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TURF IRRIGATION AND SOD

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INSTALLATION

, BOLLARD

TUCSON, ARIZONA 85710

(520) 326-3700

swaim

ARCHITECTS AIA

10.25.2024

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hardscape plan construction landscape plan construction

c1.3 civil details

LANDSCAPE

sheet index

cover sheet

civil cover sheet

private grading plar

GENERAL

CIVIL

applicable codes

<u>AMENDMENTS</u>

2018 INTERNATIONAL BUILDING CODES W/ LOCAL

2018 INTERNATIONAL EXISTING BUILDING CODE

CITY OF TUCSON/PIMA COUNTY OUTDOOR LIGHTING

2018 INTERNATIONAL BUILDING CODE

2018 INTERNATIONAL FUEL GAS CODE

2018 INTERNATIONAL PLUMBING CODE

2018 INTERNATIONAL FIRE CODE

2018 INTERNATIONAL MECHANICAL CODE

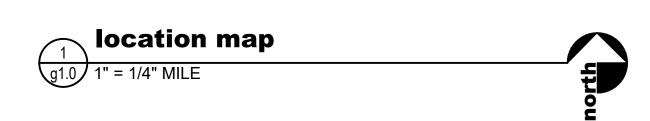
2018 INTERNATIONAL RESIDENTIAL CODE

landscape details construction irrigation plan construction irrigation details construction I5.1 irrigation details construction ARCHITECTURAL SITE PLAN

x1.0 site plan x1.1 site plan - track and field Grand total: 12

CONSTRUCTION DOCUMENTS

WILLCOX UNIFIED SCHOOL DISTRICT WILLCOX HIGH SCHOOL TRACK & FIELD REPLACEMENT



THIS BID INCLUDES THE FOLLOWING:

1. ALL LANDSCAPE IRRIGATION, SOIL PREP, DECOMPOSED GRANITE AND

SOD OUTLINED IN THE L-SHEETS.

2. TRACK CONTRACTOR WILL GET SUBGRADE TO WITHIN .2 INCHES

general project notes

- A. COORDINATE BETWEEN PROJECTS. THE OWNER WILL CONTRACT WITH MULTIPLE CONTRACTORS FOR THE **FOLLOWING:**
 - I. SYNTHETIC TRACK DEMOLITION OF EXISTING TRACK AND CURBS
 - GRADING OF ALL AREAS. SUBGRADE AT TURF
 - CONCRETE CURBS AND FLATWORK d. PAD ELEVATIONS FOR RESTROOM BUILDING
 - e. CHAIN-LINK FENCING TRACK ASPHALT AND SURFACE
 - TRACK EVENTS TRACK DRAINAGE
 - INSTALL GOAL POSTS
- II. BLEACHERS a. DEMOLITION OF EXISTING BLEACHERS
- b. INSTALLATION OF NEW BLEACHERS AND PRESS BOX
- a. DEMOLITION OF EXISTING LIGHT/ POLES AND ELECTRICAL
- b. NEW LIGHTS AND POLES
- IV. TURF FIELD a. TURF IRRIGATION
- b. SOIL PREPARATION
- NEW SOD d. ESTABLISH PERIOD
- V. PRECAST RESTROOMS
- a. SET AND CONNECT
- B. EACH CONTACT IS RESPONSIBLE FOR PROVIDING TEMPORARY TOILETS AND STORAGE. THE FIELD AREA IS FENCED.
- C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTENCE AND LOCATION OF ALL UNDERGROUND OR CONCEALED UTILITIES IN ADVANCE OF ANY CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO HIRE A PRIVATE UTILITY LOCATING SERVICE TO LOCATE ALL UNDERGROUND UTILITIES ON OR NEAR THE PROJECT SITE.
- D. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ANY OR ALL EXISTING CONDITIONS PRIOR TO THE START OF CONSTRUCTION. ANY UTILITIES FOUND TO BE IN THE WAY OF THE NEW CONSTRUCTION SHALL BE REMOVED, RELOCATED OR REPLACED AS DIRECTED. REFER CIVIL AND LANDSCAPE PLANS FOR SPECIFIC REQUIREMENTS
- E. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REMOVE ALL ABANDONED (RETIRED) UTILITIES THAT INTERFERE WITH THE CONSTRUCTION PROJECT. THE CONTRACTORS AND LOCAL UTILITY AND TRAFFIC CREWS SHALL
- COORDINATE WORK SCHEDULES SO AS TO PREVENT ANY CONFLICTING WORK CONDITIONS. F. CONTRACTOR SHALL REPAIR ANY AND ALL UTILITIES DAMAGED DURING THE COURSE OF CONSTRUCTION IN ACCORDANCE WITH LOCAL SPECIFICATIONS, AT NO ADDITIONAL COST.
- G. CONTRACTOR TO NOTIFY "BLUE STAKE" @ 1-800-782-5348, AT LEAST 48-HOURS IN ADVANCE OF ANY EXCAVATION. UTILITY LOCATIONS SHALL BE COORDINATED WITH THE ARCHITECT.
- H. ALL ITEMS REMOVED SHALL BE TEMPORARILY STORED IN A LOCATION APPROVED BY THE OWNER, AND THE OWNER SHALL REVIEW ALL ITEMS PRIOR TO ANY DISPOSAL. ANY ITEM WHICH IS DEEMED SALVAGEABLE SHALL REMAIN THE OWNER'S PROPERTY, AND WILL BE REMOVED TO STORAGE FACILITIES DESIGNATED BY THE OWNER FOR FUTURE USE IF THE OWNER DEEMS AN ITEM AS NON-SALVAGEABLE, THE CONTRACTOR SHALL DISPOSE OF IT.
- THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ANY DEBRIS RESULTING FROM THE DEMOLITION AND CONSTRUCTION. AT NO TIME SHALL ANY OF THIS MATERIAL OBSTRUCT THE NORMAL OPERATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ANY OR ALL EXCESS EXCAVATION AND CONSTRUCTION RELATED DEBRIS, AT THE END OF EACH WORK DAY.
- K. THE CONTRACTOR IS ADVISED THAT DAMAGE TO ANY PORTION OF THIS PROJECT'S BUILDING(s) & SURROUNDING AREA AS A RESULT OF THIS PROJECT IS TO BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- L. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSPECT THE JOB SITE TO FAMILIARIZE HER/HIM SELF WITH ALL THE EXISTING CONDITIONS THAT COULD AFFECT THE INSTALLATION OF ANY WORK SET FORTH IN THESE PLANS.
- M. THE JOB SITE, AT THE COMPLETION OF CONSTRUCTION, SHALL BE CLEANED OF ANY DEBRIS OR SPOILS RESULTING FROM THE CONSTRUCTION.
- N. THE CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY ALL EXISTING RECORDED DIMENSIONS INDICATED AND ALL EXISTING CONDITIONS THAT IMPACT NEW CONSTRUCTION.
- O. THE CONTRACTOR SHALL ESTABLISH ALL QUANTITIES BASED ON ACTUAL CONDITIONS. THESE DRAWINGS ARE NOT TO BE SCALED.
- P. COMPLY WITH ALL APPLICABLE CODES, RULES AND REGULATIONS. OBTAIN AND PAY FOR ALL PERMITS AND LICENSES REQUIRED.
- Q. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AT LEAST 72 HOURS IN ADVANCE OF ANY CONSTRUCTION THAT
- REQUIRES SPECIAL/REQUIRED INSPECTION(s). R. REFERENCE ALL ARCHITECTURAL, CIVIL AND LANDSCAPING SHEETS FOR SCOPE OF WORK & COORDINATION.
- S. ALL MATERIALS REQUIRED SHALL BE OF A GRADE AND QUALITY CONSISTENT WITH THE INTENDED USE AS SPECIFIED & APPROVED BY THE ARCHITECT.
- T. ALL EQUIPMENT OR MATERIALS NOT SHOWN OR SPECIFIED ON THE PLANS OR IN THE SPECIFICATIONS, BUT ARE REQUIRED TO COMPLETE THE INSTALLATION SHALL BE SUPPLIED BY THE CONTRACTOR AS PART OF THE CONTRACT
- U. FIRE LANES SHALL BE MAINTAINED IN A CONDITION TO ASSURE ACCESS TO ALL BUILDINGS DURING CONSTRUCTION.
- V. SMOKING IS PROHIBITED.

SCALE: 3" = 1 MILE WILCOX THIS -MIDDLE & HIGH **PROJECT LOCATION MAP** SE 1/4 SECTION 36. T 13 S,R 24 E G & SRM, COCHISÉ COUNTY, ARIZONA

BASIS OF BEARING

THE BASIS OF BEARING FOR THIS PROJECT IS ARIZONA STATE PLANE, NAD83 (2011), EAST ZONE (0201).

BASIS OF ELEVATION

THE BASIS OF ELEVATION IS A NGS POINT DESIGNATION "COWBOYS"; A SURVEY DISC SET IN TOP OF CONCRETE MONUMENT, LOCATED IN THE NORTHEAST CORNER OF THE FOOTBALL FIELD FOR WILLCOX HIGH SCHOOL. SAID BENCHMARK HAS AN ELEVATION OF 4172.37 (NAVD88).

GRADING NOTES

- 1. AN APPROVED COPY OF THIS PLAN SHALL BE KEPT IN AN EASILY ACCESSIBLE LOCATION AT THE JOBSITE AT ALL TIMES DURING CONSTRUCTION.
- 2. ALL CONSTRUCTION AND TEST METHODS SHALL BE IN CONFORMANCE WITH MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION, 2024 REVISION TO THE 2020 EDITION AND AS ADOPTED BY THE CITY OF WILLCOX DEVELOPMENT CODE.
- 3. A GEOTECHNICAL ENGINEERING INVESTIGATION, INCLUDING RECOMMENDATIONS FOR GRADING PROCEDURES HAS BEEN PREPARED BY WESTERN TECHNOLOGIES. ALL EARTHWORK OPERATIONS SHALL CONFORM TO THE RECOMMENDATIONS CONTAINED IN SAID REPORT, DATED SEPTEMBER 9, 2024, WT JOB NO. 29-224101-2.
- 4. ALL CONCRETE SHALL COMPLY WITH MAG UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SECTION 725, CLASS A, 3,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS, UNLESS OTHERWISE SPECIFIED.
- 5. AGGREGATE BASE COURSE SHALL CONFORM TO MAG UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION SECTION 702.
- 6. ASPHALTIC CONCRETE SHALL CONFORM TO MAG UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SECTION 710, 1/2"
- 7. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS.
- 8. THE CONTRACTOR SHALL VERIFY LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES WITHIN THE WORK AREA PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL CALL ARIZONA 811 AT 811, AT LEAST 2 WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION.
- 9. THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED BY GOVERNMENTAL AGENCIES.
- 10. ALL REVISIONS TO THESE PLANS MUST BE REVIEWED AND APPROVED BY THE OWNER AND ARCHITECT PRIOR TO CONSTRUCTION.
- 11. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CALCULATE HIS OWN EARTHWORK QUANTITIES AND SUBMIT HIS BID BASED THEREON.
- 12 .UTILITY LOCATIONS AS SHOWN ON THE PLANS ARE BASED ON A SEARCH OF AVAILABLE RECORDS AND INFORMATION PROVIDED BY THE UTILITY COMPANIES OR AGENCIES. UTILITY LOCATIONS SHOWN ARE APPROXIMATE, AND THERE MAY BE EXISTING UTILITIES WHICH ARE NOT SHOWN ON THE PLANS; THEREFORE, THE POSSIBILITY OF CONFLICTS WITH UTILITIES IN SERVICE EXISTS. THE CONTRACTOR SHALL CALL ARIZONA 811 AT 811, AT LEAST 2 WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION, TO REQUEST VERIFICATION OF THE LOCATION AND ELEVATION OF ALL UTILITIES WITHIN THE WORK AREA. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR COSTS INCURRED AS A RESULT OF DAMAGE TO UTILITIES CAUSED BY HIS OPERATIONS.
- 13. IF UNANTICIPATED CONDITIONS ARE ENCOUNTERED DURING THE COURSE OF CONSTRUCTION AND ARE BEYOND THE SCOPE OF THE DESIGN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND HE SHALL SUBMIT THE NECESSARY REVISED OR SUPPLEMENTAL IMPROVEMENT PLANS FOR REVIEW AND APPROVAL BY THE OWNER AND ARCHITECT.
- 14. UPON COMMENCEMENT OF WORK, TRAFFIC CONTROL DEVICES SHALL BE POSTED AND MAINTAINED BY THE CONTRACTOR UNTIL SUCH TIME AS THE WORK IS COMPLETED. ALL WARNING SIGNS, BARRICADES, ETC. SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES ADOPTED BY THE STATE OF ARIZONA PURSUANT TO A.R.S. 28-650.
- 15. A RIGHT-OF-WAY USE PERMIT IS REQUIRED FOR CONSTRUCTION IN THE PUBLIC RIGHT-OF-WAY AND/OR PUBLIC DRAINAGE WAYS.

