. THE CONTRACTOR SHALL MAINTAIN A CLEAR PATH FOR ALL SURFACE WATER DRAINAGE STRUCTURES AND DITCHES DURING ALL PHASES OF CONSTRUCTION AND SHALL UTILIZE WHATEVER MEANS NECESSARY TO MANAGE STORMWATER SUCH THAT IMPACT TO CONSTRUCTION IS MINIMIZED. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF DAMAGE DUE TO STORMWATER.
18. NO DISTURBANCE SHALL BE ALLOWED OUTSIDE OF THE AREAS SHOWN ON THE FINAL GRADING PLAN UNLESS APPROVED BY THE ENGINEER, OR SPECIFICALLY NOTED ON THE PLANS.
22. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ENVIRONMENTAL PROTECTION DURING THE LIFE OF THE CONTRACT. THE CONTRACTOR'S OPERATIONS SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS PERTAINING TO WATER, AIR, SOLID WASTE, HAZARDOUS WASTE MATERIALS, OILY SUBSTANCES, AND NOISE POLLUTION. THE CONTRACTOR SHALL IMPLEMENT EROSION AND SEDIMENTATION CONTROL MEASURES AS NECESSARY TO COMPLY WITH THESE REGULATIONS FOR BOTH TEMPORARY AND PERMANENT CONSTRUCTION.
23. THE CONTRACTOR SHALL COMPLY WITH ALL TERMS, CONDITIONS, AND REQUIREMENTS OF ALL APPLICABLE PERMITS, INCLUDING FDEP PERMITS FOR THE SITE.
24. THE CONTRACTOR SHALL REPLACE ALL EXISTING PAVING, LANDFILL COVER MATERIAL, ACCESS ROADS, PIPES, STABILIZED EARTH, FENCES, SIGNS AND OTHER IMPROVEMENTS WITH THE SAME TYPE OF MATERIAL THAT WAS REMOVED OR DAMAGED DURING CONSTRUCTION, AS A RESULT OF CONSTRUCTION, OR AS DIRECTED BY THE ENGINEER WITHOUT INCREASE IN THE CONTRACT PRICE OR TIME.
25. THE CONTRACTOR SHALL BE AWARE THAT THERE MAY BE SOME UTILITY CONFLICTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ANY AND ALL EXISTING UTILITIES ON THIS PROJECT WITHOUT INCREASE IN THE CONTRACT PRICE OR TIME.
26. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY WHEN CONFLICTS BETWEEN DRAWINGS AND ACTUAL CONDITIONS ARE DISCOVERED.
27. THE CONTRACTOR SHALL COMPLY WITH ALL TERMS, CONDITIONS, AND REQUIREMENTS OF ALL APPLICABLE PERMITS, INCLUDING FDEP AND WATER MANAGEMENT DISTRICT PERMITS FOR THE SITE.

### GRADING NOTES

1. ALL AREAS WITHIN AND AROUND THE LIMITS OF CONSTRUCTION SHALL BE MAINTAINED AS NEEDED TO CONTROL EROSION DURING THE LENGTH OF THE PROJECT.
2. FILL ELEVATIONS SHALL BE SUCH THAT INTERMEDIATE AND FINAL COVER DESIGN ELEVATIONS SHALL BE ACHIEVED ON ALL SLOPES.

## DRAWING SYMBOLS




C:\Civil 3D Projects\02000-217-17_03\CADD\Sheet_List\C0.01.dwg PLOT DATE 4/23/2021 11:30 AM BY MAF

| NO. | DATE | REVISION DESCRIPTION | BY |
|---|---|---|---|
| | | | |


Locklear & Associates
4140 NW 37th Place, Suite A
Gainesville, Florida 32606
Phone: 352.672.6867 Fax: 352.692.5390
Certificate of Authorization No. 30066


PROJECT TITLE:
PERMIT PLANS
ENTERPRISE ROAD CLASS III
RECYCLING & DISPOSAL FACILITY
PERMIT MODIFICATION-VERTICAL EXPANSION
DADE CITY, PASCO COUNTY, FLORIDA

LISA J. BAKER
LICENSE
No. 74652
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Digitally signed by Lisa J Baker
DN: cn=Lisa J Baker, o=Locklear & Associates, Inc., ou, email=lisa@locklearconsulting.com, c=US
Date: 2021.07.02 07:56:37 -04'00'

DESIGNED BY: LJB
DRAWN BY: MAF
LJB

SHEET TITLE:
GENERAL NOTES AND ABBREVIATIONS

PROJECT NO.: 02000-217-17_03
SCALE: AS SHOWN
DATE: SEPTEMBER 2020
DRAWING: C0.01

**REVIEW ONLY-NOT FOR CONSTRUCTION**


NORTH

0 150 300
GRAPHIC SCALE

## LEGEND

| | |
|---|---|
| x x | PERIMETER FENCE |
| | PROPERTY BOUNDARY |
| | LANDFILL FOOTPRINT (AT BUILD OUT) |
| | LANDFILL CELLS |

## NOTES:

1. PROPERTY BOUNDARY SURVEY CONDUCTED BY SIMMONS & BEALL, INC. DATED 3-30-2001, PROVIDED BY ANGELO'S AGGREGATE MATERIALS.
2. CLASS III LANDFILL PERMITTED AND FUTURE CELL LAYOUT PER NOVEMBER 2006 ANGELO'S RECYCLED MATERIALS ENTERPRISE RECYCLING & DISPOSAL FACILITY (AS AMENDED FEBRUARY 2008 AND JANUARY 2010 BY JONES EDMUNDS, AS AMENDED MARCH 2013 BY KELNER ENGINEERING AND 2015 AND 2019 BY LOCKLEAR & ASSOCIATES).
3. AERIAL IS BEING PROVIDED AS A COMPONENT OF THE TOPOGRAPHIC SURVEY BY PICKETT SURVEYING & PHOTOGRAMMETRY, DATED 10/01/18.
4. SPECIFIC PURPOSE SURVEY CONDUCTED BY RAPID SURVEYING, INC. DATED 3-20-2020, PROVIDED BY ANGELO'S AGGREGATE MATERIALS TO VERIFY ELEVATIONS AT THE TOP AND TOE OF THE SOUTH LANDFILL SLOPE.

C:\Civil 3D Projects\02000-217-17_03\CADD\Sheet_List\C0.02.dwg PLOT DATE 4/23/2021 11:31 AM BY MAF

| NO. | DATE | REVISION DESCRIPTION | BY |
|---|---|---|---|
| | | | |

Locklear & Associates
4140 NW 37th Place, Suite A
Gainesville, Florida 32606
Phone: 352.672.6867 Fax: 352.692.5390
Certificate of Authorization No. 30066

PROJECT TITLE:

PERMIT PLANS
ENTERPRISE ROAD CLASS III
RECYCLING & DISPOSAL FACILITY
PERMIT MODIFICATION-VERTICAL EXPANSION
DADE CITY, PASCO COUNTY, FLORIDA

LISA J. BAKER LICENSE No. 74652 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Lisa J Baker
DN: cn=Lisa J Baker, o=Locklear & Associates, Inc., ou, email=lisa@locklearconsulting.com, c=US
Date: 2021.07.02 07:57:19 -04'00'

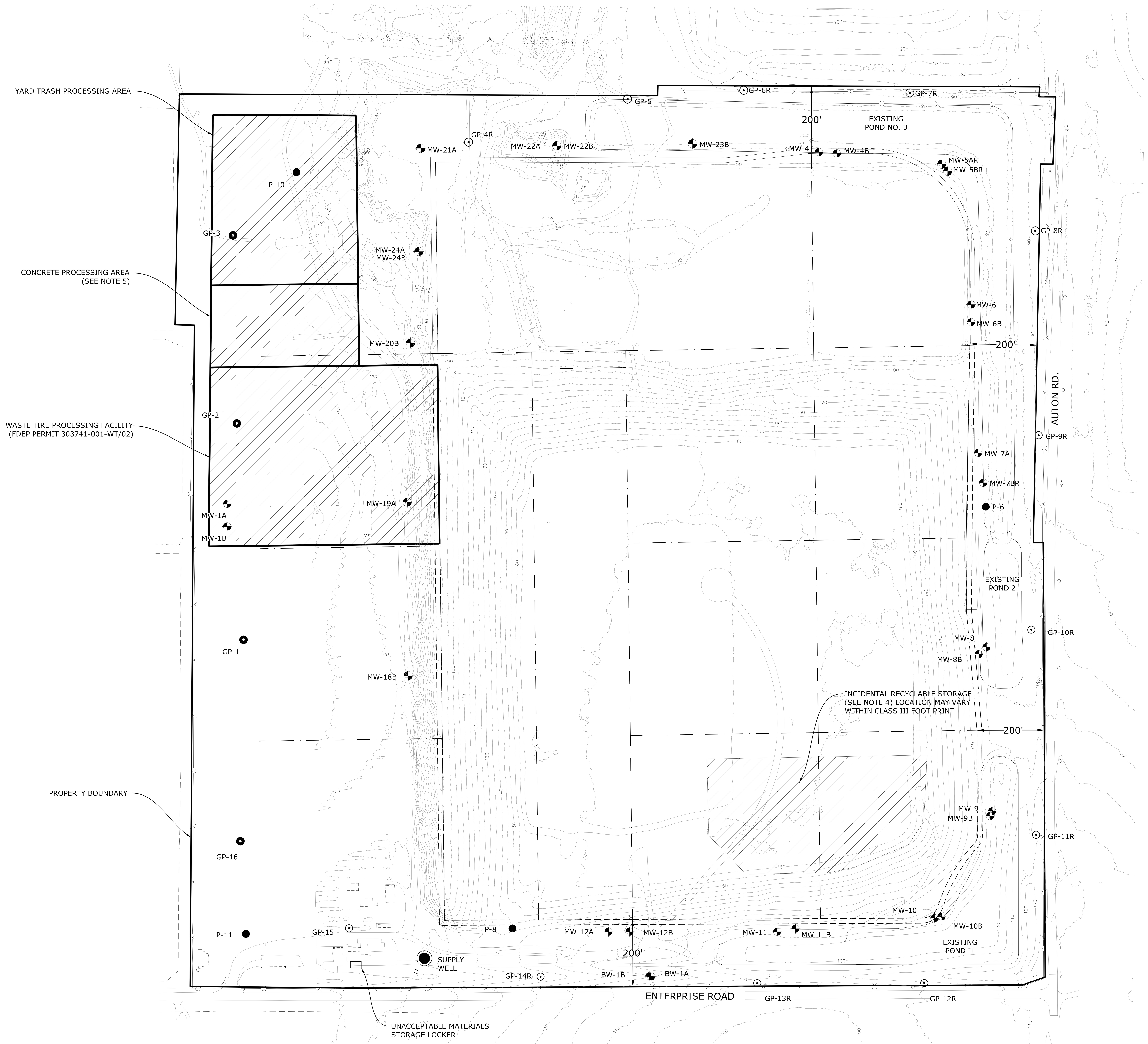
| | |
|---|---|
| DESIGNED BY | LJB |
| DRAWN BY | MAF |
| CHECKED BY | LJB |
| APPROVED BY | LJB |

SHEET TITLE:

AERIAL SITE PLAN

| | |
|---|---|
| PROJECT NO.: | 02000-217-17_03 |
| SCALE: | AS SHOWN |
| DATE: | SEPTEMBER 2020 |
| DRAWING: | C0.02 |

**REVIEW ONLY-NOT FOR CONSTRUCTION**




NORTH

0 150 300
GRAPHIC SCALE

## LEGEND

- PERIMETER FENCE
- PROPERTY BOUNDARY
- LANDFILL FOOTPRINT (AT BUILD OUT)
- LANDFILL CELLS
- EXISTING CONTOURS
- SPECIAL WASTE MANAGEMENT AREA

## LEGEND

- MW-3B MONITORING WELL LOCATION
- GP-1 GAS PROBE LOCATION
- GP-8R FUTURE GAS PROBE LOCATION
- P-11 PIEZOMETER WELL LOCATION

## NOTES:

1. PROPERTY BOUNDARY SURVEY CONDUCTED BY SIMMONS & BEALL, INC. DATED 3-30-2001, PROVIDED BY ANGELO'S AGGREGATE MATERIALS.
2. CLASS III LANDFILL PERMITTED AND FUTURE CELL LAYOUT PER NOVEMBER 2006 ANGELO'S RECYCLED MATERIALS ENTERPRISE RECYCLING & DISPOSAL FACILITY (AS AMENDED FEBRUARY 2008 AND JANUARY 2010 BY JONES EDMUNDS, AS AMENDED MARCH 2013 BY KELNER ENGINEERING, AND AS AMENDED 2015 AND 2019 BY LOCKLEAR & ASSOCIATES).
3. AERIAL IS BEING PROVIDED AS A COMPONENT OF THE TOPOGRAPHIC SURVEY BY PICKETT SURVEYING & PHOTOGRAMMETRY, DATED 10/01/18.
4. TEMPORARY STORAGE OF UNACCEPTABLE MATERIALS AND INCIDENTAL RECYCLABLES WITHIN THE LANDFILL FOOTPRINT AND NEAR WORKING FACE MAY BE PROVIDED AS FOLLOWS:

| TYPE | MAX. QTY | STORAGE |
|---|---|---|
| INCIDENTAL RECYCLABLES | | |
| FERROUS METAL | 500 CY | ROLL-OFF OR PILE |
| ALUMINUM | 300 CY | ROLL-OFF OR PILE |
| STAINLESS STEEL | 300 CY | ROLL-OFF OR PILE |
| COPPER | 25 CY | TRASH PAIL, ROLL-OFF OR PILE |
| ASPHALT | 300 CY | ROLL-OFF OR PILE |
| CONCRETE / RUBBLE | 300 CY | ROLL-OFF OR PILE |
| ELECTRONICS | 8 CY | COVERED DUMPSTER |
| UNACCEPTABLE MATERIALS | | |
| PAINT, BATTERIES, SOLVENTS, ELECTRONICS, OILS, ETC. | 40 CY | ROLL-OFF OR PILE AT WORKING FACE, REMOVED DAILY TO STORAGE LOCKER |
| CLASS I WASTE | 20 CY | COVERED DUMPSTERS |

5. CONCRETE PROCESSING AREA WILL BE RELOCATED WHEN EXCAVATION OPERATIONS MOVE TO THIS AREA.

C:\Civil 3D Projects\02000-217-17_03\CADD\Sheet_List\C0.03.dwg PLOT DATE 4/23/2021 11:39 AM BY MAF

| NO. | DATE | REVISION DESCRIPTION | BY |
|---|---|---|---|
| | | | |


Locklear & Associates
4140 NW 37th Place, Suite A
Gainesville, Florida 32606
Phone: 352.672.6867 Fax: 352.692.5390
Certificate of Authorization No. 30066


PROJECT TITLE:
PERMIT PLANS
ENTERPRISE ROAD CLASS III
RECYCLING & DISPOSAL FACILITY
PERMIT MODIFICATION-VERTICAL EXPANSION
DADE CITY, PASCO COUNTY, FLORIDA

LISA J. BAKER LICENSE No. 74652 STATE OF FLORIDA PROFESSIONAL ENGINEER

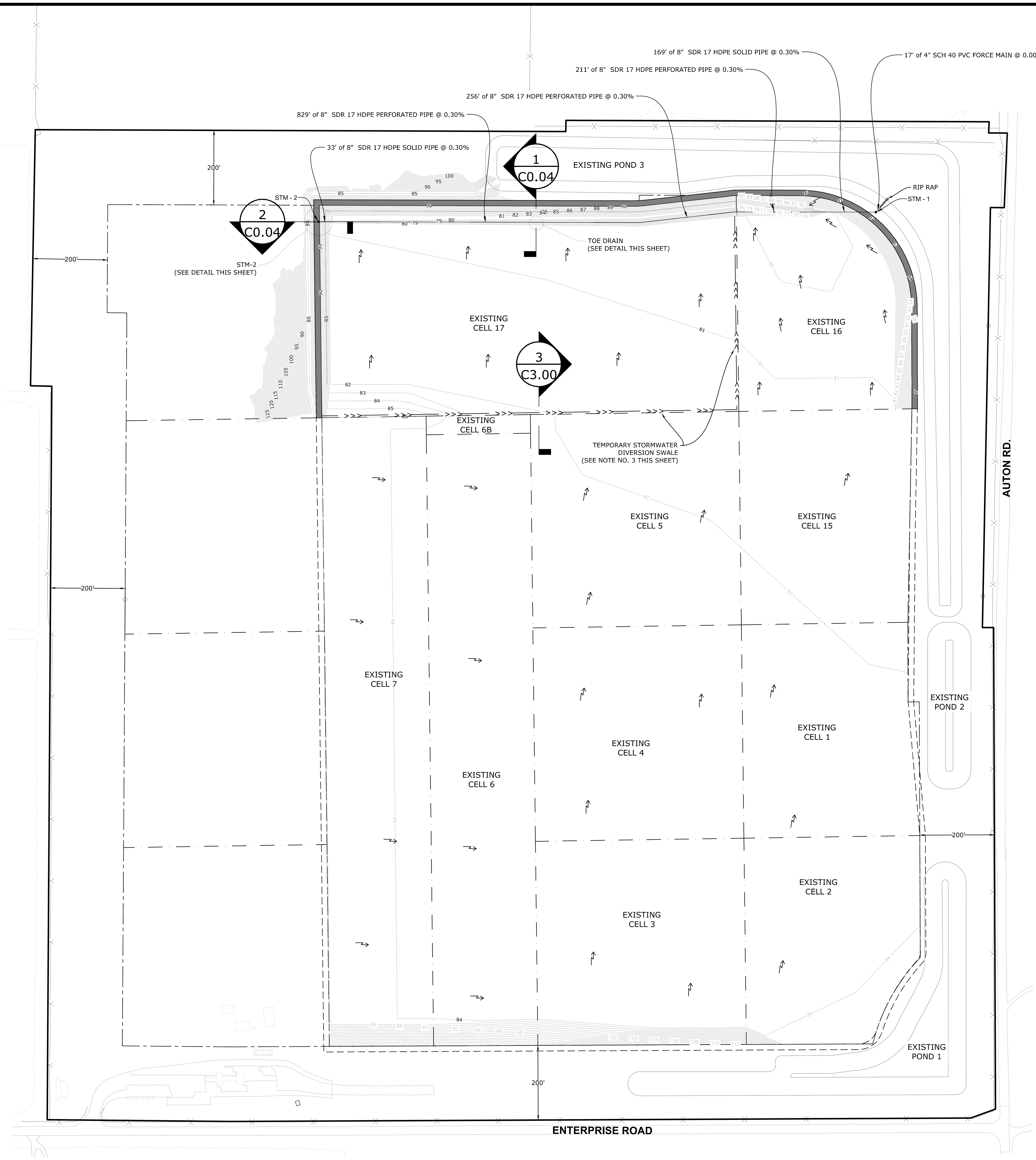
Digitally signed by Lisa J Baker
DN: cn=Lisa J Baker, o=Locklear & Associates, Inc., ou, email=lisa@locklearconsulting.com, c=US
Date: 2021.07.02 07:58:20 -04'00'

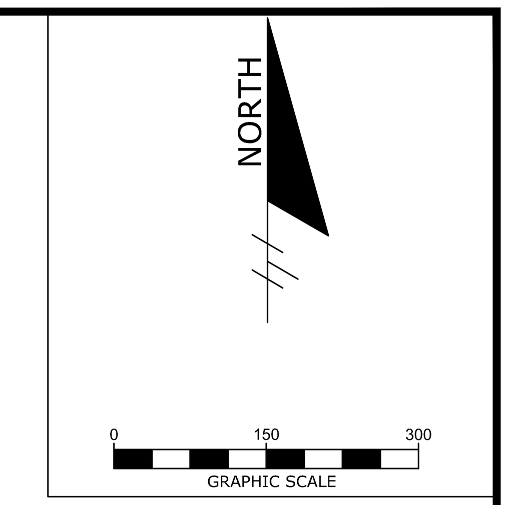
DESIGNED BY: LJB
DRAWN BY: MAF
APPROVED BY: LJB

SHEET TITLE:
SITE PLAN

PROJECT NO.: 02000-217-17_03
SCALE: AS SHOWN
DATE: SEPTEMBER 2020
DRAWING: C0.03

**REVIEW ONLY-NOT FOR CONSTRUCTION**



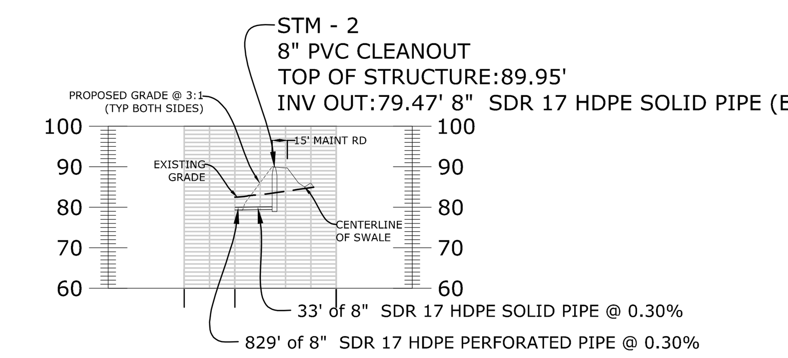




| STRUCTURE NAME: | DETAILS: | NORTHING | EASTING |
|---|---|---|---|
| STORM SEWER STM - 1 | LEACHATE COLLECTION WETWELL (SEE DETAIL ON C4.10) FINISH GRADE RIM EL = 91.92' INV IN = 74.98' 8" SDR 17 HDPE SOLID PIPE SUMP EL = 72.00' INV OUT = 88.50' 4" SCH 40 PVC FORCE MAIN | 1,454,654.80 | 613,925.38 |
| STORM SEWER STM - 2 | 8" PVC CLEANOUT FINISH GRADE RIM EL = 89.95' INV OUT = 79.47' 8" SDR 17 HDPE SOLID PIPE | 1,454,629.15 | 612,432.13 |

STORM SEWER STRUCTURE TABLE

## LEGEND

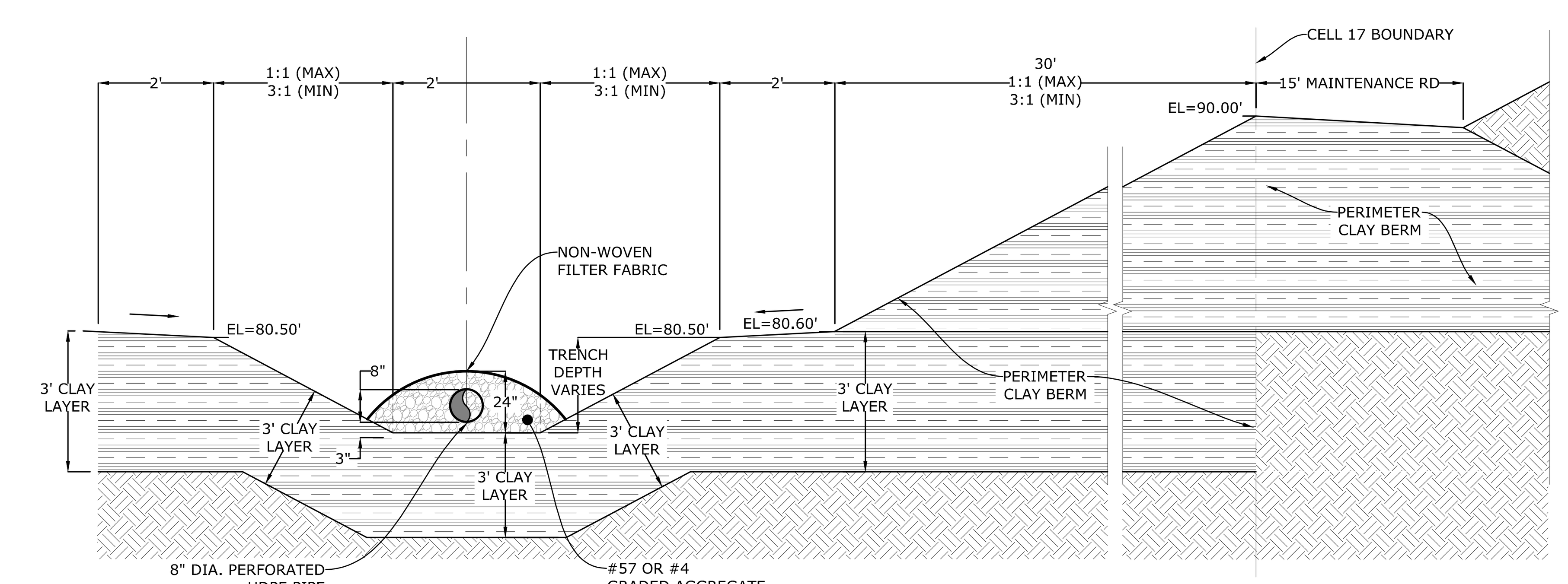
- PERIMETER FENCE
- PROPERTY BOUNDARY
- LANDFILL FOOTPRINT (AT BUILD OUT)
- LANDFILL CELLS
- 90 EXISTING CLAY LAYER CONTOURS
- 90 PROPOSED CLAY LAYER CONTOURS
- DIRECTIONAL FLOW ARROW




2 C0.04 DETAIL STM-2
SCALE: N.T.S.

## NOTES:

1. CONTOURS REPRESENT THE TOP OF CLAY (3' BARRIER LAYER) ELEVATION.
2. AERIAL IS BEING PROVIDED AS A COMPONENT OF THE TOPOGRAPHIC SURVEY BY PICKETT SURVEYING & PHOTOGRAMMETRY, DATED 10/01/18.
3. TEMPORARY STORMWATER DIVERSION SWALE SHALL BE CONSTRUCTED AS OUTLINED IN EMAIL CORRESPONDENCE FROM MR. ARNOLD ON 8-10-20 AND APPROVED BY THE DEPARTMENT ON 8-12-20. TEMPORARY SWALE SHALL BE REMOVED AND FILLED WITH CLAY ONCE INITIAL WASTE LIFT REACHES THE SWALE FROM THE NORTH.




