

SHEET INDEX:

1	G-01	COVER SHEET
2	G-02	GENERAL NOTES
3	G-03	WET POND NOTES
4	G-04	LEGEND, ABBREVIATIONS, AND CONSTRUCTION QA/QC PLAN
5	CT-01	TRAFFIC CONTROL NOTES AND BARRICADING SUMMARY
6	CT-02	TRAFFIC CONTROL PLAN
7	CT-03	TRAFFIC CONTROL DETAILS
8	C-01	EXISTING CONDITIONS
9	C-02	TREE SURVEY AND TREE MITIGATION TABLES
10	C-03	DRAINAGE AREA PLAN
11	CE-01	EROSION/SEDIMENTATION CONTROL AND TREE PROTECTION PLAN
12	CE-02	EROSION/SEDIMENTATION CONTROL AND TREE PROTECTION DETAILS
13	CP-01	DEMOLITION AND EXCAVATION GRADE
14	CP-02	LINER SYSTEM EXTENTS
15	CP-03	PROPOSED FINAL GRADE
16	CS-01	POND SECTIONS
17	CD-01	LINER SYSTEM DETAILS
18	CD-02	PIPE AND POND DETAILS
19	CD-03	CONCRETE SPILLWAY DETAILS (1 OF 2)
20	CD-04	CONCRETE SPILLWAY DETAILS (2 OF 2)
21	P-01	POND PLANTING PLAN
22	L-01	TREE AND UPLAND SEEDING PLAN
23	L-02	PLANTING NOTES AND DETAILS

NOTES:

- CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DEPARTMENT 24 HOURS PRIOR TO STARTING CONSTRUCTION OR CLEARING OPERATIONS.
- CONTRACTOR SHALL CALL "TEXAS 811" AT 811 OR 800-344-8377 FOR UTILITY LOCATIONS AT LEAST 48 HOURS PRIOR TO ANY WORK IN CITY EASEMENTS OR STREET RIGHT OF WAYS.
- THIS PROJECT IS LOCATED WITHIN THE WILLIAMSON CREEK WATERSHED (CLASSIFIED AS BARTON SPRINGS ZONE) AND SHALL BE DEVELOPED, CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH CHAPTER 25 OF THE CODE OF THE CITY OF AUSTIN.
- NO PORTION OF THIS SITE IS LOCATED WITHIN THE 100-YEAR FLOODPLAIN, PER CITY OF AUSTIN AND FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAPS. FEMA FIRM MAP PANEL 48453C0580H, EFFECTIVE 09/29/2008.
- THIS PROJECT IS WITHIN THE EDWARDS AQUIFER RECHARGE ZONE AS DEFINED BY THE CITY OF AUSTIN. THIS PROJECT IS WITHIN THE EDWARDS AQUIFER RECHARGE ZONE AS REGULATED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ).
- THERE ARE NO CRITICAL ENVIRONMENTAL FEATURES WITHIN 150' OF THIS PROJECT. AN ENVIRONMENTAL ASSESSMENT HAS BEEN PERFORMED.
- NO PORTION OF THIS SITE IS LOCATED WITHIN PARKLAND OR LAND USED FOR PARK PURPOSES. (IF SUCH LAND IS INCLUDED, DOCUMENTATION OF PARKS AND RECREATION DEPT APPROVAL IS REQUIRED AT THE TIME OF SUBMITTAL.)

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT

C.I.P. NO. 10856.003 IFB. NO. CLMC806

WILLIAMSON CREEK - VILLAGE AT WESTERN OAKS WETPOND AUSTIN, TEXAS

PROJECT INFORMATION: _____

STREET ADDRESS:
TAYLORCREST DRIVE
AND BECKETT ROAD
AUSTIN, TX 78749

OWNER:
CITY OF AUSTIN

CONTACT:
MR. TONY LOPEZ
505 BARTON SPRINGS ROAD
9TH FLOOR
AUSTIN, TX 78704
(512) 974-6581

SUBMITTAL PREPARED BY: _____



CONTACT:
MR. ADAM KORANSKY, P.E. PROJECT MANAGER
PHONE:
(512) 314-3149

**PROJECT
LOCATION**



Adam Koransky
ADAM KORANSKY, P.E. _____ 06/04/2020
DATE

A. K. YOUNG
ANNE K. YOUNG, L.A. _____ 06/04/2020
DATE

FOR PUBLIC WORKS DEPARTMENT _____ DATE

NUMBER	DESCRIPTION	REVISE (R) ADD (A) VOID (V) SHEET NO.S	TOTAL # SHEETS IN PLAN SET	NET CHANGE IMP. COVER (SQ. FT.)	TOTAL SITE IMP. COVER (SF. FT.) / %	CITY OF AUSTIN APPROVAL - DATE	DATE IMAGED

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY ADAM N. KORANSKY ON JUNE 5, 2020. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE "TEXAS ENGINEERING PRACTICE ACT".



GENERAL CONSTRUCTION NOTES

- 1. ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE CITY OF AUSTIN MUST RELY ON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.
2. CONTRACTOR SHALL CALL TEXAS 811 (811 OR 1-800-344-8377) FOR UTILITY LOCATIONS PRIOR TO ANY WORK IN CITY EASEMENTS OR STREET R.O.W.
3. CONTRACTOR SHALL NOTIFY THE CITY OF AUSTIN - SITE & SUBDIVISION DIVISION TO SUBMIT REQUIRED DOCUMENTATION, PAY CONSTRUCTION INSPECTION FEES, AND TO SCHEDULE THE REQUIRED SITE AND SUBDIVISION PRE-CONSTRUCTION MEETING. THIS MEETING MUST BE HELD PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN THE R.O.W. OR PUBLIC EASEMENTS. PLEASE VISIT: HTTP://AUSTINTEXAS.GOV/PAGE/COMMERCIAL-SITE-AND-SUBDIVISION-INSPECTIONS FOR A LIST OF SUBMITTAL REQUIREMENTS, INFORMATION CONCERNING FEES, AND CONTACT INFORMATION.
4. FOR SLOPES OR TRENCHES GREATER THAN FIVE FEET IN DEPTH, A NOTE MUST BE ADDED STATING "ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION" (OSHA) HEALTH STANDARDS MAY BE PURCHASED FROM THE GOVERNMENT PRINTING OFFICE - INFORMATION AND RELATED REFERENCE MATERIALS MAY BE PURCHASED FROM OSHA, 611 EAST 6TH STREET, AUSTIN TEXAS.)
5. ALL SITE WORK MUST ALSO COMPLY WITH ENVIRONMENTAL REQUIREMENTS.
6. UPON COMPLETION OF THE PROPOSED SITE IMPROVEMENTS, THE ENGINEER SHALL CERTIFY IN WRITING THAT THE PROPOSED DRAINAGE, FILTRATION AND DETENTION FACILITIES WERE CONSTRUCTED IN CONFORMANCE WITH THE APPROVED PLANS.
7. BLASTING WITHIN THE PROJECT AREA WILL NOT BE ALLOWED.
8. THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN BARRICADES, WARNINGS SIGNS, FLASHERS AND OTHER DEVICES OF THE TYPE AND SIZE AS INDICATED IN THE LATEST EDITION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, OR AS DIRECTED BY THE ENGINEER.
9. THE CONTRACTOR SHALL NOT DISPOSE OF SURPLUS EXCAVATED MATERIAL FROM THE SITE WITHOUT NOTIFYING THE ENVIRONMENTAL INSPECTOR AT (512) 974-2278 48 HOURS PRIOR TO THE REMOVAL. THIS NOTIFICATION SHALL INCLUDE THE DISPOSAL LOCATION AND A COPY OF THE PERMIT ISSUED TO RECEIVE THE MATERIAL, IF APPLICABLE.
10. UTILITIES SHOWN REFLECT THE BEST INFORMATION AVAILABLE AT THE TIME THE PROJECT WAS SURVEYED. UTILITY RELOCATION WORK HAS BEEN OR WILL BE ACCOMPLISHED TO CLEAR THE WORK SPACE. FOR EXACT LOCATIONS CALL 811 OR (800) 543-5377 48 HOURS PRIOR TO BEGINNING EXCAVATION.
11. ALL STORM SEWER PIPE SHALL BE RCP, CLASS III WITH CLASS B BEDDING, UNLESS OTHERWISE NOTED.
12. SIGNS IN THE WAY OF CONSTRUCTION SHALL BE REMOVED AND RELOCATED AS SOON AS POSSIBLE. ALL TRAFFIC CONTROL SIGNS, INCLUDING STOP AND STREET-NAME SIGNS, SHALL NOT BE REMOVED OR RELOCATED WITHOUT THE APPROVAL OF THE CITY ENGINEERING DIVISION OF THE CITY OF AUSTIN. THE DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION, THIS WORK SHALL BE SUBSIDIARY TO OTHER BID ITEMS.
13. PRE-CONSTRUCTION CONFERENCE
- A FIELD CONFERENCE SHALL BE HELD PRIOR TO CONSTRUCTION. PLEASE CONTACT TONY LOPEZ AT (512) 974-6581.
14. DEWATERING: THE CONTRACTOR IS RESPONSIBLE FOR DEWATERING OF WORK AREA. THE CONTRACTOR MUST SECURE CITY OF AUSTIN APPROVAL OF PROPOSED DEWATERING PROCEDURES PRIOR TO INSTALLATION OR USE. APPROVAL MUST BE SECURED FROM THE WATERSHED PROTECTION DEPARTMENT AND DEVELOPMENT SERVICES DEPARTMENT. THE CONTRACTOR SHALL SUBMIT A DEWATERING PLAN TO THE WATERSHED PROTECTION DEPARTMENT AND ALLOW A ONE WEEK (MIN.) COMMENT PERIOD FOR EACH REVIEW. CONTACT THE PLANNING DEVELOPMENT AND REVIEW DEPARTMENT FOR THE SUBMITTAL REQUIREMENTS.
15. FUEL STORAGE: FUEL STORAGE IS PROHIBITED ON THIS PROJECT. ADDITIONALLY, THE CONTRACTOR IS REQUIRED TO NOTIFY THE ENVIRONMENTAL INSPECTOR IMMEDIATELY FOLLOWING ANY SPILL OF FUEL OR OTHER TOXIC MATERIAL. THE CONTRACTOR IS REQUIRED TO FOLLOW UP WITH WRITTEN DOCUMENTATION, INCLUDING A COMPLETE DESCRIPTION OF THE INCIDENT, MATERIAL SPILLED, AND ACTIONS TAKEN TO DRAIN AND CLEAN-UP MATERIAL.
16. FUGITIVE DUST CONTROL: ALL PROJECTS APPROVED THROUGH PLANNING DEVELOPMENT AND REVIEW DEPARTMENT MUST COMPLY WITH THE CODE OF THE CITY OF AUSTIN AND THE ENVIRONMENTAL CRITERIA MANUAL REQUIREMENTS TO CONTROL AIRBORNE DUST. COMPLIANCE IS REQUIRED FOR ENTIRE PROJECT SITE AS WELL AS ASSOCIATED OPERATIONS. CONTACT THE ENVIRONMENTAL INSPECTOR FOR THE RECOMMENDED CONTROL METHODS.
17. SPOILS STORAGE: NO SPOILS STORAGE IS ALLOWED WITHIN A 100-YEAR FLOODPLAIN, OR ON A SLOPE WITH A GRADIENT OF MORE THAN 15 PERCENT. AT THE END OF EACH WORKDAY, THE CONTRACTOR SHALL REMOVE ANY STOCKPILED SPOIL UP GRADIENT OF A SILT FENCE OR SIMILAR EROSION CONTROL MEASURE.
18. ALL ELEVATIONS IN THIS PLAN SET ARE REFERENCED TO THE NAVD 88 VERTICAL DATUM, IN UNITS OF FEET.
19. ALL COORDINATES ARE REFERENCED TO THE TEXAS START PLANE COORDINATE SYSTEM, CENTRAL ZONE (GRID) NAD 83 IN UNITS OF FEET.
20. THE CONTRACTOR IS NOT ALLOWED TO HAUL MATERIALS OFF SITE BETWEEN THE HOURS OF 8:00 AM AND 9:00 AM AND BETWEEN THE HOURS OF 2:00 PM AND 3:30 PM, OR DURING THE TIME WHEN CAUTION IS REQUIRED AS CHILDREN TRAVEL TO AND FROM SCHOOL.

AMERICANS WITH DISABILITIES ACT

THE CITY OF AUSTIN HAS REVIEWED THIS PLAN FOR COMPLIANCE WITH CITY DEVELOPMENT REGULATION ONLY. THE APPLICANT, PROPERTY OWNER, AND OCCUPANT OF THE PREMISES ARE RESPONSIBLE FOR DETERMINING WHETHER THE PLAN COMPLIES WITH ALL OTHER LAWS, REGULATIONS, AND RESTRICTIONS WHICH MAY BE APPLICABLE TO THE PROPERTY AND ITS USE.

AUSTIN ENERGY NOTES

- 1. AUSTIN ENERGY HAS THE RIGHT TO PRUNE AND/OR REMOVE TREES, SHRUBBERY AND OTHER OBSTRUCTIONS TO THE EXTENT NECESSARY TO KEEP THE EASEMENTS CLEAR. AUSTIN ENERGY WILL PERFORM ALL TREE WORK IN COMPLIANCE WITH CHAPTER 25-8, SUBCHAPTER B OF THE CITY OF AUSTIN LAND DEVELOPMENT CODE.
2. THE OWNER/DEVELOPER OF THIS SUBDIVISION/LOT SHALL PROVIDE AUSTIN ENERGY WITH ANY EASEMENT AND/OR ACCESS REQUIRED, IN ADDITION TO THOSE INDICATED, FOR THE INSTALLATION AND ONGOING MAINTENANCE OF OVERHEAD AND UNDERGROUND ELECTRIC FACILITIES. THESE EASEMENTS AND/OR ACCESS ARE REQUIRED TO PROVIDE ELECTRIC SERVICE TO THE BUILDING AND WILL NOT BE LOCATED SO AS TO CAUSE THE SITE TO BE OUT OF COMPLIANCE WITH CHAPTER 25-8 OF THE CITY OF AUSTIN LAND DEVELOPMENT CODE.
3. THE OWNER SHALL BE RESPONSIBLE FOR INSTALLATION OF TEMPORARY EROSION CONTROL, REVEGETATION AND TREE PROTECTION ONLY. THE OWNER SHALL BE RESPONSIBLE FOR ANY INITIAL TREE PRUNING AND TREE REMOVAL THAT IS WITHIN TEN FEET OF THE CENTER LINE OF THE PROPOSED OVERHEAD ELECTRICAL FACILITIES DESIGNED TO PROVIDE ELECTRIC SERVICE TO THIS PROJECT. THE OWNER SHALL INCLUDE AUSTIN ENERGY'S WORK WITHIN THE LIMITS OF CONSTRUCTION FOR THIS PROJECT.
4. THE OWNER OF THE PROPERTY IS RESPONSIBLE FOR MAINTAINING CLEARANCES REQUIRED BY THE NATIONAL ELECTRIC SAFETY CODE, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS, CITY OF AUSTIN RULES AND REGULATIONS AND TEXAS STATE LAWS PERTAINING TO CLEARANCES WHEN WORKING IN CLOSE PROXIMITY TO OVERHEAD POWER LINES AND EQUIPMENT. AUSTIN ENERGY WILL NOT RENDER ELECTRIC SERVICE UNLESS REQUIRED CLEARANCES ARE MAINTAINED. ALL COSTS INCURRED BECAUSE OF FAILURE TO COMPLY WITH THE REQUIRED CLEARANCES WILL BE CHARGED TO THE OWNER.
5. ANY RELOCATION OF ELECTRIC FACILITIES SHALL BE AT LANDOWNER'S/DEVELOPER'S EXPENSE.

STANDARD SEQUENCE OF CONSTRUCTION

- 1. TEMPORARY EROSION AND SEDIMENTATION CONTROLS ARE TO BE INSTALLED AS INDICATED ON THE APPROVED SITE PLAN AND IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) THAT IS REQUIRED TO BE POSTED ON THE SITE. INSTALL TREE PROTECTION AND INITIATE TREE MITIGATION MEASURES.
2. THE ENVIRONMENTAL PROJECT MANAGER OR SITE SUPERVISOR MUST CONTACT THE WATERSHED PROTECTION DEPARTMENT, ENVIRONMENTAL INSPECTION, AT (512) 974-2278, 72 HOURS PRIOR TO THE SCHEDULED DATE OF THE REQUIRED ON-SITE PRE-CONSTRUCTION MEETING.
3. THE ENVIRONMENTAL PROJECT MANAGER, AND/OR SITE SUPERVISOR, AND/OR DESIGNATED RESPONSIBLE PARTY, AND THE GENERAL CONTRACTOR WILL FOLLOW THE SWPPP POSTED ON THE SITE. TEMPORARY EROSION AND SEDIMENTATION CONTROLS WILL BE REVISED, IF NEEDED, TO COMPLY WITH CITY INSPECTORS' DIRECTIVES, AND REVISED CONSTRUCTION SCHEDULE RELATIVE TO THE WET POND PLAN REQUIREMENTS AND THE EROSION PLAN.
4. TEMPORARY EROSION AND SEDIMENTATION CONTROLS WILL BE INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE SWPPP POSTED ON THE SITE.
5. BEGIN SITE CLEARING/CONSTRUCTION (OR DEMOLITION) ACTIVITIES.
6. ROUGH GRADE THE POND, INSTALL LINER SYSTEM AND COMPLETE BACKFILL. EITHER THE PERMANENT OUTLET STRUCTURE OR A TEMPORARY OUTLET MUST BE CONSTRUCTED PRIOR TO DEVELOPMENT OF EXCAVATION THAT LEADS TO PONDING CONDITIONS. THE OUTLET SYSTEM MUST CONSIST OF A SUMP PIT OUTLET AND AN EMERGENCY SPILLWAY MEETING THE REQUIREMENTS OF THE DRAINAGE CRITERIA MANUAL AND/OR THE ENVIRONMENTAL CRITERIA MANUAL, AS REQUIRED. THE OUTLET SYSTEM SHALL BE PROTECTED FROM EROSION AND SHALL BE MAINTAINED THROUGHOUT THE COURSE OF CONSTRUCTION UNTIL INSTALLATION OF THE PERMANENT WET POND.
7. PERMANENT WET POND CONTROLS WILL BE CLEANED OUT PRIOR TO CONCURRENTLY WITH REVEGETATION OF SITE.
8. COMPLETE CONSTRUCTION AND START REVEGETATION OF THE SITE AND INSTALLATION OF LANDSCAPING.
9. UPON COMPLETION OF THE SITE CONSTRUCTION AND REVEGETATION OF A PROJECT SITE, THE DESIGN ENGINEER SHALL SUBMIT AN ENGINEER'S LETTER OF CONCURRENCE TO THE WATERSHED PROTECTION DEPARTMENT AND DEVELOPMENT SERVICES DEPARTMENT INDICATING THAT THE REQUIRED LANDSCAPING IS COMPLETE AND IN SUBSTANTIAL CONFORMITY WITH THE APPROVED PLANS. AFTER RECEIVING THIS LETTER, A FINAL INSPECTION WILL BE SCHEDULED BY THE APPROPRIATE CITY INSPECTOR.
10. UPON COMPLETION OF LANDSCAPE INSTALLATION OF A PROJECT SITE, THE LANDSCAPE ARCHITECT SHALL SUBMIT A LETTER OF CONCURRENCE TO THE WATERSHED PROTECTION DEPARTMENT AND DEVELOPMENT SERVICES DEPARTMENT INDICATING THAT THE REQUIRED LANDSCAPING IS COMPLETE AND IN SUBSTANTIAL CONFORMITY WITH THE APPROVED PLANS. AFTER RECEIVING THIS LETTER, A FINAL INSPECTION WILL BE SCHEDULED BY THE APPROPRIATE CITY INSPECTOR.
11. AFTER A FINAL INSPECTION HAS BEEN CONDUCTED BY THE CITY INSPECTOR AND WITH APPROVAL FROM THE CITY INSPECTOR, REMOVE THE TEMPORARY EROSION AND SEDIMENTATION CONTROLS AND COMPLETE ANY NECESSARY FINAL REVEGETATION RESULTING FROM REMOVAL OF THE CONTROLS. CONDUCT ANY MAINTENANCE AND REHABILITATION OF THE WET POND OR CONTROLS.

