# 35 36 *GUADALUPE* ELLIOT RD.

### CITY OF TEMPE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

SEWER LINE PROJECT - MCKELLIPS ROAD LA ROSA DRIVE TO CAVALIER DRIVE

PROJECT NO. 3221023E

### SHEET INDEX

DESCRIPTION	SHEET NO.
COVER SHEET	1
ABBREVIATIONS & LEGEND	2
GENERAL NOTES	3
KEYMAP	4
SURVEY CONTROL	5
SEWER PLAN & PROFILE	6 - 7
DETAILS	8

## MCKELLIPS RD PROJECT LOCATION **LOCATION MAP**

■ PROJECT BENCHMARK: POINT NUMBER 35 FOUND TEMPE PUBLISHED BENCHMARK DESCRIBED AS: CITY OF TEMPE ALUMINUM CAP IN HAND HOLE AT THE INTERSECTION OF COLLEGE AVE AND MCKELLIPS ROAD. OBSERVED GROUND NORTHING = 291749.66 OBSERVED GROUND EASTING = 294636.22 PUBLISHED ELEVATION = 1226.56

### CONTACTS:

OWNER: CITY OF TEMPE 31 EAST FIFTH STREET GARDEN LEVEL, WEST WING TEMPE, AZ 85281 (480) 350-8200

### **ENGINEER:**

ARNO LESKINEN, PE DIBBLE & ASSOCIATES CONSULTING ENGINEERS, INC. 3020 EAST CAMELBACK ROAD, SUITE 201 PHOENIX, AZ 85016 TEL:(602) 957-1155 WWW.DIBBLECORP.COM





### **UTILITY INFORMATION**

MARTIN SAMANIEGO CENTURY LINK	(602) 325-0630	7/25/24 DATE
JEFF KRAUSE COX COMMUNICATIO	(520) 867-7526 ON	7/16/24 DATE
SRP BLUE STAKE SALT RIVER PROJEC	(800) 778-9140 T	7/17/24 DATE
ZACH STEVENSON SOUTHWEST GAS CO	(480) 730-3855 DRP.	7/25/24 DATE

**APPROVED** 

DEPUTY PUBLIC WORKS DIRECTOR/ CITY ENGINEER

WWR2400620

MARICOPA COUNTY **ENVIRONMENTAL SERVICES DEPARTMENT** 

12-06-2024

REFERENCE 1/4 SECTION AS-BUILT INFORMATION IS INCLUDED IN LOCATION: SE03N4 CITY IRRIG. \_\_\_ BIKE PATH WATER-RECLAIMED STORM DRAIN/DRYWELL LNDSCPE/SPRKL \_\_\_ FLOODPLAIN OFFSITE (C,G,SW,DW) GRADING/DRAINAGE AS-BUILT PLANS CHECKED FOR FIELD CHANGES PROJECT#.

