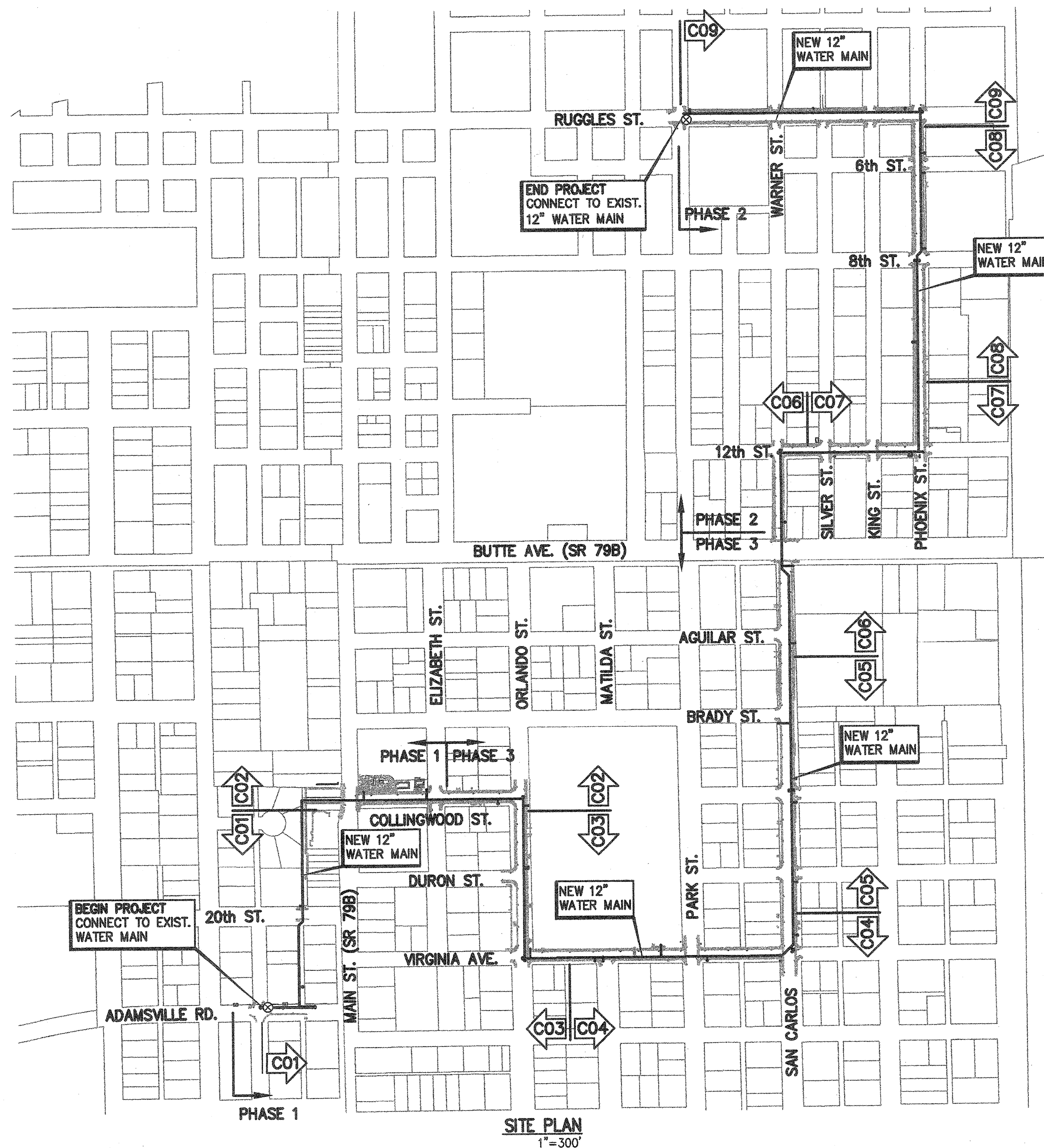


## GENERAL NOTES

- ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF STANDARD SPECIFICATIONS FOR CONSTRUCTION FOR THE TOWN OF FLORENCE, MARICOPA ASSOCIATION OF GOVERNMENTS (M.A.G.) SPECIFICATIONS AND DETAILS, LATEST EDITION, THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY BULLETIN NO. 10, AND PINAL COUNTY.
- ALL CONSTRUCTION SHALL CONFORM TO TOWN OF FLORENCE, AND THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY STANDARDS.
- THE CONTRACTOR SHALL SUPPLY ALL STAKES SET FOR THE LINES, LEVELS OR MEASUREMENTS OF THE WORK IN THEIR PROPER PLACES AND IT SHALL BE CERTIFIED BY A "REGISTERED LAND SURVEYOR". ANY EXPENSE INCURRED IN REPLACING ANY STAKES WHICH THE CONTRACTOR OR HIS SUBORDINATES MAY HAVE FAILED TO PRESERVE SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CARE, MAINTENANCE, REPAIR OR REPLACEMENT OF EXISTING IMPROVEMENTS IN THE WORK AREA WHICH HAVE BEEN REMOVED OR DAMAGED DURING THE COURSE OF CONSTRUCTION. ALL REPAIR, REPLACEMENT, OR CLEANUP SHALL BE DONE TO THE SATISFACTION OF THE OWNER.
- THE CONTRACTOR IS REQUIRED TO CONTACT "ARIZONA 811" (1-800-782-5348) 48 HOURS PRIOR TO ANY EXCAVATION TO DETERMINE ACCURATE UTILITY LOCATIONS.
- CONTRACTOR SHALL GIVE FORTY-EIGHT (48) HOURS NOTICE WHEN HE SHALL REQUIRE THE SERVICES OF THE ENGINEER OR ANY OTHER PERSON PROPERLY AUTHORIZED FOR SUCH PURPOSE FOR LAYING OUT ANY PORTION OF THE WORK. HE SHALL ALSO DIG ALL STAKE HOLES NECESSARY TO GIVE LINE AND LEVELS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FURNISH, HAUL AND APPLY ALL WATER REQUIRED FOR COMPACTION AND THE CONTROL OF DUST FROM CONSTRUCTION ACTIVITY. THE COST THEREOF IS TO BE INCLUDED IN THE GRADING CONSTRUCTION PRICE.
- OMISSIONS OR CONFLICTS BETWEEN VARIOUS ELEMENTS OF THE DRAWINGS, NOTES AND DETAILS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND RESOLVED BEFORE PROCEEDING WITH THE WORK.
- EXISTING UTILITIES ARE SHOWN BASED UPON THE BEST INFORMATION AVAILABLE. CONTRACTOR TO VERIFY LOCATION, SIZE, TYPE AND ELEVATION OF EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
- CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE OCCUPATION SAFETY AND HEALTH ADMINISTRATION REGULATIONS.
- CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED BY GOVERNMENTAL AGENCIES.
- A COPY OF THIS PLAN SHALL BE KEPT IN AN EASILY ACCESSIBLE LOCATION ON THE SITE AT ALL TIMES DURING CONSTRUCTION.
- IF UNANTICIPATED CONDITIONS ARE ENCOUNTERED DURING THE COURSE OF THE CONSTRUCTION AND ARE BEYOND THE SCOPE OF THE DESIGN, THE ENGINEER SHALL SUBMIT THE NECESSARY REVISED OR SUPPLEMENTAL IMPROVEMENT PLANS FOR REVIEW AND APPROVAL BY THE TOWN OF FLORENCE AND THEIR ENGINEER.
- A QUALIFIED REGISTERED ENGINEER OR LAND SURVEYOR MUST CERTIFY THAT THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED PLANS.
- ALL EXISTING DRAINAGE WAYS SHALL BE RESTORED TO EXISTING CONDITIONS AFTER CONSTRUCTION.
- ALL TRENCHES SHALL BE BACKFILLED AND COMPACTED TO A MINIMUM OF 95% PROCTOR DENSITY.
- CONTRACTOR SHALL REMOVE ALL EXCESS EXCAVATED MATERIALS, CONSTRUCTION DEBRIS, GRUBBED VEGETATION, AND REMOVAL ITEMS CALLED OUT ON PLANS FROM SITE AND LEGALLY DISPOSE OF THESE MATERIALS OFF SITE.
- ALL PIPE AND FITTINGS SHALL BE APPROPRIATELY MARKED OR COLOR CODED TO INDICATE THAT THE PIPE IS A POTABLE WATER PIPE. CONTRACTOR SHALL INSTALL AN INSULATED 12-GAUGE LOCATING WIRE AND WARNING TAPE OVER ALL SEWER MAINS IN ACCORDANCE WITH THE LATEST EDITION OF THE MARICOPA ASSOCIATION OF GOVERNMENT (M.A.G.) UNIFORM STANDARD SPECIFICATIONS AND DETAILS AND TOWN OF FLORENCE UTILITY CONSTRUCTION STANDARDS.
- ALL CONSTRUCTION AND TEST METHODS SHALL BE IN CONFORMANCE WITH M.A.G. UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.
- ALL CONCRETE SHALL COMPLY WITH M.A.G. SPECIFICATION SECTIONS 505 AND 725 AS APPLICABLE, UNLESS OTHERWISE SPECIFIED.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CALCULATE HIS OWN EARTHWORK QUANTITIES AND SUBMIT HIS BID BASED THEREON.
- ALL ORGANIC MATERIAL SHALL BE REMOVED WITHIN CLEARING LIMITS FOR NECESSARY GRADING TO A DEPTH OF SIX (6) INCHES AND LAWFULLY DISPOSED OF PRIOR TO GRADING.
- THE GEOTECHNICAL ENGINEER SHALL OBSERVE, INSPECT AND TEST ALL EARTHWORK OPERATIONS, INCLUDING BUT NOT LIMITED TO: CLEARING, GRUBBING, SUBGRADE PREPARATION, STRUCTURAL AND TRENCH EXCAVATION AND BACKFILL TOGETHER WITH PLACEMENT AND COMPACTION OF FILL. THE SAID ENGINEER SHALL CERTIFY THAT ALL GRADING OPERATIONS WERE PERFORMED IN ACCORDANCE WITH APPLICABLE STANDARDS.
- ALL WORK SHALL CONFORM TO GRADING STANDARDS PER TOWN OF FLORENCE ZONING CODE, LATEST EDITION.
- ALL REVISIONS TO THESE PLANS MUST BE APPROVED BY THE TOWN OF FLORENCE ENGINEER PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL USE THE FOLLOWING PIPE FOR USE ON THIS PROJECT.
  - PVC - SDR18 CLASS 150 C-900, UNLESS OTHERWISE CALLED OUT ON THE PLANS.
- THE HORIZONTAL DISTANCE BETWEEN A PUBLIC WATER PIPE AND THE GRAVITY MAIN SHALL NOT BE LESS THAN SIX (6) FEET. VERTICAL CLEARANCE BETWEEN THE WATER MAIN AND GRAVITY SEWER MAIN SHALL BE A MINIMUM OF TWO (2) FEET. (IF THESE CRITERIA CANNOT BE MET, DESIGN CHANGES WILL BE REQUIRED). CONTRACTOR SHALL FIELD VERIFY THE SEPARATION OF EXISTING WATER MAINS AND PROPOSED SEWER MAINS BY POT HOLEING THE EXISTING WATER MAINS PRIOR TO CONSTRUCTION AND IMPLEMENTATION.
- HAND BACKFILL OF SELECT MATERIAL SHALL BE IMPORTED OR TRENCH EXCAVATION MATERIAL WHICH SHALL BE IN ACCORDANCE WITH TOWN OF FLORENCE PUBLIC WORKS DEPARTMENT AND THE LATEST EDITION OF THE MARICOPA ASSOCIATION OF GOVERNMENTS (M.A.G.) UNIFORM STANDARDS AND SPECIFICATIONS.
- BEDDING SHALL BE SAND IN ACCORDANCE WITH TOWN OF FLORENCE PUBLIC WORKS DEPARTMENT. BEDDING MATERIAL DESIGN CRITERIA IS GRANULAR MATERIAL WITH A WEIGHT OF 115 LBS. PER CUBIC FOOT. S.F. 1.5. SHOULD GROUND WATER OR OTHER UNANTICIPATED SOIL CONDITION BE ENCOUNTERED, THE BEDDING SHALL BE MODIFIED AS DIRECTED BY THE ENGINEER.
- CONTRACTOR TO VISIT SITE AND FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS PRIOR TO SUBMITTING A BID FOR THE PROJECT.
- CONTRACTOR SHALL REPLACE EXISTING STRIPING, CROSSWALKS AND TRAFFIC SYMBOLS PER TOWN OF FLORENCE AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- UPON COMMENCEMENT OF WORK, TRAFFIC CONTROL DEVICES SHALL BE POSTED AND MAINTAINED BY THE CONTRACTOR UNTIL SUCH TIME AS THE WORK IS COMPLETED. ALL WARNING SIGNS, BARRICADES, ETC. SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES ADOPTED BY THE STATE OF ARIZONA PURSUANT TO A.R.S. 28-650.
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL HOMES AND BUSINESSES DURING CONSTRUCTION.
- THE CONTRACTOR SHALL CONTACT UTILITY COMPANIES PRIOR TO CROSSING OR CONSTRUCTION ADJACENT TO EXISTING FACILITIES.
- SEE SHEET C-10 FOR SURVEY POINT TABLE.

# TOWN OF FLORENCE 12" WATER LINE AUGMENTATION WATER PLANS



SITE PLAN  
1"=300'

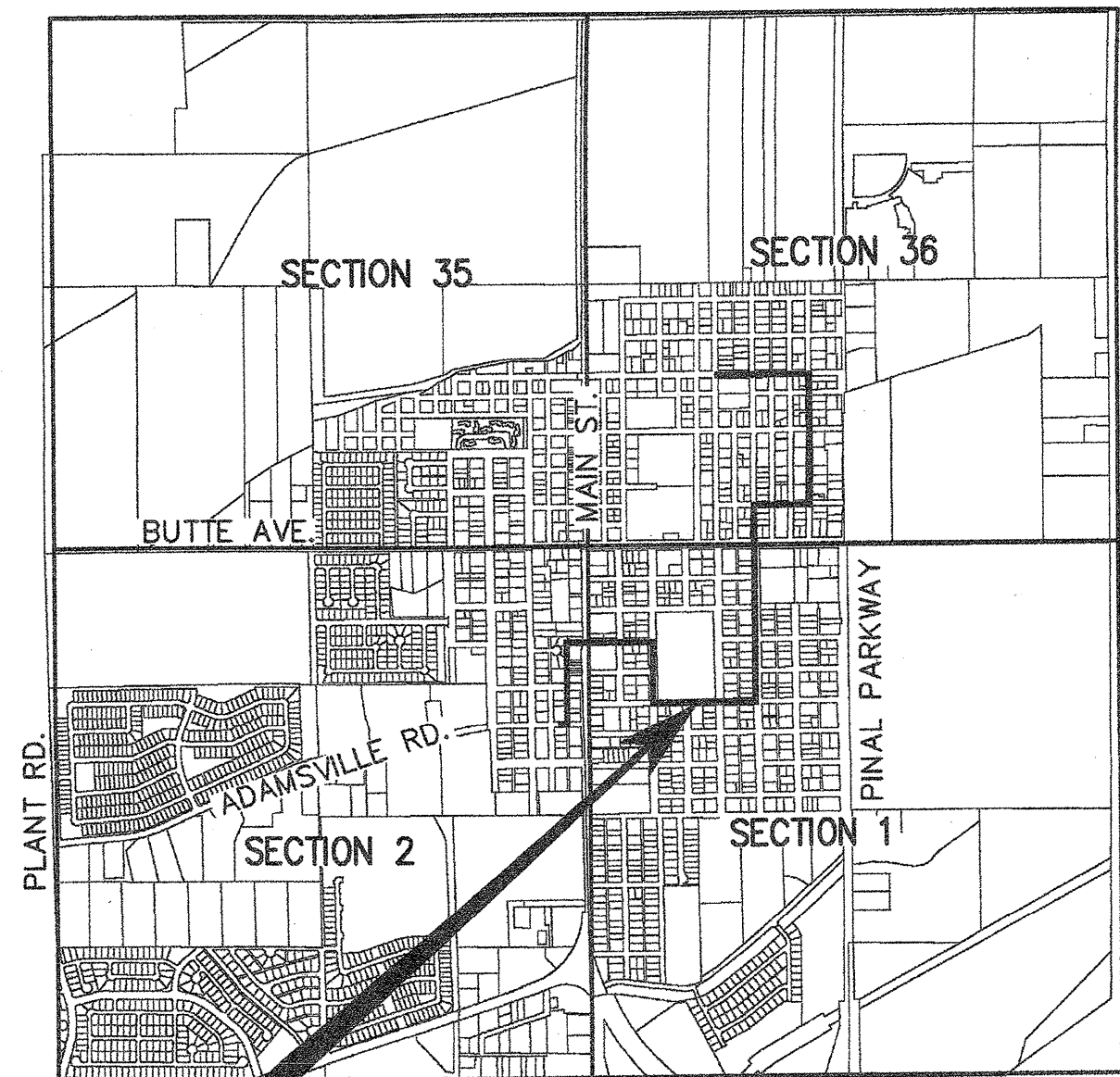
## ADEQ WATER NOTES:

- ALL WATERLINES AND FITTINGS SHALL HAVE NATIONAL SANITATION FOUNDATION (NSF) SEAL AND COMPLY WITH A.A.C. R-18-4-213.C STANDARDS.
- ALL MATERIALS AND PRODUCTS USED IN THE DRINKING WATER SYSTEM SHALL CONFORM TO NSF STANDARD 61.
- CONSTRUCTION MATERIALS USED IN THE WATER SYSTEM SHALL BE LEAD FREE AS IN ACCORDANCE WITH A.A.C. R18-5-504 AND R18-5-101.
- WATER LINES SHALL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH A.W.W.A. C605-94.
- PRESSURE AND LEAKAGE TESTING RESULTS MUST BE PROVIDED WITH THE APPROVAL OF CONSTRUCTION (AOC) APPLICATION IN ORDER FOR THE AOC PERMIT TO BE ISSUED. DATA REQUIRED FOR THE ENGINEERING CERTIFICATE OF COMPLETION (ECC) AND THE AOC CAN BE FOUND AT <http://www.azdeq.gov/environ/water/dw/download/dato.pdf>
- WATER LINES SHALL BE DISINFECTED BY CHLORINATION IN ACCORDANCE WITH A.W.W.A. C601 STANDARD AND A.D.E.Q. BULLETIN NO. 8.
- DISINFECTION RESULTS FROM AN ARIZONA STATE ACCREDITED LABORATORY MUST BE PROVIDED WITH THE APPROVAL OF CONSTRUCTION (AOC) APPLICATION IN ORDER FOR THE AOC PERMIT TO BE ISSUED.
- WATER/SEWER LINE SEPARATION SHALL BE IN ACCORDANCE WITH A.A.C. R-18-5-502.C.
- ALL FITTINGS, VALVES, FLEXIBLE COUPLINGS, AND REPAIR CLAMPS SHALL BE ENCASED WITH A 10 MIL POLYETHYLENE IN ACCORDANCE WITH A.W.W.A. C-105 METHOD C.

## MATERIAL QUANTITY LIST

| ITEM                             | PHASE 1 QTY | PHASE 2 QTY | PHASE 3 QTY |
|----------------------------------|-------------|-------------|-------------|
| 12" PVC PIPE                     | 1,660 LF    | 3,000 LF    | 3,500 LF    |
| 12" DIP PIPE                     | 30 LF       | 90 LF       | 150 LF      |
| 6" DIP PIPE                      | 83 LF       | 153 LF      | 338 LF      |
| 12" GATE VALVE, B&C              | 4 EA        | 11 EA       | 13 EA       |
| 6" GATE VALVE, B&C               | 3 EA        | 8 EA        | 12 EA       |
| 12" TAPPING SLEEVE               |             | 1 EA        |             |
| 6" TAPPING SLEEVE                |             |             | 1 EA        |
| NEW FIRE HYDRANT                 | 3 EA        | 7 EA        | 11 EA       |
| SERVICE TIE OVERS                | 20 EA       | 9 EA        | 20 EA       |
| 24" JACK AND BORE                | 90 LF       | 103 LF      | 103 LF      |
| 1" COMBINATION AIR RELEASE VALVE | 1 EA        | 4 EA        | 6 EA        |
| PAVEMENT PATCH / REPLACEMENT     | 330 SY      | 1,800 SY    | 8,850 SY    |

N  
W E  
S  
SCALE: 3"=1 MILE



## LOCATION MAP

A PORTION OF SECTIONS 1&2  
T-5-S, R-9-E,  
SECTION 36  
T-4-S, R-9-E  
G&SRM PINAL COUNTY, ARIZONA

## THIS PROJECT

## LEGEND

|       |                                |     |                           |
|-------|--------------------------------|-----|---------------------------|
| 1500  | EXISTING CONTOUR               | MON | SURVEY MON                |
| —OHE— | EXISTING OVERHEAD UTILITY LINE | —F— | FIRE HYDRANT              |
| —E—   | EXISTING ELECTRIC LINE         | PP  | POWER POLE                |
| —W—   | EXISTING WATER MAIN AND VALVE  | SMH | SANITARY SEWER MANHOLE    |
| —WS—  | EXISTING WATER SERVICE         | —E— | EXISTING EDGE OF PAVEMENT |
| —G—   | EXISTING GAS MAIN              | —C— | EXISTING CHAIN LINK FENCE |
| —N—   | NEW WATER MAIN AND VALVE       | —W— | EXISTING WIRE FENCE       |
| —A—   | NEW AIR RELEASE VALVE          | —B— | EXISTING BLOCK WALL       |
| HCP   | HORIZONTAL CONTROL POINT       | —T— | NEW METER TIE-OVER        |
| 1/3   | DETAIL NUMBER<br>SHEET NUMBER  | —W— | ABANDON WATER MAIN        |
| 2     | SHEET INDEX NUMBER             |     |                           |

## SHEET INDEX

|      |                               |
|------|-------------------------------|
| G-01 | COVER SHEET AND GENERAL NOTES |
| G-02 | TOWN OF FLORENCE NOTE SHEET   |
| C-01 | PLAN AND PROFILE SHEET        |
| C-02 | PLAN AND PROFILE SHEET        |
| C-03 | PLAN AND PROFILE SHEET        |
| C-04 | PLAN AND PROFILE SHEET        |
| C-05 | PLAN AND PROFILE SHEET        |
| C-06 | PLAN AND PROFILE SHEET        |
| C-07 | PLAN AND PROFILE SHEET        |
| C-08 | PLAN AND PROFILE SHEET        |
| C-09 | PLAN AND PROFILE SHEET        |
| C-10 | DETAIL SHEET                  |
| C-11 | PAVEMENT REPLACEMENT PLAN     |

## BASIS OF BEARING

THE BASIS OF BEARING FOR THIS PROJECT: POINT #372 (POINT TABLE) NORTH QUARTER CORNER OF SECTION 1 TO POINT #373 (POINT TABLE) CENTER QUARTER CORNER OF SECTION 1, BEARING S00°05'44"E DISTANCE OF 2640.67'.

## BASIS OF ELEVATION

THE BASIS OF ELEVATION (BENCHMARK): NGS DESIGNATION - G 364 PID - DU0539, ELEVATION NAVD 88 = 1492.97; FIELD LOCATION POINT #364 (POINT TABLE)

## ACCEPTED:

TOWN OF FLORENCE, TOWN ENGINEER

TOWN OF FLORENCE, FIRE MARSHAL

12/12/17  
DATE

12/12/17  
DATE

DESIGNED BY:  
CC  
DRAWN BY:  
GGF  
CHECKED BY:  
TMB  
DRAWING SCALE(S):

Westland Resources  
4001 E. Paradise Falls Drive  
Tucson, Arizona 85712  
(520) 206-9585

## REVISIONS

TOWN OF FLORENCE  
12" WATER LINE AUGMENTATION  
WATER PLANS  
COVER SHEET AND GENERAL NOTES

PLAN DATE:  
DECEMBER 01, 2017  
PROJECT NUMBER:  
486.05-A-8000  
SHEET NO.  
G-01  
1 OF 13



M:\Jobs\4001\4001.dwg (ENG) Deliverables\486-05-g-02.dwg Dec 01, 2017 12:08pm gford

TOWN OF FLORENCE NOTES

1. GENERAL NOTES: CONSTRUCTION INSPECTION AND TESTING

A. ALL PUBLIC IMPROVEMENT CONSTRUCTION WITHIN THE TOWN OF FLORENCE PUBLIC ROW AND ONSITE SHALL BE CONDUCTED IN ACCORDANCE WITH, AND CONFORM TO, THE LATEST EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION AND UNIFORM STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, BOTH AS PUBLISHED BY THE MARICOPA ASSOCIATION OF GOVERNMENTS (MAG).

B. INSPECTION OF WORK PER MAG 105.10: THE ENGINEER SHALL BE PERMITTED TO INSPECT ALL MATERIALS,AND EACH PART OR DETAIL OF THE WORK AT ANY TIME FOR THE PURPOSE OF EXPEDITING AND FACILITATING THE PROGRESS OF WORK. HE SHALL BE FURNISHED WITH SUCH INFORMATION AND ASSISTANCE BY THE CONTRACTOR, AS IS REQUIRED TO MAKE A COMPLETE AND DETAILED INSPECTION. THE TOWN ENGINEER REQUIRES THAT THE ACTUAL TEST RESULT DATA SHEET ACCOMPANY ALL COMPACTION TEST RESULTS SUBMITTED TO THE TOWN'S INSPECTOR. PASS/FAIL STATEMENTS ARE NOT ACCEPTABLE WITHOUT THE ATTACHED DATA SHEET. FAILURE TO SUBMIT THE TEST RESULT DATA SHEETS WILL RESULT IN AN INCOMPLETE SUBMITTAL AND THE TEST WILL BE REJECTED.

C. IN THE EVENT OF CONFLICT BETWEEN MAG STANDARD SPECIFICATIONS AND DETAILS AND THESE PLANS, THESE PLANS SHALL PREVAIL.

D. THE OFFICE OF THE TOWN ENGINEER SHALL BE NOTIFIED AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK WITHIN THE TOWN OF FLORENCE ROW. TELEPHONE: 520-868-7617.

E. CONTRACTOR IS TO NOTIFY ALL PUBLIC UTILITIES AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION, FOR FIELD LOCATIONS OF THEIR RESPECTIVE FACILITIES, BY CONTACTING THE FOLLOWING: BLUE STAKE: 1-800-782-5348.

F. CONTRACTOR SHALL IDENTIFY, COORDINATE AND MAKE ARRANGEMENTS FOR RELOCATION OF ANY UTILITIES CONFLICTING WITH THE PROPOSED CONSTRUCTION OF THESE PLANS, WITH THE APPROPRIATE UTILITY.

G. IDENTIFICATION, REMOVAL AND REPLACEMENT OF ALL TREES, SHRUBS, VEGETATION, MISCELLANEOUS STRUCTURES, DEBRIS, RUBBLE AND OTHER DELETERIOUS MATERIALS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE AT THE CONTRACTOR'S EXPENSE.

H. ALL CONCRETE SIDEWALKS, DRIVEWAYS, APRONS, CROSS-PANS, VALLEY GUTTER, CURBS AND GUTTERS LANDSCAPING AND IRRIGATION THAT MAY BE DAMAGED DURING THE COURSE OF CONSTRUCTIONS SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. SHORING IS TO BE INSTALLED OR A TRENCH BOX IS TO BE USED, IN ALL TRENCHES IN EXCESS OF FIVE (5') FEET IN DEPTH. A REGISTERED CIVIL ENGINEER OR SOILS ENGINEER SHALL CERTIFY SHORING INSTALLATION PLANS, DETAILS AND SPECIFICATIONS. SHORING MUST CONFORM TO OSHA 29 CFR, PART 1926, AND SUBPART D.

I. COMPACTION TESTING IS REQUIRED AND MUST BE PERFORMED IN THE PRESENCE OF A REPRESENTATIVE OF THE TOWN ENGINEER.

J. BACKFILL: BACKFILL WITHIN THE PUBLIC UTILITY EASEMENTS AND WITHIN PUBLIC STREET ROW SHALL BE COMPACTED TO 95% OF MAXIMUM THEORETICAL DENSITY PER ASTM D698. ALL MATERIALS OUTSIDE THE MOISTURE LIMIT SHALL BE CONSIDERED UNSUITABLE, AND SUBJECT TO REMOVAL. NO HYDRAULIC COMPACTION OR WATER JET COMPACTION WILL BE ALLOWED. ALL COMPACTION MUST BE DONE BY MECHANICAL MEANS. MOISTURE LIMIT SPEC: 2.0 PERCENT BELOW OPTIMUM MOISTURE, MATERIAL SHALL BE UNIFORM.

K. SUB-GRADE: SUB-GRADE PREPARATION FOR ALL NEW STREETS AND ROADWAYS SHALL CONSIST OF SCARIFYING AND LOOSENING SUB-GRADE TO A DEPTH OF SIX (6") INCHES. SUB-GRADE SHALL BE CONSTRUCTED TO ACHIEVE UNIFORM MOISTURE CONTENT BY THE ADDITION OF WATER AND COMPACTED TO 95% OF MAXIMUM DENSITY. MOISTURE SHALL BE MAINTAINED BETWEEN OPTIMUM AND 4.0% BELOW OPTIMUM MOISTURE AND SHALL BE COMPACTED TO 95% ON MAXIMUM THEORETICAL DENSITY, AS DETERMINED BY ASTM D698. ALL MATERIALS OUTSIDE THE MOISTURE LIMIT AT THE TIME OF PLACEMENT AND COMPACTION SHALL BE CONSIDERED UNSUITABLE AND SUBJECT TO REMOVAL. THE FINISHED SURFACE OF THE SUB-GRADE SHALL NOT VARY FROM THE GRADES ESTABLISHED BY THE TOWN ENGINEER BY MORE THAN: 0.04 OF A FOOT ABOVE OR BELOW SPECIFIED GRADE.

L. GRADING OF AGGREGATE BASES AND AGGREGATE SUB-BASE SHALL BE AS FOLLOWS: AGGREGATE MATERIALS SHALL HAVE WATER ADDED TO THEM AND SHALL BE MIXED AND PROCESSED TO PRODUCE A UNIFORM BLEND OF MATERIAL BEFORE PLACEMENT. AFTER PROCESSING, THE MATERIAL SHALL BE PLACED AND SPREAD ON THE PREPARED SUB-GRADE AND SHALL BE PLACED IN A UNIFORM LAYER OR LAYERS NOT EXCEEDING SIX (6") INCHES IN COMPACTED DEPTH, UNLESS OTHERWISE APPROVED IN WRITING BY THE TOWN ENGINEER. EACH LAYER OF AGGREGATE BASE SHALL BE COMPACTED TO A DENSITY OF NOT LESS THAN 100% OF THE MAXIMUM DENSITY. THE FINISHED SURFACE OF THE SUB-GRADE SHALL NOT VARY FROM THE GRADES ESTABLISHED BY THE TOWN ENGINEER BY MORE THAN: 0.04 OF A FOOT ABOVE OR BELOW SPECIFIED GRADE.

M. COMPACTION TESTING FOR SUB-GRADE WILL BE DONE AFTER THE SUB-GRADE HAS BEEN STRING LINED AND IS WITHIN TOLERANCE AND ACCEPTED BY THE TOWN ENGINEER. THE TOWN ENGINEER OR HIS REPRESENTATIVE WILL DIRECT THE NUMBER AND LOCATION OF DENSITY TESTS. ALL SUB-GRADES SHALL HAVE A BLUE-TOP ELEVATION SET TO FINISHED GRADE AND LEFT AND RIGHT EDGES OF PAVEMENT, AND CENTERLINE OF ROADWAY.

N. ONE (1) SAND CONE TEST SHALL BE REQUIRED FOR EVERY TEN (10) NUCLEAR DENSITY TESTS PERFORMED, OR WHEN REQUESTED BY THE TOWN ENGINEER OR HIS REPRESENTATIVE. THE TOWN ENGINEER OR ENGINEER'S REPRESENTATIVE SHALL DETERMINE THE LOCATIONS OF THESE SAND CONE TESTS.

O. ALL MATERIALS, INCLUDING BUT NOT LIMITED TO AGGREGATE BASE COURSE, BORROW MATERIAL AND NATIVE MATERIAL, WILL BE ACCEPTED IN PLACE ONLY. TESTING REQUIRED FOR ACCEPTANCE WILL INCLUDE A SIEVE ANALYSIS AND PLASTICITY INDEX, (P.I.). DETERMINATION OF MAXIMUM THEORETICAL DENSITY WILL BE IN ACCORDANCE WITH ASTM D698. ONLY A FOUR-POINT PROCTOR TEST WILL BE ACCEPTED.

P. THE BASE COURSE SHALL NOT BE PLACED ON SUB-GRADE UNTIL THE TOWN ENGINEER HAS ACCEPTED THE SUB-GRADE. ALL MATERIALS WILL BE ACCEPTED IN PLACE ONLY. COMPACTION DENSITIES: MAG TYPE I BACKFILL MATERIAL (SECTION 601.4.4) IS MODIFIED TO INCLUDE AREAS UNDER THE PAVEMENT, ROW, AND EASEMENTS FOR ALL TRENCHES INCLUDING SEWER, WATER, ELECTRIC, AND GAS, TELEPHONE, AND STORM DRAINS, MOISTURE SPEC: 2.0 PERCENT BELOW OPTIMUM MOISTURE COMPACT TO 95% OF MAXIMUM THEORETICAL DENSITY. ALL MATERIALS OUTSIDE THE MOISTURE SPEC-LIMIT SHALL BE CONSIDERED UNSUITABLE, SUBJECT TO REMOVAL AND MATERIAL SHALL BE UNIFORM.

Q. THE LOCATION OF ALL SEWER STUB-OUTS SHALL BE STAMPED ON THE TOP OF VERTICAL CURB, AND FACE OF ROLLED CURBS, WITH A FOUR (4") INCH HIGH LETTERS (IE: "S").

R. ALL CURB, GUTTER AND SIDEWALK EXPANSION JOINT FILLER WILL BE ¾" BITUMINOUS PRE-MOLDED ALL EXPANSION JOINT SPACING SHALL NOT EXCEED A MAXIMUM OF (50') FEET OR AS DIRECTED BY THE TOWN ENGINEER. CONCRETE CURING COMPOUND MATERIAL SHALL BE A WHITE PIGMENT MEMBRANE USED ON ALL CONCRETE STRUCTURES INCLUDING CURB & GUTTER, SIDEWALK, HEADWALL, CATCH BASINS AND SIDEWALK RAMPS.

S. PAVING WILL NOT COMMENCE UNTIL AGGREGATE BASE COURSE COMPACTION AND GRADATION TESTS ARE COMPLETED AND THE TOWN ENGINEER ACCEPTS THE RESULTS.

T. USPS CLUSTER MAIL BOX LOCATIONS MUST BE PRE-DETERMINED AND NOTED ON THE CIVIL PLANS FOR GRADING AND PAVING. ADD CLUSTER BOXES TO THE LEGEND AND IN CONSTRUCTION NOTES. CLUSTER BOX LOCATIONS SHOULD BE SHOWN ON THE "OVERALL SEWER/WATER/HYDRANT/STREETLIGHT PLAN."

U. MEDIAN CURB & GUTTER BULL NOSE SHALL BE PAINTED YELLOW, WITH REFLECTIVE GLASS BEADS, PER M. A. G. DTL-223, AND HAVE YELLOW PAVEMENT REFLECTORS INSTALLED AFTER THE PAINTING IS COMPLETE.

2. GRADING NOTES

A. APPROVED GEO-TECHNICAL REPORT: BY: QUALITY TESTING INC. DATED:OCTOBER 30, 2017. JOB NUMBER: # 17046.00.

B. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL NECESSARY REGULATIONS AND REQUESTS BY THE TOWN AND PINAL COUNTY REGARDING DUST CONTROL.

C. REMOVAL OF ALL CACTI AND NATIVE PLANTS SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE "ARIZONA NATIVE PLANT LAW" A.R.S. CHAPTER 7.

D. CONTRACTOR MUST KEEP PUBLIC STREETS CLEAR OF SOIL, MUD, AND DEBRIS AT ALL TIMES.

E. CONTRACTOR MUST PREVENT DAMAGE TO DRAINAGE DURING GRADING CONSTRUCTION.

F. CONTRACTOR MUST CORRECT ANY DAMAGE TO PUBLIC OR PRIVATE PROPERTY THAT RESULTS FROM WORK DONE UNDER THE APPROVAL OF THE GRADING PERMIT.

G. IF SITE GRADING TOTALS MORE THAN ONE-TENTH (0.1) ACRE, CONTRACTOR MUST OBTAIN A PINAL COUNTY DUST CONTROL PERMIT. IF GRADING EXCEEDS ONE (1.0) ACRE, THIS ACTIVATES AZPDES AND CONTRACTOR MUST SUBMIT A NOI TO ADEQ AND PREPARE A STORM WATER MANAGEMENT PLAN ACCEPTABLE TO ADEQ.

H. ALL ON-SITE GRADING MUST COMPLY WITH CHAPTER 70 OF THE UNIFORM BUILDING CODE.

I. ALL GRADING IN THE PUBLIC ROW MUST COMPLY WITH MAG SPECIFICATIONS AND STANDARD DETAILS; THE ENGINEER'S APPROVED PLANS AND SPECIFICATIONS FOR THE PROJECT; AND THE SOILS ENGINEER'S GEOTECHNICAL REPORT FOR THE PROJECT. SURVEYORS WILL SET CONSTRUCTION STATIONS, STAKES, ESTABLISHING LINES AND GRADES FOR ROAD WORK, CURBS, GUTTERS, SIDEWALKS, STRUCTURES AND CENTERLINES FOR UTILITIES AND NECESSARY APPURTENANCES AS DEEMED NECESSARY, AND WILL FURNISH THE CONTRACTOR WITH ALL NECESSARY INFORMATION RELATING TO THE GRADES. THESE STAKES AND MARKS SHALL CONSTITUTE THE FIELD CONTROL BY AND IN ACCORDANCE WITH WHICH THE CONTRACTOR SHALL ESTABLISH OTHER NECESSARY CONTROLS AND PERFORM THE WORK. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE PRESERVATION OF ALL STAKES AND MARKS, AND IF THE CONTRACTOR HAS CARELESSLY OR WILLFULLY DESTROYED THE CONSTRUCTION STAKES OR MARKS, THE COST FOR REPLACING THEM WILL BE CHARGED AGAINST HIM

J. NO MINIMUM FLOOR ELEVATION SHALL BE LOWERED UNLESS APPROVED BY THE TOWN ENGINEER.

K. ANY SLOPE THAT IS STEEPER THAN 3:1 SHALL BE RIP-RAPPED OR SHALL BE REVEGETATED.

L. THE CONTRACTOR SHALL PROVIDE A LEVEL BOTTOM (+/- 1/10) IN ALL RETENTION BASINS, AT THE ELEVATIONS SHOWN ON THE PLANS. RETENTION BASIN SIDE SLOPES SHALL NOT EXCEED 4:1, UNLESS APPROVED BY THE TOWN ENGINEER AND NOTED ON THE PLANS.

