

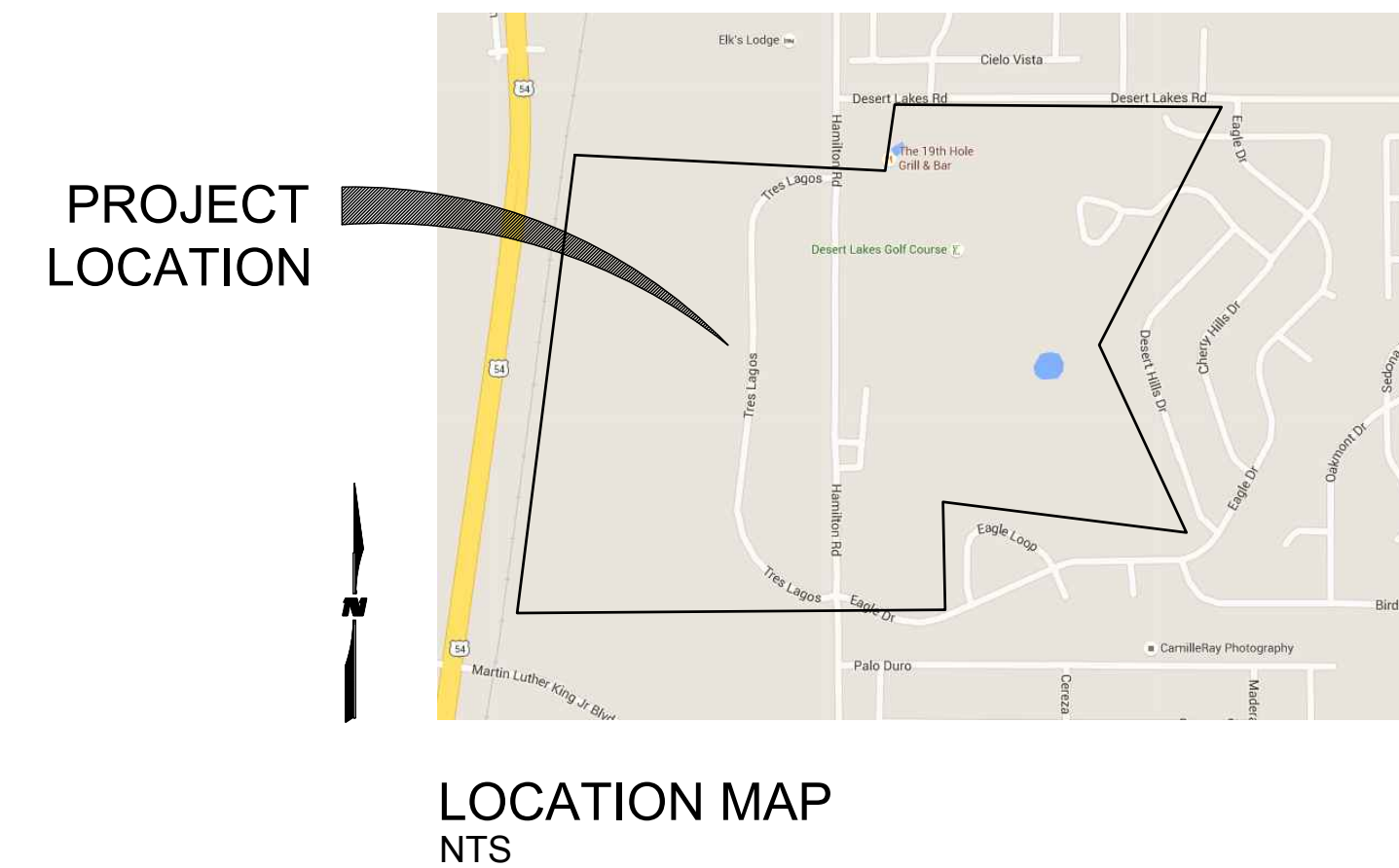
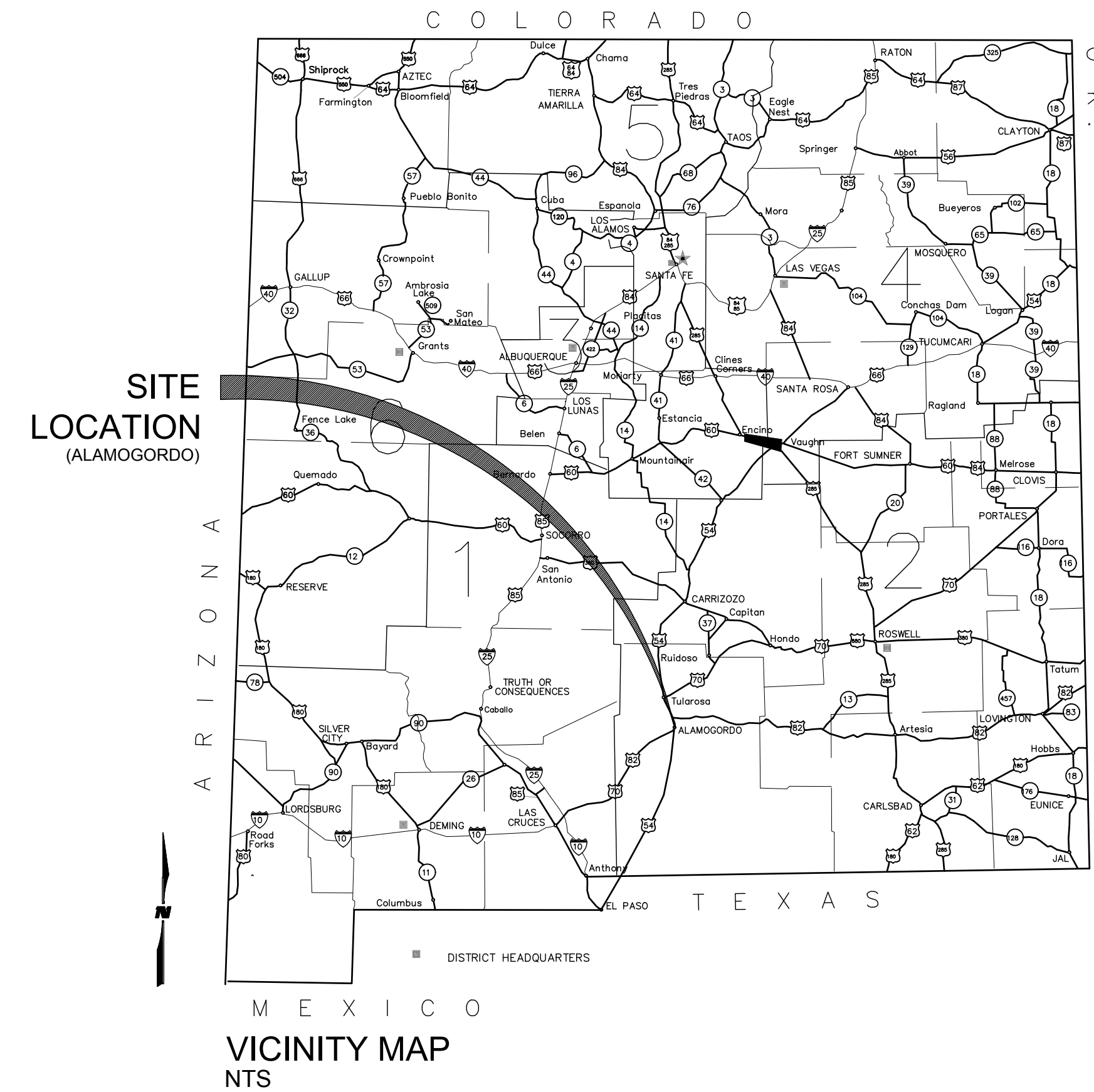


# CITY OF ALAMOGORDO ENGINEERING DEPARTMENT



## CONSTRUCTION PLANS FOR

# EFFLUENT STORAGE POND P1-3 IMPROVEMENTS - DESERT LAKES GOLF COURSE PUBLIC WORKS BID NO. 2017-017 ALAMOGORDO, NM 88310

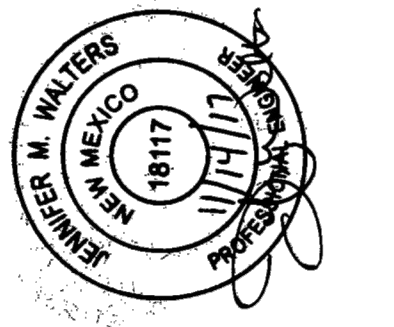


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RIO RANCHO, NM 87124  
PHONE: 505-898-8021  
FAX: 505-898-8501  
www.wilsonco.com

CONSULTANTS



PROJECT NAME  
**EFFLUENT STORAGE PONDS  
P1-3 IMPROVEMENTS DESERT  
LAKES GOLF COURSE PUBLIC  
WORKS BID NO. 2017**

REV.	DATE	DESCRIPTION	BY

PROJECT NO: 17-600-203-00  
DESIGNED BY: JMW  
DRAWN BY: CRU  
CHECKED BY: BJA  
DATE: NOVEMBER 2017

SHEET TITLE  
**COVER SHEET**

SHEET NO:  
**G-001**

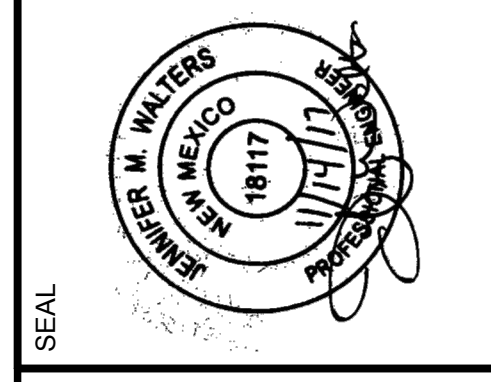
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11/15/2017 M:\MSD\17-600-203-002\_Disciplines\_SHEETS8\_sheets - utilities\01\_GEN\176020300\_G-002\_GNOTES.dwg

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<p>H</p> <p>G</p> <p>F</p> <p>E</p> <p>D</p> <p>C</p> <p>B</p> <p>A</p>	<p>1. <b>PROJECT OVERVIEW:</b> PROJECT CONSISTS OF THE RESHAPING AND COVERING OF THE POND LINER EDGE WITH RIP-RAP FOR POND 1-3 AT THE DESERT LAKES GOLF COURSE, THE EXISTING POND EDGE LINER WILL REMAIN IN PLACE AND SOME AREAS WILL BE RESHAPED BY ADDING FILL ON TOP OF THE EXISTING LINER AND RELINING THE ADDED SOIL TO ACHIEVE DESIRED FINAL GRADING ELEVATIONS. THE HDPE LINER WILL BE COVERED WITH A GEOWEB MATERIAL AND COVERED WITH RIP-RAP PER PLAN DETAILS. POND WATER LEVEL WILL BE ADJUSTED BY CITY STAFF TO PROVIDE AT LEAST 2 FEET OF DRY WORKING SPACE AROUND POND LINER WORK AREAS..</p> <p>2. <b>SPECIFICATIONS:</b> THE CITY OF ALAMOGORDO, SPECIAL PROVISION AND SUPPLEMENT SPECIFICATIONS, AND THE NMDOT STANDARD SPECIFICATION FOR HIGHWAY AND BRIDGE CONSTRUCTION 2014 EDITION, SHALL GOVERN CONSTRUCTION OF THIS PROJECT. SEE BID DOCUMENT MANUAL FOR SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS</p> <p>3. <b>GENERAL NOTES:</b> GENERAL NOTES SHALL APPLY TO ALL SHEETS, EXCEPT WHERE MORE SPECIFIC INFORMATION IS PROVIDED. SEE INDIVIDUAL DRAWINGS FOR ADDITIONAL ABBREVIATIONS, SYMBOLS, LEGENDS, NOTES, DETAILS, AND OTHER REQUIREMENTS. IN ALL CASES, THE INFORMATION SHOWN ON INDIVIDUAL DRAWINGS SHALL GOVERN OVER ANY GENERAL INFORMATION. NOT ALL SPECIFIED ITEMS AND/OR STANDARD DETAILS SHOWN MAY BE APPLICABLE TO THIS PROJECT.</p> <p>4. <b>MEANS, METHODS OR TECHNIQUES:</b> THE OWNER AND ENGINEER ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS OR TECHNIQUES, NOR FOR THE EXECUTION OF THE WORK AS SHOWN ON THESE DRAWINGS. THE OWNER AND ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THE CONTRACTORS OR SUBCONTRACTORS TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.</p> <p>5. <b>SAFETY REQUIREMENTS:</b> THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL WORK AREAS IN SAFE CONDITION FOR THE PUBLIC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE FOR ALL CONTRACTOR PERSONNEL AND SUBCONTRACTOR PERSONNEL WITH APPLICABLE CURRENT FEDERAL, OSHA, STATE, COUNTY, AND CITY LAWS, ORDINANCES, RULES AND REGULATIONS CONCERNING SAFETY AND HEALTH. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA TRENCH SAFETY RULES AND REGULATIONS APPLICABLE TO THIS PROJECT. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.</p> <p>6. <b>CONTRACTOR RESPONSIBILITY:</b> THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THESE REQUIREMENTS SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE CONTRACTORS PERFORMANCE OF WORK ON THIS PROJECT.</p> <p>7. <b>PROJECT DEVIATIONS:</b> ANY PROPOSED DEVIATIONS FROM THE CONTRACT DOCUMENTS BY THE CONTRACTOR MUST BE ACCEPTED BY THE OWNER, IN WRITING, PRIOR TO THE WORK BEING DONE. ANY DEVIATIONS PERFORMED WITHOUT THE OWNER'S APPROVAL WILL NOT BE PAID FOR AND MAY BE REQUIRED TO BE RECONSTRUCTED OR REMOVED AT THE CONTRACTOR'S EXPENSE.</p> <p>8. <b>PUBLIC ACCESS TO LOCAL BUSINESSES &amp; RESIDENCES:</b> EGRESS TO LOCAL BUSINESSES AND RESIDENCES FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL ADVISE PROPERTY OWNER OF ANY ACCESS MODIFICATIONS, AT LEAST 24 HOURS IN ADVANCE. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.</p> <p>9. <b>PERMITTING:</b> IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REQUEST AND OBTAIN ALL PERMITS NECESSARY FOR THIS PROJECT PRIOR TO COMMENCING CONSTRUCTION, EXCEPTING THAT OWNER SHALL DEAL WITH MODIFICATIONS TO GROUND WATER DISCHARGE PERMIT. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CURRENT FEDERAL, OSHA, STATE, COUNTY, AND CITY LAWS, ORDINANCES, RULES AND REGULATIONS.</p> <p>10. <b>MAINTENANCE OF AS-BUILT PLANS:</b> THE CONTRACTOR SHALL MAINTAIN AN UP TO DATE SET OF AS-BUILT PLANS FOR THE PROJECT. THESE PLANS SHALL BE KEPT CURRENT, WITHIN ONE-WEEK, AT ALL TIMES AND SHALL BE SUBJECT TO REVIEW BY THE OWNER THROUGHOUT THE PROJECT AND WILL BE REVIEWED FOR ACCURACY AND COMPLETENESS AT LEAST ONCE EVERY 14-DAYS. THE FINAL CERTIFIED AS-BUILT PLANS SHALL BE DELIVERED IN CLEAN HARD COPY 22"x34" PAPER MEDIA AND ACAD R2010 OR BETTER. THE CONTRACTOR CERTIFICATION ALONG WITH SURVEYOR CERTIFICATION SHALL BE CLEARLY STATED ON THE COVER SHEET. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR. AS-BUILTS SHALL BE SUBMITTED WITH SUBSTANTIAL COMPLETION PAY APPLICATION. NO FINAL PAYMENT WILL BE MADE WITHOUT AS-BUILT SUBMITTAL.</p> <p>11. <b>WATER FOR CONSTRUCTION:</b> THE CONTRACTOR WILL BE RESPONSIBLE FOR PURCHASING ALL OF THE RECLAIMED WATER NEEDED FOR CONSTRUCTION FROM THE CITY OF ALAMOGORDO. THE COST WILL BE DETERMINED IN ACCORDANCE WITH THE CURRENT RECLAIMED WATER RATES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO TRANSPORT AND APPLY THE RECLAIMED WATER AS SPECIFIED OR AS ORDERED BY THE OWNER. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER FOR LOCATION OF SOURCES. THIS COST SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.</p> <p>12. <b>EARTHWORK:</b> THE EARTHWORK ON THIS PROJECT WILL BE CONSIDERED AS INCIDENTAL TO THE LUMP SUM PRICE FOR ITEMS AS APPLICABLE, AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE FOR TRANSPORTING IMPORT OR EXPORT OF FILL.</p> <p>13. <b>ACCESS:</b> ACCESS TO EAST SIDE OF GOLF COURSE AND PONDS IS VIA CITY STREETS AND SUBDIVISIONS. CONTRACTOR SHALL CLEAN UP AFTER EACH DAY OF HAULING OVER CITY STREETS, PER CITY ORDINANCES. ACCESS TO WEST SIDE POND AND DISPOSAL AREA SHALL BE IDENTIFIED BY THE OWNER DURING BIDDING STAGE.</p> <p>14. <b>ACCESS (CONTD):</b> CONTRACTOR SHALL USE EXISTING MAINTENANCE ROADS WITHIN THE GOLF COURSE PROPERTY, AND SHALL COORDINATE DIRECTLY WITH THE CITY GOLF COURSE MANAGER. FOR ALL DIRECTIONS AND ALIGNMENT FOR ACCESS TO THE VARIOUS PONDS, SO AS TO MINIMIZE DAMAGE TO THE GOLF COURSE, PIPING, CONDUITS, AND SPRINKLER SYSTEMS.</p>	<p>15. <b>EXISTING LINER CONDITION:</b> CONTRACTOR SHALL USE CAUTION WHILE WORKING ON EXISTING LINER TO AVOID DAMAGE TO THE LINER. PLACEMENT OF COVER MATERIAL SHOULD BE DONE IN SUCH A MANNER AS TO PRECLUDE ANY DAMAGE TO THE LINER. NO EQUIPMENT IS ALLOWED DIRECTLY ON THE LINER, ANY DAMAGES TO THE LINER EXISTING OR NEW WILL BE REPAIRED AT THE CONTRACTORS EXPENSE.</p> <p>16. <b>PROTECTION OF EXISTING UTILITIES:</b> THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND AND OVERHEAD UTILITIES AND SHALL COORDINATE ALL WORK WITH THE CITY AND UTILITY OWNERS. ALL IMPROVEMENTS WHICH ARE DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED, RECONSTRUCTED OR REPLACED WITHIN 72 HOURS TO THE ENGINEER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE WITHOUT ADDITIONAL COMPENSATION.</p> <p>17. <b>VERIFY ELEVATIONS:</b> IF REQUIRED FOR THE WORK, THE CONTRACTOR SHALL EMPLOY A LICENSED NEW MEXICO SURVEYOR AND SHALL FIELD VERIFY ALL ELEVATIONS, DIMENSIONS, AND RIGHT-OF-WAY PRIOR TO THE BEGINNING OF CONSTRUCTION. ANY ELEVATIONS ARE BASED ON AS-BUILT AND FIELD SURVEY DATA. THE CONTRACTOR SHALL LIMIT ALL WORK ON THIS PROJECT TO WITHIN THE EXISTING RIGHT-OF-WAY AND EASEMENTS. THIS WORK WILL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.</p> <p>18. <b>UTILITY DISCLAIMER:</b> UTILITY LOCATIONS IF SHOWN HEREON ARE BASED ON THE BEST AVAILABLE EVIDENCE INCLUDING PHYSICAL FEATURES SUCH AS VALVES, PEDESTALS, WARNING MARKERS AND SPOTS BY UTILITY LOCATING SERVICES. THERE IS NO GUARANTEE AS TO THE COMPLETENESS OR ACCURACY OF THE UTILITY DATA SHOWN ON THE PLANS. THE CONTRACTOR SHALL CONTACT ALL UTILITY OWNERS TO VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF THE CONFLICT WITH MINIMUM DELAY.</p> <p>19. <b>WORK CONFINEMENT:</b> THE CONTRACTOR SHALL BE REQUIRED TO CONFINE HIS WORK WITHIN THE DESERT LAKES GOLF COURSE. PARKING OF EMPLOYEE'S PRIVATE VEHICLES SHALL NOT BE ALLOWED AT CONSTRUCTION AREAS THROUGHOUT CONSTRUCTION LIMITS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROHIBIT VEHICLES AND EQUIPMENT, ROLLERS, CRANES, ETC., FROM DRIVING UPON, ACROSS, OR TURNING ON PRIVATE PROPERTY ADJACENT TO PROJECT WORK AREAS; EXCEPT AS LEGAL ACCESS TO THE GOLF COURSE</p> <p>20. <b>SURFACE FEATURES:</b> CONTRACTOR SHALL REPAIR OR REPLACE FENCES, BLOCK WALLS, OR SURFACE FEATURES, DAMAGED BY CONTRACTOR'S OR SUBCONTRACTOR'S OPERATIONS, TO EXISTING OR BETTER CONDITION. REPAIR OR REPLACEMENT OF FENCES, BLOCK WALLS, OR SURFACE FEATURES SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.</p> <p>21. <b>ALSO INCLUDE OR ADD AS NECESSARY, ANY AREAS TO BE DISTURBED FOR MATERIAL STORAGE, EMPLOYEE PARKING OR EQUIPMENT STORAGE.</b></p> <p>22. <b>SITE CLEAN UP:</b> PROJECT SITE(S) AND YARD(S) SHALL BE MAINTAINED BY CONTRACTOR AND KEPT IN A CLEAN AND ORDERLY MANNER TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.</p> <p>23. <b>TRENCH BACKFILL:</b> NATIVE SOIL SHALL NOT BE USED TO BACKFILL TRENCHES WHERE CONCRETE WILL BE CONSTRUCTED. ALL TRENCHES UNDER THE PAVEMENT BOX SHALL BE BACKFILLED WITH IMPORT MATERIAL THAT CONFORMS TO THE TECHNICAL SPECIFICATIONS AND PLANS FOR THE PROJECT.</p> <p>24. <b>NON-DESTRUCTIVE UTILITY EXPLORATION-TYPICAL TASKS BY THE CONTRACTOR LEADING TO POND REHAB EXPLORATION ARE:</b>  A) SELECT AN APPROPRIATE METHOD OF GATHERING DATA THAT WILL ACHIEVE THE ACCURACIES AND PRECISION REQUIRED TO IDENTIFY THE LOCATION OF CONFLICT. VERTICAL AND HORIZONTAL SURVEY MAPPING ACCURACY IF REQUIRED SHALL ADHERE TO THE APPROPRIATE DESIGN SURVEY CONTROL.  B) IF EXCAVATING TEST HOLES EXPOSING THE UTILITY TO BE MEASURED, IT SHALL BE EXECUTED IN SUCH A MANNER THAT IT PROTECTS THE INTEGRITY OF THE UTILITY TO BE MEASURED. EXPOSURE IS TYPICALLY PERFORMED VIA MINIMALLY INTRUSIVE EXCAVATION.  C) NON-DESTRUCTIVE UTILITY EXPLORATION SHALL BE DONE A MINIMUM OF ONE WEEK IN ADVANCE OF PROJECT SCHEDULE. THIS WORK SHALL NOT BE PAID SEPARATELY, AND BE INCLUDED AS INCIDENTAL TO THE VARIOUS RELATED LUMP SUM ITEMS.  D) COMPLY WITH APPLICABLE UTILITY DAMAGE PREVENTION LAWS, PERMITS, AND SPECIFICATIONS, AND COORDINATE WITH UTILITY AND OTHER INSPECTORS, AS REQUIRED.  E) IF TEST HOLES ARE REQUIRED DETERMINE (a) THE HORIZONTAL AND VERTICAL LOCATION OF THE TOP AND/OR BOTTOM OF THE UTILITY REFERENCED TO THE PROJECT SURVEY DATUM; (b) THE ELEVATION OF THE EXISTING GRADE OVER THE UTILITY AT A TEST HOLE REFERENCED TO THE PROJECT SURVEY DATUM; (c) THE OUTSIDE DIAMETER OF THE UTILITY AND CONFIGURATION OF NON-ENCASED, MULTI-CONDUIT SYSTEMS; (d) THE UTILITY STRUCTURE MATERIAL COMPOSITION, WHEN REASONABLY ASCERTAINABLE; (e) THE BENCHMARKS AND /OR PROJECT SURVEY DATA USED TO DETERMINE ELEVATIONS; (f) THE PAVING THICKNESS AND TYPE, WHERE APPLICABLE; (g) THE GENERAL SOIL TYPE AND SITE CONDITIONS; AND (h) SUCH OTHER PERTINENT INFORMATION AS IS REASONABLY ASCERTAINABLE FROM EACH TEST HOLE SITE.</p>	<p><b>UTILITY COMPANY CONTACTS:</b></p> <p>CITY OF ALAMOGORDO:  WATER/SEWER: RONNIE BORUNDA 575.439.4244 or 575.439.4132  FACILITY/FIBER OPTIC: LARRY GARNER 575.439.4390 or 575.439.4391  PARK SUPERVISOR: ERIK MARION 575.439.4139  GOLF COURSE MANAGER: 575.439.4122</p> <p>ELECTRIC: PNM ELECTRIC  (OFFICE) 575.443.6610  LORNE WOFFORD 575.430.8380</p> <p>NEW MEXICO GAS COMPANY: NATURAL GAS  (OFFICE) 1.888.664.2726  KELLY SANDERS 575.491.0766</p> <p>TELEPHONE: CENTURY LINK  RAMON ROMAN (O) 575.525.5101 (C) 575.640.9152</p> <p>CABLE TV: BAJA CABLE  (OFFICE) 575.439.3534  JOHNNY RODRIGUEZ 575.442.0259</p> <p>APS:  ROY VIRDEN: 575.551.2646</p> <p>TULAROSA COMMUNICATIONS:  BILL HULL 575.585.6803</p>						



