

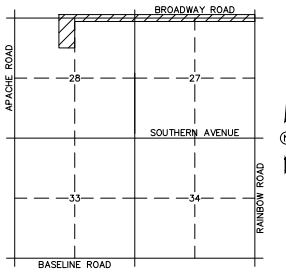
# CITY OF BUCKEYE TANK FILL - REACH LINE

## CONNECTION TO JACKIE A. MECK WATER CAMPUS

A PORTION OF SECTION 27, TOWNSHIP 1 NORTH, RANGE 3 WEST AND SECTION 28, TOWNSHIP 1 NORTH, RANGE 3 WEST OF THE GILA AND SALT RIVER BASELINE AND MERIDIAN, MARICOPA COUNTY, ARIZONA.

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VICINITY MAP  
NOT TO SCALE



### FEMA FLOOD ZONE INFORMATION

COMMUNITY NUMBER	PANEL # PANEL DATE	SUFFIX	DATE OF FIRM (INDEX DATE)	FIRM ZONE	BASE FLOOD ELEV. (IN AO ZONE, USE DEPTH)
40039	2115, 2120 10/16/2013	L	11/4/2015	X	N/A

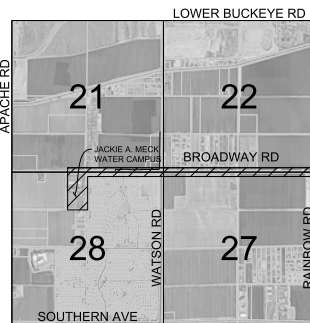
ALL FLOOD ZONES ARE SHOWN IN THIS PLAN SET.

### GENERAL PERMITTING NOTES

- ALL CONSTRUCTION IN THE PUBLIC RIGHTS-OF-WAY OR IN EASEMENTS GRANTED FOR PUBLIC USE MUST CONFORM TO THE LATEST MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM STANDARD SPECIFICATIONS AND UNIFORM STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION AS AMENDED BY THE LATEST VERSION OF THE CITY OF BUCKEYE DESIGN STANDARDS. IF THERE IS A CONFLICT, THE CITY OF BUCKEYE STANDARDS WILL GOVERN.
- THE APPROVAL OF THE PLANS IS VALID FOR ONE (1) YEAR FROM THE DATE OF THE CITY ENGINEER'S SIGNATURE. IF AN ENCROACHMENT PERMIT FOR THE CONSTRUCTION HAS NOT BEEN ISSUED WITHIN ONE (1) YEAR, THE PLANS MUST BE RESUBMITTED TO THE CITY FOR REAPPROVAL.
- A CITY OF BUCKEYE INSPECTOR WILL INSPECT ALL WORKS WITHIN THE CITY OF BUCKEYE RIGHTS-OF-WAY AND IN EASEMENTS. NOTIFY THE CITY 24 HOURS PRIOR TO THE INSPECTION BY CALLING (623) 349-6248.
- CITY PERMITS ARE REQUIRED FOR ALL WORK IN PUBLIC RIGHTS-OF-WAY AND EASEMENTS GRANTED FOR PUBLIC PURPOSES. A CITY PERMIT WILL BE ISSUED BY THE CITY ONLY AFTER ALL FEES HAVE BEEN PAID AND THE PERMIT HAS AN APPROVED MARICOPA COUNTY ENVIRONMENTAL SERVICES DUST PERMIT AND AN APPROVED STORM WATER POLLUTION PREVENTION PLAN ATTACHED. THE SWPPP SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS.
- COPIES OF ALL PERMITS AND MOST RECENT APPROVED PLANS MUST BE RETAINED ON-SITE AND BE AVAILABLE FOR INSPECTION AT ALL TIMES. FAILURE TO PRODUCE THE REQUIRED PERMITS AND PLANS WILL RESULT IN IMMEDIATE SUSPENSION OF ALL WORK UNTIL PROPER PERMIT DOCUMENTATION AND/OR PLANS ARE OBTAINED. ALL OF THESE REQUIREMENTS APPLY TO ON-SITE GRADING AND IMPROVEMENT PLANS.

### UTILITY COMPANIES DATE SUBMITTED

UTILITY COMPANIES	DATE SUBMITTED
ELECTRIC	ARIZONA PUBLIC SERVICE 5/24/2022
TELEPHONE	CENTURY LINK-LUMEN 5/24/2022
CATV	COX COMMUNICATIONS 5/24/2022
WATER	CITY OF BUCKEYE 5/24/2022
SEWER	CITY OF BUCKEYE 5/24/2022
IRRIGATION	ROOSEVELT IRRIGATION DISTRICT 5/24/2022



### SUMMARY OF QUANTITIES

ITEM	UNIT	QUANTITY
CLASS 350 12" DIP WATERLINE AND FITTINGS W/POLYWRAP	LF	8,054
30" STEEL CASING WITH CLASS 350 12" DIP WATERLINE BY BORE	LF	327
12" GATE VALVE AND BOX	EA	5
CONNECTION TO EXISTING WATERLINE	EA	1
TRENCH SAFETY	LF	8,054
2" AIR RELEASE VALVE	EA	2
PERMANENT ASPHALT PAVEMENT REPAIR	SY	2,773
ASPHALT DRIVEWAY	SY	65
ELECTRICAL, INSTRUMENTATION, AND CONTROLS IMPROVEMENTS	LS	1
CONSTRUCT CONTROL VALVE ASSEMBLY	LS	1
CONNECTION TO EXISTING RESERVOIR	LS	1
ITS PULL BOX PER COB STD DTL 66124	EA	4
7-WAY MICRO-DUCT	LF	8,223

### OWNER

CITY OF BUCKEYE  
CONTACT: PAUL NUÑO  
530 E. MONROE AVENUE  
BUCKEYE, AZ 85320  
PHONE: 623-349-6279  
EMAIL: PAUL.NUNO@BUCKEYEAZ.GOV

### ENGINEER

KIMLEY-HORN  
CONTACT: TYLER KAY, P.E.  
7740 N. 16TH STREET, STE 300  
PHOENIX, AZ 85020  
PHONE: 602-216-1263  
EMAIL: TYLER.KAY@KIMLEY-HORN.COM

### SHEET INDEX

REFER TO SHEET G-02 FOR SHEET INDEX

### BASIS OF BEARING

HORIZONTAL DATUM: NAD83 (2011) ARIZONA CENTRAL ZONE  
COMBINED SCALE FACTOR: 1.00009742  
VERTICAL DATUM: NAVD83

### BENCH MARK

A BRASS CAP IN HAND HOLE AT THE INTERSECTION OF WATSON AND BROADWAY, NW CORNER SEC. 27, T1N, R3W.  
GROUND NORTHING = 876161.9243  
GROUND EASTING = 504453.2317  
PUBLISHED ELEVATION = 966.10

### APPROVALS

#### DISCLAIMER:

THE CITY APPROVES THESE PLANS FOR CONCEPT ONLY AND ACCEPTS NO LIABILITY FOR ERRORS AND OMISSIONS.

#### BY:

CITY OF BUCKEYE ENGINEER DATE

MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT MCESD No. DATE

"IN ACCORDANCE WITH THE SAFE DRINKING WATER ACT AND AAC R18-4-213, ALL MATERIALS INSTALLED AFTER JANUARY 4, 2014 WHICH MAY COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NATIONAL SANITATION FOUNDATION STANDARD 60, 61 & 372." ALL POTABLE WATERLINES AND FITTINGS SHALL HAVE A NSF-PW SEAL. ALL MATERIALS SHALL BE LEAD FREE AS DEFINED IN NSF 372, AAC R18-5-504 AND R18-4-101.

### ROOSEVELT IRRIGATION DISTRICT APPROVAL

The Roosevelt Irrigation District (RID) has reviewed these plans solely for conformance to RID standards and specifications as related to RID irrigation and/or drainage facilities. RID makes no representations or warranties regarding the suitability, and/or adequacy, of the items being constructed to meet, fulfill, or otherwise satisfy, their intended purpose. RID approves these plans for concept only and accepts no liability for errors or omissions. RID Right-of-Way Crossing Permit required prior to construction.

ROOSEVELT IRRIGATION DISTRICT DATE

RID PERMIT NUMBER

### AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE "AS-BUILT" INFORMATION SHOWN HEREON WAS OBTAINED UNDER MY DIRECT SUPERVISION AND IS CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

ARIZONA REGISTERED LAND SURVEYOR/P.E. DATE

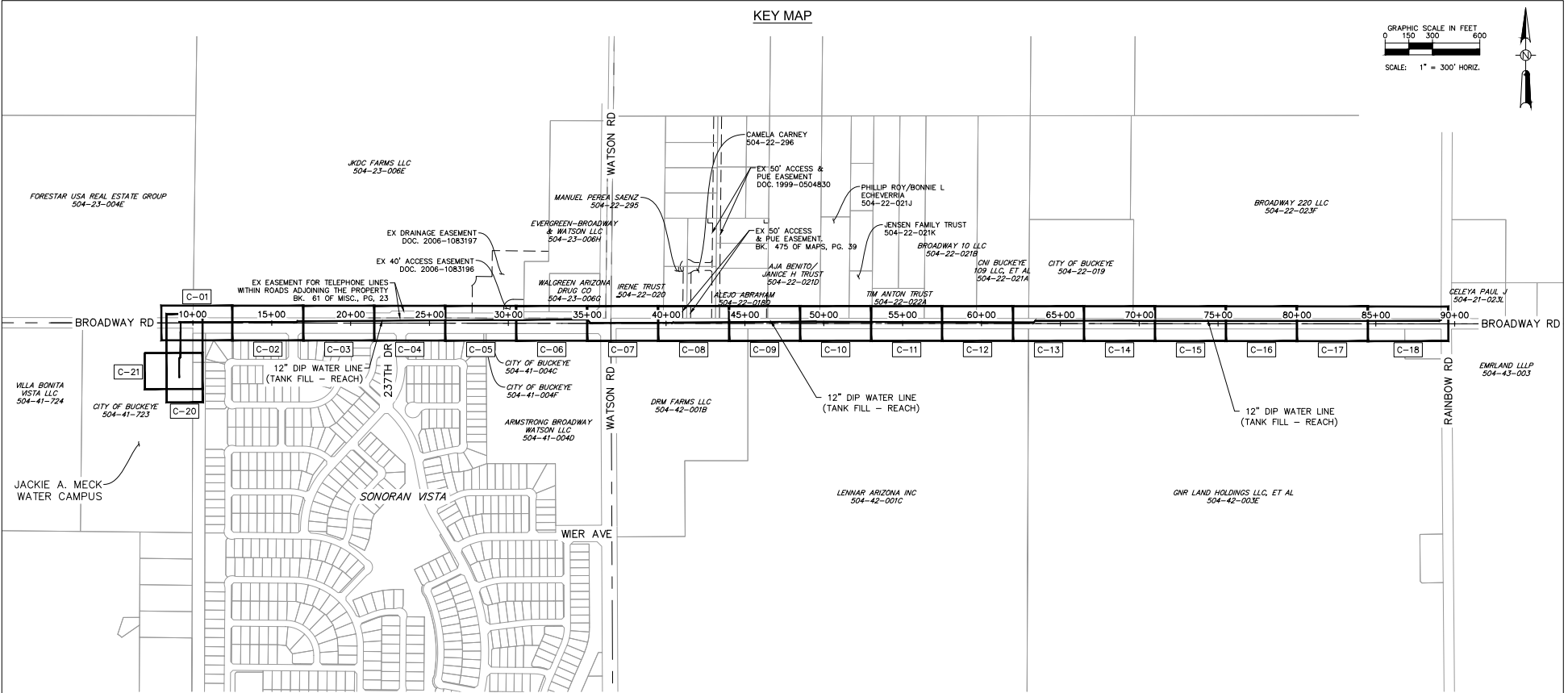
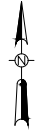
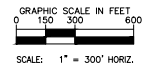
ARIZONA REGISTRATION NUMBER

TELEPHONE NUMBER



MANAGING ENGINEER/SURVEYOR TYLER KAY, P.E./ CHAD HUBER, R.L.S.	PROJECT COORDINATOR BRYAN BRUNSON	CHECKED TWK	AS NOTED ON PLANS
DESIGN LAYOUT BOB/TWK	DRAFTED BOB/SHH	CHECKED	
FIELD SURVEY	DRAFTED	CHECKED	
DRAWING SCALES			
PROJECT TYPE <b>TANK FILL - REACH LINE CONNECTION TO JACKIE A. MECK WATER CAMPUS</b>		ENGINEER INFORMATION <b>Kimley»Horn</b> 7740 N. 16TH STREET, SUITE 300, PHOENIX, AZ 85020 PHONE: 602-944-5500   FAX: 602-944-7423 WWW.KIMLEY-HORN.COM	
REVISIONS: 1. ADDENDUM NO. 1		COB PERMITTING APPROVED SEAL COB ENGINEERING APPROVED SEAL	
AS-BUILT SEAL		DESIGN SEAL	
ORIGINAL PLAN DATE 8/26/2022		LATEST REVISION DATE	
PROJECT NUMBER 191342029		SHEET NUMBER 1 OF 44	
SUBMITTAL 100% SUBMITTAL 1st SUBMITTAL		SUBMITTING # ENC01P-22-003	

KEY MAP



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26	C-19	SITE PLAN			

PLAN NAME <b>KEY MAP</b>	
ENGINEER INFORMATION <b>Kimley-Horn</b> 7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021   602-944-6500	
COB PERMITTING APPROVED SEAL	COB ENGINEERING APPROVED SEAL
AS-BUILT SEAL	DESIGN SEAL 
ORIGINAL PLAN DATE 8/23/2022	LATEST REVISION DATE
PROJECT NUMBER 191342029	SHEET NUMBER   SHEET 2 OF 44   G-02
SUBMITTAL <b>100% SUBMITTAL</b>	

CITY OF BUCKEYE GENERAL CONSTRUCTION NOTES

- 1. CITY OF BUCKEYE BUILDING SAFETY DEPARTMENT SHALL BE NOTIFIED 24 HOURS IN ADVANCE OF ANY ON-SITE OR OFF SITE CONSTRUCTION...
2. WORK PERFORMED TO MEET THE CITY OF BUCKEYE CURRENT UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION AS SPONSORED AND DISTRIBUTED BY THE MARICOPA ASSOCIATION OF GOVERNMENTS (MAC) AND AS AMENDED BY THE CITY OF BUCKEYE (COB).
3. A PERMIT IS REQUIRED FROM THE COB FOR ALL CONSTRUCTION WITHIN THE RIGHTS-OF-WAY (ROW)...
4. THE CONTRACTOR WILL EXPOSE ALL EXISTING UTILITY LINES BEING TIED IN TO VERIFY THEIR LOCATION...
5. THE CONTRACTOR WILL LOCATE, OR HAVE LOCATED, ALL EXISTING UNDERGROUND UTILITIES (ELECTRIC, TELEPHONE, PIPELINE, ETC.) AND STRUCTURES IN JOVIANUS AND AERIALS...
6. THE CONTRACTOR IS RESPONSIBLE TO CALL BLUE STAKE PRIOR TO STARTING ANY CONSTRUCTION...
7. A PRE-CONSTRUCTION MEETING IS REQUIRED PRIOR TO THE START OF WORK OR NEW PHASE OF WORK...
8. ANY WORK PERFORMED WITHOUT THE APPROVAL OF THE COB AND/OR ALL WORK AND MATERIAL NOT IN CONFORMANCE WITH THE SPECIFICATIONS IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE...
9. DISPOSAL OF EXCESS MATERIAL WITHOUT A PERMIT WITHIN THE COB LIMITS IS PROHIBITED...
10. EXCAVATION CONTRACTORS MUST IDENTIFY LOCATION FOR STOCKPILING OF EXCESS EXCAVATION MATERIAL...
11. TRAFFIC CONTROL SHALL BE PROVIDED AND MAINTAINED IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES...
12. ALL WORK TO BE DONE WITHIN THE CITY OF BUCKEYE SHALL BE APPROVED BY THE COB...
13. ENVIRONMENTAL REQUIREMENTS
a. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL RELATED TO THE PROJECT CONSTRUCTION...
14. STREET CLOSURE PERMITS SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO APPROVAL OF IMPROVEMENT PLANS...
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY AND FINAL CLEAN-UP OPERATIONS OF ADJACENT, EXISTING PAVED STREETS USED BY CONSTRUCTION TRAFFIC...
16. TEMPORARY DRAINAGE CONTROL MEASURES MAY BE REQUIRED DURING AND AFTER CONSTRUCTION UNTIL FINAL PROJECT BUILT-OUT...
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES AND STRUCTURES...
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CITY OF BUCKEYE WATER NOTES

- 1. ARRANGEMENTS FOR CONSTRUCTION WATER CAN BE MADE BY CALLING THE WATER RESOURCES DEPARTMENT AT (623) 349-6800...
2. BACKFILLING AND FILLING OPERATIONS SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO THE START OF WORK...
3. FIRE HYDRANTS SHALL BE WATERPROOF "PACER", MUELLER, OR CLOW BREAK-AWAY, DRY-BARREL DESIGN AND SHALL BE FURNISHED BY THE CONTRACTOR...
4. ALL FIRE HYDRANTS SHALL BE PAINTED NFPA YELLOW OR OTHER COLORS BASED ON STANDARD DETAIL 3141A AFTER INSTALLATION...
5. ALL SERVICE LINES SHALL BE TYPE "K" COPPER PIPE FROM THE CITY MAIN TO METER (THROUGH 2" SIZE), SERVICE CONNECTIONS SHALL CONFORM TO THE STANDARD DETAIL 3133...
6. ALL TAPS SHALL USE A BRONZE DOUBLE SERVICE SADDLE...
7. METER BOXES AND LIDS SHALL BE SUPPLIED BY THE DEVELOPER AND INSTALLED FACING THE LOT...
8. ALL WATER METERS SHALL BE PURCHASED FROM THE CITY WATER RESOURCES DEPARTMENT...
9. TRANSVERSE TRENCH BACKFILL IN ALL EXISTING ROADWAY SHALL REQUIRE 100% FULL DEPTH FINE GRADE CLSM PER MAG SPEC 728...

CITY OF BUCKEYE WATER NOTES (CONT.)

- 9. ALL VALVE BOXES SHALL BE MAG STANDARD DETAIL 391-2 AND MANUFACTURED BY TYLER UNION...
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CITY OF BUCKEYE PAVING NOTES

- 1. LOCATION OF ALL VALVES AND MANHOLES MUST BE REFERENCED AT ALL TIMES BY THE CONTRACTOR DURING CONSTRUCTION...
2. SUBGRADE AND PAVING OPERATIONS SHALL NOT BEGIN UNTIL ALL UTILITY FRAME AND COVER LOCATIONS HAVE BEEN PROPERLY REFERENCED TO FACILITATE ADJUSTMENTS...
3. BASE COURSE SHALL NOT BE PLACED ON SUBGRADE UNTIL ALL SUBGRADE REQUIREMENTS HAVE BEEN COMPLETED...
4. ALL RETURN TYPED DRIVEWAYS WITH CONCRETE PAVEMENT SHALL UTILIZE MAG CLASS A CONCRETE FOR ALL CONSTRUCTION WITHIN THE RIGHT-OF-WAY...
5. ALL ASPHALT JOINTS SHALL BE SEALED PRIOR TO THE FINAL APPROVAL BY THE CITY...
6. ALL ASPHALT SHALL BE SAU COT TO A CLEAN TRUE EDGE FOR THE FULL FACE OF THE SECTION PRIOR TO TYPING IN MILLED DEBITS...
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PROJECT SPECIFIC NOTES

- 1. HOPE ALTERNATE BID ITEM
1.1. THE CONTRACTOR SHALL BID HOPE MATERIAL AS AN ALTERNATE BID ITEM FOR ALL LINEAR PIPING NOT INCLUDING THE LIMITS OF THE CONTROL VALVE ASSEMBLY AND THE CONNECTION TO EXISTING TANK LUMP SUM BID ITEMS...
1.2. HOPE SHALL BE 16" DR14 C900 DR14 PVC IN ACCORDANCE WITH SECTION 33.14.14.12...
1.3. CONTRACTOR MAY BEND THE HOPE PIPE IN LIEU OF PIPE DEFLECTIONS LESS THAN 5 DEGREES...
1.4. CONTRACTOR SHALL USE RESTRAINED JN ADAPTERS TO CONNECT TO GATE VALVES...
1.5. HOPE ALTERNATE BID ITEM
2.1. THE CONTRACTOR SHALL BID FUSIBLE PVC MATERIAL AS AN ALTERNATE BID ITEM FOR ALL LINEAR PIPING NOT INCLUDING THE LIMITS OF THE CONTROL VALVE ASSEMBLY AND THE CONNECTION TO EXISTING TANK LUMP SUM BID ITEMS...
2.2. HOPE SHALL BE 16" DR14 C900 DR14 PVC IN ACCORDANCE WITH SECTION 33.14.14.12...
2.3. CONTRACTOR MAY BEND THE FUSIBLE PVC PIPE IN LIEU OF SMALL PIPE DEFLECTIONS AS LONG AS THE MINIMUM BEND RADIUS DOES NOT EXCEED 50% OF THE MANUFACTURER'S RECOMMENDATIONS...
2.4. CONTRACTOR SHALL USE MECHANICAL JOINT RESTRAINT AT ALL CONNECTIONS TO DUCTILE IRON FITTINGS AND VALVES...
3. CONTRACTOR MAY INSTALL PIPE BY OPEN CUT ACROSS RID IRRIGATION LINES IF PERFORMED DURING THE ANNUAL DRY UP PERIOD...
4. ALL SURFACES MUST BE RESTORED TO EXISTING OR BETTER CONDITION AND IS INCLUDED IN THE LUMP SUM BID ITEM FOR SURFACE RESTORATION...
5. ANY ASPHALT REPLACEMENT WITHIN 48" OF THE EDGE OF PAVEMENT MUST BE EXTENDED TO THE EDGE OF PAVEMENT PER MAG DETAIL 201 TYPE 1...
6. RESTRING SHALL BE RESTORED TO EXISTING OR BETTER CONDITIONS AND IS SUBSIDIARY TO THE COST OF THE PROJECT...
7. CONTRACTOR SHALL ALLOW UNRESTRICTED SITE ACCESS TO AT LEAST ONE ENTRANCE TO THE JACKIE A. MECK WATER CAMPUS AT ALL TIMES...
8. TWO-WAY TRAFFIC MUST BE MAINTAINED AT ALL TIMES WITH THE EXCEPTION ON BROADWAY EAST OF WATSON RD...
9. RESTRING SHALL BE RESTORED TO EXISTING OR BETTER CONDITIONS AND IS SUBSIDIARY TO THE COST OF THE PROJECT...

ITS GENERAL NOTES

- 1. THIS PROJECT HAS BEEN DESIGNED USING THE CURRENT 2021 EDITION OF CITY OF BUCKEYE ITS STANDARDS AS SHOWN IN THE PLAN DETAILS...
2. THE CONDUIT NOTES ONLY SHOW THOSE CABLES THAT ARE AFFECTED BY THIS PROJECT...
3. PROPOSED CONDUIT LOCATIONS THAT ARE NOT SHOWN SHALL REMAIN UNDISTURBED...
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES AND STRUCTURES...
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16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES AND STRUCTURES...
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES AND STRUCTURES...
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES AND STRUCTURES...
19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES AND STRUCTURES...
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES AND STRUCTURES...
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES AND STRUCTURES...
22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES AND STRUCTURES...
23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES AND STRUCTURES...

GENERAL NOTES

ENGINEER INFORMATION
Kimley-Horn
7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85016 | 602.244.6500
COB PERMITTING APPROVED SEAL

DESIGN SEAL
AS-BUILT SEAL
PROJECT NUMBER: 191342029
SHEET NUMBER: 3 OF 44

100% SUBMITTAL
CITY OF BUCKEYE
ENCIPR-22-0003

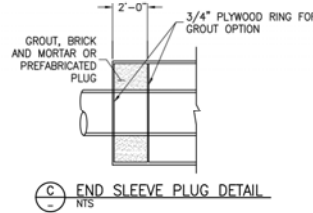
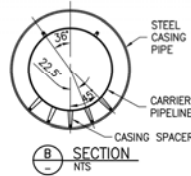
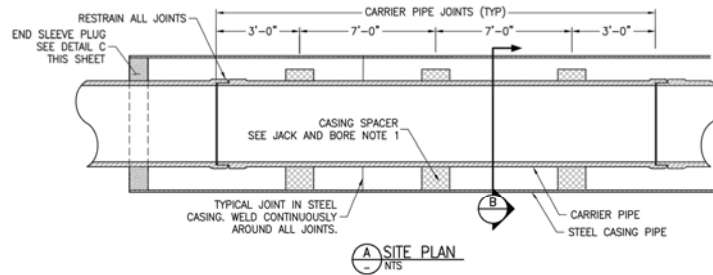
**ROOSEVELT IRRIGATION DISTRICT GENERAL NOTES**

1. THE TERM "DISTRICT" IN THESE NOTES AND PLANS SHALL REFER TO THE ROOSEVELT IRRIGATION DISTRICT.
2. THE DISTRICT CONSTRUCTION OBSERVER MUST APPROVE THE SCHEDULING OF ALL CONSTRUCTION ACTIVITIES WITHIN THE DISTRICT RIGHT-OF-WAY OR EASEMENT. THE DISTRICT MAY REQUIRE THAT SOME OR ALL OF THE CONSTRUCTION FOR THE PROJECT BE COMPLETED DURING A SCHEDULED DRY-UP OF THE MAIN CANAL.
3. ALL CONSTRUCTION PLANS AFFECTING DISTRICT FACILITIES MUST BE REVIEWED AND APPROVED BY THE DISTRICT.
4. THE CONTRACTOR SHALL CONTACT THE DISTRICTS CONSTRUCTION OBSERVER AT (602) 284-7017, A MINIMUM OF 14 CALENDAR DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
5. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A RIGHT-OF-WAY CROSSING PERMIT FROM THE DISTRICT BEFORE ANY WORK CAN COMMENCE WITHIN DISTRICT RIGHT-OF-WAY OR EASEMENT.
6. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR REVIEW BY THE DISTRICTS ENGINEER AS MAY BE NECESSARY FOR THE EXECUTION OF THE WORK AND AS REQUIRED BY THE DRAWINGS AND SPECIFICATIONS.
7. ALL EXISTING DISTRICT FACILITIES DISTURBED BY NEW CONSTRUCTION SHALL BE RECONSTRUCTED TO CURRENT DISTRICT STANDARDS.
8. ALL CONSTRUCTION INCLUDING, BUT NOT LIMITED TO: EQUIPMENT, FENCING, SPOOLS, ETC. MUST REMAIN OUTSIDE OF DISTRICT RIGHT-OF-WAY OR EASEMENT UNLESS OTHERWISE APPROVED BY THE DISTRICT CONSTRUCTION OBSERVER.
9. EXISTING DISTRICT FACILITIES MUST REMAIN OPERATIONAL AND SHALL NOT BE DISTURBED OR RENDERED INACCESSIBLE TO DISTRICT OPERATIONS AND MAINTENANCE STAFF.
10. UTILITIES INCLUDE ANY WATER, SEWER, RECLAIMED WATER, GAS, ELECTRICAL, LANDSCAPE IRRIGATION, COMMUNICATION, ETC.
11. ALL STAKING OF PROPOSED UTILITIES MUST BE COMPLETED AND APPROVED BY DISTRICTS CONSTRUCTION OBSERVER PRIOR TO ALL CONSTRUCTION.
12. ALL CROSSINGS MUST BE BORED WHILE RID'S FACILITIES ARE ACTIVE. OPEN TRENCH CONSTRUCTION ONLY DURING RID'S ANNUAL DRY-UP.
13. MINIMUM OPEN TRENCH CLEARANCE FROM OUTSIDE EXISTING RID FACILITY TO OUTSIDE PROPOSED UTILITY:
 

a. UTILITY RUNS PARALLEL	2' HORIZONTAL
b. UTILITY CROSSES PERPENDICULAR	1' VERTICAL BELOW
c. ABOVE GROUND UTILITY	4' HORIZONTAL

PIPE SIZE (IN)	PIPE O.D.* (IN)
24"	30"
30"	37"
36"	44"
48"	58"
60"	73.5"

\*O.D.= OUTSIDE DIAMETER OF THE BARREL OF THE PIPE

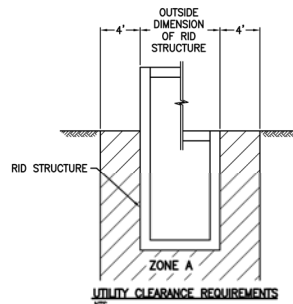


**Jack and Bore Notes**

1. JACK AND BORE PER MODIFIED MAG STD SPECIFICATION 602 AS NOTED BELOW:
  - A. ADVANCE CASING SPACER OR APPROVED EQUIVALENT.
  - B. TWO BLOCK ANGLES VARY TO MAINTAIN REQUIRED CLEARANCES AND PROPER INSTALLATION.
  - C. RESTRAIN ALL CARRIER PIPE JOINTS WITH FLEXIBLE JOINT RESTRAINT OPTIONS (AMERICAN FLEX-RINGS JOINT OR AN EQUIVALENT) OR MECHANICAL JOINT RESTRAINT (MEGA LUGS OR AN EQUIVALENT).
  - D. END SLEEVE PLUG SEE DETAIL C THIS SHEET.
2. JACK AND BORE PIPES MUST EXTEND FROM EDGE OF IRRIGATION DISTRICT'S R/W TO R/W.
3. MINIMUM CLEARANCE FROM BOTTOM OF LINING OF DISTRICT'S CANAL TO TOP OF CASING PIPE OR ROAD GRADE:
  - A. EXIST LINED 4 FT
  - B. EXIST UNLINED 6 FT FROM BOTTOM OF NEW SHOTCRETE LINING
4. UNLESS OTHERWISE APPROVED BY THE DISTRICT, NO EXCAVATION IS PERMITTED WITHIN DISTRICT R/W.
5. ALL BORE AND RECEIVING PITS MUST BE CONSTRUCTED COMPLETELY OUTSIDE OF DISTRICT'S R/W (INCLUDING ALL SLOPING).
6. BORE AND RECEIVING PITS MUST BE BERMED TO THE TOP OF CANAL ELEVATION. THE SLOPES SPECIFIED WILL NOT BE STEEPER THAN 2:1.
7. NO MANHOLES, RISERS, VALVES OR OTHER SIMILAR FACILITIES ARE TO BE PLACED IN ANY PORTION OF THE DISTRICT'S R/W.
8. ALL AFFECTED PORTIONS OF THE DISTRICT'S R/W, INCLUDING ROAD SURFACES, SHALL BE RESTORED TO THEIR ORIGINAL CONDITION OR BETTER.
9. COMPLETELY REMOVE ALL DIRT AND DEBRIS AFTER COMPLETION OF JACK AND BORE CONSTRUCTION.
10. ANNUAL SPACES TO BE FILLED PER MAG 602.
11. SEE JACK AND BORE NOTES IN RID RIGHT-OF-WAY CROSSING PERMIT

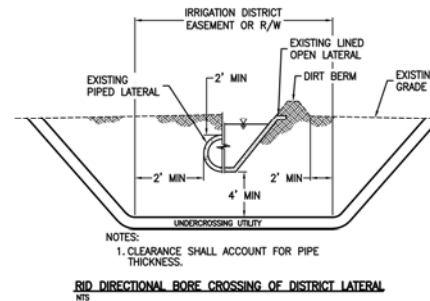
**ROOSEVELT IRRIGATION DISTRICT DIRECTIONAL BORE NOTES**

1. DIRECTIONAL BORE PER MAG STD SPECIFICATION 608.
2. DIRECTIONAL BORE PIPES MUST EXTEND FROM EDGE OF DISTRICT'S R/W TO R/W OR EASEMENT TO EASEMENT.
3. MINIMUM CLEARANCE FROM BOTTOM OF EXISTING DISTRICT'S FACILITY TO TOP OF CASING PIPE:
  - A. EXIST LINED 4FT
  - B. EXIST UNLINED 6FT FROM BOTTOM OF NEW SHORING LINING
  - C. EXISTING BOX CULVERT 3 FT FROM BOTTOM OF STRUCTURE
  - D. EXIST PIPELINE 4 FT FROM BOTTOM OF PIPELINE
4. UNLESS OTHERWISE APPROVED BY DISTRICT, NO EXCAVATION IS PERMITTED WITHIN DISTRICT R/W OR EASEMENT.
5. ALL BORE AND RECEIVING PITS MUST BE CONSTRUCTED COMPLETELY OUTSIDE OF DISTRICT'S R/W OR EASEMENT.
6. NO MANHOLES, RISERS, VALVES, OR OTHER SIMILAR FACILITIES ARE TO BE PLACED IN ANY PORTION OF THE DISTRICT'S R/W OR EASEMENT.
7. ALL AFFECTED PORTIONS OF THE DISTRICT'S R/W OR EASEMENT, INCLUDING ROAD SURFACES, SHALL BE RESTORED TO THEIR ORIGINAL CONDITION OR BETTER.
8. COMPLETELY REMOVE ALL DIRT AND DEBRIS AFTER COMPLETION OF DIRECTIONAL BORE CONSTRUCTION.
9. THE CONTRACTOR SHALL AT ALL TIMES PROTECT THE INTEGRITY OF THE MAIN CANAL, LATERALS AND ANY APPURTENANT DISTRICT FACILITIES.
10. THE DISTRICT'S CONSTRUCTION OBSERVER MAY REQUIRE CERTIFIED POTHOLE DOCUMENTING THE LOCATION OF THE INSTALLED EQUIPMENT WITH RESPECT TO RID FACILITIES. CONTRACTOR SHALL CONSULT THE CONSTRUCTION OBSERVER FOR LOCATION AND NUMBER OF POTHOLE REQUIRED.
11. CONTRACTOR SHALL SUBMIT BORING LOSS BEFORE A FINAL ACCEPTANCE CAN BE GRANTED.