SHT. 1 OF 8

Plotted on November 8, 2024

MARK WEBER, PE

MAYOR

COREY D. WOODS

VICE MAYOR

CITY COUNCIL

JENINIFER ADAMS

BERDETTA HODGE

CITY MANAGER

CITY ENGINEER

RANDY KEATING

**ROSA INCHAUSTI** 

**NIKKI AMBERG** 

ARLENE CHIN

**DOREEN GARLID** 

DATE 11/15/2024 DATE

### STANDARD ABBREVIATIONS & LEGEND **EXISTING** NEW NEW AMERICAN ASSOCIATION OF STATE HIGHWAY AND **EXISTING** LS VCP VITRIFIED CLAY PIPE LUMP SUM TRANSPORTATION OFFICIALS LT LEFT VALLEY GUTTER CABLE TV BENCHMARK BENCHMARK STORM DRAIN ABANDONED VNAE VEHICULAR NON ACCESS EASEMENT — — CATV — -ABC AGGREGATE BASE COURSE MAG MARICOPA ASSOCIATION OF GOVERNMENTS BRASS CAP FLUSH BRASS CAP FLUSH COMMUNICATION UTILITY LINE AC ACRES MAX MAXIMUM MB ASPHALT CONCRETE MAILBOX WATER BRASS CAP IN HANDHOLE BRASS CAP IN HANDHOLE ELECTRIC (UNDERGROUND) MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION **ACFC** ASPHALT CONCRETE FRICTION COURSE WITH ACI AMERICAN CONCRETE INSTITUTE MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT W/O WITHOUT BACKFLOW PREVENTER BACKFLOW PREVENTER ELECTRIC (OVERHEAD) ACP ASBESTOS CEMENT PIPE MATCH EXISTING WATER METER **ACSC** ASPHALT CONCRETE SURFACE COURSE МН MANHOLE WATER SURFACE ELEVATION CACTUS BORING LOCATION FIBER OPTIC — — FO — -ADA AMERICANS WITH DISABILITIES ACT MΙ WATER VALVE DRYWELL FIRE LINE CACTUS **ADOT** ARIZONA DEPARTMENT OF TRANSPORTATION MIN MINIMUM AHD AHEAD ΜJ MECHANICAL JOINT XFMR TRANSFORMER FIRE HYDRANT **DRYWELL** GAS — 2" G — -**AISC** AMERICAN INSTITUTE OF STEEL CONSTRUCTION MONUMENT LINE ALUMINUM CAP IN HANDHOLE **ACHH** MODIFIED FIRE DEPT CONNECTION FIRE HYDRANT IRRIGATION LINE 18" OR SMALLER APS ARIZONA PUBLIC SERVICE ARIZONA STATE LAND DEPARTMENT NORTH, NORTHING **ASLD** FIRE DEPT CONNECTION FLAG POLE IRRIGATION LINE 21" OR LARGER NC ASTM AMERICAN SOCIETY FOR TESTING MATERIALS NORMAL CROWN AVE AVENUE NORTHEAST FLAG POLE GATE RECLAIMED WATER 18" OR SMALLER NO NUMBER **GRATE** $\angle$ GATE RECLAIMED WATER 21" OR LARGER NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM BACK OF CURB BRASS CAP NON-PAY ITEM GUY WIRE **HEADWALL** TELEPHONE NSF NATIONAL SANITATION FOUNDATION BCF BRASS CAP FLUSH NTS **BCHH** BRASS CAP IN HANDHOLE NOT TO SCALE SEWER LINE 18" OR SMALLER HEADWALL MAILBOX BCR BEGIN CURB RETURN NW NORTHWEST BK MAILBOX MANHOLE SEWER LINE 21" OR LARGER **BKFL** BACKFILL ON CENTER $\mathbb{W}\mathbb{M}$ BLDG BUILDING OUTSIDE DIAMETER MANHOLE (TYPE NOTED) STORM DRAIN 18" OR SMALLER BLVD BOULEVARD OVERHEAD CENTURYLINK METER (TYPE NOTED) PIPE PLUG STORM DRAIN 21" OR LARGER ВМ BENCHMARK OHE OVERHEAD ELECTRIC BOT воттом OVERHEAD TELEPHONE PH#X WATER LINE 18" OR SMALLER PEDESTAL (TYPE NOTED) POTHOLE LOCATION CONCRETE ELEVATION PAVEMENT ELEVATION $\boxtimes$ PULLBOX (TYPE NOTED) PULLBOX WATER LINE 21" OR LARGER CONDUIT PHONE NUMBER C&G CURB AND GUTTER **PULLBOX** RIPRAP RIPRAP CAP CORRUGATED ALUMINUM PIPE POINT OF CURVATURE (3) PCC CATV CABLE TELEVISION POINT OF COMPOUND CURVATURE ROCK ROCK CB CATCH BASIN PCCP PORTLAND CEMENT CONCRETE PAVEMENT SHRUB SHRUB CIP CAST IRON PIPE PΕ POLYETHYLENE PIPE 6 CIP PED CAST IN PLACE TELEPHONE PEDESTAL SIGN SIGN CIPP CURED IN PLACE PIPE PGL PROFILE GRADE LINE CK CHECKED PH# POTHOLE NUMBER STREET LIGHT **ж**——о CENTERLINE POINT OF INTERSECTION €3 \* ₩ TREE CLR CLEAR PROTECT IN PLACE CMP CORRUGATED METAL PIPE PROPERTY LINE CO CLEAN OUT PUBLIC LAND SURVEY SYSTEM UTILITY POLE <del>-</del> UTILITY POLE COMM POC POT COMMUNICATION POINT ON CURVE VALVE (TYPE NOTED) CONC VALVE CONCRETE POINT ON TANGENT COND CONDUIT PP POWER POLE CONST PRC CONSTRUCTION POINT OF REVERSE CURVATURE COR CORNER BUILDING SETBACK ---- BUILDING SETBACK CORR PSI CORRECTION POUNDS PER SQUARE INCH CSP CORRUGATED STEEL PIPE POINT OF TANGENCY CENTERLINE ———— DISTRICT BOUNDARY OR CITY LIMITS CTB CEMENT TREATED BASE PΤ PUBLIC UTILITY EASEMENT PUE ———— EASEMENT ———— EASEMENT DRIVEWAY **PVC** POLY VINYL CHLORIDE —---- FOREST BOUNDARY LINE ---- LIMITS OF CONSTRUCTION DB DUCT BANK PVI POINT OF VERTICAL INTERSECTION DES DESIGN PVMT PAVEMENT — — — MID-SECTION ----- RIGHT-OF-WAY DET DG DIP POINT OF VERTICAL REVERSE CURVATURE DETAIL PVRC DECOMPOSED GRANITE PVT POINT OF VERTICAL TANGENCY ----- PROPERTY LINE DUCTILE IRON PIPE DR RADIUS DRIVE ----- RIGHT-OF-WAY DRN RANGE DRAWN DRNG DRAINAGE RIGHT-OF-WAY — SECTION REINFORCED CONCRETE BOX CULVERT DWG DRAWING RCP REINFORCED CONCRETE PIPE EAST, EASTING RD CHANNEL WASTER STATE OF THE STATE OF TH ROADWAY EDGE OF PAVEMENT RDWY RELOC RELOCATE ======= CURB & GUTTER T T CHANNEL EB ELECTRIC PULLBOX RGRCP RUBBER GASKET REINFORCED CONCRETE PIPE ECR CURB & GUTTER END CURB RETURN RAILROAD ---- EDGE OF PAVEMENT EGL ENERGY GRADE LINE RIGHT EL ELEVATION FENCE WOOD ——c— DAYLIGHT LINE, CUT ELEC SLOPE ELECTRIC FENCE WIRE ————F—— DAYLIGHT LINE, FILL ESMT EASEMENT SOUTH EAST VALLEY ASPHALT COMMITTEE EVAC SIDEWALK FENCE CHAINLINK ----- EDGE OF PAVEMENT EXST STORM DRAIN SOUTHEAST —— FLOWLINE FENCE WOOD FAX NUMBER SECTION FACE OF CURB SQUARE FOOT \_\_\_ GUARDRAIL ————— FENCE WIRE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY SG SUBGRADE ELEVATION FINISH FLOOR ELEVATION SHLDR SHOULDER MASONRY WALL/RETAINING WALL ——o—— FENCE CHAINLINK FG FINISH GRADE ELEVATION FH FIRE HYDRANT SPECIFICATIONS MAJOR CONTOUR — ··· ← FLOWLINE FHWA FEDERAL HIGHWAY ADMINISTRATION SALT RIVER PROJECT 33796 MINOR CONTOUR ■■■ GUARDRAIL FIRE LINE SANITARY SEWER ARNO I. LESKINEN SSD STOPPING SIGHT DISTANCE AR ZONA811 Call 811 or click Arizona811.co FLOWLINE FL RAILROAD MASONRY WALL/RETAINING WALL ST STA FLANGE FND FOUND STATION ====== SINGLE CURB MAJOR CONTOUR STD FO FIBER OPTIC STANDARD STL FT FOOT OR FEET STEEL SIDEWALK MINOR CONTOUR STNHH STONE IN HAND HOLE SIDEWALK GUTTER ELEVATION DESCRIPTION SOUTHWEST DATE BY SOUTHWEST GAS COMPANY SINGLE CURB GAF GRID ADJUSTMENT FACTOR SQUARE YARD GB GRADE BREAK GM TOWNSHIP GAS METER GND GROUND TANGENT LENGTH GV GAS VALVE TOP OF WALL TEMPORARY BENCHMARK HORIZONTAL TOP OF CURB TEMPORARY CONSTRUCTION EASEMENT HIGH DENSITY POLYETHYLENE TCE HDPE TEL HDWL HEADWALL TELEPHONE PUBLIC WORKS DEPARTMENT HYDRAULIC GRADE LINE HGL TEMP TEMPORARY CITY OF TEMPE HP HIGH PRESSURE TN TOP OF NUT TOE HW HIGH WATER TOE OF EMBANKMENT ENGINEERING DIVISION PROFILE ELEVATIONS LEGEND HWY HIGHWAY TRANSITE PIPE P.O. BOX 5002, TEMPE, AZ 85280 TRAFFIC SIGNAL |(U)| = UNKNOWNDESCRIPTION INSIDE DIAMETER TYP TYPICAL SURVEYED: STAFF DATE 10/2024 (S) = FIELD MEASUREMENT - SURVEYINV INVERT DESIGNED: AF PROJECT NO. SEWER LINE PROJECT - MCKELLIPS ROAD (PH)= FIELD MEASUREMENT - POTHOLE IRR IRRIGATION UNKNOWN DRAWN: EDS LA ROSA DRIVE TO CAVALIER DRIVE (R) = RECORD DRAWING (DESIGN/AS-BUILT) IRRIGATION VALVE UPRR UNION PACIFIC RAILROAD 3221023E CHECKED: AIL LENGTH OF CURVE VERTICAL SCALE: HORIZ: SHT 2 OF 8 ABBREVIATIONS & LEGEND LINEAR FEET VC VERTICAL CURVE