CONSULTANTS



PROJECT NAME

EFFLUENT STORAGE PONDS  
P1-3 IMPROVEMENTS DESERT  
LAKES GOLF COURSE PUBLIC  
WORKS BID NO. 2017

REV.	DATE	DESCRIPTION	BY

PROJECT NO: 17-600-203-00  
DESIGNED BY: JMW  
DRAWN BY: CRU  
CHECKED BY: BJA  
DATE: NOVEMBER 2017

SHEET TITLE

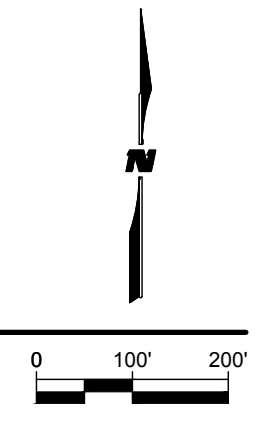
GENERAL NOTES

SHEET NO:  
G-002

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**(A1) OVERALL GOLF COURSE PROJECT LAYOUT**



**GENERAL NOTES:**

1. LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO BEGINNING WORK. THE LOCATION OF EXISTING UTILITIES IF SHOWN ON THE DRAWINGS ARE BASED ON AVAILABLE RECORD INFORMATION, ABOVE GROUND FEATURES VISIBLE IN THE FIELD, AND VERBAL DESCRIPTIONS BY THE CITY OF ALAMOGORDO. IN THE EVENT CONDITIONS IN THE FIELD ARE NOT AS SHOWN ON THE DRAWINGS, CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS INSPECTOR IMMEDIATELY SO THAT NECESSARY CHANGES TO THE DESIGN MAY BE MADE WITH THE MINIMUM OF INTERRUPTION TO THE PROJECT SCHEDULE.
2. CONTRACTOR SHALL VERIFY FIELD LOCATION, TYPE, AND DEPTH OF ALL UTILITIES SHOWN AND NOT SHOWN, WHERE SUSPECTED OF INTERFERENCE.
3. THE CITY OF ALAMOGORDO SHALL DEWATER ALL PONDS PRIOR TO CONTRACTOR WORK.

**SCOPE OF WORK NOTES:**

**PUMPING POND P2 AND OVERFLOW POND P1**

1. EXISTING LINER TO REMAIN IN PLACE. IN AREAS THAT REQUIRE GRADE ADJUSTMENT PER POND SECTIONS (C-301 TO C-303), PROVIDE AND INSTALL NEW SECTION OF 60-MIL HDPE LINER BY WELDING NEW SECTION TO EXISTING LINER AND BACK FILL WITH ENGINEERED FILL PER DETAIL B1 SHEET C-501. RESHAPE THOSE BANK AREAS TO BLEND WITH REMAINING AREAS. ALL GRADING WORK SHALL BE BACKFILLED AND COMPACTED TO 90% PER APWA SECTION 601.
2. PROVIDE AND INSTALL GEOWEB GW40V6 PANELS FILLED WITH 2"-4" RIP RAP ROCK EXTENDING 4' INTO THE POND PER DETAIL A1 & A2 SHEET C-501 ALONG ENTIRE POND PERIMETER. SECURE ENTIRE PERIMETER OF LINER AND OR GEOWEB SYSTEM IN AN EARTHEN ANCHOR TRENCH (SEE SPECIFICATIONS AND CONTRACT DRAWINGS).
3. PROVIDE AND PLACE 2"-4" RIP RAP ROCK INTO GEOWEB CELLS AROUND PERIMETER OF PONDS COVERING ALL EXPOSED LINER AND GEOWEB MATERIAL WITH ROCK PER DETAIL A1 & A2 SHEET C-501.

**OVERFLOW POND P3**

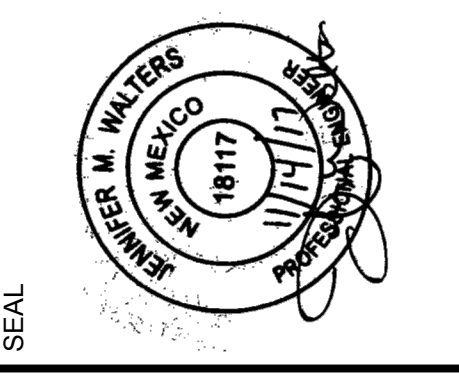
4. EXISTING LINER TO REMAIN IN PLACE. PROVIDE AND INSTALL GEOWEB GW40V6 PANELS FILLED WITH 2"-4" RIP RAP ROCK EXTENDING 4' INTO THE POND PER DETAIL A3 SHEET C-501 ALONG ENTIRE POND PERIMETER. SECURE ENTIRE PERIMETER OF LINER AND OR GEOWEB SYSTEM IN AN EARTHEN ANCHOR TRENCH (SEE SPECIFICATIONS AND CONTRACT DRAWINGS).
5. PROVIDE AND PLACE 2"-4" RIP RAP ROCK INTO GEOWEB CELLS AROUND PERIMETER OF PONDS COVERING ALL EXPOSED LINER AND GEOWEB MATERIAL WITH ROCK PER DETAIL A3 SHEET C-501.

**LEGEND:**

POND NUMBER

**WILSON & COMPANY**  
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 RIO RANCHO, NM 87124  
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 FAX: 505-898-8501  
 www.wilsonco.com

CONSULTANTS



PROJECT NAME  
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 LAKES GOLF COURSE PUBLIC  
 WORKS BID NO. 2017**

REV.	DATE	DESCRIPTION	BY

PROJECT NO: 17-600-203-00  
 DESIGNED BY: JMW  
 DRAWN BY: CRU  
 CHECKED BY: BJA  
 DATE: NOVEMBER 2017

SHEET TITLE  
**OVERALL SITE PLAN**

SHEET NO:  
**G-101**

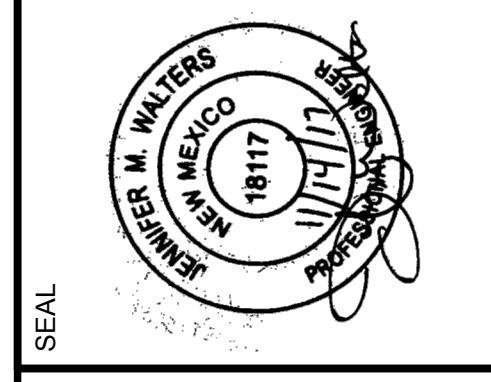
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**A1** OVERALL POND SITE PLAN

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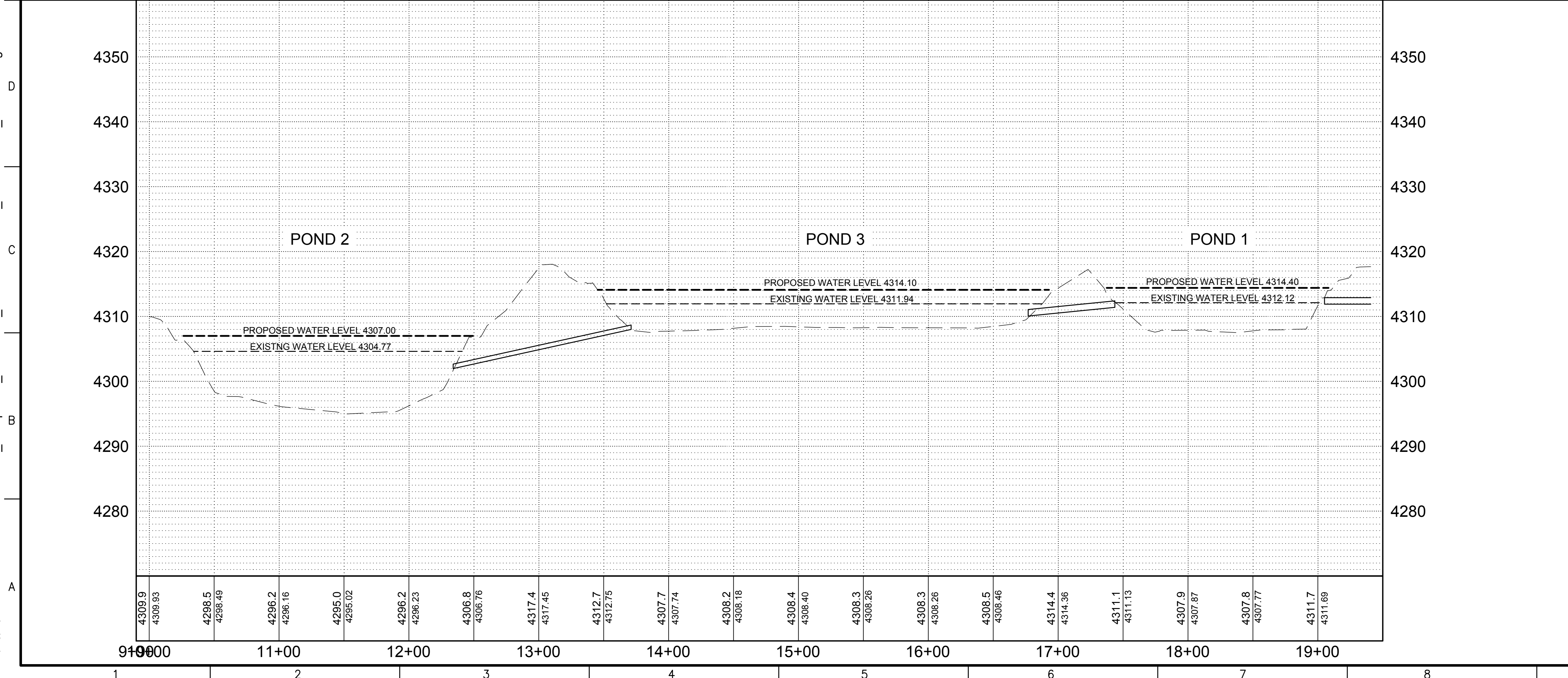
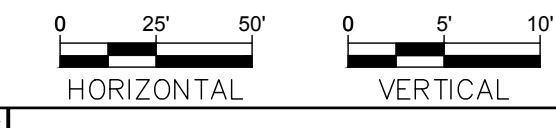
REV.	DATE	DESCRIPTION	BY

PROJECT NO: 17-600-203-00  
 DESIGNED BY: JMW  
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SHEET TITLE  
**POND SITE  
 PLAN**

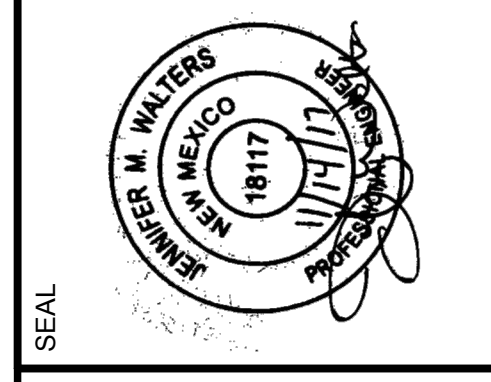
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**C-101**

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 DESIGNED BY: JMW  
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 CHECKED BY: BJA  
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SHEET TITLE  
**HYDRAULIC  
 PROFILE**

SHEET NO:  
**C-201**

11/15/2017 M:\MSD\17-600-203-002\_Disciplines\_SHEETS\8\_sheets - utilities\02\_CIVIL\760203\_OS\_X-SEC.dwg



**A1** POND 1 SITE PLAN

**CONSTRUCTION NOTES:**

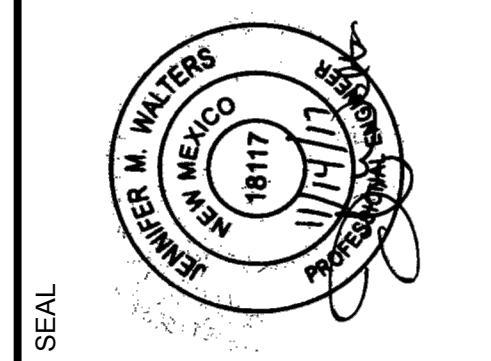
1. POND WATER LEVEL WILL BE ADJUSTED BY CITY STAFF TO PROVIDE AT LEAST 2 FEET OF DRY WORKING SPACE AROUND POND LINER WORK AREAS.
2. EXISTING HDPE LINER TO REMAIN IN PLACE, GRADE ADJUSTMENT AND LINER COVER TO BE INSTALLED OVER EXISTING. SEE SHEET C-501 DETAILS
3. FOR AREAS THAT REQUIRE GRADE ADJUSTMENT, A NEW SECTION OF 60 MIL HDPE LINER WILL BE WELDED TO EXISTING LINER TO ALLOW FOR ADDITIONAL FILL TO BE PLACED. SEE SHEET C-501 DETAIL B1.
4. AFTER GRADE ADJUSTMENTS HAVE BEEN COMPLETED CONTRACTOR TO INSTALL GEOWEB GW40V6 (6" PANELS) OR ENGINEER APPROVED EQUAL. GEOWEB SYSTEM TO BE INSTALLED PER MANUFACTURES INSTRUCTIONS.
5. CONTRACTOR TO FILL GEOWEB CELLS WITH 2"-4" RIP RAP TO FULLY COVER EXPOSED CELL MATERIAL.
6. SEE SHEET POND SECTIONS C-301 THRU C-305 FOR EXISTING POND SLOPES.

