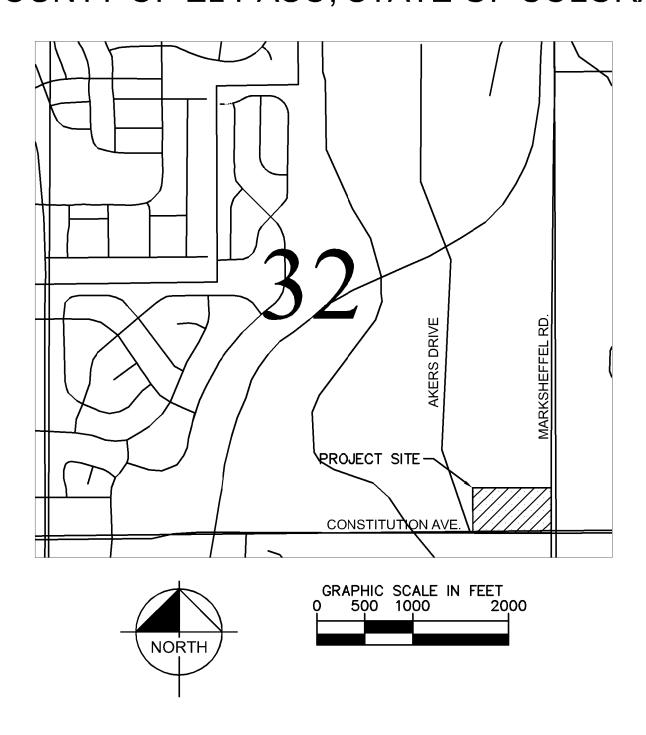
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C 609	WATER PLAN			
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C 611	WATER PLAN			+
C 612	WATER PLAN			+
C 613	OVERALL SANITARY PLAN			<del>                                     </del>
C 614	SAN, SEWER PLAN & PROFILE LINE A			+
C 615	SAN. SEWER PLAN & PROFILE LINE A			1
C 616	SAN. SEWER PLAN & PROFILE LINE A			
C 617	SAN. SEWER PLAN & PROFILE LINE B			
C 618	SAN. SEWER PLAN & PROFILE LINE C			
C 619	OVERALL STORM PLAN			
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C 621	STORM PLAN AND PROFILE LINE A			+
C 622	STORM PLAN AND PROFILE LINE A			+
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	POND DETAILS			
1: h7h	I DIAD DETUIES			
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#### **GENERAL NOTES**

1. BASED ON ELEVATION DATA, THE APPLICANT WILL NEED TO FILE FEDERAL AVIATION ADMINISTRATION (FAA) FORM 7460-1 "NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION" FOR ANY NEW VERTICAL DEVELOPMENT AT THIS SITE, INCLUDING TEMPORARY CONSTRUCTION EQUIPMENT, AND PROVIDE FAA DOCUMENTATION TO THE AIRPORT BEFORE THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES; FAA'S WEBSITE (HTTPS: //OEAAA.FAA.GOV/OEAAA/EXTERNAL/PORTAL.ISP).



#### OWNER/DEVELOPER:

111 MONUMENT CIRCLE, SUITE 1500 INDIANAPOLIS, IN 46204 TELEPHONE: (720) 495-3693

#### SURVEYOR:

BARRON LAND, LLC 2790 N. ACADEMY BLVD., SUITE 311 COLORADO SPRINGS, CO 80917 PHONE: (719) 360-6827 CONTACT: SPENCER BARRON, PLS

#### **CIVIL ENGINEER:**

WATERMARK AT CO SPRINGS AKERS CO, LLC. KIMLEY-HORN AND ASSOCIATES., INC. 2 N. NEVADA AVE., SUITE 300 COLORADO SPRINGS, CO 80903 TELEPHONE: (719) 453-0182

#### LANDSCAPE ARCHITECT:

KIMLEY-HORN AND ASSOCIATES., INC. 2 N. NEVADA AVE., SUITE 310 COLORADO SPRINGS, CO 80903 TELEPHONE: (720) 636-8306 CONTACT: JEREMÝ POWELL, PLA

#### **EL PASO COUNTY**

EL PASO COUNTY PCD DEPARTMENT 2880 INTERNATIONAL CIRCLE, SUITE 110 COLORADO SPRINGS, CO 80910 PHONE: (719) 520-6300

#### ARCHITECT:

STUDIO M ARCHITECTURE 2 WEST MAIN STREET CARMEL, IN 46032 PHONE: (317) 810-1502 CONTACT: NICK ALEXANDER, AIA, LEED AP

#### LEGAL DESCRIPTION

TRACT DD, HANNAH RIDGE AT FEATHERGRASS FILING NO. 1, AS AMENDED BY AFFIDAVIT OF CORRECTION RECORDED JULY 14, 2014 UNDER RECEPTION NO. 214081923 AND AFFIDAVIT OF CLARIFICATIONS RECORDED SEPTEMBER 9, 2014 UNDER RECEPTION NO. 214081923, COUNTY OF EL PASO, STATE OF COLORADO.

#### **BENCHMARK:**

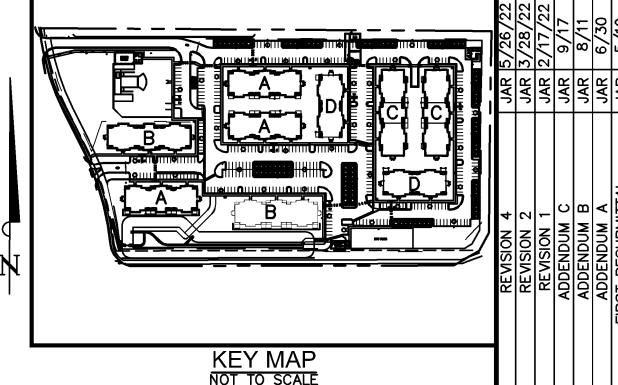
ELEVATIONS ARE BASED UPON COLORADO SPRINGS UTILITY FIMS CONTROL POINT "BLT104", DESCRIBED AS A 2" ALUMINUM CAP SET AT THE NORTHEAST TOP OF THE NORTH HEADWALL OF A BOX CULVERT AT THE FIRST CREEK CROSSING EAST OF MARKSHEFFEL ROAD, UNDER CONSTITUTION AVENUE, APPROXIMATELY 1400' EAST AND 70' NORTH OF THE SOUTHEAST CORNER OF THE SUBJECT SECTION 32. THE ELEVATION OF SAID BENCHMARK IS 6452.43', NGVD 29 VERTICAL DATUM.

#### BASIS OF BEARINGS:

BEARINGS ARE BASED UPON, AND IS ASSUMED TO BEAR S 89°37'59" E, A MEASURED DISTANCE OF 1188.72 FEET FOR THE NORTH LINE OF THE SUBJECT TRACT DD, SAID LINE BEING MONUMENTED ON THE WEST END BY A 5/8" METAL PIN WITH A YELLOW PLASTIC CAP STAMPED "PLS 31548" AND ON THE EAST END BY A 5/8" METAL PIN WITH A YELLOW PLASTIC CAP STAMPED "PLS 36567".

#### **ENGINEER'S STATEMENT**

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID DETAILED PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE ESTABLISHED CRITERIA FOR DETAILED DRAINAGE PLANS AND SPECIFICATIONS, AND SAID DETAILED PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH THE MASTER PLAN OF THE DRAINAGE BASIN. SAID DETAILED DRAINAGE PLANS AND SPECIFICATIONS MEET THE PURPOSED FOR WHICH THE PARTICULAR DRAINAGE FACILITY(S) IS DESIGNED. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THE DETAILED DRAINAGE PLANS AND SPECIFICATIONS.



DESIGNED BY: EJ

CHECKED BY: EJO

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THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES DURING THE CONSTRUCTION PROCESS REPORTED BY THE CONTRACTOR TO KIMLEY-HORN AND ASSOCIATES, INC. THIS

DRAWING IS NOT GURANTEED TO BE "AS BUILT" BUT IS BASED

RECORD DRAWING

11/20/23

ON THE INFORMATION MADE AVAILABLE.

PROJECT NO. 096302009 SHEET

ERIC GUNDERSON, PE

- 2. IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE COMMENCING WORK, THE CONTRACTOR SHALL PROVIDE 48 HOURS MINIMUM NOTICE TO ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION.
- CONTRACTOR SHALL CONTACT UTILITY NOTIFICATION CENTER FOR THE LOCATION OF UNDERGROUND UTILITIES AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION (1-800-922-1987).
- 4. CONSTRUCTION SHALL COMPLY WITH ALL GOVERNING CODES AND BE CONSTRUCTED TO SAME.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL REQUIRED CONSTRUCTION PERMITS AND BONDS PRIOR TO CONSTRUCTION.
- 6. THE CONTRACTOR SHALL RESTORE ALL DISTURBED VEGETATION IN KIND, UNLESS SHOWN OTHERWISE.
- ALL PAVING, CONSTRUCTION, MATERIALS, AND WORKMANSHIP WITHIN THE PUBLIC RIGHT-OF-WAY OR EASEMENT SHALL CONFORM TO EL PASO COUNTY SPECIFICATIONS AND STANDARDS. (LATEST EDITION)
- 8. CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGGERS, AND ALL OTHER DEVICES NECESSARY TO PROVIDE FOR PUBLIC SAFETY IN ACCORDANCE WITH MUTCD CONSTRUCTION AREA TRAFFIC CONTROL.

#### ENGINEERING DEMOLITION NOTES

- 1. ALL DEMOLITION SHALL BE CARRIED OUT IN A SAFE MANNER AND IN STRICT ACCORDANCE WITH OSHA REGULATIONS.
- 2. ALL CONDITIONS SHOWN TO BE 'EXISTING" SHALL BE VERIFIED IN THE FIELD BY THE GENERAL CONTRACTOR PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE NOTED AND SUBMITTED TO THE OWNER AND THE ENGINEER FOR REVIEW. CHANGES TO THE ORIGINAL DESIGN OF THIS PROJECT DUE TO EXISTING SITE CONDITIONS MUST BE APPROVED BY BOTH THE OWNER AND THE ENGINEER PRIOR TO MAKING ANY CHANGES.
- 3. THE CONTRACTOR SHALL FIELD VERIFY THE EXTENT OF DEMOLITION.
- 4. WHEN UTILITIES ARE REMOVED, CAP AND SEAL A MINIMUM OF 8" BELOW FINISH GRADE.

#### **ENGINEERING SITE NOTES**

- 1. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL PROPERTY CORNERS
- 2. CONTRACTOR SHALL MATCH PROPOSED CURB AND GUTTER, CONCRETE, AND PAVEMENT TO EXISTING GRADE AT ALL TIE IN LOCATIONS.
- 3. CONTRACTOR SHALL REMOVE PAVEMENT AND CONCRETE IN ACCORDANCE WITH SPECIFICATIONS OF EL PASO COUNTY AND/OR THE COLORADO STATE DEPARTMENT OF TRANSPORTATION.
- 4. THE EARTHWORK FOR ALL BUILDING FOUNDATIONS AND SLABS SHALL BE IN ACCORDANCE WITH GEOTECHNICAL RECOMMENDATIONS AND ARCHITECTURAL BUILDING PLANS AND SPECIFICATIONS.
- CONTRACTOR SHALL REFER TO BUILDING PLANS AND SPECIFICATIONS FOR ACTUAL LOCATION OF ALL UTILITY ENTRANCES, TO INCLUDE, SANITARY SEWER LATERALS, DOMESTIC AND FIRE PROTECTION WATER SERVICE, ELECTRICAL. AND TELEPHONE SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND ASSURE PROPER DEPTHS ARE ACHIEVED. AS WELL AS, COORDINATE WITH ANY UTILITY COMPANIES FOR APPROVED LOCATIONS AND SCHEDULING OF TIE-INS/CONNECTIONS TO THEIR FACILITIES.
- CONTRACTOR IS RESPONSIBLE FOR REPAIRING THE DAMAGE DONE TO ANY EXISTING ITEM DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. REPAIRS SHALL BE EQUAL TO. OR BETTER THAN. EXISTING CONDITIONS. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGE AND NOTIFY CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION START.
- CONTRACTOR TO REMOVE OR RELOCATE, WHEN APPLICABLE, ALL EXISTING BUILDINGS, FOUNDATIONS, BASEMENTS, CONNECTING IMPROVEMENTS, DRAIN PIPES, SANITARY SEWER PIPES, POWER POLES, AND GUY WIRES, WATER METERS AND WATER LINES, WELLS, SIDEWALKS, SIGN POLES, UNDERGROUND GAS, SEPTIC TANKS, AND ASPHALT, SHOWN AND NOT SHOWN, WITHIN CONSTRUCTION LIMITS AND WHERE NEEDED, TO ALLOW FOR NEW CONSTRUCTION AS SHOWN.

#### **ENGINEERING PAVING NOTES**

- CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
- 2. ALL CONCRETE SIDEWALKS SHALL HAVE CONTROL JOINTS CUT ON 5' CENTERS AND EXPANSION JOINTS PLACED ON 20' CENTERS. CONCRETE PAVEMENT JOINTS SHALL BE SPACED AT 12' CENTERS MAXIMUM.
- 3. ALL AREAS INDICATED AS PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AS INDICATED ON SHEET C 402.
- WHERE NEW PAVEMENT MEETS THE EXISTING PAVEMENT, THE CONTRACTOR SHALL SAW CUT THE EXISTING PAVEMENT A MINIMUM 2" DEEP FOR A SMOOTH AND STRAIGHT JOINT AND MATCH THE EXISTING PAVEMENT ELEVATION WITH THE PROPOSED PAVEMENT UNLESS OTHERWISE INDICATED.

#### **ENGINEERING GRADING NOTES**

- 1. CONTOURS ON SIDEWALKS AND PRIVATE/PUBLIC ROADWAYS ARE TO FINISH GRADE.
- FOR GROUND TREATMENT OF ALL DISTURBED AREAS WITHIN THE PROJECT SITE, REFER TO LANDSCAPE PLANS.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
- 4. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED AND SHALL RE-GRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND OR OTHER FINAL LANDSCAPE PLANTING IS WELL ESTABLISHED.

#### ENGINEERING DRAINAGE AND STORM WATER NOTES

- 1. ON-SITE STORM SEWER SYSTEM HAS BEEN PROVIDED TO MAINTAIN THE EXISTING DRAINAGE PATTERNS
- ALL ON—SITE STORM SEWER IS PRIVATE, UNLESS OTHERWISE NOTED.
- 3. EXISTING DRAINAGE STRUCTURES TO BE INSPECTED AND REPAIRED AS NEEDED. EXISTING PIPES TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
- 4. THE CONTRACTOR SHALL DE-SILT ALL DRAINAGE STRUCTURES AS REQUIRED DURING AND AT THE END OF CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS.
- 5. IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ANY APPLICABLE REQUIRED PERMITS. THE CONTRACTOR IS TO COORDINATE WITH THE OWNER PRIOR TO EXCAVATION.

#### PRIVATE ENGINEER'S NOTICE TO CONTRACTORS:

- THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTIONS TO THE CONTRACTOR BY THE ENGINEER OF THE PLANS.
- 1. THE COUNTY ENGINEER'S SIGNATURE ON THESE PLANS DOES NOT CONSTITUTE APPROVAL OF ANY OF THESE NOTES AND THE COUNTY WILL NOT BE HELD RESPONSIBLE FOR THEIR ENFORCEMENT.
- 2. APPROVAL OF THESE PLANS BY THE COUNTY DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL A PERMIT
- 3. THE APPROVAL OF THIS PLAN OR ISSUANCE OF A PERMIT BY EL PASO COUNTY DOES NOT AUTHORIZE THE SUBDIVIDER AND OWNER TO VIOLATE ANY FEDERAL, STATE OR COUNTY LAWS, ORDINANCES, REGULATIONS, OR POLICIES.
- NEITHER THE OWNER, NOR THE ENGINEER OF WORK WILL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT, AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING, AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS, AND REGULATIONS.
- 5. CONTRACTOR AGREES THAT HE/SHE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOBSITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING: SAFETY OF ALL PERSONS AND PROPERTY, AND THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPT LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE TO INSURE THAT ALL SLOPES, STREETS, UTILITIES, AND STORM SEWERS ARE BUILT IN ACCORDANCE WITH THESE PLANS. IF THERE IS ANY QUESTION REGARDING THESE PLANS OR FIELD STAKES, THE CONTRACTOR SHALL REQUEST AN INTERPRETATION BEFORE DOING ANY WORK BY CALLING THE ENGINEER OF WORK AT 719-453-0180. THE CONTRACTOR SHALL ALSO TAKE THE NECESSARY STEPS TO PROTECT THE PROJECT AND ADJACENT PROPERTY FROM ANY EROSION AND SILTATION THAT RESULT FROM HIS OPERATIONS BY APPROPRIATE MEANS (SAND BAGS, HAY BALES, TEMPORARY DESILTING BASINS, DIKES, SHORING, ETC.) UNTIL SUCH TIME THAT THE PROJECT IS COMPLETED AND ACCEPTED FOR MAINTENANCE BY WHATEVER OWNER, AGENCY, OR ASSOCIATION IS TO BE ULTIMATELY RESPONSIBLE FOR MAINTENANCE.
- 7. EXCEPT AS NOTED HEREON ALL UTILITY SERVICES WITHIN THIS DEVELOPMENT ARE UNDERGROUND INSTALLATIONS. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO STARTING WORK NEAR THEIR FACILITIES, AND SHALL COORDINATE HIS WORK WITH COMPANY REPRESENTATIVES. FOR UTILITY MARK-OUT SERVICE, CALL 811
- 8. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED FROM A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO OTHER EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. NO REPRESENTATION IS MADE AS TO THE ACCURACY OR COMPLETENESS OF SAID UTILITY INFORMATION. THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN HEREON AND ANY OTHERS NOT OF RECORD OR NOT SHOWN ON THESE PLANS. ALL DAMAGES THERETO CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE APPROPRIATE SPECIFICATIONS AND STANDARDS AT THE EXPENSE OF THE CONTRACTOR.
- 9. LOCATION AND ELEVATION OF EXISTING IMPROVEMENTS SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK.
- 10. CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY BECAUSE OF ACTUAL LOCATION OF EXISTING FACILITIES.
- 11. FOR ALL UTILITY TRENCHES, SOILS REPORTS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD BY A QUALIFIED SOILS ENGINEER WHICH CERTIFY THAT TRENCH BACKFILL WAS COMPACTED AS DIRECTED BY THE SOILS ENGINEER IN ACCORDANCE WITH THE ON-SITE EARTHWORK SPECIFICATIONS.
- 12. ANY WORK DONE WITHOUT INSPECTION OR MATERIALS TESTING IS SUBJECT TO REMOVAL OR CORRECTION.
- 13. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ANY DAMAGE TO THE EXISTING IMPROVEMENTS AND REPLACEMENT TO THE SATISFACTION OF THE FIELD ENGINEER.
- 14. PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL JOIN CONDITIONS FOR GRADING, DRAINAGE AND UNDERGROUND FACILITIES, INCLUDING LOCATION AND ELEVATION OF EXISTING UNDERGROUND FACILITIES AT CROSSINGS WITH PROPOSED UNDERGROUND FACILITIES. IF CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLANS THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND SHALL NOT BEGIN CONSTRUCTION UNTIL THE CHANGED CONDITIONS HAVE BEEN EVALUATED.
- 15. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF/HERSELF WITH THE PLANS, THE SOILS AND/OR GEOLOGY REPORTS, AND THE SITE CONDITIONS PRIOR TO COMMENCING WORK.
- 16. SHOULD CONFLICTING INFORMATION BE FOUND ON THE PLANS OR IN THE FIELD, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AT KIMLEY-HORN BEFORE PROCEEDING WITH THE WORK IN QUESTION.
- 17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND/OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. A LAND SURVEYOR MUST FIELD LOCATE. REFERENCE, AND /OR PRESERVE ALL HISTORICAL OR CONTROLLING MONUMENTS PRIOR TO ANY EARTHWORK. IF DESTROYED, A LAND SURVEYOR SHALL REPLACE SUCH MONUMENTS WITH APPROPRIATE MONUMENTS. A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FILED AS REQUIRED BY THE PROFESSIONAL LAND SURVEYORS ACT. IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED, THE JEFFERSON COUNTY FIELD SURVEY SECTION MUST BE NOTIFIED. IN WRITING. AT LEAST 3 DAYS PRIOR TO THE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF REPLACING ANY VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION.
- 18. DEVIATIONS FROM THESE PLANS SIGNED PLANS WILL NOT BE ALLOWED UNLESS THE COUNTY ENGINEER APPROVES A CONSTRUCTION CHANGE OR THE COUNTY/AGENCY INSPECTOR REQUIRES THE CHANGE.
- 19. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE ENGINEER PRIOR TO ACCEPTANCE OF THIS PROJECT.
- 20. THE AREA WHICH IS DEFINED AS A NON GRADING AREA AND WHICH IS NOT TO BE DISTURBED SHALL BE STAKED PRIOR TO START OF THE WORK. THE PERMIT APPLICANT AND ALL OF THEIR REPRESENTATIVES OR CONTRACTORS SHALL COMPLY WITH THE REQUIREMENTS FOR PROTECTION OF THIS AREA AS REQUIRED BY ANY APPLICABLE AGENCY. ISSUANCE OF THE COUNTY'S GRADING PERMIT SHALL NOT RELIEVE THE APPLICANT OR ANY OF THEIR REPRESENTATIVES OR CONTRACTORS FROM COMPLYING WITH ANY STATE OR FEDERAL REQUIREMENTS BY AGENCIES INCLUDING BUT NOT LIMITED TO COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT OR COLORADO DIVISION OF WILDLIFE. COMPLIANCE MAY INCLUDE OBTAINING PERMITS. OTHER AUTHORIZATIONS, OR COMPLIANCE WITH MANDATES BY ANY APPLICABLE STATE OR FEDERAL AGENCY.
- 21. NOTES AND DETAILS DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK.
- 22. IF AT ANY TIME DURING THE GRADING OPERATION, ANY UNFAVORABLE GEOLOGICAL CONDITIONS ARE ENCOUNTERED. GRADING IN THAT AREA SHALL STOP UNTIL APPROVED CORRECTIVE MEASURES ARE OBTAINED.
- 23. STRAIGHT GRADE SHALL BE MAINTAINED BETWEEN CONTOUR LINES AND SPOT ELEVATIONS UNLESS OTHERWISE SHOWN ON THE PLANS. THE CONTRACTOR SHALL TAKE ADDITIONAL CARE TO ENSURE POSITIVE DRAINAGE AWAY FROM THE STRUCTURE WHILE MEETING MINIMUM AND MAXIMUM PAVEMENT SLOPES AS DEFINED IN THE CRITERIA
- 24. ALL DEBRIS AND FOREIGN MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT APPROVED DISPOSAL SITES. THE CONTRACTOR SHALL OBTAIN NECESSARY PERMITS FOR THE TRANSPORTATION OF MATERIAL TO AND FROM
- 25. DIMENSIONS TO PIPELINES ARE TO CENTERLINE UNLESS OTHERWISE NOTED.
- 26. CONSTRUCTION STAKING FOR IMPROVEMENTS SHOWN IN THESE PLANS SHALL BE PERFORMED BY A LICENSED LAND SURVEYOR.
- 27. ALL DIMENSIONS ARE IN FEET OR DECIMALS THEREOF.
- 28. SPOT GRADES ARE TO FLOWLINE OR FINISH PAVEMENT GRADE UNLESS OTHERWISE NOTED.
- 29. CONTRACTOR TO BE AWARE OF ALL OVERHEAD LINES AT ALL TIMES, SO AS NOT TO DISTURB THEM.
- 30. WATER SHALL BE PROVIDED ONSITE AND USED TO CONTROL DUST DURING DEMOLITION AND CONSTRUCTION OPERATIONS.
- 31. STORM DRAINAGE SYSTEMS SHOWN ON THESE PLANS HAVE BEEN DESIGNED FOR THE FINAL SITE CONDITION AT COMPLETION OF THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ADEQUATE DRAINAGE OF THE SITE, DURING INTERIM CONDITIONS OF CONSTRUCTION.
- 32. RETAINING WALLS LOCATED CLOSER TO THE PROPERTY LINE THAN THE HEIGHT OF THE WALL SHALL BE BACKFILLED NOT LATER THAN 10 DAYS AFTER CONSTRUCTION OF THE WALL AND NECESSARY STRUCTURAL SUPPORTING MEMBERS UNLESS RECOMMENDED OTHERWISE BY RESPONSIBLE ENGINEER.



PROJECT NO. 096302009

SHEET



RECORD DRAWING

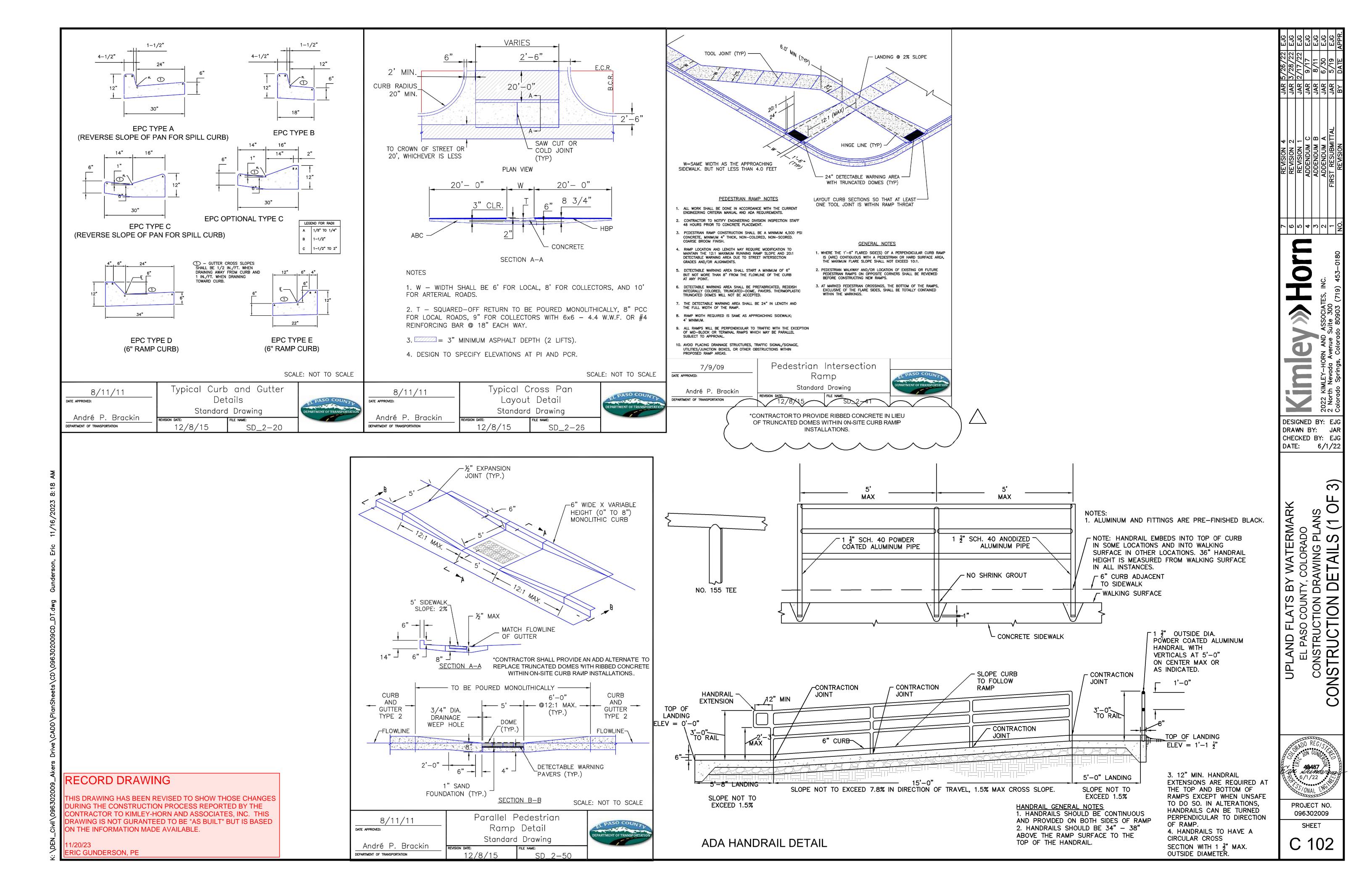
THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES URING THE CONSTRUCTION PROCESS REPORTED BY THE CONTRACTOR TO KIMLEY-HORN AND ASSOCIATES, INC. THIS RAWING IS NOT GURANTEED TO BE "AS BUILT" BUT IS BASED ON THE INFORMATION MADE AVAILABLE.

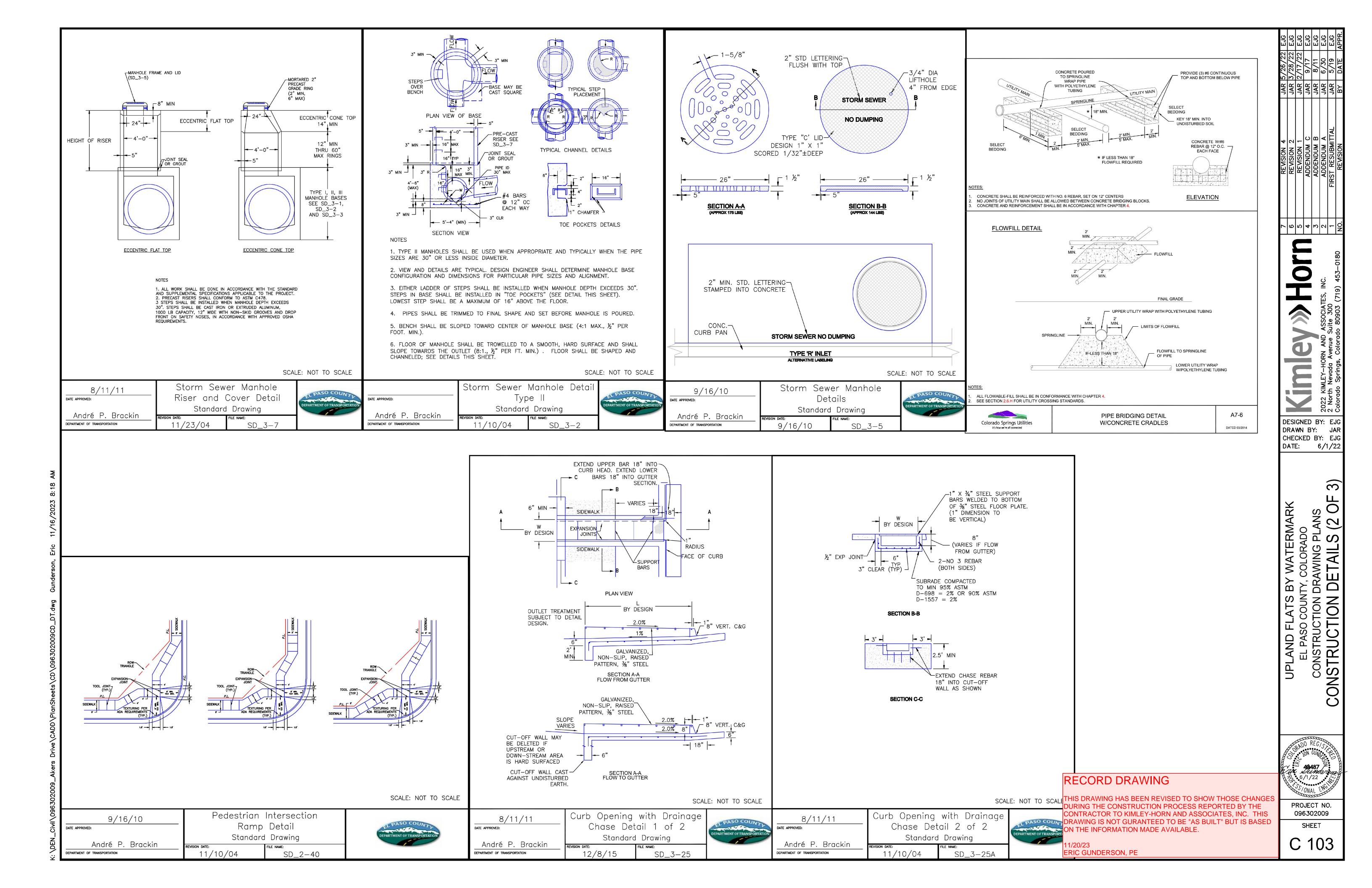
2-BUSINESS DAYS IN ADVANCE FOR THE MARKING OF UNDERGROUND

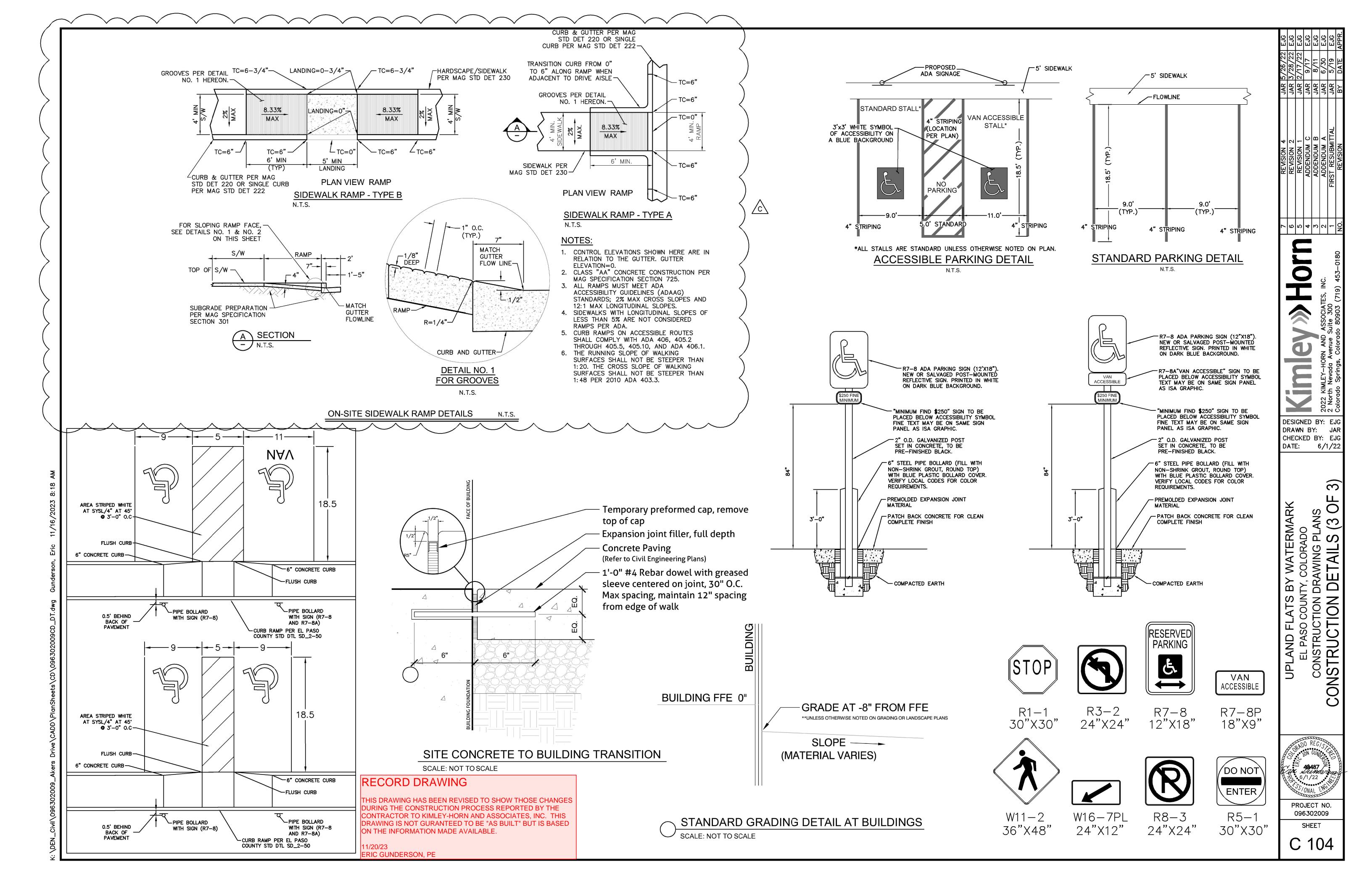
CALL UTILITY NOTIFICATION )

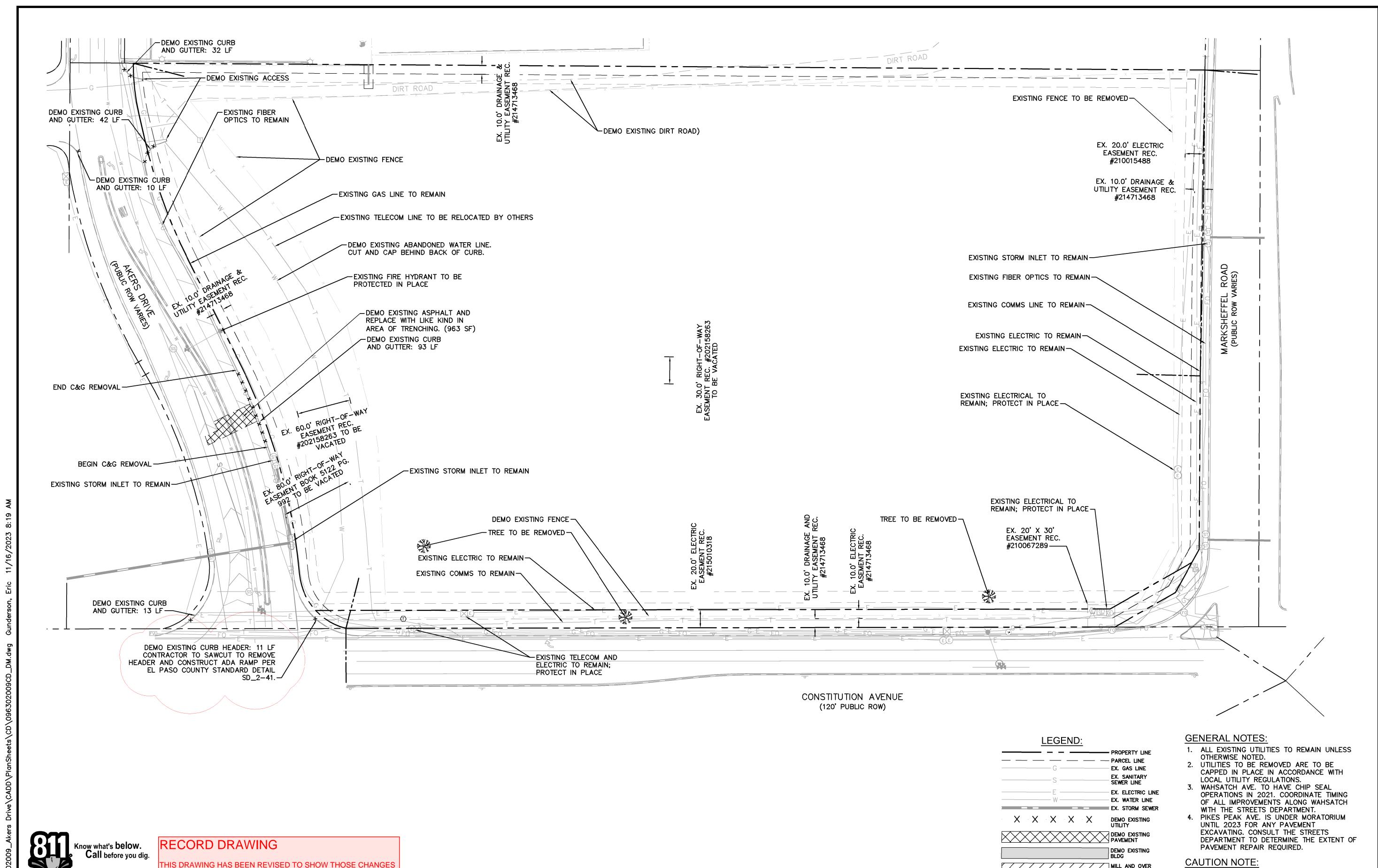
CENTER OF COLORADO

RIC GUNDERSON, PE









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URING THE CONSTRUCTION PROCESS REPORTED BY THE

CONTRACTOR TO KIMLEY-HORN AND ASSOCIATES, INC. THIS

ON THE INFORMATION MADE AVAILABLE.