### CITY OF TEMPE GENERAL AND SITE PLAN NOTES

- 1. ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF TEMPE SUPPLEMENT TO THE MAG SPECIFICATIONS AND DETAILS, MARICOPA ASSOCIATION OF GOVERNMENTS UNIFORM STANDARD SPECIFICATIONS AND DETAILS (MAG SPECIFICATIONS AND DETAILS), AND CITY OF TEMPE TRAFFIC BARRICADE MANUAL.
- 2. THE CITY SHALL BE NOTIFIED PRIOR TO ANY CONSTRUCTION WORK. CONTACT THE CITY OF TEMPE ENGINEERING INSPECTOR AT LEAST ONE BUSINESS DAY BEFORE START OF CONSTRUCTION TO COORDINATE INSPECTIONS. CONSTRUCTION WORK CONCEALED WITHOUT INSPECTION BY THE CITY SHALL BE SUBJECT TO EXPOSURE AT THE CONTRACTOR'S EXPENSE.
- 3. LOCATION OF ALL WATER VALVES, WATER/SEWER MANHOLES, AND CLEANOUTS MUST ALWAYS BE SURVEYED AND REFERENCED DURING CONSTRUCTION AND MADE AVAILABLE TO THE WATER UTILITY DIVISION.
- 4. NO JOB WILL BE CONSIDERED COMPLETE UNTIL ALL CURBS, PAVEMENT, AND SIDEWALKS HAVE BEEN SWEPT CLEAN OF ALL DIRT AND DEBRIS AND ALL SURVEY MONUMENTS ARE INSTALLED ACCORDING TO THE PLANS.
- 5. ALL EXISTING STREET MONUMENTS MUST BE PRESERVED. PRIOR TO CONSTRUCTION, MONUMENTS WILL BE REFERENCED HORIZONTALLY AND VERTICALLY. ALL SURVEY MONUMENTS TO BE DISTURBED DURING CONSTRUCTION SHALL BE COORDINATED IN ADVANCE WITH THE CITY'S ENGINEERING INSPECTOR AND CITY'S LEAD SURVEYOR.
- 6. FOR CIP PROJECTS TAKING PLACE ON LAND PARCEL/PROPERTY (NOT WITHIN THE RIGHT—OF—WAY), ALL OVERHEAD UTILITY LINES (OTHER THAN TRANSMISSION LINES 12.5KV OR GREATER) THAT ARE LOCATED ON OR ADJACENT TO THE SITE, INCLUDING STREET OR ALLEY CROSSINGS, SHALL BE PLACED UNDERGROUND PER CITY CODE SECTION 25—126 AND ORDINANCE NO. 88.85.
- 7. ANY ONSITE PRIVATE UTILITIES (OUTSIDE THE CITY RIGHT—OF—WAY) AND DETAILS SHOWN IN THESE PLANS ARE FOR REFERENCE ONLY AND ARE NOT APPROVED ON THESE PLANS. SEE PLANS THAT ARE APPROVED BY THE CITY OF TEMPE COMMUNITY DEVELOPMENT DEPARTMENT FOR ONSITE PRIVATE UTILITIES AND OTHER ONSITE IMPROVEMENTS.
- 8. THIS SET OF PLANS HAS BEEN REVIEWED FOR COMPLIANCE WITH CITY REQUIREMENTS PRIOR TO ISSUANCE OF CONSTRUCTION PERMITS. HOWEVER, SUCH REVIEW SHALL NOT PREVENT THE CITY FROM REQUIRING CORRECTION OF ERRORS IN PLANS FOUND TO BE IN VIOLATION OF ANY LAW OR ORDINANCE. IT IS THE RESPONSIBILITY OF THE PROFESSIONAL ENGINEER SEALING AND SIGNING THESE PLANS TO BE CERTAIN THAT THEY ARE IN FULL COMPLIANCE WITH TEMPE STANDARDS, DETAILS, CRITERION, LAWS AND ORDINANCES.
- 9. THE CITY DOES NOT GUARANTEE ANY QUANTITIES SHOWN ON THESE PLANS.
- 10. AN APPROVED SET OF PLANS SHALL ALWAYS BE AVAILABLE ON THE JOB SITE.
- 11. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OR RELOCATION OF ALL OBSTRUCTIONS WITHIN THE RIGHT-OF-WAY PRIOR TO STARTING NEW CONSTRUCTION.
- 12. THE CONTRACTOR IS RESPONSIBLE FOR ARRANGING THE RELOCATION OF ALL UTILITIES; COORDINATE WITH THE CITY'S ENGINEERING INSPECTOR. A UTILITY RELOCATION SCHEDULE SHALL BE SUBMITTED PRIOR TO THE START OF NEW CONSTRUCTION.
- 13. THE CONTRACTOR SHALL CALL ARIZONA 811 AT (602) 659-7500 AT LEAST TWO (2) FULL WORKING DAYS PRIOR TO CONSTRUCTION TO LOCATE UTILITIES ON ALL PROJECTS, AND ALSO IN ACCORDANCE WITH A.R.S. § 40-360.21-31, ET SEQ.
- 14. THE CONTRACTOR SHALL BARRICADE CONSTRUCTION SITES AT ALL TIMES PER THE CITY OF TEMPE TRAFFIC BARRICADE MANUAL. TRAFFIC CONTROL PLANS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL BY THE CITY'S TRAFFIC SECTION IN ADVANCE OF CONSTRUCTION.
- 15. THE CONTRACTOR MAY OBTAIN A FIRE HYDRANT METER FOR CONSTRUCTION WATER FROM CITY OF TEMPE WATER CUSTOMER SERVICES. THIS METER SHOULD BE ORDERED AT LEAST TWO (2) FULL WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. THE UNLAWFUL REMOVAL OF WATER FROM A FIRE HYDRANT IS A VIOLATION OF THE MUNICIPAL CODE, PUNISHABLE BY FINE AND/OR IMPRISONMENT.
- 16. ALL BROKEN OR DISPLACED EXISTING CONCRETE CURB, GUTTER, OR SIDEWALK SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE CITY OF TEMPE ENGINEERING DIVISION INSPECTOR.
- 17. ALL CITY FACILITIES, ALLEYS, AND ROADWAY SURFACES DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPAIRED/RESTORED TO THE SATISFACTION OF THE CITY OF TEMPE ENGINEERING DIVISION INSPECTOR PER THE RESPECTIVE CITY AND/OR MAG STANDARD DETAIL.
- 18. CONSTRUCTION ITEMS SHALL NOT BE ACCEPTED UNTIL THE CONTRACTOR HAS SUBMITTED A FULL SET OF REDLINE "AS-BUILT" PLANS AND THEY HAVE BEEN APPROVED BY THE CITY'S ENGINEERING DIVISION.