**LEGEND:**

- TIE INTO EXISTING GRADE: •
- NEW CONTOUR: —

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**EFFLUENT STORAGE PONDS  
 P1-3 IMPROVEMENTS DESERT  
 LAKES GOLF COURSE PUBLIC  
 WORKS BID NO. 2017**

REV.	DATE	DESCRIPTION	BY

PROJECT NO: 17-600-203-00  
 DESIGNED BY: JMW  
 DRAWN BY: CRU  
 CHECKED BY: BJA  
 DATE: NOVEMBER 2017

SHEET TITLE  
**POND 1  
 SITE GRADING PLAN**

SHEET NO:  
**C-102**

11/15/2017 M:\MSD\17-600-203-002\_Disciplines\_SHEETS\8\_sheets - utilities\02\_CIVIL\760203\_OS\_X-SEC.dwg



**A1** POND 2 SITE PLAN

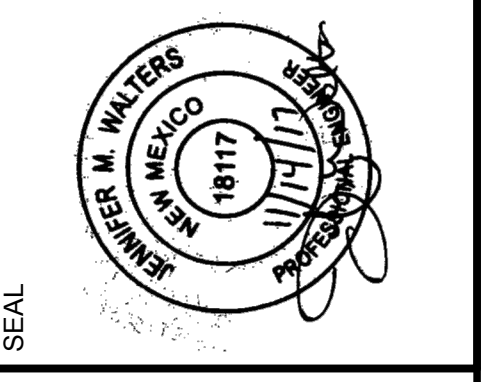
**CONSTRUCTION NOTES:**

1. POND WATER LEVEL WILL BE ADJUSTED BY CITY STAFF TO PROVIDE AT LEAST 2 FEET OF DRY WORKING SPACE AROUND POND LINER WORK AREAS.
2. EXISTING HDPE LINER TO REMAIN IN PLACE, GRADE ADJUSTMENT AND LINER COVER TO BE INSTALLED OVER EXISTING. SEE SHEET C-501 DETAILS
3. FOR AREAS THAT REQUIRE GRADE ADJUSTMENT, A NEW SECTION OF 60 MIL HDPE LINER WILL BE WELDED TO EXISTING LINER TO ALLOW FOR ADDITIONAL FILL TO BE PLACED. SEE SHEET C-501 DETAIL B1.
4. AFTER GRADE ADJUSTMENTS HAVE BEEN COMPLETED CONTRACTOR TO INSTALL GEOWEB GW40V6 (6' PANELS) OR ENGINEER APPROVED EQUAL. GEOWEB SYSTEM TO BE INSTALLED PER MANUFACTURES INSTRUCTIONS.
5. CONTRACTOR TO FILL GEOWEB CELLS WITH 2"-4" RIP RAP TO FULLY COVER EXPOSED CELL MATERIAL.
6. SEE SHEET POND SECTIONS C-301 THRU C-305 FOR EXISTING POND SLOPES.

**LEGEND:**  
 TIE INTO EXISTING GRADE: ●  
 NEW CONTOUR: —

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PROJECT NAME  
**EFFLUENT STORAGE PONDS  
 P1-3 IMPROVEMENTS DESERT  
 LAKES GOLF COURSE PUBLIC  
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REV.	DATE	DESCRIPTION	BY

PROJECT NO: 17-600-203-00  
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SHEET TITLE  
**POND 2  
 SITE GRADING PLAN**

SHEET NO:  
**C-103**

11/15/2017 M:\MSD\17-600-203-002\_Disciplines\_SHEETS\8\_sheets - utilities\02\_CIVIL\760203\_OS\_X-SEC.dwg



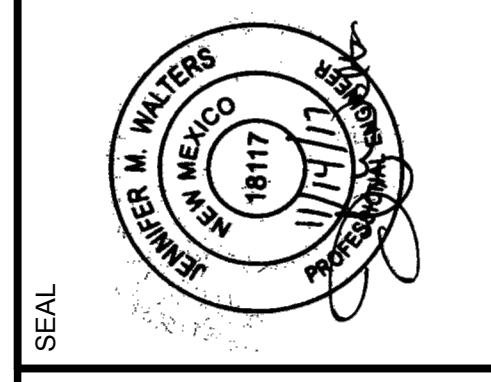
A1 POND 3 SITE PLAN

CONSTRUCTION NOTES:

1. POND WATER LEVEL WILL BE ADJUSTED BY CITY STAFF TO PROVIDE AT LEAST 2 FEET OF DRY WORKING SPACE AROUND POND LINER WORK AREAS.
2. EXISTING HDPE LINER TO REMAIN IN PLACE, GRADE ADJUSTMENT AND LINER COVER TO BE INSTALLED OVER EXISTING. SEE SHEET C-501 DETAILS
3. FOR AREAS THAT REQUIRE GRADE ADJUSTMENT, A NEW SECTION OF 60 MIL HDPE LINER WILL BE WELDED TO EXISTING LINER TO ALLOW FOR ADDITIONAL FILL TO BE PLACED. SEE SHEET C-501 DETAIL B1.
4. AFTER GRADE ADJUSTMENTS HAVE BEEN COMPLETED CONTRACTOR TO INSTALL GEOWEB GW40V6 (6' PANELS) OR ENGINEER APPROVED EQUAL. GEOWEB SYSTEM TO BE INSTALLED PER MANUFACTURES INSTRUCTIONS.
5. CONTRACTOR TO FILL GEOWEB CELLS WITH 2'-4" RIP RAP TO FULLY COVER EXPOSED CELL MATERIAL.
6. SEE SHEET POND SECTIONS C-301 THRU C-305 FOR EXISTING POND SLOPES.

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PROJECT NAME  
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 P1-3 IMPROVEMENTS DESERT  
 LAKES GOLF COURSE PUBLIC  
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REV.	DATE	DESCRIPTION	BY