APPENDIX P-1 - EROSION CONTROL NOTES

- I. THE CONTRACTOR SHALL INSTALL EROSION/SEDIMENTATION CONTROLS, TREE/NATURAL AREA PROTECTIVE FENCING, AND CONDUCT "PRE-CONSTRUCTION" TREE FERTILIZATION (IF APPLICABLE) PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR EXCAVATION).
II. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE ENVIRONMENTAL CRITERIA MANUAL AND THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN. THE COA EROSION AND SEDIMENTATION CONTROL PLAN SHALL BE THE BASIS FOR A TPOES REQUIRED SWPPP. IF A SWPPP IS REQUIRED, IT SHALL BE AVAILABLE FOR REVIEW BY THE CITY OF AUSTIN ENVIRONMENTAL INSPECTOR AT ALL TIMES DURING CONSTRUCTION, INCLUDING AT THE PRE-CONSTRUCTION MEETING. THE CHECKLIST BELOW CONTAINS THE MINIMUM REQUIREMENTS THAT SHALL BE REVIEWED FOR PERMIT APPROVAL BY COA EV PLAN REVIEWERS AS WELL AS COA EV INSPECTORS.
- PLAN SHEETS SUBMITTED TO THE CITY OF AUSTIN MUST SHOW THE FOLLOWING:
- DIRECTION OF FLOW DURING GRADING OPERATIONS.
- LOCATION, DESCRIPTION, AND CALCULATIONS FOR OFF-SITE FLOW DIVERSION STRUCTURES.
- AREAS THAT WILL NOT BE DISTURBED: NATURAL FEATURES TO BE PRESERVED.
- DELINEATION OF CONTRIBUTING DRAINAGE AREA TO EACH PROPOSED BMP (E.G., SILT FENCE, SEDIMENT BASIN, ETC.).
- LOCATION AND TYPE OF E-S BMPS FOR EACH PHASE OF DISTURBANCE.
- CALCULATIONS FOR BMPS AS REQUIRED.
- LOCATION AND DESCRIPTION OF TEMPORARY STABILIZATION MEASURES.
- LOCATION OF ON-SITE SPOILS, DESCRIPTION OF HANDLING AND DISPOSAL OF BORROW MATERIALS, AND DESCRIPTION OF ON-SITE PERMANENT SPOILS DISPOSAL AREAS, INCLUDING SIZE, DEPTH OF FILL AND REVEGETATION PROCEDURES.
- DESCRIBE SEQUENCE OF CONSTRUCTION AS IT PERTAINS TO ESC INCLUDING THE FOLLOWING ELEMENTS:
1. INSTALLATION SEQUENCE OF CONTROLS (E.G. PERIMETER CONTROLS, THEN SEDIMENT BASINS, THEN TEMPORARY STABILIZATION, THEN PERMANENT, ETC.)
2. PROJECT PHASING IF REQUIRED (LOC GREATER THAN 25 ACRES)
3. SEQUENCE OF GRADING OPERATIONS AND NOTATION OF TEMPORARY STABILIZATION MEASURES TO BE USED
4. SCHEDULE FOR CONVERTING TEMPORARY BASINS TO PERMANENT WQ CONTROLS
5. SCHEDULE FOR REMOVAL OF TEMPORARY CONTROLS
6. ANTICIPATED MAINTENANCE SCHEDULE FOR TEMPORARY CONTROLS

CATEGORIZE EACH BMP UNDER ONE OF THE FOLLOWING AREAS OF BMP ACTIVITY AS DESCRIBED BELOW:

- 3.1. MINIMIZE DISTURBED AREA AND PROTECT NATURAL FEATURES AND SOIL
3.2. CONTROL STORMWATER FLOWING ONTO AND THROUGH THE PROJECT
3.3. STABILIZE SOILS
3.4. PROTECT SLOPES
3.5. PROTECT STORM DRAIN INLETS
3.6. ESTABLISH PERIMETER CONTROLS AND SEDIMENT BARRIERS
3.7. RETAIN SEDIMENT ON-SITE AND CONTROL DEWATERING PRACTICES
3.8. ESTABLISH STABILIZED CONSTRUCTION EXITS
3.9. ANY ADDITIONAL BMPS
- NOTE THE LOCATION OF EACH BMP ON YOUR SITE MAP(S).
- FOR ANY STRUCTURAL BMPS, YOU SHOULD PROVIDE DESIGN SPECIFICATIONS AND DETAILS AND REFER TO THEM.
- FOR MORE INFORMATION, SEE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL 1.4.

- III. THE PLACEMENT OF TREE/NATURAL AREA PROTECTIVE FENCING SHALL BE IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION AND THE APPROVED GRADING/TREE AND NATURAL AREA PLAN.
IV. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD ON-SITE WITH THE CONTRACTOR, DESIGN ENGINEER/PERMIT APPLICANT AND ENVIRONMENTAL INSPECTOR AFTER INSTALLATION OF THE EROSION/SEDIMENTATION CONTROLS. TREE/NATURAL AREA PROTECTION MEASURES AND "PRE-CONSTRUCTION" TREE FERTILIZATION (IF APPLICABLE) PRIOR TO BEGINNING ANY SITE PREPARATION WORK. THE OWNER OR OWNER'S REPRESENTATIVE SHALL NOTIFY THE DEVELOPMENT SERVICES DEPARTMENT, 512-974-2278 OR BY EMAIL AT ENVIRONMENTAL INSPECTIONS: AUSTINTEXAS.GOV, AT LEAST THREE DAYS PRIOR TO THE MEETING. THE APPROVED ESC PLAN AND TPOES SWPPP (IF REQUIRED) SHOULD BE REVIEWED BY COA EV INSPECTOR AT THIS TIME.
V. ANY MAJOR VARIATION IN MATERIALS OR LOCATIONS OF CONTROLS OR FENCES FROM THOSE SHOWN ON THE APPROVED PLANS WILL REQUIRE A REVISION AND MUST BE APPROVED BY THE REVIEWING ENGINEER, ENVIRONMENTAL SPECIALIST OR CITY ARBORIST AS APPROPRIATE. MAJOR REVISIONS MUST BE APPROVED BY AUTHORIZED COA STAFF. MINOR CHANGES TO BE MADE AS FIELD REVISIONS TO THE EROSION AND SEDIMENTATION CONTROL PLAN MAY BE REQUIRED BY THE ENVIRONMENTAL INSPECTOR DURING THE COURSE OF CONSTRUCTION TO CORRECT CONTROL INADEQUACIES.
VI. THE CONTRACTOR IS REQUIRED TO PROVIDE A CERTIFIED INSPECTOR THAT IS EITHER A LICENSED ENGINEER (OR PERSON DIRECTLY SUPERVISED BY THE LICENSED ENGINEER) OR CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC OR CPESC - IT), CERTIFIED EROSION, SEDIMENT AND STORMWATER INSPECTOR (CESSWI OR CESSWI - IT) OR CERTIFIED INSPECTOR OF SEDIMENTATION AND EROSION CONTROLS (CISEC OR CISEC - IT) CERTIFICATION TO INSPECT THE CONTROLS AND FENCES AT WEEKLY OR BI-WEEKLY INTERVALS AND AFTER ONE-HALF (1/2) INCH OR GREATER RAINFALL EVENTS TO INSURE THAT THEY ARE FUNCTIONING PROPERLY. THE CONTRACTOR SHALL MAINTAIN RECORDS OF ALL INSPECTIONS AND FENCES SHALL IMMEDIATELY MAKE ANY NECESSARY REPAIRS TO DAMAGED AREAS. SILT ACCUMULATION AT CONTROLS MUST BE REMOVED WHEN THE DEPTH REACHES SIX (6) INCHES OR ONE-THIRD (1/3) OF THE INSTALLED HEIGHT OF THE CONTROL WHICHEVER IS LESS.
VII. PRIOR TO FINAL ACCEPTANCE BY THE CITY, HAIL ROADS AND WATERWAY CROSSINGS CONSTRUCTED FOR TEMPORARY EROSION CONTROL MUST BE REMOVED, ACCURATELY RECONSTRUCTED AND RESTORED TO THE WATERWAY AND THE AREAS RESTORED TO THE ORIGINAL GRADE AND REVEGETATED. ALL LAND CLEARING DEBRIS SHALL BE DISPOSED OF IN APPROVED SPOIL DISPOSAL SITES.
VIII. ALL WORK MUST STOP IF A VOID IN THE ROCK SUBSTRATE IS DISCOVERED WHICH IS ONE SQUARE FOOT IN TOTAL AREA: BLOWS AIR FROM WITHIN THE SUBSTRATE AND/OR CONSISTENTLY RECEIVES WATER DURING ANY RAIN EVENT. AT THIS TIME IT IS THE RESPONSIBILITY OF THE PROJECT MANAGER TO IMMEDIATELY CONTACT A CITY OF AUSTIN ENVIRONMENTAL INSPECTOR FOR FURTHER INVESTIGATION. IN ADDITION, IF THE PROJECT SITE IS LOCATED WITHIN THE EDWARDS AQUIFER, THE PROJECT MANAGER MUST NOTIFY THE TRAVIS COUNTY BALCONES CANYONLANDS CONSERVATION PRESERVE (BCCP) BY EMAIL AT BCPC@TRAVISCOUNTYTX.GOV. CONSTRUCTION ACTIVITIES WITHIN 50 FEET OF THE VOID MUST STOP.
IX. TEMPORARY AND PERMANENT EROSION CONTROL: ALL DISTURBED AREAS SHALL BE RESTORED AS BELOW:

- A. ALL DISTURBED AREAS TO BE REVEGETATED ARE REQUIRED TO PLACE A MINIMUM OF SIX (6) INCHES OF TOPSOIL. SEE STANDARD SPECIFICATION ITEM NO. 6015.3(A): DO NOT ADD TOPSOIL WITHIN THE CRITICAL ROOT ZONE OF EXISTING TREES.
- TOPSOIL SALVAGED FROM THE EXISTING SITE IS ENCOURAGED FOR USE, BUT IT SHOULD MEET THE STANDARDS SET FORTH IN 6015.
- AN OWNER/ENGINEER MAY PROPOSE USE OF ON-SITE SALVAGED TOPSOIL, WHICH DOES NOT MEET THE CRITERIA OF STANDARD SPECIFICATION 6015 BY PROVIDING A SOIL ANALYSIS AND A WRITTEN STATEMENT FROM A QUALIFIED PROFESSIONAL IN SOILS, LANDSCAPE ARCHITECTURE, OR AGRONOMY INDICATING THE ON-SITE TOPSOIL WILL PROVIDE AN EQUIVALENT GROWTH MEDIA AND SPECIFYING WHAT, IF ANY, SOIL AMENDMENTS ARE REQUIRED.
- SOIL AMENDMENTS SHALL BE WORKED INTO THE EXISTING ONSITE TOPSOIL WITH A DISC OR TILLER TO CREATE A WELL-BLENDED MATERIAL.
THE VEGETATIVE STABILIZATION OF AREAS DISTURBED BY CONSTRUCTION SHALL BE AS FOLLOWS:
TEMPORARY VEGETATIVE STABILIZATION:
1. FROM SEPTEMBER 15 TO MARCH 1, SEEDING SHALL BE WITH OR INCLUDE A COOL SEASON COVER CROP: (WESTERN WHEATGRASS (PASCOPYRUM SMITHII) AT 5.6 POUNDS PER ACRE, OATS (AVENA SATIVA) AT 4.0 POUNDS PER ACRE, ANNUAL RYE GRASS (SECALE CEREALE) AT 4.5 POUNDS PER ACRE, CRYSTAL BLUEgrass (POA CRISTATA) AT 5.6 POUNDS PER ACRE, OR PERENNIAL RYEGRASS (LOLIUM PERENNE) OR COOL SEASON COVER CROPS ARE NOT PERMANENT EROSION CONTROL.
2. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMDUA AT A RATE OF 45 POUNDS PER ACRE OR A NATIVE PLANT SEED MIX CONFORMING TO ITEM 6045 OR 6095.
A. FERTILIZER SHALL BE APPLIED ONLY IF WARRANTED BY A SOIL TEST AND SHALL CONFORM TO ITEM NO. 6065, FERTILIZER. FERTILIZATION SHOULD NOT OCCUR WHEN RAINFALL IS EXPECTED OR DURING SLOW PLANT GROWTH OR DORMANCY. CHEMICAL FERTILIZER MAY NOT BE APPLIED IN THE CRITICAL WATER QUALITY ZONE.
B. HYDROMULCH SHALL COMPLY WITH TABLE 1, BELOW.
C. TEMPORARY EROSION CONTROL SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1 1/2 INCHES HIGH WITH A MINIMUM OF 95% TOTAL COVERAGE SO THAT ALL AREAS OF A SITE THAT RELY ON VEGETATION FOR TEMPORARY STABILIZATION ARE UNIFORMLY VEGETATED, AND PROVIDED THERE ARE NO BARE SPOTS LARGER THAN 10 SQUARE FEET.

- D. WHEN REQUIRED, NATIVE PLANT SEEDING SHALL COMPLY WITH REQUIREMENTS OF THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL, AND STANDARD SPECIFICATION 6045 OR 6095.

TABLE 1: HYDROMULCHING FOR TEMPORARY VEGETATIVE STABILIZATION

Table with 5 columns: MATERIAL, DESCRIPTION, LONGEVITY, TYPICAL APPLICATIONS, APPLICATION RATES. Includes rows for 100% organic blend of wood, cellulose, straw, and/or cotton plant material, and 10% tackifier.

PERMANENT VEGETATIVE STABILIZATION:

- 1. FROM SEPTEMBER 15 TO MARCH 1, SEEDING IS CONSIDERED TO BE TEMPORARY STABILIZATION ONLY. IF COOL SEASON COVER CROPS EXIST WHERE PERMANENT VEGETATIVE STABILIZATION IS DESIRED, THE GRASSES SHALL BE MOWED TO A HEIGHT OF LESS THAN ONE-HALF (1/2) INCH AND THE AREA SHALL BE RE-SEEDING IN ACCORDANCE WITH TABLE 2 BELOW. ALTERNATIVELY, THE COOL SEASON COVER CROP CAN BE MIXED WITH BERMUDAGRASS OR NATIVE SEED AND INSTALLED TOGETHER, UNDERSTANDING THAT GERMINATION OF WARM-SEASON SEED TYPICALLY REQUIRES SOIL TEMPERATURES OF 60 TO 70 DEGREES.
2. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMDUA AT A RATE OF 45 POUNDS PER ACRE WITH A PURITY OF 95% AND A MINIMUM PURE LIVE SEED (PLS) OF 83. BERMDUA GRASS IS A WARM SEASON GRASS AND IS CONSIDERED PERMANENT EROSION CONTROL. PERMANENT VEGETATIVE STABILIZATION CAN ALSO BE ACCOMPLISHED WITH A NATIVE PLANT SEED MIX CONFORMING TO ITEM 6045 OR 6095.
A. FERTILIZER USE SHALL FOLLOW THE RECOMMENDATION OF A SOIL TEST. SEE ITEM 6065, FERTILIZER. APPLICATIONS OF FERTILIZER (AND PESTICIDE) ON CITY-OWNED AND MANAGED PROPERTY REQUIRES THE YEARLY SUBMITTAL OF A PESTICIDE AND FERTILIZER APPLICATION RECORD, ALONG WITH A CURRENT COPY OF THE APPLICATOR'S LICENSE. FOR CURRENT COPY OF THE RECORD TEMPLATE CONTACT THE CITY OF AUSTIN'S IPM COORDINATOR.
B. HYDROMULCH SHALL COMPLY WITH TABLE 2, BELOW.
C. WATER THE SEEDED AREAS IMMEDIATELY AFTER INSTALLATION TO ACHIEVE GERMINATION AND A HEALTHY STAND OF PLANTS THAT CAN ULTIMATELY SURVIVE WITHOUT SUPPLEMENTAL WATER. APPLY THE WATER UNIFORMLY TO THE PLANTED AREAS WITHOUT CAUSING DISPLACEMENT OR EROSION OF THE MATERIALS OR SOIL. MAINTAIN THE SEEDS IN A MOIST CONDITION FAVORABLE FOR PLANT GROWTH. ALL WATERING SHALL COMPLY WITH CITY CODE CHAPTER 6-4 (WATER CONSERVATION), AT RATES AND FREQUENCIES DETERMINED BY A LICENSED IRRIGATOR OR OTHER QUALIFIED PROFESSIONAL, AND AS ALLOWED BY THE AUSTIN WATER UTILITY AND CURRENT WATER RESTRICTIONS AND WATER CONSERVATION INITIATIVES.
D. PERMANENT EROSION CONTROL SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1 1/2 INCHES HIGH WITH A MINIMUM OF 95 PERCENT FOR THE NON-NATIVE MIX, AND 95 PERCENT COVERAGE FOR THE NATIVE MIX SO THAT ALL AREAS OF A SITE THAT RELY ON VEGETATION FOR STABILITY MUST BE UNIFORMLY VEGETATED, AND PROVIDED THERE ARE NO BARE SPOTS LARGER THAN 10 SQUARE FEET.
E. WHEN REQUIRED, NATIVE PLANT SEEDING SHALL COMPLY WITH REQUIREMENTS OF THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL, ITEMS 6045 AND 6095.

TABLE 2: HYDROMULCHING FOR PERMANENT VEGETATIVE STABILIZATION

Table with 5 columns: MATERIAL, DESCRIPTION, LONGEVITY, TYPICAL APPLICATIONS, APPLICATION RATES. Includes rows for bonded fiber matrix (BFM), 10% tackifier, and fiber reinforced matrix (FRM).

DEVELOPER INFORMATION:

OWNER: COMPANY: CITY OF AUSTIN CONTACT: TOM FRANK (512) 974-2278 ADDRESS: 505 BARTON SPRINGS ROAD, 11TH FLOOR, AUSTIN TX 78704
OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS: COMPANY: JACOBS CONTACT: ADAM KORANSKY PHONE: (512) 512-3149 ADDRESS: 2705 BEE CAVE ROAD, SUITE 300, AUSTIN TX 78748
PERSON OR FIRM RESPONSIBLE FOR EROSION/SEDIMENTATION CONTROL MAINTENANCE: COMPANY: CONTRACTOR
PERSON OR FIRM RESPONSIBLE FOR TREE/NATURAL AREA PROTECTION MAINTENANCE: COMPANY: CONTRACTOR
XI. THE CONTRACTOR SHALL NOT DISPOSE OF SURPLUS EXCAVATED MATERIAL FROM THE SITE WITHOUT NOTIFYING THE DEVELOPMENT SERVICES DEPARTMENT AT 512-974-2278 AT LEAST 48 HOURS PRIOR WITH THE LOCATION AND A COPY OF THE PERMIT ISSUED TO RECEIVE THE MATERIAL.
SOURCE: RULE NO. R165-11.13, 1-4-2016 - RULE NO. R165-17.02, 3-2-2017 - RULE NO. R165-19.02, 3-14-2019.