### CITY OF TEMPE PAVING AND SURVEY MONUMENT NOTES

- 1. NO PAVING CONSTRUCTION SHALL BE STARTED UNTIL ALL UNDERGROUND UTILITIES WITHIN THE ROADWAY PRISM ARE COMPLETED.
- 2. THE MAXIMUM STAKE INTERVAL FOR GRADES OF 0.2% OR LESS SHALL BE 25 FEET FOR CONCRETE WORK AND 50 FEET FOR ASPHALT ROADWAY SECTION, EXCEPT ON HORIZONTAL OR VERTICAL CURVES WHERE A MAXIMUM STAKE INTERVAL OF 20 FEET FOR CONCRETE WORK SHALL BE REQUIRED. ALL CURB RETURNS SHALL BE STAKED AT THE P.C., P.T. AND THE MIDPOINT OF THE RETURN. NO GRADE STAKE INTERVAL SHALL EXCEED 50 FEET
- GUTTERS WILL BE WATER TESTED IN THE PRESENCE OF THE CITY'S ENGINEER INSPECTOR, OR DESIGNEE, TO INSURE PROPER DRAINAGE, PRIOR TO FINAL APPROVAL BY THE ENGINEERING DIVISION.
- 4. EXACT POINT OF MATCHING, TERMINATION AND OVERLAY, IF NECESSARY, MAY BE DETERMINED IN THE FIELD BY THE ENGINEERING DIVISION.
- 5. ADDRESS OVERLAY REQUIREMENTS WHERE OPEN CUTTING IS PERMITTED. FINISHED PAVEMENT SURFACE MATERIALS SUCH AS RUBBERIZED ASPHALT SHALL BE MATCHED IN FIELD.
- 6. ANY PAVEMENT MARKINGS/STRIPING REMOVED AS PART OF THIS PROJECT SHALL BE REPLACED IN-KIND. THE COST TO REPLACE/RESTORE PAVEMENT MARKINGS SHALL BE INCIDENTAL TO THE COST OF THE ASPHALT PAVEMENT OR SURFACE TREATMENT AS SPECIFIED IN THE PROJECT SPECIFICATIONS.

