

FILE: P:\2021\21192\DRAWINGS\CONSTRUCTION PLANS\COVER - 21192.DWG EKEISER PLOTTED: Feb 08, 2022--12:26pm

PROJECT INFORMATION

SITE ADDRESS: TSE HO TSO MIDDLE SCHOOL FIELD HOUSE
WINDOW ROCK UNIFIED SCHOOL DISTRICT
IR 110
FT, DEFIANCE, ARIZONA
LAT 35.74 N, LONG 109.07 W

PROJECT REPRESENTATIVE:

CONTACT: ERWIN WHITE
SUPPORT SERVICES FACILITIES DIRECTOR
WINDOW ROCK UNIFIED SCHOOL DISTRICT #8
PO BOX 559 NAVAJO ROUTE 12
FT DEFIANCE, AZ, 86504

PROJECT ARCHITECT:

CONTACT: RICHARD BEGAY JR.
SPS+ ARCHITECTS
681 EAST VIA DE NEGOCIO
SCOTTSDALE, AZ 85258
(480) 276-1657

CIVIL ENGINEER:

SHEPHARD-WESNITZER, INC.
CONTACT: GUILLERMO E. CORTES
110 WEST DALE AVE
FLAGSTAFF, AZ 86001
(928) 773-0354

UTILITY COMPANY APPROVAL

NAVAJO TRIBAL UTILITY AUTHORITY

BY: DATE:

FRONTIER COMMUNICATIONS

BY: DATE:

UTILITY CONTACTS

NTUA
CONTACT: GARY YELLOWHAIR, PE
PO BOX 170, FORT DEFIANCE,
ARIZONA, 86604, UNITED STATES

FRONTIER COMMUNICATIONS
STATE HIGHWAY 264
ST. MICHAELS, AZ 86511
(928) 871-3814

BUREAU OF INDIAN AFFAIRS APPROVAL

THE BIA APPROVES THESE PLANS. ALL LIABILITY FOR ERRORS AND OMISSIONS IS THE RESPONSIBILITY OF THE DESIGN ENGINEER.

ENGINEER:

BY: DATE:

BIA CONTACT

CLARENCE TSOSIE
NAVAJO REGION
BRANCH OF TRANSPORTATION
BLDG #40, BLUE CANYON RD
P.O. BOX 619
FT DEFIANCE, AZ 86504
BIA CELL: (505) 399-1813
OTH: (928) 729-7222
FAX: (928) 729-7225

UTILITY CONFLICT

UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE AND WERE COMPILED FROM RECORD DRAWINGS, SURVEY, AND CONSTRUCTION PLANS FURNISHED BY OTHERS. THE CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR DETERMINING THE ACTUAL LOCATIONS OF ALL UNDERGROUND LINES THAT MAY AFFECT WORK PRIOR TO CONSTRUCTION.

A POTENTIAL UTILITY CONFLICT MAY EXIST WITH THE EXISTING NTUA WATERLINE THROUGH IR-110. CONTRACTOR TO VERIFY IN FIELD. EXISTING NTUA AND FRONTIER COMMUNICATION FACILITIES IN THE AREA WILL NEED TO BE PROTECTED.

SOURCE OF PROJECT INFORMATION

BOUNDARY AND TOPOGRAPHIC INFORMATION ACCORDING TO RESULTS OF SURVEY PROVIDED BY SHEPHARD-WESNITZER, DATED 12/17/2021.

SHEPHARD-WESNITZER GENERAL NOTES

PROJECT SPECIFICATIONS
ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING STANDARDS AND SPECIFICATIONS, AND ANY SPECIAL PROVISIONS PREPARED FOR THE PROJECT. THE TERM "CURRENT" MEANS THE DATE OF THE SPECIFICATIONS IN EFFECT AS OF THE DATE OF THE ENGINEERS SEAL ON THESE PLANS.