NOTES:  
ZONE A: NO UTILITIES PERMITTED WITHIN THIS ZONE. SEE NOTE TO GENERAL NOTES.

RID STRUCTURE IS DEFINED AS A TURNOUT STRUCTURE, MANHOLE, HEADWALL ETC.



NOTES:  
1. CLEARANCE SHALL ACCOUNT FOR PIPE THICKNESS.

**RID DIRECTIONAL BORE CROSSING OF DISTRICT LATERAL**

PLAN NAME <b>ROOSEVELT IRRIGATION DISTRICT GENERAL NOTES</b>	
ENGINEER INFORMATION 7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021   602-944-6500	
COB PERMITTING APPROVED SEAL	COB ENGINEERING APPROVED SEAL
AS-BUILT SEAL	DESIGN SEAL 
ORIGINAL PLAN DATE 8/23/2022	LATEST REVISION DATE 8/23/2022
PROJECT NUMBER 191342029	SHEET NUMBER / SHEET 4 OF 44 / G-04
SUBMITTAL 100% SUBMITTAL	

**LEGEND**

	PROPOSED WATERLINE
	PROPOSED ONSITE WATERLINE
	PROPOSED ITS CONDUIT
	FUTURE WATERLINE
	EXISTING ASPHALT ROAD
	CONCRETE PAVEMENT
	RIGHT-OF-WAY LINE
	EASEMENT LINE
	EXISTING SITE RETAINING WALL
	EXISTING CHAINLINK FENCE
	STORM DRAIN PIPE
	EXISTING UNDERGROUND PHONE
	OVERHEAD ELECTRIC
	EXISTING SANITARY SEWER LINE
	EXISTING IRRIGATION LINE
	EXISTING UNDERGROUND CABLE
	EXISTING UNDERGROUND ELECTRIC
	EXISTING SITE PLAN
	FUTURE RESERVOIR SITE
	EXISTING ONSITE WATER LINE
	EXISTING WATERLINE
	FUTURE ONSITE WATERLINE
	EXISTING RIPRAP
	EXISTING GROUND
	CONCRETE
	PERMANENT ASPHALT PAVEMENT REPAIR
	PROPOSED BORE PIT

**ABBREVIATIONS**

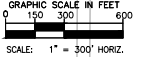
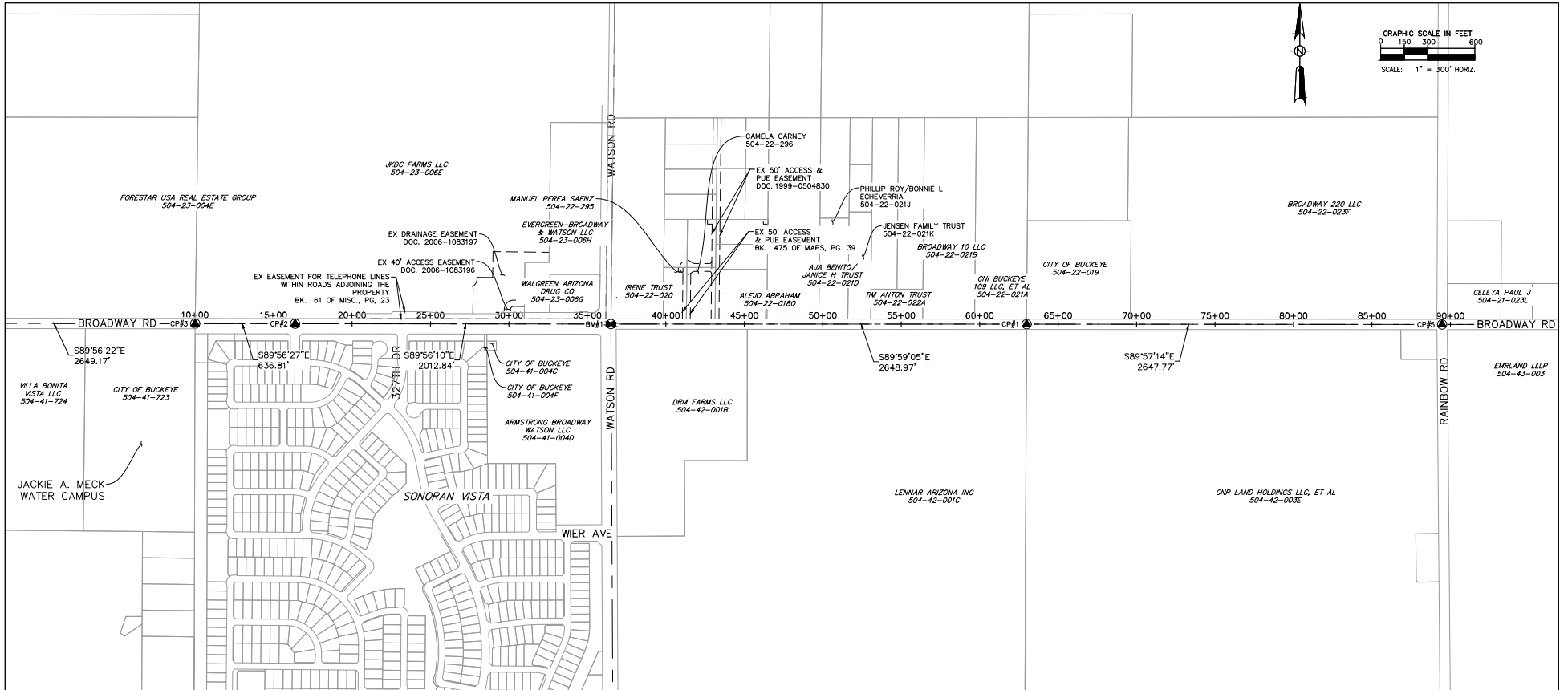
APS	ARIZONA PUBLIC SERVICE	N/A	NOT AVAILABLE
AV/ARV	AIR RELEASE VALVE	No.	NUMBER
AVE	AVENUE	NPDES	NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM
APN	ASSESSOR'S PARCEL NUMBER	NRS	NOT RISING STEM
ASPH	ASPHALT PAVEMENT	NTS	NOT TO SCALE
AZ	ARIZONA	O&M	OPERATIONS AND MAINTENANCE
B/C	BACK OF CURB	O.D.	OUTER DIAMETER
BK	BOOK	OFF	OFFSET
BM	BENCHMARK	OHE	OVERHEAD ELECTRIC
CATV	CABLE	P.E.	PROFESSIONAL ENGINEER
CBL	CABLE	PG	PAGE
C&G	CURB AND GUTTER	PH	POTHOLE
CL	CENTERLINE	PRV	PRESSURE REDUCING VALVE
COB	CITY OF BUCKEYE	P.U.E.	PUBLIC UTILITIES EASEMENT
COMM	COMMUNICATIONS	PVC	POLYVINYL CHLORIDE
CONC	CONCRETE	R	RECORD DRAWING
CP	CONTROL POINT	R/W	R.O.W. RIGHT-OF-WAY
DIA	DIAMETER	RD	ROAD
DCR	DESIGN AND CONTROL REGULATIONS	RCCP	RUBBER GASKET REINFORCED CONCRETE BOX
DIP	DUCTILE IRON PIPE	RID	ROOSEVELT WATER CONSERVATION DISTRICT
DOC	DOCKET NUMBER	RT	RIGHT
DR	DRIVE	S	FIELD MEASUREMENT SURVEY
DTL	DETAIL	SD	STORM DRAIN
E	EASTING	SEC	SECTION
EA	EACH	SF	SQUARE FEET
EL	ELEVATION	ST	STREET
ELEC	ELECTRIC	STA	STATION
EOP	EDGE OF PAVEMENT	STD	STANDARD
ESMT	EASEMENT	STL	STEEL
EX, EXST	EXISTING	SWPPP	STORMWATER POLLUTION PREVENTION PLAN
FG	PROPOSED FINISH GRADE	SY	SQUARE YARDS
FL	FLANGE	T	UNDERGROUND TELECOMMUNICATIONS
FO	FIBER OPTICS	TW	TANK WATER
FT	FEET	TYP	TYPICAL
GV	GATE VALVE	U	UNKNOWN
HDPE	HIGH DENSITY POLYETHYLENE	UGE	UNDERGROUND ELECTRIC
HORIZ	HORIZONTAL	USIC	U.S. INFRASTRUCTURE COMPANY
HPI	HORIZONTAL POINT OF INFLECTION	UV	ULTRAVIOLET LIGHT
INV	INVERT, INVERT ELEVATION	VPI	VERTICAL POINT OF INFLECTION
IPS	IRON PIPE SIZE	W	WATER
ITS	INTELLIGENT TRANSPORTATION SYSTEMS		
JMWC	JACKIE A. MECK WATER CAMPUS		
LF	LINEAR FEET		
LT	LEFT		
M	METER		
MAG	MARICOPA ASSOCIATION OF GOVERNMENTS		
MANF	MANUFACTURER		
MCESD	MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT		
MCR	MARICOPA COUNTY RECORD		
MG	MILLION GALLONS		
MIN	MINIMUM		
MISC	MISCELLANEOUS		
MJ	MECHANICAL JOINT		
mm	MILLIMETER		
N	NORTHING		

**SYMBOL**

**SYMBOL DESCRIPTION**

	AIR RELEASE VALVE		PROPOSED CITY OF BUCKEYE PULL BOX
	ALUMINUM CAP FLUSH		POWER POLE
	ALUMINUM CAP IN HAND HOLE		SANITARY SEWER CLEANOUT
	BRASS CAP FLUSH		SANITARY SEWER MANHOLE
	BRASS CAP IN HAND HOLE		STORM DRAIN MANHOLE
	BOLLARD		STREET LIGHT WITH MAST ARM
	BORE HOLE		TELEPHONE MANHOLE
	CABLE TELEVISION MANHOLE		TELEPHONE PEDESTAL
	CABLE TELEVISION VAULT		TELEPHONE PULL BOX
	ELECTRICAL CABINET		TELEPHONE RISER
	ELECTRICAL EQUIPMENT		TELEPHONE VAULT
	ELECTRICAL MANHOLE		TRAFFIC SIGNAL
	ELECTRICAL METER		TRAFFIC SIGNAL PULL BOX
	ELECTRICAL PULL BOX		TRAFFIC SIGNAL WITH MAST
	ELECTRICAL SWITCH		TRAFFIC SIGNAL VAULT
	ELECTRICAL TRANSFORMER		WATER BACKFLOW PREVENTER
	ELECTRICAL VAULT		WATER MANHOLE
	FIBER CABINET		WATER METER
	FIBER MANHOLE		WATER VALVE
	FIBER VAULT		
	FIRE HYDRANT		
	GAS MANHOLE		
	GAS METER		
	GAS VALVE		
	IRRIGATION CONTROL VALVE		
	IRRIGATION MANHOLE		
	LIGHT POST		
	TREES		

PLAN NAME	
<b>LEGEND AND ABBREVIATIONS</b>	
ENGINEER INFORMATION	
<b>Kimley Horn</b>	
7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021   602-944-6500	
COB PERMITTING APPROVED SEAL	COB ENGINEERING APPROVED SEAL
SUBMITTAL <b>100% SUBMITTAL</b>	
AS-BUILT SEAL	DESIGN SEAL
ORIGINAL PLAN DATE	LATEST REVISION DATE
8/26/2022	
PROJECT NUMBER	SHEET NUMBER / SHEET
191342029	5 OF 44 / G-05
COB PLAN TRACKING #	
COB PERMIT #	
ENCCIP-22-003	



**SURVEY POINT CONTROL TABLE**

	NORTHING	EASTING	DESCRIPTION	ELEVATION
BM #1	876161.92	504833.23	FD. BRASS CAP IN HANDHOLE	966.10
CP #1	876161.22	507482.20	FD. BRASS CAP FLUSH	960.19
CP #2	876164.16	502820.40	FD. BRASS CAP FLUSH	969.27
CP #3	876164.82	502183.59	FD. BRASS CAP FLUSH	970.09
CP #4	876167.62	499534.42	ALUMINUM CAP IN HAND HOLE	973.16
CP #5	876159.09	510129.98	ALUMINUM CAP IN HAND HOLE	956.22

**LEGEND**

- BM#X ● BENCHMARK
- CP#X ● CONTROL POINT

**GENERAL NOTES**

BASIS OF BEARING

HORIZONTAL DATUM: NAD83 (2011) ARIZONA CENTRAL ZONE  
 COMBINED SCALE FACTOR: 1.00009742  
 VERTICAL DATUM: NAVD88

BENCH MARK

A BRASS CAP IN HAND HOLE AT THE INTERSECTION OF WATSON AND BROADWAY, NW CORNER SEC. 27, T1N, R3W. GROUND NORTHING = 876161.92 GROUND EASTING = 504833.23 PUBLISHED ELEVATION = 966.10

PLAN NAME

**GEOMETRIC CONTROL**

ENGINEER INFORMATION



7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021 | 602-444-6500

COB PERMITTING APPROVED SEAL

COB ENGINEERING APPROVED SEAL

AS-BUILT SEAL

DESIGN SEAL



ORIGINAL PLAN DATE

8/26/2022

LATEST REVISION DATE

8/26/2022

PROJECT NUMBER

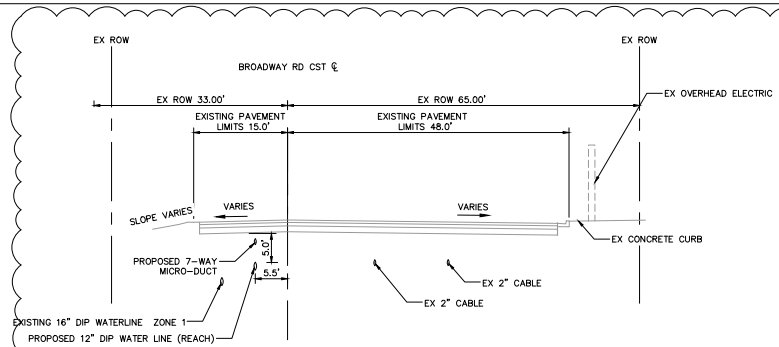
191342029

SHEET NUMBER / SHEET

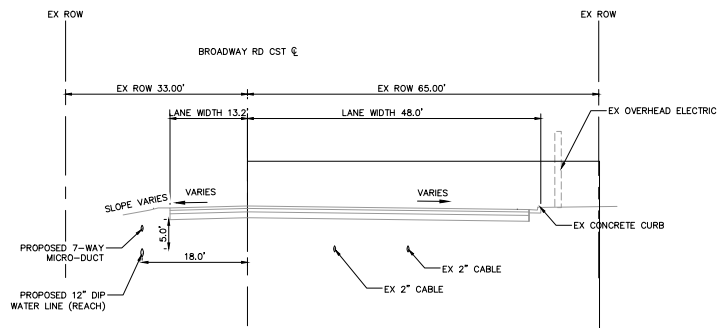
6 OF 44 / G-06

SUBMITTAL  
100% SUBMITTAL

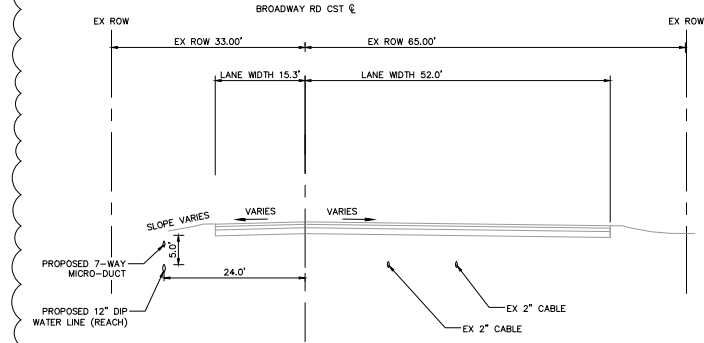
COB PLAN TRACKING #  
COB PERMIT #  
ENCPC-22-003



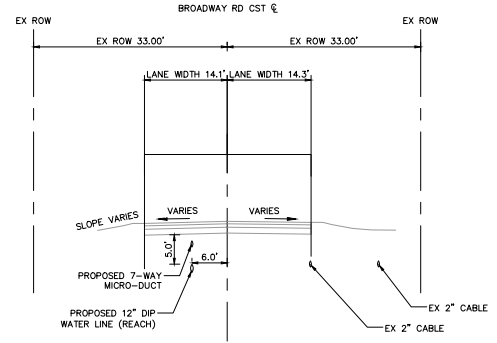
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(LOOKING EAST)  
STA 9+06.42 TO STA 16+56.17



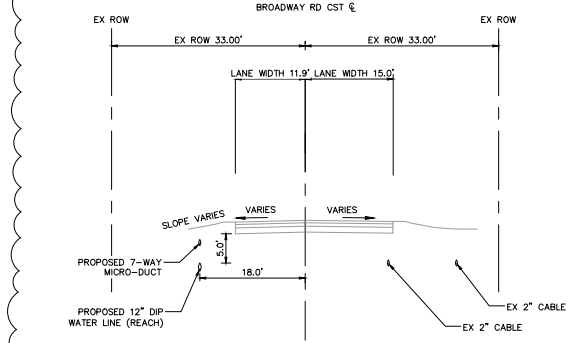
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(LOOKING EAST)  
STA 16+56.17 TO STA 31+00.00



TYPICAL SECTION - BROADWAY ROAD  
(LOOKING EAST)  
STA 31+00.00 TO STA 35+26.18



TYPICAL SECTION - BROADWAY ROAD  
(LOOKING EAST)  
STA 37+00.96 TO STA 63+41.99



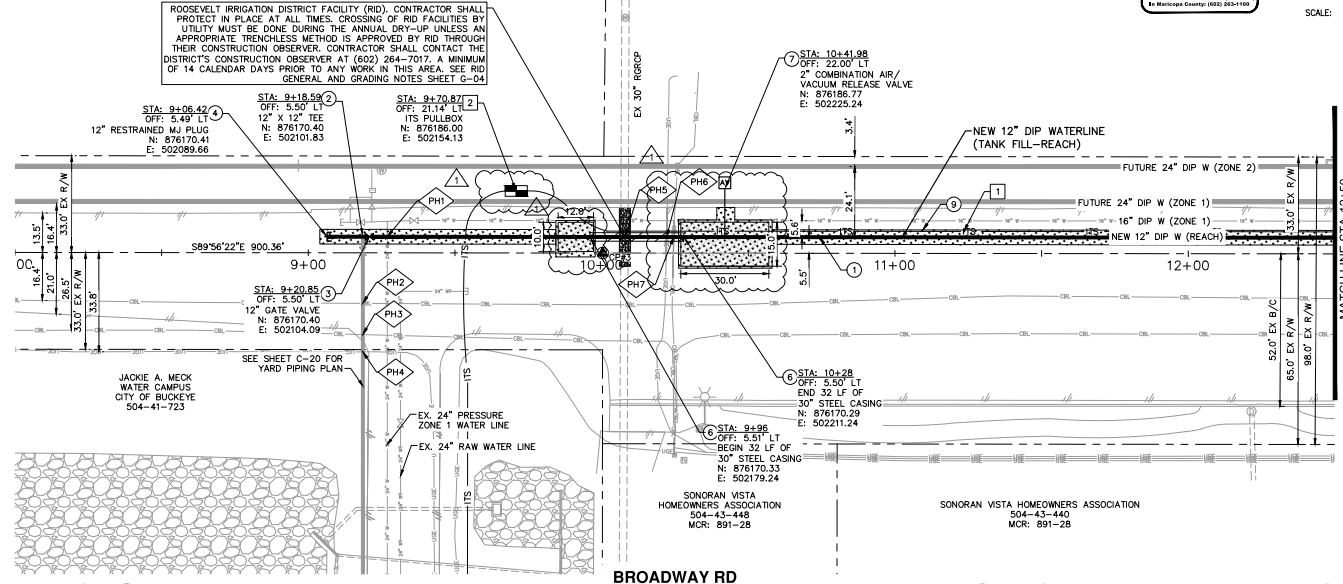
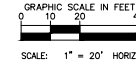
TYPICAL SECTION - BROADWAY ROAD  
(LOOKING EAST)  
STA 63+41.99 TO STA 89+04.61



REVISIONS:	
▲ ADDENDUM NO. 1	
▲	
PLAN NAME	
TYPICAL SECTIONS	
ENGINEER INFORMATION	
<b>Kimley-Horn</b>	
7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021   602-444-6500	
COB PERMITTING APPROVED SEAL	COB ENGINEERING APPROVED SEAL
AS-BUILT SEAL	DESIGN SEAL
ORIGINAL PLAN DATE 8/26/2022	LATEST REVISION DATE
PROJECT NUMBER 191342029	SHEET NUMBER / SHEET 7 OF 44
COB PERMIT #	G-07
COB PLAN TRACKING #	100% SUBMITTAL

FORESTAR USA REAL ESTATE GROUP  
504-23-004E

JKDC FARMS LLC  
504-23-006E



CONSTRUCTION NOTES		
1	INSTALL PC350 12" DIP WATERLINE, W/ POLY WRAP TRENCH PER COB DTL 51380	311 LF
2	INSTALL 12"x12" TEE	1 EA
3	INSTALL 12" GATE VALVE PER MAG STD DTL 591-2. INSTALL VALVE BOX & COVER MAG STD DTL 591-2. PROVIDE BLUE CARBONITE MARKER WITHIN 2' (NOT IN PAVEMENT). VALVE BLOCKING PER MAG STD DTL 301	1 EA
4	INSTALL 12" MJ RESTRAINED CAP	1 EA
5	INSTALL 12" 45° BEND	2 EA
6	30" X 0.375" THICK STL CASING AND SPACERS PER COB STD DTL 51384 BY BOSE AND PC350 12" DIP WATERLINE	32 LF
7	2" AIR RELEASE VALVE PER COB STD DTL 51340-1 & 51340-2	1 EA
8	PERMANENT ASPHALT PAVEMENT REPAIR PER MAG STD DTL 300-1 T-TOP	231 SF

ITS CONSTRUCTION NOTES		
1	INSTALL 15/14 MM HDPE 7-WAY MICRO-DUCT	418 LF
2	INSTALL ITS PULL BOX PER COB STANDARD DETAIL 85234	1 EA

REFERENCE NOTES		
1	POTHOLE NOT COMPLETED DURING DESIGN. CONTRACTOR SHALL POTHOLE AND COMPLETE INFORMATION IN TABLE BELOW AS PART OF AS-BUILT. NOTIFY ENGINEER OF ANY DISCREPANCIES. NON-PAY ITEM	
2	CONTRACTOR TO VERIFY LOCATION OF ITS PULL BOXES WITH CITY AND ENGINEER PRIOR TO CONSTRUCTION.	

REVISIONS:

- ADDENDUM NO. 1

PLAN NAME  
**REACH WATER LINE CONNECTION PLAN AND PROFILE BEGIN TO STA 12+50**

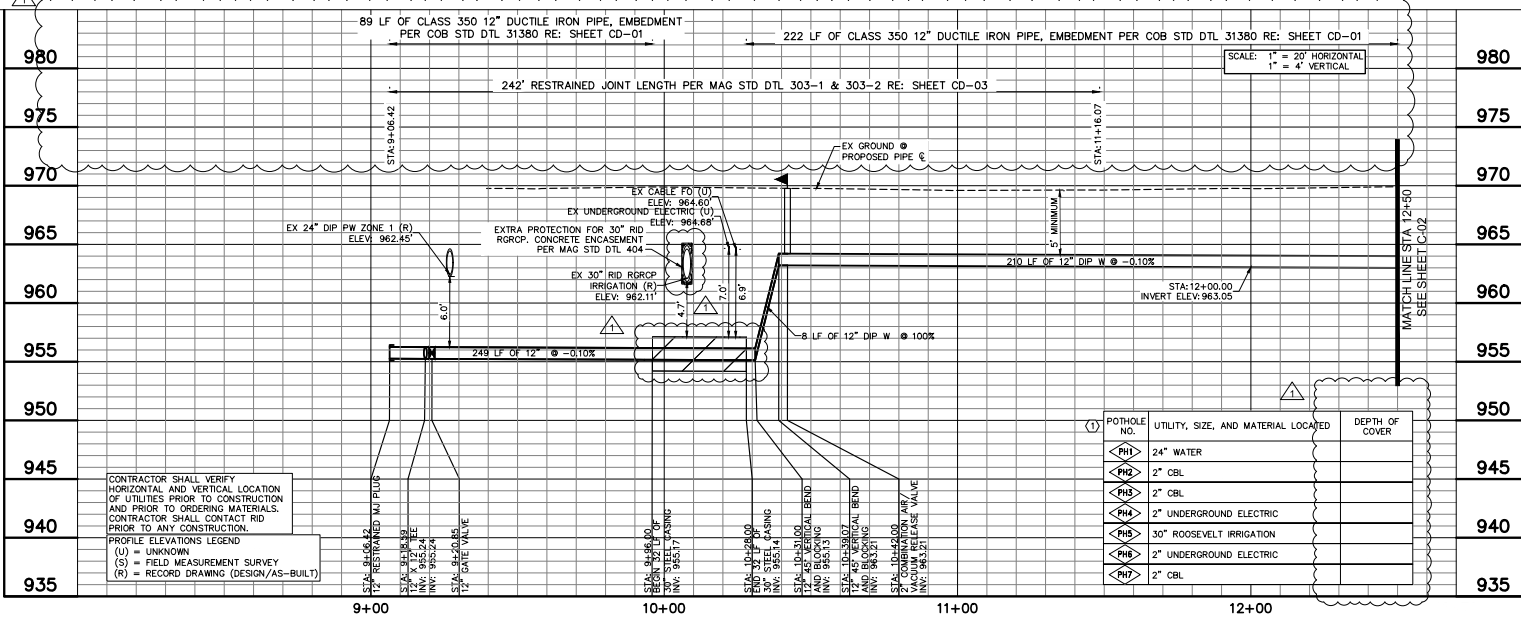
ENGINEER INFORMATION  
**Kimley-Horn**  
7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021 | 602-944-5500  
COB PERMITTING APPROVED SEAL      COB ENGINEERING APPROVED SEAL

AS-BUILT SEAL      DESIGN SEAL

ORIGINAL PLAN DATE: 8/26/2022  
PROJECT NUMBER: 191342029

LATEST REVISION DATE: 8/26/2022  
SHEET NUMBER/SHEET: 8 OF 44 C-01

100% SUBMITTAL



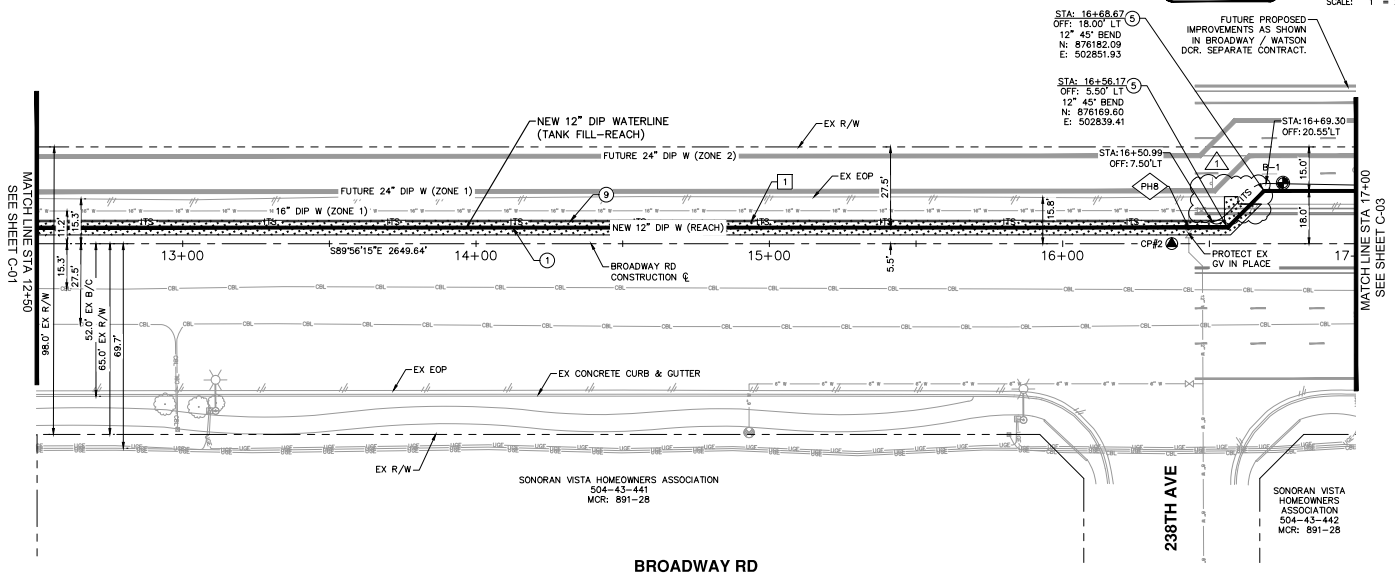
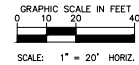
POTHOLE NO.	UTILITY, SIZE, AND MATERIAL LOCATED	DEPTH OF COVER
PH1	24" WATER	
PH2	2" CBL	
PH3	2" CBL	
PH4	2" UNDERGROUND ELECTRIC	
PH5	30" ROOSEVELT IRRIGATION	
PH6	2" UNDERGROUND ELECTRIC	
PH7	2" CBL	

CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF UTILITIES PRIOR TO CONSTRUCTION AND PRIOR TO ORDERING MATERIALS. CONTRACTOR SHALL CONTACT RID PRIOR TO ANY CONSTRUCTION.

PROFILE ELEVATIONS LEGEND  
(U) = UNKNOWN  
(S) = FIELD MEASUREMENT SURVEY  
(R) = RECORD DRAWING (DESIGN/AS-BUILT)



KDC FARMS LLC  
504-23-006E



CONSTRUCTION NOTES		
1	INSTALL PC350 12\"/>	453 LF
2	INSTALL 12\"/>	EA
3	PERMANENT ASPHALT PAVEMENT REPAIR PER MAG STD DTL 200-1 T-TOP	235 SY

ITS CONSTRUCTION NOTES		
1	INSTALL 15/14 MM HDPE 7-WAY	453 LF

REFERENCE NOTES	
1	POTHOLE NOT COMPLETED DURING DESIGN. CONTRACTOR SHALL POTHOLE AND COMPLETE INFORMATION IN TABLE BELOW AS PART OF AS-BUILT. NOTIFY ENGINEER OF ANY DISCREPANCIES. NON-PAY ITEM.
2	CONTRACTOR TO VERIFY LOCATION OF ITS PULL BOXES WITH CITY AND ENGINEER PRIOR TO CONSTRUCTION.