### CITY OF TEMPE PAVING AND SURVEY MONUMENT NOTES (CONTD.)

- 7. FOR UTILITY REHABILITATION/RESTORATION PROJECTS, ALL NEIGHBORHOOD STREETS ARE TO BE FINISHED WITH A SLURRY SEAL AND MAY BE PRECEDED BY EDGE MILLING AND HOT RUBBER CRACK FILLING/SEALING PER THE PROJECT SPECIFICATIONS. NO LESS THAN 30 DAYS AFTER SLURRY SEAL HAS BEEN APPLIED, A FULL STREET SWEEPING IS REQUIRED. RESTORATION/APPLICATION OF ALL STREET STRIPING AND/OR SYMBOLS IS ALSO REQUIRED.
- 8. ON NEIGHBORHOOD STREETS SCHEDULED FOR FINISHED SLURRY SEAL, T-TOP PAVEMENT REPLACEMENTS MAY USE A 3/4 INCH ASPHALT MIX OR A READILY AVAILABLE APPROVED
- 9. FOR WATER SERVICE LINES AND FIRE HYDRANT LINES THROUGHOUT THE NEIGHBORHOOD STREETS, THE WIDTH OF T-TOP PAVEMENT REPLACEMENT MAY BE REDUCED TO THREE (3) FEET OR FOUR (4) FEET WIDE PROVIDED THE TOP OF TRENCH IS ONE (1) FEET TO TWO (2) FEET WIDE, RESPECTIVELY, IN LIEU OF THE EIGHT (8) FOOT T-TOP WIDTH AS NOTED ON COT STD DETAIL T-450.
- 10. ASPHALT THICKNESS IS TO MATCH EXISTING BUT MUST BE A MINIMUM OF 4" ASPHALT THICKNESS ON NEIGHBORHOOD STREETS AND 6" FOR ARTERIAL/COLLECTOR STREETS FOR PAVEMENT REPLACEMENT OVER TRENCHES IF THE TRENCHES ARE SLURRY FILLED TO UNDERSIDE OF PAVEMENT; COMPACTED AB MAY ALSO BE ACCEPTABLE PER MAG SPEC SECTION 601. SEE SPECIFICATIONS FOR SLURRY SEAL MICRO SEAL AND OTHER SPECIFIC PAVEMENT REQUIREMENTS.
- 11. FOR UTILITY REHABILITATION/RESTORATION PROJECTS, ARTERIAL AND COLLECTOR STREETS ARE TO BE FINISHED WITH A FULL-WIDTH MICROSURFACING SEAL FOR FULL LIMITS OF CONSTRUCTION, AND MAY BE PRECEDED BY EDGE MILLING AND HOT RUBBER CRACK FILLING/SEALING PER THE PROJECT SPECIFICATIONS. RESTORATION/APPLICATION OF ALL STREET STRIPING AND/OR SYMBOLS IS ALSO REQUIRED.
- 12. ALL ASPHALT JOINTS ARE TO BE CRACK FILLED/SEALED WITH A HOT APPLIED RUBBERIZED ASPHALT SEALANT SUCH AS POLYFLEX 3 BY CRAFCO OR APPROVED EQUAL. REFER TO COT STD DET T—450 REGARDING PAVEMENT REPLACEMENT REQUIREMENTS.
- 13. REMOVAL AND REPLACEMENT OF ANY CONCRETE SHALL BE TO THE NEAREST JOINT.
- 14. ALL EXISTING SURVEY MONUMENTS ARE TO BE PROTECTED IN-PLACE AND SHALL BE EXPOSED AFTER ANY PAVEMENT RESTORATION/TREATMENT. ANY DAMAGED/REMOVED/DISTURBED SURVEY MONUMENTS SHALL BE CONSTRUCTED BY THE CONTRACTOR PER MAG STD DETAIL 120, TYPE A ON ARTERIALS AND/OR AT QUARTER SECTION CORNERS. LOCAL STREET SURVEY MONUMENTS SHALL BE CONSTRUCTED PER MAG STD DETAIL 120, TYPE B. TIE DOWNS, POINT SET, STRADDLERS, AND BRASS CAP PUNCHING WILL BE PERFORMED BY CITY SURVEY CREW. THE CONTRACTOR IS TO COORDINATE THE SURVEY MONUMENT ACTIVITIES WITH THE CITY'S ENGINEERING INSPECTOR AND LEAD SURVEYOR.

### CITY OF TEMPE SEWER, WATER, AND UTILITY PLANS NOTES

- 1. THE CONTRACTOR SHALL UNCOVER ALL EXISTING LINES BEING TIED INTO TO VERIFY THEIR LOCATION, SIZE, MATERIAL TYPE, ETC. PRIOR TO CONSTRUCTION OF NEW LINES. THE CONTRACTOR WILL LOCATE OR HAVE LOCATED ALL EXISTING UNDERGROUND PIPELINES, TELEPHONE AND ELECTRIC CONDUITS, AND STRUCTURES IN ADVANCE OF CONSTRUCTION AND WILL OBSERVE ALL POSSIBLE PRECAUTIONS TO AVOID DAMAGE TO SAME. THE CONTRACTOR SHALL CONTACT ARIZONA 811 AT (602) 659-7500 AT LEAST TWO (2) FULL WORKING DAYS BEFORE CONSTRUCTION TO LOCATE UTILITIES ON ALL PROJECTS, AND ALSO IN ACCORDANCE WITH A.R.S. § 40-360.21-31, ET SEQ.
- 2. SUMMITS IN WATER LINES SHALL BE LOCATED AT FIRE HYDRANTS.
- 3. BACKFILLING SHALL NOT BE STARTED UNTIL LINES ARE APPROVED BY THE ENGINEERING
- 4. IF A BACKFLOW PREVENTION ASSEMBLY IS REQUIRED TO BE INSTALLED, THE CONTRACTOR WILL CALL THE CITY OF TEMPE ENGINEERING INSPECTOR AT LEAST ONE BUSINESS DAY IN ADVANCE TO REQUEST AN INSPECTION BEFORE BACKFILLING THE ASSEMBLY.
- 5. ALL PUBLIC WATER LINES SHALL BE PRESSURE CLASS 350 DIP, PROTECTED WITH HIGH DENSITY POLYETHYLENE CORROSION PROTECTION PER MAG SPECIFICATION 610.
- 6. ALL NEW WATER AND SEWER CONNECTIONS TO EXISTING LINES SHALL BE DONE ONLY BY OPEN—CUT ON MAJOR ARTERIAL STREETS, MAJOR INTERSECTIONS OR THE PRESENCE OF A MAJOR WATER OR SEWER LINE. BORED INSTALLATIONS MUST BE CLEARLY IDENTIFIED AND SPECIFICALLY APPROVED BY THE CITY ENGINEER, OR DESIGNEE.
- 7. ALL ON-SITE SEWER SYSTEMS ARE CONSIDERED PRIVATE UNLESS OTHERWISE NOTED ON PLANS AND MUST BE APPROVED AND PERMITTED BY TEMPE COMMUNITY DEVELOPMENT
- 8. IN ACCORDANCE WITH AAC R18-4-213, ALL MATERIALS ADDED AFTER JANUARY 1, 1993, WHICH MAY COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NATIONAL SANITATION FOUNDATION STANDARDS 60 AND 61.
- 9. ALL MANHOLE INSTALLATIONS SHALL BE COMPLETE IN PLACE INCLUDING ALL EXCAVATION, BACKFILL, SWEEPS, AND CONDUITS NECESSARY TO COMPLETE THE INSTALLATION OF THE MANHOLE AND CONNECTIONS TO THE MAINLINE CONDUITS.
- 10. ALL VALVES SHALL BE FLANGED TO FITTINGS, PREFERABLY TEES.
- 11. PIPE RESTRAINT SHALL BE PER MAG STANDARD DETAIL 303-1, 303-2, AND 303-3.

