

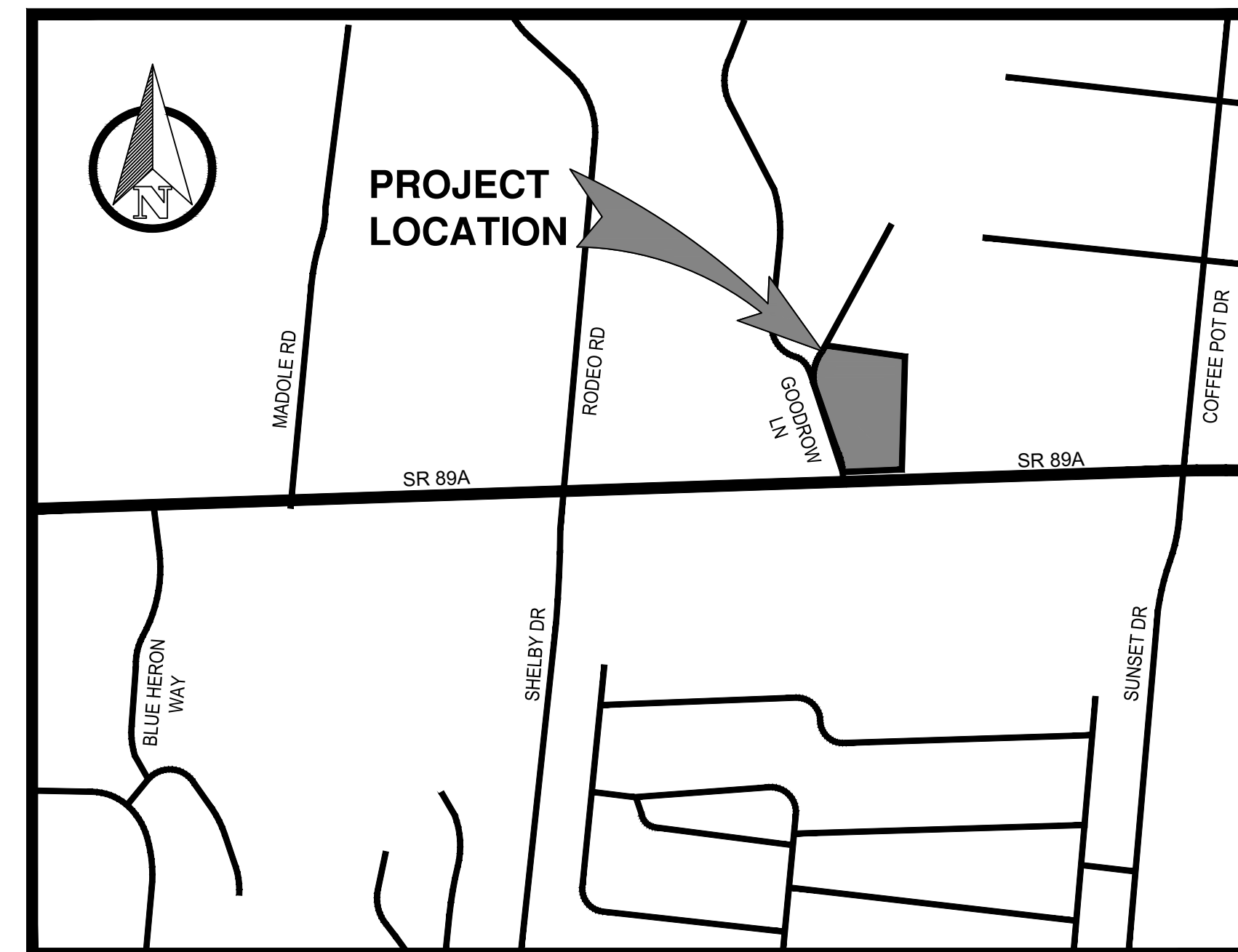
ALKEMISTA CAFE & BAR

2140 SR 89A & 40 GOODROW LANE
SEDONA, ARIZONA 32336

APN: 408-24-070A (PARCEL 1)
408-24-070C (PARCEL 2)

A TRACT OF LAND IN THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 11, TOWNSHIP 17 NORTH, RANGE 5 EAST, OF THE GILA AND SALT RIVER BASE AND MERIDIAN, YAVAPAI COUNTY, ARIZONA,

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VICINITY MAP
SEDONA, ARIZONA
NOT TO SCALE

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COVER SHEET

ALKEMISTA CAFE & BAR

2140 SR 89A SEDONA, AZ

SHEET TITLE:	COVER SHEET
PROJECT TITLE:	ALKEMISTA CAFE & BAR
DRAWN BY:	RJB/TCH
SCALE:	AS NOTED
DATE:	4/13/2023
PROJECT NO:	200209
SHEET NO.	C-1

C-1

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1 GENERAL

- 1.1 ALL PAVING, GRADING PIPING AND UTILITY LINE CONSTRUCTION WORK WITHIN THE PUBLIC RIGHT-OF-WAY ON PRIVATE STREETS, ACCESS WAYS, LOT GRADING, MATERIALS, AND WORKMANSHIP SHALL COMPLY WITH ENGINEERING STANDARDS AND SPECIFICATIONS, AND SHALL CONFORM TO THE LATEST MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) AND A.D.O.T. STANDARD DETAILS AND SPECIFICATIONS. GRADING WORK SHALL CONFORM TO MAG SPECS, THE SOILS REPORT AND CHAPTER 70 ENTITLED "EXCAVATION AND GRADING" OF THE UNIFORM BUILDING CODE (UBC) LATEST EDITION, SUBSECTIONS 7001 TO 7005, 7009 TO 7013, FIGURES 70-1 AND 70-2 AND AS STATED THEREIN. LOCAL MUNICIPAL STANDARD DETAILS WILL CONTINUE TO APPLY WHERE NOT ADOPTED OR INCLUDED BY MAG. THE FOLLOWING NOTES AND SPECIFICATIONS ARE HEREBY MADE A PART OF THE CONTRACT DOCUMENTS AND PROJECT MANUAL. WHERE THERE EXISTS A CONFLICT BETWEEN THESE NOTES, MAG SPECS, UBC, THE SOILS REPORT OR THE PROJECT MANUAL, THE MORE STRINGENT OF THE REQUIREMENTS SHALL GOVERN UNLESS PRIOR CLARIFICATION FROM THE ENGINEER HAS BEEN GIVEN IN WRITING TO THE CONTRACTOR. THE CONTRACTOR AS STATED HEREIN SHALL MEAN THE GENERAL CONTRACTOR AND HIS ASSOCIATED SUBCONTRACTORS. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION AND PERFORMANCE OF THE WORK OF ALL OF HIS SUBCONTRACTORS AND SUPPLIERS.
- 1.2 ALL WORK SHALL BE BID AND INSTALLED BY THE CONTRACTOR COMPLETE AND OPERATIONAL TO LINES, GRADES AND FUNCTIONS INDICATED ON ALL PLANS AND SPECIFICATIONS. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY TO COMPLETE ALL PROJECT EARTHWORK AND SITE WORK INCLUDING BUT NOT LIMITED TO: SITE CLEARING, GRUBBING, DEMOLITION'S, DEBRIS REMOVALS FROM THE SITE, IMPORT AND/OR EXPORT OF SOILS AND OTHER MATERIALS TO AND FROM THE SITE, BORROW MATERIALS, TEMPORARY SOILS MATERIAL STOCKPILING, BACKFILL OF ONSITE BORROW PITS, MOVING OF MATERIALS, CUT AND FILL, SLOPES, SOILS AND BANK STABILIZATION AND PROTECTION, BERMING, ROADWAY EXCAVATIONS, RELOCATION'S, STRUCTURE EXCAVATIONS, TRENCHING, ALL BACKFILLING, SITE GRADING, PAVING, PIPING, UTILITY LINE AND STORM DRAINAGE CONSTRUCTION, CURBS, SITE CONCRETE WORK AND OTHER MISCELLANEOUS SITE WORK STRUCTURES AND ITEMS INDICATED ON THE PLANS AND IN THE CONTRACT DOCUMENTS.
- 1.3 ALL OBSTRUCTIONS IN THE ROAD PRISM SHALL BE REMOVED BEFORE ANY CONSTRUCTION IS PERMITTED.
- 1.4 ANY QUANTITIES SHOWN ON PLANS ARE NOT VERIFIED BY THE ENGINEER. QUANTITIES ARE APPROXIMATE ONLY AND INTENDED AS A GUIDE FOR OWNERS PURPOSES. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING HIS OWN QUANTITY TAKE OFFS. THE CONTRACTOR SHALL VISIT THE SITE AND REVIEW THE SOILS CONDITIONS AND THE SOILS REPORT (XXXXXXXXXX #XXXXXXXXX) WITH THE PROJECT SOILS ENGINEER PRIOR TO BIDDING THIS PROJECT. ANY DISCREPANCIES IN SITE MATERIALS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER 7 DAYS MINIMUM PRIOR TO BID OPENING FOR REVIEW. ALL SHRINK OF EARTH MATERIAL OR EXCESS MATERIAL FROM UTILITY TRENCHES AND FOUNDATIONS SHALL BE INCLUDED IN THE CONTRACTOR'S BID.
- 1.5 THE ENGINEER MAY REQUIRE THE SUBMITTAL OF A "CERTIFICATE OF COMPLIANCE" AND/OR "MANUFACTURER'S GUIDELINES" FOR ANY MATERIALS USED IN THE WORK. MANUFACTURER'S GUIDELINES SHALL CONSIST OF WRITTEN INSTRUCTIONS FOR SHIPPING, HANDLING, UNLOADING, CUTTING, JOINING, INSTALLATION, STORAGE, AND/OR ANY OTHER FACETS OF CONSTRUCTION.
- 1.6 THE ENGINEER WILL REQUIRE ANY MATERIALS USED IN THE WORK TO BE TESTED ACCORDING TO AASHTO AND ASTM STANDARDS. THE CONTRACTOR SHALL, AT HIS EXPENSE, SUPPLY CERTIFICATES OR RESULTS OF TESTING.
- 1.7 ALL WORK AND MATERIALS NOT CONFORMING TO SPECIFICATIONS OR PERFORMED WITHOUT THE CONSENT OF THE OWNER OR HIS REPRESENTATIVE WILL BE SUBJECT TO REJECTION BY THE OWNER AND/OR ENGINEER AND REPLACED AT THE CONTRACTOR'S EXPENSE.
- 1.8 THE CONTRACTOR SHALL GUARD AGAINST DAMAGE DURING CONSTRUCTION TO ADJACENT PROPERTIES, FENCES, WALLS AND UTILITY EQUIPMENT. ANY ITEMS DAMAGED BY CONSTRUCTION SHALL BE REPLACED WITH SAME KIND OR BETTER AT CONTRACTOR'S EXPENSE.
- 1.9 NO CONSTRUCTION SHALL BEGIN UNTIL CONFLICTING UNDERGROUND UTILITY MITIGATING CONSTRUCTION IS COMPLETED, IF ANY.
- 1.10 NO EXISTING SURVEY MONUMENTATION SHALL BE REMOVED OR DISTURBED BY THE CONTRACTOR WITHOUT NOTIFICATION AND APPROVAL OF THE PROJECT SURVEYOR. THE CONTRACTOR SHALL CONTACT THE PROJECT SURVEYOR FOR THE SETTING OF REFERENCE POINTS 48 HOURS PRIOR TO DISTURBING OR REMOVING ANY MONUMENTS. THE CONTRACTOR SHALL BE FINANCIALLY RESPONSIBLE FOR COSTS TO REESTABLISH MONUMENTATION OR CONTROLS REMOVED WITHOUT PRIOR NOTICE AND APPROVAL.
- 1.11 TRAFFIC CONTROL SHALL CONFORM TO THE LOCAL ADOPTED STANDARDS AND MUTCD. CONTRACTOR SHALL SUBMIT PLAN TO PROJECT ENGINEER FOR REVIEW AND APPROVAL PRIOR TO STARTING CONSTRUCTION.
- 1.12 BENCH MARK: ELEVATIONS ESTABLISHED WITH REFERENCE TO THE BENCH MARK AS INDICATED ON THE SURVEY CONTROL SHEET.
- 1.13 CONTRACTOR SHALL COORDINATE HIS WORK WITH THE DESIGN ENGINEER, OWNER, PUBLIC UTILITY COMPANIES AND OTHER ASSOCIATED TRADES ON AND ADJACENT TO THE PROJECT SITE. COORDINATE INSTALLATION OF ALL PUBLIC AND PRIVATE UNDERGROUND UTILITIES, PIPES, CONDUITS AND PIPE SLEEVE SIZES AND LOCATIONS PRIOR TO THEIR PLACEMENT. INSTALLATION: THE CONTRACTOR IS RESPONSIBLE FOR SETTING CAPPED SLEEVES AND PROVIDING TYPE 1 COMPACTION IN ALL BACKFILLED TRENCHES IN PAVED AREAS AND EASEMENTS. PROVIDE TRACER WIRE AND MARKER AT GRADE LEVEL FOR FUTURE LOCATING.
- 1.14 CONTRACTOR TO BE RESPONSIBLE FOR ALL IDENTIFIED AND REQUIRED TESTING AND CONSTRUCTION STAKING, AND FOR THE FOLLOWING ADDITIONAL ENGINEERING SERVICES SHOULD THEY OCCUR:
 - A. RE-OBSERVATION, COORDINATION AND EXTRA TESTING OR RETESTING COSTS INCURRED BECAUSE OF IMPROPER OR FAULTY CONSTRUCTION.
 - B. ANY RE-STAKING REQUIRED BY THE CONTRACTOR.
 - C. CHANGES AND SUBSTITUTIONS IN MATERIALS CONSTRUCTION METHODS, REQUESTED BY THE CONTRACTOR, THAT MUST BE REVIEWED, RECALCULATED OR APPROVED BY THE PROJECT ENGINEER.
 - D. ENGINEERING DESIGN SERVICES REQUESTED BY THE CONTRACTOR OR CAUSED BY ERRORS OR OMISSIONS BY THE CONTRACTOR.
 - E. ANY ENGINEERING DESIGN APPROVED BY OTHERS AND SUBMITTED FOR REVIEW. THESE SHALL BEAR THE SEAL OF AN ENGINEER REGISTERED IN ARIZONA.

- 1.15 ANY DIFFERENCE BETWEEN PLANS AND SPECIFICATIONS AND QUESTIONS AS TO THEIR MEANING SHALL BE DETERMINED PRIOR TO BID OPENING OF THE CONTRACT AND SHALL BE INTERPRETED BY THE ENGINEER. THE GENERAL INTENT AND MEANING OF THE PLANS AND SPECIFICATIONS WILL GOVERN AND SHALL NOT WARRANT ANY ADDITIONAL COMPENSATION TO THE CONTRACTOR. THE ENGINEER WILL PROVIDE FULL INSTRUCTIONS WHEN DISCREPANCIES ARE DISCOVERED IN THE DOCUMENTS.
- 1.16 THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LIMITS OF THE WORK AREA PRIOR TO BEGINNING CONSTRUCTION ALL CONSTRUCTION LIMITS, AREAS OF WORK, SETBACKS, PERIMETERS, ADJACENT PROPERTY LINES, BOUNDARIES, AND OTHER CRITERIA DEFINING THE LIMITS OF THE CONTRACTOR'S WORK AREA AND LIMITS, SHALL BE STAKED BY THE CONTRACTOR'S SURVEYOR PRIOR TO CONSTRUCTION OR CLEARING OF THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH THE EXTENT OF WORK TO BE DONE IN EACH SEPARATE PHASE OF THE PROJECT, AND ANY WORK NECESSARY IN INACTIVE PHASES REQUIRED TO DEEM THE ACTIVE PHASES FINISHED, SAFE, AND SERVICEABLE.
- 1.17 THE CONTRACTOR OR SUBCONTRACTORS SHALL NOT DEVIATE FROM THESE PLANS OR MAKE FIELD CHANGES WITHOUT WRITTEN APPROVAL FROM THE NATION. ANY CHANGES MADE WITHOUT APPROVAL OF THE PROJECT ENGINEER ARE SUBJECT TO REMOVAL AT THE EXPENSE OF THE CONTRACTOR.
- 1.18 THE PROJECT ENGINEER RESERVES THE RIGHT TO MAKE MINOR FIELD MODIFICATIONS TO GRADES AND STRUCTURE DESIGNS TO ACCOMMODATE FIELD CONDITIONS FOUND ON SITE THAT DO NOT INVOLVE COST OR TIME. THIS INCLUDES BUT IS NOT LIMITED TO MINOR MODIFICATIONS TO GRADE, ALIGNMENT, SLOPE OR STRUCTURE LOCATIONS.
- 1.19 NO JOB WILL BE CONSIDERED COMPLETE UNTIL FINE GRADING IS COMPLETE AND ALL CURBS, PAVEMENT AND SIDEWALKS HAVE BEEN SWEEP CLEAN OF ALL DIRT AND DEBRIS. ALL SURVEY MONUMENTS ARE INSTALLED AND ALL VALVES, MANHOLES AND BOXES HAVE BEEN ADJUSTED ACCORDING TO THE PLANS AND STANDARD DETAILS.
- 1.20 EXISTING GRADES INDICATED ON PLANS ARE BASED ON PRE-GRADING CONDITIONS. LOSSES IN MATERIAL DUE TO SHRINKAGE OF MATERIAL, DEMOLITION OF EXISTING SITE FEATURES, CLEARING AND GRUBBING OF THE SITE SHALL BE INCLUDED IN CONTRACTOR'S BID.
- 1.21 SHOP DRAWINGS SHALL BE PROVIDED BY THE CONTRACTOR PER MAG SECTION 105.2.
- 1.22 ALL SERVICES SHALL BE MAINTAINED TO ALL AREAS AT ALL TIMES DURING THE CONSTRUCTION PERIOD, EXCEPT WHEN IT IS NECESSARY TO SHUT DOWN A LINE TO MAKE A CONNECTION WITH THE NEW LINE. RESIDENTS SHALL BE GIVEN A 24 HOUR NOTICE WHEN IT IS KNOWN THAT SERVICE WILL BE INTERRUPTED.
- 1.23 NO EXISTING SURVEY MONUMENTATION SHALL BE REMOVED OR DISTURBED BY THE CONTRACTOR WITHOUT NOTIFICATION AND APPROVAL OF THE PROJECT SURVEYOR. THE CONTRACTOR SHALL CONTACT THE PROJECT MANAGER FOR THE SETTING OF REFERENCE POINTS 48 HOURS PRIOR TO DISTURBING OR REMOVING ANY MONUMENTS. THE CONTRACTOR SHALL BE FINANCIALLY RESPONSIBLE FOR COSTS TO REESTABLISH MONUMENTATION OR CONTROLS REMOVED WITHOUT PRIOR NOTICE AND APPROVAL.
- 1.24 THE CONTRACTOR SHALL COORDINATE HIS WORK AND COOPERATE WITH ANY OTHER PERSONS OR ENTITIES OPERATING ON OR ADJACENT TO THE SITE OF THE PROJECT.
- 1.25 RETAINING WALLS SHALL BEAR INTO NATURAL BEDROCK, OR COMPACTED SOIL WHICH HAS A BEARING VALUE OF 3,000 P.S.F. VERIFICATION OF SAID BEARING VALUE TO BE PROVIDED BY THE SOILS ENGINEER.

2 PERMITS

- 2.1 CONTRACTOR SHALL OBTAIN ALL PERMITS AT HIS OWN EXPENSE FROM FEDERAL, STATE OR LOCAL MUNICIPAL AND AIR POLLUTION CONTROL AUTHORITIES PRIOR TO BEGINNING CONSTRUCTION.
- 2.2 REQUIRED PERMITS SHALL BE SECURED BY THE CONTRACTOR FROM THE APPROPRIATE AGENCIES.
- 2.3 THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AT HIS OWN EXPENSE ALL APPROPRIATE INSURANCE FORMS FOR PERMIT REQUIREMENTS.
- 2.4 IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ARRANGE FOR THE RELOCATION AND RELOCATION COSTS, IF ANY, OF ALL UTILITIES, AND SUBMIT A UTILITY RELOCATION SCHEDULE TO THE MUNICIPALITY AND DESIGN ENGINEER PRIOR TO CONSTRUCTION. ALL PUBLIC UTILITY EQUIPMENT POLES, BOXES, STRUCTURES AND MUNICIPAL UTILITY COMPANY EQUIPMENT SHALL BE RELOCATED BY THE APPROPRIATE UTILITY COMPANY OR MUNICIPALITY BEFORE ANY WORK IS STARTED.

3 APPROVALS

- 3.1 THE CONTRACTOR IS TO USE ONLY THAT OFFICIAL CONSTRUCTION SET OF DRAWINGS WHICH CONTAINS THE APPROVAL OF THE GOVERNMENT AGENCY SIGNED ON THE COVER SHEET OF THE PLANS. THE CONTRACTOR SHALL NOT PLACE BIDS ON A SET OF DRAWINGS UNSIGNED BY THE GOVERNMENT AGENCY AND/OR MARKED "NOT FOR CONSTRUCTION".

4 RECORD DRAWINGS

- 4.1 IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE AND KEEP AN UPDATED RECORD SET OF AS-BUILT INFORMATION DRAWINGS IN GOOD CONDITION ON THE JOB SITE FOR THE PROJECT MANAGER & UTILITY DIRECTOR TO INSPECT AND PROVIDE A COPY TO THE PROJECT ENGINEER AT COMPLETION OF THE WORK, WITH THE RECORD SET SHOWING FIELD VERIFIED LOCATIONS OF ALL VALVES, BOXES, MANHOLES, UTILITY POLES, PIPE SLEEVES, UTILITY ENCASEMENT AND OTHER UTILITY LINES AND EQUIPMENT ABOVE AND BELOW GROUND WHICH THE CONTRACTOR ENCOUNTERS AND INSTALLS IN HIS AREA OF WORK.
- 4.2 ACCEPTANCE OF THE COMPLETED PAVING, GRADING OR UTILITY INSTALLATION WILL NOT BE GIVEN UNTIL REPRODUCIBLE AS-BUILT PLANS HAVE BEEN SUBMITTED BY THE CONTRACTOR TO THE ENGINEER AND APPROVED BY THE LOCAL GOVERNING AGENCY INCLUDING HOUSING AND UTILITY DEPARTMENTS.

5 OBSERVATION

- 5.1 ALL MATERIALS USED AND ALL WORK DONE BY THE CONTRACTOR SHALL BE SUBJECT AT ALL TIMES TO THE OBSERVATION, TESTING AND APPROVAL OF THE ENGINEER AND GOVERNING AGENCY. SPECIAL INSPECTION AND TESTING SERVICES SHALL BE PROVIDED AT THE CONTRACTOR'S EXPENSE, AS REQUIRED BY THE CONTRACT DOCUMENTS.
- 5.2 THE CONTRACTOR SHALL CONTACT THE APPROPRIATE PUBLIC UTILITY COMPANIES FOR INSPECTION OF TRENCHING, BEDDING AND BACKFILLING DONE IN CONJUNCTION WITH INSTALLATION OF THOSE UTILITIES ON THIS PROJECT.
- 5.3 SUBMITTAL OF AN ENGINEER'S CERTIFICATE OF COMPLETION IS REQUIRED BY A.D.E.Q. FOR ALL WATER AND SEWER SYSTEM CONSTRUCTION. RELATED INSPECTION AND TESTING SHALL BE PROVIDED BY THE DEVELOPER'S ENGINEER AT THE DEVELOPER'S EXPENSE.
- 5.4 SOILS COMPACTION TEST RESULTS MUST BE SUBMITTED TO THE PROJECT ENGINEER'S OFFICE FOR ALL FILL MATERIAL FOR ROADS, TRENCH BACKFILL AND SITE FILL MATERIALS UNDER SLABS AND STRUCTURES. NO FILL MATERIALS SHALL BE PLACED WITHOUT TESTING DURING PLACEMENT. NO EARTH MATERIAL SHALL BE PLACED WITHOUT APPROVAL OF THE PREVIOUS LIFTS. THE CONTRACTOR SHALL SUBMIT ALL TEST RESULTS TO THE PROJECT ENGINEER.
- 5.5 THE CONTRACTOR WILL BE RESPONSIBLE FOR SCHEDULING AND COORDINATION OF ALL TESTING INCLUDING THE FOLLOWING ITEMS WHICH SHALL BE TESTED IN ACCORDANCE WITH MAG SPECIFICATIONS FOR:
 - 1. SUBGRADE COMPACTION
 - 2. BASE COURSE COMPACTION
 - 3. ASPHALT PAVEMENT MIX DESIGN QUALITY
 - 4. CONCRETE STRENGTH
 - 5. TRENCH BEDDING AND BACKFILL
 - 6. TESTING FOR UTILITIES, PIPING AND DRAINAGE SYSTEMS
 - 7. RETAINING WALLS CONCRETE AND COMPACTION
- 5.6 THE ENGINEER SHALL BE NOTIFIED BY THE CONTRACTOR 24 HOURS PRIOR TO BEGINNING DIFFERENT ASPECTS OF CONSTRUCTION SO THAT INSPECTIONS MAY BE SCHEDULED.

6 FINAL ACCEPTANCE

- 6.1 APPROVAL OF A PORTION OF THE WORK IN PROGRESS DOES NOT GUARANTEE ITS FINAL ACCEPTANCE. TESTING AND EVALUATION MAY CONTINUE UNTIL WRITTEN FINAL ACCEPTANCE OF A COMPLETE WORKABLE UNIT. ACCEPTANCE OF COMPLETED IMPROVEMENTS WILL NOT BE GIVEN UNTIL DEFECTIVE OR UNAUTHORIZED WORK IS REMOVED, AND FINAL CLEANUP IS COMPLETE.
- 6.2 APPROVAL OF A PORTION OF THE WORK IN PROGRESS DOES NOT GUARANTEE ITS FINAL ACCEPTANCE. TESTING AND EVALUATION MAY CONTINUE UNTIL WRITTEN FINAL ACCEPTANCE OF A COMPLETE WORKABLE UNIT. ACCEPTANCE OF COMPLETED IMPROVEMENTS WILL NOT BE GIVEN UNTIL DEFECTIVE OR UNAUTHORIZED WORK IS REMOVED, AND FINAL CLEANUP IS COMPLETE.

7 UTILITIES

- 7.1 A UTILITY COORDINATION MEETING SHALL BE COORDINATED BY THE CONTRACTOR PRIOR TO THE START OF ANY WORK. ALL UTILITY ISSUES SHALL BE ADDRESSED IN ACCORDANCE WITH MAG
- 7.2 THE CONTRACTOR SHALL CALL "BLUE STAKE" AND NOTIFY THE APPROPRIATE PRIVATE, PUBLIC AND MUNICIPAL UTILITY COMPANIES 48 HOURS PRIOR TO ANY CONSTRUCTION WORK TO VERIFY LOCATION AND DEPTH OF ALL UTILITY LINES IN THE AREA OF WORK. UTILITIES IF INDICATED ON PLANS ARE APPROXIMATE LOCATIONS ONLY, TAKEN FROM THE UTILITY COMPANY MAPS. IF THE CONTRACTOR ENCOUNTERS ANY LINES NOT INDICATED ON THE DRAWINGS OR MARKED IN THE FIELD BY THE UTILITY COMPANY THAT MAY INTERFERE WITH HIS WORK, HE SHALL NOTIFY THE APPROPRIATE UTILITY COMPANY IMMEDIATELY FOR DISPOSITION OF THOSE FACILITIES.
- 7.3 THE CONTRACTOR IS RESPONSIBLE FOR PREPARATION OF GRADE, TRENCHING, BACKFILLING, PAD CONSTRUCTION AND CONCRETE PADS FOR UTILITY EQUIPMENT INSTALLED ON THIS PROJECT. CONTRACTOR SHALL CONTACT LOCAL UTILITY COMPANIES FOR DETAILS AND REQUIREMENTS.
- 7.4 REQUIRED UTILITY SLEEVES SHALL BE PLACED PRIOR TO SUBBASE CONSTRUCTION AND PAVING. CONTACT APPROPRIATE UTILITY COMPANIES FOR REQUIREMENTS IN ALL AREAS.
- 7.5 ALL WATER MAINS, APPURTENANCES, AND INSTALLATION SHALL CONFORM TO A.W.W.A. STANDARDS AND ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY, AND ARIZONA WATER COMPANY REQUIREMENTS. WATER SYSTEM SHALL BE TESTED PER A.D.E.Q. BULLETIN NO. 10 TO THE APPROPRIATE A.W.W.A. STANDARDS.
- 7.6 ALL FIRE HYDRANTS SHALL MEET ALL REQUIREMENTS OF A.W.W.A. C-509-80.