REVISIONS	
1	ADDENDUM NO. 1

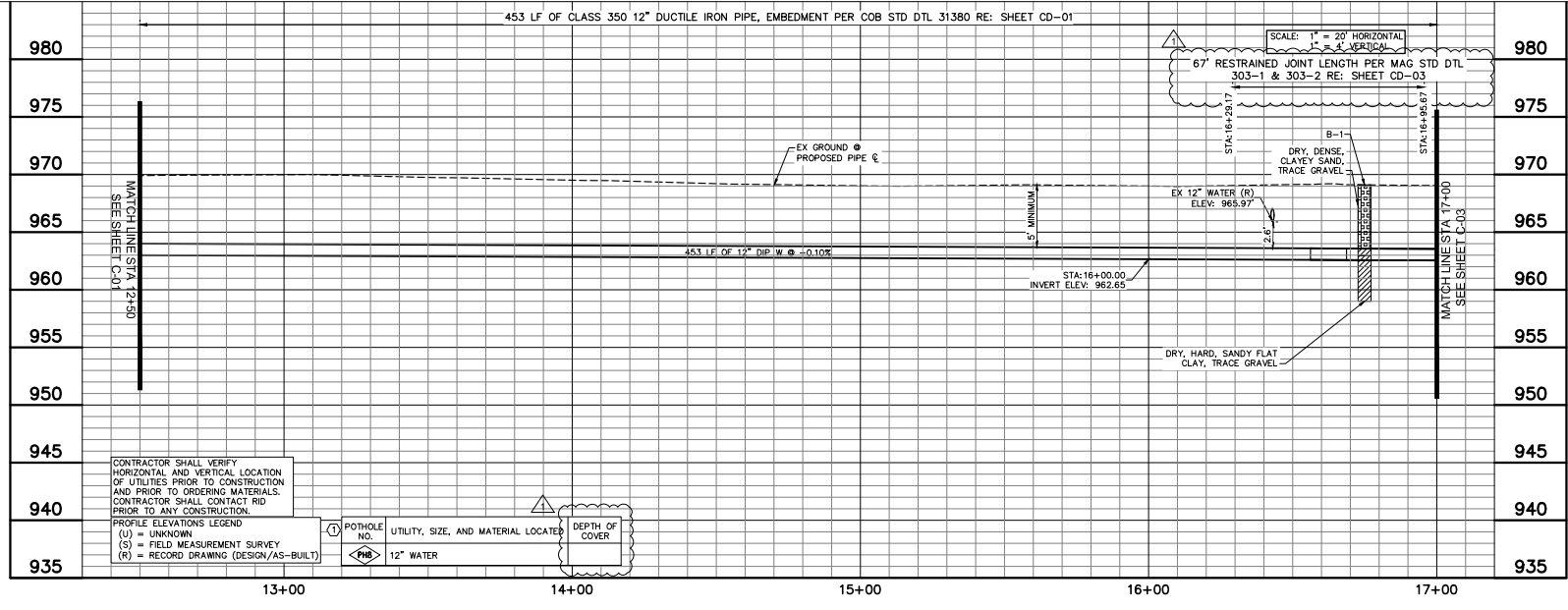
PLAN NAME  
**REACH WATER LINE CONNECTION  
PLAN AND PROFILE STA 12+50 - 17+00**

ENGINEER INFORMATION  
**Kimley-Horn**  
7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021 602-944-5500  
COB PERMITTING APPROVED SEAL      COB ENGINEERING APPROVED SEAL

AS-BUILT SEAL      DESIGN SEAL

ORIGINAL PLAN DATE: 8/26/2022  
PROJECT NUMBER: 191342029  
LATEST REVISION DATE: 8/26/2022  
SHEET NUMBER / SHEET: 9 OF 44  
C-02

SUBMITTAL  
**100% SUBMITTAL**

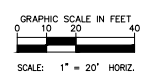
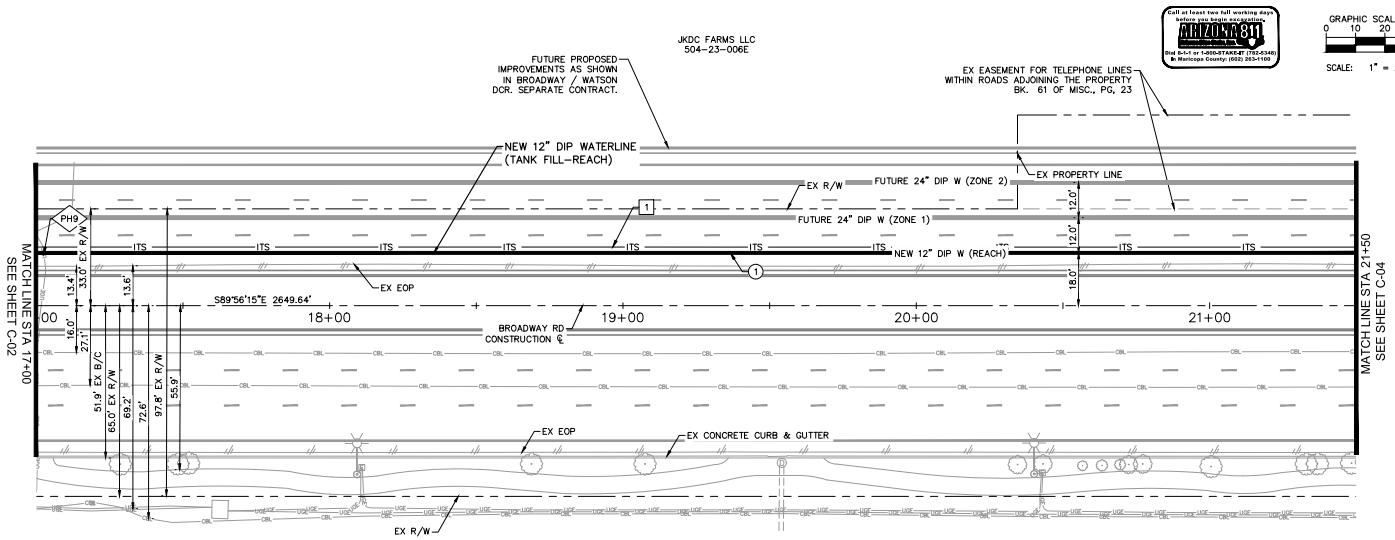


CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF UTILITIES PRIOR TO CONSTRUCTION AND PRIOR TO ORDERING MATERIALS. CONTRACTOR SHALL CONTACT RID PRIOR TO ANY CONSTRUCTION.

PROFILE ELEVATIONS LEGEND

(U)	= UNKNOWN	1	POTHOLE NO.	UTILITY, SIZE, AND MATERIAL LOCATED	DEPTH OF COVER
(S)	= FIELD MEASUREMENT SURVEY	PHB	12\"/>		
(R)	= RECORD DRAWING (DESIGN/AS-BUILT)				

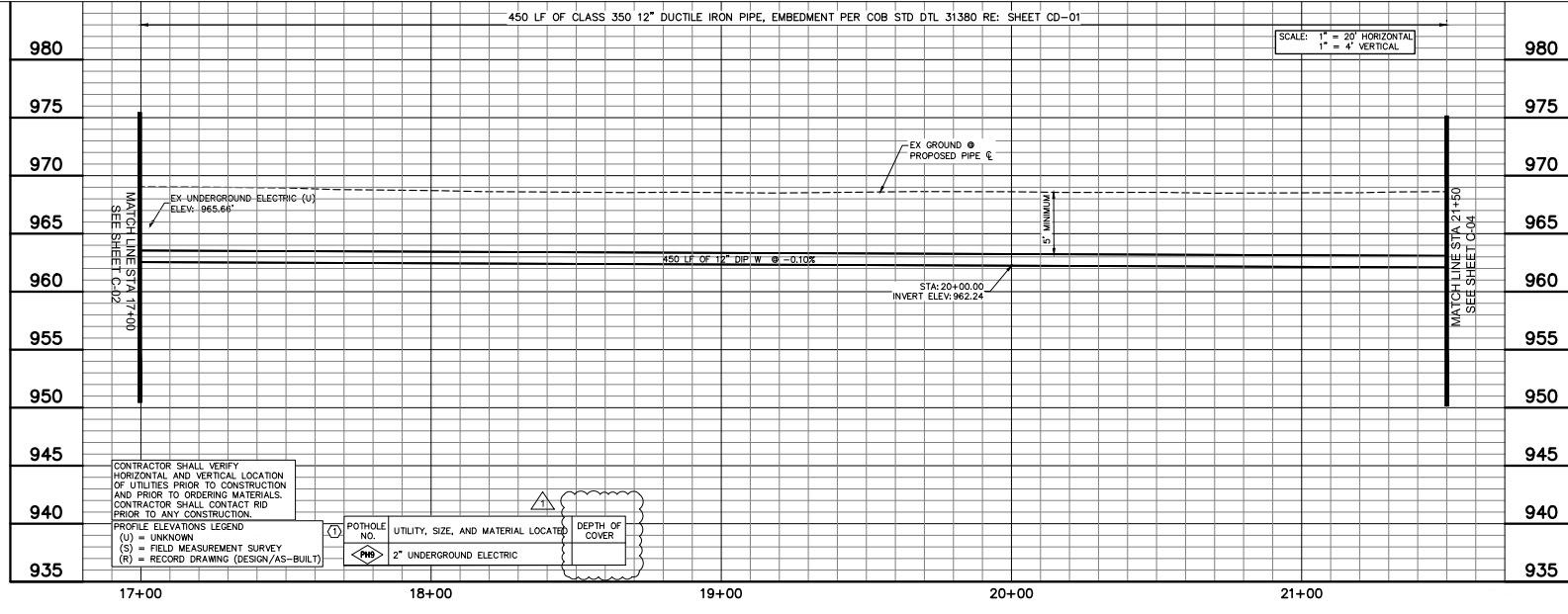
453 LF OF CLASS 350 12\"/>



CONSTRUCTION NOTES		
○	INSTALL PC350 12\"/>	450 LF
○	POLY WRAP TRENCH PER COB DTL 31380	

ITS CONSTRUCTION NOTES		
□	INSTALL 15/14 MM HDPE 7-WAY MICRO-DUCT	450 LF

**BROADWAY RD**



REFERENCE NOTES	
①	POTHOLE NOT COMPLETED DURING DESIGN. CONTRACTOR SHALL POTHOLE AND COMPLETE INFORMATION IN TABLE BELOW AS PART OF AS-BUILT. NOTIFY ENGINEER OF ANY DISCREPANCIES. NON-PAY ITEM.
②	CONTRACTOR TO VERIFY LOCATION OF ITS PULL BOXES WITH CITY AND ENGINEER PRIOR TO CONSTRUCTION.

REVISIONS	
△	ADDENDUM NO. 1
△	

PLAN NAME  
**REACH WATER LINE CONNECTION PLAN AND PROFILE STA 17+00 - 21+50**

ENGINEER INFORMATION  
**Kimley-Horn**  
7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021 | 602-944-5500  
COB PERMITTING APPROVED SEAL      COB ENGINEERING APPROVED SEAL

AS-BUILT SEAL      DESIGN SEAL

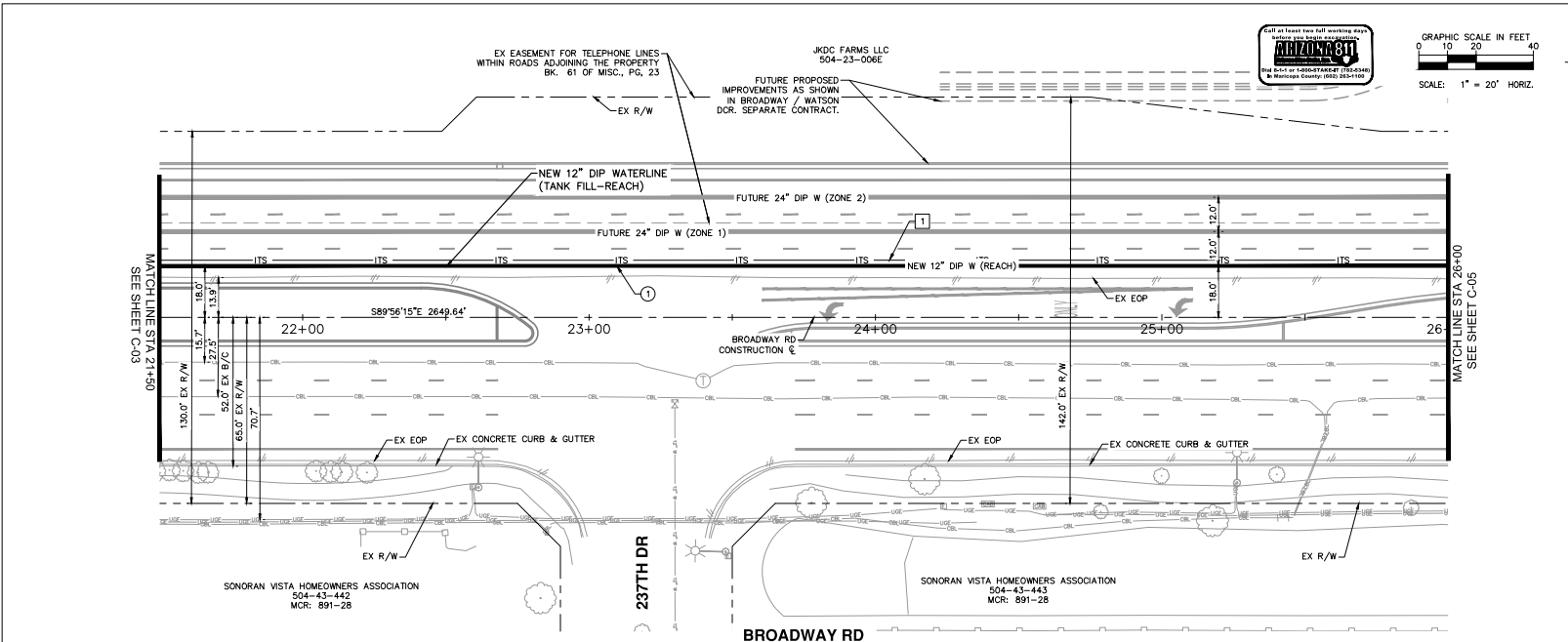
ORIGINAL PLAN DATE: 8/26/2022  
LATEST REVISION DATE: 8/26/2022  
PROJECT NUMBER: 191342029  
SHEET NUMBER: 10 OF 44  
SHEET: C-03

SUBMITTAL  
**100% SUBMITTAL**

CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF UTILITIES PRIOR TO CONSTRUCTION AND PRIOR TO ORDERING MATERIALS. CONTRACTOR SHALL CONTACT RID PRIOR TO ANY CONSTRUCTION.

PROFILE ELEVATIONS LEGEND  
(U) = UNKNOWN  
(S) = FIELD MEASUREMENT SURVEY  
(R) = RECORD DRAWING (DESIGN/AS-BUILT)

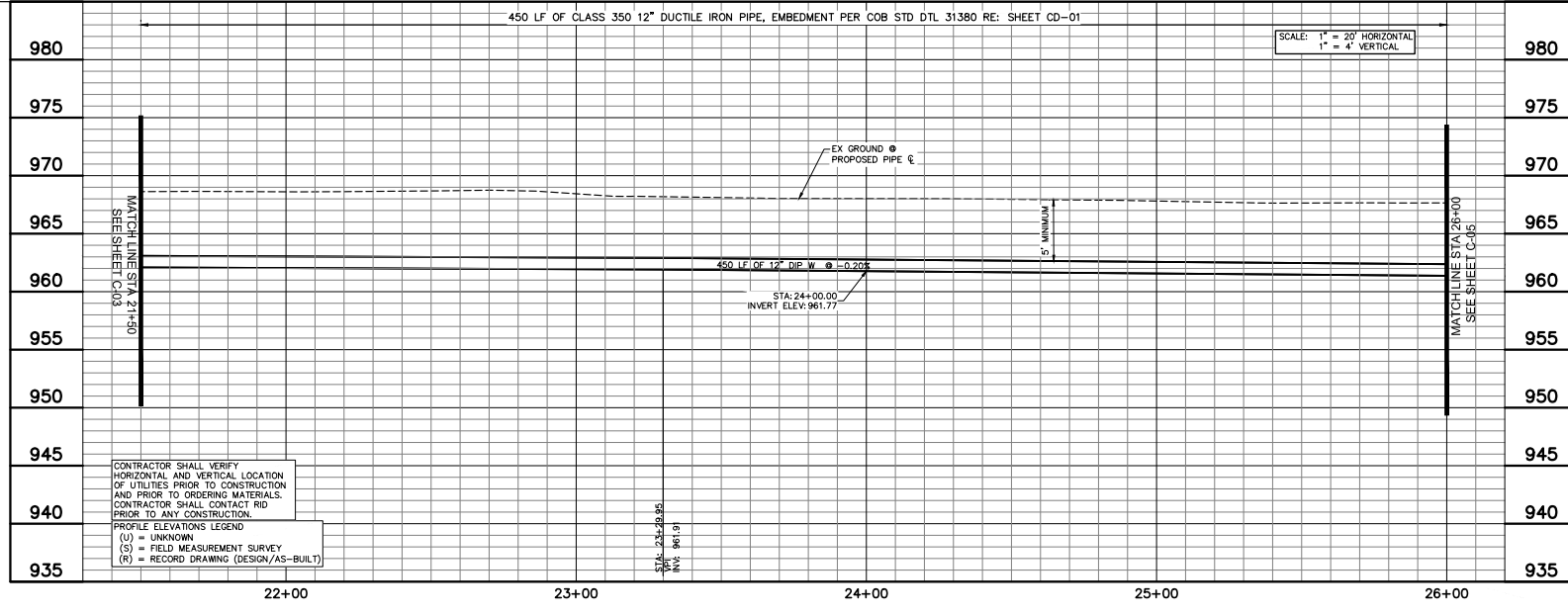
POTHOLE NO.	UTILITY, SIZE, AND MATERIAL LOCATED	DEPTH OF COVER
①	2" UNDERGROUND ELECTRIC	



CONSTRUCTION NOTES		
○	INSTALL P-350 12" DIP WATERLINE, W/ POLY WRAP TRENCH PER COB DTL 31380	450 LF

ITS CONSTRUCTION NOTES		
△	INSTALL 15/14 MM HDPE 7-WAY MICRO-DUCTS	450 LF

- REFERENCE NOTES**
- ① POTHOLE NOT COMPLETED DURING DESIGN. CONTRACTOR SHALL POTHOLE AND COMPLETE INFORMATION IN TABLE BELOW AS PART OF AS-BUILT. NOTIFY ENGINEER OF ANY DISCREPANCIES. NON-PAY ITEM.
  - ② CONTRACTOR TO VERIFY LOCATION OF ITS PULL BOXES WITH CITY AND ENGINEER PRIOR TO CONSTRUCTION.



CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF UTILITIES PRIOR TO CONSTRUCTION AND PRIOR TO ORDERING MATERIALS. CONTRACTOR SHALL CONTACT RID PRIOR TO ANY CONSTRUCTION.

PROFILE ELEVATIONS LEGEND  
 (U) = UNKNOWN  
 (S) = FIELD MEASUREMENT SURVEY  
 (R) = RECORD DRAWING (DESIGN/AS-BUILT)

SCALE: 1" = 20' HORIZONTAL  
 1" = 4' VERTICAL

**REVISIONS:**

- △ ADDENDUM NO. 1

PLAN NAME  
**REACH WATER LINE CONNECTION  
 PLAN AND PROFILE STA 21+50 - 26+00**

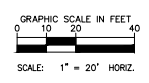
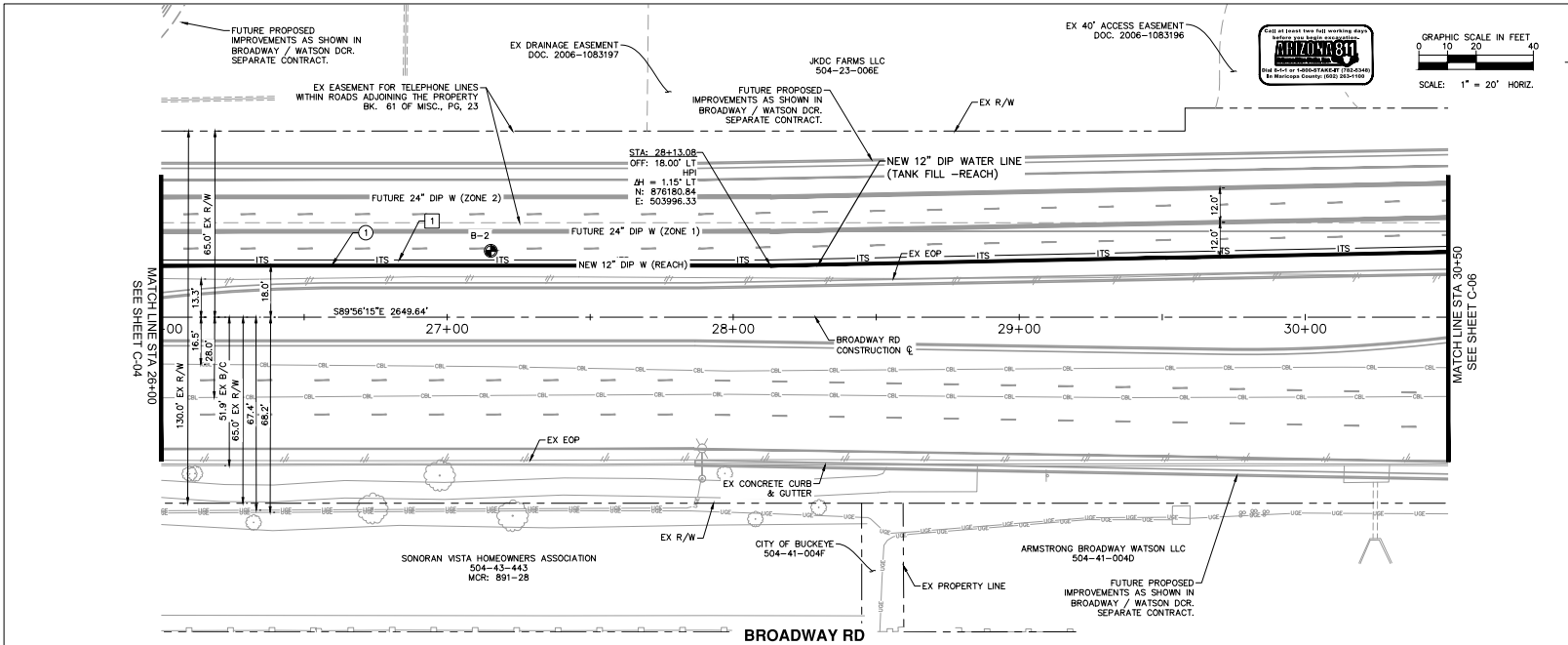
ENGINEER INFORMATION  
**Kimley-Horn**  
 7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021 | 602-944-5500  
 COB PERMITTING APPROVED SEAL      COB ENGINEERING APPROVED SEAL

AS-BUILT SEAL      DESIGN SEAL

ORIGINAL PLAN DATE: 8/26/2022      LATEST REVISION DATE: 8/26/2022  
 PROJECT NUMBER: 191342029      SHEET NUMBER: 11 OF 44      SHEET: C-04

SUBMITTAL 100% SUBMITTAL

COB PLAN TRACKING # ENCCIP-22-003



CONSTRUCTION NOTES		
○	INSTALL PC350 12" DIP WATERLINE, W/ POLY WRAP TRENCH PER COB DTL 31380	450 LF

ITS CONSTRUCTION NOTES		
△	INSTALL 15/14 MM HDPE 7-WAY MICRO-DUCT	450 LF

- REFERENCE NOTES**
- POTHOLE NOT COMPLETED DURING DESIGN. CONTRACTOR SHALL POTHOLE AND COMPLETE INFORMATION IN TABLE BELOW AS PART OF AS-BUILT. NOTIFY ENGINEER OF ANY DISCREPANCIES. NON-PAY ITEM.
  - CONTRACTOR TO VERIFY LOCATION OF ITS PULL BOXES WITH CITY AND ENGINEER PRIOR TO CONSTRUCTION.

REVISIONS:

△ ADDENDUM NO. 1

PLAN NAME

REACH WATER LINE CONNECTION  
PLAN AND PROFILE STA 26+00 - 30+50

ENGINEER INFORMATION  
**Kimley-Horn**  
 7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021 | 602-944-5500  
 COB PERMITTING APPROVED SEAL      COB ENGINEERING APPROVED SEAL

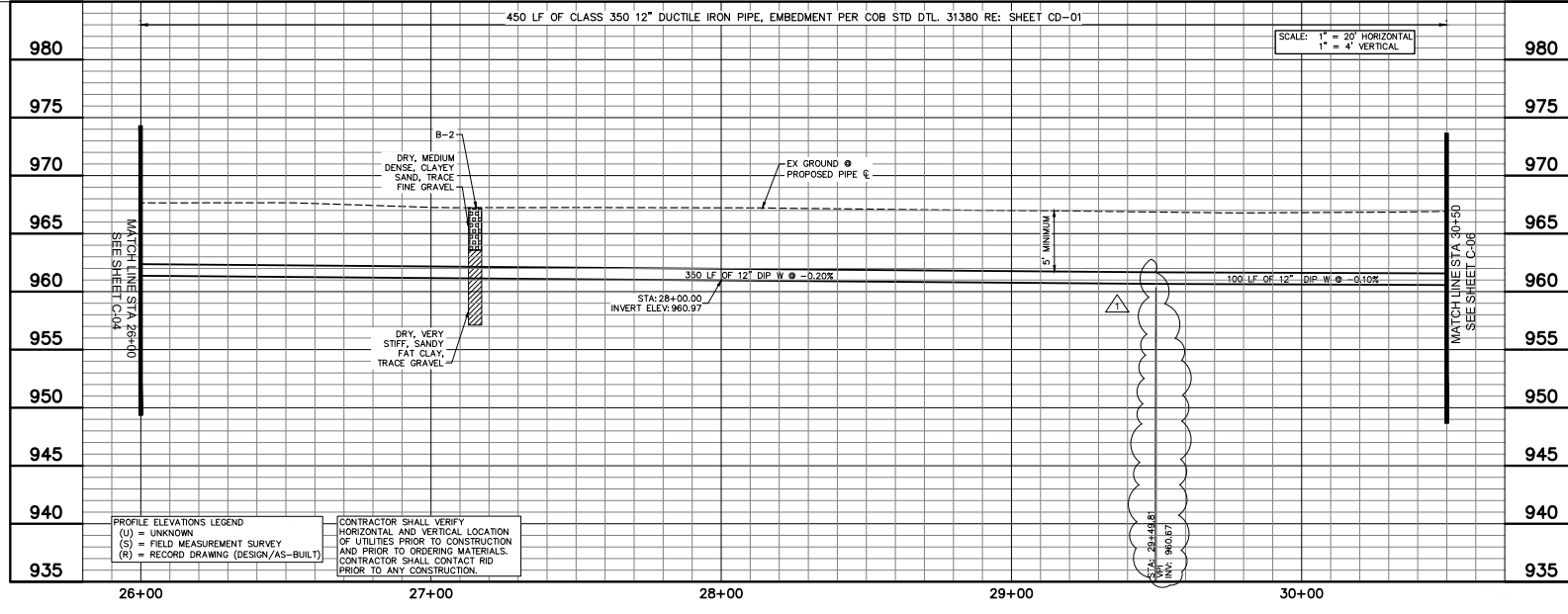
AS-BUILT SEAL      DESIGN SEAL

72388  
TYLER W.  
PE  
7/27/2022

ORIGINAL PLAN DATE: 8/26/2022  
 PROJECT NUMBER: 191342029  
 LATEST REVISION DATE: 8/26/2022  
 SHEET NUMBER / SHEET: 12 OF 44  
 C-05

SUBMITTAL 100% SUBMITTAL

COB PLAN TAGLINGS # ENCCIP-22-003

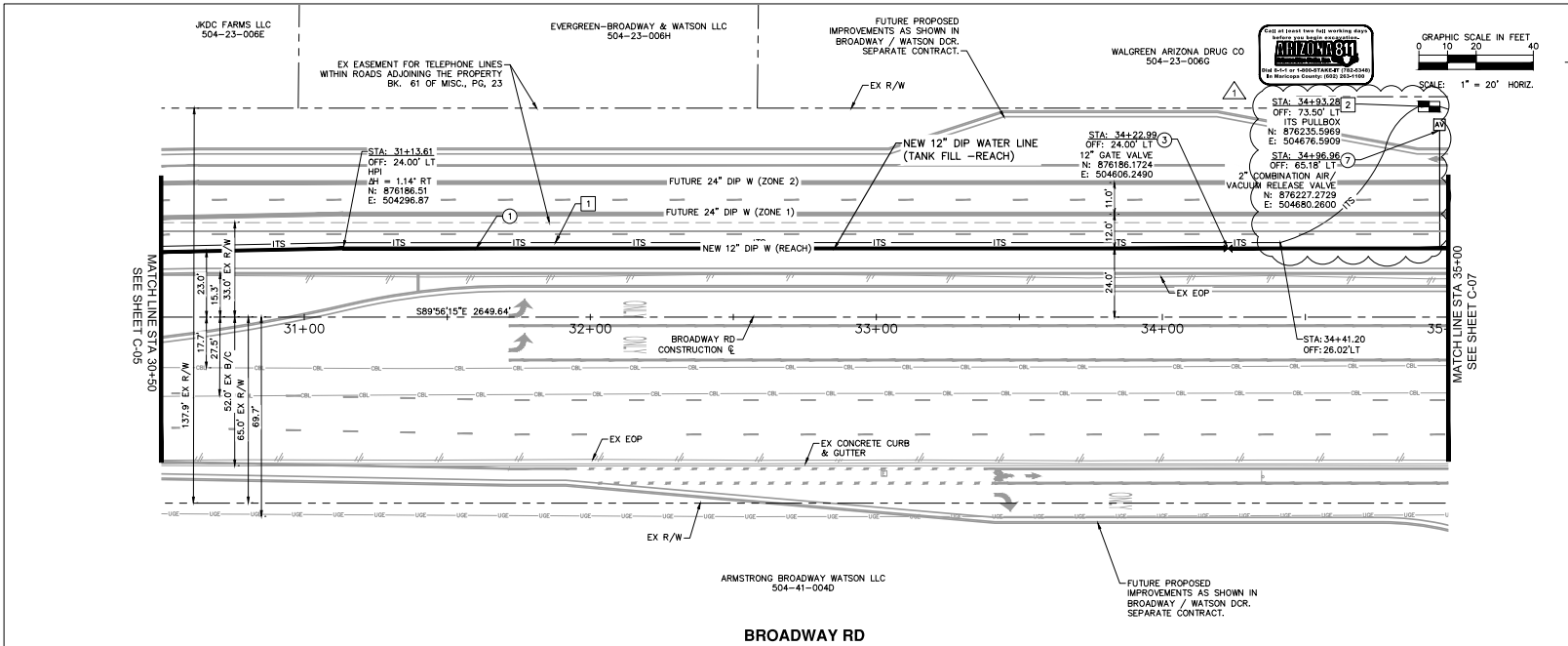


**PROFILE ELEVATIONS LEGEND**  
 (U) = UNKNOWN  
 (S) = FIELD MEASUREMENT SURVEY  
 (R) = RECORD DRAWING (DESIGN/AS-BUILT)

CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF UTILITIES PRIOR TO CONSTRUCTION AND PRIOR TO ORDERING MATERIALS. CONTRACTOR SHALL CONTACT RID PRIOR TO ANY CONSTRUCTION.