RIC GUNDERSON, PE

PRAWING IS NOT GURANTEED TO BE "AS BUILT" BUT IS BASED

CALL UTILITY NOTIFICATION

CENTER OF COLORADO

1-800-922-1987

L 2-BUSINESS DAYS IN ADVANCE DRE YOU DIG, GRADE, OR EXCAVATE R THE MARKING OF UNDERGROUND MEMBER UTILITIES

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DESIGNED BY: EJ

CHECKED BY: EJO

6/1/22

CONDITIONS A

UPLAND

DRAWN BY:

DATE:

PROJECT NO. 096302009

MILL AND OVER EXISTING PAVEMENT

DEMO EXISTING ROADWAY STRIPING

DEMO CURB AND GUTTER

PROPOSED SAWCUT

-111111111111111111111111111

CONTRACTOR SHALL TAKE EXTRA CAUTION WHEN

MATERIAL THAT IS NEAR EXISTING TREES THAT

ARE TO REMAIN. SEE THE TREE PROTECTION

PLAN FOR MORE DETAILS OF PRECAUTIONARY

MEASURES - DEVELOPMENT PLAN SHEET 13 &

REMOVING CONCRETE OR OTHER SURFACE

SHEET C 200

# STANDARD NOTES FOR EL PASO COUNTY GRADING AND EROSION CONTROL PLANS:

- 1. STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON—SITE OR OFF SITE WATERS. INCLUDING WETLANDS.
- 2. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS TO REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.
- 3. A SEPARATE STORMWATER MANAGEMENT PLAN (SMWP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. MANAGEMENT OF THE SWMP DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR. THE SWMP SHALL BE LOCATED ON SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
- 4. ONCE THE ESQCP HAS BEEN APPROVED AND A "NOTICE TO PROCEED" HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED GEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY
- 5. CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT COULD CONTRIBUTE POLLUTANTS TO STORMWATER. CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, AND DISTURBED LAND AREAS SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE.
- 6. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION IS ESTABLISHED. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL ASSESS THE ADEQUACY OF CONTROL MEASURES AT THE SITE AND IDENTIFY IF CHANGES TO THOSE CONTROL MEASURES ARE NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN.
- 7. TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS.
- 8. FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES, FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLAN DENSITY OF 70 PERCENT OF PRE—DISTURBANCE LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED, ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE.
- 9. ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT EFFECT THE DESIGN OR FUNCTION OF PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
- 10. EARTH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE—EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE, UNLESS SHOWN TO BE INFEASIBLE AND SPECIFICALLY REQUESTED AND APPROVED.
- 11. COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. IF COMPACTION PREVENTION IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, ALL AREAS DESIGNATED FOR INFILTRATION AND VEGETATION CONTROL MEASURES MUST BE LOOSENED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S).
- 12. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF SITE.
- 13. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO ENTER STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRETE WASHOUT SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT, OR WITHIN 50 FEET OF A SURFACE WATER BODY, CREEK, OR STREAM.
- 14. DURING DEWATERING OPERATIONS OF UNCONTAMINATED GROUND WATER MAY BE DISCHARGED ON SITE, BUT SHALL NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF UNLESS AN APPROVED STATE
- DEWATERING PERMIT IS IN PLACE.

  15. EROSION CONTROL BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
- 16. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE COSNTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.
- 17. WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. CONTROL MEASURES MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
- 18. TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
- 19. THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, SOIL, AND SAND THAT MAY ACCUMULATE IN ROADS, STORM DRAINS AND OTHER DRAINAGE CONVEYANCE SYSTEMS AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
- 20. THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON—SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS.
- 21. NO CHEMICAL(S) HAVING THE POTENTIAL TO BE RELEASED IN STORMWATER ARE TO BE STORED OR USED ONSITE UNLESS PERMISSION FOR THE USE OF SUCH CHEMICAL(S) IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING APPROVAL FOR THE USE OF SUCH CHEMICAL(S), SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.



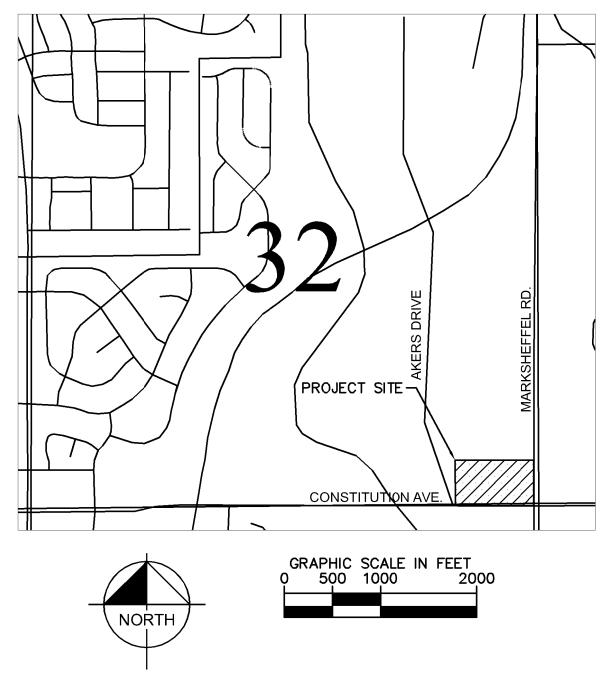


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GEC COVER SHEET			
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GEC DETAILS (3 OF 3)			

# UPLAND FLATS BY WATERMARK

GRADING EROSION CONTROL AND PUBLIC IMPROVEMENT PLAN TRACT DD, HANNAH RIDGE AT FEATHERGRASS FILING NO. 1, AS AMENDED SECTION 32, TOWNSHIP 13 SOUTH, RANGE 65 WEST OF THE 6TH P.M., CITY OF COLORADO

SPRINGS, COUNTY OF EL PASO, STATE OF COLORADO



- 22. BULK STORAGE OF PETROLEUM PRODUCTS OR OTHER ALLOWED LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL REQUIRE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS ONSITE AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS, ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
- 23. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.
- 24. OWNER/DEVELOPER AND THEIR AGENTS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS), AND THE "CLEAN WATER ACT" (33 USC 1344), IN ADDITION TO THE REQUIREMENTS OF THE LAND DEVELOPMENT CODE, DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (1041, NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND OTHER LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, LOCAL
- OR COUNTY AGENCIES, THE MOST RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
  25. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS
- POINTS.
  6. PRIOR TO CONSTRUCTION THE PERMITEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
- 27. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND SHALL BE UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
- 28. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY KUMAR AND ASSOCIATES, INC., DATED 9/10/2020 AND SHALL BE CONSIDERED A PART OF THESE PLANS.
- 29. AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB ONE (1) ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT WATER QUALITY CONTROL DIVISION WQCD -PERMITS 4300 CHERRY CREEK DRIVE SOUTH DENVER, CO 80246-1530 ATTN: PERMITS UNIT

#### **GENERAL NOTES**

1. BASED ON ELEVATION DATA, THE APPLICANT WILL NEED TO FILE FEDERAL AVIATION ADMINISTRATION (FAA) FORM 7460-1 "NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION" FOR ANY NEW VERTICAL DEVELOPMENT AT THIS SITE, INCLUDING TEMPORARY CONSTRUCTION EQUIPMENT, AND PROVIDE FAA DOCUMENTATION TO THE AIRPORT BEFORE THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES; FAA'S WEBSITE (HTTPS://OEAAA.FAA.GOV/OEAAA/EXTERNAL/PORTAL.ISP).

#### CONTACTS:

WATERMARK AT CO SPRINGS AKERS CO, LLC.

111 MONUMENT CIRCLE, SUITE 1500
INDIANAPOLIS, IN 46204
TEL: (720) 495–3693
CONTACT: MONICA UNGER

KIMLEY-HORN AND ASSOCIATES, INC. 2 NEVADA NORTH AVE., SUITE 300 COLORADO SPRINGS, CO 80903 TEL: (719) 453-0182 CONTACT: ERIC GUNDERSON, P.E.

EL PASO COUNTY:
EL PASO COUNTY
PCD DEPARTMENT
2880 INTERNATIONAL CIRCLE, SUITE 110
COLORADO SPRINGS, CO 80910
PHONE: (719) 520-6300

BARRON LAND, LLC 2790 N. ACADEMY BLVD. SUITE 311 COLORADO SPRINGS, CO 80917 TEL: (719) 360-6827 CONTACT: SPENCER BARRON, PLS

#### RECORD DRAWING

THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES DURING THE CONSTRUCTION PROCESS REPORTED BY THE CONTRACTOR TO KIMLEY-HORN AND ASSOCIATES, INC. THIS DRAWING IS NOT GURANTEED TO BE "AS BUILT" BUT IS BASED ON THE INFORMATION MADE AVAILABLE.

11/20/23

ERIC GUNDERSON, PE

#### LAND AREA:

TOTAL PROPERTY AREA: +/- 15.39 ACRES

#### **BENCHMARK:**

ELEVATIONS ARE BASED UPON COLORADO SPRINGS UTILITY FIMS CONTROL POINT "BLT104", DESCRIBED AS A 2" ALUMINUM CAP SET AT THE NORTHEAST TOP OF THE NORTH HEADWALL OF A BOX CULVERT AT THE FIRST CREEK CROSSING EAST OF MARKSHEFFEL ROAD, UNDER CONSTITUTION AVENUE, APPROXIMATELY 1400' EAST AND 70' NORTH OF THE SOUTHEAST CORNER OF THE SUBJECT SECTION 32. THE ELEVATION OF SAID BENCHMARK IS 6452.43', NGVD 29 VERTICAL DATUM.

#### LEGAL DESCRIPTION

TRACT DD, HANNAH RIDGE AT FEATHERGRASS FILING NO. 1, AS AMENDED BY AFFIDAVIT OF CORRECTION RECORDED JULY 14, 2014 UNDER RECEPTION NO. 214081923 AND AFFIDAVIT OF CLARIFICATIONS RECORDED SEPTEMBER 9, 2014 UNDER RECEPTION NO. 214081923, COUNTY OF EL PASO, STATE OF COLORADO.

#### SOIL TYPE:

THE SOIL ON SITE IS USGS HYDROLOGIC SOIL GROUP A/B.

#### FLOOD ZONE DESIGNATION

FEDERAL EMERGENCY MANAGEMENT AGENCY, FLOOD INSURANCE RATE MAP, MAP NUMBER 08041C0756G, EFFECTIVE DATE DECEMBER 7, 2018 INDICATES THIS PARCEL OF LAND IS LOCATED IN ZONE X (AREA OF MINIMAL FLOOD HAZARD).

#### SITE INFORMATION:

TIMING:

ANTICIPATED STARTING AND COMPLETION TIME PERIOD OF SITE GRADING: START: FALL 2021 END: FALL 2022

EXPECTED DATE ON WHICH THE FINAL STABILIZATION WILL BE COMPLETE: FALL 2023

REAS: TOTAL DISTURBED AREA: 15.39 ACRES

TOTAL DISTORDED AREA. 13.39 ACRES

ECEIVING WATERS:
NAME OF RECEIVING WATERS: SAND CREEK EAST FORK, ULTIMATELY SAND CREEK

SCRIPTION OF EXISTING VEGETATION:

DESCRIPTION OF EXISTING VEGETATION:

THE EXISTING SITE IS CURRENTLY UNDEVELOPED AND GROUND COVER CONSISTS OF 100% WEEDS, BRUSH, GRASSES, AND TREES.

DESCRIPTION OF PERMANENT BMPS:
FULL SPECTRUM EXTENDED DETENTION BASIN

SOILS INFORMATION:

SOIL GROUP: 80% A, 20% B SOIL SLOPES: 2.5 H: 1V OR LESS FOR ALL UN-RETAINED AREAS

#### **DEVELOPER'S STATEMENT**

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN.

WATERMARK AT CO SPRINGS AKERS CO. LLC DEVELOPER SIGNATURE

DATE

#### ENGINEER'S STATEMENT

THIS GRADING AND EROSION CONTROL PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. SAID PLAN HAS BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR GRADING AND EROSION CONTROL PLANS. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARING THIS PLAN.

ETIL SUNDERSON, PE - KIMLEY-HORN AND ASSOCIATES, INC. DATE

#### **EL PASO COUNTY**

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT. FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL, AS AMENDED.

IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTOR'S DISCRETION.

COUNTY ENGINEER/ECM ADMINISTRATOR

DATE

PROJECT NO. 096302009

DESIGNED BY: EJ

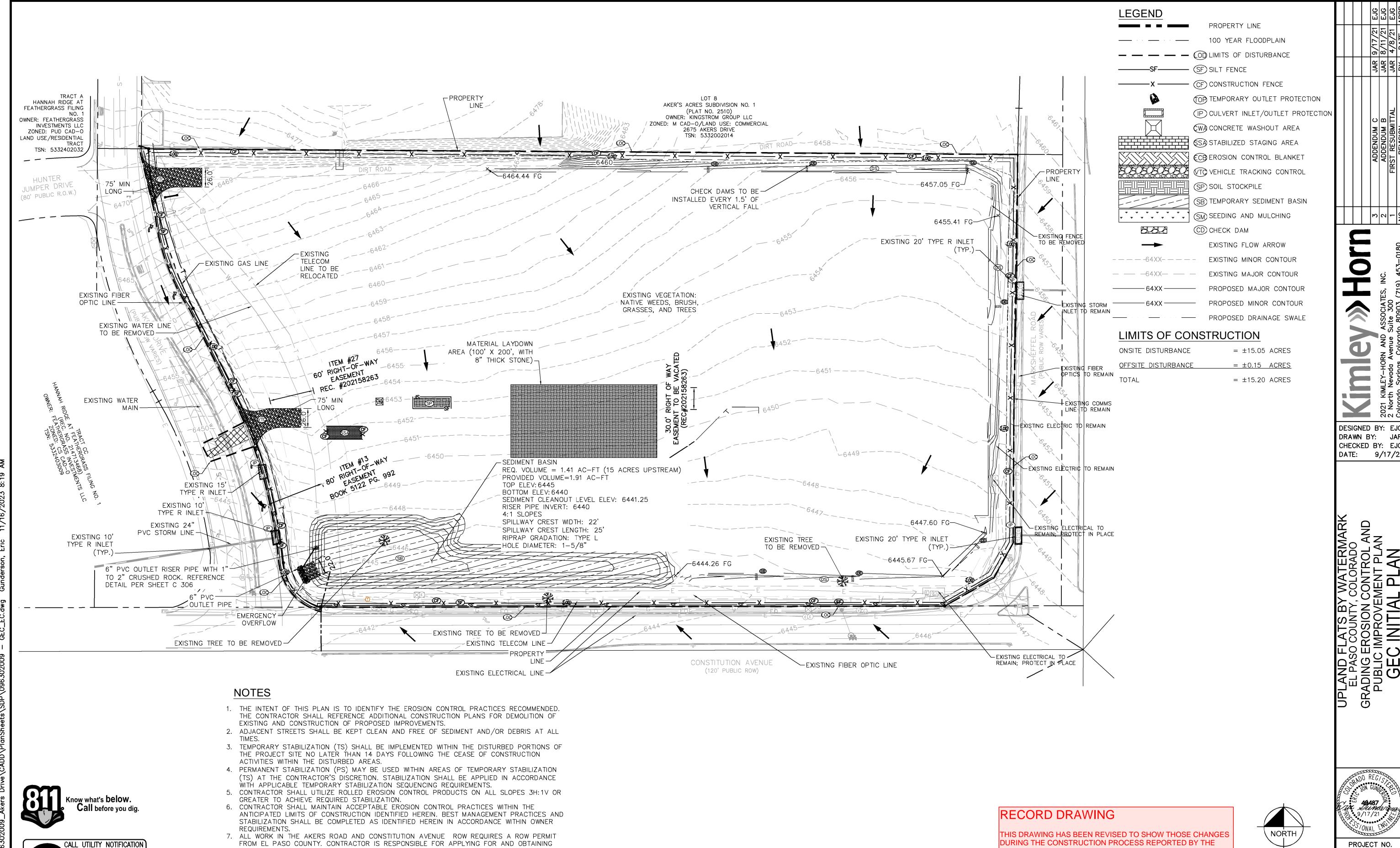
DRAWN BY: JA

CHECKED BY: EJO

DATE: 9/17/2

AND

096302009 SHEET



CONTRACTOR TO KIMLEY-HORN AND ASSOCIATES, INC. THIS

ON THE INFORMATION MADE AVAILABLE.

ERIC GUNDERSON, PE

DRAWING IS NOT GURANTEED TO BE "AS BUILT" BUT IS BASED

096302009

SHEET

C 301

GRAPHIC SCALE IN FEET

30 60

K.\DEN Civil\096302009 Akers Drive\CADD\

CENTER OF COLORADO

2-BUSINESS DAYS IN ADVANCE

E YOU DIG, GRADE, OR EXCAVATE
THE MARKING OF UNDERGROUND
MEMBER UTILITIES

ALL NECESSARY ROW PERMITS.

CONSTRUCTION ACTIVITIES.

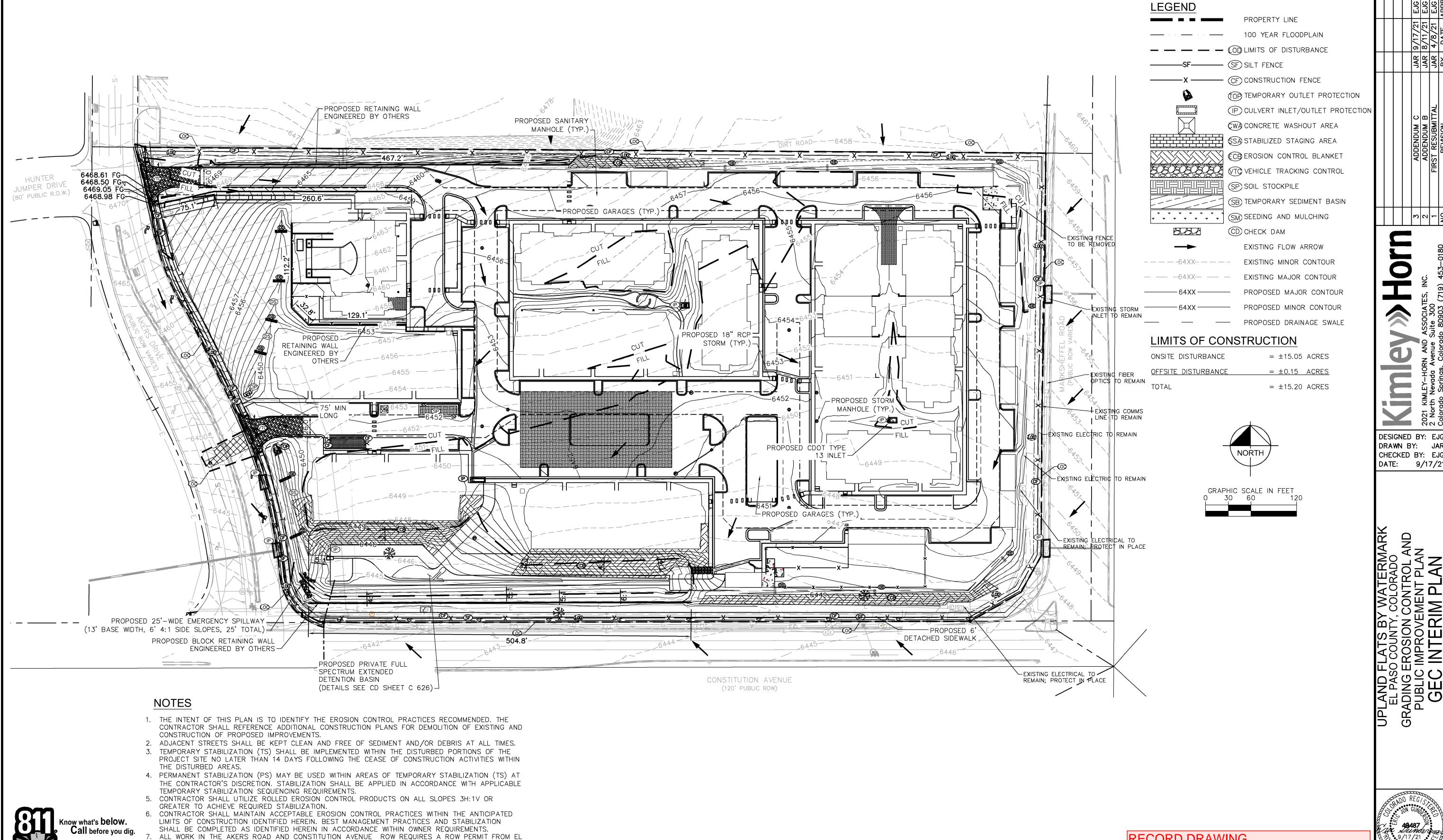
GEOTECHNICAL REPORT

8. SILT FENCE TO BE INSTALLED PRIOR TO COMMENCEMENT OF ONSITE GRADING AND

10. SEE DETAILS ON SHEET C 306 FOR RISER PIPE AND SEDIMENT BASIN DETAILS.

9. DEMOLITION, REMOVAL, OVEREXCAVATION AND SOIL TREATMENT SHALL BE IN ACCORDANCE

WITH THE GEOTECHNICAL ENGINEER RECOMMENDATIONS AS NOTED IN THE APPROVED PROJECT



Call before you dig. CALL UTILITY NOTIFICATION CENTER OF COLORADO

2-BUSINESS DAYS IN ADVANCE

RE YOU DIG, GRADE, OR EXCAVATE
THE MARKING OF UNDERGROUND
MEMBER UTILITIES

ROW PERMITS.

ACTIVITIES.

REPORT.

PASO COUNTY. CONTRACTOR IS RESPONSIBLE FOR APPLYING FOR AND OBTAINING ALL NECESSARY

DEMOLITION, REMOVAL, OVEREXCAVATION AND SOIL TREATMENT SHALL BE IN ACCORDANCE WITH THE

GEOTECHNICAL ENGINEER RECOMMENDATIONS AS NOTED IN THE APPROVED PROJECT GEOTECHNICAL

. CONTRACTOR TO DESIGNATE 100'X200' MATERIAL LAYDOWN AREA. TO BE PLACES WITH 8" THICK

8. SILT FENCE TO BE INSTALLED PRIOR TO COMMENCEMENT OF ONSITE GRADING AND CONSTRUCTION

SEE ENGINEERED RETAINING WALL PLANS FOR RETAINING WALL DESIGN.

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C 302

PROJECT NO.

096302009

SHEET

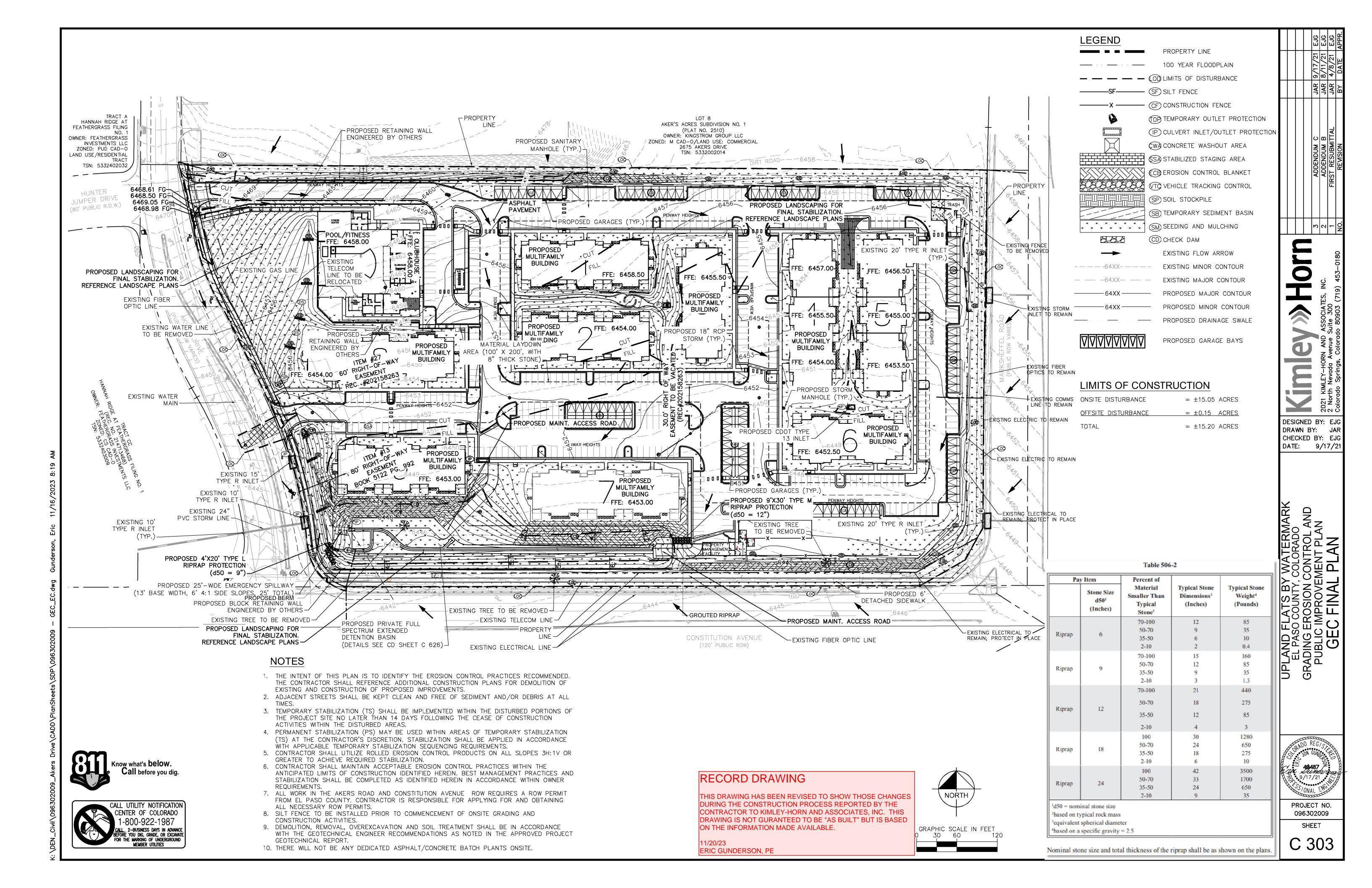
DESIGNED BY: EJO

AND

DRAWN BY:

RECORD DRAWING

ERIC GUNDERSON, PE



AKERS DRIVE - PUBLIC IMPROVEMENTS

7.5' PUBLIC IMPROVEMENT — EASEMENT RIGHT-OF-WAY PROP. 6' DETACHED SIDEWALK PROP. 6' DETACHED DEDICATION -SIDEWALK CONNECT TO EX. CONSTITUTION AVENUE (120' PUBLIC ROW)

CONSTITUTION AVENUE - PUBLIC IMPROVEMENTS

**LEGEND** 

PROPERTY LINE 100 YEAR FLOODPLAIN

- (OD) LIMITS OF DISTURBANCE

— (SF) SILT FENCE

— (CF) CONSTRUCTION FENCE

TOP TEMPORARY OUTLET PROTECTION (IP) CULVERT INLET/OUTLET PROTECTION

CWA CONCRETE WASHOUT AREA (SA) STABILIZED STAGING AREA

ECB EROSION CONTROL BLANKET SOSOSOSOS (VTC) VEHICLE TRACKING CONTROL

(SP) SOIL STOCKPILE

(SB) TEMPORARY SEDIMENT BASIN (SM) SEEDING AND MULCHING

(CD) CHECK DAM

EXISTING FLOW ARROW - - - - -64XX- - - - -EXISTING MINOR CONTOUR EXISTING MAJOR CONTOUR PROPOSED MAJOR CONTOUR

> PROPOSED MINOR CONTOUR PROPOSED DRAINAGE SWALE

PROPOSED GARAGE BAYS



R3 - 4

#### NOTES

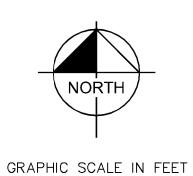
- 1. THE INTENT OF THIS PLAN IS TO IDENTIFY THE EROSION CONTROL PRACTICES RECOMMENDED. THE CONTRACTOR SHALL REFERENCE ADDITIONAL CONSTRUCTION PLANS FOR DEMOLITION OF EXISTING AND CONSTRUCTION OF PROPOSED IMPROVEMENTS.
- 2. ADJACENT STREETS SHALL BE KEPT CLEAN AND FREE OF SEDIMENT AND/OR DEBRIS AT ALL
- 3. TEMPORARY STABILIZATION (TS) SHALL BE IMPLEMENTED WITHIN THE DISTURBED PORTIONS OF THE PROJECT SITE NO LATER THAN 14 DAYS FOLLOWING THE CEASE OF CONSTRUCTION ACTIVITIES WITHIN THE DISTURBED AREAS.
- 4. PERMANENT STABILIZATION (PS) MAY BE USED WITHIN AREAS OF TEMPORARY STABILIZATION (TS) AT THE CONTRACTOR'S DISCRETION. STABILIZATION SHALL BE APPLIED IN ACCORDANCE WITH APPLICABLE TEMPORARY STABILIZATION SEQUENCING REQUIREMENTS.
- 5. CONTRACTOR SHALL UTILIZE ROLLED EROSION CONTROL PRODUCTS ON ALL SLOPES 3H:1V OR GREATER TO ACHIEVE REQUIRED STABILIZATION.
- 6. CONTRACTOR SHALL MAINTAIN ACCEPTABLE EROSION CONTROL PRACTICES WITHIN THE ANTICIPATED LIMITS OF CONSTRUCTION IDENTIFIED HEREIN. BEST MANAGEMENT PRACTICES AND STABILIZATION SHALL BE COMPLETED AS IDENTIFIED HEREIN IN ACCORDANCE WITHIN OWNER REQUIREMENTS.
- 7. ALL WORK IN THE AKERS ROAD AND CONSTITUTION AVENUE ROW REQUIRES A ROW PERMIT FROM EL PASO COUNTY. CONTRACTOR IS RESPONSIBLE FOR APPLYING FOR AND OBTAINING ALL NECESSARY ROW PERMITS.
- 8. SILT FENCE TO BE INSTALLED PRIOR TO COMMENCEMENT OF ONSITE GRADING AND CONSTRUCTION ACTIVITIES.
- 9. DEMOLITION, REMOVAL, OVEREXCAVATION AND SOIL TREATMENT SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER RECOMMENDATIONS AS NOTED IN THE APPROVED PROJECT GEOTECHNICAL REPORT.
- 10. THERE WILL NOT BE ANY DEDICATED ASPHALT/CONCRETE BATCH PLANTS ONSITE.

#### RECORD DRAWING

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1/20/23

ERIC GUNDERSON, PE



PROJECT NO. 096302009

DESIGNED BY: EJO DRAWN BY: JAI

CHECKED BY: EJO

DATE: 9/17/2°

AND

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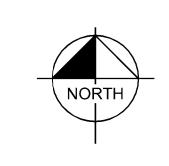
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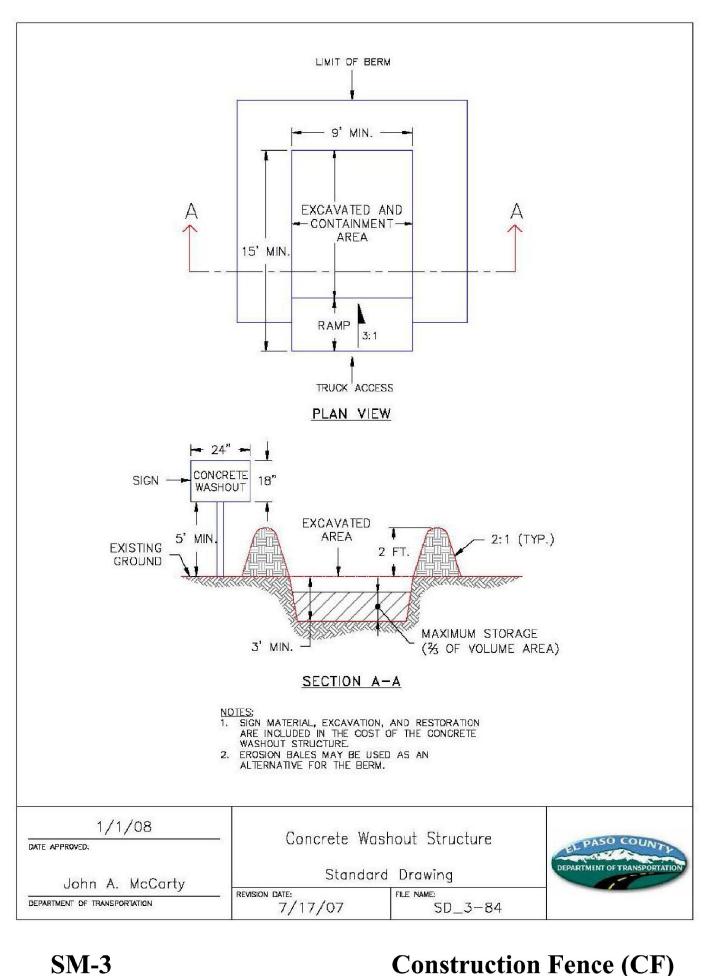
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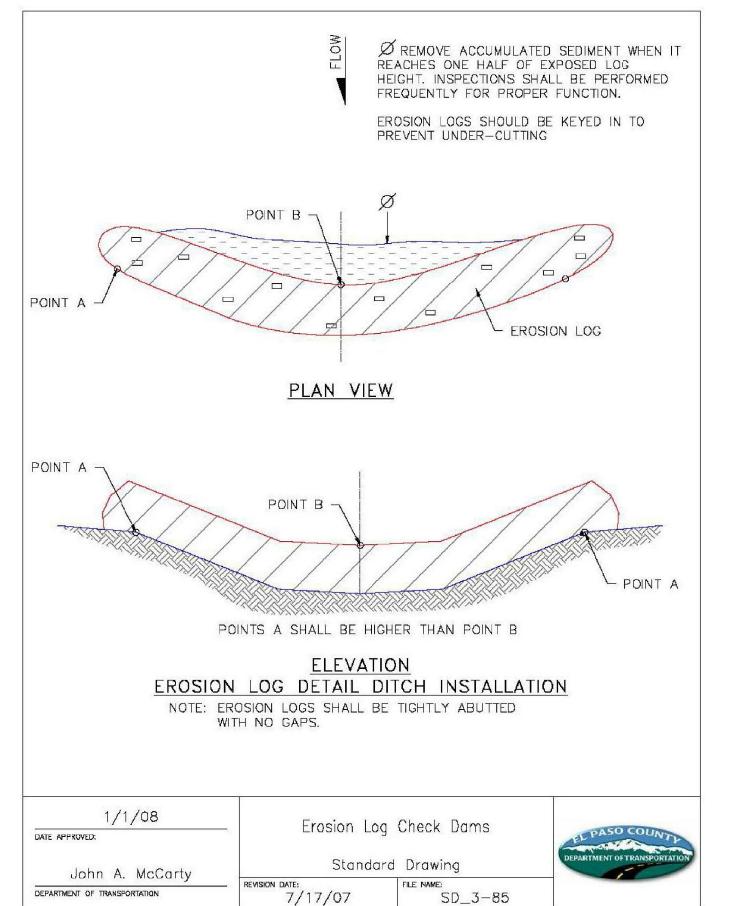
Know what's below. Call before you dig.