PROJECT NO: 17-600-203-00  
 DESIGNED BY: JMW  
 DRAWN BY: CRU  
 CHECKED BY: BJA  
 DATE: NOVEMBER 2017

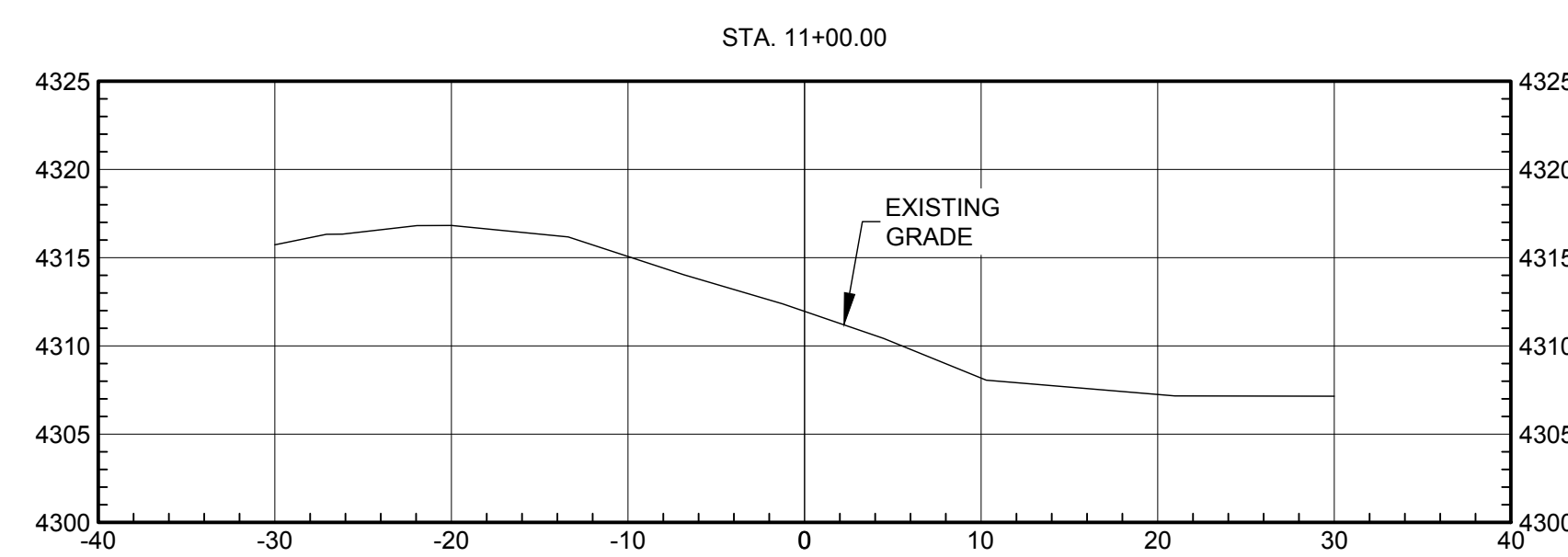
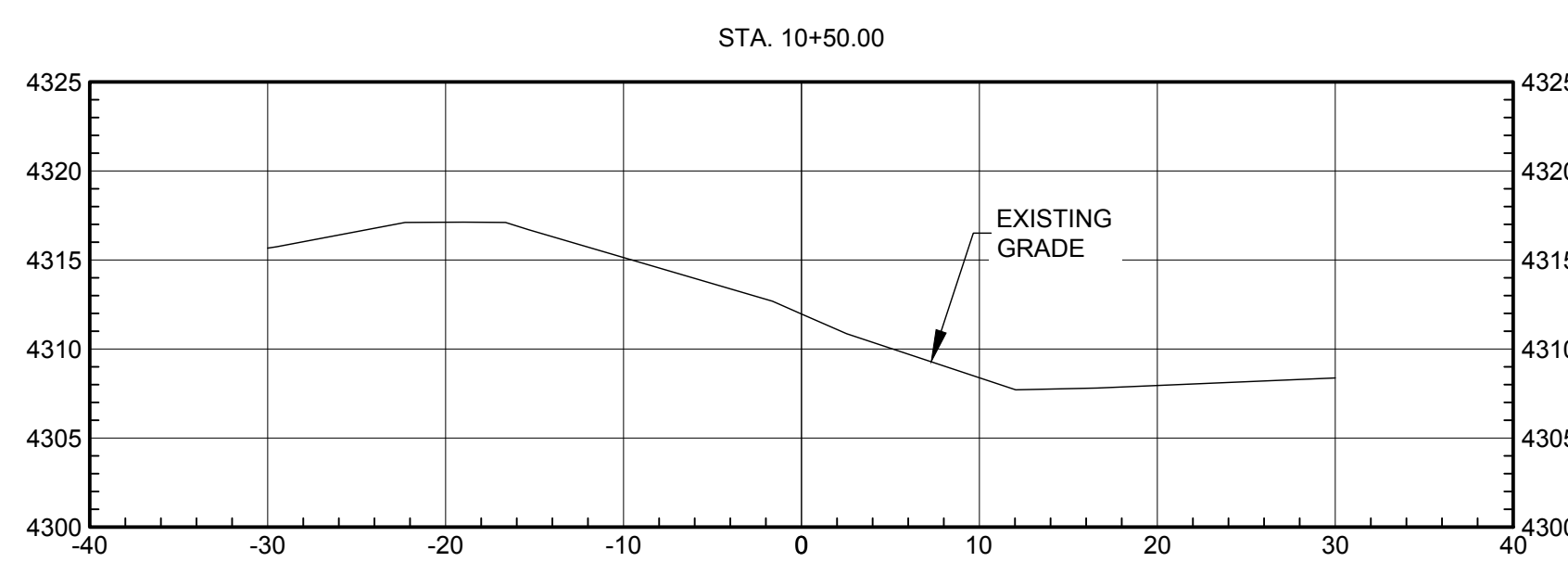
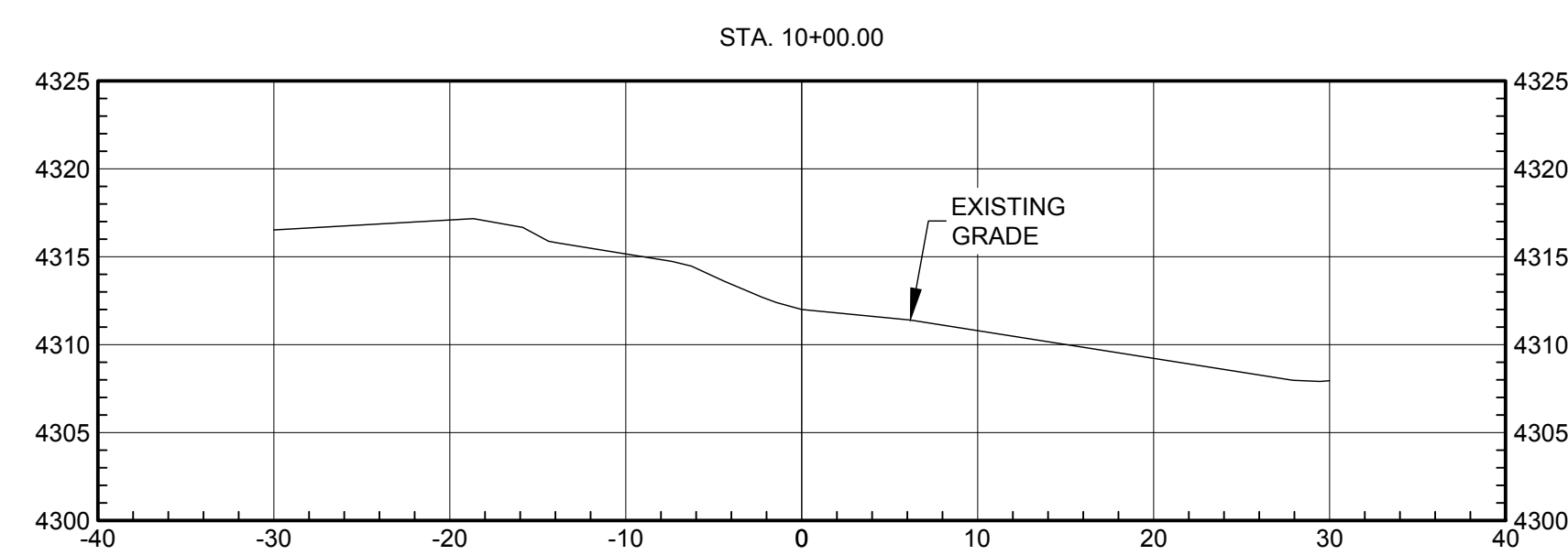
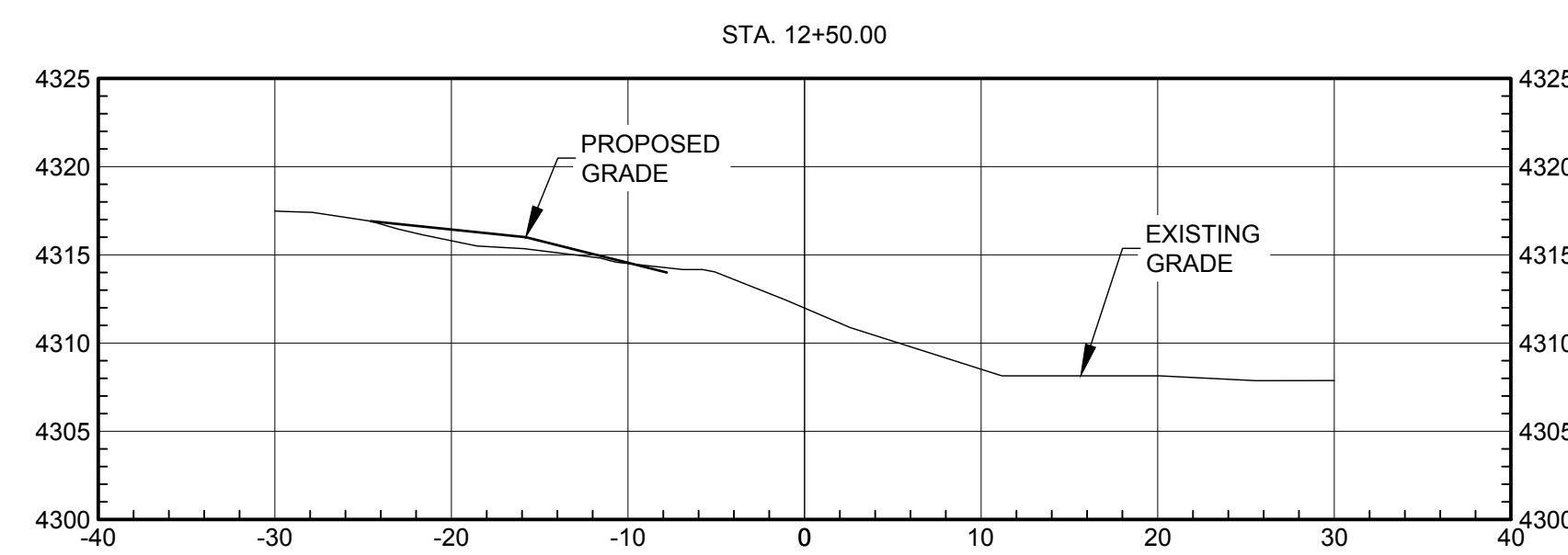
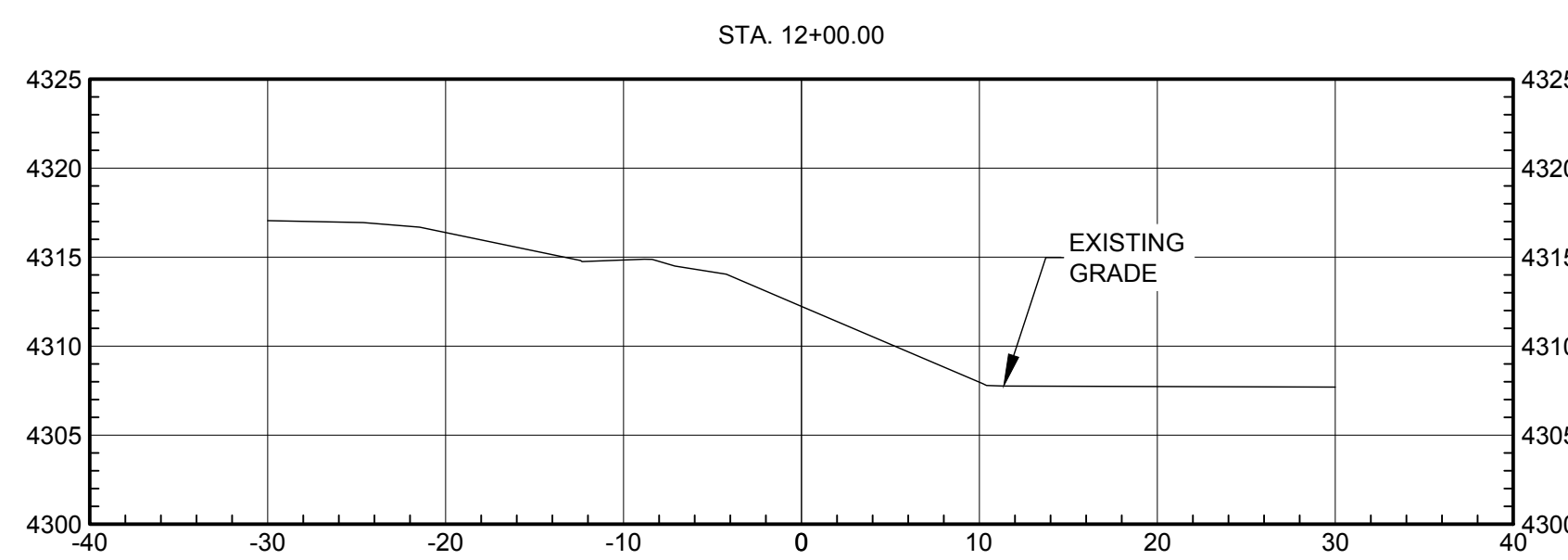
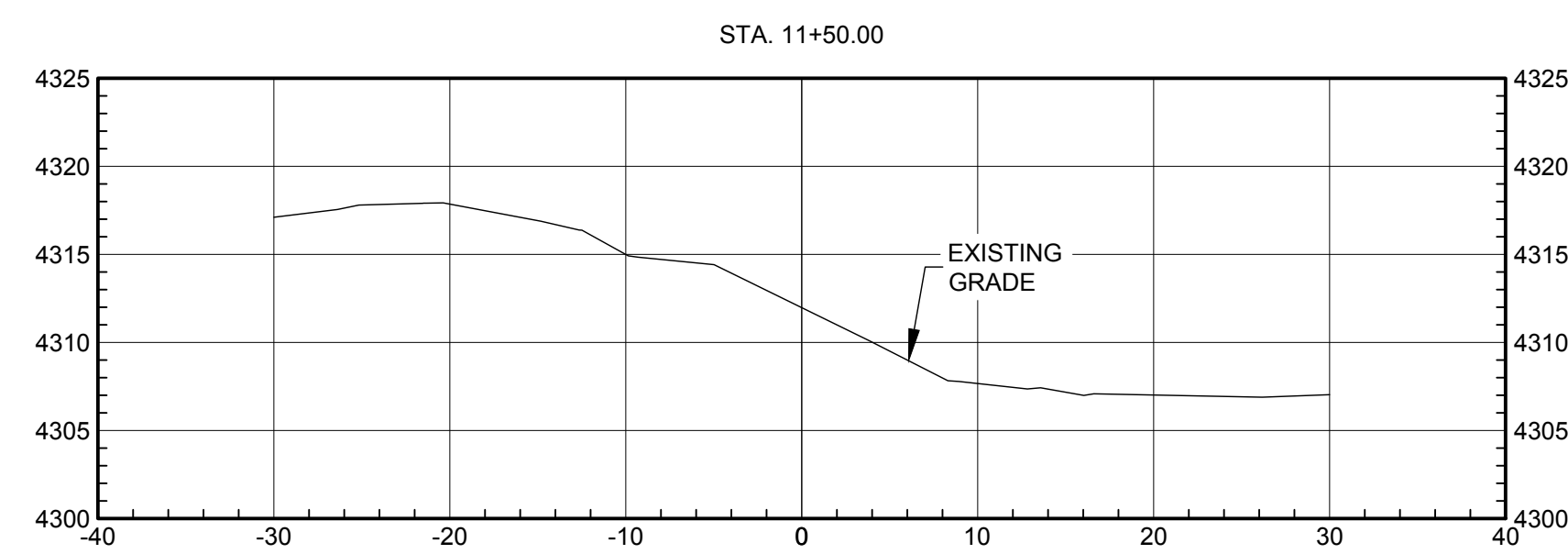
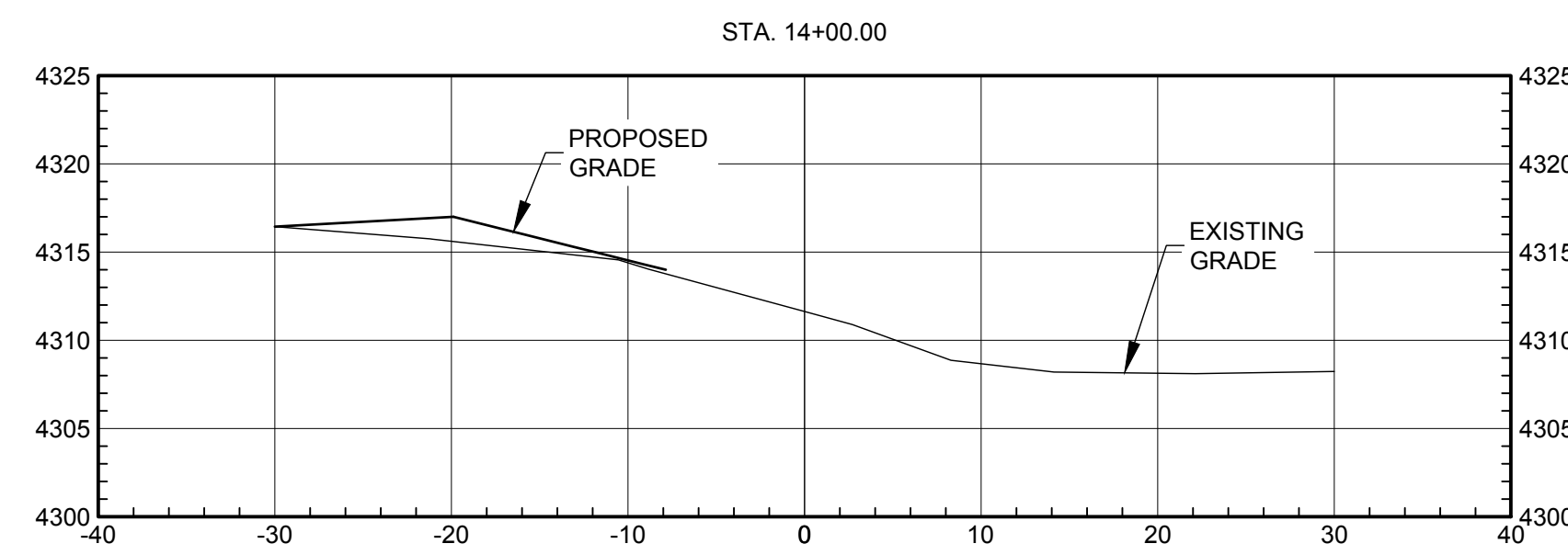
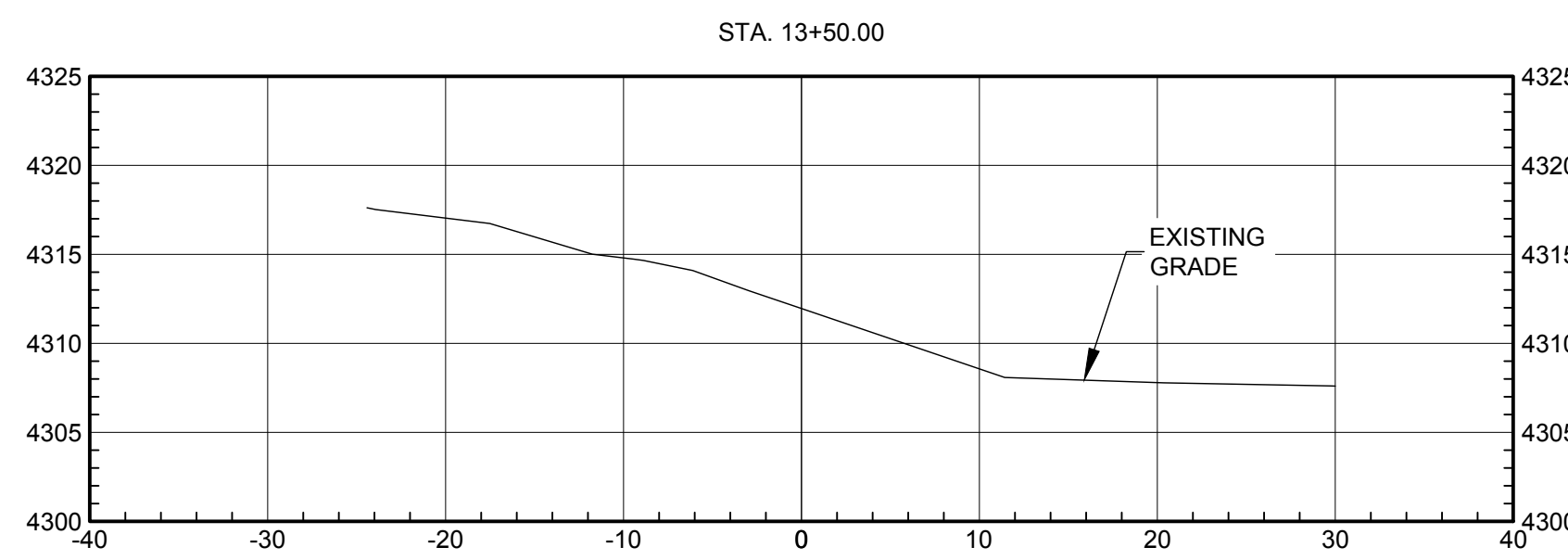
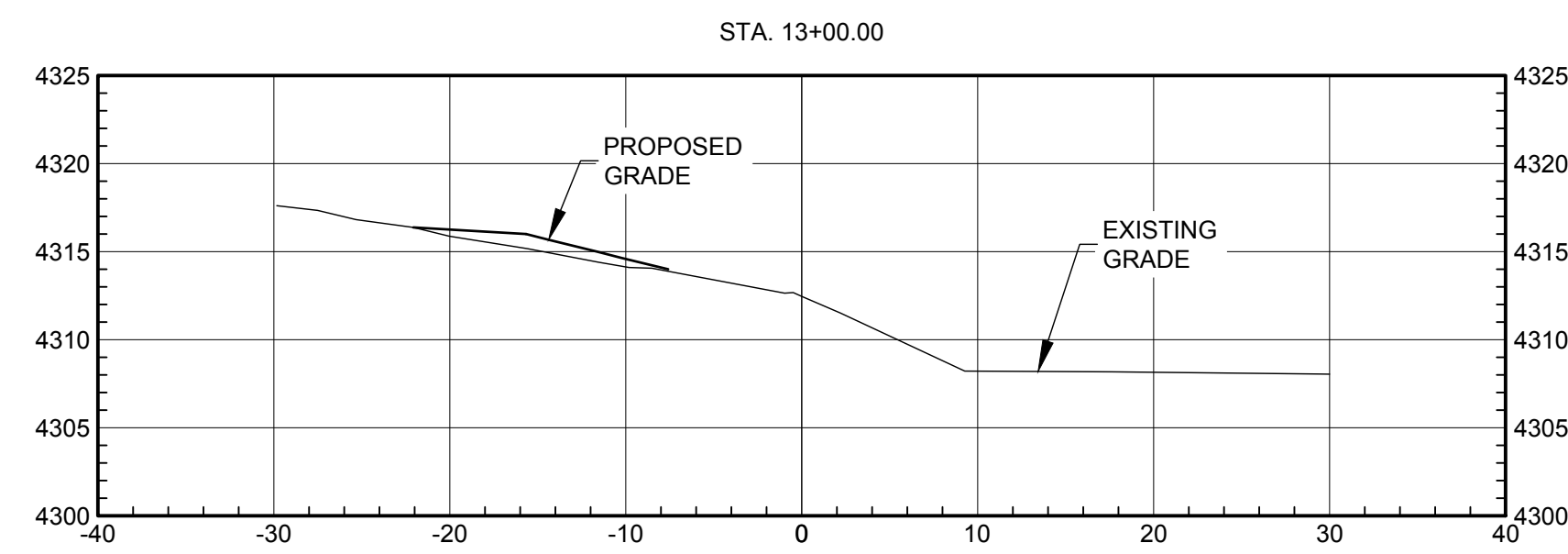
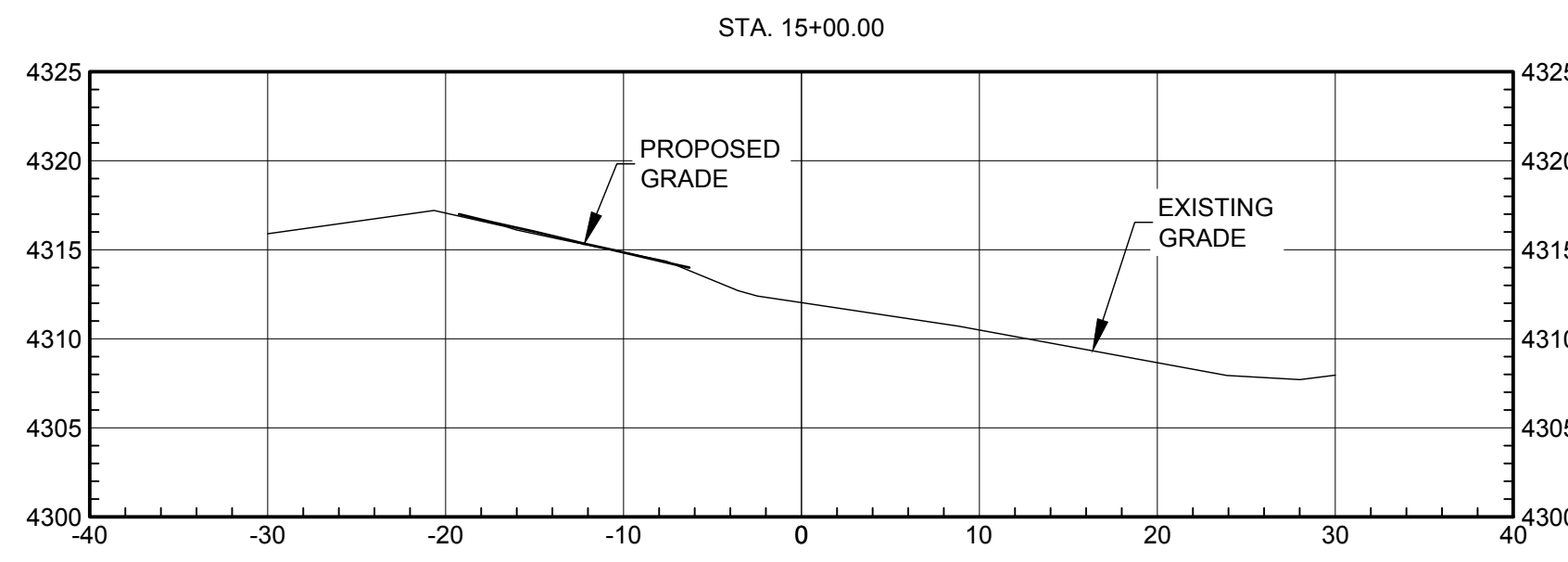
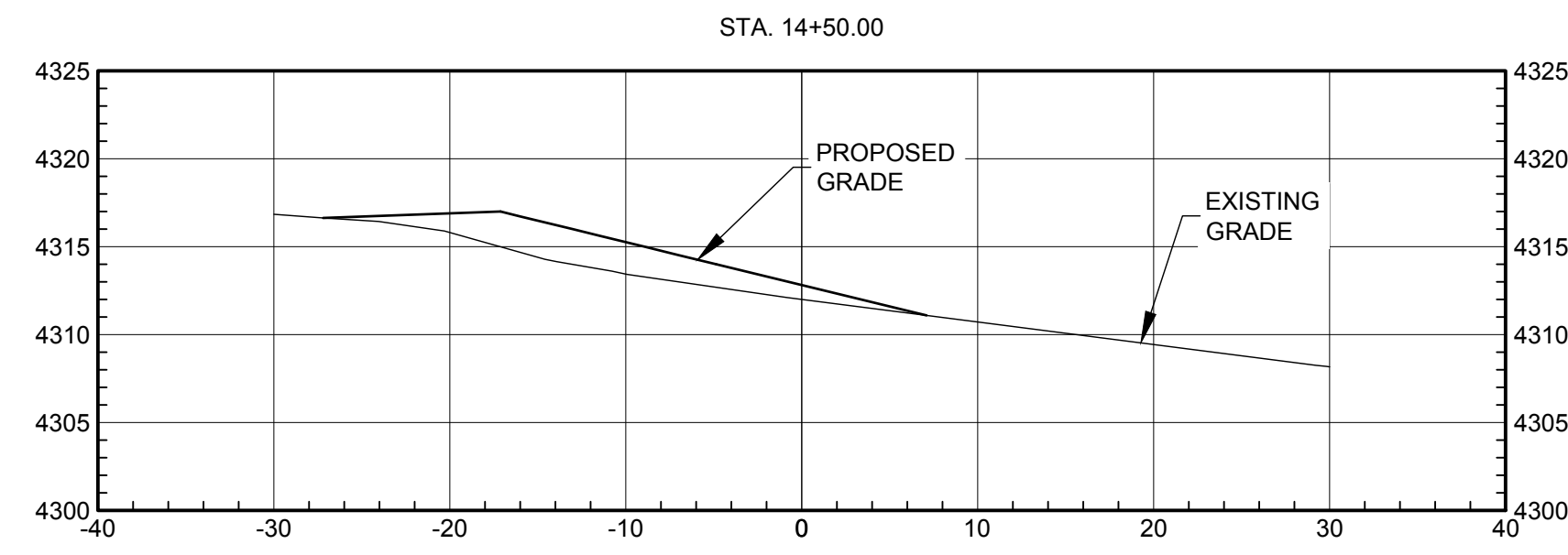
SHEET TITLE  
**POND 3  
 SITE PLAN**