M. RETENTION BASIN PERCOLATION TESTS SHALL BE PERFORMED AFTER GRADING IS COMPLETED AND PRIOR TO LANDSCAPING. PERCOLATION TESTS SHALL BE SUBMITTED TO THE TOWN ENGINEER. RECOMMENDATIONS REGARDING NUMBER OF DRYWELLS REQUIRED TO MEET THE REQUIREMENTS OF THE TOWN CODE WILL BE PRESENTED TO THE TOWN ENGINEER FOR APPROVAL, AND THE FINAL NUMBER OF DRYWELLS REQUIRED SHALL BE DETERMINED BY THESE TESTS. AFTER THE FIRST DRYWELL INSTALLATION A CONSTANT HEAD PRESSURE TEST WILL BE REQUIRED. THE DESIGN ENGINEER SHALL PROVIDE THE TOTAL NUMBER OF DRYWELLS REQUIRED AND SUBMIT THE CALCULATIONS TO THE TOWN ENGINEER. DRYWELLS REQUIRE A PERMIT FROM THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY AND ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY DRYWALL REGISTRATION NUMBERS SHALL BE NOTED ON THE AS-BUILT PLANS.

N. GRADING PLAN AS-BUILTS: AS-GRADED CERTIFICATION OF THE ON-SITE GRADING BY THE DESIGN ENGINEER IS REQUIRED PRIOR TO FINAL ACCEPTANCE OF ANY ON-SITE GRADING OR DRAINAGE IMPROVEMENTS. AS-BUILT DRAWINGS OF THE PUBLIC IMPROVEMENTS BY THE DESIGN ENGINEER ARE REQUIRED PRIOR TO FINAL ACCEPTANCE OF THE PUBLIC IMPROVEMENTS. AS-BUILT GRADING PLANS SHALL BE PREPARED BY THE DESIGN ENGINEER AFTER GRADING IS COMPLETED. THESE SHALL INCLUDE BUT NOT BE LIMITED TO, AS-BUILT ELEVATIONS FOR: FINISHED PADS, ALL REAR PROPERTY CORNERS, TOP OF CURB AT ALL PROPERTY LINES, RETENTION BASIN BOTTOMS, SWALES, BERMS AND PERIMETER LANDSCAPE EASEMENTS, ANY AND ALL DEVIATIONS FROM THE APPROVED PLANS AT THE TIME OF COMPLETION OF MASS GRADING. IF ANY DRYWELLS HAVE BEEN INSTALLED, ADEQ DRYWALL REGISTRATION NUMBERS MUST BE MADE PART OF THE AS BUILT PLANS.

3. STORM SEWER NOTES

A. CUT-OFF WALLS WITH A MINIMUM DIMENSION OF 1'-6", SHALL BE USED AT ALL SCUPPERS, AND TERMINATIONS OF RIPRAP AND CONCRETE STORM DRAINAGE CULVERTS AND CONCRETE SPILLWAY BEHIND SCUPPERS 6' MINIMUM.

B. GUARD RAILINGS SHALL BE PLACED ON ALL SCUPPERS ABOVE SPILLWAYS.

C. HINGED TRASH RACKS ARE REQUIRED AT ALL INLETS AND OUTLETS OF STORM SEWER HEAD WALLS FOR ALL PIPES 12" (INCHES) IN DIAMETER AND LARGER.

D. REINFORCED CONCRETE PIPE (RCP) SHALL BE PLACED PER MANUFACTURER'S SPECIFICATIONS AND IN ACCORDANCE WITH MAG
- E. ALL RIPRAP SHALL BE GROUTED.

F. "U-TYPE" HEADWALLS WITH WING WALLS PER MAG STD, DET. 501-3 OR 501-4 ARE REQUIRED FOR ALL XPOSED STORM WATER PIPE.

G. MANHOLE CONCRETE COLLAR SHALL BE 1' FOOT DEEP AND 1' FOOT WIDE OUTSIDE OF RIM CASTING. COLLAR SHALL BE USED IN UNPAVED AS WELL AS PAVED AREAS.

H. RETENTION BASINS SHOULD BE CONSTRUCTED WITH A TWO-FOOT (2') BENCH AT TOP PRIOR TO START OF SLOPE.

I. ALL CMP AND RCP PIPE JOINTS SHALL BE JOINED WITH AN "O" RING OR GASKET TYPE WATERTIGHT SEAL.

J. ANY STORM DRAINS CROSSING PAVED TOWN STREETS REQUIRE A.B.C. BEDDING MINIMUM FOUR (4) INCHES BELOW AND ONE (1) FOOT ABOVE THE TOP OF THE PIPE. ALL STORM PIPES WITHIN TOWN ROW SHALL BE RGRCP.

K. CONSTRUCTION OF STORM DRAIN REQUIRES FOUR (4) INCHES A.B.C. BEDDING PER MAG SPEC. 702. MODIFIED COMPACTION TO 95% TYPICAL.REINFORCED CONCRETE BOX CULVERTS SHALL BE CONSTRUCTED PER A.D.O.T. STANDARDS AND SPECIFICATIONS, TYPICAL, UNLESS OTHERWISE SPECIFIED IN CONSTRUCTION PLANS SUBMITTED.

M. CONSTRUCTION OF MANHOLE FOUNDATIONS FOR ALL STORM SEWER BASES SHALL BE PER MAG SECTIONS 505 AND 725.

N. STORM PLAN AS-BUILTS: AS-BUILT STORM SEWER PLANS PREPARED BY THE DESIGN ENGINEER SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING: TOP OF CURB (TOC) ELEVATIONS AT BOTH ENDS OF EACH SCUPPER AND GUTTER AT CENTER OR FLOW-LINE OF EACH SCUPPER; INLET AND OUTLET INVERTS; HEADWALL TOP ELEVATIONS AND INVERTS; CROSS-PAN AND VALLEY GUTTER FLOW LINES ELEVATIONS; STORM MANHOLE RIM AND INVERT ELEVATIONS; DRYWELL RIM ELEVATIONS; PIPE DIMENSIONS AND LENGTHS, AND ANY AND ALL DEVIATIONS FROM APPROVED DRAWINGS.
4. PAVING NOTES

A. ALL GRADING, EXCAVATION, PAVING, TRENCHING, PIPE BEDDING AND BACKFILL SHALL COMPLY WITH THE RECOMMENDATIONS SET FORTH IN THE SOILS (GEO-TECHNICAL) REPORT FOR THIS PROJECT AND THE REFERENCED REQUIRED SPECIFICATIONS AND DETAILS. SOILS REPORT AND PAVEMENT DESIGN WERE PREPARED: BY: QUALITY TESTING INC. DATED: OCTOBER 30, 2017, JOB NO. # 17046.00.

B. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS AND HORIZONTAL CONTROLS OF ALL EXISTING UTILITIES AT POINT OF TIE-IN PRIOR TO COMMENCING ANY NEW CONSTRUCTION. SHOULD ANY LOCATION, ELEVATION OR CONTROL DIFFER FROM THAT SHOWN ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE OWNER'S AGENT.

C. THE CONTRACTOR SHALL GIVE MINIMUM 72-HOURS NOTICE TO THE TOWN ENGINEER PRIOR TO ANY CONSTRUCTION ACTIVITY WITHIN THE ROW.

D. THE TOWN ENGINEER, OR HIS/HER AUTHORIZED REPRESENTATIVE, MUST APPROVE ALL PLAN REVISIONS IN WRITING PRIOR TO CONSTRUCTION OF ANY CHANGES TO APPROVED PLANS.

E. UPON COMMENCEMENT OF WORK, TRAFFIC CONTROL DEVICES PER THE APPROVED TRAFFIC CONTROL PLAN (TCP) SHALL BE POSTED AND MAINTAINED BY THE CONTRACTOR UNTIL SUCH TIME AS WORK IS COMPLETED.

F. REMOVAL AND RELOCATION OF ALL MAILBOXES, FENCES, SIGNS, GATES, POSTS, PIPES, ETC., WITHIN THE ROW AND CONSTRUCTION LIMITS SHALL BE DIRECTED BY THE TOWN ENGINEER.

G. 25 MPH SPEED LIMIT SIGNS SHALL BE LOCATED AT ALL ENTRANCES INTO A RESIDENTIAL SUBDIVISION DEVELOPMENT. 35 MPH SIGNS FOR COLLECTORS SHALL BE LOCATED PER THE PLANS.

H. CONCRETE COLLARS, ON ALL UTILITY AND SURVEY MONUMENT FRAME ADJUSTMENTS, ARE TO BE INSTALLED FLUSH WITH THE PROPOSED OR EXISTING PAVEMENT. CONTRACTOR SHALL PRESERVE LOCATION OF ANY/ALL PRE-EXISTING SURVEY MONUMENTS, AND PROVIDE FOR RE-INSTALLATION OF SAID SURVEY MONUMENT.

I. PAINT FOR PAVEMENT MARKING AND STRIPING SHALL BE THERMAL TRAFFIC PAINT APPLIED IN A SINGLE COAT AT A RATE OF 100 TO 110 SQ. FEET PER GALLON WITH REFLECTIVE BEADS INCLUDED.

J. STREET CUTS ON ASPHALT PAVEMENT: CUT EXISTING PAVEMENT AT ONE (1') FOOT FROM THE UTILITY TRENCH CUT, PER MAG DETAIL 200 TYPE (1) TOP; TACK EDGES (USING A19MM PER MAG SECTION710 ASPHALTIC CONCRETE HOT MIX). ASPHALT CONCRETE SHALL BE TESTED FOR COMPACTION TO 95% THE CONTRACTOR, AT THEIR EXPENSE, WILL HAVE A PRIVATE LAB CORE SAMPLE AND RUN A MARSHALL FOR COMPACTION TEST FOR ACCEPTANCE ON ALL STREET CUTS. ALL REPLACEMENT PAVEMENTS SHALL MATCH EXISTING, UNLESS AUTHORIZED IN WRITING BY THE TOWN ENGINEER.

K. ALL CONSTRUCTION AND TEST METHODS SHALL BE IN CONFORMANCE WITH THE TOWN OF FLORENCE AND MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM STANDARDS SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.
- L. ASPHALTIC CONCRETE SHALL CONFORM TO MAG USSD SECTION 710 MIX SPECIFICATIONS.

M. ALL CONCRETE SHALL COMPLY WITH MAG SECTION 725, CLASS-A 3000-PSI COMPRESSIVE STRENGTH AT 28 DAYS, UNLESS OTHERWISE SPECIFIED IN CONSTRUCTION PLANS. CONTRACTOR SHALL SUPPLY MIX DESIGN TO THE TOWN ENGINEER FOR APPROVAL PRIOR TO PLACEMENT. CONTRACTOR SHALL SUPPLY A COPY OF EACH BATCH TICKET TO THE TOWN ENGINEER OR HIS REPRESENTATIVE.

N. A COPY OF THE TOWN APPROVED PLANS MUST BE KEPT ON-SITE AT ALL TIMES, DURING THE COURSE OF CONSTRUCTION.

O. ALL NEWLY CONSTRUCTED PAVEMENTS SHALL RECEIVE AN APPLICATION OF SEALANT (SS1H), APPROVED IN ADVANCE BY THE TOWN ENGINEER AND PRIOR TO ACCEPTANCE INTO A WARRANTY PERIOD. HYDRANT REFLECTORS SHALL BE INSTALLED AFTER THE APPLICATION OF THE SEALANT.

P. IN THE EVENT OF ANY DISPUTE BETWEEN THESE PLANS AND MAG STANDARD SPECIFICATIONS, THESE APPROVED PLANS SHALL PREVAIL.

Q. THE CONTRACTOR IS RESPONSIBLE FOR FINAL ADJUSTMENT OF ALL MANHOLES, VALVES, CLEAN-OUTS, WATER METER BOXES, J-BOXES, ETC., AND RESTORATION OF CONSTRUCTION SITE TO MAG STANDARDS, INCLUDING ROW GRADING.

R. ENGINEER'S TESTING OF A/C MIX PRIOR TO PLACEMENT IS REQUIRED AND RESULTS ARE TO BE DELIVERED TO THE TOWN ENGINEER OR HIS REPRESENTATIVE PRIOR TO PAVING.

S. ROLLING PATTERNS REQUIRED BY THE GEO-TECHNICAL TESTING FIRM SHALL ALSO BE SUPPLIED TO THE TOWN ENGINEER'S REPRESENTATIVE.
- T. CORE TESTING OF NEWLY CONSTRUCTED ASPHALT CONCRETE SURFACES MAY BE REQUIRED AT THE DISCRETION OF THE TOWN ENGINEER. CORE TESTS ARE MANDATORY, ALONG WITH SUPPORTING MARSHALL TEST RESULTS, FOR ALL EXISTING ROADWAYS WHERE STREET CUTS ARE NECESSARY.

U. PROTECTION OF VALLEY GUTTERS, CROSS-PANS AND APRONS DURING PAVING OPERATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND ALL DAMAGED CONCRETE SHALL BE REPLACED PRIOR TO ACCEPTANCE.

V. TACK SEAL SHALL BE REQUIRED BETWEEN LIFTS UNLESS SECOND LIFT IS APPLIED ON THE SAME DAY AS FIRST LIFT AND ALL VERTICAL CONCRETE SURFACES PRIOR TO PLACEMENT OF ASPHALT. THIS REQUIREMENT ALSO APPLIES TO VERTICAL ASPHALTIC CONCRETE SURFACES AND AT ALL JOINTS OF NEW LIFTS.

W. THE SURVEYOR SHALL PERFORM INSTALLATION AND STRADDLING OF MONUMENTS. ONCE STAMPED, DATUM SHALL BE PART OF THE AS-BUILT PLANS.

X. STREET SIGN BASES, POLES AND SIGNS SHALL BE INSTALLED PRIOR TO THE FINAL WALKTHROUGH AND ACCEPTANCE INTO ANY WARRANTY PERIOD.

Y. ALL WARNING, REGULATORY AND STREET NAME SIGNS MUST BE MANUFACTURED OF "ASTM D-4956-01A-TYPE IX SHEETING" ALL OTHER SIGNS MUST BE MANUFACTURED WITH "ASTM D-4956-01A-TYPE III SHEETING" WHICH WILL BE ATTACHED TO THE STANDARD SIGN ALUMINUM PLATES. SIGN IMAGING SHALL BE IN COMPLIANCE WITH THE REFLECTIVE SHEETING MANUFACTURER'S MATCHED COMPONENT SYSTEM. SIGN IMAGING SHALL CONSIST OF AN ACRYLIC BASED ELECTRONIC FILM ABLE TO BE CUT 3M 1170 SERIES OR EQUIVALENT OR SILK-SCREENED (DEPENDING ON THE QUANTITY OF SIGNAGE) WITH STANDARD HIGHWAY COLORS. IN ADDITION, A GRAFFITI-PROTECTIVE COATING, OF A PREMIUM PROTECTIVE OVERLAY FILM, 3M 1160 OR EQUIVALENT, SHALL BE USED ON ALL REGULATORY AND WARNING SIGNS. GRAFFITI PROTECTIVE COATING MUST BE DESIGNED TO COMPLY WITH THE UNDERLYING REFLECTIVE SHEETING MATCH COMPONENT SYSTEM.

Z. ROW GRADING SHALL BE COMPLETED PRIOR TO THE FINAL WALK-THROUGH AND SHALL BE HELD ONE (1") INCH BELOW BACK OF WALK (B/W) OR TOP OF CURB (T/C).

AA. PAVING AS-BUILT PLANS SHALL BE PREPARED BY THE DESIGN ENGINEER/CONTRACTOR AND SHALL CERTIFY THAT THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED PLANS PRIOR TO REQUEST FOR FINAL INSPECTION, CERTIFICATE OF OCCUPANCY OR RELEASE OF ASSURANCE.

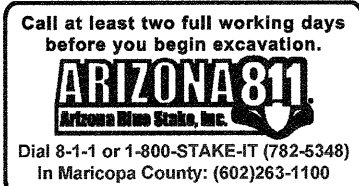
BB. FRESHLY PAVED FINISHED ROADWAY SHALL BE 1/4 "ABOVE THE LIP OF THE CONCRETE GUTTER". ASPHALT PAVING MACHINES SHALL BE EQUIPPED WITH AN ACTIVATED SCREED IN ORDER TO MAKE A FIRST PASS (RIBBON) OF 17' OR GREATER.

CC. SUB-GRADE PREPARATION FOR ALL SIDEWALKS, CURB AND GUTTER SHALL BE SCARIFIED AND LOOSENED TO A DEPTH OF 6", AND SHALL BE CONSTRUCTED TO ACHIEVE A UNIFORM MOISTURE BY THE ADDITION OF WATER. MOISTURE SHALL BE MAINTAINED 2.0 PERCENT ABOVE OPTIMUM MOISTURE PRIOR TO PLACEMENT OF CONCRETE, AND COMPACTED TO 95 PERCENT OF MAXIMUM DENSITY. ALL MATERIALS OUTSIDE THE MOISTURE LIMIT SHALL BE CONSIDERED SUBJECT TO REMOVAL.

DD. ANY PAVEMENT ADJACENT TO EXISTING ROW MUST MATCH THE EXISTING PAVEMENT DESIGN, UNLESS AUTHORIZED, IN WRITING, BY THE TOWN ENGINEER OR HIS/HER AUTHORIZED REPRESENTATIVE.

EE. FINISHED GRADE OF COMPACTED, FRESHLY PLACED ASPHALT, SHALL BE NO MORE OR NO LESS THAN ¼" INCH ABOVE THE LIP OF THE GUTTER. NO DIESEL, OR OTHER CLEANING SOLVENTS, WILL BE APPLIED TO THE PAVING HOPPER, THE SCREED, OR THE AUGER IMMEDIATELY PRIOR TO BEGINNING OF THE PAVING OPERATION.

FF. PAVING PLAN AS-BUILTS: AS-BUILT PLANS SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING: HORIZONTAL AND VERTICAL CONTROL, CHANGES TO ANY GRADE BREAK LOCATIONS, TOP OF CURB (T/C) ELEVATIONS AT EACH CURB RETURN, PROPERTY CORNER, GUTTER/FLOW LINE ELEVATIONS, SCUPPER AND CATCH BASIN INVERTS, MONUMENTATION, CROSS SLOPES, VALLEY GUTTER FLOW LINE ELEVATIONS, HYDRANT REFLECTORS AND ANY AND ALL CHANGES TO THE APPROVED PLANS.



4001 E. Paradise Falls Drive  
Tucson, Arizona 85712  
(520) 206-9585

WestLand Resources

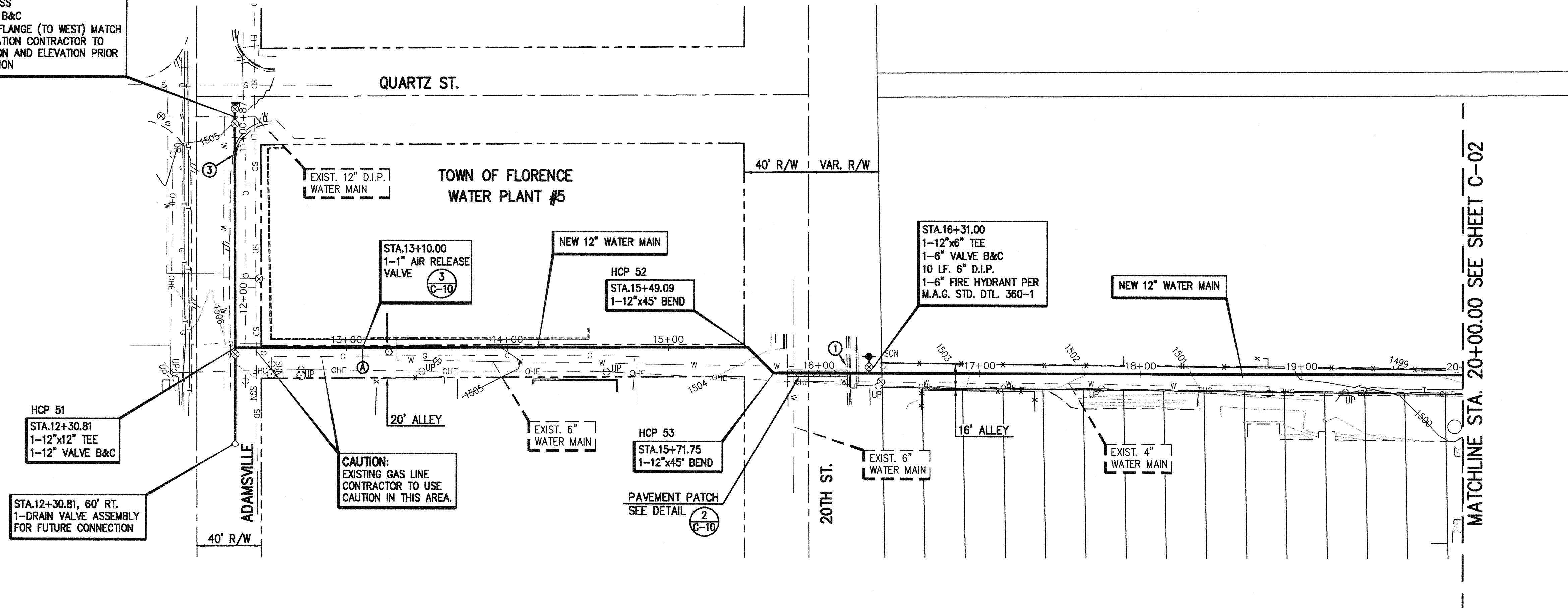
DESIGNED BY: C.C.  
DRAWN BY: G.G.F.  
CHECKED BY: T.M.B.

DRAWING SCALE(S):  
NA  
PLAN DATE:  
DECEMBER 01, 2017  
PROJECT NUMBER:  
486.05

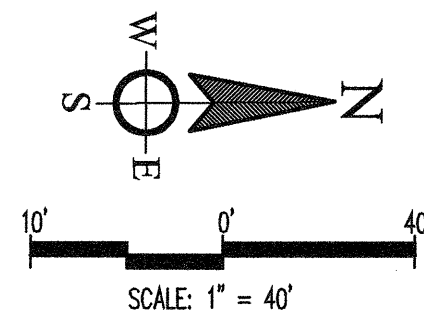
SHEET NO.  
**G-02**  
2 OF 13



HCP 50  
STA.10+87.19  
CUT IN:  
1-12"x12" CROSS  
2-12" VALVES B&C  
1-12" BLIND FLANGE (TO WEST) MATCH  
EXISTING ELEVATION CONTRACTOR TO  
VERIFY LOCATION AND ELEVATION PRIOR  
TO CONSTRUCTION



NOTES:  
1. ALL WATER MAIN STATIONING IS BASED ON CENTERLINE OF THE  
WATER MAIN UNLESS OTHERWISE NOTED.

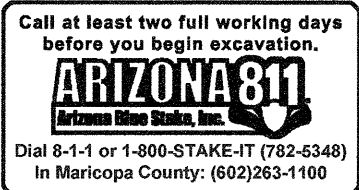
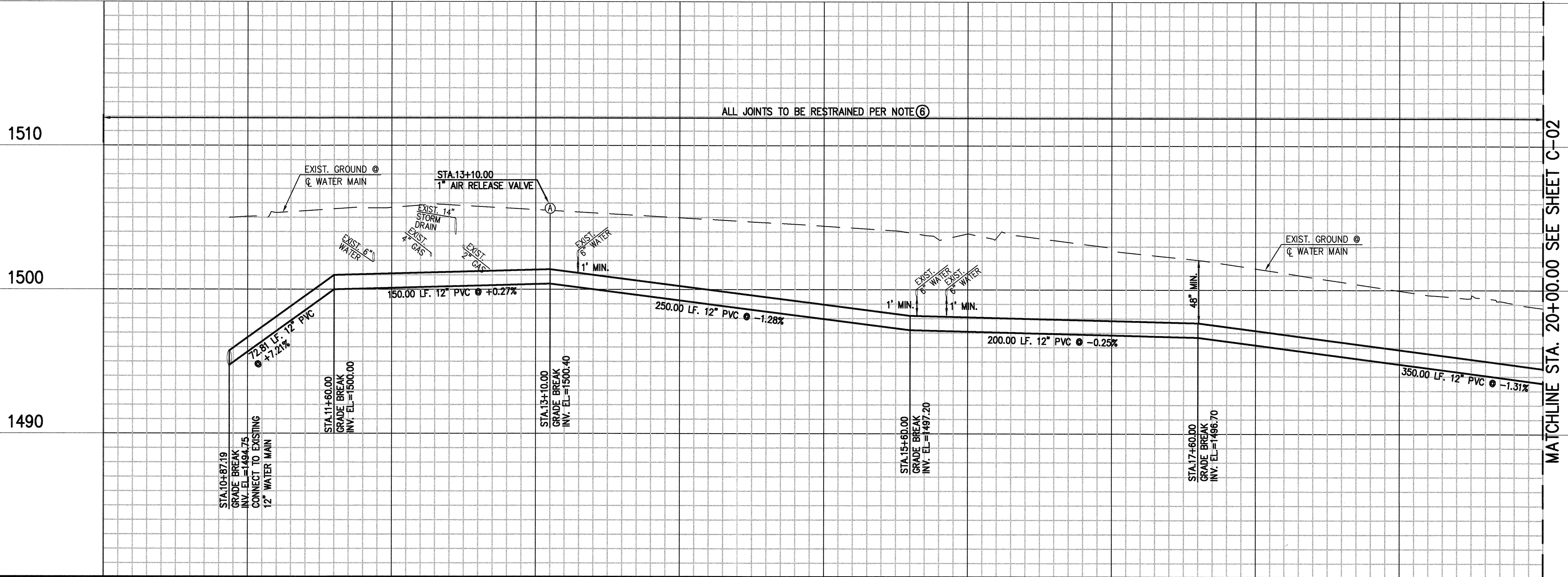


CONSTRUCTION NOTES

- 1 REMOVE AND REPLACE DRIVEWAY APRON AND  
SIDEWALK IN KIND
- 3 REMOVE AND REPLACE EXISTING VERTICAL CURB AND  
GUTTER IN KIND AS NECESSARY
- 6 ALL PIPES TO BE RESTRAINED PER MAG STANDARD  
DETAIL 303

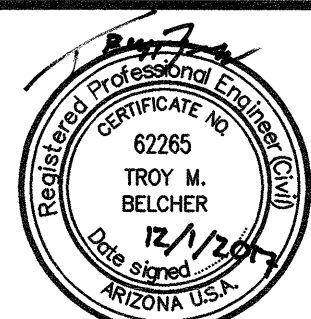
| HCP TABLE |           |           |
|-----------|-----------|-----------|
| NO.       | NORTHING  | EASTING   |
| 50        | 737566.07 | 861899.78 |
| 51        | 737566.51 | 862043.40 |
| 52        | 737884.79 | 862042.70 |
| 53        | 737900.81 | 862058.72 |

10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00



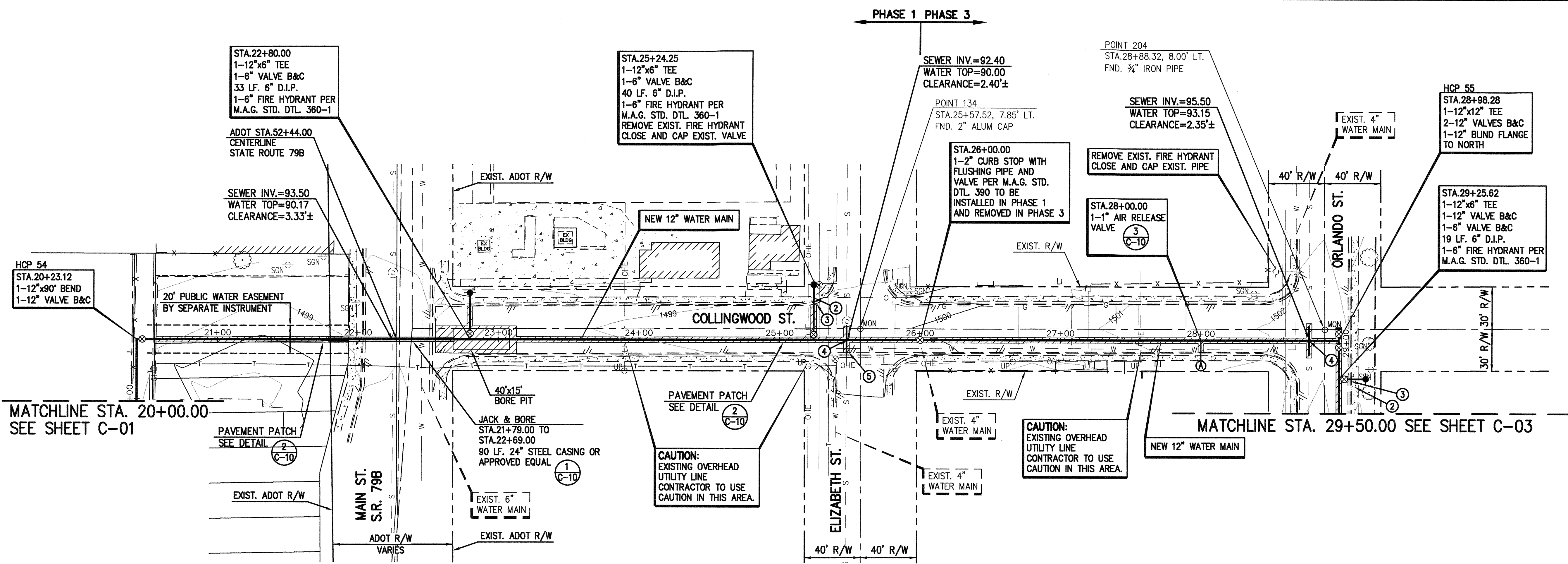
| NO.       | BY | DESCRIPTION | APP'D | DATE |
|-----------|----|-------------|-------|------|
| REVISIONS |    |             |       |      |

TOWN OF FLORENCE  
12" WATER LINE AUGMENTATION  
PLAN AND PROFILE SHEET

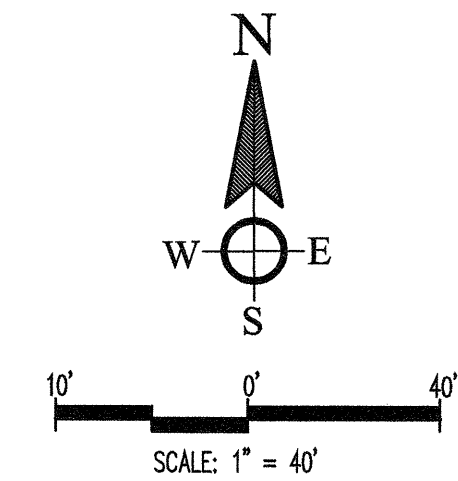


|   |                                 |                       |
|---|---------------------------------|-----------------------|
| WestLand Resources<br>4001 E. Paradise Falls Drive<br>Tucson, Arizona 85712<br>(520) 206-9585 |                                 |                       |
| DESIGNED BY:<br>C.C.  | DRAWN BY:<br>G.G.F.             | CHECKED BY:<br>T.M.B. |
| DRAWING SCALE(S):<br>1"=40'   | PLAN DATE:<br>DECEMBER 01, 2017 | SHEET NO.<br>C-01     |
| PROJECT NUMBER:<br>486.05   | 3 OF 13                         |                       |



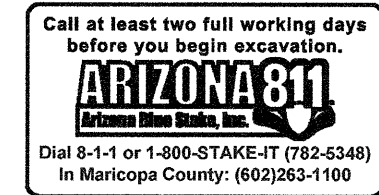
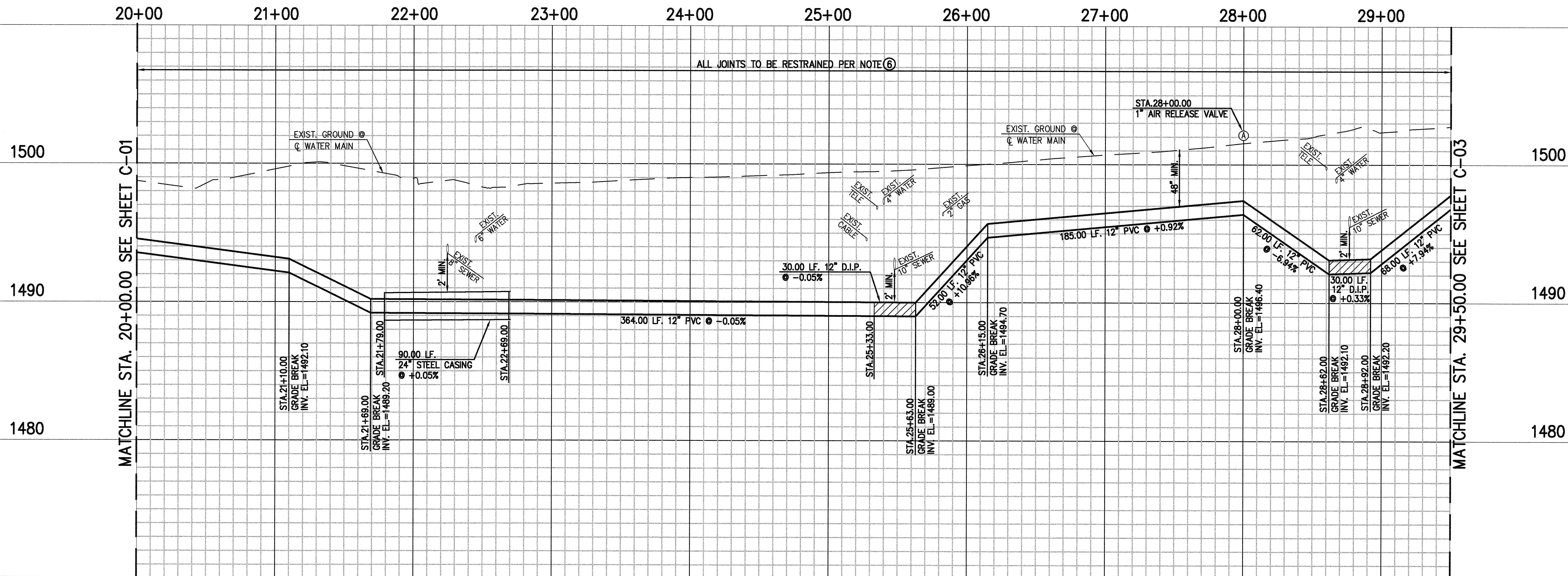


NOTES:  
1. ALL WATER MAIN STATIONING IS BASED ON CENTERLINE OF THE WATER MAIN UNLESS OTHERWISE NOTED.