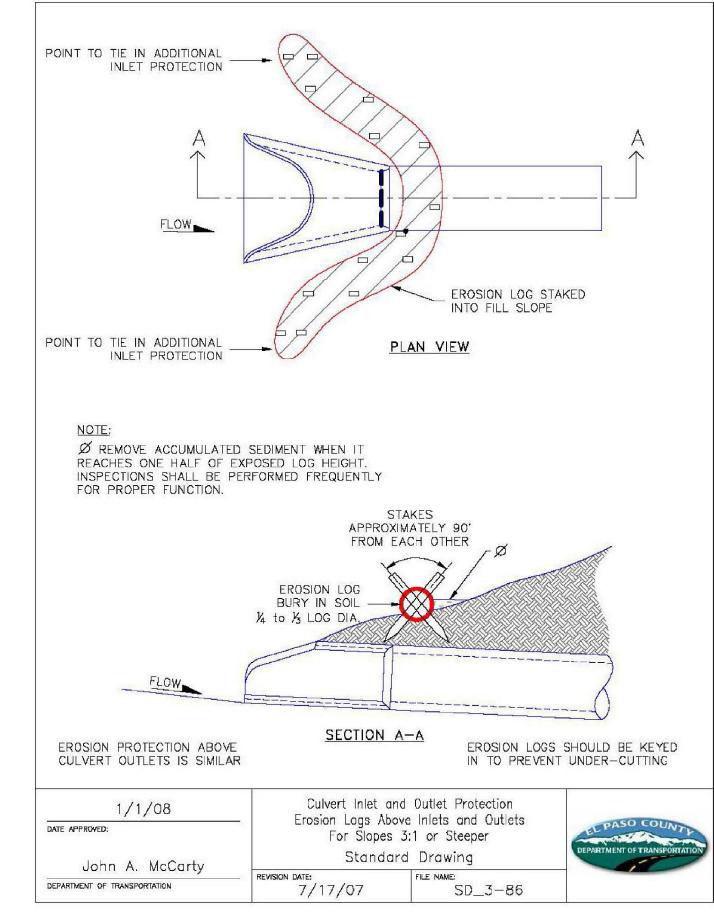




30 60







CREST LENGTH, C

CHECK DAM ELEVATION VIEW

SECTION A

SECTION B

CD-1. CHECK DAM

TOP OF CHECK DAM

GRADE

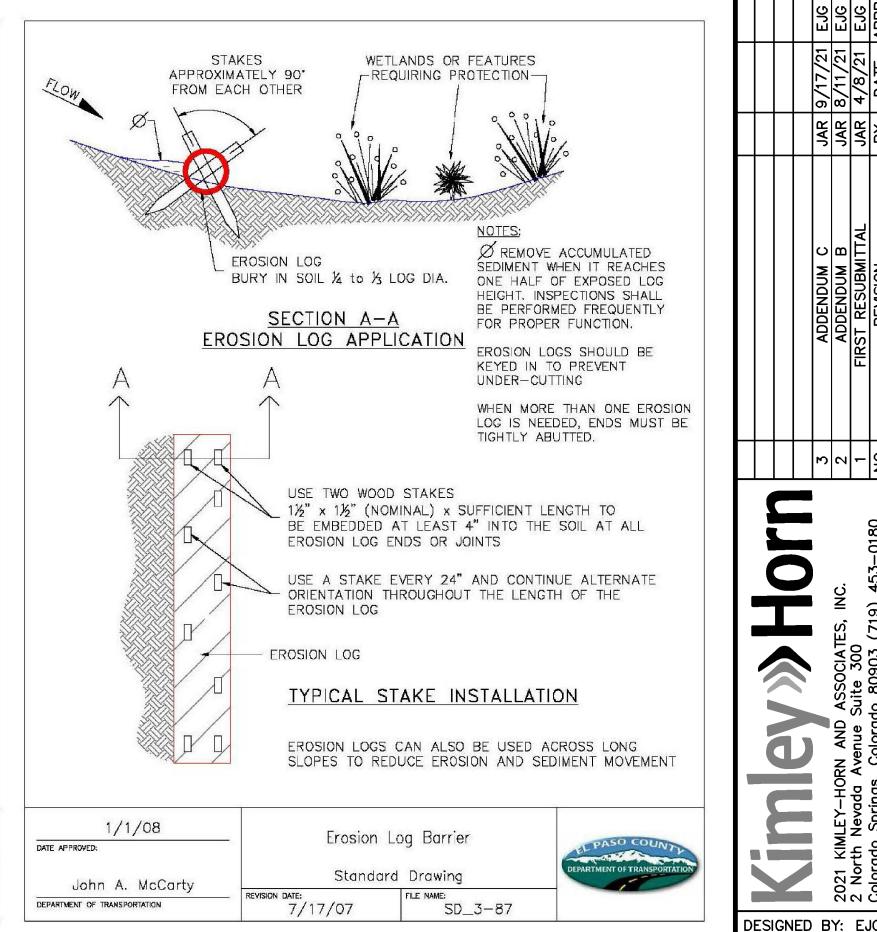
EXCAVATION TO NEAT

- CHANNEL GRADE

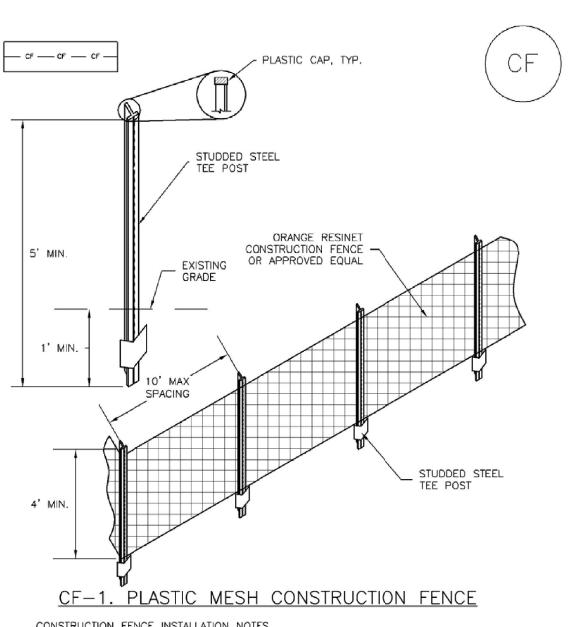
EXCAVATION TO NEAT

- LINE, AVOID OVER-EXCAVATION

- LINE, AVOID OVER-EXCAVATION,







CONSTRUCTION FENCE INSTALLATION NOTES

1. SEE PLAN VIEW FOR: -LOCATION OF CONSTRUCTION FENCE.

CF-2

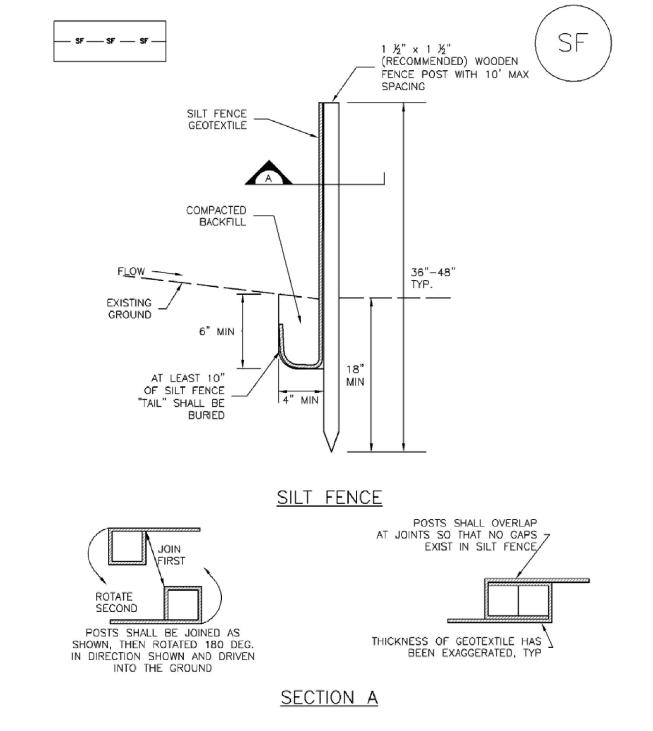
2. CONSTRUCTION FENCE SHOWN SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING

3. CONSTRUCTION FENCE SHALL BE COMPOSED OF ORANGE, CONTRACTOR-GRADE MATERIAL THAT IS AT LEAST 4' HIGH. METAL POSTS SHOULD HAVE A PLASTIC CAP FOR SAFETY. 4. STUDDED STEEL TEE POSTS SHALL BE UTILIZED TO SUPPORT THE CONSTRUCTION FENCE. MAXIMUM SPACING FOR STEEL TEE POSTS SHALL BE 10'.

5. CONSTRUCTION FENCE SHALL BE SECURELY FASTENED TO THE TOP, MIDDLE, AND BOTTOM OF EACH POST.

Silt Fence (SF)

SC-1



SF-1. SILT FENCE

SF-3

**Check Dams (CD)** 

COMPACTED

BACKFILL, -(TYP.)

FLOW - MIN.

1' MIN.

D50 = 12" RIPRAP, TYPE M OR

MD-7, MAJOR DRAINAGE, VOL.

FLOW -

1' MIN.

D50 = 12" RIPRAP, TYPE M OR TYPE L D50=9" (SEE TABLE MD-7,

MAJOR DRAINAGE, VOL. 1 FOR

TYPE L D50= 9" (SEE TABLE

FOR GRADATION)

GRADATION)

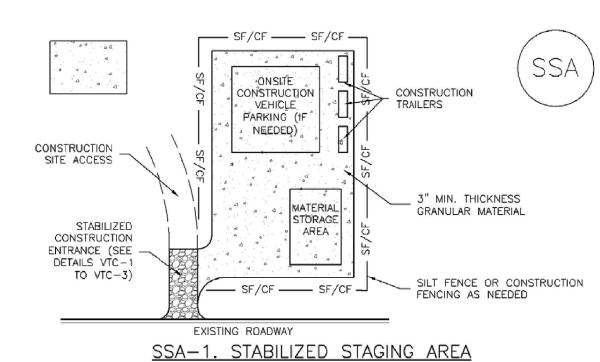
CHANNEL GRADE

UPSTREAM AND -

DOWNSTREAM

**EC-12 Stabilized Staging Area (SSA)** 

**SM-6** 



STABILIZED STAGING AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR

-LOCATION OF STAGING AREA(S). -CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.

2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.

3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.

4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR

5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

6. ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

STABILIZED STAGING AREA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE

# 3. WHERE BMPS HRECORD DRAWING

DISCOVERY OF 4. ROCK SHALL BETHIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGE UNDERLYING SUBG DURING THE CONSTRUCTION PROCESS REPORTED BY THE CONTRACTOR TO KIMLEY-HORN AND ASSOCIATES, INC. THIS DRAWING IS NOT GURANTEED TO BE "AS BUILT" BUT IS BASED ON THE INFORMATION MADE AVAILABLE

November 2010

Urba 11/20/23 ERIC GUNDERSON, PE



DRAWN BY: JAF

CHECKED BY: EJG

DATE: 9/17/21

AND AND SAND



PROJECT NO. 096302009

SHEET

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CHANNEL GRADE

CD-3

RIPRAP PAD

DIAMETER,

SINGLE

SCHEDULE 40

- EXCAVATION

**FMBANKMENT** 

August 2013

August 2013

**Inlet Protection (IP)** 

MATERIAL

TYPE L. (SEE TABLE

DRAINAGE, VOL. 1)

MD-7, MAJOR

PVC OR GREATER

COLUMN OF FIVE

SHALL ENTER AT FURTHEST

DISTANCE TO OUTLET AND SHALL

CONSIST OF A TEMPORARY SLOPE

SEDIMENT BASIN PLAN

\*EXCEPT WHERE THE HOLES EXCEED 1" DIAMETER, THEN UP TO TWO COLUMNS

OF SAME SIZED HOLES MAY BE USED

SECTION A

CREST LENGTH

EL. 03.00 AT CREST

D50=9" RIPRAP TYPE L

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SB-6

**SC-6** 

Caracaca Caracaca

SOCKS /

CURB SOCK -

FLOW --

SB-5

**SC-6** 

SIDEWALK OR OTHER

ROADWAY

COMPACTED SUBGRADE

O" ON BEDROCK OR

HARD SURFACE, 2

ROCK SOCK SECTION

ROCK SOCK JOINTING

ROCK SOCK INSTALLATION NOTES

-LOCATION(S) OF ROCK SOCKS.

SEE PLAN VIEW FOR:

IN SOIL

INSTALL ROCK FLUSH WITH

OR BELOW TOP OF PAVEMENT

PAVED SURFACE

75' MIN

20 FOOT

UNLESS OTHERWISE SPECIFIED

Y LOCAL JURISDICTION, USE

NON-WOVEN GEOTEXTILE

Rock Sock (RS)

1½" (MINUS) CRUSHED ROCK

ENCLOSED IN WIRE MESH

CDOT SECT. #703, AASHTO #3

COARSE AGGREGATE OR 6"

NON-WOVEN GEOTEXTILE FABRIC BETWEEN SOIL AND ROCK

MINUS ROCK

UNLESS OTHERWISE SPECIFIED BY LOCAL

#3 COARSE AGGREGATE

OR 6" MINUS ROCK

SECTION A

VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

1½" (MINUS) CRUSHED ROCK ENCLOSED IN WIRE MESH

WIRE TIE ENDS

GROUND SURFACE

JURISDICTION, USE COOT SECT. #703, AASHTO

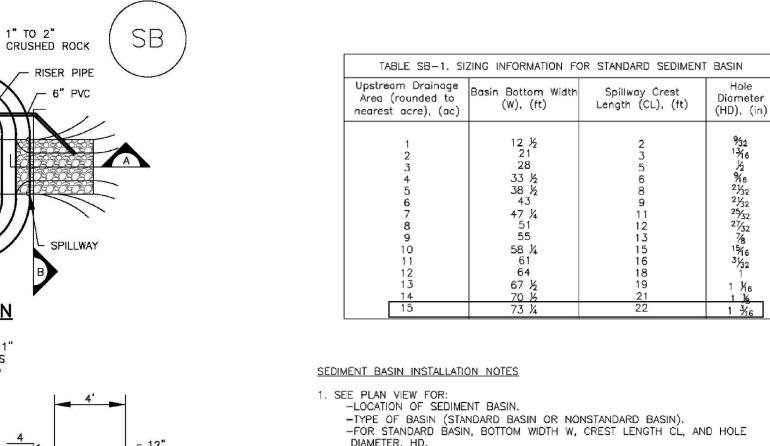
(WIDTH CAN BE

LESS IF CONST.

VEHICLES ARE PHYSICALLY CONFINED ON BOTH SIDES)

096302009

SHEET C 306



-FOR NONSTANDARD BASIN, SEE CONSTRUCTION DRAWINGS FOR DESIGN OF BASIN INCLUDING RISER HEIGHT H. NUMBER OF COLUMNS N, HOLE DIAMETER HD AND PIPE

2. FOR STANDARD BASIN, BOTTOM DIMENSION MAY BE MODIFIED AS LONG AS BOTTOM AREA IS NOT REDUCED.

3. SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO ANY OTHER LAND-DISTURBING ACTIVITY THAT RELIES ON ON BASINS AS AS A STORMWATER CONTROL.

4. EMBANKMENT MATERIAL SHALL CONSIST OF SOIL FREE OF DEBRIS, ORGANIC MATERIAL, AND

ROCKS OR CONCRETE GREATER THAN 3 INCHES AND SHALL HAVE A MINIMUM OF 15 PERCENT BY WEIGHT PASSING THE NO. 200 SIEVE. 5. EMBANKMENT MATERIAL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698

6. PIPE SCH 40 OR GREATER SHALL BE USED.

7. THE DETAILS SHOWN ON THESE SHEETS PERTAIN TO STANDARD SEDIMENT BASIN(S) FOR DRAINAGE AREAS LESS THAN 15 ACRES. SEE CONSTRUCTION DRAWINGS FOR EMBANKMENT, STORAGE VOLUME, SPILLWAY, OUTLET, AND OUTLET PROTECTION DETAILS FOR ANY SEDIMENT BASIN(S) THAT HAVE BEEN INDIVIDUALLY DESIGNED FOR DRAINAGE AREAS LARGER THAN 15 ACRES.

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SEE ROCK SOCK DESIGN

16" CINDER

IP-1. BLOCK AND ROCK SOCK SUMP OR ON GRADE

INLET PROTECTION

16" CINDER

2"x4" WOOD STUD -

CURB INLET

DETAIL FOR JOINTING

x4" WOOD

TWO CURB

IN THE OPPOSITE DIRECTION OF FLOW.

SOCKS APPROX 30 DEG.

BLOCKS

SP STOCKPILE SILT FENCE (SEE SF DETAIL FOR INSTALLATION REQUIREMENTS) STOCKPILE PROTECTION PLAN SILT FENCE (SEE SF DETAIL FOR INSTALLATION REQUIREMENTS) SECTION A

SP-1. STOCKPILE PROTECTION STOCKPILE PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR: -LOCATION OF STOCKPILES. -TYPE OF STOCKPILE PROTECTION.

2. INSTALL PERIMETER CONTROLS IN ACCORDANCE WITH THEIR RESPECTIVE DESIGN DETAILS. SILT FENCE IS SHOWN IN THE STOCKPILE PROTECTION DETAILS; HOWEVER, OTHER TYPES OF PERIMETER CONTROLS INCLUDING SEDIMENT CONTROL LOGS OR ROCK SOCKS MAY BE SUITABLE IN SOME CIRCUMSTANCES. CONSIDERATIONS FOR DETERMINING THE APPROPRIATE TYPE OF PERIMETER CONTROL FOR A STOCKPILE INCLUDE WHETHER THE STOCKPILE IS LOCATED ON A PERVIOUS OR IMPERVIOUS SURFACE, THE RELATIVE HEIGHTS OF THE PERIMETER CONTROL AND STOCKPILE, THE ABILITY OF THE PERIMETER CONTROL TO CONTAIN THE STOCKPILE WITHOUT FAILING IN THE EVENT THAT MATERIAL FROM THE STOCKPILE SHIFTS OR SLUMPS AGAINST THE PERIMETER, AND OTHER FACTORS.

3. STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOILS STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 60 DAYS) SHOULD BE SEEDED AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILE IS PLACED (TYPICALLY WITHIN 14 DAYS). USE OF MULCH ONLY OR A SOIL BINDER IS ACCEPTABLE IF THE STOCKPILE WILL BE IN PLACE FOR A MORE LIMITED TIME PERIOD (TYPICALLY 30-60 DAYS).

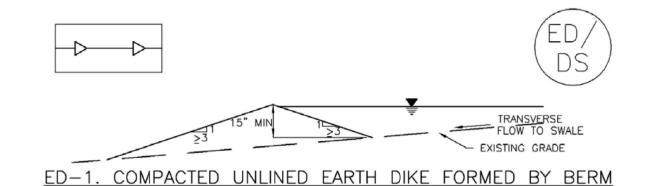
4. FOR TEMPORARY STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE, WHERE OTHER DOWNGRADIENT CONTROLS, INCLUDING PERIMETER CONTROL, ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

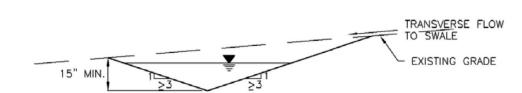
> VTC-3 November 2010 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

#### Earth Dikes and Drainage Swales (ED/DS) **EC-10**

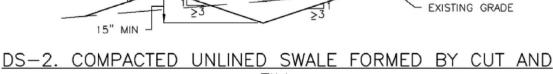
Urban Drainage and Flood Control District

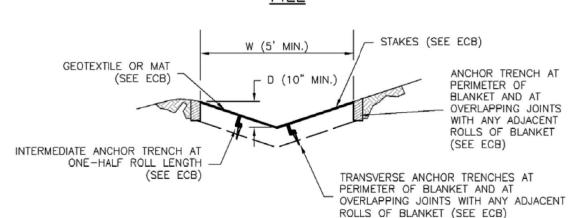
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DS-3. ECB LINED SWALE (CUT AND FILL OR BERM)

BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES COMPACTED UNLINED EXCAVATED SWALE 1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS. 2. CONCRETE "CINDER" BLOCKS SHALL BE LAID ON THEIR SIDES AROUND THE INLET IN A SINGLE ROW, ABUTTING ONE ANOTHER WITH THE OPEN END FACING AWAY FROM THE CURB. 3. GRAVEL BAGS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINTED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL. BLOCK AND ROCK SOCK INLET PROTECTION(SEE DETAIL IP-1) ROLLS OF BLANKET (SEE ECB) 2. PLACEMENT OF THE SOCK SHALL BE APPROXIMATELY 30 DEGREES FROM PERPENDICULAR

November 2010

August 2013

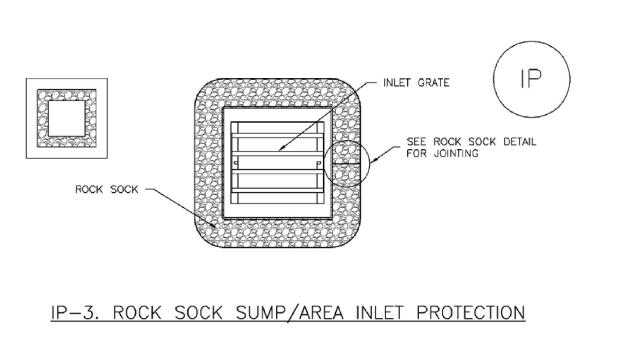
SOCKS

- SECTION A

**Inlet Protection (IP)** 

3'-5' TYP. IP-2. CURB ROCK SOCKS UPSTREAM OF INLET PROTECTION CURB ROCK SOCK INLET PROTECTION INSTALLATION NOTES 1. SEE ROCK SOCK DESIGN DETAIL INSTALLATION REQUIREMENTS.

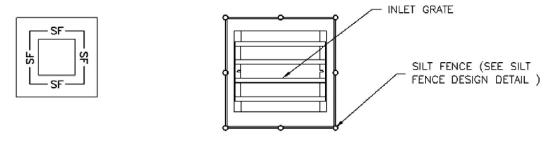
3. SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED A MINIMUM OF 5 FEET APART. 4. AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM OF ON-GRADE INLETS.



ROCK SOCK SUMP/AREA INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF ROCK SOCKS FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.



IP-4. SILT FENCE FOR SUMP INLET PROTECTION

SILT FENCE INLET PROTECTION INSTALLATION NOTES

1. SEE SILT FENCE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. POSTS SHALL BE PLACED AT EACH CORNER OF THE INLET AND AROUND THE EDGES AT A MAXIMUM SPACING OF 3 FEET.

3. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF SILT FENCE FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.

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ED/DS-3

SP-3

SC-5

(4858**3**(4558)

ROCK SOCK,

RS-2



Urban Storm Drainage Criteria Manual Volume 3

Urbai 11/20/23

ON THE INFORMATION MADE AVAILABLE. Urban ERIC GUNDERSON, PE

4" TO 6" MAX AT CURBS, OTHERWISE 6"-10" DEPENDING ON EXPECTED SEDIMENT LOADS ROCK SOCK PLAN ANY GAP AT JOINT SHALL BE FILLED WITH AN ADEQUATE AMOUNT OF 11/2" (MINUS) CRUSHED ROCK AND WRAPPED WITH ADDITIONAL WIRE MESH SECURED TO ENDS OF ROCK REINFORCED SOCK. AS AN ALTERNATIVE TO FILLING JOINTS BETWEEN ADJOINING ROCK SOCKS WITH CRUSHED ROCK AND ADDITIONAL WIRE WRAPPING, ROCK SOCKS CAN BE OVERLAPPED (TYPICALLY 12-INCH OVERLAP) TO AVOID GAPS.

GRADATION TABLE MASS PERCENT PASSING

SIEVE SIZE SQUARE MESH SIEVES NO. 4 90 - 1000 - 15MATCHES SPECIFICATIONS FOR NO. 4 COARSE AGGREGATE FOR CONCRETE PER AASHTO M43. ALL ROCK SHALL BE FRACTURED FACE, ALL SIDES.

2. CRUSHED ROCK SHALL BE 1½" (MINUS) IN SIZE WITH A FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON THIS SHEET (11/2" MINUS). 3. WIRE MESH SHALL BE FABRICATED OF 10 GAGE POULTRY MESH, OR EQUIVALENT, WITH A MAXIMUM OPENING OF 1/2", RECOMMENDED MINIMUM ROLL WIDTH OF 48"

4. WIRE MESH SHALL RE SECURED LISTING "HOC PINCS" OR WIRE TIES AT 6" CENTERS ALONG ALL JOINTS AND RECORD DRAWING

5. SOME MUNICIPALITIE MESH FOR THE ROCK

RS-1. THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES DURING THE CONSTRUCTION PROCESS REPORTED BY THE CONTRACTOR TO KIMLEY-HORN AND ASSOCIATES, INC. THIS DRAWING IS NOT GURANTEED TO BE "AS BUILT" BUT IS BASED

Seeding dates for the highest success probability of perennial species along the Front Range are generally in the spring from April through early May and in the fall after the first of September until the ground freezes. If the area is irrigated, seeding may occur in summer months, as well. See Table TS/PS-3 for appropriate seeding dates.

#### Table TS/PS-1. Minimum Drill Seeding Rates for Various Temporary Annual Grasses

Species <sup>a</sup> (Common name)	Growth Season <sup>b</sup>	Pounds of Pure Live Seed (PLS)/acre <sup>c</sup>	Planting Depth (inches)
1. Oats	Cool	35 - 50	1 - 2
2. Spring wheat	Cool	25 - 35	1 - 2
3. Spring barley	Cool	25 - 35	1 - 2
4. Annual ryegrass	Cool	10 - 15	1/2
5. Millet	Warm	3 - 15	1/2 - 3/4
6. Sudangrass	Warm	5–10	1/2 - 3/4
7. Sorghum	Warm	5–10	1/2 - 3/4
8. Winter wheat	Cool	20–35	1 - 2
9. Winter barley	Cool	20–35	1 - 2
10. Winter rye	Cool	20–35	1 - 2
11. Triticale	Cool	25–40	1 - 2

Successful seeding of annual grass resulting in adequate plant growth will usually produce enough dead-plant residue to provide protection from wind and water erosion for an additional year. This assumes that the cover is not disturbed or mowed closer than 8 inches.

Hydraulic seeding may be substituted for drilling only where slopes are steeper than 3:1 or where access limitations exist. When hydraulic seeding is used, hydraulic mulching should be applied as a separate operation, when practical, to prevent the seeds from being encapsulated in

See Table TS/PS-3 for seeding dates. Irrigation, if consistently applied, may extend the use of cool season species during the summer months.

Seeding rates should be doubled if seed is broadcast, or increased by 50 percent if done using a Brillion Drill or by hydraulic seeding.

#### Table TS/PS-2. Minimum Drill Seeding Rates for Perennial Grasses

Common <sup>a</sup> Name	Botanical Name	Growth Season <sup>b</sup>	Growth Form	Seeds/ Pound	Pounds of PLS/acre
Alakali Soil Seed Mix			-	•	
Alkali sacaton	Sporobolus airoides	Cool	Bunch	1,750,000	0.25
Basin wildrye	Elymus cinereus	Cool	Bunch	165,000	2.5
Sodar streambank wheatgrass	Agropyron riparium 'Sodar'	Cool	Sod	170,000	2.5
Jose tall wheatgrass	Agropyron elongatum 'Jose'	Cool	Bunch	79,000	7.0
Arriba western wheatgrass	Agropyron smithii 'Arriba'	Cool	Sod	110,000	5.5
Total					17.75
Fertile Loamy Soil Seed Mix					
Ephriam crested wheatgrass	Agropyron cristatum 'Ephriam'	Cool	Sod	175,000	2.0
Dural hard fescue	Festuca ovina 'duriuscula'	Cool	Bunch	565,000	1.0
Lincoln smooth brome	Bromus inermis leyss 'Lincoln'	Cool	Sod	130,000	3.0
Sodar streambank wheatgrass	Agropyron riparium 'Sodar'	Cool	Sod	170,000	2.5
Arriba western wheatgrass	Agropyron smithii 'Arriba'	Cool	Sod	110,000	7.0
Total					15.5
High Water Table Soil Seed Mix	(				
Meadow foxtail	Alopecurus pratensis	Cool	Sod	900,000	0.5
Redtop	Agrostis alba	Warm	Open sod	5,000,000	0.25
Reed canarygrass	Phalaris arundinacea	Cool	Sod	68,000	0.5
Lincoln smooth brome	Bromus inermis leyss 'Lincoln'	Cool	Sod	130,000	3.0
Pathfinder switchgrass	Panicum virgatum 'Pathfinder'	Warm	Sod	389,000	1.0
Alkar tall wheatgrass	Agropyron elongatum 'Alkar'	Cool	Bunch	79,000	5.5
Total					10.75
Transition Turf Seed Mix <sup>c</sup>					
Ruebens Canadian bluegrass	Poa compressa 'Ruebens'	Cool	Sod	2,500,000	0.5
Dural hard fescue	Festuca ovina 'duriuscula'	Cool	Bunch	565,000	1.0
Citation perennial ryegrass	Lolium perenne 'Citation'	Cool	Sod	247,000	3.0
Lincoln smooth brome	Bromus inermis leyss 'Lincoln'	Cool	Sod	130,000	3.0
Total					7.5

#### **Table TS/PS-2.** Minimum Drill Seeding Rates for Perennial Grasses (cont.)

Common Name	Botanical Name	Growth Season <sup>b</sup>	Growth Form	Seeds/ Pound	Pounds of PLS/acre
Sandy Soil Seed Mix			1		
Blue grama	Bouteloua gracilis	Warm	Sod-forming bunchgrass	825,000	0.5
Camper little bluestem	Schizachyrium scoparium 'Camper'	Warm	Bunch	240,000	1.0
Prairie sandreed	Calamovilfa longifolia	Warm	Open sod	274,000	1.0
Sand dropseed	Sporobolus cryptandrus	Cool	Bunch	5,298,000	0.25
Vaughn sideoats grama	Bouteloua curtipendula 'Vaughn'	Warm	Sod	191,000	2.0
Arriba western wheatgrass	Agropyron smithii 'Arriba'	Cool	Sod	110,000	5.5
Total					10.25
Heavy Clay, Rocky Foothill Seed	l Mix				
Ephriam crested wheatgrass <sup>d</sup>	Agropyron cristatum 'Ephriam'	Cool	Sod	175,000	1.5
Oahe Intermediate wheatgrass	Agropyron intermedium 'Oahe'	Cool	Sod	115,000	5.5
Vaughn sideoats grama <sup>e</sup>	Bouteloua curtipendula 'Vaughn'	Warm	Sod	191,000	2.0
Lincoln smooth brome	Bromus inermis leyss 'Lincoln'	Cool	Sod	130,000	3.0
Arriba western wheatgrass	Agropyron smithii 'Arriba'	Cool	Sod	110,000	5.5
Total					17.5

- All of the above seeding mixes and rates are based on drill seeding followed by crimped straw mulch. These rates should be doubled if seed is broadcast and should be increased by 50 percent if the seeding is done using a Brillion Drill or is applied through hydraulic seeding. Hydraulic seeding may be substituted for drilling only where slopes are steeper than 3:1. If hydraulic seeding is used, hydraulic mulching should be done as a separate operation.
- See Table TS/PS-3 for seeding dates.
- If site is to be irrigated, the transition turf seed rates should be doubled.
- Crested wheatgrass should not be used on slopes steeper than 6H to 1V.
- Can substitute 0.5 lbs PLS of blue grama for the 2.0 lbs PLS of Vaughn sideoats grama.

#### Table TS/PS-3. Seeding Dates for Annual and Perennial Grasses

	(Numbers in	l Grasses table reference able TS/PS-1)	Perennial Grasses		
Seeding Dates	Warm	Cool	Warm	Cool	
January 1–March 15			✓	✓	
March 16–April 30	4	1,2,3	✓	✓	
May 1–May 15	4		✓		
May 16–June 30	4,5,6,7				
July 1–July 15	5,6,7				
July 16–August 31					
September 1–September 30		8,9,10,11			
October 1–December 31			✓	✓	

Cover seeded areas with mulch or an appropriate rolled erosion control product to promote establishment of vegetation. Anchor mulch by crimping, netting or use of a non-toxic tackifier. See the Mulching BMP Fact Sheet for additional guidance.

#### **Maintenance and Removal**

Monitor and observe seeded areas to identify areas of poor growth or areas that fail to germinate. Reseed and mulch these areas, as needed.

An area that has been permanently seeded should have a good stand of vegetation within one growing season if irrigated and within three growing seasons without irrigation in Colorado. Reseed portions of the site that fail to germinate or remain bare after the first growing season.

Seeded areas may require irrigation, particularly during extended dry periods. Targeted weed control may

Protect seeded areas from construction equipment and vehicle access.

June 2012

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- CLASS 1 COMPOST FILTER BERM

TABLE CB-1. CLASS 1 COMPOST

6.0 - 8.0

80+/80+

30-60%

CHARACTERISTIC

STABLE TO VERY STABLE

MAXIMUM 5 mmhos/cm

YES/NEGATIVE RESULT

STA + CLOPYRALID

CB-1. COMPOST BLANKET AND COMPOST FILTER BERM

3" (75mm) 100% PASSING

COMPLY WITH US EPA CLASS A STANDARD, 40 CFR 503.1 TABLES 1 & 3 LEVELS

FULLY PERMITTED UNDER COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, HAZARDOUS

MATERIALS AND WASTE MANAGEMENT DIVISION

1" TO 3" THICK (2" TYP.) STA CERTIFIED CLASS 1 COMPOST BLANKET TS/PS-4

TS/PS-3

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

June 2012

June 2012

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 TS/PS-6

TS/PS-5

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 DRAWN BY: JAF CHECKED BY: EJG DATE: 9/17/21

DESIGNED BY: EJG

گن. AND AND (بې)

Compost Blanket and Filter Berm (CB)

PROPER SOIL PREPARATION

WHEN APPROPRIATE

MINIMUM STABILITY INDICATOR

MATURITY INDICATOR EXPRESSED AS

AMMONIA N/ NITRATE N RATIO

MATURITY INDEX AS CARBON TO NITROGEN RATIO

TESTED FOR CLOPYRALID

ORGANIC MATTER CONTENT

PARTICLE SIZE DISTRIBUTION

TESTING AND TEST REPORT SUBMITTAL

MINIMUM MANUFACTURING/PRODUCTION REQUIREMENT

RISK FACTOR RELATING TO PLANT

ORGANIC MATTER PER CUBIC YARD

MOISTURE CONTENT

ELEMENTS

PERCENTAGE OF GERMINATION/VIGOR

PARAMETERS

AG INDEX

SOLUBLE SALTS

**EC-5** 

#### **Compost Blanket and Filter Berm (CB)**

ANDSCAPING OR OTHER OBJECTS OR IN AREAS WHERE A SMOOTH TURF GRASS FINISH IS

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE

DISCOVERY OF THE FAILURE.

RILLING IN THE COMPOST SURFACE OCCURS.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

COMPOST FILTER BERM AND COMPOST BLANKET INSTALLATION NOTES

1. SEE PLAN VIEW FOR -LOCATION OF COMPOST FILTER BERM(S) -LENGTH OF COMPOST FILTER BERM(S)

2. COMPOST BERMS AND BLANKETS MAY BE USED IN PLACE OF STRAW MULCH OR GEOTEXTILE FABRIC IN AREAS WHERE ACCESS TO LANDSCAPING IS DIFFICULT DUE TO

(DETAILS ADAPTED FROM ARAPAHOE COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

RECORD DRAWING

THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGE DURING THE CONSTRUCTION PROCESS REPORTED BY THE CONTRACTOR TO KIMLEY-HORN AND ASSOCIATES, INC. THIS DRAWING IS NOT GURANTEED TO BE "AS BUILT" BUT IS BASED ON THE INFORMATION MADE AVAILABLE.