  THRUST & ANCHOR BLOCKS, IF ANY, SHALL BE PER MAG STANDARD DETAIL 301, 380 & 381.
- 12. ONLY THE CITY OF TEMPE WATER UTILITY DIVISION PERSONAL SHALL OPERATE ANY EXISTING VALVES OR ANY VALVE CONNECTING NEW WORK TO THE EXISTING CITY WATER SYSTEM.
- 13. WATER, STORM DRAIN & SANITARY SEWER SEPARATION/PROTECTION SHALL BE PER MAG STANDARD DETAIL 404 WITH CITY APPROVAL. THE CITY CONSIDERS STORM DRAINS TO BE "SEWER" WHEN CROSSING OVER OR WITHIN ZONES A & B OF WATER THE CITY CONSIDERS STORM DRAINS TO BE "POTABLE WATER" WHEN CROSSING UNDER OR WITHIN ZONES A & B OF SANITARY SEWER LINES.
- 14. THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PREVENT FOREIGN MATERIAL FROM ENTERING THE PIPE WHILE IT IS BEING STORED.

### CITY OF TEMPE SEWER, WATER, AND UTILITY PLANS NOTES (CONTD.)

- 15. DURING INSTALLATION AND AT ALL TIMES WHEN PIPE LAYING IS NOT IN PROGRESS, THE OPEN ENDS OF THE PIPE IN THE TRENCH SHALL BE CLOSED BY A WATER—TIGHT PLUG OR OTHER MEANS APPROVED BY THE CITY OF TEMPE ENGINEERING INSPECTOR. IF IN THE OPINION OF THE CITY OF TEMPE ENGINEERING INSPECTOR THE PIPE CONTAINS DIRT THAT WILL NOT BE REMOVED DURING THE FLUSHING OPERATION, THE INTERIOR OF THE PIPE SHALL BE CLEANED AND SWABBED, AS NECESSARY, WITH A .005 TO .010 PERCENT CHLORINE SOLUTION.
- 16. AFTER PRESSURE TESTING AND BEFORE PLACING IN SERVICE, ALL WATER LINES SHALL BE DISINFECTED AND TESTED FOR WATER QUALITY IN ACCORDANCE WITH MAG STANDARD SPECIFICATIONS SECTION 611. IF THE WATERLINE FAILS THE CHLORINE RESIDUAL TEST OR FAILS TO MEET THE WATER QUALITY TEST MORE THAN THREE (3) TIMES, THE CITY OF TEMPE ENGINEERING INSPECTOR RESERVES THE RIGHT TO REQUIRE THE INSTALLED WATERLINE TO BE CLEANED BY PIGGING THE LINE, IN ACCORDANCE WITH STANDARD PROCEDURES, AT NO COST TO THE CITY.
- 17. WHERE SPECIFIED FOR REPLACEMENT, 5/8" WATER SERVICE LINES SHALL BE REPLACED WITH 3/4". ALL OTHER SIZES TO MATCH EXISTING.
- 18. FOR THE EXISTING SEWER STUB CONNECTIONS ONLY. (TO BE SIGNED ON "AS-BUILT" MYLAR.) "THIS IS TO CERTIFY THAT AN ACTUAL FIELD FLOW TEST ON THE EXISTING SEWER STUB WAS PERFORMED AND WAS FOUND TO BE ACCEPTABLE AND FREE OF ANY OBSTRUCTIONS PRIOR TO FINAL BUILDING CONNECTION"
- ENGINEER DATE ARIZONA P.E. NUMBER