MARICOPA ASSOCIATION OF GOVERNMENTS (M.A.G.) UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION
NAVAJO TRIBAL UTILITY AUTHORITY STANDARDS AND DETAILS
INTERNATIONAL PLUMBING CODE (IPC)
INTERNATIONAL BUILDING CODE (IBC)

THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS ARE REQUIRED TO OBTAIN COPIES OF THESE, AS WELL AS ANY OTHER STANDARDS OR SPECIFICATIONS REQUIRED TO SUCCESSFULLY COMPLETE THE WORK AS DESCRIBED IN THESE PLANS AND/OR ANY SPECIAL PROVISIONS PREPARED FOR THE PROJECT. THIS REQUIREMENT EXTENDS TO ANY STANDARDS, DETAILS, OR SPECIFICATIONS REFERENCED BY THE CONSTRUCTION DOCUMENTS AND NOT INCLUDED IN THE LIST ABOVE.

QUANTITY ESTIMATE AND PAYMENT PROVISIONS
IF ANY MATERIAL QUANTITIES ARE SHOWN ON THESE PLANS, THEY ARE TO BE CONSIDERED AS APPROXIMATE ONLY AND ARE FURNISHED AS A CONVENIENCE TO THE CONTRACTOR IN EVALUATING THE MAGNITUDE OF THE PROJECT SCOPE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE ACTUAL QUANTITIES OF WORK REQUIRED AND BASE HIS BID ON HIS OWN INDEPENDENT ESTIMATE OF THE WORK SCOPE AND QUANTITIES OF MATERIALS REQUIRED.

THE ESTIMATED QUANTITIES MAY NOT DIRECTLY CORRESPOND TO A BID SCHEDULE/SCHEDULE OF VALUES INCLUDED IN THE CONTRACT DOCUMENTS. PAYMENT FOR ANY WORK ACCOMPLISHED SHALL BE IN ACCORDANCE WITH THE PAYMENT PROVISIONS OUTLINED IN THE CONTRACT DOCUMENTS.

UTILITY COORDINATION

THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY FOR COORDINATING ALL UTILITY RELOCATIONS, VALVE BOX/MANHOLE OR OTHER SURFACE APPURTENANCE ADJUSTMENTS, RESOLUTION OF UTILITY CONFLICTS, OBTAINING NECESSARY PERMITS, SCHEDULING BLUE STAKE, CONDUCTING EXPLORATORY EXCAVATIONS IN ADVANCE OF UTILITY INSTALLATIONS, AND GENERAL CONFORMANCE TO UTILITY AGENCY REQUIREMENTS AND SPECIFICATIONS FOR CONDUCTING THE WORK.

THE CONTRACTOR IS SPECIFICALLY ADVISED TO EXAMINE THE SITE FOR EVIDENCE OF AND CONFLICTS WITH EXISTING UTILITIES PRIOR TO SUBMITTING HIS BID. EXISTING UTILITIES HAVE BEEN SHOWN ON THE PLANS IN THEIR APPROXIMATE LOCATIONS BASED ON FIELD OBSERVATIONS AND ANY FURNISHED RECORD INFORMATION, BUT THERE IS NO GUARANTEE THAT ALL UTILITY CONFLICTS HAVE BEEN IDENTIFIED. AT THE TIME OF CONSTRUCTION, THE EXACT SIZES, TYPES, AND LOCATIONS OF EXISTING UNDERGROUND IMPROVEMENTS SHALL BE DETERMINED BY THE CONTRACTOR AND HE SHALL FURNISH MATERIALS AS NECESSARY TO CONSTRUCT THE REQUIRED CONNECTIONS.

THE CONTRACTOR SHALL PERFORM ALL NECESSARY POTHoles AND UTILITY LOCATING AT LEAST TWO WEEKS IN ADVANCE OF ALL UNDERGROUND UTILITY WORK TO ENSURE EXPEDIENT COMPLETION OF THE WORK IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. LOCATING EXISTING UTILITIES FOR THE PURPOSE OF IDENTIFYING CONFLICTS IN ADVANCE OF THE UTILITY RELOCATIONS IS AN IMPORTANT ELEMENT OF THE PROJECT. FAILURE OF THE CONTRACTOR TO LOCATE EXISTING UTILITIES AT LEAST TWO WEEKS IN ADVANCE OF THE CONSTRUCTION ACTIVITIES WILL DIMINISH HIS ABILITY TO MAKE A CLAIM FOR DELAYS FOR UTILITY RELOCATIONS.