11/20/23

ERIC GUNDERSON, PE

3. FILTER BERMS SHALL RUN PARALLEL TO THE CONTOUR. 4. FILTER BERMS SHALL BE A MINIMUM OF 1 FEET HIGH AND 2 FEET WIDE. 5. FILTER BERMS SHALL BE APPLIED BY PNEUMATIC BLOWER OR BY HAND. 6. FILTER BERMS SHALL ONLY BE UTILIZED IN AREAS WHERE SHEET FLOW CONDITIONS PREVAIL AND NOT IN AREAS OF CONCENTRATED FLOW. 7. COMPOST BLANKETS SHALL BE APPLIED AT A DEPTH OF 1 -3 INCHES (TYPICALLY 2 INCHES). FOR AREAS WITH EXISTING VEGETATION THAT ARE TO BE SUPPLEMENTED BY COMPOST, A THIN 0.5-INCH LAYER MAY BE USED. 8. SEEDING SHALL BE PERFORMED PRIOR TO THE APPLICATION OF COMPOST. ALTERNATIVELY, SEED MAY BE COMBINED WITH COMPOST AND BLOWN WITH THE PNEUMATIC BLOWER. 9. WHEN TURF GRASS FINISH IS NOT DESIRED, SURFACE ROUGHENING ON SLOPES SHALL TAKE PLACE PRIOR TO COMPOST APPLICATION. 10. COMPOST SHALL BE A CLASS 1 COMPOST AS DEFINED BY TABLE CB-1. COMPOST FILTER BERM MAINTENANCE NOTES 1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE

> DOCUMENTED THOROUGHLY. 3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON

4. COMPOST BERMS AND BLANKETS SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF

November 2010 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

PRIMARY, SECONDARY NUTRIENTS; TRACE MUST BE REPORTED

CB-3

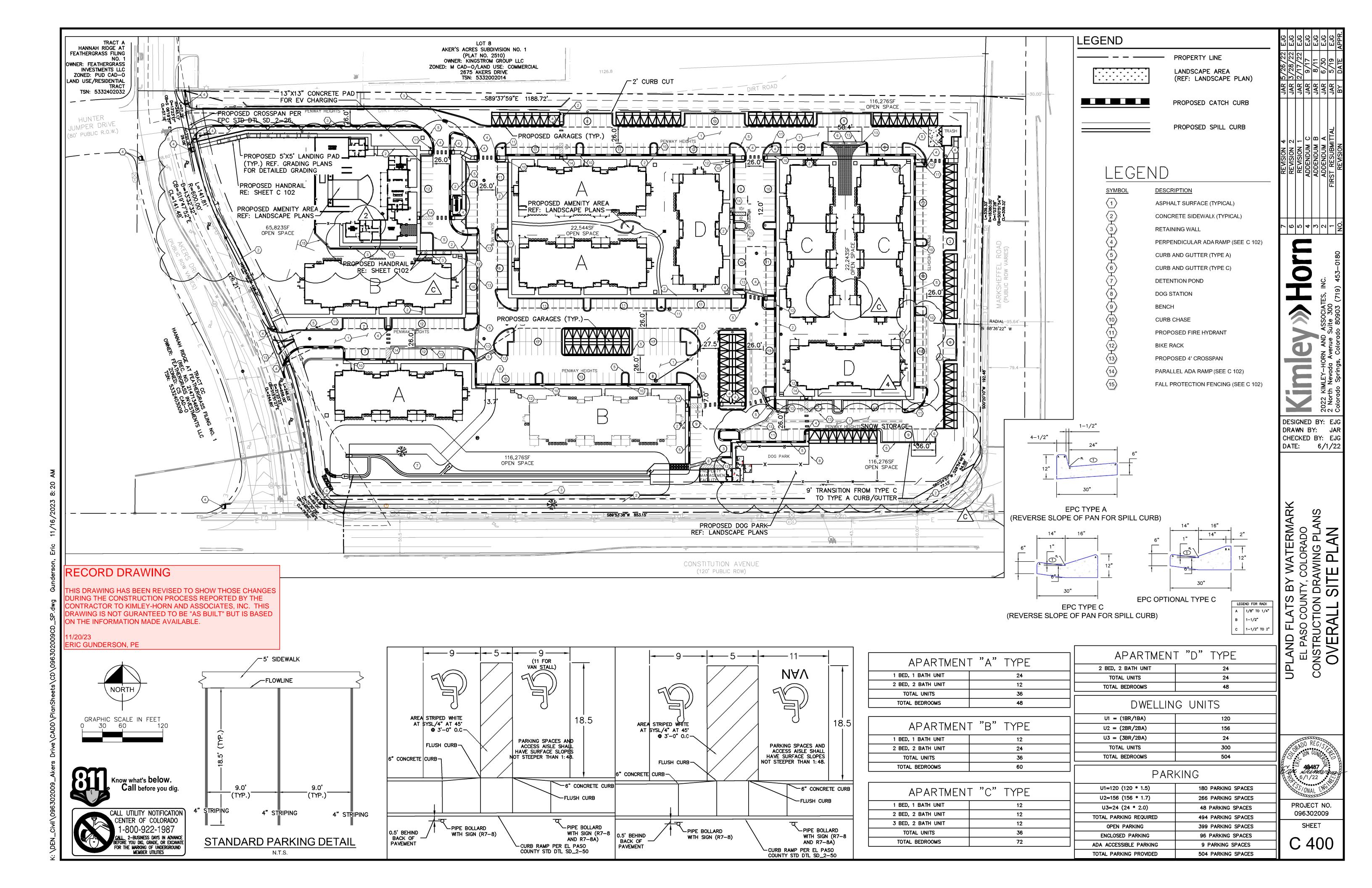
Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

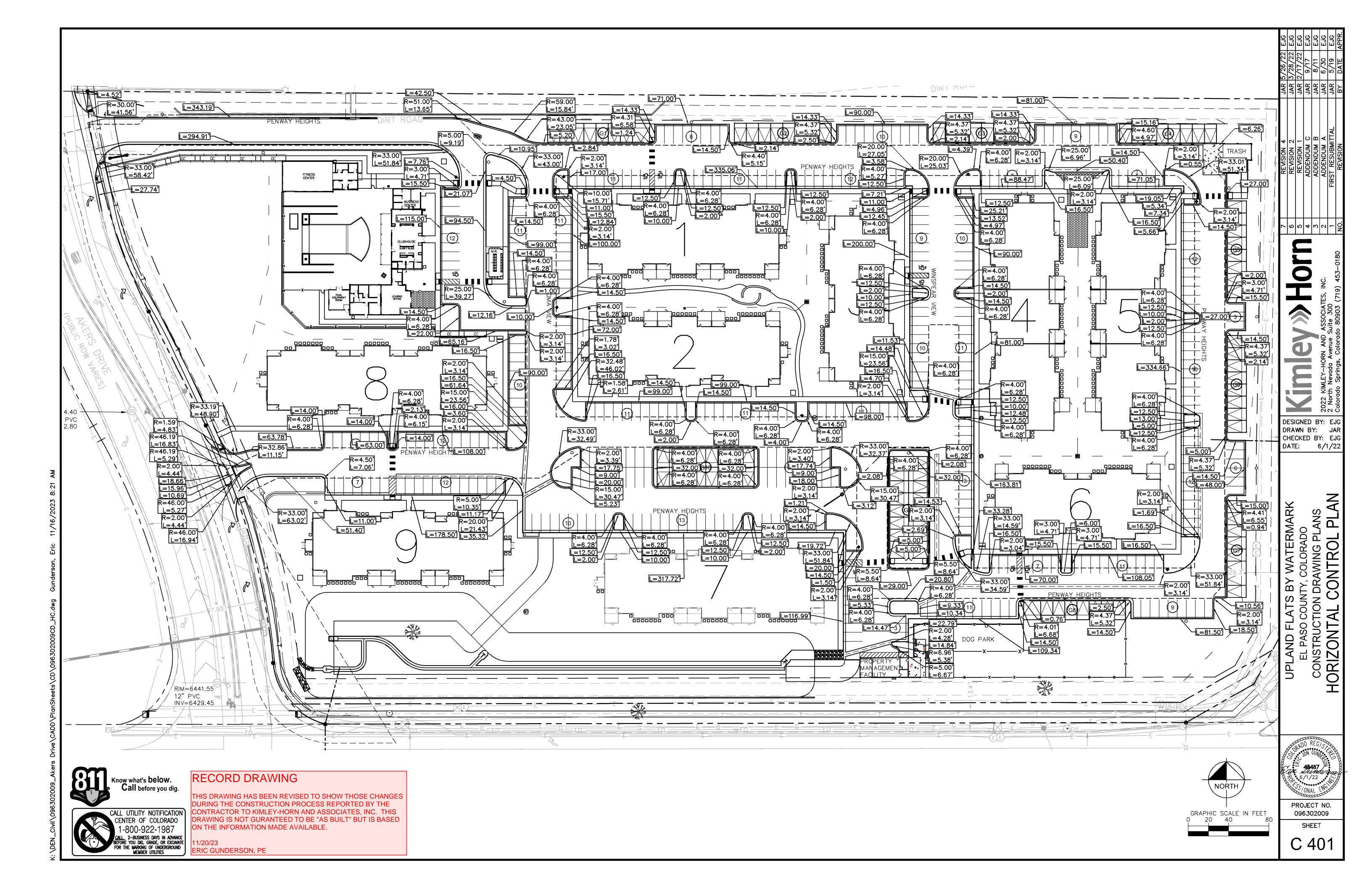
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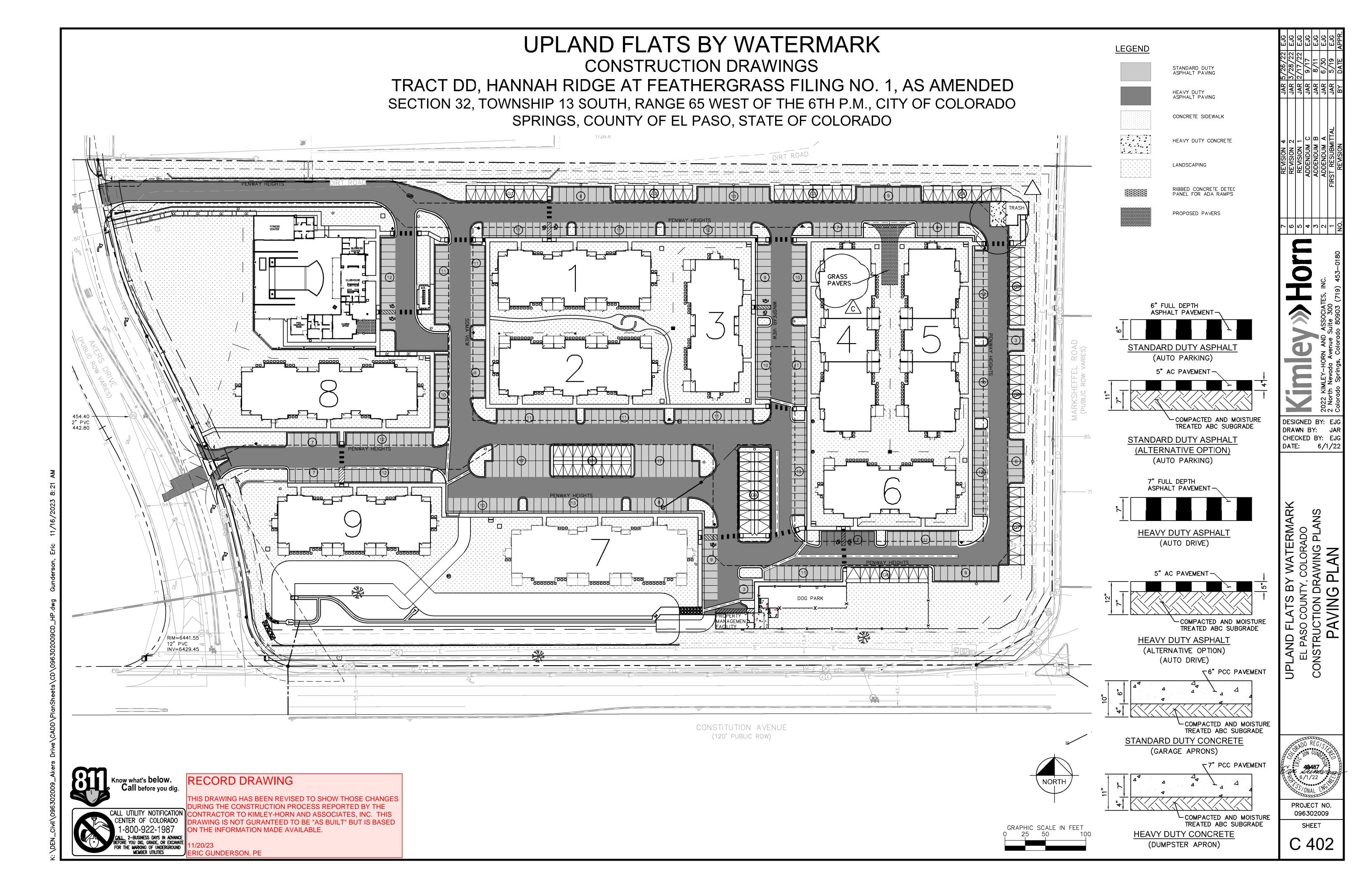


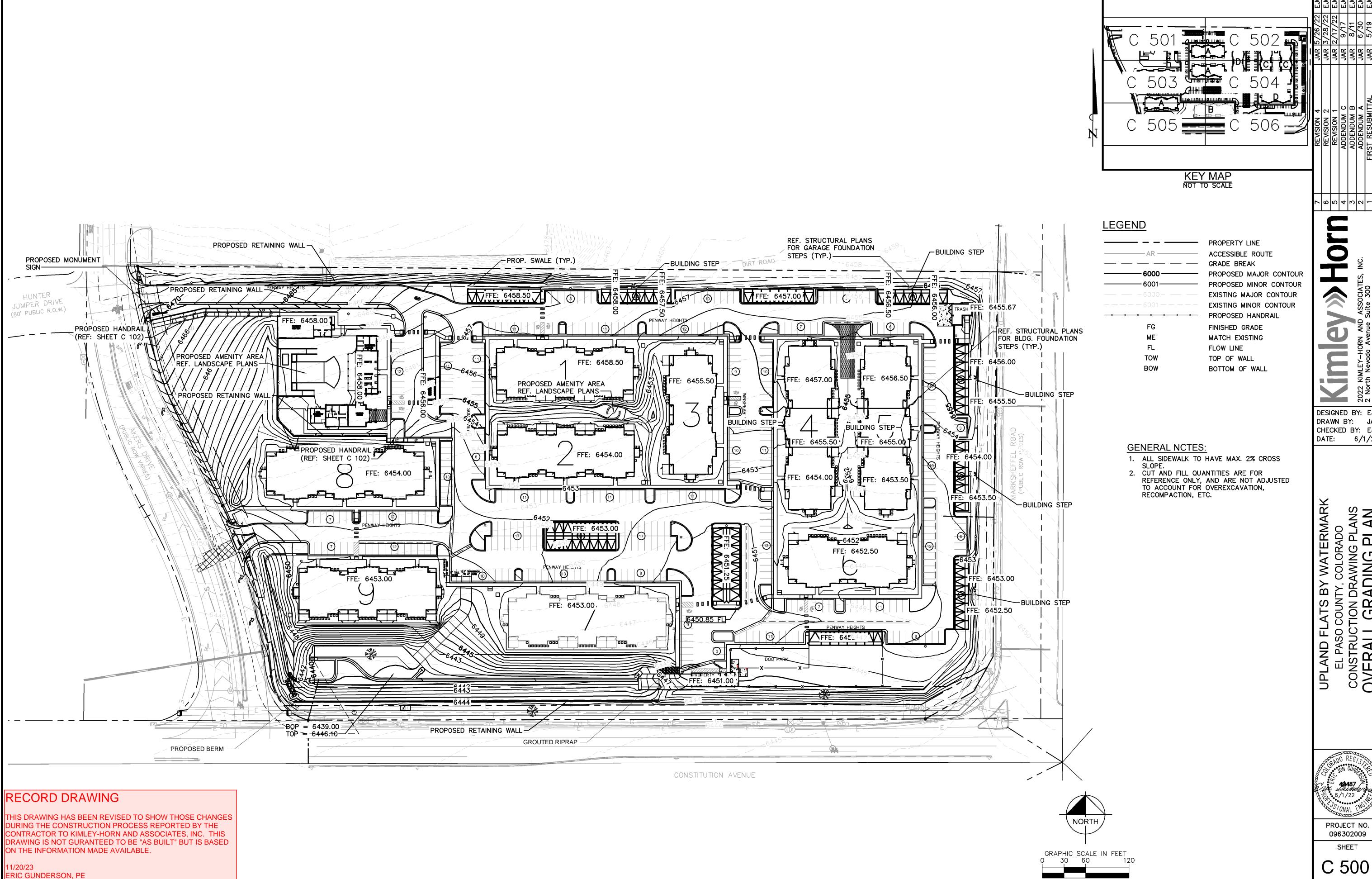
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SHEET







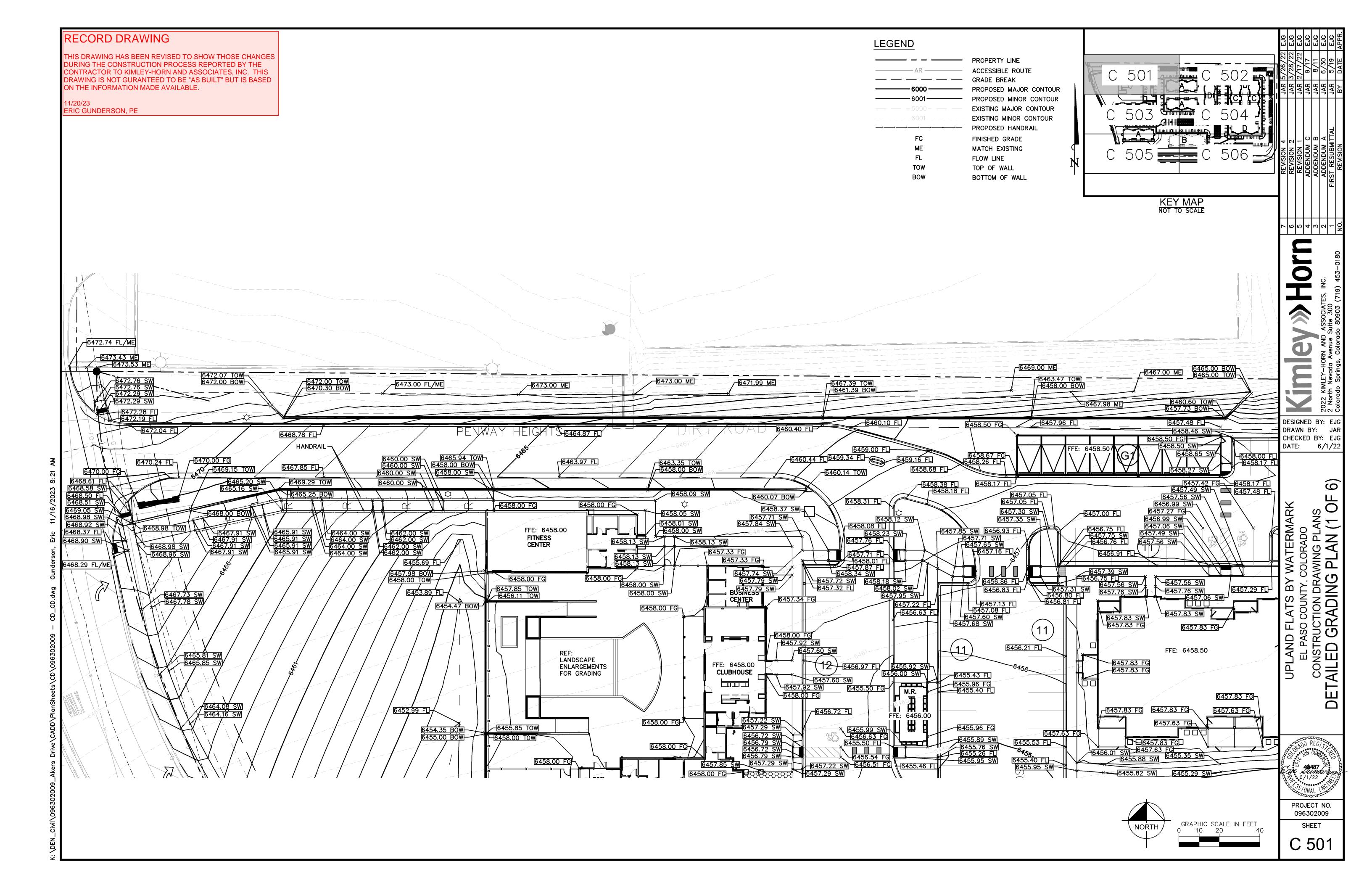


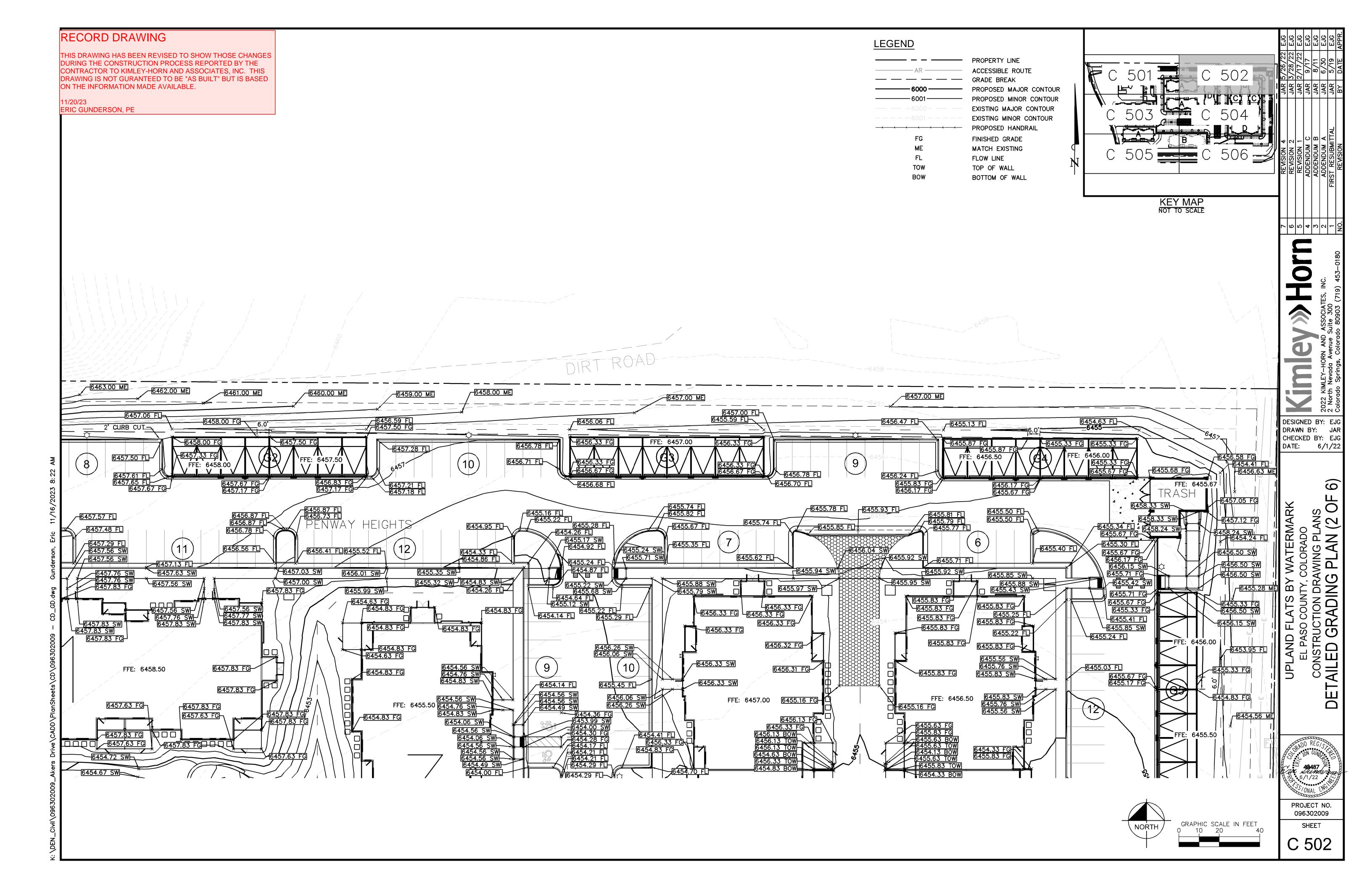
DESIGNED BY: EJO

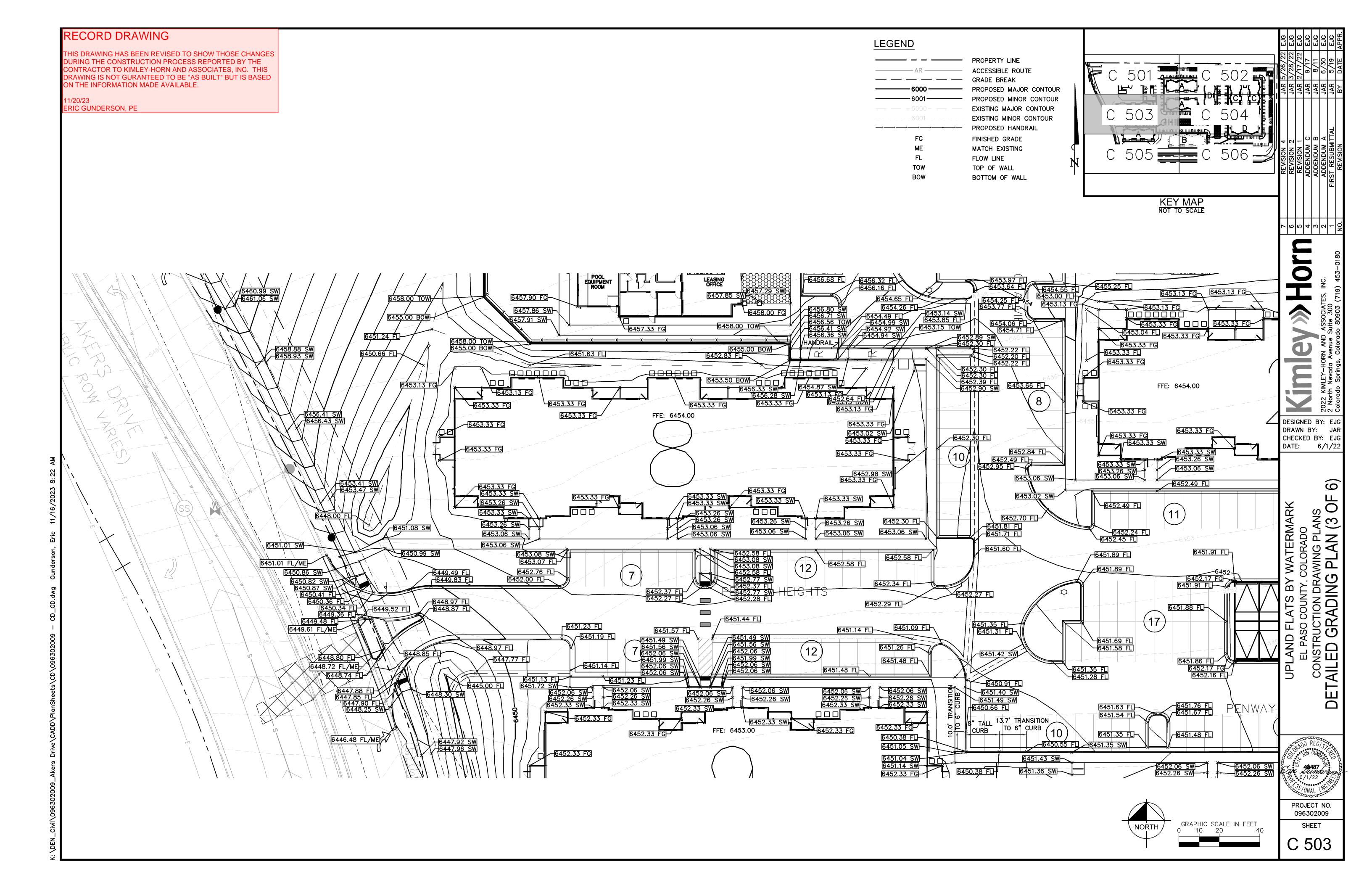
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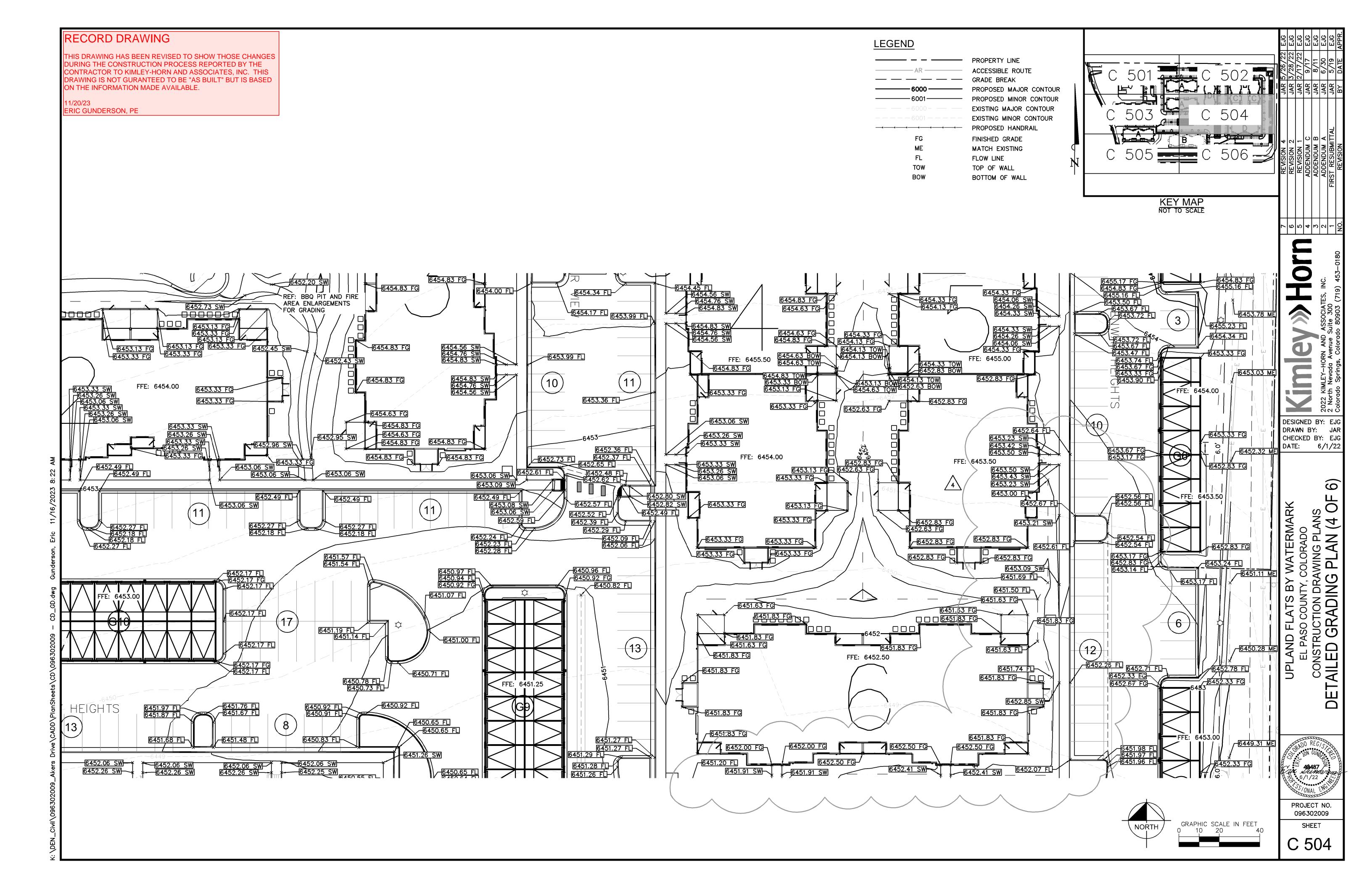
TION DRAWING PLANS GRADING PLAN CONSTRUCT
OVERALL

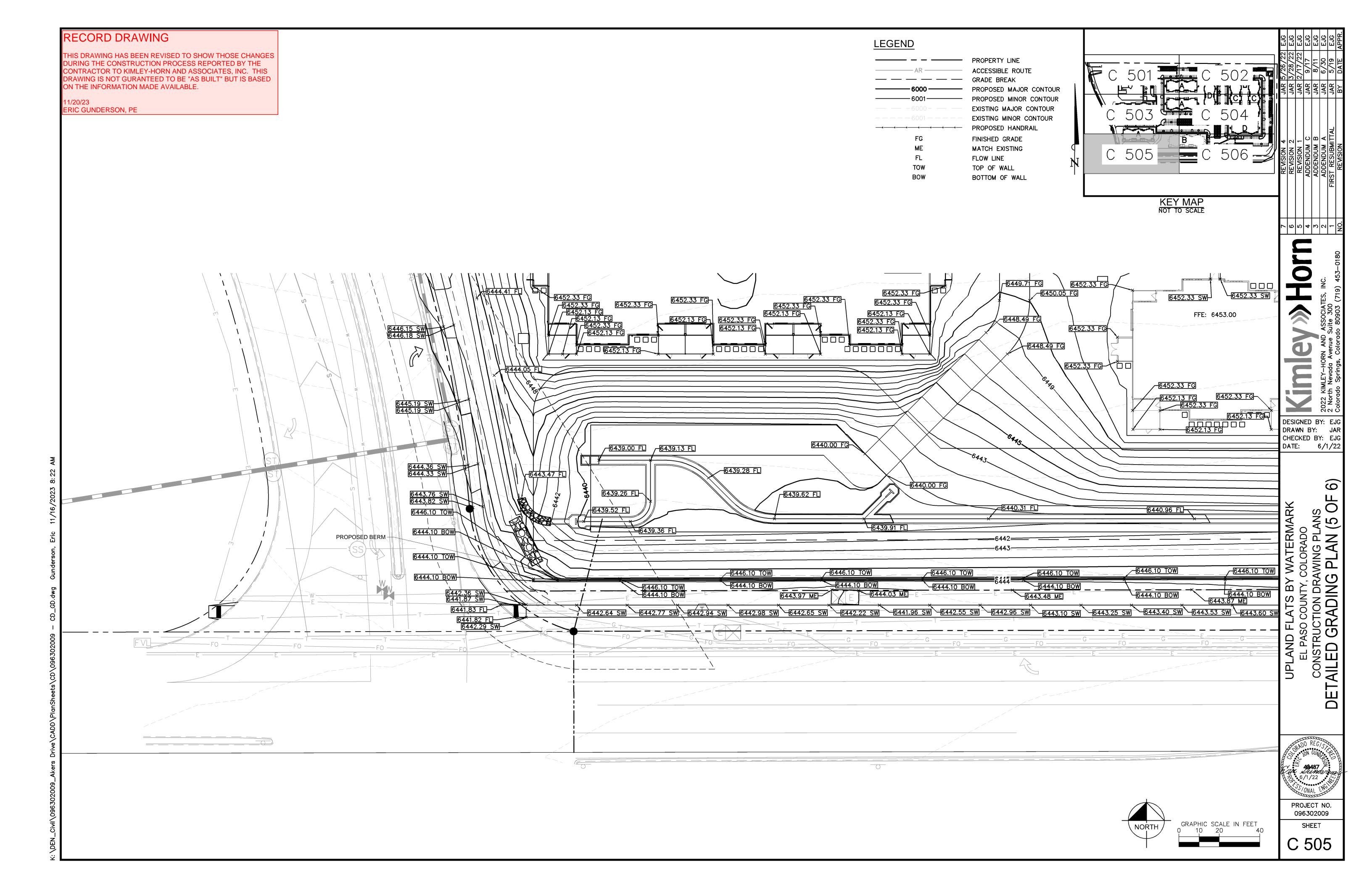
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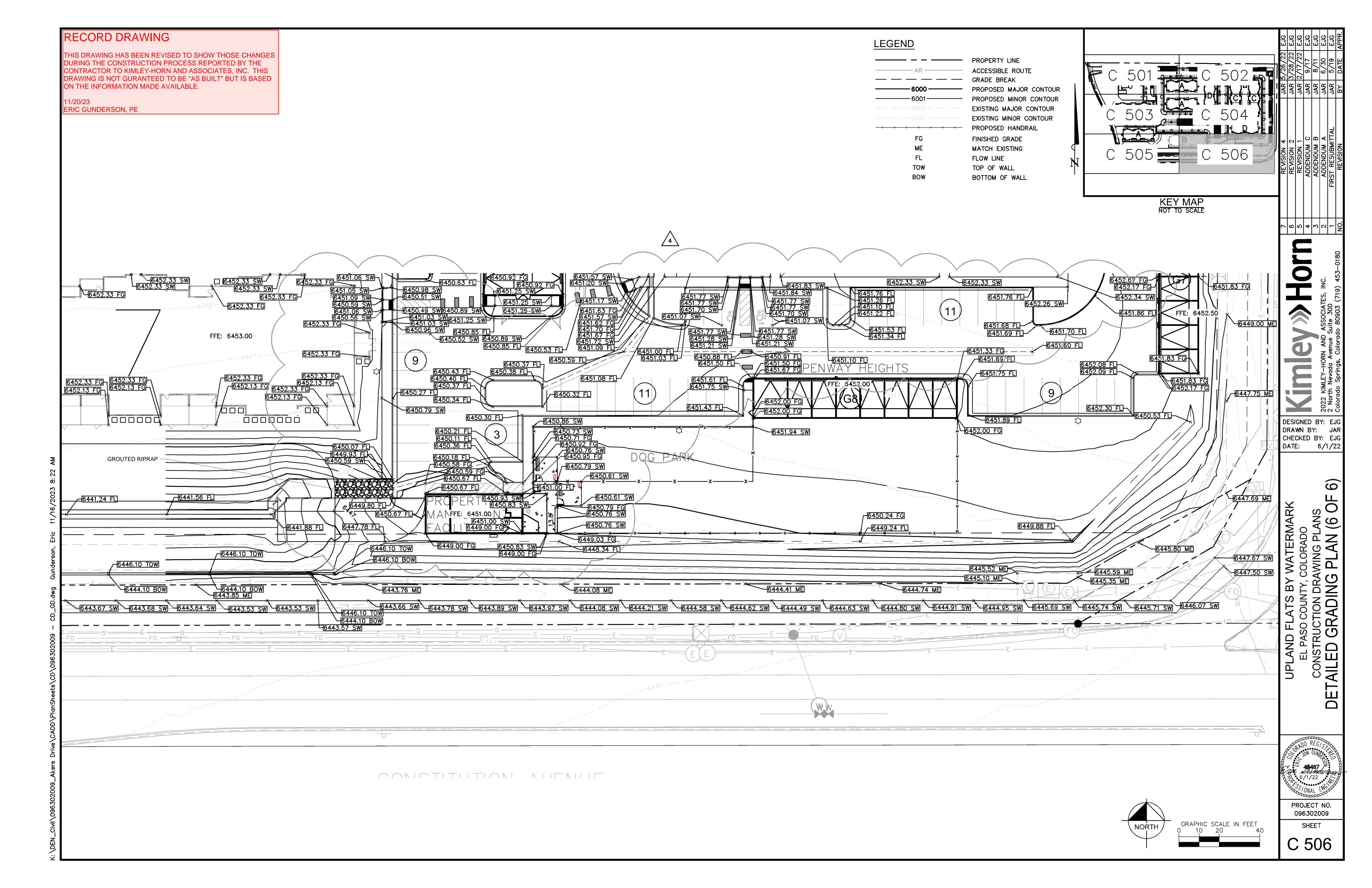












TRACT DD, HANNAH RIDGE AT FEATHERGRASS FILING NO. 1, AS AMENDED SECTION 32, TOWNSHIP 13 SOUTH, RANGE 65 WEST OF THE 6TH P.M., CITY OF COLORADO

SPRINGS, COUNTY OF EL PASO, STATE OF COLORADO

LAND AREA:

670,487 SQ, FT, OR 15,392 ACRES MORE OR LESS

#### BASIS OF BEARING:

BEARINGS ARE BASED UPON, AND IS ASSUMED TO BEAR S 89'37'59" E, A MEASURED DISTANCE OF 1188.72 FEET FOR THE NORTH LINE OF THE SUBJECT TRACT DD, SAID LINE BEING MINUMENTED ON THE WEST END BY A § METAL PIN WITH A YELLOW PLASTIC CAP STAMPED "PLS 36567".

#### BENCHMARK/ PROJECT CONTROL

ELEVATIONS ARE BASED UPON COLORADO SPRINGS UTILITY FIMS CONTROL POINT "BLT104". DESCRIBED AS A 2" ALUMINUM CAP SET AT THE NORTHEAST TOP OF THE NORTH HEADWALL OF A BOX CULVERT AT THE FIRST CREEK CROSSING EAST OF MARKSHEFFEL ROAD, UNDER CONSTITUTION AVENUE, APPROXIMATELY 1400' EAST AND 70' NORTH OF THE SOUTHEAST CORNER OF THE SUBJECT 32. THE ELEVATION OF SAID BENCHMARK IS 6452.43, NGVD 29 VERTICAL DATUM.

#### LEGAL DESCRIPTION

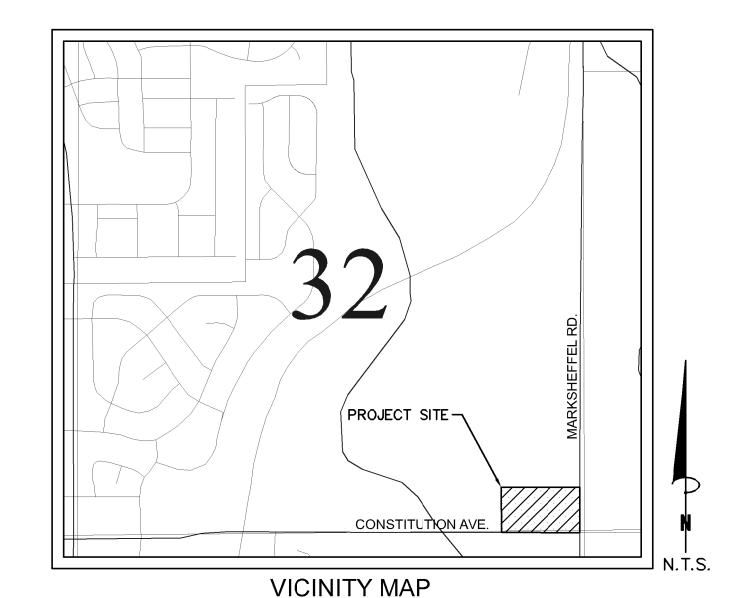
TRACT DD OF HANNAH RIDGE AT FEATHERGRASS FILING NO. 1, A PORTION OF HTE SOUTHEAST QUARTER OF SECTION 32, TOWNSHIP 13 SOUTH, RANGE 65 WEST OF THE 6TH P.M. EL PASO COUNTY, STATE OF COLORADO

#### FLOOD ZONE DESIGNATION

FEDERAL EMERGENCY MANAGEMENT AGENCY, FLOOD INSURANCE RATE MAP NO. 08041C0756G EFFECTIVE DATE DECEMBER 7, 2018 INDICATES THIS PARCEL OF LAND IS LOCATED IN ZONE X (OUTSIDE THE 500 YEAR FLOODPLAIN)

#### **GENERAL NOTES**

1. BASED ON ELEVATION DATA, THE APPLICANT WILL NEED TO FILE FEDERAL AVIATION ADMINISTRATION (FAA) FORM 7460-1 "NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION" FOR ANY NEW VERTICAL DEVELOPMENT AT THIS SITE, INCLUDING TEMPORARY CONSTRUCTION EQUIPMENT, AND PROVIDE FAA DOCUMENTATION TO THE AIRPORT BEFORE THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES; FAA'S WEBSITE (HTTPS: //OEAAA.FAA.GOV/OEAAA/EXTERNAL/PORTAL.ISP).