SHEET NO:  
**C-104**

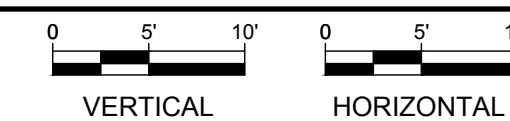


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# POND 1

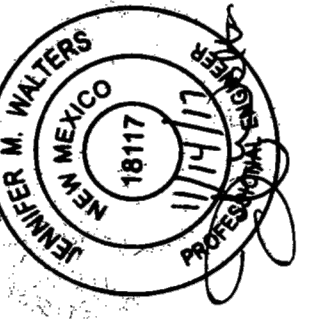


POND 1 X-SECTIONS



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SEAL

PROJECT NAME  
**EFFLUENT STORAGE PONDS  
 P1-3 IMPROVEMENTS DESERT  
 LAKES GOLF COURSE PUBLIC  
 WORKS BID NO. 2017**

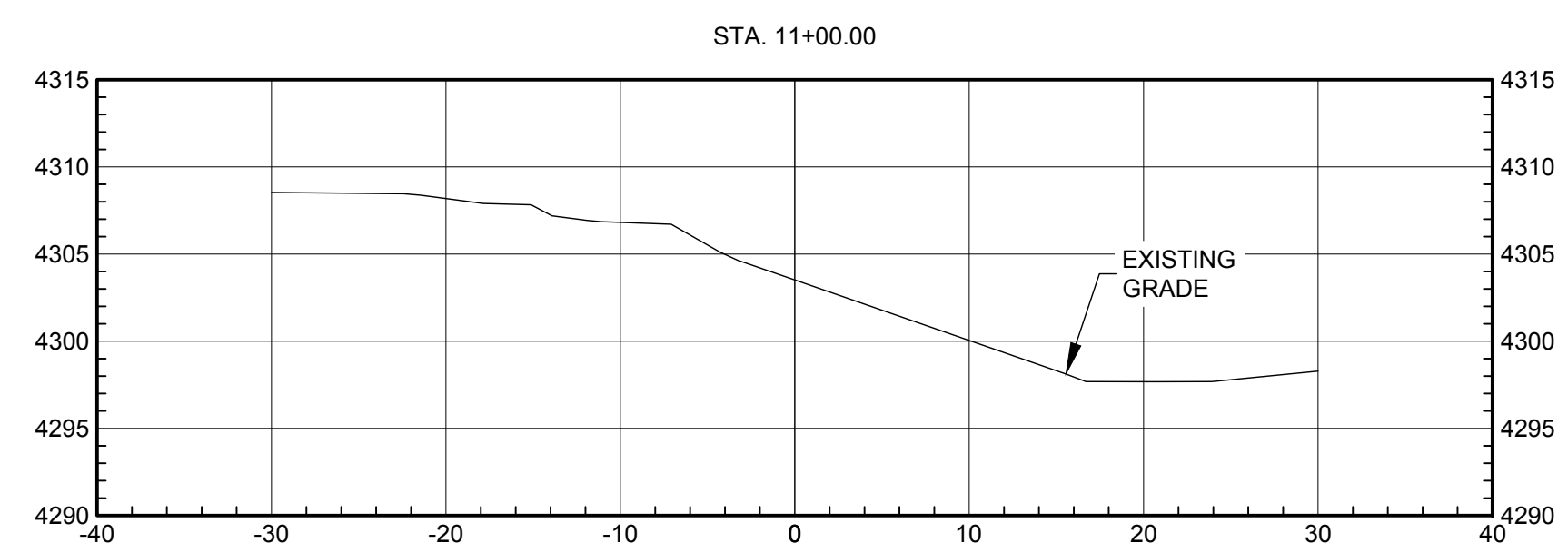
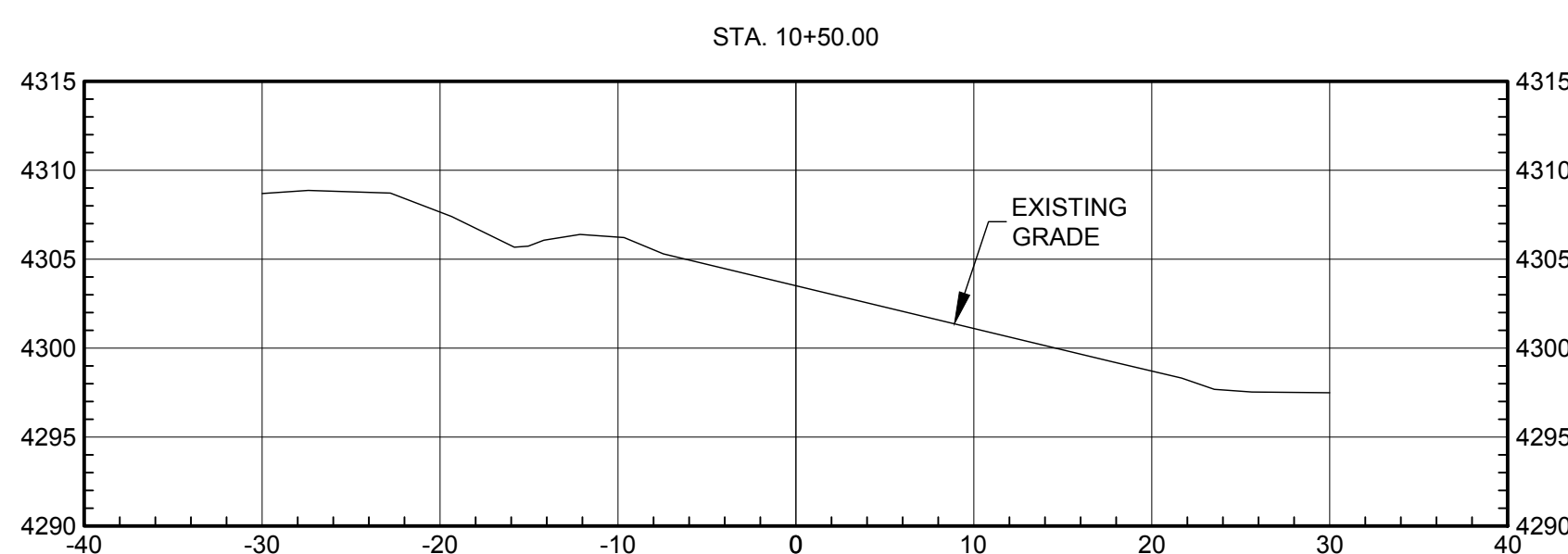