PRIVATE SEWER NOTES

- 1. ALL CONSTRUCTION AND TEST METHODS FOR PRIVATE SEWER CONSTRUCTION SHALL BE IN CONFORMANCE WITH MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION, 2024 REVISION TO THE 2020 EDITION AND AS ADOPTED BY THE CITY OF WILLCOX DEVELOPMENT CODE.
- 2. THE CONTRACTOR SHALL CALL ARIZONA 811 AT 811 A MINIMUM OF TWO (2) BUSINESS DAYS PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL KEEP ALL ARIZONA 811 REQUESTS UP-TO-DATE AND COMPLY WITH APPLICABLE ARIZONA REVISED STATUTES (A.R.S.), TITLE 40, CHAPTER 1, ARTICLE 6.3, SECTION 40-360.22 PERTAINING TO ARIZONA 811. ERRORS IN ARIZONA 811 SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER.
- 3. THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. CALL ARIZONA 811 AT 811 A MINIMUM OF TWO (2) BUSINESS DAYS PRIOR TO EXCAVATING.
- 4. THE CONTRACTOR SHALL FIELD VERIFY EXISTING SEWER ELEVATIONS AND ALIGNMENTS PRIOR TO CONSTRUCTION AND IMPLEMENTATION; VERIFICATION MAY REQUIRE POT-HOLING.
- 5. BUILDING CONNECTION SEWERS (BCSs) SHALL BE STUBBED OUT TO 5' OUTSIDE THE BUILDING ENVELOPE OR AS OTHERWISE SHOWN ON PLANS.
- 6. ALL PVC PIPE SHALL BE J.M. PIPE RING-TITE PVC GRAVITY SEWER PIPE AND FITTINGS, SDR 35, OR EQUIVALENT.
- 7. THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED BY GOVERNMENTAL AGENCIES.
- 8. THE CONTRACTOR SHALL COORDINATE WITH THE APPROPRIATE AGENCY TO ENSURE THAT AN INSPECTOR FROM THEIR BUILDING CODES DEPARTMENT IS PRESENT OVER THE COURSE OF CONSTRUCTION TO INSPECT AND APPROVE
- 9. AN APPROVED COPY OF THIS PLAN SHALL BE KEPT ON LOCATION AT THE JOBSITE AT ALL TIME DURING CONSTRUCTION.

THE INSTALLATION OF THE PRIVATE SEWER.

10. IF UNANTICIPATED CONDITIONS ARE ENCOUNTERED DURING THE COURSE OF CONSTRUCTION AND ARE BEYOND THE SCOPE OF THE DESIGN, THE ENGINEER SHALL SUBMIT THE NECESSARY REVISED OR SUPPLEMENTAL IMPROVEMENT PLANS FOR REVIEW AND APPROVAL BY GOVERNING AGENCY BUILDING CODES.

PRIVATE SEWER NOTES - CONTINUED

- 11. UPON COMMENCEMENT OF WORK, TRAFFIC CONTROL DEVICES SHALL BE POSTED AND MAINTAINED BY THE CONTRACTOR UNTIL SUCH TIME AS THE WORK IS COMPLETED. ALL WARNING SIGNS, BARRICADES, ETC. SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES ADOPTED BY THE STATE OF ARIZONA PURSUANT TO A.R.S. 28-650.
- 12. ANY ACTIVITY THAT MIGHT AFFECT THE SANITARY SEWER SYSTEM (MATERIALS ENTERING THE SYSTEM, CONVEYANCE AND TREATMENT) REQUIRES APPROVAL AND/OR PERMIT BY THE CITY OF WILLCOX PRIOR TO THAT ACTIVITY.
- 13. IMMEDIATELY REPORT ANY OF THE FOLLOWING TO THE CITY OF WILLCOX: ANY RELEASE OF SEWAGE, ANY DAMAGE TO THE PUBLIC SANITARY SEWER SYSTEM, OR THE DROPPING OF DEBRIS INTO A PUBLIC SANITARY SEWER MANHOLE. A CITY REPRESENTATIVE WILL BE DISPATCHED TO THE SITE. THE CONTRACTOR SHALL TAKE IMMEDIATE ACTION TO CONTAIN A SANITARY SEWAGE OVERFLOW (SSO). THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS TO REPAIR THE SYSTEM, MITIGATE THE RELEASE OF SEWAGE, DISINFECT THE RELEASE AREAS, AND ANY REGULATORY PENALTIES LEVIED ON PCRWRD FOR SEWAGE ENTERING A NATURAL DRAINAGE WAY OR STORM WATER DRAINAGE SYSTEM. THE CONTRACTOR SHALL REPAIR ALL DAMAGE AS DIRECTED AND APPROVED BY THE CITY FIELD REPRESENTATIVE.
- 14. THE INSPECTION OF THE CONTRACTOR'S WORK BY THE ENGINEER OF RECORD AND/OR AN AGENCY STAFF SHALL IN NO WAY RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, CONSTRUCTION PLANS AND/OR SPECIFICATIONS, IF THE ENGINEER OF RECORD OR AGENCY STAFF FAIL TO POINT OUT A DEFECT, DEFICIENCY, OR ERROR IN THE WORK FROM LACK OF DISCOVERY OR FOR ANY OTHER REASON, IT SHALL IN NO WAY PREVENT LATER REJECTION OR RELIEVE THE CONTRACTOR OF PERFORMING CORRECTIONS TO THE UNSATISFACTORY WORK WHEN DISCOVERED. THE CONTRACTOR SHALL NOT FILE A CLAIM FOR LOSSES SUFFERED DUE TO ANY NECESSARY REMOVALS OR REPAIRS RESULTING FROM THE UNSATISFACTORY WORK.
- 15. THE CONTRACTOR SHALL COMPLY WITH APPLICABLE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS AND MANHOLE ENTRY GUIDELINES AT ALL TIMES.
- 16. ALL ROUGH GRADING, INCLUDING FILL, SHALL BE COMPLETED PRIOR TO THE INSTALLATION OF SANITARY SEWERS TO A MINIMUM OF 4 FEET OVER THE TOP OF THE SEWER PIPE AND COMPACTION AS INDICATED ON THE
- 17. SANITARY SEWER CONSTRUCTION SHALL START AT THE LOWEST DOWNSTREAM POINT AND PROGRESS UPSTREAM, REGARDLESS OF THE STATIONING SHOWN ON THE PLANS. IF NOT, THE CONTRACTOR SHALL PROVIDE AN OUT OF SEQUENCE LETTER FOR REVIEW AND APPROVAL BY THE ENGINEER OF
- 18. ALL STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MEASURES SHALL BE INSTALLED SO AS TO PREVENT ALL STORM WATER, CONSTRUCTION WATER, FUELS, CHEMICALS, OR LIQUIDS TO BE DIRECTED INTO OR ONTO ANY SANITARY SEWER FACILITIES. PROTECTION OF SANITARY SEWER FACILITIES SHALL BE A PART OF THE APPROVED CONSTRUCTION SWPPP AND BEST MANAGEMENT PRACTICES. PROTECTION DEVICES SHALL BE INSTALLED AND MAINTAINED AROUND ALL POTENTIALLY AFFECTED SANITARY SEWER FACILITIES WITHIN THE PROJECT LIMITS. ADDITIONAL MEASURES SHALL INCLUDE BUT NOT BE LIMITED TO THE USE OF RAIN STOPPERS AND MANHOLE COVERS AS DEEMED NECESSARY THE ENGINEER OF RECORD.
- 19. ALL PROJECT ACTIVITIES MUST BE KEPT WITHIN THE PROJECT AREAS. CAUTION MUST BE NOTED CONCERNING HUMAN BURIALS. ARCHAEOLOGICAL CLEARANCE RECOMMENDATIONS DO NOT EXEMPT THE DEVELOPMENT FROM COMPLIANCE WITH STATE BURIAL PROTECTION LAWS. IN THE EVENT THAT HUMAN REMAINS, INCLUDING HUMAN SKELETAL REMAINS, CREMATIONS, AND/OR CEREMONIAL OBJECTS AND FUNERARY OBJECTS ARE FOUND DURING EXCAVATION OR CONSTRUCTION, GROUND DISTURBING ACTIVITIES MUST CEASE IN THE IMMEDIATE VICINITY OF THE DISCOVERY. STATE LAWS ARS 41-865 AND ARS 41-844 REQUIRE THAT THE ARIZONA STATE MUSEUM BE NOTIFIED OF THE DISCOVERY AT (520) 621-4795 SO THAT CULTURAL GROUPS WHO CLAIM CULTURAL OR RELIGIOUS AFFINITY TO THEM CAN MAKE APPROPRIATE ARRANGEMENTS FOR THE REPATRIATION AND REBURIAL OF THE REMAINS. THE HUMAN REMAINS WILL BE REMOVED FROM THE SITE BY A PROFESSIONAL ARCHAEOLOGIST PENDING CONSULTATION AND REVIEW BY THE ARIZONA STATE MUSEUM AND THE CONCERNED CULTURAL GROUPS.
- 20. SURVEY LAYOUT AND SURVEY CONTROL SHALL BE PERFORMED BY, OR UNDER THE DIRECT SUPERVISION OF, A REGISTERED LAND SURVEYOR (RLS) REGISTERED IN THE STATE OF ARIZONA.
- 21. THIS PRIVATE SEWER SYSTEM IS DESIGNED AT MINIMUM ALLOWABLE PIPE SLOPE. SPECIAL CARE SHOULD BE TAKEN TO ASSURE DESIGN SLOPE IS MAINTAINED. SEWERS FOUND TO BE CONSTRUCTED AT INSUFFICIENT SLOPES WILL NOT BE ACCEPTED BY THE OWNER. CORRECTIVE ACTION, INCLUDING RE-CONSTRUCTION OF THE SEWER(S) AT THE SOLE EXPENSE OF THE PROJECT OWNER/CONTRACTOR WILL BE REQUIRED. AS-BUILT PLANS SHALL BE REQUIRED FOR ALL NEW PRIVATE SEWERS PRIOR TO FINAL ACCEPTANCE.
- 22. ALL SANITARY SEWERS ARE DESIGNED TO PROVIDE FOR GRAVITY FLOW.

STORM DRAIN NOTES

- 1. SUBSTITUTION OF ANY MATERIALS FOR CONSTRUCTION OF STORM DRAIN WILL NOT BE ALLOWED UNLESS FIRST APPROVED BY THE ENGINEER OF WORK.
- 2. STORM DRAINS ARE TO BE CONSTRUCTED IN COMPLIANCE WITH MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM STANDARD SPECIFICATIONS AND STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, 2024 REVISION TO THE 2020 EDITION. THESE MAY BE MODIFIED AND/OR SUPPLEMENTED BY THE REQUIREMENTS OF THESE PLANS.
- 6-INCH TO 15-INCH PVC STORM DRAIN PIPE SHALL BE J.M. RING-TITE PVC GRAVITY SEWER PIPE AND FITTINGS, SDR 35, OR EQUIVALENT. BEDDING FOR PIPE SHALL BE GRAVEL CLASS I (95% DENSITY) OR GRAVEL CLASS II (90% DENSITY). PIPE AND BEDDING SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND MAG STANDARD DETAIL NO. 200.
- 4. SRP STORM DRAIN SHALL BE CONTECH ULTRA-FLO ALUMINIZED STEEL PIPE 3/4" X 3/4" X 7-1/2" CORRUGATIONS OR EQUIVALENT, 14 GAGE THICKNESS. PIPE AND BEDDING SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND MAG STANDARD DETAIL NO. 200.
- 5. HDPE STORM DRAIN SHALL BE ADS N-12 WT, OR PRINSCO GOLDFLO WT, OR EQUIVALENT HIGH DENSITY CORRUGATED POLYETHYLENE PIPE (HDPE). PIPE AND BEDDING SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND MAG STANDARD DETAIL NO. 200.

GENERAL NOTES

- 1. CURB RADII ARE MEASURED TO FRONT FACE OF CURB.
- 2. THE CONTRACTOR SHALL VERIFY EXISTENCE OF ALL UTILITIES BY CALLING ARIZONA 811 AT 811 TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION. THE PLAN LOCATIONS OF EXISTING UTILITIES BEING SHOWN ARE APPROXIMATE.
- 3. THE CONTRACTOR AGREES TO PROTECT ALL ADJACENT PROPERTY AND EXISTING IMPROVEMENTS, INCLUDING POSITIVE CONTROL OF EARTH SPILLAGE, CONSTRUCTION WATER, AND RUNOFF WATERS.