ALL FRAMES, COVERS AND VALVE BOXES IN THE CONSTRUCTION AREA SHALL BE ADJUSTED TO FINAL FINISH GRADES, WHETHER INDICATED ON THE PLANS OR NOT. ANY NECESSARY ADJUSTMENTS WHICH ARE NOT SEPARATELY ITEMIZED IN THE BID SCHEDULE SHALL BE CONSIDERED INCIDENTAL TO THE WORK.

THE APPROPRIATE UTILITY COMPANIES SHALL BE NOTIFIED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION. "BLUE STAKE" NUMBER IS 1-800-STAKE-IT. CONTRACTOR SHALL ALLOW TWO WORKING DAYS AFTER "BLUE STAKE" IS NOTIFIED, BEFORE COMMENCING ANY EXCAVATION WORK IN PROXIMITY OF BURIED UTILITIES.

AT LEAST TWO WORKING DAYS PRIOR NOTICE IS REQUIRED BEFORE DISRUPTING EXISTING UTILITY SERVICES TO MAKE CONNECTIONS. THE NOTICE MUST INCLUDE THE EXACT TIME OF THE DISRUPTION OF SERVICE AND THE EXPECTED DURATION OF THE LOSS OF SERVICE. THE NOTICE SHALL BE FURNISHED TO THE OWNER OR OTHERS AS SPECIFIED IN THE CONTRACT DOCUMENTS.

THE LOCATION OF ALL WATER VALVES MUST AT ALL TIMES DURING CONSTRUCTION BE REFERENCED AND MADE AVAILABLE TO THE GOVERNING WATER COMPANY/DEPARTMENT.

ALL WATER LINES SHALL BE PRESSURE AND LEAKAGE TESTED PER AWWA C605-13 OR MAG STANDARDS SECTION 611.

CONSTRUCTION PLANS
FOR
TSE HO TSO MIDDLE SCHOOL
FIELD HOUSE WATERLINE

WRUSD #8
FORT DEFIANCE, ARIZONA

SECTION 27, TOWNSHIP 31 NORTH, RANGE 88 EAST, GILA AND SALT RIVER MERIDIAN,
FORT DEFIANCE, APACHE COUNTY, ARIZONA



VICINITY MAP
N.T.S.

BIA/NAVAJO REGION BRANCH OF
TRANSPORTATION GENERAL NOTES

ALL PROPOSED UNDERGROUND UTILITY INSTALLATIONS (ON ASPHALT OR CONCRETE SURFACED ROADS) SHALL CROSS THE ROADWAYS BY A BORING METHOD WITH A MINIMUM COVER DEPTH OF ONE METER BELOW THE LOWEST DITCH LINE ELEVATION UNLESS OTHERWISE SPECIFIED BY THE NRBOT. ALL PROPOSED OVERHEAD UTILITIES SHALL HAVE A MINIMUM OF 5.5 METER CLEARANCE ABOVE THE ROADWAY SURFACE.

THE UTILITY OWNER ACCEPTS FULL RESPONSIBILITY FOR THE SAFETY OF THE TRAVELING PUBLIC DURING THE UTILITY INSTALLATIONS AND MAINTENANCE; AND SHALL MAINTAIN AT LEAST ONE LANE OF TRAFFIC OPEN FOR THE PUBLIC AT ALL TIMES DURING SUCH ACTIVITIES.

ALL COMPONENTS OF THE UTILITY INSTALLATIONS SHALL COMPLY WITH APPLICABLE FEDERAL, STATE, TRIBAL, AND OTHER LOCAL GOVERNING BODY LAWS AND REGULATIONS AND INDUSTRY CODE.

ANY AND ALL DAMAGES TO THE ROADWAY RIGHT-OF-WAY AND APPURTENANCES SHALL BE REPAIRED AND/OR REPLACED TO THE SATISFACTION OF THE NRBOT MANAGER AND AGENCY BOT ENGINEER.