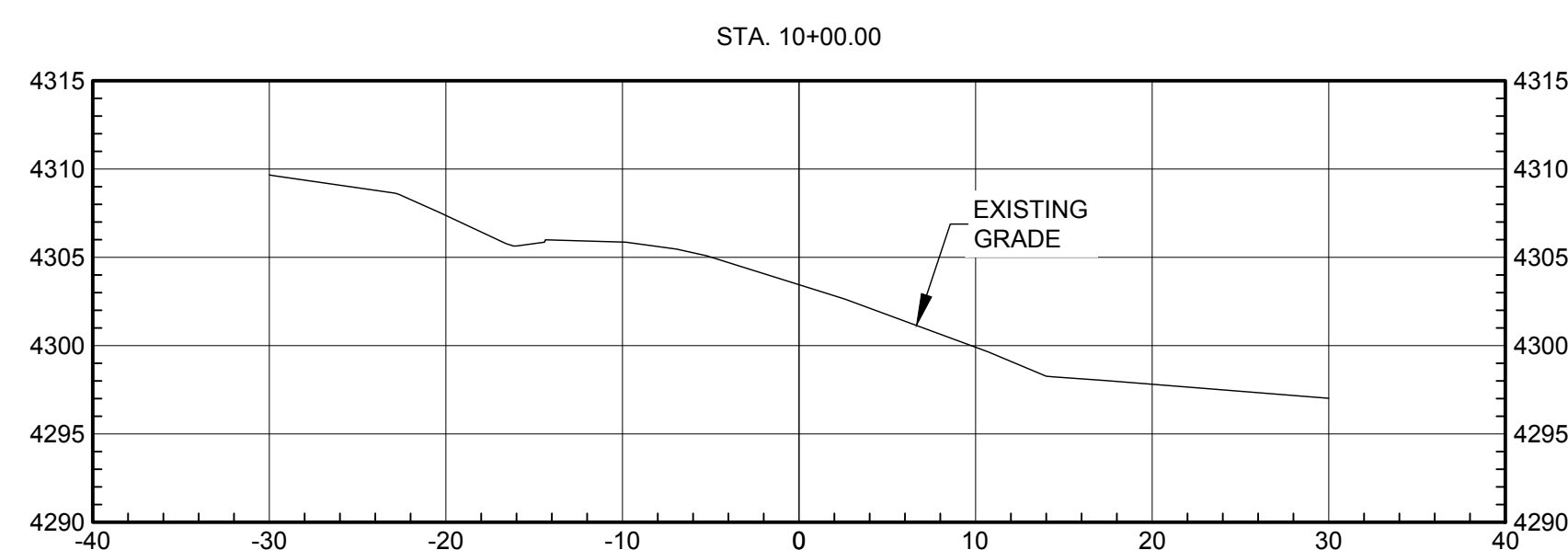
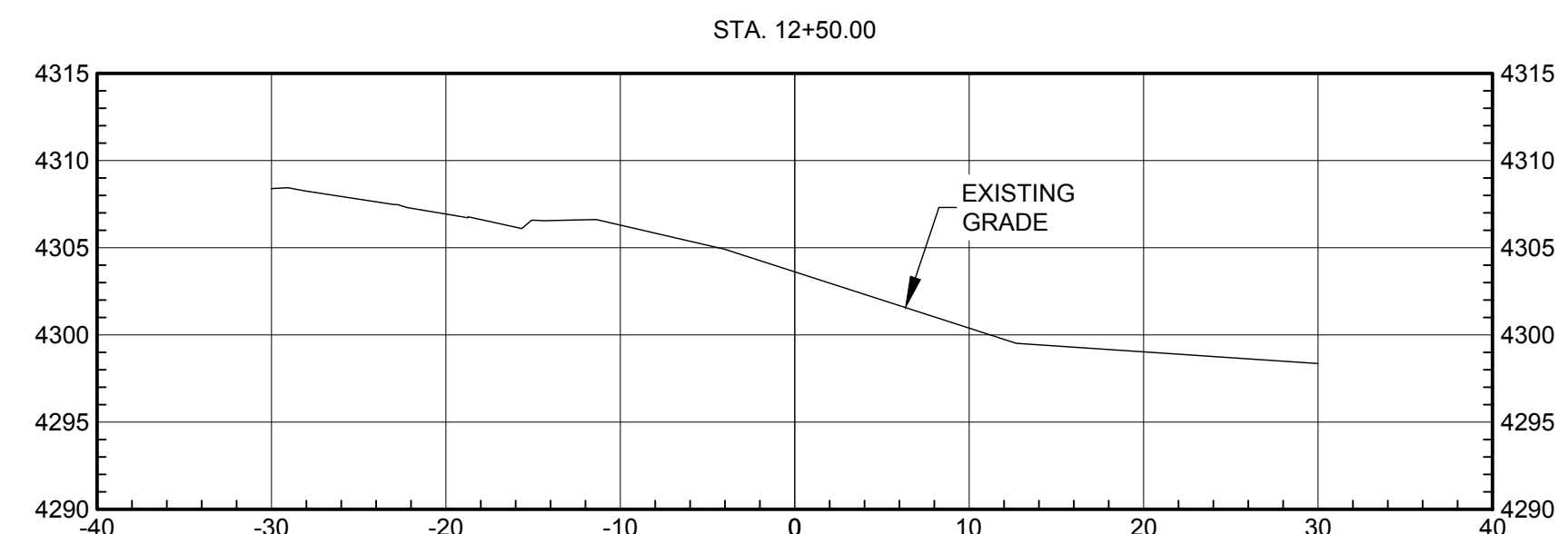
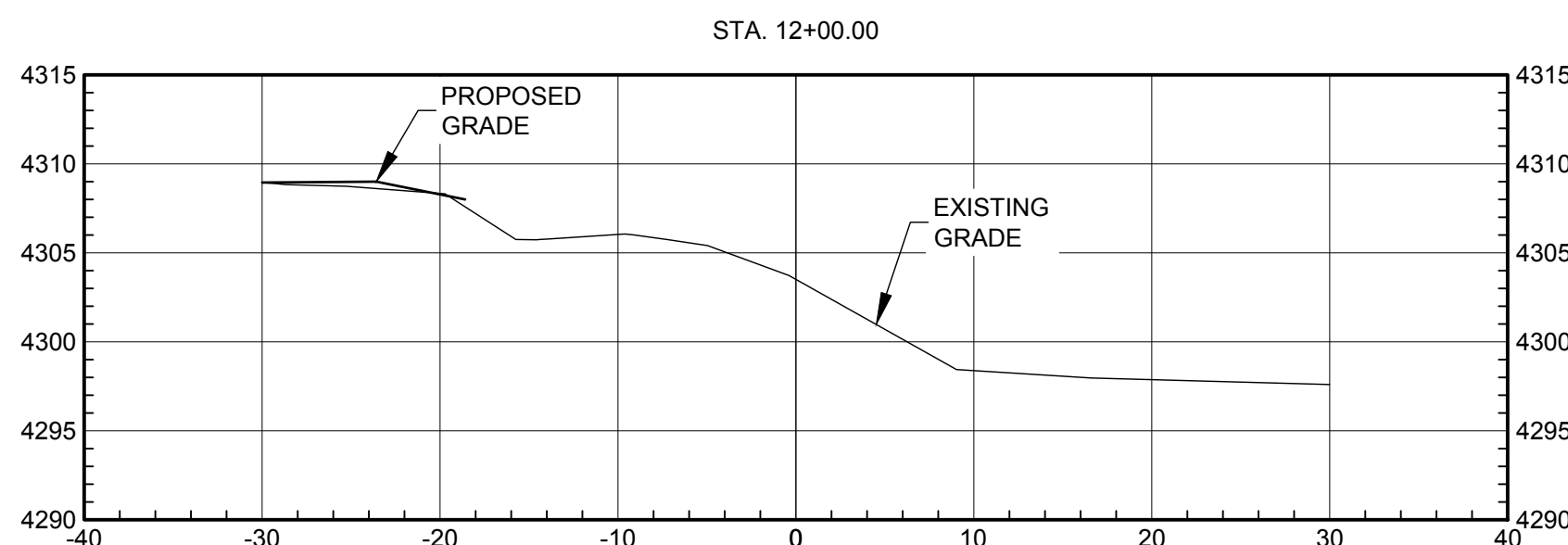
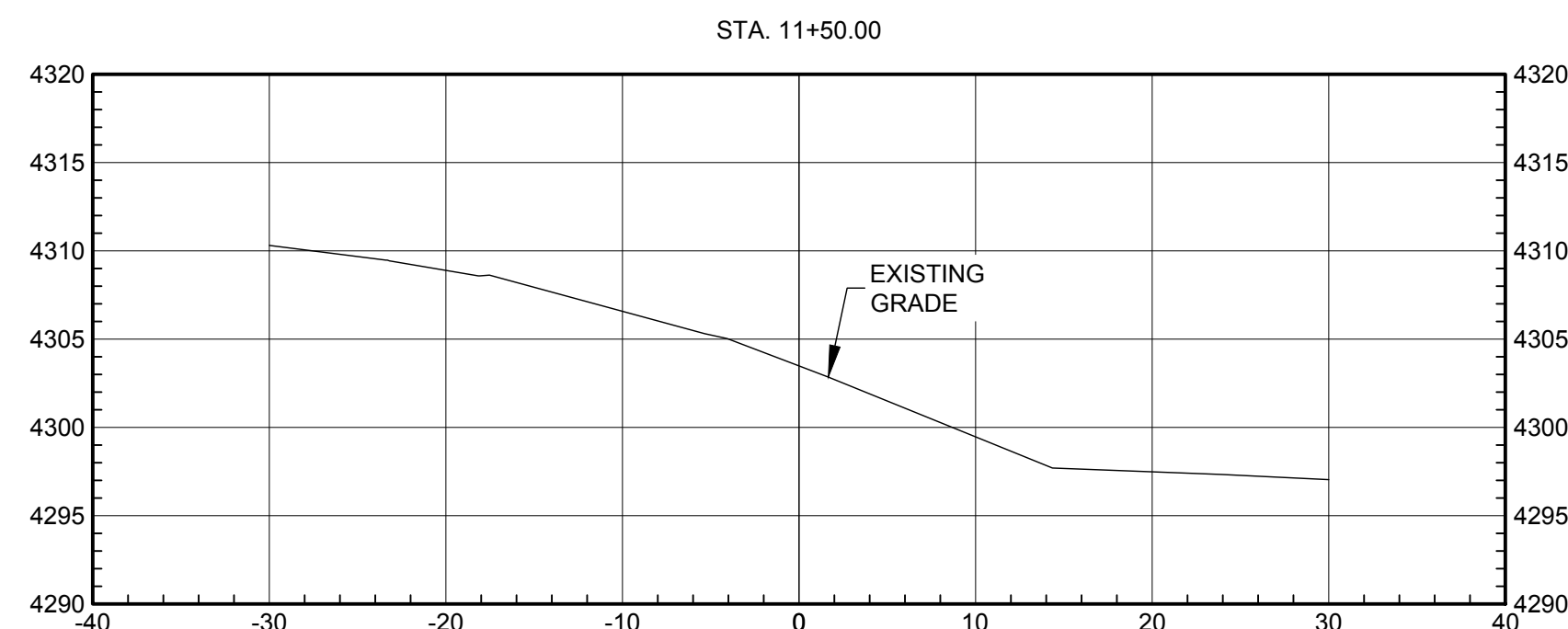
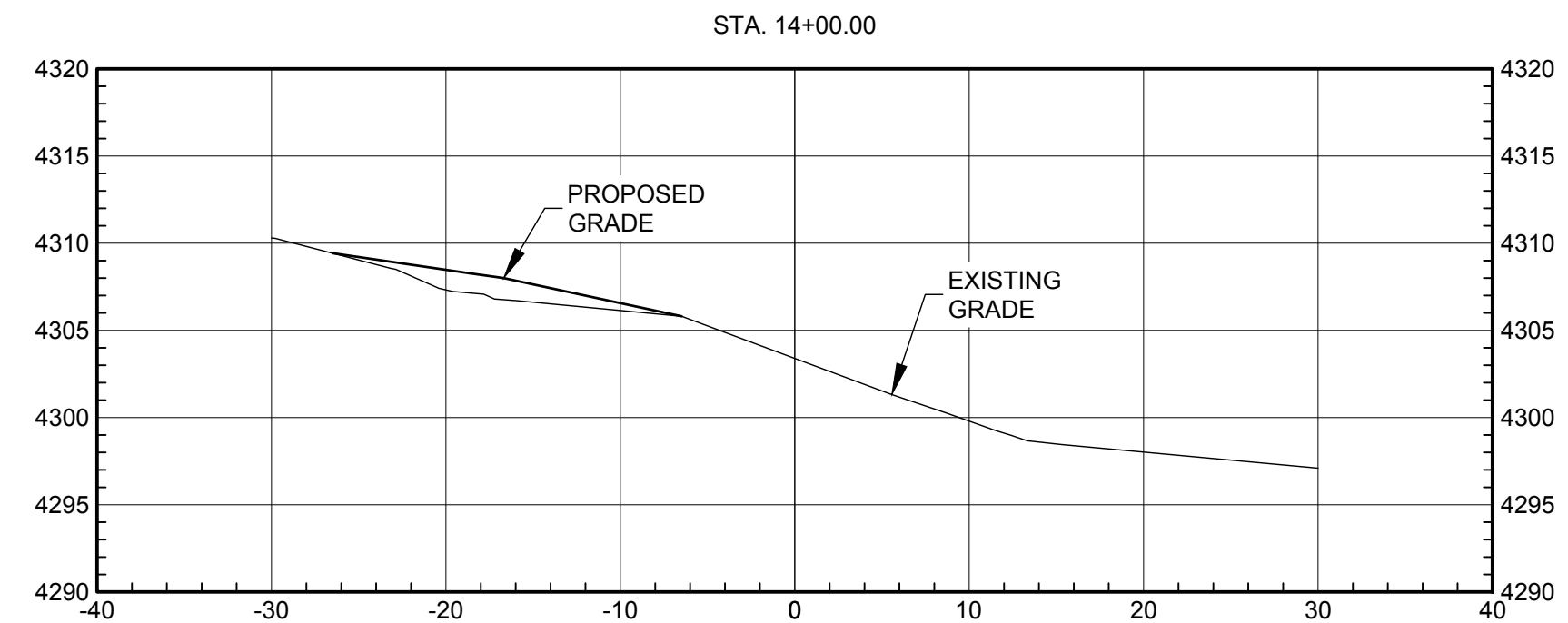
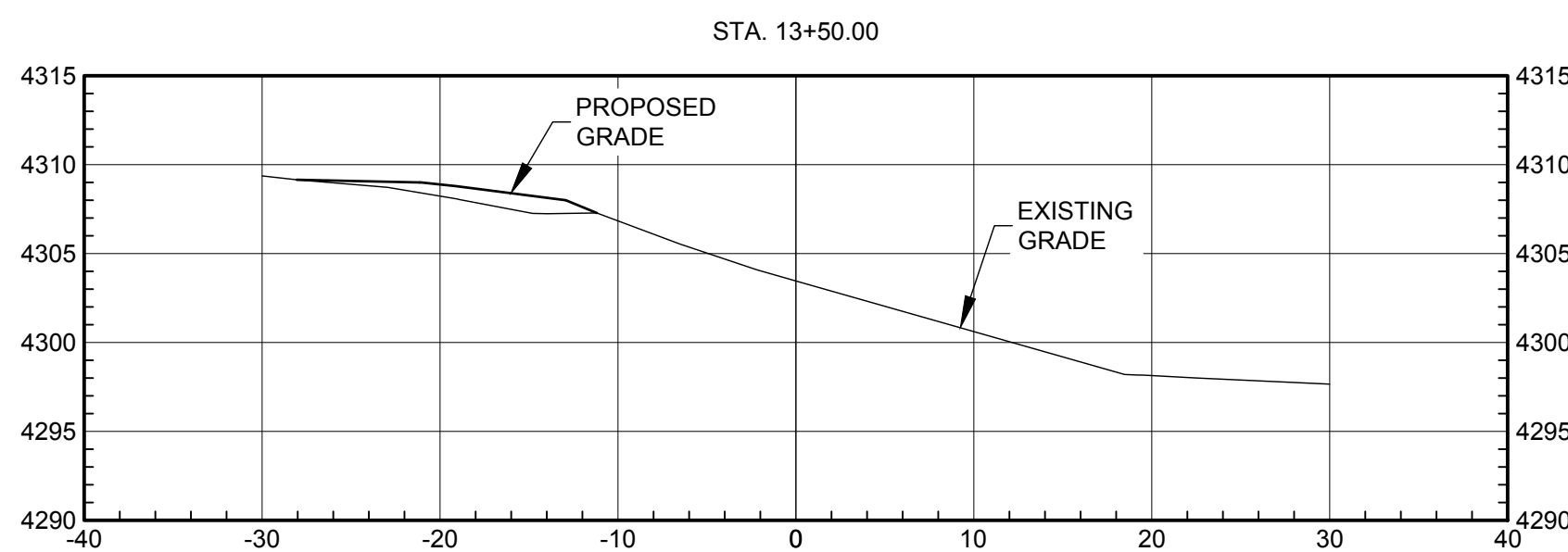
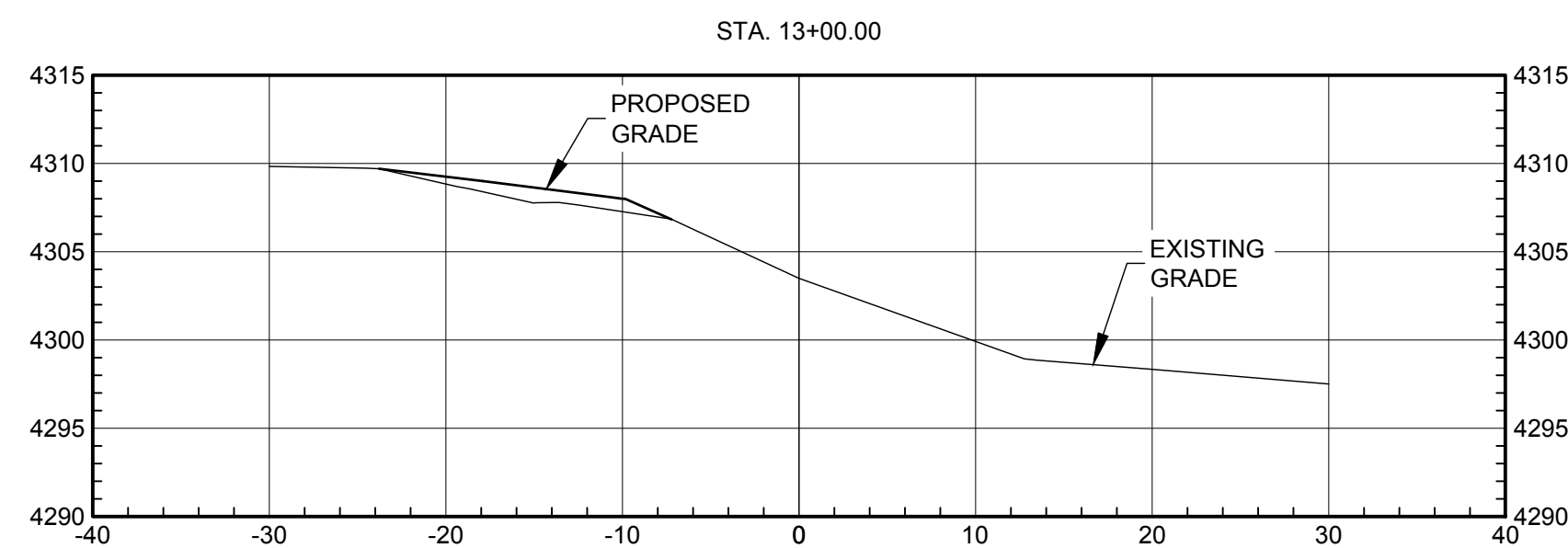
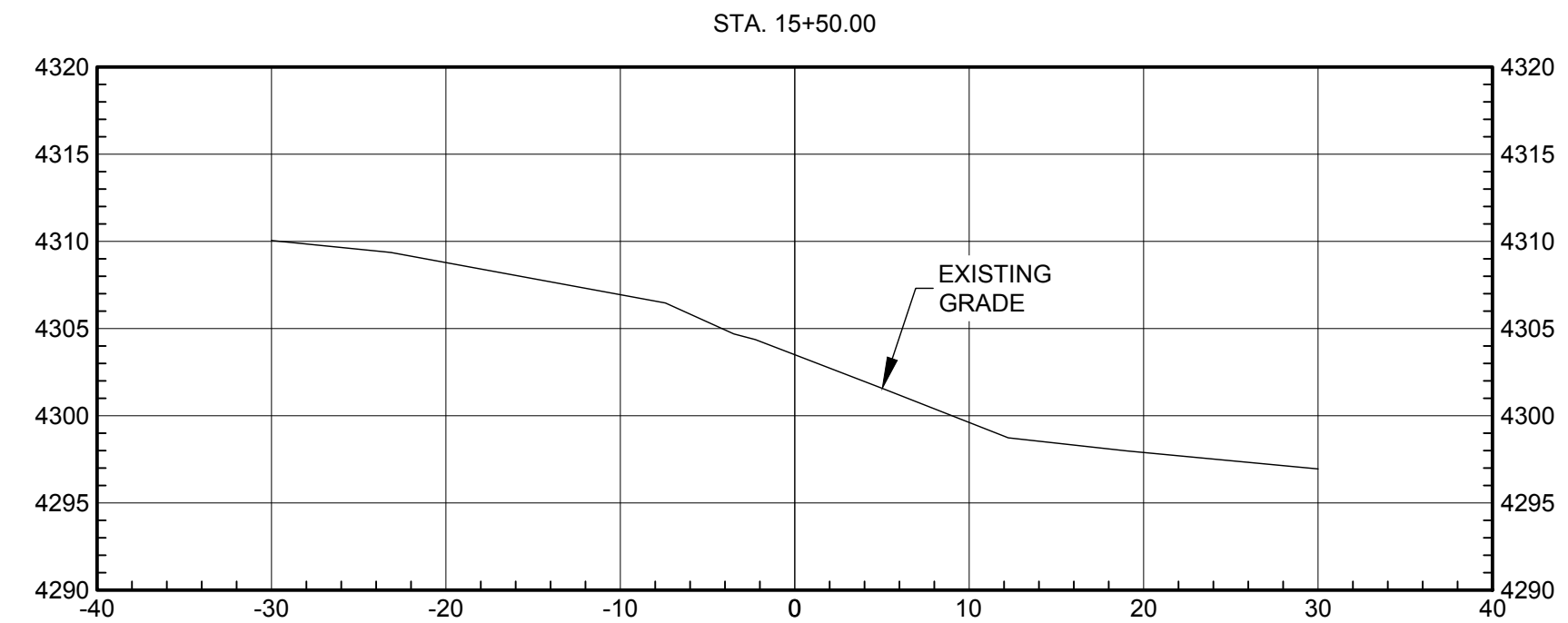
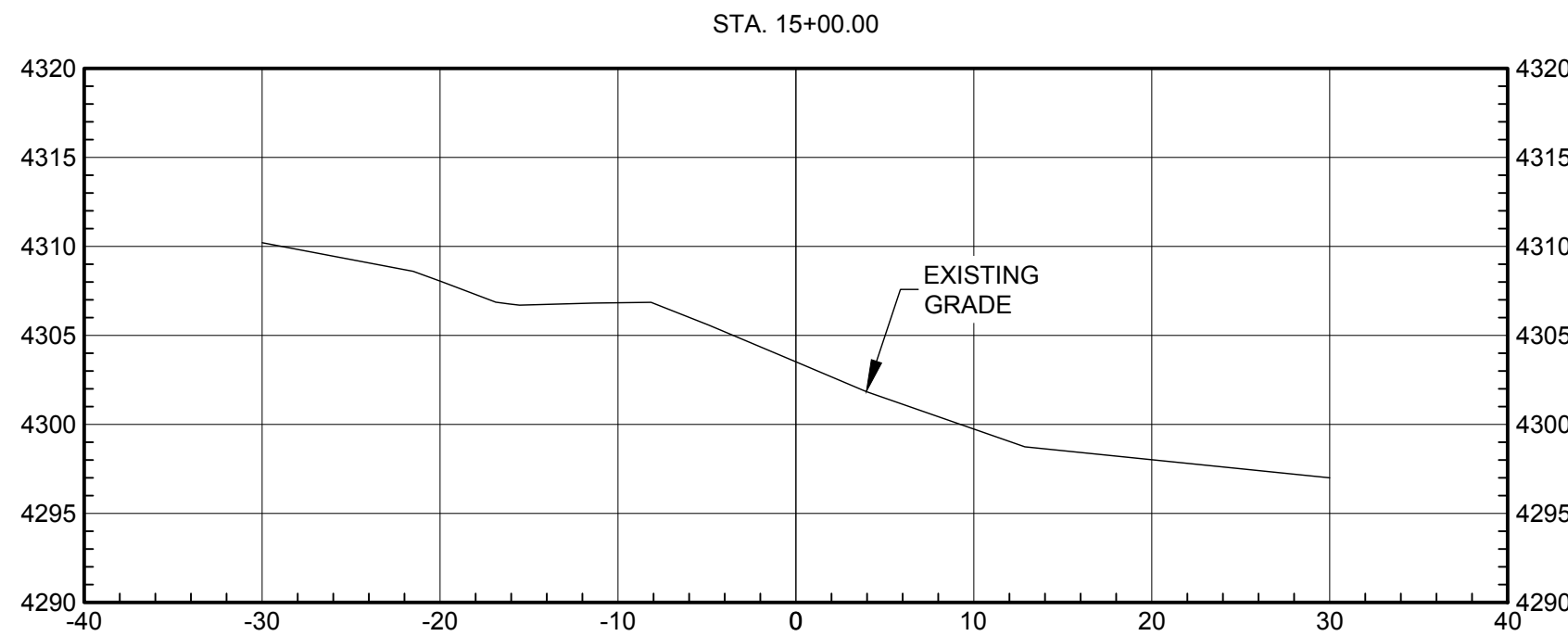
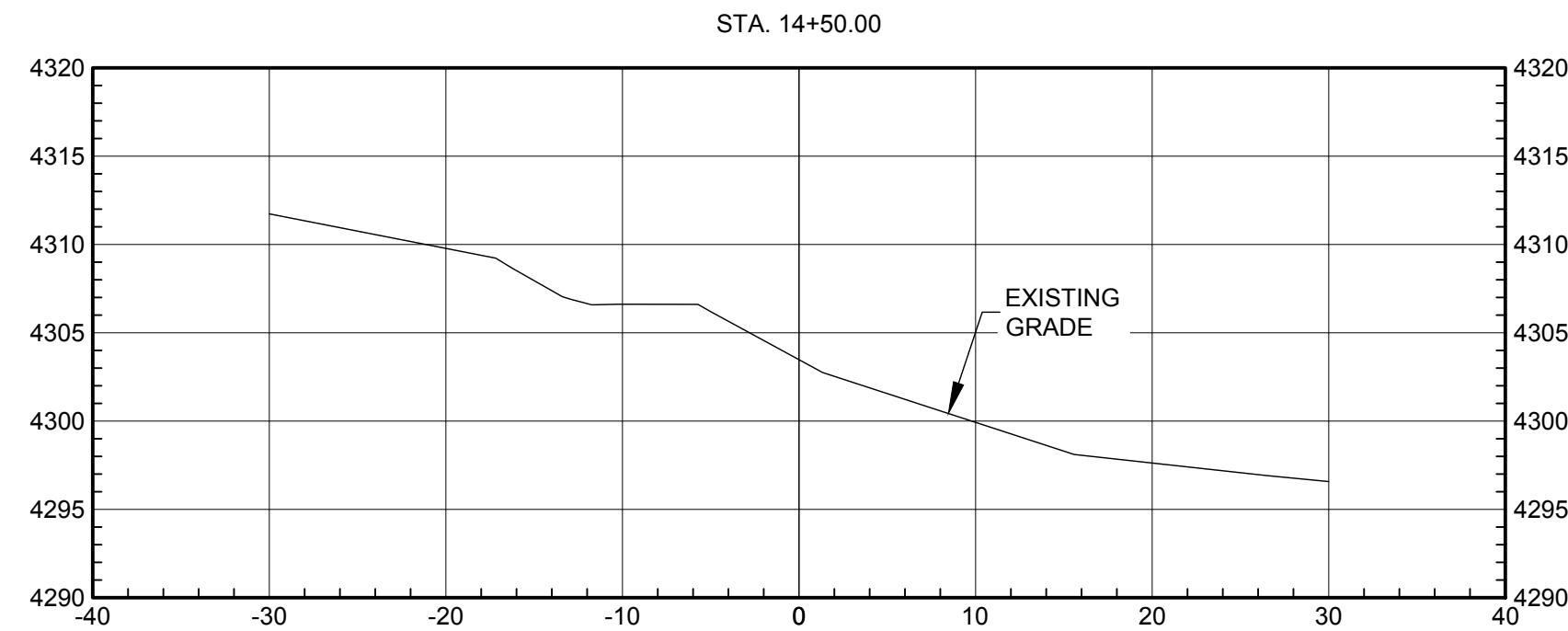
REV.	DATE	DESCRIPTION	BY