- CONSTRUCTION NOTES
- 2 REMOVE AND REPLACE EXISTING SIDEWALK IN KIND AS NECESSARY
  - 3 REMOVE AND REPLACE EXISTING VERTICAL CURB AND GUTTER IN KIND AS NECESSARY
  - 4 CONCRETE ENCASE EXISTING SEWER 10' EITHER SIDE OF PROPOSED WATER MAIN CROSSING PER M.A.G. STD. DETAIL 404
  - 5 REMOVE AND REPLACE EXISTING CONCRETE VALLEY GUTTER IN KIND AS NECESSARY
  - 6 ALL PIPES TO BE RESTRAINED PER MAG STANDARD DETAIL 303

| HCP TABLE |           |           |
|-----------|-----------|-----------|
| NO.       | NORTHING  | EASTING   |
| 54        | 738371.50 | 862059.06 |
| 55        | 738371.90 | 862914.90 |



| NO.       | BY | DESCRIPTION | APP'D | DATE |
|-----------|----|-------------|-------|------|
| REVISIONS |    |             |       |      |

TOWN OF FLORENCE  
12" WATER LINE AUGMENTATION  
PLAN AND PROFILE SHEET

DESIGNED BY: G.C.C.  
DRAWN BY: T.M.B.  
CHECKED BY: T.M.B.  
SHEET NO. C-02  
4 OF 13

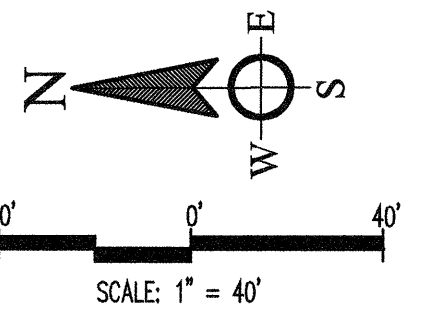
4001 E. Paradise Falls Drive  
Tucson, Arizona 85712  
(520) 206-9585

WestLand Resources

DESIGNED BY: G.C.C.  
DRAWN BY: T.M.B.  
CHECKED BY: T.M.B.  
SHEET NO. C-02  
4 OF 13

PLAN DATE: DECEMBER 01, 2017  
PROJECT NUMBER: 486.05



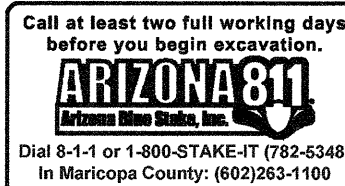


CONSTRUCTION NOTES

- ② REMOVE AND REPLACE EXISTING SIDEWALK IN KIND AS NECESSARY
- ③ REMOVE AND REPLACE EXISTING VERTICAL CURB AND GUTTER IN KIND AS NECESSARY
- ④ CONCRETE ENCASE EXISTING SEWER 10' EITHER SIDE OF PROPOSED WATER MAIN CROSSING PER M.A.G. STD. DETAIL 404
- ⑤ REMOVE AND REPLACE EXISTING CONCRETE VALLEY GUTTER IN KIND AS NECESSARY
- ⑥ ALL PIPES TO BE RESTRAINED PER MAG STANDARD DETAIL 303

HCP TABLE

| NO. | NORTHING  | EASTING   |
|-----|-----------|-----------|
| 56  | 737750.21 | 862915.35 |



| NO. | BY | DESCRIPTION | APP'D | DATE |
|-----|----|-------------|-------|------|
|-----|----|-------------|-------|------|

REVISIONS

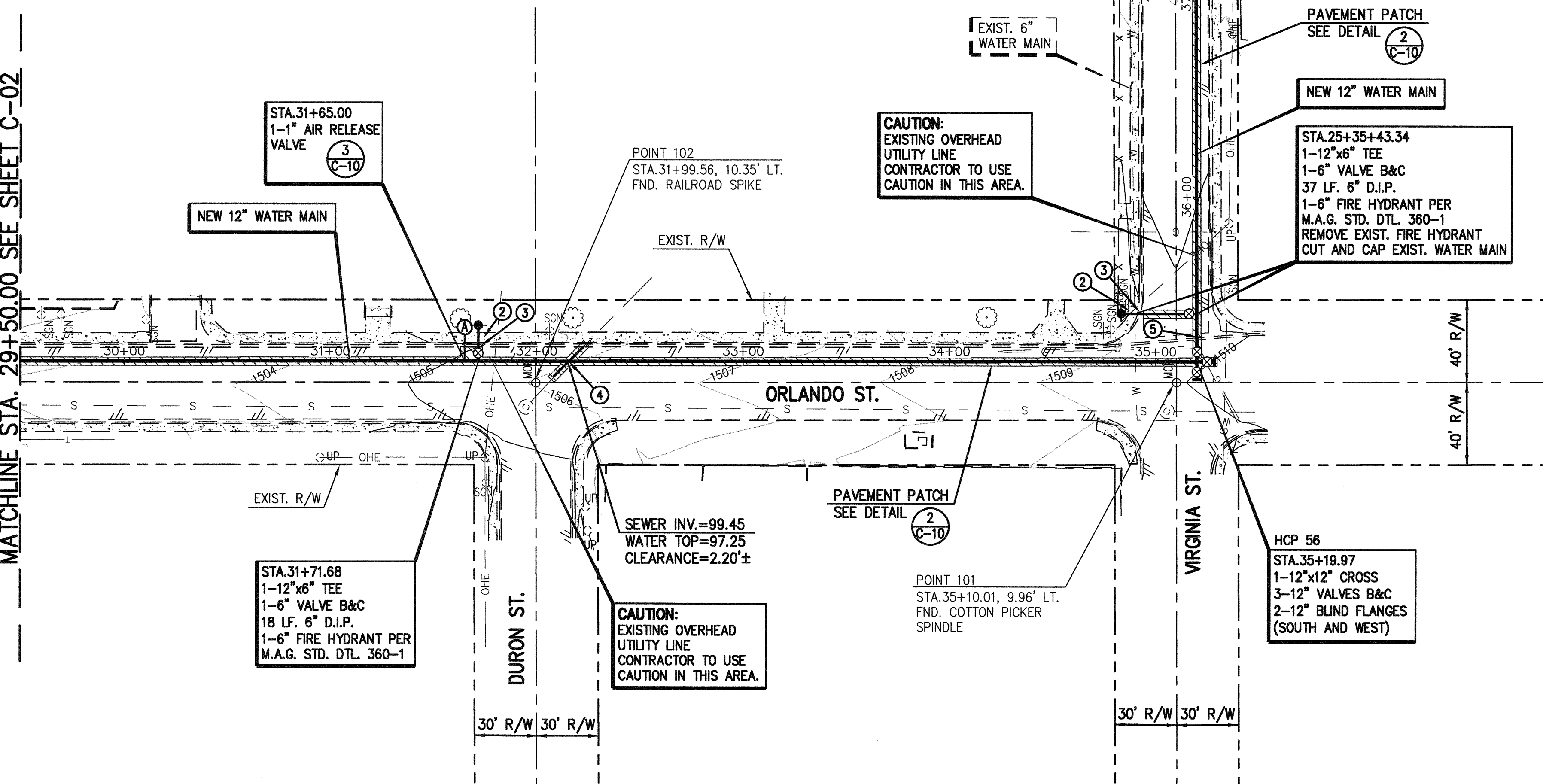
TOWN OF FLORENCE  
12" WATER LINE AUGMENTATION  
PLAN AND PROFILE SHEET



4001 E. Paradise Falls Drive  
Tucson, Arizona 85712  
(520) 206-9585  
WestLand Resources  
DESIGNED BY: C.C. C.C.  
DRAWN BY: TROY M. BELCHER  
CHECKED BY: T.M.B.  
SHEET NO. C-03  
12/1/2017  
DECEMBER 01, 2017  
PROJECT NUMBER: 486.05  
5 OF 13

MATCHLINE STA. 37+00.00 SEE SHEET C-04

MATCHLINE STA. 29+50.00 SEE SHEET C-02



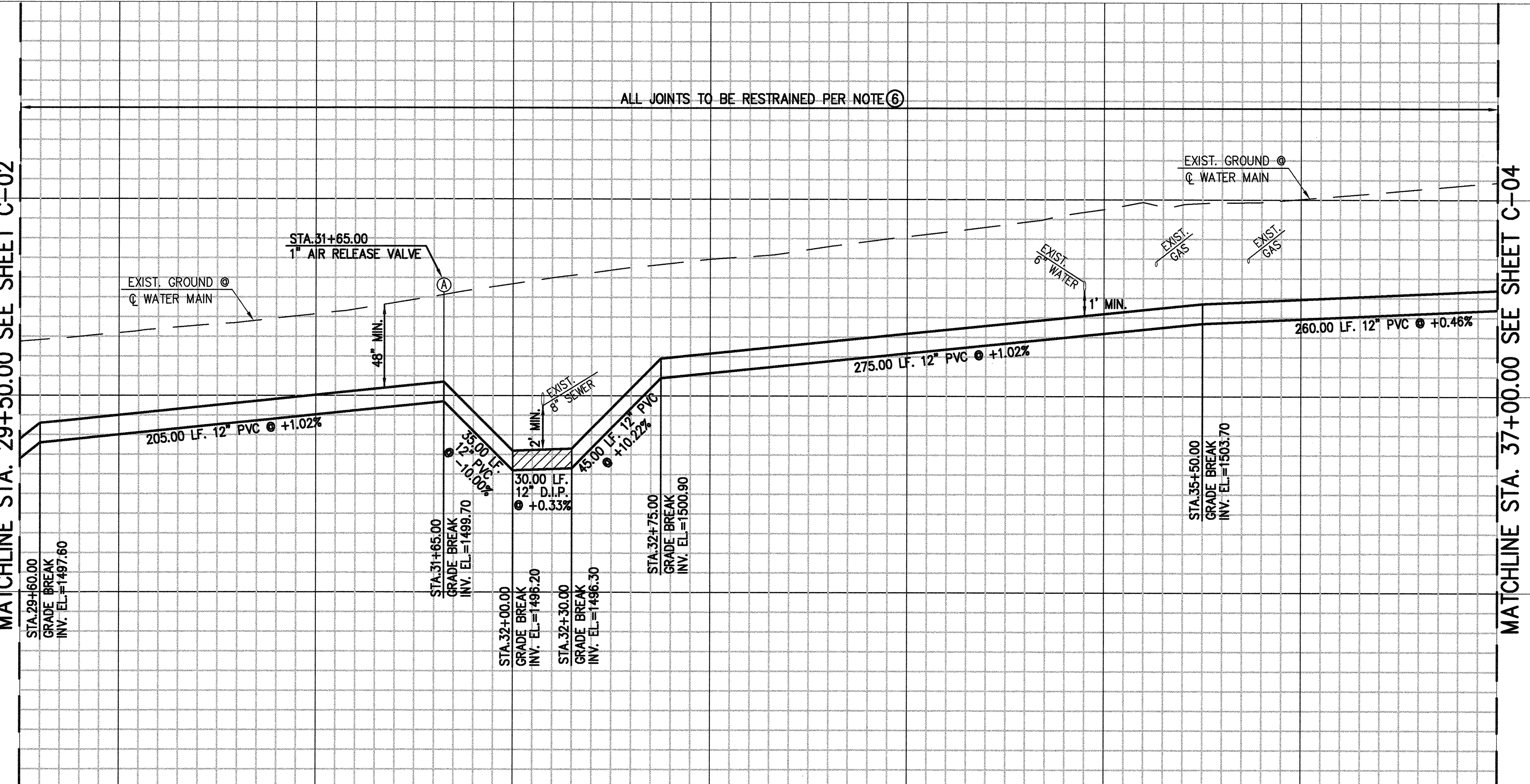
- NOTES:
1. ALL WATER MAIN STATIONING IS BASED ON CENTERLINE OF THE WATER MAIN UNLESS OTHERWISE NOTED.

30+00 31+00 32+00 33+00 34+00 35+00 36+00 37+00

1510

1500

1490

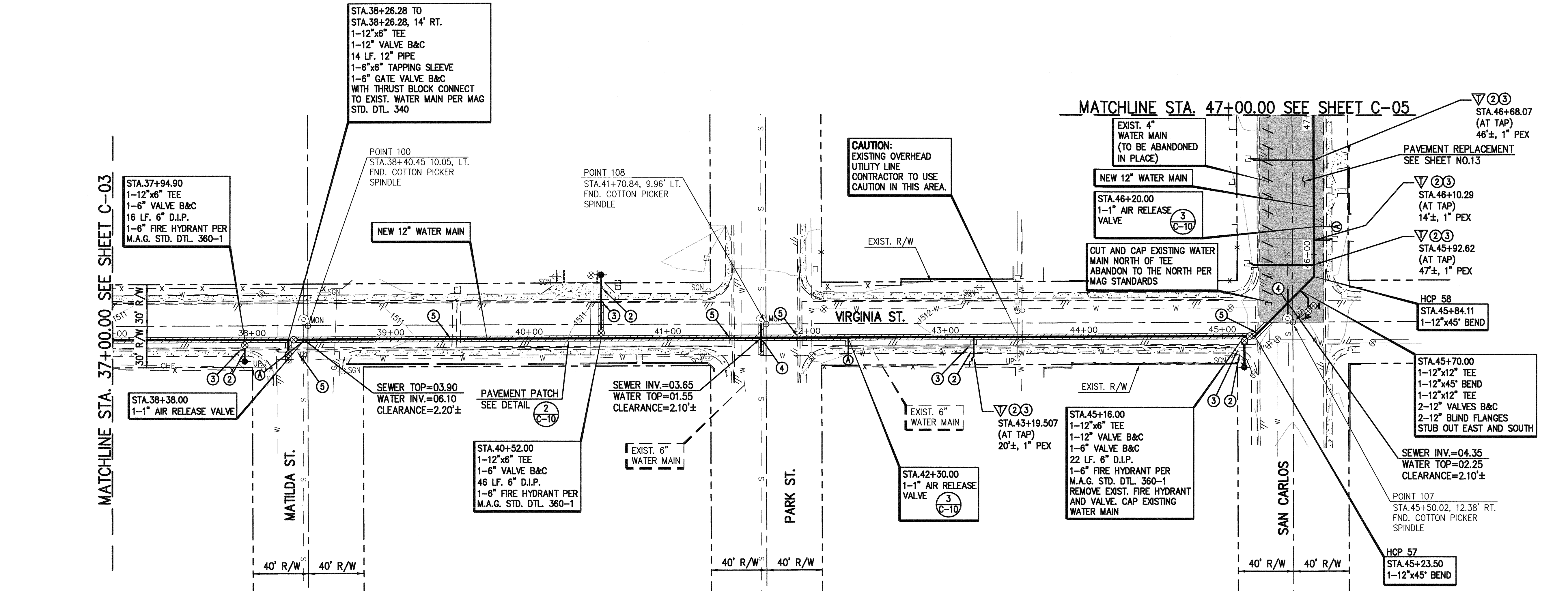


MATCHLINE STA. 37+00.00 SEE SHEET C-04

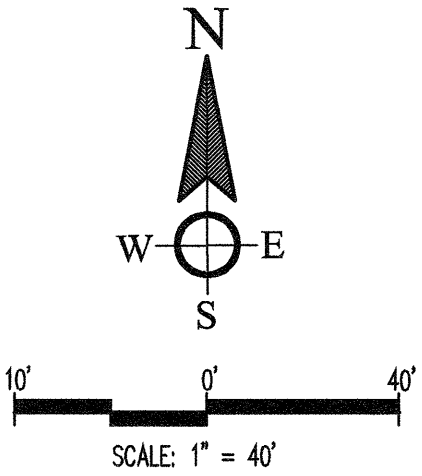
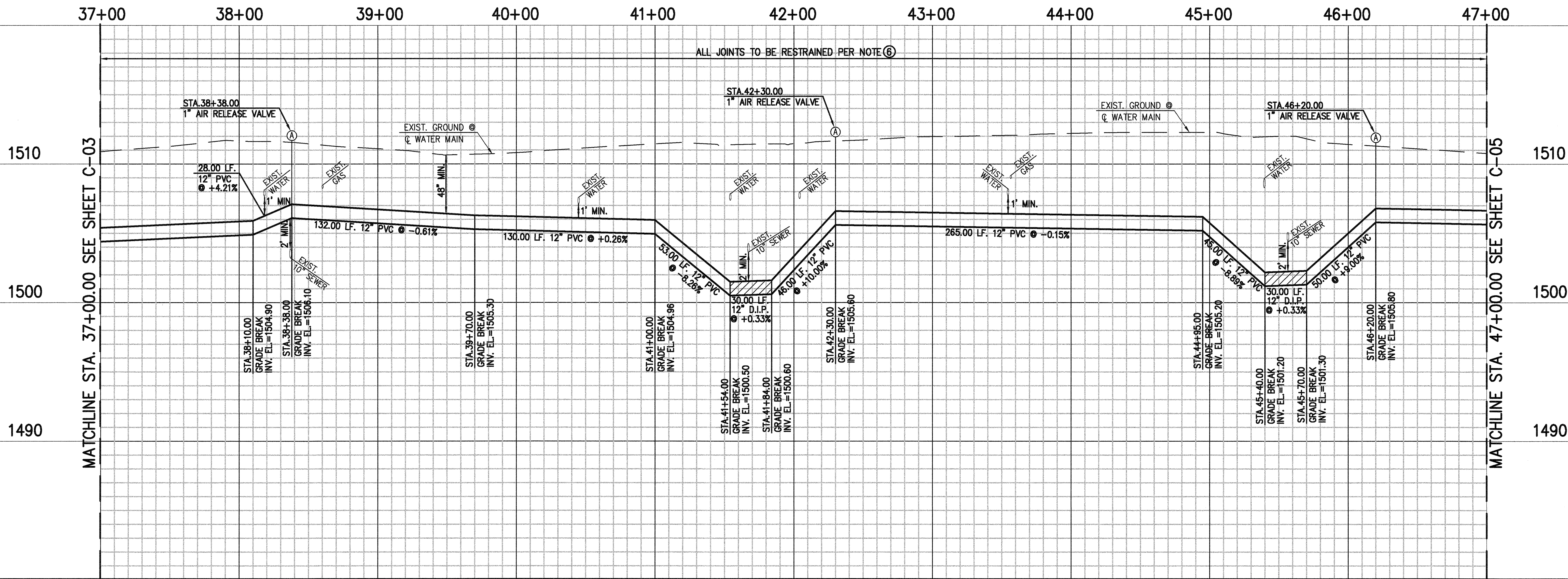
M:\Jobs\400\A\486.05\ENG\Deliverables\486.05-C-03.dwg Dec 01, 2017 - 10:36am gfarfard



M:\Jobs\4001\4001.dwg (ENR) Deliverables\4001-05-C-04.dwg Dec 01, 2017 - 12:3pm gford



NOTES:  
1. ALL WATER MAIN STATIONING IS BASED ON CENTERLINE OF THE WATER MAIN UNLESS OTHERWISE NOTED.



CONSTRUCTION NOTES

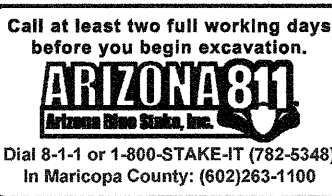
- REMOVE AND REPLACE EXISTING SIDEWALK IN KIND AS NECESSARY
- REMOVE AND REPLACE EXISTING VERTICAL CURB AND GUTTER IN KIND AS NECESSARY
- CONCRETE ENCASE EXISTING SEWER 10' EITHER SIDE OF PROPOSED WATER MAIN CROSSING PER M.A.G. STD. DETAIL 404
- REMOVE AND REPLACE EXISTING CONCRETE VALLEY GUTTER IN KIND AS NECESSARY
- ALL PIPES TO BE RESTRAINED PER MAG STANDARD DETAIL 303
- ALL SERVICE TIE OVERS PER DETAIL 4, SHEET C-10.

GENERAL NOTES

- CONTRACTOR TO MAINTAIN WATER SERVICE TO HOMES THROUGHOUT THE DURATION OF THE PROJECT. IF SERVICE SHUT DOWNS ARE REQUIRED A MINIMUM OF 30 DAY NOTICE SHALL BE PROVIDED TO THE AFFECTED RESIDENCE.

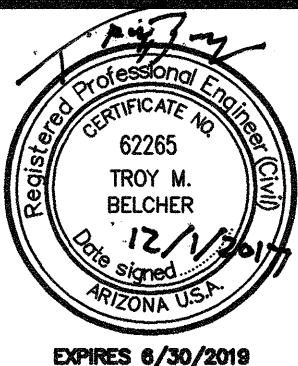
HCP TABLE

| NO. | NORTHING  | EASTING   |
|-----|-----------|-----------|
| 57  | 737754.07 | 863918.87 |
| 58  | 737797.09 | 863961.56 |



| NO.       | BY | DESCRIPTION | APP'D | DATE |
|-----------|----|-------------|-------|------|
| REVISIONS |    |             |       |      |

TOWN OF FLORENCE  
12" WATER LINE AUGMENTATION  
PLAN AND PROFILE SHEET



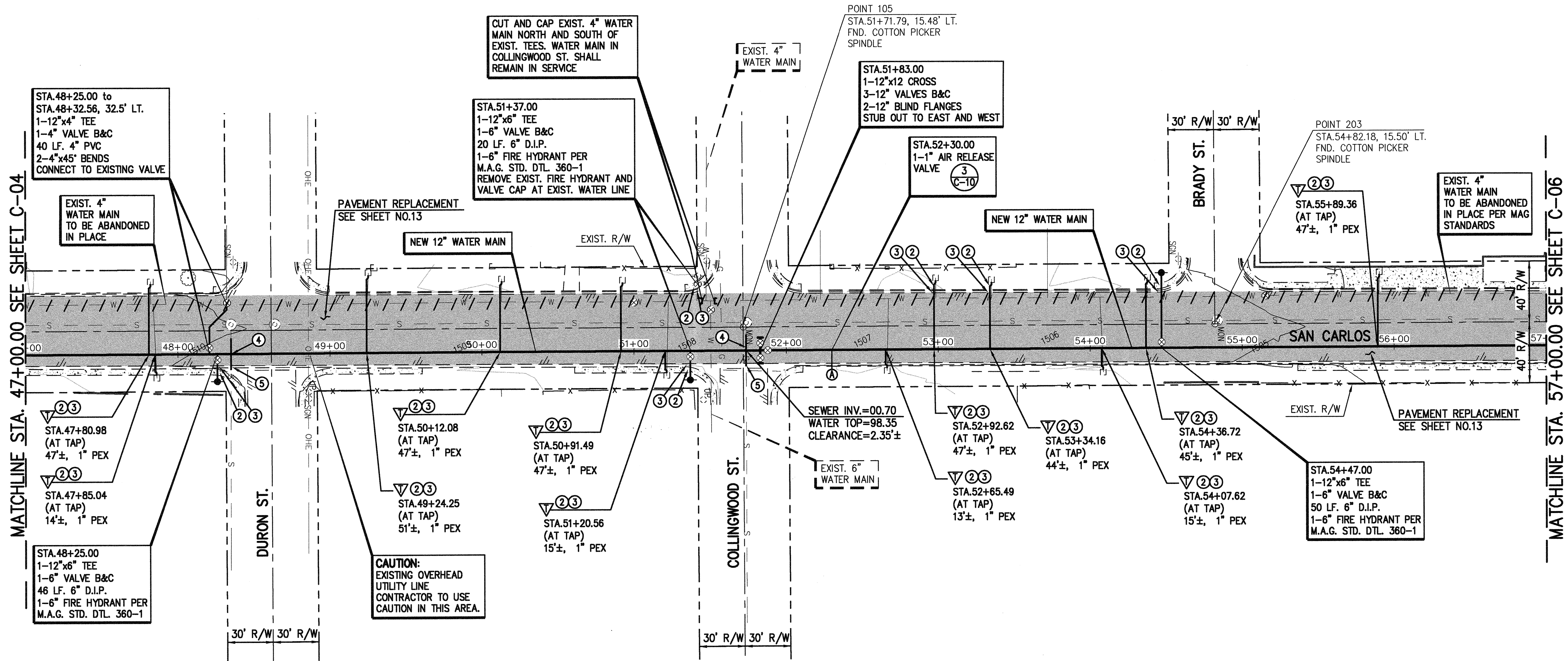
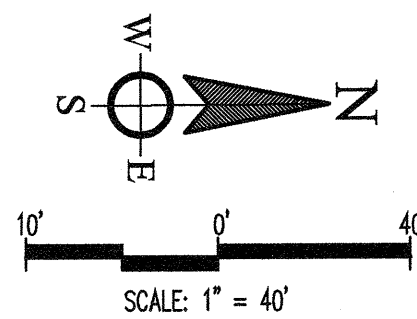
|                                 |                           |                       |
|---------------------------------|---------------------------|-----------------------|
| DESIGNED BY:<br>C.C.            | DRAWN BY:<br>G.G.F.       | CHECKED BY:<br>T.M.B. |
| DRAWING SCALE(S):<br>1"=40'     | SHEET NO.<br>C-04         |                       |
| PLAN DATE:<br>DECEMBER 01, 2017 | PROJECT NUMBER:<br>486.05 |                       |
| EXPIRES 6/30/2019               |                           | 6 OF 13               |



M:\Jobs\4001\486.05\ENR\Deliverables\486.05-C-05.dwg Dec 01, 2017 - 10:42am gford

MATCHLINE STA. 47+00.00 SEE SHEET C-04

MATCHLINE STA. 57+00.00 SEE SHEET C-06



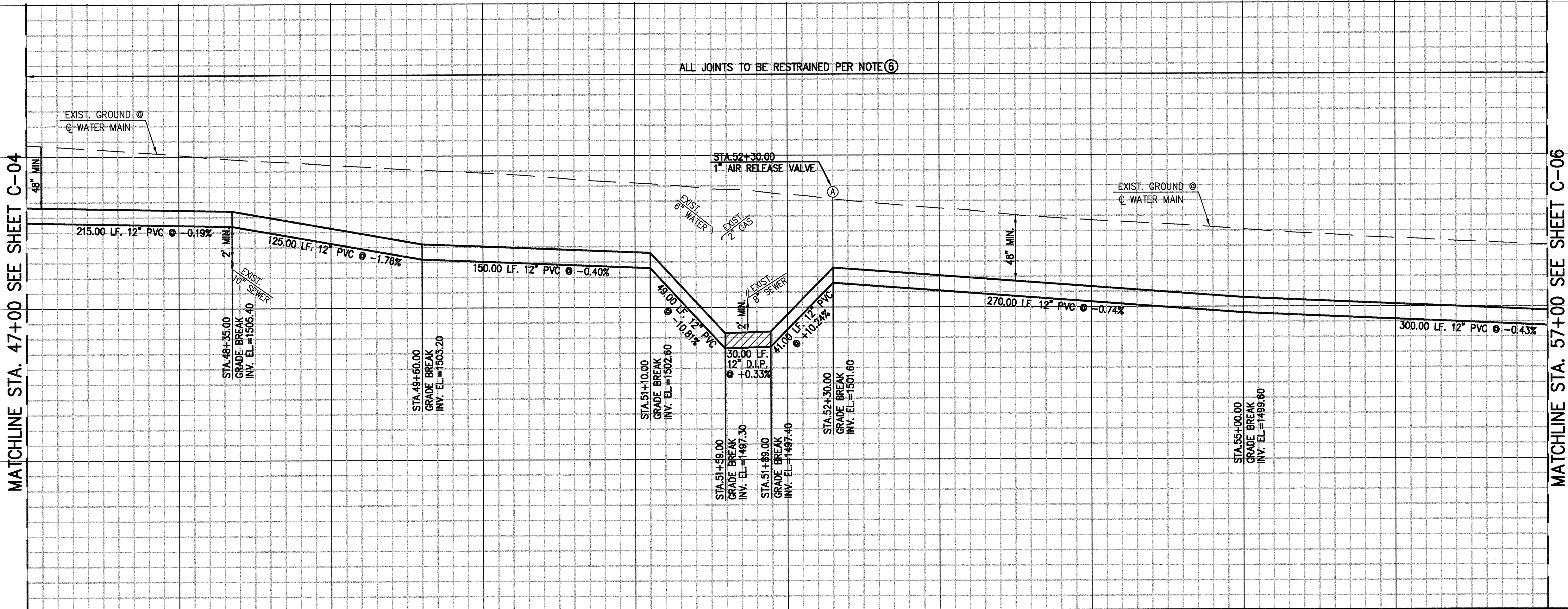
NOTES:

1. ALL WATER MAIN STATIONING IS BASED ON CENTERLINE OF THE WATER MAIN UNLESS OTHERWISE NOTED.

47+00 48+00 49+00 50+00 51+00 52+00 53+00 54+00 55+00 56+00 57+00

MATCHLINE STA. 47+00 SEE SHEET C-04

MATCHLINE STA. 57+00 SEE SHEET C-06

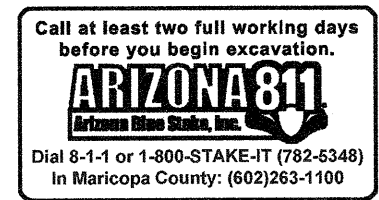


CONSTRUCTION NOTES

- 2 REMOVE AND REPLACE EXISTING SIDEWALK IN KIND AS NECESSARY
- 3 REMOVE AND REPLACE EXISTING VERTICAL CURB AND GUTTER IN KIND AS NECESSARY
- 4 CONCRETE ENCASE EXISTING SEWER 10" EITHER SIDE OF PROPOSED WATER MAIN CROSSING PER M.A.G. STD. DETAIL 404
- 5 REMOVE AND REPLACE EXISTING CONCRETE VALLEY GUTTER IN KIND AS NECESSARY
- 6 ALL PIPES TO BE RESTRAINED PER MAG STANDARD DETAIL 303
- 7 ALL SERVICE TIE OVERTS PER DETAIL 4, SHEET C-10.

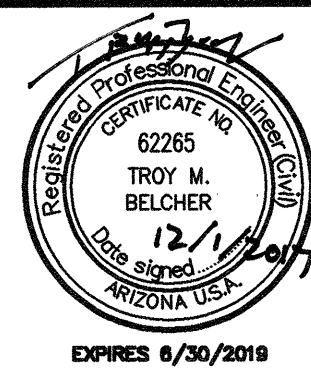
GENERAL NOTES

1. CONTRACTOR TO MAINTAIN WATER SERVICE TO HOMES THROUGHOUT THE DURATION OF THE PROJECT. IF SERVICE SHUT DOWNS ARE REQUIRED A MINIMUM OF 30 DAY NOTICE SHALL BE PROVIDED TO THE AFFECTED RESIDENCE.



| NO. | BY | DESCRIPTION | APP'D | DATE |
|-----|----|-------------|-------|------|
|-----|----|-------------|-------|------|

TOWN OF FLORENCE  
12" WATER LINE AUGMENTATION  
PLAN AND PROFILE SHEET



4001 E. Paradise Falls Drive  
Tucson, Arizona 85712  
(520) 206-9585  
DESIGNED BY: C.C. DRAWN BY: G.G.F. CHECKED BY: T.M.B.  
DRAWING SCALE(S): 1"=40' SHEET NO. C-05  
PLAN DATE: DECEMBER 01, 2017  
PROJECT NUMBER: 486.05 7 OF 13



M:\Jobs\4001\486.05\ENG\Deliverables\486.05-C-06.dwg Dec 01, 2017 10:47am gldand

MATCHLINE STA. 57+00.00 SEE SHEET C-05

57+00

58+00

59+00

60+00

61+00

62+00

63+00

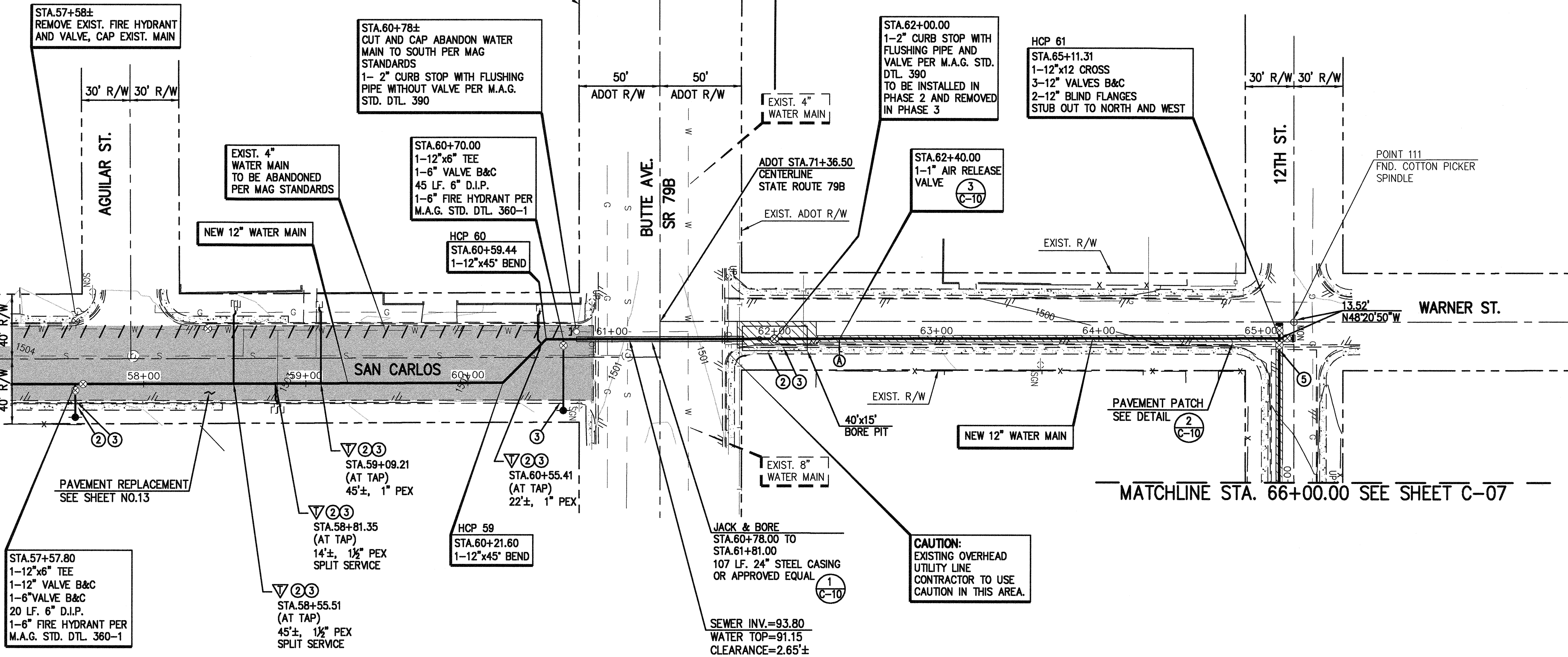
64+00

65+00

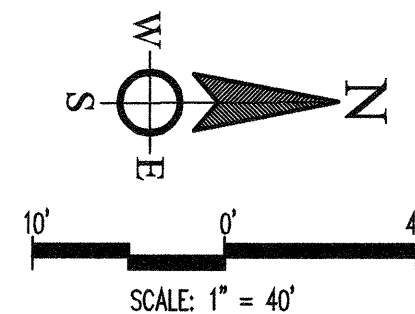
66+00

MATCHLINE STA. 57+00.00 SEE SHEET C-05

- NOTES:
1. ALL WATER MAIN STATIONING IS BASED ON CENTERLINE OF THE WATER MAIN UNLESS OTHERWISE NOTED.



MATCHLINE STA. 66+00.00 SEE SHEET C-07



#### CONSTRUCTION NOTES

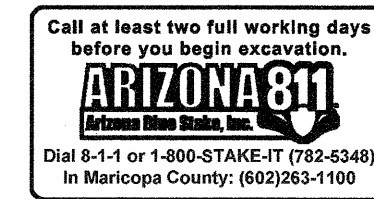
2. REMOVE AND REPLACE EXISTING SIDEWALK IN KIND AS NECESSARY
3. REMOVE AND REPLACE EXISTING VERTICAL CURB AND GUTTER IN KIND AS NECESSARY
5. REMOVE AND REPLACE EXISTING CONCRETE VALLEY GUTTER IN KIND AS NECESSARY
6. ALL PIPES TO BE RESTRAINED PER MAG STANDARD DETAIL 303
7. ALL SERVICE TIE OVERS PER DETAIL 4, SHEET C-10.

#### GENERAL NOTES

1. CONTRACTOR TO MAINTAIN WATER SERVICE TO HOMES THROUGHOUT THE DURATION OF THE PROJECT. IF SERVICE SHUT DOWNS ARE REQUIRED A MINIMUM OF 30 DAY NOTICE SHALL BE PROVIDED TO THE AFFECTED RESIDENCE.

#### HCP TABLE

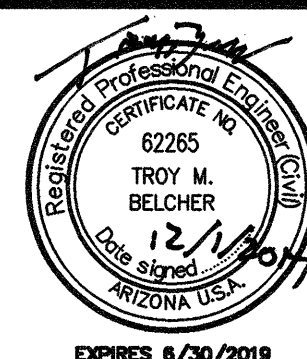
| NO. | NORTHING  | EASTING   |
|-----|-----------|-----------|
| 59  | 739234.57 | 863956.31 |
| 60  | 739261.26 | 863929.47 |
| 61  | 739713.12 | 863928.24 |



| NO. | BY | DESCRIPTION | APP'D | DATE |
|-----|----|-------------|-------|------|
|-----|----|-------------|-------|------|

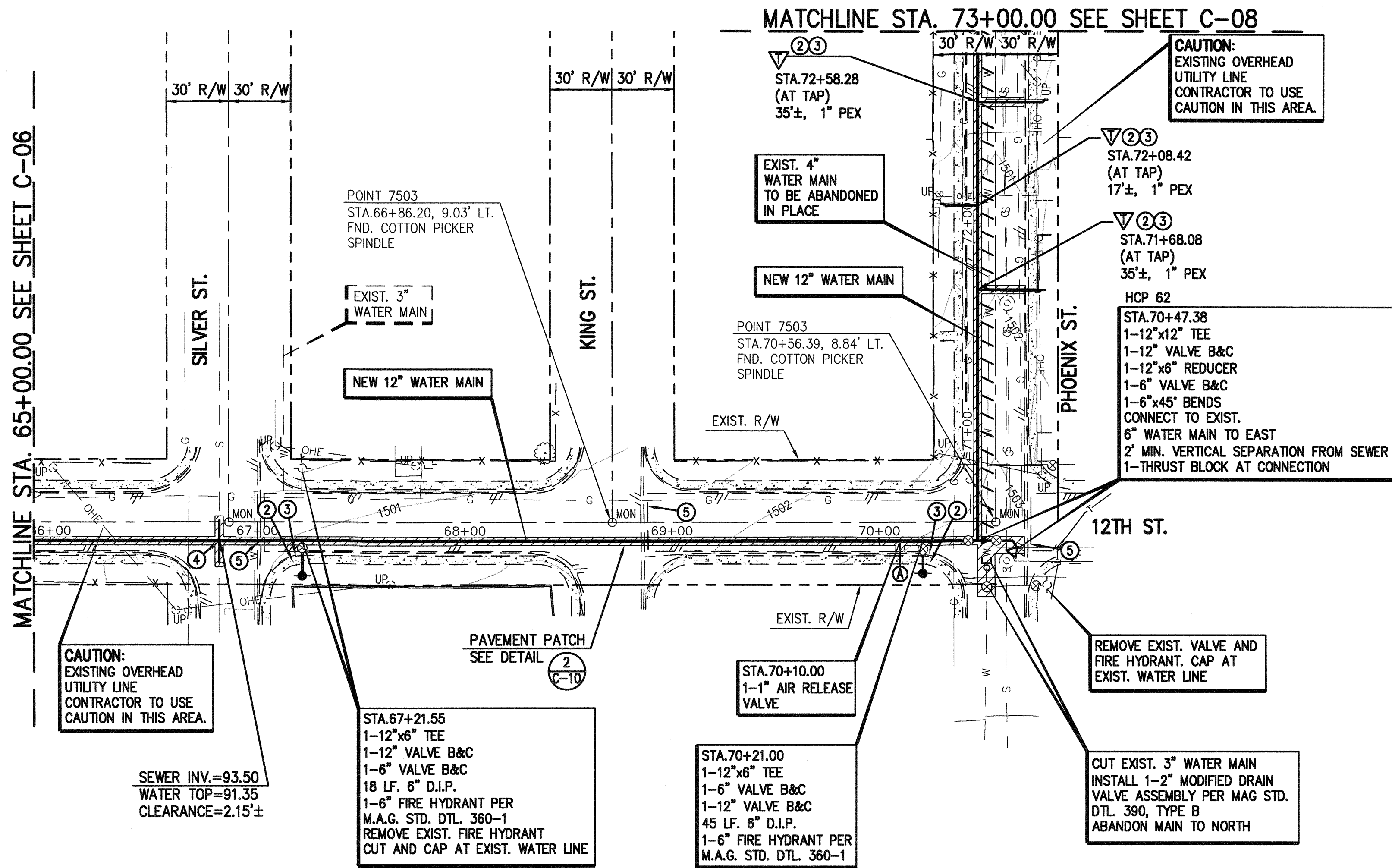
#### REVISIONS

### TOWN OF FLORENCE 12" WATER LINE AUGMENTATION PLAN AND PROFILE SHEET



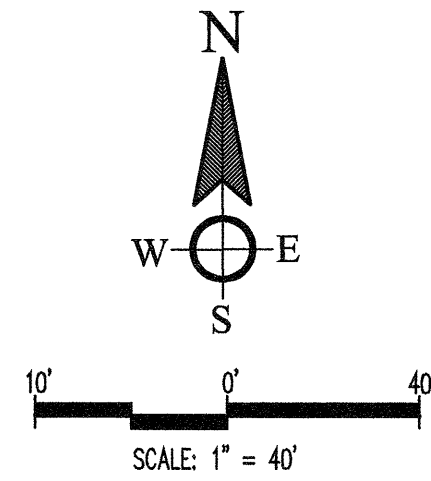
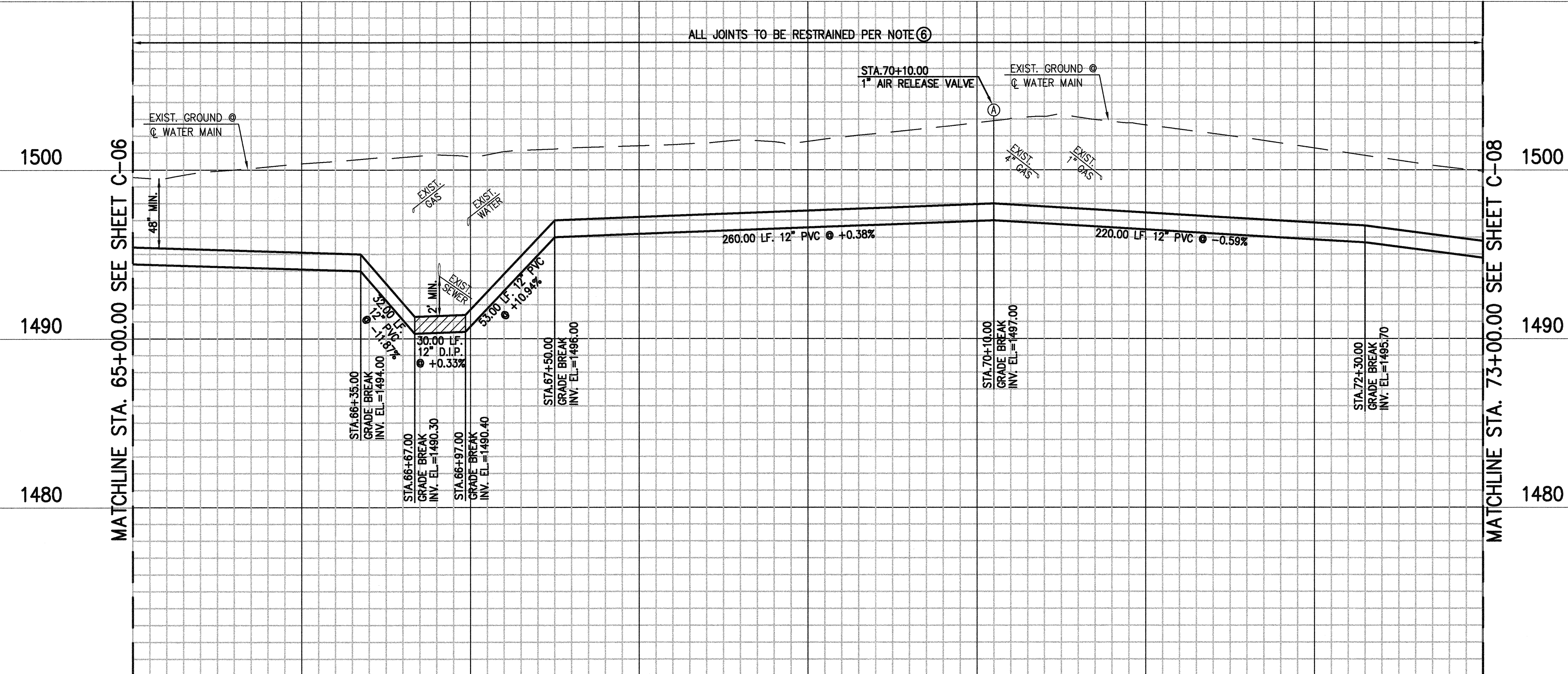
|                             |                                 |                       |
|-----------------------------|---------------------------------|-----------------------|
| DESIGNED BY:<br>C.C.        | DRAWN BY:<br>G.G.F.             | CHECKED BY:<br>T.M.B. |
| DRAWING SCALE(S):<br>1"=40' | PLAN DATE:<br>DECEMBER 01, 2017 | SHEET NO.<br>C-06     |
| PROJECT NUMBER:<br>486.05   |                                 | 8 OF 13               |





NOTES:  
1. ALL WATER MAIN STATIONING IS BASED ON CENTERLINE OF THE WATER MAIN UNLESS OTHERWISE NOTED.