GENERAL NOTES

- 4. THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOBSITE CONDITIONS DURING THE COURSE OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY. REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
- 5. THE EXISTENCE AND LOCATION OF ANY EXISTING UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. APPROVAL OF THIS PLAN DOES NOT CONSTITUTE A REPRESENTATION OF THE ACCURACY OR COMPLETENESS OF THE LOCATION OR THE EXISTENCE OR NONEXISTENCE OF ANY UNDERGROUND UTILITY OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THE CONTRACTOR IS REQUIRED TO TAKE ALL PRECAUTIONARY MEANS TO PROTECT ANY UTILITY NOT OF RECORD OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL VERIFY LOCATIONS AND ELEVATIONS OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR COSTS INCURRED AS A RESULT OF DAMAGE TO UTILITIES CAUSED BY HIS OPERATIONS.
- IF THERE ARE ANY QUESTIONS REGARDING THESE PLANS OR FIELD STAKES, THE CONTRACTOR SHALL REQUEST AN INTERPRETATION BEFORE DOING ANY WORK BY CALLING THE ENGINEER OF WORK AT (520) 795-1000.
- 7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CALCULATE HIS OWN EARTHWORK QUANTITIES AND SUBMIT HIS BID THEREON. EARTHWORK QUANTITIES SHOWN HEREON ARE ESTIMATED FOR PERMITTING PURPOSES ONLY AND ARE NOT TO BE USED FOR BIDDING OR PAYMENT QUANTITIES.
- 8. ALL NOTES SHALL CROSS-APPLY TO ALL CONSTRUCTION DISCIPLINES INVOLVED WITH THIS PROJECT.
- 9. FACE OF CURB REVEAL IS 6 INCHES UNLESS OTHERWISE SHOWN.
- 10. SOME ELEVATIONS ARE SHORTENED FOR CLARITY, REMOVING THE THOUSAND AND HUNDRED UNIT VALUES. SEE BASIS OF ELEVATION FOR FULL ELEVATION REFERENCE.
- 11. CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO CONFINE HIS OPERATIONS TO THE GRADING LIMITS SHOWN.

12. WRITTEN PERMISSION SHALL BE OBTAINED IN ADVANCE FOR ANY OFF-SITE

- 13. THE CONTRACTOR SHALL FACILITATE THE WORK OF THE SOILS ENGINEER DURING HIS OBSERVATIONS AND COMPACTION TESTS DURING THE FILLING AND COMPACTING OPERATIONS.
- 14. ALL EARTHWORK OPERATIONS SHALL BE DONE UNDER THE OBSERVATION OF A SOILS ENGINEER AND IN ACCORDANCE WITH THE RECOMMENDATIONS AND SPECIFICATIONS SET FORTH IN THE SOILS REPORT. THE SOILS ENGINEER SHALL OBSERVE, INSPECT, AND TEST ALL EARTHWORK OPERATIONS, INCLUDING, BUT NOT LIMITED TO, CLEARING AND GRUBBING, SUBGRADE PREPARATION, STRUCTURAL AND TRENCH EXCAVATION AND BACKFILL, AND PLACEMENT AND COMPACTION OF FILL.
- 15. CUT AND FILL SLOPES SHALL BE TRIMMED TO THE FINISH GRADE TO PRODUCE A UNIFORM CROSS-SECTION. THE SLOPE OF THE EXCAVATIONS OR EMBANKMENTS SHALL BE SHAPED AND TRIMMED AS SHOWN ON THE PLANS AND LEFT IN A NEAT AND ORDERLY CONDITION. ALL STONES, ROOTS, OR OTHER WASTE MATTER EXPOSED ON EXCAVATION OR EMBANKMENT SLOPES SHALL BE REMOVED AND LEGALLY DISPOSED OF OFF-SITE BY THE CONTRACTOR.
- 16. THE CONTRACTOR SHALL PRESERVE ALL STAKES SET FOR THE LINES. LEVELS OR MEASUREMENTS OF THE WORK IN THEIR PROPER PLACES UNTIL AUTHORIZED TO REMOVE THEM BY THE ENGINEERS. ANY EXPENSE INCURRED IN REPLACING ANY STAKES WHICH THE CONTRACTOR OR HIS SUBORDINATES MAY HAVE FAILED TO PRESERVE, SHALL BE CHARGED TO THE CONTRACTOR.
- 17. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FURNISH, HAUL AND APPLY ALL WATER REQUIRED FOR COMPACTION AND FOR THE CONTROL OF DUST FROM CONSTRUCTION ACTIVITY. THE COST THEREOF IS TO BE INCLUDED IN THE GRADING CONSTRUCTION PRICE.
- 18. PRIOR TO THE START OF GRADING, ALL VEGETATION AND OBSTRUCTIONS, AS WELL AS TRASH, SHALL BE REMOVED FROM CUT AND FILL AREAS AND LEGALLY DISPOSED OF OFF-SITE. ANY EXISTING IRRIGATION, DRAINAGE OR UTILITY LINES OR OTHER ABANDONED SUBSURFACE STRUCTURES SHALL BE REMOVED, DESTROYED OR ABANDONED IN COMPLIANCE WITH SPECIFICATIONS OF THE APPROPRIATE BUILDING OFFICE OR THE SOILS ENGINEER. BRUSH SHALL BE REMOVED ONLY WITHIN THE AREA TO BE GRADED.
- 19. THE FINAL TEST RESULTS AND APPROVAL FROM THE SOILS ENGINEER SHALL CONTAIN THE TYPE OF FIELD TESTING PERFORMED AND SUBMITTED TO THE OWNER. EACH TEST SHALL BE IDENTIFIED WITH THE METHOD OF OBTAINING THE IN-PLACE DENSITY, WHETHER SAND CONE, DRIVE RING, OR NUCLEAR DENSITY GAUGE.
- 20. EXISTING MANHOLE RIMS, VALVE COVERS, ETC., TO REMAIN IN PLACE, SHALL BE ADJUSTED TO PROPOSED FINISHED GRADE AND/OR FINISHED SURFACE ELEVATIONS.
- 21. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FULLY COMPLY WITH THE ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT IN ACCORDANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN PREPARED FOR THIS PROJECT.
- 22. THE GENERAL CONTRACTOR SHALL COORDINATE ALL RIP RAP SLOPE TREATMENT REQUIREMENTS WITH THE LANDSCAPE CONTRACTOR. LANDSCAPE PLANTINGS AND IRRIGATION LINES WITHIN AREAS TO BE RIP RAPPED SHALL BE COORDINATED TO FACILITATE THE WORK OF THE LANDSCAPE CONTRACTOR BEFORE THE RIP RAP IS PLACED. SEE LANDSCAPE PLANS FOR PLANTINGS AND IRRIGATION LINES WITHIN AREAS TO BE RIP RAPPED.
- 23. THE GRADING CONTRACTOR SHALL EXCAVATE AND REMOVE THE SOIL BENEATH ALL PROPOSED RIP RAP AREAS SUCH THAT THE FINISHED SURFACE OF THE RIP RAP WILL MATCH THE FINISHED SURFACE ELEVATION AND SLOPE AS CALLED OUT ON THESE PLANS.
- 24. ALL RIP RAP IS NOT SHOWN FOR CLARITY. REFER TO THE TYPICAL SLOPE TREATMENT BOX FOR SURFACE TREATMENT OF FINISHED SLOPE FACES.
- 25. THE GRADING CONTRACTOR SHALL EXCAVATE AND REMOVE THE SOIL BENEATH ALL DECOMPOSED GRANITE AREAS SO THAT THE FINISHED SURFACE OF THE DECOMPOSED GRANITE WILL MATCH THE FINISHED SURFACE ELEVATION AS CALLED OUT ON THESE PLANS. WATER HARVESTING AREAS SHALL BE KEPT LOW TO ACHIEVE THE FULL DEPTH OF WATER HARVESTING TO THE FINISHED SURFACE OF THE DECOMPOSED GRANITE. SEE LANDSCAPE PLANS FOR DECOMPOSED GRANITE AREAS.
- 26. THE BOTTOMS OF ALL WATER HARVESTING AREAS SHALL BE COMPACTED IN ACCORDANCE WITH THE SOILS ENGINEER'S RECOMMENDATIONS TO FACILITATE GROUNDWATER INFILTRATION. DECOMPOSED GRANITE USED IN WATER HARVESTING AREAS SHALL BE SCREENED PRIOR TO PLACEMENT TO REMOVE ALL FINE MATERIAL. WATER HARVESTING AREAS SHALL NOT BE UTILIZED FOR WORKER PARKING OR MATERIAL STORAGE AT ANYTIME DURING CONSTRUCTION.

WORK TO BE DONE

THE IMPROVEMENTS AND GRADING CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THESE PLANS AND SPECIFICATIONS AND STANDARD DETAILS: STANDARD SPECIFICATIONS

- 1) UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION. MARICOPA ASSOCIATION OF GOVERNMENTS, 2024 REVISION TO THE 2020 EDITION. STANDARD DETAILS/DRAWINGS
- 1) UNIFORM STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION. MARICOPA ASSOCIATION OF GOVERNMENTS, 2024 REVISION TO THE 2020 EDITION.
- 2) THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) LATEST EDITION.

LEGEND

ITEM	STANDARD DETAIL	SYMBOL
	SEE DETAIL D. SHEET C1.3 ————————————————————————————————————	-
TYPE B VERTICAL CURB SD 222-		
6" × 12" CONCRETE HEADER ——		
TOP OF CURB ELEVATION———		TC_52.50
FINISHED SURFACE ELEVATION—		
FINISHED GRADE ELEVATION——		
FLOW ELEVATION ——— ——		× FL 52.00
HIGH POINT		- HP I I
RIDGE LINE		
DETAIL REFERENCE	A = DETAIL IDENTIFICATION. 1 = SHEET SHOWING DETAIL	$\frac{A}{1}$
EXIST CONTOUR — — —		2750
DAYLIGHT LINE		- II
	SD 230	
DIRECTION OF FLOW OR SWALE $-$		
	—— SD 200, SEE NOTES —— ——	
EXIST UNDERGROUND ELECTRIC LINE		- E
EXIST IRRIGATION LINE ————		- IRR — —
EXIST STORM DRAIN		- SD
EXIST SEWER LINE		<u> </u>
EXIST CHAIN LINK FENCE		××
PROPOSED PRIVATE SEWER W/SINGLE	CLEANOUT—SEE DETAIL A. SHEET C1.5	- 0
NEW WATERLINE W/VALVE —————		⊗
RIP RAP PAD		- 8553
PROPOSED SLOPE		- - - - - - - - - -

SHEET INDEX

- C1.0 CIVIL COVER SHEET C1.1 PRIVATE GRADING PLAN
- C1.2 STORM DRAIN PLAN C1.3 CIVIL DETAILS C1.4 HORIZONTAL CONTROL C1.5 PRIVATE UTILITY PLAN

GENERAL NOTES

- 27. THE BOTTOMS OF ALL RETENTION AND/OR DETENTION BASINS SHALL BE COMPACTED IN ACCORDANCE WITH THE SOILS ENGINEER'S RECOMMENDATIONS TO FACILITATE GROUNDWATER INFILTRATION AND SHALL REMAIN "NATURAL", IE, DECOMPOSED GRANITE, RIP RAP, HYDROSEED OR OTHER GROUND COVER SHALL NOT BE PLACED IN THE BASIN BOTTOMS. WHENEVER POSSIBLE IRRIGATION LINES AND EQUIPMENT SHALL ALSO NOT BE PLACED WITHIN THE BASIN BOTTOMS. RETENTION AND/OR DETENTION BASINS/AREAS SHALL NOI BE UTILIZED FOR WORKER PARKING OR MATERIAL STORAGE AT ANYTIME DURING CONSTRUCTION. THE CONTRACTOR SHALL SCARIFY ALL RETENTION AND/OR DETENTION BASIN BOTTOMS IMMEDIATELY PRIOR TO REMOVING EARTHWORK EQUIPMENT FROM PROJECT SITE AND/OR BEGINNING LANDSCAPING ACTIVITIES. CONTRACTOR SHALL COORDINATE AND CONFIRM WITH THE SOILS ENGINEER THE SPECIFIC COMPACTION/TREATMENT SPECIFICATION REQUIREMENTS FOR THE BASIN BOTTOMS.
- 28. ALL REMAINING DISTURBED AREAS, EXCEPT RETENTION AND/OR DETENTION BASIN BOTTOMS, NOT OTHERWISE ALREADY TREATED, SHALL BE STABILIZED IN A FINAL MANNER IN CONFORMANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED FOR THIS PROJECT. A NOTICE OF TERMINATION TO CLOSE OUT THE SWPPP'S NOTICE OF INTENT CANNOT BE FILED WITH ADEQ UNTIL THESE FINAL STABILIZATION MEASURES ARE IN PLACE.

PRIVATE WATER AND BACKFLOW ASSEMBLY NOTES

- 1. ALL PLUMBING ASSOCIATED WITH WATER SERVICE LINES SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF THE INTERNATIONAL PLUMBING CODE.
- 2. ALL BEDDING, SHADING, AND BACKFILL SHALL BE PER MAG SD 200 AT A MINIMUM. NO WATER SETTLING SHALL BE PERMITTED.
- 3. DEPTH OF COVER TO BE 36" MINIMUM.