COORDINATE SYSTEM DETAILS

LINEAR UNIT: INTERNATIONAL FEET
GEODETIC DATUM: NAD 83 (2011)
VERTICAL DATUM: NAVD 88, REFERENCED FROM SWI CONTROL POINT "1000"
SYSTEM: ARIZONA STATE PLANE 1983
ZONE: ARIZONA EAST (0201)
PROJECTION: TRANSVERSE MERCATOR
LATITUDE OF GRID ORIGIN: 31° 00' 00" N
LONGITUDE OF CENTRAL MERIDIAN: 110° 10' 00" W
NORTHING AT GRID ORIGIN: 0 FT
EASTING AT CENTRAL MERIDIAN: 700,000 FT
CENTRAL MERIDIAN SCALE FACTOR: 0.9999 (EXACT)

ALL MEASURED DISTANCES AND BEARINGS SHOWN HEREON ARE GRID VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT GRID DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.

THE BASIS OF BEARINGS IS TRUE GEODETIC NORTH; NOTE THAT THE MEASURED GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

ORTHOMETRIC HEIGHTS (ELEVATIONS) WERE TRANSFERRED TO THE SITE FROM SWI CONTROL POINT "1000" USING GPS WITH NGS GEOID MODEL "GEOID12B". ELEVATIONS SHOWN HEREON ARE REFERENCED TO AN NGS "OPUS" SOLUTION OF THIS STATION.

THE SURVEY WAS CONDUCTED USING GPS REFERENCED TO THE NATIONAL SPATIAL REFERENCE SYSTEM. A PARTIAL LIST OF POINT COORDINATES FOR THIS SURVEY IS GIVEN BELOW (ADDITIONAL COORDINATES ARE AVAILABLE UPON REQUEST). LOCAL NETWORK ESTIMATES ARE GIVEN AT THE 95% CONFIDENCE LEVEL AND ARE BASED ON A LEAST-SQUARES ADJUSTMENT OF STATISTICALLY INDEPENDENT OBSERVATIONS.

POINT "1000" = SURVEY NAIL, SWI CONTROL POINT
LATITUDE = N 35°44'22.98282" NORTHING = 1726354.671 FT
LONGITUDE = W 109°04'02.58755" EASTING = 1026220.247 FT
ELLIPSOID HEIGHT = 6736.178 FT ELEVATION = 6803.943 FT

POINT #1001 = FOUND WATER VALVE
NORTHING = 1726192.128 FT
EASTING = 1026349.151 FT
ELEVATION = 6800.496 FT

POINT #1002 = FOUND WATER VALVE
NORTHING = 1725850.965 FT
EASTING = 1026061.094 FT
ELEVATION = 6800.337 FT

THE CONTRACTOR SHALL RESTORE THE LANDS WITHIN THE ROADWAY RIGHT-OF-WAY TO ITS NATURAL CONDITIONS INCLUDING DRAINAGE, RE-SEEDING, AND MULCHING.

EXPOSED UTILITY LINES, POLES, ANCHORS, AND FACILITY APPURTENANCES SHALL BE CONSTRUCTED OUTSIDE OF CLEAR RECOVERY ZONES OF THE ROADWAY AS DETERMINED BY THE NRBOT MANAGER. WHEN POSSIBLE, THESE ITEMS SHALL BE CONSTRUCTED NEXT TO RIGHT-OF-WAY LINES WHEN POSSIBLE, OR TWO FEET BEHIND THE BACK FACE OF SIDEWALK.

ALL PROPOSED UNDER ROADWAY UTILITY LINE CROSSINGS SHALL BE INSTALLED IN A CASING PIPE PER NRBOT STANDARD DETAILS OR NRBOT APPROVED UTILITY COMPANY STANDARDS AND BURIED AT LEAST 1 METER/3 FEET BELOW DITCH LINES. CASING PIPE SHALL BE STEEL, DUCTILE IRON, REINFORCED CONCRETE, OR OTHER APPROVED MATERIAL. ELECTRICAL, CABLE TV, OR TELEPHONE LINES MAY BE ENCASED IN NON-METALLIC CONDUIT OR PLACED ON POLES WITH THE REQUIRED CLEARANCE OF 5.5 M (18 FEET). HIGH PRESSURE AND/OR HAZARDOUS LIQUID UTILITY LINES MAY CALL FOR ADDITIONAL PROTECTION REQUIREMENTS FROM THE NRBOT IN COORDINATION WITH THE UTILITY COMPANY IN ADVANCE.

ALL NEW UTILITY CROSSINGS SHALL BE MARKED WITH APPROVED PERMANENT MARKERS NEXT TO THE ROAD RIGHT-OF-WAY LINES AND OUTSIDE OF THE CLEAR RECOVERY ZONE FROM EDGE OF ROADWAY SHOULDER.