APPENDIX P-2 - CITY OF AUSTIN STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION

- 1. ALL TREES AND NATURAL AREAS SHOWN ON PLAN TO BE PRESERVED SHALL BE PROTECTED DURING CONSTRUCTION WITH TEMPORARY FENCING.
2. PROTECTIVE FENCES SHALL BE ERRECTED ACCORDING TO CITY OF AUSTIN STANDARDS FOR TREE PROTECTION.
3. PROTECTIVE FENCES SHALL BE INSTALLED PRIOR TO THE START OF ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR GRADING), AND SHALL BE MAINTAINED THROUGHOUT ALL PHASES OF THE CONSTRUCTION PROJECT.
4. EROSION AND SEDIMENTATION CONTROL BARRIERS SHALL BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILD-UP WITHIN TREE DRIP LINES.
5. PROTECTIVE FENCES SHALL SURROUND THE TREES OR GROUP OF TREES, AND WILL BE LOCATED AT THE OUTERMOST LIMIT OF BRANCHES (DRIP LINE). FOR NATURAL AREAS, PROTECTIVE FENCES SHALL FOLLOW THE LIMIT OF CONSTRUCTION LINE, IN ORDER TO PREVENT THE FOLLOWING:

- A. SOIL COMPACTION IN THE ROOT ZONE AREA RESULTING FROM VEHICULAR TRAFFIC OR STORAGE OF EQUIPMENT OR MATERIALS.
B. ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES (GREATER THAN 6 INCHES CUT OR FILL), OR TRENCHING NOT REVIEWED AND AUTHORIZED BY THE CITY ARBORIST.
C. WOUNDS TO EXPOSED ROOTS, TRUNK OR LIMBS BY MECHANICAL EQUIPMENT.
D. OTHER ACTIVITIES DETRIMENTAL TO TREES SUCH AS CHEMICAL STORAGE, CEMENT TRUCK CLEANING, AND FIRES.
6. EXCEPTIONS TO INSTALLING FENCES AT TREE DRIP LINES MAY BE PERMITTED IN THE FOLLOWING CASES:
A. WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE, TREE WELL, OR OTHER SUCH SITE DEVELOPMENT, ERECT THE FENCE APPROXIMATELY 2 TO 4 FEET BEYOND THE AREA DISTURBED.
B. WHERE PERMEABLE PAVING IS TO BE INSTALLED WITHIN A TREE'S DRIP LINE, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA (PRIOR TO SITE GRADING SO THAT THIS AREA IS GRADED SEPARATELY PRIOR TO PAVING INSTALLATION TO MINIMIZE ROOT DAMAGE).
C. WHERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE TO ALLOW 6 TO 10 FEET OF WORK SPACE BETWEEN THE FENCE AND THE BUILDING.
D. WHERE THERE ARE SEVERE SPACE CONSTRAINTS DUE TO TRACT SIZE, OR OTHER SPECIAL REQUIREMENTS, CONTACT THE CITY ARBORIST AT 974-1876 TO DISCUSS ALTERNATIVES.
SPECIAL NOTE: FOR THE PROTECTION OF NATURAL AREAS, NO EXCEPTIONS TO INSTALLING FENCES AT THE LIMIT OF CONSTRUCTION LINE WILL BE PERMITTED.
7. WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN A FENCE BEING CLOSER THAN 4 FEET TO A TREE TRUNK, PROTECT THE TRUNK WITH STRAPPED-ON PLANKING TO A HEIGHT OF 8 FT (OR TO THE LIMITS OF LOWER BRANCHING) IN ADDITION TO THE REDUCED FENCING PROVIDED.
8. TREES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.
9. ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOP SOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN 2 DAYS, COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.

- 10. ANY TRENCHING REQUIRED FOR THE INSTALLATION OF LANDSCAPE IRRIGATION SHALL BE PLACED AS FAR FROM EXISTING TREE TRUNKS AS POSSIBLE.
11. NO LANDSCAPE TOPSOIL DRESSING GREATER THAN 4 INCHES SHALL BE PERMITTED WITHIN THE DRIP LINE OF TREES. NO SOIL IS PERMITTED ON THE ROOT FLARE OF ANY TREE.
12. PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC AND EQUIPMENT SHALL TAKE PLACE BEFORE DAMAGE OCCURS (RIPPING OF BRANCHES, ETC.).
13. ALL FINISHED PRUNING SHALL BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE NATIONAL ARBORIST ASSOCIATION PRUNING STANDARDS FOR SHADE TREES AVAILABLE ON REQUEST FROM THE CITY ARBORIST).
14. DEVIATIONS FROM THE ABOVE NOTES MAY BE CONSIDERED ORDINANCE VIOLATIONS IF THERE IS SUBSTANTIAL NON-COMPLIANCE OR IF A TREE SUSTAINS DAMAGE AS A RESULT.

APPENDIX P-3 - ADDITIONAL EROSION CONTROL NOTES FOR BARTON SPRINGS CONTRIBUTING ZONE

- 1. DESIGNATION OF AN ENVIRONMENTAL PROJECT MANAGER WHO IS ON-SITE 90% OF THE TIME, WHO IS REQUIRED TO BE AT THE PRE-CONSTRUCTION AND MID-CONSTRUCTION MEETINGS, AND IS RESPONSIBLE FOR COMPLIANCE ON-SITE OF THE TEMPORARY EROSION AND SEDIMENTATION CONTROLS. THE ENVIRONMENTAL PROJECT MANAGER IS RESPONSIBLE FOR ENSURING COMPLIANCE WITH THE CONTROLS DURING THE CONSTRUCTION PERIOD. SHOULD THE PROJECT MANAGER NEED TO BE ABSENT FROM THE SITE FOR AN EXTENDED PERIOD (IN EXCESS OF ONE WEEK), THE ENVIRONMENTAL INSPECTOR WITH THE WATERSHED PROTECTION AND DEVELOPMENT REVIEW DEPARTMENT SHOULD BE INFORMED OF THE NAME OF A DESIGNATED REPLACEMENT.
2. THE MAXIMUM LENGTH OF TIME BETWEEN CLEARING AND FINAL REVEGETATION OF A PROJECT SHALL NOT EXCEED 18 MONTHS, UNLESS EXTENDED BY THE DIRECTOR OF THE WATERSHED PROTECTION AND DEVELOPMENT REVIEW DEPARTMENT (THIS DOES NOT AFFECT THE EXPIRATION OF THE SITE PLAN OR BUILDING PERMIT. THIS REQUIREMENT APPLIES TO SITES THAT HAVE SUSPENDED WORK AND ARE EXPERIENCING EROSION CONTROL DURING PERIODS OF IDLENESS. DISTURBED AREAS MUST BE MAINTAINED TO PREVENT EROSION AND SEDIMENT LOADING OF ANY WATERWAYS OR DRAINAGE FACILITIES.
3. IT IS A VIOLATION OF THE CODE AND THIS DEVELOPMENT PERMIT TO ALLOW SEDIMENT FROM A CONSTRUCTION SITE TO ENTER A CLASSIFIED WATERWAY DUE TO A FAILURE TO MAINTAIN THE REQUIRED EROSION AND SEDIMENTATION CONTROLS OR TO FOLLOW THE APPROVED CONSTRUCTION SEQUENCE.

APPENDIX P-4 - STANDARD SEQUENCE OF CONSTRUCTION

- THE FOLLOWING SEQUENCE OF CONSTRUCTION SHALL BE USED FOR ALL DEVELOPMENT. THE APPLICANT IS ENCOURAGED TO PROVIDE ANY ADDITIONAL DETAILS APPROPRIATE FOR THE PARTICULAR DEVELOPMENT.
1. TEMPORARY EROSION AND SEDIMENTATION CONTROLS ARE TO BE INSTALLED AS INDICATED ON THE APPROVED SITE PLAN OR SUBDIVISION CONSTRUCTION PLAN AND IN ACCORDANCE WITH THE EROSION SEDIMENTATION CONTROL PLAN (ESC) AND STORMWATER POLLUTION PREVENTION PLAN (SWPPP) THAT IS REQUIRED TO BE POSTED ON THE SITE. INSTALL TREE PROTECTION, INITIATE TREE MITIGATION MEASURES AND CONDUCT "PRE-CONSTRUCTION" TREE FERTILIZATION (IF APPLICABLE).
2. THE ENVIRONMENTAL PROJECT MANAGER OR SITE SUPERVISOR MUST CONTACT THE DEVELOPMENT SERVICES DEPARTMENT, ENVIRONMENTAL INSPECTION, AT 512-974-2278, 72 HOURS PRIOR TO THE SCHEDULED DATE OF THE REQUIRED ON-SITE PRE-CONSTRUCTION MEETING.
3. THE ENVIRONMENTAL PROJECT MANAGER, AND/OR SITE SUPERVISOR, AND/OR DESIGNATED RESPONSIBLE PARTY, AND THE GENERAL CONTRACTOR WILL FOLLOW THE EROSION SEDIMENTATION CONTROL PLAN (ESC) AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP) POSTED ON THE SITE. TEMPORARY EROSION AND SEDIMENTATION CONTROLS WILL BE REVISED, IF NEEDED, TO COMPLY WITH CITY INSPECTORS' DIRECTIVES, AND REVISED CONSTRUCTION SCHEDULE RELATIVE TO THE WATER QUALITY PLAN REQUIREMENTS AND THE EROSION PLAN.
4. ROUGH GRADE THE POND(S) AT 100% PROPOSED CAPACITY. EITHER THE PERMANENT OUTLET STRUCTURE OR A TEMPORARY OUTLET MUST BE CONSTRUCTED PRIOR TO DEVELOPMENT OF EMBANKMENT OR EXCAVATION THAT LEADS TO PONDING CONDITIONS. THE OUTLET SYSTEM MUST CONSIST OF A SUMP PIT OUTLET AND AN EMERGENCY SPILLWAY MEETING THE REQUIREMENTS OF THE DRAINAGE CRITERIA MANUAL AND/OR THE ENVIRONMENTAL CRITERIA MANUAL, AS REQUIRED. THE OUTLET SYSTEM SHALL BE PROTECTED FROM EROSION AND SHALL BE MAINTAINED THROUGHOUT THE COURSE OF CONSTRUCTION UNTIL INSTALLATION OF THE PERMANENT WATER QUALITY POND(S).
5. TEMPORARY EROSION AND SEDIMENTATION CONTROLS WILL BE INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE EROSION SEDIMENTATION CONTROL PLAN (ESC) AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP) POSTED ON THE SITE.
6. BEGIN SITE CLEARING/CONSTRUCTION (OR DEMOLITION) ACTIVITIES.
7. IN THE BARTON SPRINGS ZONE, THE ENVIRONMENTAL PROJECT MANAGER OR SITE SUPERVISOR WILL SCHEDULE A MID-CONSTRUCTION CONFERENCE TO COORDINATE CHANGES IN THE CONSTRUCTION SCHEDULE AND EVALUATE THE NECESSARY REVISIONS TO THE CONSTRUCTION PLAN. PARTICIPANTS SHALL INCLUDE THE CITY INSPECTOR, PROJECT ENGINEER, GENERAL CONTRACTOR AND ENVIRONMENTAL PROJECT MANAGER OR SITE SUPERVISOR. THE ANTICIPATED COMPLETION DATE AND FINAL CONSTRUCTION SEQUENCE AND INSPECTION SCHEDULE WILL BE COORDINATED WITH THE APPROPRIATE CITY INSPECTOR.
8. PERMANENT WATER QUALITY PONDS OR CONTROLS WILL BE CLEANED OUT AND FILTER MEDIA WILL BE INSTALLED PRIOR TO CONCURRENTLY WITH REVEGETATION OF SITE.
9. COMPLETE CONSTRUCTION AND START REVEGETATION OF THE SITE AND INSTALLATION OF LANDSCAPING.
10. UPON COMPLETION OF THE SITE CONSTRUCTION AND REVEGETATION OF A PROJECT SITE, THE DESIGN ENGINEER SHALL SUBMIT AN ENGINEER'S LETTER OF CONCURRENCE TO THE WATERSHED PROTECTION DEPARTMENT AND DEVELOPMENT SERVICES DEPARTMENT INDICATING THAT THE REQUIRED LANDSCAPING IS COMPLETE AND IN SUBSTANTIAL CONFORMITY WITH THE APPROVED PLANS. AFTER RECEIVING THIS LETTER, A FINAL INSPECTION WILL BE SCHEDULED BY THE APPROPRIATE CITY INSPECTOR.
11. UPON COMPLETION OF LANDSCAPE INSTALLATION OF A PROJECT SITE, THE LANDSCAPE ARCHITECT SHALL SUBMIT A LETTER OF CONCURRENCE TO THE WATERSHED PROTECTION DEPARTMENT AND DEVELOPMENT SERVICES DEPARTMENT INDICATING THAT THE REQUIRED LANDSCAPING IS COMPLETE AND IN SUBSTANTIAL CONFORMITY WITH THE APPROVED PLANS. AFTER RECEIVING THIS LETTER, A FINAL INSPECTION WILL BE SCHEDULED BY THE APPROPRIATE CITY INSPECTOR.
12. AFTER A FINAL INSPECTION HAS BEEN CONDUCTED BY THE CITY INSPECTOR AND WITH APPROVAL FROM THE CITY INSPECTOR, REMOVE THE TEMPORARY EROSION AND SEDIMENTATION CONTROLS AND COMPLETE ANY NECESSARY FINAL REVEGETATION RESULTING FROM REMOVAL OF THE CONTROLS. CONDUCT ANY MAINTENANCE AND REHABILITATION OF THE WATER QUALITY PONDS OR CONTROLS.
SOURCE: RULE NO. R165-17.03, 3-2-2017.

APPENDIX P-6 - REMEDIAL TREE CARE NOTES AERATION AND SUPPLEMENTAL NUTRIENT REQUIREMENTS FOR TREES WITHIN CONSTRUCTION AREAS

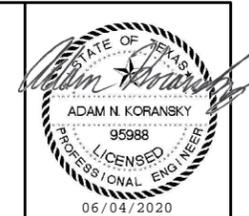
AS A COMPONENT OF AN EFFECTIVE REMEDIAL TREE CARE PROGRAM PER ENVIRONMENTAL CRITERIA MANUAL SECTION 3.5.4, PRESERVED TREES WITHIN THE LIMITS OF CONSTRUCTION MAY REQUIRE SOIL AERATION AND SUPPLEMENTAL NUTRIENTS. SOIL AND/OR FOLIAR ANALYSIS SHOULD BE USED TO DETERMINE THE NEED FOR SUPPLEMENTAL NUTRIENTS. THE CITY ARBORIST MAY REQUIRE THESE ANALYSES AS PART OF A COMPREHENSIVE TREE CARE PLAN. SOIL PH SHALL BE CONSIDERED WHEN DETERMINING THE FERTILIZATION COMPOSITION AS SOIL PH INFLUENCES THE UPTAKE OF NUTRIENTS FROM THE SOIL. IF ANALYSES INDICATE THE NEED FOR SUPPLEMENTAL NUTRIENTS, THEN HUMATE/NUTRIENT SOLUTIONS WITH MYCORRHIZAE COMPONENTS ARE HIGHLY RECOMMENDED. IN ADDITION, SOIL ANALYSIS MAY BE NEEDED TO DETERMINE IF ORGANIC MATERIAL OR BENEFICIAL MICROORGANISMS ARE NEEDED TO IMPROVE SOIL HEALTH. MATERIALS AND METHODS ARE TO BE APPROVED BY THE CITY ARBORIST (512-974-1876) PRIOR TO APPLICATION. THE OWNER OR GENERAL CONTRACTOR SHALL SELECT A FERTILIZATION CONTRACTOR AND ENSURE COORDINATION WITH THE CITY ARBORIST.

PRE-CONSTRUCTION TREATMENT SHOULD BE APPLIED IN THE APPROPRIATE SEASON, IDEALLY THE SEASON PRECEDING THE PROPOSED CONSTRUCTION. MINIMALLY, AREAS TO BE TREATED INCLUDE THE ENTIRE CRITICAL ROOT ZONE OF TREES AS DEPICTED ON THE CITY APPROVED PLANS. TREATMENT SHOULD INCLUDE, BUT NOT LIMITED TO, FERTILIZATION, SOIL TREATMENT, MULCHING, AND PROPER PRUNING.

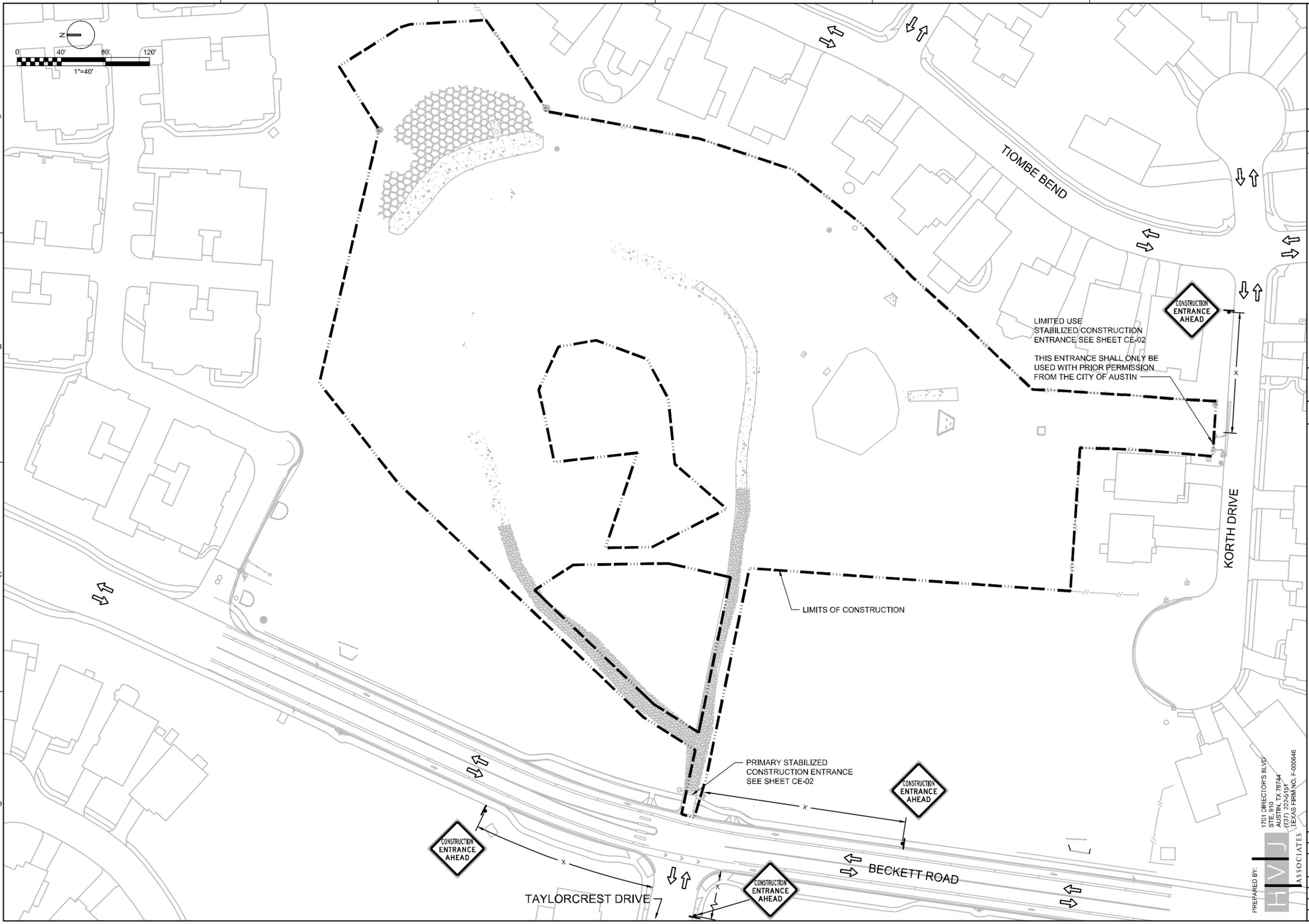
POST-CONSTRUCTION TREATMENT SHOULD OCCUR DURING FINAL REVEGETATION OR AS DETERMINED BY A QUALIFIED ARBORIST AFTER THE CONSTRUCTION ACTIVITIES ARE COMPLETED. COVER THOSE AREAS WITH A MINIMUM OF 12 INCHES OF SOIL MACRO AND MICRO PORES AND AN INCREASE IN SOIL BULK DENSITY, TO AMELIORATE THE DEGRADED SOIL CONDITIONS. AERATION VIA WATER AND/OR AIR INJECTED INTO THE SOIL IS NEEDED OR BY OTHER METHODS AS APPROVED BY THE CITY ARBORIST. SOIL AND/OR FOLIAR ANALYSES SHOULD BE USED TO DETERMINE THE NEED FOR SUPPLEMENTAL NUTRIENTS. SOIL AND/OR FOLIAR ANALYSIS SHOULD BE USED TO DETERMINE THE NEED FOR SUPPLEMENTAL NUTRIENTS. SOIL PH SHALL BE CONSIDERED WHEN DETERMINING THE FERTILIZATION COMPOSITION AS SOIL PH INFLUENCES THE UPTAKE OF NUTRIENTS FROM THE SOIL. IF ANALYSES INDICATE THE NEED FOR SUPPLEMENTAL NUTRIENTS, THEN HUMATE/NUTRIENT SOLUTIONS WITH MYCORRHIZAE COMPONENTS ARE HIGHLY RECOMMENDED. IN ADDITION, SOIL ANALYSIS MAY BE NEEDED TO DETERMINE IF ORGANIC MATERIAL OR BENEFICIAL MICROORGANISMS ARE NEEDED TO IMPROVE SOIL HEALTH. MATERIALS AND METHODS ARE TO BE APPROVED BY THE CITY ARBORIST (512-974-1876) PRIOR TO APPLICATION. THE OWNER OR GENERAL CONTRACTOR SHALL SELECT A FERTILIZATION CONTRACTOR AND ENSURE COORDINATION WITH THE CITY ARBORIST.