520-795-1000 rickengineering.com

11:00

01-NOV-2024

SAN DIEGO ORANGE RIVERSIDE SACRAMENTO SAN LUIS OBISPO SANTA CLARITA PHOENIX TUCSON LAS VEGAS DENVER

350 FAST SPEEDWAY 21 TUCSON, ARIZONA 85710

OFFICE (520) 326-3700

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swaim

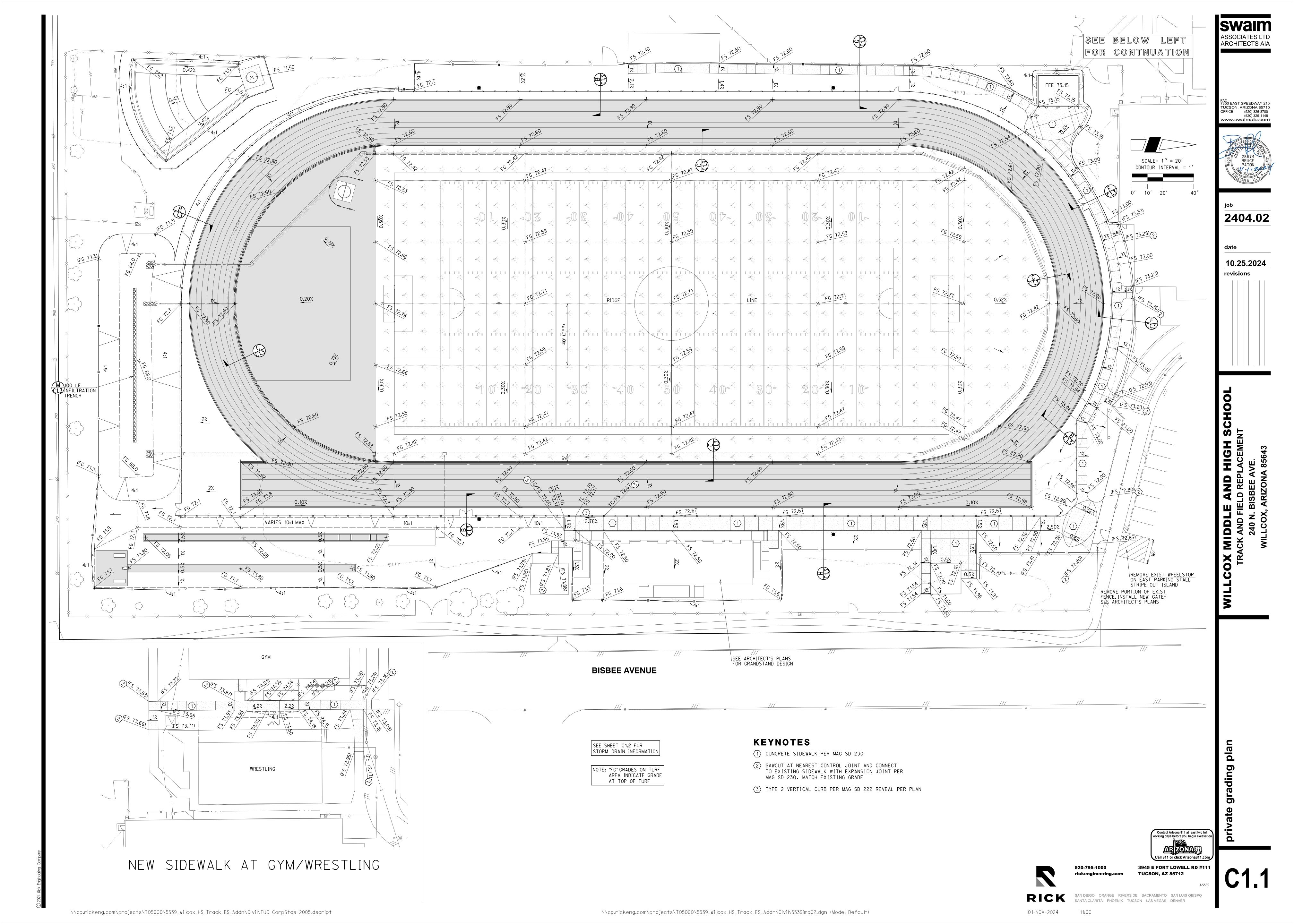
ARCHITECTS AIA

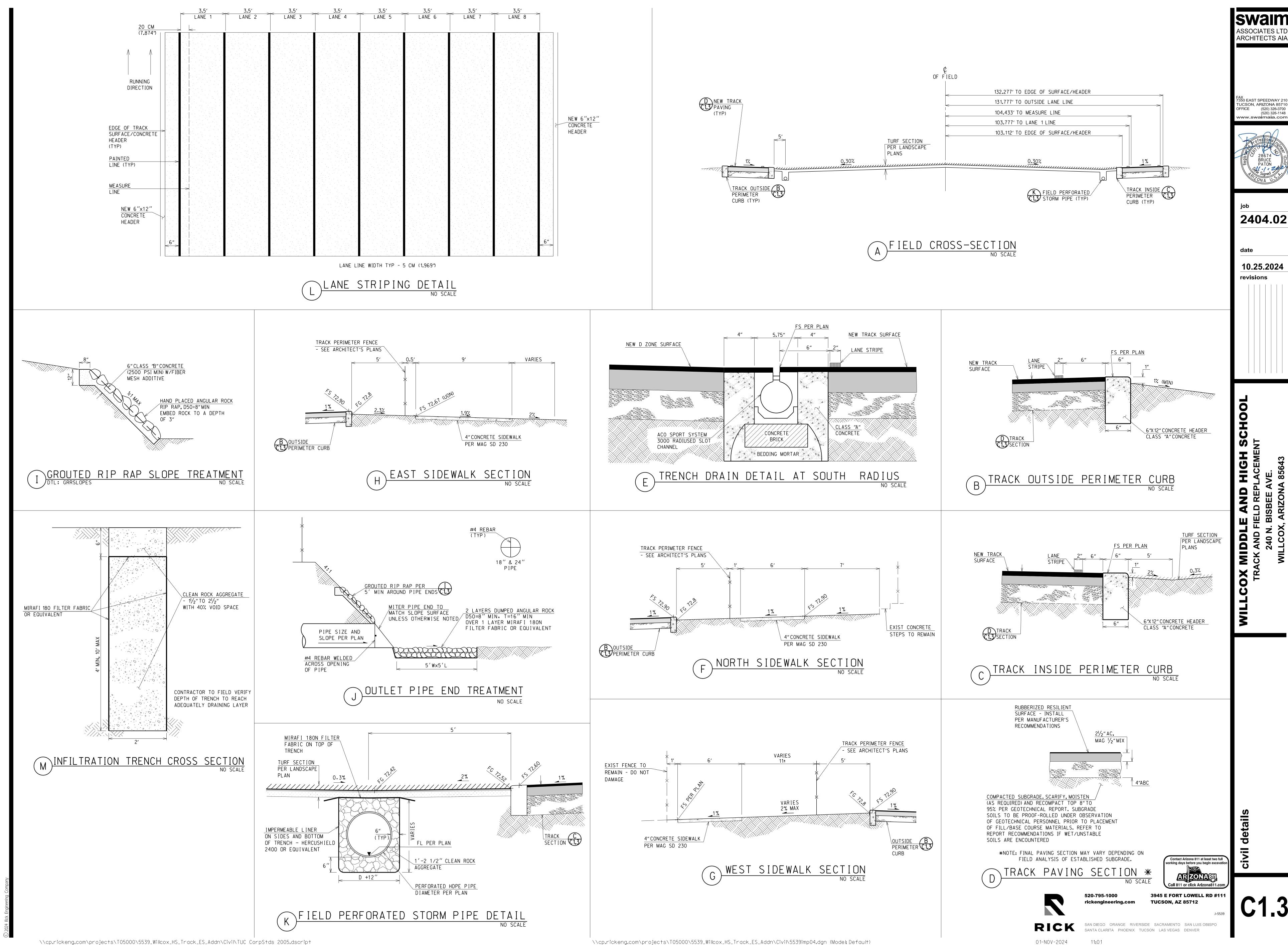
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10.25.2024 revisions

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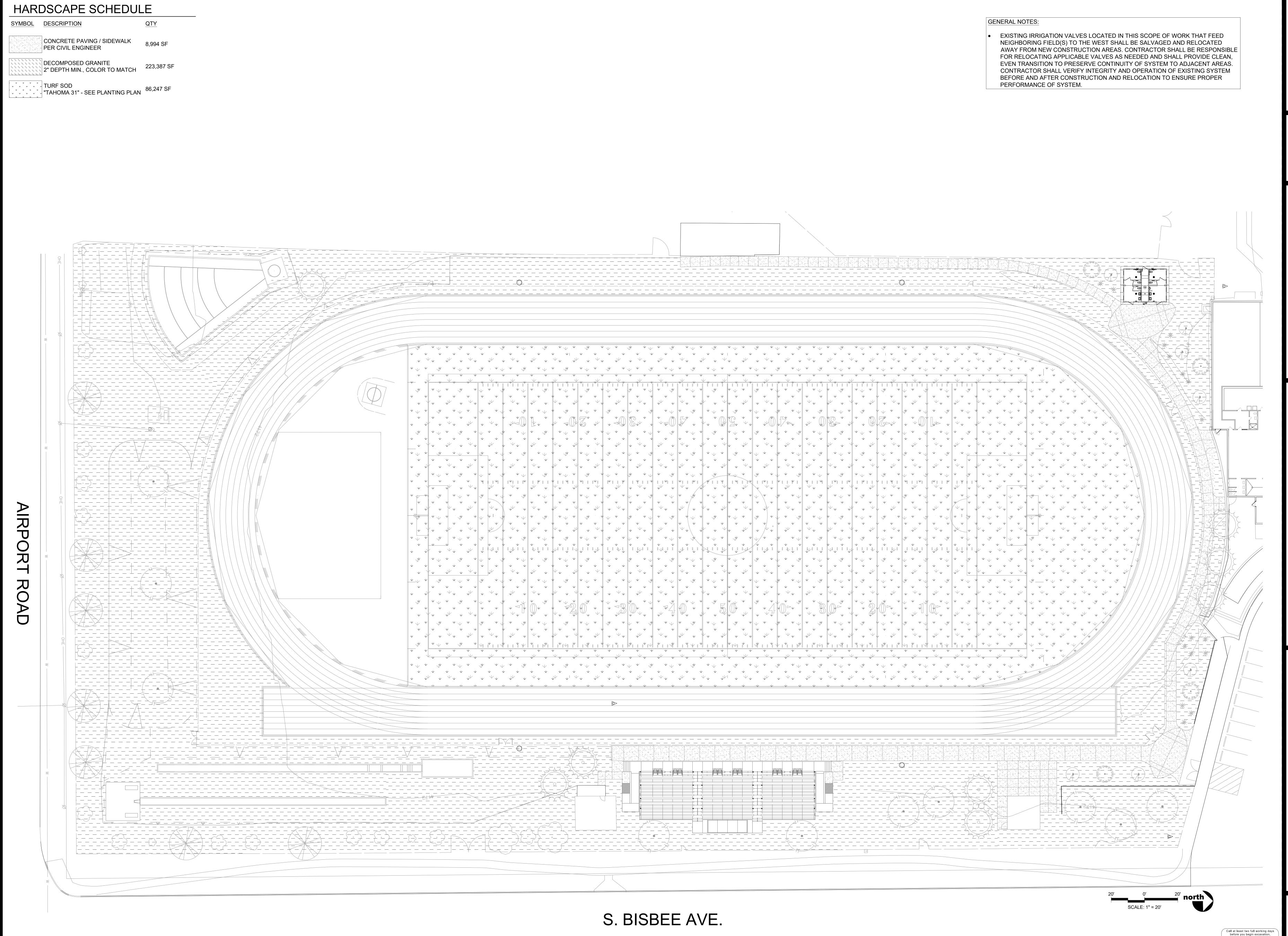
ASSOCIATES LTD ARCHITECTS AIA