8 CONSTRUCTION STAKING

- 8.1 THE ACCURACY OF ALL CONSTRUCTION WORK SHALL BE MAINTAINED AND VERIFIED BY A REGISTERED LAND SURVEYOR. CONSTRUCTION STAKING SUITABLE TO THE ENGINEER WILL BE SET ESTABLISHING LINES AND GRADES (FINISH OR FLOWLINE) FOR ALL CONSTRUCTION INCLUDING ROADS, CURB AND GUTTER, SIDEWALKS, UTILITIES, STRUCTURES, AND OTHER WORK AS CONSIDERED NECESSARY BY THE PROJECT ENGINEER. ALL SURVEY CONTROL SHALL BE SET BY THE SURVEYOR FROM MONUMENTS ACCEPTABLE TO THE ENGINEER.
- 8.2 THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION STAKING.

9 GRADING AND EARTHWORK

- 9.1 PERFORM ALL EARTHWORK GRADING, CUTTING AND FILLING AS PER THE PROJECT SOILS REPORT FOR THIS PROJECT.
- 9.2 NO GRADING OR TRENCHING WORK SHALL BEGIN PRIOR TO SUPPORTING AND PROTECTING EXISTING ONSITE AND ADJACENT PROPERTY FROM SETTling, CRACKING, OR OTHER DAMAGE WHICH MIGHT RESULT.
- 9.3 WATER SOURCE: THE CONTRACTOR SHALL MAKE THE NECESSARY ARRANGEMENTS FOR OBTAINING ALL WATER REQUIRED FOR SOIL COMPACTION, DRINKING PURPOSES AND DUST CONTROL. (MAG SPEC 225)
- 9.4 CLEARING AND GRUBBING: EXAMINE SITE AND PROVIDE NECESSARY EQUIPMENT AND LABOR TO REMOVE FROM THE SITE AND DISPOSE OF STUMPS, ROOTS, ROCKS, LOOSE FILL, VEGETATION, DEBRIS, AND ANY OTHER OBJECTIONABLE MATERIALS FROM THE BUILDING AND FILL AREAS. CLEAN, UNCLASSIFIED ONSITE SOILS MAY BE USED IN GENERAL AS FILL MATERIAL. SEE MAG SPECIFICATION SECTIONS 201 AND 215.
- 9.5 TOPSOIL THAT WILL BE AFFECTED BY ROUGH GRADING OR EXCAVATION SHALL BE STOCKPILED ON THE SITE SEPARATELY AND SHALL NOT BE USED FOR FILL, BUT SHALL BE CONSERVED AND USED FOR FINE AND FINISH GRADING.
- 9.6 SITE DRAINAGE: CONSTRUCTION OF ALL SWALES, CHANNELS, DRAINAGE PIPES, DRAINAGE STRUCTURES AND BANK PROTECTION SHALL BE CONSTRUCTED DURING THE FIRST PHASES OF SITE CONSTRUCTION TO PROTECT ALL OTHER CONSTRUCTION FROM SURFACE WATERS. DIVERT RUN OFF WATER AROUND CONSTRUCTION OPERATIONS. CARE SHALL BE TAKEN BY THE CONTRACTOR NOT TO ADVERSELY AFFECT ADJACENT PROPERTIES. DRAIN EXCAVATIONS BY PUMPING OR OTHER SATISFACTORY METHOD TO PREVENT SOFTENING OF THE FOUNDATION SOILS, UNDERCUTTING OF FOOTINGS, OR OTHER ACTIONS DETRIMENTAL TO PROPER CONSTRUCTION PROCEDURES.
- 9.7 THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL WALLS AND FOUNDATIONS. ALL STORM DRAINS, DRAIN LINES, OVERFLOWS, OUTLETS, AND/OR OTHER DRAINAGE TYPE OUTLETS WHICH CONDUCT MOISTURE NEAR THE STRUCTURES SHALL BE POSITIVELY DRAINED AWAY FROM THE STRUCTURE. NO WATER SHALL BE PERMITTED TO POND NEAR STRUCTURES OR FOUNDATIONS. ALL DRAINAGE SHALL BE CHANNLED AND TAKEN A MINIMUM OF 10 FEET AWAY FROM ALL STRUCTURES.
- 9.8 SUBGRADE PREPARATION: IF THE NATURAL SUBGRADE IS LESS THAN THE REQUIRED DENSITY, IT SHALL BE SCARIFIED AND COMPACTED TO A MINIMUM DEPTH OF TWELVE INCHES OR AS NOTED IN THE SOILS REPORT IMMEDIATELY PRIOR TO PLACING SUBSEQUENT FILL MATERIAL THEREON. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND REPAIR OF DAMAGE TO PREPARED SUBGRADE CAUSED BY CONTRACTORS OPERATIONS OR PUBLIC TRAFFIC UNTIL ACCEPTANCE OF PROJECT. NO MATERIALS SHALL BE PLACED UPON THE PREPARED SUBGRADE UNTIL IT MEETS THE SPECIFIED REQUIREMENTS. ROADWAY SUBGRADE COMPACTION INCLUDES SUBGRADE UNDER ALL PAVEMENT, CURB, SIDEWALKS, SHOULDERS AND FILL SLOPES. SUBGRADE TOLERANCES SHALL BE AS SPECIFIED IN MAG SECTION 301. OPEN LANDSCAPED AREAS SHALL BE GRADED TO +/- 0.20 FEET.
- 9.9 EARTH FILL: AREAS TO BE FILLED SHALL BE LEVELED TO PROVIDE A LEVEL BASE TO SUPPORT FILL MATERIALS. SUBGRADE AND SUBBASE AREAS REQUIRING FILL MATERIAL SHALL BE SCARIFIED MOISTENED AND COMPACTED PRIOR TO PLACING FILL. ALL FILL, SUBGRADE AND SUBBASE MATERIALS SHALL BE COMPACTED TO SPECIFIED DENSITIES AT OR NEAR OPTIMUM MOISTURE CONTENTS AS VERIFIED AND RECOMMENDED BY THE SOILS ENGINEER. PLACE FILL IN HORIZONTAL LIFTS NOT EXCEEDING SIX INCHES IN LOOSE THICKNESS BEFORE COMPACTION. SLOPED SURFACES SHALL BE PLOWED, STEPPED, AND BENCHED SO THAT THE FILL MATERIAL WILL BOND WITH THE EXISTING MATERIAL. BENCH AT THE TOE OF FILL SLOPES AND PERIODIC INTERVALS UP THE FILL SLOPES BENCHES.
- 9.10 IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE SOILS ENGINEER FOR SCHEDULING OF COMPACTION TESTING. THE FREQUENCY OF DENSITY AND MOISTURE TESTS REQUIRED FOR ADEQUATE CONTROL SHALL BE THE RESPONSIBILITY OF THE SOILS ENGINEER WHO SHALL CERTIFY TO THE ENGINEER AND CONTRACTOR AT PROJECT END THAT THE ROADBED FILL IS COMPACTED AS OUTLINED HEREIN. COMPACTION SHALL BE ACHIEVED BY MECHANICAL MEANS. IN NO CASE SHALL STRUCTURE BACKFILLING BE FLOOD WATER SETTLED.
- 9.11 ALL SLOPE CONSTRUCTION AND ROADWAY EXCAVATION SHALL CONFORM TO THE REQUIREMENTS OF MAG SPECIFICATIONS SECTIONS 201, 205, 212, 301, AND UBC SECTION 7009 AND 8010. CUT AND FILL SLOPES SHALL BE AS INDICATED ON THE DETAILS AND PLANS. CUT AND FILL SLOPE GRADIENTS SHALL NOT EXCEED 2:1 IN STEEPNESS WITHOUT WRITTEN AUTHORIZATION FROM THE PROJECT ENGINEER AND EXAMINATION BY THE PROJECT ENGINEER. ALL SLOPE CONDITIONS SHALL BE PROVIDED WITH THE APPROPRIATE BENCHES AS SPECIFIED IN THE REFERENCE DOCUMENTS AND INDICATED ON THE PLANS. IF SOILS CONDITIONS ARE ENCOUNTERED WHICH DO NOT ALLOW THE ESTABLISHMENT OF THE INDICATED CUT OR FILL SLOPES, THE PROJECT ENGINEER AND SOILS ENGINEER SHALL BE CONTACTED IMMEDIATELY TO DETERMINE AN ADJUSTMENT TO THE SLOPE GRADIENT OR TO ESTABLISH A METHOD OF STABILIZATION. ALL FILL SLOPES SHALL BE COMPACTED AS EACH LIFT OF FILL MATERIAL IS PLACED. ALL CUT AND FILL SLOPES SHALL BE UNIFORMLY GRADED TO LINES AND GRADES INDICATED. TOPS OF ALL CUT SLOPES SHALL BE ROUNDED AND ALL UNSTABLE AND LOOSE MATERIAL AT TOP OF SLOPE SHALL BE REMOVED. TOP OF CUT SLOPES OVER 10' HIGH SHALL BE PROVIDED WITH BROW DITCHES FOR DRAINAGE.
- NOTE:
REFER TO SECTION 15 FOR SEED MIX DESIGN.
- NOTE:
THERE ARE EXISTING SEWER, WATER, GAS, AND DRY UTILITIES LOCATED WITHIN THE ROAD PRISM. IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE AND PROTECT THESE UTILITIES DURING CONSTRUCTION.
- 9.12 COMPACT TO THE FOLLOWING SPECIFIED PERCENT OF MAXIMUM DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM D698 AND MAG SECTION 211.

MINIMUM PERCENT COMPACTION:

SUBGRADE SOIL:
ROADWAY AND STRUCTURE AREAS-----95
PAVED AREAS (PAVEMENTS, SIDEWALKS, & PADS)-----95

EARTH FILL:
ROADWAY AND STRUCTURE AREAS-----95
PAVED AREAS (PAVEMENTS, SIDEWALKS, & PADS)-----95
GRASSED AND PLANTING AREAS-----85
AGGREGATE BASE COURSE-----100
BACKFILL AROUND STRUCTURES-----95
BACKFILL FOR UTILITY TRENCHES (PER MAG SECTION 601) EXCEPT AS FOLLOWS: BACKFILL FOR TRENCHES SHALL BE COMPACTED TO 100%.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR READING AND UNDERSTANDING THE PROJECT SOIL REPORT.



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NOTES - SHEET 1 OF 3

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PROJECT TITLE:

DRAWN BY: RJB/TCH

SCALE: NONE

DATE: 4/13/2023

PROJECT NO: 200209

SHEET NO.

C-2

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9 GRADING AND EARTHWORK

- 9.13 EXCAVATION: EXCAVATE TO THE DIMENSIONS AND DEPTHS INDICATED ON THE DRAWINGS. FOUNDATIONS SHALL REST ON ENGINEERED COMPACTED FILL OR UNDISTURBED NATURAL SOILS AT GRADE ELEVATIONS INDICATED. IF SUITABLE SOIL IS NOT REACHED AT THE DEPTHS INDICATED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE SOILS ENGINEER AND ENGINEER. THE CONTRACTOR WILL BE DIRECTED, IN WRITING, TO EXCAVATE TO THE DEPTH OF SUITABLE SOIL. EXCAVATION FOR FOUNDATIONS WHICH ARE CARRIED BELOW THE DEPTHS INDICATED SHALL HAVE THE CONCRETE EXTENDED TO THE BOTTOM OF THE EXCAVATION AT THE CONTRACTOR'S EXPENSE. SEE MAG SPECIFICATION SECTION 206.
- 9.14 WATERING: CAREFULLY WATER EARTH FILL DURING PLACING BY MEANS OF A FINE SPRAY OR OTHER APPROVED METHOD, SO THAT EACH LAYER IS THOROUGHLY AND UNIFORMLY WETTED. MOISTURE CONTENT OF THE MATERIAL SHALL BE CAREFULLY CONTROLLED AT ALL TIMES AND CHECKED AT PROPER INTERVALS TO INSURE CORRECT MOISTURE FOR COMPACTION SPECIFIED. SEE MAG SECTION 225 AND SOILS REPORT.

10 PAVING

- 10.1 COMPLETE ASPHALTIC CONCRETE PAVEMENT INSTALLATION SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:
- A. TACK COATING OF CONCRETE SURFACES, UNDILUTED .02 TO .10 GAL/SY, DILUTED 1:1 MIXTURE, .05 TO .15 GAL/SY, OR AS DIRECTED.
- B. PAINT FOR PAVEMENT STRIPING AND MARKING SHALL CONFORM TO FEDERAL SPEC. NO. TTP-155E, "PAINT, TRAFFIC, HIGHWAY, WHITE AND YELLOW". COLORS FOR PAVEMENT MARKING AND STRIPING SHALL BE AS SPECIFIED BY THE PROJECT ENGINEER.
- C. TRAFFIC CONTROL DEVICES: SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" LATEST EDITION, PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.
- 10.2 ASPHALTIC PAVEMENT SHALL CONFORM TO MAG SPECIFICATION SECTION 32 WITH THICKNESS AND DESIGN MIX AS INDICATED ON THE PLANS.
- 10.3 ALL FRAMES, COVERS, VALVE BOXES, AND MANHOLES IN PAVED AREAS AND RIGHT-OF-WAY SHALL BE ADJUSTED TO GRADE BY THE PAVING CONTRACTOR. IN NON-PAVED AREAS THEY SHALL BE ADJUSTED TO GRADE BY THE GENERAL CONTRACTOR.
- 10.4 ALL PAVING WORK SHALL BE PLACED IN STRICT CONFORMANCE TO MAG SECTION 321 PAR.321.3 WEATHER AND MOISTURE CONDITIONS. ALL WORK AND MATERIALS PLACED IN VIOLATION OF THESE REQUIREMENTS WILL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
- 10.5 EXACT POINT OF PAVEMENT MATCHING, TERMINATION AND/OR OVERLAY, IF NECESSARY, SHALL BE SUBJECT TO FIELD APPROVAL BY THE ENGINEER, HIS REPRESENTATIVE AND LOCAL MUNICIPAL AUTHORITIES. EDGE OF EXISTING PAVEMENT WHERE NECESSARY SHALL BE UNIFORMLY SAWCUT AND TACKY COAT APPLIED. 10.6 THE CONTRACTOR SHALL IN ALL AREAS OF PAVING PROVIDE A UNIFORM DENSE SURFACE SMOOTH AND TRUE TO LINE. SURFACE SHALL BE FREE OF PITS, DEPRESSIONS, ROCK POCKETS AND PATCHES.
- 10.6 THE CONTRACTOR SHALL IN ALL AREAS OF PAVING PROVIDE A UNIFORM DENSE SURFACE SMOOTH AND TRUE TO LINE. SURFACE SHALL BE FREE OF PITS, DEPRESSIONS, ROCK POCKETS AND PATCHES.

11 FIELD INSPECTION

- 11.1 THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MAINTAINING ALL CONSTRUCTION STAKING. ANY ADDITIONAL STAKING WILL BE AT THE COST OF THE CONTRACTOR.
- 11.2 THE ENGINEER SHALL BE NOTIFIED BY THE CONTRACTOR 24 HOURS PRIOR TO BEGINNING DIFFERENT ASPECTS OF CONSTRUCTION SO THAT INSPECTIONS MAY BE SCHEDULED.
- 11.3 ANY QUESTIONS RAISED RELATIVE TO ACCURACY OF IMPROVEMENT INSTALLATION SHALL NOT BE RAISED SUBSEQUENT TO COMPLETION OF THE WORK UNLESS ALL SURVEY STAKES ARE MAINTAINED INTACT. SHOULD SUCH STAKES NOT BE PRESENT AND VERIFIED AS TO THEIR ORIGIN, NO CLAIM FOR ADDITIONAL COMPENSATION FOR CORRECTION SHALL BE PRESENTED TO ANY PARTY AND SUCH WORK SHALL BE CORRECTED BY THE CONTRACTOR AT HIS EXPENSE.

12 SUSPENSION OF WORK

- 12.1 THE ENGINEER OR HIS AUTHORIZED REPRESENTATIVE MAY SUSPEND THE WORK BY WRITTEN NOTICE WHEN, IN HIS JUDGMENT, PROGRESS IS UNSATISFACTORY, WORK BEING DONE IS UNAUTHORIZED OR DEFECTIVE, WEATHER CONDITIONS ARE UNSUITABLE, OR THERE IS DANGER TO THE PUBLIC HEALTH OR SAFETY.

13 WARRANTY

- 13.1 ANY DEFECTS WHICH APPEAR IN THE WORK WITHIN TWO YEARS FROM THE DATE OF ACCEPTANCE AND WHICH ARE DUE TO IMPROPER WORKMANSHIP OR INFERIOR MATERIALS SUPPLIED SHALL BE CORRECTED BY OR AT THE EXPENSE OF THE CONTRACTOR.

14 EROSION CONTROL NOTES

(SPECIFICATIONS FOR PERMANENT SEEDING)

- 14.1 SITE PREPARATION
- A. INSTALL NECESSARY SURFACE WATER CONTROL MEASURES PRIOR TO PLANTING PERMANENT SEEDING.
- B. GRADE TO PERMIT USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION.
- C. PROVIDE ADEQUATE DRAINAGE WHERE INTERNAL WATER MOVEMENT, ESPECIALLY AT TOES OF SLOPES, MAY CAUSE SEEPS OR SLIPPAGE BEFORE SEEDING IS WELL ESTABLISHED.
- 14.2 SEEDBED PREPARATION
- A. AS PRACTICAL, PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO THE SLOPE.
- B. IMMEDIATELY BEFORE SEEDING, RAKE OR OTHERWISE LOOSEN PLANTING SURFACE TO PROVIDE A SMOOTH, FRABLE SURFACE FREE OF EARTH CLODS, HUMPS AND DEPRESSIONS, AND DISPOSE OF LOOSE STONES HAVING A DIMENSION GREATER THAN ONE INCH AND DEBRIS BROUGHT TO THE SURFACE DURING CULTIVATION.
- 14.3 PLANTING
- A. APPLY SEED MIX AT THE RATE OF 11 POUNDS PER ACRE. MIX SHALL CONTAIN THE FOLLOWING PROPORTION OF PURE LIVE SEED: SAND DROPSEED (SPOROBOLUS CRYPTANDRUS) 1 LB SIDEATS GRAMA (BOUITELOUS CURTIPENDULA) 5 LB CRESTED WHEAT GRASS (AGROPYRON CRISTATUM) 5 LB
- B. APPLY SEED IN TWO DIRECTIONS AT RIGHT ANGLES TO EACH OTHER WITH HALF THE SPECIFIED APPLICATION RATE APPLIED IN EACH DIRECTION.
- C. IMMEDIATELY AFTER SEEDING, UNIFORMLY SPREAD SCREENED MANURE AT THE RATE OF ONE CUBIC YARD PER 1000 SQUARE FEET AND WATER UNTIL THE GROUND IS WET TO A MINIMUM DEPTH OF TWO INCHES.
- D. HYDRAULIC SEEDING USING 1500 POUNDS OF WOOD CELLULOSE FIBER PER ACRE MAY BE UTILIZED IN LIEU OF PLANTING.
- 14.4 MAINTENANCE
- A. PROTECT PLANTED AREAS FROM GRAZING, FIRE, TRAFFIC, AND WEED GROWTH.
- B. MAINTAIN PLANTED AREAS UNTIL A GOOD STAND OF GRASS IS ESTABLISHED. AREAS AS REQUIRED IF NO GROWTH IS PRESENT WITHIN 15 DAYS OF PLANTING.

15 TEMPORARY EROSION CONTROL

- 15.1 EROSION CONTROL BERMS AND ROCK CHECK DAMS
- A. PROVIDE EARTHEN BERMS AT TOES OF SLOPES REMAINING BARE BETWEEN CONSTRUCTION PHASES.
- B. PLACE TEMPORARY ROCK CHECK DAMS IN ROAD DITCHES AND CHANNELS IF RIP-RAP PROTECTION WILL NOT BE PROVIDED WITHIN 60 DAYS.
- 15.2 CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING EROSION CONTROL MEASURES SUCH AS SAND BAGGING, TEMPORARY DE-SILTING BASIN CONSTRUCTION BERMS, VISQUEEN, ETC. TO PROTECT ADJOINING PROPERTIES FROM EROSION.

16 SEWER LINE NOTES

- 16.1 ALL PVC LINES WILL BE BURIED WITH A GREEN #14 TRACE WIRE WITH A "CAUTION SEWER LINE BELOW" TAPE.
- 16.2 SEWER "YARD" LINES WILL BE CONSTRUCTED OF 4" ABS/PVC PIPE WITH GLUE JOINTS. NO JOINTS TO BE CONSTRUCTED WITHIN 6 FEET EITHER SIDE OF WATER "YARD" LINE CROSSINGS.
- 16.3 UNLESS SPECIFICALLY CALLED OUT ALL INVERTS ARE TO BE THREE (3) FEET BELOW FINISHED FLOOR STUBBED OUT.
- 16.4 MARK EACH STUB-OUT PER M.S.D. 440-1. IF BUILDING LOCATION IS KNOWN THEN MARK PER M.S.D. 440-2.
- 16.5 EXFILTRATION FROM MANHOLES SHALL BE LIMITED TO .1 GALLONS PER HOUR PER VERTICAL FOOT.
- 16.6 AT LEAST 20% OF ALL NEW SEWER LINES ARE TO BE TESTED FOR INFILTRATION/EXFILTRATION AS PER A.D.E.Q. BULLETIN # 11. MAXIMUM ALLOWABLE INFILTRATION/EXFILTRATION IS 0.158 GALLONS/INCH DIAMETER/100 FEET.
- 16.7 SHORT TERM DEFLECTION TESTING FOR AT LEAST 20% OF PVC SEWER SHALL BE PERFORMED. SHORT TERM DEFLECTION IN EXCESS OF 5% SHALL BE CONSIDERED UNSERVICEABLE AND SHALL BE REPAIRED AND RETESTED.
- 16.8 THE ENGINEER SHALL REVISE THESE PLANS TO "AS BUILT" CONDITIONS AND RETURN THEM TO YAVAPAI COUNTY ENVIRONMENTAL SERVICES PRIOR TO THE ACCEPTANCE OF ANY IMPROVEMENTS SHOWN ON THESE PLANS.
- 16.9 SEWER PIPE SHALL BE IN ACCORDANCE WITH SECTION 745 OF THE MAG STANDARD SPECIFICATIONS.
- 16.10 CONSTRUCTION AND TESTING OF SEWER LINES SHALL BE IN ACCORDANCE WITH MAG STANDARD SPECIFICATIONS SECTION 615.
- 16.11 INSTALLATION OF PVC SEWER MUST BE IN CONFORMANCE WITH STANDARD SPECIFICATION ASTM D2321.
- 16.12 WATER TIGHTNESS TESTING OF THE SEWER LINE SHALL BE PERFORMED IN ACCORDANCE WITH MAG SPECIFICATION 615.10.
- 16.13 SEWER SERVICE TAPS SHALL BE INSTALLED IN ACCORDANCE WITH MAG STANDARD DETAIL 440. SERVICE PIPE SHALL BE 4-INCH FOR HOUSE CONNECTIONS. TAP LOCATION AND SERVICE LINES SHALL BE FIELD LOCATED AND MARKED WITH A GREEN # 4 REBAR OR AS SPECIFIED.
- 16.14 SEWER LINES MUST HAVE 3' MINIMUM COVER OVER PIPE.
- 16.15 TRENCH EXCAVATION, BEDDING, AND BACKFILLING FOR SEWER PIPES SHALL BE IN COMPLIANCE WITH MAG SPECIFICATIONS SECTION 601.
- 16.16 SEWER MAINS (GRAVITY, PRESSURE, FORCE) SHALL BE KEPT AT A MINIMUM OF 100 FEET FROM DRINKING WATER WELLS, UNLESS THE FOLLOWING CONDITIONS ARE MET: 1. WATER MAIN PIPE, PRESSURE TESTED IN PLACE TO 150 PSI WITHOUT EXCESSIVE LEAKAGE, MAY BE USED FOR PRESSURE SEWERS AND FORCE MAINS AT DISTANCES GREATER THAN 20 FEET FROM DRINKING WATER WELLS.

17 WATER LINE NOTES

- 17.1 ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE ARIZONA WATER COMPANY (A.W.CO.) STANDARD SPECIFICATIONS TO INCLUDE E-4-1-1 AND E-8-1.
- 17.2 CONTRACTOR SHALL ACQUIRE ALL NECESSARY PERMITS.
- 17.3 THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
- 17.4 THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "BLUE STAKE" AT 1-800-STAKE IT (1-800-782-5348) TWO WORKING DAYS PRIOR TO ANY EXCAVATION OR CONSTRUCTION.
- 17.5 DUCTILE IRON PIPE (PUSH-ON TYPE) CLASS 350, CEMENT LINED AND CONFORMING TO AWWA C151 SHALL BE USED AS MAIN LINE WATER PIPING. ALL MAIN LINE VALVES SHALL CONFORM TO AWWA C500 WITH A MINIMUM WORKING PRESSURE OF 200 PSI. ALL CAST IRON FITTINGS TO BE CEMENT LINED IN ACCORDANCE WITH AWWA C104 AND SHALL CONFORM TO AWWA C110 WITH A MINIMUM WORKING PRESSURE OF 250 PSI.
- 17.6 WATER MAINS NEAR SEWER MAINS SHALL HAVE SEPARATION OR PROTECTION IN ACCORDANCE WITH AAC R18-9-811 INCLUDED HEREIN.
- A. IN ORDER TO PROTECT PUBLIC WATER SYSTEMS FROM POSSIBLE CONTAMINATION, A WATER MAIN SHALL NOT:
1. INFRINGE UPON AN AREA WHICH IS WITHIN SIX FEET OF EITHER SIDE OF A SEWER MAIN AND SHALL NOT BE BELOW, AT THE SAME LEVEL AS, OR LESS THAN TWO FEET ABOVE THE TOP OF THE SEWER MAIN, UNLESS EXTRA PROTECTION IS PROVIDED. EXTRA PROTECTION SHALL CONSIST OF CONSTRUCTING THE SEWER MAIN AND WATER MAIN WITH MECHANICAL JOINT DUCTILE IRON PIPE OR WITH SLIP-JOINT DUCTILE IRON PIPE IF JOINT RESTRAINT IS PROVIDED OR SHALL CONSIST OF ENCASING THE SEWER MAIN IN AT LEAST SIX INCHES OF CONCRETE.
2. UNDER ANY CIRCUMSTANCES, INFRINGE UPON AN AREA WHICH IS WITHIN TWO FEET BELOW THE SEWER MAIN.
- B. WHEN UNUSUAL CONDITIONS SUCH AS, BUT NOT LIMITED TO, HIGHWAY OR BRIDGE CROSSINGS PREVENT THE WATER AND SEWER MAIN SEPARATIONS REQUIRED BY SUBSECTION A ABOVE FROM BEING MET, THE DEPARTMENT WILL REVIEW AND MAY APPROVE, REQUEST FOR AUTHORIZATION TO USE ALTERNATE CONSTRUCTION TECHNIQUES, MATERIALS AND JOINTS ON A CASE-BY-CASE BASIS.
- C. NO WATER PIPE SHALL PASS THROUGH, OR COME INTO CONTACT WITH ANY PART OF A SEWER MANHOLE. THE MINIMUM HORIZONTAL SEPARATION BETWEEN WATER MAINS AND MANHOLES SHALL BE SIX FEET MEASURED FROM THE CENTER OF THE MANHOLE.
- D. THE MINIMUM SEPARATION BETWEEN FORCE, GRAVITY OR PRESSURE SEWERS AND WATER MAINS SHALL BE TWO FEET VERTICALLY AND SIX FEET HORIZONTALLY UNDER ALL CONDITIONS. WHERE A SEWER FORCE MAIN CROSSES ABOVE, OR LESS THAN TWO FEET BELOW A WATER LINE, THE SEWER MAIN SHALL BE ENCASED IN AT LEAST SIX INCHES OF CONCRETE FOR 10 FEET ON EITHER SIDE OF THE WATER MAIN.
- E. ALL DISTANCES ARE MEASURED PERPENDICULARLY FROM THE OUTSIDE OF THE SEWER MAIN TO THE OUTSIDE OF THE WATER MAIN. THESE SEPARATION REQUIREMENTS DO NOT APPLY TO BUILDING PLUMBING OR INDIVIDUAL HOUSE SERVICE CONNECTIONS.
- F. ALL WATER SERVICE LINES THAT ARE UNDER PAVEMENT SHALL BE SLEEVED IN 4" CLASS 160 PVC PIPE CONDUIT.
- G. THRUST BLOCKS SHALL BE INSTALLED AT ALL ANGLES, TEES AND IN ACCORDANCE WITH AWC STANDARDS E-9-5-1, E-9-5-2 OR PER DETAILS.
- 17.7 A ONE (1) FOOT MINIMUM VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN A STORM DRAIN CROSSING A WATER MAIN. THE MINIMUM VERTICAL SEPARATION IS MEASURED FROM OUTSIDE OF WATER MAIN TO OUTSIDE OF STORM DRAIN. EXTRA PROTECTION IS REQUIRED PER MAG SPECIFICATIONS WHEN THESE REQUIREMENTS ARE NOT MET.
- 17.8 A THREE (3) FOOT MINIMUM HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN A FIRE HYDRANT AND ANY WATER SERVICE LINE.
- 17.9 RECLAIMED WASTEWATER MAINS SHALL BE CONSIDERED THE SAME AS WATER MAINS FOR THE PURPOSE OF MINIMUM COVER AND SEPARATION.
- 17.10 VERTICAL CLEARANCE BETWEEN WATER MAINS AND SEWER SERVICE CONNECTIONS:

THE WATER MAIN MAIN SHALL NOT BE LESS THAN SIX (6) INCHES ABOVE THE SEWER SERVICE EVEN IF THE SEWER SERVICE CONNECTION IS CONSTRUCTED WITH DUCTILE IRON PIPE IN ACCORDANCE WITH NOTE 3B OF MAG STANDARD DETAIL 404-11.