ANY BURIED NON-METALLIC UTILITY LINES SHALL HAVE A METALLIC TAPE OR OTHER APPROVED METHOD OF EFFECTIVELY LOCATING THE LINES.



110 W. Dale Avenue
Flagstaff, AZ 86001
928.773.0354
928.774.8934 fax
www.swi.coz.com

Shephard Wesnitzer, Inc.

REVISIONS

NO.	DESCRIPTION	DATE	BY

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

Arizona Blue Stakes, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)

DRAWING NO.
CV01

SHT NO. 1 OF 3

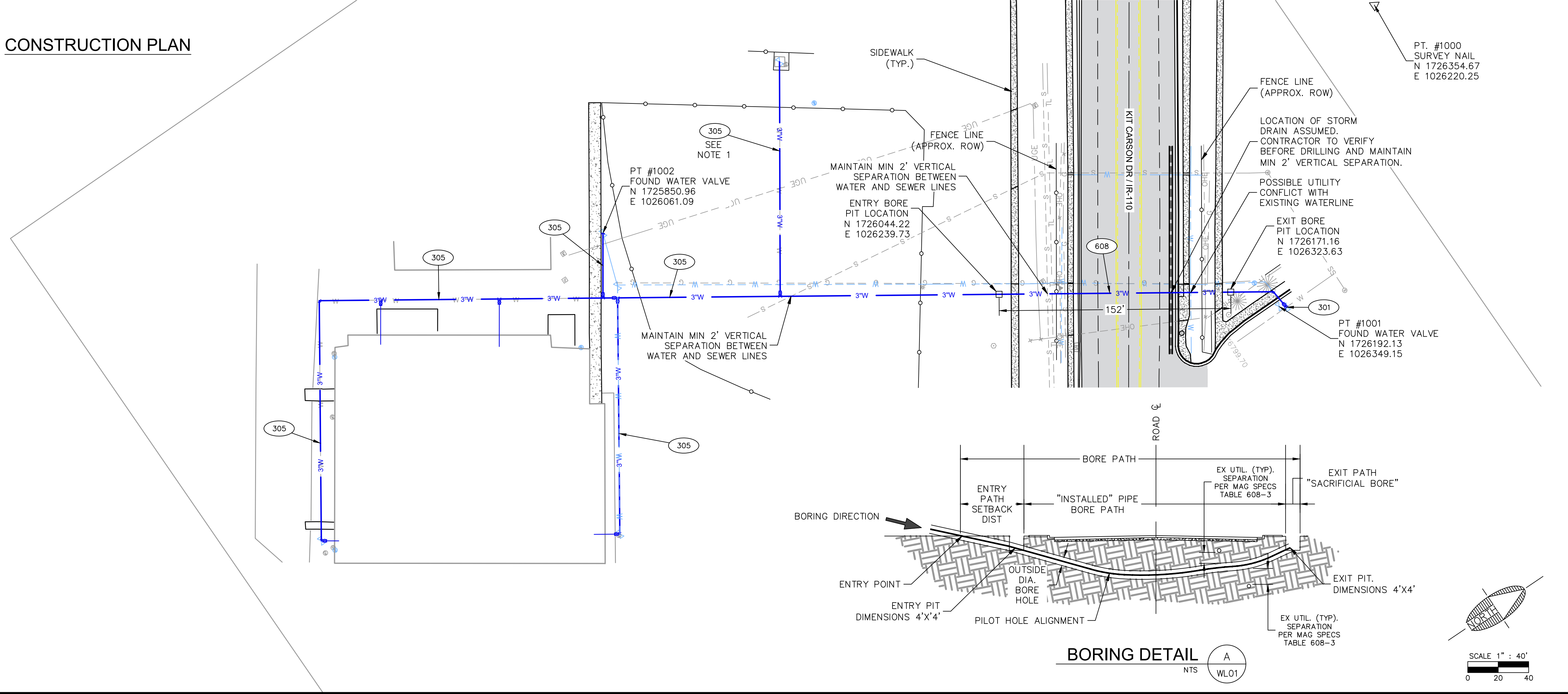
WINDOW ROCK FIELD HOUSE WATERLINE

FT DEFIANCE ARIZONA

COVER SHEET & NOTES



CONSTRUCTION PLAN



CONSTRUCTION KEYNOTES

- 101 663 LF REMOVE AND DISPOSE OF EXISTING 2.5" WATERLINE.
- 102 2 EA CUT, CAP, AND ABANDON EXISTING 2.5" WATERLINE IN PLACE.
- 301 1 EA CONNECT TO EXISTING WATERLINE.
- 305 1106 LF INSTALL 3" WATERLINE (C-900/CL 305 PVC/DR14) INCLUDING ALL APPURTENANCES PER MAG SPECS SECTION 610. TRENCH EXCAVATION, BACKFILLING, AND COMPACTION PER MAG SPECS SECTION 601.
- 608 152 LF BORE UNDER ROAD WITH HORIZONTAL DIRECTIONAL DRILL FOR WATERLINE INSTALLATION PER MAG. SPEC. SECTION 608 AND DETAIL 'A' ON THIS SHEET. BORE PATH PER THESE PLANS.

NOTE:
1. CONTRACTOR TO VERIFY CONDITION OF EXISTING LINE DURING DEMOLITION AND VERIFY REPLACEMENT WITH ENGINEER.

LEGEND


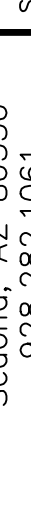
- EX. FENCE
- EX. WATER LINE
- EX. GAS
- EX. UNDERGROUND UTIL.
- EX. COMMUNICATIONS LINE
- EX. SEWER
- EX. OVERHEAD UTIL.
- WATER LINE
- GATE VALVE
- EX. WATER VALVE
- EX. WATER RISER
- EX. STORM MANHOLE
- EX. SEWER CLEANOUT
- EX. TRANSFORMER BOX
- EX. SWITCH BOX
- EX. ELECTRIC RISER
- EX. UTILITY POLE
- EX. DOWNGUY
- EX. GAS METER