1 C0.04 TOE DRAIN DETAIL
SCALE: N.T.S.

| NO. | DATE | REVISION DESCRIPTION | BY |
|---|---|---|---|
| | | | |

Locklear & Associates
4140 NW 37th Place, Suite A
Gainesville, Florida 32606
Phone: 352.672.6867 Fax: 352.692.5390
Certificate of Authorization No. 30066

PROJECT TITLE:
PERMIT PLANS
ENTERPRISE ROAD CLASS III
RECYCLING & DISPOSAL FACILITY
PERMIT MODIFICATION-VERTICAL EXPANSION
DADE CITY, PASCO COUNTY, FLORIDA

LISA J BAKER LICENSE No. 74652 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Lisa J Baker
DN: cn=Lisa J Baker, o=Locklear & Associates, Inc., ou, email=lisa@locklearconsulting.com, c=US
Date: 2021.07.02 07:59:17 -04'00'

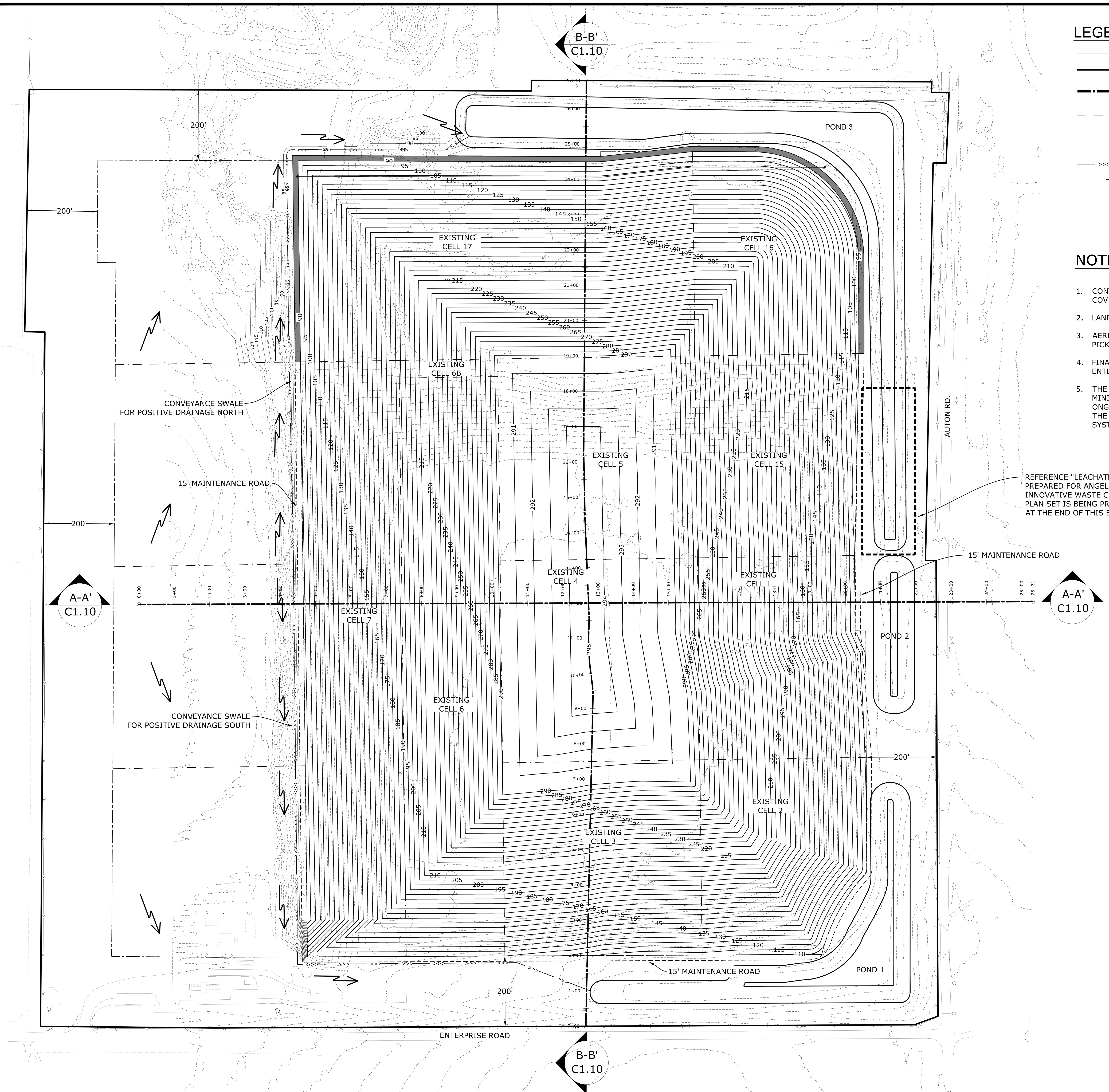
DESIGNED BY: LJB
DRAWN BY: MAF
APPROVED BY: LJB

SHEET TITLE:
EXISTING CELL FLOOR GRADING PLAN

PROJECT NO.: 02000-217-17_03
SCALE: AS SHOWN
DATE: SEPTEMBER 2020
DRAWING: C0.04

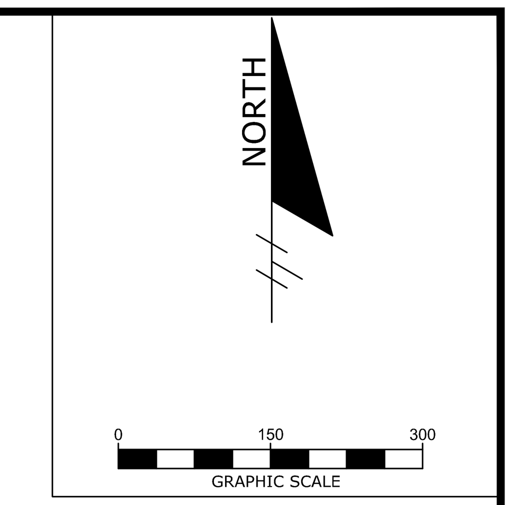
C:\Civil 3D Projects\02000-217-17_03\CADD\Sheet_List\C0.04.dwg PLOT DATE 4/23/2021 11:39 AM BY MAF

**REVIEW ONLY-NOT FOR CONSTRUCTION**




## LEGEND

| | |
|---|---|
| ——x——x—— | PERIMETER FENCE |
| —— — — —— | PROPERTY BOUNDARY |
| —·—·—·— | LANDFILL FOOTPRINT (AT BUILD OUT) |
| - - - - - - | LANDFILL CELLS |
| ······90······ | EXISTING CONTOURS |
| —— >>> —— | CONVEYANCE SWALE |
| → | DIRECTIONAL FLOW ARROW |
| 10+00 | CROSS SECTION STATIONS |




## NOTES:

1. CONTOURS REPRESENT TOP OF WASTE. FILL ELEVATIONS SHALL BE SUCH THAT FINAL COVER DESIGN ELEVATIONS SHALL NOT BE EXCEEDED ON ALL SLOPES
2. LANDFILL FINAL COVER PER SHEET C3.00 CLOSURE DETAILS.
3. AERIAL IS BEING PROVIDED AS A COMPONENT OF THE TOPOGRAPHIC SURVEY BY PICKETT SURVEYING & PHOTOGRAMMETRY, DATED 10/01/18.
4. FINAL COVER CONSTRUCTION TO BE IN ACCORDANCE WITH SECTION 7.1 OF THE ENTERPRISE RECYCLING & DISPOSAL FACILITY RECLAMATION & CLOSURE PLAN.
5. THE FACILITY'S OVERALL STORMWATER MANAGEMENT SYSTEM IS GOVERNED BY THE MINING OPERATIONS AND ERP PERMITS. GRADES AND ELEVATION VARY BASED ONGOING MINING OPERATIONS AND TOPOGRAPHY. A DETAILED DESIGN THAT WILL TIE THE CONCEPTUAL CLOSURE PLAN INTO THE FACILITY'S STORMWATER MANAGEMENT SYSTEM WILL BE SUBMITTED AT THE TIME OF CLOSURE.

C:\Civil 3D Projects\02000-217-17_03\CADD\Sheet_List\C2.00.dwg PLOT DATE 4/23/2021 11:40 AM BY MAF

| NO. | DATE | REVISION DESCRIPTION | BY |
|---|---|---|---|
| | | | |

Locklear & Associates
4140 NW 37th Place, Suite A
Gainesville, Florida 32606
Phone: 352.672.6867 Fax: 352.692.5390
Certificate of Authorization No. 30066

PROJECT TITLE:

PERMIT PLANS
ENTERPRISE ROAD CLASS III
RECYCLING & DISPOSAL FACILITY
PERMIT MODIFICATION-VERTICAL EXPANSION
DADE CITY, PASCO COUNTY, FLORIDA

LISA J BAKER LICENSE No. 74652 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Lisa J Baker
DN: cn=Lisa J Baker, o=Locklear & Associates, Inc., ou, email=lisa@locklearconsulting.com, c=US
Date: 2021.07.02 08:00:02 -04'00'

| | |
|---|---|
| DESIGNED BY | LJB |
| DRAWN BY | MAF |
| CHECKED BY | JDL |
| APPROVED BY | LJB |

SHEET TITLE:

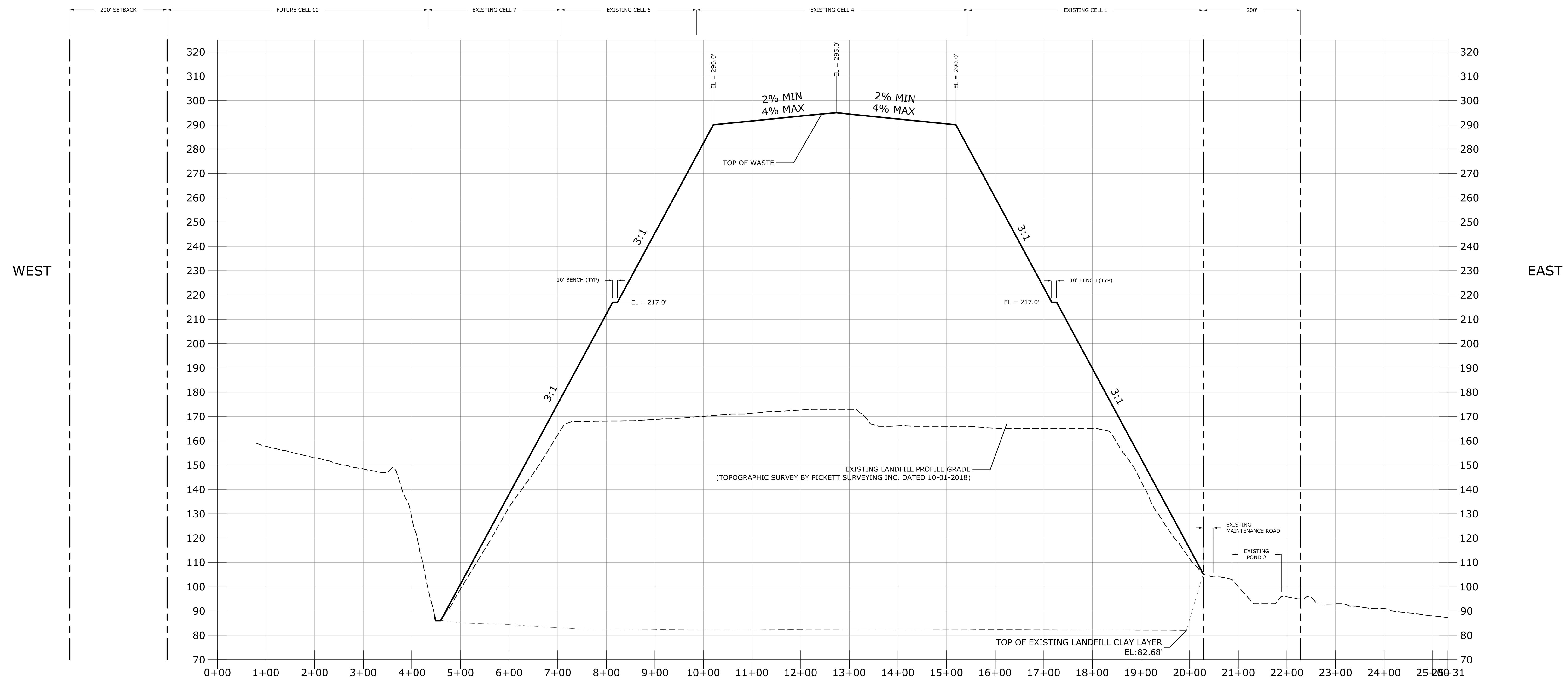
OVERALL LANDFILL GRADING AND VERTICAL EXPANSION

| | |
|---|---|
| PROJECT NO.: | 02000-217-17_03 |
| SCALE: | AS SHOWN |
| DATE: | SEPTEMBER 2020 |
| DRAWING: | C1.00 |

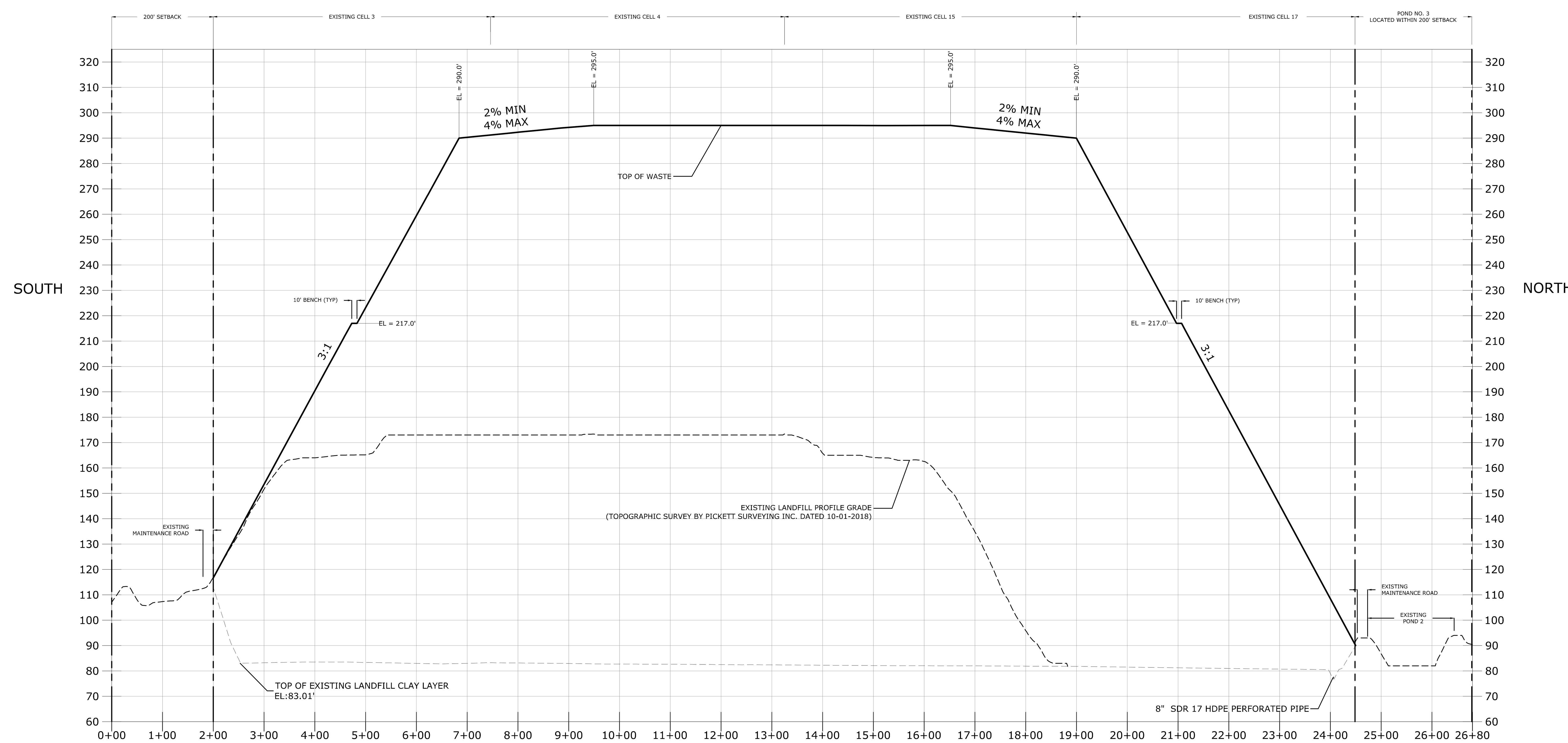
REVIEW ONLY-NOT FOR CONSTRUCTION

SCALES:

HORIZONTAL 1"=150'
VERTICAL 1"= 30'




## SECTION CUT A-A'




## SECTION CUT B-B'

| NO. | DATE | REVISION DESCRIPTION | BY |
|---|---|---|---|
| | | | |


Locklear & Associates
4140 NW 37th Place, Suite A
Gainesville, Florida 32606
Phone: 352.672.6867 Fax: 352.692.5390
Certificate of Authorization No. 30066


PROJECT TITLE:

PERMIT PLANS
ENTERPRISE ROAD CLASS III
RECYCLING & DISPOSAL FACILITY
PERMIT MODIFICATION-VERTICAL EXPANSION
DADE CITY, PASCO COUNTY, FLORIDA

LISA J. BAKER
LICENSE
No. 74652
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Digitally signed by Lisa J Baker
DN: cn=Lisa J Baker, o=Locklear & Associates, Inc., ou, email=lisa@locklearconsulting.com, c=US
Date: 2021.07.02 08:01:01 -04'00'

DESIGNED BY: LJB
DRAWN BY: MAF
APPROVED BY: LJB

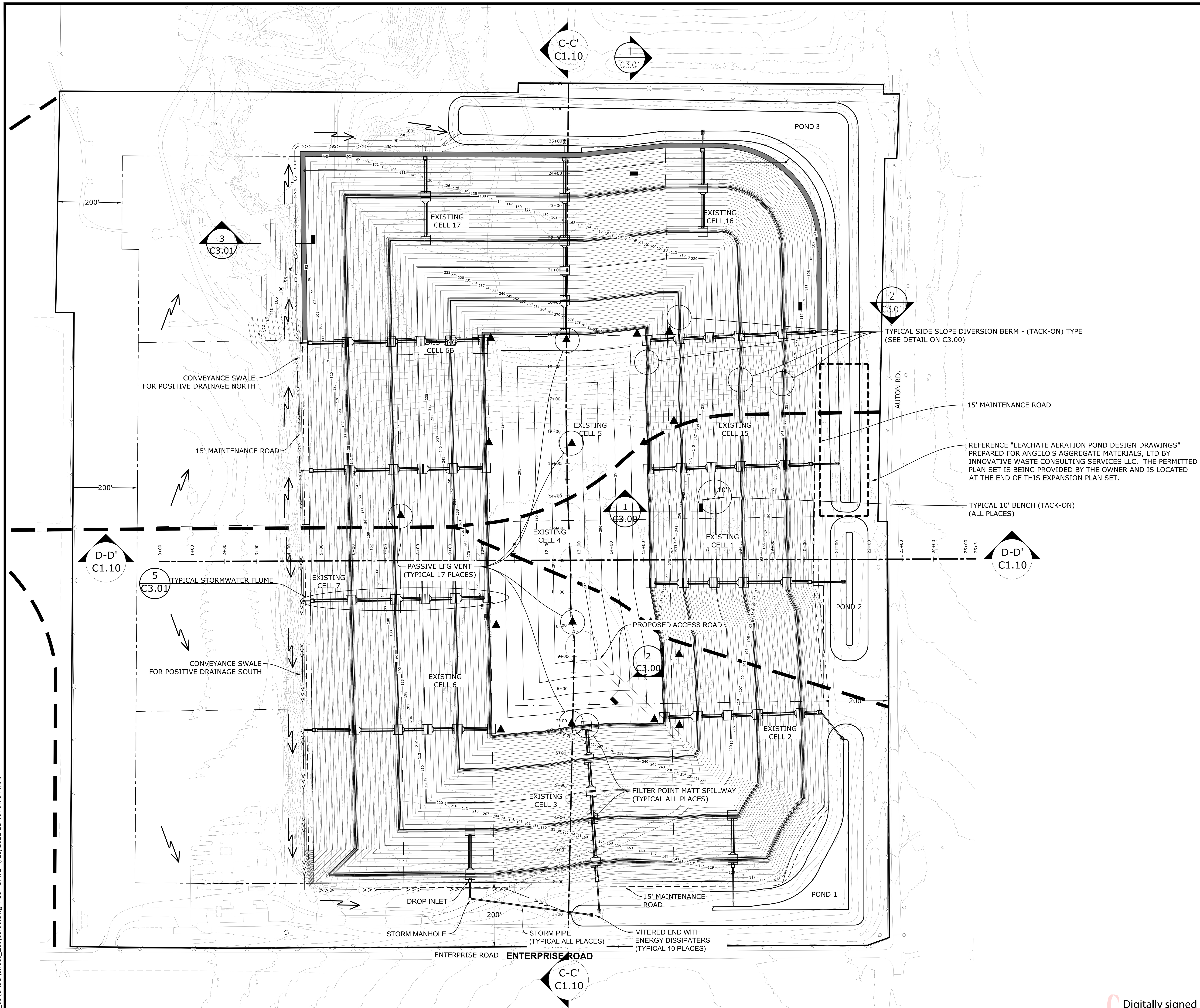
SHEET TITLE:

OVERALL LANDFILL GRADING AND VERTICAL EXPANSION SECTIONS

PROJECT NO.: 02000-217-17_03
SCALE: AS SHOWN
DATE: SEPTEMBER 2020
DRAWING: C1.10

**REVIEW ONLY-NOT FOR CONSTRUCTION**

C:\Civil 3D Projects\02000-217-17_03\CADD\Sheet_List\C2.00.dwg PLOT DATE 4/23/2021 11:40 AM BY MAF




## LEGEND

- PERIMETER FENCE
- PROPERTY BOUNDARY
- LANDFILL FOOTPRINT (AT BUILD OUT)
- LANDFILL CELLS
- EXISTING CONTOURS
- DIRECTIONAL FLOW ARROW
- 10+00 CROSS SECTION STATIONS
- CONVEYANCE SWALE
- DRAINAGE DIVIDE
- PASSIVE LFG VENT
- STORMWATER CONVEYANCE SYSTEM (FILTER POINT MAT, DROP INLET, MITERED END WITH ENERGY DISSIPATERS)

NORTH

0 150 300
GRAPHIC SCALE

## NOTES:

1. CONTOURS REPRESENT TOP OF FINAL COVER.
2. LANDFILL FINAL COVER PER SHEET C3.00 CLOSURE DETAILS.
3. AERIAL IS BEING PROVIDED AS A COMPONENT OF THE TOPOGRAPHIC SURVEY BY PICKETT SURVEYING & PHOTOGRAMMETRY, DATED 10/01/18.
4. FINAL COVER CONSTRUCTION TO BE IN ACCORDANCE WITH SECTION 7.1 OF THE ENTERPRISE RECYCLING & DISPOSAL FACILITY RECLAMATION & CLOSURE PLAN.
5. THE FACILITY'S OVERALL STORMWATER MANAGEMENT SYSTEM IS GOVERNED BY THE MINING OPERATIONS AND ERP PERMITS. GRADES AND ELEVATION VARY BASED ONGOING MINING OPERATIONS AND TOPOGRAPHY. A DETAILED DESIGN THAT WILL TIE THE CONCEPTUAL CLOSURE PLAN INTO THE FACILITY'S STORMWATER MANAGEMENT SYSTEM WILL BE SUBMITTED AT THE TIME OF CLOSURE.

C:\Civil 3D Projects\02000-217-17_03\CADD\Sheet_List\C3.00.dwg PLOT DATE 4/23/2021 11:40 AM BY MAF

| NO. | DATE | REVISION DESCRIPTION | BY |
| --- | --- | --- | --- |


Locklear & Associates
4140 NW 37th Place, Suite A
Gainesville, Florida 32606
Phone: 352.672.6867 Fax: 352.692.5390
Certificate of Authorization No. 30066


PROJECT TITLE:
PERMIT PLANS
ENTERPRISE ROAD CLASS III
RECYCLING & DISPOSAL FACILITY
PERMIT MODIFICATION-VERTICAL EXPANSION
DADE CITY, PASCO COUNTY, FLORIDA

LISA J BAKER LICENSE No. 74652 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Lisa J Baker
DN: cn=Lisa J Baker, o=Locklear & Associates, Inc., ou, email=lisa@locklearconsulting.com, c=US
Date: 2021.07.02 08:02:15 -04'00'