PROJECT NO: 17-600-203-00  
 DESIGNED BY: JMW  
 DRAWN BY: CRU  
 CHECKED BY: BJA  
 DATE: NOVEMBER 2017

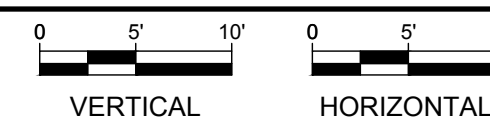
SHEET TITLE  
**POND 1  
 SECTIONS**

SHEET NO:  
**C-301**

# POND 2



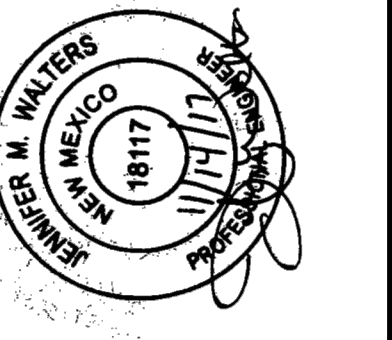
POND 2 X-SECTIONS



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SEAL

PROJECT NAME  
**EFFLUENT STORAGE PONDS  
 P1-3 IMPROVEMENTS DESERT  
 LAKES GOLF COURSE PUBLIC  
 WORKS BID NO. 2017**

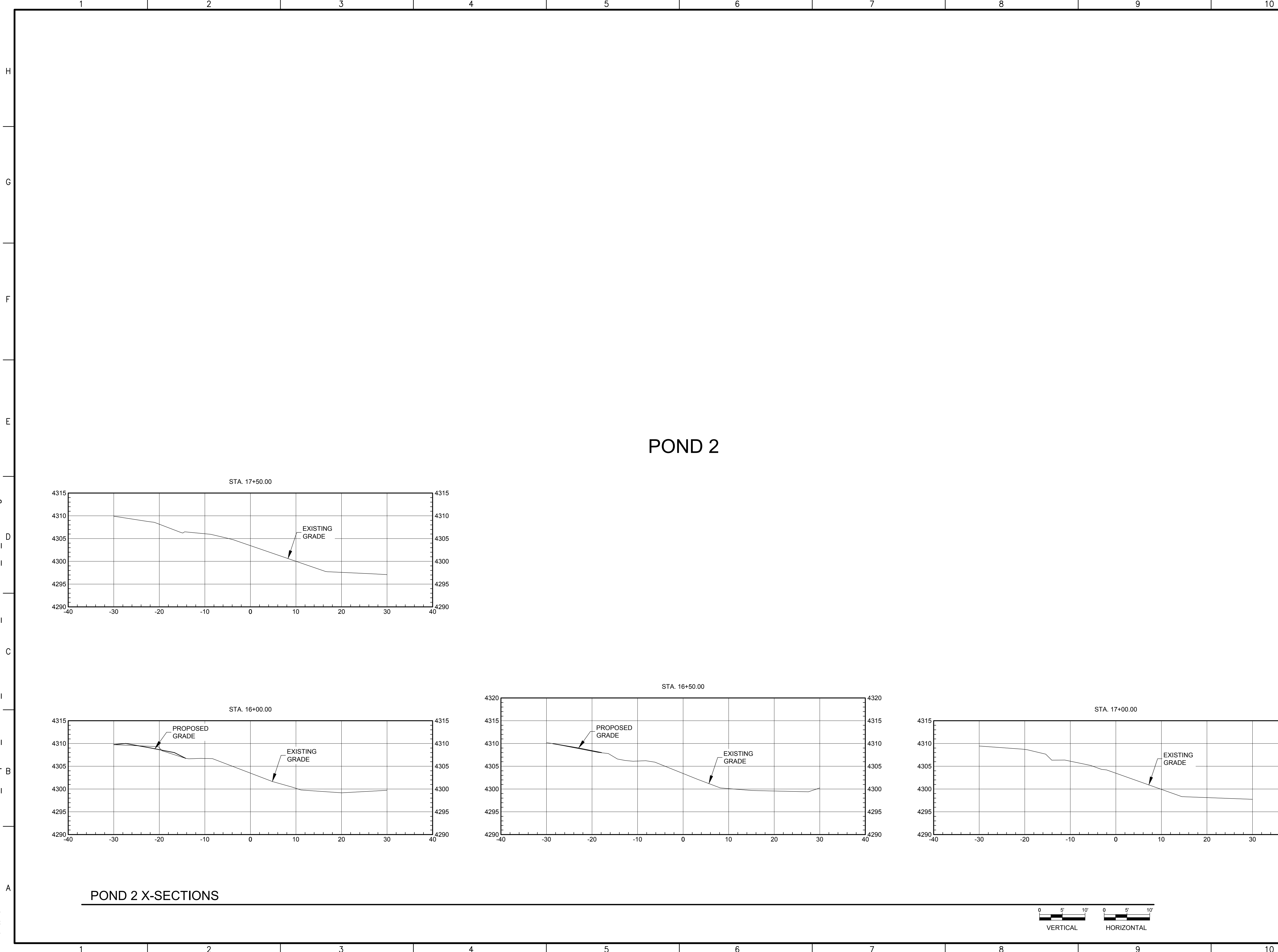
REV.	DATE	DESCRIPTION	BY

PROJECT NO: 17-600-203-00  
 DESIGNED BY: JMW  
 DRAWN BY: CRU  
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 DATE: NOVEMBER 2017

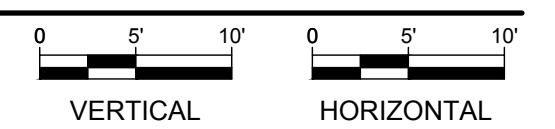
SHEET TITLE  
**POND 2  
 SECTIONS**

SHEET NO:  
**C-302**

11/15/2017 M:\MSD\17-600-203-002\_Disciplines\_SHEETS\8\_sheets - utilities\02\_CIVIL\760203\_OS\_X-SEC.dwg

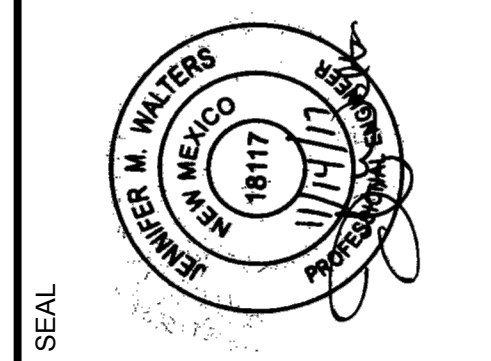


POND 2



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PROJECT NAME  
 EFFLUENT STORAGE PONDS  
 P1-3 IMPROVEMENTS DESERT  
 LAKES GOLF COURSE PUBLIC  
 WORKS BID NO. 2017

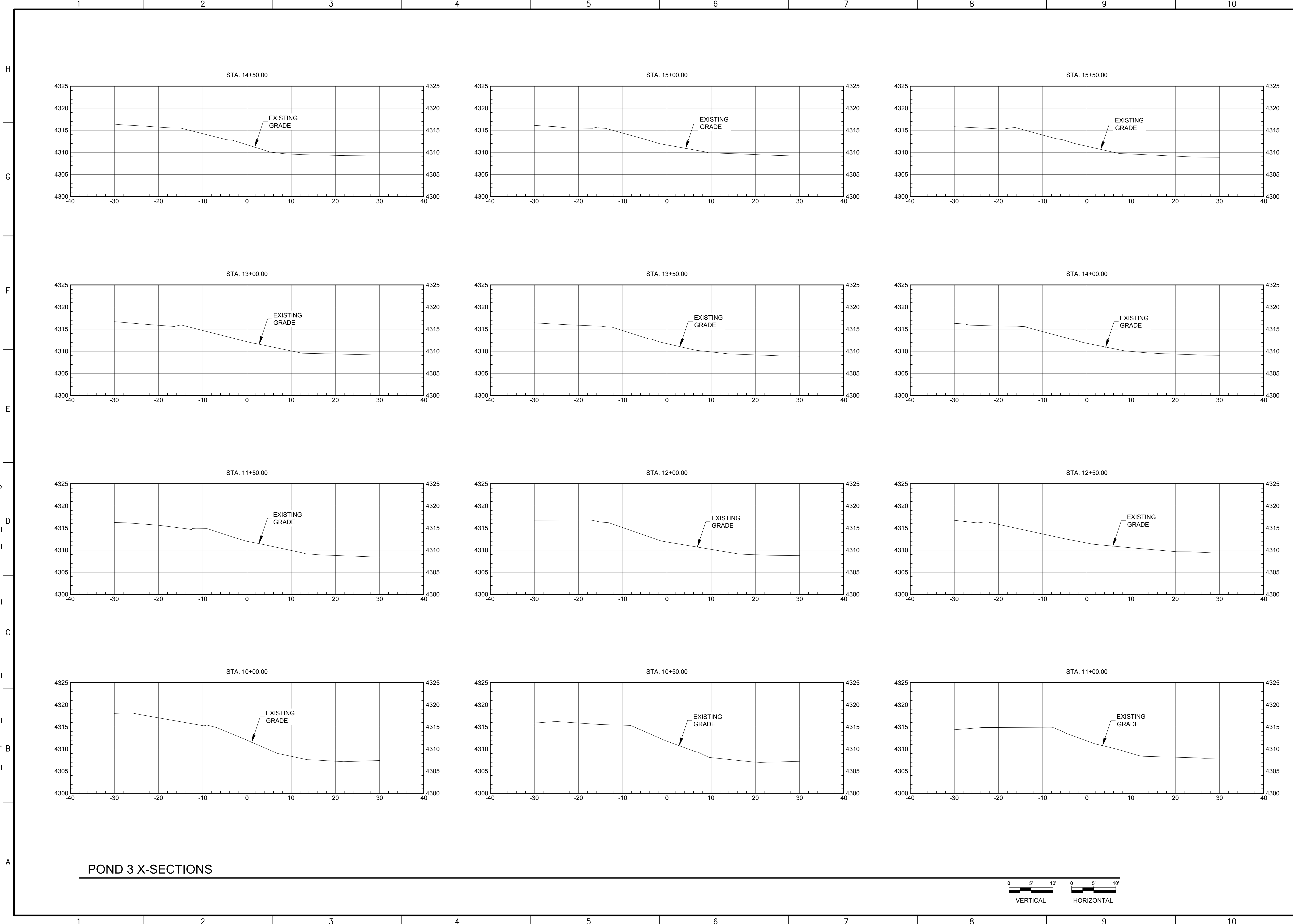
REV.	DATE	DESCRIPTION	BY

PROJECT NO: 17-600-203-00  
 DESIGNED BY: JMW  
 DRAWN BY: CRU  
 CHECKED BY: BJA  
 DATE: NOVEMBER 2017

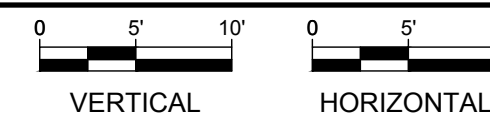
SHEET TITLE  
**POND 2  
 SECTIONS**

SHEET NO:  
**C-303**

11/15/2017 M:\MSD\17-600-203-002\_Disciplines\_SHEETS8\_sheets - utilities02\_CIVIL\760203\_OS\_X-SEC.dwg

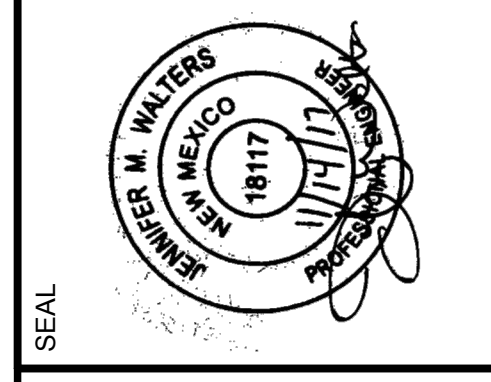


POND 3 X-SECTIONS



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PROJECT NAME  
**EFFLUENT STORAGE PONDS  
 P1-3 IMPROVEMENTS DESERT  
 LAKES GOLF COURSE PUBLIC  
 WORKS BID NO. 2017**

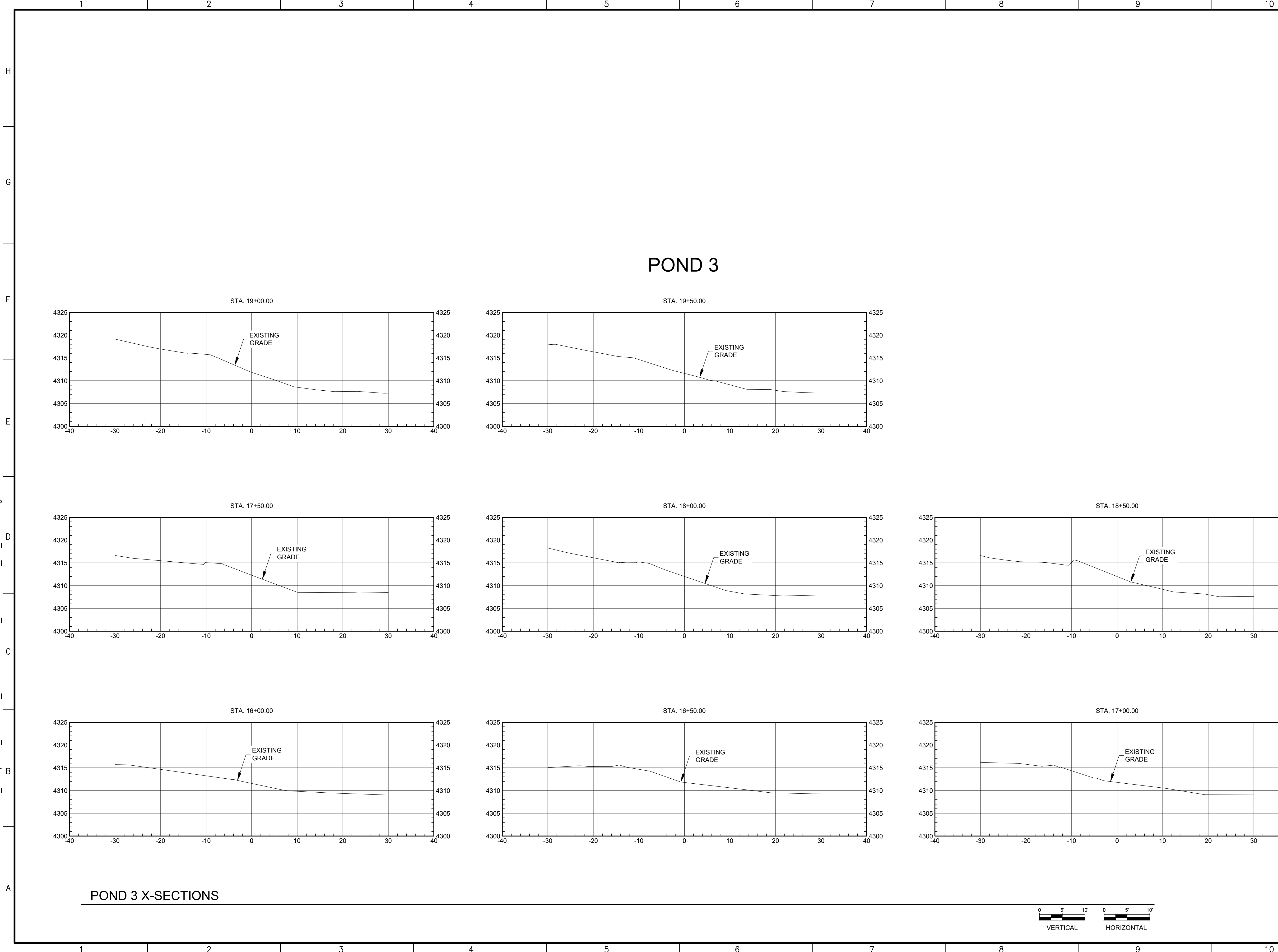
REV.	DATE	DESCRIPTION	BY

PROJECT NO: 17-600-203-00  
 DESIGNED BY: JMW  
 DRAWN BY: CRU  
 CHECKED BY: BJA  
 DATE: NOVEMBER 2017

SHEET TITLE  
**POND 3  
 SECTIONS**

SHEET NO:  
**C-304**

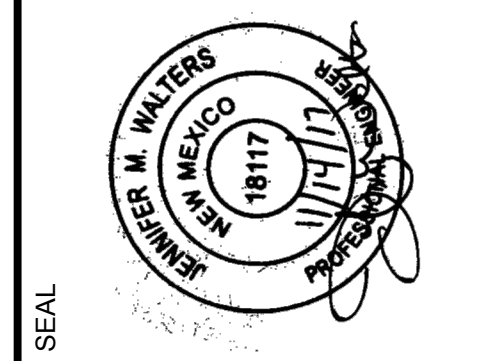
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### POND 3