SCALE: 1" = 20' HORIZONTAL  
 1" = 4' VERTICAL

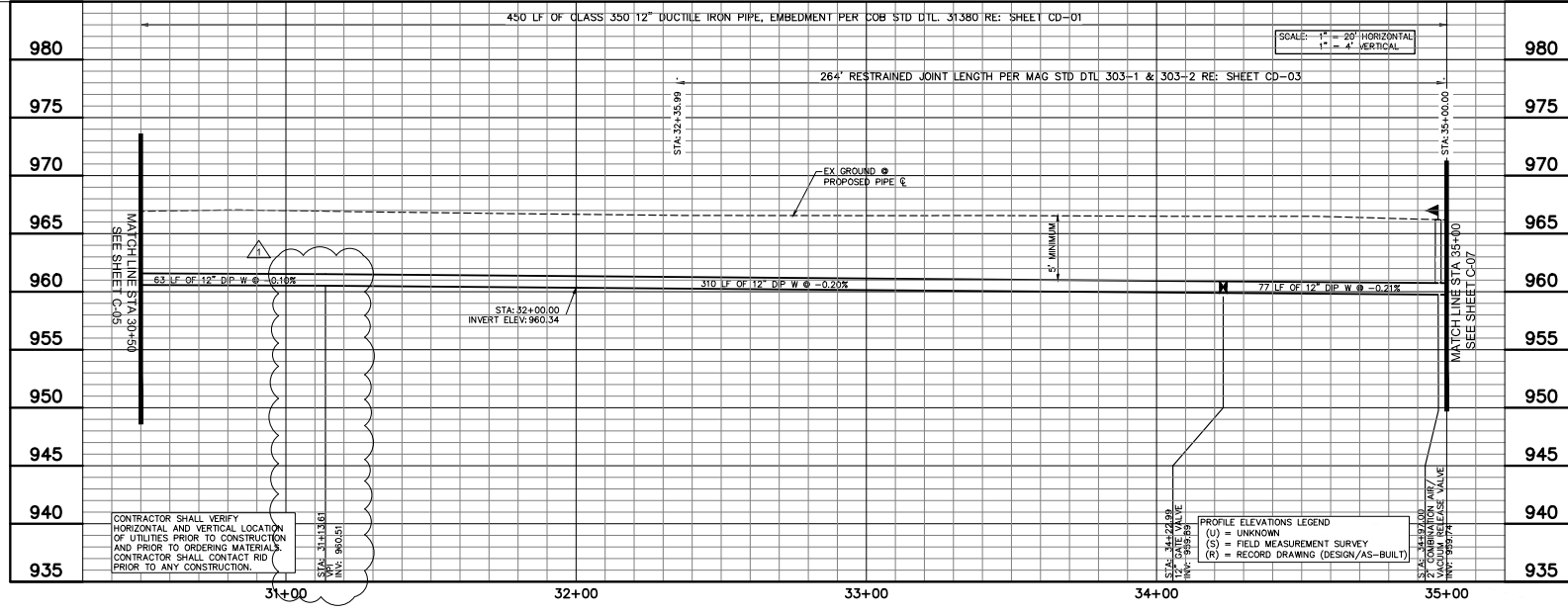
450 LF OF CLASS 350 12" DUCTILE IRON PIPE, EMBEDMENT PER COB STD DTL. 31380 RE: SHEET CD-01



CONSTRUCTION NOTES			
1	INSTALL PC350 12" DIP WATERLINE, W/ POLY WRAP TRENCH PER COB DTL 31380	450	LF
2	INSTALL 12" GATE VALVE PER MAG STD DTL 391-2. INSTALL VALVE BOX & COVER MAG STD DTL 391-2. PROVIDE BLUE CARBONITE MARKER WITHIN 2'(NOT IN PAVEMENT). VALVE BLOCKING PER MAG STD DTL 301	1	EA
3	2" AIR RELEASE VALVE PER COB STD DTL 31340-1 & 31340-2	1	EA

ITS CONSTRUCTION NOTES			
1	INSTALL 15/14 MM HDPE 7-WAY MICRO-DUCT	462	LF
2	INSTALL ITS PULL BOX PER COB STANDARD DETAIL 9524	1	EA

REFERENCE NOTES	
1	POT HOLE NOT COMPLETED DURING DESIGN. CONTRACTOR SHALL FILL AND COMPLETE INFORMATION IN TABLE BELOW AS PART OF AS-BUILT. NOTIFY ENGINEER OF ANY DISCREPANCIES. NON-PAY ITEM.
2	CONTRACTOR TO VERIFY LOCATION OF ITS PULL BOXES WITH CITY AND ENGINEER PRIOR TO CONSTRUCTION.



REVISIONS:

- ADDENDUM NO. 1

PLAN NAME

**REACH WATER LINE CONNECTION  
PLAN AND PROFILE STA 30+50 - 35+00**

ENGINEER INFORMATION

**Kimley-Horn**

7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021 | 602-944-5500

COB PERMITTING APPROVED SEAL      COB ENGINEERING APPROVED SEAL

AS-BUILT SEAL      DESIGN SEAL

PROFESSIONAL ENGINEER  
72388  
TYLER W. RAY  
P.E.  
STATE OF ARIZONA

ORIGINAL PLAN DATE: 8/26/2022  
PROJECT NUMBER: 191342029

LATEST REVISION DATE: 8/26/2022  
SHEET NUMBER / SHEET: 13 OF 44  
C-06

100% SUBMITTAL

WALGREEN ARIZONA DRUG CO  
504-23-0065  
EX EASEMENT FOR TELEPHONE  
LINES WITHIN ROADS ADJOINING  
THE PROPERTY  
BK. 61 OF MISC., PG. 23

RID EXTRA PROTECTION ONLY  
NECESSARY WHEN CONSTRUCTING  
NEW 12" WATERLINE BY OPEN  
CUT. OPEN CUT METHOD ONLY  
ALLOWED DURING DRY UP PERIOD.

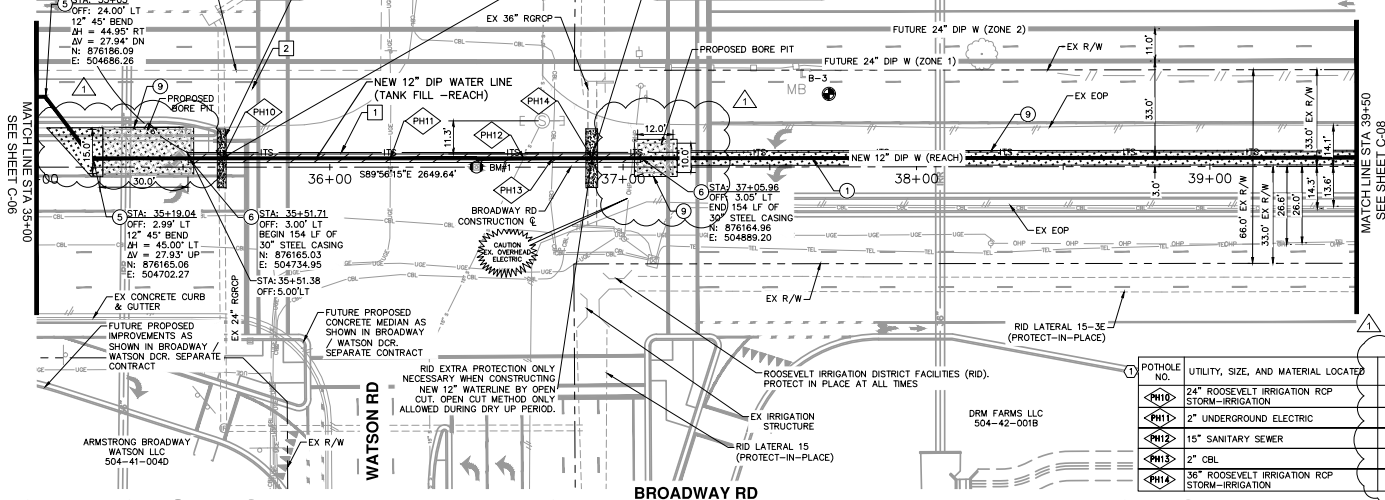
ROOSEVELT IRRIGATION DISTRICT FACILITY (RID). CONTRACTOR SHALL  
PROTECT IN PLACE AT ALL TIMES. CROSSING OF RID FACILITIES BY  
UTILITY MUST BE DONE DURING THE ANNUAL DRY-UP UNLESS AN  
APPROPRIATE TRENCHLESS METHOD IS APPROVED BY RID THROUGH  
THEIR CONSTRUCTION OBSERVER. CONTRACTOR SHALL CONTACT THE  
DISTRICT'S CONSTRUCTION OBSERVER AT (602) 264-7017. A  
MINIMUM OF 14 CALENDAR DAYS PRIOR TO ANY WORK IN THIS AREA.  
SEE RID GENERAL AND GRADING NOTES SHEET C-04.

IRENE TRUST  
504-22-020



GRAPHIC SCALE IN FEET  
0 10 20 40  
SCALE: 1" = 20' HORIZ.

CONSTRUCTION NOTES		
①	INSTALL PCS50 12" DIP WATERLINE, W/ POLY WRAP TRENCH PER COB DTL 31380	305 LF
②	INSTALL 12" 45° BEND	1EA
③	30" X 0.375" THICK STL CASING AND SPACERS PER COB STD DTL 31284 BY BORE AND PCS50 12" DIP WATERLINE	154 LF
④	PERMANENT ASPHALT PAVEMENT REPAIR PER MAG STD DTL 200-1 T-TOP	229 SQ



ITS CONSTRUCTION NOTES		
①	INSTALL 15/14 MM HOPE 7-WAY MICRO-DUCT	490 LF

POTHOLE NO.	UTILITY, SIZE, AND MATERIAL LOCATED	DEPTH OF COVER
PH10	24" ROOSEVELT IRRIGATION RCP STORM-IRRIGATION	
PH11	2" UNDERGROUND ELECTRIC	
PH12	15" SANITARY SEWER	
PH13	2" CBL	
PH14	36" ROOSEVELT IRRIGATION RCP STORM-IRRIGATION	

REFERENCE NOTES	
①	POTHOLE NOT COMPLETED DURING DESIGN. CONTRACTOR SHALL POTHOLE AND COMPLETE INFORMATION IN TABLE BELOW AS PART OF AS-BUILT. NOTIFY ENGINEER OF ANY DISCREPANCIES. NON-PAY ITEM.
②	CONTRACTOR TO VERIFY LOCATION OF ITS PULL BOXES WITH CITY AND ENGINEER PRIOR TO CONSTRUCTION.

REVISIONS:  
 △ ADDENDUM NO. 1  
 △  
 △  
 PLAN NAME

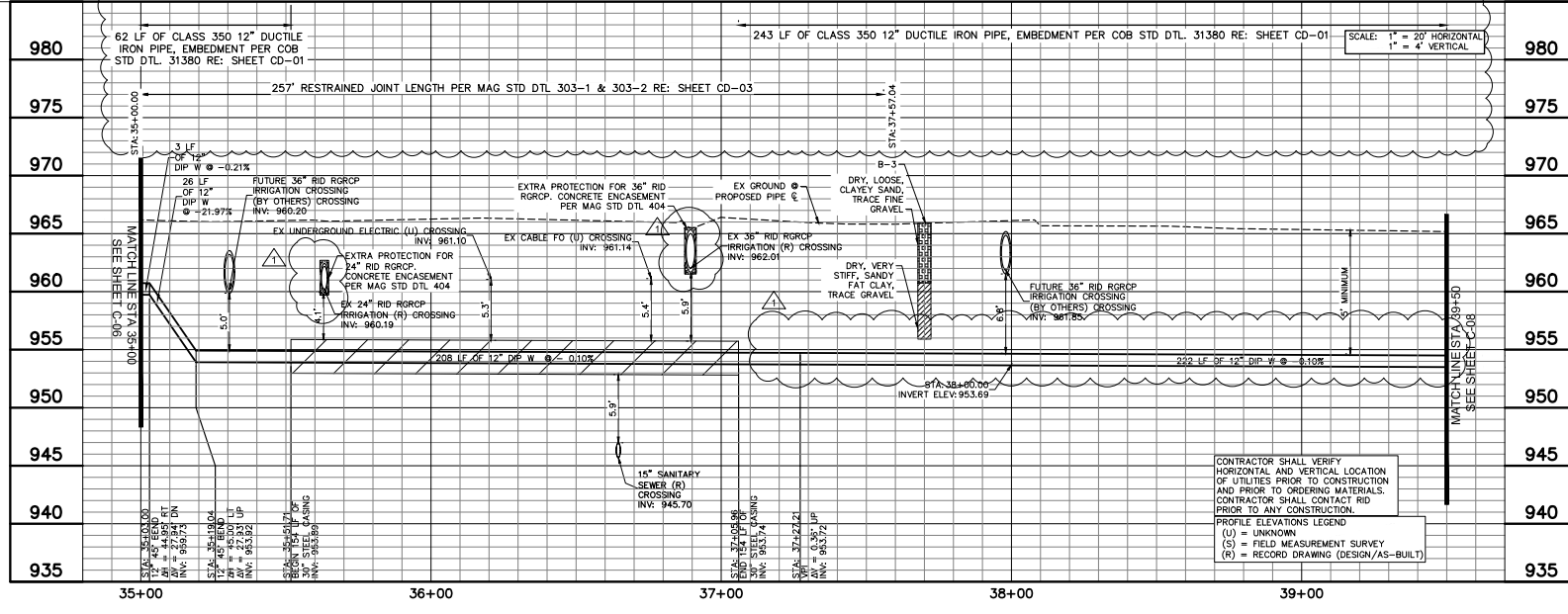
REACH WATER LINE CONNECTION  
PLAN AND PROFILE STA 35+00 - 39+50

ENGINEER INFORMATION  
**Kimley-Horn**  
 7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021 | 602-944-5500  
 COB PERMITTING APPROVED SEAL  
 COB ENGINEERING APPROVED SEAL

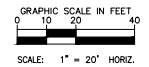
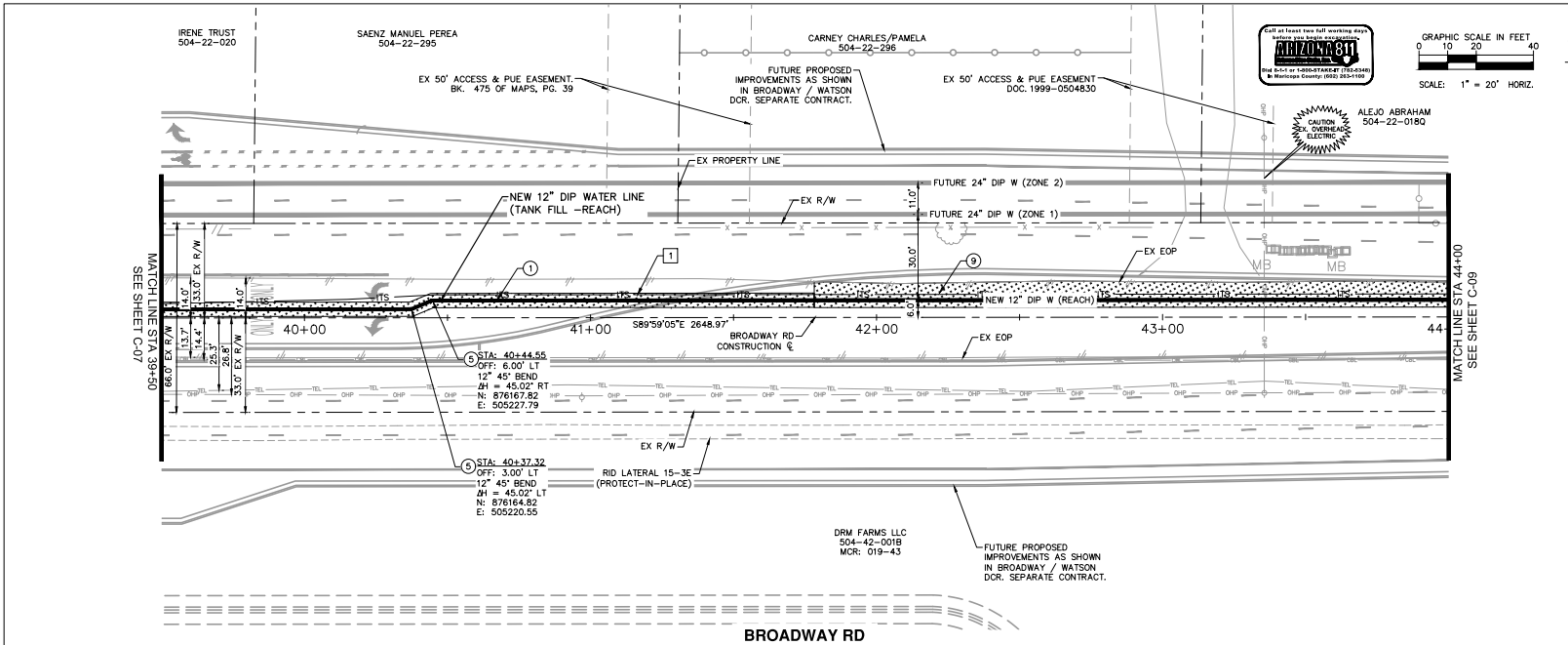
AS-BUILT SEAL  
 DESIGN SEAL

ORIGINAL PLAN DATE: 8/26/2022  
 PROJECT NUMBER: 191342029  
 LATEST REVISION DATE: 14 OF 44  
 SHEET NUMBER/SHEET: C-07

SUBMITTAL 100% SUBMITTAL



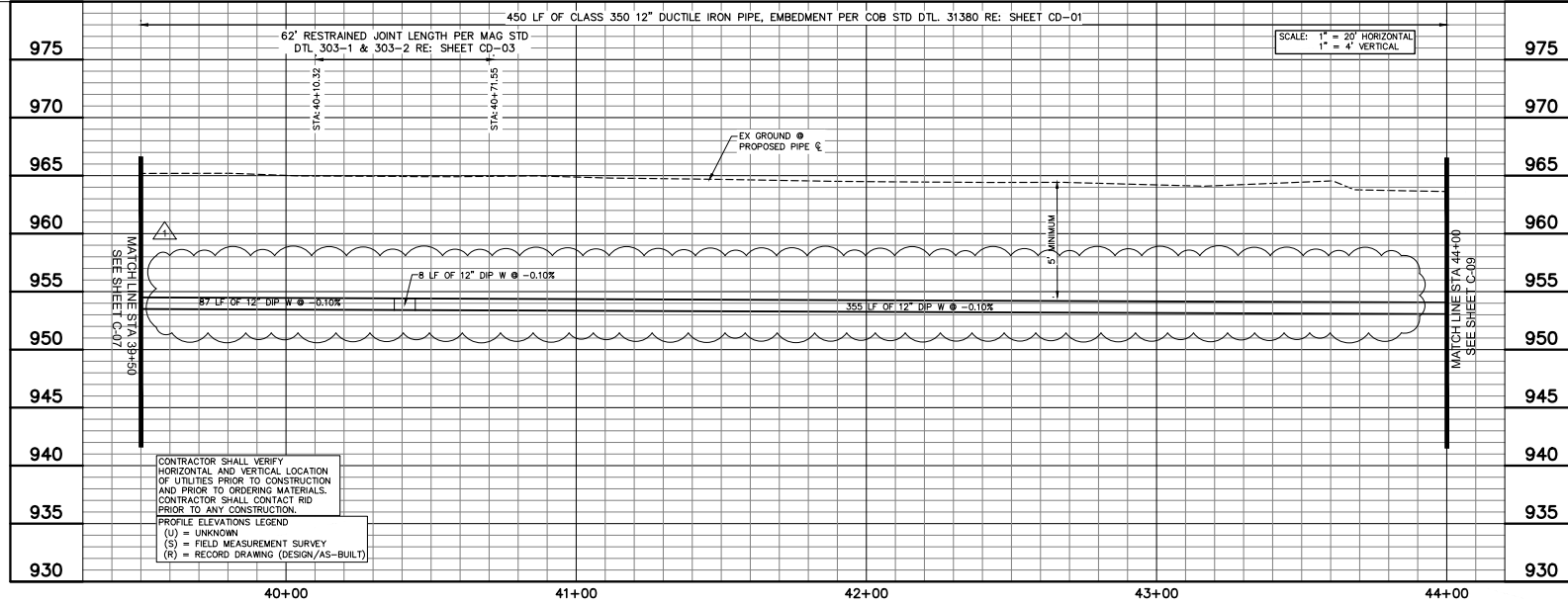
CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF UTILITIES PRIOR TO CONSTRUCTION AND PRIOR TO ORDERING MATERIALS. CONTRACTOR SHALL CONTACT RID PRIOR TO ANY CONSTRUCTION.  
 PROFILE ELEVATIONS LEGEND  
 (U) = UNKNOWN  
 (S) = FIELD MEASUREMENT SURVEY  
 (R) = RECORD DRAWING (DESIGN/AS-BUILT)



CONSTRUCTION NOTES		
①	INSTALL PC350 12" DIP WATERLINE, W/ POLY WRAP TRENCH PER COB DTL 31380	450 LF
②	INSTALL 12" 45° BEND	2 EA
③	PERMANENT ASPHALT PAVEMENT REPAIR PER MAG STD DTL 200-1 T-TOP	240 SY

ITS CONSTRUCTION NOTES		
④	INSTALL 15/14 MM HDPE 7-WAY MICRO-DUST	450 LF

REFERENCE NOTES	
①	POTHOLE NOT COMPLETED DURING DESIGN. CONTRACTOR SHALL POTHOLE AND COMPLETE INFORMATION IN TABLE BELOW AS PART OF AS-BUILT. NOTIFY ENGINEER OF ANY DISCREPANCIES. NON-PAY ITEM.
②	CONTRACTOR TO VERIFY LOCATION OF ITS PULL BOXES WITH CITY AND ENGINEER PRIOR TO CONSTRUCTION.



REVISIONS:

- ADDENDUM NO. 1

PLAN NAME:  
**REACH WATER LINE CONNECTION  
PLAN AND PROFILE STA 39+50 - 44+00**

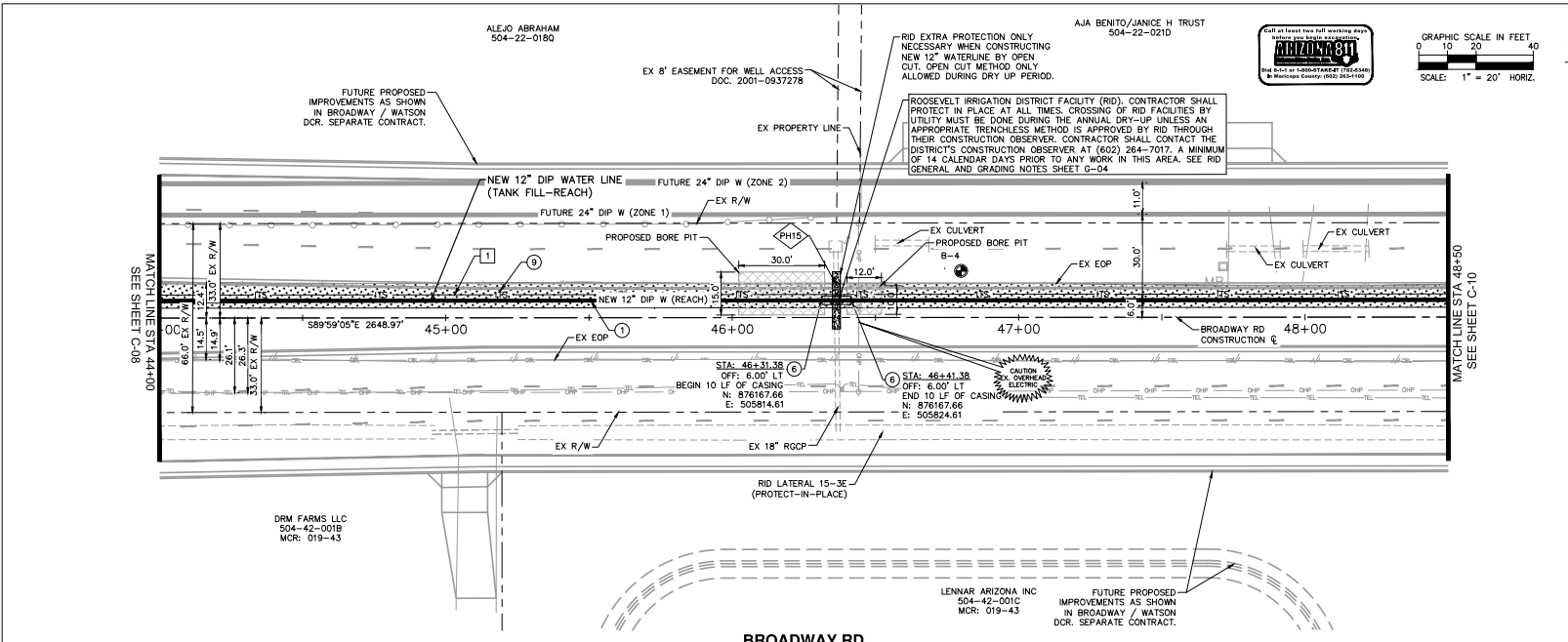
ENGINEER INFORMATION:  
**Kimley-Horn**  
7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021 | 602-944-6500  
COB PERMITTING APPROVED SEAL | COB ENGINEERING APPROVED SEAL

AS-BUILT SEAL | DESIGN SEAL

ORIGINAL PLAN DATE: 8/26/2022  
PROJECT NUMBER: 191342029

LATEST REVISION DATE: 8/26/2022  
SHEET NUMBER / SHEET: 15 OF 44 | C-08

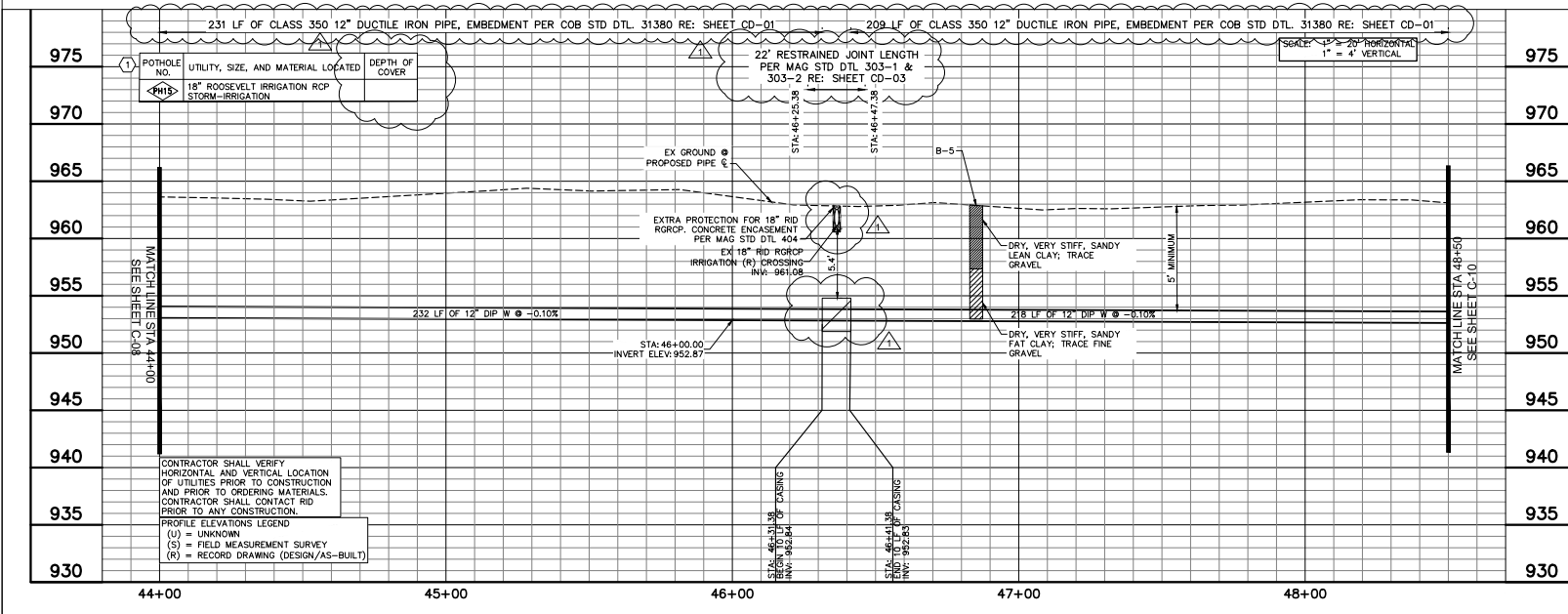
100% SUBMITTAL



CONSTRUCTION NOTES		
1	INSTALL PC350 12\"/>	440 LF
2	30\"/>	10 LF
3	PERMANENT ASPHALT PAVEMENT REPAIR PER MAG STD DTL 200-1 T-TOP	420 SY

ITS CONSTRUCTION NOTES		
1	INSTALL 15/14 MM HOPE 7-WAY MICRO-DUCT	450 LF

REFERENCE NOTES	
1	POTHOLE NOT COMPLETED DURING DESIGN. CONTRACTOR SHALL POTHOLE AND COMPLETE INFORMATION IN TABLE BELOW AS PART OF AS-BUILT. NOTIFY ENGINEER OF ANY DISCREPANCIES. NON-PAY ITEM.
2	CONTRACTOR TO VERIFY LOCATION OF ITS PULL BOXES WITH CITY AND ENGINEER PRIOR TO CONSTRUCTION.