FAX 7350 EAST SPEEDWAY 210 TUCSON, ARIZONA 85710 OFFICE (520) 326-3700 (520) 326-1148



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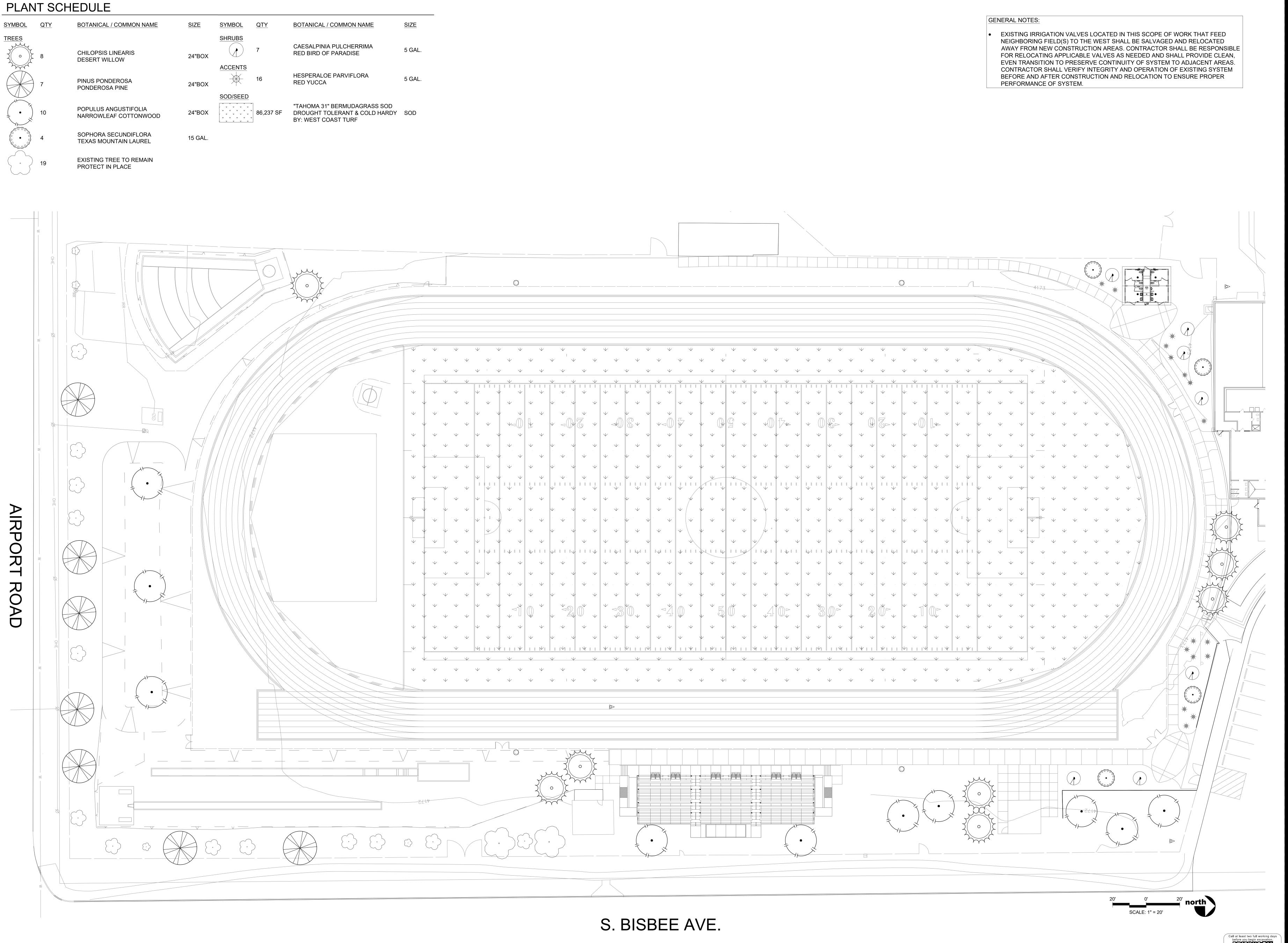
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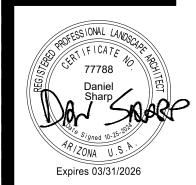
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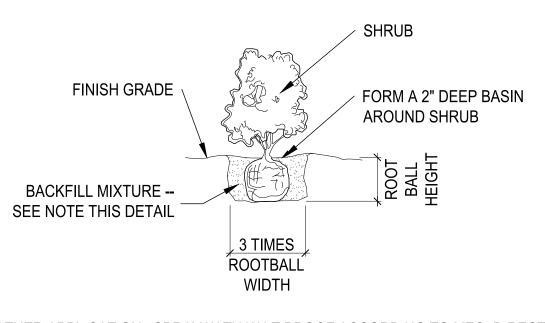
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10.25.2024

- 1" VINYL TIE-LEAVE SLACK EQUAL TO TRUNK DIAMATER AND WRAP FORM A 2" DEEP — TWICE AROUND BASIN AROUND TREE - (3) 2" X 10' STAKES. SEE SPECIFICATIONS. DRIVE 3" MIN. INTO GROUND TO FIRM BEARING. TAKE CARE NOT TO DAMAGE FINISH GRADE — ROOTBALL. SAW STAKES ABOVE TIE TO PREVENT ABRASION TO OTHER BRANCHES. BACKFILL MIXTURE -- SEE NOTES THIS DETAIL. ROOT BALL (SIZE FERTILIZER TABLET (TYP) DRIVE STAKE 6" MIN. INTO UNDISTURBED SOIL **BALL DIAMETER** PLANT PIT

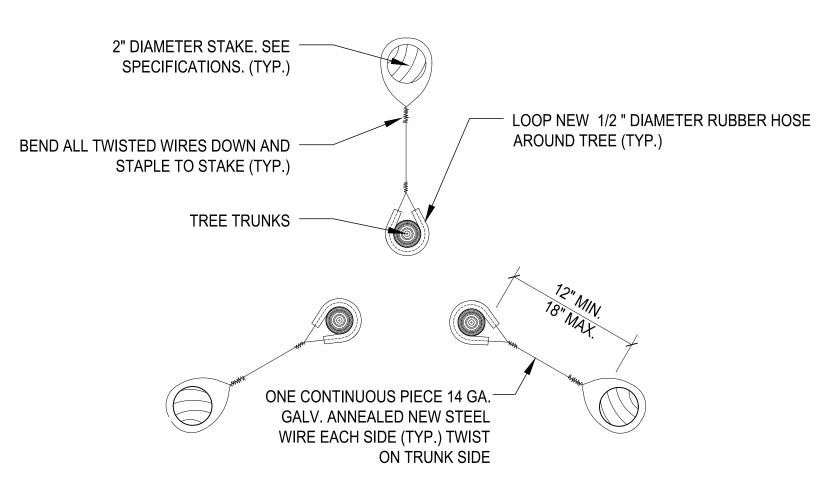
- 1. WARM WEATHER APPLICATION: SPRAY WITH WILT PROOF ACCORDING TO MFG. DIRECTIONS.
- 2. ROOT BALL IS TO BE SET ON FIRM GRADE.
- 3. WATER SETTLE BACKFILL. 4. REMOVE ALL NURSERY STAKES, NURSERY TIE TAPE, POTS, WOODEN BOX SIDES AND BOTTOM
- BEFORE PLANTING.
- 5. USE OF STAKES SHALL BE DETERMINED IN THE FIELD. 6. SEE EMITTER PLACEMENT DETAIL FOR EMITTER LOCATIONS.
- 7. SEE EMITTER SCHEDULE FOR NUMBER AND FLOW VALUE OF EMITTERS PER PLANT.
- 8. SEE SPECIFICATIONS FOR BACKFILL MIXTURE.

MULTI-TRUNK TREE PLANTING



- 1. WARM WEATHER APPLICATION: SPRAY WITH WILT PROOF ACCORDING TO MFG. DIRECTIONS.
- 2. ROOT BALL IS TO BE SET ON FIRM GRADE. 3. WATER SETTLE BACKFILL.
- 4. REMOVE ALL NURSERY STAKES, NURSERY TIE TAPE, POTS, WOODEN BOX SIDES AND BOTTOM BEFORE PLANTING.
- 5. SEE EMITTER PLACEMENT DETAIL FOR EMITTER LOCATIONS.
- 6. SEE EMITTER SCHEDULE FOR NUMBER AND FLOW VALUE OF EMITTERS PER PLANT.
- 7. SEE SPECIFICATIONS FOR BACKFILL MIXTURE.
- **SHRUB PLANTING**

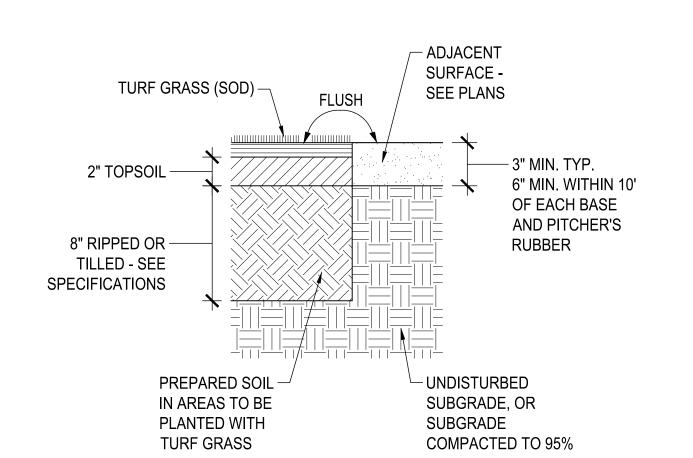
SCALE: N.T.S.



- 1. TWIST WIRE MIN. 2 TIMES AT ALL LOCATIONS SHOWN.
- 2. PLACE STAKES MIN. 12" OUTSIDE OF ROOTBALL. 3. DRIVE STAKES A MINIMUM OF 12 INCHES INTO UNDISTURBED SOIL.
- 4. 2 OF 3 STAKES TO FORM A LINE PARALLEL TO THE ROADWAY OR SIDEWALK.
- 5. STAPLE WIRE TO STAKE 2 TIMES EACH WIRE.

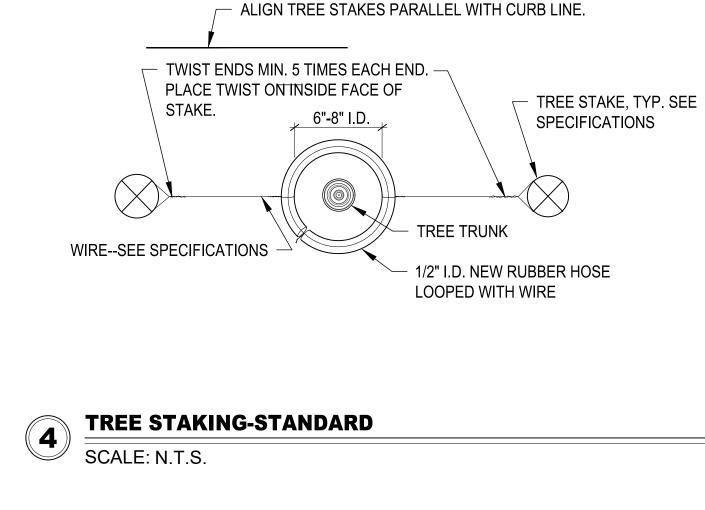
MULTI-TRUNK TREE STAKING

SCALE: N.T.S.



TURF GRASS

SCALE: N.T.S.



SINGLE TRUNK TREE PLANTING

SEE TREE STAKING DETAIL

FORM 2" DEEP BASIN

AROUND TREE

FINISH GRADE-

ROOT BALL (SIZE-

DRIVE STAKE 6" MIN.

5. USE OF STAKES SHALL BE DETERMINED IN THE FIELD.

8. SEE SPECIFICATIONS FOR BACKFILL MIXTURE.

6. SEE EMITTER PLACEMENT DETAIL FOR EMITTER LOCATIONS.

2. ROOT BALL IS TO BE SET ON FIRM GRADE.

B. WATER SETTLE BACKFILL.

BEFORE PLANTING.

VARIES)

5 TIMES ROOT

BALL DIAMETER

1. WARM WEATHER APPLICATION: SPRAY WITH WILT PROOF ACCORDING TO MFG. DIRECTIONS.

4. REMOVE ALL NURSERY STAKES, NURSERY TIE TAPE, POTS, WOODEN BOX SIDES AND BOTTOM

7. SEE EMITTER SCHEDULE FOR NUMBER AND FLOW VALUE OF EMITTERS PER PLANT.

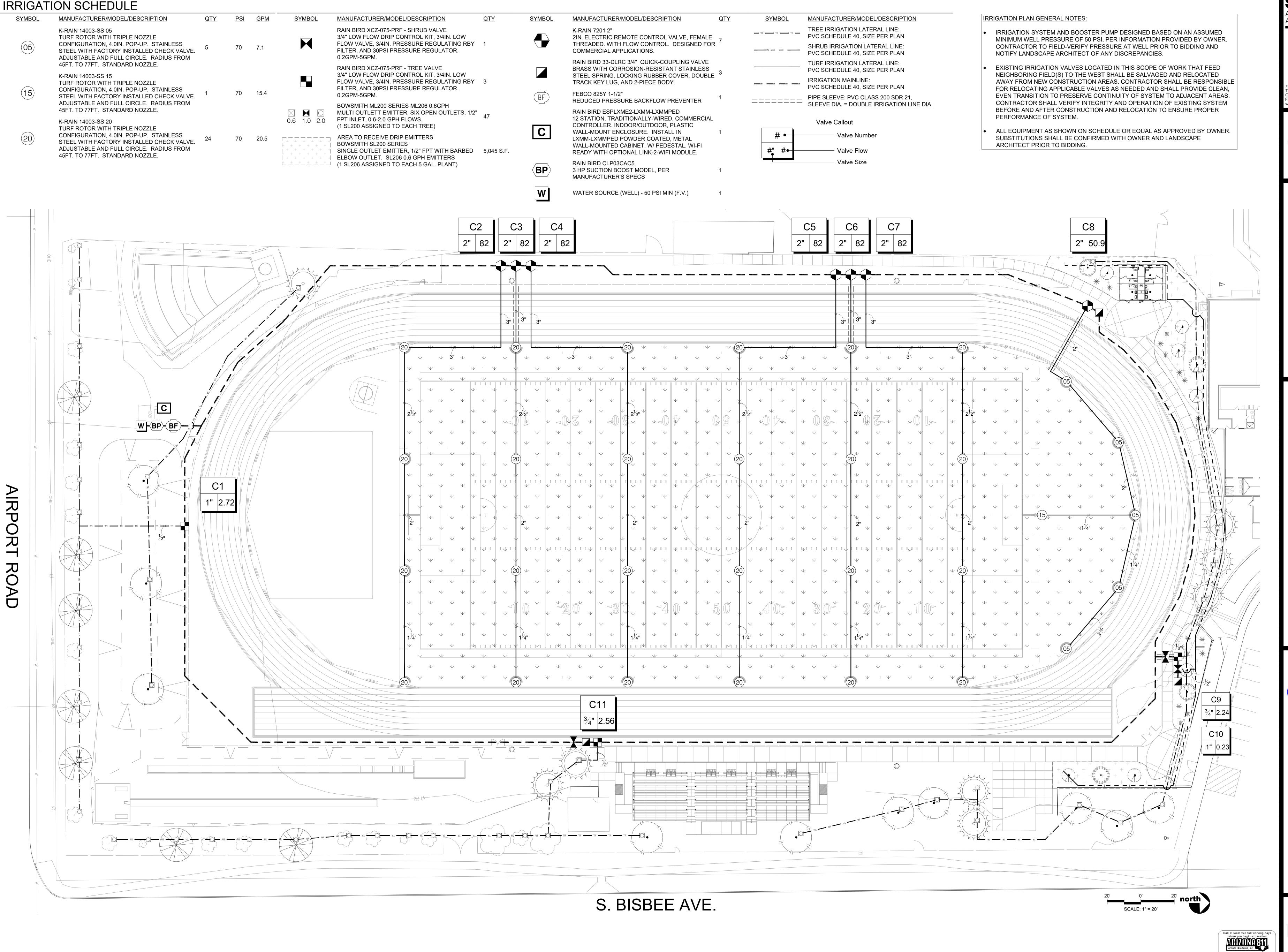
TREE STAKE, SEE

PLASTIC TREE COLLAR

BACKFILL MIXTURE --

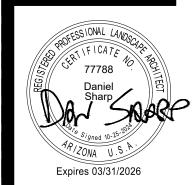
SEE NOTE THIS DETAIL.