18 STORM SEWER NOTES

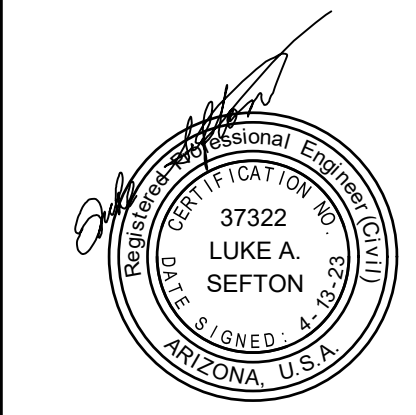
- 18.1 ALL CORRUGATED METAL PIPE TO BE 14 GAUGE, UNLESS OTHERWISE APPROVED BY THE DESIGN ENGINEER.
- 18.2 ALL CORRUGATED METAL PIPE SHALL HAVE FLARED END SECTIONS, EXCEPT WHERE HEADWALLS ARE USED.
- 18.3 ALL DRAINAGE CULVERTS AND PIPES SHALL HAVE A MINIMUM COVER OF 12".

19 DRY UTILITIES NOTES

- 19.1 GAS MAINS SHALL HAVE A MINIMUM COVER OF 36" WITH SAND SHADE 6" BELOW AND ABOVE PIPING. MAINTAIN A MINIMUM OF 1 FOOT VERTICAL AND HORIZONTAL SEPARATION BETWEEN GAS LINE AND OTHER UTILITIES. CONSULT CITIZEN'S UTILITIES FOR FUR-OTHER REQUIREMENTS.
- 19.2 PRIMARY ELECTRIC LINES SHALL HAVE A MINIMUM COVER OF 48". CONSULT APS FOR FURTHER REQUIREMENTS.
- 19.3 CABLE TV LINES SHALL BE INSTALLED PER THE REQUIREMENTS OF SEDONA CABLEVISION.
- 19.4 TELEPHONE LINES SHALL BE INSTALLED PER THE REQUIREMENTS OF US WEST.

20 LANDSCAPING NOTES

- 20.1 ALL EXISTING TREES AND SHRUBS NOT AFFECTED BY BUILDING CONSTRUCTION OR ROAD DEVELOPMENT MUST BE FENCED WITH A CONSTRUCTION ENVELOPE FENCE TO PROTECT THEM DURING CONSTRUCTION.



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NOTES - SHEET 2 OF 3

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SCALE: NONE

DATE: 4/13/2023

PROJECT NO: 200209

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C-3

21 ADEQ WATER AND SEWER SYSTEM NOTES

- 1 WATER SYSTEM THRUST BLOCKING AND/OR JOINT RESTRAINT
2 PIPE LINES SHALL BE PROVIDED WITH CONCRETE THRUST BLOCKS AT ALL CHANGES IN DIRECTION AND SIZE AND AT ALL TEES, VALVES, PLUGS, AND DEAD ENDS, PER MAG STANDARD DETAILS 301 AND 380 AND YAG STANDARD DETAIL 3-03. PIPE LINES MAY ALSO BE PROVIDED WITH RESTRAINED JOINTS AT ALL CHANGES IN DIRECTION AND SIZE AND AT ALL TEES, VALVES, PLUGS, AND DEAD ENDS, PER MAG STANDARD DETAILS 302 AND 303.
3 TRENCHING AND BACKFILLING
3.1 ROUGH GRADING SHALL BE COMPLETED PRIOR TO INSTALLATION OF UNDERGROUND UTILITIES.
3.2 TRENCH BOTTOM SHALL BE COMPACTED BY SUITABLE MEANS APPROVED BY THE ENGINEER PRIOR TO PLACEMENT OF BEDDING MATERIAL. BEDDING MATERIAL SHALL BE PLACED TO PROVIDE UNIFORM AND ADEQUATE LONGITUDINAL SUPPORT UNDER THE PIPE. THE CONTRACTOR SHALL ENSURE THAT A MINIMUM COMPACTED DEPTH OF 6" IS MAINTAINED UNDERNEATH THE PIPE. BELL HOLES SHOULD BE PROVIDED AT EACH JOINT TO PERMIT PROPER ASSEMBLY WHILE MAINTAINING UNIFORM SUPPORT.
3.3 BEDDING MATERIAL SHALL BE AGGREGATE BASE COURSE WITH A MAXIMUM PARTICLE SIZE OF 3/4" AND SHALL BE NON-PLASTIC. WHERE DEPTH OF COVER IS 2-FT. OR LESS, BACKFILL MATERIAL SHALL BE ROUNDED GRAVEL WITH A MAXIMUM PARTICLE SIZE OF 1/2" AND WITH NO MORE THAN 20% PASSING THE #200 SIEVE.
4 GENERAL CONTRACTOR TO STUB OUT UTILITIES 1-FT WITHIN EACH PROPERTY AND MARKED. SEWER TO BE MARKED PER M.S.D. 440-1. IF BUILDING LOCATION IS KNOWN THEN MARK PER M.S.D. 440-2, ALL OTHER UTILITIES TO BE MARKED WITH METAL STUD PER M.S.D. 440-1 BUT PAINTED GREEN FOR SEWER, BLUE FOR WATER AND RED FOR APS. PIPES ALSO TO HAVE TRACER WIRE AND MARKING TAPE.
5 BACKFILL SHALL BE PLACED IN LAYERS OF NOT MORE THAN 8" LOOSE DEPTH AND COMPACTED TO ACHIEVE COMPACTION OF 95% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99 AND T-191 OR ASTM D-2922 AND D-3017. THE CONTRACTOR SHALL CONTRACT WITH AN INDEPENDENT TESTING LABORATORY TO PROVIDED COMPACTION TESTING. TESTS SHALL BE PROVIDED AT MINIMUM INTERVALS OF ONE TEST PER 50 CUBIC YARDS OF TRENCH BACKFILL. TEST RESULTS SHALL BE SUBMITTED TO THE ENGINEER DAILY.
6 TRENCHING, PIPELAYING, BACKFILLING, AND ALL OTHER CONSTRUCTION SHALL BE PERFORMED UNDER THE INSPECTION, COORDINATION, AND SUPERVISION OF A REGISTERED PROFESSIONAL CIVIL ENGINEER.
7 NO TRENCH SHALL BE FILLED WITH BEDDING MATERIAL OR BACKFILL UNTIL THE EXCAVATION AND PIPE LAYING, RESPECTIVELY, HAVE BEEN APPROVED BY THE OWNER OR HIS AUTHORIZED REPRESENTATIVE.
8 THE EXCAVATION METHOD EMPLOYED SHALL BE THE CONTRACTOR'S OPTION. MATERIAL SHALL NOT BE STOCKPILED TO A DEPTH OF MORE THAN 5 FEET ABOVE FINISHED GRADE WITHIN 25 FEET OF ANY EXCAVATION OR STRUCTURE. EXCAVATION SHALL EXTEND SUFFICIENT DISTANCE FROM WALLS AND FOOTINGS TO ALLOW PLACING AND REMOVAL OF FORMS, INSTALLATION OF SERVICES AND INSPECTION BY THE ENGINEER. WITHIN 12" OF FINISHED GRADE SHOWN ON THE DRAWINGS, AND FOR THE MANHOLES, FILL AND BACKFILL SHALL BE NATIVE MATERIAL, FEE FROM BROKEN CONCRETE, ORGANIC MATERIAL, OR OTHER DEBRIS WITH SUFFICIENT FINES TO FILL ALL VOIDS AND TO INSURE A UNIFORMLY COMPACTED MASS OF THE REQUIRED DENSITY AND HAVING A MAXIMUM SIZE OF 2 - 1/4 INCHES WITH 0 TO 20% MINUS #200. ALL FILL AND BACKFILL SHALL BE PLACED IN LAYERS OF NOT MORE THAN 8" LOOSE AND COMPACTED TO 95% OF MAXIMUM DENSITY, DETERMINED BY AASHTO TEST METHOD T-99, PRIOR TO PLACEMENT OF THE NEXT LAYER.

22 WATER AND SEWER SYSTEM DESIGN

- 22.1 WATER AND SEWER MAINS SHALL BE SEPARATED IN ORDER TO PROTECT PUBLIC WATER SYSTEMS FROM POSSIBLE CONTAMINATION. ALL DISTANCES ARE MEASURED PERPENDICULARLY FROM THE OUTSIDE OF THE SEWER MAIN TO THE OUTSIDE OF THE WATER MAIN. SEPARATION REQUIREMENTS ARE AS FOLLOWS:
1. WATER MAIN SHALL NOT BE PLACED: (AAC: 18-5-502)
A. WITHIN SIX FEET, HORIZONTAL DISTANCE, AND BELOW TWO FEET, VERTICAL DISTANCE, ABOVE THE TOP OF A SEWER MAIN UNLESS EXTRA PROTECTION IS PROVIDED (WHEN A WATER MAIN IS ABOVE A SEWER MAIN; EXTRA PROTECTION IS REQUIRED WHEN THE WATER MAIN IS CLOSER THAN TWO (2) FEET TO THE SEWER MAIN. WHEN A WATER MAIN IS BELOW A SEWER MAIN; THE MINIMUM SEPARATION IS TWO (2) FEET AND EXTRA PROTECTION IS ALWAYS REQUIRED PER MAG SPECIFICATIONS). EXTRA PROTECTION SHALL CONSIST OF CONSTRUCTING THE SEWER MAIN WITH MECHANICAL JOINT DUCTILE IRON PIPE OR WITH SLIP-JOINT DUCTILE IRON PIPE IF JOINT RESTRAINT IS PROVIDED. ALTERNATE EXTRA PROTECTION SHALL CONSIST OF ENCASED BOTH THE WATER AND SEWER MAINS IN AT LEAST SIX INCHES OF CONCRETE FOR AT LEAST TEN FEET BEYOND THE AREA COVERED BY THIS SUBPARAGRAPH.
B. WITHIN TWO FEET HORIZONTALLY AND TWO FEET BELOW THE SEWER MAIN.
2. NO WATER PIPE SHALL PASS THROUGH OR COME INTO CONTACT WITH ANY PART OF A SEWER MANHOLE. THE MINIMUM HORIZONTAL SEPARATION BETWEEN WATER MAINS AND MANHOLES SHALL BE SIX FEET, MEASURED FROM THE CENTER OF THE MANHOLE.
3. THE MINIMUM SEPARATION BETWEEN FORCE MAINS OR PRESSURE SEWERS AND WATER MAINS SHALL BE TWO FEET VERTICALLY AND SIX FEET HORIZONTALLY UNDER ALL CONDITIONS. WHERE A SEWER FORCE MAIN CROSSES ABOVE OR LESS THAN SIX FEET BELOW A WATER LINE, THE SEWER MAIN SHALL BE ENCASED IN AT LEAST SIX INCHES OF CONCRETE OR CONSTRUCTED USING MECHANICAL JOINT DUCTILE IRON PIPE FOR TEN FEET ON EITHER SIDE OF THE WATER MAIN.
4. A ONE (1) FOOT MINIMUM VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN A STORM DRAIN CROSSING A WATER MAIN. THE MINIMUM VERTICAL SEPARATION IS MEASURED FROM OUTSIDE OF WATER MAIN TO OUTSIDE OF STORM DRAIN. EXTRA PROTECTION IS REQUIRED PER MAG SPECIFICATIONS WHEN THESE REQUIREMENTS ARE NOT MET.
5. A SIX (6) FOOT MINIMUM HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN A SEWER MAIN OR STORM DRAIN AND A WATER MAIN. THE MINIMUM HORIZONTAL SEPARATION IS MEASURED FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
6. WHENEVER TWO PARALLEL WATER MAINS ARE REQUIRED, THERE SHALL BE A TEN (10) FOOT MINIMUM HORIZONTAL SEPARATION BETWEEN THE TWO MAINS TO ALLOW FOR TAPPING, TIE-OVER, AND MAINTENANCE.
7. A THREE (3) FOOT MINIMUM HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN A FIRE HYDRANT AND ANY WATER SERVICE LINE.
8. RECLAIMED WASTEWATER MAINS SHALL BE CONSIDERED THE SAME AS WATER MAINS FOR THE PURPOSE OF MINIMUM COVER AND SEPARATION.
9. VERTICAL CLEARANCE BETWEEN WATER MAINS AND SEWER SERVICE CONNECTIONS: THE WATER MAIN SHALL NOT BE LESS THAN 6 INCHES ABOVE THE SEWER SERVICE EVEN IF THE SEWER SERVICE CONNECTION IS CONSTRUCTED WITH DUCTILE IRON PIPE IN ACCORDANCE WITH NOTE 3B OF MAG STANDARD DETAIL 404-1.
10. WHEN THE SEWER SERVICE IS ABOVE THE WATER MAIN IS NOT ALLOWED.
11. SEPARATION FROM STORM DRAINS AND CULVERTS; WATER AND SEWER MAINS SHALL MAINTAIN SIX (6) FEET HORIZONTAL AND ONE FOOT VERTICAL SEPARATION FROM STORM DRAINS AND CULVERTS.
12. MINIMUM COVER IS TO BE MEASURED TO SUBGRADE UNLESS THERE IS NO PAVEMENT; THEN IT IS MEASURED TO FINISHED GRADE. IN ALL CASES, SEWER LINES ARE TO BE AT A DEPTH SUFFICIENT TO PROVIDE GRAVITY SERVICE TO ALL ADJACENT BUILDING PADS. SERVICE LINES ARE TO BE LAID AT GRADES AND DEPTHS PRESCRIBED IN THE INTERNATIONAL PLUMBING CODE.
22.2 MANHOLES
ALL MANHOLES SHALL BE 4-FT. ID PRECAST CONCRETE WITH POURED-IN-PLACE CONCRETE BASE AND TRAFFIC BEARING RING AND COVER. ALL COVERS SHALL BE 2-FT. IN DIAMETER AND SHALL BE MARKED "SEWER". TEST MANHOLES FOR WATER TIGHTNESS (INFILTRATION) PER R 18-9-E301.4.01.D.3.F. WATER TIGHTNESS SHALL BE TESTED BY EITHER 1) FILLING THE MANHOLE WITH WATER AND ENSURING THAT THE DROP IN WATER LEVEL DOES NOT EXCEED 0.001% OF THE TOTAL MANHOLE VOLUME IN ONE HOUR, OR 2) AIR PRESSURE TESTING USING THE "STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY NEGATIVE AIR PRESSURE (VACUUM) TEST". ASTM C-1244-93. TEST 100% OF ALL MANHOLES. MANHOLES SHALL CONFORM TO A.D.E.Q. AND M.A.G. SPECIFICATIONS. CONSTRUCTION SHALL CONFORM TO M.A.G. STD. D.TLS. 420-1 AND 420-2.
22.3 CONCRETE
CLASS A CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI. ALL POURED-IN-PLACE CONCRETE FOR WATER CONTAINING AND/OR TRANSPORTING CHAMBERS, MANHOLES AND BOXES, AND FOUNDATIONS SHALL BE CLASS A CONCRETE, AND SHALL BE SMOOTH FINISHED ON WATER CONTACT SURFACES. THRUST BLOCKS, VALVE ANCHORS, AND CONCRETE SURROUNDS MAY BE FORMED FROM CLASS C CONCRETE. THE EXCAVATION METHOD EMPLOYED SHALL BE THE CONTRACTOR'S GRADE WITHIN 25 FEET OF ANY EXCAVATION OR STRUCTURE. EXCAVATION SHALL EXTEND A SUFFICIENT DISTANCE FROM WALLS AND FOOTINGS TO ALLOW PLACING AND REMOVAL OF FORMS, INSTALLATION OF SERVICES AND INSPECTION BY THE ENGINEER.

23 SEWER AND WATER LINE TESTING

- GRAVITY SANITARY SEWER TESTING:
ALL GRAVITY SANITARY SEWER MAINS SHALL BE TESTED IN ACCORDANCE WITH THE ARIZONA ADMINISTRATIVE CODE. ALL ACCEPTANCE TESTING SHALL BE PERFORMED IN THE PRESENCE OF THE PROJECT ENGINEER OR AUTHORIZED REPRESENTATIVE. TESTING SHALL CONSIST OF THE FOLLOWING:
1. TEST EACH SECTION OF GRAVITY PIPELINE FOR LEAKAGE AND PRESSURE RATING AFTER BACKFILLING OCCURS AND BEFORE ROAD IS PAVED. PERFORM LEAKAGE TESTS WITH THE AIR TEST AS SPECIFIED BELOW. TEST LATERALS FROM THE MAIN LINE TO PROPERTY LINE.
2. IN ADDITION TO PRESSURE AND LEAKAGE TESTING, A DEFLECTION TEST SHALL BE PERFORMED ON ALL GRAVITY PIPELINES INSTALLED. A RIGID BALL OR MANDREL DEFLECTION TESTING EQUIPMENT AND LABOR SHALL BE PROVIDED. TEST SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES. ANY SECTION OF THE PIPELINE WHICH SHOWS DEFLECTION IN EXCESS OF 5 PERCENT OF THE AVERAGE INSIDE DIAMETER AS PER ASTM D3034 SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE. ENGINEER MAY REQUIRE CONTRACTOR TO TEST PVC PIPE AFTER BACKFILL HAS BEEN IN PLACE FOR 30 DAYS.
3. VIDEO INSPECTION
3.a. THE CONTRACTOR WILL BE REQUIRED TO VIDEO RECORD THE INTERIOR OF THE SEWER LINE USING A VIDEO CAMERA. ANY DEFECTS OR 'SAGS' IN THE PIPE OR CONSTRUCTION METHODS REVEALED BY THE INSPECTION SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST.
3.b. THE CONTRACTOR SHALL RE-VIDEO THE PIPE AFTER IT HAS BEEN REPAIRED OR EXCAVATED. ANY ADDITIONAL INSPECTION(S) REQUIRED, BASED ON A FAILURE OR DEFICIENCY DISCOVERED DURING THE INSPECTION, SHALL BE PAID FOR BY THE CONTRACTOR. ALL SEWER LINE VIDEOS SHALL BE TURNED IN TO THE PROJECT MANAGER AFTER ACCEPTANCE.
4. AIR TESTING (ASTM F1417)
4.a. PERFORM AIR TESTS FOR PLASTIC MAINLINE AND WILL INCLUDE LATERAL PIPES TO THE PROPERTY LINES WHERE APPLICABLE.
4.b. CONTRACTOR SHALL FURNISH ALL FACILITIES REQUIRED INCLUDING: NECESSARY PIPING CONNECTIONS, TEST PUMPING EQUIPMENT, PRESSURE GAUGES OR MANOMETERS, BULKHEADS, ALL MISCELLANEOUS ITEMS REQUIRED. OBTAIN APPROVAL OF EQUIPMENT AND ACCEPTANCE OF METHODS PROPOSED FOR USE. CONDUCT. INITIAL TEST ON FIRST SECTION OF PIPE LAID BY EACH CREW.
4.c. INTRODUCE LOW-PRESSURE AIR UNTIL INTERNAL AIR PRESSURE IS 4.0 PSI. ALLOW TWO TO FIVE MINUTES FOR INTERNAL AIR PRESSURE AND TEMPERATURE TO STABILIZE. ADJUST PRESSURE TO 3.5 PSI AND START TEST. THE TIME REQUIRED FOR THE PRESSURE TO DECREASE 1.0 PSI FROM 3.5 TO 2.5 PSI GREATER THAN THE AVERAGE BACK PRESSURE OF ANY GROUND WATER ABOVE THE PIPE INVERT SHALL NOT BE LESS THAN THE MINIMUM TEST TIME IN THE FOLLOWING FOR THE GIVEN DIAMETERS: NOMINAL PIPE TIME (MIN) PER DIAMETER PER 100FT OF PIPE: 4"=66 MIN; 6"=1.48 MIN; 8"=2.510 MIN; 10"=3.912 MIN; 12"=5.615 MIN; 15"=8.918 MIN; 18" =12.8 MIN.
5. MANHOLES SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH AAC R18-9-E301D.3, ASTM C -1244 AND MAG SPECIFICATION SECTION 615.
WATER SYSTEM PRESSURE AND LEAKAGE TESTING:
1. THE CONTRACTOR SHALL PROVIDE THE LABOR, TOOLS, EQUIPMENT, AND MATERIALS NECESSARY TO PERFORM THE PRESSURE TESTS AND LEAKAGE TESTS.
2. ALL TESTS PERFORMED FOR EACH PIPE TEST SECTION, FACILITY, OR PART OF A FACILITY SHALL BE OBSERVED AND APPROVED BY THE ENGINEER BEFORE ACCEPTANCE. IN THE EVENT THE CONTRACTOR PERFORMS ANY TEST WITHOUT OBSERVED BY THE ENGINEER, THE CONTRACTOR WILL BE REQUIRED TO TEST THE SECTION, FACILITY, OR PART OF A FACILITY AGAIN IN CONFORMANCE WITH THIS SPECIFICATION AT NO COST TO THE OWNER.
3. SUBMIT TEST RESULTS OF ALL TESTING INCLUDED IN THIS SECTION, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: PRESSURE TESTS AND GAUGE CALIBRATIONS.
4. THE ENGINEER AND PROJECT MANAGER SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO ANY TESTING AND/OR DISINFECTING.
5. TEST PRESSURES SHALL BE 150 PSI, MEASURED AT THE LOWEST POINT OF THE PIPE SEGMENT BEING TESTED. ONLY POTABLE WATER SHALL BE USED FOR FLUSHING AND TESTING THE POTABLE WATER SYSTEM.
6. THE CONTRACTOR WILL BE RESPONSIBLE FOR DISPOSAL OF ANY WATER ASSOCIATED WITH HYDROSTATIC TESTING. THE CONTRACTOR SHALL COORDINATE WITH THE PROJECT ENGINEER TO DETERMINE DISPOSAL LOCATIONS. PERMITTING, COORDINATION, AND APPROVAL OF DISPOSAL LOCATIONS ARE THE RESPONSIBILITY OF CONTRACTOR. ALL TEMPORARY PLUGS, BULKHEADS, OR BLIND FLANGES USED FOR HYDROSTATIC TESTING WILL BE FURNISHED BY THE CONTRACTOR AND INCIDENTAL TO THE COST OF THE PIPELINE.
7. ALL PRESSURE MAINS SHALL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH MAG SPECIFICATION SECTION 610. SUBSECTION 610.15 EXCEPT THAT THE MAXIMUM ALLOWABLE LEAKAGE FROM THE PIPE LINE SHALL BE DETERMINED BY THE FOLLOWING FORMULA: WHERE: L = SD^2P/133,200; L = ALLOWABLE LEAKAGE IN GALLONS PER HOUR, S = LENGTH OF PIPE TESTED IN FEET, D = NOMINAL DIAMETER OF PIPE IN INCHES, AND P = AVERAGE TEST PRESSURE IN PSI GAGE DURING THE HYDROSTATIC TEST AS MEASURED AT THE LOWEST POINT IN THE TEST SECTION.
8. EACH SECTION OF PRESSURE MAIN TO BE TESTED SHALL BE SLOWLY FILLED WITH WATER AND THE SPECIFIED TEST PRESSURE SHALL BE APPLIED BY MEANS OF A PUMP CONNECTED TO THE PIPE IN A MANNER SATISFACTORY TO THE ENGINEER. BEFORE APPLYING THE SPECIFIED TEST PRESSURE, ALL AIR SHALL BE EXPELLED FROM THE PIPE. THE WATER PRESSURE SHALL BE BROUGHT TO THE SPECIFIED TEST PRESSURES AND MAINTAINED FOR AT LEAST 2 HOURS. LEAKAGE WILL BE DETERMINED BY MEASURING THE QUANTITY OF WATER TO BE SUPPLIED TO MAINTAIN THE SPECIFIED TEST PRESSURE. THE CONTRACTOR SHALL REPAIR AND RETEST ANY LINES THAT FAILED.
9. PRESSURE TESTING OF NEW MAINS SHALL BE BY THE CONTRACTOR PER MAG SECTION 610.15 AND PROJECT ENGINEER OR REPRESENTATION WILL BE PRESENT AT ALL TESTING.
WATER SYSTEM CHLORINATION FLUSHING AND BACTERIOLOGICAL TESTING:
1. CHLORINATION, FLUSHING AND BACTERIOLOGICAL TESTING CHLORINATION AND FLUSHING OF NEW MAINS SHALL BE PERFORMED BY THE CONTRACTOR PER MAG SECTION 611 AND PART V OF ADEQ ENGINEERING BULLETIN NO. 8. BEFORE BEING PLACED IN SERVICE, ALL NEWLY INSTALLED PIPE, VALVES, HYDRANTS, AND APPURTENANCES SHALL BE FLUSHED, DISINFECTED, KEPT CLEAN, AND WILL BE SAMPLED FOR ACCEPTABLE BACTERIOLOGICAL ANALYSIS. THE CONTRACTOR WILL HAVE SAMPLE TAKEN FROM EACH AND EVERY 500-FOOT INTERVAL, AND AT EACH END. FOR EACH HYDRANT LATERAL OVER 18- FEET IN LENGTH, A SAMPLE WILL BE TAKEN AT THE HYDRANT END. ON NEW WATERLINE WITHOUT HYDRANT, TEMPORARY SAMPLING TAPS SHALL BE PROVIDED, AND THEN REMOVED AND PLUGGED AFTER ACCEPTABLE BACTERIOLOGICAL RESULTS ARE RECEIVED. HYDRANT USED FOR SAMPLING SHALL BE FITTED WITH AN APPROVED SAMPLING TAP.
THE CONTRACTOR SHALL COORDINATE WITH THE PROJECT ENGINEER AND UTILITY DEPARTMENT FOR THE LOCATION OF SAMPLING TAPS.
2. PRE-DISINFECTION FLUSHING: PIPE SHALL FIRST BE FLUSHED TO REMOVE ANY SOLID OR CONTAMINATED MATERIAL. FLUSHING VELOCITY SHALL BE AT LEAST 2.5- FEET PER SECOND IN THE PIPE. FLUSHING PERIOD SHALL BE AT LEAST 5 MINUTES FOR EVERY 150- FEET OF NEW PIPE BUT IN NO CASE LESS THAN 30 MINUTES. B. ONE 2-1/2 INCH HYDRANT OPENING WILL, UNDER NORMAL PRESSURE OF 40 PSI, PROVIDE THIS VELOCITY IN PIPE SIZES UP TO AND INCLUDING 12- INCHES.
3. FINAL FLUSHING AND TESTING. FOLLOWING CHLORINATION, ALL TREATED WATER SHALL BE FLUSHED FROM THE PIPE UNTIL THE REPLACEMENT WATER TREATED THROUGHOUT ITS LENGTHS SHOWS AN ABSENCE OF CHLORINE. IF CHLORINE IS NORMALLY USED IN THE SOURCE OF SUPPLY, TESTS SHALL SHOW A RESIDUAL NOT IN EXCESS OF THAT CARRIED IN THE SYSTEM. FLUSHING VELOCITY SHALL BE AT LEAST 2.5- FEET PER SECOND IN THE WATERLINE. FLUSHING PERIOD SHALL BE AT LEAST 5 MINUTES FOR EVERY 150- FEET OF NEW WATERLINE BUT IN NO CASE LESS THAN 30 MINUTES. ALL HYDRANTS ON THE NEW WATERLINE SHALL BE FLUSHED TO REMOVE EXCESS CHLORINE FROM THE HYDRANT AND HYDRANT BRANCH.
4. THE CONTRACTOR WILL PROVIDE A COPY OF ALL TEST TO THE PROJECT ENGINEER AND UTILITY DEPARTMENT.