ECM 3.5.4(D) SPECIAL CONSTRUCTION TECHNIQUES

- IN CONJUNCTION WITH REMEDIAL CARE, MITIGATION FOR TREES REMOVED MAY INCLUDE SPECIAL CONSTRUCTION TECHNIQUES NOT NORMALLY REQUIRED IN STANDARD SPECIFICATIONS. SOME OF THESE TECHNIQUES INCLUDE THE FOLLOWING:
- PRIOR TO EXCAVATION WITHIN TREE DRIP LINES OR THE REMOVAL OF TREES ADJACENT TO OTHER TREES THAT ARE TO REMAIN, MAKE A CLEAN CUT BETWEEN THE DISTURBED AND UNDISTURBED ROOT ZONES WITH A ROCK SAW OR SIMILAR EQUIPMENT TO MINIMIZE ROOT DAMAGE.
- IN CRITICAL ROOT ZONE AREAS THAT CANNOT BE PROTECTED DURING CONSTRUCTION WITH FENCING AND WHERE HEAVY VEHICULAR TRAFFIC IS ANTICIPATED, COVER THOSE AREAS WITH A MINIMUM OF 12 INCHES OF ORGANIC MULCH TO MINIMIZE SOIL COMPACTION. IN AREAS WITH HIGH SOIL PLASTICITY GEOTEXTILE FABRIC, PER STANDARD SPECIFICATION 6205, SHOULD BE PLACED UNDER THE MULCH TO PREVENT EXCESSIVE MIXING OF THE SOIL AND MULCH. MATERIALS SUCH AS PLANKWOOD AND METAL SHEETS SHALL NOT BE USED. MULCH SHALL BE REQUIRED BY THE CITY ARBORIST TO MINIMIZE ROOT IMPACTS FROM HEAVY EQUIPMENT. ONCE THE PROJECT IS COMPLETED, ALL MATERIALS SHOULD BE REMOVED, AND THE MULCH SHOULD BE REDUCED TO A DEPTH OF 3 INCHES.
- PERFORM ALL GRADING WITHIN CRITICAL ROOT ZONE AREAS BY HAND OR WITH SMALL EQUIPMENT TO MINIMIZE ROOT DAMAGE.
- WATER ALL TREES MOST HEAVILY IMPACTED BY CONSTRUCTION ACTIVITIES DEEPLY ONCE A WEEK DURING PERIODS OF HOT, DRY WEATHER. SPRAY TREE CROWNS WITH WATER PERIODICALLY TO REDUCE DUST ACCUMULATION ON THE LEAVES.
- WHEN INSTALLING CONCRETE ADJACENT TO THE ROOT ZONE OF A TREE, USE A PLASTIC VAPOR BARRIER BEHIND THE CONCRETE TO PROHIBIT LEACHING OF LIME INTO THE SOIL.



Project information table including: PROJECT NAME: WILLIAMSON CREEK - VILLAGE AT WESTERN OAKS WETPOND; CITY OF AUSTIN; AUSTIN, TEXAS; PROJECT NO.: 704370; SHEET: G-02; DATE: JUNE 2020; FILENAME: G-02; PLOT DATE: 6/4/2020; PLOT TIME: 10:17:13 AM. Includes a VERIFY SCALE bar and a CH2M logo.



4/6/2020

NO.	DATE	DSGN	DR	CHK	BY
			R. JAMES		R. JAMES

WILLIAMSON CREEK - VILLAGE
 AT WESTERN OAKS WETPOND
 CITY OF AUSTIN
 AUSTIN, TEXAS

ch2m
 TRAFFIC CONTROL
TRAFFIC CONTROL PLAN

PREPARED FOR:

NONE
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
DATE: APRIL 2020
PROJ: 704370
DWG: CT-02
SHEET: 6 of 23

PREPARED BY:
 H V J
 ASSOCIATES
 1701 DIRECTOR'S BLVD
 STE. 910
 AUSTIN, TX 78744
 (371) 222-5151
 TEXAS FIRM NO. F-000646

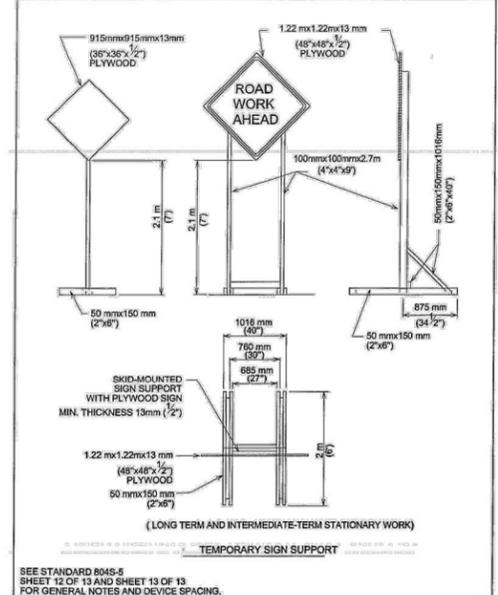
- ALL SETUPS SHALL BE IN ACCORDANCE WITH THE CURRENT ADDITION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND THE CITY OF AUSTIN TRANSPORTATION CRITERIA MANUAL.
- TO DETERMINE APPROPRIATE DEVICES AND SIGN SIZES TO BE USED, REFER TO STANDARD 804S-5, SHEETS 5, 6 AND 7 OF 11.
- FOR INTERMEDIATE-TERM SITUATIONS, WHEN IT IS NOT FEASIBLE TO REMOVE AND RESTORE PAVEMENT MARKINGS, THE CHANNELIZATION MUST BE MADE DOMINANT BY USING A VERY CLOSE DEVICE SPACING. THIS IS ESPECIALLY IMPORTANT IN LOCATIONS OF CONFLICTING INFORMATION, SUCH AS WHERE TRAFFIC IS DIRECTED OVER A DOUBLE YELLOW CENTERLINE. IN SUCH LOCATIONS, A MAXIMUM CHANNELIZING DEVICE SPACING OF 3 m (10') IS REQUIRED.
- FOR LONG TERM STATIONARY WORK, ALL CONFLICTING PAVEMENT MARKINGS MUST BE REMOVED AND CENTERLINE STRIPING PROVIDED WHERE TWO WAY TRAFFIC IS IN ADJACENT LANES.
- FOR TEMPORARY PAVEMENT MARKING REQUIREMENTS SEE STANDARD 804S-3.
- FOR ONE-WAY AND MULTI-LANE ROADWAYS THE "LANE BLOCKED" SIGN MAY BE USED IN LIEU OF THE "LANE CLOSED AHEAD" SIGN. THE NUMBER OF DIGITS ON THE SIGN SHALL NOT BE GREATER THAN THE NUMBER OF LANES PRESENT ON THE ROADWAY. THE "X" SHALL BE PLACED UNDER THE NUMBER OF LANE(S) BLOCKED.
- FOR FLAGGING OPERATION REQUIREMENTS SEE STANDARD 804S-2.
- CONTRACTOR SHALL PROVIDE SIDEWALK CLOSURES, CROSSWALK CLOSURES OR WALKWAY BYPASS WHEREVER PEDESTRIAN MOVEMENTS ARE AFFECTED BY CONSTRUCTION ACTIVITIES. ALL SIDEWALKS AND CROSSWALKS SHALL BE ACCESSIBLE WHEN CONTRACTOR IS NOT WORKING UNLESS APPROVED BY THE TRANSPORTATION DIVISION.
- FOR EXCAVATION PROTECTION AND SAFETY FENCE REQUIREMENTS SEE STANDARD 804S-4.
- THE USE OF ARROW DISPLAYS ARE REQUIRED ON ALL LANE CLOSURES. THE CONTRACTOR SHALL PROVIDE ONE (1) STAND-BY UNIT IN GOOD WORKING CONDITION AT THE JOB SITE, READY FOR USE IF THE OPERATION REQUIRES 24-HOUR A DAY LANE CLOSURE SET-UPS.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		GENERAL NOTES	
RECORD COPY SIGNED BY KERI JUAREZ	01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 804S-1 8 OF 9

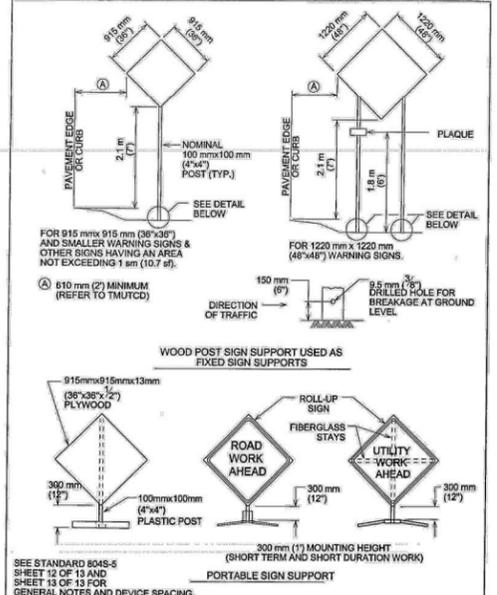
Typical Transition Lengths and Suggested Maximum Spacing of Devices

Speed KMPH	Posted Speed MPH	Formula	Minimum Desirable Taper Lengths (L) Meters (Feet)	Suggested Max. Device Spacing Meters (Feet)	Suggested Sign Spacing Meters (Feet)
45	30	L=WS ² /60	3.0(10)	3.3(11)	3.8(12)
50	35		45 (150)	50 (165)	55 (180)
55	40		65 (215)	75 (245)	90 (300)
60	45	L=WS ² /60	80 (265)	90 (300)	100 (330)
65	50		100 (330)	110 (360)	120 (396)
70	55		120 (396)	135 (445)	150 (500)
75	60	L=WS ² /60	150 (500)	165 (550)	180 (600)
80	65		165 (550)	180 (600)	200 (660)
85	70		180 (600)	200 (660)	220 (730)
90	75	L=WS ² /60	180 (600)	200 (660)	220 (730)
95	80		185 (610)	215 (710)	235 (780)
100	85		195 (645)	225 (750)	255 (850)
105	90	L=WS ² /60	215 (710)	235 (780)	255 (850)
110	95		215 (710)	235 (780)	255 (850)

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		DEVICE SPACING	
RECORD COPY SIGNED BY KERI JUAREZ	01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 804S-1 9 OF 9



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		TRAFFIC CONTROL SIGNS	
RECORD COPY SIGNED BY KERI JUAREZ	01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 804S-5 6 OF 13



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		TRAFFIC CONTROL SIGNS	
RECORD COPY SIGNED BY KERI JUAREZ	01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 804S-5 7 OF 13

1. WARNING SIGNS SHALL BE ORANGE, FLUORESCENT RED-ORANGE OR FLUORESCENT YELLOW-ORANGE IN COLOR. THE FLUORESCENT VERSIONS OF ORANGE PROVIDE HIGHER CONSPICUITY THAN STANDARD ORANGE, ESPECIALLY DURING TWILIGHT. ALL SIGNS USED AT NIGHT SHALL BE EITHER RETROREFLECTIVE WITH A MATERIAL THAT HAS A SMOOTH, SEALED OUTER SURFACE, OR ILLUMINATED TO SHOW SHARPER SHAPE AND COLOR BOTH DAY AND NIGHT. SIGN ILLUMINATION MAY BE EITHER INTERNAL OR EXTERNAL. ROADWAY LIGHTING DOES NOT MEET THE REQUIREMENTS FOR SIGN ILLUMINATION.

2. TYPE A FLASHING WARNING LIGHTS MAY BE USED IN CONJUNCTION WITH SIGNS AT NIGHT. STANDARD ORANGE FLAGS MAY BE USED FOR DAY TIME OPERATIONS. HOWEVER, NEITHER LIGHTS NOR FLAGS MAY BLOCK THE SIGN LEGEND.

3. SIGNS SHOULD BE LOCATED ON THE RIGHT-HAND SIDE OF THE ROADWAY. WHEN SPECIAL EMPHASIS IS NEEDED, SIGNS MAY BE PLACED ON BOTH THE LEFT AND RIGHT SIDES OF ROADWAY. SIGNS SHALL BE PLACED ON BOTH THE LEFT AND RIGHT SIDES OF ONE-WAY OR DIVIDED ROADWAYS. SIGNS USED FOR LONG-TERM STATIONARY AND INTERMEDIATE-TERM STATIONARY WORK SHALL BE MOUNTED AT A HEIGHT OF AT LEAST 2.1 m (7'), MEASURED FROM THE BOTTOM OF THE SIGN. THE HEIGHT TO THE BOTTOM OF A SECONDARY SIGN MOUNTED BELOW ANOTHER SIGN MAY BE 0.3 m (1') LESS THAN THE APPROPRIATE HEIGHT ABOVE.

4. SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR SHORT-TERM, SHORT DURATION, MOBILE CONDITIONS AND EMERGENCIES. SIGNS MOUNTED ON PORTABLE SUPPORTS SHALL BE AT A HEIGHT OF AT LEAST 0.3 m (1'), MEASURED FROM THE BOTTOM OF THE SIGN.

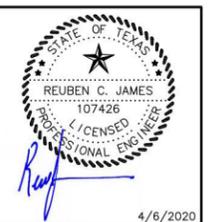
5. ALL SIGN SYSTEMS SHOULD BE CRASHWORTHY. NO SIGN MOUNTS SHALL BLOCK OR IMPEDE SIDEWALKS UNLESS NO OTHER OPTION IS AVAILABLE. ONLY SANDWICH SHOULD BE USED FOR BALLASTING SIGN MOUNTS.

TABLE 10-3 TYPICAL CONSTRUCTION WARNING SIGN SIZE AND SPACING

Roadway Class/Section	Posted Speed (KMPH)	Sign Spacing (m)	Long-Term Stationary Or Intermediate-Term Stationary Approaching Warning Sign (20'20' Sign)		Short-Term Stationary Approaching Warning Sign (20'20' Sign)		Other Warning Sign
			Standard (m)	Minimum (m)	Standard (m)	Minimum (m)	
Commuter	50 (30)	40 (130)	120x120 (48x48)	91x91 (36x36)	91x91 (36x36)	91x91 (36x36)	
	60 (40)	50 (165)	120x120 (48x48)	91x91 (36x36)	91x91 (36x36)	91x91 (36x36)	
Urban	70 (45)	60 (200)	120x120 (48x48)	91x91 (36x36)	91x91 (36x36)	91x91 (36x36)	
	80 (50)	70 (230)	120x120 (48x48)	91x91 (36x36)	91x91 (36x36)	91x91 (36x36)	
Rural	90 (55)	80 (265)	120x120 (48x48)	91x91 (36x36)	91x91 (36x36)	91x91 (36x36)	
	100 (60)	90 (300)	120x120 (48x48)	91x91 (36x36)	91x91 (36x36)	91x91 (36x36)	
Expressway	110 (70)	100 (330)	120x120 (48x48)	91x91 (36x36)	91x91 (36x36)	91x91 (36x36)	
	120 (75)	110 (360)	120x120 (48x48)	91x91 (36x36)	91x91 (36x36)	91x91 (36x36)	

1. SPECIAL OR LARGER SIZE SIGNS MAY BE USED AS NECESSARY.
2. DISTANCE BETWEEN SIGNS SHOULD BE INCREASED AS REQUIRED TO HAVE 450 m (1500') OR MORE ADVANCE WARNING.
3. DISTANCE BETWEEN SIGNS SHOULD BE INCREASED AS REQUIRED TO HAVE A 0.8 km (1/2 MILE) OR MORE ADVANCE WARNING.
4. FOR USE ONLY ON SECONDARY ROADS OR CITY STREETS WHERE SPEEDS ARE LOW.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		TRAFFIC CONTROL SIGNS	
RECORD COPY SIGNED BY KERI JUAREZ	01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 804S-5 8 OF 13



NO.	DATE	BY	APVD
1		REVISION	APVD
2		CH/K	APVD
3		L. BARLOW	APVD
4		R. JAMES	APVD

WILLIAMSON CREEK - VILLAGE
AT WESTERN OAKS WETPOND
CITY OF AUSTIN
AUSTIN, TEXAS

ch2m

TRAFFIC CONTROL
TRAFFIC CONTROL DETAILS

PREPARED FOR: NONE
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
DATE: APRIL 2020
PROJ: 704370
DWG: CT-03
SHEET: 7 OF 23

1701 DIRECTOR'S BLVD
STE. 910
AUSTIN, TX 78744
(737) 222-5151
TEXAS FIRM NO. F-000646

PREPARED BY: HVJ ASSOCIATES

SURVEYED TREE INVENTORY

TAG No.	BOLE DIA.	SPECIES	NOTE
247	10.75"	CEDAR (7.5, 6.5)	
248	12.75"	CEDAR (8, 5, 4.5)	
249	10"	CEDAR (5.5, 5, 4)	
250	9"	CEDAR	
251	10"	CEDAR (5.5, 4.5, 4.5)	
252	8.75"	CEDAR (6, 5.5)	
253	12.5"	CEDAR (5.5, 5.5, 4.5, 4)	
254	14.5"	CEDAR (7.5, 5.5, 4.5, 4)	
255	10.75"	CEDAR (6.5, 4.5, 4)	
256	9"	CEDAR (6.5, 5)	
257	8.25"	CEDAR (6, 4.5)	
258	8.75"	CEDAR (6.5, 4.5)	
259	15"	CEDAR (7, 7, 5, 4)	
260	8"	CEDAR (5.5, 5)	
261	8.5"	CEDAR (6, 5)	
262	14"	COTTONWOOD (7.5, 4.5, 4.5, 4)	REMOVE
263	18"	CHINESE ELM (MULTI)	REMOVE
1538	11"	CEDAR (7, 7)	
1539	8"	CEDAR	
1540	8"	CEDAR	
1541	8"	CEDAR	REMOVE
1843	13"	LIVE OAK	
1844	9"	LIVE OAK	
1845	24.5"	LIVE OAK	HERITAGE
1846	10.25"	CEDAR (8, 4.5)	
1847	18.5"	LIVE OAK	
1848	29"	LIVE OAK	HERITAGE
1849	10.5"	CEDAR ELM	
1850	10.5"	CEDAR ELM	
1851	17.25"	CEDAR (11, 6.5, 6)	
1852	10"	CEDAR	
1853	25"	LIVE OAK	HERITAGE
1854	9"	CEDAR	
1855	11"	CEDAR (9, 4)	
1856	10"	CEDAR	
1857	8.5"	CEDAR	
1858	9"	CEDAR	
1859	9"	CEDAR	
1860	11"	CEDAR ELM	
1861	8"	CEDAR	
1862	8"	CEDAR	
1863	9"	CEDAR	
1864	8"	CEDAR	
1865	12.75"	CEDAR (9, 7.5)	
1866	8"	CEDAR	
1867	15"	CEDAR ELM	
1868	8"	HACKBERRY	REMOVE
1869	8.5"	CEDAR	
1870	8"	CEDAR	REMOVE
1871	10"	LIVE OAK	
1872	15.5"	LIVE OAK (DEAD)	
1873	8.5"	CEDAR	REMOVE
1874	8"	CEDAR	
1875	9.5"	CEDAR	REMOVE
1876	21.5"	LIVE OAK	
1877	17.5"	LIVE OAK	
1878	17.5"	CEDAR ELM	
1879	15.5"	CEDAR ELM	
1880	15"	COTTONWOOD	REMOVE
1881	13.5"	CEDAR	REMOVE
1882	8"	CEDAR	REMOVE
1883	15.5"	CEDAR ELM	REMOVE
1884	17"	CEDAR ELM	REMOVE
1885	15"	CEDAR ELM	REMOVE