- EX. GAS RISER

JOB NO: 21192		DATE: FEB 22		SCALE: AS SHOWN		DRAWN: ELK		DESIGN: ELK		CHECKED: GEC	
75 Kallio Pl Scottsdale, AZ 86336 928.282.2058 fax www.swiaz.com		WINDOW ROCK FIELD HOUSE WATERLINE		FT DEFANCE ARIZONA		WATERLINE DEMO & CONSTRUCTION PLANS					
Shephard Wesnitzer, Inc.		REVISIONS		DATE		BY		DRAWING NO. WL01			
Contact Arizona 811 at least two full working days before you begin excavation		NO.		DESCRIPTION				SHT NO. 2 OF 3			



- | | |
|--|-------------------------|
| | EX. FENCE |
| | ROAD CENTERLINE |
| | LANE STRIPING |
| | CENTER LANE STRIPING |
| | TRAFFIC CONTROL SIGNAGE |
| | EX. WATER VALVE |
| | EX. WATER RISER |
| | EX. STORM MANHOLE |
| | EX. SEWER CLEANOUT |
| | EX. TRANSFORMER BOX |
| | EX. SWITCH BOX |
| | EX. ELECTRIC RISER |
| | EX. UTILITY POLE |
| | EX. DOWNGUY |
| | EX. GAS METER |
| | EX. GAS RISER |



<div>Contact Arizona 811 at least two full working days before you begin excavation</div> <div><div>Call 811 or click Arizona811.com</div></div> <div>DRAWING NO. TC01</div>				<div>REVISIONS</div> <table><thead><tr><th>NO.</th><th>DESCRIPTION</th><th>DATE</th><th>BY</th></tr></thead><tbody><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></tbody></table>				NO.	DESCRIPTION	DATE	BY																					<div><div>Shephard Associates, Inc.</div><div>75 Kallot Place Sedona, AZ 86336 928.282.1061 928.282.2058 fax www.swiaz.com</div></div> <div>JOB NO: 21192 DATE: FEB 22 SCALE: AS SHOWN DRAWN: ELK DESIGN: ELK CHECKED: GEC</div>				<div>WINDOW ROCK FIELD HOUSE WATERLINE</div> <div>FT DEFANCE, ARIZONA</div>			
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