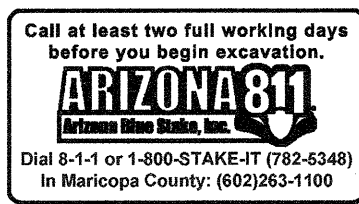
65+00      66+00      67+00      68+00      69+00      70+00      71+00      72+00      73+00



- CONSTRUCTION NOTES
- REMOVE AND REPLACE EXISTING SIDEWALK IN KIND AS NECESSARY
  - REMOVE AND REPLACE EXISTING VERTICAL CURB AND GUTTER IN KIND AS NECESSARY
  - CONCRETE ENCASE EXISTING SEWER 10' EITHER SIDE OF PROPOSED WATER MAIN CROSSING PER M.A.G. STD. DETAIL 404
  - REMOVE AND REPLACE EXISTING CONCRETE VALLEY GUTTER IN KIND AS NECESSARY
  - ALL PIPES TO BE RESTRAINED PER MAG STANDARD DETAIL 303
  - ALL SERVICE TIE OVERS PER DETAIL 4, SHEET C-10.

- GENERAL NOTES
- CONTRACTOR TO MAINTAIN WATER SERVICE TO HOMES THROUGHOUT THE DURATION OF THE PROJECT. IF SERVICE SHUT DOWNS ARE REQUIRED A MINIMUM OF 30 DAY NOTICE SHALL BE PROVIDED TO THE AFFECTED RESIDENCE.

| HCP TABLE |           |           |
|-----------|-----------|-----------|
| NO.       | NORTHING  | EASTING   |
| 62        | 739713.52 | 864464.31 |



| NO.       | BY | DESCRIPTION | APP'D | DATE |
|-----------|----|-------------|-------|------|
| REVISIONS |    |             |       |      |

TOWN OF FLORENCE  
12" WATER LINE AUGMENTATION  
PLAN AND PROFILE SHEET

DESIGNED BY: C.C.  
DRAWN BY: G.G.F.  
CHECKED BY: T.M.B.  
DRAFTING SCALE(S): 1"=40'  
PLAN DATE: DECEMBER 01, 2017  
PROJECT NUMBER: 486.05

4001 E. Paradise Falls Drive  
Tucson, Arizona 85712  
(520) 206-9685

WestLand Resources

SHEET NO. C-07  
9 OF 13



MATCHLINE STA. 73+00.00 SEE SHEET C-07

73+00

74+00

75+00

76+00

77+00

78+00

79+00

80+00

81+00

82+00

83+00

MATCHLINE STA. 73+00.00 SEE SHEET C-07

1500

1490

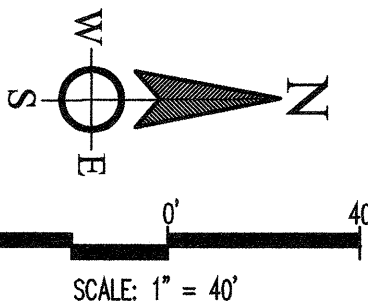
1480

MATCHLINE STA. 83+00.00 SEE SHEET C-09

1500

1490

1480



### CONSTRUCTION NOTES

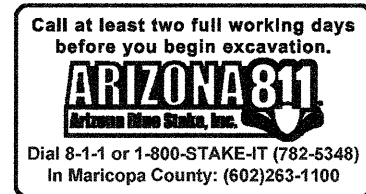
- REMOVE AND REPLACE EXISTING SIDEWALK IN KIND AS NECESSARY
- REMOVE AND REPLACE EXISTING VERTICAL CURB AND GUTTER IN KIND AS NECESSARY
- CONCRETE ENCASE EXISTING SEWER 10' EITHER SIDE OF PROPOSED WATER MAIN CROSSING PER M.A.G. STD. DETAIL 404
- REMOVE AND REPLACE EXISTING CONCRETE VALLEY GUTTER IN KIND AS NECESSARY
- ALL PIPES TO BE RESTRAINED PER MAG STANDARD DETAIL 303
- ALL SERVICE TIE OVERS PER DETAIL 4, SHEET C-10.

### GENERAL NOTES

- CONTRACTOR TO MAINTAIN WATER SERVICE TO HOMES THROUGHOUT THE DURATION OF THE PROJECT. IF SERVICE SHUT DOWNS ARE REQUIRED A MINIMUM OF 30 DAY NOTICE SHALL BE PROVIDED TO THE AFFECTED RESIDENCE.

### HCP TABLE

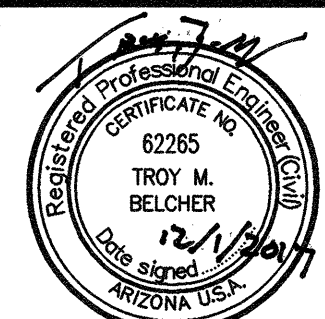
| NO. | NORTHING  | EASTING   |
|-----|-----------|-----------|
| 63  | 740476.08 | 864464.31 |
| 64  | 740492.72 | 864480.95 |



| NO. | BY | DESCRIPTION | APP'D | DATE |
|-----|----|-------------|-------|------|
|-----|----|-------------|-------|------|

### REVISIONS

## TOWN OF FLORENCE 12" WATER LINE AUGMENTATION PLAN AND PROFILE SHEET



|                             |                                 |                       |
|-----------------------------|---------------------------------|-----------------------|
| DESIGNED BY:<br>C.C.        | DRAWN BY:<br>G.G.F.             | CHECKED BY:<br>T.M.B. |
| DRAWING SCALE(S):<br>1"=40' | PLAN DATE:<br>DECEMBER 01, 2017 | SHEET NO.:<br>C-08    |
| PROJECT NUMBER:<br>486.05   | EXPIRES: 8/30/2019              | 10 OF 13              |

- NOTES:
- ALL WATER MAIN STATIONING IS BASED ON CENTERLINE OF THE WATER MAIN UNLESS OTHERWISE NOTED.

STA.77+91.00  
1-12"x12" CROSS  
3-12" VALVES B&C  
2-12" BLIND FLANGES ON  
STUB OUT TO EAST AND WEST

CUT AND CAP EXISTING  
WATER MAIN AT TEE AND  
CAP PIPE TO SOUTH  
ABANDON PIPE TO SOUTH  
PER MAG STANDARDS  
WATER MAIN IN 8TH STREET  
TO REMAIN IN SERVICE

HCP 63  
STA.78+09.94  
1-12"x45" BEND

SEWER INV.=86.60  
WATER TOP=84.30  
CLEARANCE=2.30'±

HCP 64  
STA.78+33.47  
1-12"x45" BEND

STA.81+38.00  
1-12"x6" TEE  
1-6" VALVE B&C  
16 LF. 6" D.I.P.  
1-6" FIRE HYDRANT PER  
M.A.G. STD. DTL. 360-1

SEWER INV.=83.50  
WATER TOP=81.25  
CLEARANCE=2.25'±

POINT 121  
STA.81+73.30, 9.33' LT.  
FND. COTTON PICKER  
SPINDLE

STA.82+15.00  
1-1" AIR RELEASE  
VALVE

STA.78+44.50  
1-12"x6" TEE  
1-6" VALVE B&C  
17 LF. 6" D.I.P.  
1-6" FIRE HYDRANT PER  
M.A.G. STD. DTL. 360-1

STA.74+72.40  
1-12"x6" TEE  
1-6" VALVE B&C  
20 LF. 6" D.I.P.  
1-6" FIRE HYDRANT PER  
M.A.G. STD. DTL. 360-1  
REMOVE EXIST. FIRE HYDRANT CUT  
AND CAP AT EXIST. WATER LINE

EXIST. 4" WATER MAIN  
TO BE ABANDONED  
IN PLACE

STA.75+40.24  
(AT TAP)  
17'±, 1" PEX

STA.77+32.12  
(AT TAP)  
18'±, 1" PEX

STA.76+22.86  
(AT TAP)  
35'±, 1" PEX

STA.73+01.60  
(AT TAP)  
17'±, 1" PEX

STA.73+64.11  
(AT TAP)  
17'±, 1" PEX

STA.73+85.57  
(AT TAP)  
35'±, 1" PEX

POINT 120  
STA.77+96.35, 8.34' LT.  
FND. COTTON PICKER  
SPINDLE

ALL JOINTS TO BE RESTRAINED PER NOTE ⑥

EXIST. GROUND  
Q WATER MAIN

520.00 LF. 12" PVC @ -1.31%

EXIST. 2" GAS

EXIST. WATER

EXIST. GROUND  
Q WATER MAIN

STA.82+15.00  
1" AIR RELEASE VALVE

STA.77+50.00  
GRADE BREAK  
INV. EL.=1486.90

STA.78+05.00  
GRADE BREAK  
INV. EL.=1483.30

STA.81+00.00  
GRADE BREAK  
INV. EL.=1483.00

STA.81+38.00  
GRADE BREAK  
INV. EL.=1480.20

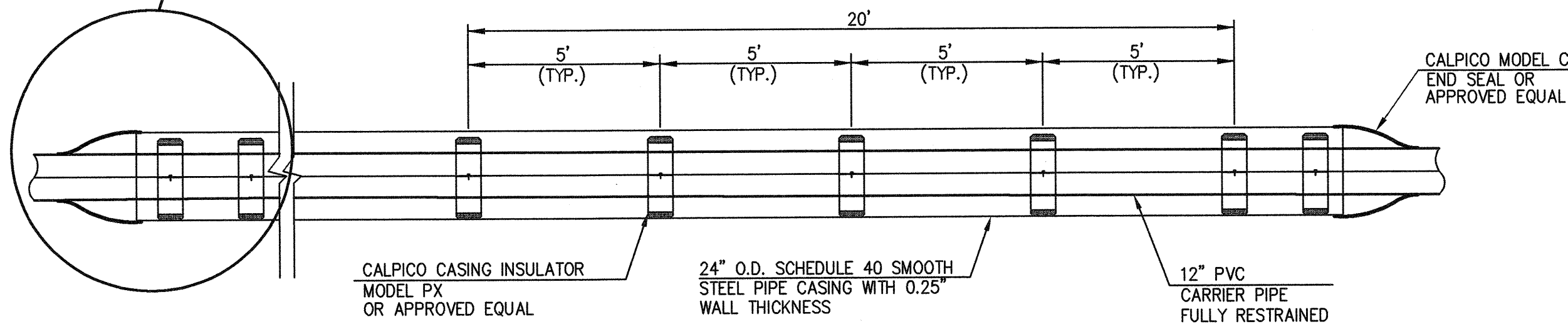
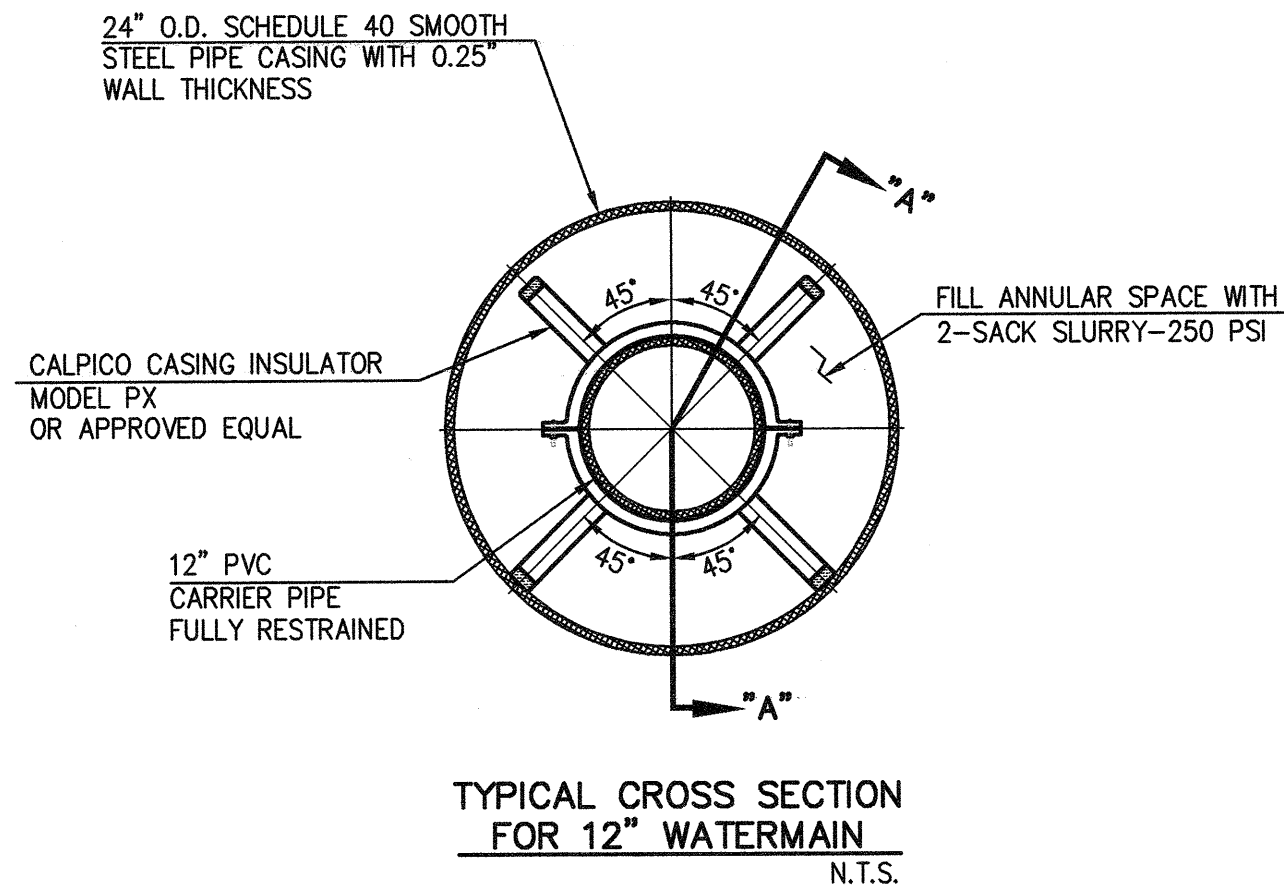
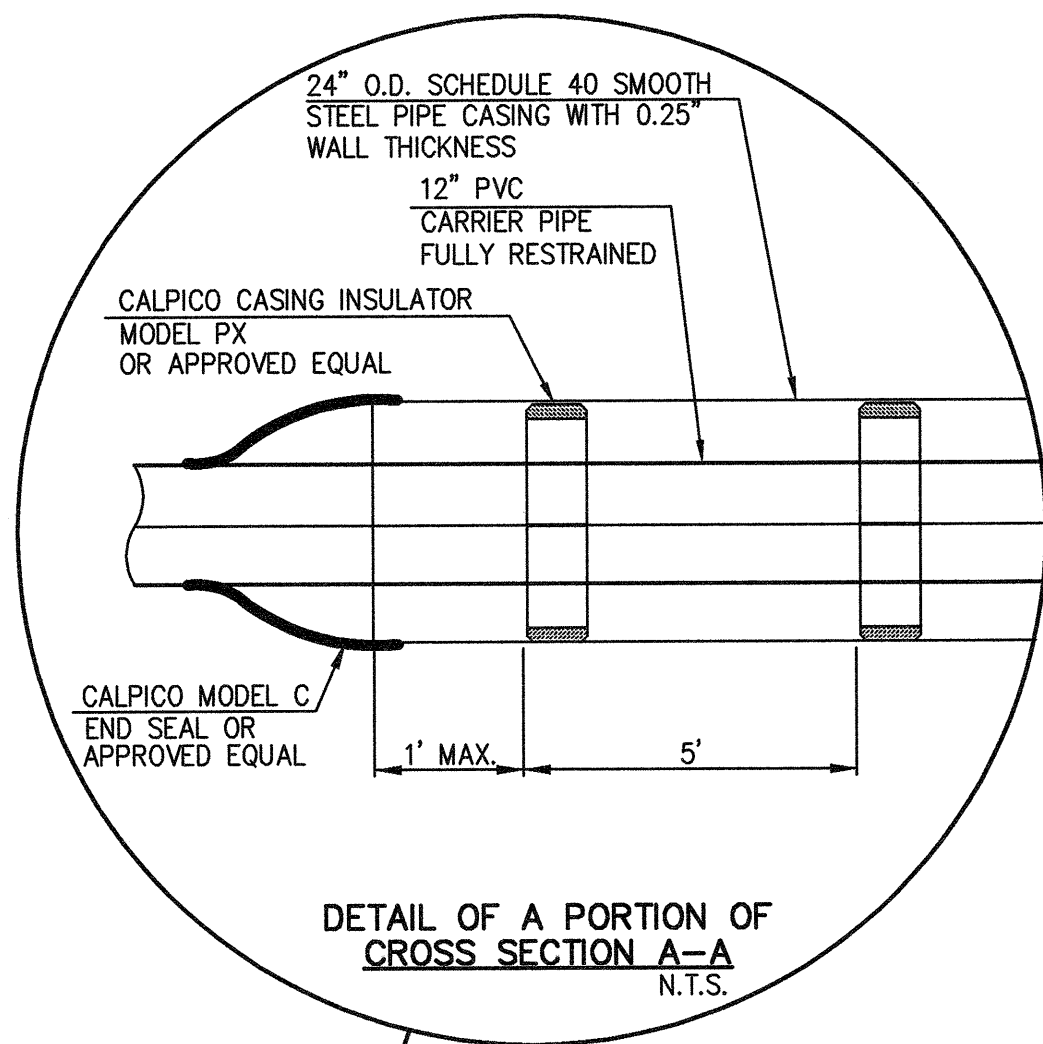
STA.81+68.00  
GRADE BREAK  
INV. EL.=1480.30

STA.82+15.00  
GRADE BREAK  
INV. EL.=1484.40



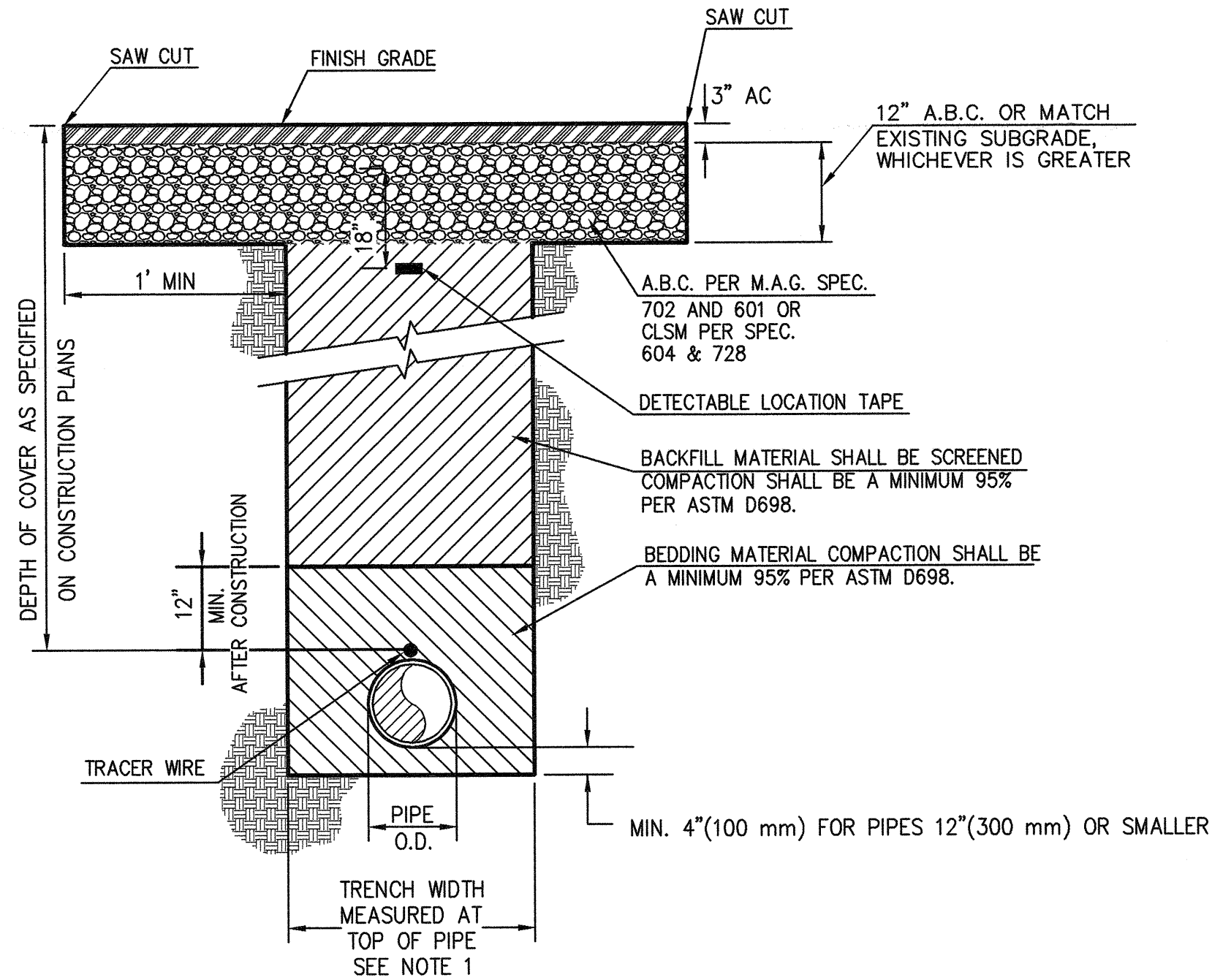






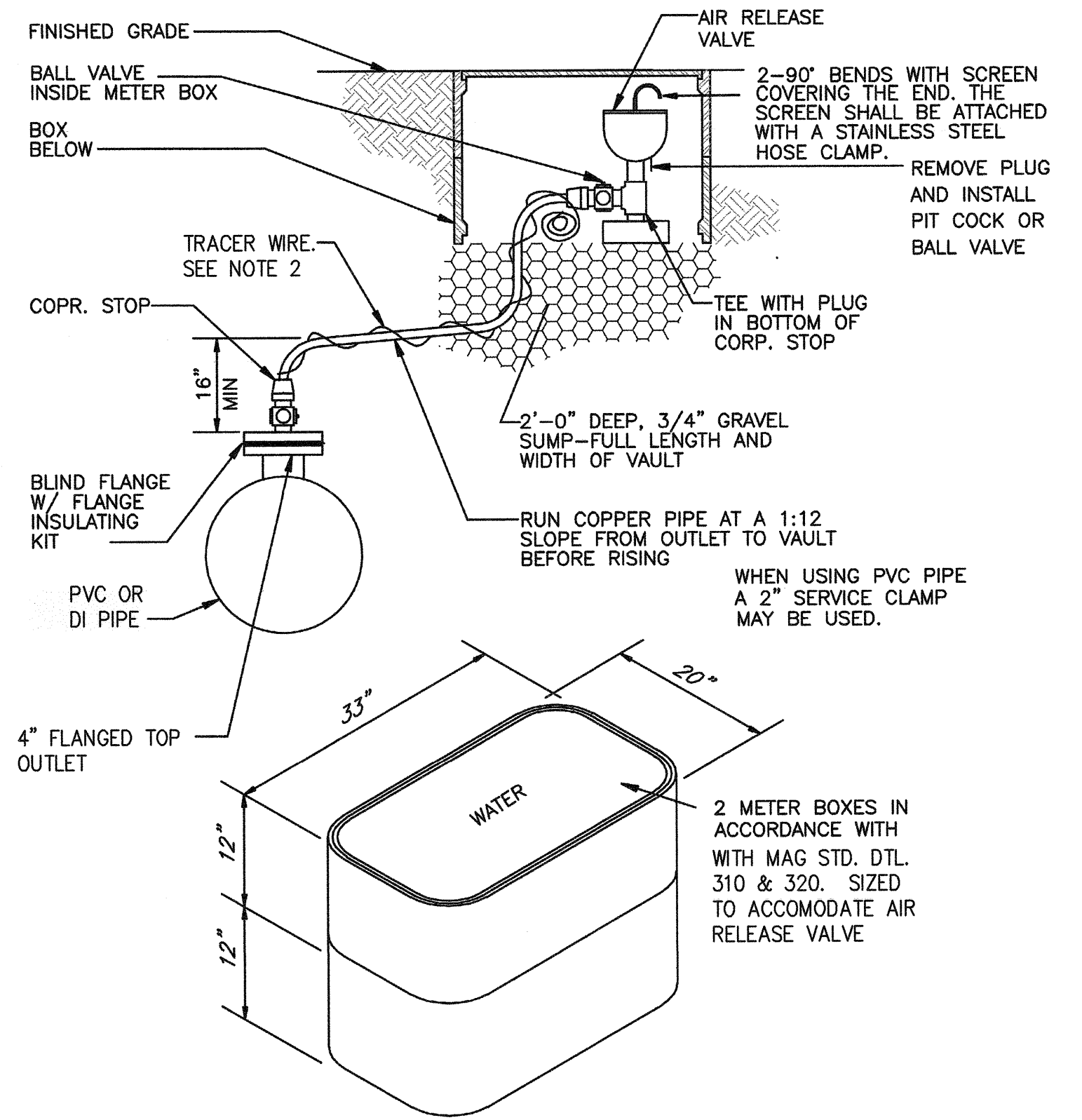
CROSS SECTION A-A  
N.T.S.

1 WATER INSTALLATION IN CASING AT MAIN ST. (SR 79B) AND BUTTE ROAD (SR79B)  
C-10 N.T.S.



1. TRENCH WIDTH MEASURED AT THE TOP OF THE PIPE SHALL BE 18" (455 mm) FOR 4" (100 mm) AND 6" (150 mm) MAINS, AND 24" (610 mm) FOR 8" (200 mm) MAINS. TRENCH WIDTH FOR 12" (300 mm) AND LARGER SHALL BE O.D. + 18" (455 mm) MIN., O.D. + 24" (610 mm) MAX.
2. FOR TRENCHING UNDER CONCRETE AND CURB, SAWCUT BOTH EDGES. MINIMUM WIDTH OF TRENCH TO BE 2 FT. REPLACE CONCRETE OR CURB IN KIND.

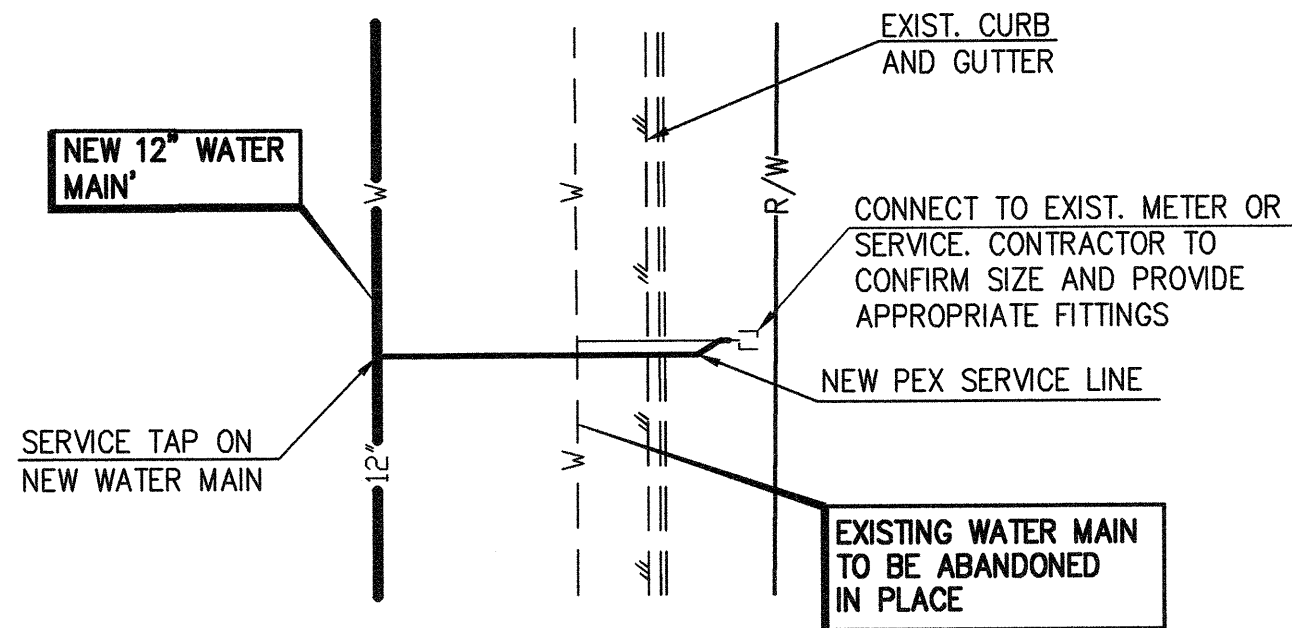
2 WATER TRENCH DETAIL  
C-10 N.T.S.



NOTES:

1. FLANGE INSULATING KIT MUST BE TESTED TO CONFIRM ISOLATION PRIOR TO BACKFILL. INCLUDE TEST RESULTS IN FINAL CORROSION REPORT.
2. ALL AIR RELEASE VALVE INSTALLATIONS REQUIRE A TRACER WIRE. THE TRACER WIRE SHALL BE USE, RHW, OR RHH SOLID 10 GAUGE AND RUN IN A CONTINUOUS LENGTH FROM THE CORPORATION TO BALL VALVE. THE TRACER WIRE SHALL BE ATTACHED TO THE AIR RELEASE LINE WITH TAPE OR WIRE TIES AT 1' INTERVALS. A 3' COIL OF WIRE SHALL BE LEFT IN THE METER BOX.

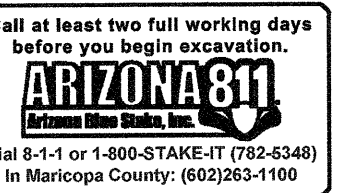
3 1" AIR RELEASE VALVE INSTALLATION  
C-10 N.T.S.



NOTE:  
SERVICE RENEWALS SHALL INCLUDE  
NEW SERVICE SADDLE, CORPORATION  
STOP TAP, PEX PIPE (ENTIRE LENGTH),  
ANGLE, METER VALVE, MAGNETIC LOCATOR  
TAPE, TRACER WIRE, AND CONNECTION  
TO EXISTING METER.

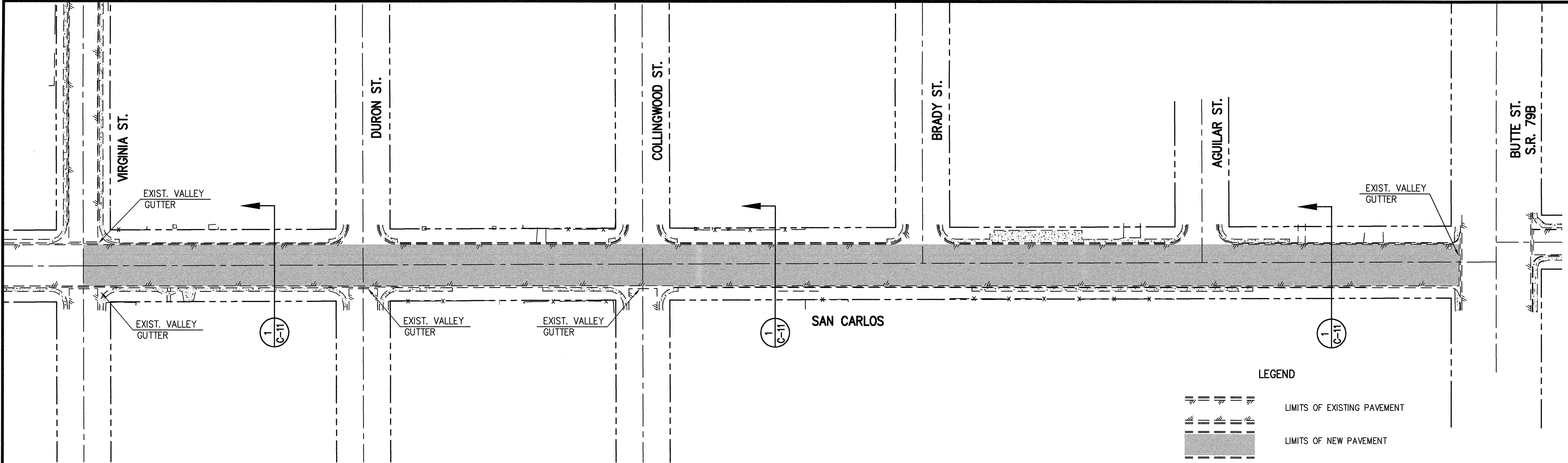
4 SERVICE LINE RENEWAL DETAIL  
C-10 N.T.S.

| SURVEY POINT TABLE |            |            |           |                       |
|--------------------|------------|------------|-----------|-----------------------|
| POINT #            | NORTHING   | EASTING    | ELEVATION | RAW DESCRIPTION       |
| 100                | 737761.489 | 863235.784 | 1511.76   | COTTON PICKER SPINDLE |
| 101                | 737760.162 | 862905.379 | 1509.91   | COTTON PICKER SPINDLE |
| 102                | 738070.614 | 862904.763 | 1506.07   | RAILROAD SPIKE        |
| 105                | 738384.732 | 863943.944 | 1508.02   | COTTON PICKER SPINDLE |
| 107                | 737764.172 | 863946.336 | 1512.21   | COTTON PICKER SPINDLE |
| 108                | 737762.671 | 863566.172 | 1511.76   | COTTON PICKER SPINDLE |
| 111                | 739722.110 | 863918.138 | 1499.38   | COTTON PICKER SPINDLE |
| 120                | 740462.479 | 864472.658 | 1494.35   | COTTON PICKER SPINDLE |
| 121                | 740832.556 | 864472.301 | 1490.11   | COTTON PICKER SPINDLE |
| 131                | 739722.524 | 864473.150 | 1503.40   | COTTON PICKER SPINDLE |
| 134                | 738379.595 | 862574.135 | 1499.72   | ALUMINUM CAP 2IN      |
| 200                | 741021.914 | 863547.080 | 1486.77   | BRASS CAP             |
| 202                | 741022.247 | 864102.296 | 1488.25   | BRASS CAP             |
| 203                | 738695.100 | 863942.778 | 1505.41   | COTTON PICKER SPINDLE |
| 204                | 738379.892 | 862904.927 | 1501.93   | IRON PIPE 3/4 IN      |
| 372                | 739301.266 | 864825.854 | 1507.98   | BRASS CAP HAND HOLE   |
| 373                | 736660.603 | 864830.257 | 1526.66   | BRASS CAP HAND HOLE   |
| 7500               | 741022.168 | 863917.221 | 1487.95   | BRASS CAP             |
| 7503               | 739722.267 | 864103.120 | 1500.91   | COTTON PICKER SPINDLE |



|  |    |  |       |      |
|--|----|--|-------|------|
| NO.  | BY | DESCRIPTION  | APP'D | DATE |
| REVISIONS  |    |  |       |      |
| TOWN OF FLORENCE<br>12" WATER LINE AUGMENTATION<br>DETAIL SHEET  |    |  |       |      |
|  |    | 4001 E. Paradise Falls Drive<br>Tucson, Arizona 85712<br>WestLand Resources (520) 206-9585 |       |      |
| DESIGNED BY: C.C.<br>DRAWN BY: G.G.F.<br>CHECKED BY: T.M.B.<br>DRAWING SCALE(S): NTS<br>PLAN DATE: DECEMBER 01, 2017<br>PROJECT NUMBER: 486.05 |    | SHEET NO. C-10<br>12 OF 13   |       |      |





PAVING NOTES

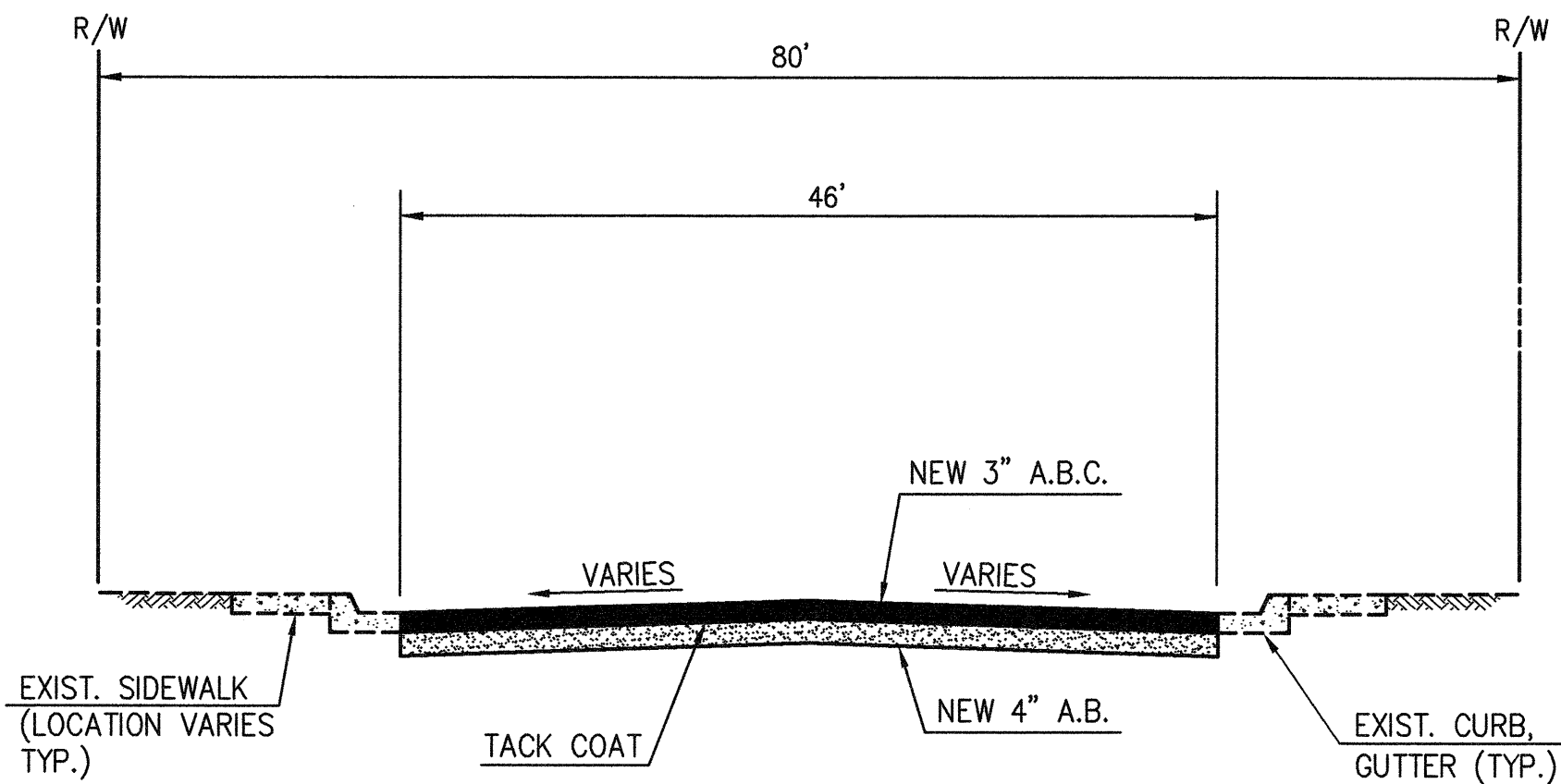
- ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF STANDARD SPECIFICATIONS FOR CONSTRUCTION FOR THE TOWN OF FLORENCE, MARICOPA ASSOCIATION OF GOVERNMENTS (M.A.G.) SPECIFICATIONS AND DETAILS, LATEST EDITION AND PINAL COUNTY.
- EXCAVATION AND BACKFILL FOR STRUCTURES SHALL CONFORM TO M.A.G., SECTION 206
- AGGREGATE BASE COURSE SHALL CONFORM TO M.A.G. SECTION 702.
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE OCCUPATION SAFETY AND HEALTH ADMINISTRATION REGULATIONS.
- THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED BY ALL GOVERNMENTAL AGENCIES.
- UPON COMMENCEMENT OF WORK, TRAFFIC CONTROL DEVICES SHALL BE POSTED AND MAINTAINED BY THE CONTRACTOR UNTIL SUCH TIME AS THE WORK IS COMPLETED. ALL WARNING SIGNS, BARRICADES, ETC. SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES ADOPTED BY THE STATE OF ARIZONA PURSUANT TO A.R.S. 28-650.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CARE AND MAINTENANCE OF EXISTING IMPROVEMENTS AND VEGETATION IN THE WORK AREA. PAVEMENT, CURBS, AND ANY OTHER OBSTRUCTIONS DAMAGED DURING CONSTRUCTION ARE TO BE REPLACED BY THE CONTRACTOR. ANY UNDERGROUND PIPES, IRRIGATION CONTROLS, DRAINS, STRUCTURES OR OBSTRUCTIONS NOT SHOWN ON THESE PLANS SHALL BE MOVED, ALTERED OR REPAIRED BY THE CONTRACTOR WHEN ENCOUNTERED, AS DIRECTED BY THE TOWN ENGINEER, AND IS A DEFINITE PART OF THIS PROJECT.
- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO FURNISH, HAUL AND APPLY ALL WATER REQUIRED FOR COMPACTION AND FOR THE CONTROL OF DUST FROM CONSTRUCTION ACTIVITY. THE COST THEREOF IS TO BE INCLUDED IN THE APPROPRIATE BID ITEM(S) PRICE(S).
- THE CONTRACTOR BEFORE UNDERTAKING ANY GRADING OR CONSTRUCTION WORK OF ANY TYPE WITHIN THE PUBLIC RIGHT-OF-WAY, MUST FIRST OBTAIN ANY REQUIRED PERMITS FROM THE TOWN OF FLORENCE.
- INSPECTION BY THE TOWN OF FLORENCE OR THE TOWNS REPRESENTATIVE OF THE WORK CALLED FOR THE PLANS SHALL NOT IN ANY WAY, RELIEVE THE CONTRACTOR AND/OR HIS/HER SUBCONTRACTORS OF THEIR OBLIGATION TO PERFORM THE WORK IN COMPLIANCE WITH THE PLANS, SPECIFICATIONS, CONTRACT DOCUMENTS, TOWN CODE AND ANY OTHER APPLICABLE REGULATION PERTAINING THERE TO.
- THE CONTRACTOR SHALL OPERATE IN A MANNER COMPLIANT WITH ALL APPLICABLE REGULATIONS OF THE TOWN, COUNTY, STATE AND FEDERAL GOVERNMENT.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE SURVEYOR PROVIDING THE CONSTRUCTION LAYOUT TO VERIFY THE BENCHMARK AND COMPARE THE SITE CONDITIONS WITH THE PLANS AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES OBSERVED. SHOULD ANY BENCHMARK, GRADE OR DESIGN INDICATED ON THE PLANS BE SUSPECT THE ENGINEER SHALL BE NOTIFIED OF SAID BENCHMARK GRADE OR PROBLEM AT LEAST TWENTY-FOUR HOURS BEFORE CONSTRUCTION IS SCHEDULED TO BEGIN ON THE AFFECTED AREA.
- EARTHWORK, EXCEPT AS MODIFIED BY THE SOILS REPORT OF RECORD SHALL CONFORM TO M.A.G. SECTION 200.