REVISIONS:

ADDENDUM NO. 1

PLAN NAME

**REACH WATER LINE CONNECTION PLAN AND PROFILE STA 44+00 - 48+50**

ENGINEER INFORMATION

**Kimley-Horn**

7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021 602-944-5500

COB PERMITTING APPROVED SEAL

COB ENGINEERING APPROVED SEAL

AS-BUILT SEAL

DESIGN SEAL

Professional Engineer Seal: 72388, TERRY W. RAY, P.E., STATE OF ARIZONA

ORIGINAL PLAN DATE: 8/26/2022

LATEST REVISION DATE: 8/26/2022

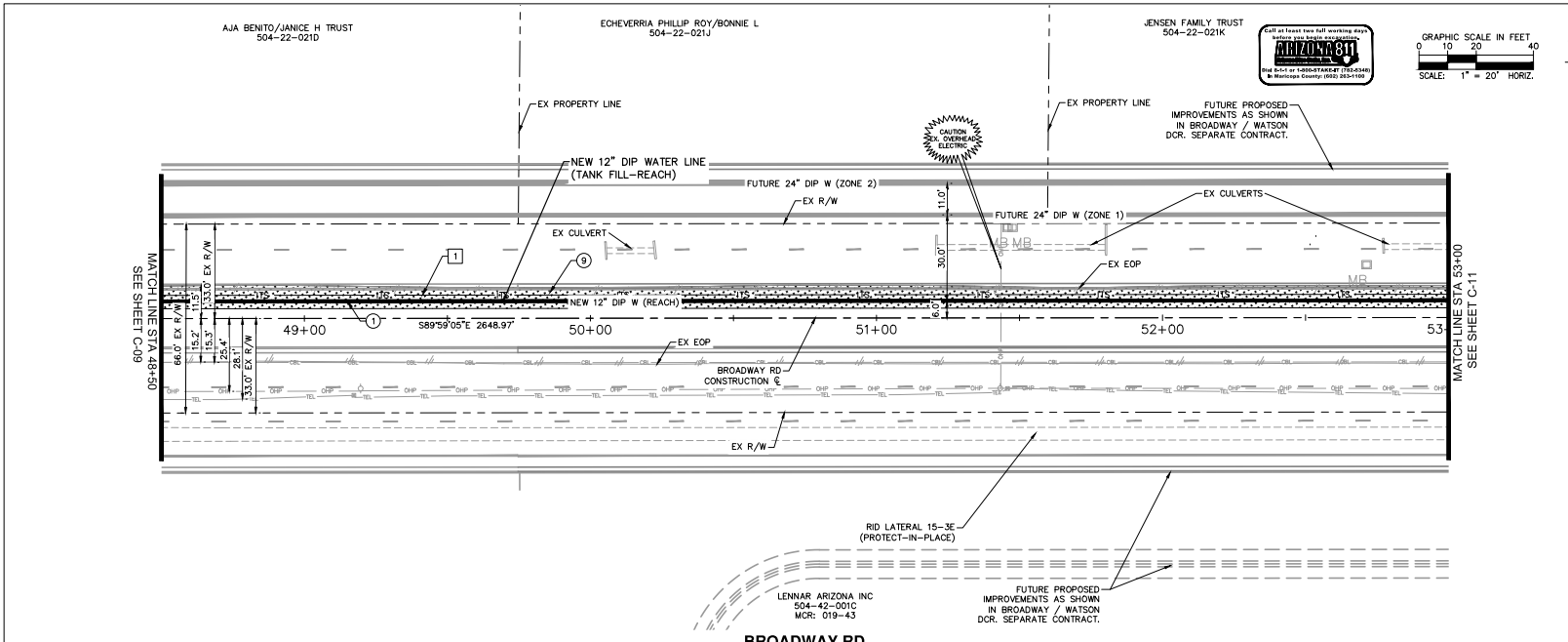
PROJECT NUMBER: 191342029

SHEET NUMBER / SHEET: 16 OF 44

C-09

100% SUBMITTAL

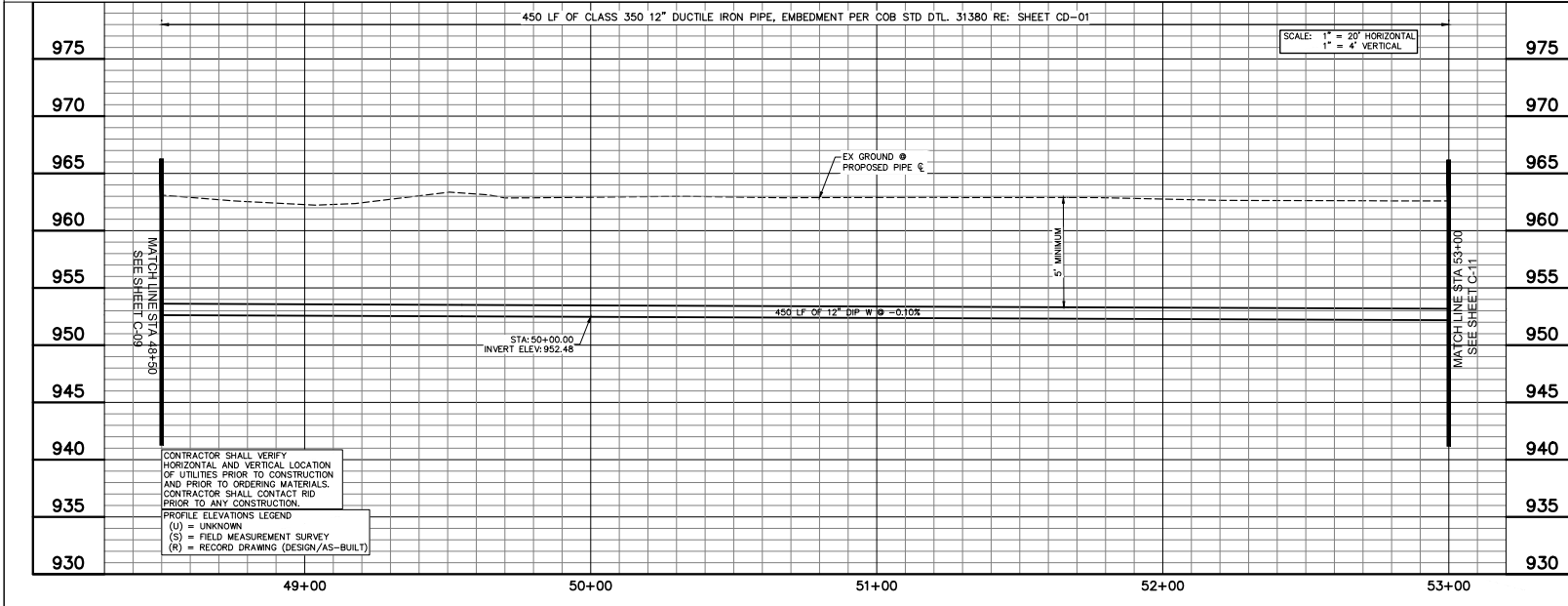




CONSTRUCTION NOTES		
1	INSTALL PC350 12" DIP WATERLINE, W/ POLY WRAP TRENCH PER COB DTL 51350	450 LF
2	PERMANENT ASPHALT PAVEMENT REPAIR PER MAG STD DTL 200-1 T-TOP	385 SY

ITS CONSTRUCTION NOTES		
1	INSTALL 15/14 MM HDPE 7-WAY MIPRO-DUCT	450 LF

REFERENCE NOTES	
1	POTHOLE NOT COMPLETED DURING DESIGN. CONTRACTOR SHALL POTHOLE AND COMPLETE INFORMATION IN TABLE BELOW AS PART OF AS-BUILT. NOTIFY ENGINEER OF ANY DISCREPANCIES. NON-PAY ITEM.
2	CONTRACTOR TO VERIFY LOCATION OF ITS PULL BOXES WITH CITY AND ENGINEER PRIOR TO CONSTRUCTION.



REVISIONS:

ADDENDUM NO. 1

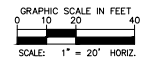
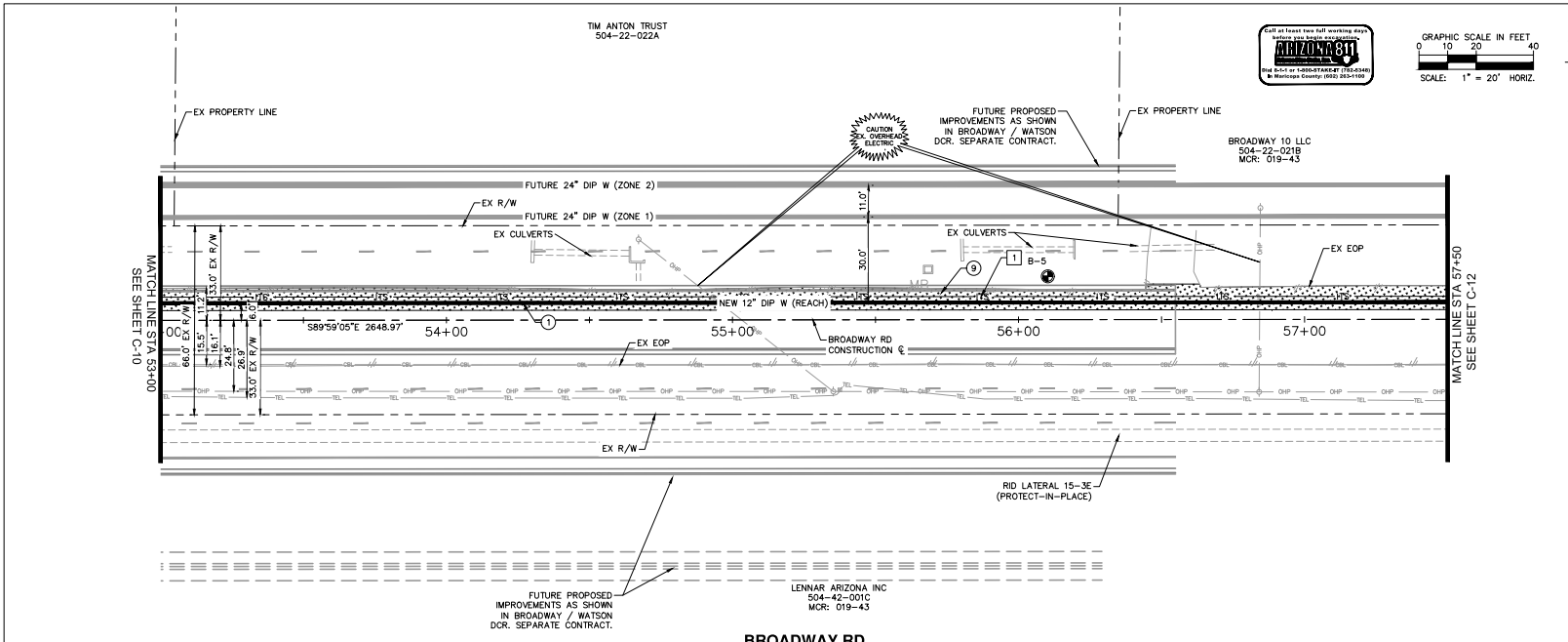
PLAN NAME  
**REACH WATER LINE CONNECTION  
PLAN AND PROFILE STA 48+50 - 53+00**

ENGINEER INFORMATION  
**Kimley-Horn**  
7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021 | 602-944-6500  
COB PERMITTING APPROVED SEAL      COB ENGINEERING APPROVED SEAL

AS-BUILT SEAL      DESIGN SEAL

ORIGINAL PLAN DATE: 8/26/2022      LATEST REVISION DATE:      PROJECT NUMBER: 191342029      SHEET NUMBER: 17 OF 44      SHEET: C-10

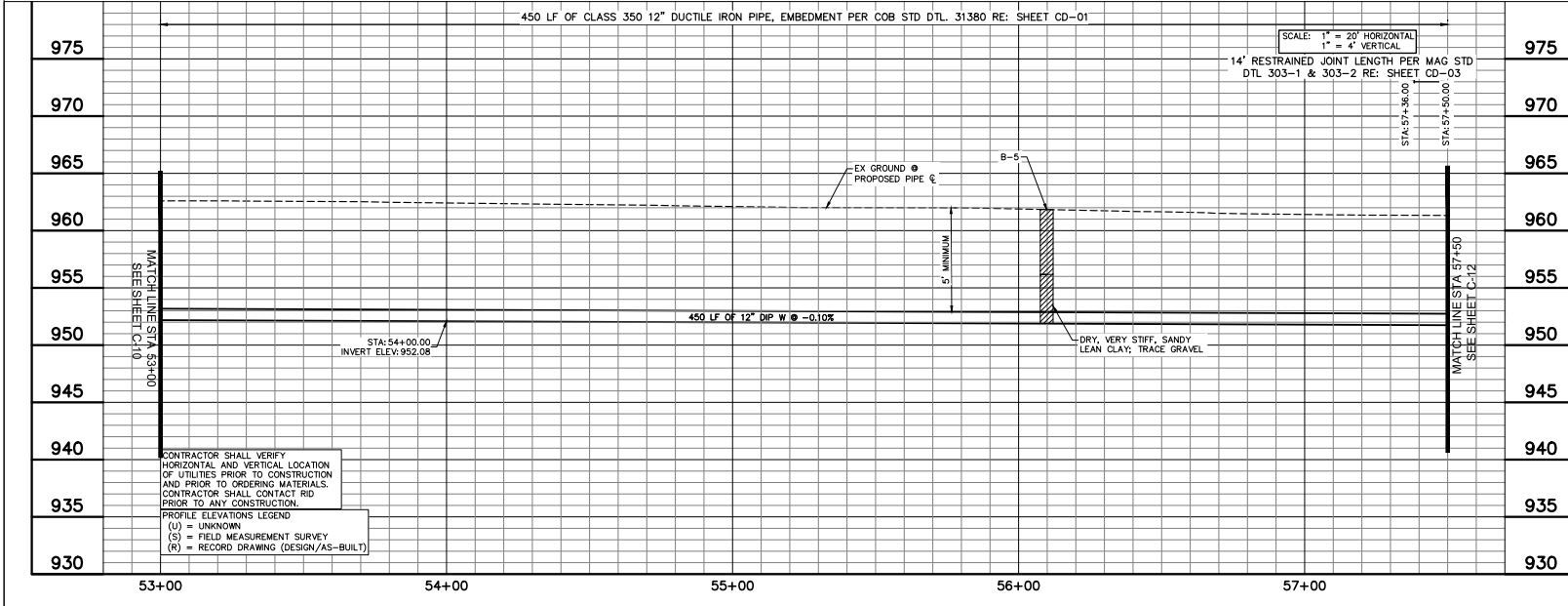
100% SUBMITTAL



CONSTRUCTION NOTES		
①	INSTALL PC350 12" DIP WATERLINE, W/ POLY WRAP TRENCH PER COB DTL 31380	450 LF
②	PERMANENT ASPHALT PAVEMENT REPAIR PER MAG STD DTL 200-1 T-TOP	388 SY

ITS CONSTRUCTION NOTES		
①	INSTALL 15/14 MM HDPE 7-WAY MICRO-DUCT	450 LF

REFERENCE NOTES	
①	POTHOLE NOT COMPLETED DURING DESIGN. CONTRACTOR SHALL POTHOLE AND COMPLETE INFORMATION IN TABLE BELOW AS PART OF AS-BUILT. NOTIFY ENGINEER OF ANY DISCREPANCIES. NON-PAY ITEM.
②	CONTRACTOR TO VERIFY LOCATION OF ITS PULL BOXES WITH CITY AND ENGINEER PRIOR TO CONSTRUCTION.



CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF UTILITIES PRIOR TO CONSTRUCTION AND PRIOR TO ORDERING MATERIALS. CONTRACTOR SHALL CONTACT RID PRIOR TO ANY CONSTRUCTION.

PROFILE ELEVATIONS LEGEND  
 (U) = UNKNOWN  
 (S) = FIELD MEASUREMENT SURVEY  
 (R) = RECORD DRAWING (DESIGN/AS-BUILT)

REVISIONS:

△ ADDENDUM NO. 1

△ PLAN NAME

**REACH WATER LINE CONNECTION PLAN AND PROFILE STA 53+00 - 57+50**

ENGINEER INFORMATION

**Kimley-Horn**

7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021 | 602-944-5500

COB PERMITTING APPROVED SEAL      COB ENGINEERING APPROVED SEAL

AS-BUILT SEAL      DESIGN SEAL

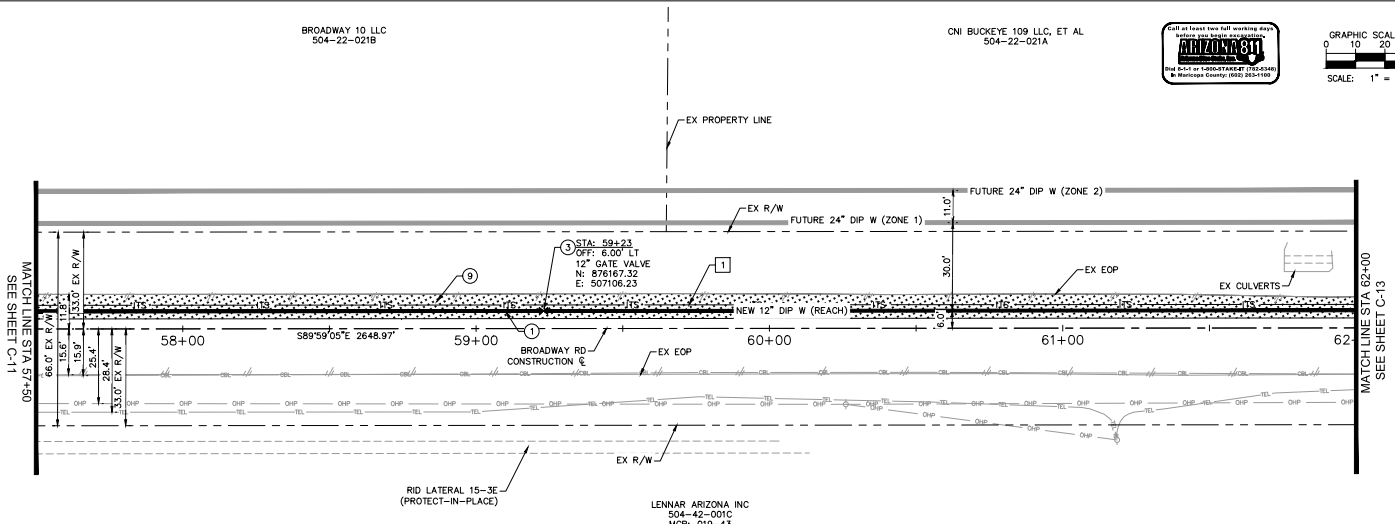
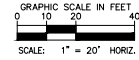
ORIGINAL PLAN DATE: 8/26/2022      LATEST REVISION DATE: 8/26/2022

PROJECT NUMBER: 191342029      SHEET NUMBER / SHEET: 18 OF 44 C-11

100% SUBMITTAL

BROADWAY 10 LLC  
504-22-021B

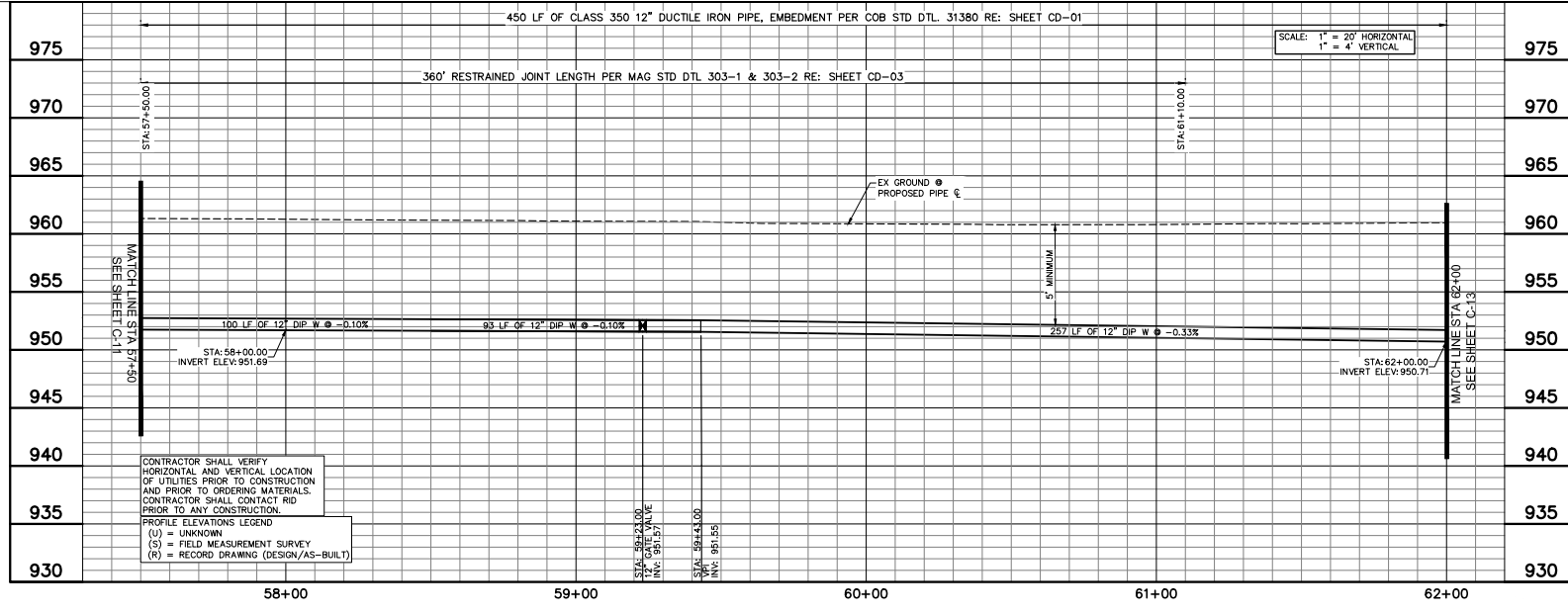
CNI BUCKEYE 109 LLC, ET AL  
504-22-021A



CONSTRUCTION NOTES		
1	INSTALL PG350 12" DIP WATERLINE, W/ POLY WRAP TRENCH PER COB DTL 31380	450 LF
2	INSTALL 12" GATE VALVE PER MAG STD DTL 391-2. INSTALL VALVE BOX & COVER MAG STD DTL 391-2. PROVIDE BLUE CARBONITE MARKER WITHIN 2'(NOT IN PAVEMENT), VALVE BLOCKING PER MAG STD DTL 391.	1 EA
3	PERMANENT ASPHALT PAVEMENT REPAIR PER MAG STD DTL 200-1 T-TOP	411 SY

ITS CONSTRUCTION NOTES		
1	INSTALL 18/14 MM HDPE 7-WAY MICRO-DUCT	450 LF

**BROADWAY RD**



REFERENCE NOTES	
1	POTHOLE NOT COMPLETED DURING DESIGN. CONTRACTOR SHALL POTHOLE AND COMPLETE INFORMATION IN TABLE BELOW AS PART OF AS-BUILT. NOTIFY ENGINEER OF ANY DISCREPANCIES. NON-PAY ITEM.
2	CONTRACTOR TO VERIFY LOCATION OF ITS PULL BOXES WITH CITY AND ENGINEER PRIOR TO CONSTRUCTION.

REVISIONS	
1	ADDENDUM NO. 1

PLAN NAME  
**REACH WATER LINE CONNECTION  
PLAN AND PROFILE STA 57+50 - 62+00**

ENGINEER INFORMATION  
**Kimley-Horn**  
7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021 602-944-6500  
COB PERMITTING APPROVED SEAL      COB ENGINEERING APPROVED SEAL

AS-BUILT SEAL      DESIGN SEAL

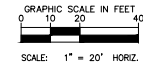
ORIGINAL PLAN DATE: 8/26/2022  
PROJECT NUMBER: 191342029  
LATEST REVISION DATE: 8/26/2022  
SHEET NUMBER: 19 OF 44  
SHEET: C-12

SUBMITTAL  
100% SUBMITTAL

CNI BUCKEYE 109, LLC, ET AL  
504-22-021A

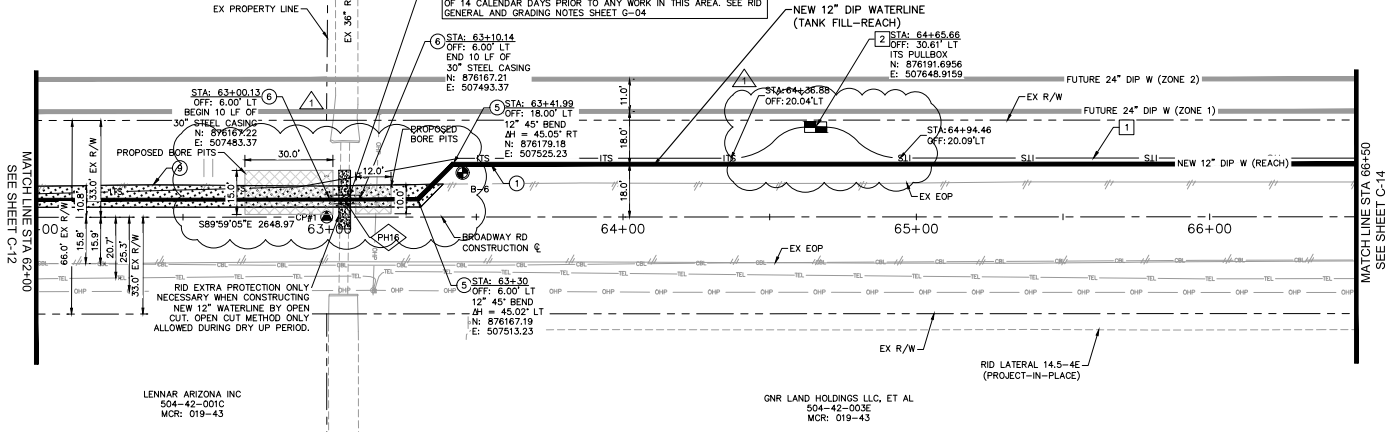
RID LATERAL 14.5-4E  
(PROJECT-IN-PLACE)

CITY OF BUCKEYE  
504-22-019



ROOSEVELT IRRIGATION DISTRICT FACILITY (RID), CONTRACTOR SHALL PROTECT IN PLACE AT ALL TIMES. CROSSING OF RID FACILITIES BY UTILITY MUST BE DONE DURING THE ANNUAL DRY-UP UNLESS AN APPROPRIATE TRENCHLESS METHOD IS APPROVED BY RID THROUGH THEIR CONSTRUCTION OBSERVER. CONTRACTOR SHALL CONTACT THE DISTRICT'S CONSTRUCTION OBSERVER AT (602) 264-7017, A MINIMUM OF 14 CALENDAR DAYS PRIOR TO ANY WORK IN THIS AREA. SEE RID GENERAL AND GRADING NOTES SHEET G-04.

NEW 12" DIP WATERLINE  
(TANK FILL-REACH)



LENNAR ARIZONA INC  
504-42-001C  
MCR: 019-43

GNR LAND HOLDINGS LLC, ET AL  
504-42-002E  
MCR: 019-43

CONSTRUCTION NOTES			
1	INSTALL PC350 12" DIP WATERLINE, W/ POLY WRAP TRENCH PER COB DTL 31380	445	LF
2	INSTALL 12" 45° BEND	10	EA
3	30" X 0.375" THICK STL CASING AND SPACERS PER COB STD DTL 31384 BY BORE AND PC350 12" DIP WATERLINE	10	LF
4	PERMANENT ASPHALT PAVEMENT REPAIR PER MAG STD DTL 200-1 T-TOP AND 20 TYPER A	111	SF

ITS CONSTRUCTION NOTES			
1	INSTALL 15/14 MM HDPE 7-WAY MICRO-DUCT	449	LF
2	INSTALL ITS PULL BOX PER COB STANDARD DETAIL 64-24	1	EA

REFERENCE NOTES	
1	POTHOLE NOT COMPLETED DURING DESIGN. CONTRACTOR SHALL POTHOLE AND COMPLETE INFORMATION IN TABLE BELOW AS PART OF AS-BUILT. NOTIFY ENGINEER OF ANY DISCREPANCIES. NON-PAY ITEM.
2	CONTRACTOR TO VERIFY LOCATION OF ITS PULL BOXES WITH CITY AND ENGINEER PRIOR TO CONSTRUCTION.

REVISIONS:	
△	ADDENDUM NO. 1
△	
△	

PLAN NAME  
**REACH WATER LINE CONNECTION  
PLAN AND PROFILE STA 62+00 - 66+50**

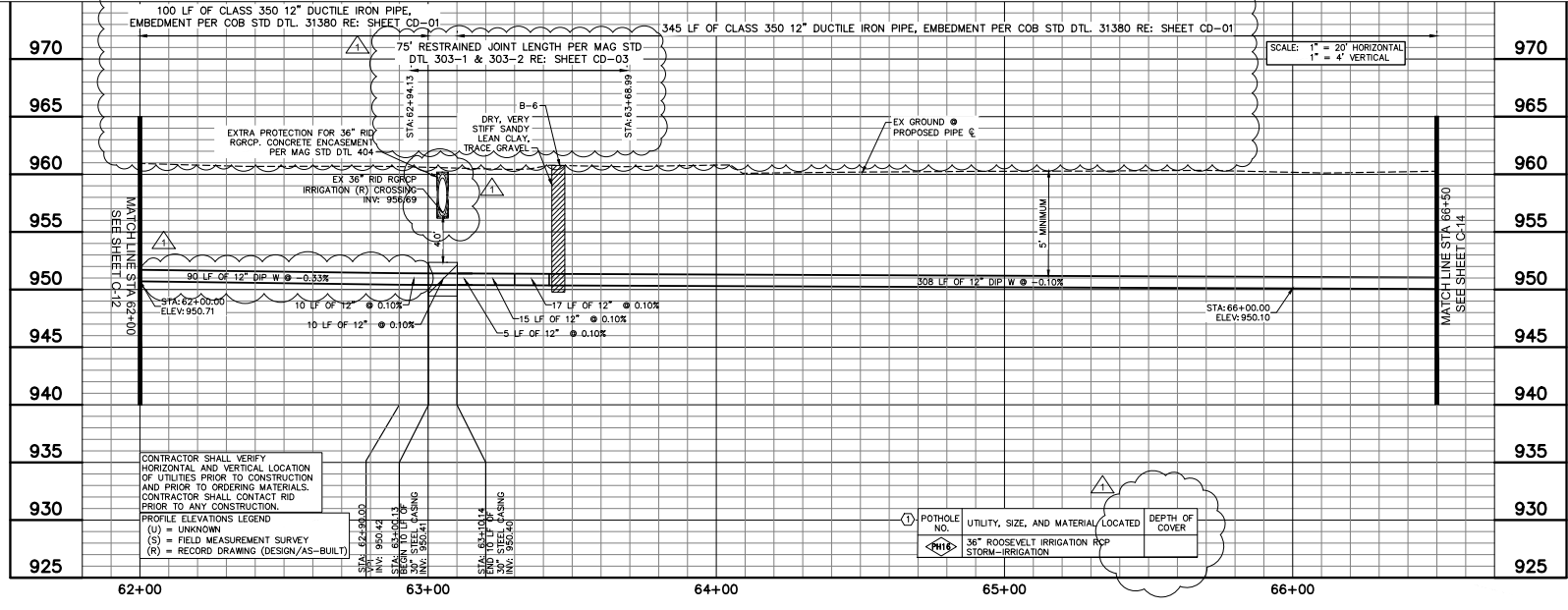
ENGINEER INFORMATION  
**Kimley-Horn**  
7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021 | 602-944-5500  
COB PERMITTING APPROVED SEAL      COB ENGINEERING APPROVED SEAL

AS-BUILT SEAL      DESIGN SEAL

ORIGINAL PLAN DATE: 8/26/2022  
PROJECT NUMBER: 191342029  
LATEST REVISION DATE: 20 OF 44  
SHEET NUMBER / SHEET: C-13

SUBMITTAL  
**100% SUBMITTAL**  
COB PLAN TRACKING #  
COB PERMIT #  
ENCCIP-22-003

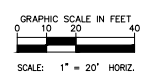
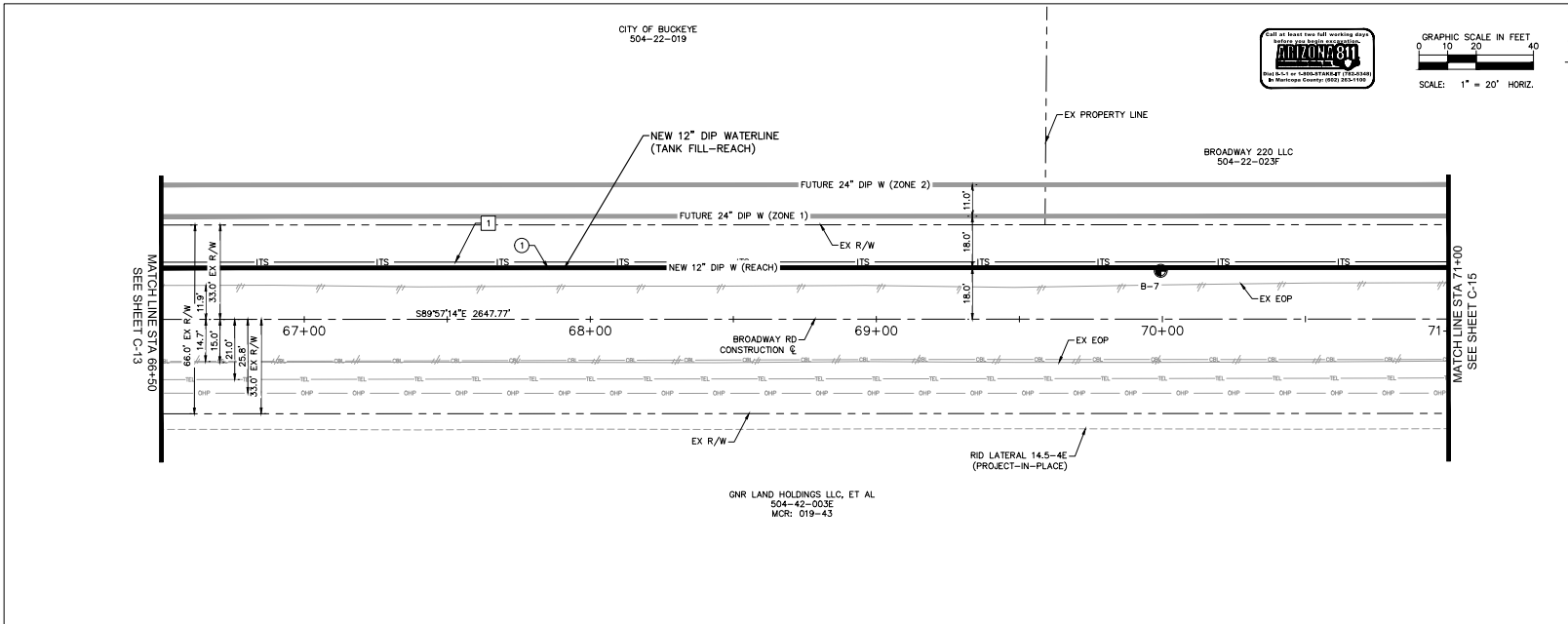
**BROADWAY RD**



CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF UTILITIES PRIOR TO CONSTRUCTION AND PRIOR TO ORDERING MATERIALS. CONTRACTOR SHALL CONTACT RID PRIOR TO ANY CONSTRUCTION.