N.T.S

Sheet List Table

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C 600	UTILITY COVER SHEET
C 601	NOTES
C 602	NOTES
C 603	OVERALL UTILITY PLAN
C 604	UTILITY SERVICE PLAN
C 605	UTILITY SERVICE PLAN
C 606	UTILITY SERVICE PLAN
C 607	UTILITY SERVICE PLAN
C 608	OVERALL WATER PLAN
C 609	WATER PLAN
C 610	WATER PLAN
C 611	WATER PLAN
C 612	WATER PLAN
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C 619	OVERALL STORM PLAN
C 620	STORM SEWER PLAN & PROFILE LINE A
C 621	STORM PLAN AND PROFILE LINE A
C 622	STORM PLAN AND PROFILE LINE A
C 623	STORM PLAN AND PROFILE LINE B & C
C 624	AMENITY SPACE STORM SEWER

OVERALL DRY UTILITY PLAN

POND DETAILS

C 625

C 626

#### CONTACTS:

DEVELOPER:
WATERMARK AT CO SPRINGS AKERS CO, LLC.
111 MONUMENT CIRCLE, SUITE 1500

ENGINEER:
KIMLEY—HORN AND ASSOCIATES, INC.
2 NEVADA NORTH AVE., SUITE 300 INDIANAPOLIS, IN 46204 TEL: (720) 495-3693 CONTACT: MONICA UNGER

SURVEYOR: BARRON LAND 2790 N. ACADEMY BLVD. SUITE 311 COLORADO SPRINGS, CO 80917 TEL: (719) 360-6827 CONTACT: SPENCER BARRON, PLS

COLORADO SPRINGS, CO 80903 TEL: (719) 453-0182 CONTACT: ERIC GUNDERSON, P.E.

EL PASO COUNTY: EL PASO COUNTY DEVELOPMENT SERVICES DEPARTMENT 2880 INTERNATIONAL CIRCLE, SUITE 110 COLORADO SPRINGS, CO 80910 PHONE: (719) 520-3600

#### **DEVELOPER'S SIGNATURE BLOCK**

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH ALL OF THE REQUIREMENTS SPECIFIED IN THESE DETAILED PLANS AND SPECIFICATIONS.

#### **ENGINEER'S SIGNATURE BLOCK**

THESE DETAILED PLANS AND SPEFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION, SAID PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED ROADWAY, DRAINAGE, GRADING AND EROSION CONTROL PLANS AND SPECIFICATIONS AND SAID PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH THE APPLICABLE MASTER DRAINAGE PLANS AND MASTER TRANSPORTATION PLANS. SAID PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR ROADWAY AND DRAINAGE FACILITIES ARE DESIGNED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THE DETAILED PLANS AND SPECIFICATIONS

9/17/2020 ERIC GUNDERSON, PE - KIMLEY-HORN AND ASSOCIATES, INC. DATE

#### EL PASO COUNTY REVIEW STATEMENT

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN DIMENSIONS AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTORS DISCRETION.

JENNIFER IRVINE, P.E. COUNTY ENGINEER / ECM ADMINISTRATOR DATE

## RECORD DRAWING

THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGE DURING THE CONSTRUCTION PROCESS REPORTED BY THE CONTRACTOR TO KIMLEY-HORN AND ASSOCIATES, INC. THIS DRAWING IS NOT GURANTEED TO BE "AS BUILT" BUT IS BASED ON THE INFORMATION MADE AVAILABLE.

11/20/23 ERIC GUNDERSON, PE PROJECT NO.

DESIGNED BY: EJ

DRAWN BY: JAI

CHECKED BY: EJO

DATE: 8/03/202

SH

SHEET

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#### PRIVATE ENGINEER'S NOTICE TO CONTRACTORS:

- THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTIONS TO THE CONTRACTOR BY THE ENGINEER OF THE PLANS.
- 1. THE CHEROKEE METRO DISTRICT ENGINEER'S SIGNATURE ON THESE PLANS DOES NOT CONSTITUTE APPROVAL OF ANY OF THESE NOTES AND THE CITY WILL NOT BE HELD RESPONSIBLE FOR THEIR ENFORCEMENT.
- 2. APPROVAL OF THESE PLANS BY CHEROKEE METRO DISTRICT DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL A PERMIT HAS BEEN ISSUED.
- 3. THE APPROVAL OF THIS PLAN OR ISSUANCE OF A PERMIT BY CHEROKEE METRO DISTRICT DOES NOT AUTHORIZE THE SUBDIVIDER AND OWNER TO VIOLATE ANY FEDERAL, STATE OR COUNTY LAWS, ORDINANCES, REGULATIONS, OR POLICIES.
- NEITHER THE OWNER, NOR THE ENGINEER OF WORK WILL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT, AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING, AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS, AND REGULATIONS.
- 5. CONTRACTOR AGREES THAT HE/SHE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOBSITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING: SAFETY OF ALL PERSONS AND PROPERTY, AND THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPT LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE TO INSURE THAT ALL SLOPES, STREETS, UTILITIES, AND STORM SEWERS ARE BUILT IN ACCORDANCE WITH THESE PLANS. IF THERE IS ANY QUESTION REGARDING THESE PLANS OR FIELD STAKES, THE CONTRACTOR SHALL REQUEST AN INTERPRETATION BEFORE DOING ANY WORK BY CALLING THE ENGINEER OF RECORD AT 719-453-0180. IN THE EVENT THAT PROPOSED EROSION CONTROL IS INSUFFICIENT, CONTRACTOR WILL INSTALL ADDITIONAL EROSION CONTROLS AT OWNER'S EXPENSE.
- 7. EXCEPT AS NOTED HEREON ALL UTILITY SERVICES WITHIN THIS DEVELOPMENT ARE UNDERGROUND INSTALLATIONS. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO STARTING WORK NEAR THEIR FACILITIES, AND SHALL COORDINATE HIS WORK WITH COMPANY REPRESENTATIVES. FOR UTILITY MARK—OUT SERVICE, CALL 811.
- 8. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED FROM A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO OTHER EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. NO REPRESENTATION IS MADE AS TO THE ACCURACY OR COMPLETENESS OF SAID UTILITY INFORMATION. THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN HEREON AND ANY OTHERS NOT OF RECORD OR NOT SHOWN ON THESE PLANS. UTILITIES NOT OF RECORD OR NOT SHOWN ON PLANS SHALL BE CONSIDERED UNFORESEEN CONDITIONS AND DAMAGES THERETO SHALL BE REPAIRED AT THE OWNER'S EXPENSE.
- 9. LOCATION AND ELEVATION OF EXISTING IMPROVEMENTS SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK.
- 10. CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY BECAUSE OF ACTUAL LOCATION OF EXISTING FACILITIES. AT THE OWNER'S DISCRETION AND EXPENSE.
- 11. FOR ALL UTILITY TRENCHES, SOILS REPORTS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD BY A QUALIFIED SOILS ENGINEER WHICH CERTIFY THAT TRENCH BACKFILL WAS COMPACTED AS DIRECTED BY THE SOILS ENGINEER IN ACCORDANCE WITH THE ON—SITE EARTHWORK SPECIFICATIONS.
- 12. ANY WORK DONE WITHOUT INSPECTION OR MATERIALS TESTING IS SUBJECT TO REMOVAL OR CORRECTION.
- 13. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ANY DAMAGE TO THE EXISTING IMPROVEMENTS AND REPLACEMENT TO THE SATISFACTION OF THE FIELD ENGINEER.
- 14. PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL JOIN CONDITIONS FOR GRADING, DRAINAGE AND UNDERGROUND FACILITIES, INCLUDING LOCATION AND ELEVATION OF EXISTING UNDERGROUND FACILITIES AT CROSSINGS WITH PROPOSED UNDERGROUND FACILITIES, AT THE OWNER'S DISCRETION AND EXPENSE. IF CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLANS THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND SHALL NOT BEGIN CONSTRUCTION UNTIL THE CHANGED CONDITIONS HAVE BEEN EVALUATED.
- 15. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF/HERSELF WITH THE PLANS, THE SOILS AND/OR GEOLOGY REPORTS, AND THE SITE CONDITIONS PRIOR TO COMMENCING WORK.
- 16. SHOULD CONFLICTING INFORMATION BE FOUND ON THE PLANS OR IN THE FIELD, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AT KIMLEY—HORN BEFORE PROCEEDING WITH THE WORK IN QUESTION.
- 17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND/OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. CONTRACTOR'S LAND SURVEYOR MUST FIELD LOCATE, REFERENCE, AND/OR PRESERVE ALL HISTORICAL OR CONTROLLING MONUMENTS PRIOR TO ANY EARTHWORK. IF DESTROYED, CONTRACTOR'S LAND SURVEYOR SHALL REPLACE SUCH MONUMENTS WITH APPROPRIATE MONUMENTS. A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FILED AS REQUIRED BY THE PROFESSIONAL LAND SURVEYORS ACT. IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED, THE COLORADO SPRINGS (EL PASO COUNTY) FIELD SURVEY SECTION MUST BE NOTIFIED, IN WRITING, AT LEAST 3 DAYS PRIOR TO THE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF REPLACING ANY VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION.
- 18. DEVIATIONS FROM THESE PLANS SIGNED PLANS WILL NOT BE ALLOWED UNLESS THE COUNTY ENGINEER APPROVES A CONSTRUCTION CHANGE OR THE COUNTY/AGENCY INSPECTOR REQUIRES THE CHANGE.
- 19. AS-BUILT DRAWINGS MUST BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER PRIOR TO ACCEPTANCE OF THIS PROJECT.
- 20. THE AREA WHICH IS DEFINED AS A NON GRADING AREA AND WHICH IS NOT TO BE DISTURBED SHALL BE STAKED PRIOR TO START OF THE WORK. THE PERMIT APPLICANT AND ALL OF THEIR REPRESENTATIVES OR CONTRACTORS SHALL COMPLY WITH THE REQUIREMENTS FOR PROTECTION OF THIS AREA AS REQUIRED BY ANY APPLICABLE AGENCY. ISSUANCE OF THE CITY'S GRADING PERMIT SHALL NOT RELIEVE THE APPLICANT OR ANY OF THEIR REPRESENTATIVES OR CONTRACTORS FROM COMPLYING WITH ANY STATE OR FEDERAL REQUIREMENTS BY AGENCIES INCLUDING BUT NOT LIMITED TO COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT OR COLORADO DIVISION OF WILDLIFE. COMPLIANCE MAY INCLUDE OBTAINING PERMITS, OTHER AUTHORIZATIONS, OR COMPLIANCE WITH MANDATES BY ANY APPLICABLE STATE OR FEDERAL AGENCY.
- 21. NOTES AND DETAILS DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK.
- 22. IF AT ANY TIME DURING THE GRADING OPERATION, ANY UNFAVORABLE GEOLOGICAL CONDITIONS ARE ENCOUNTERED, GRADING IN THAT AREA SHALL STOP UNTIL APPROVED CORRECTIVE MEASURES ARE OBTAINED.
- 23. STRAIGHT GRADE SHALL BE MAINTAINED BETWEEN CONTOUR LINES AND SPOT ELEVATIONS UNLESS OTHERWISE SHOWN ON THE PLANS. THE CONTRACTOR SHALL TAKE ADDITIONAL CARE TO ENSURE POSITIVE DRAINAGE AWAY FROM THE STRUCTURE WHILE MEETING MINIMUM AND MAXIMUM PAVEMENT SLOPES AS DEFINED IN THE CRITERIA.
- 24. ALL DEBRIS AND FOREIGN MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT APPROVED DISPOSAL SITES. THE CONTRACTOR SHALL OBTAIN NECESSARY PERMITS FOR THE TRANSPORTATION OF MATERIAL TO AND FROM THE SITE.
- 25. DIMENSIONS TO PIPELINES ARE TO CENTERLINE UNLESS OTHERWISE NOTED.
- 26. CONSTRUCTION STAKING FOR IMPROVEMENTS SHOWN IN THESE PLANS SHALL BE PERFORMED BY CONTRACTOR'S LICENSED LAND SURVEYOR.
- 27. ALL DIMENSIONS ARE IN FEET OR DECIMALS THEREOF.
- 28. SPOT GRADES ARE TO FLOWLINE OR FINISH PAVEMENT GRADE UNLESS OTHERWISE NOTED.
- 29. CONTRACTOR TO BE AWARE OF ALL OVERHEAD LINES AT ALL TIMES, SO AS NOT TO DISTURB THEM.
- 30. STORM DRAINAGE SYSTEMS SHOWN ON THESE PLANS HAVE BEEN DESIGNED FOR THE FINAL SITE CONDITION AT COMPLETION OF THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ADEQUATE DRAINAGE OF THE SITE, DURING INTERIM CONDITIONS OF CONSTRUCTION.
- 31. RETAINING WALLS LOCATED CLOSER TO THE PROPERTY LINE THAN THE HEIGHT OF THE WALL SHALL BE BACKFILLED NOT LATER THAN 10 DAYS AFTER CONSTRUCTION OF THE WALL AND NECESSARY STRUCTURAL SUPPORTING MEMBERS UNLESS RECOMMENDED OTHERWISE BY RESPONSIBLE ENGINEER.
- 32. THE CONTRACTOR IS RESPONSIBLE FOR APPLYING FOR AND OBTAINING A STATE STORMWATER DISCHARGE PERMIT FROM COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (CDPHE) AT MINIMUM 10 BUSINESS DAYS PRIOR TO THE START OF GRADING ACTIVITIES ONSITE. 10 BUSINESS DAYS IS THE MINIMUM TIME REQUIRED BY THE STATE TO PROCESS THE APPLICATION. IT IS HIGHLY RECOMMENDED THAT THE CONTRACTOR APPLY FOR THE PERMIT AT LEAST 20 BUSINESS DAYS PRIOR TO THE START OF GRADING ACTIVITIES.

#### WATER PLAN NOTES

THE CONTRACTOR SHALL NOTIFY COLORADO SPRINGS UTILITIES' INSPECTIONS OFFICE (NORTH: 668-4396 OR SOUTH: 668-4658) AND/OR CHEROKEE METRO DISTRICT (719-597-5080) A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

#### GENERAL

- . ALL CONSTRUCTION METHODS AND MATERIALS SHALL MEET CHEROKEE METRO DISTRICT WATER LINE EXTENSION AND SERVICE STANDARDS (WATER LESS).
- 2. THE CONTRACTOR SHALL OBTAIN LOCATES PRIOR TO ANY EXCAVATION.
- 3. CHEROKEE METRO DISTRICT DOES NOT GUARANTEE THE ACCURACY OF LOCATIONS OF EXISTING PIPELINES, HYDRANTS, VALVES AND SERVICE LINES. IF FIELD CONDITIONS ARE FOUND TO BE DIFFERENT THAN SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE INSPECTOR AND THE ENGINEER OF RECORD IMMEDIATELY.
- 4. NO TREES OR STRUCTURES ARE PERMITTED WITHIN FIFTEEN FEET (15') OF A WATER MAIN.
- 5. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITY FACILITIES AS A RESULT OF HIS ACTIONS. THE CONTRACTOR SHALL MAKE ALL THE REQUIRED REPAIRS IMMEDIATELY TO THE SATISFACTION OF COLORADO SPRINGS UTILITIES AND CHEROKEE METRO DISTRICT.
- 6. ALL FIELD STAKING SHALL COMPLY WITH THE WATER LESS AND CHEROKEE STANDARDS.
- 7. THE CONTRACTOR SHALL MAKE THEIR BEST EFFORT TO ENSURE THAT WATER SERVICE TO ADJACENT PROPERTIES IS MAINTAINED DURING CONSTRUCTION.
- 8. CORROSION PROTECTION MEASURES SHALL COMPLY WITH THE WATER LESS AND CHEROKEE STANDARDS.
- 9. NO SERVICE TAPS SHALL BE MADE UNTIL AUTHORIZATION HAS BEEN GRANTED BY THE CHEROKEE METRO DISTRICT' INSPECTOR.
- 10. ALL BENDS SHALL BE FIELD STAKED PRIOR TO CONSTRUCTION AND THE STATIONING ON THE FIELD STAKES SHALL MATCH THE STATIONING ON THE PLANS.
- 11. FIELD MODIFICATIONS TO A FIRE SERVICE LINE OR FIRE HYDRANT DESIGN OR LOCATION MAY NEED TO BE APPROVED BY THE DESIGN ENGINEER, FALCON FIRE DEPARTMENT AND CHEROKEE METRO DISTRICT, AS REQUIRED BY THE INSPECTOR.
- 12. REUSE OR SALVAGE OF ANY MATERIAL IS LEFT TO THE DISCRETION OF THE CHEROKEE METRO DISTRICT INSPECTOR.
- 13. ALL TRENCH BACKFILL AND COMPACTION SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE CHEROKEE METRO DISTRICT STANDARD SPECIFICATIONS MANUAL AND CHEROKEE STANDARDS.
- 14. ALL ISOLATION VALVES TO OPEN COUNTERCLOCKWISE.

#### **UTILITY SERVICE PLAN NOTES**

THE CONTRACTOR SHALL NOTIFY COLORADO SPRINGS UTILITIES' INSPECTIONS OFFICE (NORTH: 668-4396 OR SOUTH: 668-4658) AND/OR CHEROKEE METRO DISTRICT (719-597-5080) A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

#### GENERAL

- 1. ALL CONSTRUCTION METHODS AND MATERIALS SHALL MEET CHEROKEE METRO DISTRICT WASTEWATER AND WATER LINE EXTENSION AND SERVICE STANDARDS (WATER/WASTEWATER LESS).
- 2. CHEROKEE METRO DISTRICT DOES NOT GUARANTEE THE ACCURACY OF LOCATIONS OF EXISTING PIPELINES, MANHOLES, HYDRANTS, VALVES AND SERVICE LINES. IF FIELD CONDITIONS ARE FOUND TO BE DIFFERENT THAN SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE INSPECTOR AND THE DESIGN ENGINEER IMMEDIATELY.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITY FACILITIES AS A RESULT OF HIS ACTIONS. THE CONTRACTOR SHALL MAKE ALL THE REQUIRED REPAIRS IMMEDIATELY TO THE SATISFACTION OF CHEROKEE METRO DISTRICT.
- 4. ALL FIELD STAKING SHALL COMPLY WITH THE WATER/WASTEWATER LESS AND CHEROKEE STANDARDS.
- 5. CORROSION PROTECTION MEASURES SHALL COMPLY WITH THE WATER/WASTEWATER LESS AND CHEROKEE STANDARDS.
- 6. FINAL LOCATION OF ALL WASTEWATER AND WATER SERVICES SHALL BE APPROVED IN THE FIELD BY THE CHEROKEE METRO DISTRICT INSPECTOR.
- 7. ALL TRENCH BACKFILL AND COMPACTION SHALL BE IN ACCORDANCE WITH SECTION 206 COLORADO SPRINGS UTILITIES SPECIFICATIONS MANUAL AND SECTION 5.18 OF THE WATER LESS AND CHEROKEE STANDARDS.

#### WASTEWATER:

- 1. SERVICE STUBS SHALL BE INSTALLED A MINIMUM OF SEVEN FEET (7') INTO THE PROPERTY, UNLESS OTHERWISE SHOWN, AND THE END OF THE STUB SHALL BE MARKED WITH A 2"X4"X12' STEEL OR WOODEN POST.
- 2. SERVICES SHALL BE CONNECTED A MINIMUM OF FIVE FEET (5') FROM THE OUTSIDE EDGE OF ANY MANHOLE ON THE MAIN LINE AND SHALL MAINTAIN TWO FEET (2') OF SEPARATION BETWEEN TAPS CENTER TO CENTER.
- 3. ALL CLEANOUTS SHALL BE THE SAME SIZE AS THE SERVICE LINE.
- 4. THE CONTRACTOR SHALL NOTIFY EL PASO COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT WHEN ANY SEPTIC TANK IS TO BE ABANDONED AND PAY ALL FEES NECESSARY TO OBTAIN A PERMIT.

#### WATER

- 1. SERVICE STUBS SHALL BE INSTALLED WITH THE CURB STOP AT OR NEAR PROPERTY LINE AND SHALL NOT BE INSTALLED WITHIN DRIVEWAYS OR SIDEWALKS (SEE DETAIL DRAWING B2-3).
- 2. SERVICE TAPS SHALL BE MADE A MINIMUM OF THREE FEET (3') FROM THE BELL OR APPURTENANCE ON THE WATER MAIN. TAPS SHALL BE A MINIMUM OF THREE FEET (3') APART ON THE SAME SIDE OF THE WATER MAIN AND A MINIMUM OF ONE—AND—A—HALF FEET (1.5') WHEN TAPS ARE MADE ON OPPOSITE SIDES OF THE WATER MAIN.
- 3. ALL SERVICES FOR COMMERCIAL USE AND SOME RESIDENTIAL USES REQUIRE INSTALLATION OF A BACKFLOW PREVENTION ASSEMBLY IMMEDIATELY AFTER THE METER. THE BACKFLOW PREVENTION ASSEMBLY SHALL BE APPROVED BY THE FOUNDATION FOR CROSS—CONNECTION CONTROL AND HYDRAULIC RESEARCH OF THE UNIVERSITY OF SOUTHERN CALIFORNIA (USC—FCCCHR) AND INSTALLED IN ACCORDANCE WITH THIS LISTING. PLEASE REFERENCE THE WATER LINE EXTENSION STANDARDS FOR ADDITIONAL REQUIREMENTS.
- 4. ALL TAPS ON CHEROKEE METRO DISTRICT WATER MAINS SHALL BE PERFORMED BY CONTRACTOR WITH INSPECTION BY CHEROKEE METRO DISTRICT. ALL OTHER TAPS SHALL BE PERFORMED BY THE CONTRACTOR.
- 5. ANY ABANDONED SERVICES MUST BE PHYSICALLY DISCONNECTED AT THE MAIN. ANY NECESSARY REPAIRS TO THE MAIN AND/OR SHUT DOWN OF THE TAPPING VALVE SHALL BE AS DIRECTED BY CHEROKEE METRO DISTRICT.
- 6. ALL WATER SERVICE LINES SHOULD ENTER THE BUILDING WITHIN 3 FEET OF AN EXTERIOR WALL. EXPOSED WATER PLUMBING SHALL BE MINIMIZED INSIDE THE BUILDING PRIOR TO THE WATER METER AND/OR APPROVED BACKFLOW PREVENTION ASSEMBLY OR METHOD.
- 7. ALL HDPE WATER SERVICE LINES MUST EXTEND A MINIMUM OF 6 INCHES ABOVE THE FLOOR AND BE 90 DEGREES FROM THE FLOOR PLAN TO ALLOW FOR BRACING AND TRANSITION TO THE METER LOOP ASSEMBLY.

#### WATER PROJECT SPECIFIC NOTES

# ANY EXISTING STUBS AND APPURTENANCES THAT WILL NOT BE USED SHALL BE REMOVED AND REPLACED WITH AN ACCEPTABLE SECTION OF MAIN AT THE EXPENSE OF THE CONTRACTOR. A CONNECTION TO AN EXISTING STUB IS PROPOSED. CHEROKEE METRO DISTRICT DOES NOT GUARANTEE THE ACCURACY OF THE DEPTHS OR LOCATIONS OF EXISTING STUBS SHOWN ON ANY "AS-BUILT" DRAWINGS. A WATER STUB-OUT(S) IS/ARE PROPOSED. CHEROKEE METRO DISTRICT DOES NOT GUARANTEE THAT THE DESIGN OR INSTALLATION OF THE PROPOSED WATER STUB-OUT WILL MEET FUTURE DEVELOPMENT NEEDS.

RECORD DRAWING

11/20/23

ERIC GUNDERSON. PE

ON THE INFORMATION MADE AVAILABLE.

THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGE

CONTRACTOR TO KIMLEY-HORN AND ASSOCIATES, INC. THIS

DRAWING IS NOT GURANTEED TO BE "AS BUILT" BUT IS BASED

DURING THE CONSTRUCTION PROCESS REPORTED BY THE

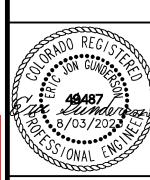
A WATER QUALITY PLAN HAS BEEN APPROVED FOR THIS PROJECT

7 REVISION 5 JAR 8/17/22
6 REVISION 4 JAR 6/1/22
5 REVISION 2 JAR 3/28/22
4 REVISION 1 JAR 2/17/22
3 ADDENDUM C JAR 9/17
1 SDP RESUBMITTAL JAR 5/27
NO. REVISION BY DATE I

2022 KIMLEY-HORN AND ASSOCIATES, INC.
2 North Nevada Avenue Suite 300

DESIGNED BY: EJO DRAWN BY: JAF CHECKED BY: EJO DATE: 8/03/2023

ND FLATS BY WATERMARK PASO COUNTY, COLORADO AND WATER SERVICE PLANS NOTES



PROJECT NO. 096302009

SHEET

#### WASTEWATER PLAN NOTES

PERIOD FOR THIS PROJECT.

THE CONTRACTOR SHALL NOTIFY COLORADO SPRINGS UTILITIES' INSPECTIONS OFFICE (NORTH: 668–4396 OR SOUTH: 668-4658) AND/OR CHEROKEE METRO DISTRICT (719-597-5080) A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

#### GENERAL:

1. ALL CONSTRUCTION METHODS AND MATERIALS SHALL MEET CSU WASTEWATER LINE EXTENSION AND SERVICE STANDARDS (WASTEWATER STANDARDS) AND CHEROKEE METRO DISTRICT STANDARDS.

A WASTEWATER STUB OR STUBS ARE PROPOSED. CHEROKEE METRO DISTRICT DOES NOT GUARANTEE DEVELOPMENT NEEDS. FURTHER, THE STUB WILL NOT BE INCLUDED IN THE TWO-YEAR WARRANTY

- 2. THE CONTRACTOR SHALL OBTAIN LOCATES PRIOR TO ANY EXCAVATION
- 3. CHEROKEE METRO DISTRICT DOES NOT GUARANTEE THE ACCURACY OF LOCATIONS OF EXISTING PIPELINES, MANHOLES AND SERVICE LINES. IF FIELD CONDITIONS ARE FOUND TO BE DIFFERENT THAN SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE INSPECTOR AND THE ENGINEER OF RECORD IMMEDIATELY.
- 4. NO TREES OR STRUCTURES ARE PERMITTED WITHIN FIFTEEN FEET (15') OF A WASTEWATER MAIN.
- 5. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITY FACILITIES AS A RESULT OF HIS ACTIONS. THE CONTRACTOR SHALL MAKE ALL THE REQUIRED REPAIRS IMMEDIATELY TO THE SATISFACTION OF CHEROKEE METRO DISTRICT.
- 6. ALL FIELD STAKING SHALL COMPLY WITH THE WASTEWATER STANDARDS.
- 7. THE CONTRACTOR SHALL ENSURE THAT WASTEWATER SERVICE TO ADJACENT PROPERTIES IS MAINTAINED DURING CONSTRUCTION.
- 8. ALL MANHOLES LOCATED WITHIN THE PROJECT LIMITS SHALL BE ADJUSTED TO FINISH GRADE, IF MANHOLES ARE IN POOR CONDITION OR IF THE DISTANCE BETWEEN THE RING/COVER AND CONE OF THE MANHOLE EXCEEDS THE WASTEWATER STANDARDS, THE CONTRACTOR MAY BE REQUIRED TO REPLACE PART OR ALL OF THE EXISTING MANHOLES.
- 9. REUSE OR SALVAGE OF ANY MATERIAL IS LEFT TO THE DISCRETION OF THE CHEROKEE METRO DISTRICT
- 10. ALL TRENCH BACKFILL AND COMPACTION SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE CHEROKEE METRO DISTRICT STANDARD SPECIFICATIONS MANUAL.
- 11. ALL MANHOLES TO BE 5' MIN. DIAMETER & EXTERIOR COATED WITH MIN. 45 MIL. COAL TAR EPOXY & WRAP JOINTS WITH 12" WIDE ELASTOMERIC JOINT WRAP.

#### UTILITY SERVICE PLAN NOTES

THE CONTRACTOR SHALL NOTIFY COLORADO SPRINGS UTILITIES' INSPECTIONS OFFICE (NORTH: 668-4396 OR SOUTH: 668-4658) AND/OR CHEROKEE METRO DISTRICT (719-597-5080) A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

- ALL CONSTRUCTION METHODS AND MATERIALS SHALL MEET CHEROKEE METRO DISTRICT WASTEWATER AND WATER LINE EXTENSION AND SERVICE STANDARDS (WATER/WASTEWATER LESS).
- 2. CHEROKEE METRO DISTRICT DOES NOT GUARANTEE THE ACCURACY OF LOCATIONS OF EXISTING PIPELINES, MANHOLES, HYDRANTS, VALVES AND SERVICE LINES. IF FIELD CONDITIONS ARE FOUND TO BE DIFFERENT THAN SHOWN ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE INSPECTOR AND THE DESIGN ENGINEER IMMEDIATELY.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITY FACILITIES AS A RESULT OF HIS ACTIONS. THE CONTRACTOR SHALL MAKE ALL THE REQUIRED REPAIRS IMMEDIATELY TO THE SATISFACTION OF CHEROKEE METRO DISTRICT.
- 4. ALL FIELD STAKING SHALL COMPLY WITH THE WATER/WASTEWATER LESS.
- 5. CORROSION PROTECTION MEASURES SHALL COMPLY WITH THE WATER/WASTEWATER LESS AND CHEROKEE METRO STANDARDS.
- 6. FINAL LOCATION OF ALL WASTEWATER AND WATER SERVICES SHALL BE APPROVED IN THE FIELD BY THE CHEROKEE METRO DISTRICT INSPECTOR.
- 7. ALL TRENCH BACKFILL AND COMPACTION SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE COLORADO SPRINGS UTILITIES STANDARD SPECIFICATIONS MANUAL AND SECTION 5.18 OF THE WATER LESS AND CHEROKEE METRO STANDARDS.

#### WASTEWATER:

- 1. SERVICE STUBS SHALL BE INSTALLED A MINIMUM OF SEVEN FEET (7') INTO THE PROPERTY, UNLESS OTHERWISE SHOWN, AND THE END OF THE STUB SHALL BE MARKED WITH A 2"X4"X12' STEEL OR WOODEN POST.
- 2. SERVICES SHALL BE CONNECTED A MINIMUM OF FIVE FEET (5') FROM THE OUTSIDE EDGE OF ANY MANHOLE ON THE MAIN LINE AND SHALL MAINTAIN TWO FEET (2') OF SEPARATION BETWEEN TAPS CENTER TO CENTER.
- 3. ALL CLEANOUTS SHALL BE THE SAME SIZE AS THE SERVICE LINE.
- 4. THE CONTRACTOR SHALL NOTIFY EL PASO COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT WHEN ANY SEPTIC TANK IS TO BE ABANDONED AND PAY ALL FEES NECESSARY TO OBTAIN A PERMIT.
- 5. ALL MAINS TO BE ASTM D3034 SDR35.

- SERVICE STUBS SHALL BE INSTALLED WITH THE CURB STOP AT OR NEAR PROPERTY LINE AND SHALL NOT BE INSTALLED WITHIN DRIVEWAYS OR SIDEWALKS (SEE DETAIL DRAWING B2-3).
- 2. SERVICE TAPS SHALL BE MADE A MINIMUM OF THREE FEET (3') FROM THE BELL OR APPURTENANCE ON THE WATER MAIN. TAPS SHALL BE A MINIMUM OF THREE FEET (3') APART ON THE SAME SIDE OF THE WATER MAIN AND A MINIMUM OF ONE-AND-A-HALF FEET (1.5') WHEN TAPS ARE MADE ON OPPOSITE SIDES OF THE WATER MAIN.
- 3. ALL SERVICES FOR COMMERCIAL USE AND SOME RESIDENTIAL USES REQUIRE INSTALLATION OF A BACKFLOW PREVENTION ASSEMBLY IMMEDIATELY AFTER THE METER. THE BACKFLOW PREVENTION ASSEMBLY SHALL BE APPROVED BY THE FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH OF THE UNIVERSITY OF SOUTHERN CALIFORNIA (USC-FCCCHR) AND INSTALLED IN ACCORDANCE WITH THIS LISTING. PLEASE REFERENCE THE WATER LINE EXTENSION STANDARDS FOR ADDITIONAL REQUIREMENTS.
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- 7. ALL HDPE WATER SERVICE LINES MUST EXTEND A MINIMUM OF 6 INCHES ABOVE THE FLOOR AND BE 90 DEGREES FROM THE FLOOR PLAN TO ALLOW FOR BRACING AND TRANSITION TO THE METER LOOP ASSEMBLY.
- 8. NO COPPER PIPING ALLOWED IN CHEROKEE METRO DISTRICT EXCEPT ABOVE GRADE PIPING IMMEDIATELY BEFORE
- AND AFTER WATER METER. 9. ALL WATER MAINS TO BE AWWA C900 DR14.

DESIGNED BY: EJ DRAWN BY: JA CHECKED BY: EJO DATE: 8/03/202

RMARK ADO E PLANS WAT COLOF WATE NO:

二下

PROJECT NO.

#### RECORD DRAWING

THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGE DURING THE CONSTRUCTION PROCESS REPORTED BY THE CONTRACTOR TO KIMLEY-HORN AND ASSOCIATES, INC. THIS DRAWING IS NOT GURANTEED TO BE "AS BUILT" BUT IS BASED ON THE INFORMATION MADE AVAILABLE.

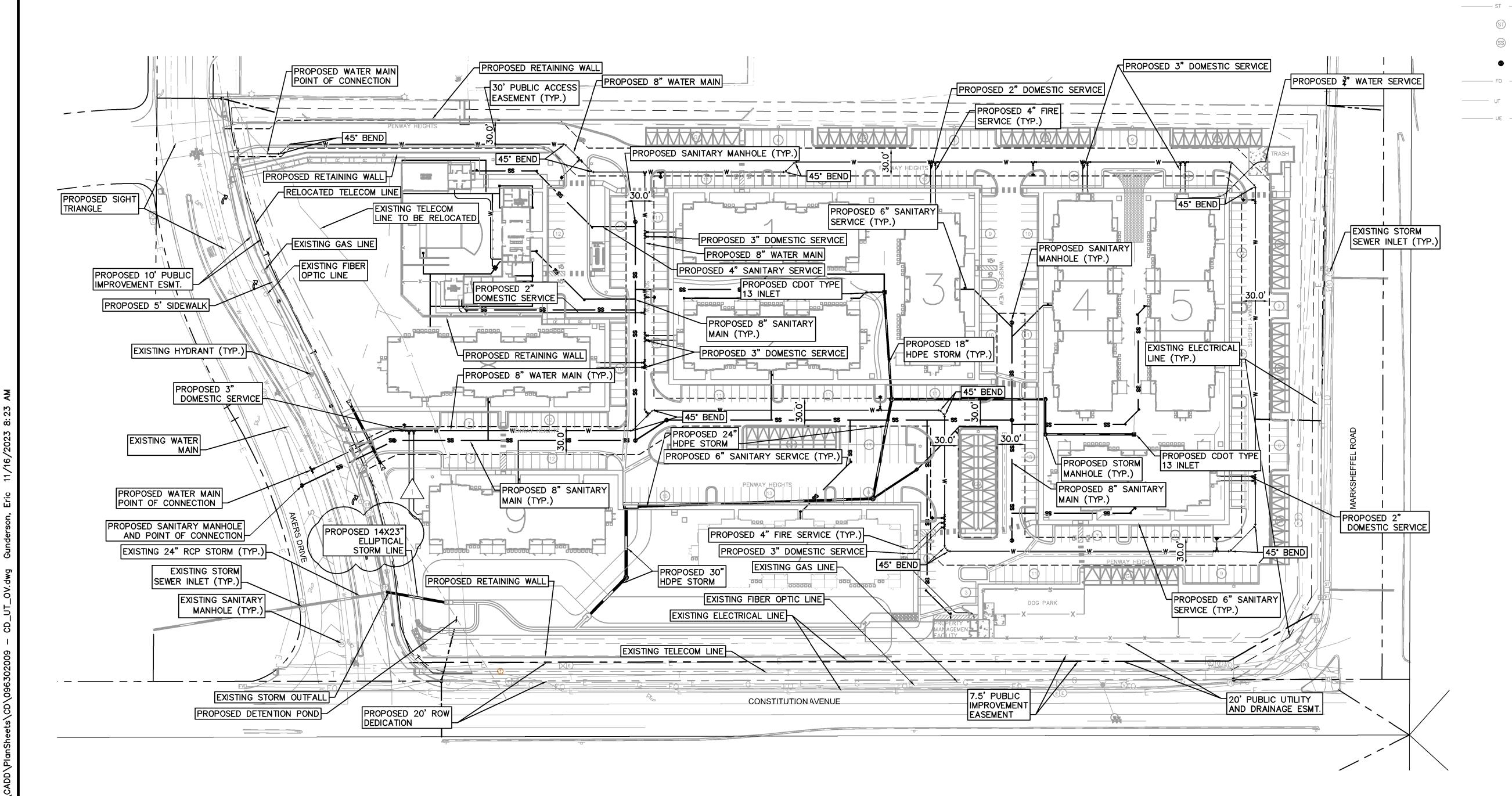
11/20/23 ERIC GUNDERSON. PE

096302009

SHEET C 602

# UPLAND FLATS BY WATERMARK CONSTRUCTION DRAWINGS

TRACT DD, HANNAH RIDGE AT FEATHERGRASS FILING NO. 1, AS AMENDED SECTION 32, TOWNSHIP 13 SOUTH, RANGE 65 WEST OF THE 6TH P.M., CITY OF COLORADO SPRINGS, COUNTY OF EL PASO, STATE OF COLORADO





EXISTING MAJOR CONTOUR EXISTING MINOR CONTOUR EXISTING WATER LINE EXISTING SANITARY LINE - PROPOSED SANITARY LINE EXISTING STORM LINE EXISTING STORM MANHOLE EXISTING SANITARY MANHOLE PROPOSED SANITARY MANHOLE EXISTING FIBER OPTIC LINE

EXISTING UNDERGROUND TELECOM

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CHECKED BY: EJ

PROJECT NO. 096302009 SHEET

GRAPHIC SCALE IN FEET 0 30 60 12

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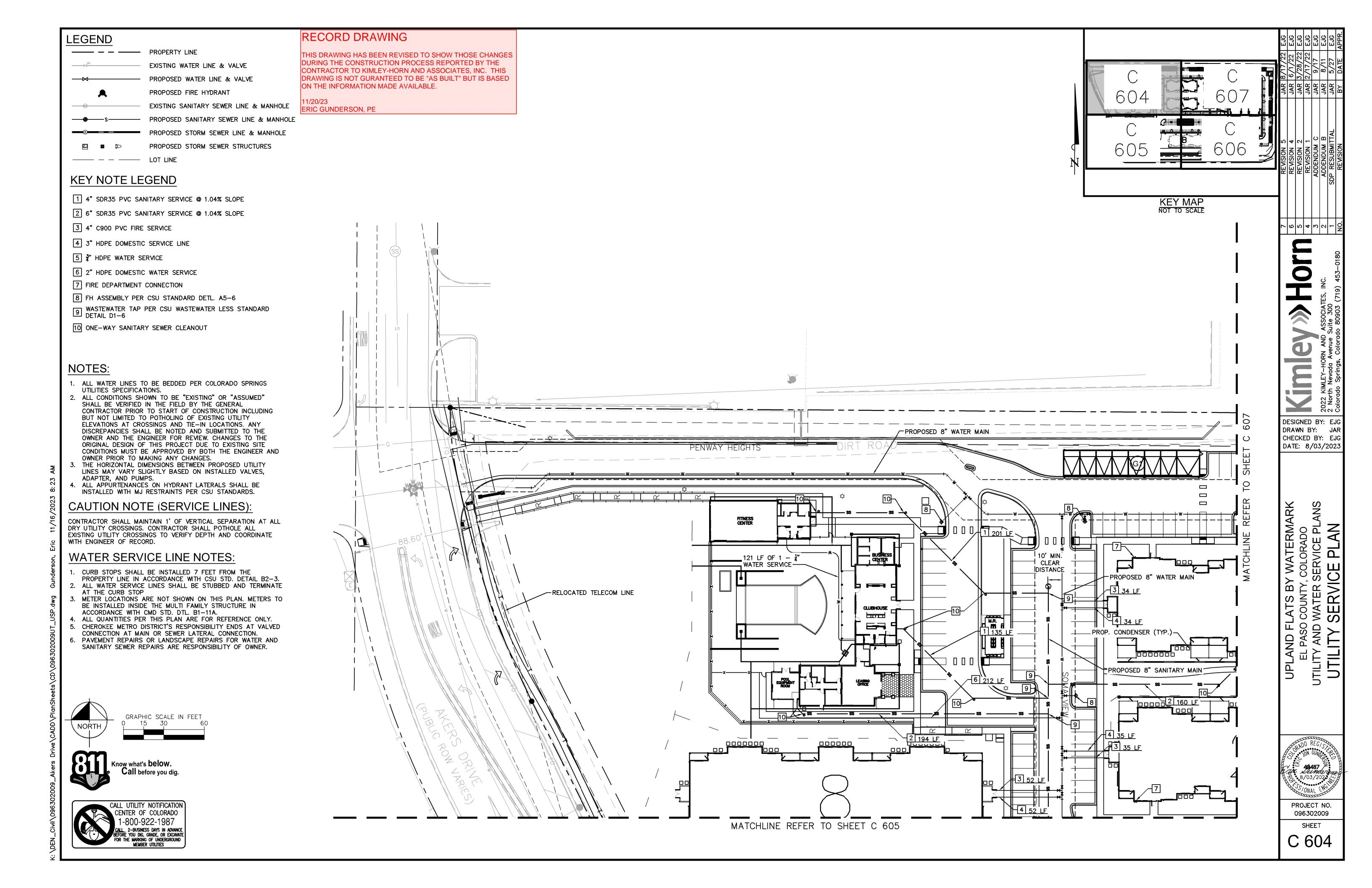
Call before you dig.