WHEN PLANTED IN TURF



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ACK AND FIELD REPLACEMENT
240 N. BISBEE AVE.

VestLand Resources
2020 N. Central Ave. #695
Phoenix, Arizona 85004

Construction

L 4.0

TYP. 2" GRANITE MULCH

PVC ELL-SXT

- 3/4" CRUSHED

GRAVEL, 6" DEEP

 $\mathsf{1}\ ig)$ UNDISTURBED SOIL (TYPICAL)

45 & 22.5 DEG.

NOT

REQUIRED

1 SF

3 SF

CONCRETE THRUST BLOCK (TYPICAL)

B) PIPE (TYPICAL)

FITTING (TYPICAL)

5) FITTING (TYPICAL)

SUPPLY LINES 3-INCHES IN DIAMETER AND LARGER SHALL

IRRIGATION PIPE

RECEIVE CONCRETE THRUST BLOCKS.

TEE, DEAD END

90° BEND

NOT

REQUIRED

1.5 SF

4 SF

REBAR BENT AROUND

SCH 40 PVC PIPE

WITH GEOTEXTILE FABRIC

SEAL ALL OPENINGS AND BOTTOM

WHERE SHOWN ON PLAN

2404.02

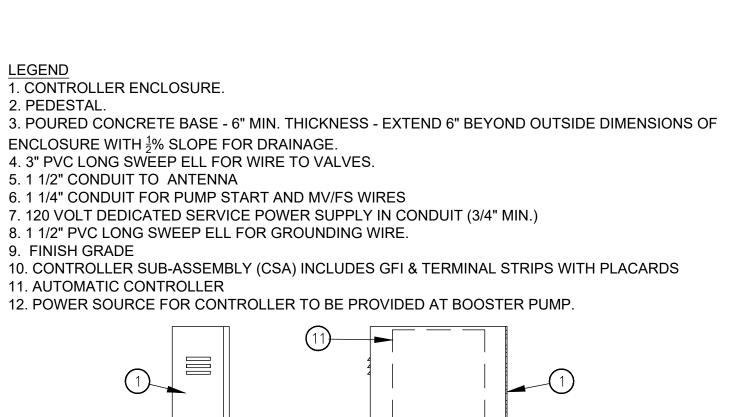
10.25.2024 revisions

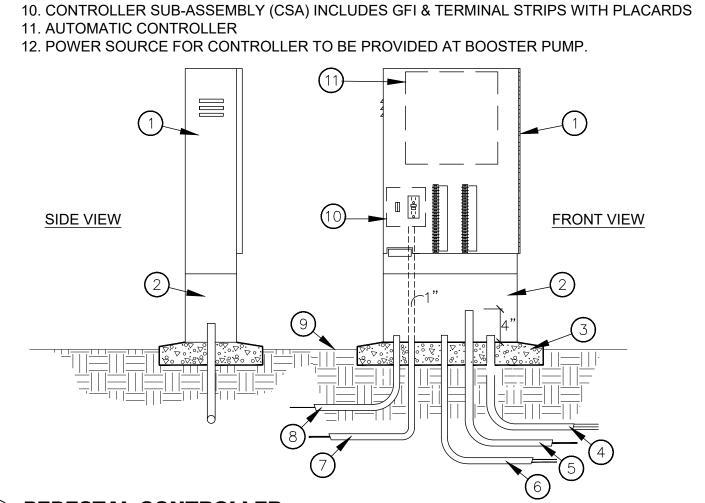
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Call at least two full working day before you begin excavation

ARIZONA 81

Arizona Blue Stake, Inc.



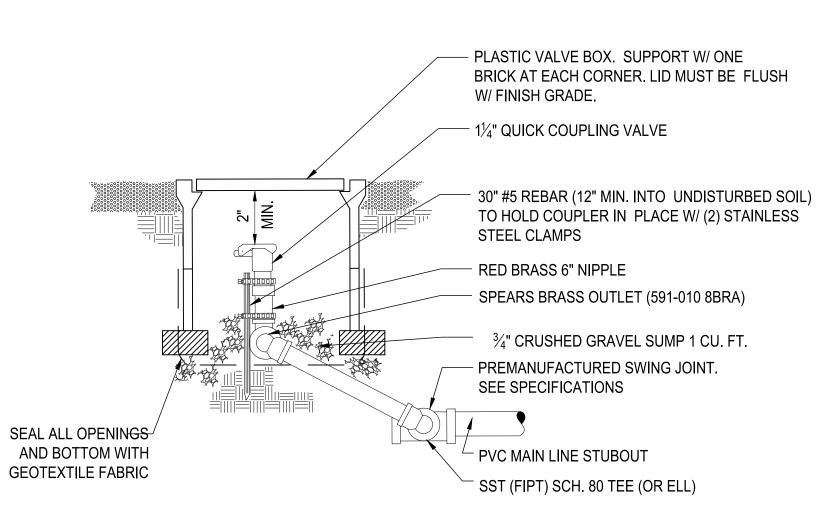


PEDESTAL CONTROLLER SCALE: N.T.S.

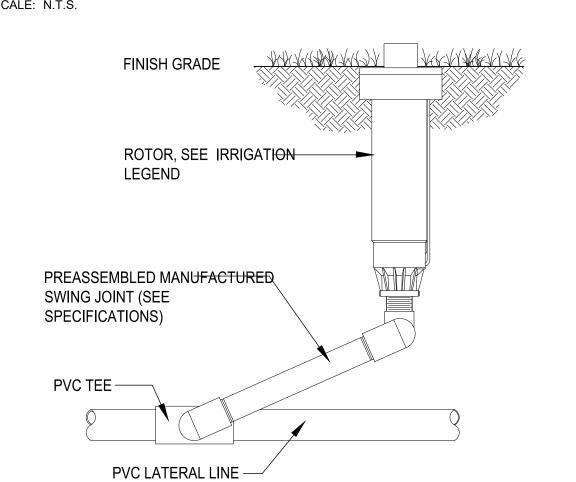
 VALVE BOX WITH LOCKING LID, SEE SPECIFICATIONS. TOP OF BOX SHALL BE AT FINISH GRADE. SUPPORT W/ONE BRICK AT EACH CORNER. FINISH GRADE -6" SCH 40 PIPE FOR VALVES UP TO 3". 8" SCH 40 PIPE FOR 4" AND LARGER VALVES EXTEND SLEEVE 3" MIN. ABOVE GATE VALVE - SIZE PER LINE SIZE COMPACT DISTURBED AREA AROUND BOX TO FINISH GRADE. SEAL ALL OPENINGS AND BOTTOM WITH GEOTEXTILE FABRIC STEEL ANCHOR EACH SIDE 3/4" CRUSHED GRAVEL, 6' MAIN SUPPLY LINE THRUST BLOCK-WRAP VALVE BODY IN POLYETHYLENE WHERE IN CONTACT WITH CONCRETE.

> NOTE: COMPACT SOIL AROUND VALVE PIT ASSEMBLY TO SAME DENSITY AS UNDISTURBED ADJACENT SOIL. KEY CONCRETE 6" MIN. INTO UNDISTURBED SIDE WALL OF TRENCH.

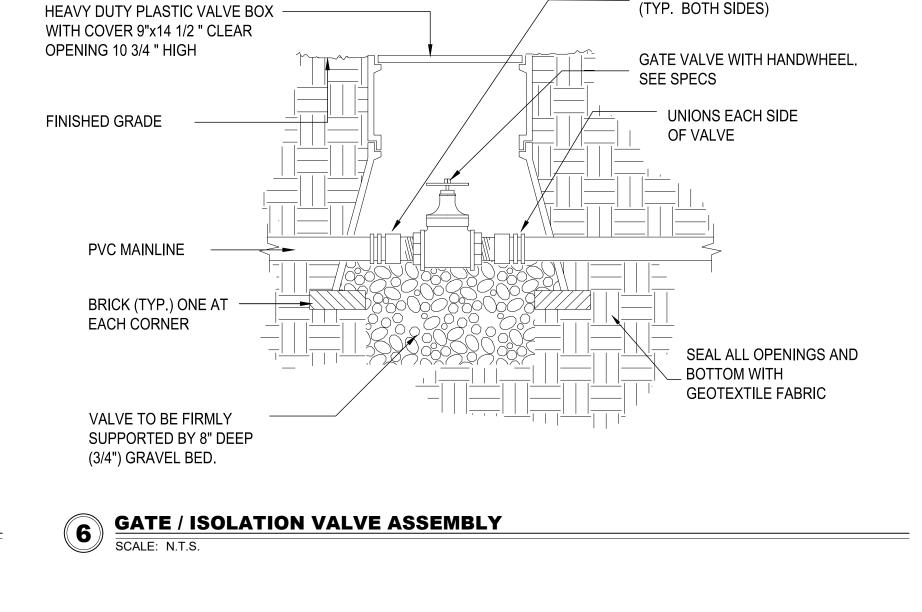
5 GATE VALVE (MAINLINE 2 1/2" & LARGER) SCALE: N.T.S.



9 QUICK COUPLER ASSEMBLY SCALE: N.T.S.



SINGLE OUTLET EMITTER SPRAY HEAD ROTOR SCALE: N.T.S.



HEAVY DUTY CONCRETE METER BOX. (1)-PIECE HEAVY

CONTRACTORS-ENGINEERS SUPPLY OR APPROVED

EQUAL. TOP OF BOX TO BE FLUSH WITH FINISH GRADE.

EXTENSIONS AS NECESSARY. ALSO SEE NOTE THIS SHEET.

-FINISH GRADE

─SEAL ALL OPENINGS AND

-BALL VALVE (FULL PORT)-

SAME SIZE AS RC VALVE

- REDUCING ADAPTER IF

REQUIRED (SCH 80 PVC)

-SCH. 80 PVC ELL, TxT

SCH. 80 PVC MALE ADAPTER

BOTTOM WITH GEOTEXTILE FABRIC

SCH 80 PVC NIPPLE (LENGTH AS REQ'D), TxT

SCH. 80 PVC TEE SST FOR MAINLINES 2

SPECS. FOR MAINLINES 3" AND LARGER

12" OR SMALLER, DUCTILE IRON OR

SADDLE TEE PER TUCSON WATER

WIRES FROM CONTROLLER (BUNDLE & TAPE EVERY 10')

PVC MAINLINE (SIZE NOTED ON PLANS)

CAST-IRON LOCKING LID, AS MANUFACTURED BY

SUPPORT W/ONE BRICK AT EACH CORNER. ADD

SAME SIZE AS LARGEST

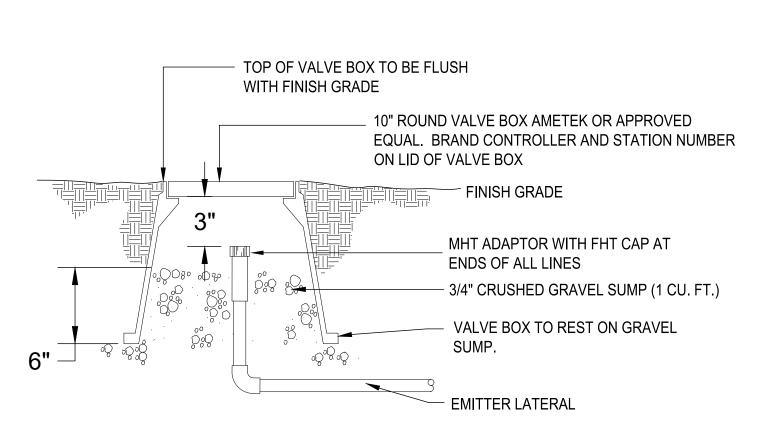
LATERAL PIPE IN ZONE_,

PROVIDE EXPANSION COIL AT EACH CONNECTION IN VALVE BOX (COIL WIRE AROUND 1/2" PIPE 10 TIMES).

INTERIOR OF VALVE BOX & BOX LID--BOTH TOP & BOTTOM--TO BE INTEGRAL COLOR PURPLE OR PAINTED PURPLE W

DIAMETER OF FITTINGS LEADING TO AND FROM VALVE SHALL EQUAL CONTROL VALVE DIAMETER.