### ENGINEER'S GENERAL NOTES:

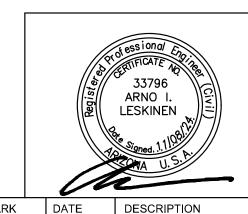
- 1. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACT DRAWINGS, SPECIAL PROVISIONS, TECHNICAL SPECIFICATIONS, SUPPLEMENTAL GENERAL CONDITIONS, MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (2024), MAG UNIFORM STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION (2024), THE CITY OF TEMPE SUPPLEMENT TO THE MAG SPECIFICATIONS AND DETAILS, AND THE CITY OF TEMPE TRAFFIC BARRICADE MANUAL.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ARIZONA 811 (602-263-1100) OR BY DIALING 811 FOR UTILITY LOCATION A MINIMUM OF 48 HOUR IN ADVANCE OF ANY EXCAVATION. UTILITY LOCATIONS SHALL BE PROTECTED, MAINTAINED AND UPDATED IN ACCORDANCE WITH APPLICABLE STATE AND MUNICIPAL LAWS.
- 3. PRIOR TO THE START OF ANY WORK ACTIVITIES, THE CONTRACTOR SHALL PROVIDE NOTIFICATION TO THE OWNER AND THE ENGINEER. A PRE—ACTIVITY MEETING (PRECONSTRUCTION CONFERENCE) MAY BE REQUIRED.
- 4. EXISTING UTILITIES AND OTHER FACILITIES HAVE BEEN SHOWN ON THE CONTRACT DRAWINGS BASED ON FIELD SURVEYS, EXISTING MAPS AND OTHER INFORMATION GATHERED BY THE ENGINEER DURING DESIGN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT LOCATIONS OF ALL UTILITIES IMPACTING CONSTRUCTION AND PROTECTION OF SAID UTILITIES. IF RELOCATION OF UTILITIES IS REQUIRED, THE CONTRACTOR SHALL COORDINATE THE RELOCATION WITH THE OWNER. UTILITIES DAMAGED BY CONTRACTORS ACTIVITIES SHALL BE REPAIRED WITH NEW MATERIALS AT NO COST TO THE OWNER TO THE OWNER'S SATISFACTION.
- 5. CONTRACTOR SHALL SUPPORT AND PROTECT IN-PLACE UTILITIES WITHIN THE EXCAVATION IN ACCORDANCE WITH MAG SPECIFICATIONS, UNLESS OTHERWISE APPROVED IN WRITING BY THE OWNER OF THE UTILITY.
- 6. EXISTING FEATURES AND FACILITIES WHICH ARE NOT SPECIFICALLY LOCATED WITH HORIZONTAL AND VERTICAL CONTROLS ARE LOCATED APPROXIMATELY WITH THE BEST AVAILABLE INFORMATION. VARIATIONS BETWEEN PLAN LOCATION AND ACTUAL DIMENSIONS WILL NOT BE A BASIS FOR A MODIFICATION OF THE CONTRACT AMOUNT.
- THE OWNER HAS OBTAINED PERMIT APPROVAL FROM DESIGNATED AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING PERMITS, PAYING PERMIT FEES, COORDINATING DESIGNATED AGENCY INSPECTIONS AND CLOSURE OF PERMITS. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF THE DESIGNATED PERMITS AND THE REGULATIONS OF THE PERMITTING AGENCIES.
- 8. TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE GOVERNING AGENCY'S REQUIREMENTS. CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLANS TO THE GOVERNING AGENCIES AS REQUIRED BY THE AGENCY.
- 9. CONTRACTOR'S WORK ACTIVITIES SHALL BE SCHEDULED AND PHASED SO AS NOT TO UNDULY IMPEDE OR PREVENT ACCESS TO PRIVATE RESIDENCES, PUBLIC FACILITIES, SCHOOLS, OR BUSINESS EXCEPT BY PRIOR WRITTEN AGREEMENT WITH THE IMPACTED OWNER(S) OR OPERATORS.
- 10. ALL EQUIPMENT, MATERIALS, VEHICLES AND CONSTRUCTION ACTIVITIES SHALL REMAIN WITHIN PUBLIC RIGHTS—OF—WAY OR DESIGNATED EASEMENTS.
- 11. ANY EXISTING FEATURES OR FACILITIES DISTURBED BY THE CONTRACTOR SHALL BE REPLACED IN KIND WITH NEW MATERIALS MEETING THE OWNER'S APPROVAL AT NO ADDITIONAL COST TO THE OWNER.
- 12. CONSTRUCTION STAKING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 13. THE CONTRACTOR SHALL PROVIDE CLEAR AND ACCURATE REDLINES TO THE OWNER FOR PREPARATION OF RECORD DRAWINGS. THE REDLINES SHALL BE UPDATED ON A DAILY BASIS TO REFLECT THE CURRENT CONSTRUCTION ACTIVITIES AT ALL TIMES AND MAY BE INSPECTED BY THE OWNER/ENGINEER AT ANY TIME UPON REQUEST.
- 14. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SAFETY ON THE CONSTRUCTION SITE. THE CONTRACTOR SHALL PROVIDE SAFETY PLAN TO THE OWNER AND THE ENGINEER FOR APPROVAL. THE CONTRACTOR SHALL IMPLEMENT AN APPROVED SAFETY PLAN, AND ALL PERSONNEL ON THE JOB SHALL FOLLOW THE APPROVED SAFETY PLAN.
- 15. THE CONTRACTOR SHALL PROVIDE SUITABLE PROTECTION FOR EXCAVATIONS. AT A MINIMUM, OSHA REGULATIONS REQUIRE PROTECTION FROM CAVE—INS FOR EXCAVATIONS GREATER THAN FIVE FEET IN DEPTH. WHERE EXCAVATIONS ARE DEEPER THAN TWENTY FEET, EXCAVATION PLANS AND SHORING SYSTEM DESIGN SHALL BE SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF ARIZONA.

### ENGINEER'S GENERAL NOTES (CONTD.)

- 16. TRENCH EXCAVATION, BACKFILL, AND SURFACE REPLACEMENT SHALL BE AS SHOWN ON THE DRAWINGS AND/OR REQUIRED BY THE CONTRACT DOCUMENTS. IN NO CASE SHALL TRENCH EXCAVATION, BACKFILL AND SURFACE REPLACEMENT BE LESS STRINGENT THAN MAG REQUIREMENTS, EXCEPT AS MAY BE SPECIFICALLY ALLOWED IN WRITING BY THE ENGINEER.
- 17. UNLESS OTHERWISE DESIGNATED, ALL COMPACTION DENSITIES SHALL MEET THE REQUIREMENTS OF MAG SPECIFICATION SECTION 601, TYPE I.
- 18. CONTRACTOR SHALL USE EXTREME CAUTION WHILE WORKING IN THE VICINITY OF ALL GAS AND POWER LINES. THE CONTRACTOR SHALL MAINTAIN THE INTEGRITY OF THE GAS AND POWER TRENCHES AND PIPELINES AT ALL TIMES. SPECIAL ATTENTION SHALL BE GIVEN TO BRACING AND SUPPORT FOR UNDERGROUND POWER CROSSINGS. POLE BRACING MAY BE REQUIRED BY THE POWER COMPANY WHEN EXCAVATING NEAR POWER POLES.