TAG No.	BOLE DIA.	SPECIES	NOTE
1886	12"	CEDAR ELM	REMOVE
1887	23.5"	CEDAR ELM	HERITAGE
1888	29.5"	BLACKJACK OAK (20, 19)	HERITAGE
1889	21"	LIVE OAK	
1890	24.75"	COTTONWOOD (22, 5.5)	REMOVE
1891	14"	LIVE OAK	REMOVE
1892	19.75"	MULBERRY	REMOVE
1893	.5"	LIVE OAK	
1894	10.5"	LIVE OAK	
1895	9.5"	LIVE OAK	
1896	10"	LIVE OAK	
1897	10"	LIVE OAK	
1898	8"	CEDAR	
1899	8"	LIVE OAK	
1900	12.5"	LIVE OAK	
1901	18.5"	UNKNOWN TYPE (12.5, 12)	
1902	16.75"	UNKNOWN TYPE (11.5, 10.5)	
1903	9"	LIVE OAK	
1904	10"	LIVE OAK	
1905	17.25"	UNKNOWN TYPE (12, 10.5)	
1906	11"	CEDAR	
1907	14"	LIVE OAK	
1908	1"	LIVE OAK	
1908	18.75"	LIVE OAK (15, 7.5)	
1910	20.75"	CEDAR (9.5, 6, 6, 5, 5, 4.5)	
1911	22"	CEDAR (10.5, 7, 6, 6, 4)	
1912	10"	LIVE OAK	
1913	10"	LIVE OAK	
1914	12"	LIVE OAK	
1915	17"	LIVE OAK	
1916	19.5"	LIVE OAK	
1917	8"	CEDAR	
1918	15.5"	LIVE OAK (12.5, 6)	
1919	16.75"	CEDAR (13.5, 6.5)	
1920	8.5"	LIVE OAK	
1921	8.5"	LIVE OAK	
1922	9"	LIVE OAK	
1923	12.25"	CEDAR (8.5, 7.5)	
1924	14"	CEDAR (DEAD)	
1925	8.5"	CEDAR	
1926	11.25"	LIVE OAK (8.5, 5.5)	
1927	9"	LIVE OAK	
1928	9.5"	LIVE OAK	
1929	8"	CEDAR	
1930	9"	LIVE OAK	
1931	22"	CEDAR	
1932	10.5"	CEDAR	
1933	12"	LIVE OAK (9.5, 5)	
1934	9"	LIVE OAK	
1935	12.5"	CEDAR	
1936	11"	LIVE OAK	
1937	8"	LIVE OAK	
1938	9.5"	CEDAR ELM	
1939	10"	CEDAR	
1940	24"	LIVE OAK	HERITAGE
1941	11.5"	CEDAR ELM (8, 7)	
1942	14"	LIVE OAK	
1943	15"	LIVE OAK (11, 8)	
1944	11.75"	CEDAR (9, 5.5)	
1945	9.5"	LIVE OAK	
1946	13"	LIVE OAK (9, 4, 4)	
1947	9"	HACKBERRY	REMOVE
1948	12"	LIVE OAK	
1949	14.5"	LIVE OAK	

TAG No.	BOLE DIA.	SPECIES	NOTE
3776	9"	LIVE OAK	
3777	9"	CEDAR	
3778	10"	CEDAR ELM	
3779	16.5"	LIVE OAK	
3780	13.5"	LIVE OAK	
3781	17.25"	LIVE OAK (12, 10.5)	
3782	11"	LIVE OAK	
3783	14"	LIVE OAK	
3784	15"	LIVE OAK	
3785	9"	CEDAR	REMOVE
3786	19.75"	CEDAR (8.5, 7.5, 6, 5, 4)	
3787	8"	CEDAR	
3788	8"	CEDAR	REMOVE
3789	8.5"	CEDAR	REMOVE
3790	21.5"	CEDAR	
3791	19.5"	LIVE OAK	
3792	30"	LIVE OAK (21, 18)	HERITAGE
3793	10.75"	CEDAR (8, 5.5)	
3794	9"	CEDAR	
3795	9"	CEDAR	
3796	35.5"	LIVE OAK (24, 23)	HERITAGE
3797	8"	CEDAR	
3798	11.5"	CEDAR	
3799	8.5"	CEDAR	
3800	11.5"	CEDAR (9, 5)	
3823	12.5"	LIVE OAK	
3824	10"	LIVE OAK	
3825	22.5"	LIVE OAK	
3826	15"	CEDAR	
3827	8"	LIVE OAK	
3828	26"	LIVE OAK	HERITAGE
3829	21"	CEDAR ELM (14, 14)	
3830	9"	CEDAR ELM	
3831	10"	CEDAR ELM	
3860	9.5"	CEDAR	
3862	12"	CEDAR ELM	
3863	9"	CEDAR ELM	
3864	8.5"	CEDAR ELM	
3867	8"	CEDAR	
3868	11.5"	CEDAR	
3869	9"	CEDAR ELM	
3870	12.5"	CEDAR ELM	REMOVE
3871	13.5"	CEDAR ELM	
3881	23"	LIVE OAK	
3882	18"	LIVE OAK	REMOVE
3883	8.5"	CEDAR ELM	REMOVE
3884	11"	LIVE OAK	
3885	10"	LIVE OAK	
3886	14"	LIVE OAK	
3887	13.5"	CEDAR ELM	
3888	11.5"	LIVE OAK	
3889	14"	LIVE OAK	
3890	23.5"	LIVE OAK (19, 9)	HERITAGE
3891	13.5"	CEDAR (9.5, 8)	
3892	15.5"	CEDAR ELM (7, 7, 5, 5)	
3893	12.5"	LIVE OAK	
3894	9"	CEDAR	
3895	10"	LIVE OAK	
3896	14"	LIVE OAK	
3897	11"	LIVE OAK	
3898	13.5"	LIVE OAK (9.5, 8)	
3899	13"	LIVE OAK	
3900	10"	LIVE OAK	

TREE MITIGATION

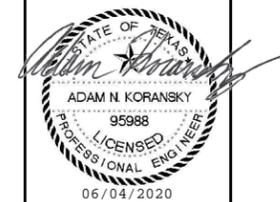
APPENDIX F SURVEYED TREE SPECIES TO BE REMOVED
 CEDAR, CEDAR ELM, COTTONWOOD, HACKBERRY
 LIVE OAK, MULBERRY

TREE MITIGATION

2,366.00 TOTAL APPENDIX F TREES INCHES SURVEYED
 284.00 TOTAL APPENDIX F TREES INCHES REMOVED
 18.00 TOTAL NON-APPENDIX F & INVASIVE INCHES REMOVED
 0 TOTAL DEAD INCHES REMOVED
 168.75 TOTAL MITIGATION INCHES REQUIRED
 169.50 TOTAL MITIGATION INCHES PLANTED ONSITE
 <TBD> REMEDIAL TREE CARE (P-6) MITIGATION INCHES

	REMOVED INCHES	MITIGATION RATE	MITIGATION INCHES
APPENDIX F, 19" +	44.50	100%	44.50
APPENDIX F, 8" - 18.9"	239.5	50%	119.75
APPENDIX F TOTAL	284.00		164.25
NON APPENDIX F, 19" +	0	50%	0
NON APPENDIX F, 8" - 18.9"	18.00	25%	4.50
INVASIVE/UNDESIRABLE	0	0%	0
NON APPENDIX F & INVASIVE TOTAL	18.00		4.50

NOTE:
 NO HERITAGE TREES WILL BE REMOVED AS PART OF THIS PROJECT.



APVD	BY	APVD	REVISION	CHK	DR	DATE	DSGN

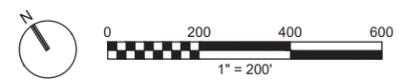
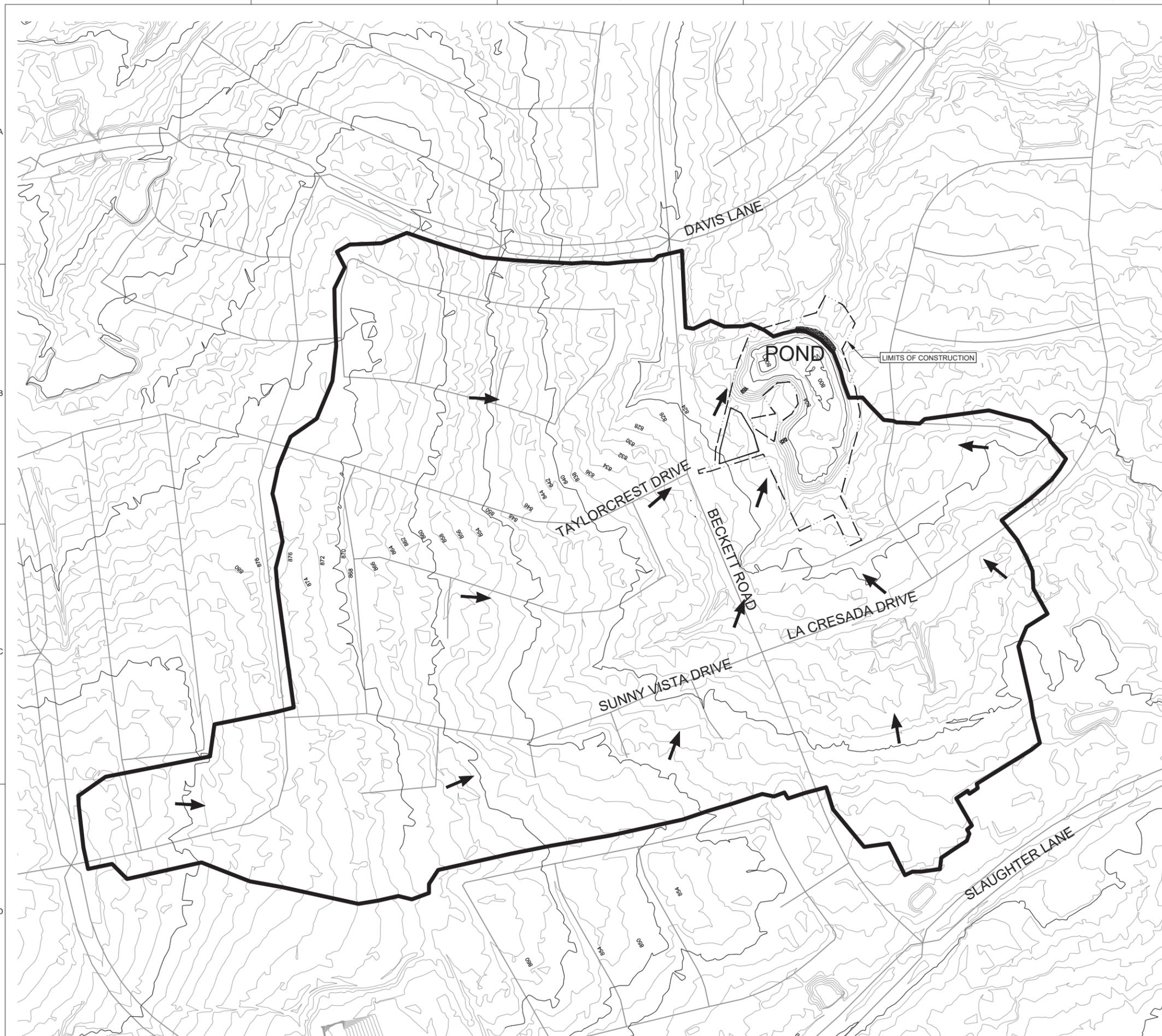
WILLIAMSON CREEK - VILLAGE
 AT WESTERN OAKS WETPOND
 CITY OF AUSTIN
 AUSTIN, TEXAS

ch2m CIVIL

TREE SURVEY AND MITIGATION TABLES

VERIFY SCALE
 BAR IS ONE INCH ON ORIGINAL DRAWING.

DATE	JUNE 2020
PROJ	704370
DWG	C-02
SHEET	9 of 23



LEGEND
 DRAINAGE BOUNDARY
 FLOW DIRECTION

1. REQUIRED CAPTURE VOLUME BASED ON THE WILLIAMSON CREEK ORDINANCE
2. VOLUMES BY INCH AND BY ACRE-FEET BASED ON THE DRAINAGE AREA MINUS THE POND SITE AREA
3. THE PERMANENT POOL VOLUME FOR CURRENT CONDITIONS IS REDUCED DUE TO THE FACT THAT THE EXTENDED DETENTION OUTLETS ARE APPROXIMATELY 0.5 FEET LOW ON THE DOWNSTREAM END.
4. OFFSITE TOPOGRAPHY SHOWN IS FROM CITY OF AUSTIN 2012 2' CONTOURS.

	Original Design	Current Conditions	Proposed Design
Total Drainage Area (acres)	118.8	112.6	112.6
Estimated Percent Impervious Cover for Total Area	29.7%	40.5%	40.5%
Drainage Area minus Pond Site (acres)	107.0	104.6	104.6
Percent Impervious Cover Upstream of Pond	33.0%	43.6%	43.6%

	PEAK INFLOW (CFS)	PEAK ELEVATION (FT)	PEAK DISCHARGE (CFS)
2 YEAR	185.7	807.6	112.0
25 YEAR	518.2	808.3	506.7
100 YEAR	719.1	808.6	708.5

TIME OF CONCENTRATION (MIN)	33.5
CURVE NUMBER	74.0

NO.	DATE	REVISION	BY

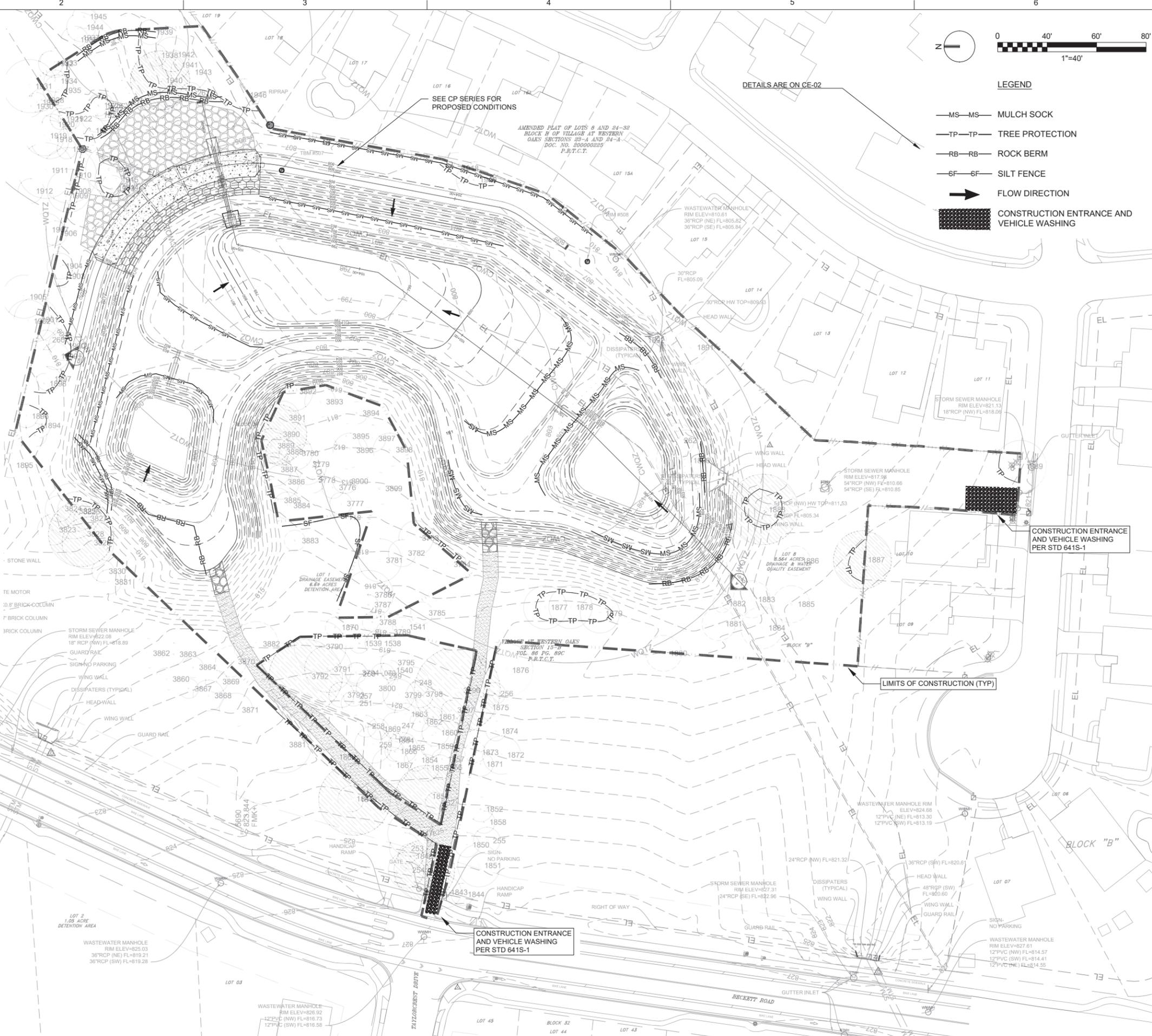
WILLIAMSON CREEK - VILLAGE
 AT WESTERN OAKS WETPOND
 CITY OF AUSTIN
 AUSTIN, TEXAS

ch2m
 CIVIL
DRAINAGE AREA PLAN

N.T.S.
 VERIFY SCALE
 BAR IS ONE INCH ON ORIGINAL DRAWING.
 DATE: APRIL 2020
 PROJ: 704370
 DWG: C-03
 SHEET: 10 of 20



1. ANY STOCKPILE MATERIALS MUST BE COVERED WITH A WATER RESISTANT MATERIAL DURING ANY RAIN EVENT AND AT ALL TIMES WHEN NOT BEING USED. SILT FENCE OR TRIANGULAR FILTER DIKES SHALL BE INSTALLED AROUND THE PERIMETER OF STOCKPILED MATERIALS.
2. CONTRACTOR TO DETERMINE PROPOSED STOCKPILE LOCATIONS AND OBTAIN APPROVAL FROM THE ENGINEER PRIOR TO CONSTRUCTION. FOR STOCKPILES LOCATED OFFSITE, SEE GENERAL NOTES SHEET. IF STOCKPILES ARE TO BE LOCATED ON PRIVATE PROPERTY, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING WRITTEN APPROVAL FROM THE PROPERTY OWNER(S) PRIOR TO CONSTRUCTION.
3. CONSTRUCTION VEHICLES SHALL BE FREE OF MUD AND DIRT PRIOR TO LEAVING THE CONSTRUCTION SITE. VEHICLES SHALL BE CLEANED ONLY IN DESIGNATED AREAS WITH APPROVED METHODS PRIOR TO LEAVING THE SITE.
4. PROTECT ALL TREES WITHIN LIMITS OF CONSTRUCTION WITH BOARD CLADDING. INSTALL TREE PROTECTION FENCING AS SHOWN ON PLANS.
5. ENVIRONMENTAL INSPECTOR HAS AUTHORITY TO ADD OR MODIFY EROSION AND SEDIMENT CONTROLS TO KEEP PROJECT IN COMPLIANCE WITH CITY OF AUSTIN RULES AND REGULATIONS.
6. SEE GENERAL NOTES SHEET AND SWPPP FOR BEST MANAGEMENT PRACTICES WITH RESPECT TO GOOD HOUSEKEEPING AND MINIMIZING THE POTENTIAL FOR VEHICLES TO TRACK MATERIAL OFF-SITE.
7. DIVERT OR SEPARATE OFF-SITE FLOWS FROM EXCAVATION AREAS USING TEMPORARY PIPES, COFFER DAMS, DIVERSION SWALES, DIVERSION BERMS, ROCK BERMS AND SILT FENCE. DIVERSIONS SHALL BE SUFFICIENT FOR THE STORM EVENTS (2-YR STORM EVENT FLOWS).
8. DEWATERING SYSTEMS SHALL BE CONFIGURED TO MINIMIZE COMBINING WITH OFF-SITE FLOW.
9. SOIL RETENTION BLANKET SHALL BE PLACED FOR TEMPORARY CONTROL OF DISTURBED AREAS GREATER THAN 4:1 SLOPE FOR AREAS THAT DO NOT HAVE GRADING OR FINAL STABILIZATION PLANNED FOR OVER 14 DAYS. TEMPORARY SEEDING IS REQUIRED FOR DISTURBED AREA EXPOSED WITH WORK BEING PERFORMED FOR OVER 21 DAYS. CHANNELS AND SWALES WITH CONCENTRATED FLOW SHALL BE LINED WITH CLASS 2 CHANNEL LINER.
10. STORAGE OF WASTE, OTHER SPOILS OR EQUIPMENT IS NOT ALLOWED ON THE CITY STREETS.
11. ROCK RIPRAP USED FOR TEMPORARY SLOPE STABILIZATION CAN BE REUSED IN THE FINAL DESIGN.
12. PLACE MULCH SOCK AROUND EXISTING OUTLET PIPES WITHOUT BLOCKING THE PIPE ENTRANCE
13. MULCH SOCK IN THE POND AREA TO BE REMOVED AND REPLACED AS NECESSARY DURING GRADING.