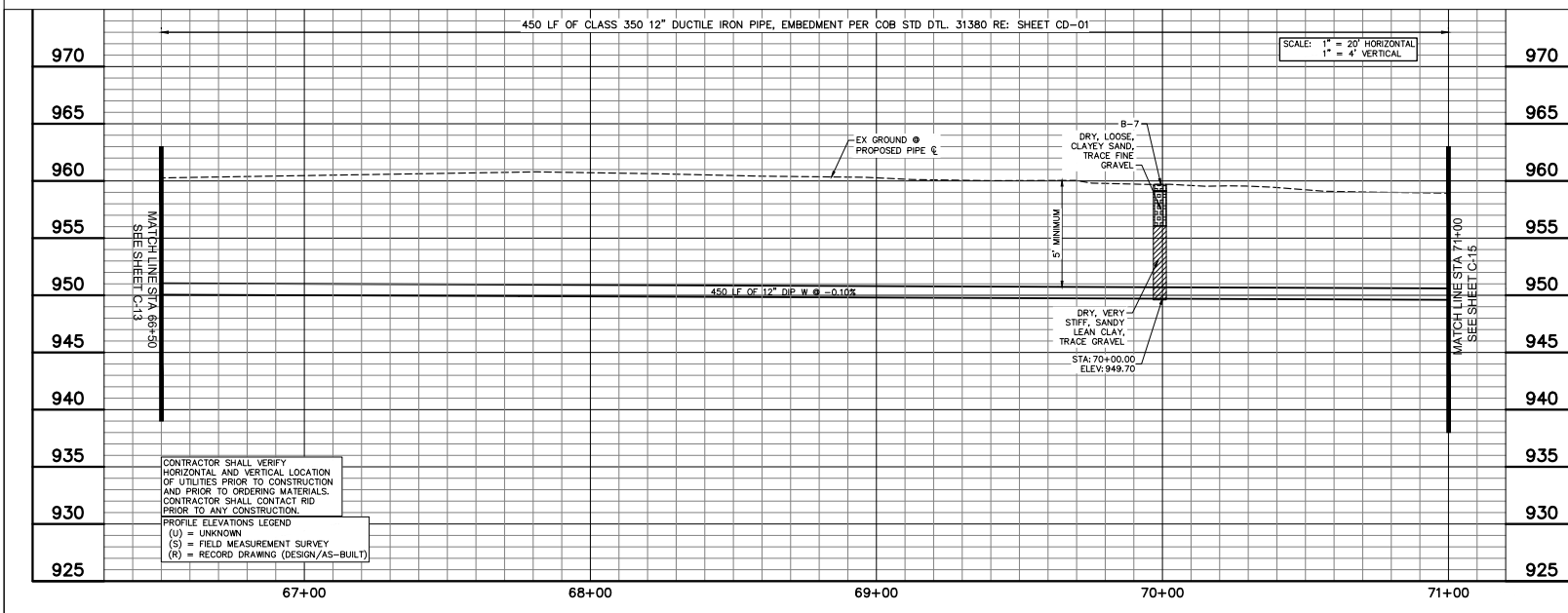
PROFILE ELEVATIONS LEGEND  
(U) = UNKNOWN  
(S) = FIELD MEASUREMENT SURVEY  
(R) = RECORD DRAWING (DESIGN/AS-BUILT)

SCALE: 1" = 20' HORIZONTAL  
1" = 4' VERTICAL



CONSTRUCTION NOTES		
○	INSTALL PC350 12" DIP WATERLINE, W/ POLY WRAP TRENCH PER COB DTL 31380	450 LF

ITS CONSTRUCTION NOTES		
△	INSTALL 15/14 MM HDPE 7-WAY MICRO-DUST	450 LF



REFERENCE NOTES	
①	POTHOLE NOT COMPLETED DURING DESIGN. CONTRACTOR SHALL POTHOLE AND COMPLETE INFORMATION IN TABLE BELOW AS PART OF AS-BUILT. NOTIFY ENGINEER OF ANY DISCREPANCIES. NON-PAY ITEM.
②	CONTRACTOR TO VERIFY LOCATION OF ITS PULL BOXES WITH CITY AND ENGINEER PRIOR TO CONSTRUCTION.

REVISIONS	
△	ADDENDUM NO. 1

PLAN NAME  
**REACH WATER LINE CONNECTION  
 PLAN AND PROFILE STA 66+50 - 71+00**

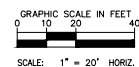
ENGINEER INFORMATION  
**Kimley-Horn**  
 7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021 | 602-944-6500  
 COB PERMITTING APPROVED SEAL | COB ENGINEERING APPROVED SEAL

AS-BUILT SEAL | DESIGN SEAL  
  
 ORIGINAL PLAN DATE: 8/26/2022  
 LATEST REVISION DATE: 8/26/2022  
 PROJECT NUMBER: 191342029  
 SHEET NUMBER: 21 OF 44  
 SHEET: C-14

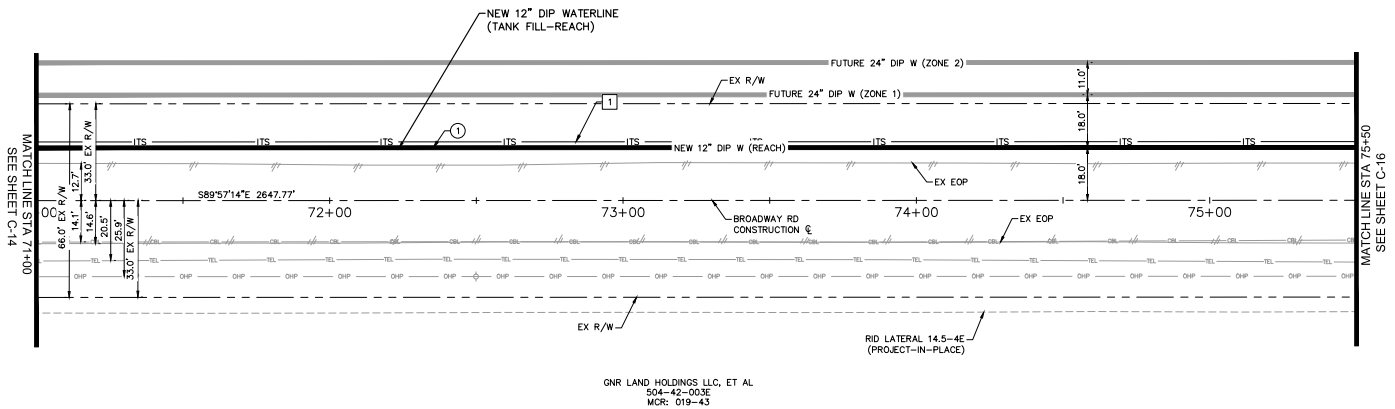
SUBMITTAL  
**100% SUBMITTAL**

CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF UTILITIES PRIOR TO CONSTRUCTION AND PRIOR TO ORDERING MATERIALS. CONTRACTOR SHALL CONTACT RID PRIOR TO ANY CONSTRUCTION.  
 PROFILE ELEVATIONS LEGEND  
 (U) = UNKNOWN  
 (S) = FIELD MEASUREMENT SURVEY  
 (R) = RECORD DRAWING (DESIGN/AS-BUILT)

BROADWAY 220, LLC  
504-22-023F



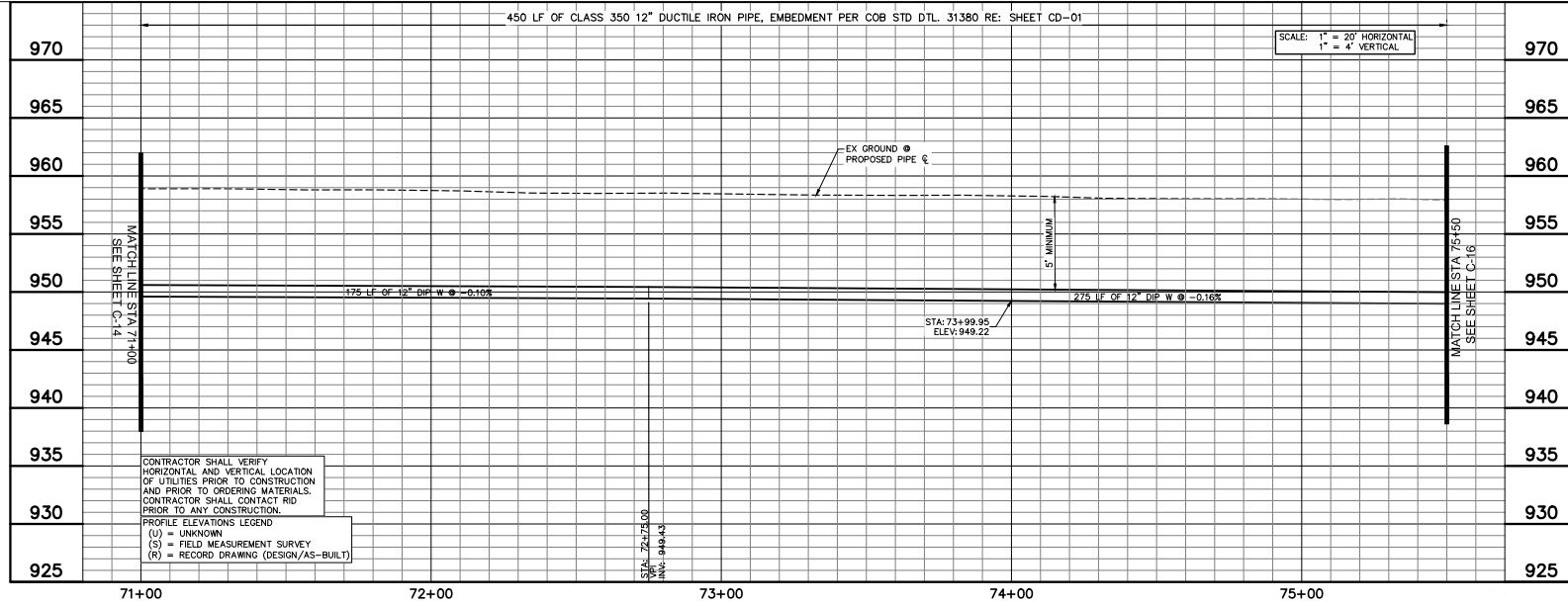
CONSTRUCTION NOTES		
①	INSTALL PC350 12\"/>	



GNR LAND HOLDINGS LLC, ET AL  
504-42-000E  
MCR: 019-43

ITS CONSTRUCTION NOTES		
①	INSTALL 18/14 MM HDPE 7-WAY MICRO-DUCT	450 LF

**BROADWAY RD**



CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF UTILITIES PRIOR TO CONSTRUCTION AND PRIOR TO ORDERING MATERIALS. CONTRACTOR SHALL CONTACT RID PRIOR TO ANY CONSTRUCTION.

PROFILE ELEVATIONS LEGEND  
(U) = UNKNOWN  
(S) = FIELD MEASUREMENT SURVEY  
(R) = RECORD DRAWING (DESIGN/AS-BUILT)

STA: 72+75.00  
ELEV: 949.43

STA: 73+99.95  
ELEV: 949.22

SCALE: 1" = 20' HORIZONTAL  
1" = 4' VERTICAL

REFERENCE NOTES	
①	POTHOLE NOT COMPLETED DURING DESIGN. CONTRACTOR SHALL POTHOLE AND COMPLETE INFORMATION IN TABLE BELOW AS PART OF AS-BUILT. NOTIFY ENGINEER OF ANY DISCREPANCIES. NON-PAY ITEM.
②	CONTRACTOR TO VERIFY LOCATION OF ITS PULL BOXES WITH CITY AND ENGINEER PRIOR TO CONSTRUCTION.

REVISIONS:

△ ADDENDUM NO. 1

PLAN NAME

REACH WATER LINE CONNECTION  
PLAN AND PROFILE STA 71+00 - 75+50

ENGINEER INFORMATION  
**Kimley-Horn**  
7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021 | 602-944-6500  
COB PERMITTING APPROVED SEAL      COB ENGINEERING APPROVED SEAL

AS-BUILT SEAL      DESIGN SEAL

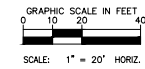
ORIGINAL PLAN DATE: 8/26/2022  
PROJECT NUMBER: 191342029

LATEST REVISION DATE: 8/26/2022  
SHEET NUMBER: 22 OF 44  
SHEET: C-15

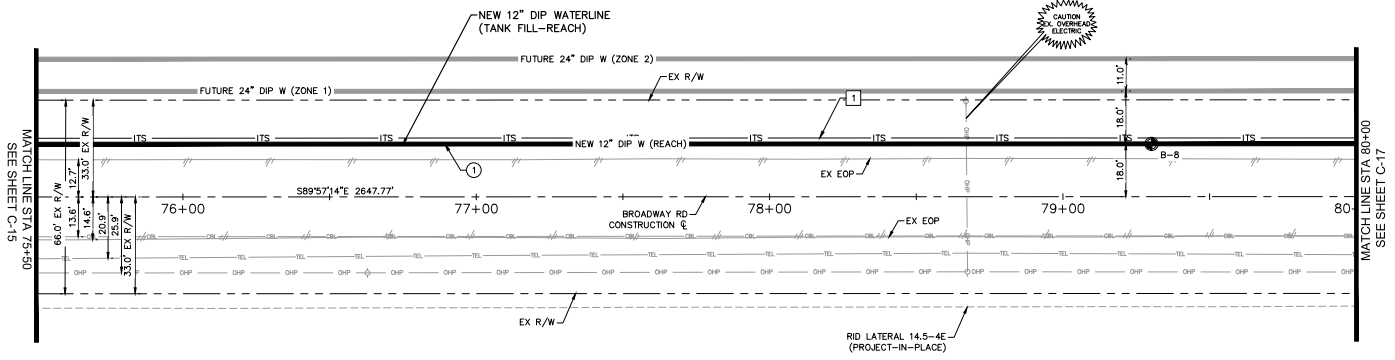
SUBMITTAL  
100% SUBMITTAL

COB PLAN TRACKING #  
COB PERMIT #  
ENCCIP-22-003

BROADWAY 220 LLC  
504-22-023F



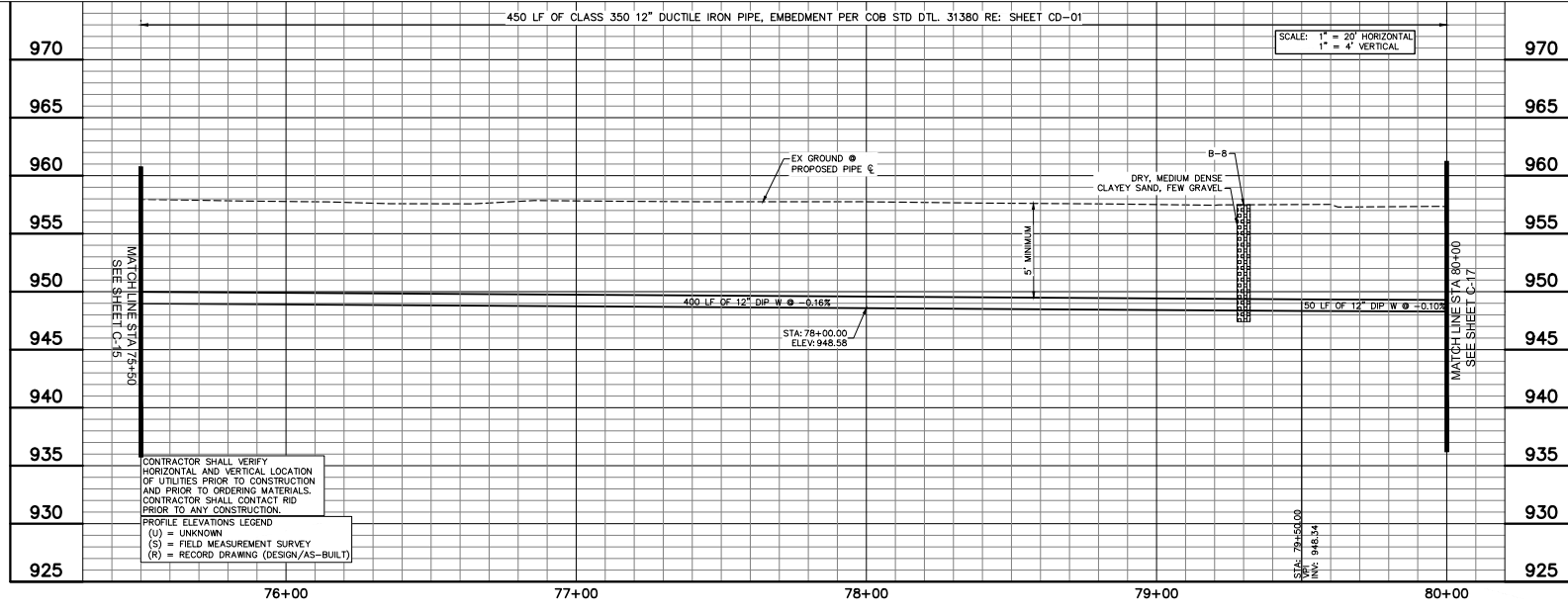
CONSTRUCTION NOTES		
①	INSTALL PC350 12" DIP WATERLINE, W/ POLY WRAP TRENCH PER COB DTL 31380	450 LF



GNR LAND HOLDINGS LLC, ET AL  
504-42-003E  
MCR: 019-43

ITS CONSTRUCTION NOTES		
①	INSTALL 15/14 MM HDPE 7-WAY MICRO-DUCT	450 LF

**BROADWAY RD**



CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF UTILITIES PRIOR TO CONSTRUCTION AND PRIOR TO ORDERING MATERIALS. CONTRACTOR SHALL CONTACT RID PRIOR TO ANY CONSTRUCTION.

PROFILE ELEVATIONS LEGEND  
(U) = UNKNOWN  
(S) = FIELD MEASUREMENT SURVEY  
(R) = RECORD DRAWING (DESIGN/AS-BUILT)

REFERENCE NOTES	
①	POTHOLE NOT COMPLETED DURING DESIGN. CONTRACTOR SHALL POTHOLE AND COMPLETE INFORMATION IN TABLE BELOW AS PART OF AS-BUILT. NOTIFY ENGINEER OF ANY DISCREPANCIES. NON-PAY ITEM.
②	CONTRACTOR TO VERIFY LOCATION OF ITS PULL BOXES WITH CITY AND ENGINEER PRIOR TO CONSTRUCTION.

REVISIONS:

△ ADDENDUM NO. 1

PLAN NAME

REACH WATER LINE CONNECTION  
PLAN AND PROFILE STA 75+50 - 80+00

ENGINEER INFORMATION  
**Kimley-Horn**  
7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021 | 602-944-6500  
COB PERMITTING APPROVED SEAL      COB ENGINEERING APPROVED SEAL

AS-BUILT SEAL      DESIGN SEAL

ORIGINAL PLAN DATE: 8/26/2022  
PROJECT NUMBER: 191342029

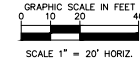
LATEST REVISION DATE: 23 OF 44  
SHEET NUMBER SHEET: C-16

SUBMITTAL 100% SUBMITTAL

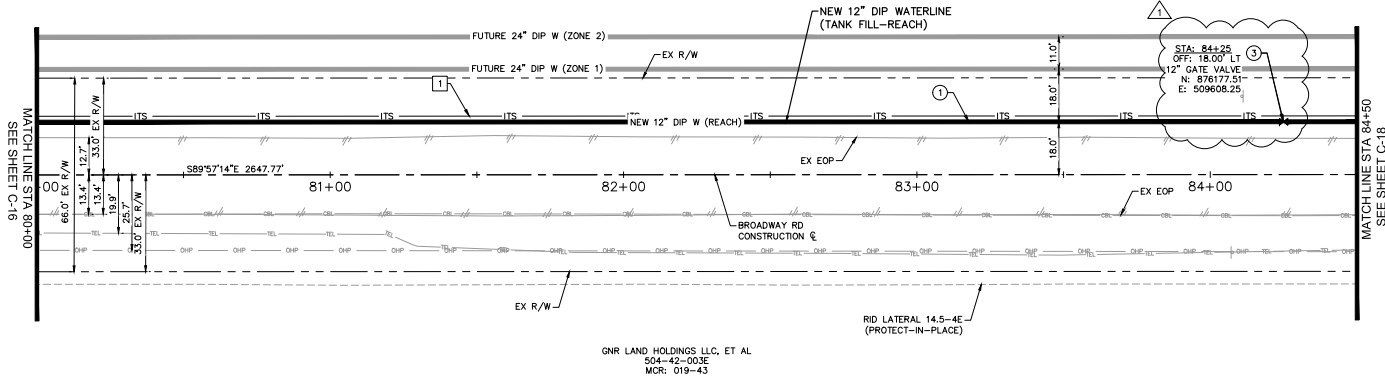
COB PLAN TRACKING #

COB PERMIT # ENCPCP-22-0038

BROADWAY 220 LLC  
504-22-023F



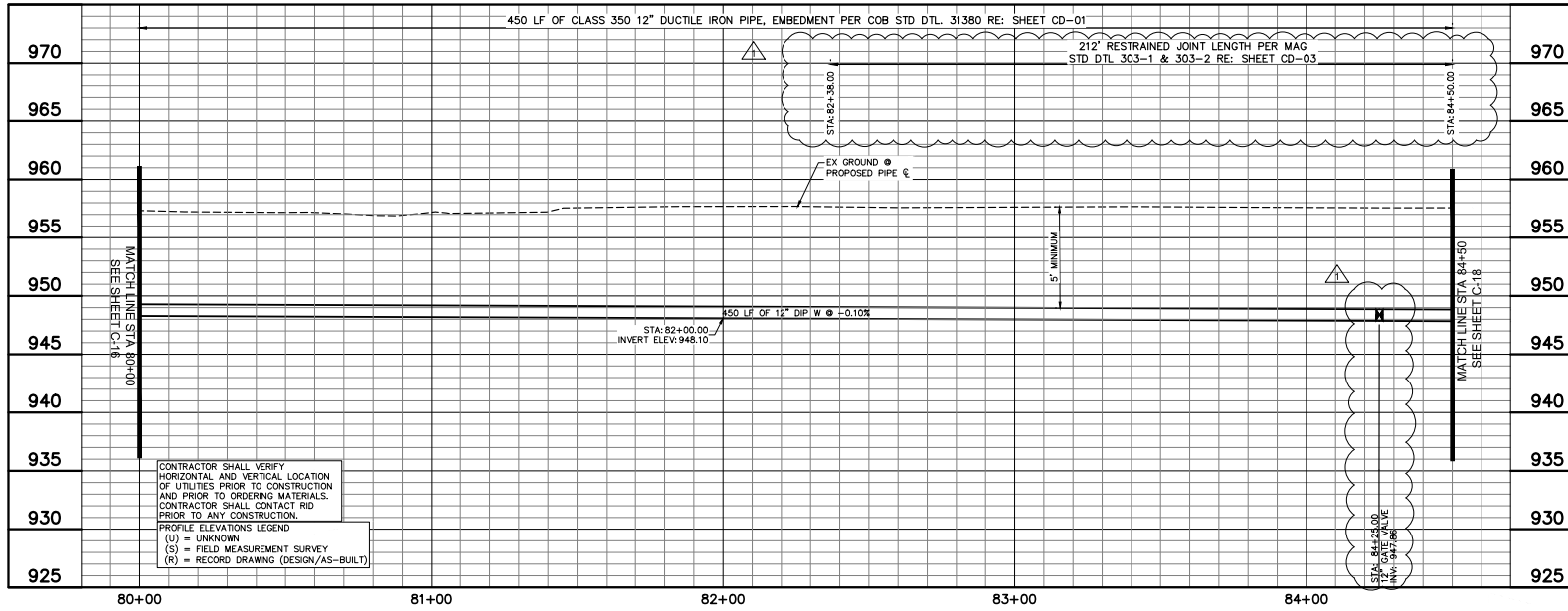
CONSTRUCTION NOTES			
1	INSTALL PC350 12" DIP WATERLINE, W/ POLY WRAP TRENCH PER COB DTL	450	LF
2	INSTALL 12" GATE VALVE PER MAG STD DTL 391-2. INSTALL VALVE BOX & COVER MAG STD DTL 391-2. PROVIDE BLUE CARBONITE MARKER WITHIN 2' (NOT IN PAVEMENT), VALVE BLOCKING PER MAG STD DTL 391.	1	EA



ITS CONSTRUCTION NOTES			
1	INSTALL 15/14 MM HDPE 7-WAY MICRO-DUCT	450	LF

GNR LAND HOLDINGS LLC, ET AL  
504-42-003E  
MCR: 019-43

**BROADWAY RD**



CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF UTILITIES PRIOR TO CONSTRUCTION AND PRIOR TO ORDERING MATERIALS. CONTRACTOR SHALL CONTACT RID PRIOR TO ANY CONSTRUCTION.

PROFILE ELEVATIONS LEGEND  
(U) = UNKNOWN  
(S) = FIELD MEASUREMENT SURVEY  
(R) = RECORD DRAWING (DESIGN/AS-BUILT)

REFERENCE NOTES	
1	POTHOLE NOT COMPLETED DURING DESIGN. CONTRACTOR SHALL POTHOLE AND COMPLETE INFORMATION IN TABLE BELOW AS PART OF AS-BUILT. NOTIFY ENGINEER OF ANY DISCREPANCIES. NON-PAY ITEM.
2	CONTRACTOR TO VERIFY LOCATION OF ITS PULL BOXES WITH CITY AND ENGINEER PRIOR TO CONSTRUCTION.

REVISIONS:  
 1. ADDENDUM NO. 1

PLAN NAME  
**REACH WATER LINE CONNECTION PLAN AND PROFILE STA 80+00 - 84+50**

ENGINEER INFORMATION  
**Kimley-Horn**  
 7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021 602-944-5500  
 COB PERMITTING APPROVED SEAL      COB ENGINEERING APPROVED SEAL

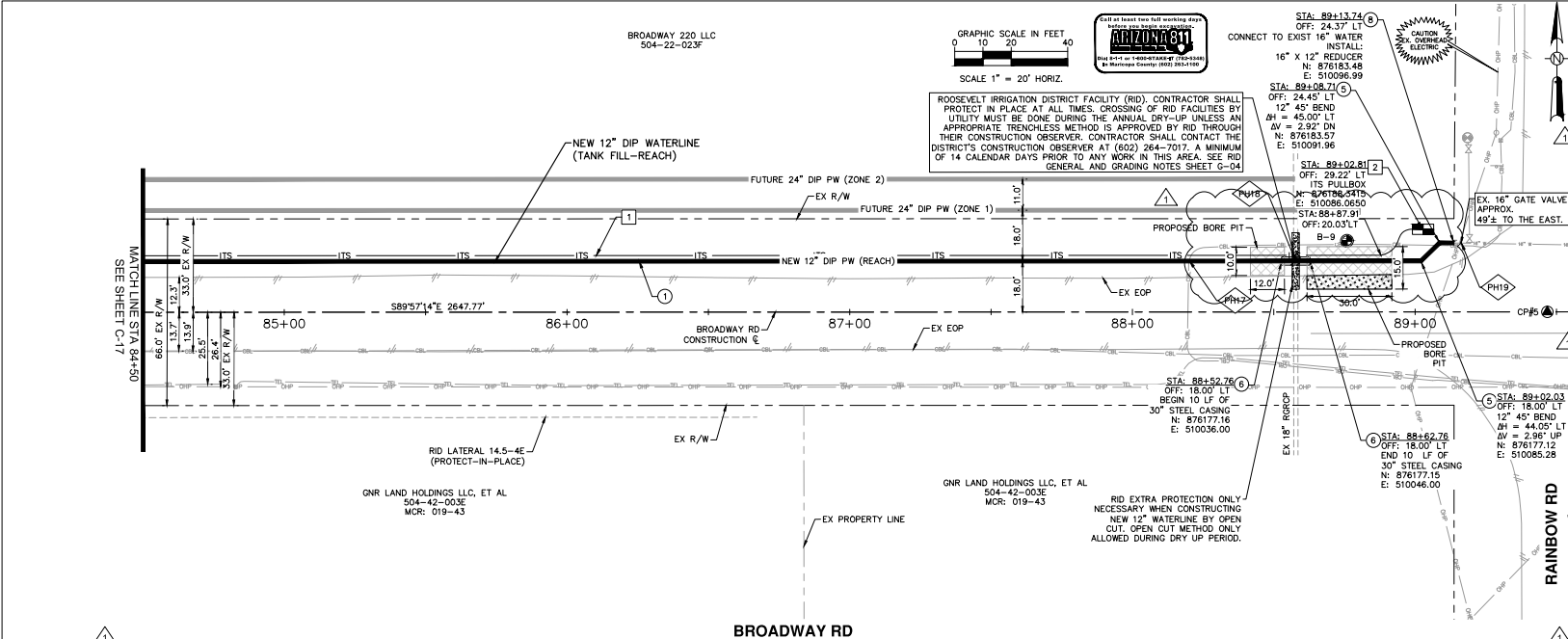
AS-BUILT SEAL      DESIGN SEAL

ORIGINAL PLAN DATE: 8/26/2022  
 PROJECT NUMBER: 191342029  
 LATEST REVISION DATE: 24 OF 44  
 SHEET NUMBER / SHEET: C-17

SUBMITTAL 100% SUBMITTAL

COB PLAN TRACKING #  
COB PERMIT # ENCCIP-22-003

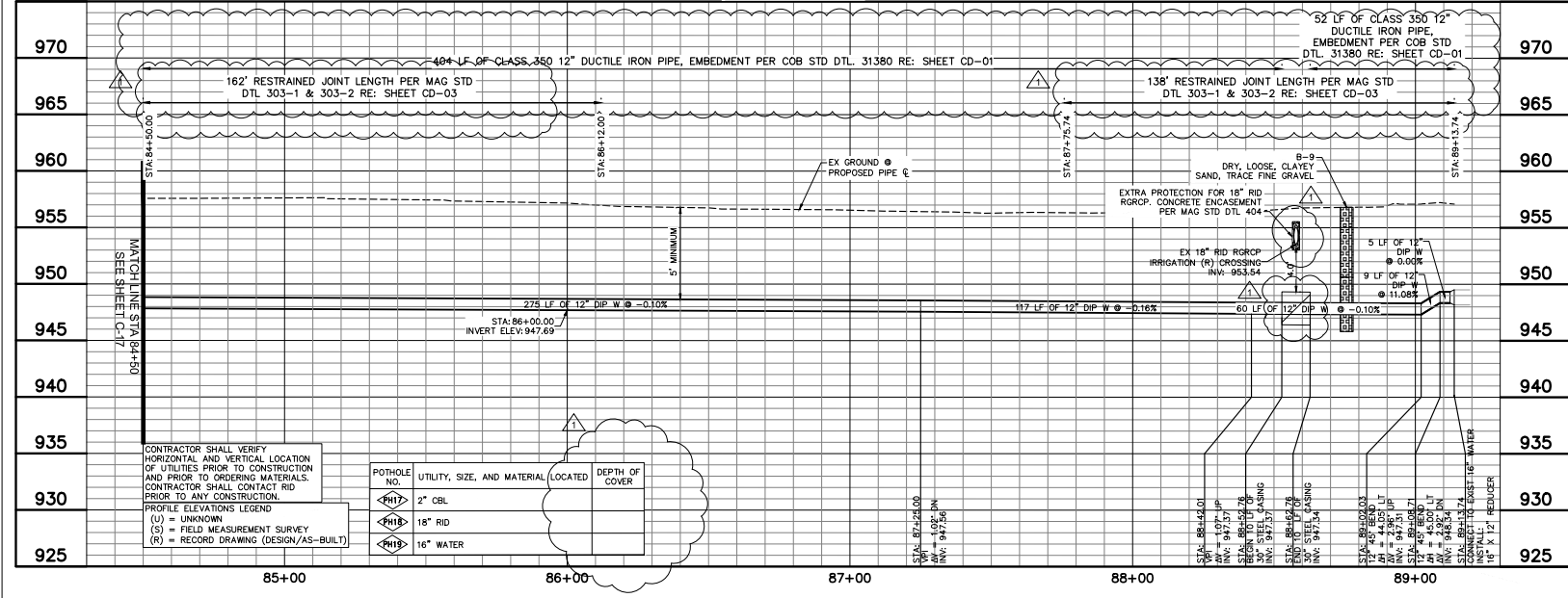




CONSTRUCTION NOTES		
①	INSTALL PC350 12" DIP WATERLINE, W/ POLY WRAP TRENCH PER COB DTL 31380	456 LF
②	INSTALL 12" 45° BEND	2 EA
③	30" X 0.375" THICK STL CASING AND SPACERS PER COB STD DTL 31284 BY BORE AND PC350 12" DIP WATERLINE	10 LF
④	CONNECTION TO EXISTING WATERLINE	1 EA
⑤	PERMANENT ASPHALT PAVEMENT REPAIR PER MAG STD DTL 200-1 1'-TOP	16 SY

ITS CONSTRUCTION NOTES		
①	INSTALL 15/14 MM HDPE 7-WAY MICRO-DUCT	453 LF
②	INSTALL ITS PULL BOX PER COB STANDARD DTL 9124	1 EA

REFERENCE NOTES		
①	POTHOLE NOT COMPLETED DURING DESIGN. CONTRACTOR SHALL POTHOLE AND COMPLETE INFORMATION IN TABLE BELOW AS PART OF AS-BUILT. NOTIFY ENGINEER OF ANY DISCREPANCIES. NON-PAY ITEM.	
②	CONTRACTOR TO VERIFY LOCATION OF ITS PULL BOXES WITH CITY AND ENGINEER PRIOR TO CONSTRUCTION.	