### ENGINEER'S NOTES FOR SANITARY SEWER CONSTRUCTION:

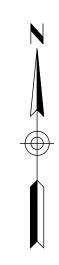
- NEW SANITARY SEWERS SHALL BE CONSTRUCTED OF MATERIALS IN ACCORDANCE WITH THE SPECIFICATIONS. ACCEPTABLE MATERIALS INCLUDE THE FOLLOWING:
  - -EXTRA STRENGTH VITRIFIED CLAY PIPE (VCP) IN ACCORDANCE WITH MAG STANDARD SPECIFICATION SECTION 745. TWO POINTS OF FLEXIBILITY SHALL BE USED WITH 3-FEET OF THE MANHOLE BY USING ONE BELL & SPIGOT JOINT AND FLEXIBLE MANHOLE CONNECTOR OR USING TWO SHORT LENGTHS (24-INCH OR LESS) WITH FLEXIBLE COMPRESSION COUPLINGS.
- 2. CONTRACTOR SHALL FLUSH EXISTING SANITARY SEWERS PRIOR TO PLUGGING OR ABANDONMENT.
- 3. NEW SANITARY SEWERS SHALL BE TESTED IN ACCORDANCE WITH MAG STANDARD SPECIFICATION SECTION 611.4.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FLOW MANAGEMENT AND SHALL NOT DISRUPT SERVICE TO LOCAL BUSINESS AND RESIDENCE. CONTRACTOR SHALL MAINTAIN EXISTING SERVICE WITHIN EXISTING MANHOLES BY EITHER FLOW THROUGH PLUGS, SUBMERSIBLE TRASH PUMPS, OR VACTOR TRUCK ON STANDBY. THE CONTRACTOR SHALL SUBMIT A FLOW MANAGEMENT PLAN FOR REVIEW.

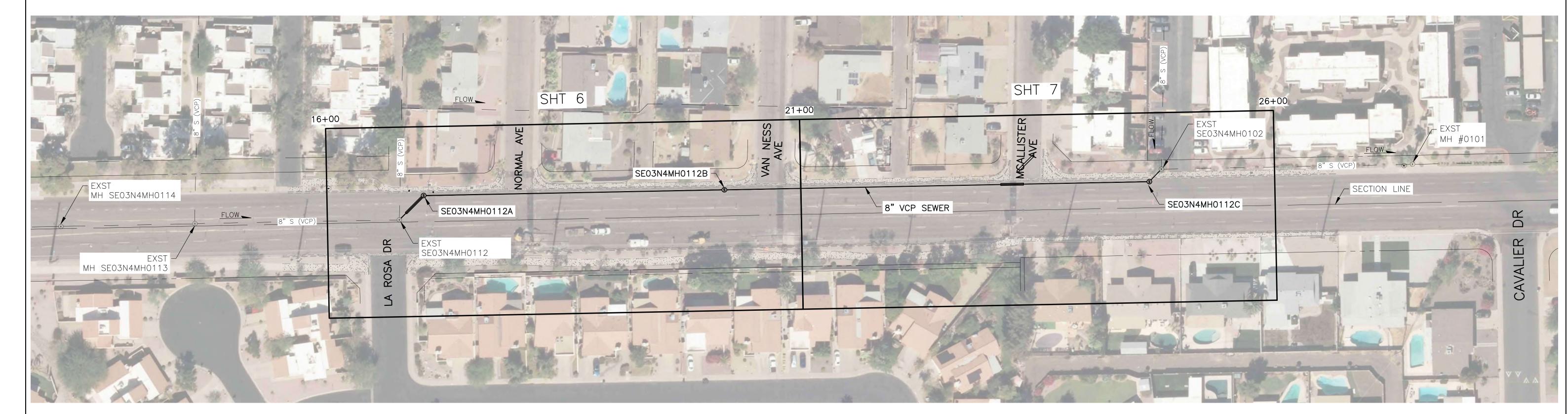




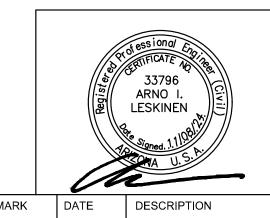
BY

PUBLIC WORKS DEPARTMENT				
CITY OF TEMPE				
	ENGINEERING DIVISION			
P.O. BOX 5002, TEMPE, AZ 85280				
SURVEYED: STAFF	DESCRIPTION	DATE	10/2024	
DESIGNED: AF	SEWER LINE PROJECT - MCKELLIPS ROAD		PROJECT NO.	
DRAWN: EDS	LA ROSA DRIVE TO CAVALIER DRIVE	3221023E		
CHECKED: AIL				
SCALE: HORIZ: VERT:	GENERAL NOTES	SHT 3	3 OF 8	





MCKELLIPS RD





MARK	DATE	DESCRIPTION	BY
		PUBLIC WORKS DEPARTMENT	
		CITY OF TEMPE	
		ENGINEERING DIVISION	
		P.O. BOX 5002. TEMPE. AZ 85280	

	P.O. BOX 5002, TEMPE, AZ 85280		
SURVEYED: STAFF	DESCRIPTION	DATE	10/2024
DESIGNED: AF	SEWER LINE PROJECT - MCKELLIPS ROAD	PROJEC	CT NO.
DRAWN: EDS	LA ROSA DRIVE TO CAVALIER DRIVE	000	40005
CHECKED: AIL		3221023E	
SCALE: HORIZ: 1"=50' VERT:	KEYMAP	SHT 4	OF 8

.1024018.01\_TEMPE\_MCKELLIPS\_SEWER\CAD\24018.01-G4.DWG - Nov. 8,