DESIGNED BY: LJB
DRAWN BY: MAF
CHECKED BY: JDL
APPROVED BY: LJB

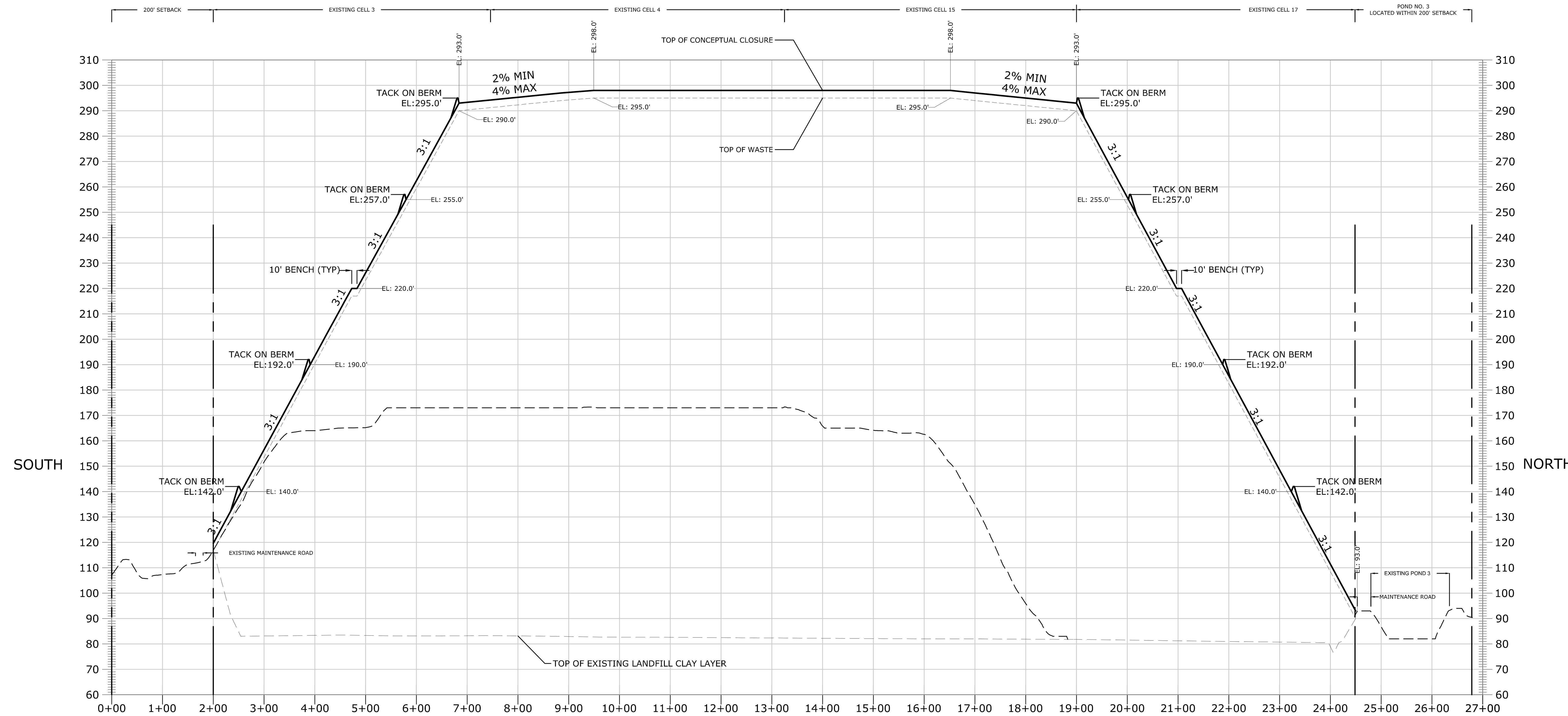
SHEET TITLE:
CONCEPTUAL CLOSURE

PROJECT NO.: 02000-217-17_03
SCALE: AS SHOWN
DATE: SEPTEMBER 2020
DRAWING: C2.00

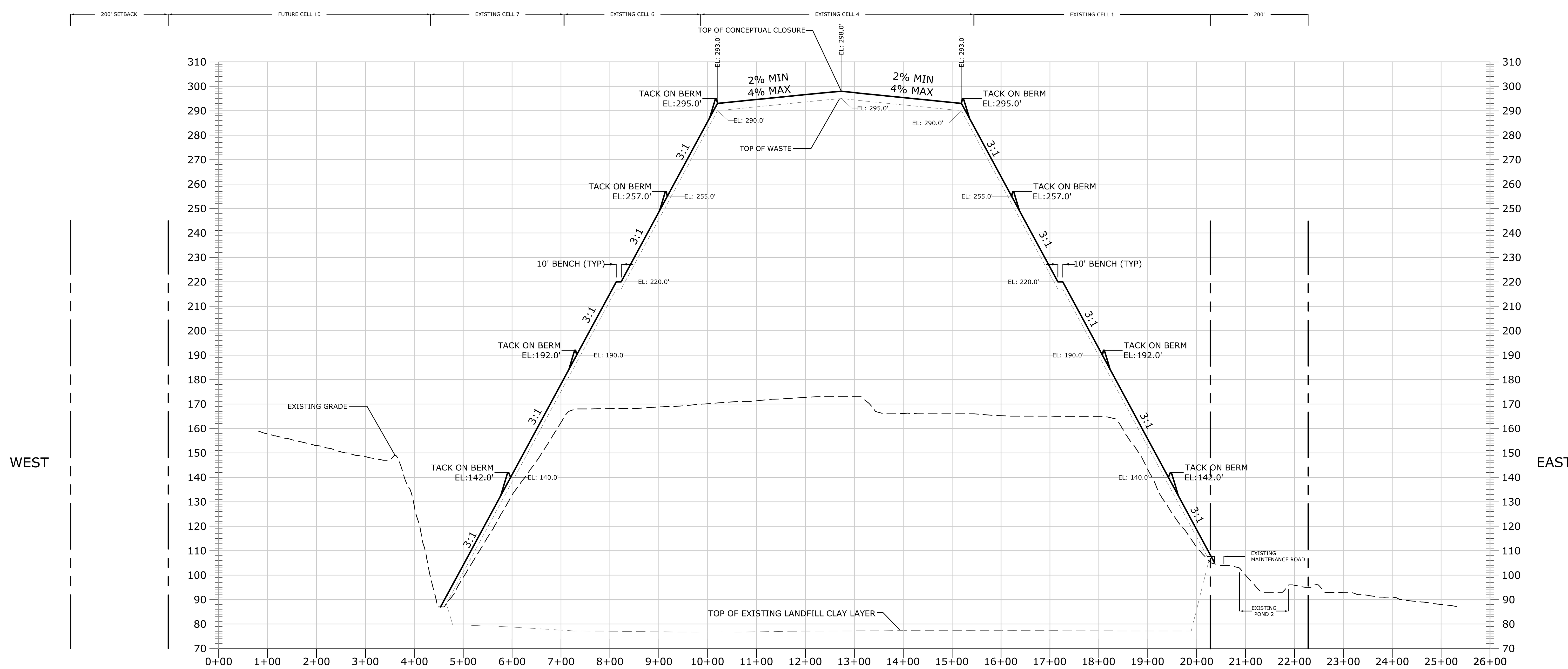
**REVIEW ONLY-NOT FOR CONSTRUCTION**

SCALES:

HORIZONTAL 1"=150'
VERTICAL 1"= 30'




**SECTION CUT C-C'**




**SECTION CUT D-D'**

C:\Civil 3D Projects\02000-217-17_03\CADD\Sheet_List\C3.00.dwg PLOT DATE 4/23/2021 11:40 AM BY MAF

| NO. | DATE | REVISION DESCRIPTION | BY |
|---|---|---|---|

Locklear & Associates


4140 NW 37th Place, Suite A
Gainesville, Florida 32606
Phone: 352.672.6867 Fax: 352.692.5390
Certificate of Authorization No. 30066


PROJECT TITLE:

PERMIT PLANS
ENTERPRISE ROAD CLASS III
RECYCLING & DISPOSAL FACILITY
PERMIT MODIFICATION-VERTICAL EXPANSION
DADE CITY, PASCO COUNTY, FLORIDA

LISA J BAKER LICENSE No. 74652 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Lisa J Baker
DN: cn=Lisa J Baker, o=Locklear & Associates, Inc., ou, email=lisa@locklearconsulting.com, c=US
Date: 2021.07.02 08:03:06 -04'00'

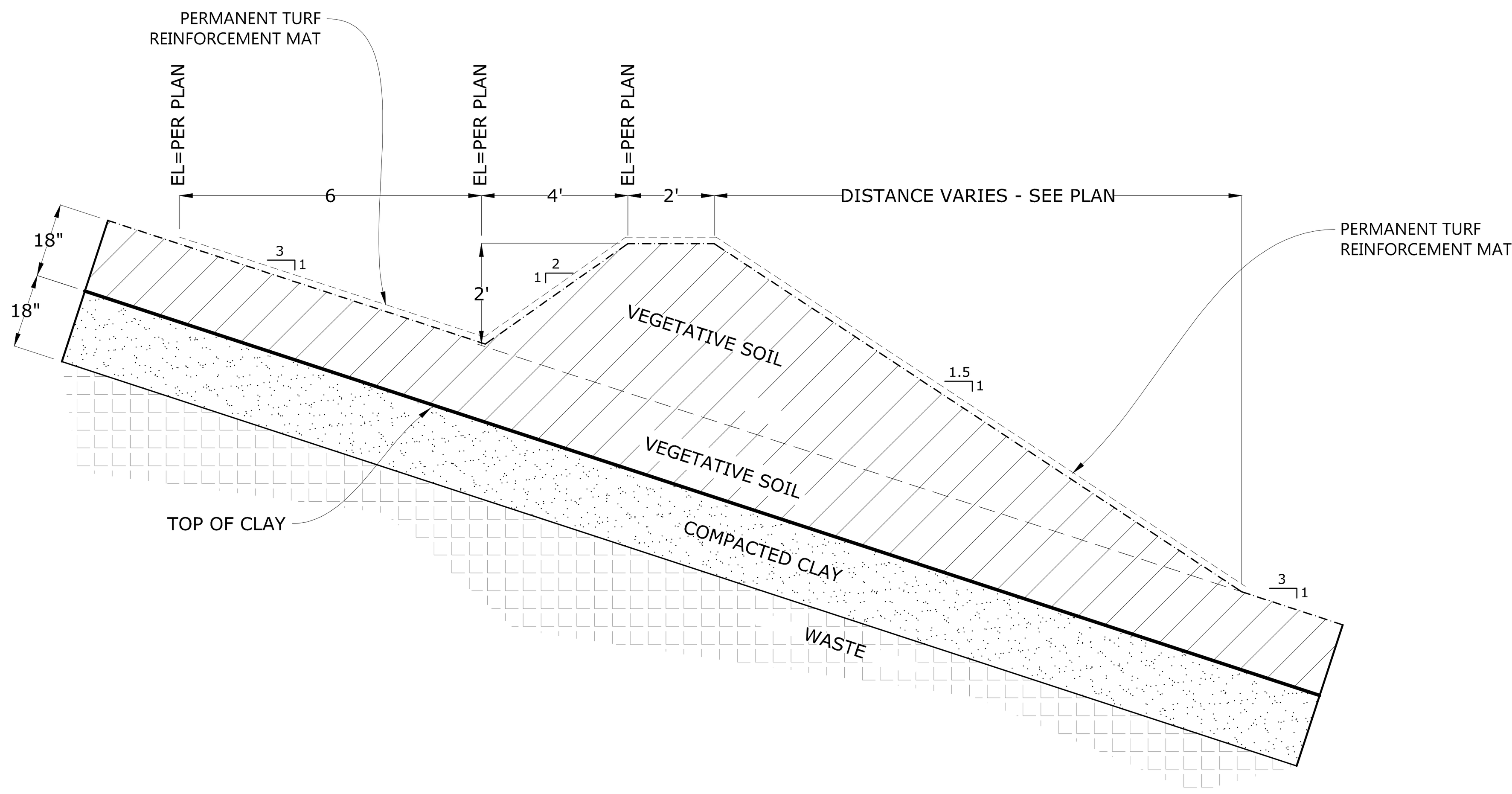
DESIGNED BY LJB
DRAWN BY MAF
APPROVED BY LJB

SHEET TITLE:

CONCEPTUAL CLOSURE SECTIONS

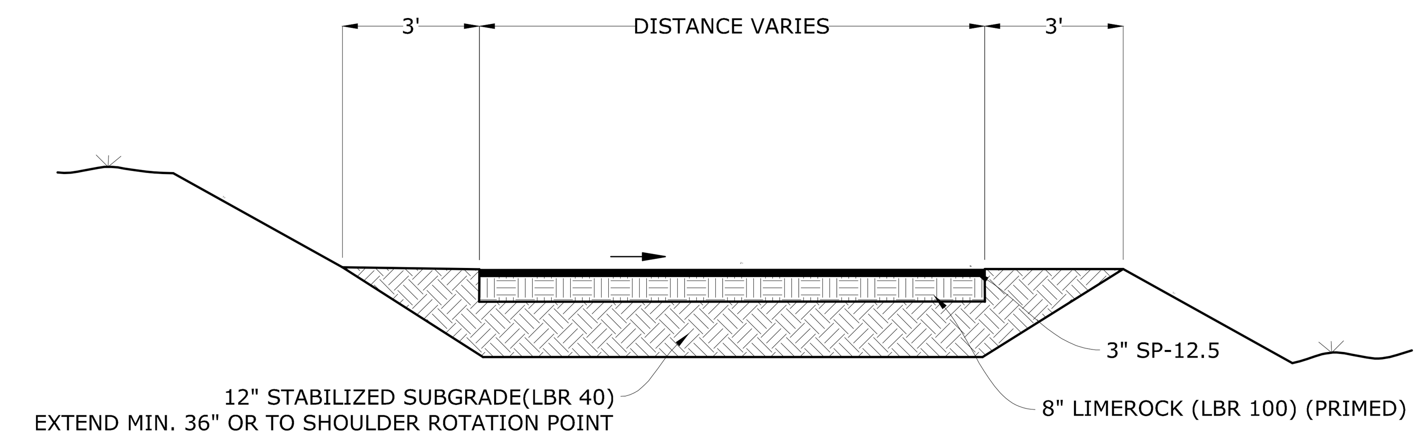
PROJECT NO.: 02000-217-17_03
SCALE: AS SHOWN
DATE: SEPTEMBER 2020
DRAWING: C2.10

**REVIEW ONLY-NOT FOR CONSTRUCTION**



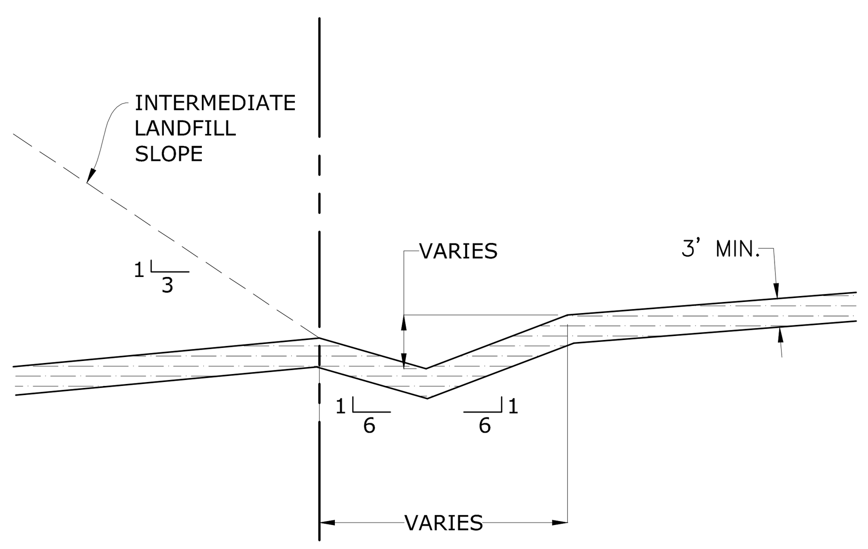

1 C3.00 TYPICAL SIDE SLOPE DIVERSION BERM (TACK-ON) DETAIL

SCALE: N.T.S.



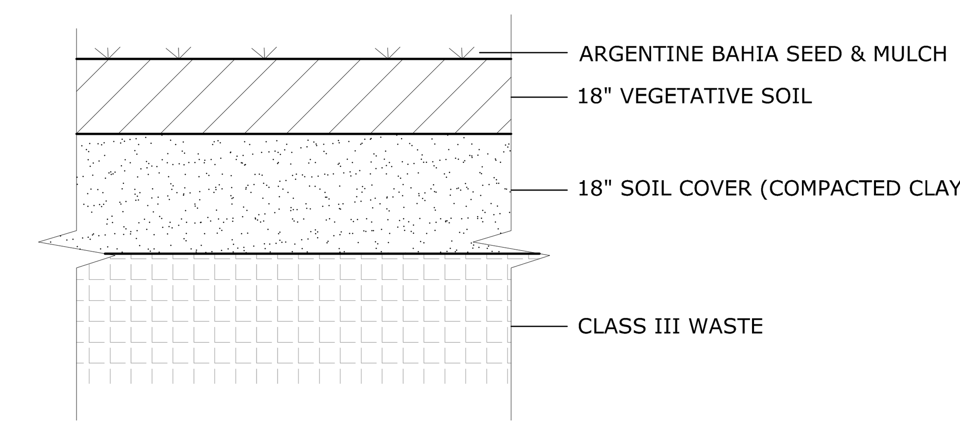

2 C3.00 ACCESS ROAD TYPICAL SECTION

SCALE: N.T.S.




## NOTES:

1. FOR PERMITTED CELL 17 THE TEMPORARY DIVERSION SWALE IS CONSTRUCTED PRIOR TO WASTE ACCEPTANCE WITHIN CELL.
2. TEMPORARY STORMWATER DIVERSION SWALE SHALL BE CONSTRUCTED AS OUTLINED IN EMAIL CORRESPONDENCE FROM MR. ARNOLD ON 8-10-20 AND APPROVED BY THE DEPARTMENT ON 8-12-20. TEMPORARY SWALE SHALL BE REMOVED AND FILLED WITH CLAY ONCE INITIAL WASTE LIFT REACHES THE SWALE FROM THE NORTH.
3. FINAL COVER CONSTRUCTION TO BE IN ACCORDANCE WITH SECTION 7.1 OF THE ENTERPRISE RECYCLING & DISPOSAL FACILITY RECLAMATION & CLOSURE PLAN.




3 C3.00 TEMPORARY STORMWATER DIVERSION SWALE DETAIL

SCALE: N.T.S.

4 C3.00 TYPICAL FINAL COVER

SCALE: N.T.S.

C:\Civil 3D Projects\02000-217-17_03\CADD\Sheet_List\C4.00.dwg PLOT DATE 4/23/2021 11:41 AM BY MAF

| NO. | DATE | REVISION DESCRIPTION | BY |
|---|---|---|---|
| | | | |

Locklear & Associates
4140 NW 37th Place, Suite A
Gainesville, Florida 32606
Phone: 352.672.6867 Fax: 352.692.5390
Certificate of Authorization No. 30066

PROJECT TITLE:
PERMIT PLANS
ENTERPRISE ROAD CLASS III
RECYCLING & DISPOSAL FACILITY
PERMIT MODIFICATION-VERTICAL EXPANSION
DADE CITY, PASCO COUNTY, FLORIDA

LISA J BAKER LICENSE No. 74652 STATE OF FLORIDA PROFESSIONAL ENGINEER

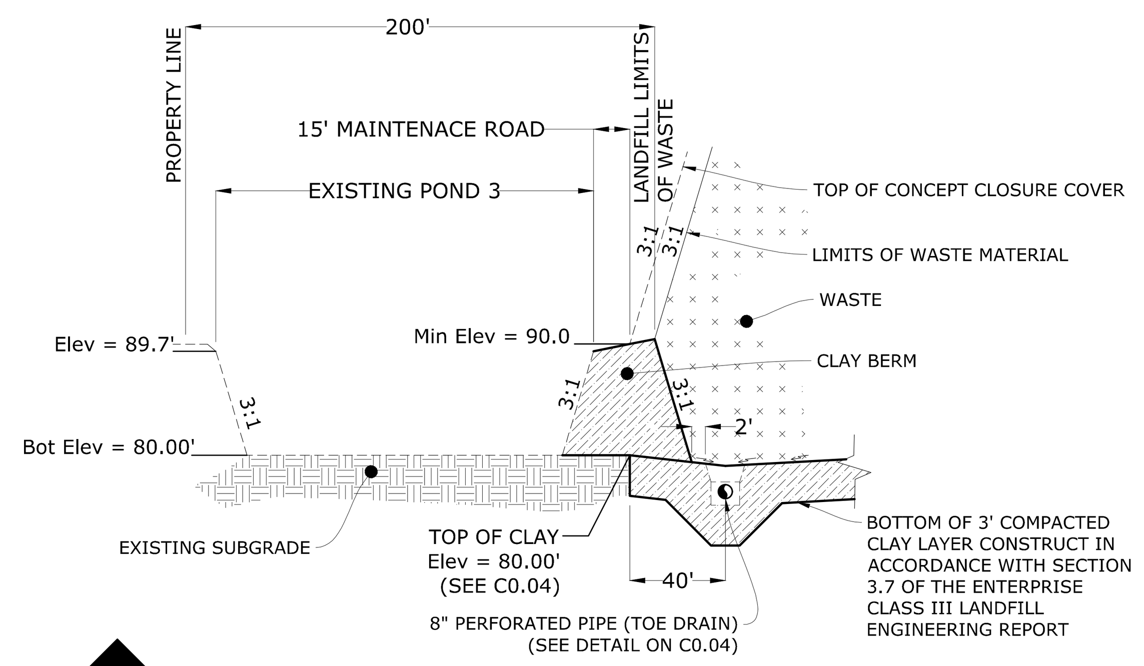
Digitally signed by Lisa J Baker
DN: cn=Lisa J Baker, o=Locklear & Associates, Inc., ou, email=lisa@locklearconsulting.com, c=US
Date: 2021.07.02 08:04:02 -04'00'

DESIGNED BY: LJB
DRAWN BY: MAF
CHECKED BY: LJB
APPROVED BY: LJB

SHEET TITLE:
CLOSURE DETAILS

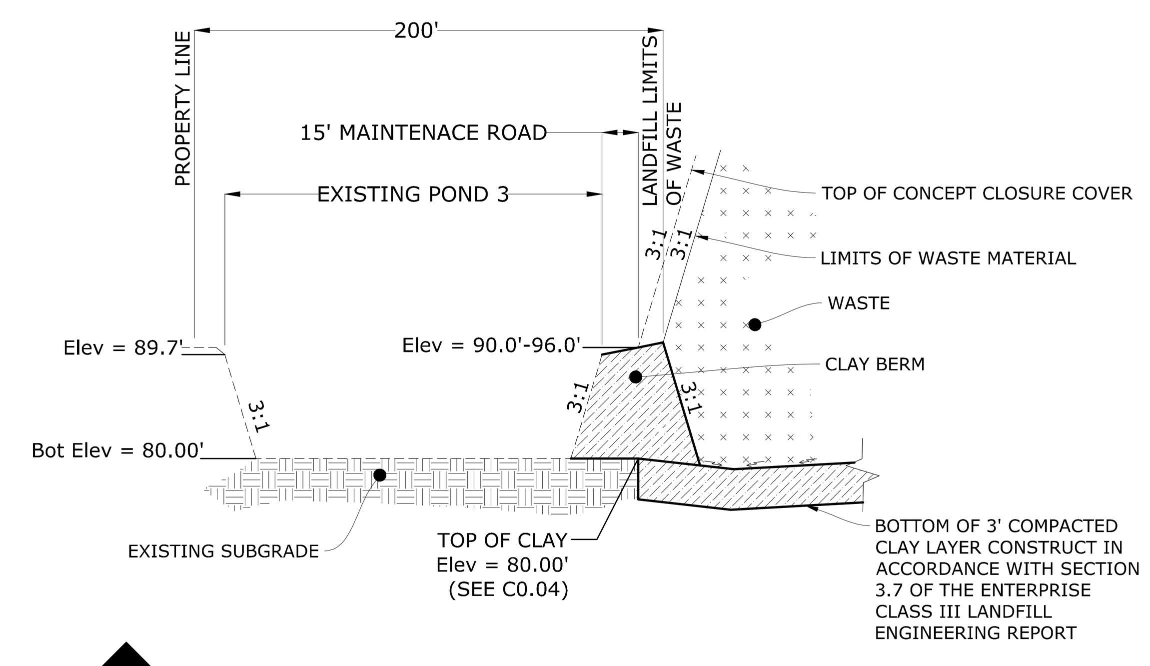
PROJECT NO.: 02000-217-17_03
SCALE: AS SHOWN
DATE: SEPTEMBER 2020
DRAWING: C3.00

**REVIEW ONLY-NOT FOR CONSTRUCTION**



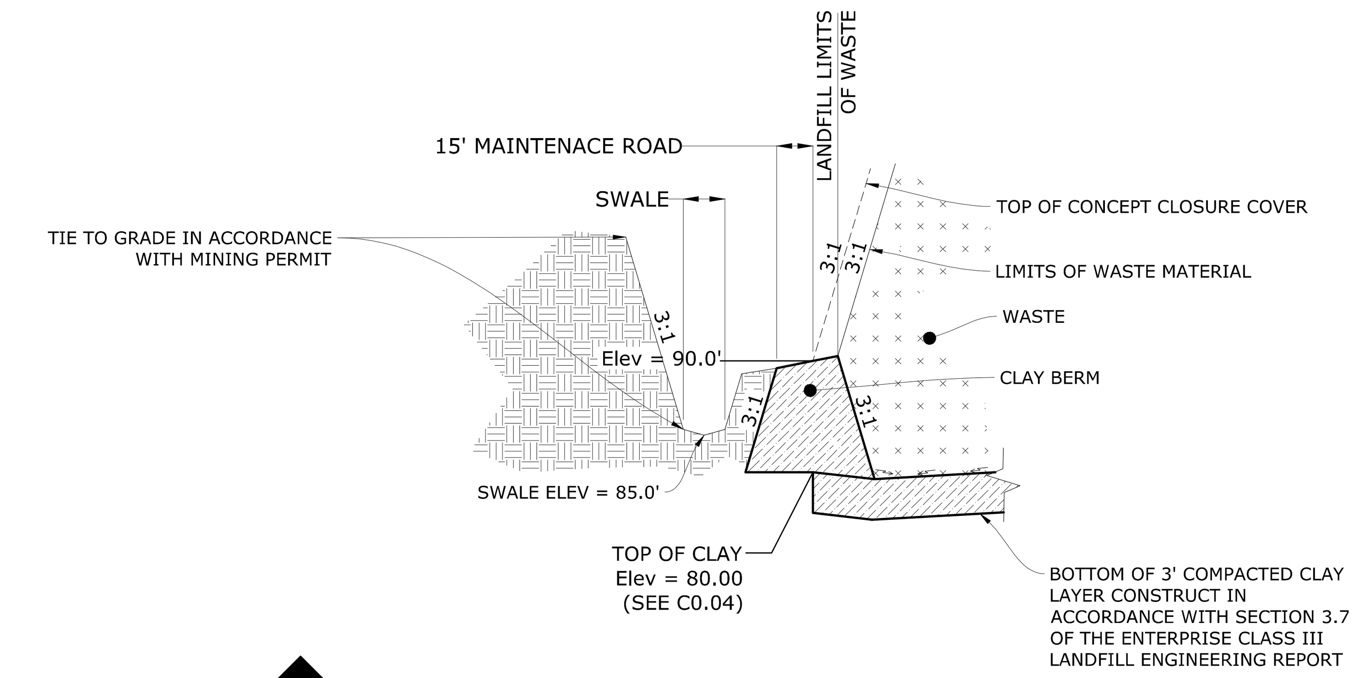

1 C3.01 NORTH BERM DETAIL CELLS 16 & 17

SCALE: N.T.S.



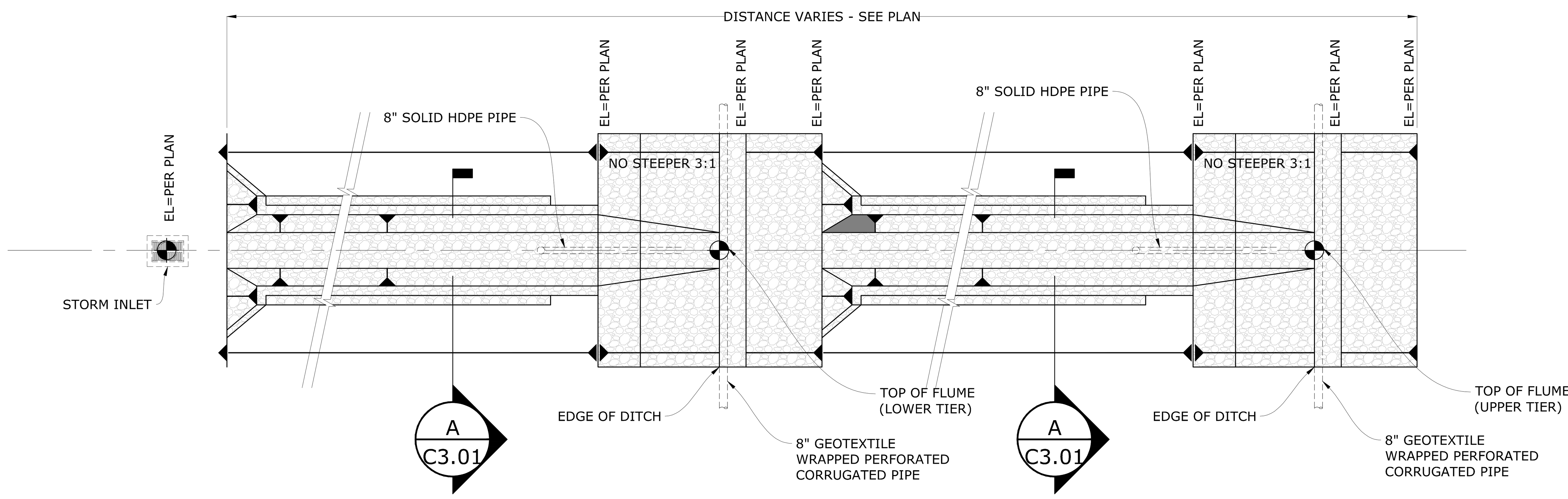

2 C3.01 EAST BERM DETAIL CELL 16

SCALE: N.T.S.