REVISIONS:

- △ ADDENDUM NO. 1

PLAN NAME

**REACH WATER LINE CONNECTION PLAN AND PROFILE STA 84+50 - END**

ENGINEER INFORMATION

**Kimley-Horn**  
 7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021 | 602-944-5500  
 COB PERMITTING APPROVED SEAL      COB ENGINEERING APPROVED SEAL

AS-BUILT SEAL      DESIGN SEAL

PROFESSIONAL ENGINEER  
 72388  
 TERRY W.  
 RAY  
 P.E.

ORIGINAL PLAN DATE: 8/26/2022  
 LATEST REVISION DATE: 8/26/2022

PROJECT NUMBER: 191342029  
 SHEET NUMBER/SHEET: 25 OF 44 C-18

100% SUBMITTAL

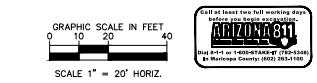
MATCH LINE STA 84+50  
SEE SHEET C-17

MATCH LINE STA 84+50  
SEE SHEET C-17

CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF UTILITIES PRIOR TO CONSTRUCTION AND PRIOR TO ORDERING MATERIALS. CONTRACTOR SHALL CONTACT RID PRIOR TO ANY CONSTRUCTION.

PROFILE ELEVATIONS LEGEND  
 (U) = UNKNOWN  
 (S) = FIELD MEASUREMENT SURVEY  
 (R) = RECORD DRAWING (DESIGN/AS-BUILT)

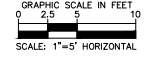
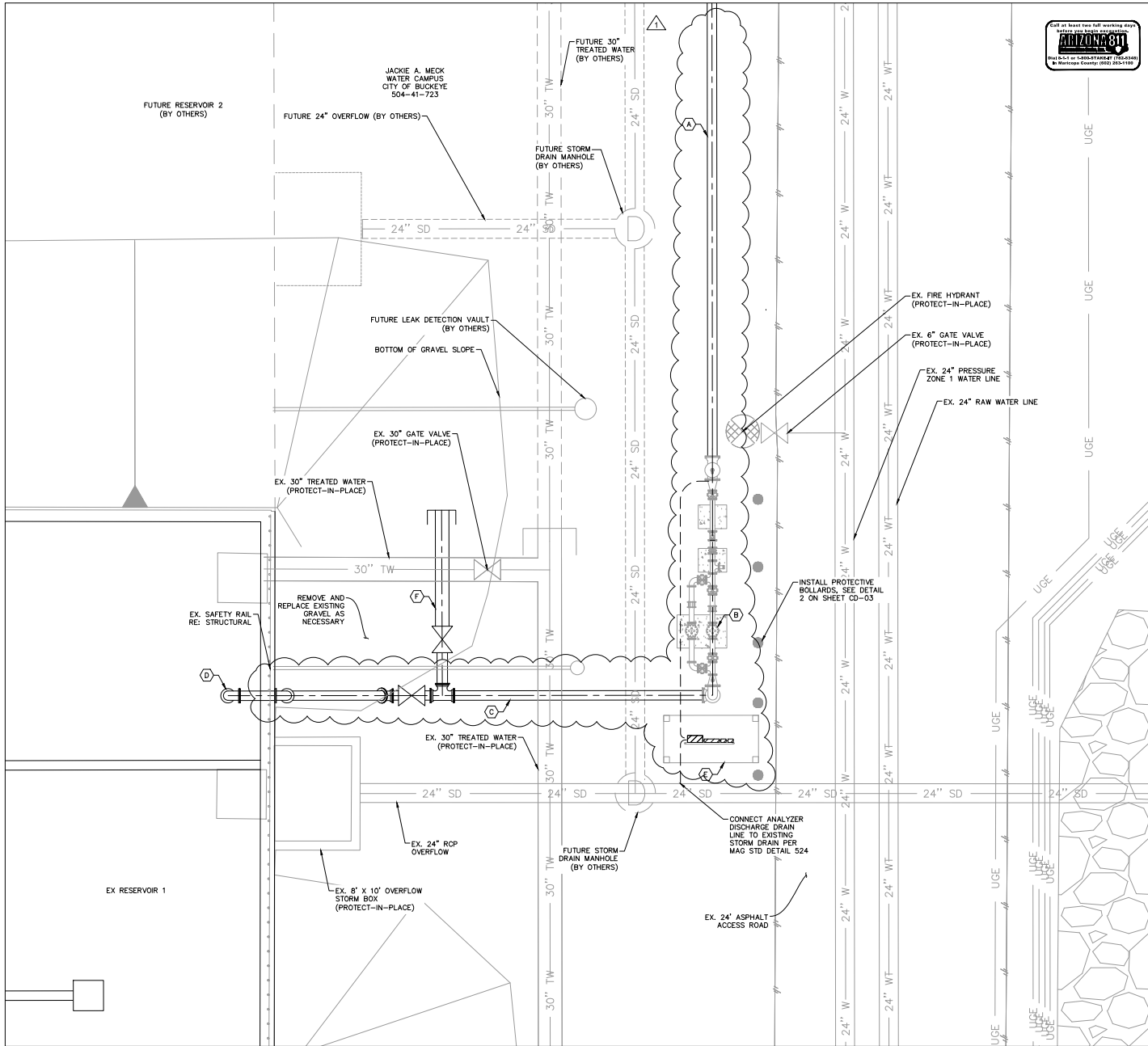
POTHOLE NO.	UTILITY, SIZE, AND MATERIAL LOCATED	DEPTH OF COVER
PH17	2" CBL	
PH18	18" RID	
PH19	16" WATER	



ROOSEVELT IRRIGATION DISTRICT FACILITY (RID). CONTRACTOR SHALL PROTECT IN PLACE AT ALL TIMES. CROSSING OF RID FACILITIES BY UTILITY MUST BE DONE DURING THE ANNUAL DRY-UP UNLESS AN APPROPRIATE TRENCHLESS METHOD IS APPROVED BY RID THROUGH THEIR CONSTRUCTION OBSERVER. CONTRACTOR SHALL CONTACT THE DISTRICT'S CONSTRUCTION OBSERVER AT (602) 264-7017. A MINIMUM OF 14 CALENDAR DAYS PRIOR TO ANY WORK IN THIS AREA SEE RID GENERAL AND GRADING NOTES SHEET G-04

RID EXTRA PROTECTION ONLY NECESSARY WHEN CONSTRUCTING NEW 12" WATERLINE BY OPEN CUT. OPEN CUT METHOD ONLY ALLOWED DURING DRY UP PERIOD.





**CONSTRUCTION NOTES**

1. ALL DIMENSIONS SHALL BE FIELD VERIFIED AND CONFIRMED BY CONTRACTOR, PRIOR TO CONSTRUCTION.
2. PAINT ALL ABOVE GRADE PIPING AND EQUIPMENT PER SPECIFICATION 09 09600.01 "HIGH PERFORMANCE COATINGS".
3. ALL PIPING TO BE CLASS 350 DUCTILE IRON PIPE
4. CONTRACTOR TO COORDINATE EXACT LOCATION OF THE EQUIPMENT RACK WITH OWNER AND ENGINEER.

**REFERENCE NOTES**

- (A) 12" YARD PIPING SEE SHEET C-20
- (B) CONTROL VALVE ASSEMBLY SEE SHEET C-22
- (C) 12" WATER LINE TO EXISTING 4 MG RESERVOIR SEE SHEET C-21
- (D) 12" CONNECTION TO EXISTING 4 MG RESERVOIR SEE 1/C-21 AND SHEET ST-01
- (E) CHLORINE ANALYZER AND ELECTRICAL EQUIPMENT RACK W/SHADE CANOPY. SEE SHEET E-2
- (F) 12" WATERLINE STUB TO FUTURE RESERVOIRS. SEE SHEET C-21

REVISIONS:

ADDENDUM NO. 1

PLAN NAME

SITE PLAN

ENGINEER INFORMATION



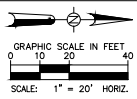
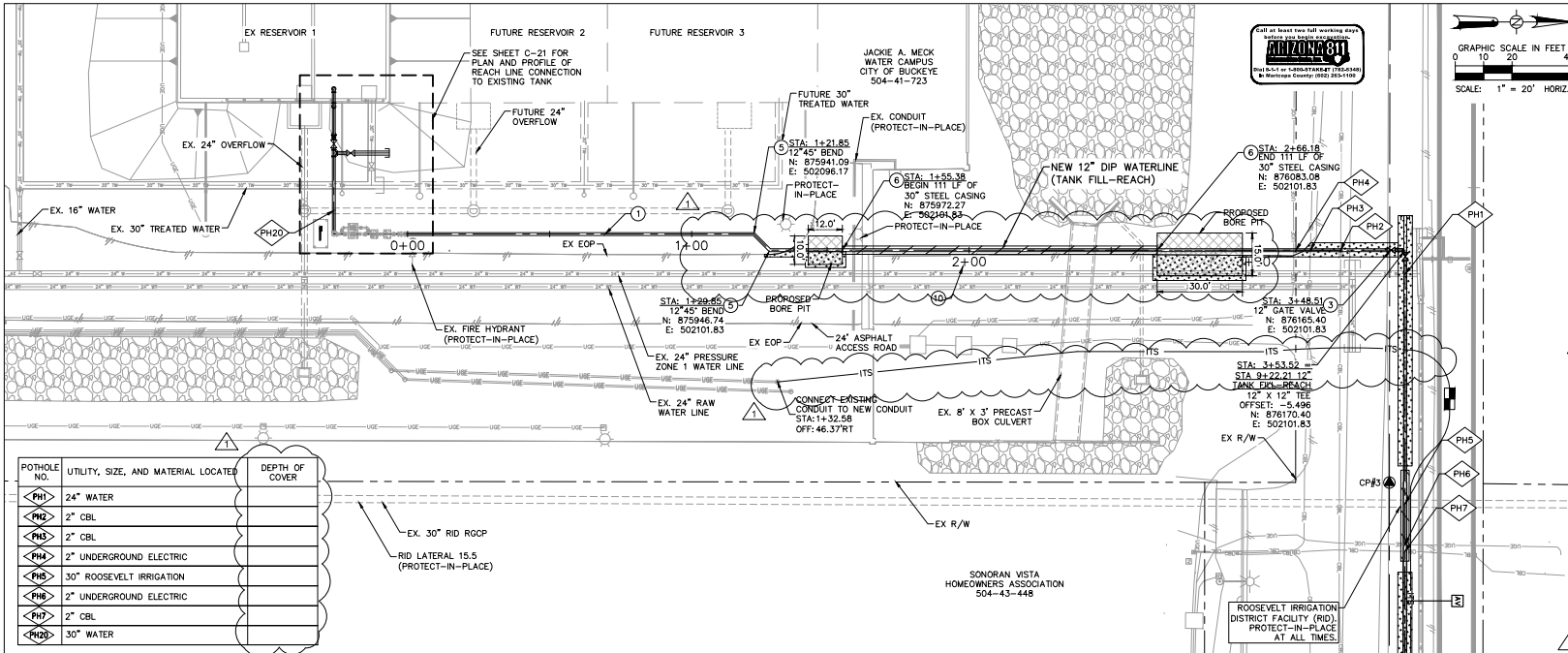
7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021 | 602-944-6500  
 COB PERMITTING APPROVED SEAL      COB ENGINEERING APPROVED SEAL

AS-BUILT SEAL      DESIGN SEAL



ORIGINAL PLAN DATE: 8/26/2022      LATEST REVISION DATE: 26 OF 44 C-19  
 SHEET NUMBER: 191342029

SUBMITTAL 100% SUBMITTAL



CONSTRUCTION NOTES		
1	INSTALL PC350 12\"/>	243 LF
2	INSTALL 12\"/>	1 EA
3	INSTALL 12\"/>	2 EA
4	30\"/>	111 LF
5	ASPHALT DRIVEWAY REPAIR	65 SY

ITS CONSTRUCTION NOTES		
1	INSTALL 18/14 MM HDPE 7-WAY MICRO-DUCT	106

POTHOLE NO.	UTILITY, SIZE, AND MATERIAL LOCATED	DEPTH OF COVER
PH1	24\"/>	
PH2	2\"/>	
PH3	2\"/>	
PH4	2\"/>	
PH5	30\"/>	
PH6	2\"/>	
PH7	2\"/>	
PH20	30\"/>	

REFERENCE NOTES	
1	POTHOLE NOT COMPLETED DURING DESIGN. CONTRACTOR SHALL POTHOLE AND COMPLETE INFORMATION IN TABLE BELOW AS PART OF AS-BUILT. NOTIFY ENGINEER OF ANY DISCREPANCIES. NON-PAY ITEM.
2	CONTRACTOR TO VERIFY LOCATION OF ITS PULL BOXES WITH CITY AND ENGINEER PRIOR TO CONSTRUCTION.

REVISIONS:

ADDENDUM NO. 1

PLAN NAME

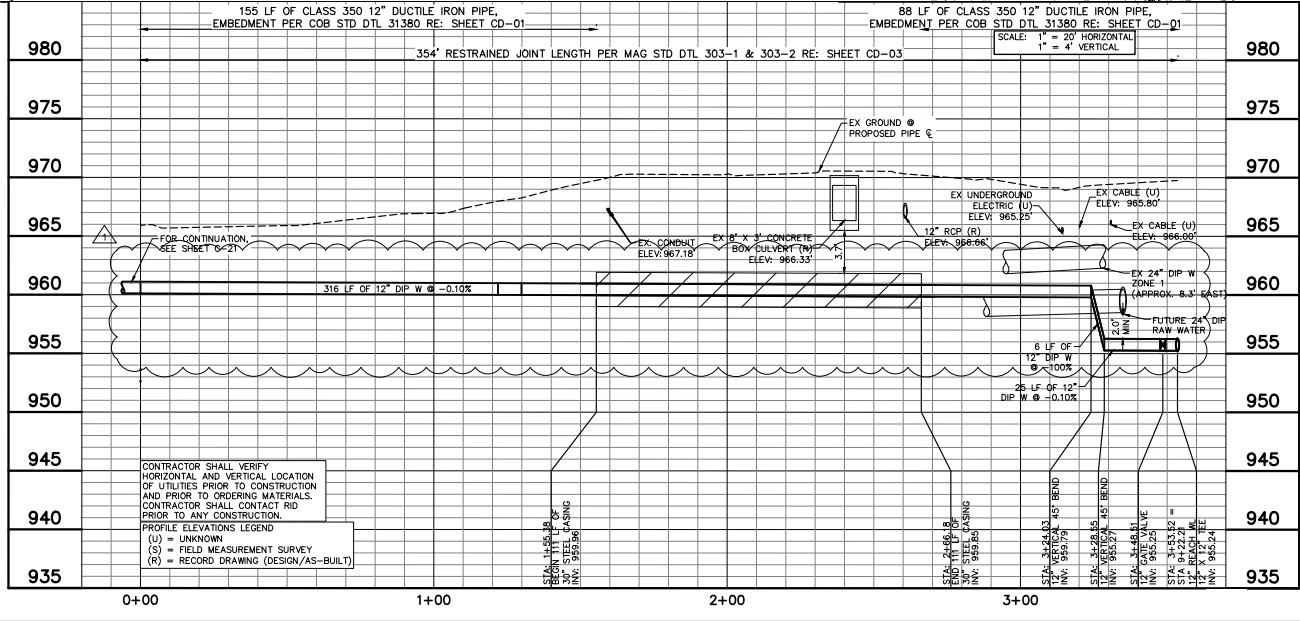
**YARD PIPING PLAN & PROFILE**

ENGINEER INFORMATION  
**Kimley-Horn**  
 7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021 602-944-5500  
 COB PERMITTING APPROVED SEAL      COB ENGINEERING APPROVED SEAL

AS-BUILT SEAL      DESIGN SEAL

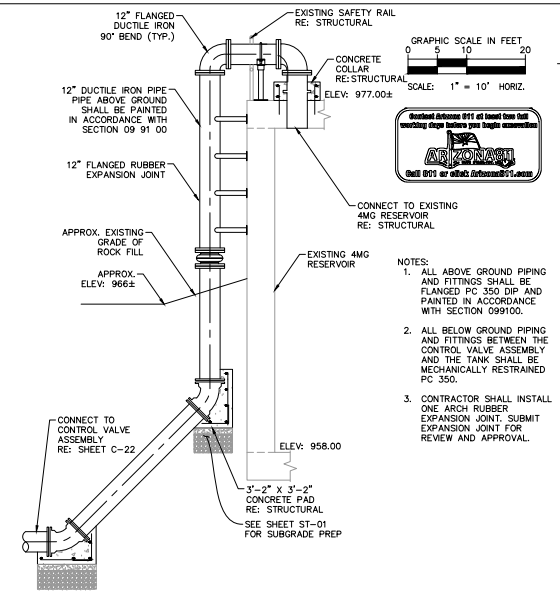
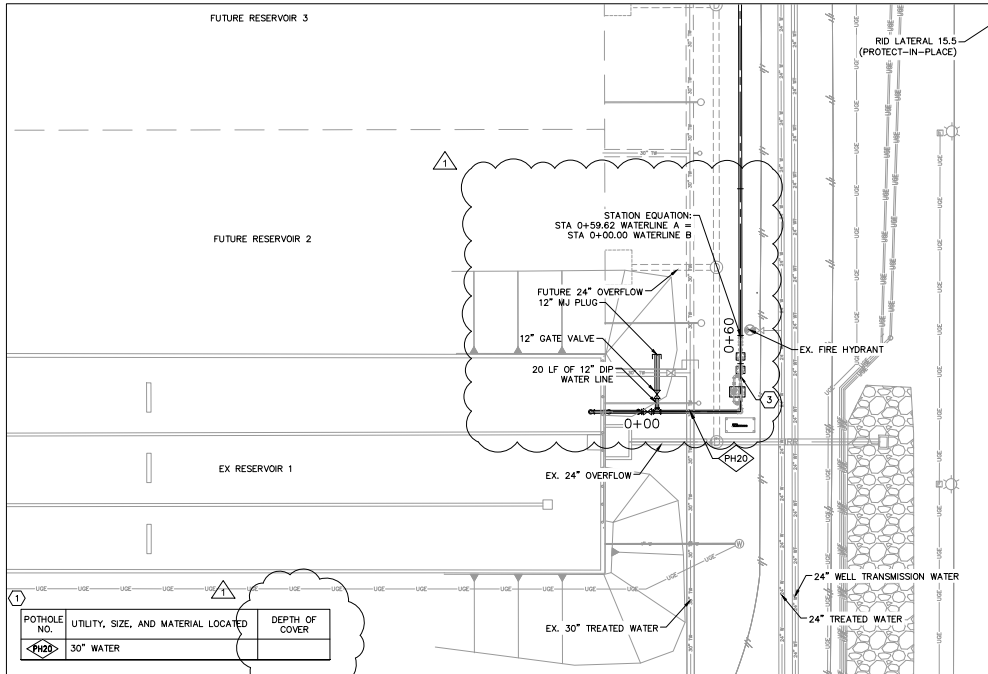
100% SUBMITTAL

ORIGINAL PLAN DATE: 8/26/2022  
 PROJECT NUMBER: 191342029  
 SHEET NUMBER: 27 OF 44  
 SHEET: C-20



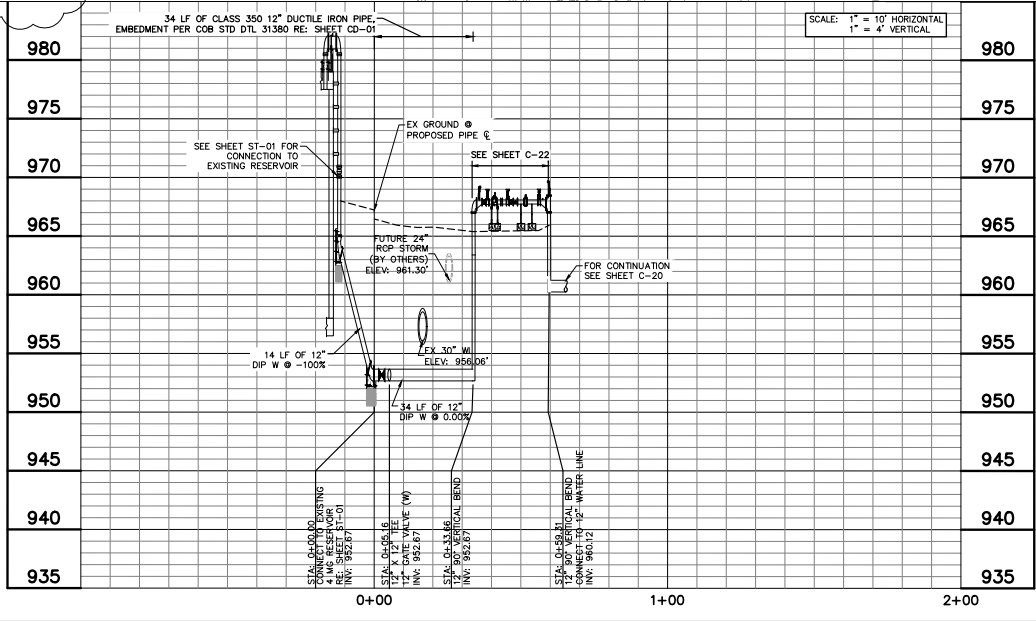
CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF UTILITIES PRIOR TO CONSTRUCTION AND PRIOR TO ORDERING MATERIALS. CONTRACTOR SHALL CONTACT RID PRIOR TO ANY CONSTRUCTION.

PROFILE ELEVATIONS LEGEND  
 (U) = UNKNOWN  
 (S) = FIELD MEASUREMENT SURVEY  
 (R) = RECORD DRAWING (DESIGN/AS-BUILT)



1 TANK CONNECTION DETAIL  
C-21 NTS

POTHOLE NO.	UTILITY, SIZE, AND MATERIAL LOCATED	DEPTH OF COVER
PH20	30" WATER	



CONSTRUCTION NOTES

ITS CONSTRUCTION NOTES

REFERENCE NOTES

- ① POTHOLE NOT COMPLETED DURING DESIGN. CONTRACTOR SHALL POTHOLE AND COMPLETE INFORMATION IN TABLE BELOW AS PART OF AS-BUILT. NOTIFY ENGINEER OF ANY DISCREPANCIES. NON-PAY ITEM.
- ② CONTRACTOR TO VERIFY LOCATION OF ITS PULL BOXES WITH CITY AND ENGINEER PRIOR TO CONSTRUCTION.
- ③ PROPOSED CONTROL VALVE ASSEMBLY SEE SHEET C-22

REVISIONS:  
 △ ADDENDUM NO. 1

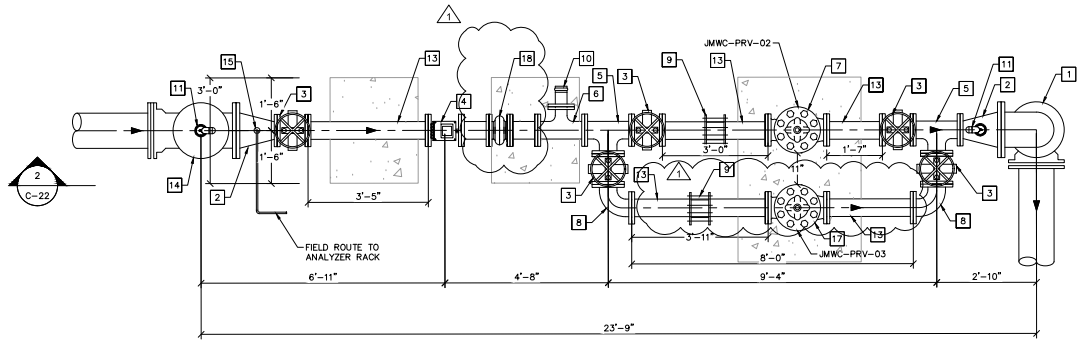
PLAN NAME  
 CONTROL VALVE ASSEMBLY AND TANK CONNECTION PLAN & PROFILE

ENGINEER INFORMATION  
**Kimley-Horn**  
 7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021 602-444-5500  
 COB PERMITTING APPROVED SEAL | COB ENGINEERING APPROVED SEAL

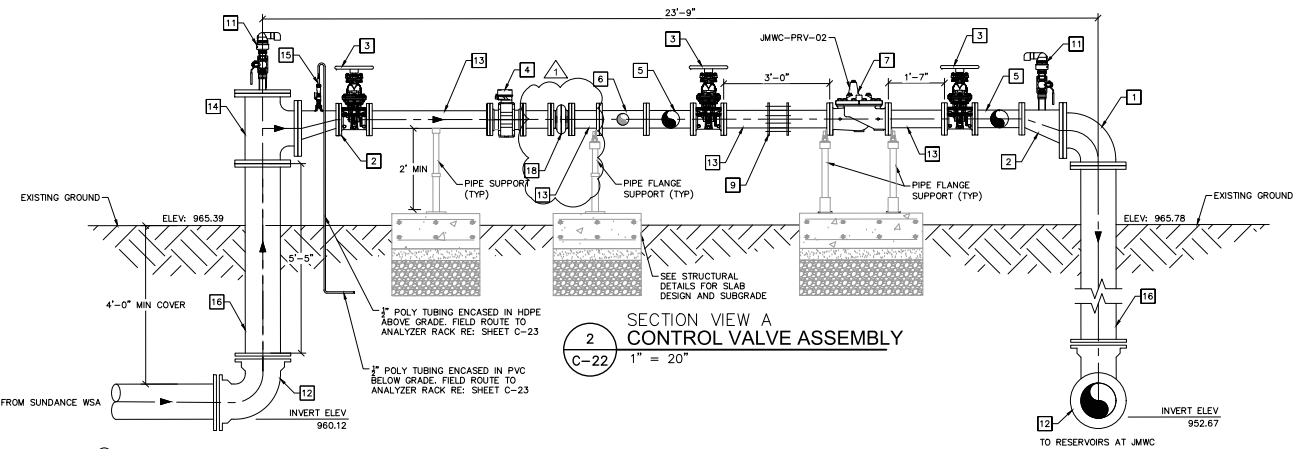
AS-BUILT SEAL | DESIGN SEAL  
 ORIGINAL PLAN DATE: 8/26/2022  
 LATEST REVISION DATE: 8/26/2022  
 PROJECT NUMBER: 191342029  
 SHEET NUMBER / SHEET: 28 OF 44  
 SHEET: C-21



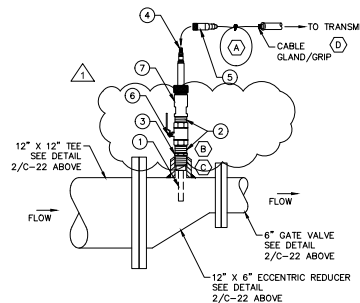
SUBMITTAL 100% SUBMITTAL



1 CONTROL VALVE ASSEMBLY  
1" = 20"



2 SECTION VIEW A CONTROL VALVE ASSEMBLY  
1" = 20"



3 CHLORINE ANALYZER  
NTS

- GENERAL NOTES**
- PROVIDE MECHANICAL SUPPORT AND FITTINGS FOR ROUTED CONDUIT.
  - VENDOR FURNISHED CABLING SHALL BE RATED WATERTIGHT AND FOR CONTINUOUS UV EXPOSURE WITHOUT DEGRADATION.
  - REFER TO DIVISION 26 SPECIFICATIONS FOR FLEX AND RIGID CONDUIT MATERIAL AND USAGE LIMITATIONS.
  - USE PVC COATED SS TIE-WRAPS TO NEATLY COIL AND SECURE ANY EXCESS SENSOR CABLING AS SHOWN.
  - WRAP THE SENSOR THREADS WITH PIPE TAPE BEFORE INSERTING INTO MOUNTING.
  - RETRACTION ASSEMBLY COMPONENTS SIZED TO ACCOMMODATE SENSOR DIAMETER.
  - MAXIMUM RETRACTION PRESSURE TYPICALLY LIMITED TO APPROXIMATELY 64 PSI/ 440 Kpa (OR PER MANUFACTURER DEFINED LIMIT). FOR APPLICATIONS REQUIRING GREATER RETRACTION PRESSURE (BUT LESS THAN 200 PSI OR 2000 Kpa), A SUPPORT DRIVE SCREW AS OFFERED BY THE MANUFACTURER) SHALL BE REQUIRED.

- CHLORINE ANALYZER KEYNOTES**
- MAINTENANCE LOOP SHALL INCLUDE 3 FT (1 M) LENGTH OF CABLE SECURED WITH PVC-COATED SS TIE WRAPS, BEND RADIUS NO LESS THAN 8" (200 mm).
  - ENSURE MIN OF 1/4" CLEARANCE BETWEEN SENSOR AND PIPE WALL.
  - THE ELECTRODES MUST BE COMPLETELY SUBMERGED IN THE PROCESS LIQUID TO ENSURE PROPER MEASUREMENT.
  - MAX CABLE LENGTH: 50 FT (15 M) OR PER MANUFACTURER SPECIFICATION.