5. TOP OF BOX LID TO BE LABELED "RECLAIMED WATER." USE PERMANANT MARKING.



FLUSH END CAP ASSEMBLY

WIRE CONNECTORS. SEE SPECS.

PROJECT PLAN (SIZE PER PLANS)

PRESSURE REGULATING MODULE-

REMOTE CONTROL VALVE, SEE-

SCH 80 PVC THREADED UNION -

WHERE SPECIFIED

TO HEADS

(ONE EACH SIDE)(TxT)

SAME SIZE AS LARGEST

LATERAL PIPE IN ZONE

COUPLING W/ REDUCING -

ADAPTER IF REQUIRED

3/4 " CRUSHED GRAVEL

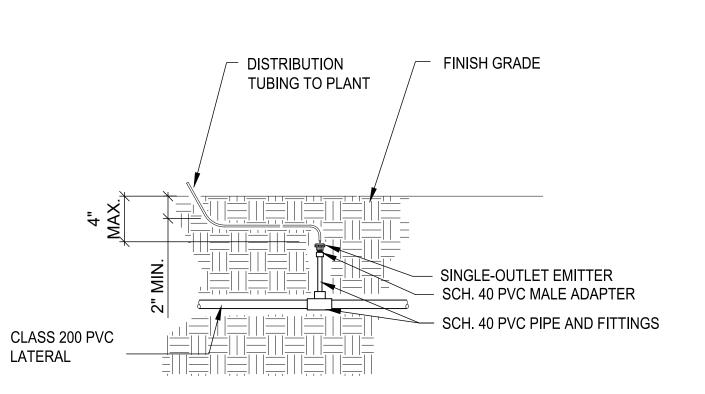
SUMP, 6" DEEP

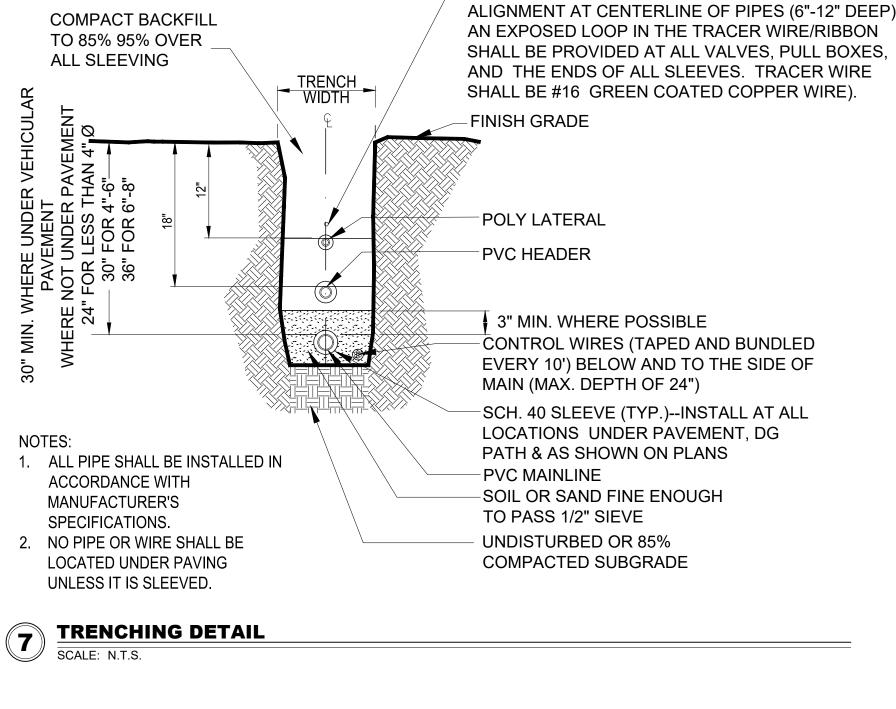
UV-RESISTANT PAINT.

SCALE: N.T.S.

1. ALL WIRE TO BE INSTALLED & SUPPLIED PER LOCAL CODE.

REMOTE CONTROL VALVE ASSEMBLY





-3/4" CRUSHED GRAVEL SUMP - 2 CU. FT.

WITH CONTROLLER AND STATION NUMBER.

HEAVY DUTY PLASTIC METER BOX, AMETEK OR APPROVED EQUAL

SUPPORT W/ONE BRICK AT EACH CORNER. TOP OF BOX SHALL BE

FLUSH W/FINISH GRADE. ADD EXTENSIONS AS NECESSARY. BRAND LID

- TOP OF BOX TO BE FLUSH WITH

- 2' FLEX HOSE AND ADAPTER

VALVE DETAIL THIS SHEET

- HEAVY DUTY 6" ROUND PLASTIC BOX WITH LOCKABLE LID. TOP OF BOX TO BE FLUSH WITH

TO PRESSURE REGULATOR

FINISH GRADE

- EMMITTER HEADER

-1" BALL VALVE.

- PVC UNION **-** 3/4"

PVC MAINLINE

PRESSURE REGULATOR (MAY BE REMOTELY

REQUIRES SEPARATE VALVE BOX. SEE PLAN)

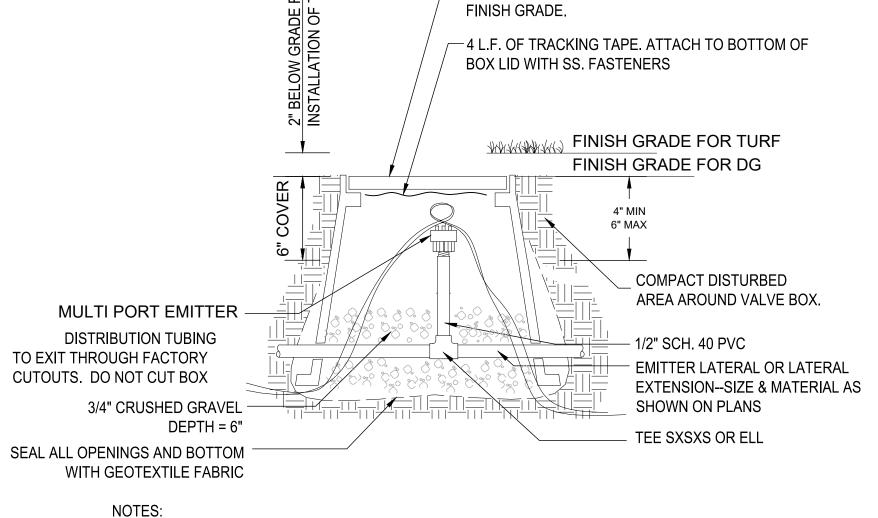
1" CONTROL VALVE. SEE REMOTE CONTROL

-COLOR TRACER RIBBON TO BE RUN ALONG DITCH

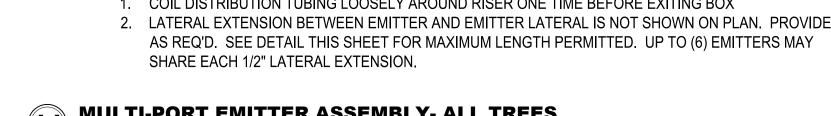
LOCATED FROM REMOTE CONTROL VALVE.

— Y-FILTER

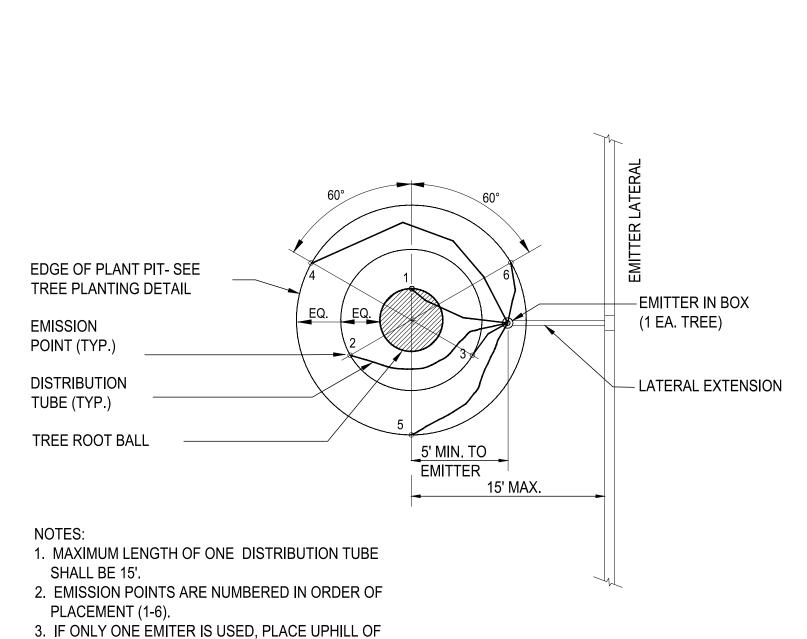
REMOTE CONTROL DRIP VALVE ASSEMBLY



1. COIL DISTRIBUTION TUBING LOOSELY AROUND RISER ONE TIME BEFORE EXITING BOX 2. LATERAL EXTENSION BETWEEN EMITTER AND EMITTER LATERAL IS NOT SHOWN ON PLAN. PROVIDE AS REQ'D. SEE DETAIL THIS SHEET FOR MAXIMUM LENGTH PERMITTED. UP TO (6) EMITTERS MAY SHARE EACH 1/2" LATERAL EXTENSION.



MULTI-PORT EMITTER ASSEMBLY- ALL TREES



	TREE IF ON SLOPE
42	EMITTER LOCATIONS - TREES

SCALE: N.T.S.

45° ELL

HEAVY DUTY PLASTIC METER BOX, AMETEK OR -

APPROVED EQUAL. SUPPORT W/ONE BRICK AT

EACH CORNER. TOP OF BOX SHALL BE FLUSH

NECESSARY. BRAND LID WITH CONTROLLER

PVC UNION SCH. 80 THD.

COMPACT DISTURBED AREA -

BRICK UNDERNEATH

EACH CORNER (TYP.)

PVC FITTING - SXSXS

EMITTER LATERAL-

PVC OR HDPE--SEE

EMITTER HEADER - FROM RCV -

PLANS

PRESSURE REGULATOR ASSEMBLY

CROSS

FINISH GRADE

AROUND VALVE BOX.

SCH 40 PVC PIPE

PVC ELL-SXT -

W/FINISH GRADE. ADD EXTENSIONS AS

AND STATION NUMBER.

ALL PIPE SCH. 40 EXCEPT SCH. 80 UNIONS

NOTE:

PIPE

SIZE

2" & LESS THRUST BLOCK DETAIL

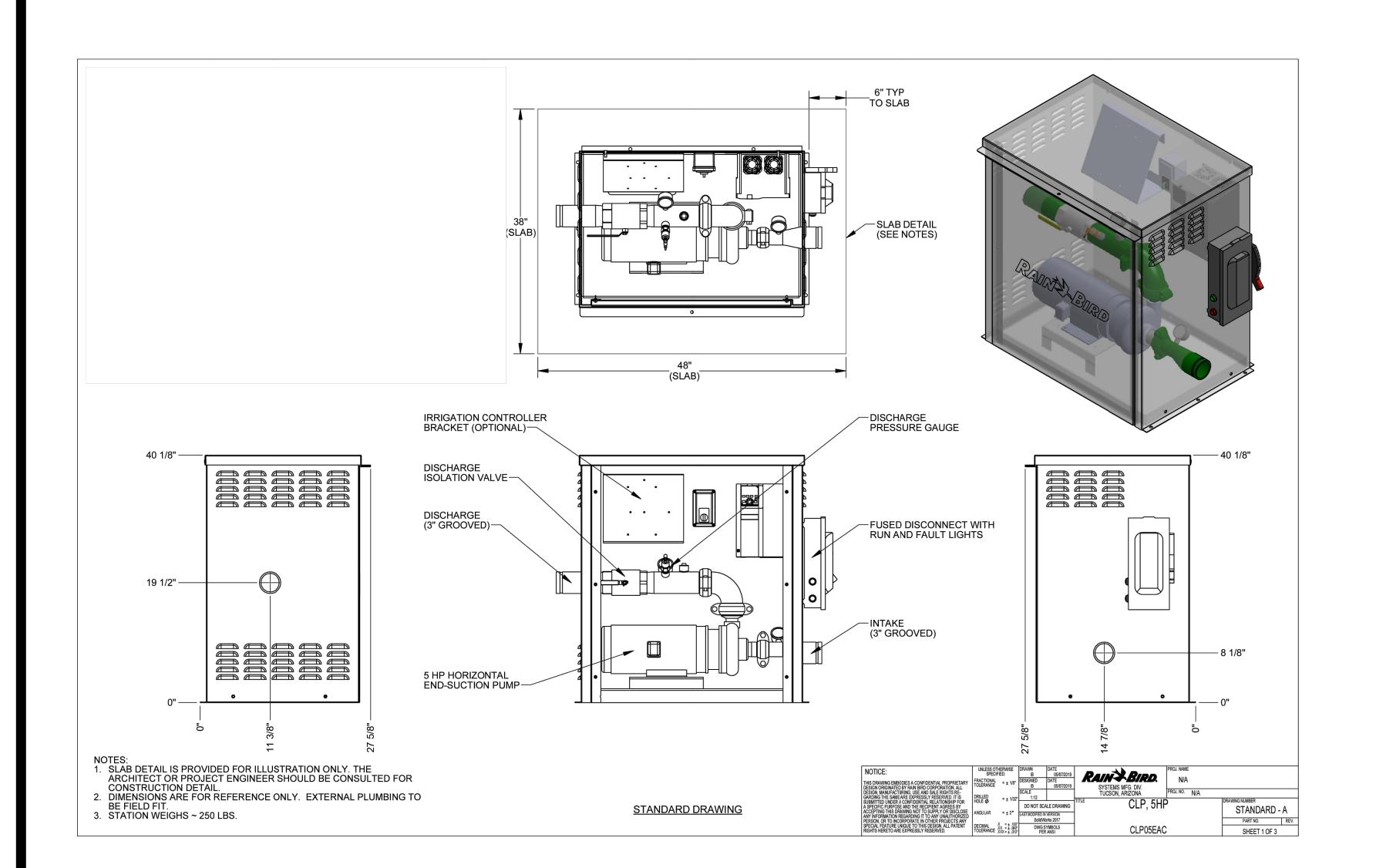
SCALE: N.T.S.