3 C3.01 WEST BERM DETAIL CELL 17

SCALE: N.T.S.



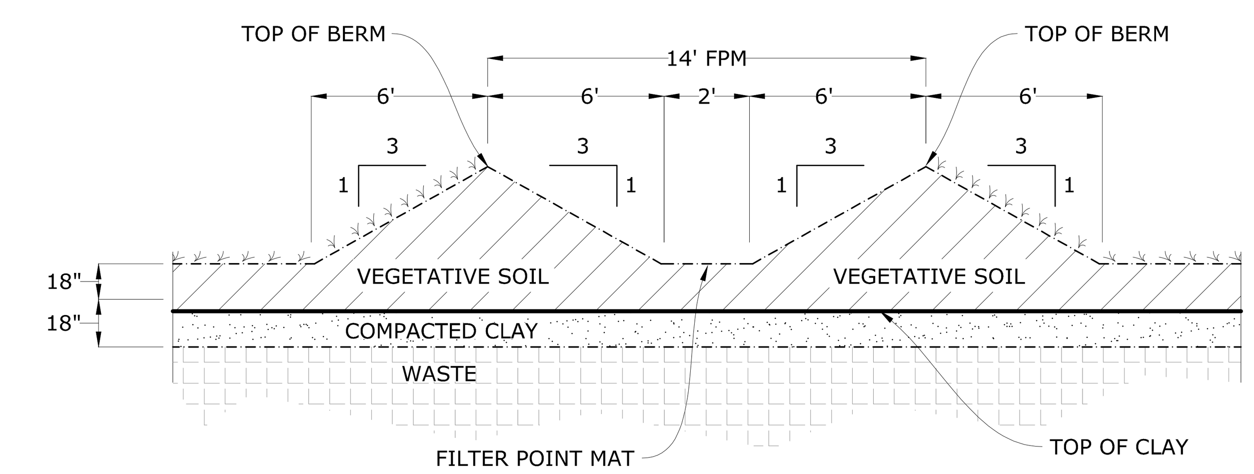

NOTES:
1. UNLESS OTHERWISE NOTED FILTER POINT MAT SHALL BE PLACED ON SURFACE OF FINAL COVER AND ALL SLOPES SHALL CONFORM WITH SLOPES ON WHICH THE FILTER POINT MAT IS PLACED.
2. GEOTEXTILE WRAPPED PERFORATED CORRUGATED PIPE REQUIRED ON ALL STORMWATER CONTROL BERMS AND AT FLUMES.

5 C3.01 TYPICAL STORMWATER FLUME PLAN VIEW

SCALE: N.T.S.

NOTE:

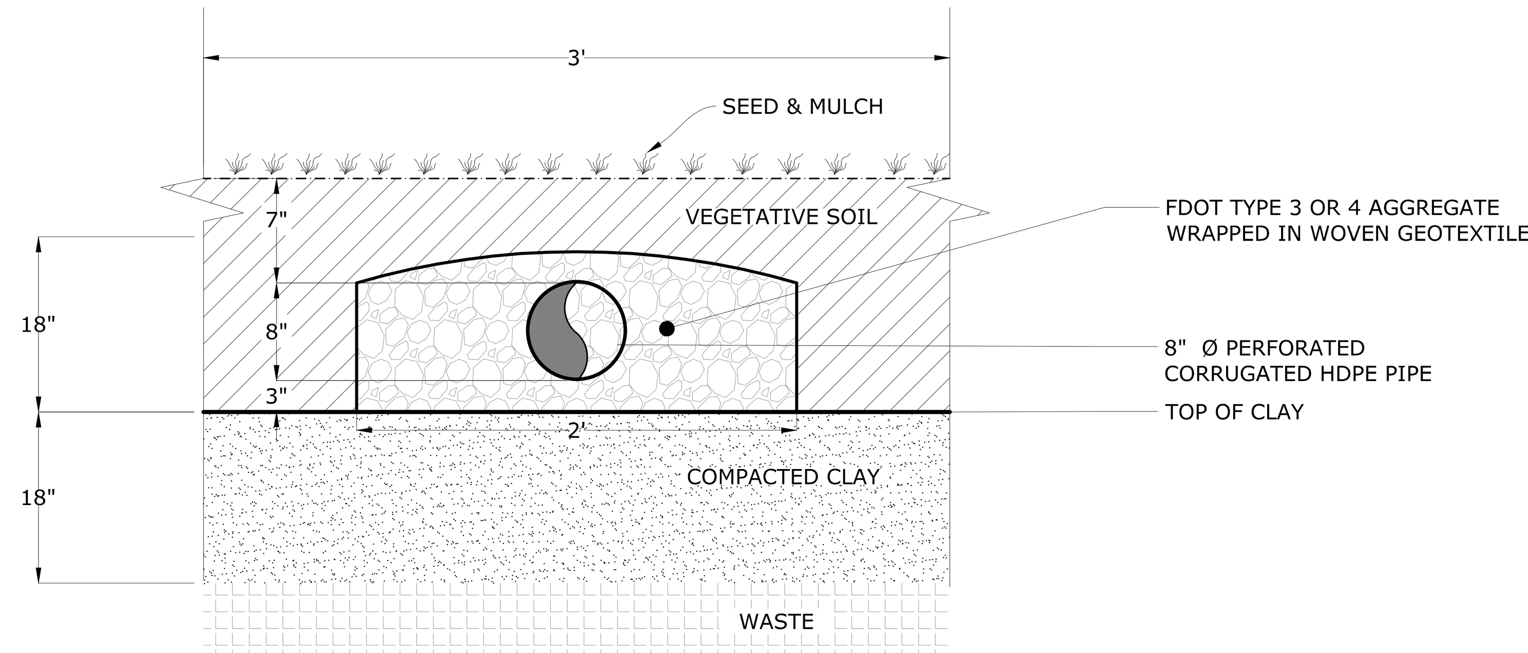
FPM = FILTER POINT MAT




A C3.01 TYPICAL DOWNCHUTE CROSS SECTION

SCALE: N.T.S.

VEGETATIVE SOIL




NOTES:
1. INSTALL PERFORATED TERRACE UNDERDRAIN (CONTINUOUS) EITHER SIDE OF DOWNCHUTE.

6 C3.01 TYPICAL TERRACE UNDERDRAIN COLLECTION PIPE DETAIL

SCALE: N.T.S.

C:\Civil 3D Projects\02000-217-17_03\CADD\Sheet_List\C4.00.dwg PLOT DATE 4/23/2021 11:41 AM BY MAF

| NO. | DATE | REVISION DESCRIPTION | BY |
|---|---|---|---|
| | | | |

Locklear & Associates
4140 NW 37th Place, Suite A
Gainesville, Florida 32606
Phone: 352.672.6867 Fax: 352.692.5390
Certificate of Authorization No. 30066

PROJECT TITLE:
PERMIT PLANS
ENTERPRISE ROAD CLASS III
RECYCLING & DISPOSAL FACILITY
PERMIT MODIFICATION-VERTICAL EXPANSION
DADE CITY, PASCO COUNTY, FLORIDA

LISA J. BAKER LICENSE No. 74652 STATE OF FLORIDA PROFESSIONAL ENGINEER

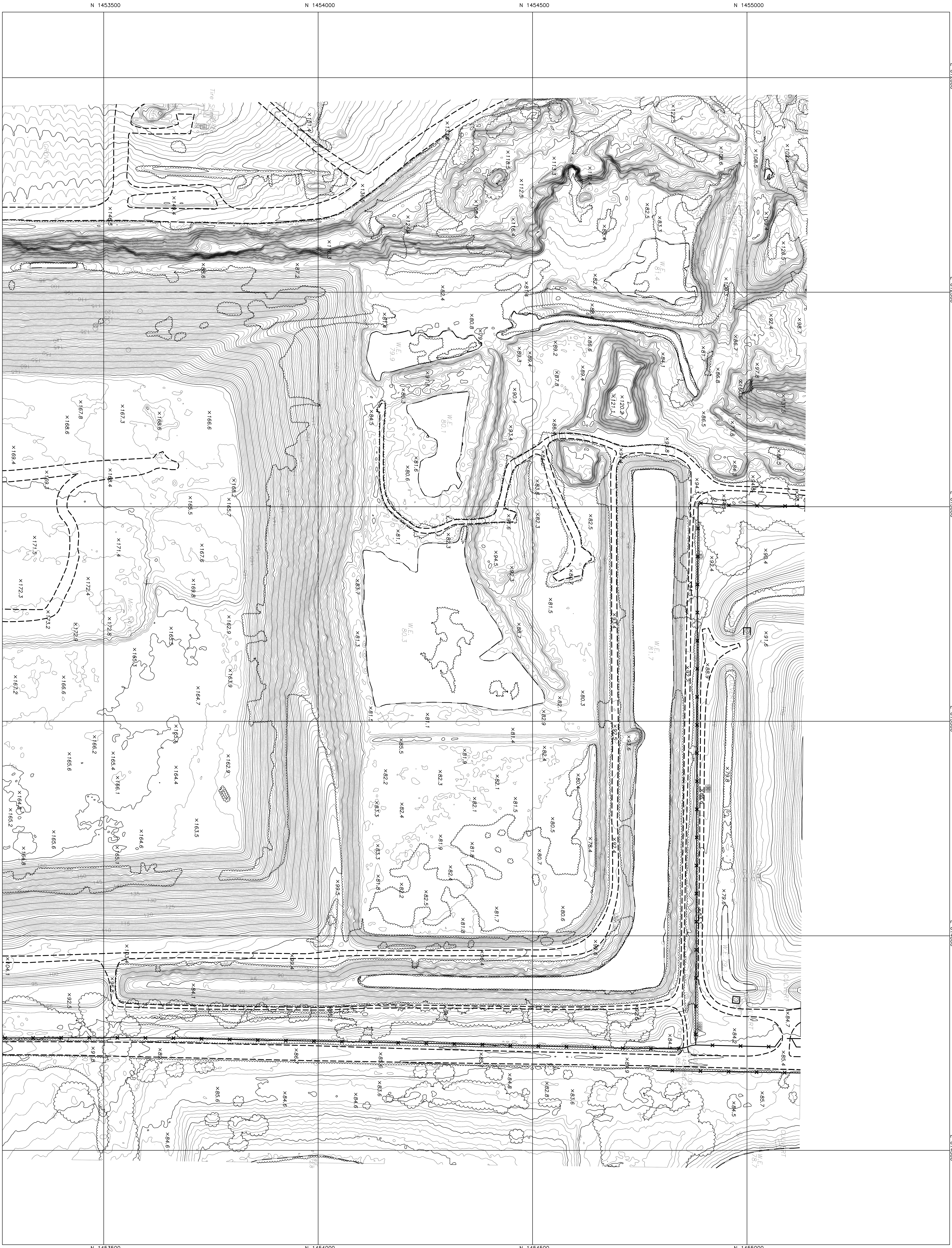
Digitally signed by Lisa J Baker
DN: cn=Lisa J Baker, o=Locklear & Associates, Inc., ou, email=lisa@locklearconsulting.com, c=US
Date: 2021.07.02 08:04:59 -04'00'

DESIGNED BY: LJB
DRAWN BY: MAF
APPROVED BY: LJB

SHEET TITLE:
CLOSURE DETAILS

PROJECT NO.: 02000-217-17_03
SCALE: AS SHOWN
DATE: SEPTEMBER 2020
DRAWING: C3.01

REVIEW ONLY-NOT FOR CONSTRUCTION




## SURVEYOR's NOTES:

1.) North, the grid, and the coordinates shown hereon are referenced to the West Zone of the Florida State Plane Coordinate System, NAD 83, 1990 adjustment

2.) Elevations are to National Geodetic Vertical Datum of 1929.

3.) This topographic survey was prepared using photogrammetric and LiDAR methods. See the attached report for map accuracy and surveyor's signature and seal. This map is limited to those features visible on aerial imagery.

(THESE FEATURES ARE REPRESENTED BY SYMBOLS NOT TO SCALE)

- CONTROL
- PT# TARGET NUMBER
- N NORTHING
- E EASTING
- EL ELEVATION
- UTILITY POLE
- LIGHT POLE
- TRAFFIC LIGHT
- SIGN
- POST
- FLAG
- MAIL BOX
- GUYWIRE
- CATCH BASIN
- VALVE
- ELECTRICAL
- AIR CONDITIONER
- MISCELLANEOUS SYMBOL
- CULVERT
- MANHOLE
- HYDRANT
- TREE
- PALM
- SHRUB

## LEGEND:

(THESE FEATURES ARE TO SCALE)

- CURB
- PAVED ROAD
- CONCRETE SURFACE
- UNPAVED ROAD
- FENCE
- GUARDRAIL
- WALL
- RAILROAD
- STRUCTURE
- TREE LINE
- SHRUB LINE
- PIPELINE
- RECREATION
- EDGE OF GROVE
- EDGE OF WATER

(THESE INFORMATIVE LABELS ARE NOT SCALE DEPENDENT)

- W.E. WATER ELEVATION
- × 120.1 SPOT ELEVATION
- MISC MISCELLANEOUS

1
2

NORTH

GRAPHIC SCALE

100 0 50 100 200 400

( IN FEET )
1 inch = 100 ft.

*ACCURACY STATEMENT:* The following stated plus or minus tolerances encompass a minimum of 90% of the difference between photogrammetrically measured values and ground truth of all well-identified features. Mapped features meet or exceed the Florida Standards of Practice.

*VERTICAL:* Contours have been measured to an estimated vertical positional accuracy of 0.5'. Spot elevations and well-identified features have been measured to an estimated vertical positional accuracy of 0.25'

*HORIZONTAL:* Well-identified features have been measured to an estimated horizontal positional accuracy of 1.66'.

*MAP PLOTTING:* This map is intended to be displayed at a scale of 1" = 50' (1:600) or smaller.

*MEASUREMENT METHODS:* This map is limited to those features visible on aerial imagery.

*LIMITATIONS:* This mapping should be used for preliminary design work only and should not replace an actual field survey where the required accuracy is greater than the accuracy stated in this report. No responsibility is assumed for areas outside the contracted scope.

9/17/18

T. JEFFREY YOUNG, PSM, CP — SURVEY DATE
FLORIDA REGISTRATION NO. 5440
PICKETT AND ASSOCIATES, INC.

| No. | DATE | APPROVED | REVISION |
|---|---|---|---|
| O.R. | 10/1/18 | TJY | ORIGINAL RELEASE |

TOPOGRAPHIC SURVEY

# ENTERPRISE ROAD LANDFILL

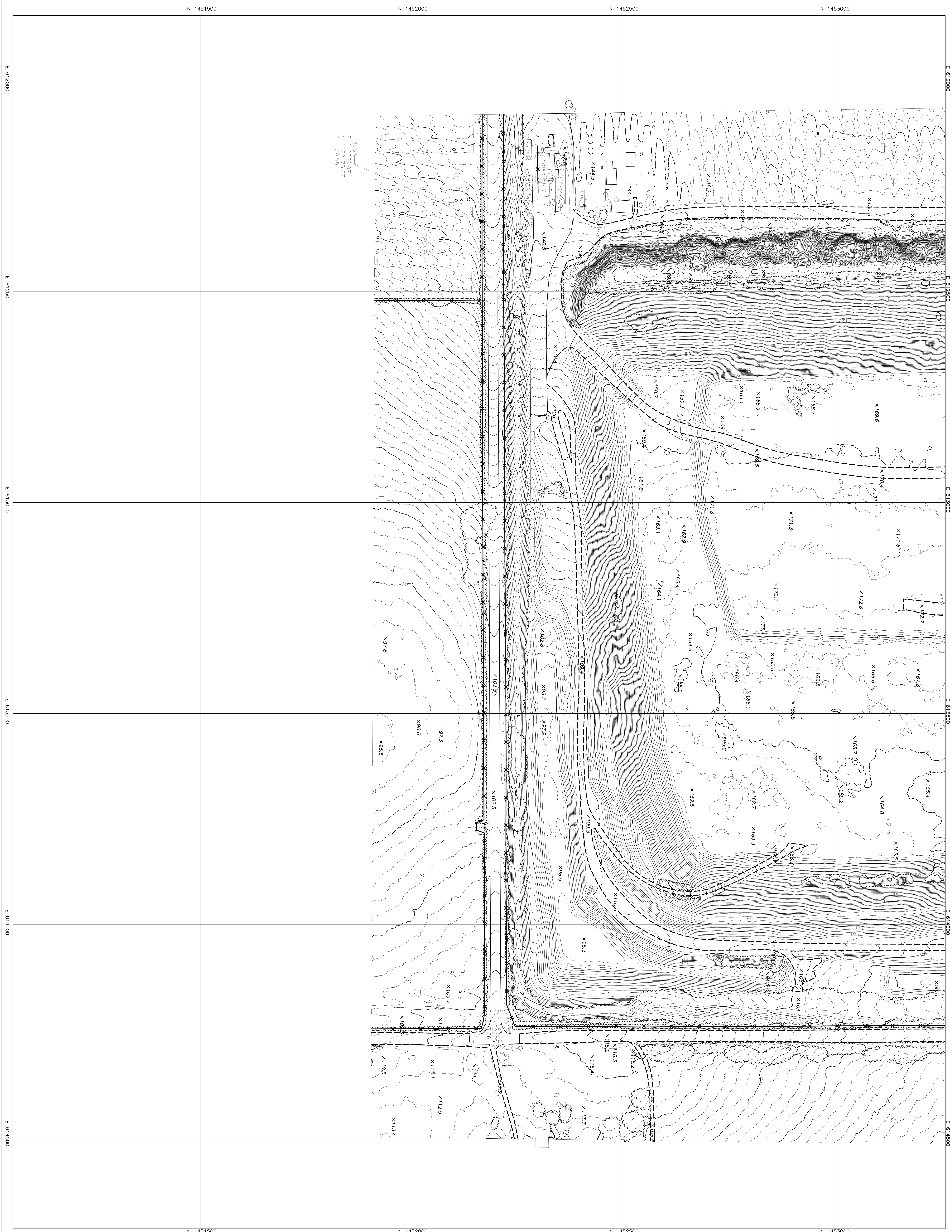
PREPARED FOR: ANGELO'S RECYCLED MATERIALS

PICKETT
SURVEYING • ENGINEERING

PICKETT AND ASSOCIATES, INC.
475 SOUTH FIRST AVENUE BARTOW, FLORIDA 33830
PHONE: (863)-533-9095
FAX: (863)-534-1464
LICENSED BUSINESS No. LB364

Horiz. Scale: 1" = 100'
Contour Interval: 1'
Edited by: RP
Compiled by: PL
Flight Date: 9/17/18
Drawing Name: 14094-9.DWG

PROJECT No. 14094-9
DRAWING No. LD-6398
No. 1 OF 2




## SURVEYOR's NOTES:

1.) North, the grid, and the coordinates shown hereon are referenced to the West Zone of the Florida State Plane Coordinate System, NAD 83, 1990 adjustment

2.) Elevations are to National Geodetic Vertical Datum of 1929.

3.) This topographic survey was prepared using photogrammetric and LiDAR methods. See the attached report for map accuracy and surveyor's signature and seal. This map is limited to those features visible on aerial imagery.

(THESE FEATURES ARE REPRESENTED BY SYMBOLS NOT TO SCALE)

| | |
|---|---|
| CONTROL | CATCH BASIN |
| PT# TARGET NUMBER | VALVE |
| N NORTHING | ELECTRICAL |
| E EASTING | AIR CONDITIONER |
| EL ELEVATION | MISCELLANEOUS SYMBOL |
| UTILITY POLE | CULVERT |
| LIGHT POLE | MANHOLE |
| TRAFFIC LIGHT | HYDRANT |
| SIGN | TREE |
| POST | PALM |
| FLAG | SHRUB |
| MAIL BOX | |
| GUYWIRE | |

## LEGEND:

(THESE FEATURES ARE TO SCALE)

CURB
PAVED ROAD
CONCRETE SURFACE
UNPAVED ROAD
FENCE
GUARDRAIL
WALL
RAILROAD
STRUCTURE
TREE LINE
SHRUB LINE

PIPELINE
RECREATION
EDGE OF GROVE
EDGE OF WATER

(THESE INFORMATIVE LABELS ARE NOT SCALE DEPENDENT)

W.E. WATER ELEVATION
× 120.1 SPOT ELEVATION
MISC MISCELLANEOUS

NORTH

1
2

GRAPHIC SCALE

100 0 50 100 200 400

( IN FEET )
1 inch = 100 ft.

ACCURACY STATEMENT: The following stated plus or minus tolerances encompass a minimum of 90% of the difference between photogrammetrically measured values and ground truth of all well-identified features. Mapped features meet or exceed the Florida Standards of Practice.

VERTICAL: Contours have been measured to an estimated vertical positional accuracy of 0.5'. Spot elevations and well-identified features have been measured to an estimated vertical positional accuracy of 0.25'

HORIZONTAL: Well-identified features have been measured to an estimated horizontal positional accuracy of 1.66'.

MAP PLOTTING: This map is intended to be displayed at a scale of 1" = 50' (1:600) or smaller.

MEASUREMENT METHODS: This map is limited to those features visible on aerial imagery.

LIMITATIONS: This mapping should be used for preliminary design work only and should not replace an actual field survey where the required accuracy is greater than the accuracy stated in this report. No responsibility is assumed for areas outside the contracted scope.

THIS MAP AND ATTACHED REPORT ARE NOT FULL AND COMPLETE WITHOUT THE OTHER AND ARE NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER

SEE PAGE 1 FOR THE SIGNATURE AND THE ORIGINAL RAISED SEAL

| No. | DATE | APPROVED | REVISION |
|---|---|---|---|
| O.R. | 10/1/18 | TJY | ORIGINAL RELEASE |

# TOPOGRAPHIC SURVEY

## ENTERPRISE ROAD LANDFILL

PREPARED FOR: ANGELO'S RECYCLED MATERIALS

PICKETT
SURVEYING • ENGINEERING
PICKETT AND ASSOCIATES, INC.
475 SOUTH FIRST AVENUE BARTOW, FLORIDA 33830
PHONE: (863)-533-9095
FAX: (863)-534-1464
LICENSED BUSINESS No. LB364

Horiz. Scale: 1" = 100'
Contour Interval: 1'
Edited by: RP
Compiled by: PL
Flight Date: 9/17/18
Drawing Name: 14094-9.DWG

PROJECT No. 14094-9
DRAWING No. LD-6398
No. 2 OF 2

# LEACHATE AERATION POND DESIGN DRAWINGS

## PREPARED FOR: ANGELO'S AGGREGATE MATERIALS, LTD.

### REVISION - A


AREA LOCATION MAP

DRAWING INDEX

| DRAWING NO. | DESCRIPTION |
|---|---|
| 1 | COVER SHEET |
| 2 | GENERAL NOTES |
| 3 | SITE LAYOUT |
| 4 | PROPOSED BOTTOM GRADES OF LEACHATE AERATION POND |
| 5 | LEACHATE AERATION POND BOTTOM GRADES CROSS-SECTIONS LAYOUT |
| 6 | LEACHATE AERATION POND SECTIONS |
| 7 | BOTTOM GRADES OF LEACHATE AERATION POND WITH DETAIL CALLOUTS |
| 8 | ANCHOR TRENCH EXTENTS LAYOUT |
| 9 | LEACHATE FORCEMAIN LAYOUT |
| 10 | DETAILS – 1 |
| 11 | DETAILS – 2 |
| 12 | DETAILS – 3 |
| 13 | DETAILS – 4 |
| 14 | DETAILS – 5 |
| 15 | DETAILS – 6 |

SITE LOCATION MAP

PREPARED FOR:

855 28th STREET SOUTH,
ST. PETERSBURG, FL 33712

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY PRADEEP JAIN, PE, ON 9/21/2020.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTROIC COPIES.