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NOTES - SHEET 3 OF 3

ALKEMISTA CAFE & BAR

2140 SR 89A SEDONA, AZ

SHEET TITLE:

PROJECT TITLE:

DRAWN BY: RJB/TCH

SCALE: NONE

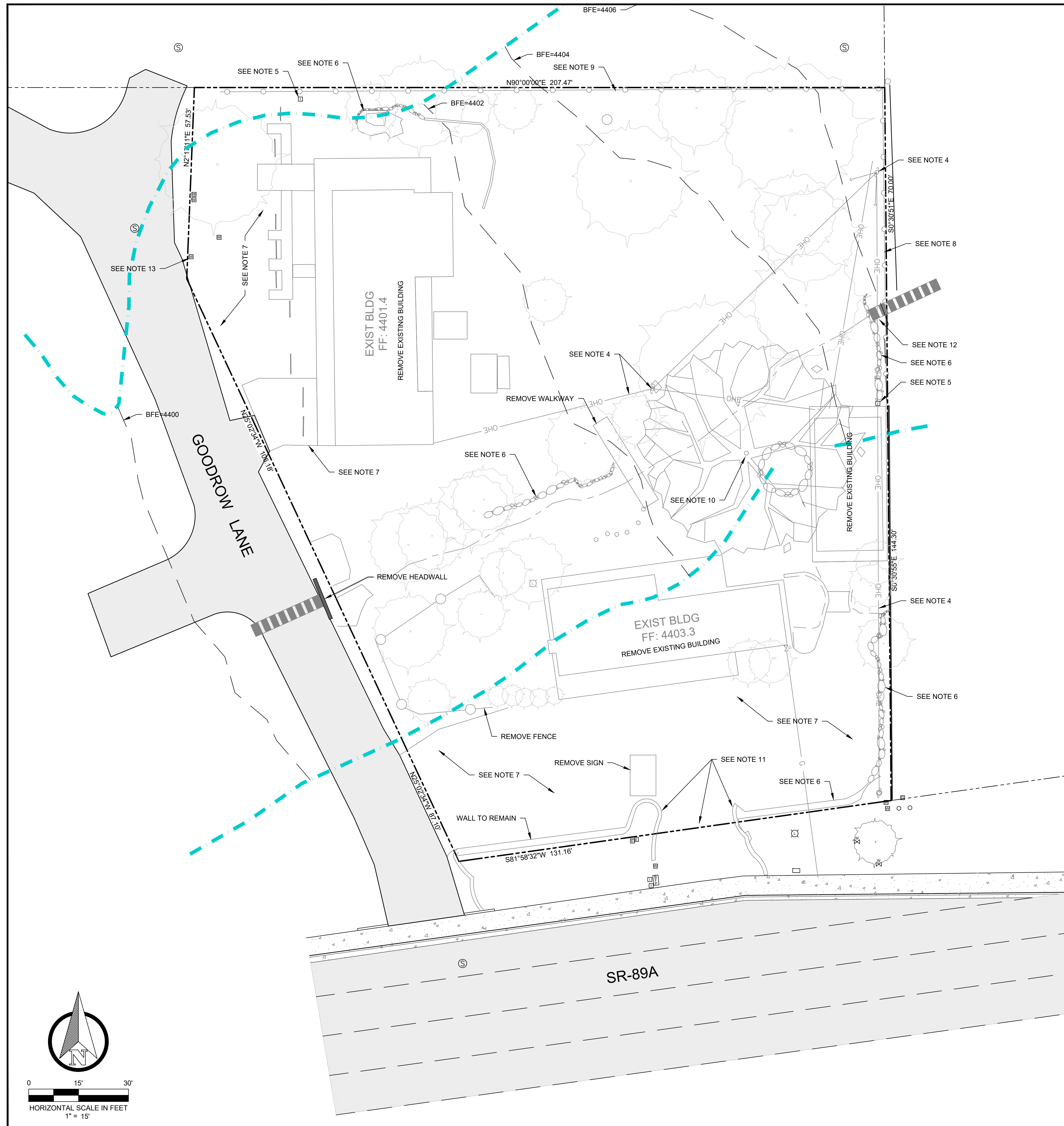
DATE: 4/13/2023

PROJECT NO: 200209

SHEET NO.

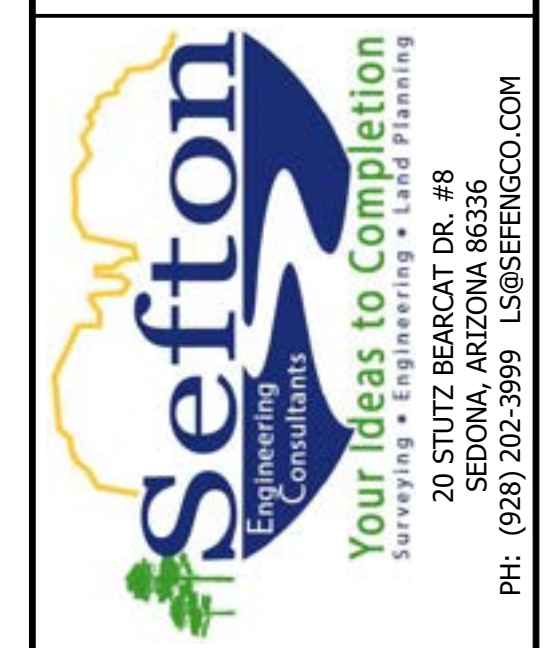
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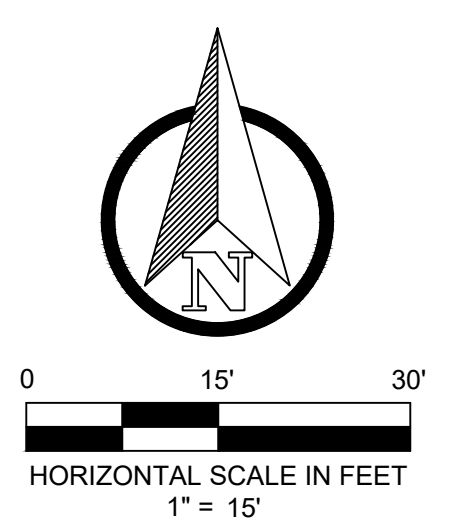


DEMOLITION NOTES:

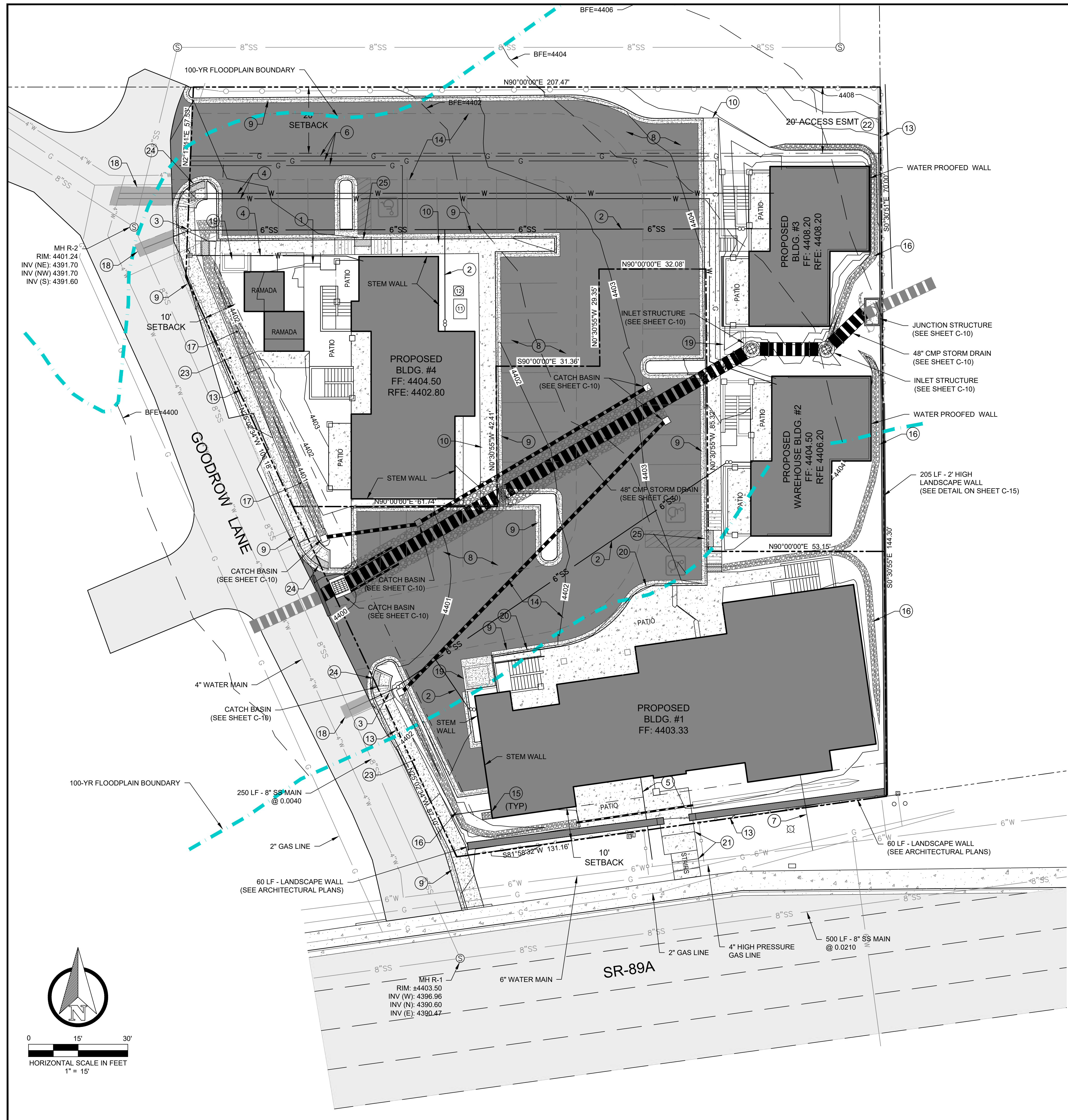
1. SURVEY AND TOPOGRAPHY DATA SHOWN HEREON IS BASED ON A TOPOGRAPHIC SURVEY PROVIDED BY HAMMES SURVEYING, LLC, 2100 VIA SILVERDO, CAMP VERDE, AZ. DATED 2/20/2020.
2. CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS.
3. ALL EXISTING BUILDINGS AND ASSOCIATED STRUCTURES TO BE REMOVED.
4. ALL UTILITY POLES AND OVERHEAD SERVICE LINES TO BE RELOCATED. CONTRACTOR TO COORDINATE WITH UTILITY COMPANIES.
5. EXISTING IRRIGATION LINES TO BE ABANDONED. LINES AND ASSOCIATED WATER METERS TO BE REMOVED.
6. EXISTING STONE AND TIMBER WALLS, PAVERS AND PLANTERS TO BE REMOVED.
7. EXISTING DRIVEWAYS AND PARKING AREAS TO BE REMOVED.
8. FENCE ALONG EAST PROPERTY LINE TO BE REMOVED AND REPLACED WITH 3' HIGH RETAINING WALL. AFTER WALL CONSTRUCTION NEW OR ORIGINAL FENCING TO BE PLACED ON TOP OF WALL.
9. FENCE ALONG NORTH PROPERTY LINE TO REMAIN.
10. EVERY EFFORT SHALL BE MADE TO PRESERVE NOTED TREE. ALL OTHER TREES TO BE REMOVED.
11. ENTRANCE FROM SR-89A TO BE REMOVED AND REGRADED. STONE WALL ALONG ENTRANCE EDGE TO BE RELOCATED ALONG PROPERTY LINE TO EXTEND EXISTING WALL ACROSS ENTRANCE AT PROPERTY LINE.
12. REMOVE EXIST CULVERT HEADWALL AND SHORTEN CULVERT APPROX 4' FLUSH TO NEW RETAINING WALL, (SEE SHEET C-10).
13. EXISTING WATER SERVICE TO BE RELOCATED PER SITE PLAN.



DEMOLITION PLAN	
ALKEMISTA CAFE & BAR	
2140 SR 89A SEDONA, AZ	
SHEET TITLE:	DEMOLITION PLAN
PROJECT TITLE:	ALKEMISTA CAFE & BAR
DRAWN BY:	RJB/TCH
SCALE:	1" = 15'
DATE:	4/13/2023
PROJECT NO:	200209
SHEET NO.	C-5



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CONSTRUCTION KEY NOTES:

- 1 CONCRETE STEPS
- 2 INSTALL NEW 6" SEWER SERVICE LINE WITH TWO-WAY CLEANOUT AT BUILDING (SEE SHEET C-14)
- 3 INSTALL CLEANOUT WITH FRAME & COVER (SEE SHEET C-14)
- 4 INSTALL NEW 1" WATER SERVICE WITH METER IN BOX
- 5 CONNECT NEW 1" WATER SERVICE TO EXISTING WATER SERVICE LINE
- 6 INSTALL GAS SERVICE
- 7 CONNECT NEW GAS SERVICE TO EXISTING SERVICE LINE
- 8 ASPHALT DRIVEWAY (SEE DETAIL ON SHEET 15)
- 9 CONC. CURB & GUTTER (SEE DETAIL ON SHEET 15)
- 10 4.5' WIDE CONC. SIDEWALK (SEE CONSTRUCTION NOTE 5 BELOW)
- 11 LOCATION OF TEMPORARY CONSTRUCTION DUMPSTER
- 12 LOCATION OF TEMPORARY PORT-A-JOHN
- 13 CONSTRUCTION ENVELOPE FENCE PER COS LDC 812.04
- 14 TEMPORARY TRAFFIC SURFACING (SEE CONSTRUCTION NOTE 4 BELOW)
- 15 INSTALL 3"x2" RIP RAP PADS UNDERNEATH ALL DOWNSPOUTS
- 16 RIPRAP LINED DRAINAGE CHANNEL (SEE SHEET C-9)
- 17 RIPRAP LINED STORM DETENTION CHANNEL (SEE SHEET C-9)
- 18 SAWCUT PAVEMENT FOR UTILITY LINES AND REPAIR PER T-TOP DETAIL (SEE SHEET C-15)
- 19 DUMPSTER PAD (SEE ARCHITECTURAL PLAN)
- 20 HIGH CURB (SEE GRADING & DRAINAGE SHEET)
- 21 WORK DONE IN SR 89A RIGHT-OF-WAY SHALL REQUIRE ADOT PERMIT.
- 22 20' ACCESS ESMT TO BE PROVIDED FOR CONNECTION TO THE PAREL EAST OF THIS LOT (APN 408-24-073F).
- 23 5.0' WIDE CONC. SIDEWALK (SEE CONSTRUCTION NOTE 5 BELOW)
- 24 PROVIDE ADA ACCESSIBLE RAMP PER MAG STD. DTL. 236-5
- 25 PROVIDE ADA ACCESSIBLE RAMP PER MAG STD. DTL. 238-3

CONSTRUCTION NOTES:

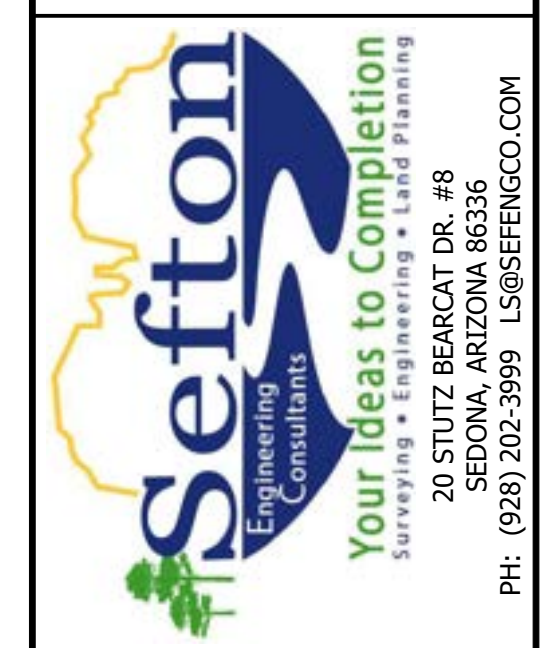
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2. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THE CORRECT DIMENSIONS OF THE PROPOSED BUILDING AND THAT IT IS LOCATED WITHIN THE PROPER SETBACK LOCATION.
3. ALL EXISTING UTILITY LOCATIONS SHOWN ARE BASED ON AS-BUILT AND SURVEY DATA AND MAY NOT BE ACCURATE. CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION.
4. TEMPORARY TRAFFIC SURFACING SHALL BE APPLIED PRIOR TO CONSTRUCTION AND SHALL CONSIST OF NO LESS THAN A 4" THICKNESS OF 3/4" AGGREGATE. THE SURFACE SHALL EXTEND AS SHOWN ON PLAN.
5. ALL NEW SIDEWALKS, DRIVEWAYS, EXPOSED SURFACES OF CONCRETE DRAINAGE STRUCTURES, AND OTHER EXPOSED CONCRETE SURFACES SHALL BE INTEGRALLY COLORED "SEDONA RED". THE AMOUNT OF CONCRETE COLOR ADDITIVE REQUIRED IS 3.05 LBS OF DAVIS 160 LIQUID PER SACK OF CONCRETE. THIS IS THE SEDONA RED AS MANUFACTURED BY HANSON CONCRETE IN COTTONWOOD ARIZONA. VARIATIONS IN THE ADDITIVE TO ACCOMPLISH THE "SEDONA RED" SHALL BE SUBJECT TO CITY ENGINEER APPROVAL.

AREA OF DISTURBANCE:

40,615 SF

LINETYPE LEGEND

EXISTING STORM SEWER LINE	---
EXISTING WATER MAIN	W
EXISTING SANITARY SEWER MAIN	8"SS
EXISTING OVERHEAD ELECTRIC LINE	OHE
EXISTING GAS LINE	G
EXISTING CONTOURS	4095 4096
PROPOSED CONTOURS	4095 4096
PROPOSED STORM SEWER LINE (SIZE PER PLAN)	---
PROPOSED 1" WATER SERVICE	W
PROPOSED 4" SANITARY SERVICE	4"SS
PROPOSED GAS LINE	G
PROPERTY & RIGHT-OF-WAY LINE	---
BUILDING SETBACK LINE	---
PROPOSED FLOW LINE	---
CONSTRUCTION FENCE	o-o-o-o



OVERALL SITE & UTILITY PLAN

ALKEMISTA CAFE & BAR

2140 SR 89A SEDONA, AZ

SHEET TITLE:
PROJECT TITLE:

DRAWN BY: RJB/TCH

SCALE: 1" = 15'

DATE: 4/13/2023

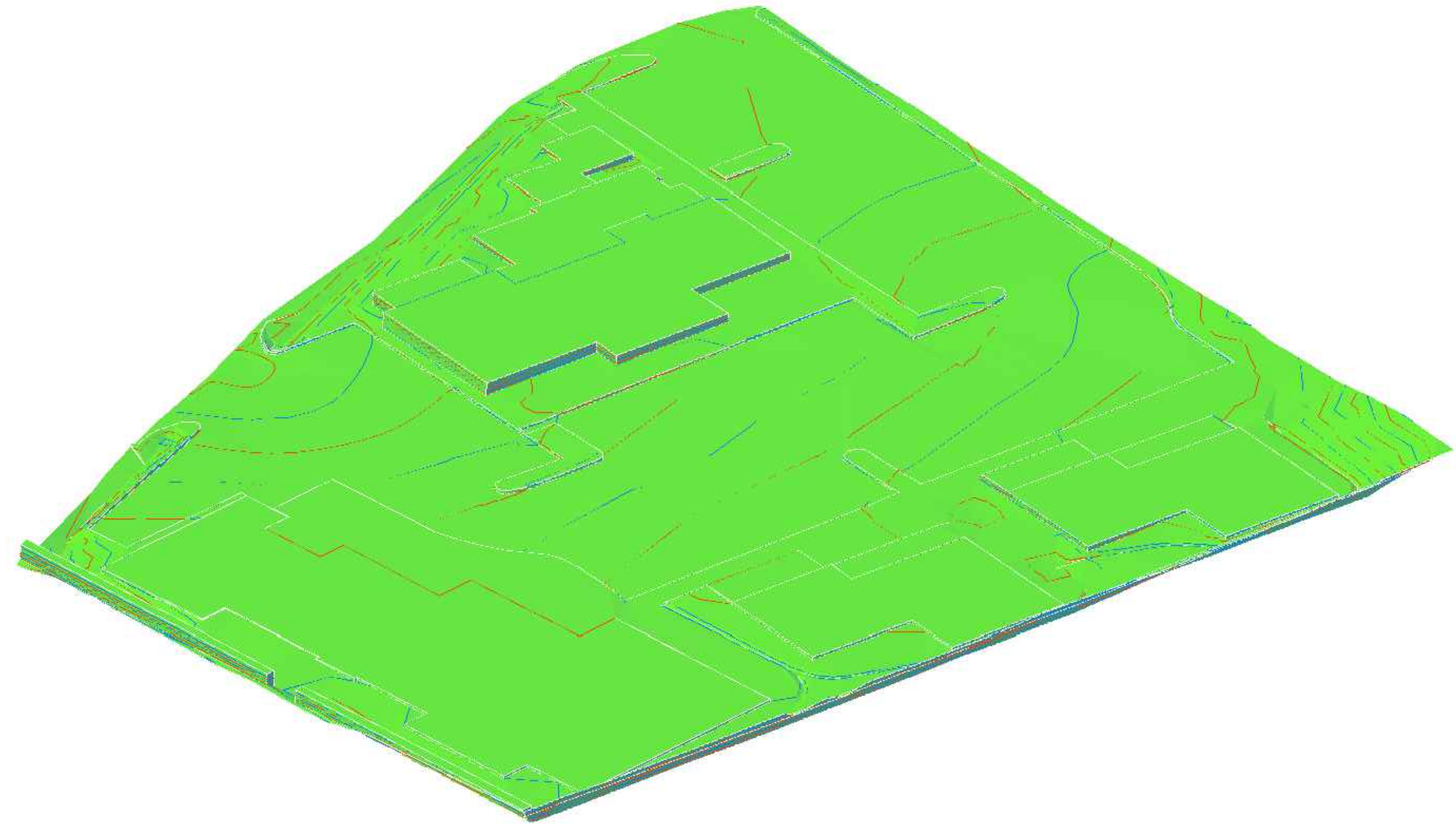
PROJECT NO: 200209

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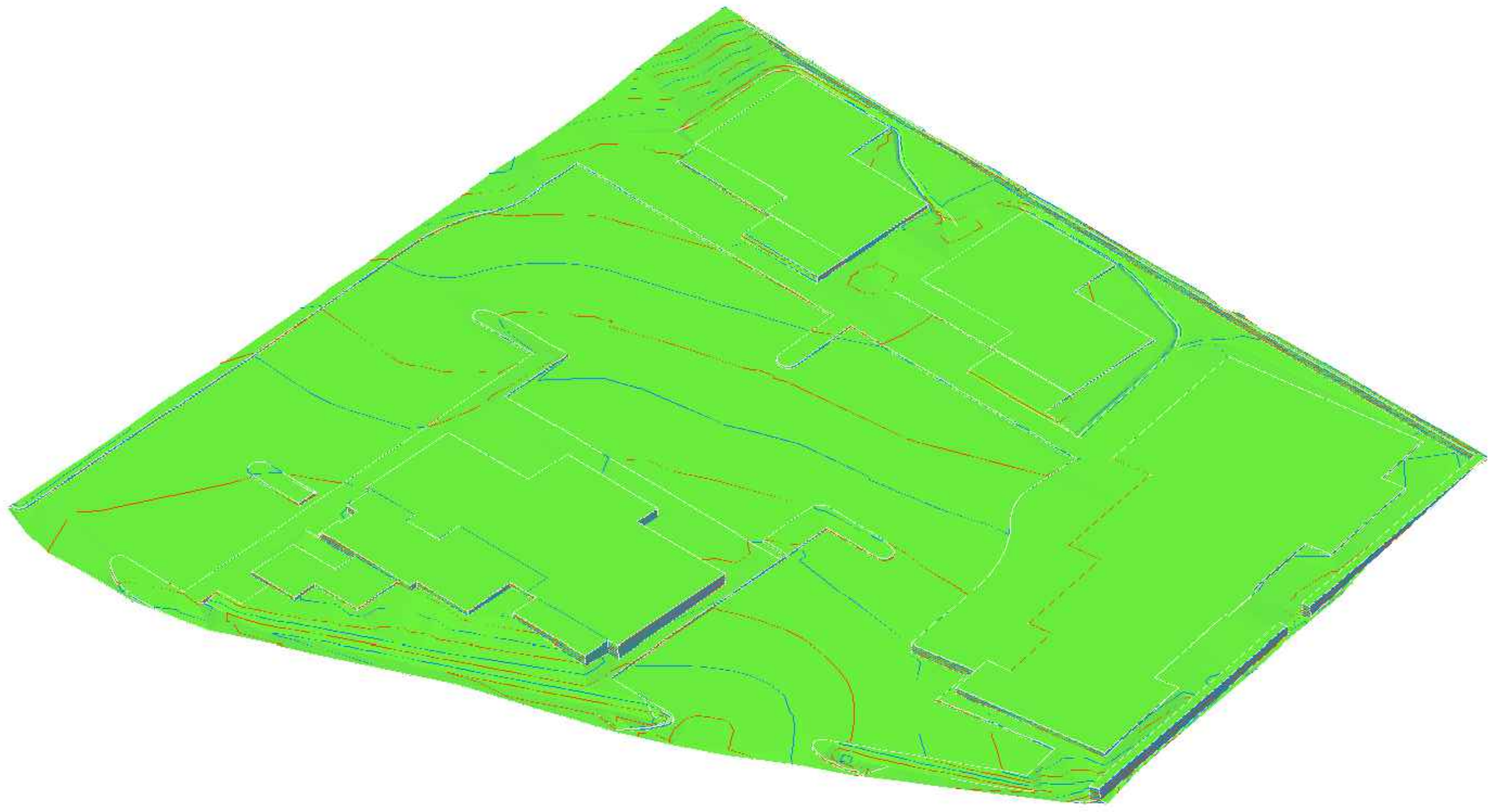
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3D SITE MODEL
 LOOKING NORTHWEST
 0.5' CONTOURS
 NOT TO SCALE



3D SITE MODEL
 LOOKING NORTHEAST
 0.5' CONTOURS
 NOT TO SCALE

SHEET TITLE:

3D SITE MODEL

PROJECT TITLE:

ALKEMISTA CAFE & BAR

2140 SR 89A SEDONA, AZ

DRAWN BY:

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SCALE:

1" = 15'

DATE:

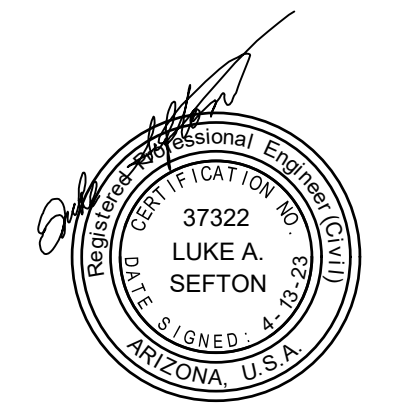
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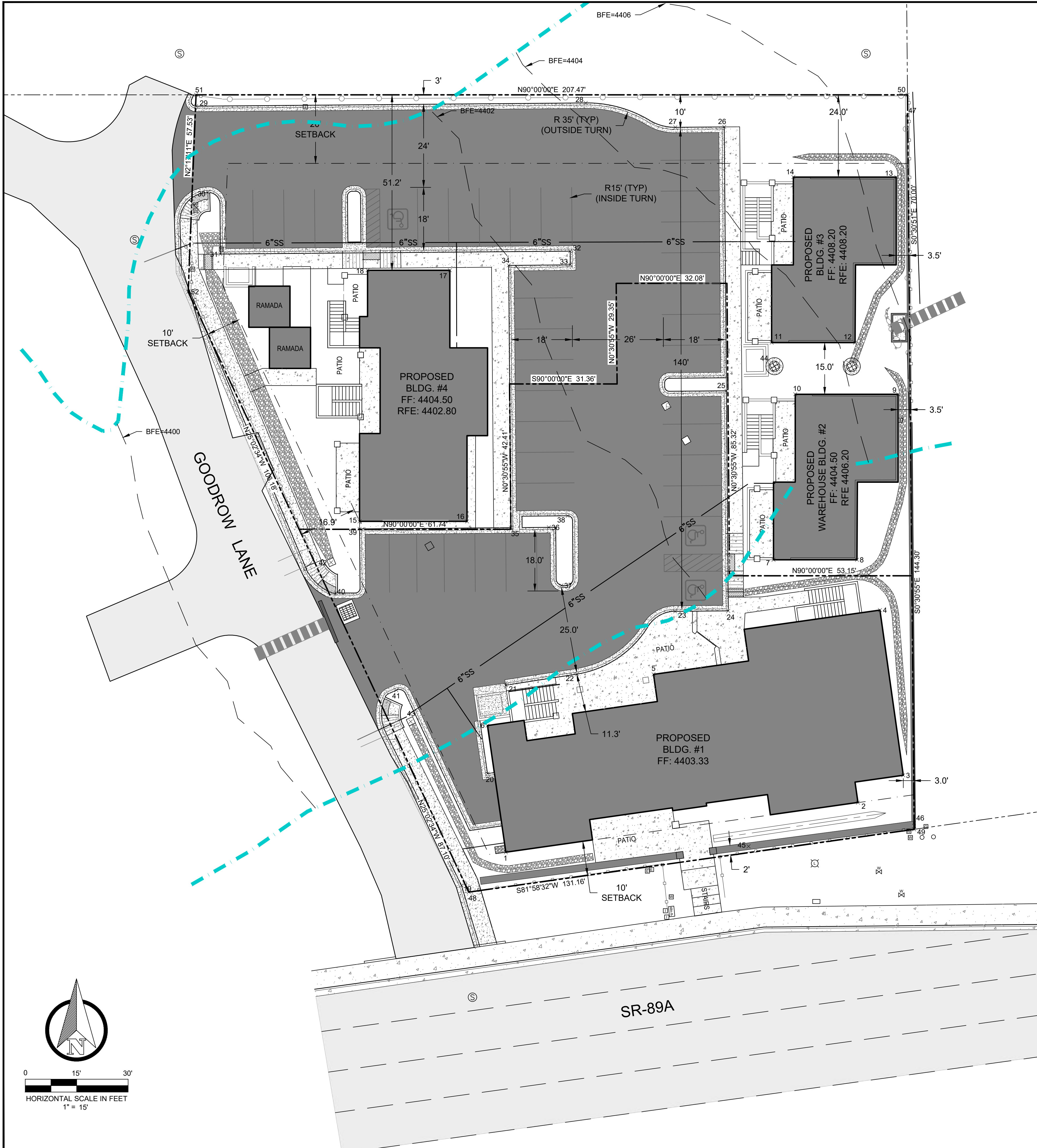
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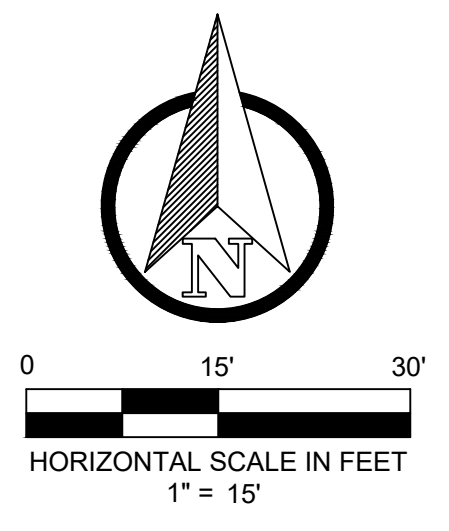


POINT TABLE			
POINT #	NORTHING	EASTING	DESCRIPTION
1	4452.18	4883.54	BLDG
2	4466.65	4986.22	BLDG
3	4474.64	4999.44	BLDG
4	4522.82	4992.63	BLDG
5	4504.07	4926.63	BLDG
6	4489.15	4878.19	BLDG
7	4537.50	4961.60	BLDG
8	4537.50	4985.93	BLDG
9	4585.79	4997.93	BLDG
10	4585.79	4967.93	BLDG
11	4600.86	4961.05	BLDG
12	4600.86	4985.38	BLDG
13	4649.15	4997.38	BLDG
14	4649.15	4967.38	BLDG
15	4548.71	4840.88	BLDG
16	4548.71	4872.21	BLDG
17	4621.96	4867.21	BLDG
18	4621.96	4843.21	BLDG
19	4442.52	4870.60	BOC
20	4475.13	4878.19	BOC
21	4500.90	4883.48	BOC
22	4504.15	4904.28	BOC
23	4522.47	4932.92	BOC
24	4522.60	4948.40	BOC
25	4586.79	4947.87	BOC
26	4663.79	4947.23	BOC

POINT TABLE			
POINT #	NORTHING	EASTING	DESCRIPTION
27	4663.67	4932.95	BOC
28	4670.78	4906.84	BOC
29	4669.84	4793.20	BOC
30	4644.66	4796.69	BOC
31	4626.69	4800.30	BOC
32	4627.54	4902.29	BOC
33	4623.54	4902.33	BOC
34	4623.39	4884.36	BOC
35	4546.87	4885.00	BOC
36	4546.96	4896.09	BOC
37	4529.99	4899.74	BOC
38	4550.33	4901.57	BOC
39	4546.50	4840.89	BOC
40	4527.81	4833.95	BOC
41	4499.46	4851.60	BOC
42	4536.74	4832.58	CB
43	4490.30	4855.79	CB
44	4593.98	4961.89	JCT
45	4453.91	4954.32	COW
46	4460.72	5002.55	COW
47	4667.31	5000.67	COW
48	4440.55	4872.72	PRCOR
49	4458.86	5002.60	PRCOR
50	4673.15	5000.67	PRCOR
51	4673.15	4793.20	PRCOR
52	4615.67	4790.90	PRCOR

POINT DESCRIPTION LEGEND

- BLDG BUILDING CORNER
- BOC BACK OF CURB
- CB CATCH BASIN
- COW CORNER OF WALL
- JCT JUNCTION
- PR PROPERTY CORNER



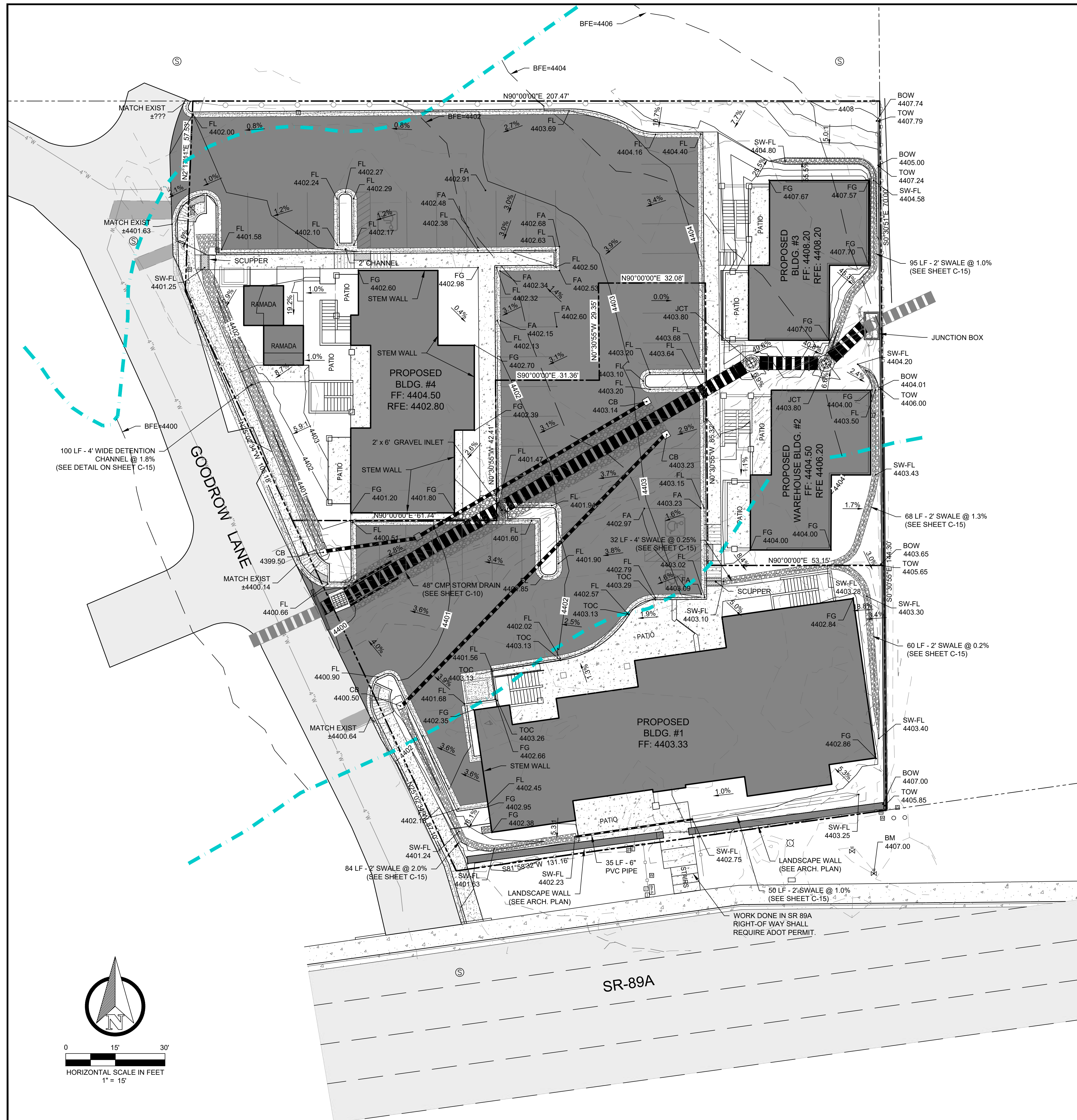
HORIZONTAL CONTROL PLAN

ALKEMISTA CAFE & BAR

2140 SR 89A SEDONA, AZ

SHEET TITLE:	HORIZONTAL CONTROL PLAN
PROJECT TITLE:	ALKEMISTA CAFE & BAR
DRAWN BY:	RJB/TCH
SCALE:	1" = 15'
DATE:	4/13/2023
PROJECT NO:	200209
SHEET NO.	C-8

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GENERAL GRADING AND DRAINAGE NOTES:

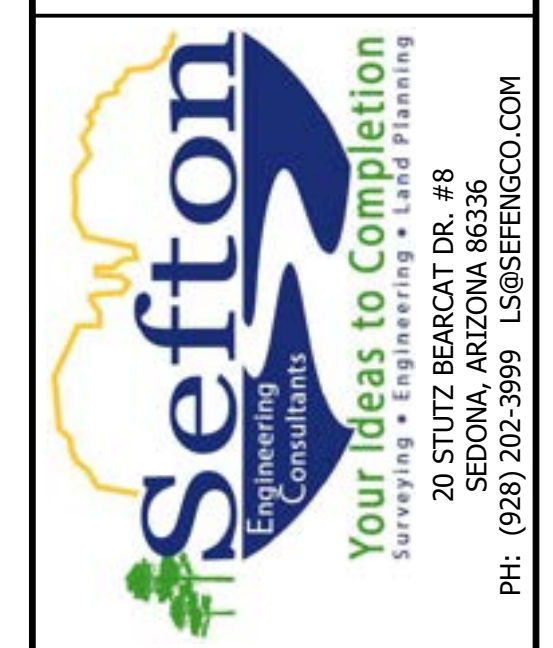
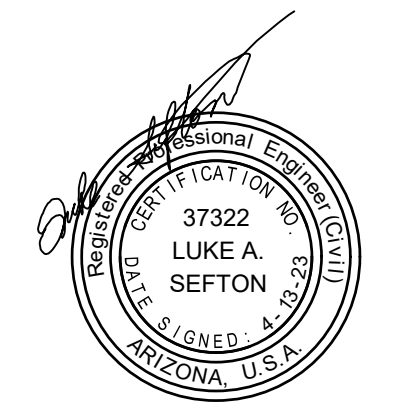
1. SURVEY AND TOPOGRAPHY DATA PROVIDED BY HAMMES SURVEYING, LLC, 2100 VIA SILVERDO, CAMP VERDE, AZ. AND WAS RELEASED 2/12/2020.
2. SITE BENCHMARK IS A WATER VALVE IN THE SR 89-A ROW NEAR THE SE PROPERTY CORNER WITH AN ELEVATION OF 4407.00. ELEVATIONS ARE TIED TO CITY OF SEDONA BENCHMARK RM 7 WITH AN ELEVATION OF 4353.50 (NAVD88).
3. TOP OF CUT SLOPES SHALL BE MADE NOT NEARER TO A SITE BOUNDARY LINE THAN 1/5 OF THE VERTICAL HEIGHT OF THE CUT WITH A MINIMUM OF 2 FEET. THE TOE OF FILL SLOPES SHALL BE MADE NOT NEARER TO A SITE BOUNDARY LINE THAN 1/2 OF THE VERTICAL HEIGHT OF THE FILL, WITH A MINIMUM OF 2 FEET. ALL CUT OR FILL SLOPES STEEPER THAN 2:1 SHALL BE STABILIZED WITH RIPRAP.
4. THE GROUND SURFACE SHALL BE PREPARED TO RECEIVE FILL BY REMOVING ALL VEGETATION, NON-COMPLYING FILL, AND OTHER UNSUITABLE MATERIALS.
5. NO ROCK OR SIMILAR IRREDUCIBLE MATERIAL WITH A MAXIMUM DIMENSION GREATER THAN 12" SHALL BE ALLOWED IN FILLS IN THE ABSENCE OF A SOILS REPORT AND INSPECTION BY A SOILS ENGINEER.
6. ALL FILLS SHALL BE COMPACTED TO A MINIMUM OF 90% OF MAXIMUM DENSITY AND VERIFIED BY A COMPACTION REPORT WHEN SUPPORTING A STRUCTURE.
7. THE BASE FLOOD ELEVATION (BFE) FOR BUILDING #2 WAS DETERMINED TO BE 4405.20' w/ A REGULATORY FLOOD ELEVATION (RFE) OF 4406.20'; THE BFE FOR BUILDING #3 IS 4407.20' w/ RFE OF 4408.20'; THE BFE FOR BUILDING #4 IS 4401.80' w/ A RFE OF 4402.80' BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988.
8. ALL ELECTRICAL AND MECHANICAL UNITS MUST BE ABOVE THE DETERMINED RFE FOR EACH BUILDING
9. FOR BUILDING #2 THE FIRST FLOOR WALLS SHOULD BE CONSTRUCTED OF FLOOD PROOF MATERIAL SUCH AS MASONRY UP TO THE RFE OF 4406.20'.

EARTHWORKS VOLUMES

FINISHED GROUND LESS EXISTING GROUND
 CUT: 170 CY
 EXPANSION: 15 CY
 FILL: 1460 CY
 MATERIALS: (30,000 x 0.67) / 27 = 745 CY
 PIPE: [(190) (3.14) (2x2)] / 27 = 90 CY
 NET: 1460 - 185 - 745 - 90 = 440 CY (IMPORT)

SPOT ELEVATIONS LEGEND

- BOW BOTTOM OF WALL
- BM BENCH MARK
- EG EXISTING GROUND
- FA FINISHED ASPHALT
- FF FINISHED FLOOR
- FG FINISHED GROUND
- FL FLOW LINE
- JCT JUNCTION STRUCTURE
- RFE REGULATORY FLOOD ELEVATION
- TOW TOP OF WALL



PH: (928) 202-5995 LS@SEFTON.COM

GRADING & DRAINAGE PLAN

ALKEMISTA CAFE & BAR

2140 SR 89A SEDONA, AZ

SHEET TITLE:
PROJECT TITLE:

DRAWN BY: RJB/TCH

SCALE: 1" = 15'

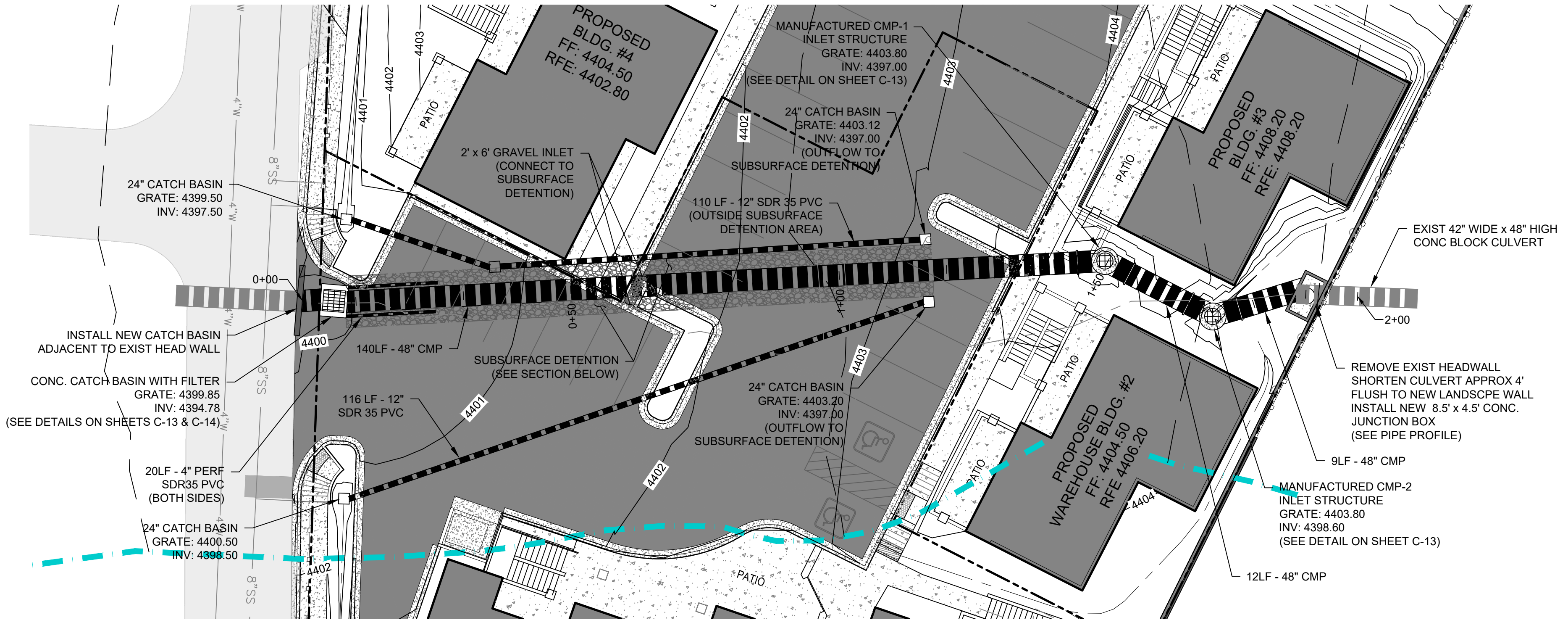
DATE: 4/13/2023

PROJECT NO: 200209

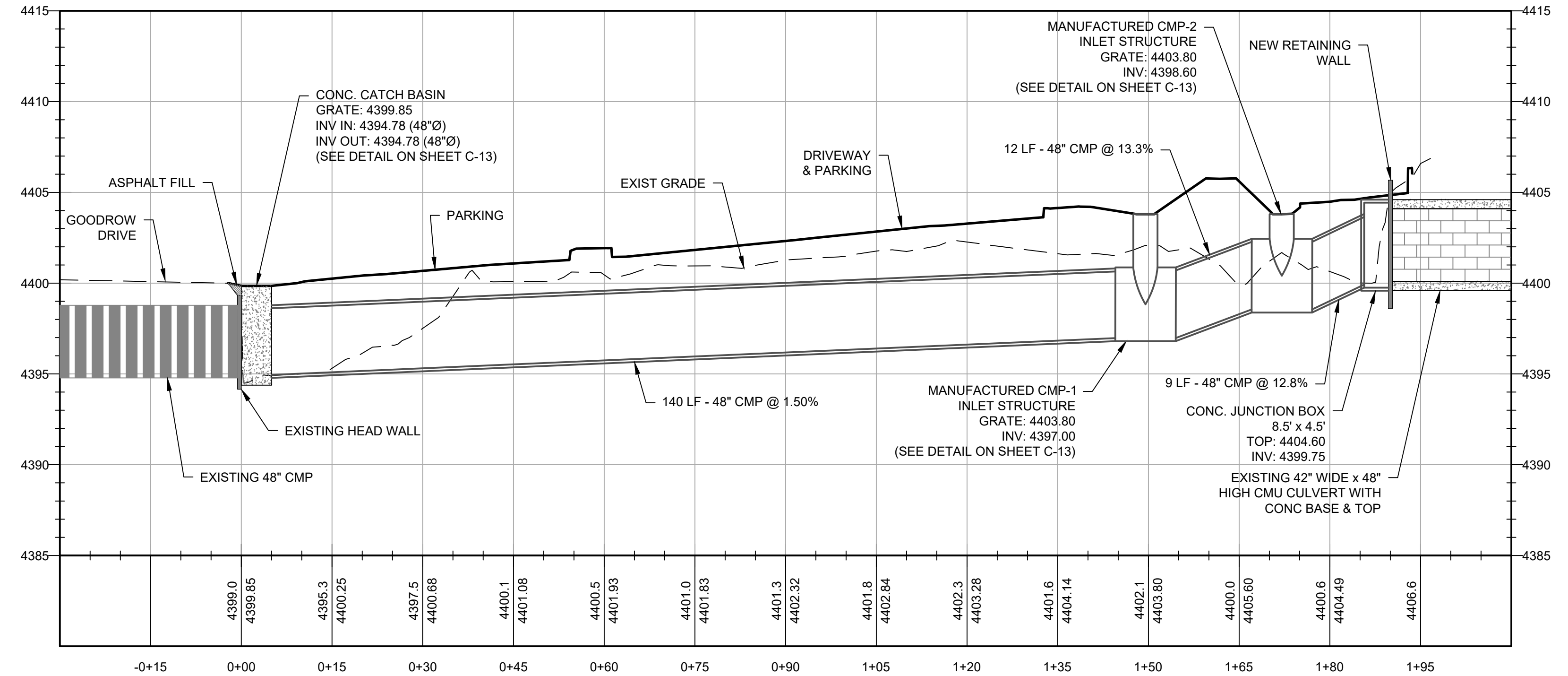
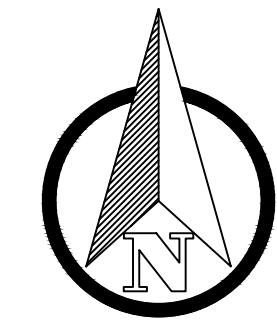
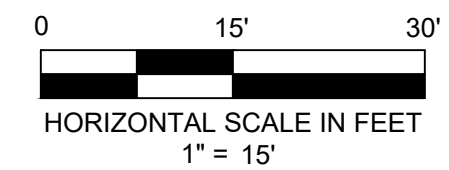
SHEET NO.

C-9

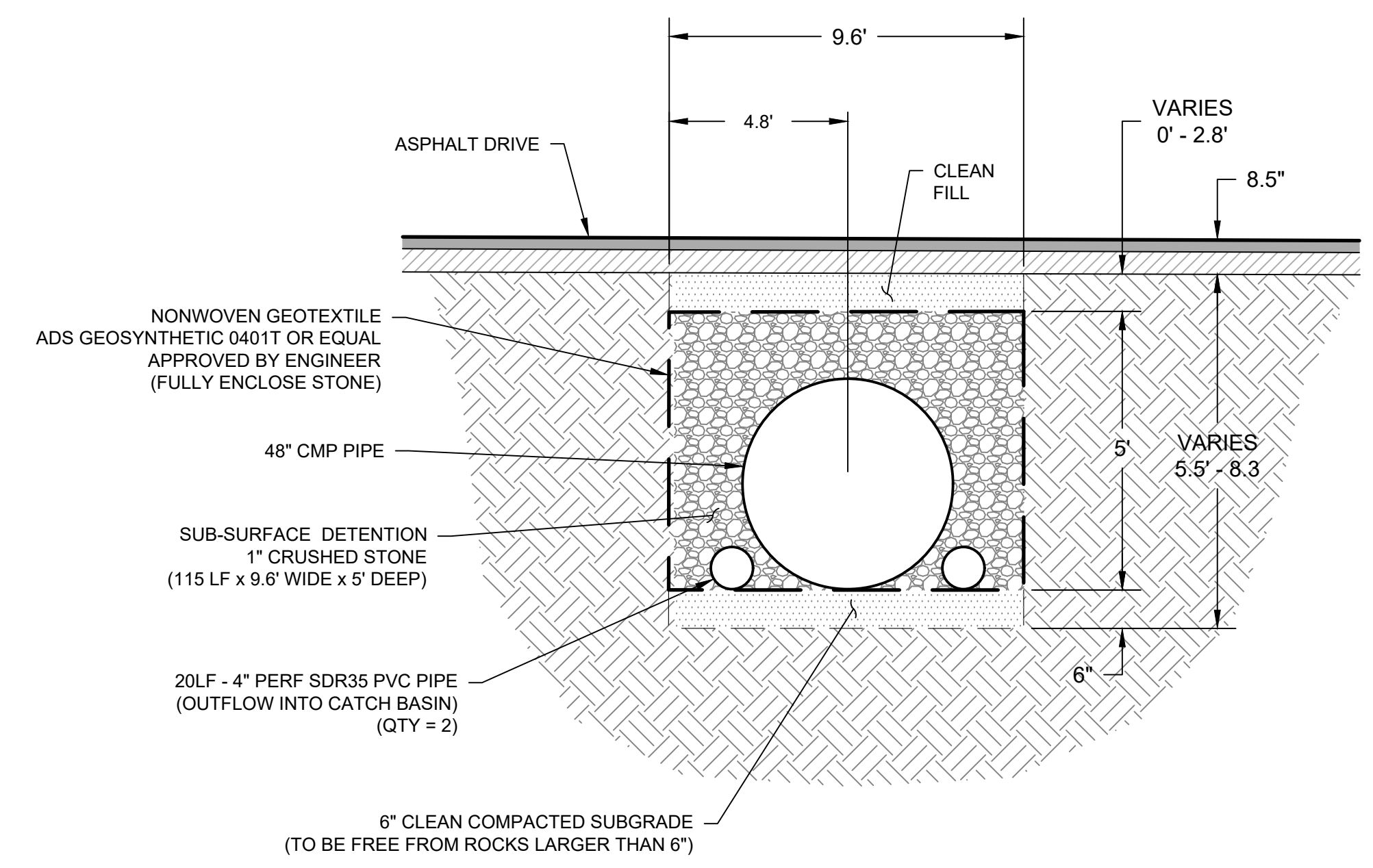
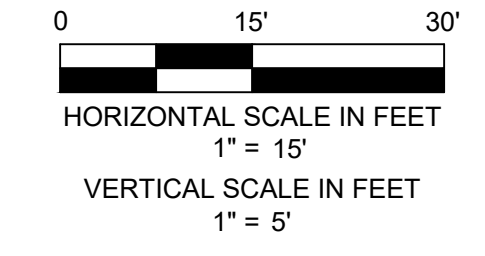
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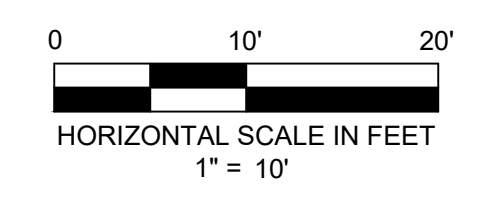
48"Ø STORM PIPE PLAN



48"Ø STORM PIPE PROFILE



48"Ø STORM PIPE SECTION



48 IN STORM PIPE PLAN & PROFILE

ALKEMISTA CAFE & BAR

2140 SR 89A SEDONA, AZ

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PROJECT TITLE:

DRAWN BY: RJB/TCH

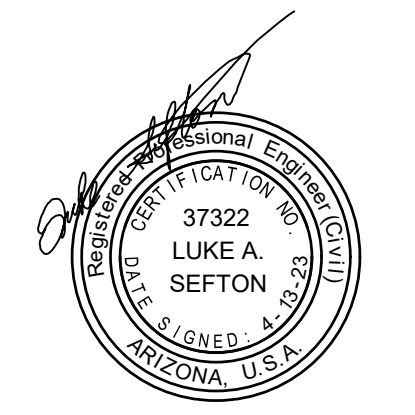
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DATE: 4/13/2023

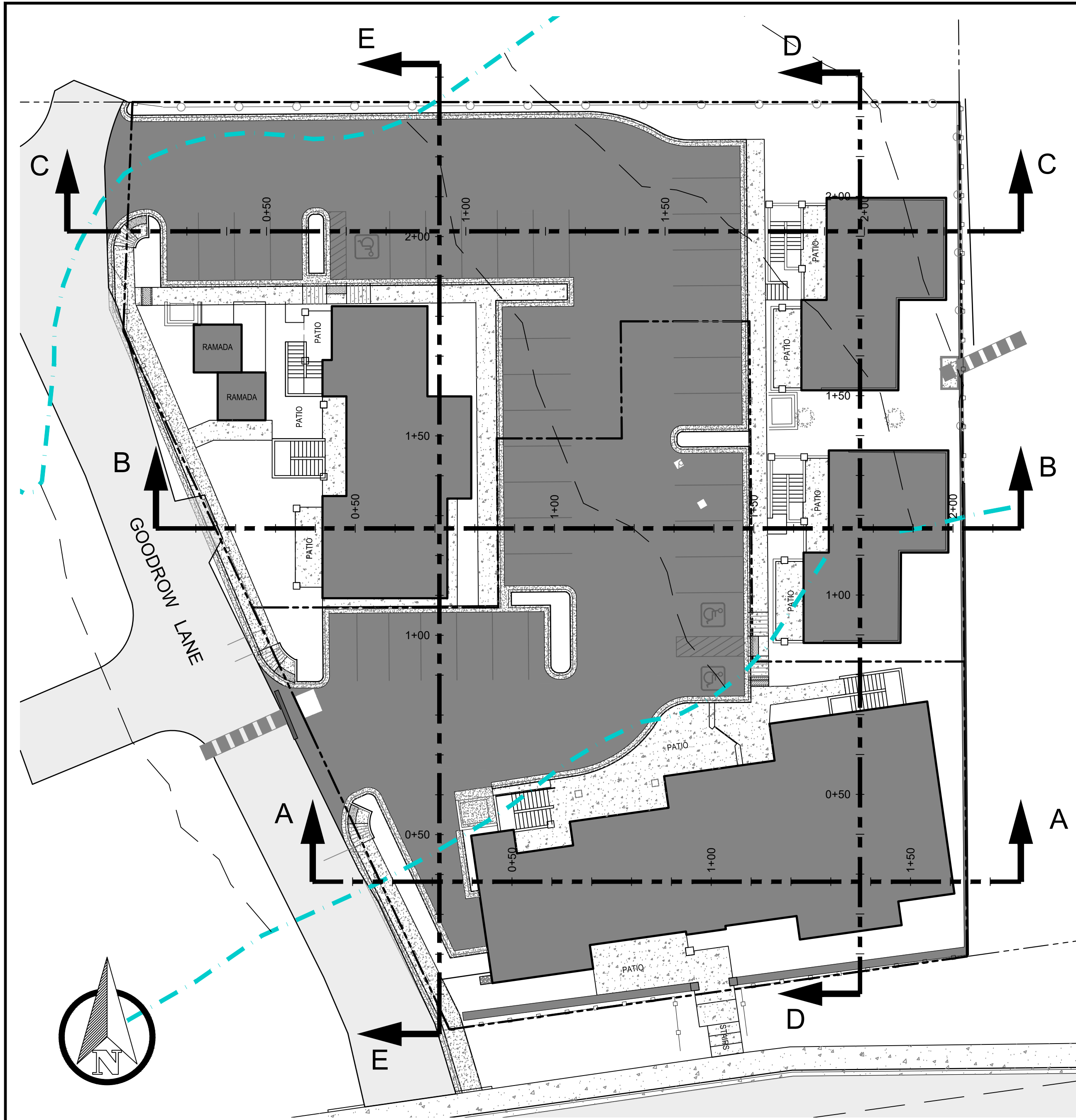
PROJECT NO: 200209

SHEET NO.