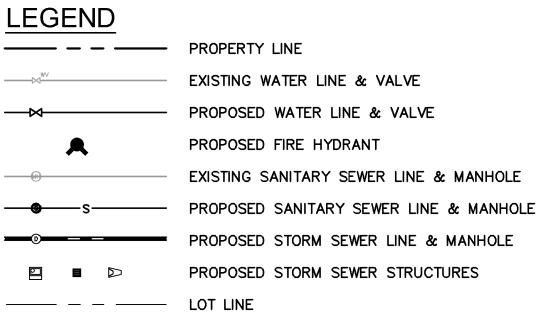
CALL UTILITY NOTIFICATION CENTER OF COLORADO 2-BUSINESS DAYS IN ADVANCE

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IC GUNDERSON, PE





#### KEY NOTE LEGEND

- 1 4" SDR35 PVC SANITARY SERVICE @ 1.04% SLOPE
- 2 6" SDR35 PVC SANITARY SERVICE @ 1.04% SLOPE
- 3 4" C900 PVC FIRE SERVICE
- 4 3" HDPE DOMESTIC SERVICE LINE
- 5 7 HDPE WATER SERVICE
- 6 2" HDPE DOMESTIC SERVICE LINE
- 7 FIRE DEPARTMENT CONNECTION
- 8 FH ASSEMBLY PER CSU STANDARD DETL. A5-6
- 9 WASTEWATER TAP PER CSU WASTEWATER LESS STANDARD DETAIL D1-6
- 10 ONE-WAY SANITARY SEWER CLEANOUT

#### NOTES:

- 1. ALL WATER LINES TO BE BEDDED PER COLORADO SPRINGS UTILITIES SPECIFICATIONS.
- ALL CONDITIONS SHOWN TO BE "EXISTING" OR "ASSUMED" SHALL BE VERIFIED IN THE FIELD BY THE GENERAL CONTRACTOR PRIOR TO START OF CONSTRUCTION INCLUDING BUT NOT LIMITED TO POTHOLING OF EXISTING UTILITY ELEVATIONS AT CROSSINGS AND TIE—IN LOCATIONS, ANY DISCREPANCIES SHALL BE NOTED AND SUBMITTED TO THE OWNER AND THE ENGINEER FOR REVIEW. CHANGES TO THE ORIGINAL DESIGN OF THIS PROJECT DUE TO EXISTING SITE CONDITIONS MUST BE APPROVED BY BOTH THE ENGINEER AND OWNER PRIOR TO MAKING ANY CHANGES.
   THE HORIZONTAL DIMENSIONS BETWEEN PROPOSED UTILITY
- LINES MAY VARY SLIGHTLY BASED ON INSTALLED VALVES, ADAPTER, AND PUMPS.
- 4. ALL APPURTENANCES ON HYDRANT LATERALS SHALL BE INSTALLED WITH MJ RESTRAINTS PER CSU STANDARDS.

#### CAUTION NOTE (SERVICE LINES):

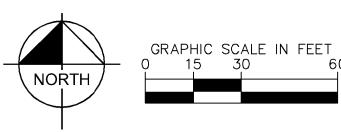
CONTRACTOR SHALL MAINTAIN 1' OF VERTICAL SEPARATION AT ALL DRY UTILITY CROSSINGS. CONTRACTOR SHALL POTHOLE ALL EXISTING UTILITY CROSSINGS TO VERIFY DEPTH AND COORDINATE WITH ENGINEER OF RECORD.

## WATER SERVICE LINE NOTES:

- 1. CURB STOPS SHALL BE INSTALLED 7 FEET FROM THE
- PROPERTY LINE IN ACCORDANCE WITH CSU STD. DETAIL B2-3.
  2. ALL WATER SERVICE LINES SHALL BE STUBBED AND TERMINATE
- AT THE CURB STOP

  3. METER LOCATIONS ARE NOT SHOWN ON THIS PLAN. METERS TO BE INSTALLED INSIDE THE MULTI FAMILY STRUCTURE IN
- BE INSTALLED INSIDE THE MULTI FAMILY STRUCTURE IN ACCORDANCE WITH CMD STD. DTL. B1—11A.

  4. ALL QUANTITIES PER THIS PLAN ARE FOR REFERENCE ONLY.
- 5. CHEROKEE METRO DISTRICT'S RESPONSIBILITY ENDS AT VALVED CONNECTION AT MAIN OR SEWER LATERAL CONNECTION.
- 6. PAVEMENT REPAIRS OR LANDSCAPE REPAIRS FOR WATER AND SANITARY SEWER REPAIRS ARE RESPONSIBILITY OF OWNER.



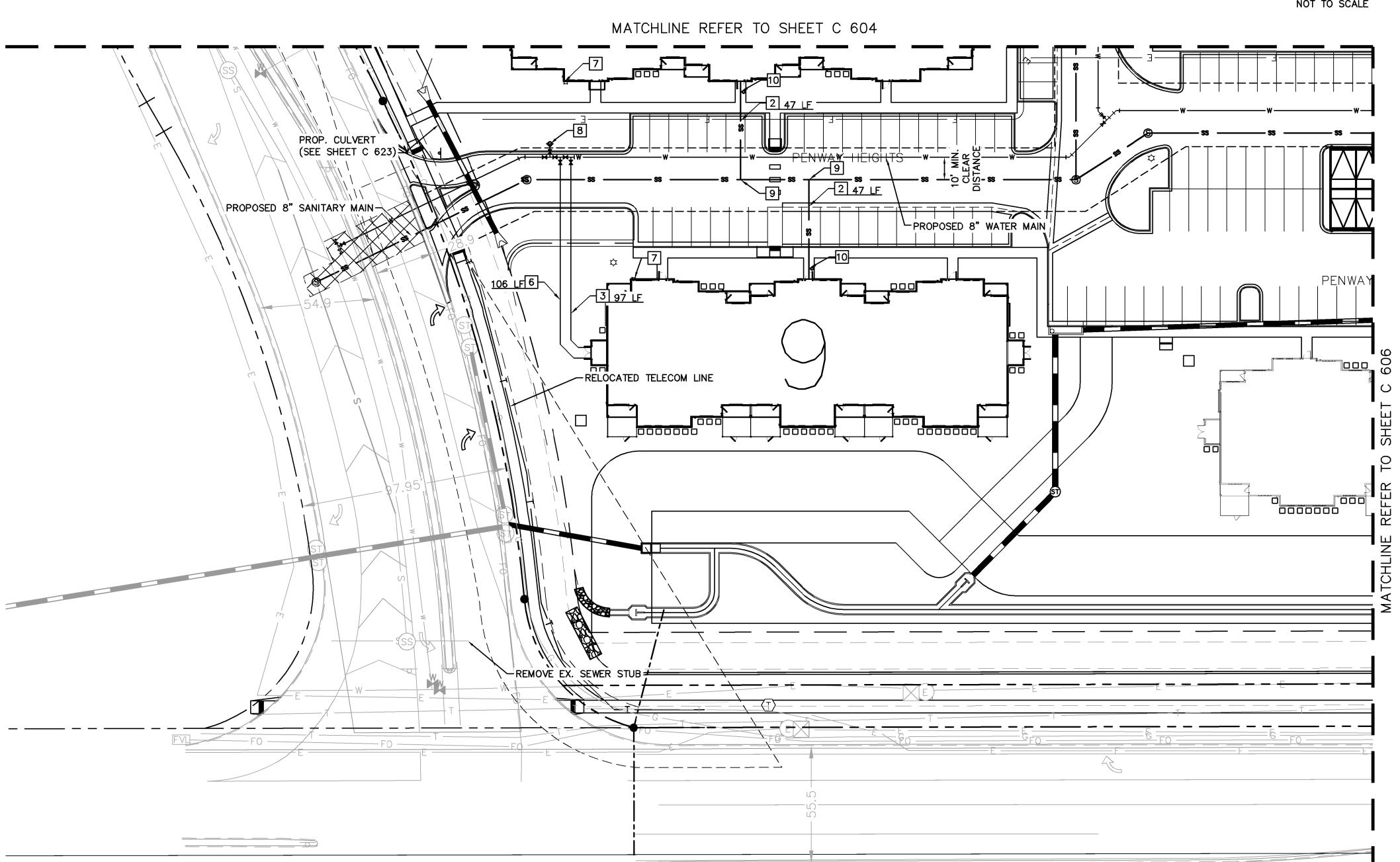




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11/20/23 ERIC GUNDERSON, PE



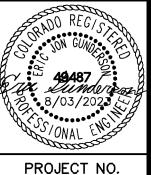
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2022 KIMLEY-HORN AND ASSOCIATES, INC.
2 North Nevada Avenue Suite 300

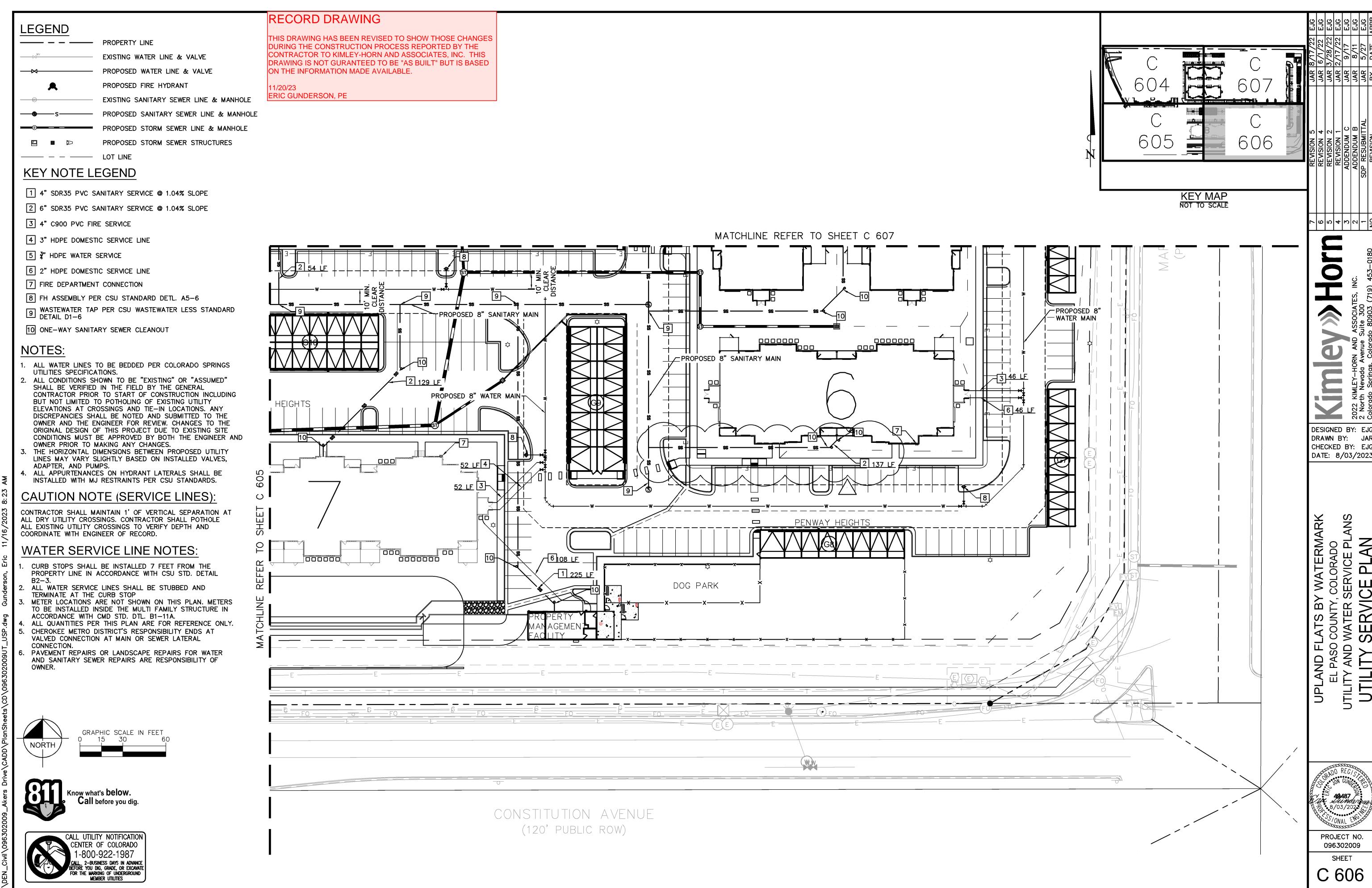
DESIGNED BY: EJG DRAWN BY: JAR CHECKED BY: EJG DATE: 8/03/2023

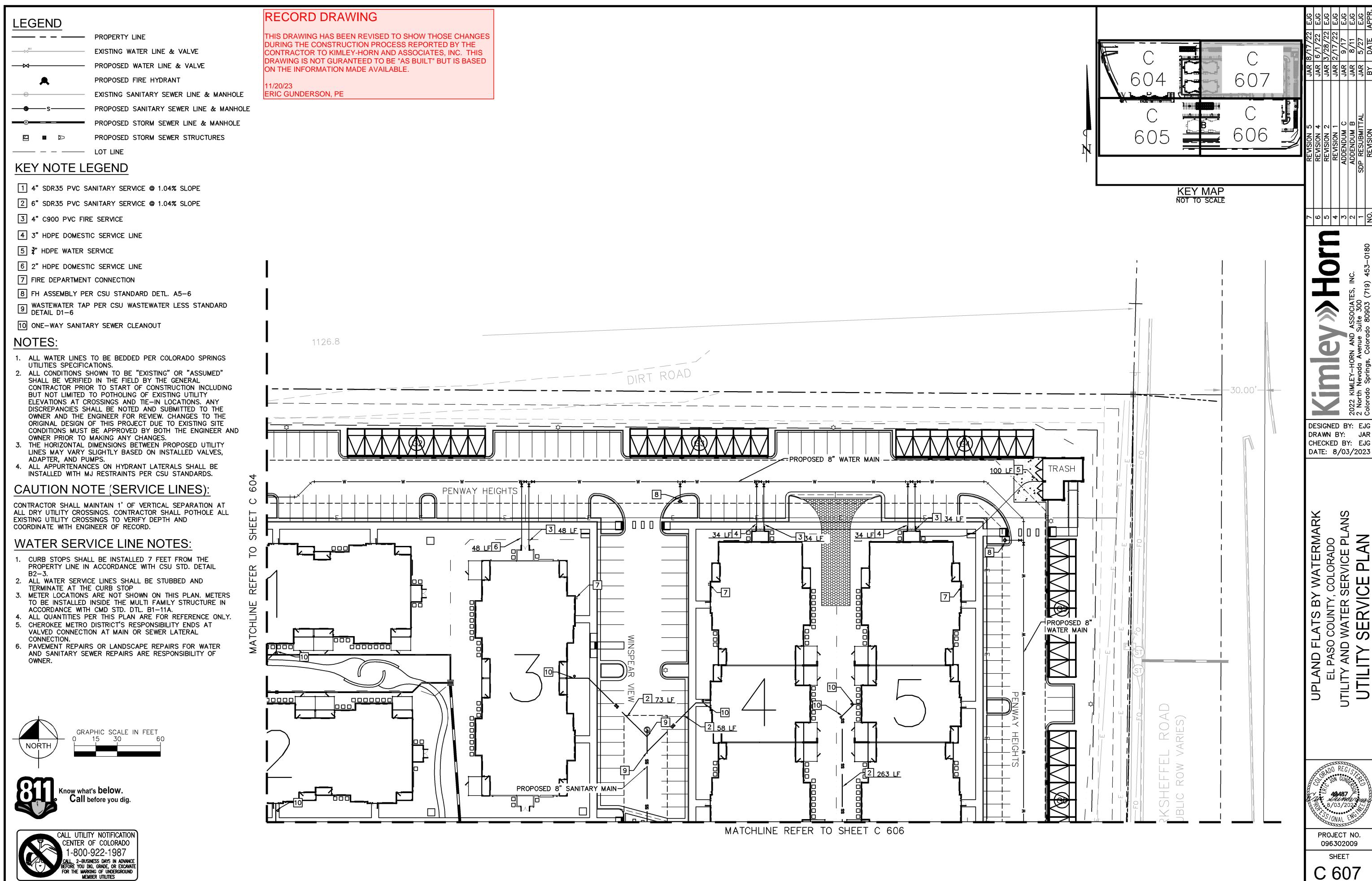
ATS BY WATERMARK
COUNTY, COLORADO
NATER SERVICE PLANS

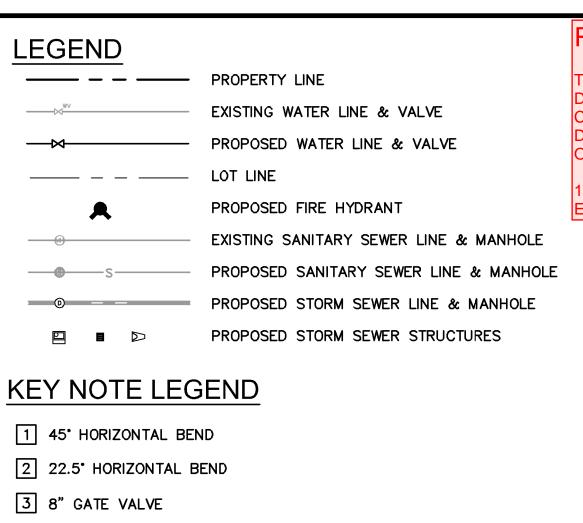
UPLAND FLATS BY
EL PASO COUNTY,
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UTILITY SERVI(



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ERIC GUNDERSON, PE

KEY MAP NOT TO SCALE

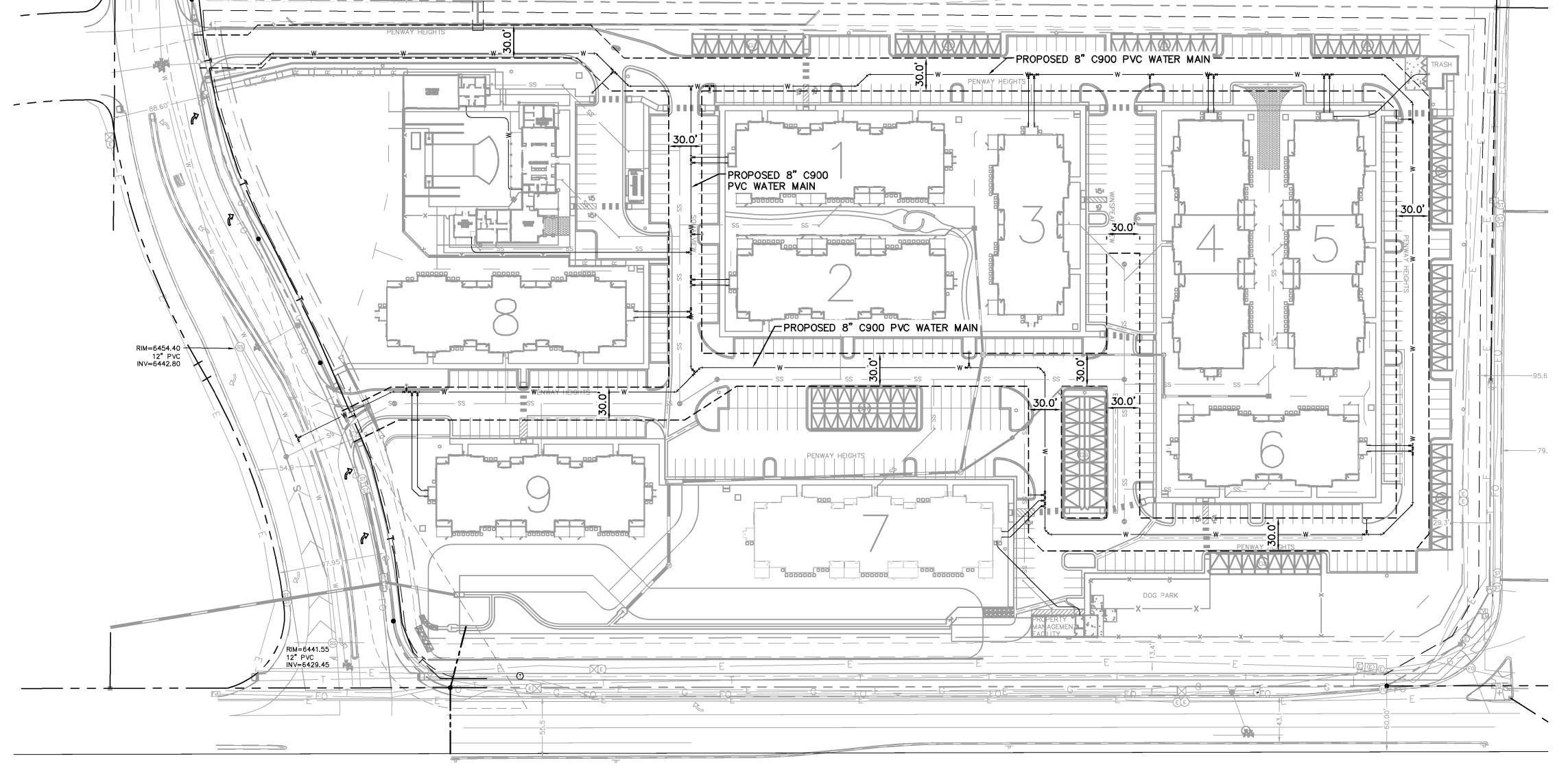
- 4 FH ASSEMBLY PER CSU STANDARD DETL. A5-6
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- 6 STORM SEWER CROSSING
- 7 8"X8" FIRE SERVICE TEE W/ 8" GATE VALVE (3-VALVE CLUSTER)

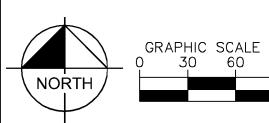
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## **CAUTION NOTE (SERVICE LINES):**

CONTRACTOR SHALL MAINTAIN 1' OF VERTICAL SEPARATION AT ALL DRY UTILITY CROSSINGS. CONTRACTOR SHALL POTHOLE ALL EXISTING UTILITY CROSSINGS TO VERIFY DEPTH AND COORDINATE WITH ENGINEER OF RECORD.









OVERALL

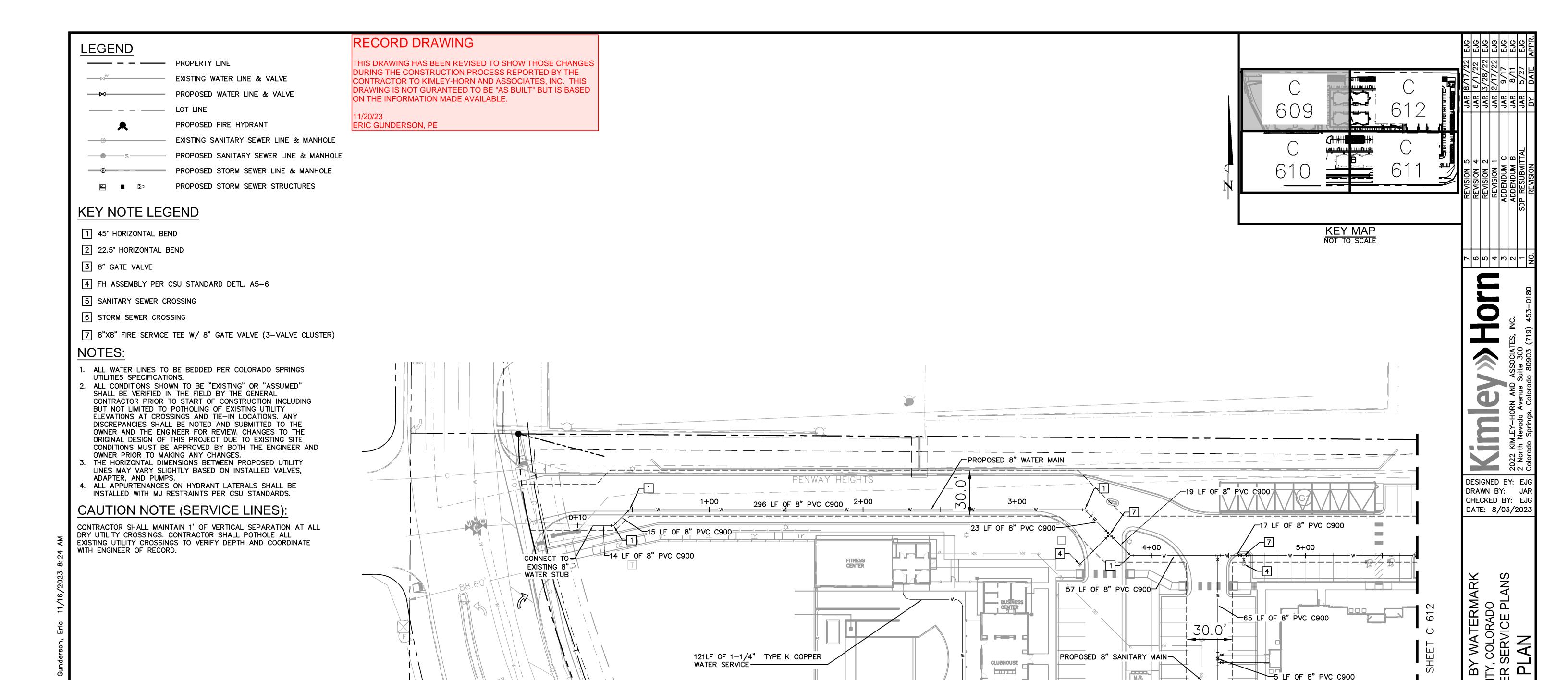
DESIGNED BY: EJO

DRAWN BY: JAI CHECKED BY: EJG

DATE: 8/03/2023

PROJECT NO. 096302009

SHEET



65 LF OF 8" PVC C900-

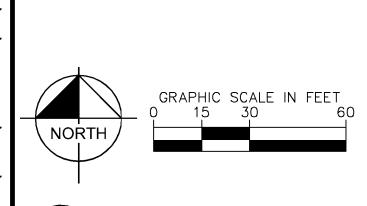
16 LF OF 8" PVC C900-

25 LF OF 8" PVC C900

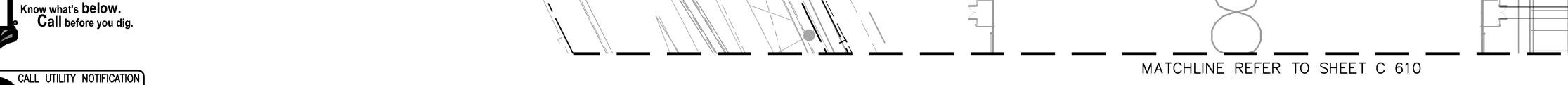
LF OF 8" PVC C900-

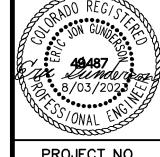
5 LF OF 8" PVC C900

24 LF OF 8" PVC C900-









2

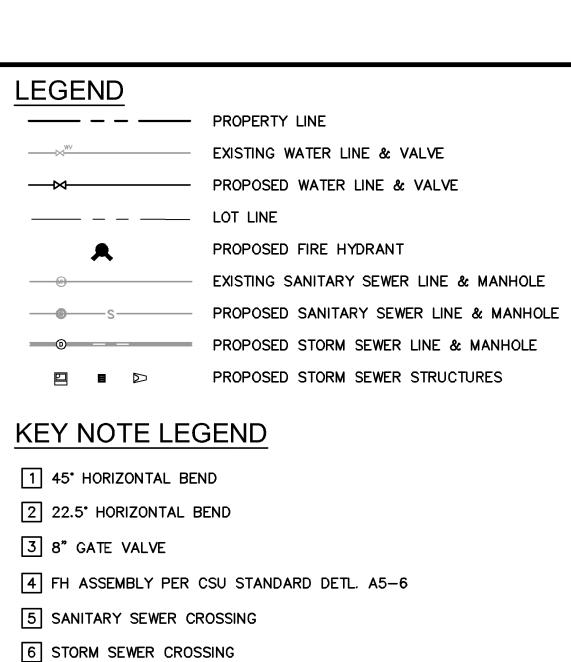
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PROJECT NO. 096302009

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## NOTES:

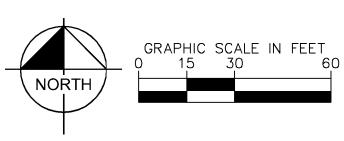
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7 8"X8" FIRE SERVICE TEE W/ 8" GATE VALVE (3 VALVE CLUSTER)

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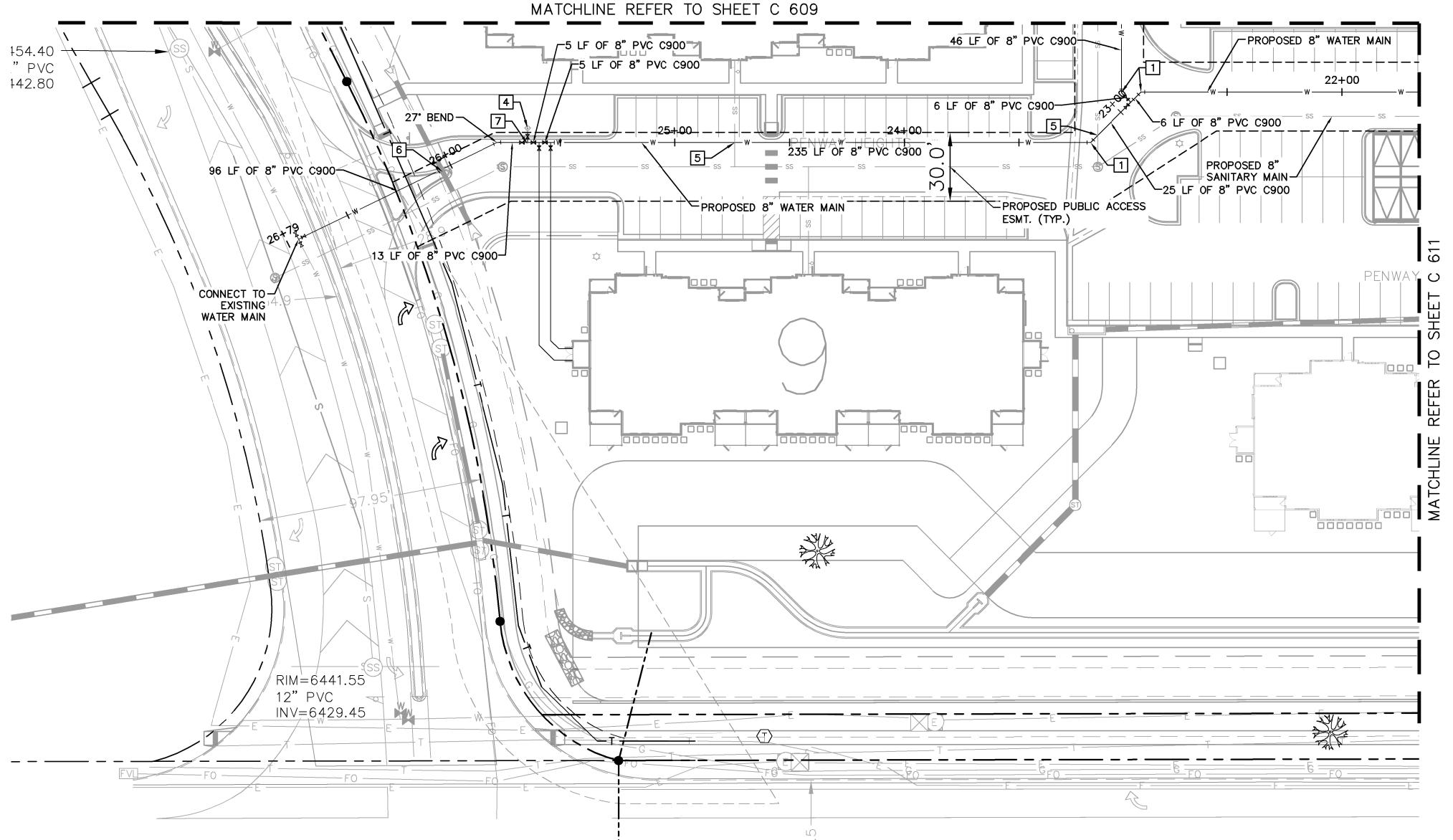




#### RECORD DRAWING

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|11/20/23 |ERIC GUNDERSON, PE



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WAD ASSOCIATES, INC.

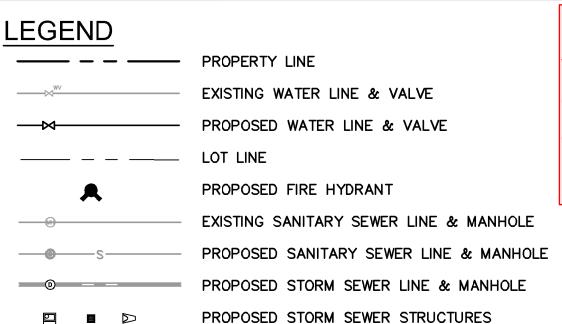
**KEY MAP** 

DESIGNED BY: EJG DRAWN BY: JAR CHECKED BY: EJG DATE: 8/03/2023

AD FLATS BY WATERMARK PASO COUNTY, COLORADO AND WATER SERVICE PLANS

19.00 REG/S/CRANGE SON GUNDANS SON GUNDANS

PROJECT NO. 096302009 SHEET



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#### **KEY NOTE LEGEND**

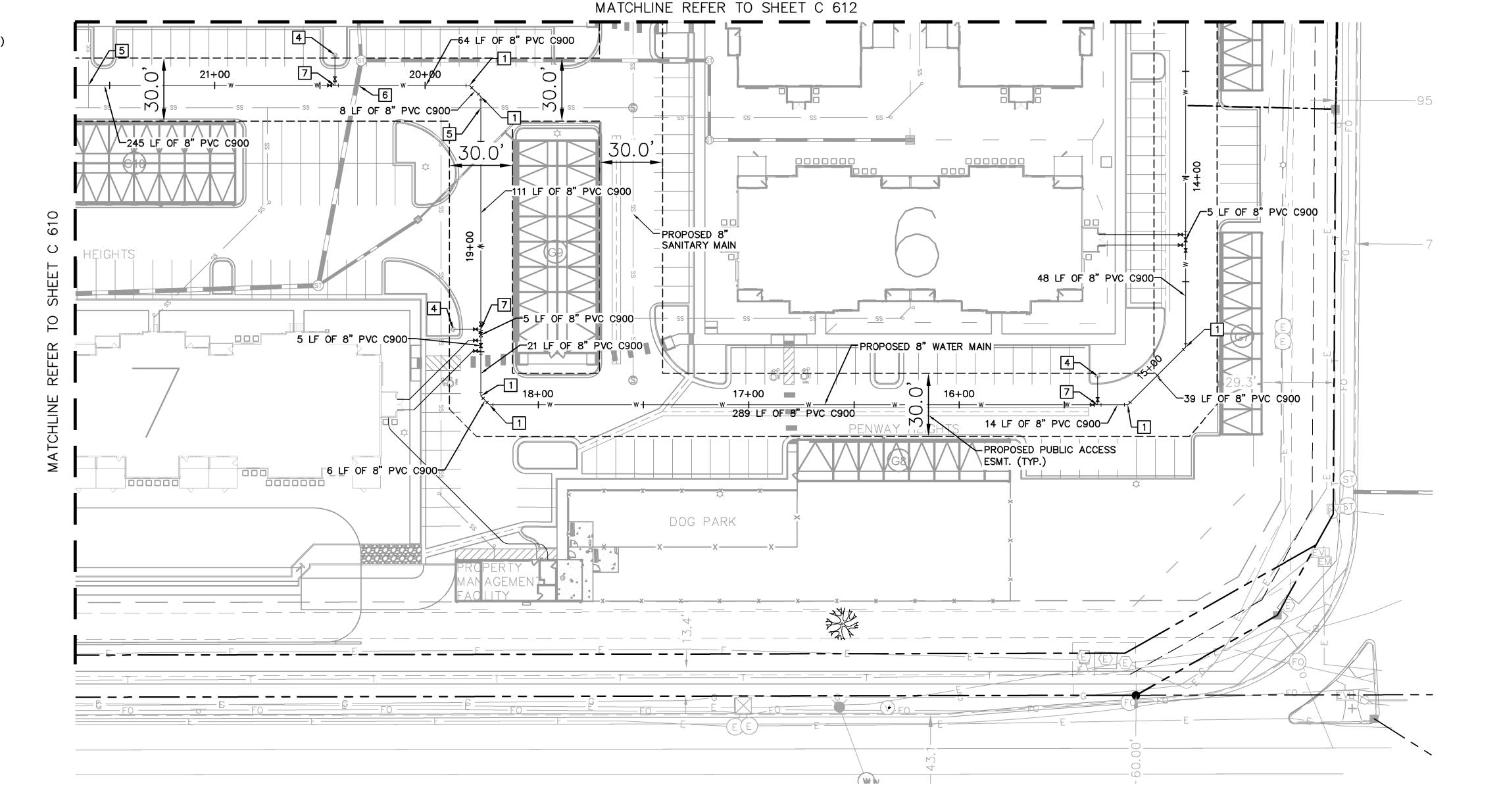
- 1 45° HORIZONTAL BEND
- 2 22.5° HORIZONTAL BEND
- 3 8" GATE VALVE
- 4 FH ASSEMBLY PER CSU STANDARD DETL. A5-6
- 5 SANITARY SEWER CROSSING
- 6 STORM SEWER CROSSING
- 7 8"X8" FIRE SERVICE TEE W/ 8" GATE VALVE (3 VALVE CLUSTER)

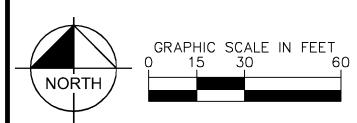
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- 3. THE HORIZONTAL DIMENSIONS BETWEEN PROPOSED UTILITY LINES MAY VARY SLIGHTLY BASED ON INSTALLED VALVES, ADAPTER, AND PUMPS.
- 4. ALL APPURTENANCES ON HYDRANT LATERALS SHALL BE INSTALLED WITH MJ RESTRAINTS PER CSU STANDARDS.