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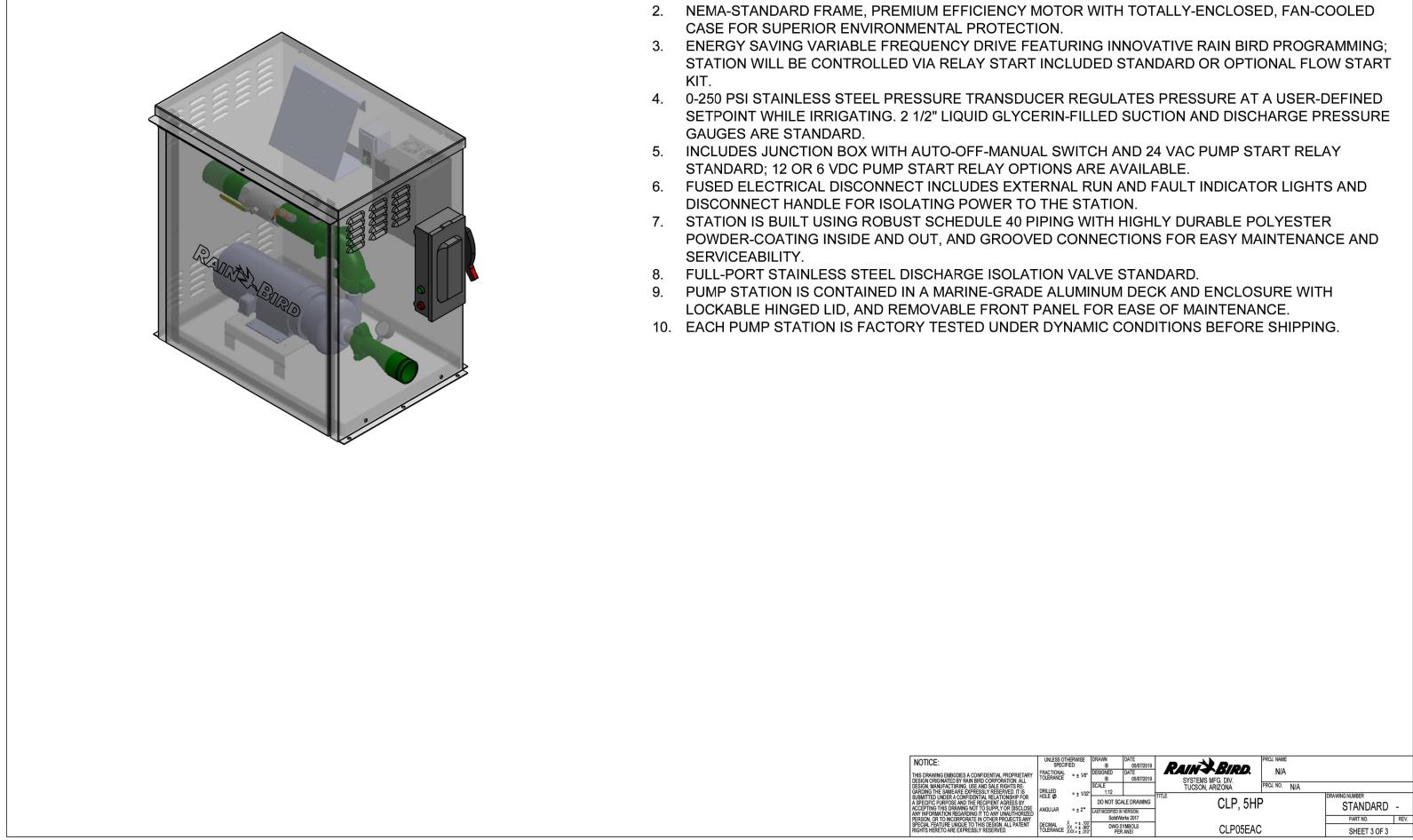
Call at least two full working days before you begin excavation.

ARIZONA 811.

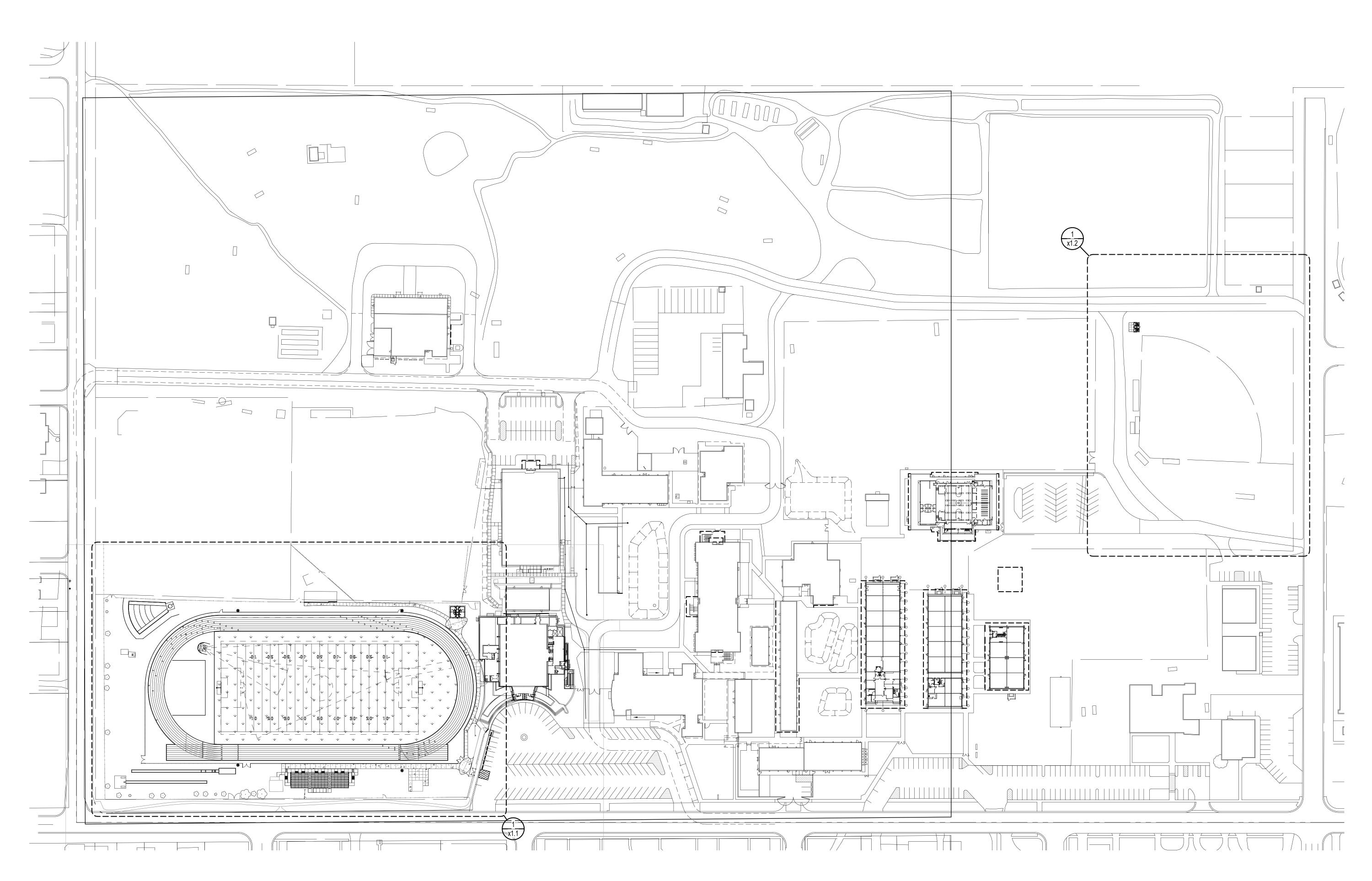
Arizona Blue Stake, Inc.



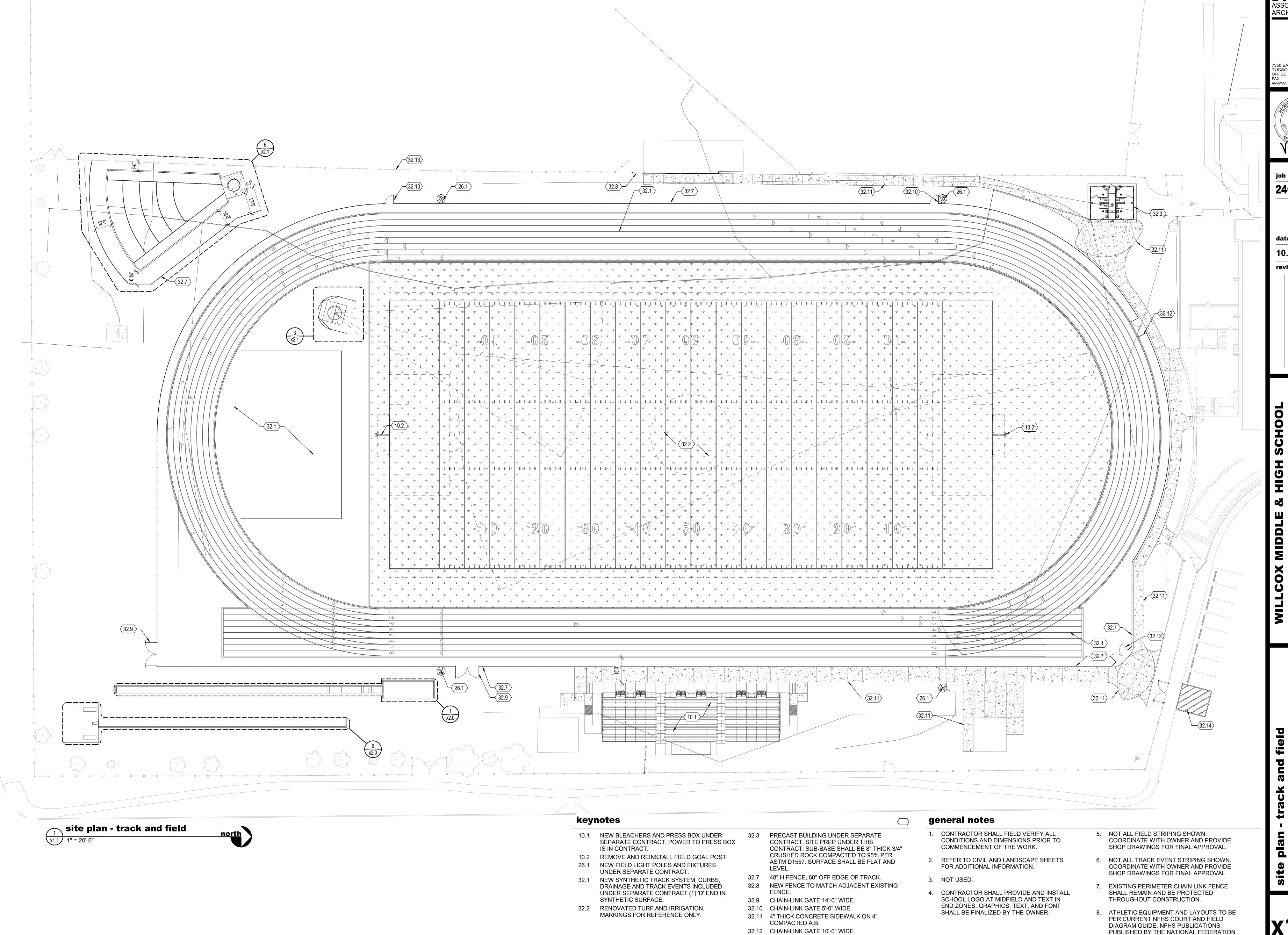
- 1. CLOSE-COUPLED, HORIZONTAL END-SUCTION PUMP WITH BRONZE IMPELLER AND TYPE 21 BUNA-N MECHANICAL SEAL FOR LONG PUMP LIFE.



x1.0







32.13 REPAIR TOP RAIL.

DRAWINGS.

32.14 16' X 18' ACCESSIBLE AISLE, SEE CIVIL

ASSOCIATES LTD ARCHITECTS AIA

TUCSON, ARIZONA 85710 OFFICE (520) 326-3700 FAX (520) 326-1148 www.swaimaia.com



10.25.2024

OF STATE HIGH SCHOOL ASSOCIATIONS.

PHONE: 800-776-3462