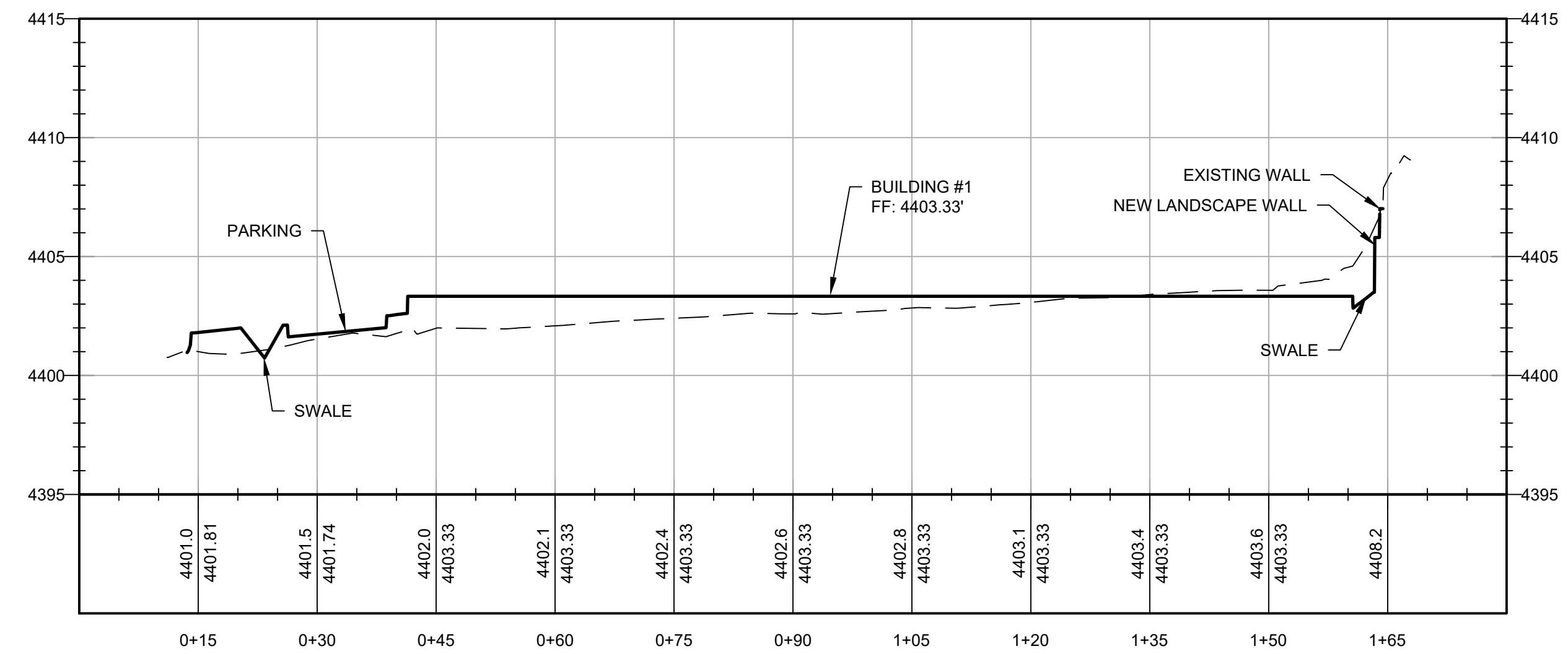
C-10



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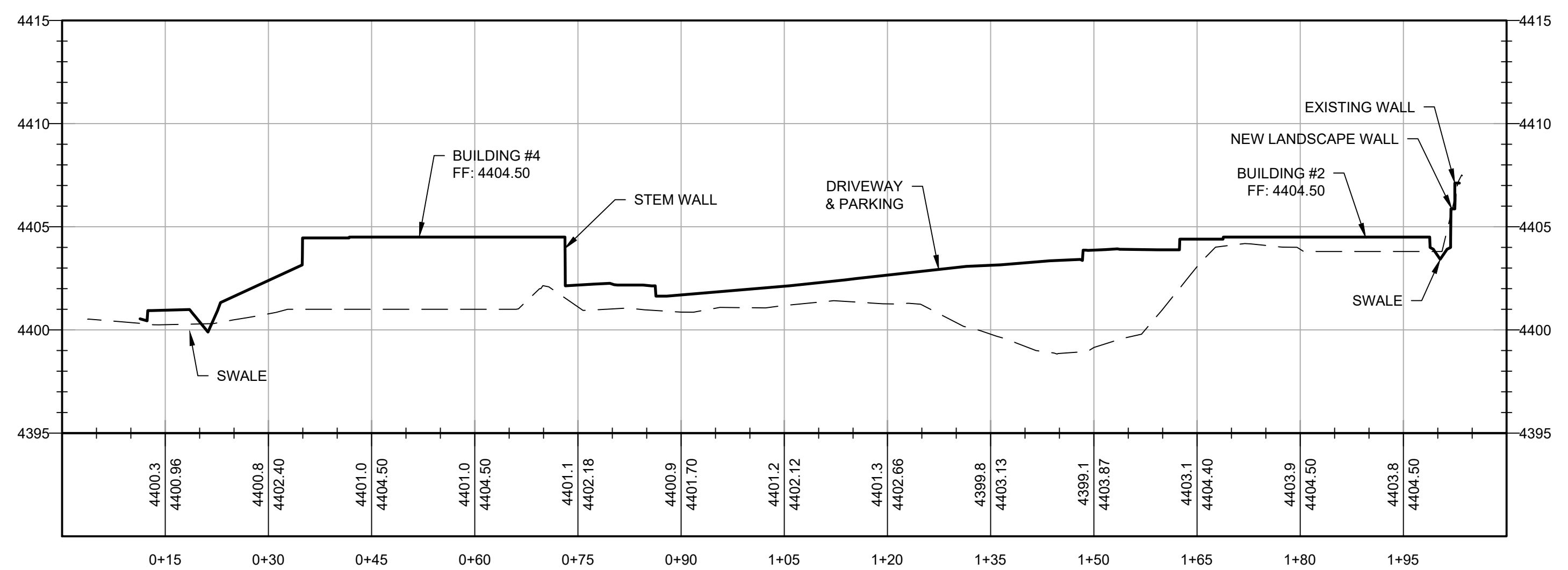


SECTION LEGEND



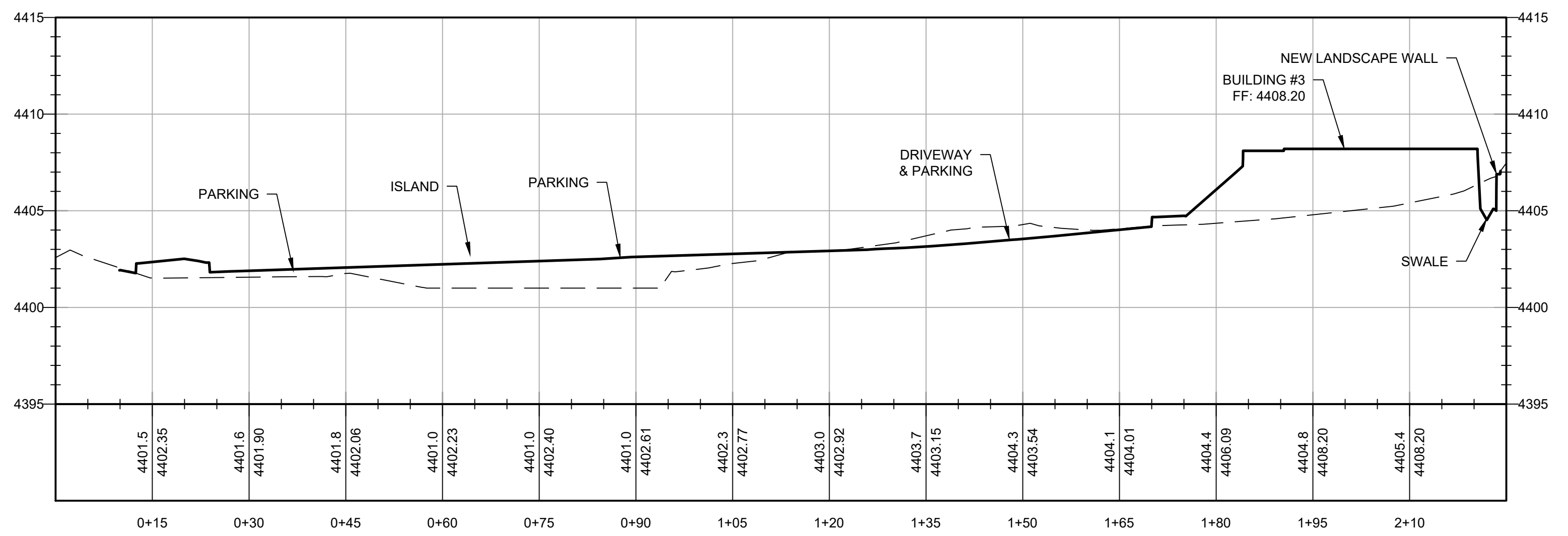
SECTION 'A'

0 15' 30'
 HORIZONTAL SCALE IN FEET
 1" = 15'
 VERTICAL SCALE IN FEET
 1" = 5'



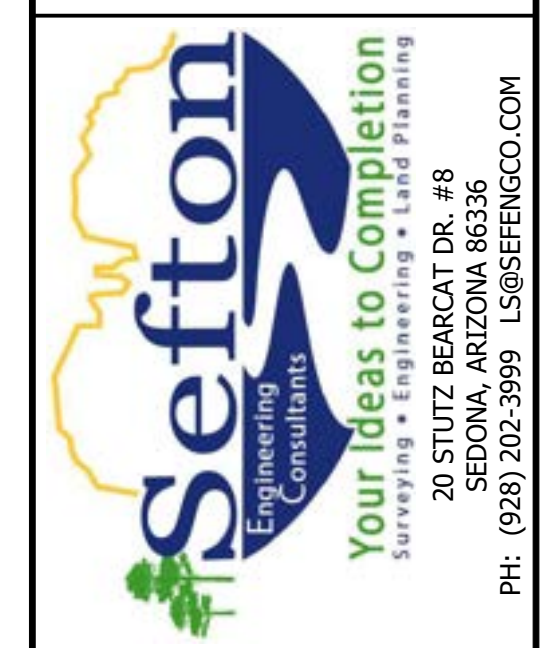
SECTION 'B'

0 15' 30'
 HORIZONTAL SCALE IN FEET
 1" = 15'
 VERTICAL SCALE IN FEET
 1" = 5'



SECTION 'C'

0 15' 30'
 HORIZONTAL SCALE IN FEET
 1" = 15'
 VERTICAL SCALE IN FEET
 1" = 5'



SECTIONS - SHEET 1 OF 2

ALKEMISTA CAFE & BAR

2140 SR 89A SEDONA, AZ

SHEET TITLE:

PROJECT TITLE:

DRAWN BY: RJB/TCH

SCALE: AS NOTED

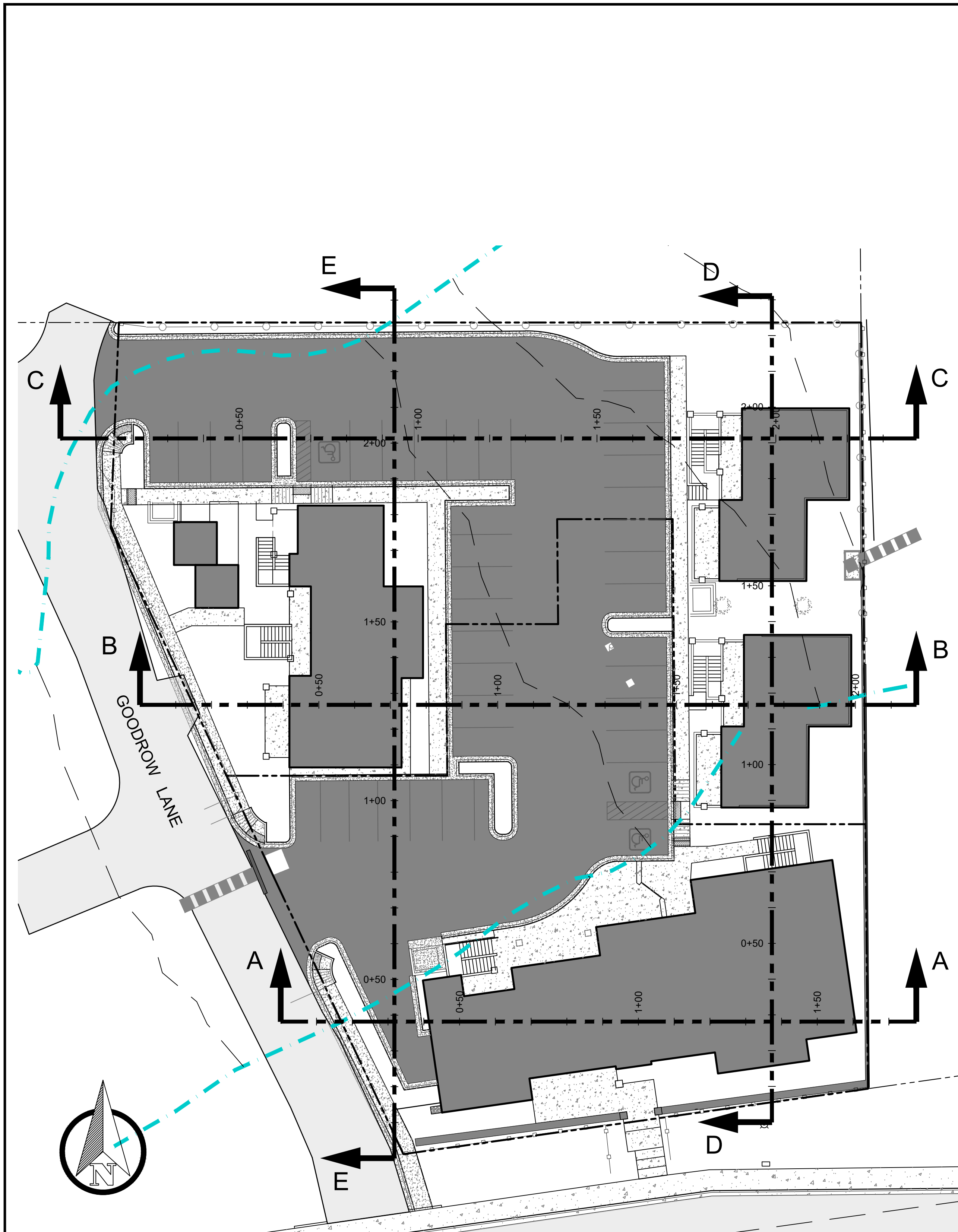
DATE: 4/13/2023

PROJECT NO: 200209

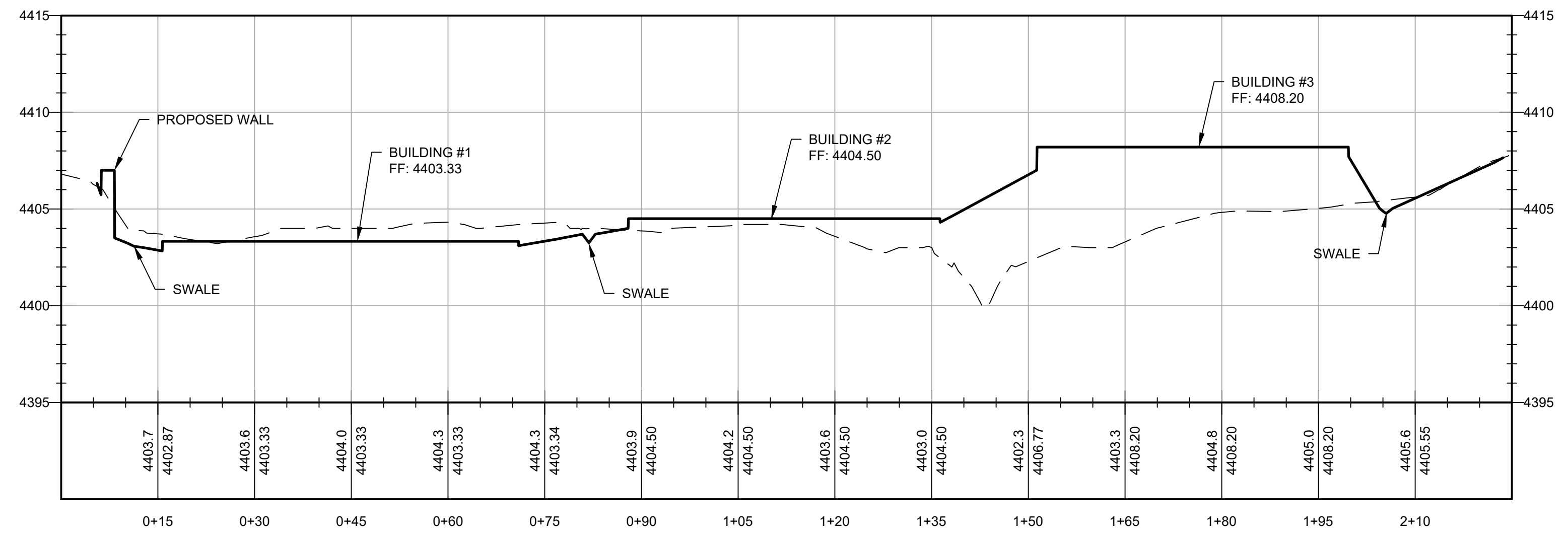
SHEET NO.

C-11

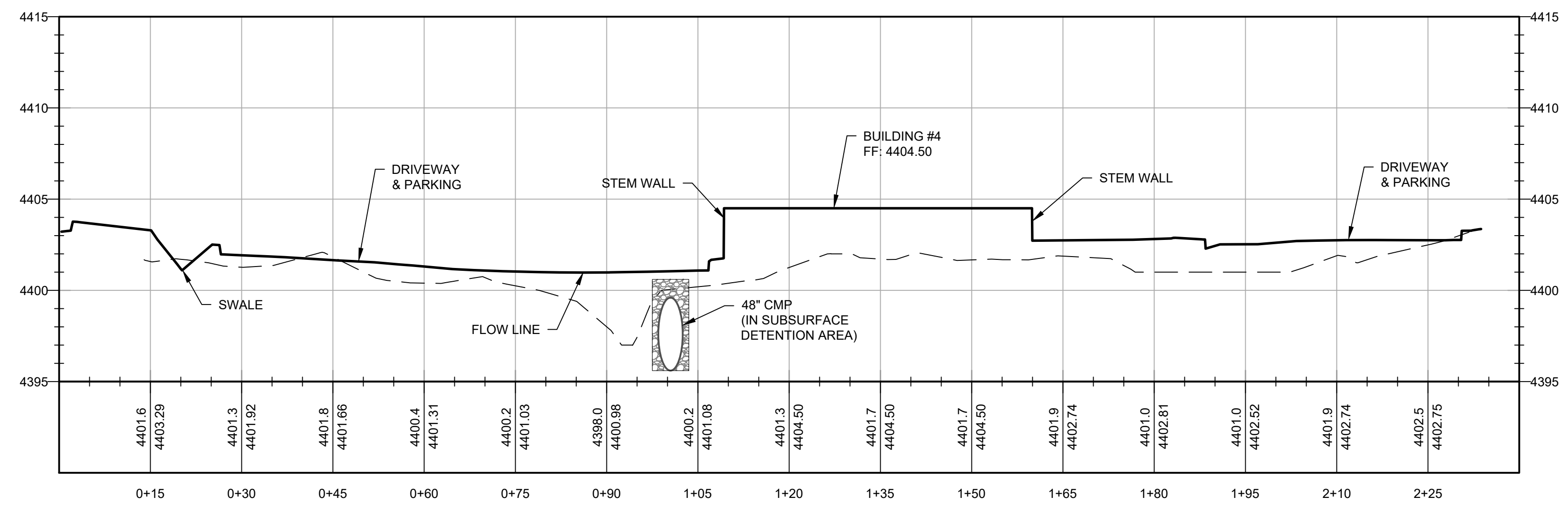
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SECTION LEGEND



SECTION 'D'
 0 15' 30'
 HORIZONTAL SCALE IN FEET
 1" = 15'
 VERTICAL SCALE IN FEET
 1" = 5'



SECTION 'E'
 0 15' 30'
 HORIZONTAL SCALE IN FEET
 1" = 15'
 VERTICAL SCALE IN FEET
 1" = 5'

SECTIONS - SHEET 2 OF 2

ALKEMISTA CAFE & BAR

2140 SR 89A SEDONA, AZ

SHEET TITLE:	
PROJECT TITLE:	
DRAWN BY:	RJB/TCH
SCALE:	AS NOTED
DATE:	4/13/2023
PROJECT NO:	200209
SHEET NO.	

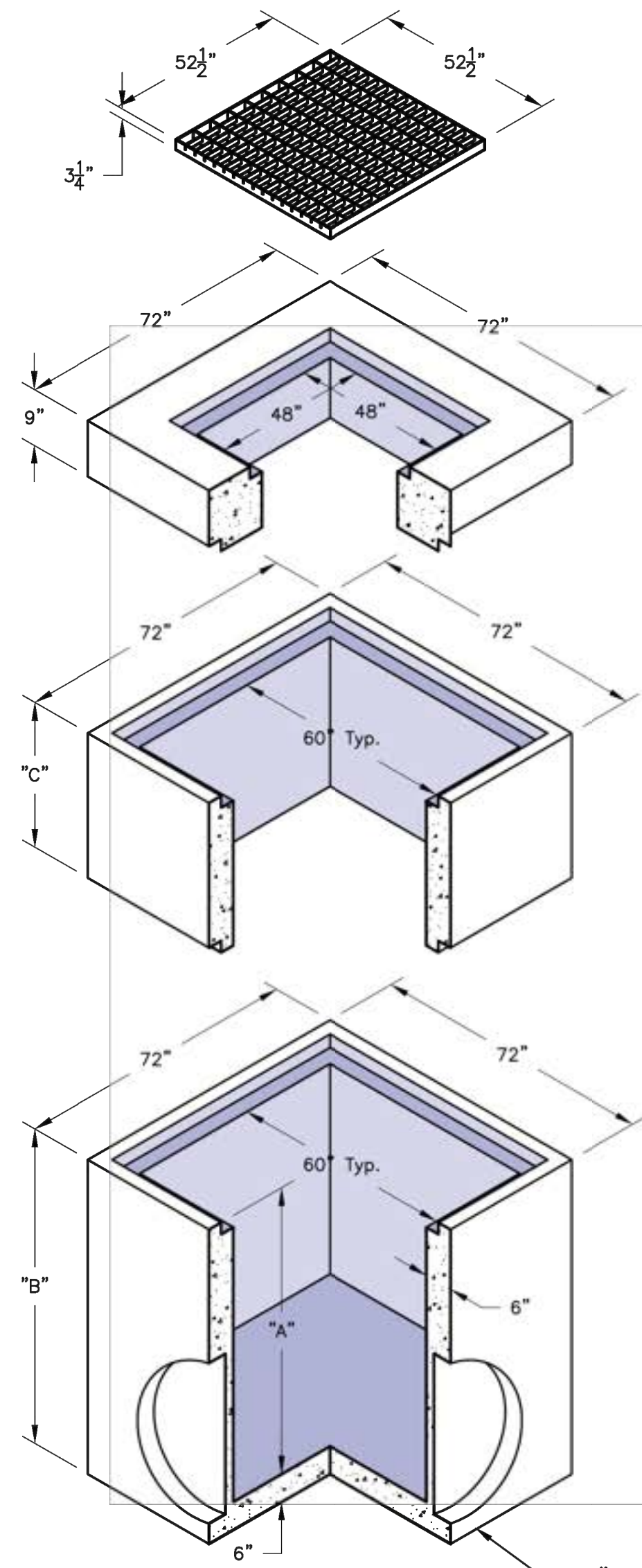
C-12

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Water

60"x60" I.D.
Catch Basin
Model: CB-6060-GA



Traffic Rated Galv. Steel Grate

Weight - 325 Lbs.
Item# - 7207200

GENERAL NOTES:
1. Different Height of Extensions and Bodies are Available by Request.
2. Frames may be Cast in Extension or Body. Frames are Cast Iron or Steel.

Roof Slab W/ Frame

Weight - 2400 Lbs.
Item# - 1205445

SPECIFICATIONS:
1. Concrete has a design strength of 5000 PSI at 28 days.
2. Steel reinforcement: ASTM A-615 Grade 60 or ASTM A-497 Welded wire fabric.
3. Loading: Designed for H20 Loading.
4. C.I. Castings: ASTM A-48, Class 30/35.