(PAVING NOTES CONTINUED)

- CONTRACTOR SHALL CALL BLUE STAKE (1-800-782-53481) TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO COMMENCEMENT OF OPERATION.
- IF UNANTICIPATED CONDITIONS ARE ENCOUNTERED DURING THE COURSE OF CONSTRUCTION AND ARE BEYOND THE SCOPE OF DESIGN, THE ENGINEER SHALL SUBMIT THE NECESSARY REVISED OR SUPPLEMENTAL IMPROVEMENT PLANS FOR REVIEW AND APPROVAL BY THE TOWN ENGINEER.
- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO FULLY COMPLY WITH U.S. EPA STORMWATER DISCHARGE PERMIT IN ACCORDANCE WITH THE ADOT EROSION AND POLLUTION CONTROL MANUAL AND AS DIRECTED BY THE ENGINEER.
- THE SOILS ENGINEER SHALL OBSERVE, INSPECT AND TEST ALL CONSTRUCTION OPERATIONS, INCLUDING BUT NOT LIMITED TO: SUBGRADE PREPARATION, TRENCH EXCAVATIONS AND BACKFILL, MATERIAL TESTING, TOGETHER WITH PLACEMENT OF FILL. SAID ENGINEER SHALL CERTIFY IN WRITING, THAT ALL SOILS OPERATIONS AND MATERIALS USED FOR THIS DEVELOPMENT WERE PERFORMED IN ACCORDANCE WITH THE RECOMMENDATIONS AS SET FORTH IN THE GEOTECHNICAL INVESTIGATION OF RECORD AND ARE IN CONFORMANCE WITH THE ACCEPTED PLANS AND SPECIFICATIONS. CERTIFICATION, IN WRITING, ARE TO BE RECEIVED BY THE TOWN ENGINEER OF THE TOWN OF FLORENCE PRIOR TO THE REQUEST FOR FINAL INSPECTION AND RELEASE OF ASSURANCES.
- THE TOWN ENGINEER WILL, UPON RECEIPT OF ALL NECESSARY CERTIFICATIONS AS OUTLINED IN THE IMPROVEMENT PLANS, PERFORM A FIELD REVIEW IF THE DEVELOPMENT. FIELD CONDITIONS, DESIGN OVERSIGHTS, ETC., MAY REQUIRE ADDITIONAL WORK AND/OR IMPROVEMENTS AS A RESULT OF SAID REVIEW.
- CONTRACTOR SHALL HAUL OFF EXISTING PAVEMENT THAT HAS BEEN REMOVED AND DISPOSE OF PROPERLY.

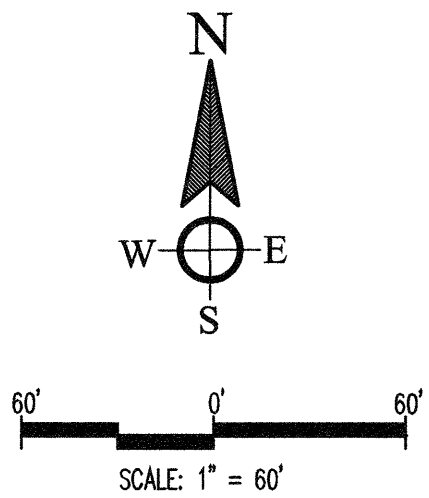
LEGEND

- LIMITS OF EXISTING PAVEMENT
- LIMITS OF NEW PAVEMENT



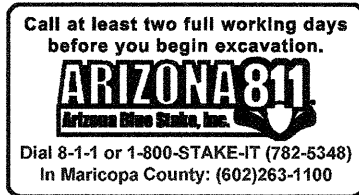
NOTE:  
EXISTING PAVEMENT SECTION VARIES SEE  
GEOTECHNICAL REPORT.

1 SAN CARLOS TYPICAL SECTION  
C-11 N.T.S.



CONSTRUCTION NOTES

- NEW PAVEMENT LIMITS ALL SIDE STREETS ARE SHOWN APPROXIMATELY, EXACT LIMITS WILL HAVE TO BE ESTABLISHED BASED ON 5 FEET PAST THE DISTURBED PAVEMENT SECTION ON EACH CONNECTION, UNLESS OTHERWISE SHOWN.
- EXISTING VALVE BOXES AND COVERS OF MAINS TO REMAIN IN SERVICE SHALL BE ADJUSTED TO NEW PAVING ELEVATIONS.
- CONTRACTOR MUST PROVIDE THE SERVICE OF A REGISTERED LAND SURVEYOR TO VERIFY ALL HORIZONTAL CONTROL AND SET UP TEMPORARY CONTROL PRIOR TO PAVEMENT REMOVAL, SAID SURVEYOR SHALL BE ALSO RESPONSIBLE FOR RE-ESTABLISHING REMOVED SURVEY MONUMENTS AND FILE A RECORD OF SURVEY SHOWING PRIOR AND POST CONSTRUCTION SURVEY MONUMENTATION INFORMATION.
- AFTER COMPLETION OF THE NEW PAVING, RAISED REFLECTIVE MARKERS SHALL BE PLACED AT EVERY HYDRANT ALONG THE PROJECT LENGTH.
- SAWCUT/TRIM TACK AND SEAL EXISTING PAVEMENT.
- THIS PROJECT SHALL REQUIRE REMOVAL AND REPLACEMENT OF EXISTING ROADWAY PAVING. THE NEW PAVEMENT SHALL BE PLACED AT THE SAME LOCATION, WIDTH, LINE AND GRADE AS THE EXISTING PAVEMENT. THE CONTRACTOR SHALL BE REPOSIBLE FOR PROVIDING AND CERTIFYING BOTH (BY A REGISTERED LAND SURVEYOR) PRE-CONSTRUCTION AND POST-CONSTRUCTION AS-BUILTS OF THE ROADWAY AS PART OF THIS CONTRACT.



| NO.       | BY | DESCRIPTION | APP'D | DATE |
|-----------|----|-------------|-------|------|
| REVISIONS |    |             |       |      |

TOWN OF FLORENCE  
12" WATER LINE AUGMENTATION  
PAVEMENT REPLACEMENT PLAN

DESIGNED BY: C.C.  
DRAWING SCALE(S): 1"=40'  
PLAN DATE: DECEMBER 01, 2017  
PROJECT NUMBER: 486.05

4001 E. Paradise Falls Drive  
Tucson, Arizona 85712  
(520) 206-9585

WestLand Resources

DESIGNED BY: T.M.B.  
DRAWN BY: T.M.B.  
CHECKED BY: T.M.B.  
SHEET NO. C-11  
13 OF 13



**MEETING SIGN IN SHEET****Addendum 2****September 10,2018****PROJECT: MANDATORY PRE-BID MEETING - CDBG 12" WATERLINE PROJECT****DATE: MONDAY, SEPTEMBER 10, 2018****TIME: 10:00 AM****FACILITATOR: TIMM WAINSCOTT, WATER SUPERINTENDENT****LOCATION: TOWN HALL****Rec Room A  
Community Center**

Please print clearly - thank you.

|    | LAST NAME         | FIRST NAME | COMPANY                         | ADDRESS  | EMAIL  | PHONE        |
|----|-------------------|------------|---------------------------------|--|--|--------------|
| 1  | Lewis             | Mike       | Jonovich Companies              | 501 S Broad Street, Globe AZ 85501             | <a href="mailto:Wjonovich@jonovichcompanies.com">Wjonovich@jonovichcompanies.com</a>       | 928-701-2281 |
| 2  | Haley             | Ryan       | RBH Construction                | P.O. Box 1638, Queen Creek, AZ 85142           | <a href="mailto:Rbhaley@Rbhaleyconstruction.com">Rbhaley@Rbhaleyconstruction.com</a>       | 602-615-2973 |
| 3  | Munoz             | Juan       | RBH Construction                | 429 W B Place, Mesa AZ                         | <a href="mailto:munozjuan@Rbhaleyconstruction.com">munozjuan@Rbhaleyconstruction.com</a>   | 602-846-6298 |
| 4  | Scholz            | Jeff       | Scholz Contracting, LLC         | 7526 E Orion Circle, Mesa AZ                   | <a href="mailto:jeff@scholaz.com">jeff@scholaz.com</a>                                     | 213-216-3441 |
| 5  | Warner            | John       | KE&G Construction Inc           | 3949 E. Irvington Road, Tucson, AZ 85714       | <a href="mailto:jwarner@kegtus.com">jwarner@kegtus.com</a>                                 | 520-940-8423 |
| 6  | Aguirre           | Guillermo  | KE&G Construction Inc           | 3949 E. Irvington Road, Tucson, AZ 85714       | <a href="mailto:gaguirre@kegtus.com">gaguirre@kegtus.com</a>                               | 520-468-9261 |
| 7  | Ferris            | Mike       | Redpoint Contracting            | 139506 N Daisy Mtn Dr, #122, Phoenix, AZ 85086 | <a href="mailto:estimating@redpointcontracting.com">estimating@redpointcontracting.com</a> | 602-792-0013 |
| 8  | Morgan            | Shawn      | E. W. Parker Enterprises        | 107 W Wade Lane, Payson, AZ 85541              | <a href="mailto:ewpebid@gmail.com">ewpebid@gmail.com</a>                                   | 928-978-0902 |
| 9  | Vermillion        | Shawn      | Tiffany Contruction             | 7122 N 27th Avenue, Glendale, AZ               | <a href="mailto:svermillion@tiffanyconst.com">svermillion@tiffanyconst.com</a>             | 480-619-3023 |
| 10 | Gardner           | Mark       | Apache Underground & Excavating | P.O. Box 1113, Lakeside, AZ 85929              | <a href="mailto:apacheunderground@frontiernet.net">apacheunderground@frontiernet.net</a>   | 928-242-1055 |
| 11 | Zimmerman         | James      | Western Companies               | 1350 N. Penrod Road, Show Low, AZ 85901        | <a href="mailto:JamesZ@westernngc.com">JamesZ@westernngc.com</a>                           | 928-243-7676 |
| 12 | Clayton           | Cody       | Team Fishel                     | Arizona  | <a href="mailto:cdclayton@teamfishel.com">cdclayton@teamfishel.com</a>                     | 486-417-3027 |
| 13 | Sanders-Brillault | Thierry    | Kinkaid Civil Construction      | 4505 E. Viginia St., Mesa, AZ 85215            | <a href="mailto:Thierry@kinkaidcivil.com">Thierry@kinkaidcivil.com</a>                     | 602-717-9249 |
| 14 | Anderson          | Devin      | DWA Construction Co. LLC        | P.O. Box 12788, Casa Grande, AZ 85130          | <a href="mailto:devin@dwaconstruction.com">devin@dwaconstruction.com</a>                   | 520-836-1860 |
| 15 |                   |            |                                 |  |  |              |
| 16 |                   |            |                                 |  |  |              |
| 17 |                   |            |                                 |  |  |              |
| 18 |                   |            |                                 |  |  |              |
| 19 |                   |            |                                 |  |  |              |
| 20 |                   |            |                                 |  |  |              |
| 21 |                   |            |                                 |  |  |              |
| 22 |                   |            |                                 |  |  |              |
| 23 |                   |            |                                 |  |  |              |
| 24 |                   |            |                                 |  |  |              |
| 25 |                   |            |                                 |  |  |              |



**MEETING SIGN IN SHEET****Addendum 2****September 10,2018****PROJECT: MANDATORY PRE-BID MEETING - CDBG 12" WATERLINE PROJECT****DATE: MONDAY, SEPTEMBER 10, 2018****FACILITATOR: TIMM WAINSCOTT, WATER SUPERINTENDENT****TIME: 10:00 AM****LOCATION: TOWN HALL****Rec Room A  
Community Center**

Please print clearly - thank you.

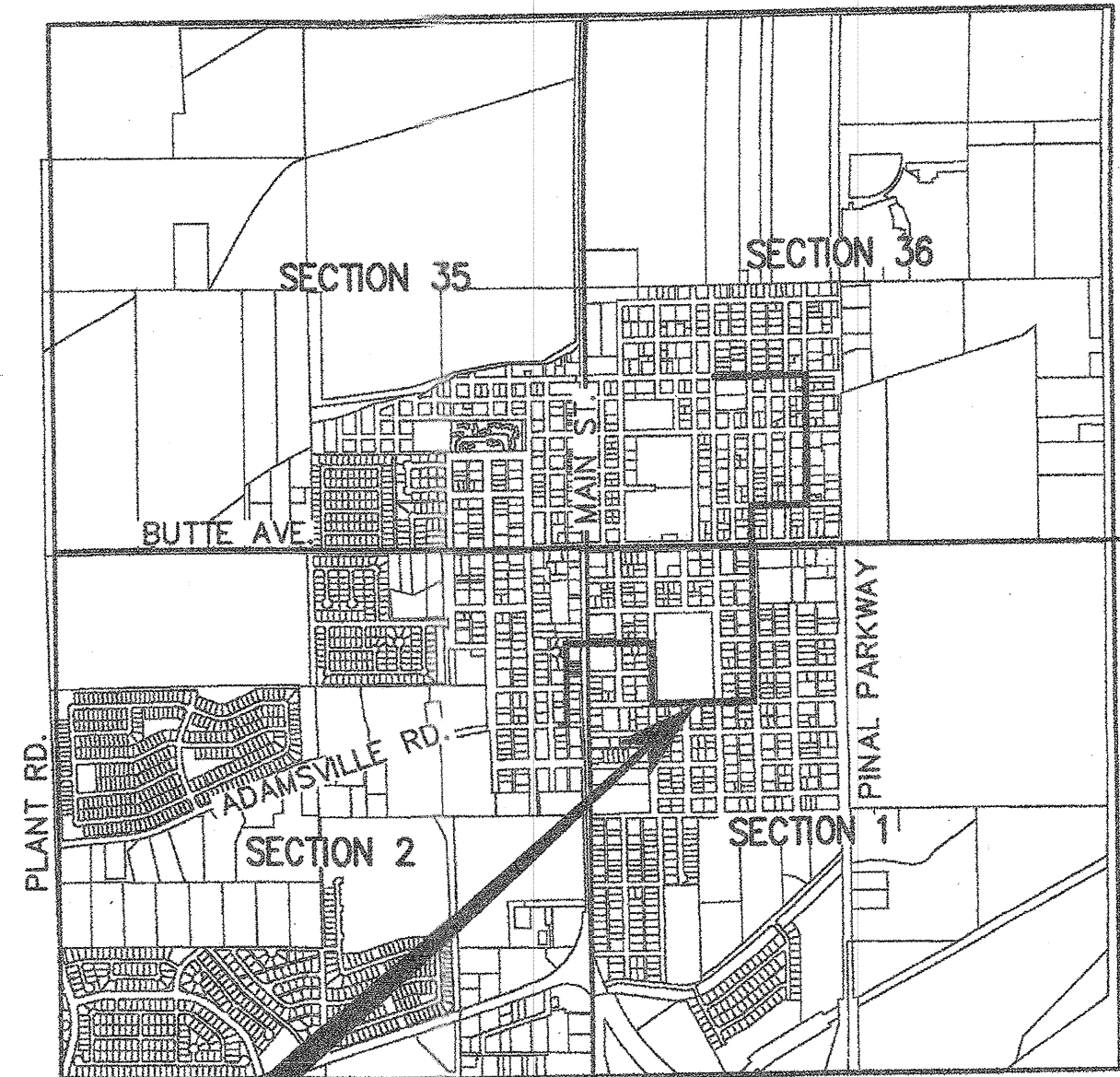
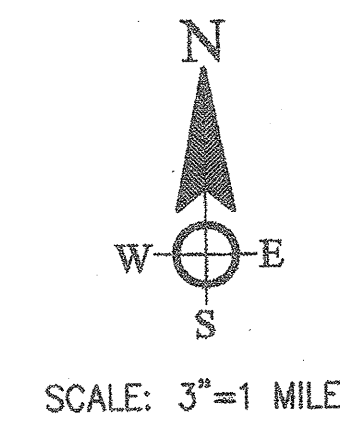
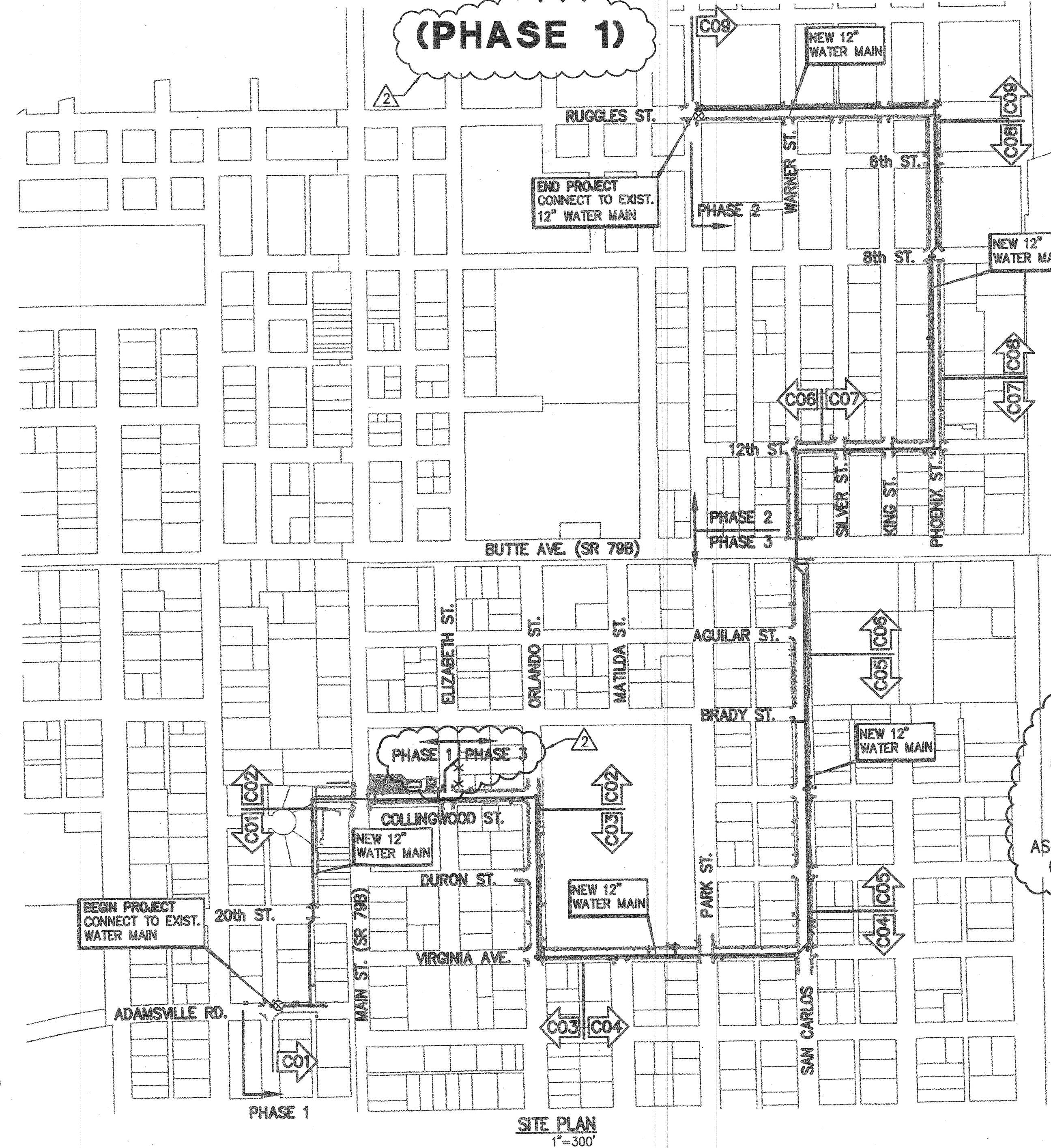
|    | LAST NAME         | FIRST NAME | COMPANY                         | ADDRESS   | EMAIL  | PHONE        |
|----|-------------------|------------|---------------------------------|---|--|--------------|
| 1  | Lewis             | Mike       | Jonovich Companies              | 501 S Broad Street, Globe AZ 85501                      | <a href="mailto:Wjonovich@jonovichcompanies.com">Wjonovich@jonovichcompanies.com</a>       | 928-701-2281 |
| 2  | Haley             | Ryan       | RBH Construction                | P.O. Box 1638, Queen Creek, AZ 85142                    | <a href="mailto:Rbhaley@Rbhaleyconstruction.com">Rbhaley@Rbhaleyconstruction.com</a>       | 602-615-2973 |
| 3  | Munoz             | Juan       | RBH Construction                | 429 W B Place, Mesa AZ                                  | <a href="mailto:munozjuan@Rbhaleyconstruction.com">munozjuan@Rbhaleyconstruction.com</a>   | 602-846-6298 |
| 4  | Scholz            | Jeff       | Scholz Contracting, LLC         | 7526 E Orion Circle, Mesa AZ                            | <a href="mailto:jeff@scholaz.com">jeff@scholaz.com</a>                                     | 213-216-3441 |
| 5  | Warner            | John       | KE&G Construction Inc           | 3949 E. Irvington Road, Tucson, AZ 85714                | <a href="mailto:jwarner@kegtus.com">jwarner@kegtus.com</a>                                 | 520-940-8423 |
| 6  | Aguirre           | Guillermo  | KE&G Construction Inc           | 3949 E. Irvington Road, Tucson, AZ 85714                | <a href="mailto:gaguirre@kegtus.com">gaguirre@kegtus.com</a>                               | 520-468-9261 |
| 7  | Ferris            | Mike       | Redpoint Contracting            | 139506 N Daisy Mtn Dr, #122, Phoenix, AZ 85086          | <a href="mailto:estimating@redpointcontracting.com">estimating@redpointcontracting.com</a> | 602-792-0013 |
| 8  | Morgan            | Shawn      | E. W. Parker Enterprises        | 107 W Wade Lane, Payson, AZ 85541                       | <a href="mailto:ewpebid@gmail.com">ewpebid@gmail.com</a>                                   | 928-978-0902 |
| 9  | Vermillion        | Shawn      | Tiffany Contruction             | 7122 N 27th Avenue, Glendale, AZ                        | <a href="mailto:svermillion@tiffanyconst.com">svermillion@tiffanyconst.com</a>             | 480-619-3023 |
| 10 | Gardner           | Mark       | Apache Underground & Excavating | P.O. Box 1113, Lakeside, AZ 85929                       | <a href="mailto:apacheunderground@frontiernet.net">apacheunderground@frontiernet.net</a>   | 928-242-1055 |
| 11 | Zimmerman         | James      | Western Companies               | 1350 N. Penrod Road, Show Low, AZ 85901                 | <a href="mailto:JamesZ@westernngc.com">JamesZ@westernngc.com</a>                           | 928-243-7676 |
| 12 | Clayton           | Cody       | Team Fishel                     | Arizona   | <a href="mailto:cdclayton@teamfishel.com">cdclayton@teamfishel.com</a>                     | 486-417-3027 |
| 13 | Sanders-Brillault | Thierry    | Kinkaid Civil Construction      | 4505 E. Viginia St., Mesa, AZ 85215                     | <a href="mailto:Thierry@kinkaidcivil.com">Thierry@kinkaidcivil.com</a>                     | 602-717-9249 |
| 14 | Anderson          | Devin      | DWA Construction Co. LLC        | P.O. Box 12788, Casa Grande, AZ 85130                   | <a href="mailto:devin@dwaconstruction.com">devin@dwaconstruction.com</a>                   | 520-836-1860 |
| 15 | Sonny             | Pettit     | In Ground Construction Inc      | 3048 E. Baseline Road, Bldg 13, Ste 127, Mesa, AZ 85204 | <a href="mailto:psonny1969@gmail.com">psonny1969@gmail.com</a>                             | 480-468-0522 |
| 16 |                   |            |                                 |   |  |              |
| 17 |                   |            |                                 |   |  |              |
| 18 |                   |            |                                 |   |  |              |
| 19 |                   |            |                                 |   |  |              |
| 20 |                   |            |                                 |   |  |              |
| 21 |                   |            |                                 |   |  |              |
| 22 |                   |            |                                 |   |  |              |
| 23 |                   |            |                                 |   |  |              |
| 24 |                   |            |                                 |   |  |              |
| 25 |                   |            |                                 |   |  |              |



## GENERAL NOTES

- ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF STANDARD SPECIFICATIONS FOR CONSTRUCTION FOR THE TOWN OF FLORENCE, MARICOPA ASSOCIATION OF GOVERNMENTS (M.A.G.) SPECIFICATIONS AND DETAILS, LATEST EDITION, THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY BULLETIN NO. 10, AND PINAL COUNTY.
- ALL CONSTRUCTION SHALL CONFORM TO TOWN OF FLORENCE, AND THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY STANDARDS.
- THE CONTRACTOR SHALL SUPPLY ALL STAKES SET FOR THE LINES, LEVELS OR MEASUREMENTS OF THE WORK IN THEIR PROPER PLACES AND IT SHALL BE CERTIFIED BY A "REGISTERED LAND SURVEYOR". ANY EXPENSE INCURRED IN REPLACING ANY STAKES WHICH THE CONTRACTOR OR HIS SUBORDINATES MAY HAVE FAILED TO PRESERVE SHALL BE THE CONTRACTORS RESPONSIBILITY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CARE, MAINTENANCE, REPAIR OR REPLACEMENT OF EXISTING IMPROVEMENTS IN THE WORK AREA WHICH HAVE BEEN REMOVED OR DAMAGED DURING THE COURSE OF CONSTRUCTION. ALL REPAIR, REPLACEMENT, OR CLEANUP SHALL BE DONE TO THE SATISFACTION OF THE OWNER.
- THE CONTRACTOR IS REQUIRED TO CONTACT "ARIZONA 811" (1-800-782-5348) 48 HOURS PRIOR TO ANY EXCAVATION TO DETERMINE ACCURATE UTILITY LOCATIONS.
- CONTRACTOR SHALL GIVE FORTY-EIGHT (48) HOURS NOTICE WHEN HE SHALL REQUIRE THE SERVICES OF THE ENGINEER OR ANY OTHER PERSON PROPERLY AUTHORIZED FOR SUCH PURPOSE FOR LAYING OUT ANY PORTION OF THE WORK. HE SHALL ALSO DIG ALL STAKE HOLES NECESSARY TO GIVE LINE AND LEVELS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FURNISH, HAUL AND APPLY ALL WATER REQUIRED FOR COMPACTION AND THE CONTROL OF DUST FROM CONSTRUCTION ACTIVITY. THE COST THEREOF IS TO BE INCLUDED IN THE GRADING CONSTRUCTION PRICE.
- OMISSIONS OR CONFLICTS BETWEEN VARIOUS ELEMENTS OF THE DRAWINGS, NOTES AND DETAILS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND RESOLVED BEFORE PROCEEDING WITH THE WORK.
- EXISTING UTILITIES ARE SHOWN BASED UPON THE BEST INFORMATION AVAILABLE. CONTRACTOR TO VERIFY LOCATION, SIZE, TYPE AND ELEVATION OF EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
- CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE OCCUPATION SAFETY AND HEALTH ADMINISTRATION REGULATIONS.
- CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED BY GOVERNMENTAL AGENCIES.
- A COPY OF THIS PLAN SHALL BE KEPT IN AN EASILY ACCESSIBLE LOCATION ON THE SITE AT ALL TIMES DURING CONSTRUCTION.
- IF UNANTICIPATED CONDITIONS ARE ENCOUNTERED DURING THE COURSE OF THE CONSTRUCTION AND ARE BEYOND THE SCOPE OF THE DESIGN, THE ENGINEER SHALL SUBMIT THE NECESSARY REVISED OR SUPPLEMENTAL IMPROVEMENT PLANS FOR REVIEW AND APPROVAL BY THE TOWN OF FLORENCE AND THEIR ENGINEER.
- A QUALIFIED REGISTERED ENGINEER OR LAND SURVEYOR MUST CERTIFY THAT THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED PLANS.
- ALL EXISTING DRAINAGE WAYS SHALL BE RESTORED TO EXISTING CONDITIONS AFTER CONSTRUCTION.
- ALL TRENCHES SHALL BE BACKFILLED AND COMPACTED TO A MINIMUM OF 95% PROCTOR DENSITY.
- CONTRACTOR SHALL REMOVE ALL EXCESS EXCAVATED MATERIALS, CONSTRUCTION DEBRIS, GRUBBED VEGETATION, AND REMOVAL ITEMS CALLED OUT ON PLANS FROM SITE AND LEGALLY DISPOSE OF THESE MATERIALS OFF SITE.
- ALL PIPE AND FITTINGS SHALL BE APPROPRIATELY MARKED OR COLOR CODED TO INDICATE THAT THE PIPE IS A POTABLE WATER PIPE. CONTRACTOR SHALL INSTALL AN INSULATED 12-GAUGE LOCATING WIRE AND WARNING TAPE OVER ALL SEWER MAINS IN ACCORDANCE WITH THE LATEST EDITION OF THE MARICOPA ASSOCIATION OF GOVERNMENT (M.A.G.) UNIFORM STANDARD SPECIFICATIONS AND DETAILS AND TOWN OF FLORENCE UTILITY CONSTRUCTION STANDARDS.
- ALL CONSTRUCTION AND TEST METHODS SHALL BE IN CONFORMANCE WITH M.A.G. UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.
- ALL CONCRETE SHALL COMPLY WITH M.A.G. SPECIFICATION SECTIONS 505 AND 725 AS APPLICABLE, UNLESS OTHERWISE SPECIFIED.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CALCULATE HIS OWN EARTHWORK QUANTITIES AND SUBMIT HIS BID BASED THEREON.
- ALL ORGANIC MATERIAL SHALL BE REMOVED WITHIN CLEARING LIMITS FOR NECESSARY GRADING TO A DEPTH OF SIX (6) INCHES AND LAWFULLY DISPOSED OF PRIOR TO GRADING.
- THE GEOTECHNICAL ENGINEER SHALL OBSERVE, INSPECT AND TEST ALL EARTHWORK OPERATIONS, INCLUDING BUT NOT LIMITED TO: CLEARING, GRUBBING, SUBGRADE PREPARATION, STRUCTURAL AND TRENCH EXCAVATION AND BACKFILL TOGETHER WITH PLACEMENT AND COMPACTION OF FILL. THE SAID ENGINEER SHALL CERTIFY THAT ALL GRADING OPERATIONS WERE PERFORMED IN ACCORDANCE WITH APPLICABLE STANDARDS.
- ALL WORK SHALL CONFORM TO GRADING STANDARDS PER TOWN OF FLORENCE ZONING CODE, LATEST EDITION.
- ALL REVISIONS TO THESE PLANS MUST BE APPROVED BY THE TOWN OF FLORENCE ENGINEER PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL USE THE FOLLOWING PIPE FOR USE ON THIS PROJECT.  
A) PVC - SDR18 CLASS 150 C-900, UNLESS OTHERWISE CALLED OUT ON THE PLANS.
- THE HORIZONTAL DISTANCE BETWEEN A PUBLIC WATER PIPE AND THE GRAVITY MAIN SHALL NOT BE LESS THAN SIX (6) FEET. VERTICAL CLEARANCE BETWEEN THE WATER MAIN AND GRAVITY SEWER MAIN SHALL BE A MINIMUM OF TWO (2) FEET. (IF THESE CRITERIA CANNOT BE MET, DESIGN CHANGES WILL BE REQUIRED). CONTRACTOR SHALL FIELD VERIFY THE SEPARATION OF EXISTING WATER MAINS AND PROPOSED SEWER MAINS BY POT HOLEING THE EXISTING WATER MAINS PRIOR TO CONSTRUCTION AND IMPLEMENTATION.
- HAND BACKFILL OF SELECT MATERIAL SHALL BE IMPORTED OR TRENCH EXCAVATION MATERIAL WHICH SHALL BE IN ACCORDANCE WITH TOWN OF FLORENCE PUBLIC WORKS DEPARTMENT AND THE LATEST EDITION OF THE MARICOPA ASSOCIATION OF GOVERNMENTS (M.A.G.) UNIFORM STANDARDS AND SPECIFICATIONS.
- BEDDING SHALL BE SAND IN ACCORDANCE WITH TOWN OF FLORENCE PUBLIC WORKS DEPARTMENT. BEDDING MATERIAL DESIGN CRITERIA IS GRANULAR MATERIAL WITH A WEIGHT OF 115 LBS. PER CUBIC FOOT. S.F. 1.5. SHOULD GROUND WATER OR OTHER UNANTICIPATED SOIL CONDITION BE ENCOUNTERED, THE BEDDING SHALL BE MODIFIED AS DIRECTED BY THE ENGINEER.
- CONTRACTOR TO VISIT SITE AND FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS PRIOR TO SUBMITTING A BID FOR THE PROJECT.
- CONTRACTOR SHALL REPLACE EXISTING STRIPING, CROSSWALKS AND TRAFFIC SYMBOLS PER TOWN OF FLORENCE AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- UPON COMMENCEMENT OF WORK, TRAFFIC CONTROL DEVICES SHALL BE POSTED AND MAINTAINED BY THE CONTRACTOR UNTIL SUCH TIME AS THE WORK IS COMPLETED. ALL WARNING SIGNS, BARRICADES, ETC. SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES ADOPTED BY THE STATE OF ARIZONA PURSUANT TO A.R.S. 28-650.
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL HOMES AND BUSINESSES DURING CONSTRUCTION.
- THE CONTRACTOR SHALL CONTACT UTILITY COMPANIES PRIOR TO CROSSING OR CONSTRUCTION ADJACENT TO EXISTING FACILITIES.
- SEE SHEET C-10 FOR SURVEY POINT TABLE.

# TOWN OF FLORENCE 12" WATER LINE AUGMENTATION WATER PLANS (PHASE 1)



**THIS PROJECT**

## LOCATION MAP

A PORTION OF SECTIONS 1&2  
T-5-S, R-9-E,  
SECTION 36  
T-4-S, R-9-E  
G&SRM PINAL COUNTY, ARIZONA

## LEGEND

|       |                                |     |                           |
|-------|--------------------------------|-----|---------------------------|
| 1500  | EXISTING CONTOUR               | MON | SURVEY MON                |
| -OHE- | EXISTING OVERHEAD UTILITY LINE | PP  | FIRE HYDRANT              |
| -E-   | EXISTING ELECTRIC LINE         | SMH | POWER POLE                |
| -W-   | EXISTING WATER MAIN AND VALVE  |     | SANITARY SEWER MANHOLE    |
| -WS-  | EXISTING WATER SERVICE         |     | EXISTING EDGE OF PAVEMENT |
| -G-   | EXISTING GAS MAIN              |     | EXISTING CHAIN LINK FENCE |
|       | NEW WATER MAIN AND VALVE       |     | EXISTING WIRE FENCE       |
| ⊙     | NEW AIR RELEASE VALVE          |     | EXISTING BLOCK WALL       |
| HCP   | HORIZONTAL CONTROL POINT       |     | NEW METER TIE-OVER        |
| 1/3   | DETAIL NUMBER<br>SHEET NUMBER  |     | ABANDON WATER MAIN        |
| 2     | SHEET INDEX NUMBER             |     |                           |

## SHEET INDEX

|      |                               |
|------|-------------------------------|
| G-01 | COVER SHEET AND GENERAL NOTES |
| G-02 | TOWN OF FLORENCE NOTE SHEET   |
| C-01 | PLAN AND PROFILE SHEET        |
| C-02 | PLAN AND PROFILE SHEET        |
| C-03 | PLAN AND PROFILE SHEET        |
| C-04 | PLAN AND PROFILE SHEET        |
| C-05 | PLAN AND PROFILE SHEET        |
| C-06 | PLAN AND PROFILE SHEET        |
| C-07 | PLAN AND PROFILE SHEET        |
| C-08 | PLAN AND PROFILE SHEET        |
| C-09 | PLAN AND PROFILE SHEET        |
| C-10 | DETAIL SHEET                  |
| C-11 | PAVEMENT REPLACEMENT PLAN     |

## BASIS OF BEARING

THE BASIS OF BEARING FOR THIS PROJECT: POINT #372 (POINT TABLE) NORTH QUARTER CORNER OF SECTION 1 TO POINT #373 (POINT TABLE) CENTER QUARTER CORNER OF SECTION 1, BEARING S00°05'44"E DISTANCE OF 2840.67'.