## CAUTION NOTE (SERVICE LINES):

CONTRACTOR SHALL MAINTAIN 1' OF VERTICAL SEPARATION AT ALL DRY UTILITY CROSSINGS. CONTRACTOR SHALL POTHOLE ALL EXISTING UTILITY CROSSINGS TO VERIFY DEPTH AND COORDINATE WITH ENGINEER OF RECORD.









PROJECT NO. 096302009

7 9 4 6 2 -

DESIGNED BY: EJG

DRAWN BY: JAF

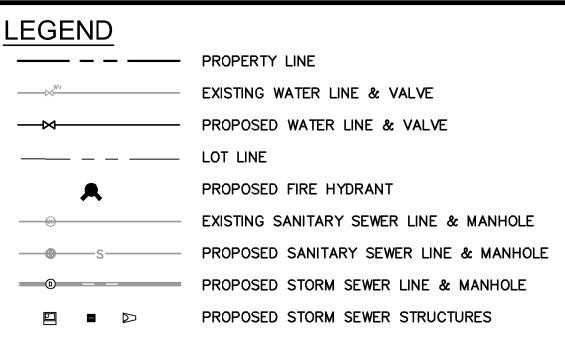
CHECKED BY: EJG

DATE: 8/03/2023

KEY MAP

NOT TO SCALE

SHEET C 611



## RECORD DRAWING

THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES DURING THE CONSTRUCTION PROCESS REPORTED BY THE CONTRACTOR TO KIMLEY-HORN AND ASSOCIATES, INC. THIS DRAWING IS NOT GURANTEED TO BE "AS BUILT" BUT IS BASED ON THE INFORMATION MADE AVAILABLE.

ERIC GUNDERSON, PE

# KEY NOTE LEGEND

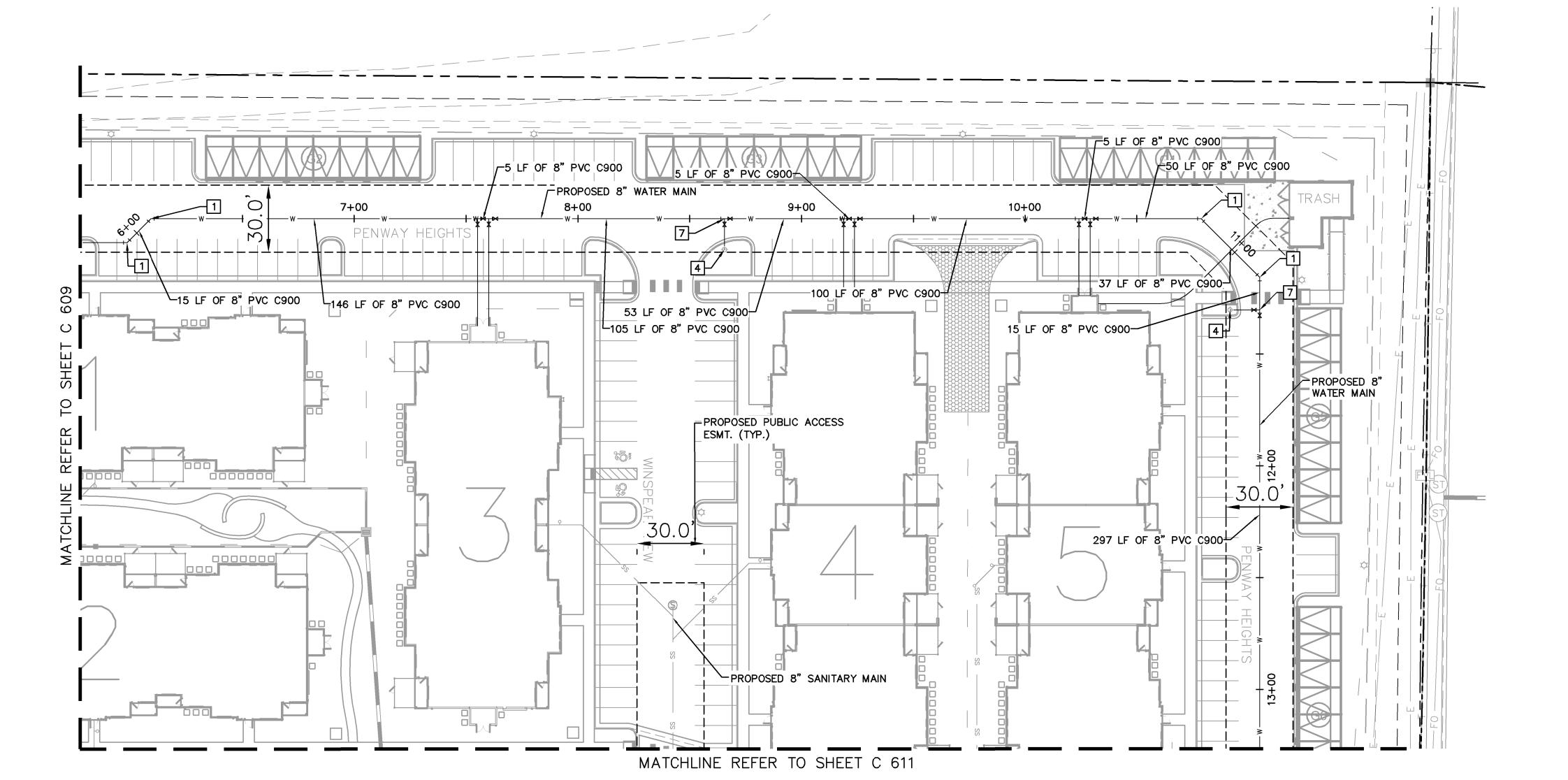
- 1 45° HORIZONTAL BEND
- 2 22.5° HORIZONTAL BEND
- 3 8" GATE VALVE
- 4 FH ASSEMBLY PER CSU STANDARD DETL. A5-6
- 5 SANITARY SEWER CROSSING
- 6 STORM SEWER CROSSING
- 7 8"X8" FIRE SERVICE TEE W/ 8" GATE VALVE (3-VALVE CLUSTER)

## NOTES:

- 1. ALL WATER LINES TO BE BEDDED PER COLORADO SPRINGS UTILITIES SPECIFICATIONS.
- 2. ALL CONDITIONS SHOWN TO BE "EXISTING" OR "ASSUMED" SHALL BE VERIFIED IN THE FIELD BY THE GENERAL CONTRACTOR PRIOR TO START OF CONSTRUCTION INCLUDING BUT NOT LIMITED TO POTHOLING OF EXISTING UTILITY ELEVATIONS AT CROSSINGS AND TIE—IN LOCATIONS. ANY DISCREPANCIES SHALL BE NOTED AND SUBMITTED TO THE OWNER AND THE ENGINEER FOR REVIEW. CHANGES TO THE ORIGINAL DESIGN OF THIS PROJECT DUE TO EXISTING SITE CONDITIONS MUST BE APPROVED BY BOTH THE ENGINEER AND OWNER PRIOR TO MAKING ANY CHANGES.
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CONTRACTOR SHALL MAINTAIN 1' OF VERTICAL SEPARATION AT ALL DRY UTILITY CROSSINGS. CONTRACTOR SHALL POTHOLE ALL EXISTING UTILITY CROSSINGS TO VERIFY DEPTH AND COORDINATE WITH ENGINEER OF RECORD.









A: \DEN\_CIVII \U303UZUU3\_AKEIS DIIVE \CADD \FIR

49487 SUNDER 8/03/2023 PROJECT NO.

7 9 4 5 7

DESIGNED BY: EJO

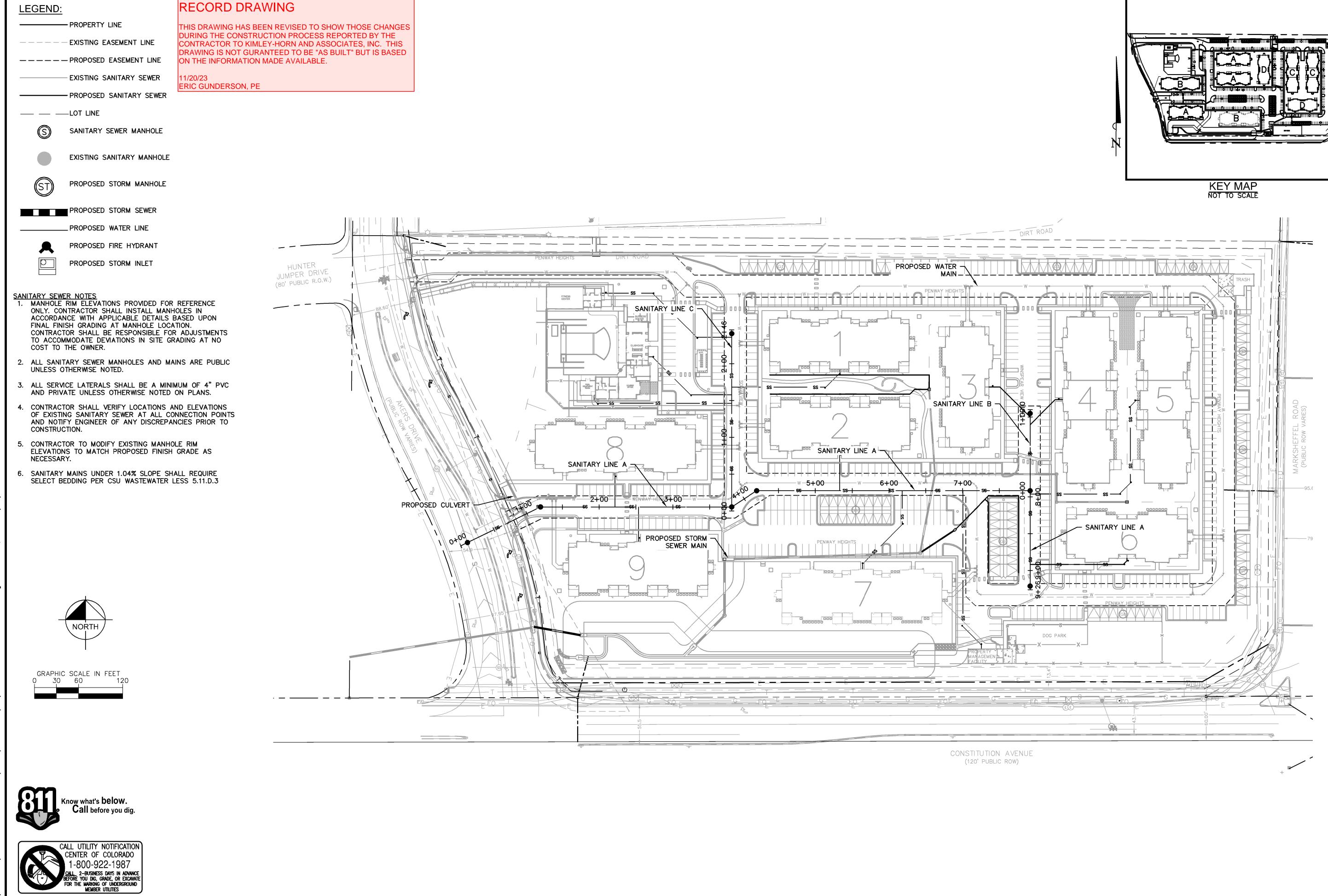
DRAWN BY: JAI

CHECKED BY: EJO

DATE: 8/03/2023

KEY MAP

096302009 SHEET



K:\DEN\_Civil\096302009\_Akers Drive\CADD\

PROJECT NO. 096302009 SHEET

DESIGNED BY: EJO

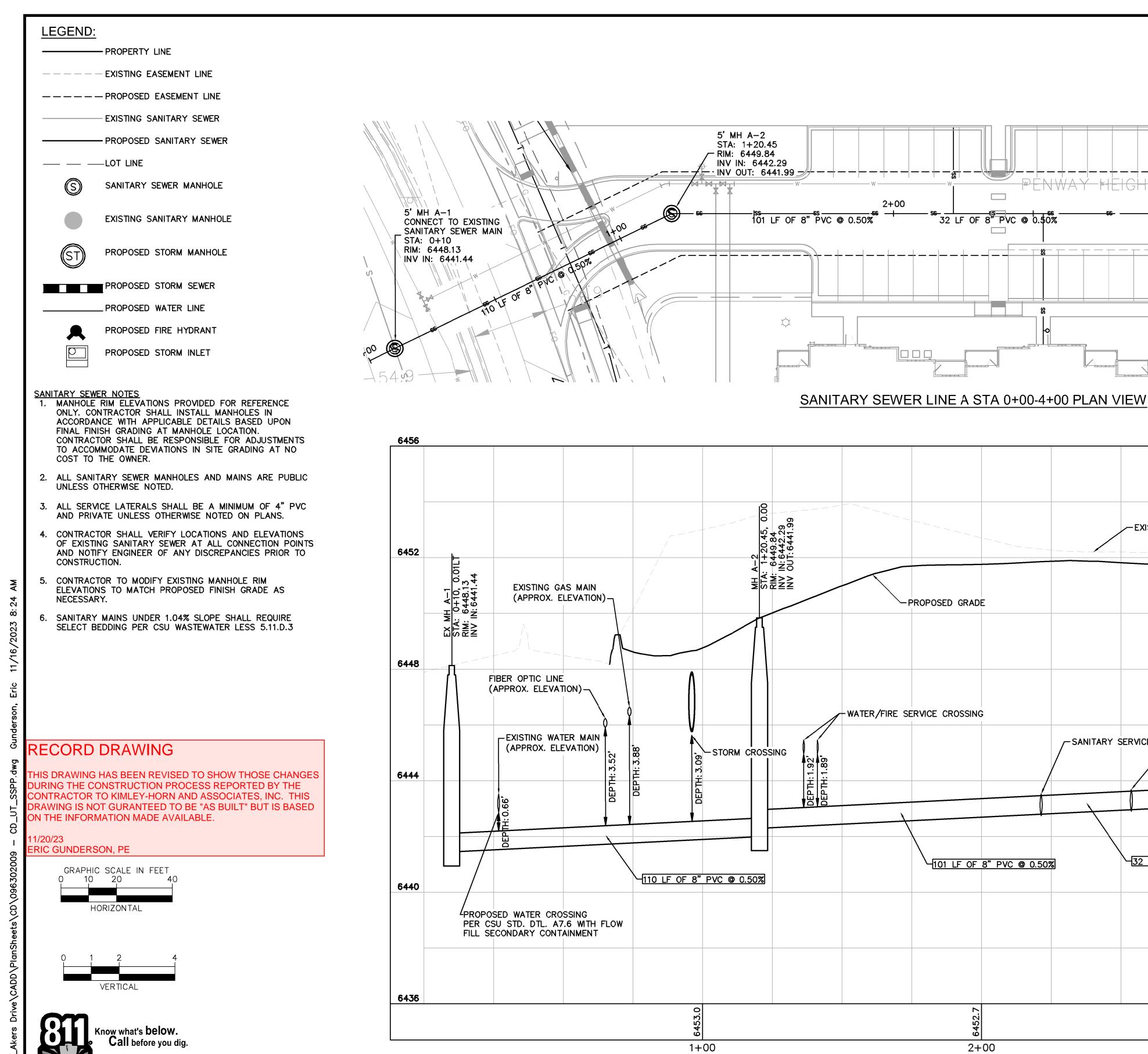
DRAWN BY: JAI

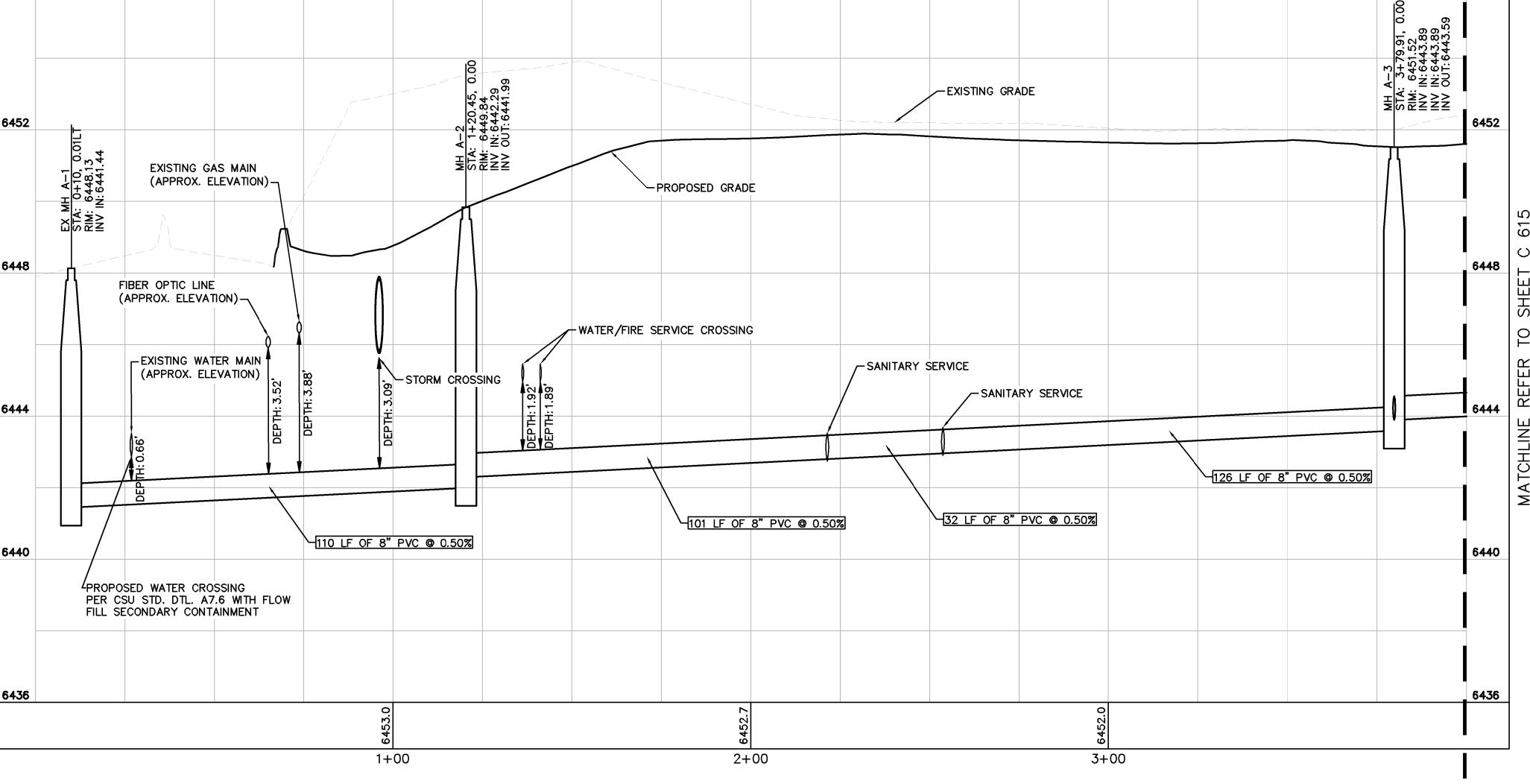
CHECKED BY: EJG

DATE: 8/03/2023

WATER SERVICE PLANS L SANITARY PLAN

UTILITY AND W. OVERALL





3+00

126 LF OF 8" PVC @ 0.50%

5' MH A-3

STA: 3+79.91

INV IN: 6443.89 INV IN: 6443.89

INV OUT: 6443.59

RIM: 6451.52

PROPOSED STORM -SEWER MAIN

**KEY MAP** 

NOT TO SCALE

6456

SANITARY SEWER LINE A STA 0+00-4+00 PROFILE VIEW

CALL UTILITY NOTIFICATION

CENTER OF COLORADO

1-800-922-1987

ALL 2-BUSINESS DAYS IN ADVANCE FORE YOU DIG, GRADE, OR EXCAVATE R THE MARKING OF UNDERGROUND MEMBER UTILITIES

SHEET C 614

PROJECT NO.

096302009

7 9 4 5 6 7

DESIGNED BY: EJO DRAWN BY: JAI

CHECKED BY: EJO

DATE: 8/03/2023

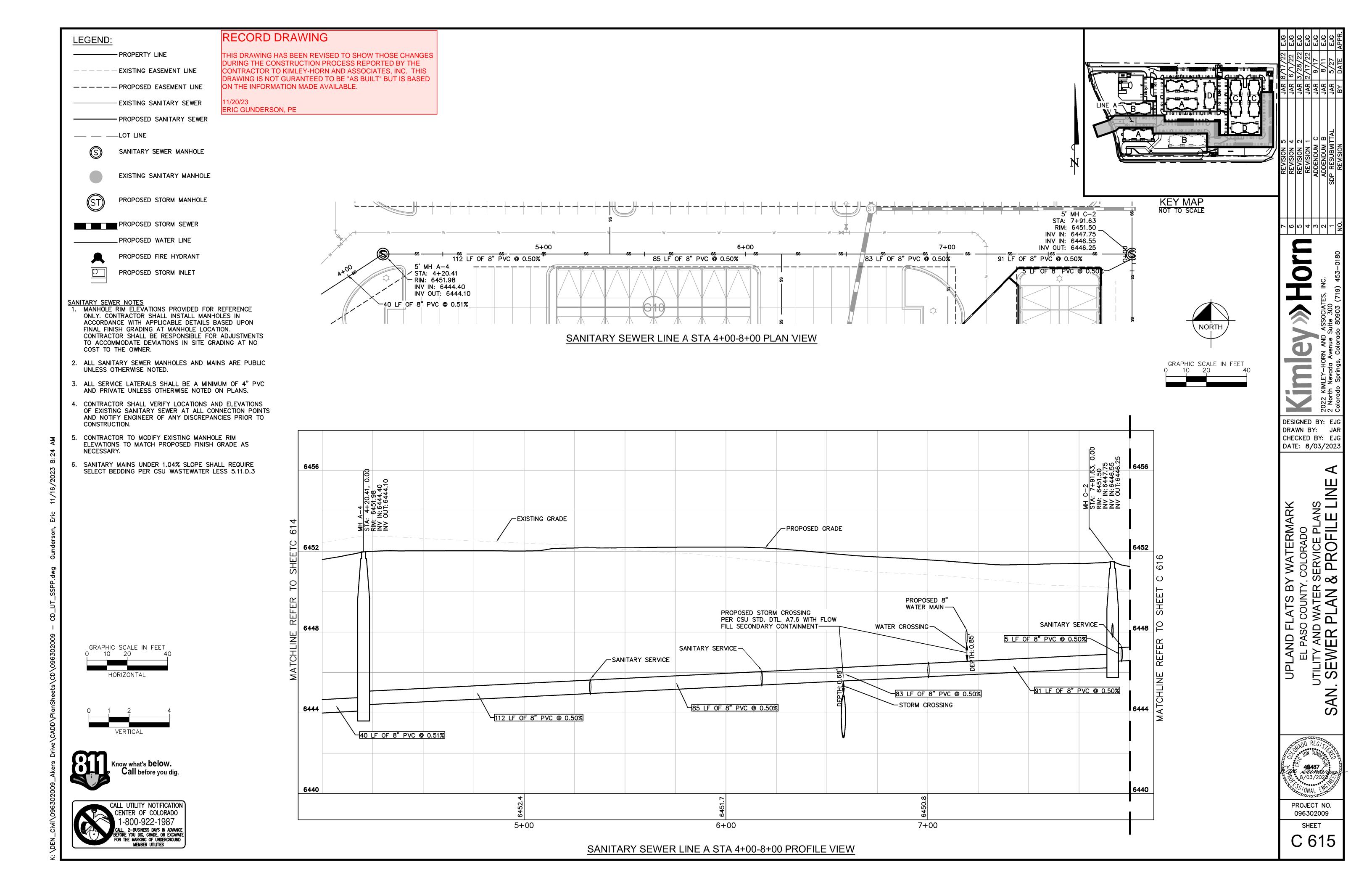
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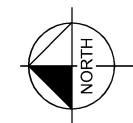
ERVICE PLANS PROFILE LI

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NATER PLAN

SEWER F





1. MANHOLE RIM ELEVATIONS PROVIDED FOR REFERENCE ONLY. CONTRACTOR SHALL INSTALL MANHOLES IN ACCORDANCE WITH APPLICABLE DETAILS BASED UPON FINAL FINISH GRADING AT MANHOLE LOCATION. CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTMENTS

UNLESS OTHERWISE NOTED.

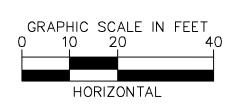
TO ACCOMMODATE DEVIATIONS IN SITE GRADING AT NO COST TO THE OWNER. 2. ALL SANITARY SEWER MANHOLES AND MAINS ARE PUBLIC

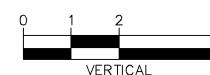
3. ALL SERVICE LATERALS SHALL BE A MINIMUM OF 4" PVC AND PRIVATE UNLESS OTHERWISE NOTED ON PLANS.

4. CONTRACTOR SHALL VERIFY LOCATIONS AND ELEVATIONS OF EXISTING SANITARY SEWER AT ALL CONNECTION POINTS AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

5. CONTRACTOR TO MODIFY EXISTING MANHOLE RIM ELEVATIONS TO MATCH PROPOSED FINISH GRADE AS

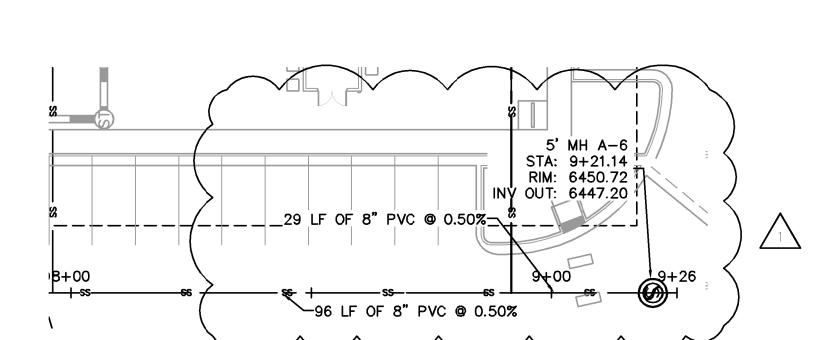
6. SANITARY MAINS UNDER 1.04% SLOPE SHALL REQUIRE SELECT BEDDING PER CSU WASTEWATER LESS 5.11.D.3



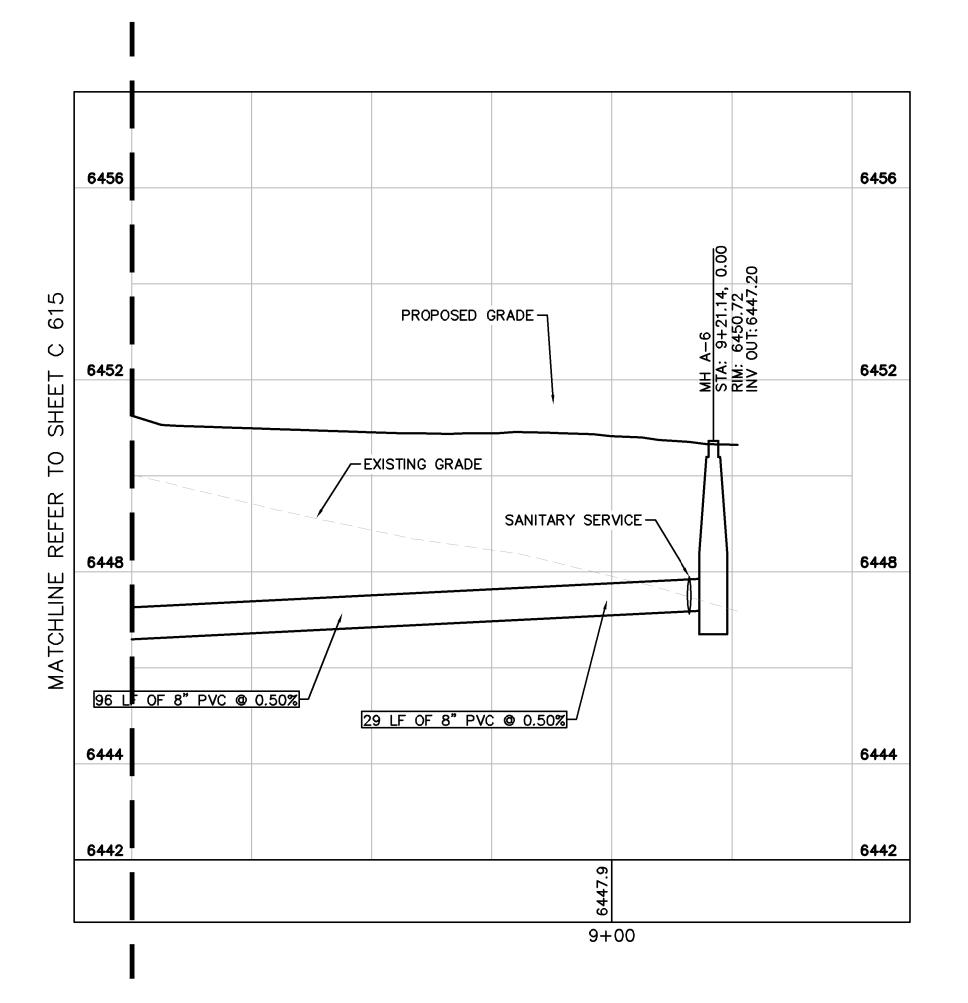








SANITARY SEWER LINE A STA 8+00-9+27 PLAN VIEW



SANITARY SEWER LINE A STA 8+00-9+26 PROFILE VIEW

**KEY MAP** NOT TO SCALE

DESIGNED BY: EJO DRAWN BY: JAF CHECKED BY: EJG

DATE: 8/03/2023

UTILITY AND WATER SERVICE PLANS. SEWER PLAN & PROFILE L

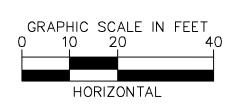
PROJECT NO. 096302009 SHEET

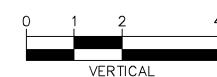
COST TO THE OWNER. 2. ALL SANITARY SEWER MANHOLES AND MAINS ARE PUBLIC UNLESS OTHERWISE NOTED.

CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTMENTS TO ACCOMMODATE DEVIATIONS IN SITE GRADING AT NO

FINAL FINISH GRADING AT MANHOLE LOCATION.

- 3. ALL SERVICE LATERALS SHALL BE A MINIMUM OF 4" PVC AND PRIVATE UNLESS OTHERWISE NOTED ON PLANS.
- 4. CONTRACTOR SHALL VERIFY LOCATIONS AND ELEVATIONS OF EXISTING SANITARY SEWER AT ALL CONNECTION POINTS AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO
- CONTRACTOR TO MODIFY EXISTING MANHOLE RIM ELEVATIONS TO MATCH PROPOSED FINISH GRADE AS NECESSARY.





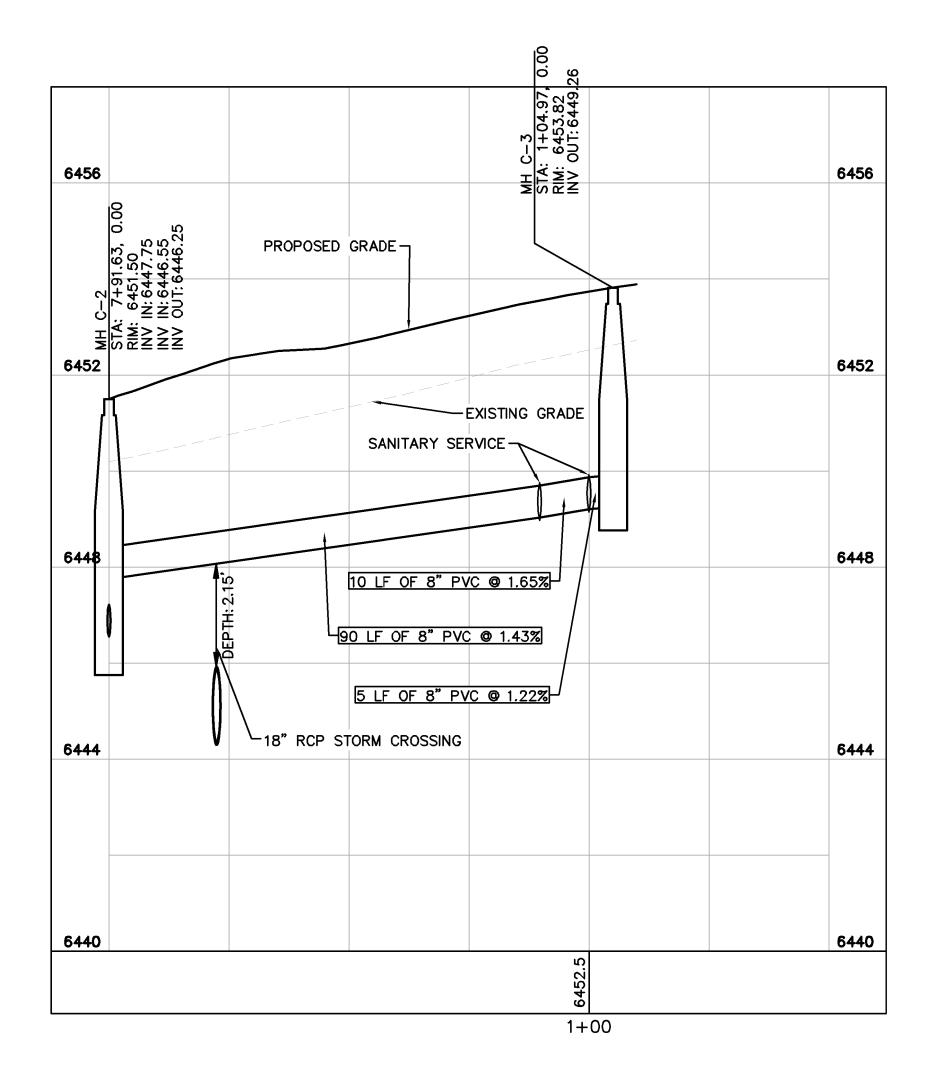




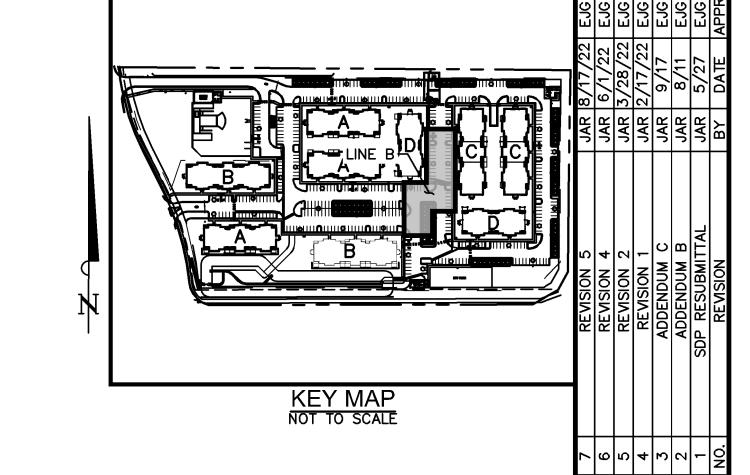
RECORD DRAWING THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES DURING THE CONSTRUCTION PROCESS REPORTED BY THE CONTRACTOR TO KIMLEY-HORN AND ASSOCIATES, INC. THIS DRAWING IS NOT GURANTEED TO BE "AS BUILT" BUT IS BASED ON THE INFORMATION MADE AVAILABLE. 11/20/23 ERIC GUNDERSON, PE

5' MH C-2 STA: 7+91.63 RIM: 6451.50 INV IN: 6447.75 INV IN: 6446.55 /-90 LF OF 8" PVC @ 1.43% INV OUT: 6446.25 STA: 1+04.97 10 LF OF 8" PVC @ 1.65%-- RIM: 6453.82 INV OUT: 6449.26 5 LF OF 8" PVC @ 1.22%—

SANITARY SEWER LINE B STA 0+00-1+50 PLAN VIEW



SANITARY SEWER LINE B STA 0+00-1+50 PROFILE VIEW

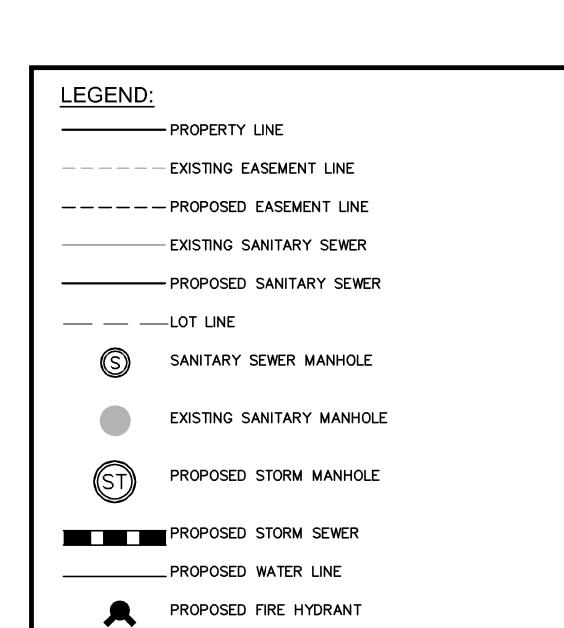


DESIGNED BY: EJO

DRAWN BY: JAI CHECKED BY: EJG DATE: 8/03/2023  $\mathbf{\Omega}$ 

> & PROFILE LII PLAN 8 UTILITY AND I. SEWER F

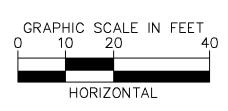
PROJECT NO. 096302009 SHEET

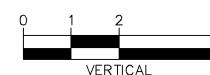


PROPOSED STORM INLET

SANITARY SEWER NOTES 1. MANHOLE RIM ELEVATIONS PROVIDED FOR REFERENCE ONLY. CONTRACTOR SHALL INSTALL MANHOLES IN ACCORDANCE WITH APPLICABLE DETAILS BASED UPON FINAL FINISH GRADING AT MANHOLE LOCATION. CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTMENTS TO ACCOMMODATE DEVIATIONS IN SITE GRADING AT NO COST TO THE OWNER.