PRADEEP JAIN
LICENSE
No. 68657
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

FOR PERMITTING PURPOSE ONLY

SEPTEMBER 2020

PREPARED BY:

3720 NW 43rd ST. SUITE 103
GAINESVILLE, FL 32606-6091

## GENERAL NOTES

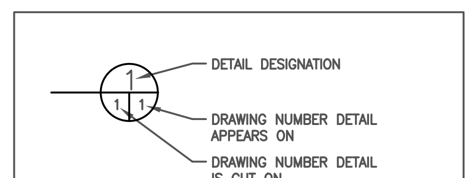
1. ALL ELEVATIONS ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929, UNLESS OTHERWISE NOTED.
2. THE TOPOGRAPHIC CONDITIONS ARE BASED ON A SURVEY CONDUCTED BY PICKETT AND ASSOCIATES, INC. ON SEPTEMBER 17, 2018.
3. THE ELEVATIONS, DIMENSIONS AND LOCATIONS OF EXISTING UTILITIES AND OTHER SITE INFRASTRUCTURE ARE SHOWN BASED ON THE BEST INFORMATION AVAILABLE AT THE TIME OF DRAWING PREPARATION. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE ELEVATIONS, DIMENSIONS AND LOCATIONS OF ALL EXISTING UTILITIES, INFRASTRUCTURE, AND OTHER FEATURES THAT MAY AFFECT THEIR WORK.
4. THE INFORMATION INCLUDED IN THESE DRAWINGS IS SOLELY PROVIDED TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING WORK. THE CONTRACTOR IS DIRECTED, PRIOR TO BIDDING, TO CONDUCT ANY NECESSARY INVESTIGATION TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED AND UPON WHICH THEIR BIDS SHALL BE BASED.
5. ACTUAL FIELD CONDITIONS MAY REQUIRE ALIGNMENT OR GRADE DEVIATIONS FROM THE PROPOSED CONSTRUCTION GRADES TO AVOID OBSTACLES, AS ORDERED BY THE ENGINEER. THE CONTRACTOR SHALL CONSTRUCT THE PROPOSED FACILITIES TO THE ORDERED DEVIATION WITHOUT AN INCREASE IN THE CONTRACT PRICE OR TIME.
6. THE CONTRACT SHALL BE AWARE THAT THERE MAY BE CONFLICTS WITH ONSITE UTILITIES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ALL EXISTING UTILITIES ON THIS PROJECT WITHOUT ANY INCREASE TO THE CONTRACT PRICE OR TIME.
7. ANY CONFLICTS BETWEEN THE DRAWINGS AND ACTUAL CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY UPON DISCOVERY.
8. THE CONTRACTOR SHALL REPLACE ALL INFRASTRUCTURE (I.E., INCLUDING, BUT NOT LIMITED TO PAVEMENT, SIGNS, STABILIZED EARTH) REMOVED AS PART OF CONSTRUCTION WITH THE SAME TYPE OF MATERIAL OR AS DIRECTED BY THE ENGINEER WITHOUT ANY INCREASE TO THE CONTRACT PRICE OR TIME.
9. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGMEN AND ANY OTHER DEVICES AND/OR PERSONNEL IN ACCORDANCE WITH OSHA, DTOP AND ANY OTHER APPLICABLE LOCAL, REGIONAL, AND FEDERAL REGULATIONS TO PROVIDE FOR SITE SAFETY DURING CONSTRUCTION.
10. WHEN NECESSARY TO DEFLECT A PIPE HORIZONTALLY OR VERTICALLY, THE PIPE SHALL NOT BE DEFLECTED MORE THAN 75% OF THE PIPE MANUFACTURER'S RECOMMENDED MAXIMUM DEFLECTION ANGLE. THE MINIMUM DEFLECTION RADIUS SHALL BE 25% MORE THAN THE MANUFACTURER'S RECOMMENDED MINIMUM RADIUS.
11. THE CONTRACTOR SHALL PREVENT DISTURBANCE TO AND/OR UNDERMINING OF STRUCTURES, SLABS, UTILITIES, PIPING, FACILITIES OR INFRASTRUCTURE ADJACENT TO THE PROJECT CONSTRUCTION AREA.
12. THE CONTRACTOR SHALL VERIFY ALL CLEARANCES BEFORE INITIATING CONSTRUCTION.
13. THE CONTRACTOR SHALL PROVIDE DEWATERING TO INSTALL/CONSTRUCT THE WORK PROPERLY. DEWATERING DISCHARGE SHALL BE CONDUCTED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, REGIONAL, AND FEDERAL REGULATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS TO CONDUCT DEWATERING AND SHALL EXECUTE DEWATERING WITHOUT AN INCREASE IN CONTRACT PRICE OR TIME.
14. ALL PIPING SHALL BE PROPERLY SUPPORTED.
15. ALL PERMANENT ONSITE FACILITIES (E.G., RESTROOMS, OFFICES) AND AREAS (E.G., STORAGE, PARKING) USED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE CLEANED BY THE CONTRACTOR PRIOR TO THE COMPLETION OF CONSTRUCTION.
16. THE CONTRACTOR IS RESPONSIBLE FOR PROPER HORIZONTAL AND VERTICAL ALIGNMENT OF THE CONSTRUCTED FACILITIES AND THE FINISHED GRADES. THE CONTRACTOR SHALL VERIFY TO THEIR OWN SATISFACTION THE ACCURACY OF ALL ONSITE SURVEY BENCHMARKS OR OTHER MONUMENTS PRIOR TO COMMENCING WORK.
17. THE CONTRACTOR SHALL PROVIDE A LICENSED LAND SURVEYOR TO ESTABLISH THE CONSTRUCTION SITE LAYOUT, PERFORM TOPOGRAPHIC SURVEYS, AND PERFORM ANY OTHER NECESSARY SURVEYING SERVICE.
18. THE CONTRACTOR SHALL PROTECT ALL GROUNDWATER MONITORING WELLS AND METHANE MONITORING PROBES FROM DAMAGE DURING CONSTRUCTION. ANY DAMAGED GROUNDWATER MONITORING WELL OR METHANE MONITORING PROBE SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. WELLS OR PROBES SHALL BE REPAIRED OR REPLACED WITH SIMILAR MATERIALS (AS APPROVED BY THE ENGINEER). THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IN THE EVEN OF ANY DAMAGE TO A GROUNDWATER MONITORING WELL OR METHANE MONITORING PROBE.
19. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE TERMS, CONDITIONS, AND REQUIREMENTS OF ALL PERMITS, ADMINISTRATIVE ORDERS, OR ANY OTHER GOVERNMENT DIRECTIVE RELATED TO THE SITE AND THIS CONSTRUCTION PROJECT.
20. THE CONTRACTOR SHALL NOT INTERFERE WITH FACILITY OPERATION. THE CONTRACTOR SHALL PROVIDE AT LEAST 2 DAYS (I.E., 48 HOURS) NOTICE IN ADVANCE OF ALL ACTIVITIES THAT MAY IMPACT FACILITY OPERATION (E.G., POWER OUTAGES, RESTRICTED ACCESS TO COVER MATERIAL STORAGE PILES).
21. BEFORE COMMENCING WORK, THE CONTRACTOR SHALL PROVIDE STORMWATER AND EROSION CONTROL PLANS TO CONTROL EROSION AND RUNOFF AND TO PREVENT PONDING. NO WATER PONDING SHALL BE ALLOWED. THE CONTRACTOR SHALL PREVENT EROSION AND SHALL BE RESPONSIBLE FOR CONDUCTING ALL WORK AND PROVIDING ALL PERSONNEL, EQUIPMENT, AND MATERIALS NECESSARY TO REPAIR ALL AREAS IMPACTED BY EROSION.
22. BEFORE COMMENCING WORK, THE CONTRACTOR SHALL PROVIDE A FUGITIVE DUST CONTROL PLAN. THE CONTRACTOR IS RESPONSIBLE FOR PREVENTING DUST EMISSIONS ASSOCIATED WITH CONSTRUCTION AND WORK AREAS IN EXCESS OF APPLICABLE AIR POLLUTION STANDARDS.
23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING THE INTRUSION OF LEACHATE, STORMWATER, OR SOLID WASTE FROM ENTERING OR IMPACTING CONSTRUCTION WORK AREAS. CONTROL DEVICES SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR IN ACCORDANCE WITH THE CONTRACT DOCUMENTS WITHOUT AN INCREASE IN THE CONTRACT PRICE OR TIME.
24. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROTECTING THE GEOMEMBRANE, GEONET, AND GEOTEXTILE FROM DAMAGE DURING THE ENTIRE DURATION OF THE PROJECT. DAMAGED MATERIALS WILL BE REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
25. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ENVIRONMENTAL PROTECTION OVER THE LIFE OF THE CONTRACT, INCLUDING THE WARRANTY PERIOD. ALL OF THE CONTRACTOR'S OPERATIONS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE LOCAL, REGIONAL, AND FEDERAL REGULATIONS INCLUDING (BUT NOT LIMITED TO) THOSE PERTAINING TO HAZARDOUS WASTE, WATER, AIR, LEACHATE, NOISE POLLUTION, OTHER SOLID WASTES, AND OILY SUBSTANCES.
26. NOT ALL FLANGED AND MECHANICAL PIPE JOINT CONNECTIONS ARE SHOWN IN THE DRAWINGS.
27. ALL ROAD CROSSING SHALL BE CONSTRUCTED OUTSIDE OF LANDFILL OPERATING HOURS. ALL ROADS SHALL BE AVAILABLE FOR LANDFILL OPERATIONS DURING LANDFILL OPERATING HOURS.
28. THE CONTRACTOR SHALL PREVENT THE OFFSITE TRACKING OF SOIL, SEDIMENT, OR WASTE.

## HEALTH AND SAFETY NOTES

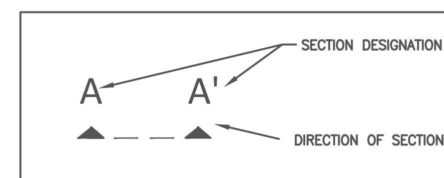
1. THIS PROJECT INVOLVES WORK AROUND A LANDFILL. THE CONTRACTOR SHALL PROTECT ALL PERSONNEL FROM HAZARDS ASSOCIATED WITH WORKING AT A LANDFILL. HAZARDS INCLUDE (BUT ARE NOT LIMITED TO) POTENTIAL EXPOSURE TO LEACHATE; LANDFILL GAS; WATERBORNE, AIRBORNE AND SOLID PHASE MICROBIOLOGICAL CONTAMINANTS; SHARP OBJECTS; AND DANGEROUS CHEMICALS. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ASSURE WORKER HEALTH AND SAFETY IN ACCORDANCE WITH OSHA REGULATIONS INCLUDING 29 CFR 1910 AND 1926 AND ANY OTHER APPLICABLE REGULATIONS.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY WITH OSHA EXCAVATION SAFETY STANDARDS AND ANY OTHER APPLICABLE TRENCH REGULATIONS.
3. A SITE-SPECIFIC HEALTH AND SAFETY PLAN SHALL BE PREPARED BY THE CONTRACTOR PRIOR TO WORK COMMENCEMENT.

## ABBREVIATIONS

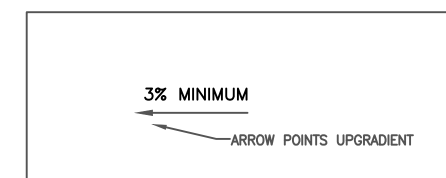
| | |
|---|---|
| APPROX. | APPROXIMATE, APPROXIMATELY |
| ELEV. | ELEVATION |
| DIA. | DIAMETER |
| FT | FEET |
| HDPE | HIGH DENSITY POLYETHYLENE |
| INV. | INVERT |
| LLDPE | LINEAR LOW DENSITY POLYETHYLENE |
| NGVD | NATIONAL GEODETIC VERTICAL DATUM |
| NTS | NOT TO SCALE |
| OSHA | OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION |
| PVC | POLYVINYL CHLORIDE |
| SDR | STANDARD DIMENSION RATIO |
| SS | STAINLESS STEEL |



DETAIL DESIGNATION



SECTION DESIGNATION



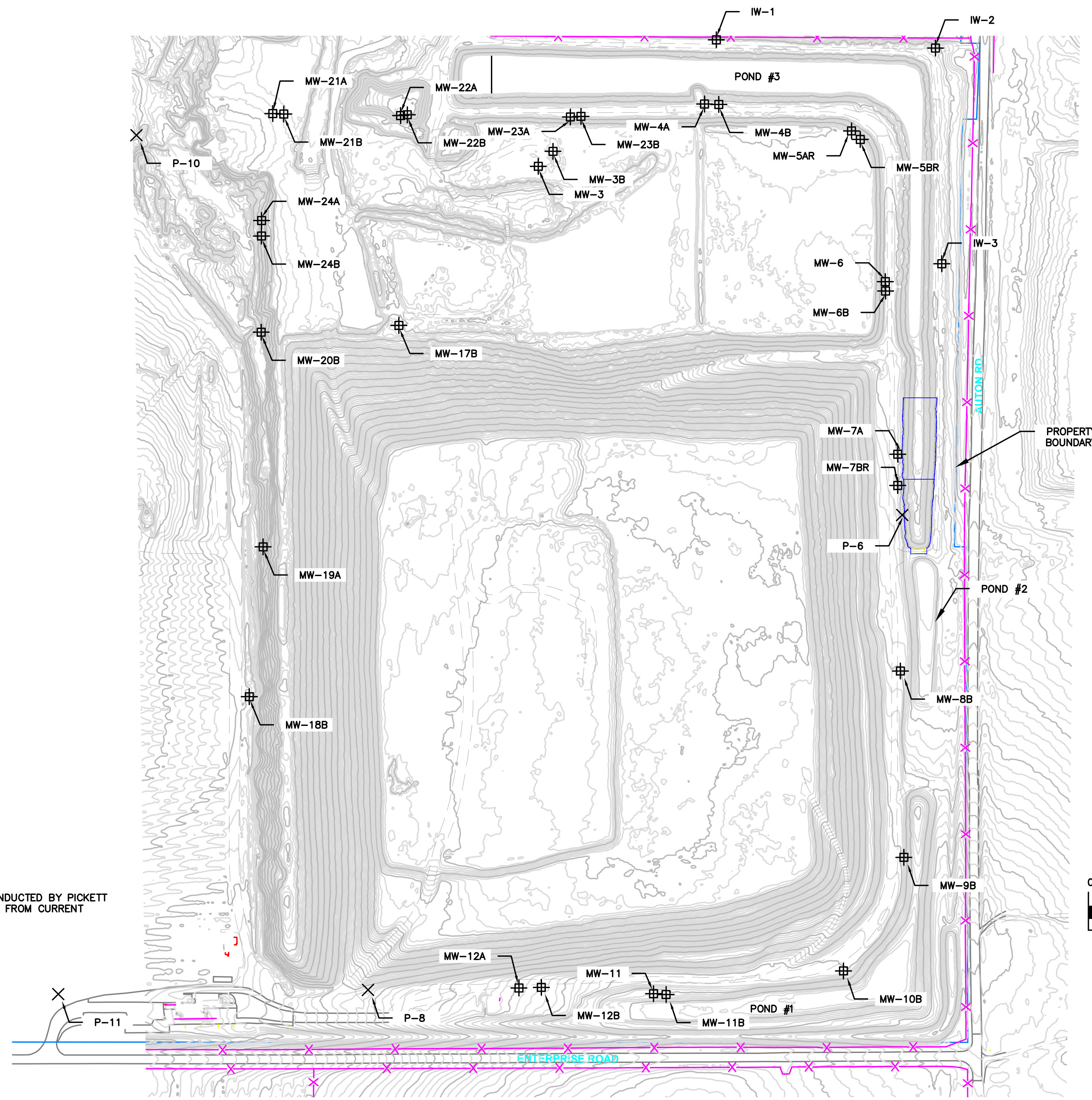
SLOPE INDICTOR

11/19/2020 9:58:29 AM

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| LTR | DATE | REVISIONS | BY | APPRD. | DESIGNED AK, SS<br>DRAWN AK<br>CHECKED PJ | INNOVATIVE WASTE CONSULTING SERVICES, LLC<br>3720 NW 43rd ST. SUITE 103<br>GAINESVILLE, FL 32606-6091<br>PHONE: (352) 331-4828<br>FAX: (352) 331-4842 | ANGELO'S AGGREGATE MATERIALS, LTD.<br>855 28th STREET SOUTH,<br>ST. PETERSBURG, FL 32606-6091<br>PHONE: (727) 581-1544<br>FAX: (727) 586-5676 | THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY PRADEEP JAIN, PE, ON 9/21/2020. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTROIC COPIES.<br>PRADEEP JAIN LICENSE No. 68657 STATE OF FLORIDA PROFESSIONAL ENGINEER | LEACHATE AERATION POND DESIGN | GENERAL NOTES |

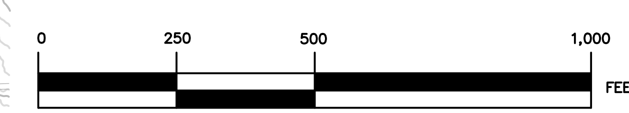
DATE: SEPTEMBER 2020
SCALE: AS SHOWN
DWG No: 2 OF 15

C:\Civil 3D Projects\02000-272-19\CADD_Incoming\CADD Files\PRADEEP\Angelo's – Leachate Aeration Pond Design Drawings – Revision A.dwg




LEGEND

| | |
|---|---|
| MW-8B | GROUNDWATER MONITORING WELL |
| P-2 | PIEZOMETRIC WELL |
| | UNPAVED ROAD |




GRAPHIC SCALE

NOTES

1. THE TOPOGRAPHIB CONDITIONS ARE BASED ON A SURVEY CONDUCTED BY PICKETT AND ASSOCIATES, INC. ON SEPTEMBER 17, 2018 AND MAY VARY FROM CURRENT CONDITION.

11/19/2020 9:58:29 AM

| LTR | DATE | REVISIONS | BY | APPRD. |
|---|---|---|---|---|

DESIGNED AK, SS
DRAWN AK
CHECKED PJ

INNOVATIVE WASTE CONSULTING SERVICES, LLC
3720 NW 43rd ST. SUITE 103
GAINESVILLE, FL 32606-6091
PHONE: (352) 331-4828
FAX: (352) 331-4842

ANGELO'S AGGREGATE MATERIALS, LTD.
855 28th STREET SOUTH,
ST. PETERSBURG, FL 32606-6091
PHONE: (727) 581-1544
FAX: (727) 586-5676

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY PRADEEP JAIN, PE, ON 9/21/2020.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTROIC COPIES.

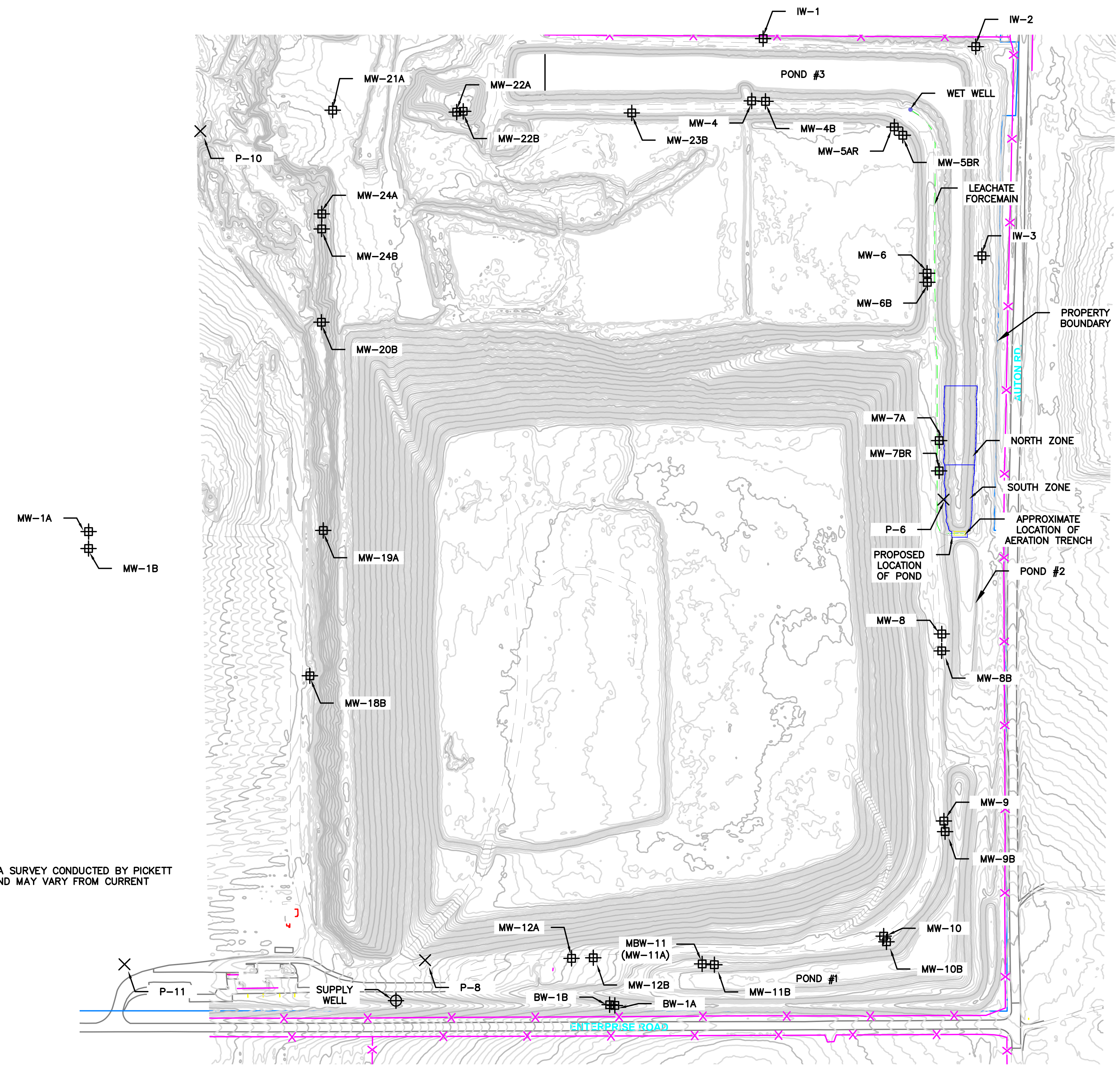
PRADEEP JAIN
LICENSE
No. 68657
STATE OF FLORIDA
PROFESSIONAL ENGINEER

LEACHATE AERATION POND DESIGN

SITE LAYOUT

DATE: SEPTEMBER 2020
SCALE: AS SHOWN
DWG No: 3 OF 15

C:\Civil 3D Projects\02000-272-19\CADD_Incoming\CADD Files\PRADEEP\Angelo's – Leachate Aeration Pond Design Drawings – Revision A.dwg

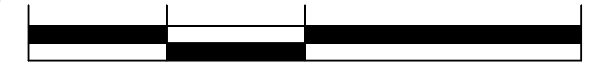






## LEGEND

| | |
|---|---|
| MW-8B | GROUNDWATER MONITORING WELL |
| P-2 | PIEZOMETRIC WELL |
| SUPPLY WELL | SUPPLY WELL |
| | UNPAVED ROAD |



GRAPHIC SCALE

NOTES

1. THE TOPOGRAPHIC CONDITIONS ARE BASED ON A SURVEY CONDUCTED BY PICKETT AND ASSOCIATES, INC. ON SEPTEMBER 17, 2018 AND MAY VARY FROM CURRENT CONDITION.

11/19/2020 9:58:29 AM

| LTR | DATE | REVISIONS | BY | APPRD. |
|---|---|---|---|---|
| A | NOVEMBER 2020 | DISPLAYING LOCATION OF WET WELL, LEACHATE FORCEMAIN, AND EXTENTS OF AERATION TRENCH, SOUTH ZONE, AND NORTH ZONE | AK | PJ |

DESIGNED AK, SS
DRAWN AK
CHECKED PJ


INNOVATIVE WASTE CONSULTING SERVICES, LLC
3720 NW 43rd ST. SUITE 103
GAINESVILLE, FL 32606-6091
PHONE: (352) 331-4828
FAX: (352) 331-4842


ANGELO'S AGGREGATE MATERIALS, LTD.
855 28th STREET SOUTH,
ST. PETERSBURG, FL 32606-6091
PHONE: (727) 581-1544
FAX: (727) 586-5676

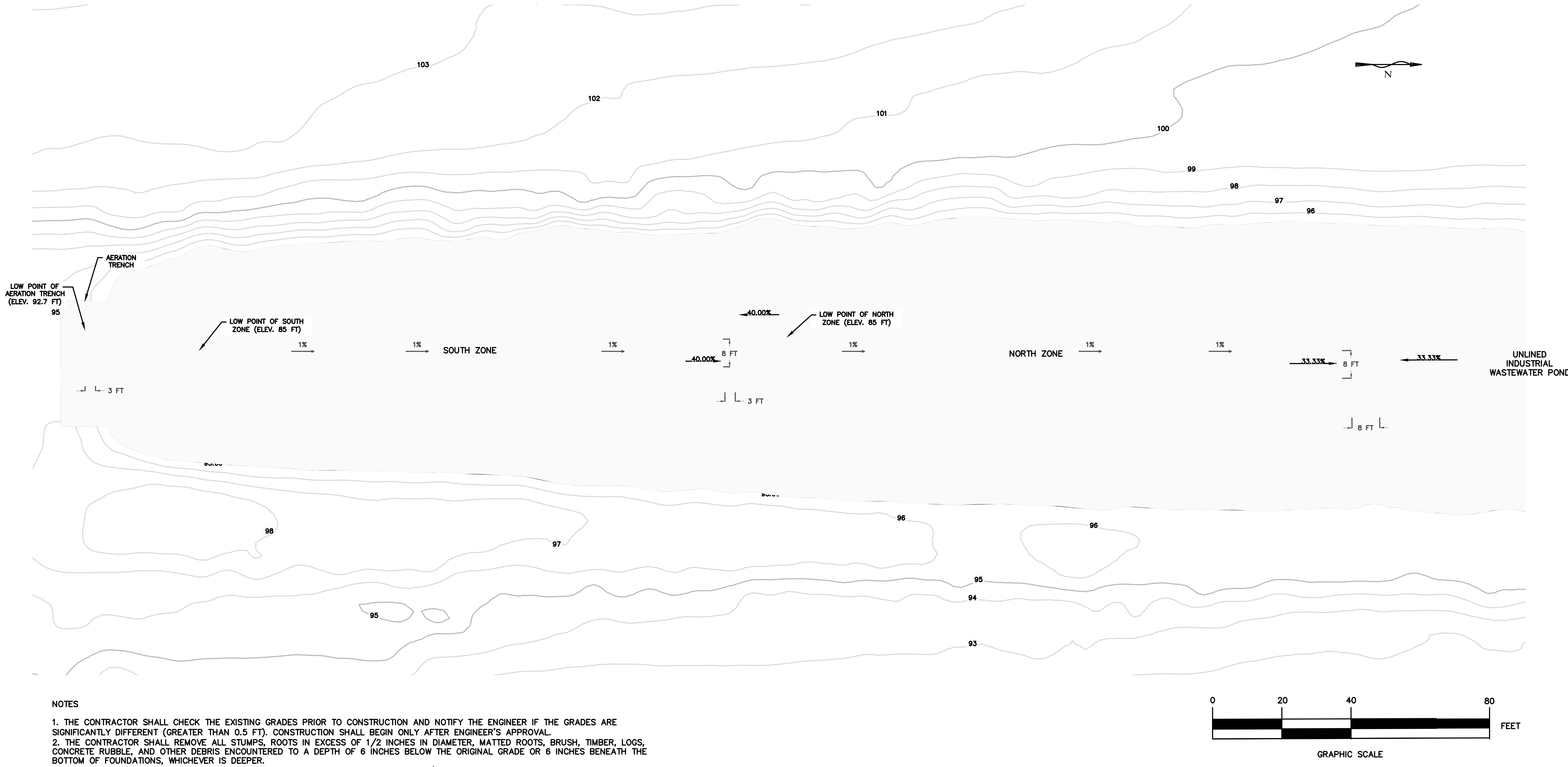
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY PRADEEP JAIN, PE, ON 9/21/2020. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PRADEEP JAIN LICENSE No. 68657 STATE OF FLORIDA PROFESSIONAL ENGINEER

LEACHATE AERATION POND DESIGN

SITE LAYOUT

DATE: SEPTEMBER 2020
SCALE: AS SHOWN
DWG No: 3 OF 15




NOTES

1. THE CONTRACTOR SHALL CHECK THE EXISTING GRADES PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IF THE GRADES ARE SIGNIFICANTLY DIFFERENT (GREATER THAN 0.5 FT). CONSTRUCTION SHALL BEGIN ONLY AFTER ENGINEER'S APPROVAL.
2. THE CONTRACTOR SHALL REMOVE ALL STUMPS, ROOTS IN EXCESS OF 1/2 INCHES IN DIAMETER, MATTED ROOTS, BRUSH, TIMBER, LOGS, CONCRETE RUBBLE, AND OTHER DEBRIS ENCOUNTERED TO A DEPTH OF 6 INCHES BELOW THE ORIGINAL GRADE OR 6 INCHES BENEATH THE BOTTOM OF FOUNDATIONS, WHICHEVER IS DEEPER.
3. THE COMPACTED GRADE SHALL BE FREE FROM ANY SHARP DEBRIS GREATER THAN 1/2 INCH IN DIAMETER THAT MAY HAVE POTENTIAL TO DAMAGE THE GEOMEMBRANE.
4. WATER SHALL NOT BE PERMITTED IN THE POND OR THE TRENCH AREA DURING CONSTRUCTION.
5. THE PROPOSED GRADES MAY BE CHANGED TO ACCOMMODATE THE FIELD CONDITIONS AND THE FUTURE MAINTENANCE ISSUES.