## BASIS OF ELEVATION

THE BASIS OF ELEVATION (BENCHMARK): NGS DESIGNATION - G 364 PID - DU0539, ELEVATION NAVD 88 = 1492.97; FIELD LOCATION POINT #384 (POINT TABLE)

## ACCEPTED:

TOWN OF FLORENCE, TOWN ENGINEER

TOWN OF FLORENCE, FIRE MARSHAL

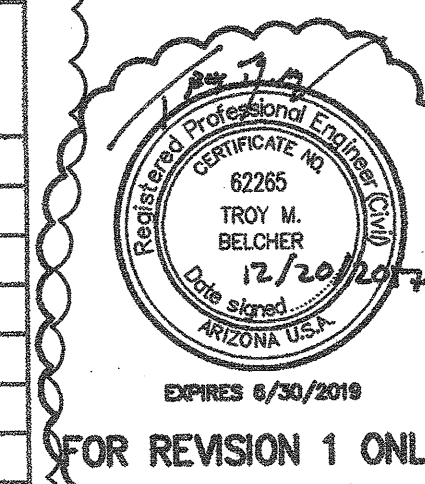
12/12/17  
DATE

## ADEQ WATER NOTES:

- ALL WATERLINES AND FITTINGS SHALL HAVE NATIONAL SANITATION FOUNDATION (NSF) SEAL AND COMPLY WITH A.A.C. R-18-4-213.C STANDARDS.
- ALL MATERIALS AND PRODUCTS USED IN THE DRINKING WATER SYSTEM SHALL CONFORM TO NSF STANDARD 61.
- CONSTRUCTION MATERIALS USED IN THE WATER SYSTEM SHALL BE LEAD FREE AS IN ACCORDANCE WITH A.A.C. R18-5-504 AND R18-5-101.
- WATER LINES SHALL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH A.W.W.A. C805-94.
- PRESSURE AND LEAKAGE TESTING RESULTS MUST BE PROVIDED WITH THE APPROVAL OF CONSTRUCTION (AOC) APPLICATION IN ORDER FOR THE AOC PERMIT TO BE ISSUED. DATA REQUIRED FOR THE ENGINEERING CERTIFICATE OF COMPLETION (ECC) AND THE AOC CAN BE FOUND AT <http://www.azdeq.gov/environ/water/dw/download/data.pdf>
- WATER LINES SHALL BE DISINFECTED BY CHLORINATION IN ACCORDANCE WITH A.W.W.A. C801 STANDARD AND A.D.E.Q. BULLETIN NO. 8.
- DISINFECTION RESULTS FROM AN ARIZONA STATE ACCREDITED LABORATORY MUST BE PROVIDED WITH THE APPROVAL OF CONSTRUCTION (AOC) APPLICATION IN ORDER FOR THE AOC PERMIT TO BE ISSUED.
- WATER/SEWER LINE SEPARATION SHALL BE IN ACCORDANCE WITH A.A.C. R-18-5-502.C.
- ALL FITTINGS, VALVES, FLEXIBLE COUPLINGS, AND REPAIR CLAMPS SHALL BE ENCASED WITH A 10 MIL POLYETHYLENE IN ACCORDANCE WITH A.W.W.A. C-105 METHOD C.

## MATERIAL QUANTITY LIST

| ITEM                             | PHASE 1 QTY  | PHASE 2 QTY | PHASE 3 QTY |
|----------------------------------|--------------|-------------|-------------|
| 12" PVC PIPE                     | 15861.666 LF | 3,000 LF    | 3,500 LF    |
| 12" DIP PIPE                     | 30 LF        | 90 LF       | 150 LF      |
| 6" DIP PIPE                      | 156.83 LF    | 153 LF      | 338 LF      |
| 12" GATE VALVE, B&C              | 5 - 4 EA     | 11 EA       | 13 EA       |
| 6" GATE VALVE, B&C               | 4 - 3 EA     | 8 EA        | 12 EA       |
| 12" TAPPING SLEEVE               |              | 1 EA        |             |
| 6" TAPPING SLEEVE                |              |             | 1 EA        |
| NEW FIRE HYDRANT                 | 4 - 3 EA     | 7 EA        | 11 EA       |
| SERVICE TIE OVERS                | 20 EA        | 9 EA        | 20 EA       |
| 24" JACK AND BORE                | 90 LF        | 103 LF      | 103 LF      |
| 1" COMBINATION AIR RELEASE VALVE | 1 EA         | 4 EA        | 6 EA        |
| PAVEMENT PATCH / REPLACEMENT     | 330 SY       | 1,800 SY    | 8,850 SY    |



FOR REVISION 1 ONLY



M:\Jobs\400's\486.05\ENR\Deliverables\686.05-G-02.dwg Dec 01, 2017 - 12:08pm glford

TOWN OF FLORENCE NOTES

1. GENERAL NOTES: CONSTRUCTION INSPECTION AND TESTING

A. ALL PUBLIC IMPROVEMENT CONSTRUCTION WITHIN THE TOWN OF FLORENCE PUBLIC ROW AND ONSITE SHALL BE CONDUCTED IN ACCORDANCE WITH, AND CONFORM TO, THE LATEST EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION AND UNIFORM STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, BOTH AS PUBLISHED BY THE MARICOPA ASSOCIATION OF GOVERNMENTS (MAG).

B. INSPECTION OF WORK PER MAG 105.10: THE ENGINEER SHALL BE PERMITTED TO INSPECT ALL MATERIALS, AND EACH PART OR DETAIL OF THE WORK AT ANY TIME FOR THE PURPOSE OF EXPEDITING AND FACILITATING THE PROGRESS OF WORK. HE SHALL BE FURNISHED WITH SUCH INFORMATION AND ASSISTANCE BY THE CONTRACTOR, AS IS REQUIRED TO MAKE A COMPLETE AND DETAILED INSPECTION. THE TOWN ENGINEER REQUIRES THAT THE ACTUAL TEST RESULT DATA SHEET ACCOMPANY ALL COMPACTION TEST RESULTS SUBMITTED TO THE TOWN'S INSPECTOR. PASS/FAIL STATEMENTS ARE NOT ACCEPTABLE WITHOUT THE ATTACHED DATA SHEET. FAILURE TO SUBMIT THE TEST RESULT DATA SHEETS WILL RESULT IN AN INCOMPLETE SUBMITTAL AND THE TEST WILL BE REJECTED.

C. IN THE EVENT OF CONFLICT BETWEEN MAG STANDARD SPECIFICATIONS AND DETAILS AND THESE PLANS, THESE PLANS SHALL PREVAIL.

D. THE OFFICE OF THE TOWN ENGINEER SHALL BE NOTIFIED AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK WITHIN THE TOWN OF FLORENCE ROW. TELEPHONE: 520-868-7617.

E. CONTRACTOR IS TO NOTIFY ALL PUBLIC UTILITIES AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION, FOR FIELD LOCATIONS OF THEIR RESPECTIVE FACILITIES, BY CONTACTING THE FOLLOWING: BLUE STAKE: 1-800-782-5348.

F. CONTRACTOR SHALL IDENTIFY, COORDINATE AND MAKE ARRANGEMENTS FOR RELOCATION OF ANY UTILITIES CONFLICTING WITH THE PROPOSED CONSTRUCTION OF THESE PLANS, WITH THE APPROPRIATE UTILITY.

G. IDENTIFICATION, REMOVAL AND REPLACEMENT OF ALL TREES, SHRUBS, VEGETATION, MISCELLANEOUS STRUCTURES, DEBRIS, RUBBLE AND OTHER DELETERIOUS MATERIALS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE AT THE CONTRACTOR'S EXPENSE.

H. ALL CONCRETE SIDEWALKS, DRIVEWAYS, APRONS, CROSS-PANS, VALLEY GUTTER, CURBS AND GUTTERS LANDSCAPING AND IRRIGATION THAT MAY BE DAMAGED DURING THE COURSE OF CONSTRUCTIONS SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. SHORING IS TO BE INSTALLED OR A TRENCH BOX IS TO BE USED, IN ALL TRENCHES IN EXCESS OF FIVE (5) FEET IN DEPTH. A REGISTERED CIVIL ENGINEER OR SOILS ENGINEER SHALL CERTIFY SHORING INSTALLATION PLANS, DETAILS AND SPECIFICATIONS. SHORING MUST CONFORM TO OSHA 29 CFR, PART 1926, AND SUBPART D.

I. COMPACTION TESTING IS REQUIRED AND MUST BE PERFORMED IN THE PRESENCE OF A REPRESENTATIVE OF THE TOWN ENGINEER.

J. BACKFILL: BACKFILL WITHIN THE PUBLIC UTILITY EASEMENTS AND WITHIN PUBLIC STREET ROW SHALL BE COMPACTED TO 95% OF MAXIMUM THEORETICAL DENSITY PER ASTM D698. ALL MATERIALS OUTSIDE THE MOISTURE LIMIT SHALL BE CONSIDERED UNSUITABLE, AND SUBJECT TO REMOVAL. NO HYDRAULIC COMPACTION OR WATER JET COMPACTION WILL BE ALLOWED. ALL COMPACTION MUST BE DONE BY MECHANICAL MEANS. MOISTURE LIMIT SPEC: 2.0 PERCENT BELOW OPTIMUM MOISTURE, MATERIAL SHALL BE UNIFORM.

K. SUB GRADE: SUB-GRADE PREPARATION FOR ALL NEW STREETS AND ROADWAYS SHALL CONSIST OF SCARIFYING AND LOOSENING SUB-GRADE TO A DEPTH OF SIX (6") INCHES. SUB-GRADE SHALL BE CONSTRUCTED TO ACHIEVE UNIFORM MOISTURE CONTENT BY THE ADDITION OF WATER AND COMPACTED TO 95% OF MAXIMUM DENSITY. MOISTURE SHALL BE MAINTAINED BETWEEN OPTIMUM AND 4.0% BELOW OPTIMUM MOISTURE AND SHALL BE COMPACTED TO 95% ON MAXIMUM THEORETICAL DENSITY, AS DETERMINED BY ASTM D698. ALL MATERIALS OUTSIDE THE MOISTURE LIMIT AT THE TIME OF PLACEMENT AND COMPACTION SHALL BE CONSIDERED UNSUITABLE AND SUBJECT TO REMOVAL. THE FINISHED SURFACE OF THE SUB-GRADE SHALL NOT VARY FROM THE GRADES ESTABLISHED BY THE TOWN ENGINEER BY MORE THAN: 0.04 OF A FOOT ABOVE OR BELOW SPECIFIED GRADE.

L. GRADING OF AGGREGATE BASES AND AGGREGATE SUB-BASE SHALL BE AS FOLLOWS: AGGREGATE MATERIALS SHALL HAVE WATER ADDED TO THEM AND SHALL BE MIXED AND PROCESSED TO PRODUCE A UNIFORM BLEND OF MATERIAL BEFORE PLACEMENT. AFTER PROCESSING, THE MATERIAL SHALL BE PLACED AND SPREAD ON THE PREPARED SUB-GRADE AND SHALL BE PLACED IN A UNIFORM LAYER OR LAYERS NOT EXCEEDING SIX (6") INCHES IN COMPACTED DEPTH, UNLESS OTHERWISE APPROVED IN WRITING BY THE TOWN ENGINEER. EACH LAYER OF AGGREGATE BASE SHALL BE COMPACTED TO A DENSITY OF NOT LESS THAN 100% OF THE MAXIMUM DENSITY. THE FINISHED SURFACE OF THE SUB-GRADE SHALL NOT VARY FROM THE GRADES ESTABLISHED BY THE TOWN ENGINEER BY MORE THAN: 0.04 OF A FOOT ABOVE OR BELOW SPECIFIED GRADE.

M. COMPACTION TESTING FOR SUB-GRADE WILL BE DONE AFTER THE SUB-GRADE HAS BEEN STRING LINED AND IS WITHIN TOLERANCE AND ACCEPTED BY THE TOWN ENGINEER. THE TOWN ENGINEER OR HIS REPRESENTATIVE WILL DIRECT THE NUMBER AND LOCATION OF DENSITY TESTS. ALL SUB-GRADES SHALL HAVE A BLUE-TOP ELEVATION SET TO FINISHED GRADE AND LEFT AND RIGHT EDGES OF PAVEMENT, AND CENTERLINE OF ROADWAY.

N. ONE (1) SAND CONE TEST SHALL BE REQUIRED FOR EVERY TEN (10) NUCLEAR DENSITY TESTS PERFORMED, OR WHEN REQUESTED BY THE TOWN ENGINEER OR HIS REPRESENTATIVE. THE TOWN ENGINEER OR ENGINEER'S REPRESENTATIVE SHALL DETERMINE THE LOCATIONS OF THESE SAND CONE TESTS.

O. ALL MATERIALS, INCLUDING BUT NOT LIMITED TO AGGREGATE BASE COURSE, BORROW MATERIAL AND NATIVE MATERIAL, WILL BE ACCEPTED IN PLACE ONLY. TESTING REQUIRED FOR ACCEPTANCE WILL INCLUDE A SIEVE ANALYSIS AND PLASTICITY INDEX, (P.I.). DETERMINATION OF MAXIMUM THEORETICAL DENSITY WILL BE IN ACCORDANCE WITH ASTM D698. ONLY A FOUR-POINT PROCTOR TEST WILL BE ACCEPTED.

P. THE BASE COURSE SHALL NOT BE PLACED ON SUB-GRADE UNTIL THE TOWN ENGINEER HAS ACCEPTED THE SUB-GRADE. ALL MATERIALS WILL BE ACCEPTED IN PLACE ONLY. COMPACTION DENSITIES: MAG TYPE I BACKFILL MATERIAL (SECTION 601.4.4) IS MODIFIED TO INCLUDE AREAS UNDER THE PAVEMENT, ROW, AND EASEMENTS FOR ALL TRENCHES INCLUDING SEWER, WATER, ELECTRIC, AND GAS, TELEPHONE, AND STORM DRAINS, MOISTURE SPEC. 2.0 PERCENT BELOW OPTIMUM MOISTURE COMPACT TO 95% OF MAXIMUM THEORETICAL DENSITY. ALL MATERIALS OUTSIDE THE MOISTURE SPEC-LIMIT SHALL BE CONSIDERED UNSUITABLE, SUBJECT TO REMOVAL AND MATERIAL SHALL BE UNIFORM.

Q. THE LOCATION OF ALL SEWER STUB-OUTS SHALL BE STAMPED ON THE TOP OF VERTICAL CURB, AND FACE OF ROLLED CURBS, WITH A FOUR (4") INCH HIGH LETTERS (IE: "S").

R. ALL CURB, GUTTER AND SIDEWALK EXPANSION JOINT FILLER WILL BE ¾" BITUMINOUS PRE-MOLDED ALL EXPANSION JOINT SPACING SHALL NOT EXCEED A MAXIMUM OF (50') FEET OR AS DIRECTED BY THE TOWN ENGINEER. CONCRETE CURING COMPOUND MATERIAL SHALL BE A WHITE PIGMENT MEMBRANE USED ON ALL CONCRETE STRUCTURES INCLUDING CURB & GUTTER, SIDEWALK, HEADWALL, CATCH BASINS AND SIDEWALK RAMPS.

S. PAVING WILL NOT COMMENCE UNTIL AGGREGATE BASE COURSE COMPACTION AND GRADATION TESTS ARE COMPLETED AND THE TOWN ENGINEER ACCEPTS THE RESULTS.

T. USPS CLUSTER MAIL BOX LOCATIONS MUST BE PRE-DETERMINED AND NOTED ON THE CIVIL PLANS FOR GRADING AND PAVING. ADD CLUSTER BOXES TO THE LEGEND AND IN CONSTRUCTION NOTES. CLUSTER BOX LOCATIONS SHOULD BE SHOWN ON THE "OVERALL SEWER/WATER/HYDRANT/STREETLIGHT PLAN."

U. MEDIAN CURB & GUTTER BULL NOSE SHALL BE PAINTED YELLOW, WITH REFLECTIVE GLASS BEADS, PER M. A. G. DTL-223, AND HAVE YELLOW PAVEMENT REFLECTORS INSTALLED AFTER THE PAINTING IS COMPLETE.

2. GRADING NOTES

A. APPROVED GEO-TECHNICAL REPORT: BY: QUALITY TESTING INC. DATED: OCTOBER 30, 2017. JOB NUMBER: # 17046.00.

B. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL NECESSARY REGULATIONS AND REQUESTS BY THE TOWN AND PINAL COUNTY REGARDING DUST CONTROL.

C. REMOVAL OF ALL CACTI AND NATIVE PLANTS SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE "ARIZONA NATIVE PLANT LAW" A.R.S. CHAPTER 7.

D. CONTRACTOR MUST KEEP PUBLIC STREETS CLEAR OF SOIL, MUD, AND DEBRIS AT ALL TIMES.

E. CONTRACTOR MUST PREVENT DAMAGE TO DRAINAGE DURING GRADING CONSTRUCTION.

F. CONTRACTOR MUST CORRECT ANY DAMAGE TO PUBLIC OR PRIVATE PROPERTY THAT RESULTS FROM WORK DONE UNDER THE APPROVAL OF THE GRADING PERMIT.

G. IF SITE GRADING TOTALS MORE THAN ONE-TENTH (0.1) ACRE, CONTRACTOR MUST OBTAIN A PINAL COUNTY DUST CONTROL PERMIT. IF GRADING EXCEEDS ONE (1.0) ACRE, THIS ACTIVATES AZPDES AND CONTRACTOR MUST SUBMIT A NOI TO ADEQ AND PREPARE A STORM WATER MANAGEMENT PLAN ACCEPTABLE TO ADEQ.

H. ALL ON-SITE GRADING MUST COMPLY WITH CHAPTER 70 OF THE UNIFORM BUILDING CODE.

I. ALL GRADING IN THE PUBLIC ROW MUST COMPLY WITH MAG SPECIFICATIONS AND STANDARD DETAILS; THE ENGINEER'S APPROVED PLANS AND SPECIFICATIONS FOR THE PROJECT; AND THE SOILS ENGINEER'S GEOTECHNICAL REPORT FOR THE PROJECT. SURVEYORS WILL SET CONSTRUCTION STATIONS, STAKES, ESTABLISHING LINES AND GRADES FOR ROAD WORK, CURBS, GUTTERS, SIDEWALKS, STRUCTURES AND CENTERLINES FOR UTILITIES AND NECESSARY APPURTENANCES AS DEEMED NECESSARY, AND WILL FURNISH THE CONTRACTOR WITH ALL NECESSARY INFORMATION RELATING TO THE GRADES. THESE STAKES AND MARKS SHALL CONSTITUTE THE FIELD CONTROL BY AND IN ACCORDANCE WITH WHICH THE CONTRACTOR SHALL ESTABLISH OTHER NECESSARY CONTROLS AND PERFORM THE WORK. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE PRESERVATION OF ALL STAKES AND MARKS, AND IF THE CONTRACTOR HAS CARELESSLY OR WILLFULLY DESTROYED THE CONSTRUCTION STAKES OR MARKS, THE COST FOR REPLACING THEM WILL BE CHARGED AGAINST HIM

J. NO MINIMUM FLOOR ELEVATION SHALL BE LOWERED UNLESS APPROVED BY THE TOWN ENGINEER.

K. ANY SLOPE THAT IS STEEPER THAN 3:1 SHALL BE RIP-RAPPED OR SHALL BE REVEGETATED.

L. THE CONTRACTOR SHALL PROVIDE A LEVEL BOTTOM (+/- 1/10") IN ALL RETENTION BASINS, AT THE ELEVATIONS SHOWN ON THE PLANS. RETENTION BASIN SIDE SLOPES SHALL NOT EXCEED 4:1, UNLESS APPROVED BY THE TOWN ENGINEER AND NOTED ON THE PLANS.

M. RETENTION BASIN PERCOLATION TESTS SHALL BE PERFORMED AFTER GRADING IS COMPLETED AND PRIOR TO LANDSCAPING. PERCOLATION TESTS SHALL BE SUBMITTED TO THE TOWN ENGINEER. RECOMMENDATIONS REGARDING NUMBER OF DRYWELLS REQUIRED TO MEET THE REQUIREMENTS OF THE TOWN CODE WILL BE PRESENTED TO THE TOWN ENGINEER FOR APPROVAL, AND THE FINAL NUMBER OF DRYWELLS REQUIRED SHALL BE DETERMINED BY THESE TESTS. AFTER THE FIRST DRYWELL INSTALLATION A CONSTANT HEAD PRESSURE TEST WILL BE REQUIRED. THE DESIGN ENGINEER SHALL PROVIDE THE TOTAL NUMBER OF DRYWELLS REQUIRED AND SUBMIT THE CALCULATIONS TO THE TOWN ENGINEER. DRYWELLS REQUIRE A PERMIT FROM THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY AND ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY DRYWALL REGISTRATION NUMBERS SHALL BE NOTED ON THE AS-BUILT PLANS.

N. GRADING PLAN AS-BUILTS: AS-GRADED CERTIFICATION OF THE ON-SITE GRADING BY THE DESIGN ENGINEER IS REQUIRED PRIOR TO FINAL ACCEPTANCE OF ANY ON-SITE GRADING OR DRAINAGE IMPROVEMENTS. AS-BUILT DRAWINGS OF THE PUBLIC IMPROVEMENTS BY THE DESIGN ENGINEER ARE REQUIRED PRIOR TO FINAL ACCEPTANCE OF THE PUBLIC IMPROVEMENTS. AS-BUILT GRADING PLANS SHALL BE PREPARED BY THE DESIGN ENGINEER AFTER GRADING IS COMPLETED. THESE SHALL INCLUDE BUT NOT BE LIMITED TO, AS-BUILT ELEVATIONS FOR: FINISHED PADS, ALL REAR PROPERTY CORNERS, TOP OF CURB AT ALL PROPERTY LINES, RETENTION BASIN BOTTOMS, SWALES, BERMS AND PERIMETER LANDSCAPE EASEMENTS, ANY AND ALL DEVIATIONS FROM THE APPROVED PLANS AT THE TIME OF COMPLETION OF MASS GRADING. IF ANY DRYWELLS HAVE BEEN INSTALLED, ADEQ DRYWALL REGISTRATION NUMBERS MUST BE MADE PART OF THE AS BUILT PLANS.

3. STORM SEWER NOTES

A. CUT-OFF WALLS WITH A MINIMUM DIMENSION OF 1'-6", SHALL BE USED AT ALL SCUPPERS, AND TERMINATIONS OF RIPRAP AND CONCRETE STORM DRAINAGE CULVERTS AND CONCRETE SPILLWAY BEHIND SCUPPERS 6' MINIMUM.

B. GUARD RAILINGS SHALL BE PLACED ON ALL SCUPPERS ABOVE SPILLWAYS.

C. HINGED TRASH RACKS ARE REQUIRED AT ALL INLETS AND OUTLETS OF STORM SEWER HEAD WALLS FOR ALL PIPES 12" (INCHES) IN DIAMETER AND LARGER.

D. REINFORCED CONCRETE PIPE (RCP) SHALL BE PLACED PER MANUFACTURER'S SPECIFICATIONS AND IN ACCORDANCE WITH MAG

E. ALL RIPRAP SHALL BE GROUTED.

F. "U-TYPE" HEADWALLS WITH WING WALLS PER MAG STD, DET. 501-3 OR 501-4 ARE REQUIRED FOR ALL XPOSED STORM WATER PIPE.

G. MANHOLE CONCRETE COLLAR SHALL BE 1' FOOT DEEP AND 1' FOOT WIDE OUTSIDE OF RIM CASTING. COLLAR SHALL BE USED IN UNPAVED AS WELL AS PAVED AREAS.

H. RETENTION BASINS SHOULD BE CONSTRUCTED WITH A TWO-FOOT (2') BENCH AT TOP PRIOR TO START OF SLOPE.

I. ALL CMP AND RCP PIPE JOINTS SHALL BE JOINED WITH AN "O" RING OR GASKET TYPE WATERTIGHT SEAL.

J. ANY STORM DRAINS CROSSING PAVED TOWN STREETS REQUIRE A.B.C. BEDDING MINIMUM FOUR (4) INCHES BELOW AND ONE (1) FOOT ABOVE THE TOP OF THE PIPE. ALL STORM PIPES WITHIN TOWN ROW SHALL BE RGRCP.

K. CONSTRUCTION OF STORM DRAIN REQUIRES FOUR (4) INCHES A.B.C. BEDDING PER MAG SPEC. 702. MODIFIED COMPACTION TO 95% TYPICAL. REINFORCED CONCRETE BOX CULVERTS SHALL BE CONSTRUCTED PER A.D.O.T. STANDARDS AND SPECIFICATIONS, TYPICAL, UNLESS OTHERWISE SPECIFIED IN CONSTRUCTION PLANS SUBMITTED.

M. CONSTRUCTION OF MANHOLE FOUNDATIONS FOR ALL STORM SEWER BASES SHALL BE PER MAG SECTIONS 505 AND 725.

N. STORM PLAN AS-BUILTS: AS-BUILT STORM SEWER PLANS PREPARED BY THE DESIGN ENGINEER SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING: TOP OF CURB (TOC) ELEVATIONS AT BOTH ENDS OF EACH SCUPPER AND GUTTER AT CENTER OR FLOW-LINE OF EACH SCUPPER; INLET AND OUTLET INVERTS; HEADWALL TOP ELEVATIONS AND INVERTS; CROSS-PAN AND VALLEY GUTTER FLOW LINES ELEVATIONS; STORM MANHOLE RIM AND INVERT ELEVATIONS; DRYWELL RIM ELEVATIONS; PIPE DIMENSIONS AND LENGTHS, AND ANY AND ALL DEVIATIONS FROM APPROVED DRAWINGS.

4. PAVING NOTES

A. ALL GRADING, EXCAVATION, PAVING, TRENCHING, PIPE BEDDING AND BACKFILL SHALL COMPLY WITH THE RECOMMENDATIONS SET FORTH IN THE SOILS (GEO-TECHNICAL) REPORT FOR THIS PROJECT AND THE REFERENCED REQUIRED SPECIFICATIONS AND DETAILS. SOILS REPORT AND PAVEMENT DESIGN WERE PREPARED: BY: QUALITY TESTING INC. DATED: OCTOBER 30, 2017, JOB NO. # 17046.00.

B. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS AND HORIZONTAL CONTROLS OF ALL EXISTING UTILITIES AT POINT OF TIE-IN PRIOR TO COMMENCING ANY NEW CONSTRUCTION. SHOULD ANY LOCATION, ELEVATION OR CONTROL DIFFER FROM THAT SHOWN ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE OWNER'S AGENT.

C. THE CONTRACTOR SHALL GIVE MINIMUM 72-HOURS NOTICE TO THE TOWN ENGINEER PRIOR TO ANY CONSTRUCTION ACTIVITY WITHIN THE ROW.

D. THE TOWN ENGINEER, OR HIS/HER AUTHORIZED REPRESENTATIVE, MUST APPROVE ALL PLAN REVISIONS IN WRITING PRIOR TO CONSTRUCTION OF ANY CHANGES TO APPROVED PLANS.

E. UPON COMMENCEMENT OF WORK, TRAFFIC CONTROL DEVICES PER THE APPROVED TRAFFIC CONTROL PLAN (TCP) SHALL BE POSTED AND MAINTAINED BY THE CONTRACTOR UNTIL SUCH TIME AS WORK IS COMPLETED.

F. REMOVAL AND RELOCATION OF ALL MAILBOXES, FENCES, SIGNS, GATES, POSTS, PIPES, ETC., WITHIN THE ROW AND CONSTRUCTION LIMITS SHALL BE DIRECTED BY THE TOWN ENGINEER.

G. 25 MPH SPEED LIMIT SIGNS SHALL BE LOCATED AT ALL ENTRANCES INTO A RESIDENTIAL SUBDIVISION DEVELOPMENT. 35 MPH SIGNS FOR COLLECTORS SHALL BE LOCATED PER THE PLANS.

H. CONCRETE COLLARS, ON ALL UTILITY AND SURVEY MONUMENT FRAME ADJUSTMENTS, ARE TO BE INSTALLED FLUSH WITH THE PROPOSED OR EXISTING PAVEMENT. CONTRACTOR SHALL PRESERVE LOCATION OF ANY/ALL PRE-EXISTING SURVEY MONUMENTS, AND PROVIDE FOR RE-INSTALLATION OF SAID SURVEY MONUMENT.

I. PAINT FOR PAVEMENT MARKING AND STRIPING SHALL BE THERMAL TRAFFIC PAINT APPLIED IN A SINGLE COAT AT A RATE OF 100 TO 110 SQ. FEET PER GALLON WITH REFLECTIVE BEADS INCLUDED.

J. STREET CUTS ON ASPHALT PAVEMENT: CUT EXISTING PAVEMENT AT ONE (1') FOOT FROM THE UTILITY TRENCH CUT, PER MAG DETAIL 200 TYPE (T) TOP; TACK EDGES (USING A19MM PER MAG SECTION 710 ASPHALTIC CONCRETE HOT MIX). ASPHALT CONCRETE SHALL BE TESTED FOR COMPACTION TO 95% THE CONTRACTOR, AT THEIR EXPENSE, WILL HAVE A PRIVATE LAB CORE SAMPLE AND RUN A MARSHALL FOR COMPACTION TEST FOR ACCEPTANCE ON ALL STREET CUTS. ALL REPLACEMENT PAVEMENTS SHALL MATCH EXISTING, UNLESS AUTHORIZED IN WRITING BY THE TOWN ENGINEER.

K. ALL CONSTRUCTION AND TEST METHODS SHALL BE IN CONFORMANCE WITH THE TOWN OF FLORENCE AND MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM STANDARDS SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.

L. ASPHALTIC CONCRETE SHALL CONFORM TO MAG USSD SECTION 710 MIX SPECIFICATIONS.

M. ALL CONCRETE SHALL COMPLY WITH MAG SECTION 725, CLASS-A 3000-PSI COMPRESSIVE STRENGTH AT 28 DAYS, UNLESS OTHERWISE SPECIFIED IN CONSTRUCTION PLANS. CONTRACTOR SHALL SUPPLY MIX DESIGN TO THE TOWN ENGINEER FOR APPROVAL PRIOR TO PLACEMENT. CONTRACTOR SHALL SUPPLY A COPY OF EACH BATCH TICKET TO THE TOWN ENGINEER OR HIS REPRESENTATIVE.

N. A COPY OF THE TOWN APPROVED PLANS MUST BE KEPT ON-SITE AT ALL TIMES, DURING THE COURSE OF CONSTRUCTION.

O. ALL NEWLY CONSTRUCTED PAVEMENTS SHALL RECEIVE AN APPLICATION OF SEALANT (SSIH), APPROVED IN ADVANCE BY THE TOWN ENGINEER AND PRIOR TO ACCEPTANCE INTO A WARRANTY PERIOD. HYDRANT REFLECTORS SHALL BE INSTALLED AFTER THE APPLICATION OF THE SEALANT.

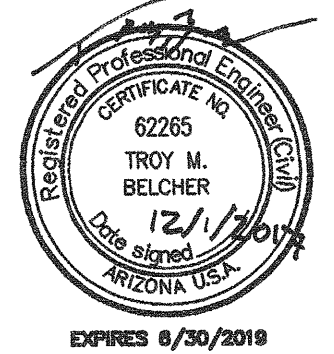
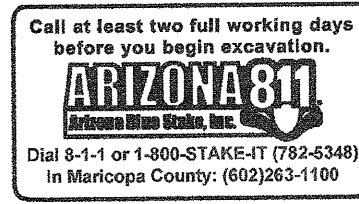
P. IN THE EVENT OF ANY DISPUTE BETWEEN THESE PLANS AND MAG STANDARD SPECIFICATIONS, THESE APPROVED PLANS SHALL PREVAIL.


Q. THE CONTRACTOR IS RESPONSIBLE FOR FINAL ADJUSTMENT OF ALL MANHOLES, VALVES, CLEAN-OUTS, WATER METER BOXES, J-BOXES, ETC., AND RESTORATION OF CONSTRUCTION SITE TO MAG STANDARDS, INCLUDING ROW GRADING.

R. ENGINEER'S TESTING OF A/C MIX PRIOR TO PLACEMENT IS REQUIRED AND RESULTS ARE TO BE DELIVERED TO THE TOWN ENGINEER OR HIS REPRESENTATIVE PRIOR TO PAVING.

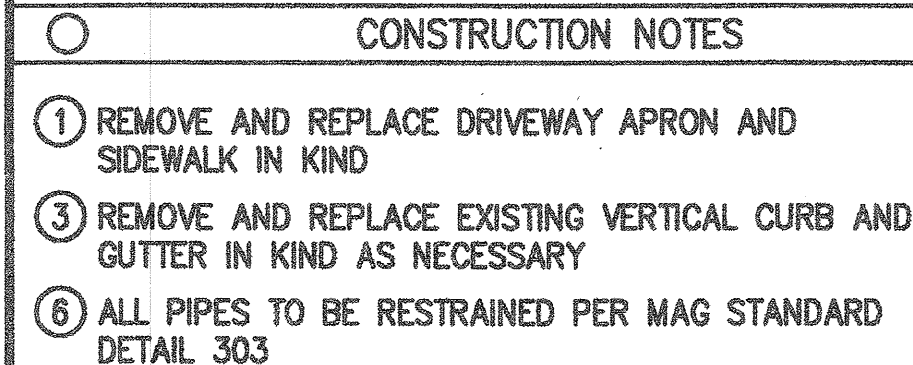
S. ROLLING PATTERNS REQUIRED BY THE GEO-TECHNICAL TESTING FIRM SHALL ALSO BE SUPPLIED TO THE TOWN ENGINEER'S REPRESENTATIVE.

- T. CORE TESTING OF NEWLY CONSTRUCTED ASPHALT CONCRETE SURFACES MAY BE REQUIRED AT THE DISCRETION OF THE TOWN ENGINEER. CORE TESTS ARE MANDATORY, ALONG WITH SUPPORTING MARSHALL TEST RESULTS, FOR ALL EXISTING ROADWAYS WHERE STREET CUTS ARE NECESSARY.
- U. PROTECTION OF VALLEY GUTTERS, CROSS-PANS AND APRONS DURING PAVING OPERATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND ALL DAMAGED CONCRETE SHALL BE REPLACED PRIOR TO ACCEPTANCE.
- V. TACK SEAL SHALL BE REQUIRED BETWEEN LIFTS UNLESS SECOND LIFT IS APPLIED ON THE SAME DAY AS FIRST LIFT AND ALL VERTICAL CONCRETE SURFACES PRIOR TO PLACEMENT OF ASPHALT. THIS REQUIREMENT ALSO APPLIES TO VERTICAL ASPHALTIC CONCRETE SURFACES AND AT ALL JOINTS OF NEW LIFTS.
- W. THE SURVEYOR SHALL PERFORM INSTALLATION AND STRADDLING OF MONUMENTS. ONCE STAMPED, DATUM SHALL BE PART OF THE AS-BUILT PLANS.
- X. STREET SIGN BASES, POLES AND SIGNS SHALL BE INSTALLED PRIOR TO THE FINAL WALKTHROUGH AND ACCEPTANCE INTO ANY WARRANTY PERIOD.
- Y. ALL WARNING, REGULATORY AND STREET NAME SIGNS MUST BE MANUFACTURED OF "ASTM D-4956-01A-TYPE IX SHEETING". ALL OTHER SIGNS MUST BE MANUFACTURED WITH "ASTM D-4956-01A-TYPE III SHEETING" WHICH WILL BE ATTACHED TO THE STANDARD SIGN ALUMINUM PLATES. SIGN IMAGING SHALL BE IN COMPLIANCE WITH THE REFLECTIVE SHEETING MANUFACTURER'S MATCHED COMPONENT SYSTEM. SIGN IMAGING SHALL CONSIST OF AN ACRYLIC BASED ELECTRONIC FILM ABLE TO BE CUT 3M 1170 SERIES OR EQUIVALENT OR SILK-SCREENED (DEPENDING ON THE QUANTITY OF SIGNAGE) WITH STANDARD HIGHWAY COLORS. IN ADDITION, A GRAFFITI-PROTECTIVE COATING, OF A PREMIUM PROTECTIVE OVERLAY FILM, 3M 1160 OR EQUIVALENT, SHALL BE USED ON ALL REGULATORY AND WARNING SIGNS. GRAFFITI PROTECTIVE COATING MUST BE DESIGNED TO COMPLY WITH THE UNDERLYING REFLECTIVE SHEETING MATCH COMPONENT SYSTEM.
- Z. ROW GRADING SHALL BE COMPLETED PRIOR TO THE FINAL WALK-THROUGH AND SHALL BE HELD ONE (1") INCH BELOW BACK OF WALK (B/W) OR TOP OF CURB (T/C).
- AA. PAVING AS-BUILT PLANS SHALL BE PREPARED BY THE DESIGN ENGINEER/CONTRACTOR AND SHALL CERTIFY THAT THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED PLANS PRIOR TO REQUEST FOR FINAL INSPECTION, CERTIFICATE OF OCCUPANCY OR RELEASE OF ASSURANCE.
- BB. FRESHLY PAVED FINISHED ROADWAY SHALL BE 1/4 "ABOVE THE LIP OF THE CONCRETE GUTTER". ASPHALT PAVING MACHINES SHALL BE EQUIPPED WITH AN ACTIVATED SCREED IN ORDER TO MAKE A FIRST PASS (RIBBON) OF 17' OR GREATER.
- CC. SUB-GRADE PREPARATION FOR ALL SIDEWALKS, CURB AND GUTTER SHALL BE SCARIFIED AND LOOSENED TO A DEPTH OF 6", AND SHALL BE CONSTRUCTED TO ACHIEVE A UNIFORM MOISTURE BY THE ADDITION OF WATER. MOISTURE SHALL BE MAINTAINED 2.0 PERCENT ABOVE OPTIMUM MOISTURE PRIOR TO PLACEMENT OF CONCRETE, AND COMPACTED TO 95 PERCENT OF MAXIMUM DENSITY. ALL MATERIALS OUTSIDE THE MOISTURE LIMIT SHALL BE CONSIDERED SUBJECT TO REMOVAL.
- DD. ANY PAVEMENT ADJACENT TO EXISTING ROW MUST MATCH THE EXISTING PAVEMENT DESIGN, UNLESS AUTHORIZED, IN WRITING, BY THE TOWN ENGINEER OR HIS/HER AUTHORIZED REPRESENTATIVE.
- EE. FINISHED GRADE OF COMPACTED, FRESHLY PLACED ASPHALT, SHALL BE NO MORE OR NO LESS THAN ¼" INCH ABOVE THE LIP OF THE GUTTER. NO DIESEL, OR OTHER CLEANING SOLVENTS, WILL BE APPLIED TO THE PAVING HOPPER, THE SCREED, OR THE AUGER IMMEDIATELY PRIOR TO BEGINNING OF THE PAVING OPERATION.
- FF. PAVING PLAN AS-BUILTS: AS-BUILT PLANS SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING: HORIZONTAL AND VERTICAL CONTROL, CHANGES TO ANY GRADE BREAK LOCATIONS, TOP OF CURB (T/C) ELEVATIONS AT EACH CURB RETURN, PROPERTY CORNER, GUTTER/FLOW LINE ELEVATIONS, SCUPPER AND CATCH BASIN INVERTS, MONUMENTATION, CROSS SLOPES, VALLEY GUTTER FLOW LINE ELEVATIONS, HYDRANT REFLECTORS AND ANY AND ALL CHANGES TO THE APPROVED PLANS.