LEGEND

- MS—MS MULCH SOCK
- TP—TP TREE PROTECTION
- RB—RB ROCK BERM
- SF—SF SILT FENCE
- ➔ FLOW DIRECTION
- ▨ CONSTRUCTION ENTRANCE AND VEHICLE WASHING

NO.	DATE	REVISION	BY

WILLIAMSON CREEK - VILLAGE
AT WESTERN OAKS WETPOND
CITY OF AUSTIN
AUSTIN, TEXAS

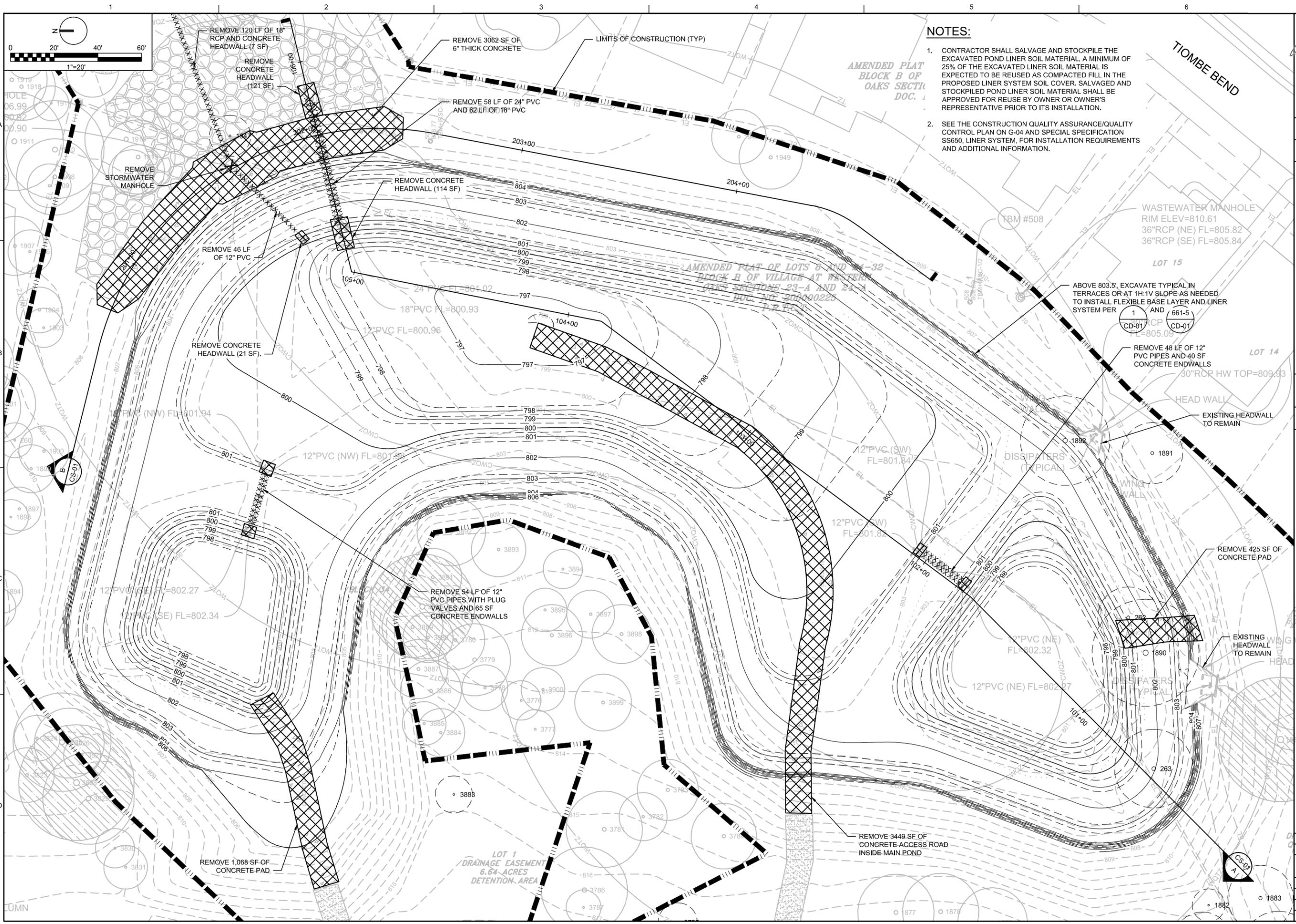
ch2m CIVIL

EROSION/SEDIMENTATION CONTROL AND TREE PROTECTION PLAN

1" = 20'
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.

DATE	APRIL 2020
PROJ	704370
DWG	CE-01
SHEET	11 of 20

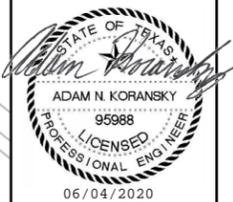
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NOTES:

1. CONTRACTOR SHALL SALVAGE AND STOCKPILE THE EXCAVATED POND LINER SOIL MATERIAL. A MINIMUM OF 25% OF THE EXCAVATED LINER SOIL MATERIAL IS EXPECTED TO BE REUSED AS COMPACTED FILL IN THE PROPOSED LINER SYSTEM SOIL COVER. SALVAGED AND STOCKPILED POND LINER SOIL MATERIAL SHALL BE APPROVED FOR REUSE BY OWNER OR OWNER'S REPRESENTATIVE PRIOR TO ITS INSTALLATION.
2. SEE THE CONSTRUCTION QUALITY ASSURANCE/QUALITY CONTROL PLAN ON G-04 AND SPECIAL SPECIFICATION SS650, LINER SYSTEM, FOR INSTALLATION REQUIREMENTS AND ADDITIONAL INFORMATION.

AMENDED PLAT
BLOCK B OF
OAKS SECTR
DOC. 1



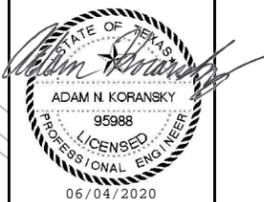
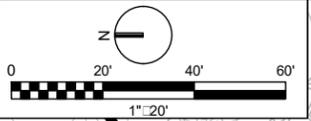
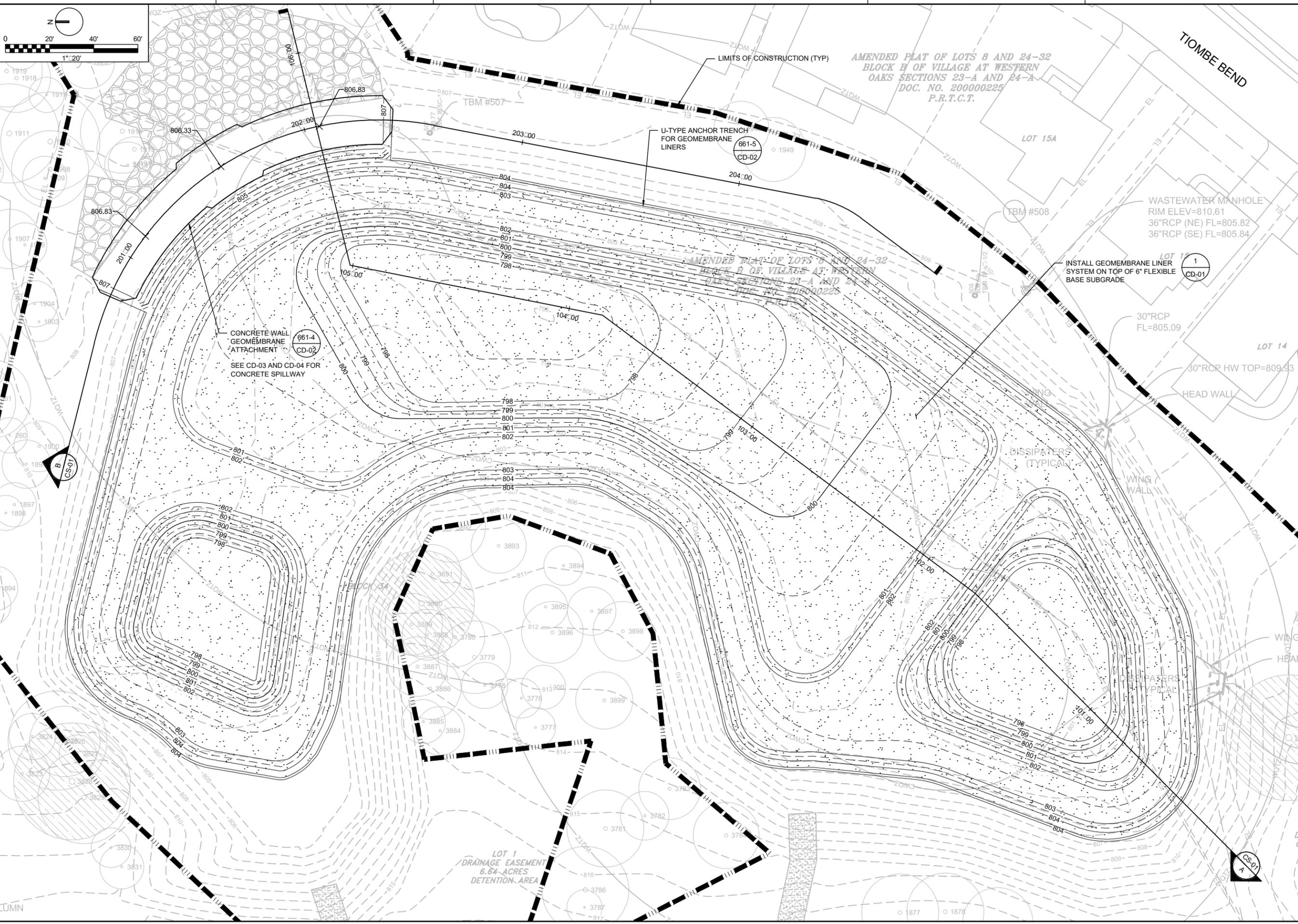
NO.	DATE	DR	CHK	BY
		J DAVENPORT	T WEINSTEIN	A KORANSKY

WILLIAMSON CREEK - VILLAGE
AT WESTERN OAKS WETPOND
CITY OF AUSTIN
AUSTIN, TEXAS

ch2m.
CIVIL
**DEMOLITION PLAN AND
EXCAVATION GRADE**

1" = 20'
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.

DATE	JUNE 2020
PROJ	704370
DWG	CP-01
SHEET	13 of 23

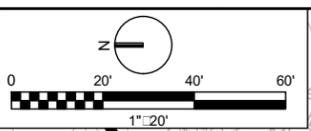
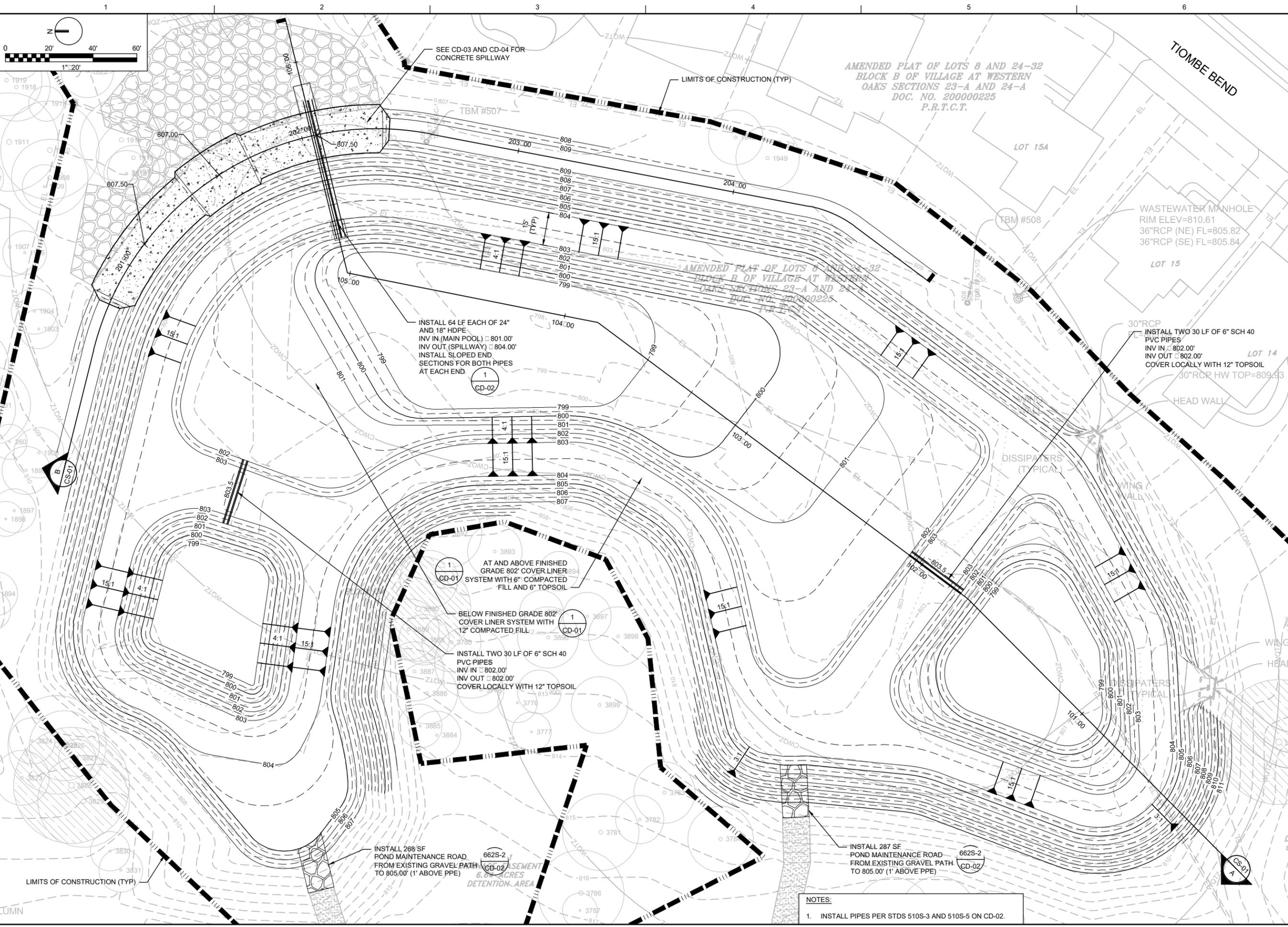


NO.	DATE	DR	CHK	REVISION	BY	APVD
		J DAVENPORT	T WEINSTEIN		A KORANSKY	

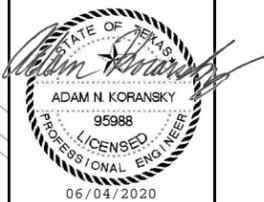
WILLIAMSON CREEK - VILLAGE
AT WESTERN OAKS WETPOND
CITY OF AUSTIN
AUSTIN, TEXAS

ch2m
CIVIL
LINER SYSTEM EXTENTS

DATE	JUNE 2020
PROJ	704370
DWG	CP-02
SHEET	14 of 23



AMENDED PLAT OF LOTS 8 AND 24-32
 BLOCK B OF VILLAGE AT WESTERN
 OAKS SECTIONS 23-A AND 24-A
 DOC. NO. 200000225
 P.R.T.C.T.



NO.	DATE	DR	CHK	REVISION	BY
		J DAVENPORT	T WEINSTEIN		A KORANSKY

WILLIAMSON CREEK - VILLAGE
 AT WESTERN OAKS WETPOND
 CITY OF AUSTIN
 AUSTIN, TEXAS

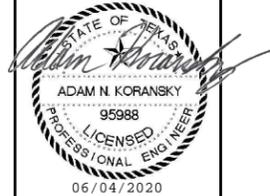
ch2m
 CIVIL

PROPOSED FINAL GRADE

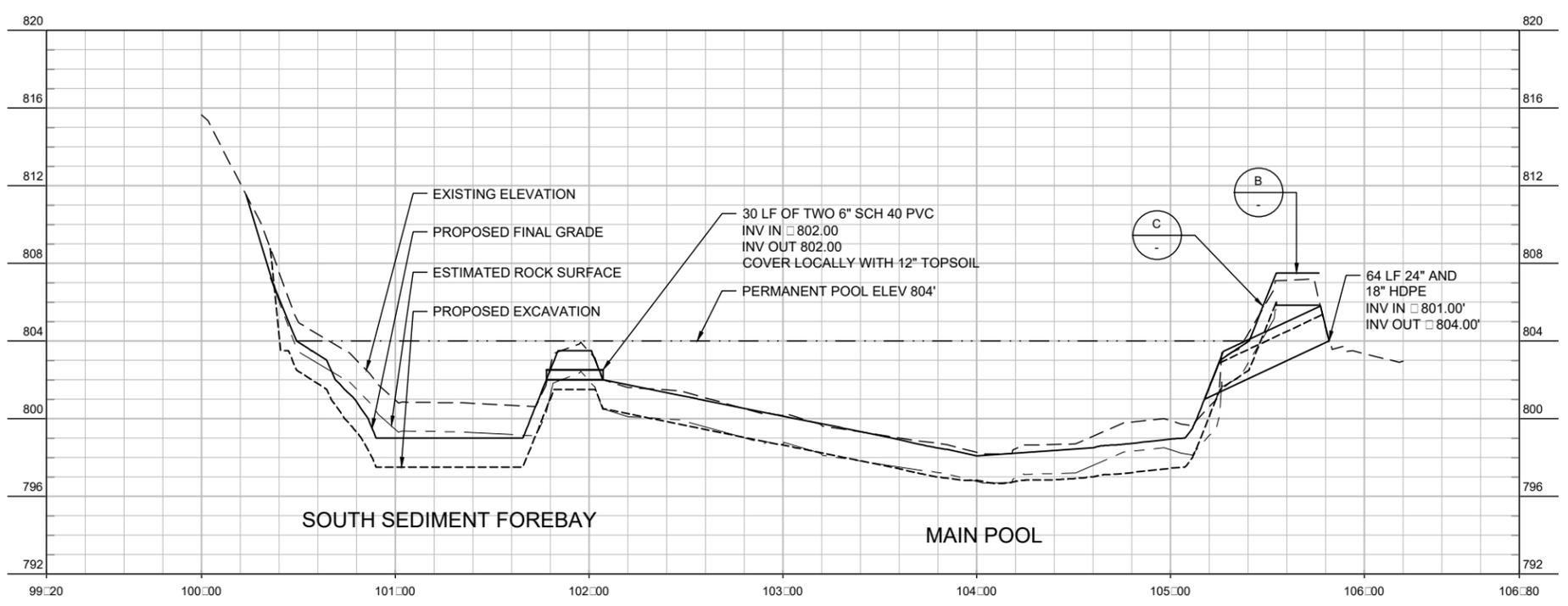
1" = 20'
 VERIFY SCALE
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DATE	JUNE 2020
PROJ	704370
DWG	CP-03
SHEET	15 OF 23

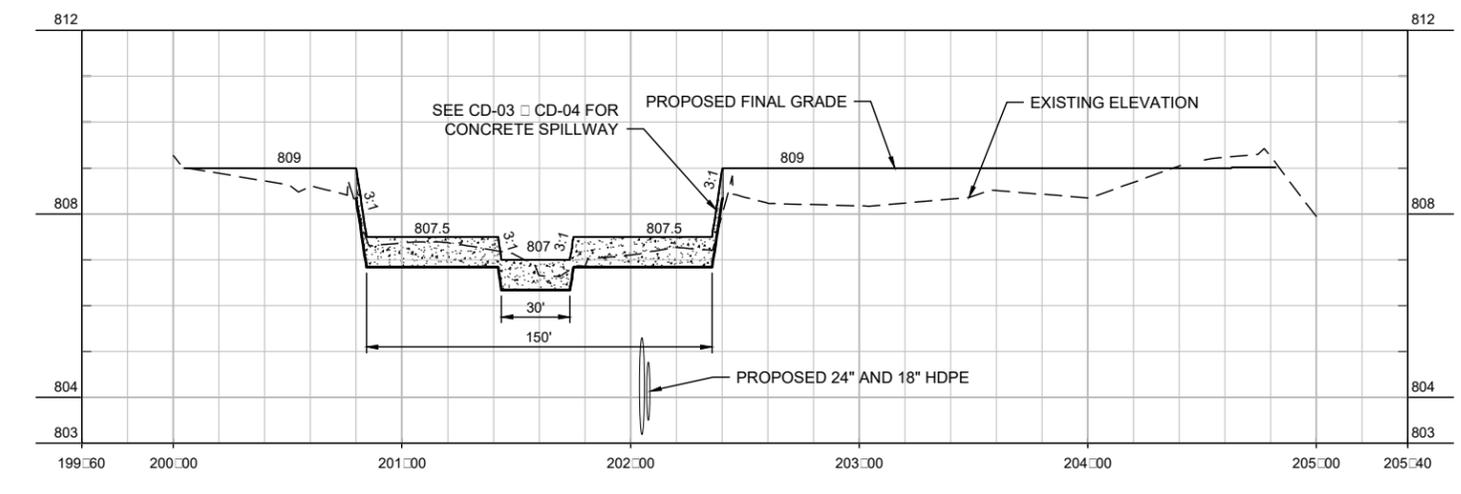
- NOTES:**
- INSTALL PIPES PER STDS 510S-3 AND 510S-5 ON CD-02.