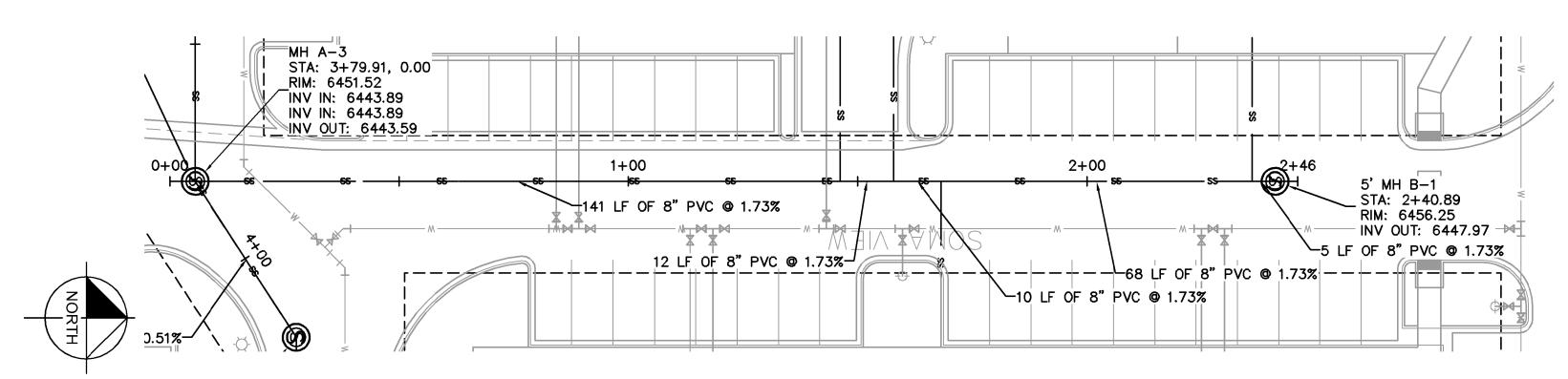
- 2. ALL SANITARY SEWER MANHOLES AND MAINS ARE PUBLIC UNLESS OTHERWISE NOTED.
- 3. ALL SERVICE LATERALS SHALL BE A MINIMUM OF 4" PVC AND PRIVATE UNLESS OTHERWISE NOTED ON PLANS.
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- CONTRACTOR TO MODIFY EXISTING MANHOLE RIM ELEVATIONS TO MATCH PROPOSED FINISH GRADE AS NECESSARY.



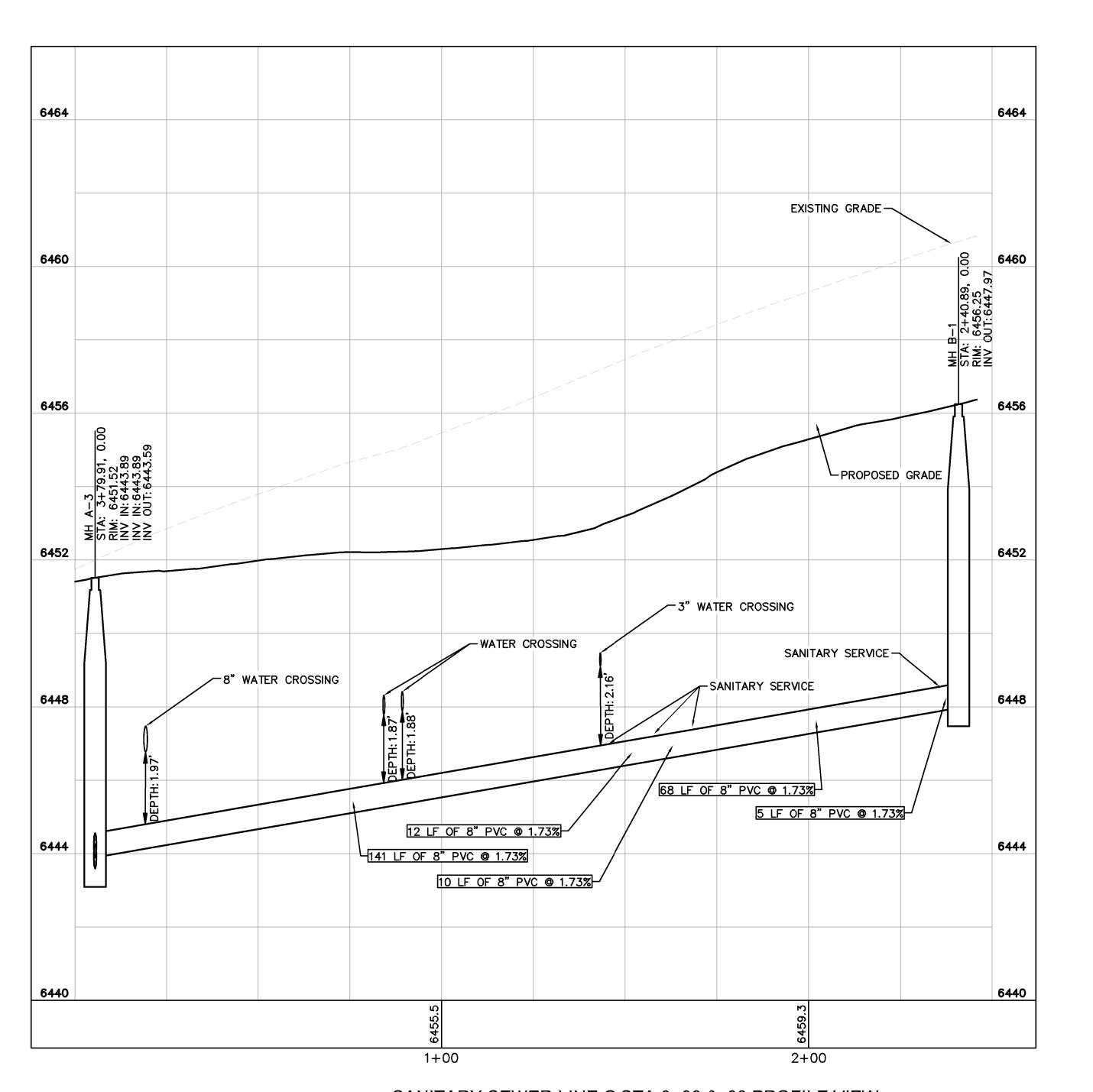




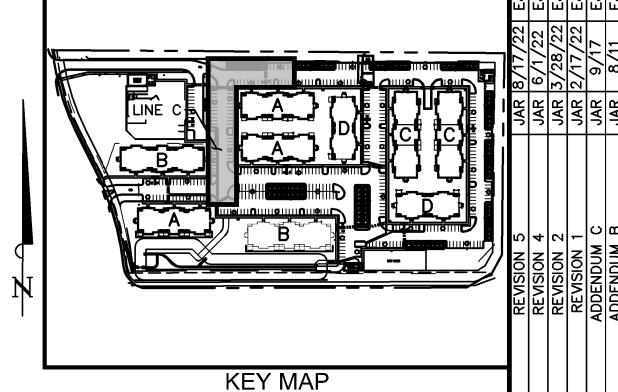




## SANITARY SEWER LINE C STA 0+00-2+46 PLAN VIEW



SANITARY SEWER LINE C STA 0+00-3+00 PROFILE VIEW



**KEY MAP** NOT TO SCALE

7 9 4 5 6 7

DESIGNED BY: EJO

DRAWN BY: JAI CHECKED BY: EJG DATE: 8/03/2023

PROFILE LI NATER PLAN UTILITY AND I. SEWER F

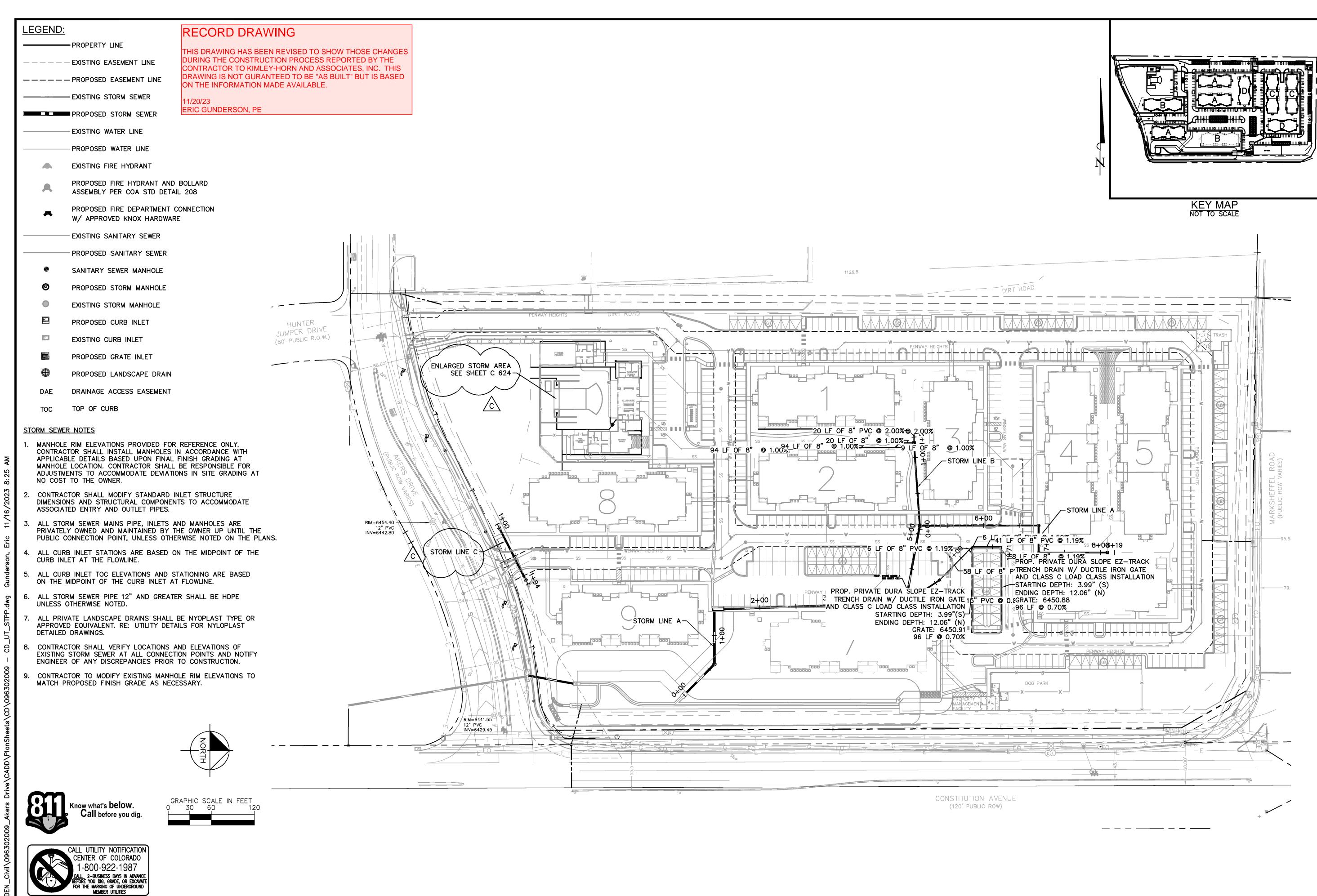
PROJECT NO. 096302009

SHEET C 618

RECORD DRAWING

THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES DURING THE CONSTRUCTION PROCESS REPORTED BY THE CONTRACTOR TO KIMLEY-HORN AND ASSOCIATES, INC. THIS DRAWING IS NOT GURANTEED TO BE "AS BUILT" BUT IS BASED ON THE INFORMATION MADE AVAILABLE.

11/20/23 ERIC GUNDERSON, PE



C 619

PROJECT NO.

096302009

SHEET

7 9 4 5 6 7

DESIGNED BY: EJO

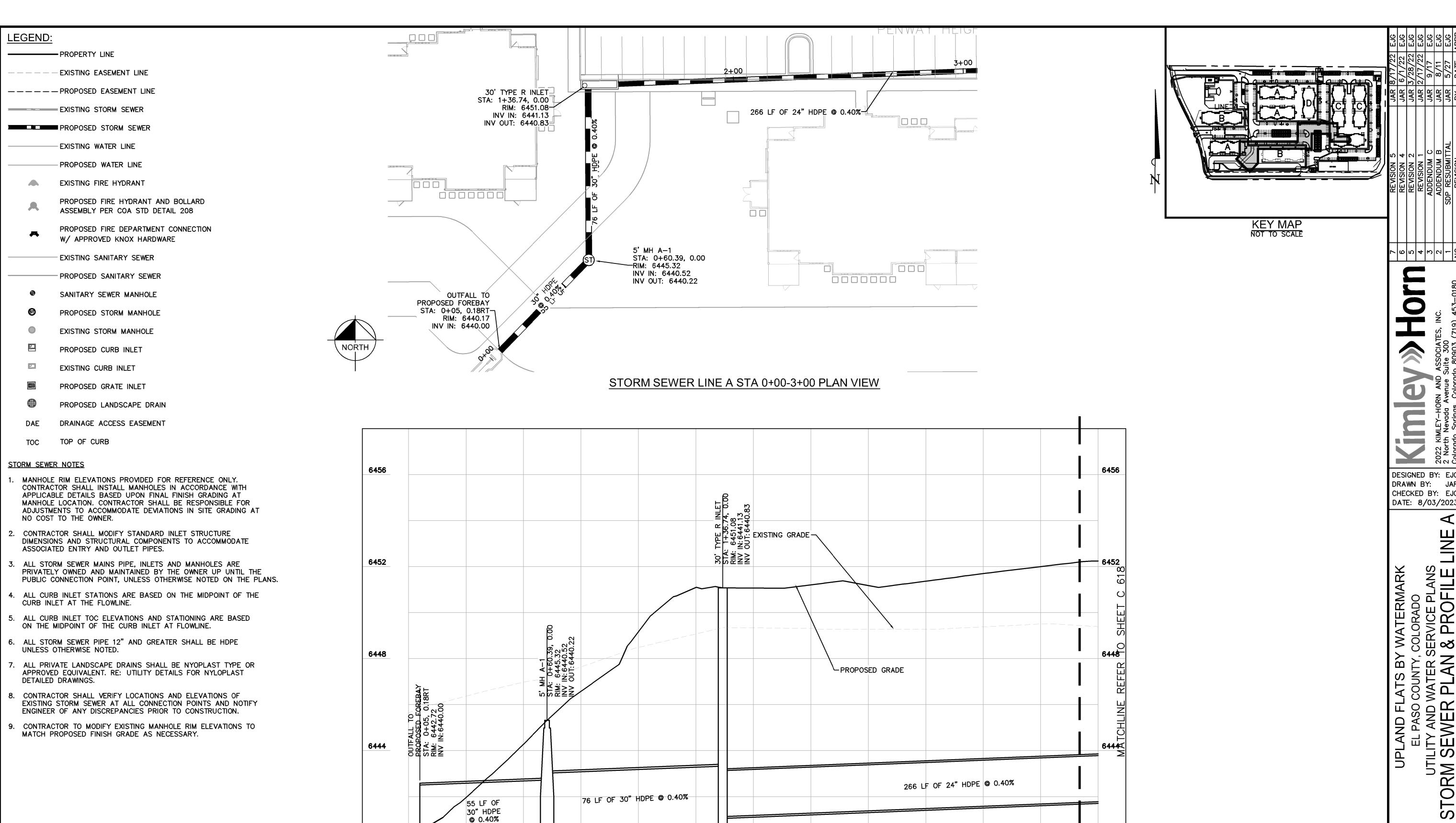
DRAWN BY: JAI

CHECKED BY: EJO

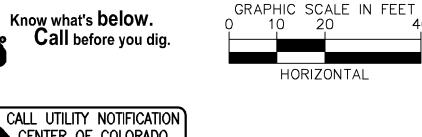
DATE: 8/03/2023

TER SERVICE PLANS STORM PLAN

UTILITY AND WAT OVERALL







6440

6438





2+00

1+00

# RECORD DRAWING

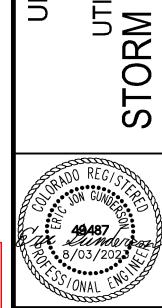
THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES DURING THE CONSTRUCTION PROCESS REPORTED BY THE CONTRACTOR TO KIMLEY-HORN AND ASSOCIATES, INC. THIS DRAWING IS NOT GURANTEED TO BE "AS BUILT" BUT IS BASED ON THE INFORMATION MADE AVAILABLE.

11/20/23

6440

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ERIC GUNDERSON, PE



RVICE PLANS

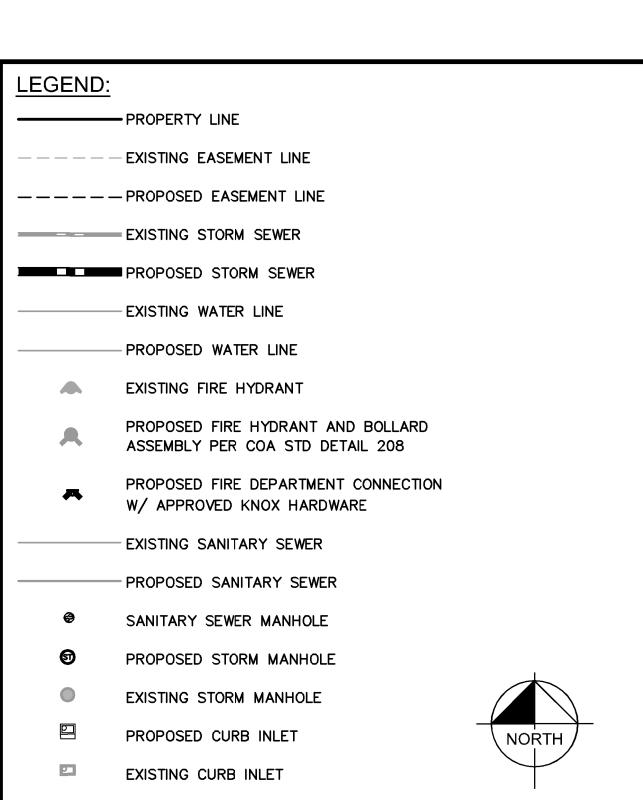
PROFILE I

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MATER SE PLAN

SEWER

PROJECT NO. 096302009 SHEET



PROPOSED GRATE INLET

PROPOSED LANDSCAPE DRAIN

DRAINAGE ACCESS EASEMENT

TOP OF CURB

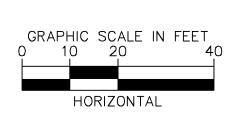
#### STORM SEWER NOTES

- MANHOLE RIM ELEVATIONS PROVIDED FOR REFERENCE ONLY. CONTRACTOR SHALL INSTALL MANHOLES IN ACCORDANCE WITH APPLICABLE DETAILS BASED UPON FINAL FINISH GRADING AT MANHOLE LOCATION. CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTMENTS TO ACCOMMODATE DEVIATIONS IN SITE GRADING AT NO COST TO THE OWNER.
- CONTRACTOR SHALL MODIFY STANDARD INLET STRUCTURE DIMENSIONS AND STRUCTURAL COMPONENTS TO ACCOMMODATE ASSOCIATED ENTRY AND OUTLET PIPES.
- 3. ALL STORM SEWER MAINS PIPE, INLETS AND MANHOLES ARE PRIVATELY OWNED AND MAINTAINED BY THE OWNER UP UNTIL THE PUBLIC CONNECTION POINT, UNLESS OTHERWISE NOTED ON THE PLANS.
- 4. ALL CURB INLET STATIONS ARE BASED ON THE MIDPOINT OF THE CURB INLET AT THE FLOWLINE.
- ALL CURB INLET TOC ELEVATIONS AND STATIONING ARE BASED ON THE MIDPOINT OF THE CURB INLET AT FLOWLINE.

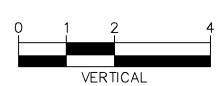
ALL STORM SEWER PIPE 12" AND GREATER SHALL BE HDPE

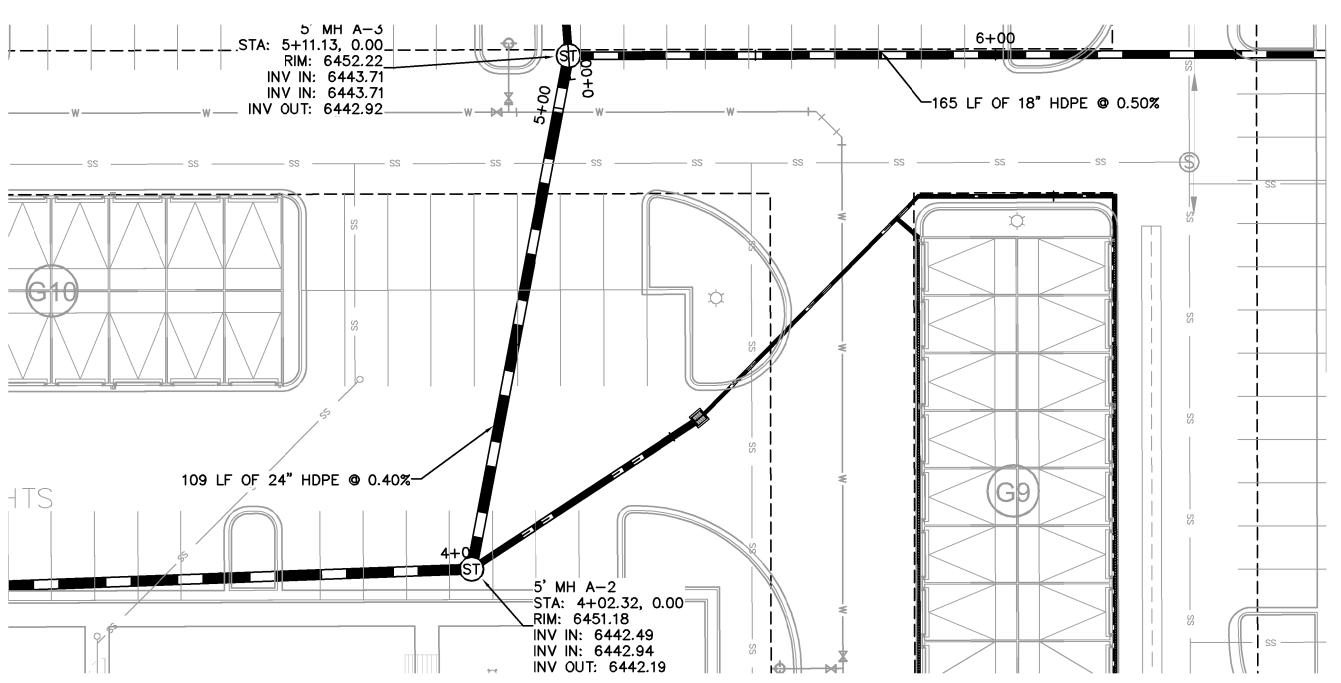
- UNLESS OTHERWISE NOTED.
- ALL PRIVATE LANDSCAPE DRAINS SHALL BE NYOPLAST TYPE OR APPROVED EQUIVALENT. RE: UTILITY DETAILS FOR NYLOPLAST DETAILED DRAWINGS.
- CONTRACTOR SHALL VERIFY LOCATIONS AND ELEVATIONS OF EXISTING STORM SEWER AT ALL CONNECTION POINTS AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
- CONTRACTOR TO MODIFY EXISTING MANHOLE RIM ELEVATIONS TO MATCH PROPOSED FINISH GRADE AS NECESSARY.



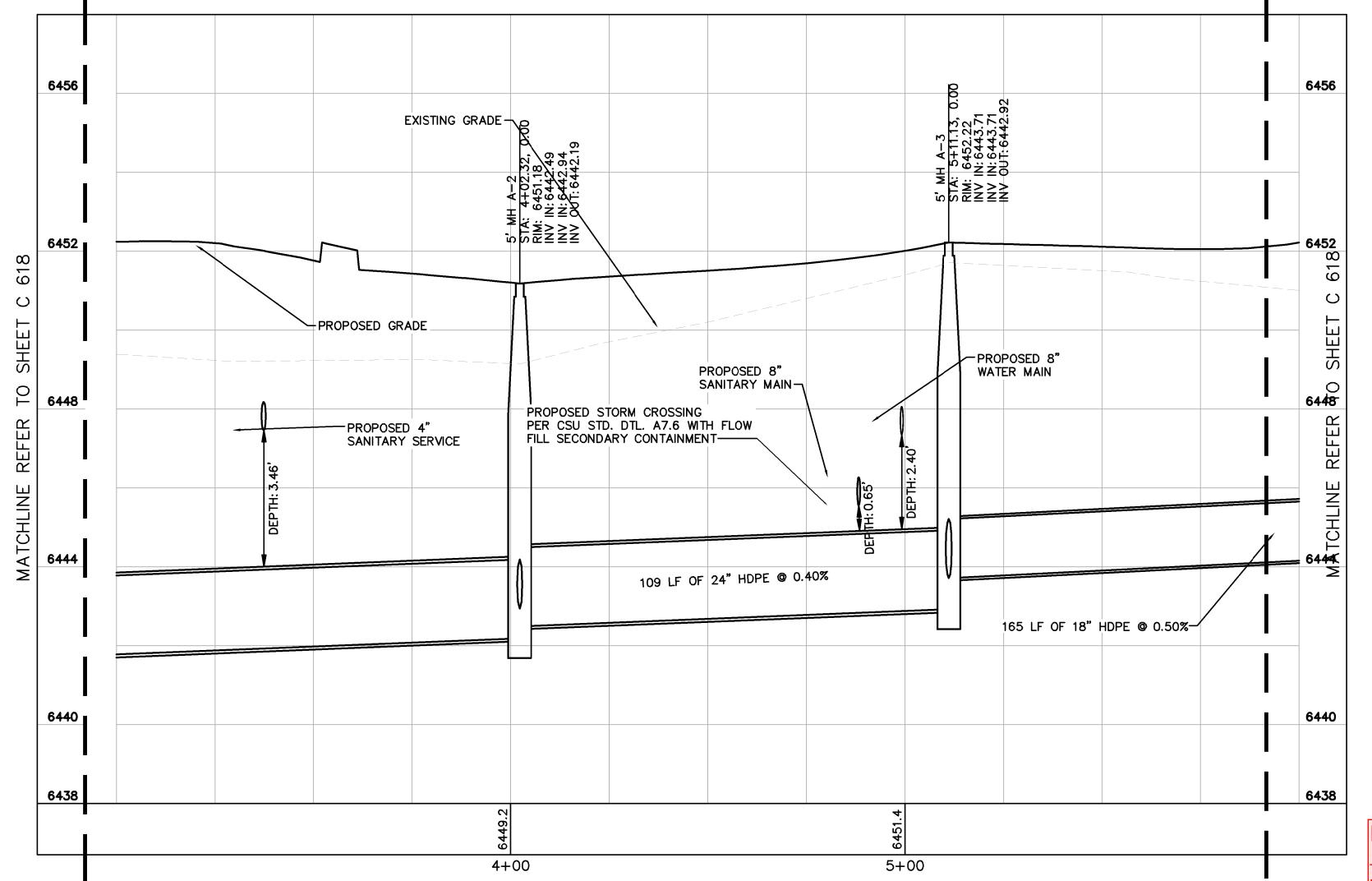








STORM SEWER LINE A STA 3+00-6+00 PLAN VIEW



STORM SEWER LINE A STA 3+00-6+00 PROFILE VIEW

### RECORD DRAWING

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**KEY MAP** 

NOT TO SCALE

11/20/23

ERIC GUNDERSON, PE

PROJECT NO.

7 9 4 5 6 7

DESIGNED BY: EJ

DRAWN BY: JAI

CHECKED BY: EJO

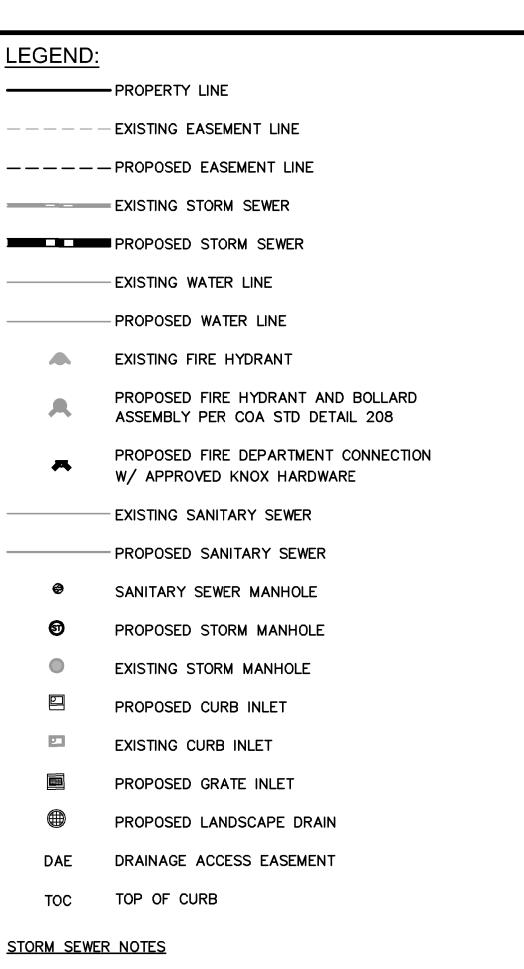
DATE: 8/03/202

SERVICE PLA PROFILE

PLAN AND

STORM

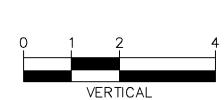
096302009 SHEET



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- CONTRACTOR SHALL MODIFY STANDARD INLET STRUCTURE DIMENSIONS AND STRUCTURAL COMPONENTS TO ACCOMMODATE ASSOCIATED ENTRY AND OUTLET PIPES.
- 3. ALL STORM SEWER MAINS PIPE, INLETS AND MANHOLES ARE PRIVATELY OWNED AND MAINTAINED BY THE OWNER UP UNTIL THE PUBLIC CONNECTION POINT, UNLESS OTHERWISE NOTED ON THE PLANS.
- 4. ALL CURB INLET STATIONS ARE BASED ON THE MIDPOINT OF THE CURB INLET AT THE FLOWLINE.
- ALL CURB INLET TOC ELEVATIONS AND STATIONING ARE BASED ON THE MIDPOINT OF THE CURB INLET AT FLOWLINE.
- ALL STORM SEWER PIPE 12" AND GREATER SHALL BE HDPE UNLESS OTHERWISE NOTED.
- ALL PRIVATE LANDSCAPE DRAINS SHALL BE NYOPLAST TYPE OR APPROVED EQUIVALENT. RE: UTILITY DETAILS FOR NYLOPLAST DETAILED DRAWINGS.
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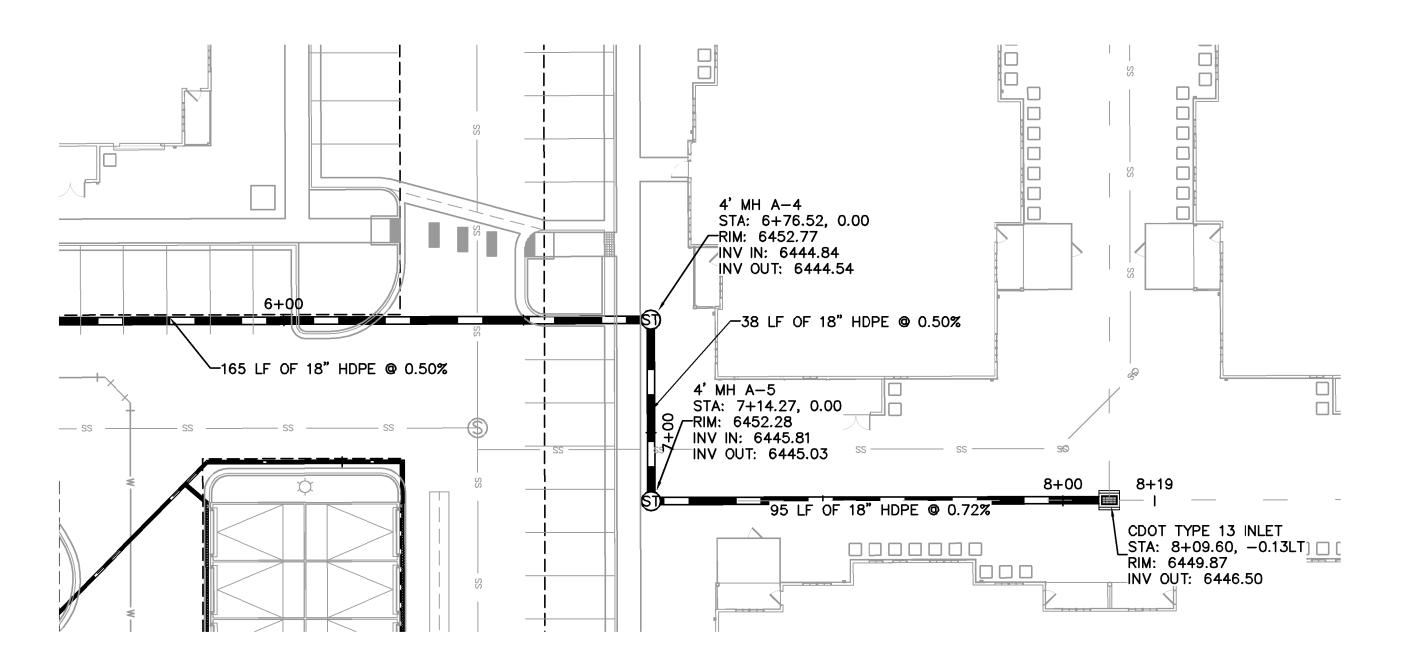




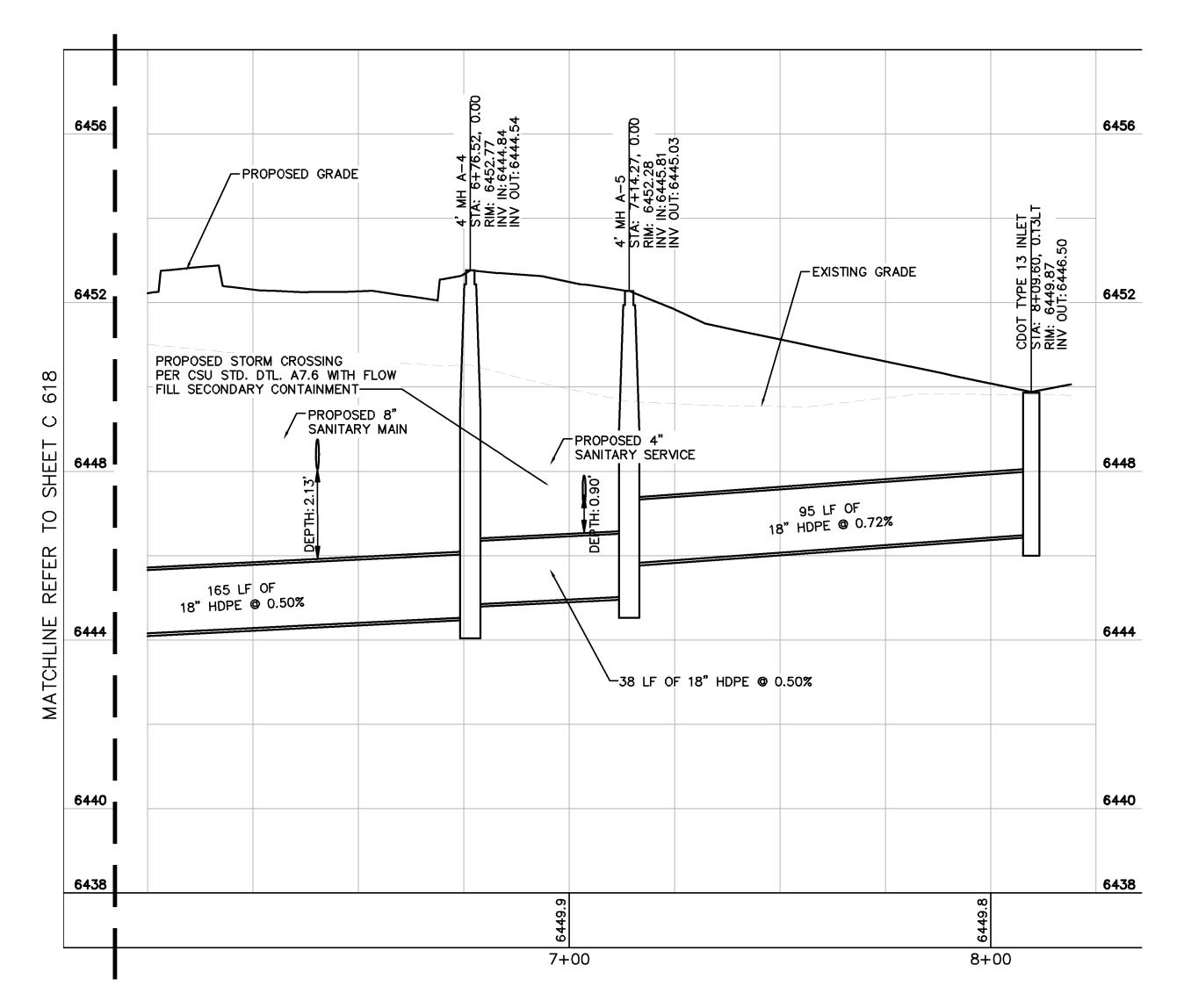
GRAPHIC SCALE IN FEET

HORIZONTAL

10 20



# STORM SEWER LINE A STA 6+00-7+90 PLAN VIEW



# STORM SEWER LINE A STA 6+00-8+25 PROFILE VIEW

# RECORD DRAWING

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**KEY MAP** 

NOT TO SCALE

11/20/23 ERIC GUNDERSON, PE

7 4 4 5 2 5

DESIGNED BY: EJ

DRAWN BY: JAI

CHECKED BY: EJO

DATE: 8/03/2023

SERVICE PLA PROFILE

PLAN AND

STORM

PROJECT NO. 096302009

C 622

SHEET