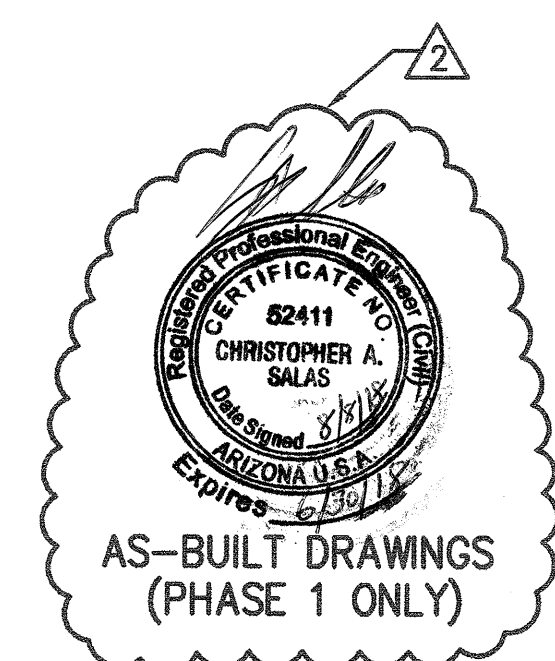
|   |                     |   |                                      |
|---|---------------------|---|--------------------------------------|
| <br>WestLand Resources |                     | 4001 E. Paradise Falls Drive<br>Tucson, Arizona 85712<br>(520) 266-9585 |                                      |
| DESIGNED BY:<br>C.C.  | DRAWN BY:<br>G.G.F. | CHECKED BY:<br>T.M.B.   | SHEET NO.<br><br>G-02<br><br>2 OF 13 |
| DRAWING SCALE(S):<br>NA   |                     |   |                                      |
| PLAN DATE:<br>DECEMBER 01, 2017   |                     |   |                                      |
| PROJECT NUMBER:<br>486.05   |                     |   |                                      |






2

| NO. | NORTHING  | EASTING   |
|-----|-----------|-----------|
| 50  | 737566.07 | 861899.78 |
| 51  | 737566.51 | 862043.40 |
| 52  | 737884.79 | 862042.70 |
| 53  | 737900.01 | 862050.72 |



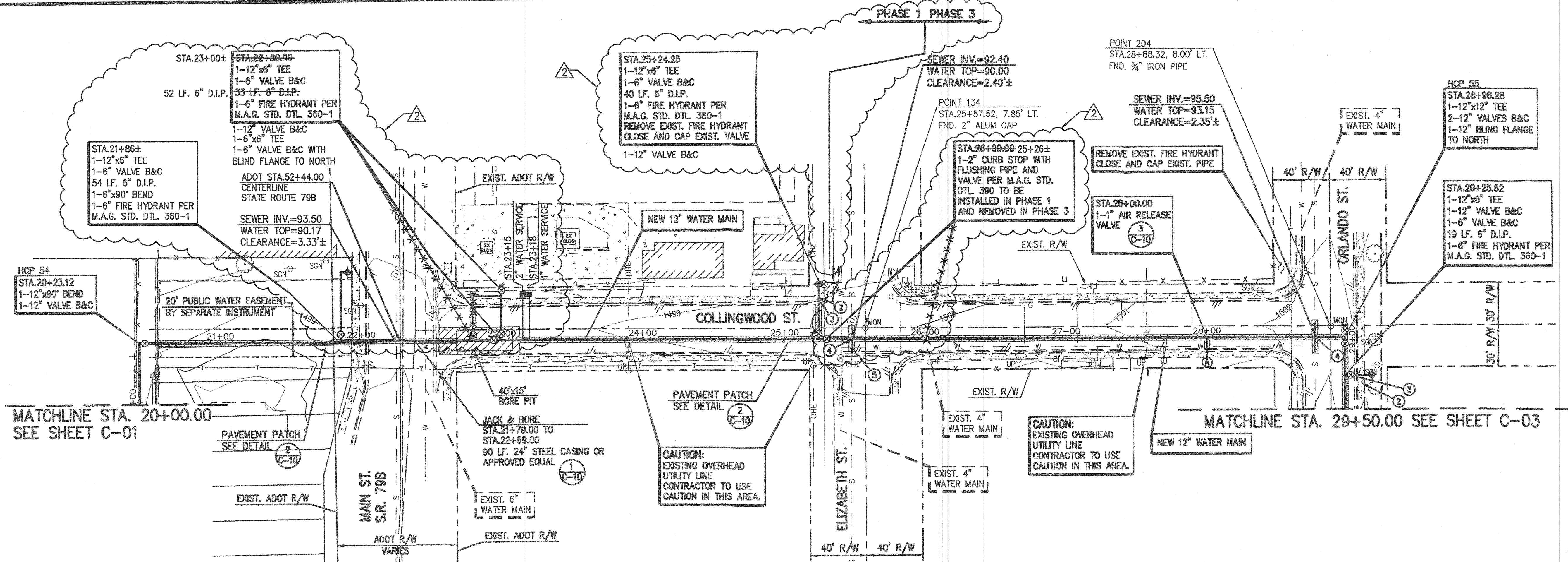
|                                 |    |             |            |
|---------------------------------|----|-------------|------------|
| ASBUILT DRAWINGS - PHASE 1 ONLY |    |             |            |
| NO.                             | BY | DESCRIPTION | APP'D DATE |
| R E V I S I O N S               |    |             |            |

 4001 E. Paradise Falls Drive  
Tucson, Arizona 85712  
(520) 206-9585

**WestLand Resources**

|                                 |                     |   |
|---------------------------------|---------------------|---|
| DESIGNED BY:<br>C.C.            | DRAWN BY:<br>G.G.F. | CHECKED BY:<br>T.M.B.                       |
| DRAWING SCALE(S):<br>1"=40'     |                     | SHEET NO.<br><br><b>C-01</b><br><br>3 OF 13 |
| PLAN DATE:<br>DECEMBER 01, 2017 |                     |   |
| PROJECT NUMBER:<br>486.05       |                     |   |

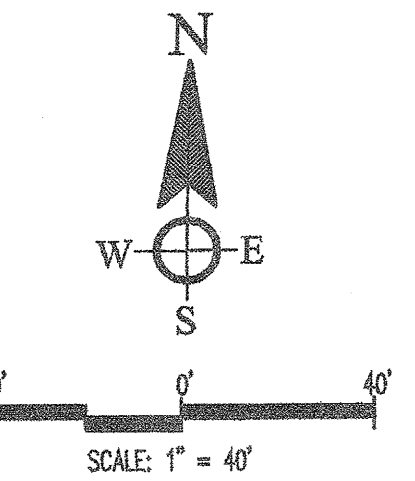
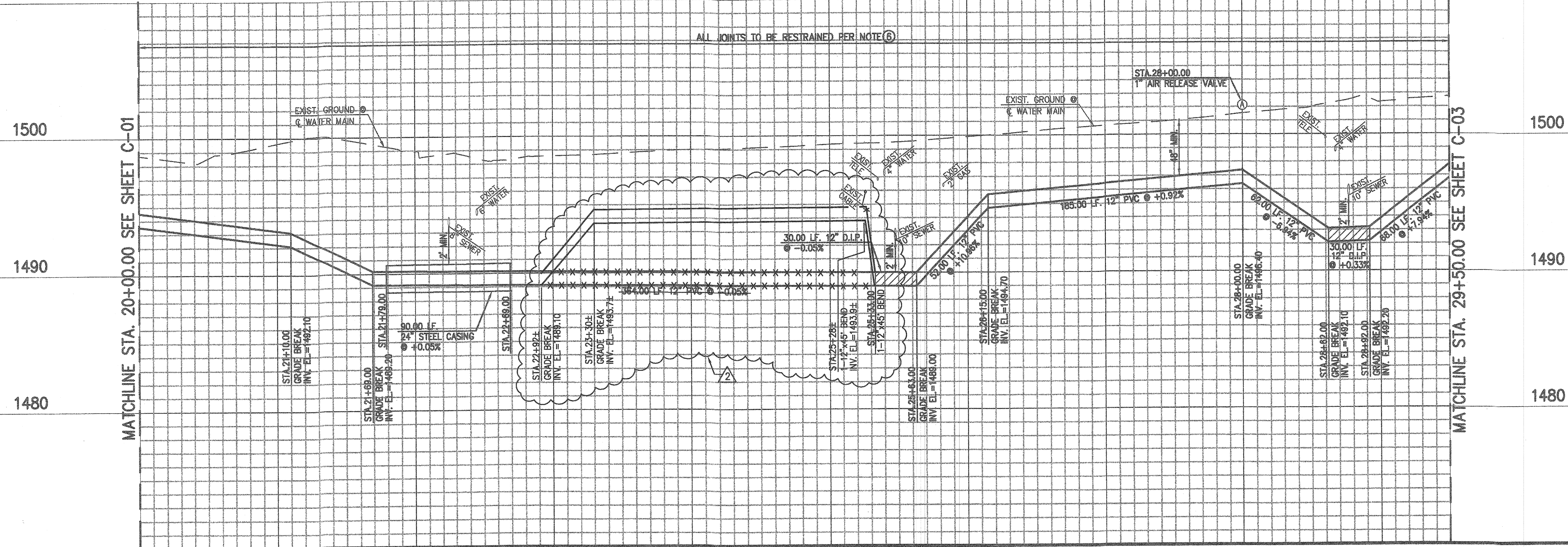




NOTES:

1. ALL WATER MAIN STATIONING IS BASED ON CENTERLINE OF THE WATER MAIN UNLESS OTHERWISE NOTED.

20+00 21+00 22+00 23+00 24+00 25+00 26+00 27+00 28+00 29+00

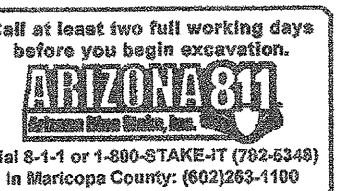
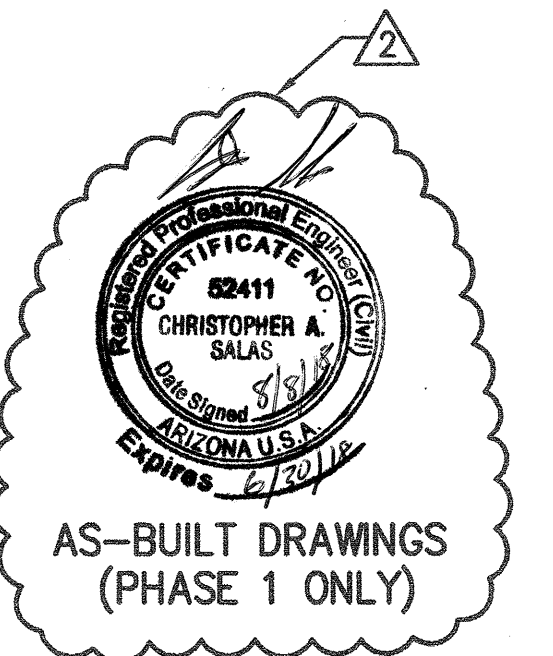


CONSTRUCTION NOTES

2. REMOVE AND REPLACE EXISTING SIDEWALK IN KIND AS NECESSARY
3. REMOVE AND REPLACE EXISTING VERTICAL CURB AND GUTTER IN KIND AS NECESSARY
4. CONCRETE ENCASE EXISTING SEWER 10' EITHER SIDE OF PROPOSED WATER MAIN CROSSING PER M.A.G. STD. DETAIL 404
5. REMOVE AND REPLACE EXISTING CONCRETE VALLEY GUTTER IN KIND AS NECESSARY
6. ALL PIPES TO BE RESTRAINED PER MAG STANDARD DETAIL 303

HCP TABLE

| NO. | NORTHING  | EASTING   |
|-----|-----------|-----------|
| 54  | 738371.50 | 862059.06 |
| 55  | 738371.90 | 862914.90 |



| NO. | BY | DESCRIPTION                      | APP'D | DATE |
|-----|----|----------------------------------|-------|------|
|     |    | AS-BUILT DRAWINGS - PHASE 1 ONLY |       |      |

REVISIONS

TOWN OF FLORENCE  
12" WATER LINE AUGMENTATION  
PLAN AND PROFILE SHEET

|                                 |   |                     |                       |
|---------------------------------|---|---------------------|-----------------------|
|                                 | 4001 E. Paradise Falls Drive<br>Tucson, Arizona 85712<br>(520) 206-9585 |                     |                       |
|                                 | DESIGNED BY:<br>C.C.  | DRAWN BY:<br>G.G.F. | CHECKED BY:<br>T.M.B. |
| DRAWING SCALE(S):<br>1"=40'     |   |                     | SHEET NO.<br>C-02     |
| PLAN DATE:<br>DECEMBER 01, 2017 |   |                     | 4 OF 13               |
| PROJECT NUMBER:<br>486.05       |   |                     |                       |

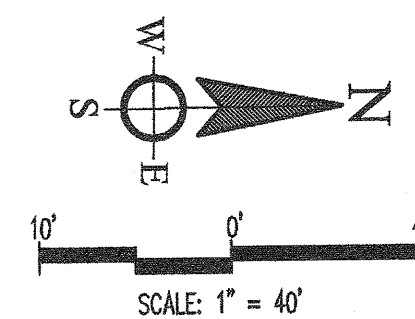
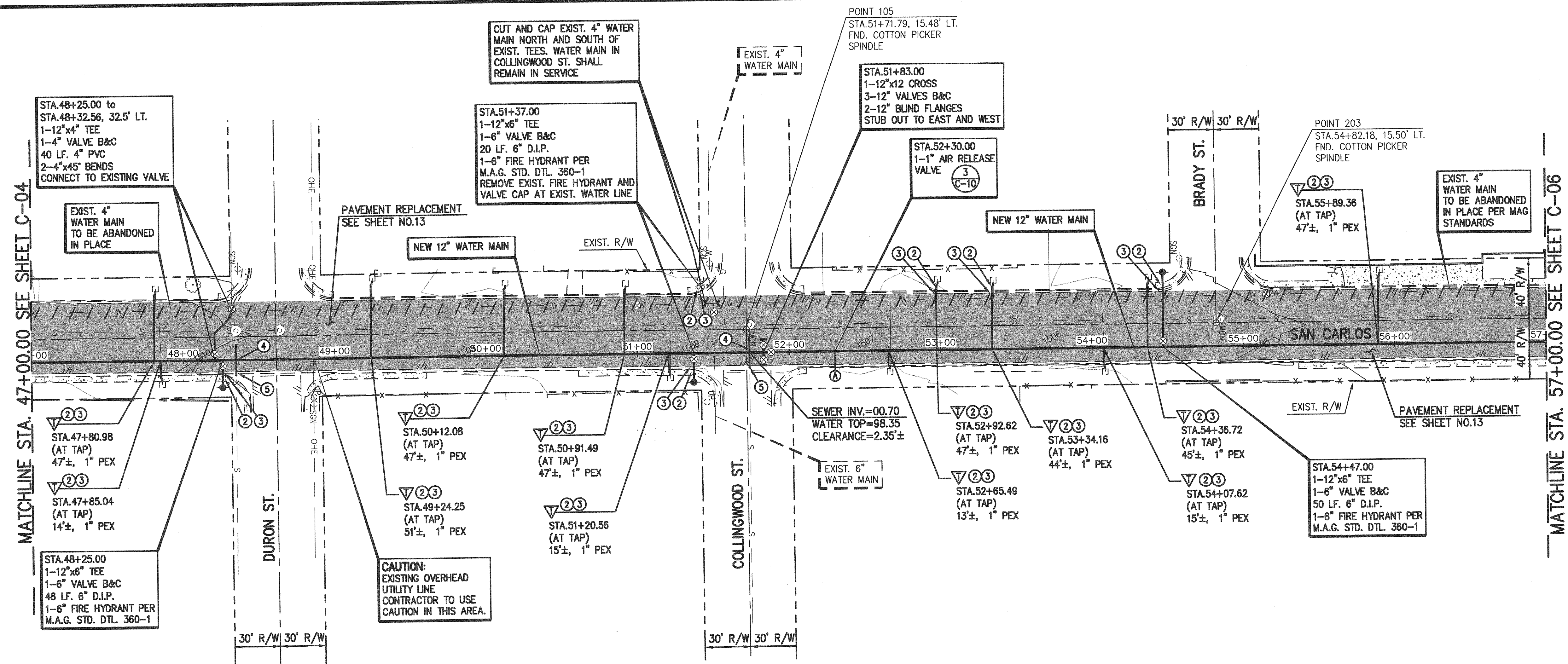








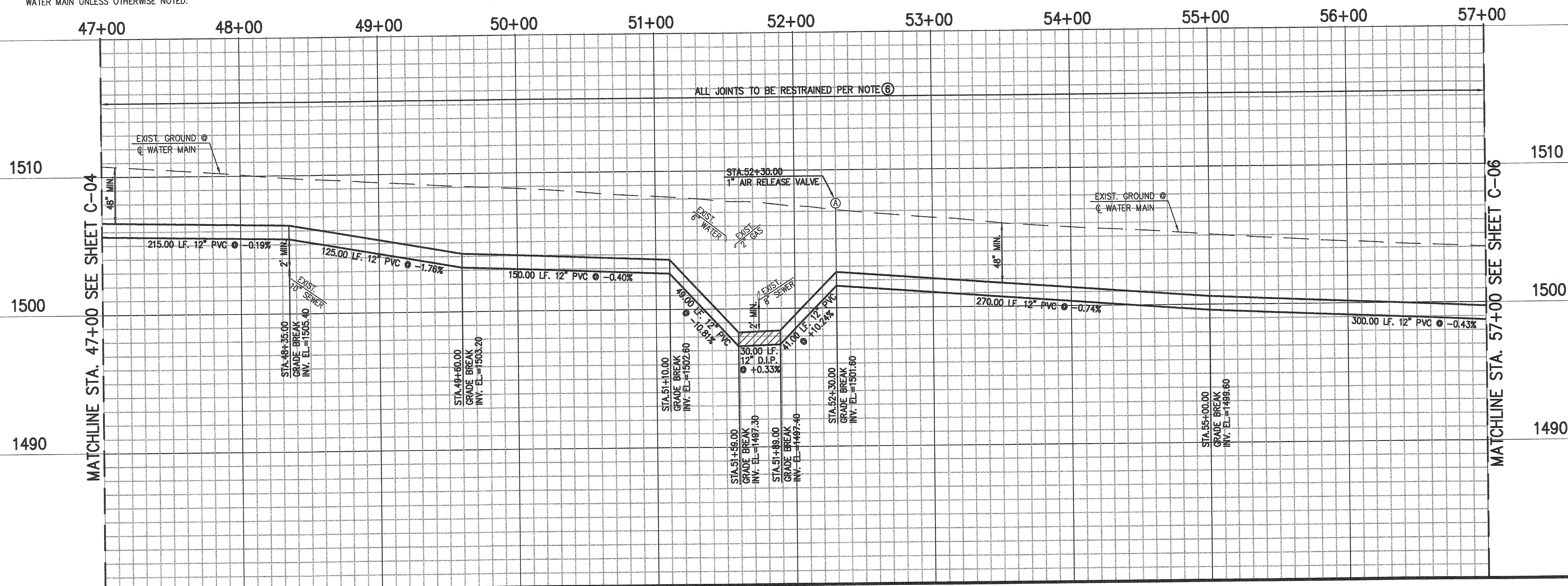




- | O | CONSTRUCTION NOTES  |
|---|---|
| 2 | REMOVE AND REPLACE EXISTING SIDEWALK IN KIND AS NECESSARY   |
| 3 | REMOVE AND REPLACE EXISTING VERTICAL CURB AND GUTTER IN KIND AS NECESSARY                                 |
| 4 | CONCRETE ENCASE EXISTING SEWER 10' EITHER SIDE OF PROPOSED WATER MAIN CROSSING PER M.A.G. STD. DETAIL 404 |
| 5 | REMOVE AND REPLACE EXISTING CONCRETE VALLEY GUTTER IN KIND AS NECESSARY                                   |
| 6 | ALL PIPES TO BE RESTRAINED PER MAG STANDARD DETAIL 303  |
| 7 | ALL SERVICE TIE OVERS PER DETAIL 4, SHEET C-10.   |

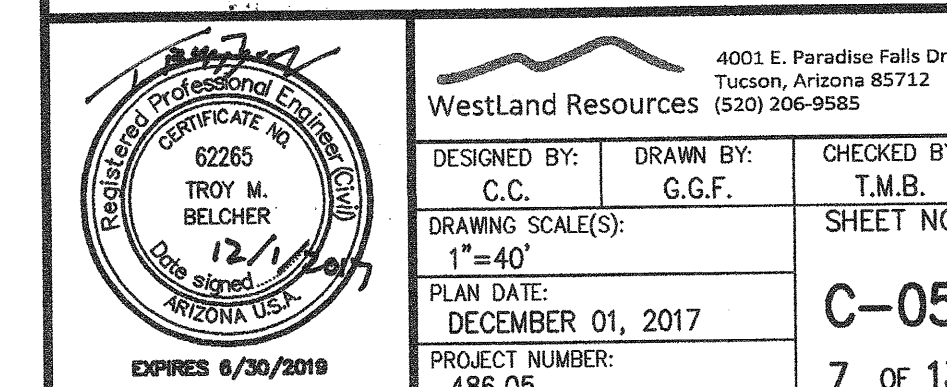
- | GENERAL NOTES |  |
|---------------|--|
| 1.            | CONTRACTOR TO MAINTAIN WATER SERVICE TO HOMES THROUGHOUT THE DURATION OF THE PROJECT. IF SERVICE SHUT DOWNS ARE REQUIRED A MINIMUM OF 30 DAY NOTICE SHALL BE PROVIDED TO THE AFFECTED RESIDENCE. |

**NOTES:**  
1. ALL WATER MAIN STATIONING IS BASED ON CENTERLINE OF THE  
WATER MAIN UNLESS OTHERWISE NOTED.



| NO.       | BY | DESCRIPTION | APP'D | DATE |
|-----------|----|-------------|-------|------|
| REVISIONS |    |             |       |      |

TOWN OF FLORENCE  
12" WATER LINE AUGMENTATION  
PLAN AND PROFILE SHEET









M:\Jobs\400's\486.05\ENR\Deliverables\486.05-C-07.dwg Dec 01, 2017 - 10:54am gford

MATCHLINE STA. 65+00.00 SEE SHEET C-06

65+00

66+00

67+00

68+00

69+00

70+00

71+00

72+00

73+00

MATCHLINE STA. 65+00.00 SEE SHEET C-06

1500

1490

1480

MATCHLINE STA. 73+00.00 SEE SHEET C-08

1500

1490

1480

MATCHLINE STA. 73+00.00 SEE SHEET C-08

STA.72+58.28  
(AT TAP)  
35'±, 1" PEX

CAUTION:  
EXISTING OVERHEAD  
UTILITY LINE  
CONTRACTOR TO USE  
CAUTION IN THIS AREA.

STA.72+08.42  
(AT TAP)  
17'±, 1" PEX

STA.71+68.08  
(AT TAP)  
35'±, 1" PEX

STA.70+47.38  
1-12"x12" TEE  
1-12" VALVE B&C  
1-12"x6" REDUCER  
1-6" VALVE B&C  
1-6"x45" BENDS  
CONNECT TO EXIST.  
6" WATER MAIN TO EAST  
2' MIN. VERTICAL SEPARATION FROM SEWER  
1-THRUST BLOCK AT CONNECTION

EXIST. 4"  
WATER MAIN  
TO BE ABANDONED  
IN PLACE

POINT 7503  
STA.70+56.39, 8.84' LT.  
FND. COTTON PICKER  
SPINDLE

EXIST. R/W

STA.70+10.00  
1-1" AIR RELEASE  
VALVE

STA.70+21.00  
1-12"x6" TEE  
1-6" VALVE B&C  
1-12" VALVE B&C  
45 LF. 6" D.I.P.  
1-6" FIRE HYDRANT PER  
M.A.G. STD. DTL. 360-1

REMOVE EXIST. VALVE AND  
FIRE HYDRANT. CAP AT  
EXIST. WATER LINE

CUT EXIST. 3" WATER MAIN  
INSTALL 1-2" MODIFIED DRAIN  
VALVE ASSEMBLY PER MAG STD.  
DTL. 390, TYPE B  
ABANDON MAIN TO NORTH

POINT 7503  
STA.66+86.20, 9.03' LT.  
FND. COTTON PICKER  
SPINDLE

EXIST. 3"  
WATER MAIN

NEW 12" WATER MAIN

STA.67+21.55  
1-12"x6" TEE  
1-12" VALVE B&C  
1-6" VALVE B&C  
18 LF. 6" D.I.P.  
1-6" FIRE HYDRANT PER  
M.A.G. STD. DTL. 360-1  
REMOVE EXIST. FIRE HYDRANT  
CUT AND CAP AT EXIST. WATER LINE

SEWER INV.=93.50  
WATER TOP=91.35  
CLEARANCE=2.15'±

CAUTION:  
EXISTING OVERHEAD  
UTILITY LINE  
CONTRACTOR TO USE  
CAUTION IN THIS AREA.

PAVEMENT PATCH  
SEE DETAIL (C-10)

ALL JOINTS TO BE RESTRAINED PER NOTE (6)

STA.70+10.00  
1" AIR RELEASE VALVE

EXIST. GROUND  
Q. WATER MAIN

EXIST. GROUND  
Q. WATER MAIN

STA.66+35.00  
GRADE BREAK  
INV. EL.=1494.00

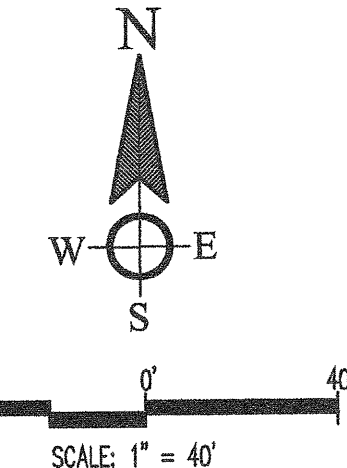
STA.66+67.00  
GRADE BREAK  
INV. EL.=1490.30

STA.66+97.00  
GRADE BREAK  
INV. EL.=1490.40

STA.67+50.00  
GRADE BREAK  
INV. EL.=1495.00

STA.70+10.00  
GRADE BREAK  
INV. EL.=1497.00

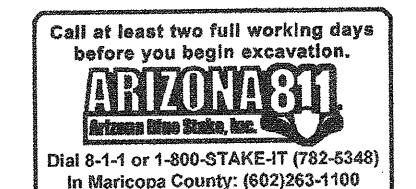
STA.72+30.00  
GRADE BREAK  
INV. EL.=1495.70



- CONSTRUCTION NOTES
- REMOVE AND REPLACE EXISTING SIDEWALK IN KIND AS NECESSARY
  - REMOVE AND REPLACE EXISTING VERTICAL CURB AND GUTTER IN KIND AS NECESSARY
  - CONCRETE ENCASE EXISTING SEWER 10' EITHER SIDE OF PROPOSED WATER MAIN CROSSING PER M.A.G. STD. DETAIL 404
  - REMOVE AND REPLACE EXISTING CONCRETE VALLEY GUTTER IN KIND AS NECESSARY
  - ALL PIPES TO BE RESTRAINED PER MAG STANDARD DETAIL 303
  - ALL SERVICE TIE OVERS PER DETAIL 4, SHEET C-10.

- GENERAL NOTES
- CONTRACTOR TO MAINTAIN WATER SERVICE TO HOMES THROUGHOUT THE DURATION OF THE PROJECT. IF SERVICE SHUT DOWNS ARE REQUIRED A MINIMUM OF 30 DAY NOTICE SHALL BE PROVIDED TO THE AFFECTED RESIDENCE.

| HCP TABLE |           |           |
|-----------|-----------|-----------|
| NO.       | NORTHING  | EASTING   |
| 62        | 739713.52 | 864464.31 |



| NO.       | BY | DESCRIPTION | APP'D | DATE |
|-----------|----|-------------|-------|------|
| REVISIONS |    |             |       |      |

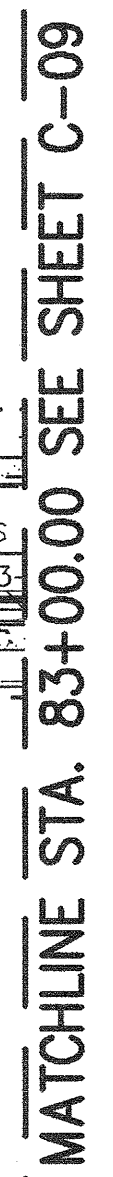
TOWN OF FLORENCE  
12" WATER LINE AUGMENTATION  
PLAN AND PROFILE SHEET

WestLand Resources  
4001 E. Paradise Falls Drive  
Tucson, Arizona 85712  
(520) 206-9585

DESIGNED BY: C.C.  
DRAWN BY: G.G.F.  
CHECKED BY: T.M.B.  
DRAWING SCALE(S): 12"=40'  
PLAN DATE: DECEMBER 01, 2017  
PROJECT NUMBER: 486.05

SHEET NO. C-07  
9 OF 13

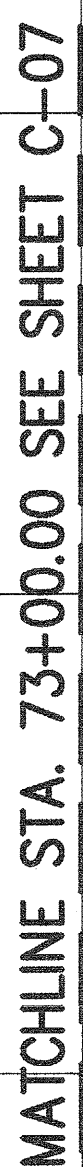




- | GENERAL NOTES |  |
|---------------|--|
| 1.            | CONTRACTOR TO MAINTAIN WATER SERVICE TO HOMES THROUGHOUT THE DURATION OF THE PROJECT. IF SERVICE SHUT DOWNS ARE REQUIRED A MINIMUM OF 30 DAY NOTICE SHALL BE PROVIDED TO THE AFFECTED RESIDENCE. |

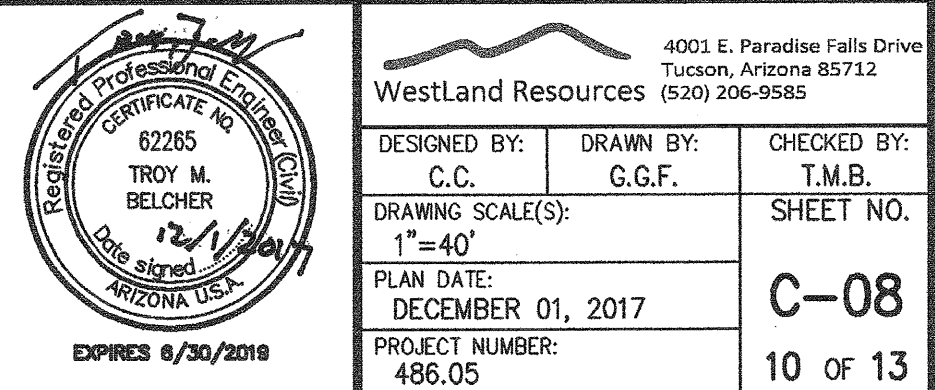
**NOTES:**

1. ALL WATER MAIN STATIONING IS BASED ON CENTERLINE OF THE WATER MAIN UNLESS OTHERWISE NOTED.

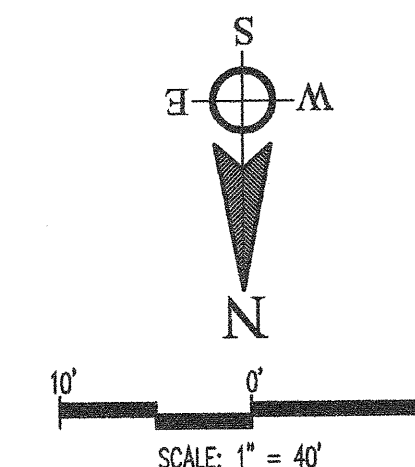


| NO.               | BY | DESCRIPTION | APP'D | DATE |
|-------------------|----|-------------|-------|------|
| R E V I S I O N S |    |             |       |      |

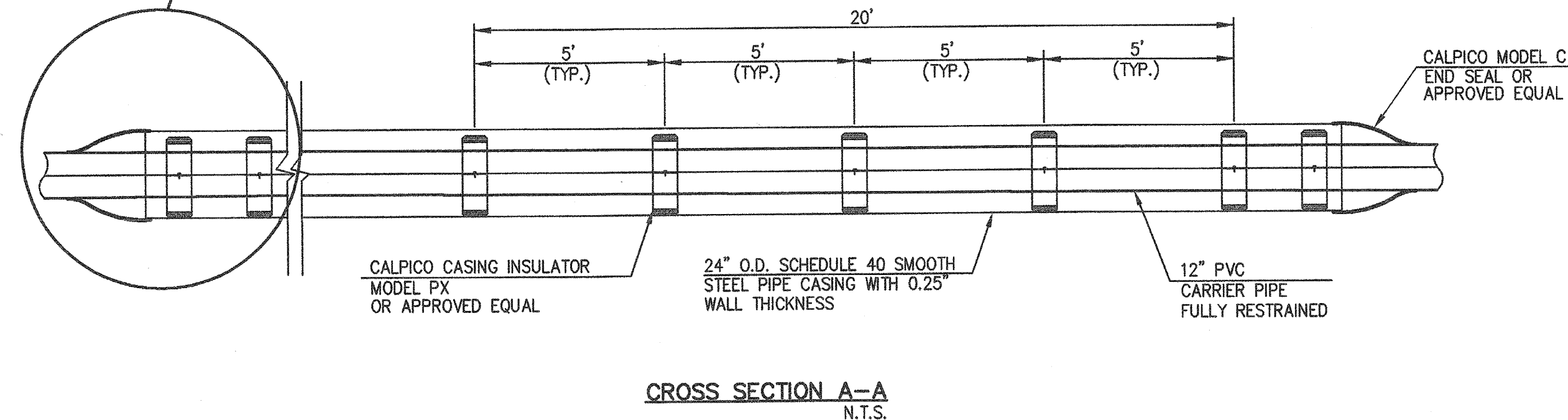
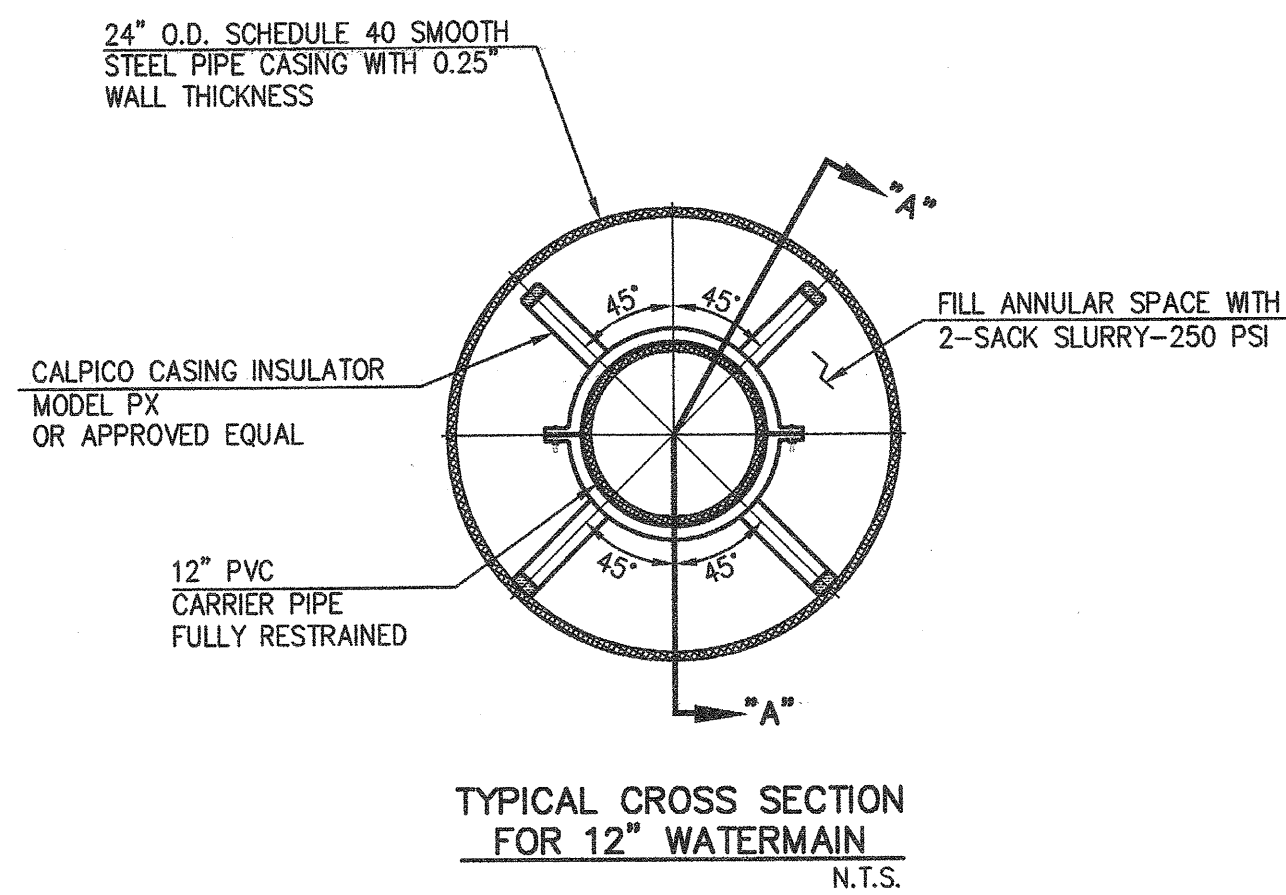
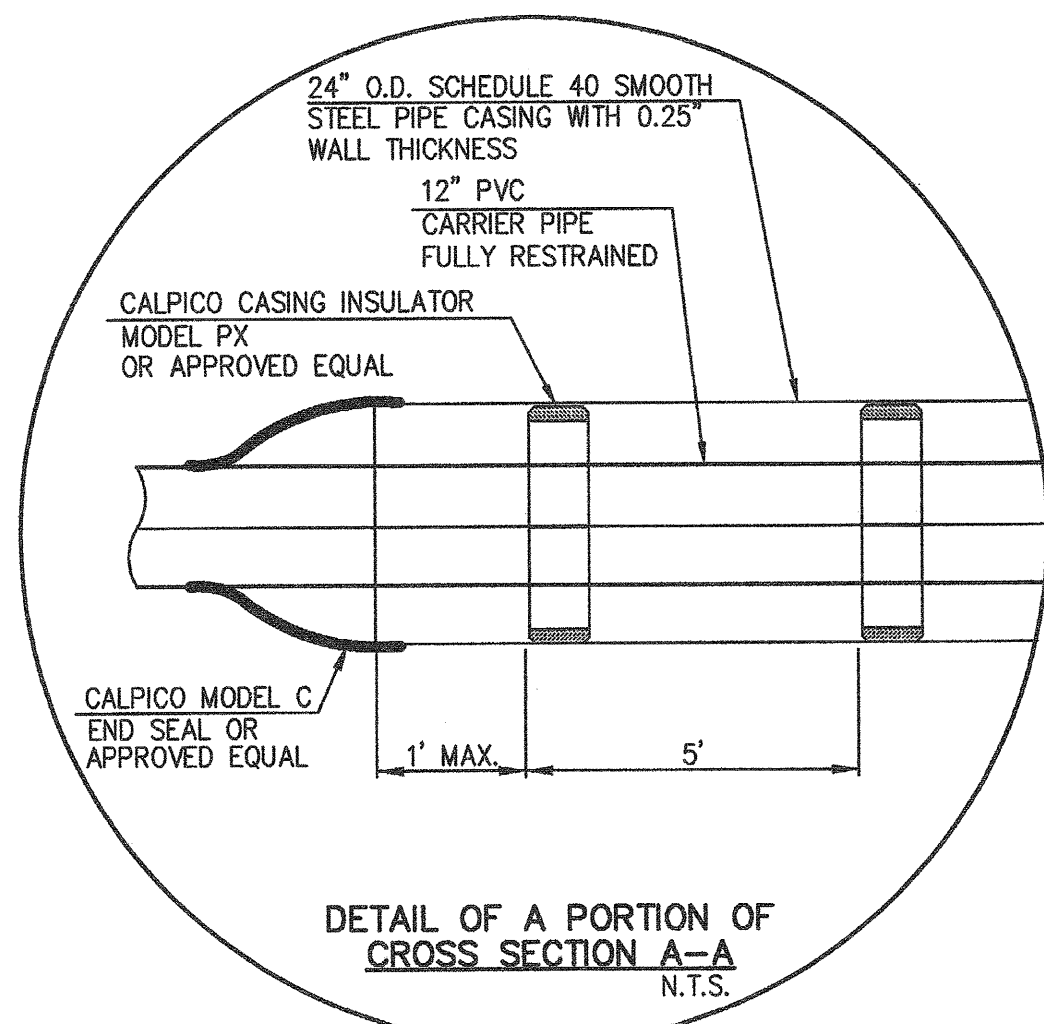
TOWN OF FLORENCE  
12" WATER LINE AUGMENTATION  
PLAN AND PROFILE SHEET