11/19/2020 9:58:29 AM

| LTR | DATE | REVISIONS | BY | APPRD. |
|---|---|---|---|---|
| | | | | |

DESIGNED AK, SS
DRAWN AK
CHECKED PJ

INNOVATIVE WASTE CONSULTING SERVICES, LLC
3720 NW 43rd ST. SUITE 103
GAINESVILLE, FL 32606-6091
PHONE: (352) 331-4828
FAX: (352) 331-4842

ANGELO'S AGGREGATE MATERIALS, LTD.
855 28th STREET SOUTH,
ST. PETERSBURG, FL 32606-6091
PHONE: (727) 581-1544
FAX: (727) 586-5676

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY PRADEEP JAIN, PE, ON 9/21/2020.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTROIC COPIES.

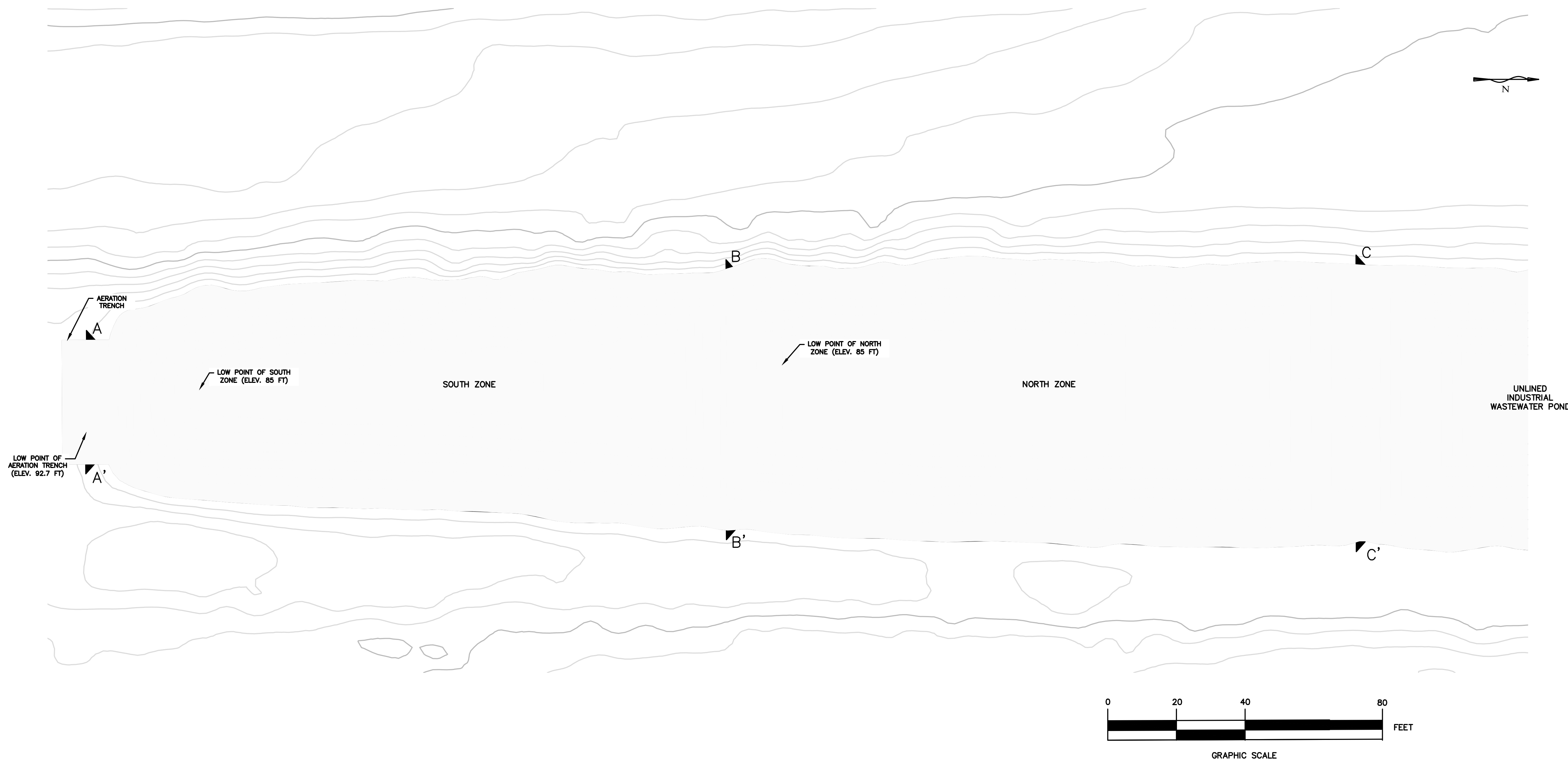
PRADEEP JAIN LICENSE No. 68657 STATE OF FLORIDA PROFESSIONAL ENGINEER

LEACHATE AERATION POND DESIGN

PROPOSED BOTTOM GRADES OF LEACHATE AERATION POND

DATE: SEPTEMBER 2020
SCALE: AS SHOWN
DWG No: 4 OF 15

C:\Civil 3D Projects\02000-272-19\CADD_Incoming\CADD Files\PRADEEP\Angelo's – Leachate Aeration Pond Design Drawings – Revision A.dwg




11/19/2020 9:58:29 AM

| LTR | DATE | REVISIONS | BY | APPRD. |
|---|---|---|---|---|

DESIGNED AK, SS
DRAWN AK
CHECKED PJ


INNOVATIVE WASTE CONSULTING SERVICES, LLC
3720 NW 43rd ST. SUITE 103
GAINESVILLE, FL 32606-6091
PHONE: (352) 331-4828
FAX: (352) 331-4842


ANGELO'S AGGREGATE MATERIALS, LTD.
855 28th STREET SOUTH,
ST. PETERSBURG, FL 32606-6091
PHONE: (727) 581-1544
FAX: (727) 586-5676

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY PRADEEP JAIN, PE, ON 9/21/2020.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTROIC COPIES.

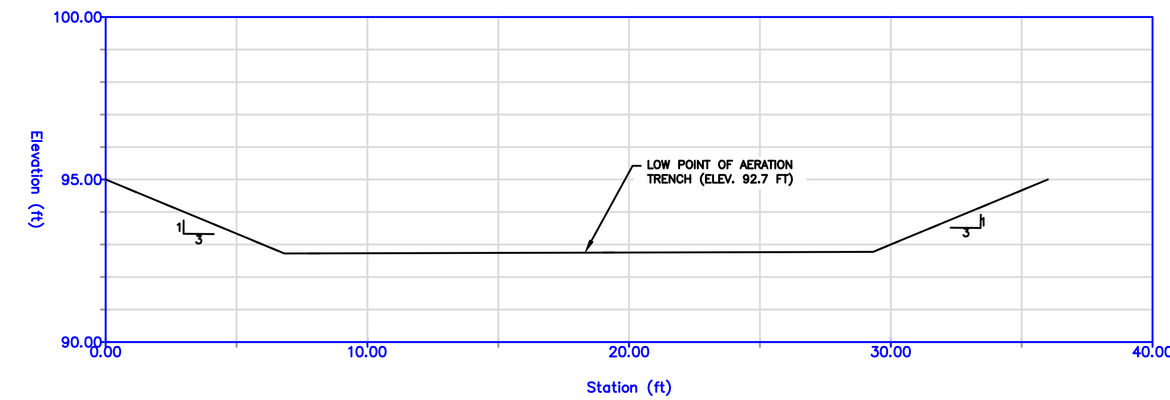
PRADEEP JAIN
LICENSE
No. 68657
STATE OF FLORIDA
PROFESSIONAL ENGINEER

LEACHATE AERATION POND DESIGN

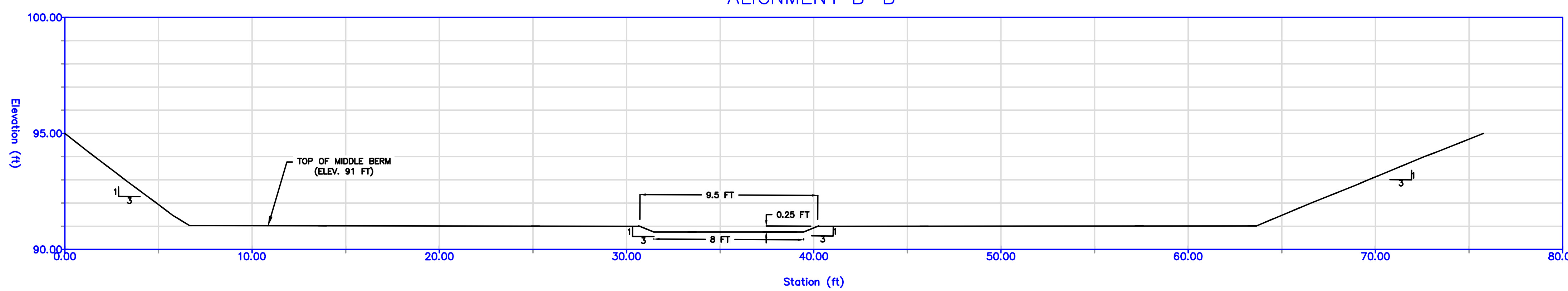
LEACHATE AERATION POND BOTTOM GRADES CROSS-SECTIONS LAYOUT

DATE: SEPTEMBER 2020
SCALE: AS SHOWN
DWG No: 5 OF 15

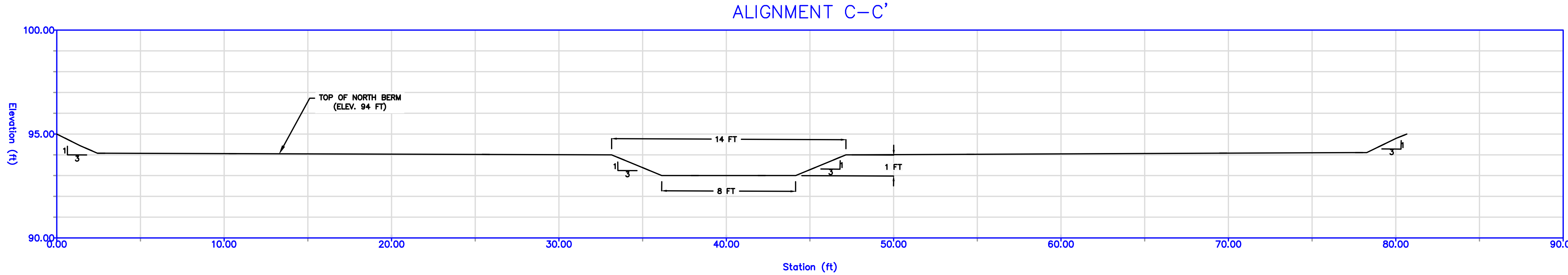
## ALIGNMENT A–A'




## ALIGNMENT B–B'




## ALIGNMENT C–C'




11/19/2020 9:58:29 AM

| LTR | DATE | REVISIONS | BY | APPRD. |
|---|---|---|---|---|

DESIGNED AK, SS
DRAWN AK
CHECKED PJ

INNOVATIVE WASTE CONSULTING SERVICES, LLC
3720 NW 43rd ST. SUITE 103
GAINESVILLE, FL 32606-6091
PHONE: (352) 331-4828
FAX: (352) 331-4842

ANGELO'S AGGREGATE MATERIALS, LTD.
855 28th STREET SOUTH,
ST. PETERSBURG, FL 32606-6091
PHONE: (727) 581-1544
FAX: (727) 586-5676

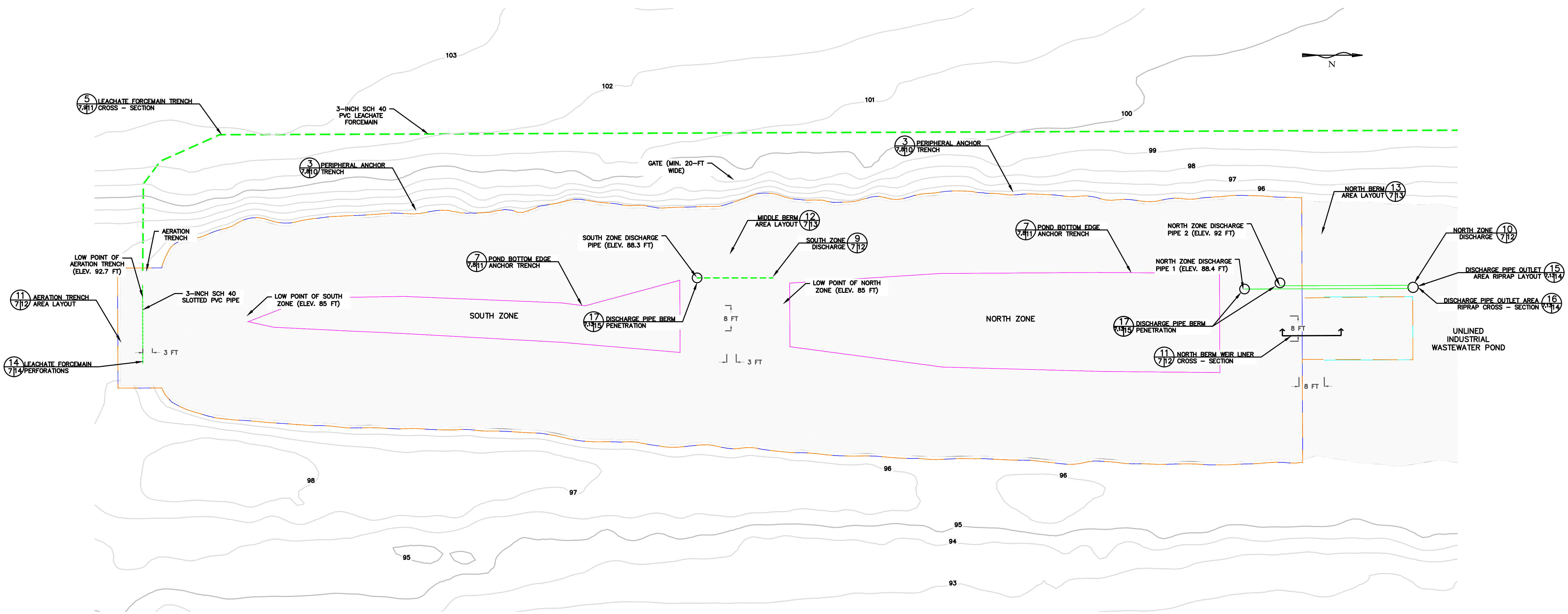
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY PRADEEP JAIN, PE, ON 9/21/2020.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PRADEEP JAIN LICENSE No. 68657 STATE OF FLORIDA PROFESSIONAL ENGINEER

LEACHATE AERATION POND DESIGN

LEACHATE AERATION POND CROSS-SECTIONS

DATE: SEPTEMBER 2020
SCALE: AS SHOWN
DWG No: 6 OF 15




## LEGEND

- ANCHOR TRENCH EXTENTS – PERIPHERAL BERM
- ANCHOR TRENCH EXTENT – POND BOTTOM
- ANCHOR TRENCH EXTENTS – NORTH BERM WEIR
- LEACHATE FORCEMIAN
- SLOTTED SECTION OF LEACHATE FORCEMAIN

0 20 40 80 FEET

GRAPHIC SCALE

| | | | | | | |
|---|---|---|---|---|---|---|
| LTR | DATE | REVISIONS | BY | APPRD. | DESIGNED AK, SS<br>DRAWN AK<br>CHECKED PJ | |

INNOVATIVE WASTE CONSULTING SERVICES, LLC
3720 NW 43rd ST. SUITE 103
GAINESVILLE, FL 32606–6091
PHONE: (352) 331–4828
FAX: (352) 331–4842

ANGELO'S AGGREGATE MATERIALS, LTD.
855 28th STREET SOUTH,
ST. PETERSBURG, FL 32606–6091
PHONE: (727) 581–1544
FAX: (727) 586–5676

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY PRADEEP JAIN, PE, ON 9/21/2020.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTROIC COPIES.

PRADEEP JAIN LICENSE No. 68657 STATE OF FLORIDA PROFESSIONAL ENGINEER

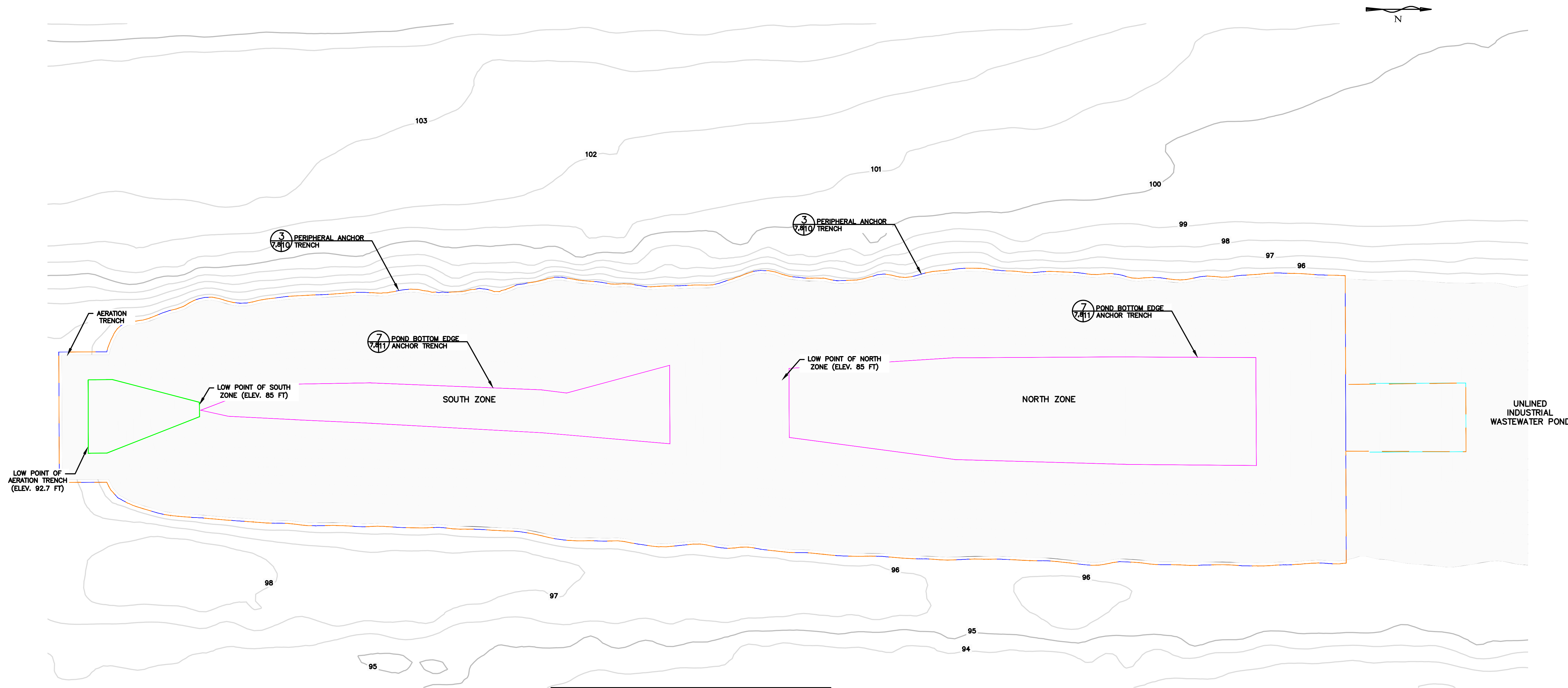
LEACHATE AERATION POND DESIGN

BOTTOM GRADES OF LEACHATE AERATION POND WITH DETAIL CALLOUTS

DATE: SEPTEMBER 2020
SCALE: AS SHOWN
DWG No: 7 OF 15

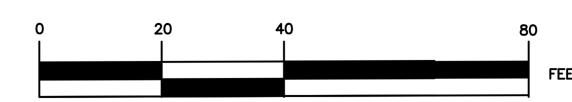
11/19/2020 9:58:29 AM

C:\Civil 3D Projects\02000-272-19\CADD_Incoming\CADD Files\PRADEEP\Angelo's – Leachate Aeration Pond Design Drawings – Revision A.dwg




## LEGEND

- ANCHOR TRENCH EXTENTS – PERIPHERAL BERM
- ANCHOR TRENCH EXTENT – POND BOTTOM
- ANCHOR TRENCH EXTENTS – NORTH BERM WEIR
- EXTENT OF GEOMEMBRANE LINER
- EXTENT OF GEONET




GRAPHIC SCALE

11/19/2020 9:58:29 AM

| LTR | DATE | REVISIONS | BY | APPRD. |
|---|---|---|---|---|

DESIGNED AK, SS
DRAWN AK
CHECKED PJ

INNOVATIVE WASTE CONSULTING SERVICES, LLC
3720 NW 43rd ST. SUITE 103
GAINESVILLE, FL 32606-6091
PHONE: (352) 331-4828
FAX: (352) 331-4842

ANGELO'S AGGREGATE MATERIALS, LTD.
855 28th STREET SOUTH,
ST. PETERSBURG, FL 32606-6091
PHONE: (727) 581-1544
FAX: (727) 586-5676

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY PRADEEP JAIN, PE, ON 9/21/2020.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PRADEEP JAIN LICENSE No. 68657 STATE OF FLORIDA PROFESSIONAL ENGINEER

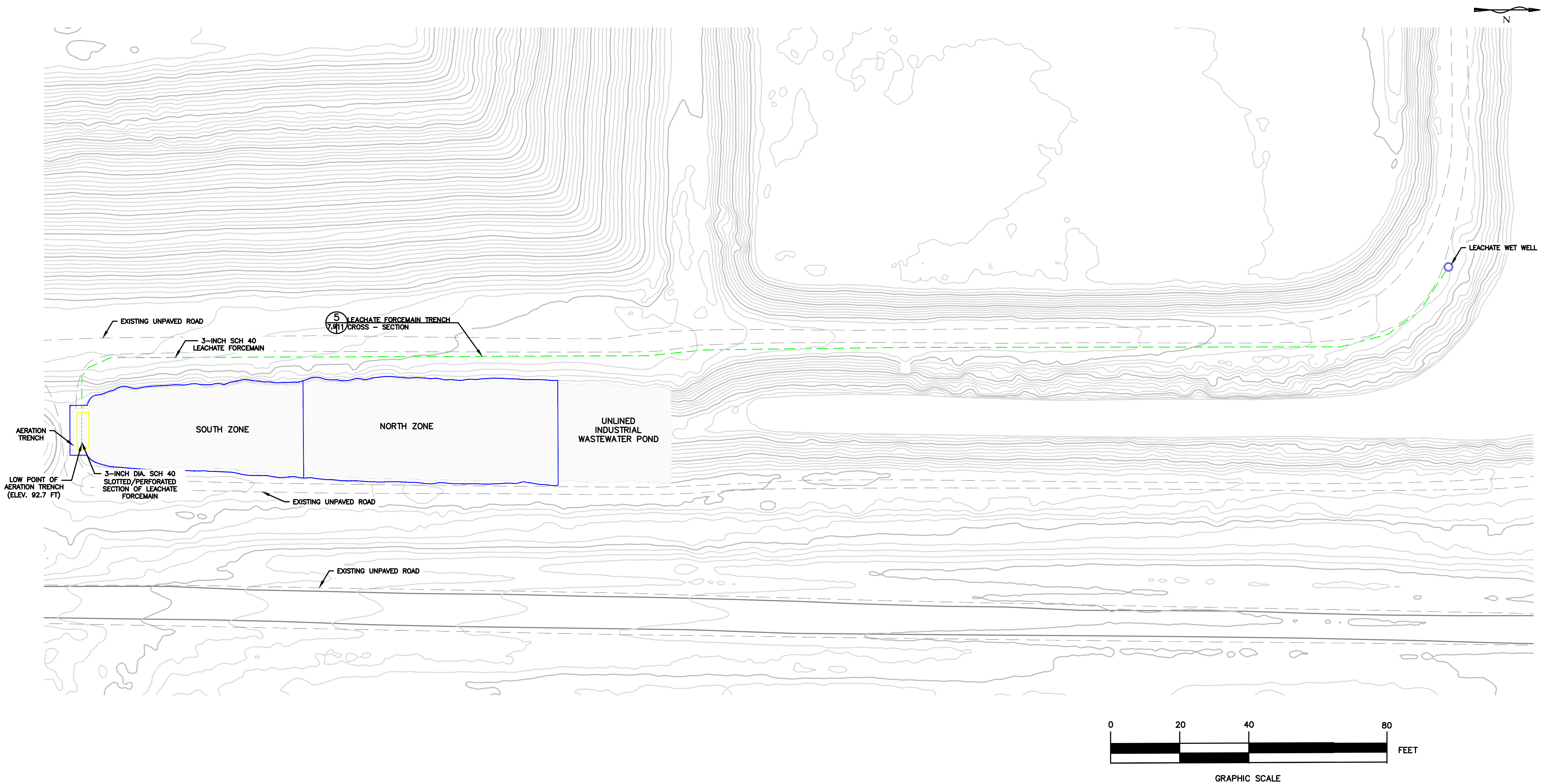
LEACHATE AERATION POND DESIGN

ANCHOR TRENCH EXTENTS LAYOUT

DATE: SEPTEMBER 2020
SCALE: AS SHOWN
DWG No: 8 OF 15

C:\Civil 3D Projects\02000-272-19\CADD_Incoming\CADD Files\PRADEEP\Angelo's – Leachate Aeration Pond Design Drawings – Revision A.dwg

11/19/2020 9:58:29 AM




| LTR | DATE | REVISIONS | BY | APPRD. |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

DESIGNED AK, SS

DRAWN SS

CHECKED PJ

INNOVATIVE WASTE CONSULTING SERVICES, LLC
3720 NW 43rd ST. SUITE 103
GAINESVILLE, FL 32606-6091
PHONE: (352) 331-4828
FAX: (352) 331-4842

ANGELO'S AGGREGATE MATERIALS, LTD.
855 28th STREET SOUTH,
ST. PETERSBURG, FL 32606-6091
PHONE: (727) 581-1544
FAX: (727) 586-5676

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY PRADEEP JAIN, PE, ON 9/21/2020.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTROIC COPIES.