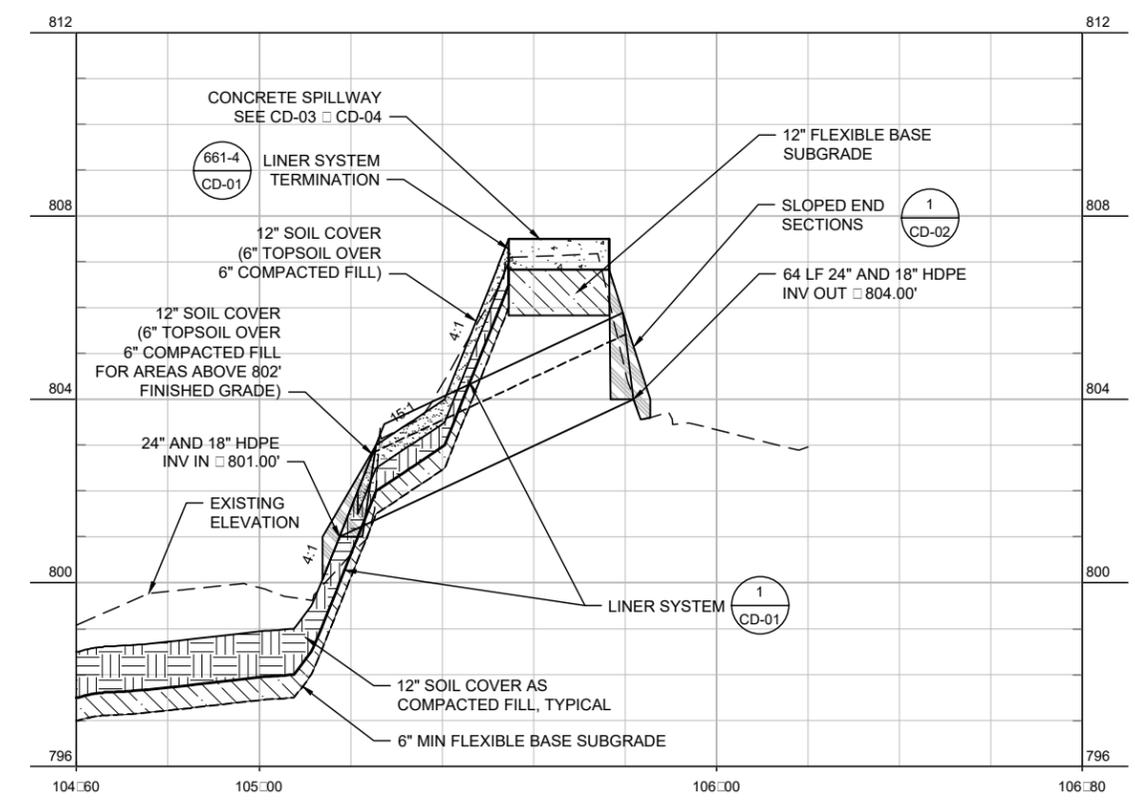
NO.	DATE	DR	CHK	REVISION	BY	APVD
		J. DAVENPORT	T. WEINSTEIN		J. DAVENPORT	A. KORANSKY



A SOUTH SEDIMENT FOREBAY AND MAIN POOL SECTION
 1" = 40' HORZ / 1" = 4' VERT
 CP-01, CP-02, CP-03



B WEIR OUTLET STRUCTURE CROSS SECTION
 1" = 40' HORZ / 1" = 2' VERT
 CP-01, CP-02, CP-03

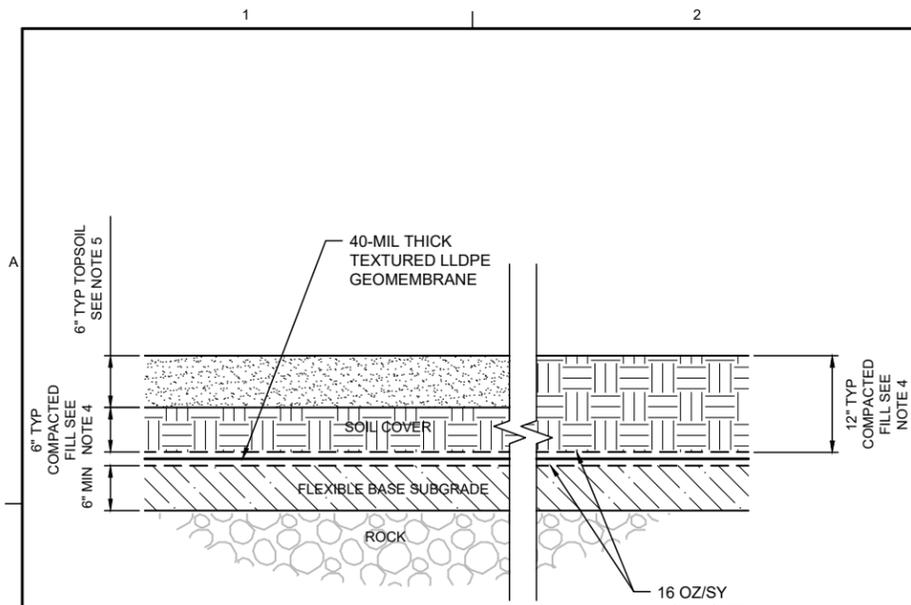


C WEIR SECTION
 1" = 20' HORZ / 1" = 2' VERT

WILLIAMSON CREEK - VILLAGE
 AT WESTERN OAKS WETPOND
 CITY OF AUSTIN
 AUSTIN, TEXAS

ch2m
 CIVIL
POND SECTIONS

VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING.	
DATE	JUNE 2020
PROJ	704370
DWG	CS-01
SHEET	16 OF 23



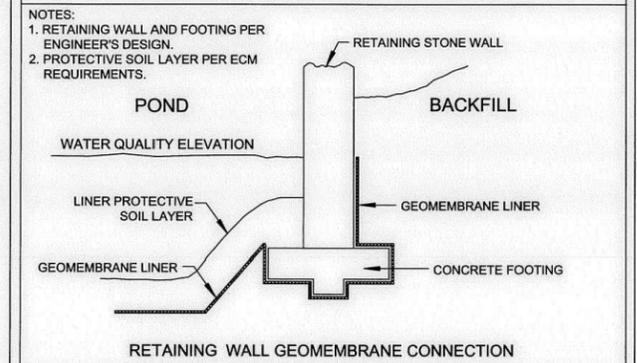
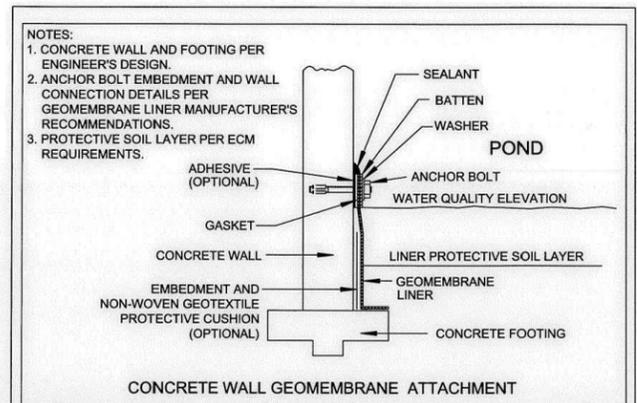
AT OR ABOVE FINISHED GRADE 802' **BELOW FINISHED GRADE 802'**

NOTES:

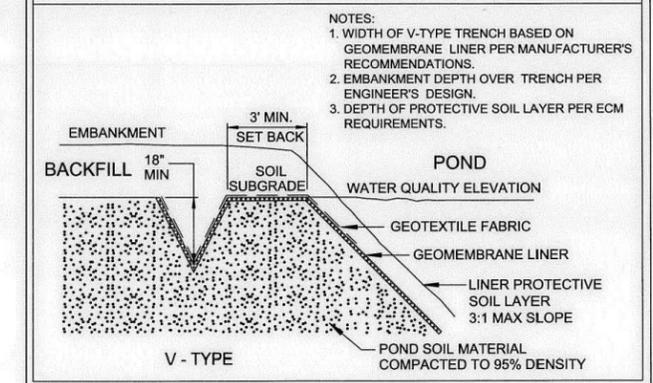
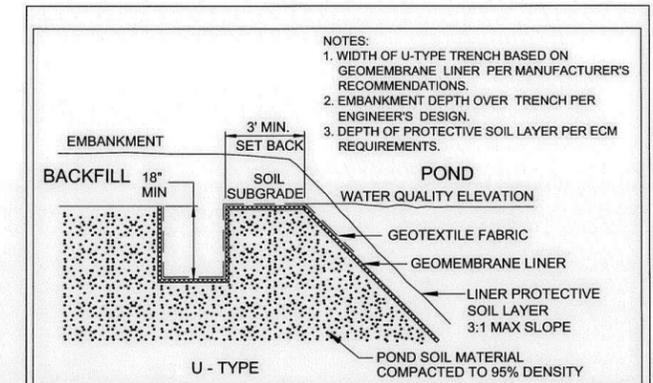
1. LINER SYSTEM CONSISTS OF A 40-MIL THICK LLDPE GEOMEMBRANE AND 16 OZ/SY NONWOVEN GEOTEXTILE LAYERS ON TOP AND BOTTOM OF GEOMEMBRANE. SOIL COVER CONSISTS OF APPROVED REUSE SOIL OR CLASS B BORROW AND IMPORTED CLASS C TOPSOIL FILL.
2. PRIOR TO LINER SYSTEM INSTALLATION, INSTALL AND PROOF-ROLL 6" MIN LAYER OF FLEXIBLE BASE (STD 210S). ANY SUSPECT AREAS SHALL BE REWORKED AND RECOMPACTED, OR WEAK SOILS REMOVED AND REPLACED WITH FLEXIBLE BASE.
3. INSTALL LINER SYSTEM ON TOP OF FLEXIBLE BASE AND ANCHOR AS SHOWN. SEE THE U-TYPE ANCHOR TRENCH IN STD 661-5.
4. INSTALL FILL ON TOP OF LINER SYSTEM IN 6" LIFTS, COMPACTED AT 95% OF STANDARD PROCTOR DENSITY. FILL DEPTHS ARE 6" TYPICAL IN AREAS WITH FINISHED GRADE AT OR ABOVE 802' AND 12" TYPICAL IN AREAS WITH FINISHED GRADE BELOW 802. DEPTHS VARY AT INTERBASIN BERMS, SEE CP-03.
5. IN AREAS WITH FINISHED GRADE AT OR ABOVE 802', COMPLETE SOIL COVER WITH 6" TOPSOIL (STD 130S) TO MEET FINAL GRADE SHOWN ON CP-03. MECHANICALLY COMPACT WITH TRACKED EQUIPMENT OR BUCKET-TAMPING TO APPROXIMATELY 80% OF STANDARD PROCTOR DENSITY.
6. SEE THE CONSTRUCTION QUALITY ASSURANCE/QUALITY CONTROL PLAN ON G-04 AND SPECIAL SPECIFICATION SS650, LINER SYSTEM, FOR INSTALLATION REQUIREMENTS AND ADDITIONAL INFORMATION.

1 LINER SYSTEM AND SOIL COVER SECTION
NOT TO SCALE

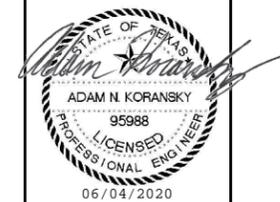
CP-02, CS-01



CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	GEOMEMBRANE LINER ATTACHMENT DETAILS	STANDARD NO. 661-4
<i>May May, P.E. 12/30/14</i> ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	



CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	ANCHOR TRENCHES FOR GEOMEMBRANE LINERS	STANDARD NO. 661-5
<i>May May, P.E. 12/30/14</i> ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	

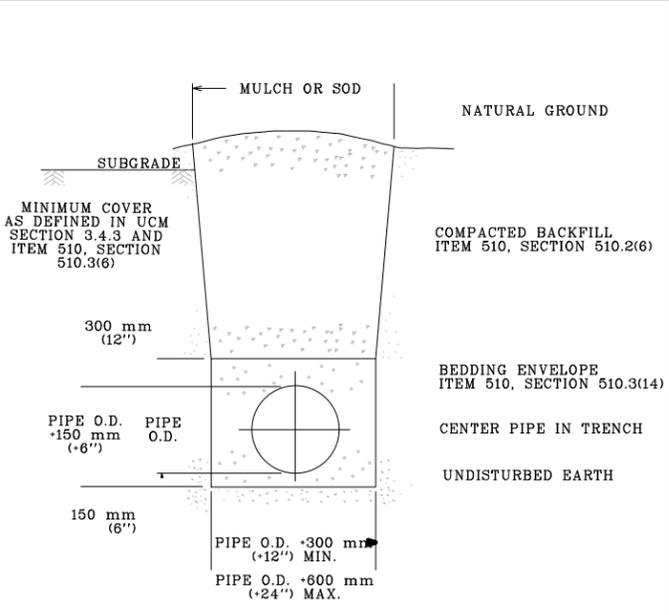
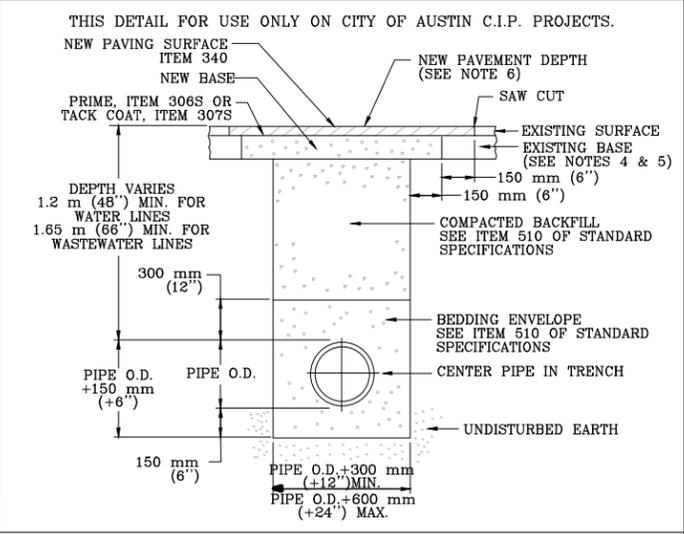
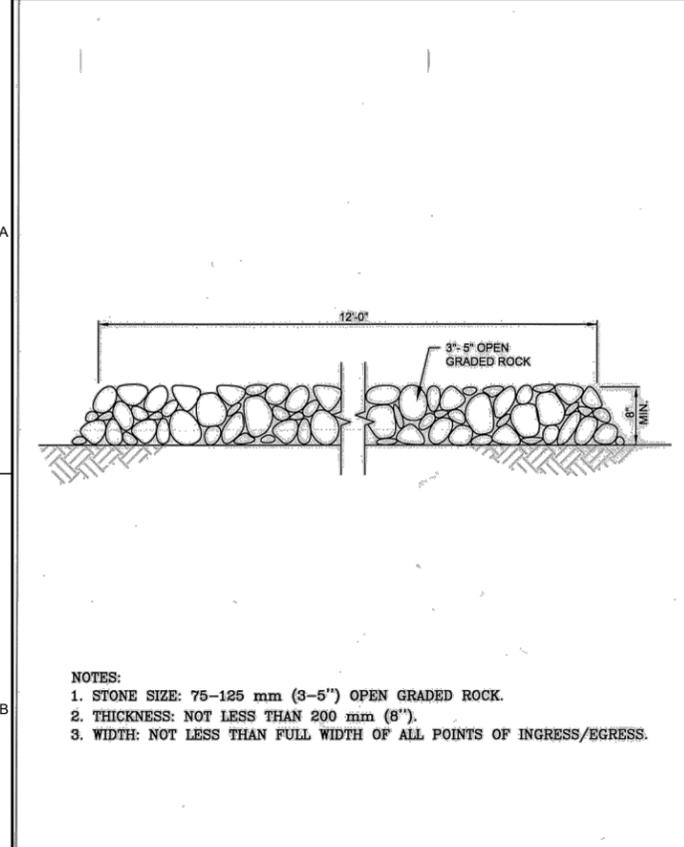


NO.	DATE	DR	CHK	BY	APVD
		J DAVENPORT	T WEINSTEIN	J DAVENPORT	A KORANSKY

WILLIAMSON CREEK - VILLAGE
AT WESTERN OAKS WETPOND
CITY OF AUSTIN
AUSTIN, TEXAS

ch2m
CIVIL
LINER SYSTEM DETAILS

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING.
DATE: JUNE 2020
PROJ: 704370
DWG: CD-01
SHEET: 17 of 23



NOTES:

1. THE EXISTING PAVING SURFACE SHALL BE SAW CUT IN A STRAIGHT LINE A MINIMUM OF 300 mm (12") WIDER THAN THE UNDISTURBED SIDES OF THE TRENCH, SYMMETRICAL ABOUT THE CENTER LINE OF THE EXCAVATION.
2. ANY CONCRETE PAVING SHALL BE SAW CUT 150 mm (6") WIDER THAN UNDISTURBED SIDES OF EXCAVATION.
3. IF EXCAVATION AREA IS OPEN FOR TEMPORARY PUBLIC USE, THE SURFACE SHALL BE MAINTAINED LEVEL WITH ADJACENT RIDING SURFACE WITH COLD MIX OR TEMPORARY HOT MIX ASPHALTIC CONCRETE.
4. ROAD BASE AND SURFACE MATERIALS IN THE TRENCH CUT SHALL BE REPLACED IN KIND OF EQUAL THICKNESS, OR MINIMUM BASE THICKNESS OF 250 mm (10"), WHICHEVER IS GREATER.
5. ALL DAMAGED AREAS OF PAVEMENT OUTSIDE THE TRENCH CUT SHALL BE REMOVED AND REPLACED WITH MINIMUM OF 200 mm (8") OF BASE OR MATCH EXISTING THICKNESS, WHICHEVER IS GREATER.
6. SURFACE PAVEMENT SHALL BE OF THE KIND AND THICKNESS AS EXISTING, OR MINIMUM 50 mm (2"), WHICHEVER IS GREATER.