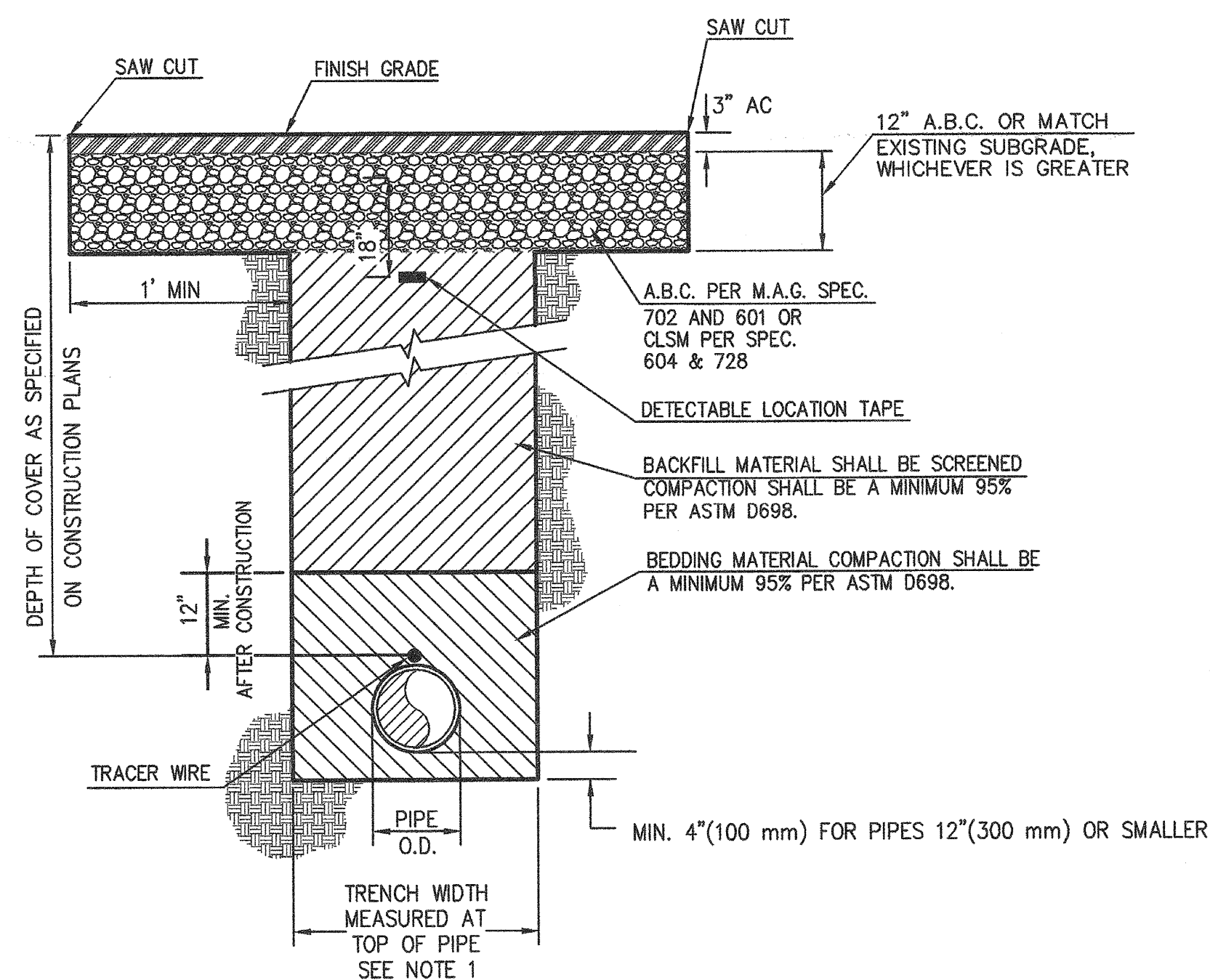






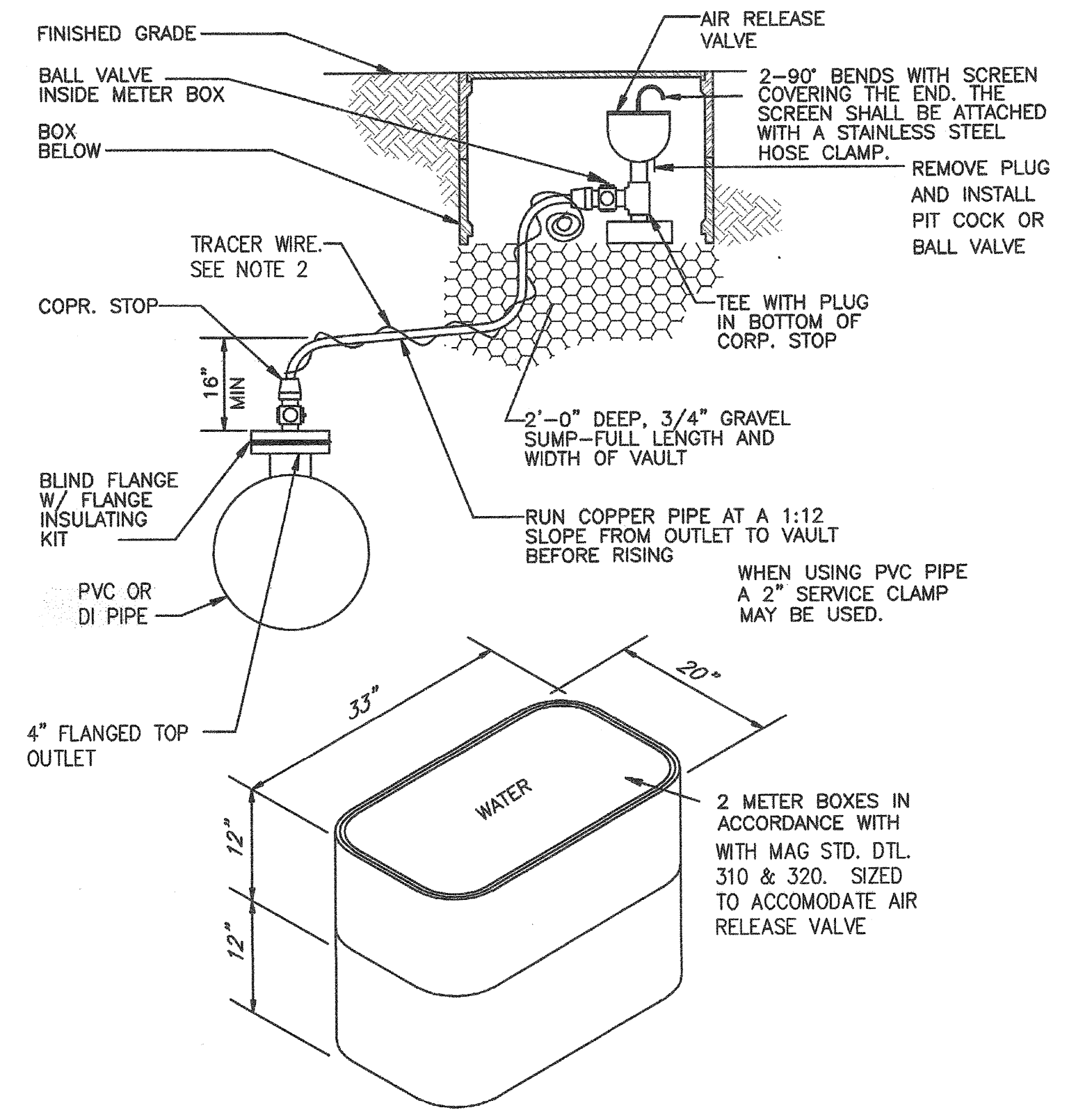


# 1 WATER INSTALLATION IN CASING AT MAIN ST. (SR 79B) AND BUTTE ROAD (SR79B) N.T.S.



1. TRENCH WIDTH MEASURED AT THE TOP OF THE PIPE SHALL BE 18" (455 mm) FOR 4" (100 mm) AND 6" (150 mm) MAINS, AND 24" (610 mm) FOR 8" (200 mm) MAINS. TRENCH WIDTH FOR 12" (300 mm) AND LARGER SHALL BE O.D. + 18" (455 mm) MIN., O.D. + 24" (610 mm) MAX.
2. FOR TRENCHING UNDER CONCRETE AND CURB, SAWCUT BOTH EDGES. MINIMUM WIDTH OF TRENCH TO BE 2 FT. REPLACE CONCRETE OR CURB IN KIND.

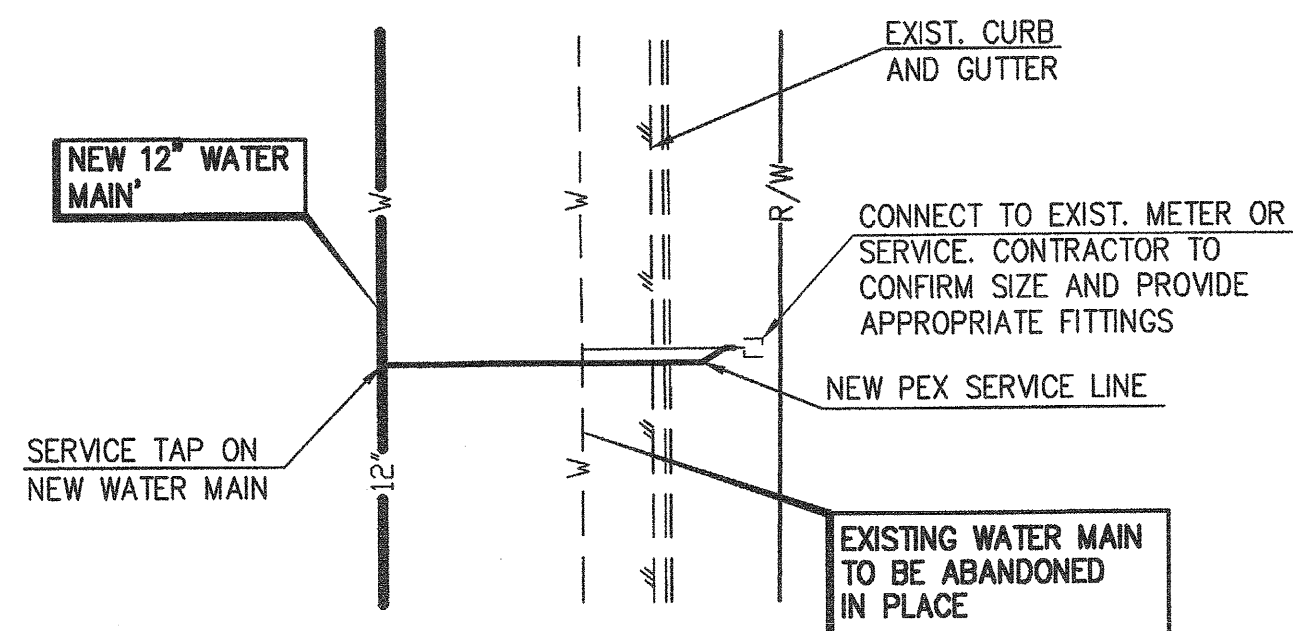
## 2 WATER TRENCH DETAIL N.T.S.



NOTES:

1. FLANGE INSULATING KIT MUST BE TESTED TO CONFIRM ISOLATION PRIOR TO BACKFILL. INCLUDE TEST RESULTS IN FINAL CORROSION REPORT.
2. ALL AIR RELEASE VALVE INSTALLATIONS REQUIRE A TRACER WIRE. THE TRACER WIRE SHALL BE USE, RHW, OR RHH SOLID 10 GAUGE AND RUN IN A CONTINUOUS LENGTH FROM THE CORPORATION TO BALL VALVE. THE TRACER WIRE SHALL BE ATTACHED TO THE AIR RELEASE LINE WITH TAPE OR WIRE TIES AT 1' INTERVALS. A 3' COIL OF WIRE SHALL BE LEFT IN THE METER BOX.

## 3 1" AIR RELEASE VALVE INSTALLATION N.T.S.



NOTE:  
SERVICE RENEWALS SHALL INCLUDE  
NEW SERVICE SADDLE, CORPORATION  
STOP TAP, PEX PIPE (ENTIRE LENGTH),  
ANGLE METER VALVE, MAGNETIC LOCATOR  
TAPE, TRACER WIRE, AND CONNECTION  
TO EXISTING METER.

## 4 SERVICE LINE RENEWAL DETAIL N.T.S.

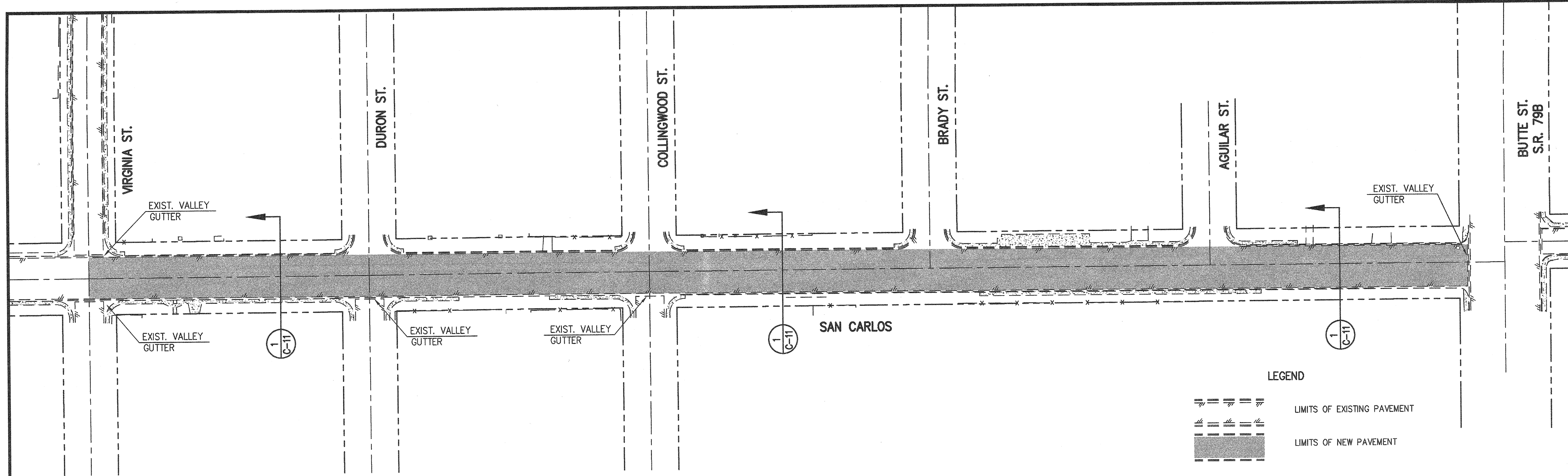
| SURVEY POINT TABLE |            |            |           |                       |
|--------------------|------------|------------|-----------|-----------------------|
| POINT #            | NORTHING   | EASTING    | ELEVATION | RAW DESCRIPTION       |
| 100                | 737761.489 | 863235.784 | 1511.76   | COTTON PICKER SPINDLE |
| 101                | 737760.162 | 862905.379 | 1509.91   | COTTON PICKER SPINDLE |
| 102                | 738070.614 | 862904.763 | 1506.07   | RAILROAD SPIKE        |
| 105                | 738384.732 | 863943.944 | 1508.02   | COTTON PICKER SPINDLE |
| 107                | 737764.172 | 863946.336 | 1512.21   | COTTON PICKER SPINDLE |
| 108                | 737762.671 | 863566.172 | 1511.76   | COTTON PICKER SPINDLE |
| 111                | 739722.110 | 863918.138 | 1499.38   | COTTON PICKER SPINDLE |
| 120                | 740462.479 | 864472.658 | 1494.35   | COTTON PICKER SPINDLE |
| 121                | 740832.556 | 864472.301 | 1490.11   | COTTON PICKER SPINDLE |
| 131                | 739722.524 | 864473.150 | 1503.40   | COTTON PICKER SPINDLE |
| 134                | 738379.595 | 862574.135 | 1499.72   | ALUMINUM CAP 2IN      |
| 200                | 741021.914 | 863547.080 | 1486.77   | BRASS CAP             |
| 202                | 741022.247 | 864102.296 | 1488.25   | BRASS CAP             |
| 203                | 738695.100 | 863942.778 | 1505.41   | COTTON PICKER SPINDLE |
| 204                | 738379.892 | 862904.927 | 1501.93   | IRON PIPE 3/4 IN      |
| 372                | 739301.266 | 864825.854 | 1507.98   | BRASS CAP HAND HOLE   |
| 373                | 736660.603 | 864830.257 | 1526.66   | BRASS CAP HAND HOLE   |
| 7500               | 741022.168 | 863917.221 | 1487.95   | BRASS CAP             |
| 7503               | 739722.267 | 864103.120 | 1500.91   | COTTON PICKER SPINDLE |

Call at least two full working days  
before you begin excavation.  
**ARIZONA 811**  
Dig Safe  
Dial 8-1-1 or 1-800-STAKE-IT (782-6348)  
In Maricopa County: (602)263-1100

|   |                   |   |        |             |
|---|-------------------|---|--------|-------------|
| NO.   | BY                | DESCRIPTION   | APP'D  | DATE        |
| REVISIONS   |                   |   |        |             |
| TOWN OF FLORENCE<br>12" WATER LINE AUGMENTATION<br>DETAIL SHEET |                   |   |        |             |
|   |                   | 4001 E. Paradise Falls Drive<br>Tucson, Arizona 85712<br>WestLand Resources<br>(520) 206-9585 |        |             |
| DESIGNED BY:  | C.C.              | DRAWN BY:   | G.G.F. | CHECKED BY: |
| PLAN DATE:  | DECEMBER 01, 2017 | PROJECT NUMBER:   | 486.05 | SHEET NO.   |
|   |                   |   |        | C-10        |
|   |                   |   |        | 12 OF 13    |



M:\Jobs\400's\486.05\ENR\Deliverables\486.05-C-11.dwg Dec 01, 2017 11:12am glford

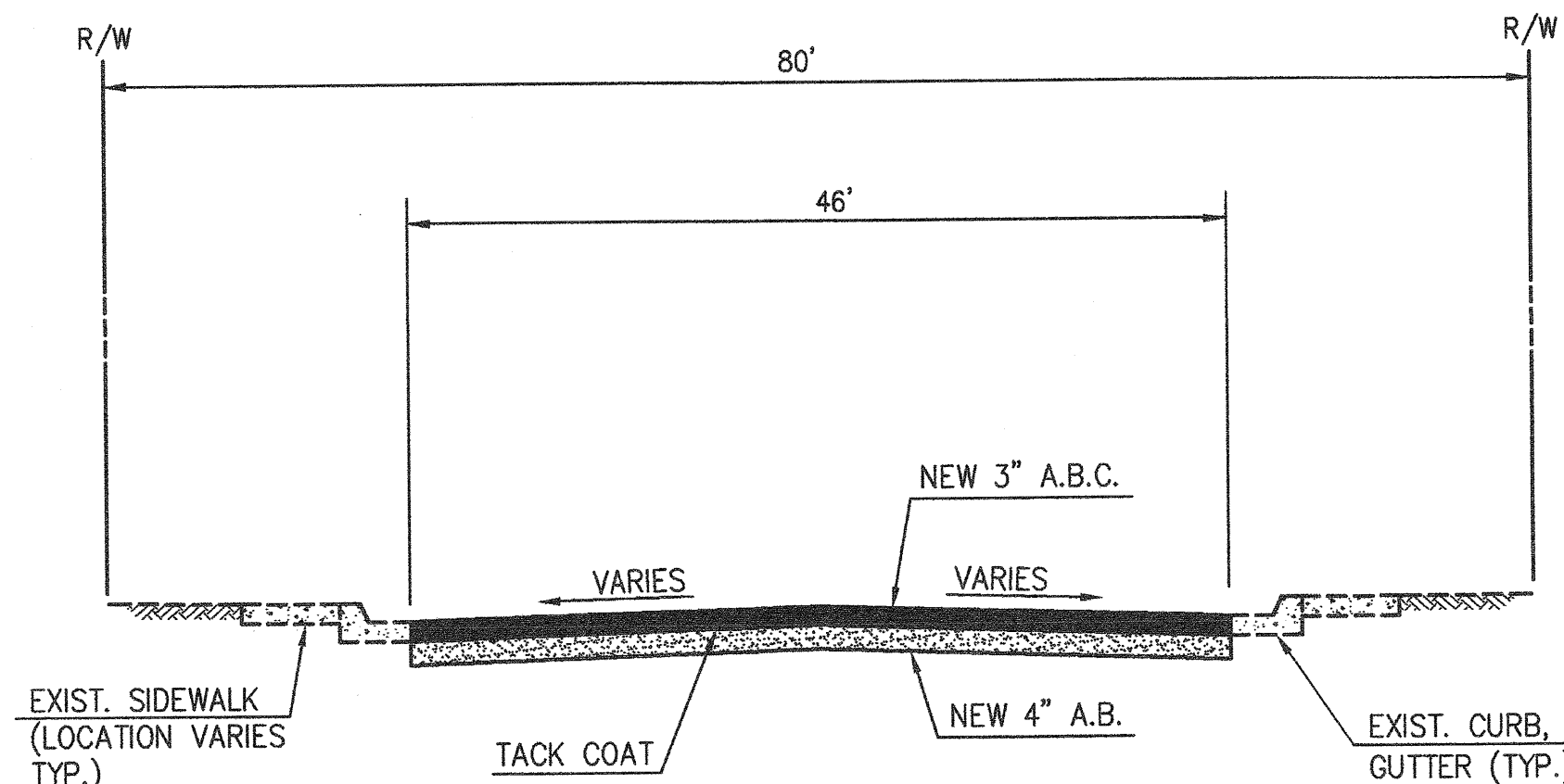


#### PAVING NOTES

- ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF STANDARD SPECIFICATIONS FOR CONSTRUCTION FOR THE TOWN OF FLORENCE, MARICOPA ASSOCIATION OF GOVERNMENTS (M.A.G.) SPECIFICATIONS AND DETAILS, LATEST EDITION AND PINAL COUNTY.
- EXCAVATION AND BACKFILL FOR STRUCTURES SHALL CONFORM TO M.A.G., SECTION 206
- AGGREGATE BASE COURSE SHALL CONFORM TO M.A.G. SECTION 702.
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE OCCUPATION SAFETY AND HEALTH ADMINISTRATION REGULATIONS.
- THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED BY ALL GOVERNMENTAL AGENCIES.
- UPON COMMENCEMENT OF WORK, TRAFFIC CONTROL DEVICES SHALL BE POSTED AND MAINTAINED BY THE CONTRACTOR UNTIL SUCH TIME AS THE WORK IS COMPLETED. ALL WARNING SIGNS, BARRICADES, ETC. SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES ADOPTED BY THE STATE OF ARIZONA PURSUANT TO A.R.S. 28-650.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CARE AND MAINTENANCE OF EXISTING IMPROVEMENTS AND VEGETATION IN THE WORK AREA. PAVEMENT, CURBS, AND ANY OTHER OBSTRUCTIONS DAMAGED DURING CONSTRUCTION ARE TO BE REPLACED BY THE CONTRACTOR. ANY UNDERGROUND PIPES, IRRIGATION CONTROLS, DRAINS, STRUCTURES OR OBSTRUCTIONS NOT SHOWN ON THESE PLANS SHALL BE MOVED, ALTERED OR REPAIRED BY THE CONTRACTOR WHEN ENCOUNTERED, AS DIRECTED BY THE TOWN ENGINEER, AND IS A DEFINITE PART OF THIS PROJECT.
- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO FURNISH, HAUL AND APPLY ALL WATER REQUIRED FOR COMPACTION AND FOR THE CONTROL OF DUST FROM CONSTRUCTION ACTIVITY. THE COST THEREOF IS TO BE INCLUDED IN THE APPROPRIATE BID ITEM(S) PRICE(S).
- THE CONTRACTOR BEFORE UNDERTAKING ANY GRADING OR CONSTRUCTION WORK OF ANY TYPE WITHIN THE PUBLIC RIGHT-OF-WAY, MUST FIRST OBTAIN ANY REQUIRED PERMITS FROM THE TOWN OF FLORENCE.
- INSPECTION BY THE TOWN OF FLORENCE OR THE TOWNS REPRESENTATIVE OF THE WORK CALLED FOR THE PLANS SHALL NOT IN ANY WAY, RELIEVE THE CONTRACTOR AND/OR HIS/HER SUBCONTRACTORS OF THEIR OBLIGATION TO PERFORM THE WORK IN COMPLIANCE WITH THE PLANS, SPECIFICATIONS, CONTRACT DOCUMENTS, TOWN CODE AND ANY OTHER APPLICABLE REGULATION PERTAINING THERE TO.
- THE CONTRACTOR SHALL OPERATE IN A MANNER COMPLIANT WITH ALL APPLICABLE REGULATIONS OF THE TOWN, COUNTY, STATE AND FEDERAL GOVERNMENT.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE SURVEYOR PROVIDING THE CONSTRUCTION LAYOUT TO VERIFY THE BENCHMARK AND COMPARE THE SITE CONDITIONS WITH THE PLANS AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES OBSERVED. SHOULD ANY BENCHMARK, GRADE OR DESIGN INDICATED ON THE PLANS BE SUSPECT THE ENGINEER SHALL BE NOTIFIED OF SAID BENCHMARK GRADE OR PROBLEM AT LEAST TWENTY-FOUR HOURS BEFORE CONSTRUCTION IS SCHEDULED TO BEGIN ON THE AFFECTED AREA.
- EARTHWORK, EXCEPT AS MODIFIED BY THE SOILS REPORT OF RECORD SHALL CONFORM TO M.A.G. SECTION 200.

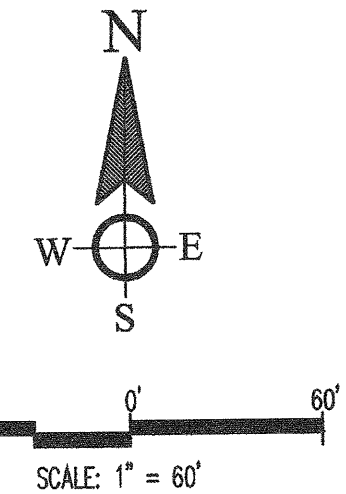
#### (PAVING NOTES CONTINUED)

- CONTRACTOR SHALL CALL BLUE STAKE (1-800-782-53481) TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO COMMENCEMENT OF OPERATION.
- IF UNANTICIPATED CONDITIONS ARE ENCOUNTERED DURING THE COURSE OF CONSTRUCTION AND ARE BEYOND THE SCOPE OF DESIGN, THE ENGINEER SHALL SUBMIT THE NECESSARY REVISED OR SUPPLEMENTAL IMPROVEMENT PLANS FOR REVIEW AND APPROVAL BY THE TOWN ENGINEER.
- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO FULLY COMPLY WITH U.S. EPA STORMWATER DISCHARGE PERMIT IN ACCORDANCE WITH THE ADOT EROSION AND POLLUTION CONTROL MANUAL AND AS DIRECTED BY THE ENGINEER.
- THE SOILS ENGINEER SHALL OBSERVE, INSPECT AND TEST ALL CONSTRUCTION OPERATIONS, INCLUDING BUT NOT LIMITED TO: SUBGRADE PREPARATION, TRENCH EXCAVATIONS AND BACKFILL, MATERIAL TESTING, TOGETHER WITH PLACEMENT OF FILL. SAID ENGINEER SHALL CERTIFY IN WRITING, THAT ALL SOILS OPERATIONS AND MATERIALS USED FOR THIS DEVELOPMENT WERE PERFORMED IN ACCORDANCE WITH THE RECOMMENDATIONS AS SET FORTH IN THE GEOTECHNICAL INVESTIGATION OF RECORD AND ARE IN CONFORMANCE WITH THE ACCEPTED PLANS AND SPECIFICATIONS. CERTIFICATION, IN WRITING, ARE TO BE RECEIVED BY THE TOWN ENGINEER OF THE TOWN OF FLORENCE PRIOR TO THE REQUEST FOR FINAL INSPECTION AND RELEASE OF ASSURANCES.
- THE TOWN ENGINEER WILL, UPON RECEIPT OF ALL NECESSARY CERTIFICATIONS AS OUTLINED IN THE IMPROVEMENT PLANS, PERFORM A FIELD REVIEW IF THE DEVELOPMENT. FIELD CONDITIONS, DESIGN OVERSIGHTS, ETC., MAY REQUIRE ADDITIONAL WORK AND/OR IMPROVEMENTS AS A RESULT OF SAID REVIEW.
- CONTRACTOR SHALL HAUL OFF EXISTING PAVEMENT THAT HAS BEEN REMOVED AND DISPOSE OF PROPERLY.



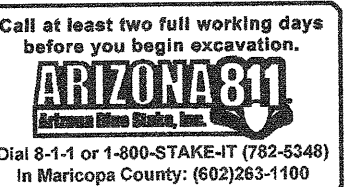
NOTE:  
EXISTING PAVEMENT SECTION VARIES SEE  
GEOTECHNICAL REPORT.

1  
C-11  
SAN CARLOS TYPICAL SECTION  
N.T.S.



#### CONSTRUCTION NOTES

- NEW PAVEMENT LIMITS ALL SIDE STREETS ARE SHOWN APPROXIMATELY, EXACT LIMITS WILL HAVE TO BE ESTABLISHED BASED ON 5 FEET PAST THE DISTURBED PAVEMENT SECTION ON EACH CONNECTION, UNLESS OTHERWISE SHOWN.
- EXISTING VALVE BOXES AND COVERS OF MAINS TO REMAIN IN SERVICE SHALL BE ADJUSTED TO NEW PAVING ELEVATIONS.
- CONTRACTOR MUST PROVIDE THE SERVICE OF A REGISTERED LAND SURVEYOR TO VERIFY ALL HORIZONTAL CONTROL AND SET UP TEMPORARY CONTROL PRIOR TO PAVEMENT REMOVAL, SAID SURVEYOR SHALL BE ALSO RESPONSIBLE FOR RE-ESTABLISHING REMOVED SURVEY MONUMENTS AND FILE A RECORD OF SURVEY SHOWING PRIOR AND POST CONSTRUCTION SURVEY MONUMENTATION INFORMATION.
- AFTER COMPLETION OF THE NEW PAVING, RAISED REFLECTIVE MARKERS SHALL BE PLACED AT EVERY HYDRANT ALONG THE PROJECT LENGTH.
- SAWCUT/TRIM TACK AND SEAL EXISTING PAVEMENT.
- THIS PROJECT SHALL REQUIRE REMOVAL AND REPLACEMENT OF EXISTING ROADWAY PAVING. THE NEW PAVEMENT SHALL BE PLACED AT THE SAME LOCATION, WIDTH, LINE AND GRADE AS THE EXISTING PAVEMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND CERTIFYING BOTH (BY A REGISTERED LAND SURVEYOR) PRE-CONSTRUCTION AND POST-CONSTRUCTION AS-BUILTS OF THE ROADWAY AS PART OF THIS CONTRACT.



| NO. | BY | DESCRIPTION | APP'D | DATE |
|-----|----|-------------|-------|------|
|-----|----|-------------|-------|------|

#### REVISIONS

### TOWN OF FLORENCE 12" WATER LINE AUGMENTATION PAVEMENT REPLACEMENT PLAN

|                             |                     |  |                   |
|-----------------------------|---------------------|--|-------------------|
|                             |                     | 4001 E. Paradise Falls Drive<br>Tucson, Arizona 85712<br>WestLand Resources (520) 206-9585 |                   |
| DESIGNED BY:<br>C.C.        | DRAWN BY:<br>G.G.F. | CHECKED BY:<br>T.M.B.  | SHEET NO.<br>C-11 |
| DRAWING SCALE(S):<br>1"=40' |                     | PLAN DATE:<br>DECEMBER 01, 2017  |                   |
| PROJECT NUMBER:<br>486.05   |                     | 13 OF 13   |                   |



# ADDENDUM #4

## PHASE 2A - Station 80+00 to 91+87.81 (Park St. to 6th St.)

Project Name: Florence 12-inch Augmentation phase 2  
 Project No.: 486.05  
 Location: Florence, Arizona  
 Description: System Upgrades

Prepared by: CWL

Date: 6/19/2018

Checked by: TMB

Date:

Client: City of Florence

| Item No. | Item Description                        | Unit | Quantity | Unit Price | Amount | Remarks  |
|----------|---|------|----------|------------|--------|--|
| 1        | 12-inch P.V.C. Pipe                     | LF   | 1,200    |            |        |  |
| 2        | 12-inch D.I.P. Pipe                     | LF   | 60       |            |        |  |
| 3        | 6-inch D.I.P. Pipe                      | LF   | 50       |            |        |  |
| 4        | Pipeline connections to existing system | EA   | 2        |            |        | Assumes no valves needed   |
| 5        | Asphalt Replacement                     | SY   | 530      |            |        | Assumes pipeline installed in pavement with 4-ft trench and additional area called out on plans. |
| 6        | 1" Air Release Valve                    | LS   | 2        |            |        | Includes vault and pipe  |
| 7        | New 6" Fire hydrant                     | LS   | 3        |            |        | Includes 6" DIP riser pipe   |
| 8        | 6" Gate Valve B & C                     | LS   | 3        |            |        |  |
| 9        | 12" Gate Valve B& C                     | LS   | 3        |            |        |  |
| 10       | 12" Tapping Sleeve                      | LS   | 1        |            |        | Includes Tap   |
| 11       | Fire Hydrant Removal                    | EA   | 1        |            |        |  |
| 12       | Curb and Sidewalk replacement           | SY   | 5        |            |        |  |
| 13       | Concrete Encased Sewer                  | EA   | 2        |            |        |  |
| 14       | Traffic Control                         | LS   | 1        |            |        |  |
|          | <b>Subtotal</b>                         |      |          |            |        |  |



**PHASE 2B - Station 62+00 to 80+00 (6th St. to Phase 3)**

**Project Name:** Florence 12-inch Augmentation phase 2  
**Project No.:** 486.05  
**Location:** Florence, Arizona  
**Description:** System Upgrades

**Prepared by:** CWL  
**Checked by:** TMB  
**Client:** City of Florence

**Date:** / /2018

**Date:**

| Item No. | Item Description                        | Unit | Quantity | Unit Price | Amount | Remarks  |
|----------|---|------|----------|------------|--------|--|
| 1        | 12-inch P.V.C. Pipe                     | LF   | 1,800    |            |        |  |
| 2        | 12-inch D.I.P. Pipe                     | LF   | 30       |            |        |  |
| 3        | 6-inch D.I.P. Pipe                      | LF   | 103      |            |        |  |
| 4        | Service Tie Overs                       | EA   | 9        |            |        | Including 1-inch poly service lines  |
| 5        | Abandonment of Existing 4-inch          | LS   | 2        |            |        | Assumed to be abandoned in place with no grouting  |
| 6        | Pipeline connections to existing system | EA   | 1        |            |        | Assumes no valves needed   |
| 7        | Asphalt Replacement                     | SY   | 1,270    |            |        | Assumes pipeline installed in pavement with 4-ft trench and additional area called out on plans. |
| 8        | 1" Air Release Valve                    | LS   | 2        |            |        | Includes vault and pipe  |
| 9        | New 6" Fire hydrant                     | LS   | 4        |            |        | Includes 6" DIP riser pipe   |
| 10       | 6" Gate Valve B & C                     | LS   | 5        |            |        |  |
| 11       | 12" Gate Valve B& C                     | LS   | 8        |            |        |  |
| 12       | 12" Tapping Sleeve                      | LS   | 0        |            |        | Includes Tap   |
| 13       | Fire Hydrant Removal                    | EA   | 4        |            |        |  |
| 14       | Curb and Sidewalk replacement           | SY   | 15       |            |        |  |
| 15       | Concrete Encased Sewer                  | EA   | 2        |            |        |  |
| 16       | Traffic Control                         | LS   | 1        |            |        |  |
|          | <b>Subtotal</b>                         |      |          |            |        |  |
|          | Contingencies (20%)                     |      |          |            |        |  |
|          | <b>TOTAL PROJECT COSTS</b>              |      |          |            |        |  |





Town of Florence  
Development Services Department  
224 W. 20<sup>th</sup> Street, P.O. Box 2670  
Florence, AZ 85132  
(520) 868-7575  
[www.florenceaz.gov](http://www.florenceaz.gov)

**Solicitation CDBG 12" Water Line Augmentation Phase 2  
Addendum #5  
Questions and Answers  
September 17, 2018**

**QUESTION:** Can we have the Phase 1 – As-Built Plans?

**ANSWER:** Posted on the Town's website.

**QUESTION:** Warranty?

**ANSWER:** The warranties are typically 1 year from the completion date.

**QUESTION:** Warranty?

**ANSWER:** The warranties are typically 1 year from the completion date.

**QUESTION:** Materials list – SOW – bid tab is not blank.

**ANSWER:** New bid tab added to Town website as ADDENDUM 4.

**QUESTION:** Are domestic materials required on the project due to it being federally funded project?

**ANSWER:** Yes.

**QUESTION:** The plans or specs do not call out the class of either PVC or ductile iron to use on the project.

**ANSWER:** PVC C-900

**QUESTION:** What DR rating is required for the PVC and what class of ductile iron is required?

**ANSWER:** DR18

**QUESTION:** What is the anticipated start date?

**ANSWER:** Immediately after Council Approval, either October 15, 2018 or November 35, 2018.