PRADEEP JAIN LICENSE No. 68657 STATE OF FLORIDA PROFESSIONAL ENGINEER

LEACHATE AERATION POND DESIGN

LEACHATE FORCEMAIN LAYOUT

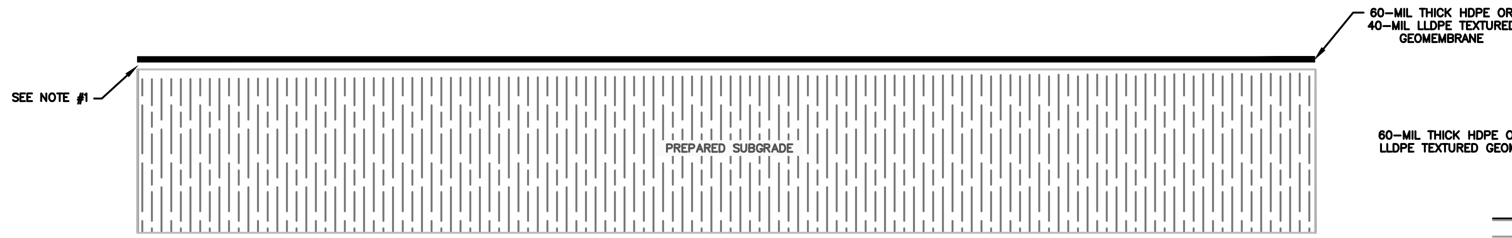
DATE: SEPTEMBER 2020

SCALE: AS SHOWN

DWG No: 9 OF 15

C:\Civil 3D Projects\02000-272-19\CADD_Incoming\CADD Files\PRADEEP\Angelo's – Leachate Aeration Pond Design Drawings – Revision A.dwg

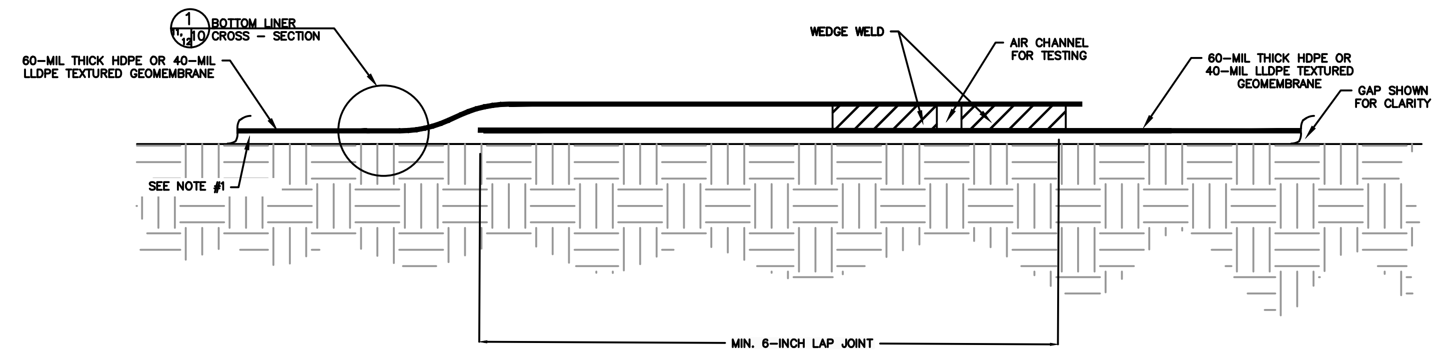
## 1 (10,12 / 15) BOTTOM LINER CROSS–SECTION (NTS)



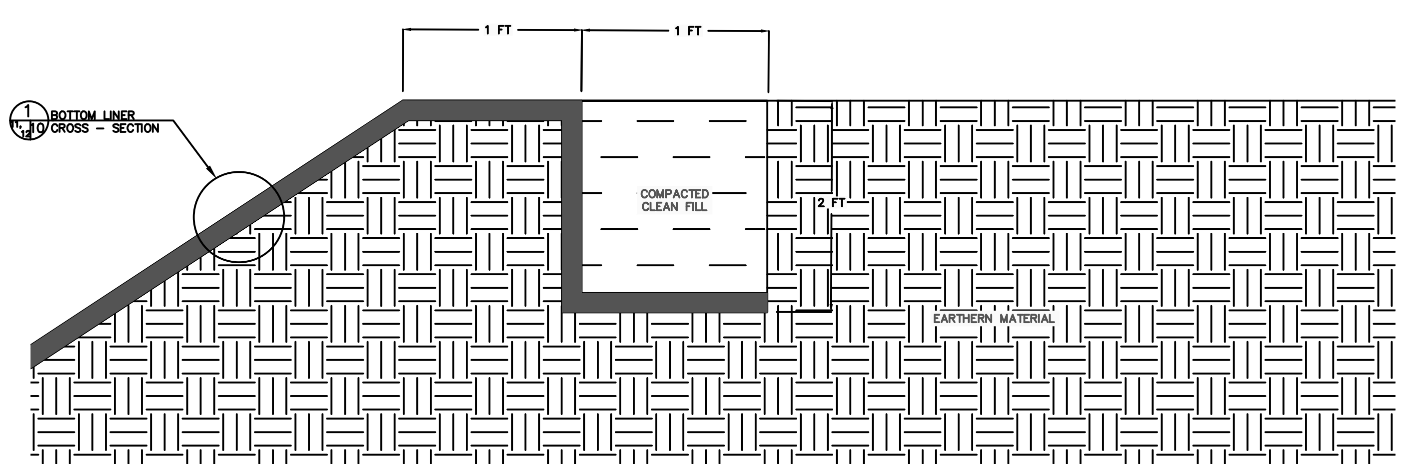

NOTES

1. THE GEOMEMBRANE SHALL BE PLACED IN INTIMATE CONTACT WITH THE SUBGRADE. THE GAP SHOWN IN THE DETAIL IS FOR CLARITY PURPOSE ONLY.

## 2 (– / 10) GEOMEMBRANE DOUBLE WEDGE WELD (NTS)



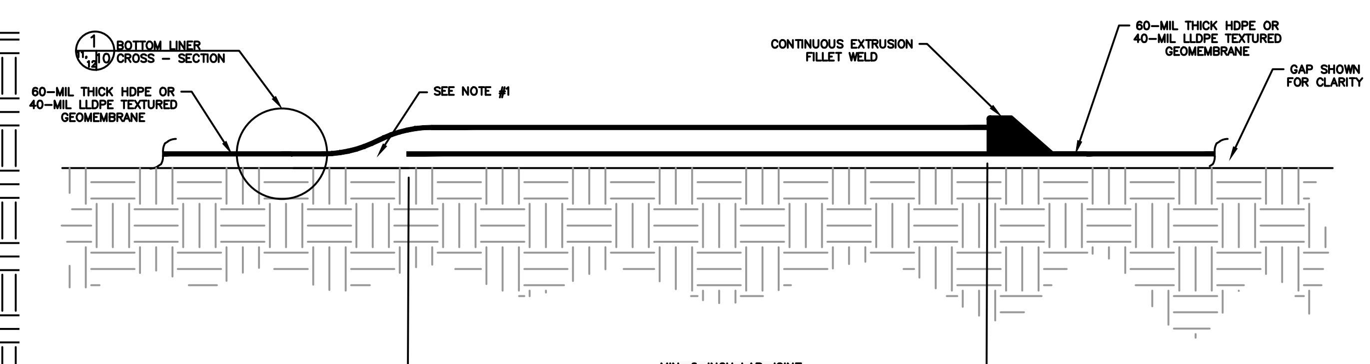

## 3 (7,9 / 10) PERIPHERAL ANCHOR TRENCH (NTS)




## 4 (– / 10) GEOMEMBRANE EXTRUSION WELD (NTS)

NOTES

1. THE GEOMEMBRANE SHALL BE PLACED IN INTIMATE CONTACT WITH THE SUBGRADE. THE GAP SHOWN IN THE DETAIL IS FOR CLARITY PURPOSE ONLY.
2. ALL GEOMEMBRANE WELDS SHALL BE CONTINUOUS AND AIR TIGHT.
3. SPARK TEST ALL FILLET EXTRUSION WELDS.
4. ALLOW A MIN. 6–IN OF OVERLAP BETWEEN OLD AND NEW GEOMEMBRANES.
5. REMOVE THE UNBOUND TOP EDGE IF AIR CHANNEL TEST FAILS EXTRUSION WELD AND VACUUM BOX TEST.




11/19/2020 9:58:29 AM

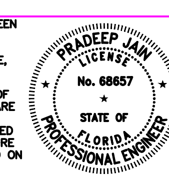
| LTR | DATE | REVISIONS | BY | APPRD. |
|---|---|---|---|---|

DESIGNED AK, SS
DRAWN SS
CHECKED PJ


INNOVATIVE WASTE CONSULTING SERVICES, LLC
3720 NW 43rd ST. SUITE 103
GAINESVILLE, FL 32606–6091
PHONE: (352) 331–4828
FAX: (352) 331–4842


ANGELO'S AGGREGATE MATERIALS, LTD.
855 28th STREET SOUTH,
ST. PETERSBURG, FL 32606–6091
PHONE: (727) 581–1544
FAX: (727) 586–5676

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY PRADEEP JAIN, PE, ON 9/21/2020.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTROIC COPIES.



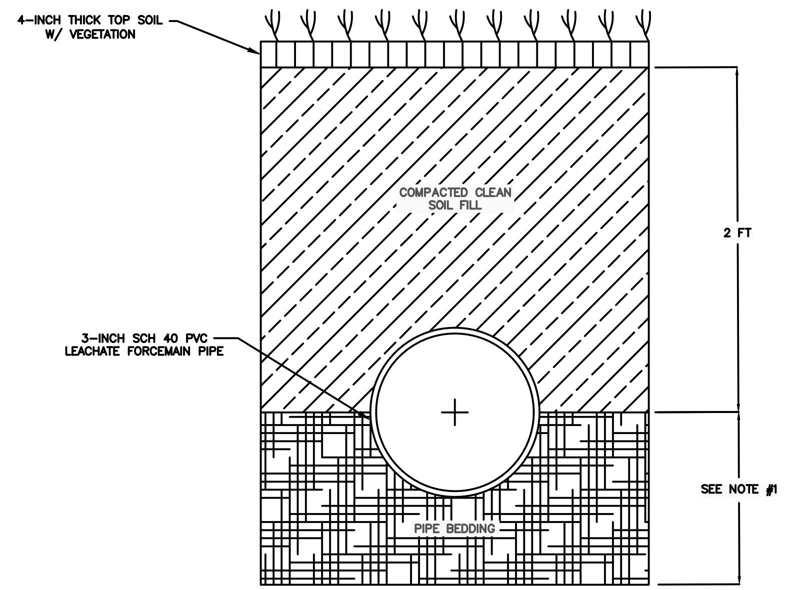

LEACHATE AERATION POND DESIGN

DETAILS – 1

DATE: SEPTEMBER 2020
SCALE: AS SHOWN
DWG No: 10 OF 15

5 | 7,8 11

## LEACHATE FORCEMAIN TRENCH CROSS-SECTION (NTS)

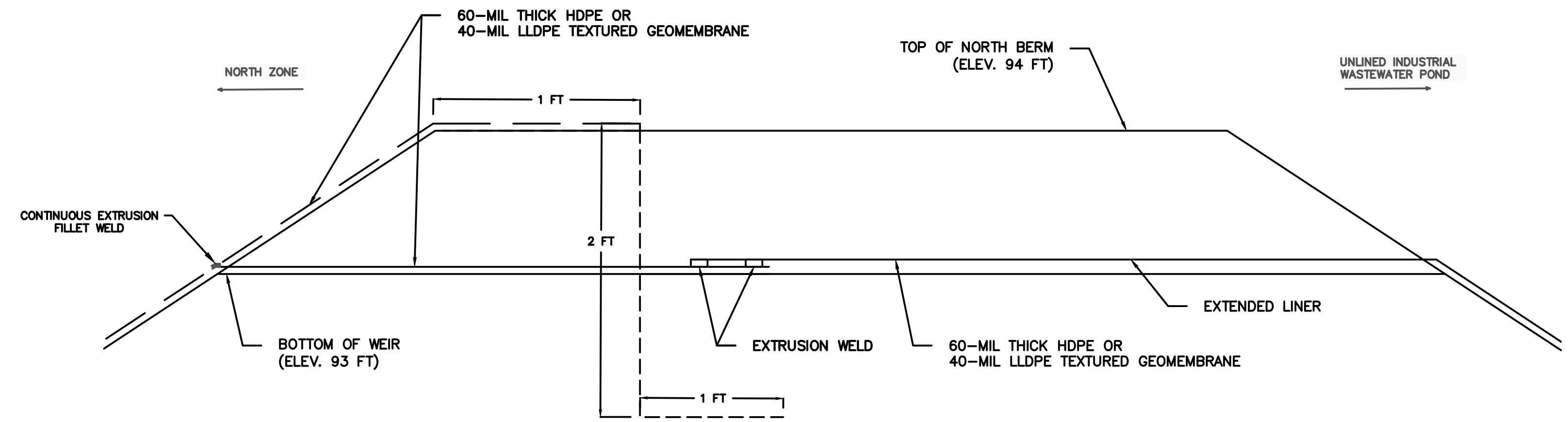



NOTES

1. THE DEPTH OF THE PIPE BEDDING SHALL BE DETERMINED BY REMOVING UNSUITABLE IN-SITU SOIL.
2. WATER SHALL NOT BE PERMITTED INTO THE TRENCH OR POND AREAS DURING CONSTRUCTION.
3. THE GEOMEMBRANE SHALL BE PLACED IN DIRECT INTIMATE CONTACT WITH THE SUBGRADE. THE GAP SHOWN IS FOR CLARITY PURPOSE.

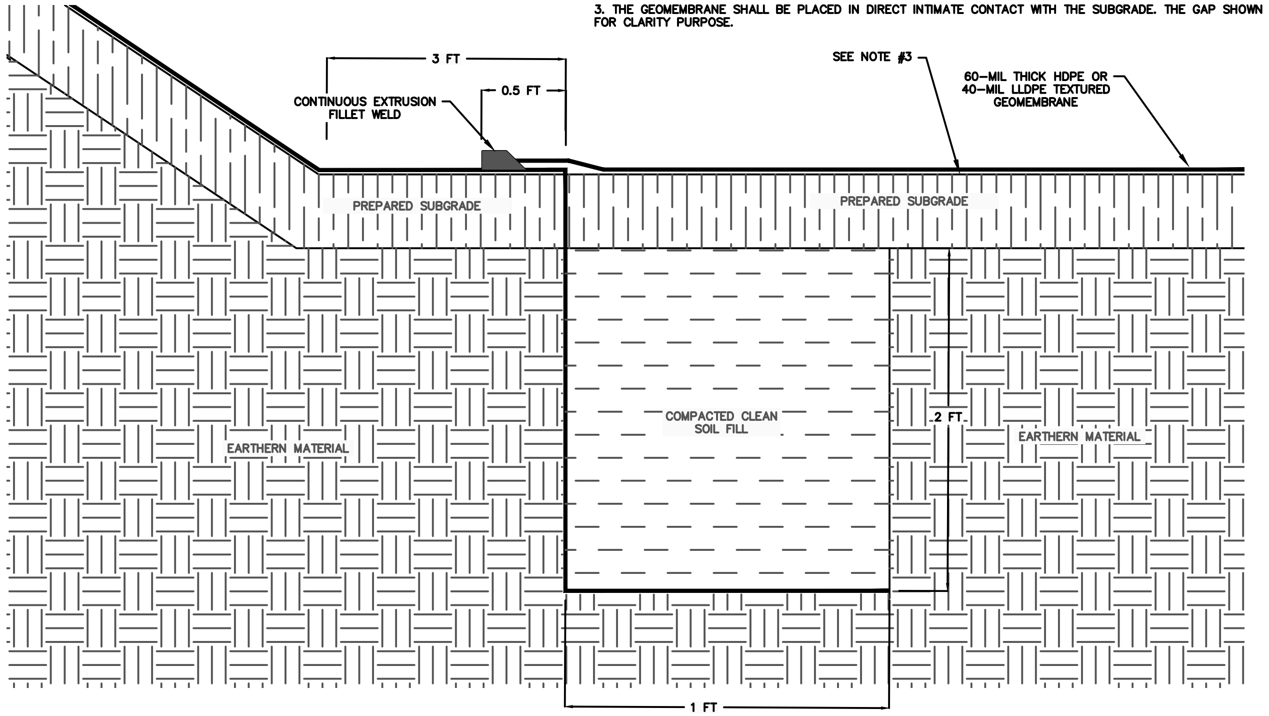
6 | 7 11

## NORTH BERM WEIR LINER CROSS-SECTION (NTS)



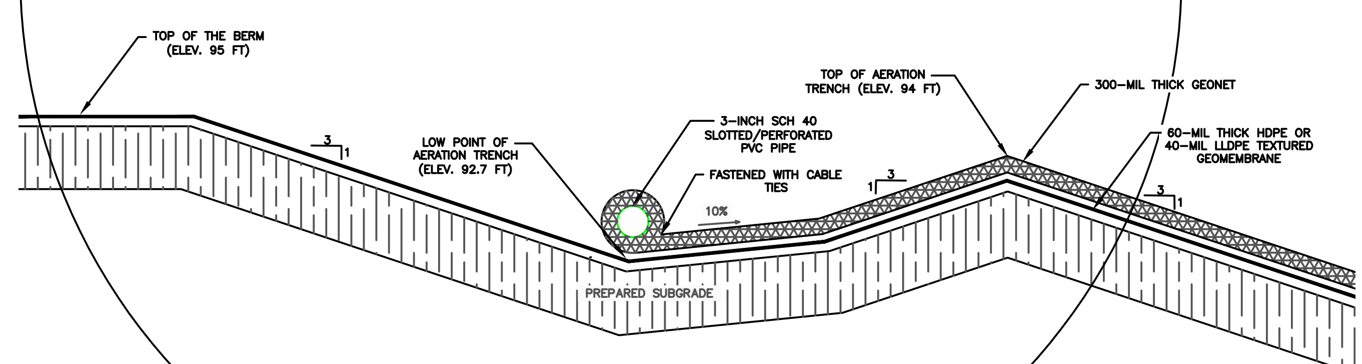

7 | 7,8 11

## POND BOTTOM EDGE ANCHOR TRENCH (NTS)




8 | 7 11

## AERATION TRENCH CROSS-SECTION (NTS)




NOTES

1. GEONET SHALL BE WRAPPED AND TIED AROUND THE SLOTTED/PERFORATED PIPE.
2. A MIN. OF 6 INCH OVERLAP MUST BE PROVIDED FOR GEONETS.

11/19/2020 9:58:29 AM

| LTR | DATE | REVISIONS | BY | APPRD. |
|---|---|---|---|---|
| | | | | |

DESIGNED AK, SS
DRAWN AK
CHECKED PJ

INNOVATIVE WASTE CONSULTING SERVICES, LLC
3720 NW 43rd ST. SUITE 103
GAINESVILLE, FL 32606-6091
PHONE: (352) 331-4828
FAX: (352) 331-4842

ANGELO'S AGGREGATE MATERIALS, LTD.
855 28th STREET SOUTH,
ST. PETERSBURG, FL 32606-6091
PHONE: (727) 581-1544
FAX: (727) 586-5676

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY PRADEEP JAIN, PE, ON 9/21/2020.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTROIC COPIES.

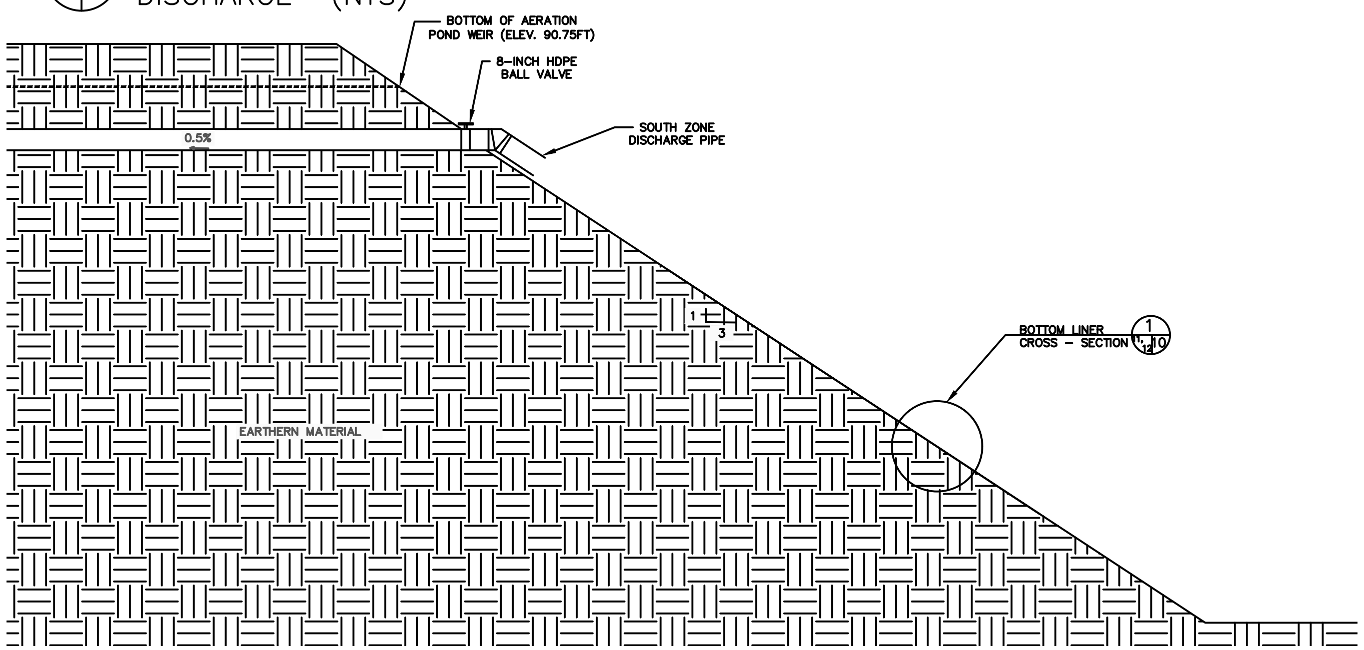
PRADEEP JAIN LICENSE No. 68657 STATE OF FLORIDA PROFESSIONAL ENGINEER

LEACHATE AERATION POND DESIGN

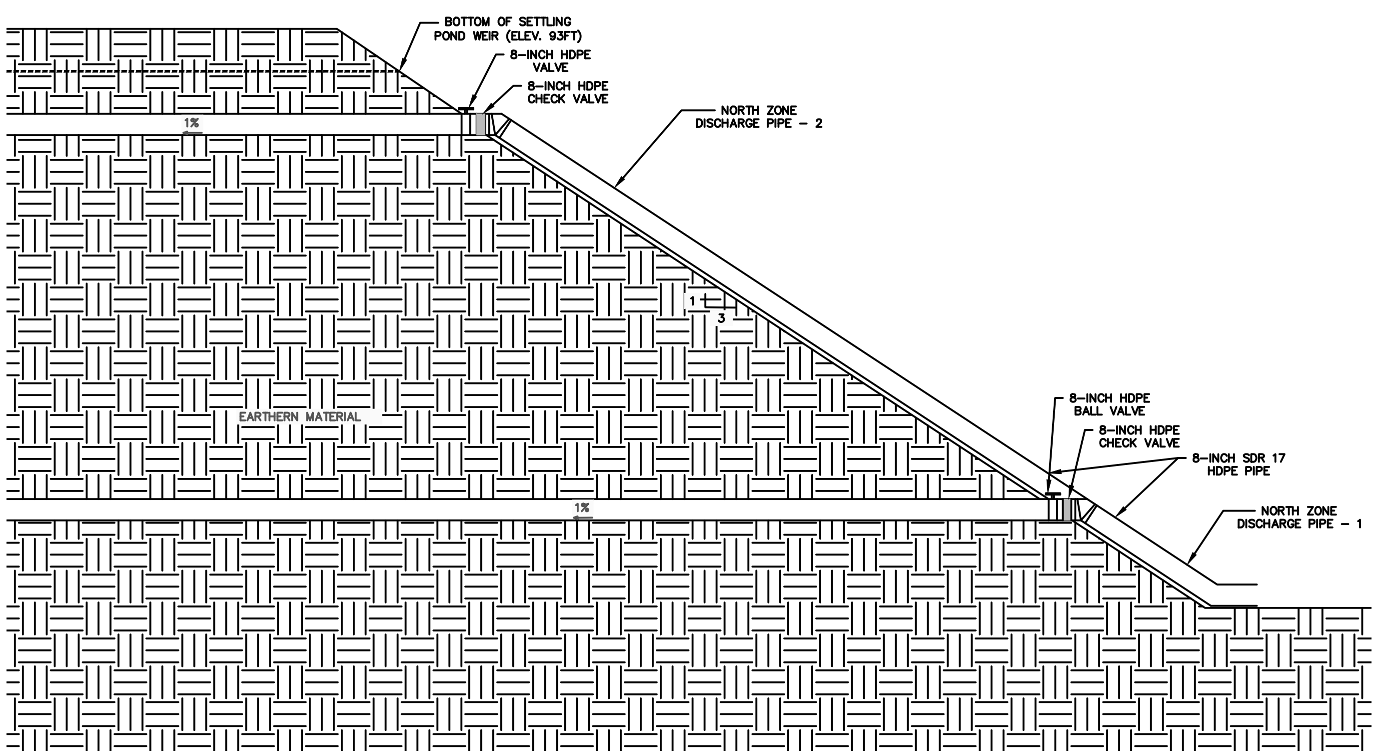
DETAILS – 2

DATE: SEPTEMBER 2020
SCALE: AS SHOWN
DWG No: 11 OF 15

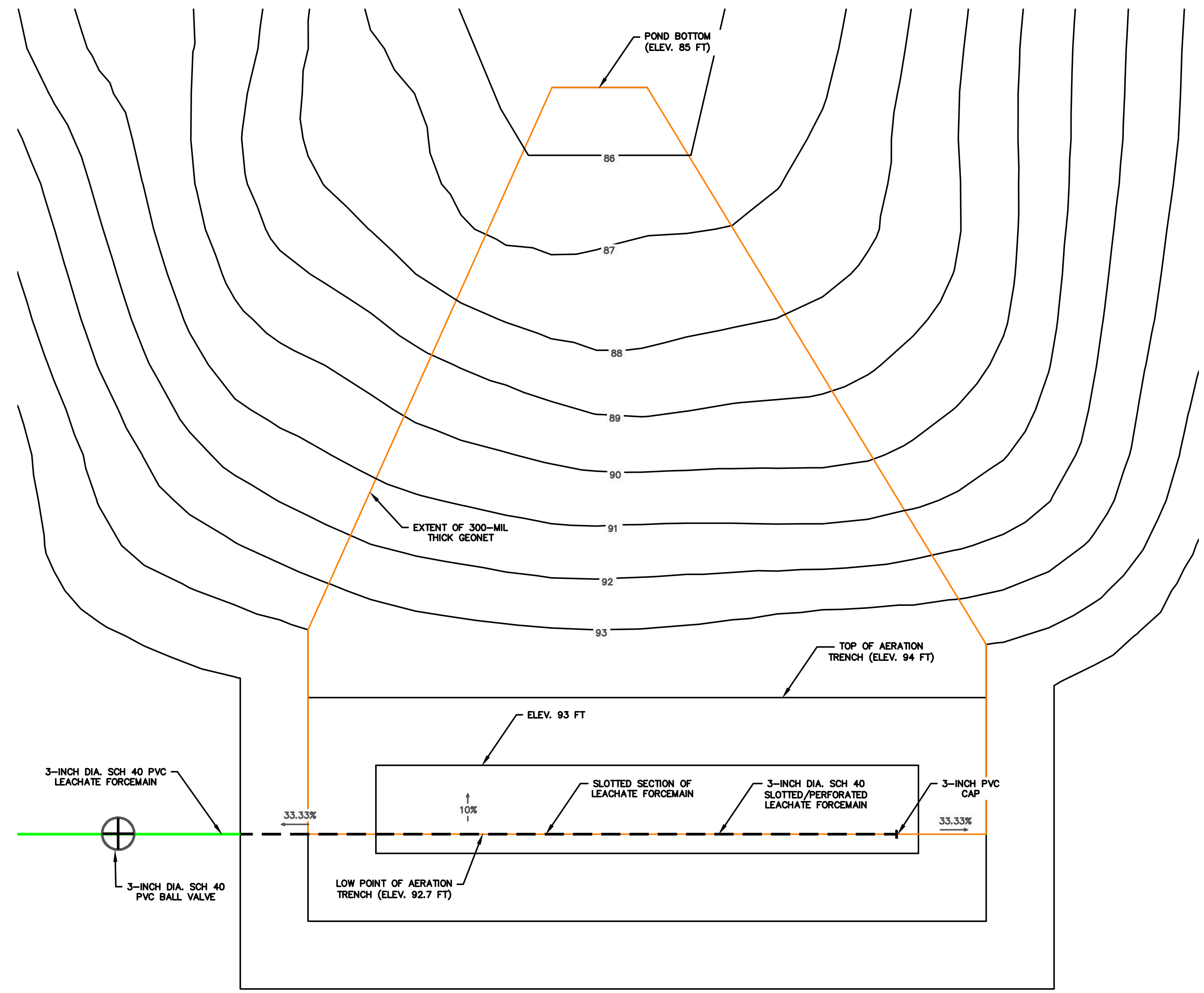
## 9/7-12 SOUTH ZONE DISCHARGE (NTS)




## 10/7-12 NORTH ZONE DISCHARGE (NTS)




## 11/7-12 AERATION TRENCH AREA LAYOUT (NTS)




NOTES

1. SANDBAGS OR OTHER SUITABLE BALLAST SHALL BE PLACED IF NEEDED, ON EAST AND WEST EDGES OF TRENCH TO HOLD THE GEONET IN PLACE.