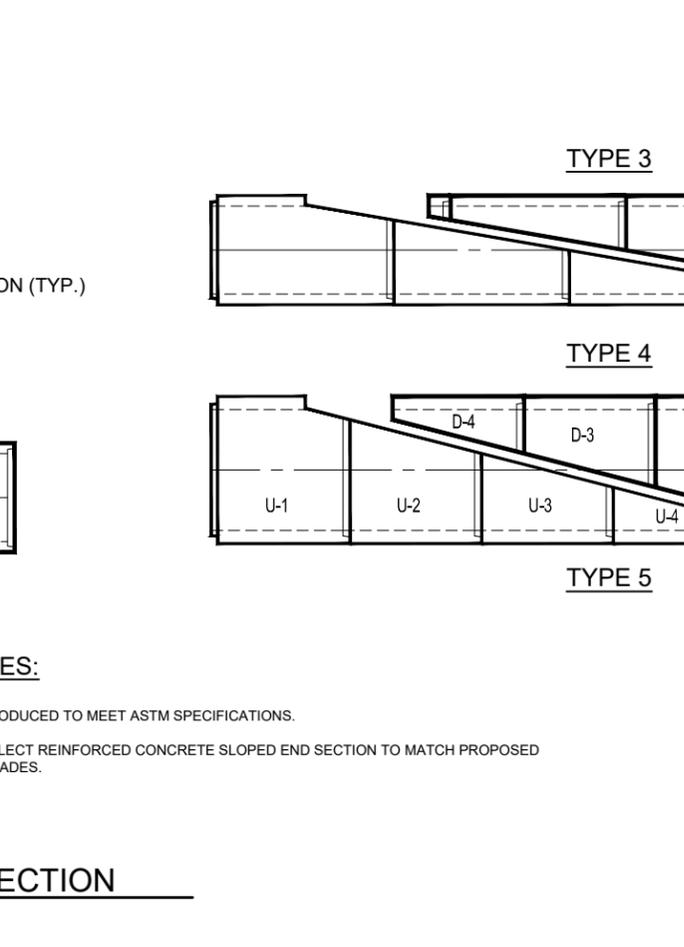
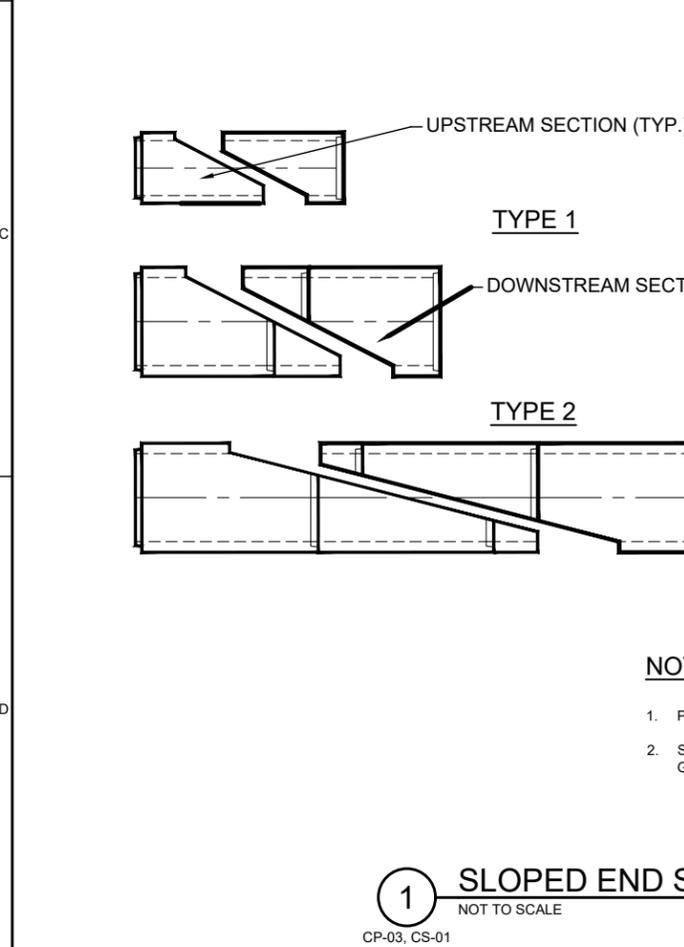
REFERENCES:

1. UTILITY CRITERIA MANUAL SECTION 3.4.3, "FINAL DESIGN"
2. STANDARD SPECIFICATION MANUAL ITEM 510, SECTION 510.2(6), "SELECT BACKFILL OR BORROW"; SECTION 510.3(6), "TRENCH DEPTH AND DEPTH OF COVER"; SECTION 510.3(14), "PIPE BEDDING ENVELOPE"

CITY OF AUSTIN
DEPARTMENT OF PUBLIC WORKS
POND MAINTENANCE ROAD
CROSS SECTION
STANDARD NO. 662S-2
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
E.D.L., P.E. 1/19/2016 ADOPTED

CITY OF AUSTIN
WATER AND WASTEWATER UTILITY
TYPICAL TRENCH WITH PAVED SURFACE
STANDARD NO. 510S-3
RECORD COPY SIGNED BY KATHI L. FLOWERS 8/19/02 ADOPTED
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.

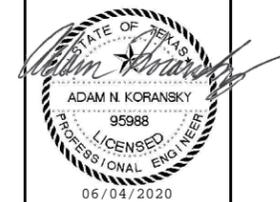
CITY OF AUSTIN
DEPARTMENT OF PUBLIC WORKS
TYPICAL TRENCH DETAIL WITH UNFINISHED SURFACE
STANDARD NO. 510S-5
RECORD COPY SIGNED BY BILL GARDNER 03/13/06 ADOPTED
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



NOTES:

1. PRODUCED TO MEET ASTM SPECIFICATIONS.
2. SELECT REINFORCED CONCRETE SLOPED END SECTION TO MATCH PROPOSED GRADES.

1 SLOPED END SECTION
NOT TO SCALE
CP-03, CS-01



NO.	DATE	DR	CHK	BY	APVD
		J DAVENPORT	T WEINSTEIN	J DAVENPORT	A KORANSKY

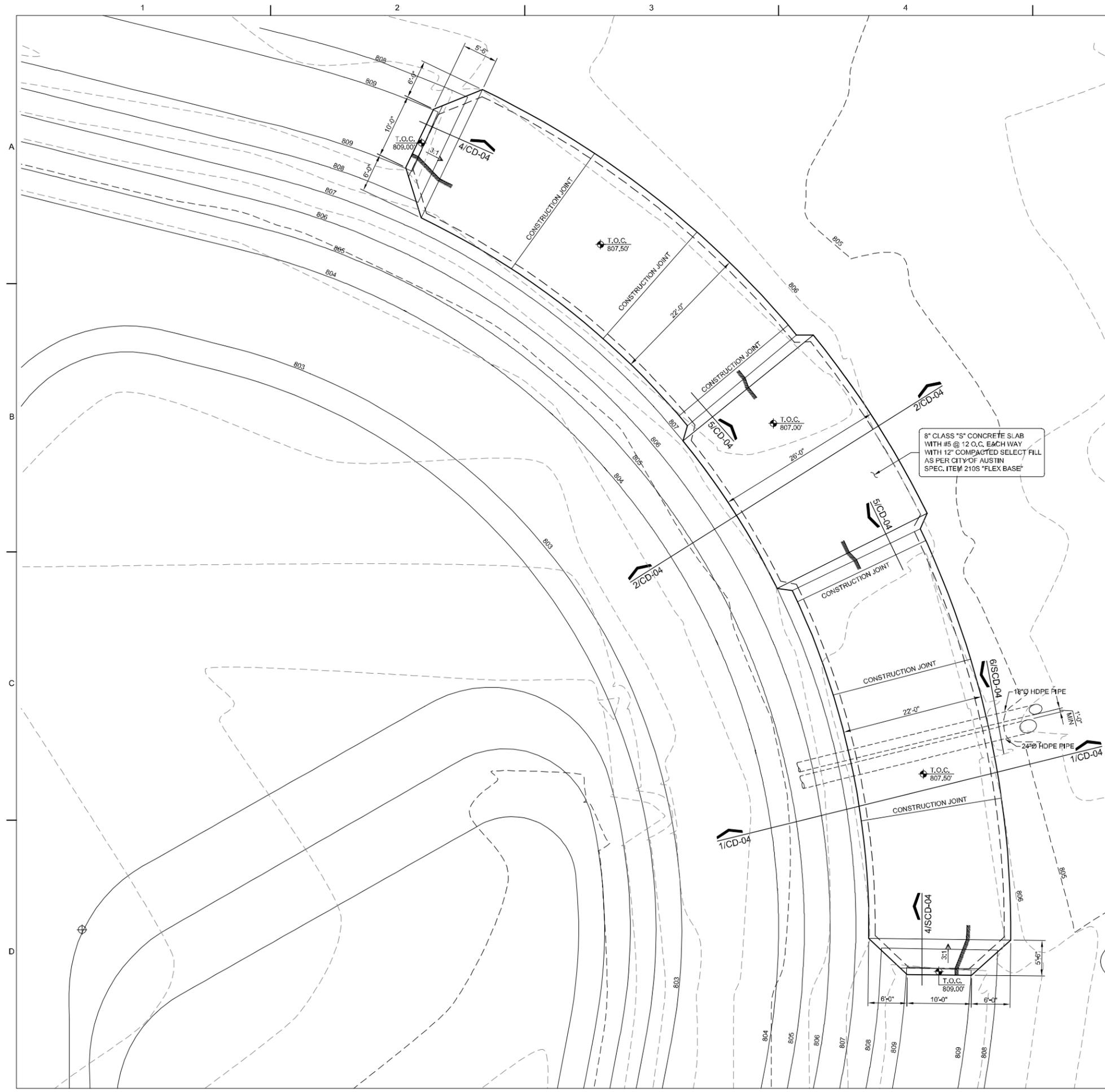
WILLIAMSON CREEK - VILLAGE
AT WESTERN OAKS WETPOND
CITY OF AUSTIN
AUSTIN, TEXAS

ch2m
CIVIL
PIPE AND POND DETAILS

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.

DATE	JUNE 2020
PROJ	704370
DWG	CD-02
SHEET	18 OF 23

Z:\PROJECTS\2018\1805 - Village at Western Oaks Ponds\Struct\1805 - CD-03 Spillway Plan.dwg, 4/8/2020 3:42:13 PM, Bill



STRUCTURAL NOTES

THESE STRUCTURAL NOTES SHALL APPLY UNLESS OTHERWISE SPECIFICALLY NOTED ON PLANS AND DETAILS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, NEW AND/OR EXISTING, AND SHALL COORDINATE ALL STRUCTURAL PLANS AND DETAILS WITH CIVIL DRAWINGS BEFORE STARTING WORK. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. IN CASE THERE ARE DISCREPANCIES AMONG DRAWINGS AND SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT SHALL GOVERN. DESIGN, CONSTRUCTION, WORKMANSHIP AND MATERIALS, AND SPECIAL INSPECTIONS SHALL COMPLY WITH THE LATEST EDITION OF THE INTERNATIONAL BUILDING CODE, OSHA REGULATIONS, AND THE CITY OF AUSTIN STANDARD SPECIFICATIONS AND DETAILS. DESIGN AND INSTALLATION OF TRENCHING, SHORING, AND BRACING DURING CONSTRUCTION ARE THE CONTRACTOR'S RESPONSIBILITY. CONTRACTOR SHALL CAREFULLY CHECK AND VERIFY ALL SHOP DRAWINGS BEFORE SUBMITTING TO THE CONSULTANTS. UNCHECKED SHOP DRAWINGS WILL BE RETURNED TO THE CONTRACTOR WITHOUT REVIEW BY THE ENGINEER.

DESIGN CRITERIA

- LIVE LOADS:
TOP SLAB OF EMBANKMENT 250 PSF
- FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL INVESTIGATION PREPARED BY: HVJ INC., DATED: JULY 30, 2018.

CONCRETE

- ALL CONCRETE WORK SHALL CONFORM TO THE CITY OF AUSTIN STANDARD SPECIFICATIONS.
- ALL DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS, UNLESS OTHERWISE NOTED, MUST FOLLOW THE A.C.I. "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE", A.C.I. #315, LATEST EDITION.
- CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS AS FOLLOWS:
ALL STRUCTURAL CONCRETE:
4,000 PSI MINIMUM STRENGTH AT 28 DAYS.
CITY OF AUSTIN CLASS "S" CONCRETE AS PER STANDARD SPEC. ITEM 403S "CONCRETE FOR STRUCTURES"
- REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A-615, GRADE 60.
- STANDARD PROTECTIVE COVER OF REINFORCING BARS UNLESS OTHERWISE NOTED SHALL BE:
WHERE CAST AGAINST DIRT OR FILL 3 IN.
EXPOSED TO EARTH OR WEATHER 2 IN.
OTHER 1-1/2 IN.

- UNLESS NOTED OTHERWISE AT CORNERS AND "T" INTERSECTIONS OF ALL BEAMS, EXTEND 4 CORNER BARS EQUAL TO THE SCHEDULED STEEL IN THE ADJACENT BEAMS 2'-0" EACH WAY, 2 BARS TOP AND 2 BARS BOTTOM. MAKE ALL HORIZONTAL WALL STEEL CONTINUOUS AROUND CORNERS.
- ALL ACCESSORIES SHALL BE IN ACCORDANCE WITH THE A.C.I. "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE", A.C.I. #315, LATEST EDITION.
- BARS SCHEDULED AND DETAILED "CONT" SHALL BE LAPPED AS PER STANDARD TENSION LAP TABLE.
- SHOP DRAWINGS SHALL BE PREPARED FOR ALL REINFORCING STEEL AND SUBMITTED FOR REVIEW BY ENGINEER. ENGINEERING DRAWINGS SHALL NOT BE REPRODUCED AND USED AS SHOP DRAWINGS.
- WELDING OF REINFORCING BARS SHALL NOT BE PERMITTED, UNLESS APPROVED BY ENGINEER.
- DURING PLACEMENT OF CONCRETE, USE TREMIE OR OTHER MEANS TO LIMIT FREE-FALL OF CONCRETE TO 6'-0".

FOUNDATION NOTES FOR SLAB ON EMBANKMENT

- REMOVE ALL EXISTING CONCRETE SLAB AND 1 FOOT OF FILL BELOW THE SLAB.
- REWORK AND COMPACT THE TOP 6" OF THE EXPOSED SUBGRADE TO A MINIMUM OF 95% OF THE ASTM D 698 MAXIMUM DRY DENSITY AT A MOISTURE CONTENT RANGING BETWEEN -3 AND +3 PERCENT OF OPTIMUM MOISTURE CONTENT.
- FILL BACK TO REQUIRED GRADE WITH MATERIAL SELECTED AND COMPACTED IN ACCORDANCE WITH THE REQUIREMENTS BELOW.
- SELECT FILL SHALL BE CRUSHED LIMESTONE BASE MATERIAL MEETING CITY OF AUSTIN STANDARD SPECIFICATIONS ITEM 210S 'FLEX BASE'.
- SAMPLES OF PROPOSED SELECT FILL SHALL BE FURNISHED TO THE TESTING LABORATORY 7 DAYS PRIOR TO INSTALLATION TO PERMIT TIME FOR SPECIFICATION COMPLIANCE INSPECTION AND APPROVAL.
- SELECT FILL SHALL BE COMPACTED IN THE FIELD IN LIFTS NOT TO EXCEED 6" TO A MINIMUM OF 95% OF THE ASTM D 698 MAXIMUM DRY DENSITY AT A MOISTURE CONTENT RANGING BETWEEN -3 AND +3 PERCENT OF OPTIMUM MOISTURE CONTENT.

1 CONCRETE SPILLWAY SLAB PLAN

SCALE: 1/8"=1'-0"

NOTES:

- ALL DIMENSIONS ARE APPROXIMATE. CONTRACTOR TO SURVEY AND RECORD ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO DEMOLITION OF EXISTING SLAB.
- REFER TO CIVIL DRAWINGS FOR PIPING, GRADING AND TOP OF CONCRETE ELEVATIONS.



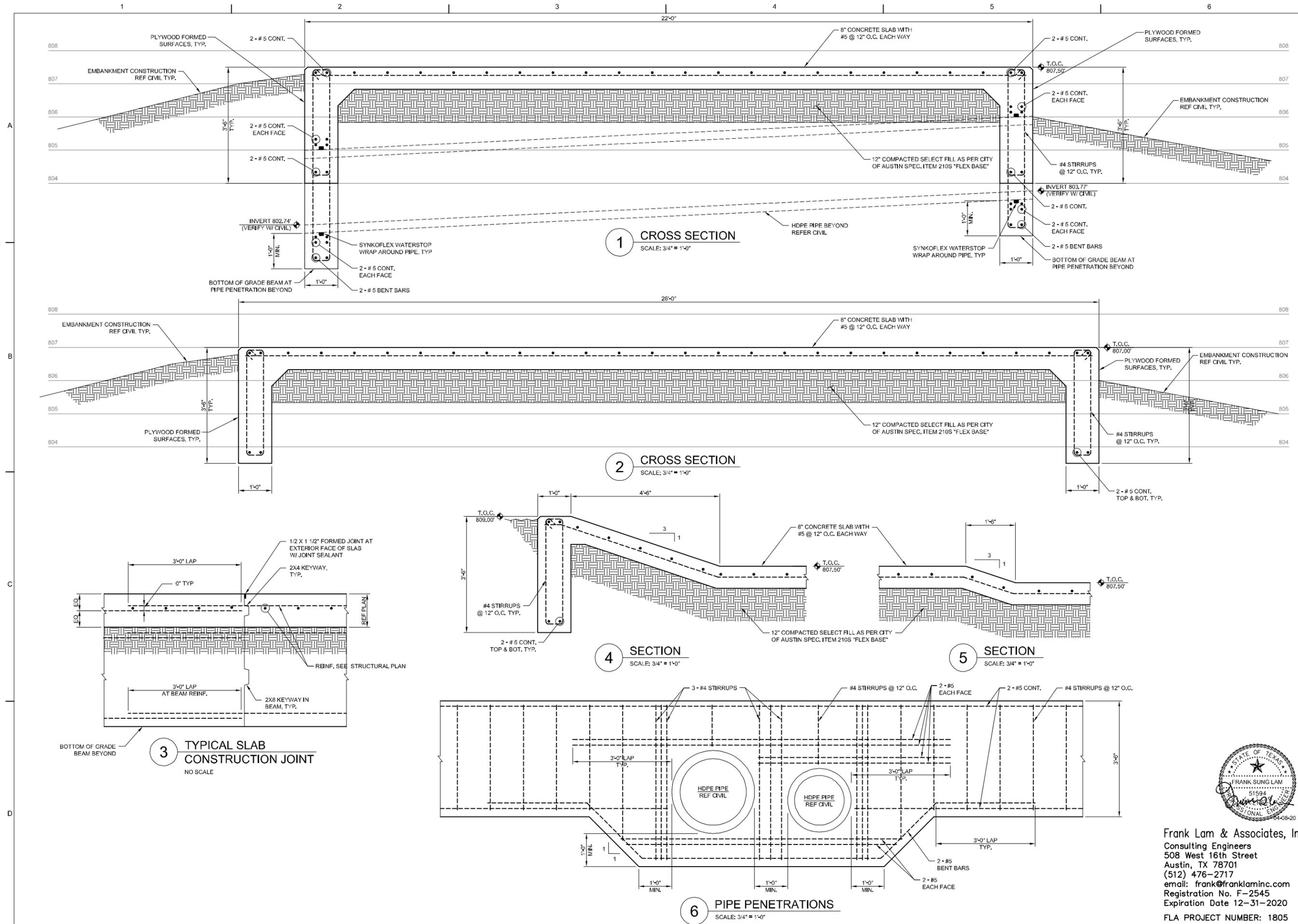
Frank Lam & Associates, Inc.
Consulting Engineers
508 West 16th Street
Austin, TX 78701
(512) 476-2717
email: frank@franklaminc.com
Registration No. F-2545
Expiration Date 12-31-2020
FLA PROJECT NUMBER: 1805

NO.	DATE	DR	DESIGNER
REVISION	CHK	CHK	CHK
BY	AP/VD	AP/VD	SEAL/NAME

WILLAMSON CREEK - VILLAGE
AT WESTERN OAKS WETPOND
CITY OF AUSTIN
AUSTIN, TEXAS

ch2m
CONCRETE SPILLWAY DETAILS
(1 OF 2)

VERIFY SCALE	
BARS ONE INCH ON ORIGINAL DRAWING.	
DATE	APRIL 2020
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NO.	DATE	DR	DESIGNER	CHK	REVISION	BY	AP/VD	SEALNAME

WILLIAMSON CREEK - VILLAGE
AT WESTERN OAKS WETPOND
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CONCRETE SPILLWAY DETAILS
(2 OF 2)



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PROJ	704370
DWG	CD-04
SHEET	20 of 23