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PROJECT NAME  
**EFFLUENT STORAGE PONDS  
 P1-3 IMPROVEMENTS DESERT  
 LAKES GOLF COURSE PUBLIC  
 WORKS BID NO. 2017**

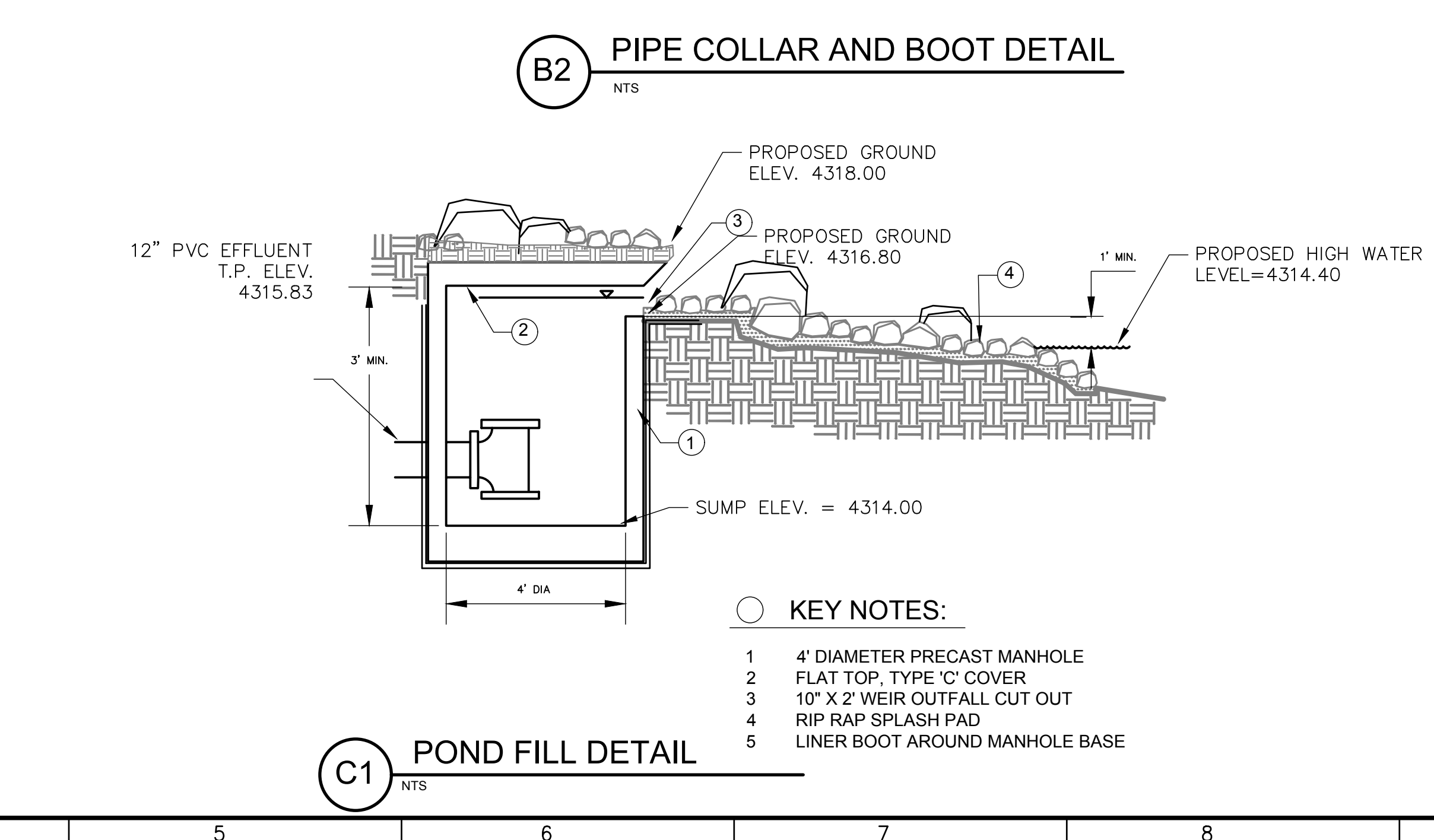
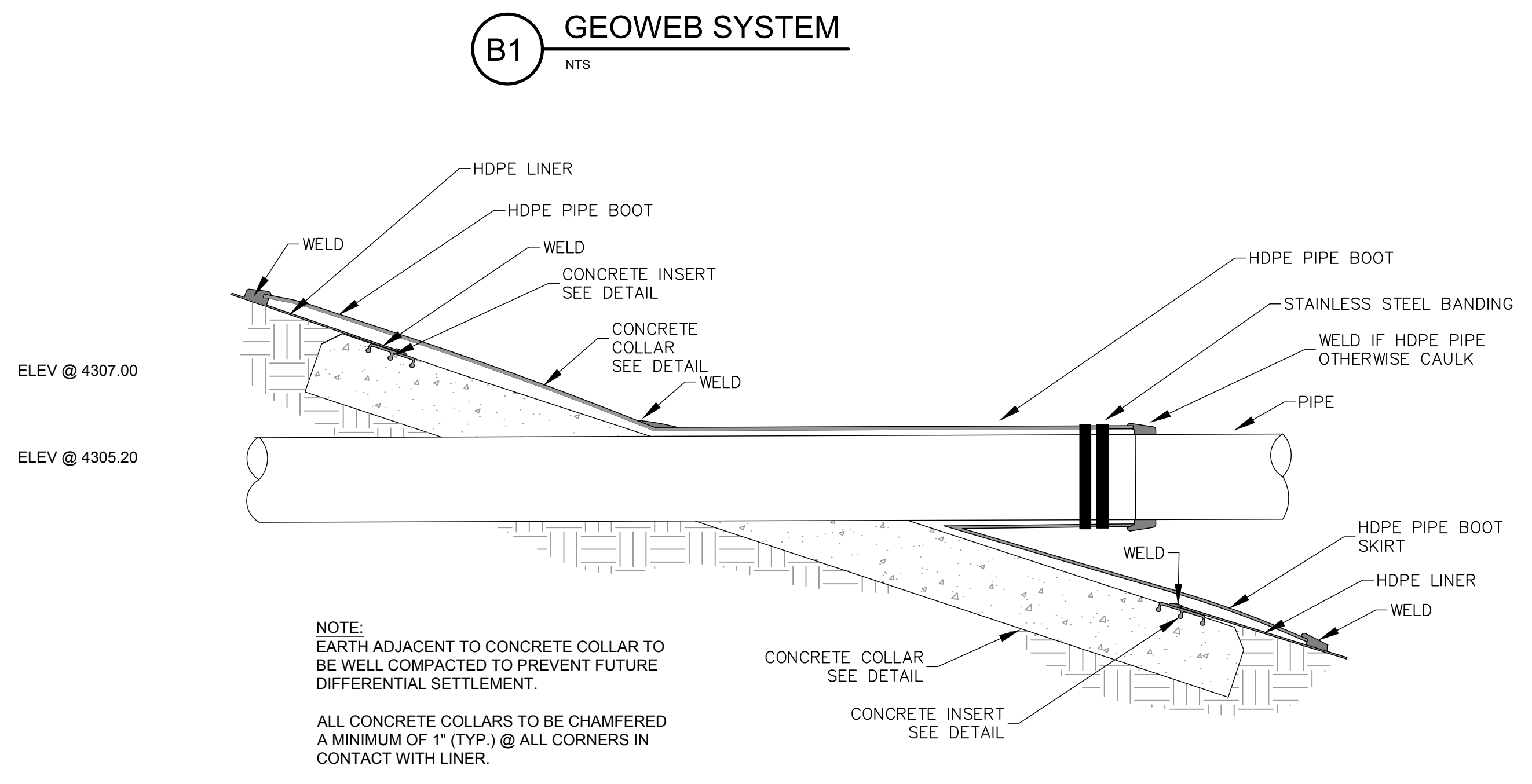
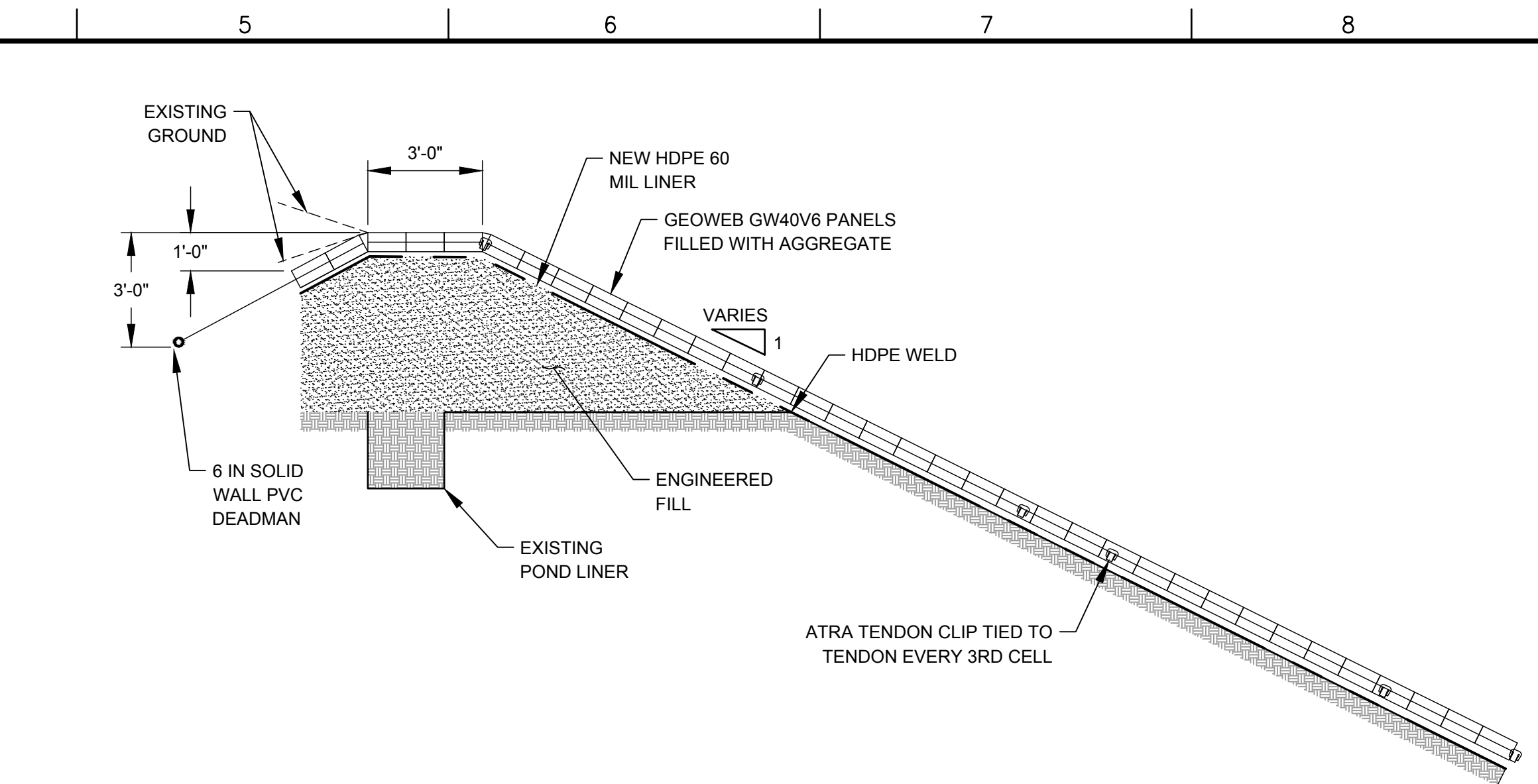
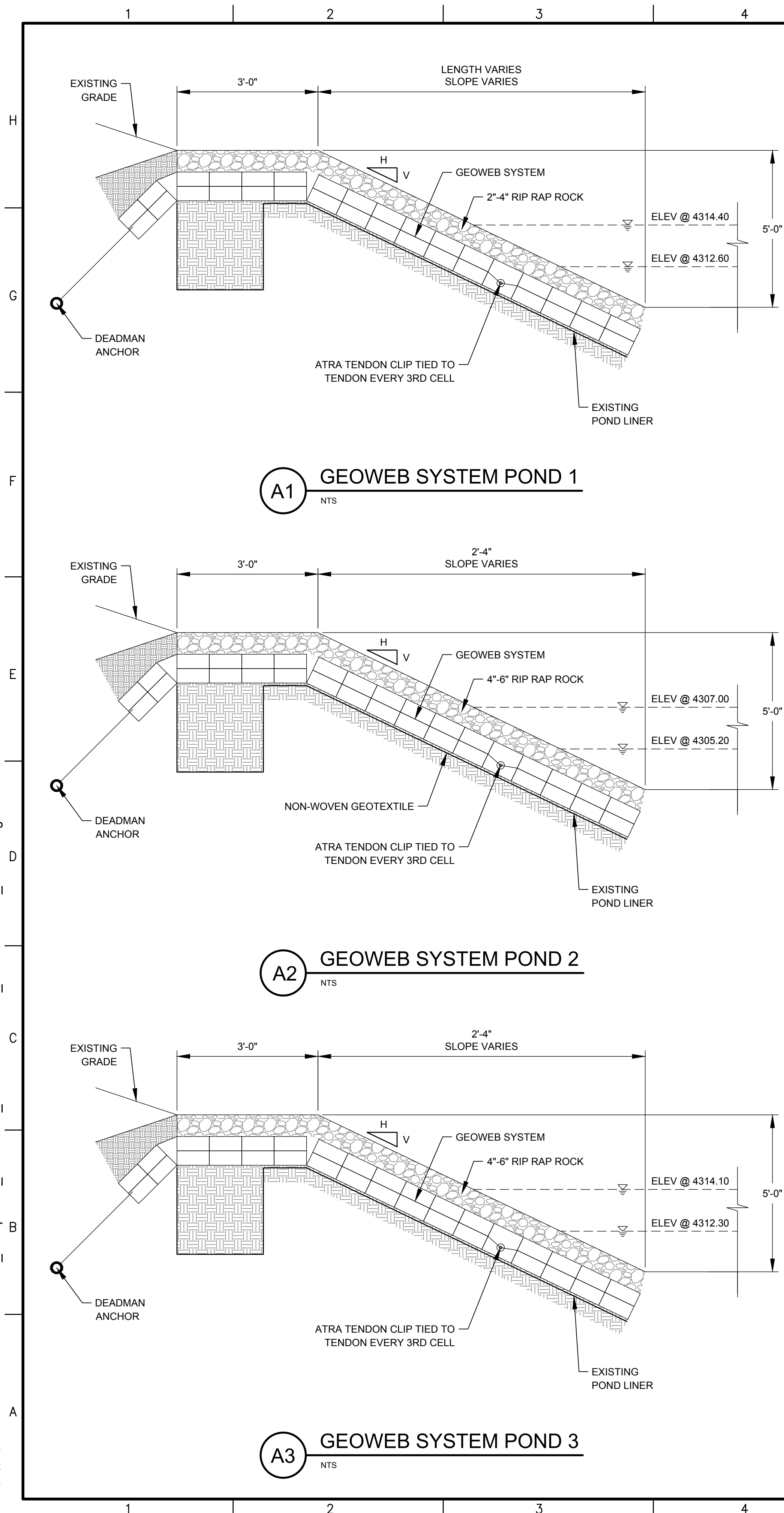
REV.	DATE	DESCRIPTION	BY

PROJECT NO: 17-600-203-00  
 DESIGNED BY: JMW  
 DRAWN BY: CRU  
 CHECKED BY: BJA  
 DATE: NOVEMBER 2017

SHEET TITLE  
**POND 3  
 SECTIONS**

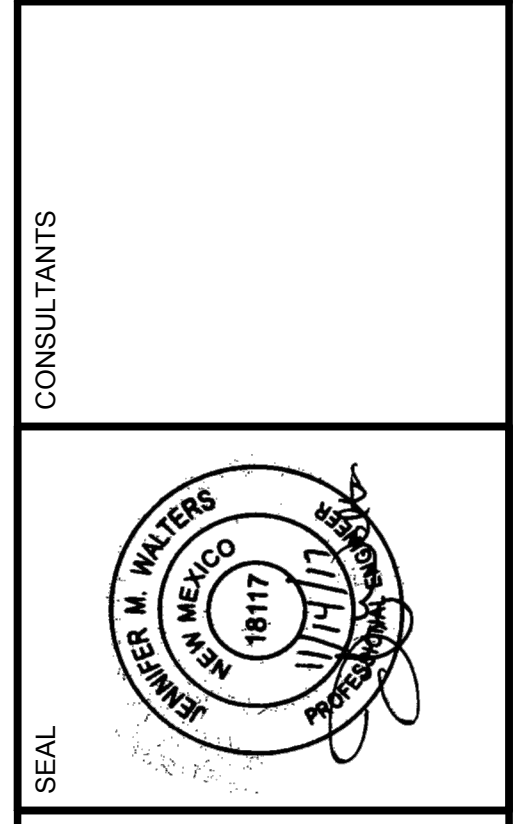
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**C-305**

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- ### GENERAL NOTES
1. PROPOSED GRADE ADJUSTMENT SHOWN ON SHEET C102-C104.
  2. CONTRACTOR TO INSTALL GEOWEB GW40V6 (6-INCH) PANELS, OR ENGINEER APPROVED EQUAL, ON TOP OF EXISTING LINER. INSTALLATION OF THE GEOWEB COVER SHOULD BE PER MANUFACTURES INSTRUCTIONS.
  3. CONTRACTOR SHALL ADJUST GRADING AROUND EXISTING PIPE TO MATCH EXISTING INVERTS.
  4. CONTRACTOR TO SUPPLY 2'-4" RIP RAP RIVER ROCK FOR GEOWEB BACKFILL.
  5. MAXIMUM SLOPE 2:1

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 CHECKED BY: BJA  
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SHEET TITLE  
**POND  
 DETAILS**

SHEET NO:  
**C-501**