Extension

Weight - See Table
Item# - See Table

Extension		
C	Weight	Item#
18"	2475 Lbs.	1205500
30"	4125 Lbs.	1205540

Body			
A	B	Weight	Item#
42"	48"	8475 Lbs.	1205600
48"	54"	9300 Lbs.	1205620
54"	60"	10,125 Lbs.	1205640
60"	66"	10,950 Lbs.	1205680

Body

Weight - See Table
Item# - See Table

46"Ø Standard Knockout or as Required (Typical)

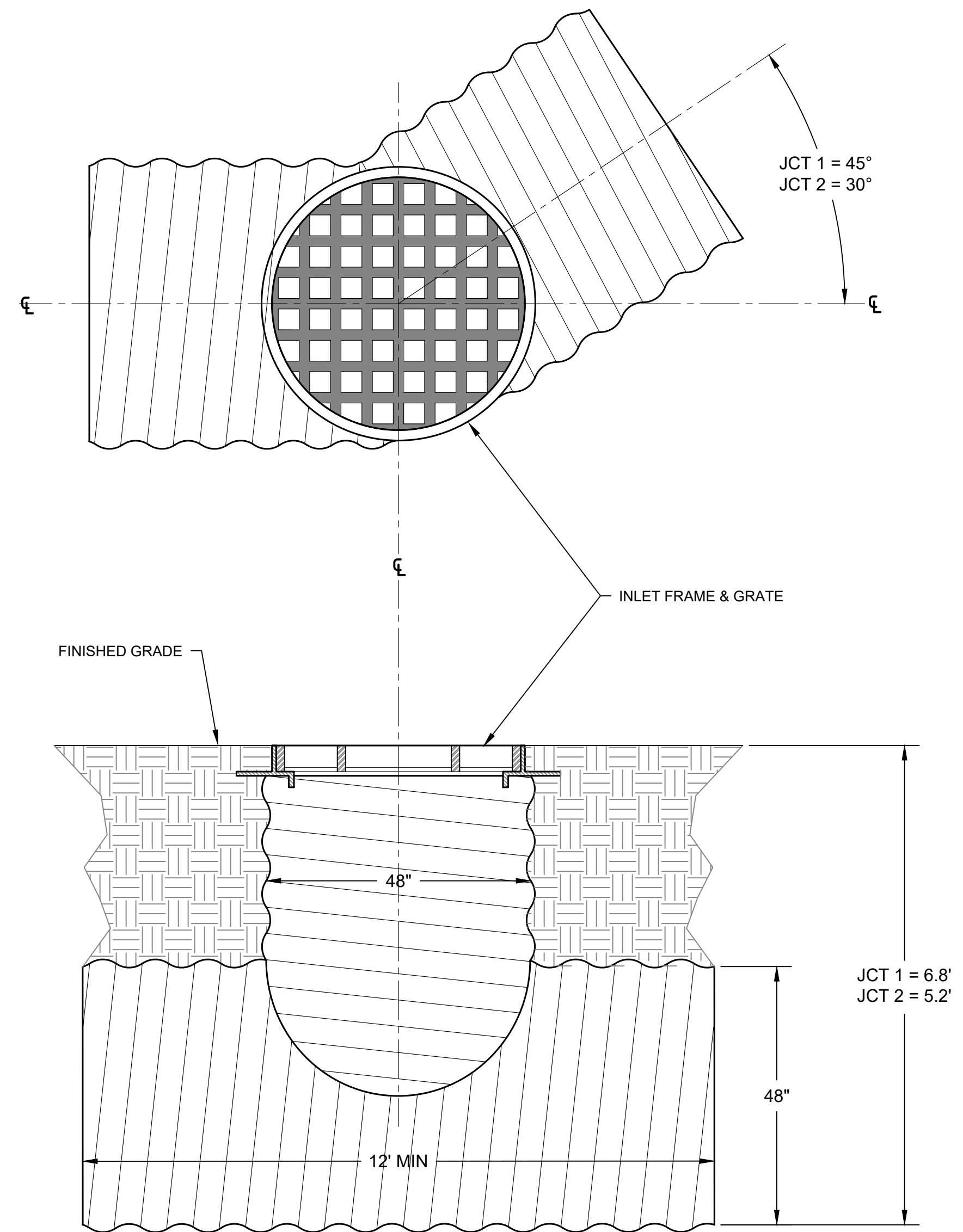
Texas Region

For more information about our products please visit us on the web at:
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CB-19

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(888-965-3227)

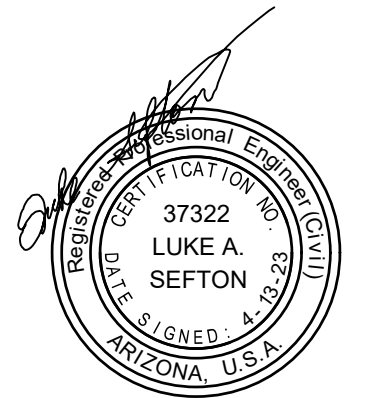
NOTES

1. PRIOR TO CONSTRUCTION CONTRACTOR TO FIELD VERIFY INVERT OF EXISTING 48" OUTFALL PIPE AND ADJUST STRUCTURE ELEVATION IF NECESSARY.



NOTE: OR EQUAL APPROVED BY DESIGN ENGINEER

MANUFACTURED CMP INLET STRUCTURE
NOT TO SCALE



DETAILS - SHEET 1 OF 3

ALKEMISTA CAFE & BAR

2140 SR 89A SEDONA, AZ

SHEET TITLE:

PROJECT TITLE:

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SHEET NO.

C-13

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DETAILS - SHEET 2 OF 3

ALKEMISTA CAFE & BAR

2140 SR 89A SEDONA, AZ

SHEET TITLE:

PROJECT TITLE:

DRAWN BY: RJB/TCH

SCALE: AS NOTED

DATE: 4/13/2023

PROJECT NO: 200209

SHEET NO.

C-14

FLEXSTORM CATCH-IT FILTERS FOR TEMPORARY INLET PROTECTION PRODUCT SELECTION AND SPECIFICATION DRAWING

NOTES:

- ALL FRAMING IS CONSTRUCTED OF CORROSION RESISTANT STEEL (ZINC PLATED OR GALVANIZED) FOR 7 YEAR MINIMUM SERVICE LIFE.
- UPON ORDERING CONFIRMATION OF THE JOB CALLOUT, PRECAST OR CASTING MAKE AND MODEL, OR DETAILED DIMENSIONAL FORMS MUST BE PROVIDED TO CONFIGURE AND ASSEMBLE YOUR CUSTOMIZED FLEXSTORM INLET FILTER. PART NUMBER ALONE IS NOT SUFFICIENT.
- FOR WRITTEN SPECIFICATIONS AND MAINTENANCE GUIDELINES VISIT WWW.INLETFILTERS.COM

STYLE	FRAME STYLE AND SIZE	Frame P/N
ROUND	Small Round (up to 20" dia grates (A) and 18" dia openings (B))	62NRD
	Med Round (20 1/2" - 26 1/2" dia grates (A) up to 25" dia openings (B))	62MRD
	Large Round (26 1/2" - 32 1/2" dia grates (A) up to 30" openings (B))	62LRD
	Xt Round (32 1/2" - 38 1/2" dia grates (A) up to 37" dia openings (B))	62XRD
RECT / SQUARE	Small Rect / Square (up to 18" (B) x 18" (C) openings or 64" perimeter)	62NSQ
	Med Rect / Square (up to 24" (B) x 24" (C) openings or 96" perimeter)	62MSQ
	Large Rect / Square (up to 30" (B) x 30" (C) openings or 120" perimeter)	62LSQ
	Xt Rect / Square (side by side 2 up to fit up to 48" (B) x 36" (C) openings)	62XLSQ
RECTANGULAR HOODS	Small Rect / Square (see Rect using, shipped with Magnetic Curb Flaps)	62RCB
	Med Rect / Square (see Rect using, shipped with Magnetic Curb Flaps)	62MCR
	Large Rect / Square (see Rect using, shipped with Magnetic Curb Flaps)	62LCR
	Xt Rect / Square (see Rect using, shipped with Magnetic Curb Flaps)	62XCR
NYMPHANT	12" diameter NympHant castings (Stainless Steel Framing Standard)	6212NY
	15" diameter NympHant castings (Stainless Steel Framing Standard)	6215NY
	18" diameter NympHant castings (Stainless Steel Framing Standard)	6218NY
	24" diameter NympHant castings (Stainless Steel Framing Standard)	6224NY

FLEXSTORM FILTER BAGS	(27" depth)	(32" depth)	Clean Water Flow Rate (GPM)	Min. A.D.S. (US Gallons)
PK Standard Woven Bag	PK	PK-S	200	40
UL DDT Non-Woven Bag	IL	IL-S	145	70

Frame P/N from Step 1.	Filter Bag P/N from Step 2.
------------------------	-----------------------------

Nominal Bag Size	Solids Storage (Cu Ft)	Filtered Flow Rate at 50% Max (GPM)	IL (Non-Woven)
Small	1.6	1.2	0.9
Medium	2.1	1.7	1.3
Large	3.8	2.7	1.9
XL	4.2	3.6	2.6

INSTALLATION:

- REMOVE GRATE
- DROP FLEXSTORM INLET FILTER INTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE
- REPLACE GRATE

FLEXSTORM CATCH IT

ALL PRODUCTS MANUFACTURED BY INLET & PIPE PROTECTION, INC A DIVISION OF ADS, INC. WWW.INLETFILTERS.COM
 (866) 287-8655 PH
 (630) 335-3477 FX
 INFO@INLETFILTERS.COM

CLEAN OUT FRAME & GRADE ADJUSTMENT WATER VALVE, SURVEY MONUMENT, OR SEWER

NOTES:

- CASTING TO CONFORM TO SECT. 787.
- LETTERS ON COVER TO BE AS FOLLOWS:
 "SEWER", "WATER", OR "SURVEY" AS DIRECTED TOTAL WIDTH OF WORD "SEWER" OR "WATER" 3-3/4". TOTAL WIDTH OF WORD "SURVEY" 4-1/2". LETTER SIZE 5/8" x 3/4", RAISED 1/16" ABOVE LEVEL OF COVER, TYPE OF LETTERS TO BE SUBMITTED FOR APPROVAL.
- ✓ INDICATES MACHINE FINISHED SURFACE.

DETAIL NO. **270** STANDARD DETAIL ENGLISH **FRAME AND COVER** REVISED 01-01-2014 DETAIL NO. **270**

TYPE 'B' - SEWER BUILDING CONNECTION TWO-WAY CLEANOUT AND METER BOX AT R/W

NOTES:

- CONSTRUCTION DETAIL APPLIES WHERE CONTRACTOR BUILDS HOUSE CONNECTION. TAP EXTENDS TO PROPERTY LINE IN ALLEYS OR STREETS OR TO EASEMENT LINE.
- SIZE OF TAP SHALL BE DESIGNATED ON PLANS.
- CONSTRUCT TAP AT MINIMUM SLOPE IF COVER WILL BE LESS THAN 5' AT PROPERTY LINE.
- IF DEPTH REQUIRES, MINIMUM SLOPE CAN BE REDUCED TO 1/8" PER FOOT PROVIDED STUB IS STAKED TO GRADE.
- ALL FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D-2321. THE CONTRACTOR MAY VARY FROM THE DRAWING TO USE THE APPROPRIATE WYES, TEE-WYES AND BENDS TO ENSURE NO MISALIGNMENT OF THE PIPE AND FITTINGS. BLOCK OR BRACE FITTING JOINTS TO ENSURE ZERO DEGREES ANGULAR JOINT DEFLECTION.
- END OF TAP TO BE SEALED AND MARKED AS NOTED.
- ELECTRONIC MARKER SHALL BE A 3M MODEL 1424-XR/ID [4" DIAMETER SELF LEVELING MARKER BALL GREEN IN COLOR] OR APPROVED EQUAL OR AS REQUIRED BY THE LOCAL AGENCY.
- #14 BARE COPPER LOCATOR WIRE ACCESSIBLE AT R/W AND AT PROPERTY OWNER CLEANOUT BOX NO GREATER THAN 4' DEEP.
- STAMP OR WELD THE LETTER "S" ON LID OF METER BOX.

SLOPE:
 MIN: 4" OR 6" = 1/4" PER FT.
 MAX: 4" = 1-1/2" PER FT.
 MAX: 6" = 7/8" PER FT.

DETAIL NO. **440-2** STANDARD DETAIL ENGLISH **TYPE 'B' - SEWER BUILDING CONNECTION TWO-WAY CLEANOUT AND METER BOX AT R/W (WHEN SPECIFIED BY LOCAL AGENCY)** REVISED 01-01-2007 DETAIL NO. **440-2**

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DETAILS - SHEET 3 OF 3

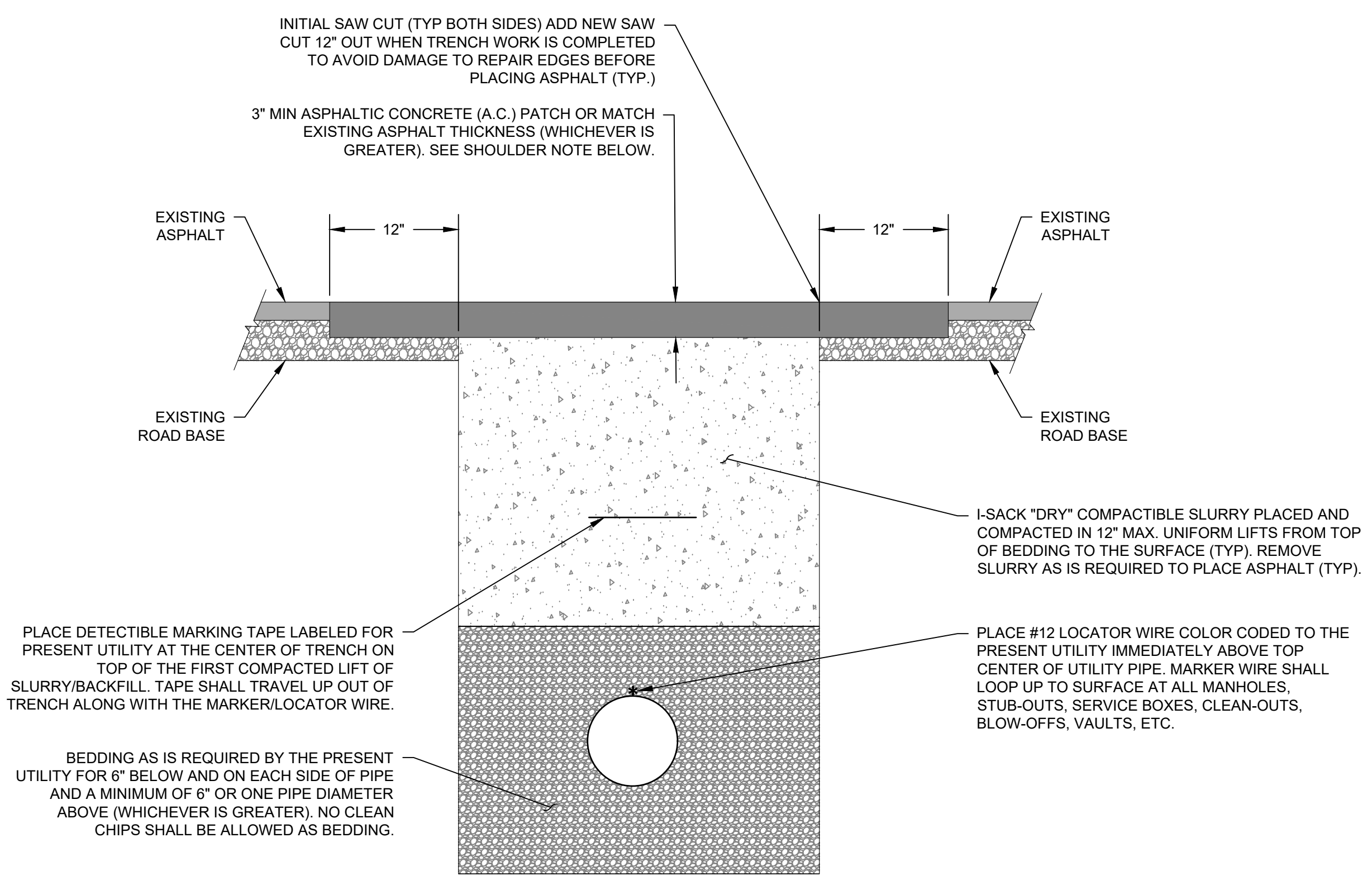
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2140 SR 89A SEDONA, AZ

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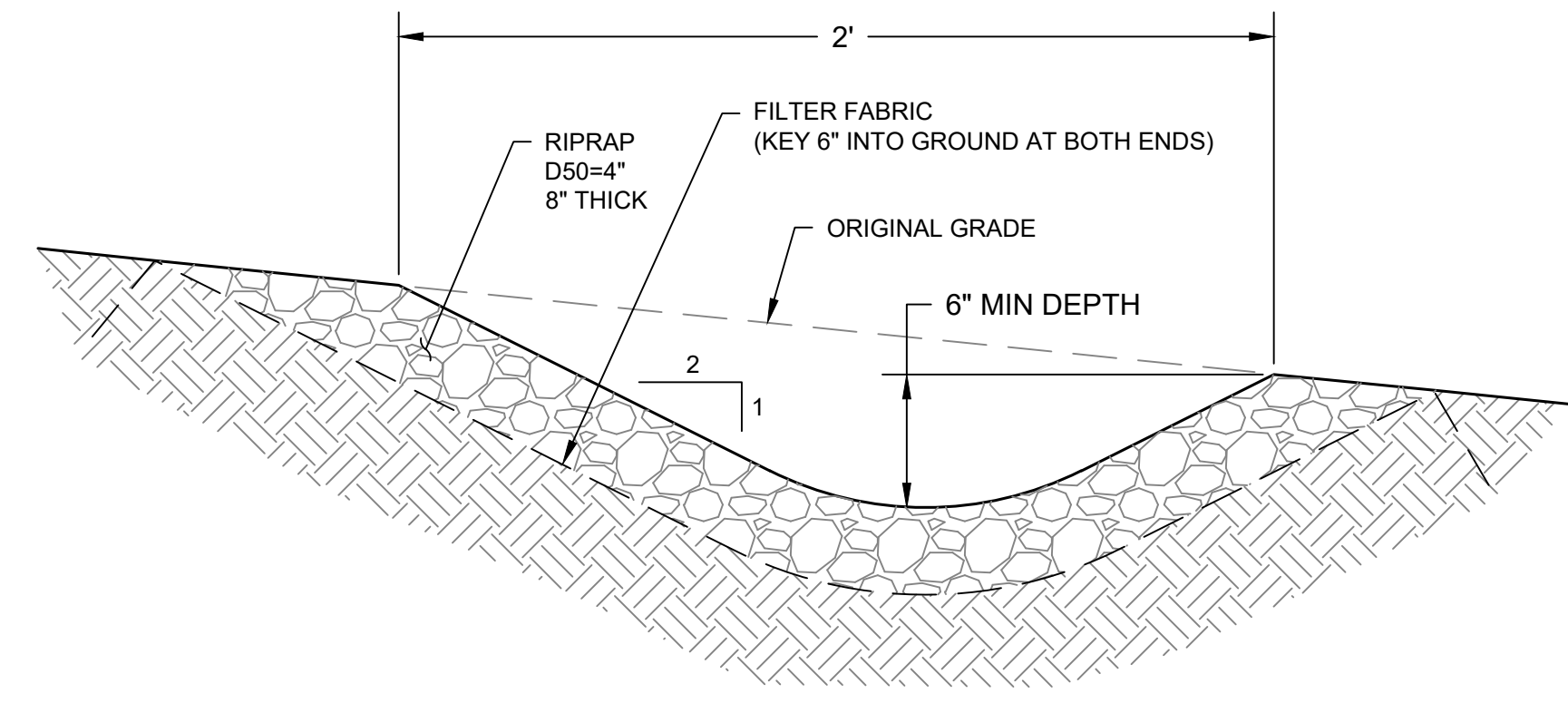
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PROJECT NO: 200209
SHEET NO:

C-15



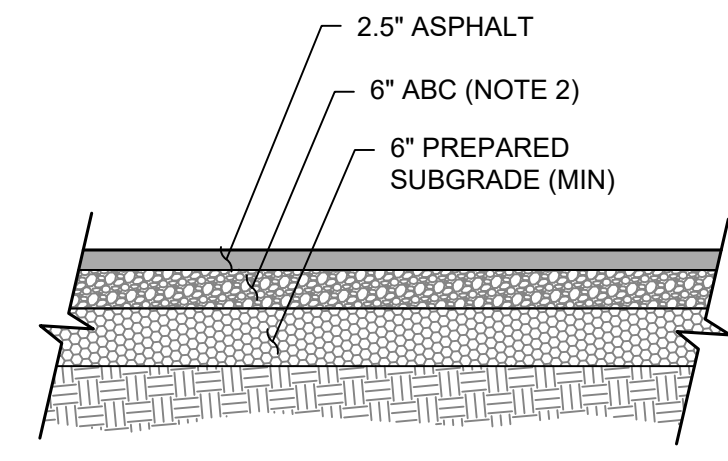
TYPICAL STANDARD UTILITY TRENCH CROSS-SECTION
TYPICAL ROAD REPAIR CROSS-SECTION

NOT TO SCALE



RIPRAP LINED DRAINAGE CHANNEL

NOT TO SCALE

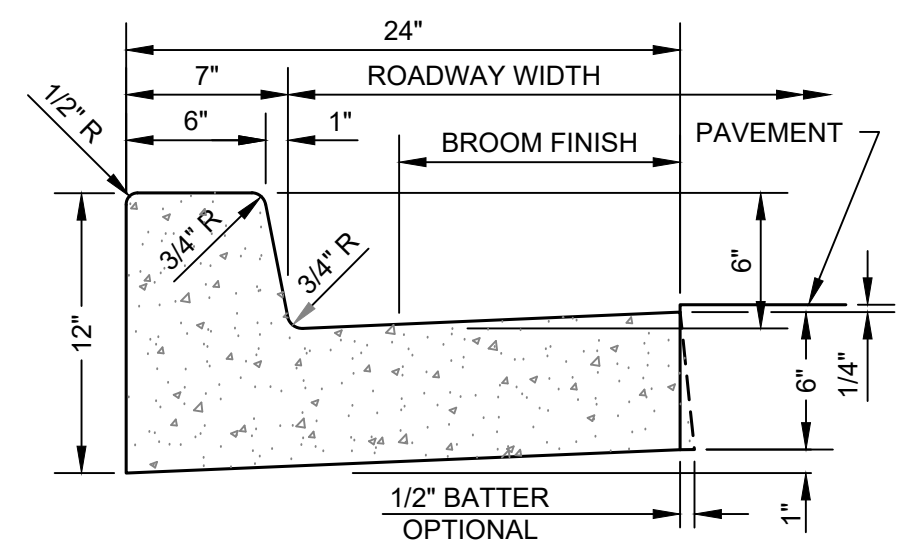


NOTES:

- 1) INSTALLATION, SEPARATION, AND COVER OF UTILITIES IN TRENCHES TO MEET UTILITY COMPANY STANDARDS.
- 2) PAVEMENT AND BASE COURSE THICKNESS PER SOILS REPORT OR AS SHOWN.

ROAD SECTION

NOT TO SCALE



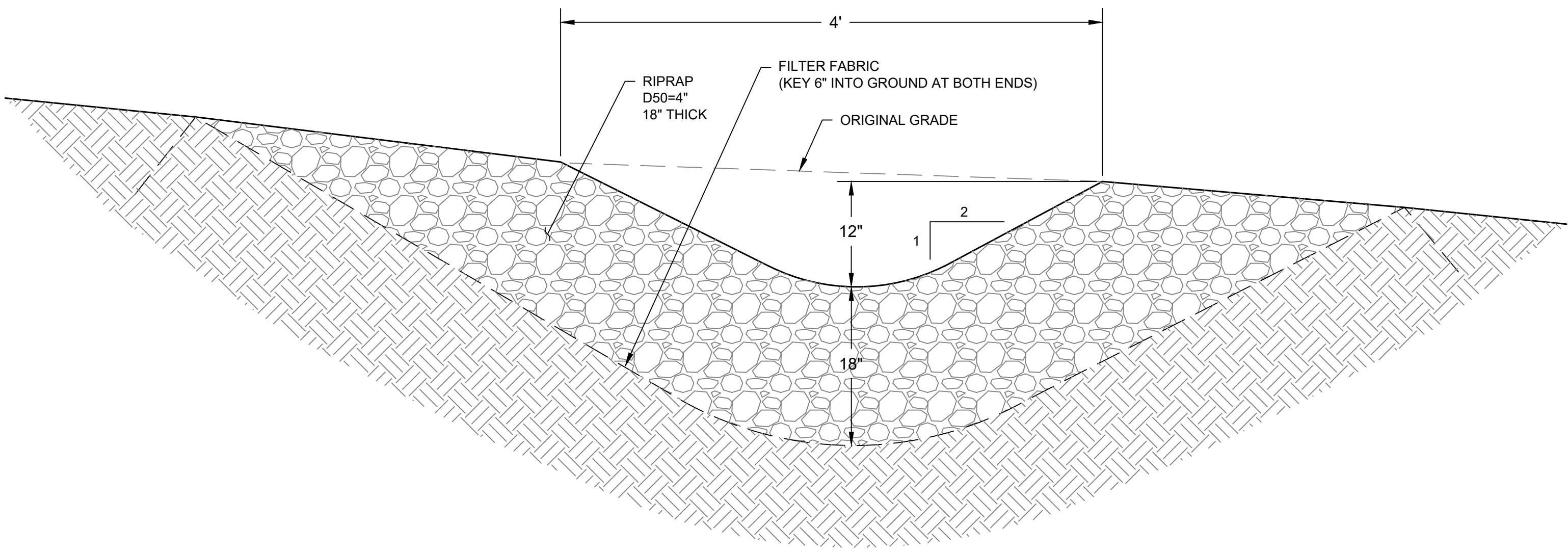
VERTICAL CURB AND GUTTER (TYPE A)

NOTES:

1. ALL EXPOSED SURFACES TO BE TROWEL FINISHED EXCEPT AS SHOWN. SEE SECTION 340.
2. H=6 OR AS SPECIFIED ON PLANS.
3. CONTRACTION JOINT SPACING 10' MAXIMUM.
4. EXPANSION JOINTS AS PER SECTION 340.
5. CLASS 'B' CONCRETE PER 725.
6. WHEN THE ADJACENT PAVEMENT SECTION SLOPES AWAY FROM THE GUTTER, THE SLOPE OF THE GUTTER PAN SHALL MATCH PAVEMENT CROSS SLOPE.