11/19/2020 9:58:29 AM

| LTR | DATE | REVISIONS | BY | APPRD. |
|---|---|---|---|---|
| A | NOVEMBER 2020 | ADDED A PVC BALL VALVE ON LECHATE FORCEMAIN | AK | PJ |

DESIGNED AK, SS
DRAWN SS
CHECKED PJ


INNOVATIVE WASTE CONSULTING SERVICES, LLC
3720 NW 43rd ST. SUITE 103
GAINESVILLE, FL 32606-6091
PHONE: (352) 331-4828
FAX: (352) 331-4842



ANGELO'S AGGREGATE MATERIALS, LTD.
855 28th STREET SOUTH,
ST. PETERSBURG, FL 32606-6091
PHONE: (727) 581-1544
FAX: (727) 586-5676


THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY PRADEEP JAIN, PE, ON 9/21/2020.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTROIC COPIES.

PRADEEP JAIN LICENSE No. 68657 STATE OF FLORIDA PROFESSIONAL ENGINEER

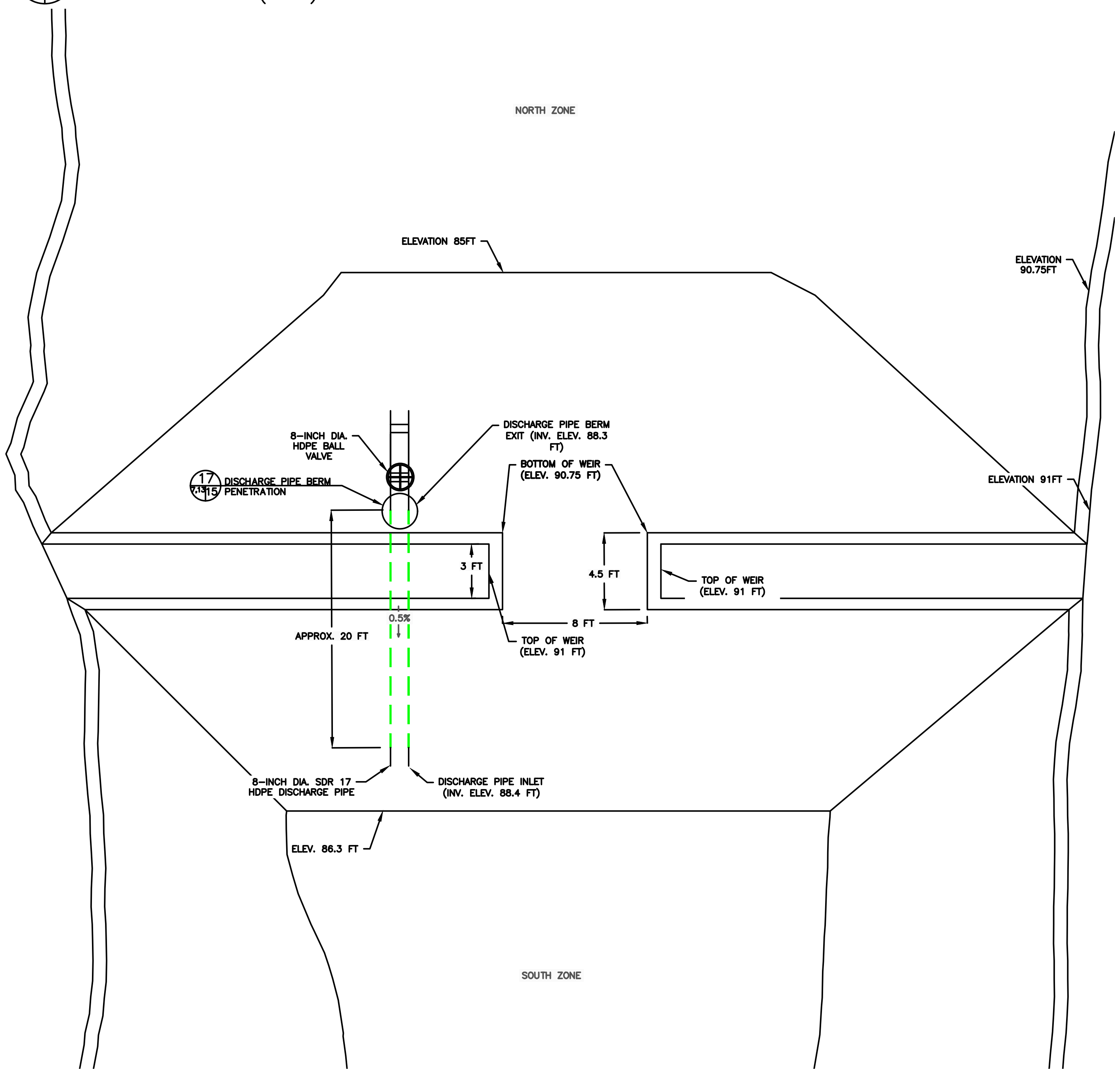
LEACHATE AERATION POND DESIGN

DETAILS – 3

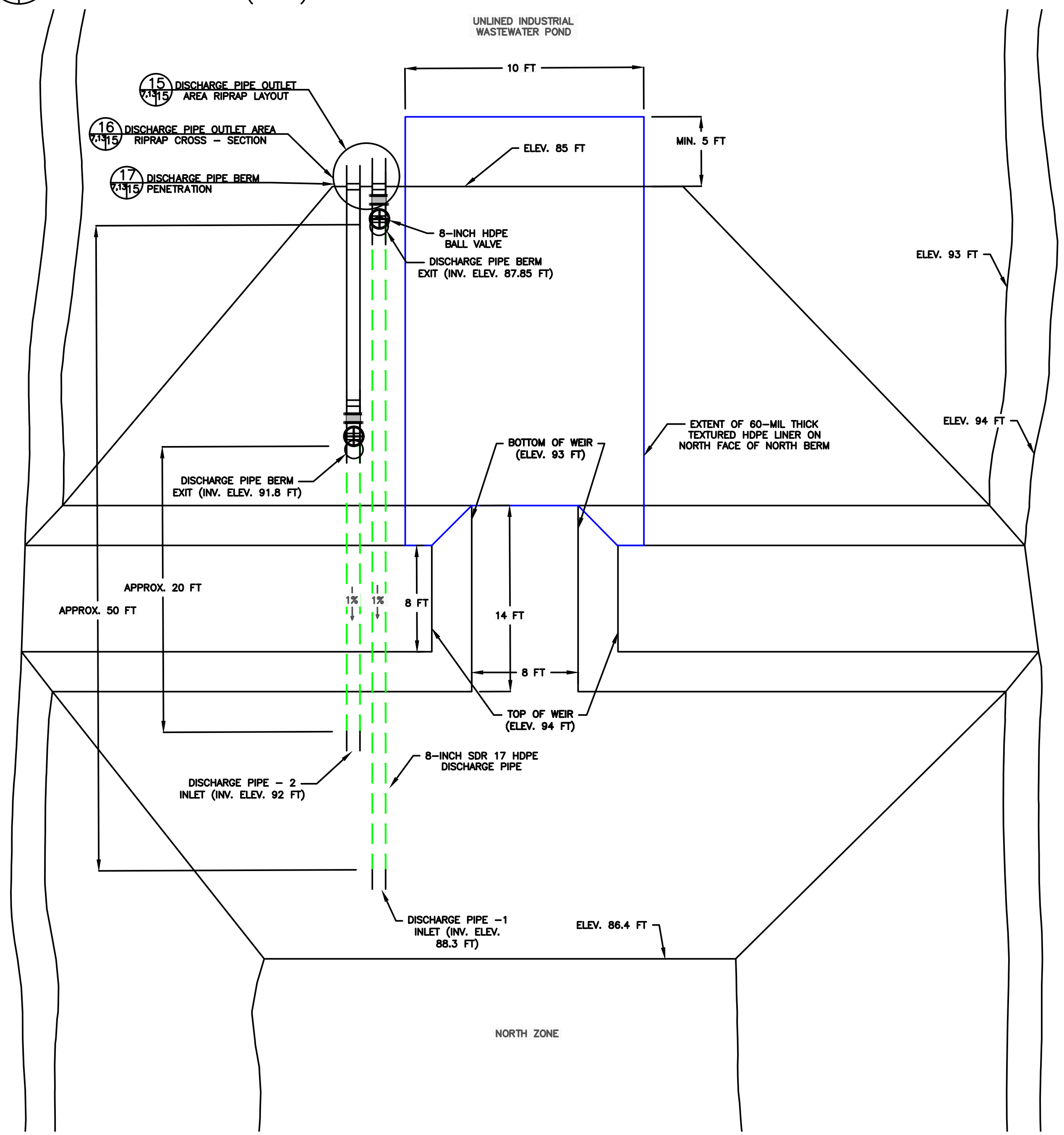
DATE: SEPTEMBER 2020
SCALE: AS SHOWN
DWG No: 12 OF 15

C:\Civil 3D Projects\02000-272-19\CADD_Incoming\CADD Files\PRADEEP\Angelo's – Leachate Aeration Pond Design Drawings – Revision A.dwg

## 12 (7 | 13) MIDDLE BERM AREA LAYOUT (NTS)




## 13 (7 | 13) NORTH BERM AREA LAYOUT (NTS)




11/19/2020 9:58:29 AM

| LTR | DATE | REVISIONS | BY | APPRD. |
|---|---|---|---|---|
| | | | | |

DESIGNED AK, SS
DRAWN SS
CHECKED PJ

INNOVATIVE WASTE CONSULTING SERVICES, LLC
3720 NW 43rd ST. SUITE 103
GAINESVILLE, FL 32606-6091
PHONE: (352) 331-4828
FAX: (352) 331-4842

ANGELO'S AGGREGATE MATERIALS, LTD.
855 28th STREET SOUTH,
ST. PETERSBURG, FL 32606-6091
PHONE: (727) 581-1544
FAX: (727) 586-5676

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY PRADEEP JAIN, PE, ON 9/21/2020.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTROIC COPIES.

PRADEEP JAIN LICENSE No. 68657 STATE OF FLORIDA PROFESSIONAL ENGINEER

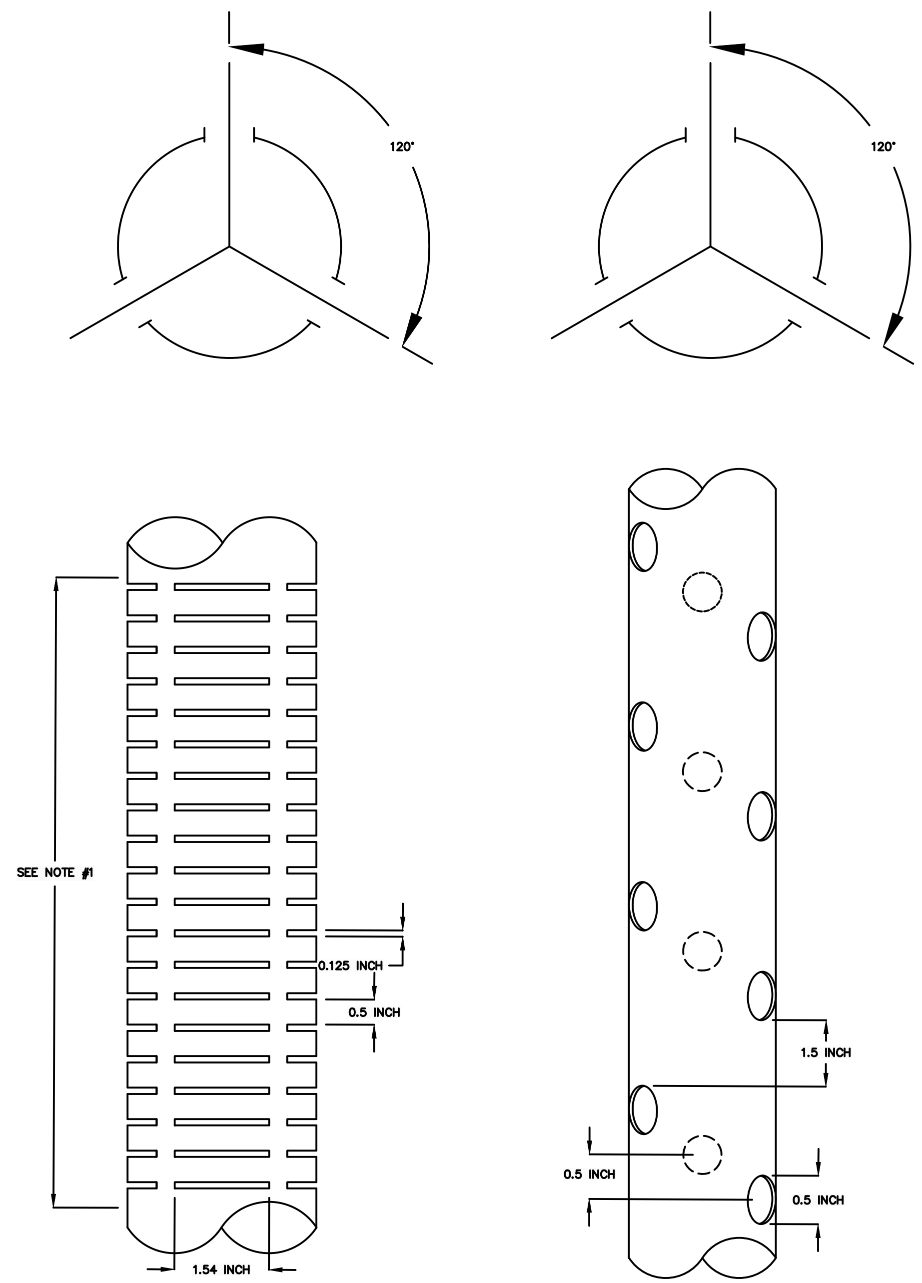
LEACHATE AERATION POND DESIGN

DETAILS – 4

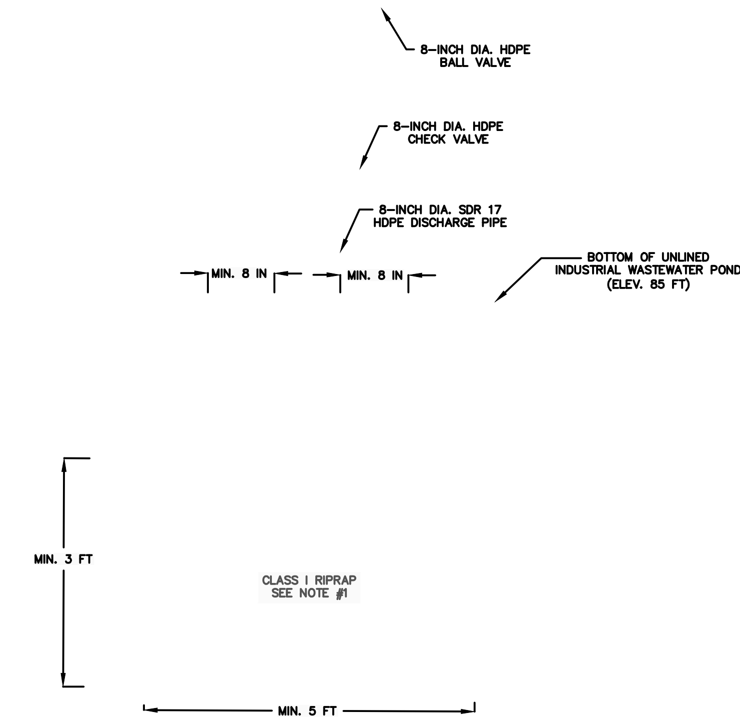
DATE: SEPTEMBER 2020
SCALE: AS SHOWN
DWG No: 13 OF 15

## 14 (7 | 14) LEACHATE FORCEMAIN PERFORATIONS (NTS)

NOTES:
1. THE PIPE SHALL CONTAIN AT LEAST 19 SLOTS/ROWS PER FOOT.
2. A PERFORATED PIPE MAY E USED IN LIEU OF SLOTTED PIPE.

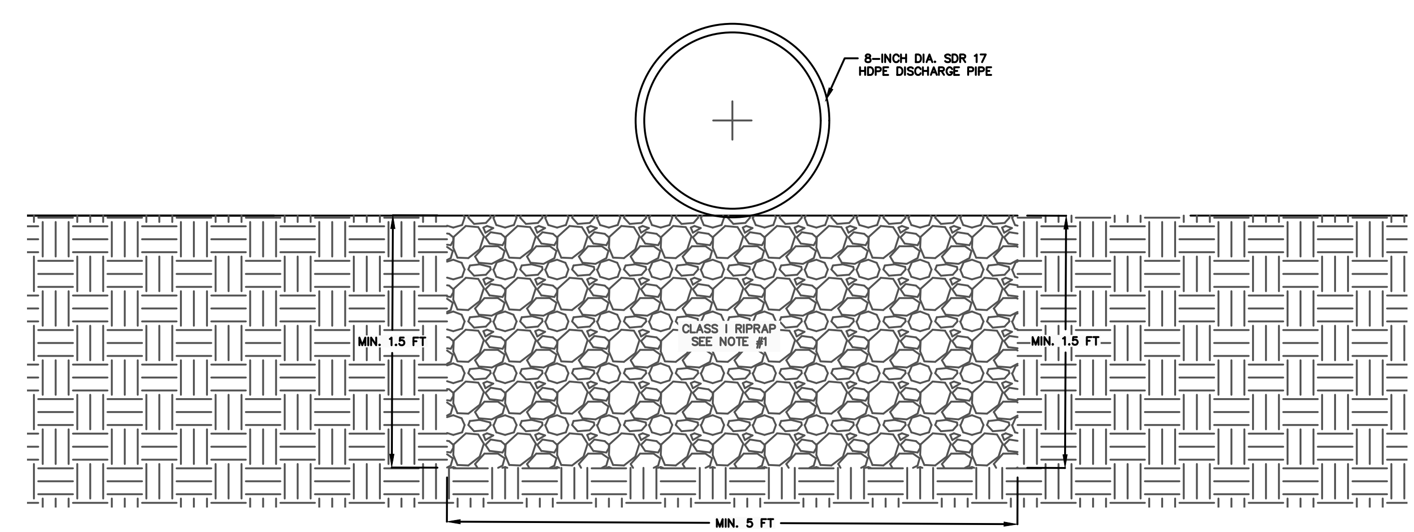



## 15 (7,13 | 14) DISCHARGE PIPE OUTLET AREA RIPRAP LAYOUT (NTS)




## 16 (7,13 | 14) DISCHARGE PIPE OUTLET AREA RIPRAP CROSS-SECTION (NTS)

NOTES:
1. CLASS I RIPRAP WITH D50 OF 5-INCHES (D50 = PARTICLE SIZE OF GRADATION OF WHICH 50% OF MIXTURE IS FINER BY DIAMETER)




11/19/2020 9:58:29 AM

| LTR | DATE | REVISIONS | BY | APPRD. |
|---|---|---|---|---|
| | | | | |

DESIGNED AK, SS
DRAWN SS
CHECKED PJ

INNOVATIVE WASTE CONSULTING SERVICES, LLC
3720 NW 43rd ST. SUITE 103
GAINESVILLE, FL 32606-6091
PHONE: (352) 331-4828
FAX: (352) 331-4842

ANGELO'S AGGREGATE MATERIALS, LTD.
855 28th STREET SOUTH,
ST. PETERSBURG, FL 32606-6091
PHONE: (727) 581-1544
FAX: (727) 586-5676

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY PRADEEP JAIN, PE, ON 9/21/2020.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTROIC COPIES.

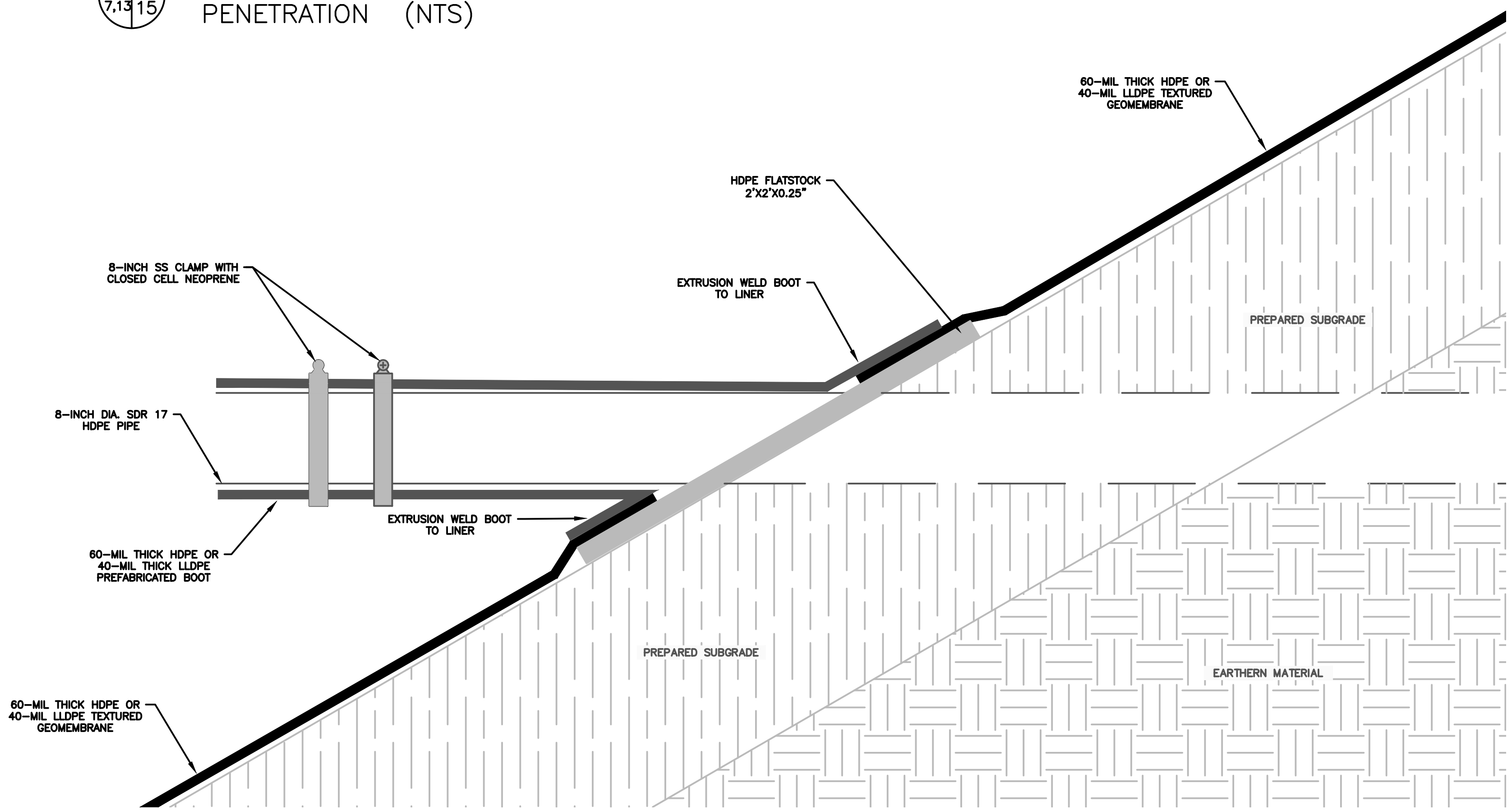
PRADEEP JAIN LICENSE No. 68657 STATE OF FLORIDA PROFESSIONAL ENGINEER

LEACHATE AERATION POND DESIGN

DETAILS – 5

DATE: SEPTEMBER 2020
SCALE: AS SHOWN
DWG No: 14 OF 15

17 / 7,13 15 DISCHARGE PIPE BERM PENETRATION (NTS)




11/19/2020 9:58:29 AM

| LTR | DATE | REVISIONS | BY | APPRD. |
|---|---|---|---|---|
| | | | | |

DESIGNED AK, SS
DRAWN SS
CHECKED PJ

INNOVATIVE WASTE CONSULTING SERVICES, LLC
3720 NW 43rd ST. SUITE 103
GAINESVILLE, FL 32606-6091
PHONE: (352) 331-4828
FAX: (352) 331-4842

ANGELO'S AGGREGATE MATERIALS, LTD.
855 28th STREET SOUTH,
ST. PETERSBURG, FL 32606-6091
PHONE: (727) 581-1544
FAX: (727) 586-5676

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY PRADEEP JAIN, PE, ON 9/21/2020.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTROIC COPIES.

PRADEEP JAIN LICENSE No. 68657 STATE OF FLORIDA PROFESSIONAL ENGINEER

LEACHATE AERATION POND DESIGN

DETAILS – 3

DATE: SEPTEMBER 2020
SCALE: AS SHOWN
DWG No: 15 OF 15