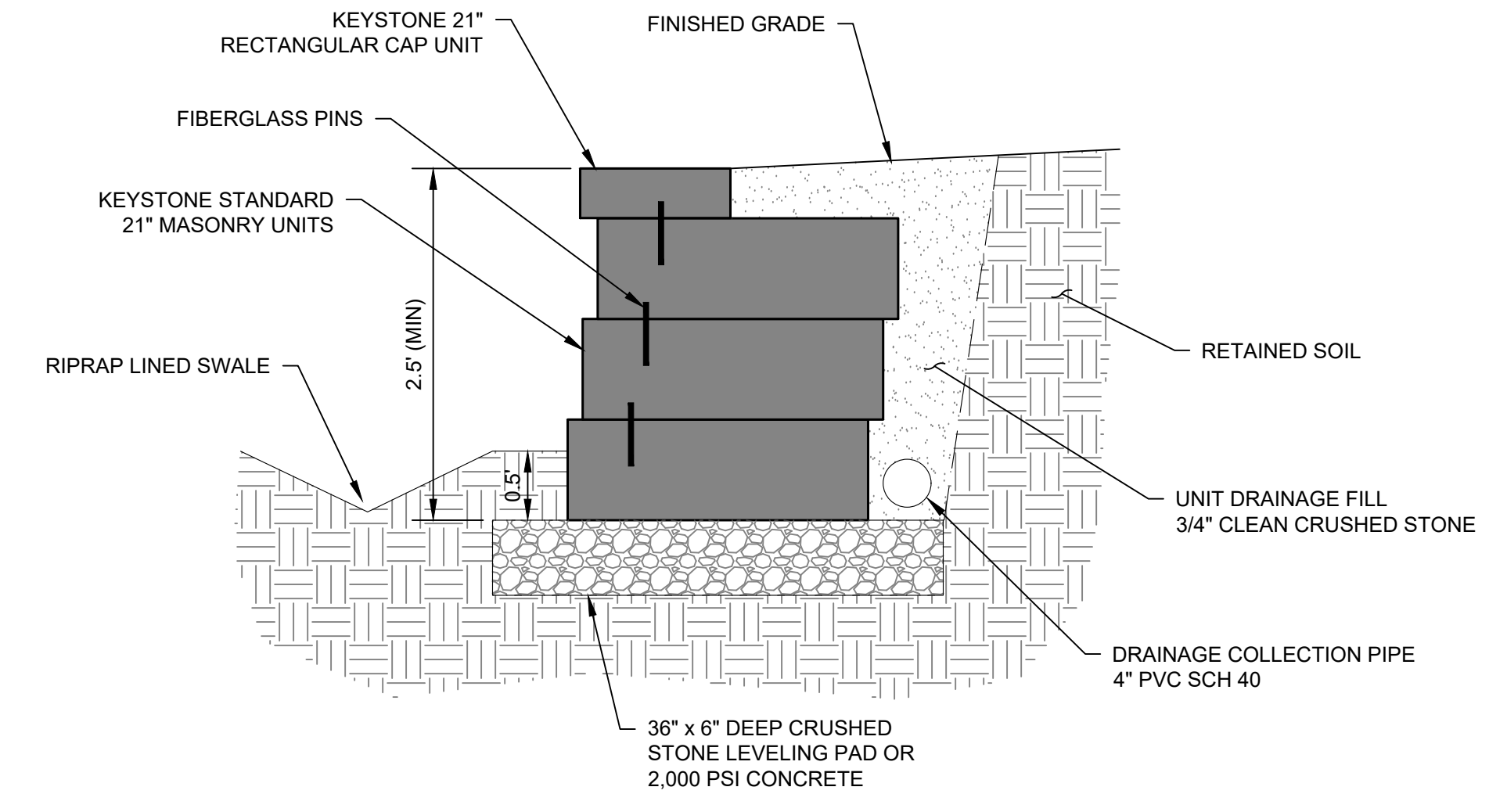
MAG STANDARD DETAIL 220-1

REVISED 01-01-2007



RIPRAP LINED STORM DETENTION CHANNEL

NOT TO SCALE



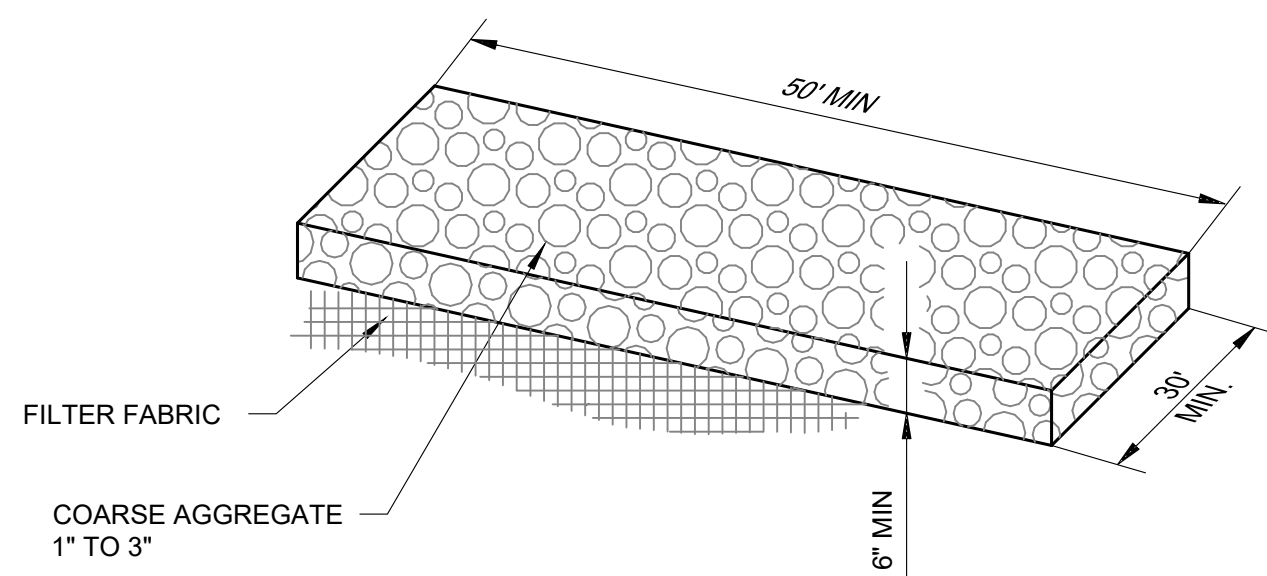
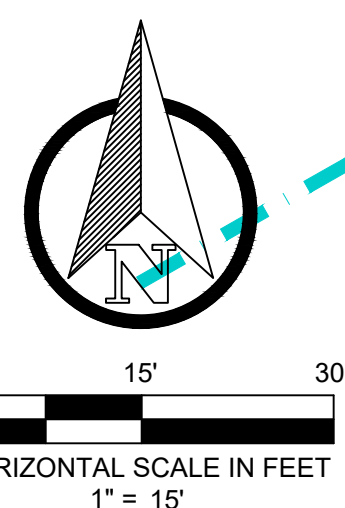
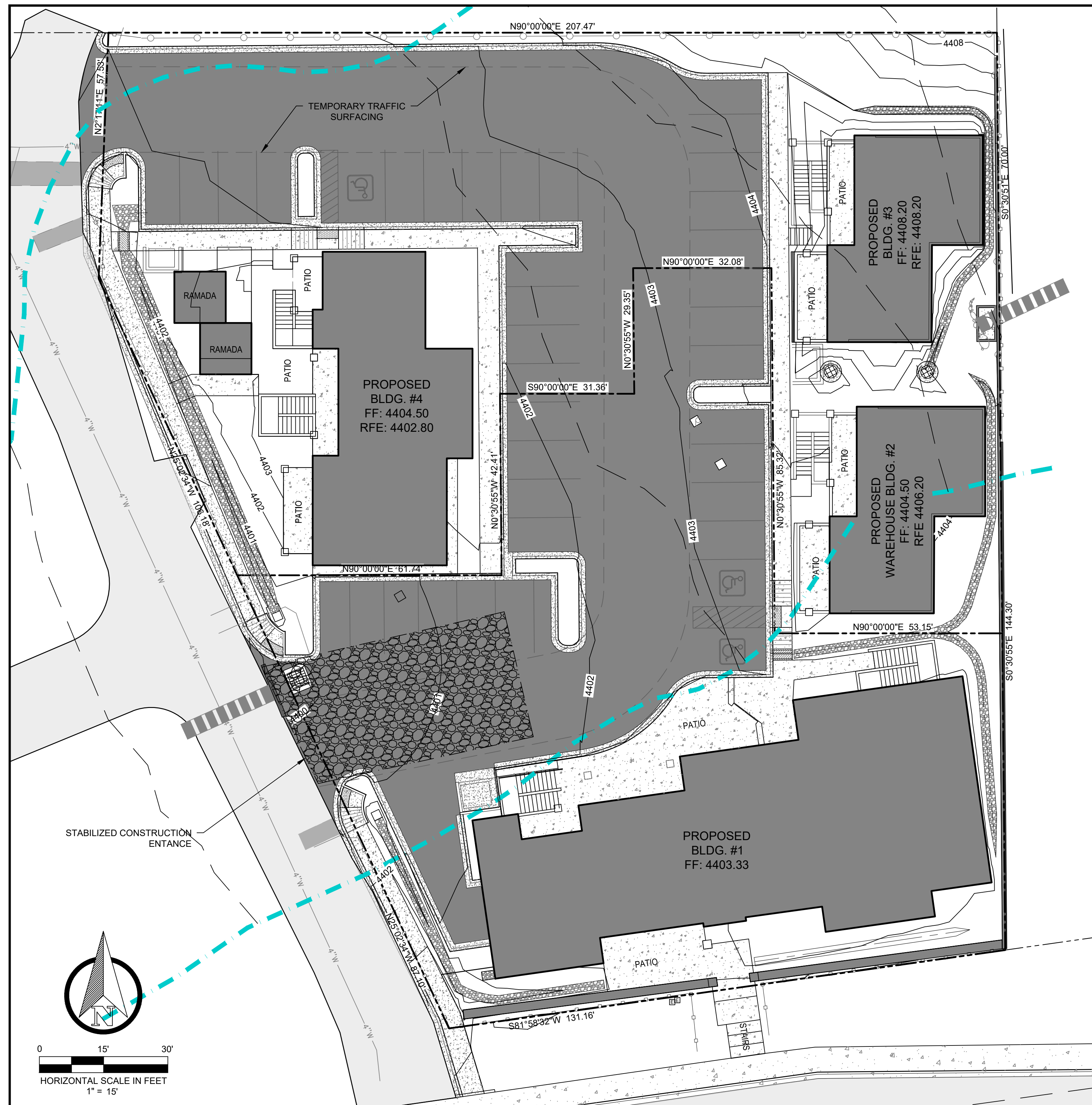
KEYSTONE SEGMENTED MASONRY RETAINING WALL (LANDSCAPE WALL)

NOT TO SCALE

NOTES:

1. BASE FOUNDATION TO BE APPROVED BY THE SITE GEOTECHNICAL ENGINEER PRIOR O PLACEMENT OF THE LEVELING PAD.
2. ALL BACKFILL MATERIALS TO BE COMPACTED IN 8" LIFTS TO 95% STANDARD PROCTOR DENSITY OR 92% MODIFIED PROCTOR DENSITY.
3. FINISHED GRADE MUST PROVIDE POSITIVE DRAINAGE.

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STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

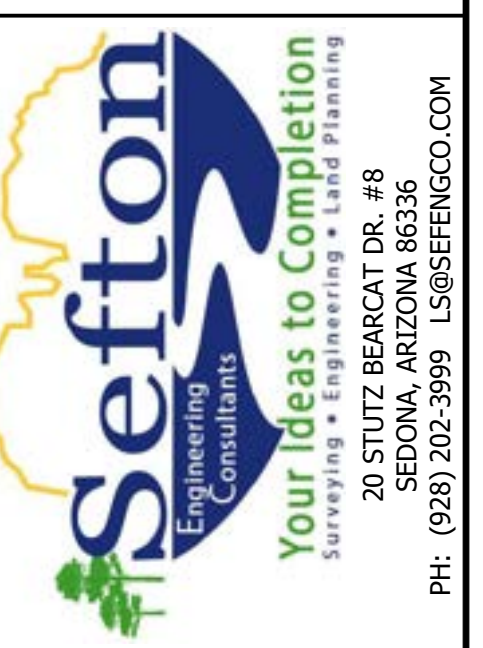
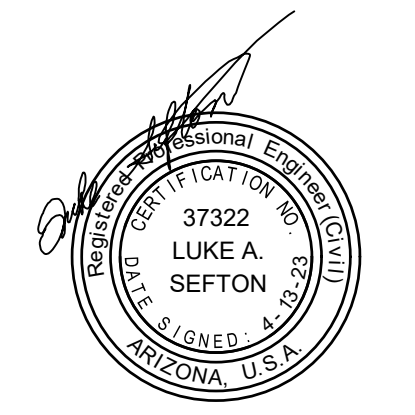
AREA OF DISTURBANCE:
40,615 SF

STORM WATER MANAGEMENT POLLUTION PREVENTION PLAN (SWMP) NOTES

1. THE SWMP IS INTENDED TO BE A DYNAMIC PLAN THAT CAN BE REVISED EITHER AS A RESULT OF UNANTICIPATED CONDITIONS DURING DESIGN OR AS A RESULT OF CHANGING CONDITIONS IN THE FIELD. MAKING CHANGES TO THE PLAN WHERE IT IS NOT EFFECTIVE IS A REQUIREMENT OF THE AZPDES PERMIT. ANY CHANGES TO THE PLAN SHALL BE NOTED AND DATED ON THE PLAN.
2. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT A NOTICE OF INTENT (NOI) AND A NOTICE OF TERMINATION (NOT) IS SENT AT THE BEGINNING AND END OF THE PROJECT TO THE PROPER AUTHORITIES. THE CONTRACTOR IS RESPONSIBLE FOR UNDERSTANDING THE REQUIREMENT OF THE EPA'S NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (AZPDES) PERMITTING PROGRAM. ESTABLISH UNDER SECTION 402 OF THE CLEAN WATER ACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SWMP ACTIVITIES AND FOR ALL SUB CONSULTANTS ON SITE. THE CONTRACTOR SHALL OBTAIN AN NOI AT [HTTP://CDX.EPA.GOV/](http://cdx.epa.gov/). THE SWMP TEMPLATE IS LOCATED AT [HTTP://WATER.EPA.GOV/POLWASTE/NPDES/BASICS/UPLOADED/SW_CGP2012_SWMP_TEMPLATE.DOCX](http://water.epa.gov/polwaste/npdes/basics/upl04dsw_cgp2012_swmp_template.docx). FURTHER INFORMATION CAN BE FOUND AT [HTTP://WATER.EPA.GOV/POLWASTE/NPDES/STORMWATER/STORMWATER-POLLUTION-PREVENTION-PLANS-FOR-CONSTRUCTION-ACTIVITIES.CFM](http://water.epa.gov/polwaste/npdes/stormwater/stormwater-pollution-prevention-plans-for-construction-activities.cfm). A TUTORIAL IS AVAILABLE AT [HTTP://WWW.EPA.GOV/NPDES/PUBS/ENR_2012/CGP_USERMANUAL.PDF](http://www.epa.gov/npdes/pubs/enr_2012/cgp_usermanual.pdf) FOR REGISTRATION. IF YOU HAVE ANY QUESTION YOU MAY CALL 1-888-896-1995 OR FOR NOI INFORMATION YOU MAY CALL 1-866-352-7755.
3. LIMIT LAND DISTURBANCE AND PRESERVE EXISTING VEGETATION. SENSITIVITY TO THE ENVIRONMENT DURING CONSTRUCTION IS A DEFINING FACTOR IN PRESERVING NATURAL VEGETATION. THE EXTENT OF THE CUT AND FILL SLOPES SHOULD BE FIELD SURVEYED AND STAKED PRIOR TO CONSTRUCTION TO DEFINE ALL AREAS THAT REQUIRE GRADING. AREAS OUTSIDE THESE LIMITS SHOULD BE PROTECTED FROM ALL CONSTRUCTION ACTIVITIES. TREES THAT LIE WITHIN TRANSITION AREAS OF SIGNIFICANT CUT OR FILL AND OUTSIDE REQUIRED CLEAR-ZONE DISTANCES SHALL BE FLAGGED AND/OR FENCED FOR PROTECTION. EXISTING TREES AT OR NEAR THE TOE OF FILL SLOPES SHALL BE SAVED WITH PROTECTIVE TREE WELLS.
4. MINIMIZE SOIL EXPOSURE AND RE-VEGETATE DENuded AREAS. TRY TO SCHEDULE CONSTRUCTION TO COINCIDE WITH THE DRY SEASON OF THE SITE'S LOCATION. LIMIT THE SIZE OF THE EXPOSED AREA AND AMOUNT OF TIME IT IS EXPOSED. UNDER THE EPA'S GENERAL PERMIT ALL BARE GROUND SHALL BE SEEDED WITHIN 14 DAYS AFTER GRADING IS FINISHED WITH SOME EXCEPTIONS.
5. PROTECT FILL SLOPES FROM ROADWAY RUNOFF. DROWN DRAINS AND RIPRAP PROTECTION HAVE BEEN CALLED OUT ON THE PLAN AS NEEDED. THE CONTRACTOR SHOULD MONITOR SLOPES TO ENSURE ADEQUATE PROTECTION IS PROVIDED THROUGH OUT THE CONSTRUCTION ACTIVITIES.
6. PREVENT EROSION IN AREAS WHERE RUNOFF CONCENTRATES. CONTRACTOR SHALL PROVIDE PROTECTION OF ALL DITCHES, OPEN CHANNELS, CULVERT AND CHANNEL OUTLETS AS SHOWN ON THE CONSTRUCTION PLAN.
7. TRAP SEDIMENT BEFORE IT LEAVES THE SITE. IT IS PREFERABLE TO PROVIDE EROSION CONTROL INSTEAD OF SEDIMENT CONTROL WHERE PRACTICABLE. IT IS IMPORTANT THAT REGULAR MAINTENANCE OF ANY SEDIMENT TRAPPING IS CONDUCTED ON A REGULAR BASIS IN ORDER FOR IT TO OPERATE EFFECTIVELY. THIS INCLUDES REMOVING ACCUMULATIONS OF SEDIMENT AND MAKING NECESSARY REPAIRS AND ADJUSTMENTS. TEMPORARY SEDIMENT BARRIERS SHOULD BE PLACED AROUND CATCH BASIN INLETS DURING CONSTRUCTION TO TRAP SEDIMENT BEFORE IT ENTERS THE INLET. SEDIMENT TRAPPING IS NECESSARY AT SOIL STOCKPILES AND THESE STOCKPILES SHOULD BE LOCATED ABOVE AND AWAY FROM STREAMS, WASHES AND SWALES TO PREVENT THEM FROM BEING WASHED DOWNSTREAM. A STABILIZED CONSTRUCTION ENTRANCE SHOULD BE PROVIDED TO REMOVE SEDIMENT FROM THE TIRES OF THE VEHICLES BEFORE THEY LEAVE THE SITE.
8. AS NEEDED A SPILL CONTAINMENT AREA SHOULD BE PROVIDED AT THE JOB SITE FOR STORING CHEMICALS, FUELS, PAINTS AND OTHER MATERIALS. THIS AREA WILL PREVENT CHEMICALS FROM MIXING WITH STORM WATER AND DISCHARGING INTO STREAMS AND WASHES, OR SEEPING INTO AND CONTAMINATING THE SURROUNDING SOIL. THE PROTECTED AREA SHOULD BE EXCAVATED OR BERMED, AND LINED WITH PLASTIC SO THAT AN ACCIDENTAL SPILL FROM A CHEMICAL DRUM WILL BE CONTAINED. IT SHOULD BE LOCATED IN AREAS WHERE ANY SPILL WILL BE PREVENTED FROM DISCHARGING OFF-SITE. PROCEDURES SHALL BE ESTABLISHED TO PREVENT CONTAMINATION OF ON-SITE SOILS FROM EQUIPMENT MAINTENANCE. CONSTRUCTION EQUIPMENT SHALL BE REGULARLY MAINTAINED TO REPAIR LEAKY HOSES AND GASKETS. USED OIL, HYDRAULIC FLUIDS, FILTERS, BATTERIES AND TIRES SHALL BE PROPERLY DISPOSED OF IN ACCORDANCE WITH STATE AND FEDERAL LAWS
9. SOLID WASTE MATERIALS SHOULD BE COLLECTED DAILY. A TRASH CONTAINER OR DUMPSTER SHOULD BE PROVIDED AT THE SITE TO CONTAIN SMALLER WASTE MATERIALS. THE TRASH CONTAINERS SHOULD BE COVERED TO PREVENT MIXING WITH RAINWATER OR LOSS OF CONTENTS BY HIGH WINDS. OTHER TYPES OF LARGER DEBRIS, SUCH AS: VEGETATION FORM CLEARING OPERATIONS SHOULD BE COLLECTED AND STOCKPILED ON A DAILY BASIS AND DISPOSED OF REGULARLY. THE STOCKPILE LOCATION SHALL BE LOCATED AWAY FROM STREAMS AND WASHES.
10. TEMPORARY PITS OR BERMED AREAS SHOULD BE PROVIDED AT THE CONSTRUCTION SITE FOR THE WASHOUT OF CONCRETE TRUCKS AND FOR WASHING AGGREGATE MATERIALS AND TOOLS. THE WASH WATER SHOULD BE KEPT OUT OF STREAMS AND WASHES. WASHOUT AREAS SHOULD BE LARGE ENOUGH TO RETAIN ALL WASH WATER. HARDENED CONCRETE SHOULD BE ROUTINELY REMOVED AND DISPOSED OF IN ORDER TO MAINTAIN ADEQUATE WATER PERCOLATION.
11. PROPER IMPLEMENTATION, INSPECTION AND MAINTENANCE OF POLLUTION CONTROL MEASURES IS ESSENTIAL TO ACHIEVE THE GOALS OF EROSION AND SEDIMENT CONTROL AND TO IDENTIFY POTENTIAL PROBLEMS. A RAIN GAGE SHOULD BE KEPT AT THE SITE TO RECORD THE DEPTH OF RAINFALL. THE CONTRACTOR SHOULD COORDINATE THE IMPLEMENTATION, INSPECTION AND MAINTENANCE OF THE POLLUTION CONTROLS WITH THE PROJECT INSPECTOR. THE CONTRACTOR SHOULD ALSO MONITOR WEATHER FORECASTS AND MAKE ALL SITE INSPECTIONS AND NECESSARY REPAIRS BEFORE STORMS ARE EXPECTED. THE CONTRACTOR SHALL MONITOR AND RECORD WEEKLY EXTENDED WEATHER FORECASTS. THESE FORECASTS SHALL BE DISCUSSED BY THE CONTRACTOR AT REGULARLY SCHEDULED WEEKLY PROGRESS MEETINGS. IN THE EVENT THAT EXTENDED FORECASTS REPORT A HIGH PROBABILITY FOR PRECIPITATION IN THE GIVEN PROJECT AREA, THE CONTRACTOR SHALL REVIEW AND SUPPLEMENT EXISTING EROSION CONTROL MEASURES. HE SHALL ALSO INSTALL ADDITIONAL MEASURES IN AREAS DETERMINED TO BE SUSCEPTIBLE TO EROSION AND/OR SEDIMENTATION, AS DIRECTED BY THE PROJECT ENGINEER. THE EPA GENERAL PERMIT REQUIRES REGULAR INSPECTIONS EVERY 7 DAYS OR WITHIN 24 HOURS AFTER A RAINFALL OF 1/4 INCH OR GREATER.
12. THE CONTRACTOR MUST RECORD ANY DAMAGES OR DEFICIENCIES IN THE CONTROL MEASURES ON A INSPECTION REPORT FORM. THIS REPORT DOCUMENTS THE INSPECTION OF THE POLLUTION PREVENTION MEASURES. THE SAME FORM CAN BE USED TO REQUEST REPAIRS AND TO PROVE THAT REQUIRED INSPECTIONS AND MAINTENANCE WERE PERFORMED. AS A CONDITION OF THE GENERAL PERMIT, THE CONTRACTOR SHALL CORRECT DAMAGE OR DEFICIENCIES AS SOON AS PRACTICABLE AFTER THE INSPECTION; BUT IN NO CASE LATER THAN 7 DAYS AFTER THE INSPECTION. ANY CHANGES THAT MAY BE REQUIRED TO CORRECT DEFICIENCIES IN THE SWMP SHOULD ALSO BE MADE AS SOON AS PRACTICABLE AFTER THE INSPECTION; BUT IN NO CASE LATER THAN 7 DAYS AFTER THE INSPECTION
13. OVERVIEW OF INSPECTION REQUIREMENTS, CONSTRUCTION OPERATORS COVERED UNDER THE 2012 CGP ARE SUBJECT TO THE FOLLOWING REQUIREMENTS IN PART 4:
 - INSPECTION FREQUENCY (SEE PART 4.1.4) YOU ARE REQUIRED TO CONDUCT INSPECTIONS EITHER:
 - ONCE EVERY 7 CALENDAR DAYS, OR
 - ONCE EVERY 14 CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT OF 0.25 INCHES OR GREATER.
 YOUR INSPECTION FREQUENCY IS INCREASED IF THE SITE DISCHARGES TO A SENSITIVE WATER. SEE PART 4.1.3. YOUR INSPECTION FREQUENCY MAY BE DECREASED TO ACCOUNT FOR STABILIZED AREAS, OR FOR ARID, SEMI-ARID, OR DROUGHT-STRIKEN CONDITIONS, OR FOR FROZEN CONDITIONS. SEE PART 4.1.4.
 - AREAS THAT NEED TO BE INSPECTED (SEE PART 4.1.5) DURING EACH INSPECTION YOU MUST INSPECT THE FOLLOWING AREAS OF YOUR SITE:
 - CLEARED, GRADED, OR EXCAVATED AREAS OF THE SITE;
 - STORMWATER CONTROLS (E.G. PERIMETER CONTROLS, SEDIMENT BASINS, INLETS, EXIT POINTS ETC.) AND POLLUTION PREVENTION PRACTICES (E.G., POLLUTION PREVENTION PRACTICES FOR VEHICLE FUELING/MAINTENANCE AND WASHING, CONSTRUCTION PRODUCT STORAGE, HANDLING, AND DISPOSAL, ETC.) AT THE SITE;
 - MATERIAL WASTE, OR BORROW AREAS COVERED BY THE PERMIT, AND EQUIPMENT STORAGE AND MAINTENANCE AREAS;
 - AREAS WHERE STORMWATER FLOWS WITHIN THE SITE;
 - STORMWATER DISCHARGE POINTS; AND
 - AREAS WHERE STABILIZATION HAS BEEN IMPLEMENTED.
 - WHAT TO CHECK FOR DURING YOUR INSPECTION (SEE PART 4.1.6) DURING YOUR SITE INSPECTION YOU ARE REQUIRED TO CHECK:
 - WHETHER STORMWATER CONTROLS OR POLLUTION PREVENTION PRACTICES REQUIRE MAINTENANCE OR CORRECTIVE ACTION, OR WHETHER NEW OR MODIFIED CONTROLS ARE REQUIRED;
 - FOR THE PRESENCE OF CONDITIONS THAT COULD LEAD TO SPILLS, LEAKS, OR OTHER POLLUTANT ACCUMULATIONS AND DISCHARGES;
 - WHETHER THERE ARE VISIBLE SIGNS OF EROSION AND SEDIMENT ACCUMULATION AT POINTS OF DISCHARGE AND TO THE CHANNELS AND STREAMBANKS THAT ARE IN THE IMMEDIATE VICINITY OF THE DISCHARGE;
 - IF A STORMWATER DISCHARGE IS OCCURRING AT THE TIME OF THE INSPECTION, WHETHER THERE ARE OBVIOUS, VISUAL SIGNS OF POLLUTANT DISCHARGES; AND
 - IF ANY PERMIT VIOLATIONS HAVE OCCURRED ON THE SITE.
 - INSPECTION REPORTS (SEE PART 4.1.7) WITHIN 24 HOURS OF COMPLETING EACH INSPECTION, YOU ARE REQUIRED TO COMPLETE AN INSPECTION REPORT THAT INCLUDES:
 - DATE OF INSPECTION;
 - NAMES AND TITLES OF PERSONS CONDUCTING THE INSPECTION;
 - SUMMARY OF INSPECTION FINDINGS;
 - RAIN GAUGE OR WEATHER STATION READINGS IF YOUR INSPECTION IS TRIGGERED BY THE 0.25 INCH STORM THRESHOLD; AND
 - IF YOU DETERMINE THAT A PORTION OF YOUR SITE IS UNSAFE TO ACCESS FOR THE INSPECTION, DOCUMENTATION OF WHAT CONDITIONS PREVENTED THE INSPECTION AND WHERE THESE CONDITIONS OCCURRED ON THE SITE
14. REMOVAL OF TEMPORARY CONTROLS WHEN THE PROJECT IS COMPLETE IS THE RESPONSIBILITY OF THE CONTRACTOR. AFTER ALL CONSTRUCTION ACTIVITIES HAVE STOPPED, THE CONTRACTOR MUST KEEP A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN. RECORDS OF ALL THE DATA USED TO COMPLETE THE NOTICE OF INTENT MUST ALSO BE KEPT FOR A PERIOD OF THREE YEARS FOLLOWING FINAL STABILIZATION. THE RETENTION PERIOD MAY BE EXTENDED BY THE EPA'S REQUEST.
15. AS A CONDITION OF THE GENERAL PERMIT, A COPY OF THE CONTRACTOR'S NOI AND A COPY OF THE SWMP ARE TO REMAIN AT THE JOB SITE THROUGHOUT THE CONSTRUCTION PROCESS AND AVAILABLE DAILY TO THE PROJECT MANAGER.
16. DUST CONTROL IN ACCORDANCE WITH THE COUNTY REQUIREMENTS SHALL BE PROVIDED AT ALL TIMES WHILE UNDER CONSTRUCTION.
17. THE CONTRACTOR SHALL KEEP THE SITE WATERED DOWN (OR OTHER APPROVED METHODS) TO PREVENT DUST MIGRATING OFFSITE.
18. THE CONTRACTOR SHALL ON A DAILY OR AS NEEDED BASIS CLEAN ALL ROADS LEADING OUT OF THE SITE AND SHALL PLACE SAND BAGS (OR OTHER APPROVED METHODS) TO TRAP SEDIMENT BEFORE IT ENTERS INTO THE STORM DRAIN SYSTEM.
19. ALL DUMP TRUCKS ENTERING AND EXITING THE SITE SHALL BE COVERED WITH AN APPROVED COVER TO PREVENT DUST AND FLYING DEBRIS.
20. THE CONTRACTOR WILL PROVIDE THE COUNTY A SIGNED COPY OF THE SWMP BEFORE BEGINNING CONSTRUCTION.

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM (AZPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

CONTRACTOR SIGNATURE _____ PRINT NAME OF CONTRACTOR AND COMPANY _____



STORM WATER POLLUTION PLAN
PROJECT TITLE:
SHEET TITLE:

ALKEMISTA CAFE & BAR
2140 SR 89A SEDONA, AZ

DRAWN BY: RJB/TCH
SCALE: 1" = 15'
DATE: 4/13/2023
PROJECT NO: 200209
SHEET NO:

C-16

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