**BILL OF MATERIALS**

ITEM	QTY	DESCRIPTION	SUPPLY	MATERIAL/RATING (WATER)	MATERIAL/RATING (CHEMICAL)
1	1	SENSOR AND SENSOR INSERTION TUBE	MANF	PER DATASHEET / SPEC	PER DATASHEET / SPEC
2	1	CLOSE NIPPLE	MANF	316 SS	316 SS / TITANIUM
3	1	ADAPTER FITTING	MANF	316 SS	316 SS / TITANIUM
4	1	VARIPOLE PLUG (MALE) CONNECTOR	MANF	PER MANF	PER MANF
5	1	FACTORY PREPARED SHIELDED SENSOR CABLE WITH VARIPOLE CONNECTOR (LENGTH AS REQ.)	MANF	PVC JACKET	PVC JACKET
6	1	NPT FULL PORT BALL VALVE	MANF	316 SS	316 SS / TITANIUM
7	1	RETRACTION CHAMBER	MANF	316 SS	316 SS / TITANIUM

**GENERAL NOTES**

- ELECTRONIC FLOW CONTROL VALVE (JMW-PRV-02) SHALL BE A 6" CLA-VAL 131-BW BOPSPY D/S GL150FL CONTROL VALVE. SHALL BE EPOXY COATED, DUCTILE IRON BODY WITH STAINLESS STEEL MAIN BODY ANTI-CAVITATION TRIM IN ACCORDANCE WITH SECTION 40 OR 67.
- PRESSURE SUSTAINING CONTROL VALVE (JMW-PRV-03) SHALL BE A 6" CLA-VAL BPOK D/S GL150FL CONTROL VALVE. SHALL BE EPOXY COATED, DUCTILE IRON BODY WITH STAINLESS STEEL MAIN BODY ANTI-CAVITATION TRIM IN ACCORDANCE WITH SECTION 40 OR 67.
- ALL PIPING TO BE RATED FOR A MINIMUM 350 PSI WORKING PRESSURE.
- ALL OUTDOOR NUTS, BOLTS, AND WASHERS SHALL BE 304 STAINLESS STEEL. USE ANTI-SEIZE COMPOUND.
- GATE VALVES SHALL BE DUCTILE IRON BODY.
- PAINT ALL ABOVE GRADE PIPING AND EQUIPMENT PER SPECIFICATION 09 91 00.
- THE DIMENSIONS OF VALVES, PIPING, AND EQUIPMENT ARE BASED ON SUPPLIER INFORMATION AND GENERAL DESIGN STANDARDS. CONTRACTOR SHALL VERIFY ALL LAY LENGTHS PRIOR TO THE SUBMITTAL OF LAY DRAWINGS AND INCORPORATE INTO THE LAY DRAWINGS AND ADJUSTMENTS REQUIRED TO ACCOMMODATE ANY EQUIPMENT OR PIPING DIMENSIONS WHICH DIFFER FROM THOSE SHOWN. ANY QUESTIONS REGARDING DIMENSION ADJUSTMENTS SHALL BE DIRECTED TO THE ENGINEER.
- VERIFY DIMENSIONS WITH VALVE MANUFACTURER PRIOR TO CONSTRUCTION.
- SEE SHEETS E-1-1-2 FOR CONTROL VALVE ELECTRICAL SERVICE, SCADA GENERAL NOTES, SITE PLAN AND DETAILS.

**SHEET KEYNOTES**

KEYNOTE	DESCRIPTION	QTY
1	12" - 90° BEND (FL X FL)	2
2	12"x6" ECCENTRIC REDUCER (FL X FL)	2
3	6" GATE VALVE, NRS WITH HANDWHEEL (FL X FL)	5
4	ENDRESS HAUSER 6" ELECTROMAGNETIC FLOWMETER, PROMAG P500 ETHERNET/IP MODEL	1
5	6"x6" TEE (FL X FL)	2
6	6"x4" TEE (FL X FL)	1
7	6" FLOW CONTROL VALVE, SEE NOTES 1 AND 3	1
8	6" - 90° BEND (FL X FL)	2
9	6" RESTRAINED DISMANTLING JOINT, SMITH-BLAIR 975 OR APPROVED EQUAL	2
10	4" MALE CAM-LOCK CONNECTION WITH LOCKING PLUG	1
11	2" ARI D-040-C AIR RELEASE VALVE	2
12	12" - 90° BEND, RESTRAINED (MJ X MJ)	2
13	6" SPOOL PIECE	NA
14	12"x12" TEE WITH BLIND FLANGE (FL X FL)	1
15	TAP LOCATION FOR PROMINENT DACB FREE CHLORINE ANALYZER AND CONTROLLER	1
16	12" SPOOL PIECE	NA
17	6" PRESSURE SUSTAINING VALVE, SEE NOTES 2 AND 3	1
18	6" OPEN ARCH RUBBER EXPANSION JOINT W/ RESTRAINT HARNESS KIT	1

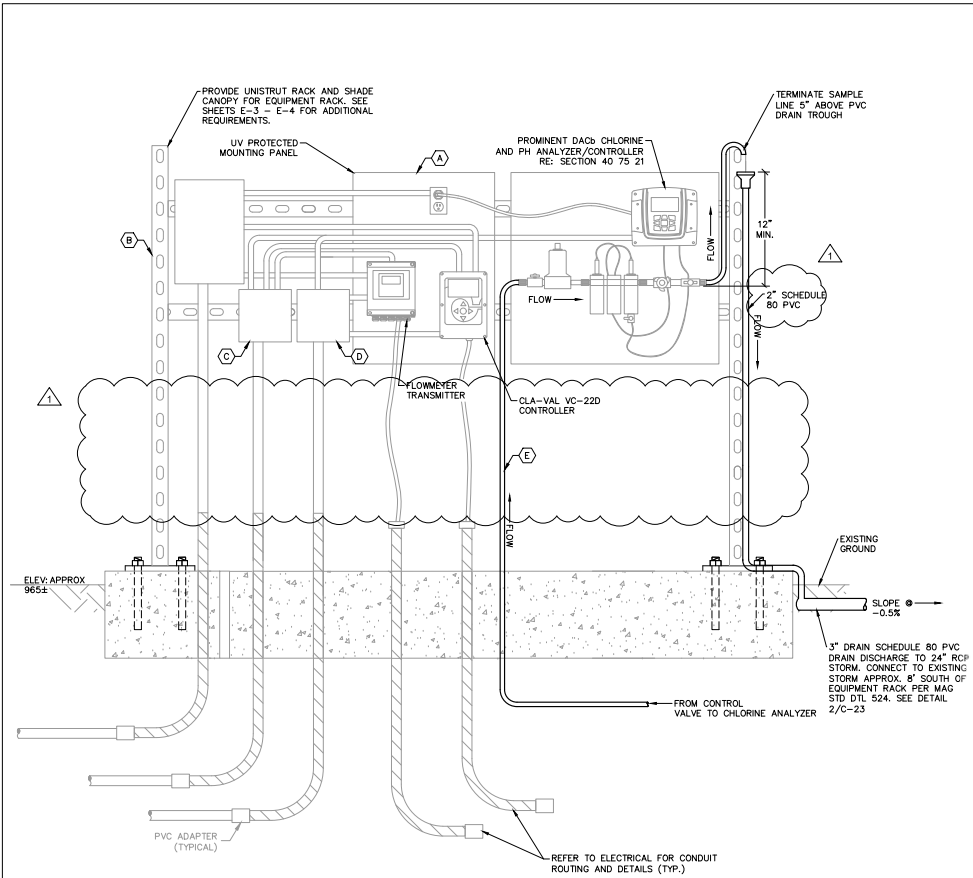
**CONTROL VALVE MECHANICAL PLAN & SECTION**

ENGINEER INFORMATION  
**Kimley-Horn**  
 7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021 | 602-944-6500  
 COB PERMITTING APPROVED SEAL  
 COB ENGINEERING APPROVED SEAL

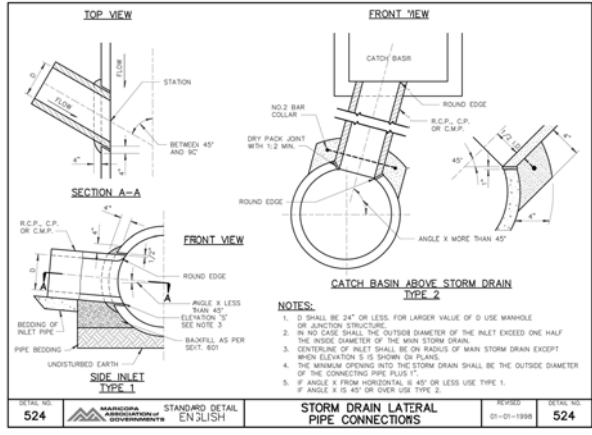
AS-BUILT SEAL  
 DESIGN SEAL

ORIGINAL PLAN DATE: 8/26/2022  
 PROJECT NUMBER: 191342029  
 SHEET NUMBER: 29 OF 44  
 SHEET: C-22

100% SUBMITTAL



**1**  
C-23 NTS  
**CHLORINE ANALYZER AND CONTROL VALVE EQUIPMENT RACK**



**2**  
C-23 NTS  
**STORM DRAIN LATERAL PIPE CONNECTIONS DETAIL**

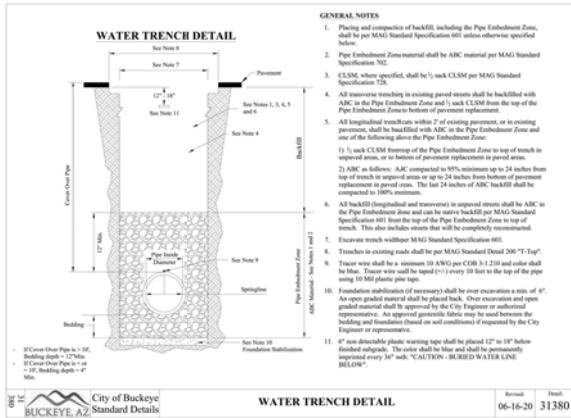
**GENERAL NOTES**

1. MOUNT 2" SCH 80 PVC DRAIN TROUGH TO UNISTRUT CHANNELS. CONTRACTOR SHALL FURNISH FITTINGS AND STRAPS TO SECURE DRAIN TROUGH AND CONNECT TO 3" PVC DRAIN.
2. REFERENCE ELECTRICAL PLANS, DETAILS, AND SPECIFICATIONS FOR ADDITIONAL EQUIPMENT REQUIREMENTS.

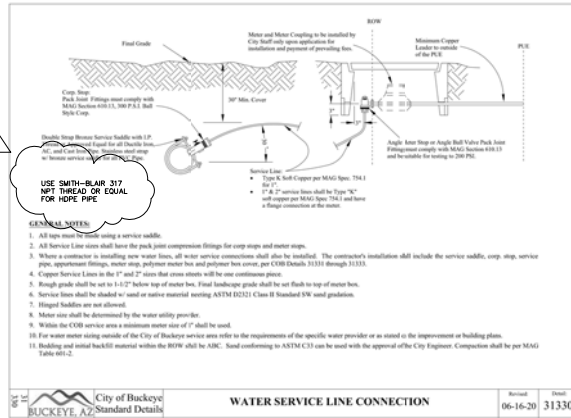
**REFERENCE NOTES**

- (A) REFERENCE ELECTRICAL SITE PLAN FOR EQUIPMENT RACK LOCATION. SEE SHEET E-2
- (B) ELECTRICAL EQUIPMENT RACK SEE SHEET E-3
- (C) NEMA 3R JUNCTION BOX FOR ANALOG COMMUNICATION CABLING. SEE SHEET E-3
- (D) NEMA 3R JUNCTION BOX FOR DIGITAL COMMUNICATION CABLING. SEE SHEET E-3
- (E) 3" PIPE FROM CONTROL VALVE ASSEMBLY FIELD ROUTED TO CHLORINE ANALYZER. SEE SHEET C-19

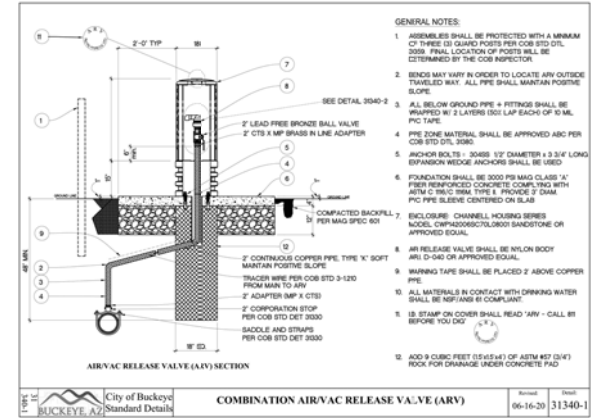
REVISIONS:		
△	ADDENDUM 1	
PLAN NAME		
<b>CHLORINE ANALYZER AND CONTROL VALVE EQUIPMENT RACK</b>		
ENGINEER INFORMATION		
<b>Kimley-Horn</b>		
7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021   602-944-6500		
COB PERMITTING APPROVED SEAL	COB ENGINEERING APPROVED SEAL	<b>100% SUBMITTAL</b>
AS-BUILT SEAL	DESIGN SEAL	
ORIGINAL PLAN DATE	LATEST REVISION DATE	
8/23/2022	8/23/2022	
PROJECT NUMBER	SHEET NUMBER	SHEET
191342029	30 OF 44	C-23
COB PLAN TRACKING #		
COB PERMIT #		
ENCCIP-22-003		



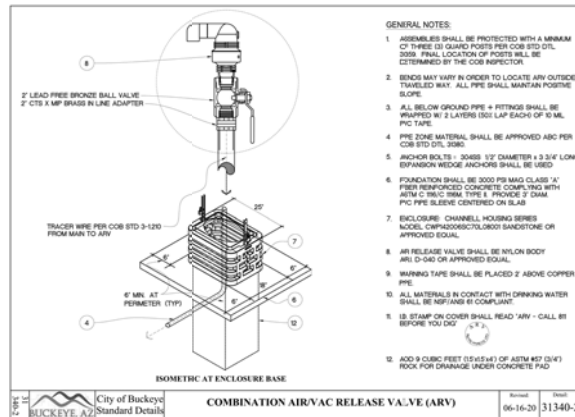
1  
CD-01  
WATER TRENCH  
DETAIL  
NTS



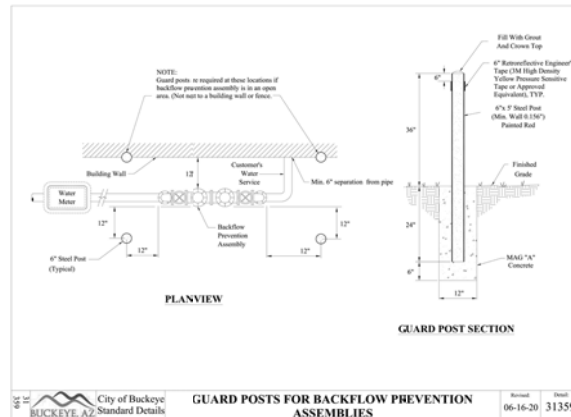
2  
CD-01  
WATER SERVICE LINE CONNECTION  
DETAIL  
NTS



3  
CD-01  
COMBINATION AIR RELEASE VALVE  
DETAIL  
NTS

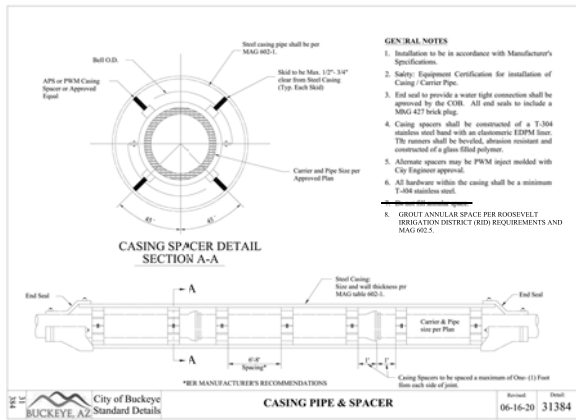


4  
CD-01  
COMBINATION AIR/VAC RELEASE VALVE  
DETAIL  
NTS

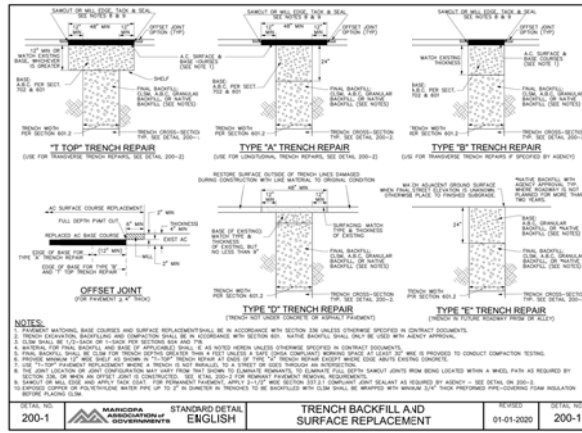


5  
CD-01  
GUARD POSTS FOR BACKFLOW PREVENTION ASSEMBLIES  
DETAIL  
NTS

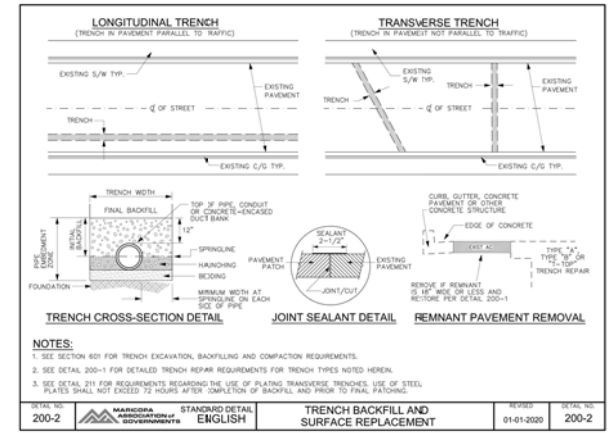
REVISIONS:	
ADDENDUM NO. 1	
PLAN NAME	
CONSTRUCTION DETAILS	
ENGINEER/INFORMANT	<b>Kimley-Horn</b>
7740 N 16TH ST. SUITE 300, PHOENIX, AZ 85021   602-244-5500	
COB PERMITTING APPROVED SEAL	COB ENGINEERING APPROVED SEAL
AS-BUILT SEAL	DESIGN SEAL
ORIGINAL PLAN DATE	LATEST REVISION DATE
8/23/2022	8/23/2022
PROJECT NUMBER	SHEET NUMBER   SHEET
191342029	31 OF 44   CD-01
COB PLAN TRACKING #	SUBMITTAL
	100% SUBMITTAL
COB PERMIT #	ENCIP-22-003



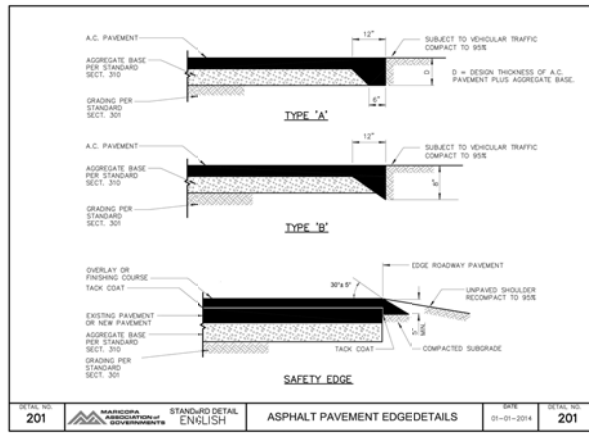
1 CASING PIPE & SPACER  
 CD-02 NTS



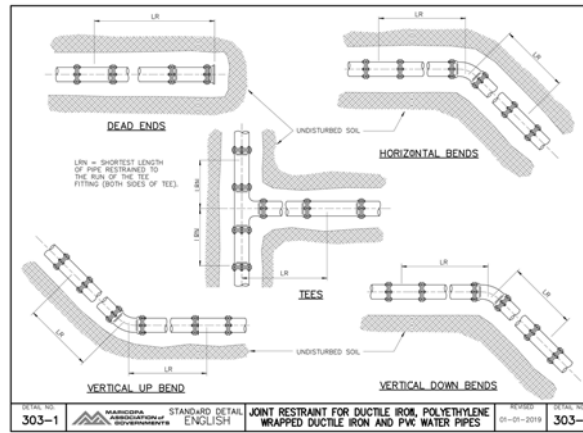
2 TRENCH BACKFILL AND SURFACE REPLACEMENT  
 CD-02 NTS



3 TRENCH BACKFILL AND SURFACE REPLACEMENT  
 CD-02 NTS



4 ASPHALT PAVEMENT EDGE  
 CD-02 NTS



5 JOINT RESTRAINT FOR DI AND PVC WATER PIPES  
 CD-02 NTS

REVISIONS:	
ADDENDUM NO. 1	
PLAN NAME	
CONSTRUCTION DETAILS	
ENGINEER INFORMATION	
7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021   602-944-6500	
COB PERMITTING APPROVED SEAL	COB ENGINEERING APPROVED SEAL
AS-BUILT SEAL	
DESIGN SEAL	
ORIGINAL PLAN DATE	LATEST REVISION DATE
8/26/2022	8/26/2022
PROJECT NUMBER	SHEET NUMBER / SHEET
191342029	32 OF 44 CD-02
COB PLAN TRACKING #	SUBMITTAL
	100% SUBMITTAL
COB PERMIT #	ENCIP-22-003



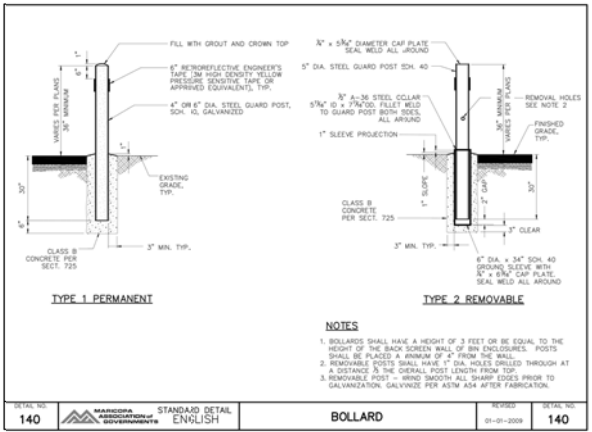
RESTRAINED LENGTHS, LR, FOR DUCTILE IRON PIPE												
NOMINAL PIPE SIZE INCHES	HORIZONTAL BENDS			TEES		VERTICAL OFFSETS						DEAD ENDS
	90°	45°	22-1/2°	LRN+10°	LRN+10°	90° BEND FITTINGS	45° BEND FITTINGS	22-1/2° BEND FITTINGS	DOWN BEND	UP BEND	DOWN BEND	
4	18	7	4	20	8	21	18	13	10	6	2	21
6	25	10	5	27	10	24	20	14	10	6	5	24
8	32	13	6	36	14	32	26	18	13	11	6	32
10	38	16	8	43	17	39	32	22	16	13	8	39
12	45	19	9	50	20	46	37	26	19	15	9	46
14	50	22	10	57	23	52	42	30	21	17	10	52
16	57	24	11	63	25	58	47	33	24	21	11	58
18	63	27	12	70	28	64	52	36	27	23	12	64
20	68	28	14	75	30	69	56	39	28	25	14	69
24	79	33	16	87	35	80	66	45	33	29	16	80

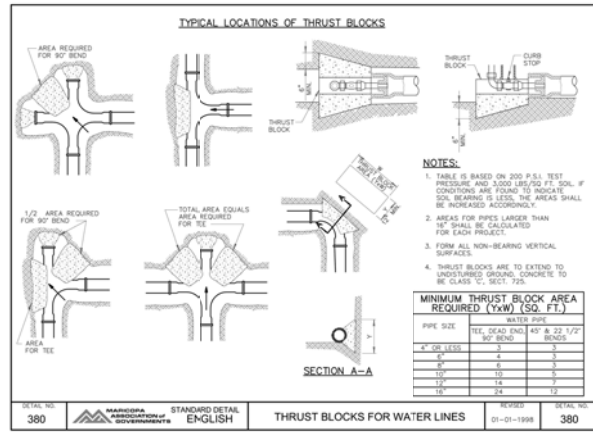
RESTRAINED LENGTHS, LR, FOR DUCTILE IRON WITH POLYETHYLENE WRAP AND PVC PIPE												
NOMINAL PIPE SIZE INCHES	HORIZONTAL BENDS			TEES		VERTICAL OFFSETS						DEAD ENDS
	90°	45°	22-1/2°	LRN+10°	LRN+10°	90° BEND FITTINGS	45° BEND FITTINGS	22-1/2° BEND FITTINGS	DOWN BEND	UP BEND	DOWN BEND	
4	26	11	5	29	11	27	23	16	11	7	5	27
6	36	15	7	39	15	36	30	21	15	10	7	36
8	47	19	9	50	19	47	37	26	19	13	9	47
10	56	23	11	59	23	56	44	31	23	15	11	56
12	65	27	13	68	27	65	51	36	27	17	13	65
14	74	31	15	77	31	74	58	41	30	19	15	74
16	82	34	16	85	34	82	65	46	33	21	16	82
18	90	37	18	93	37	90	72	51	36	23	18	90
20	98	41	20	101	41	98	79	56	39	25	20	98
24	113	47	22	117	47	113	93	65	45	29	22	113

NOTES:  
1. RESTRAINT LENGTHS SHALL BE REDUCED WHEN SUPPORTED BY ENGINEERING CALCULATIONS.  
2. ALL LENGTHS ARE GIVEN IN FEET.  
3. THE MAXIMUM TEST PRESSURE SHALL NOT EXCEED 300 PSI.  
4. THE MINIMUM DEPTH OF BURIAL SHALL BE 3' TO TOP OF PIPE.  
5. RESTRAINED LENGTHS MAY BE REDUCED WHEN SUPPORTED BY ENGINEERING CALCULATIONS.

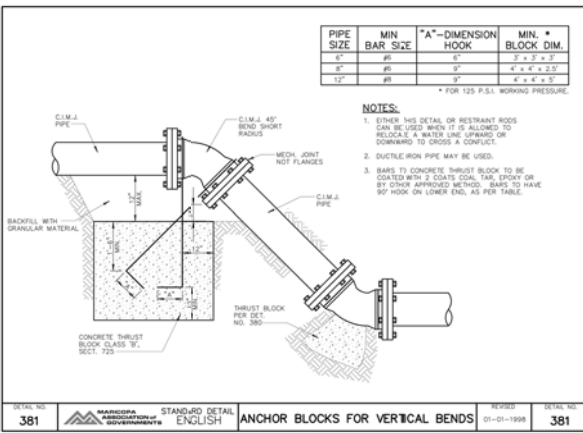
1 **JOINT RESTRAINT FOR DI AND PVC WATER PIPES**  
**DETAIL**  
CD-03 NTS



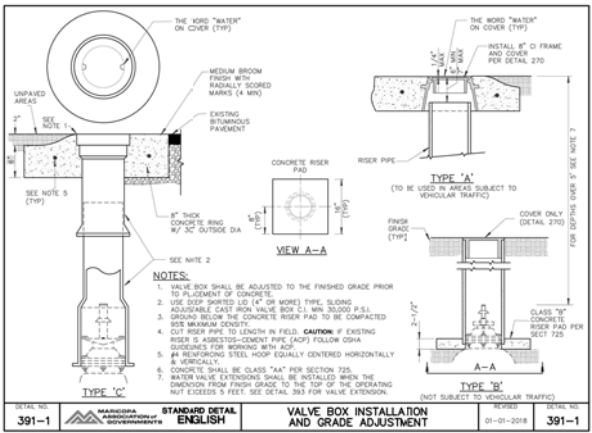
2 **BOLLARD**  
**DETAIL**  
CD-03 NTS



3 **THRUST BLOCKS FOR WATER LINES**  
**DETAIL**  
CD-03 NTS



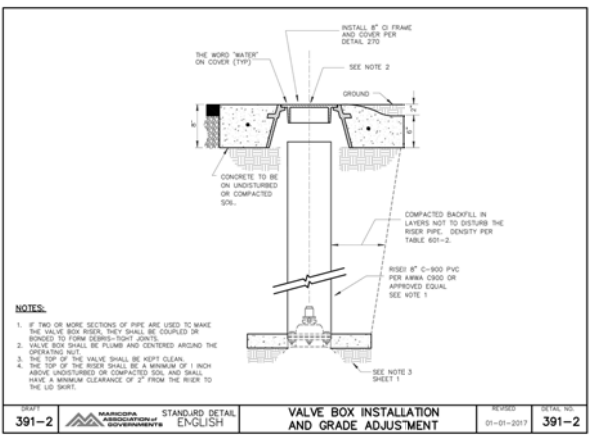
4 **ANCHOR BLOCKS FOR VERTICAL BENDS**  
**DETAIL**  
CD-03 NTS



5 **VALVE INSTALLATION BOX AND GRADE ADJUSTMENT**  
**DETAIL**  
CD-03 NTS

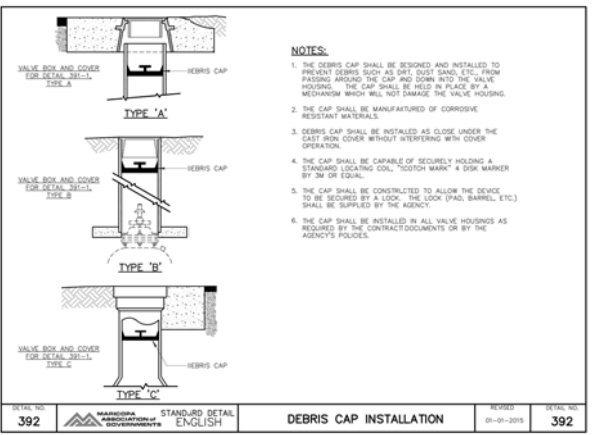
REVISIONS:	
△	ADDENDUM NO. 1
△	
PLAN NAME	
CONSTRUCTION DETAILS	
ENGINEER INFORMATION	
7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021 602-944-6500	
COB PERMITTING APPROVED SEAL	COB ENGINEERING APPROVED SEAL
AS-BUILT SEAL	DESIGN SEAL
ORIGINAL PLAN DATE	LATEST REVISION DATE
8/26/2022	8/26/2022
PROJECT NUMBER	SHEET NUMBER / SHEET
191342029	33 OF 44 CD-03

SUBMITTAL  
100% SUBMITTAL  
COB PERMIT # ENCPC-22-003



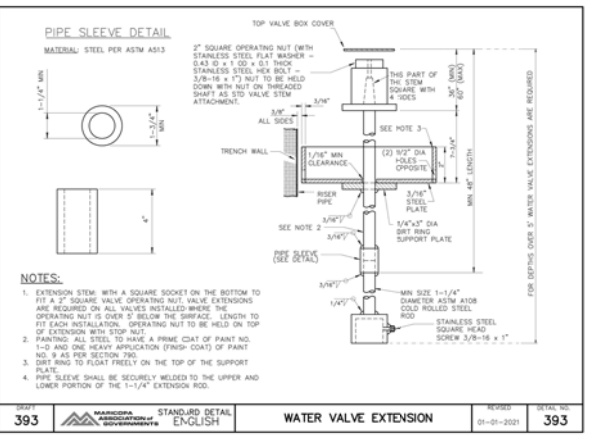
DEPT 391-2	STANDARD DETAIL ENGLISH	VALVE BOX INSTALLATION AND GRADE ADJUSTMENT	REVISION 01-01-2017	DETAIL NO. 391-2
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1 VALVE INSTALLATION BOX AND GRADE ADJUSTMENT  
CD-04 NTS



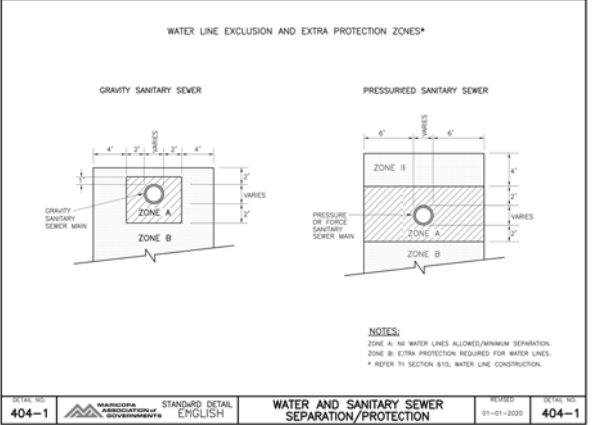
DEPT 392	STANDARD DETAIL ENGLISH	DEBRIS CAP INSTALLATION	REVISION 01-01-2015	DETAIL NO. 392
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2 DEBRIS CAP INSTALLATION  
CD-04 NTS



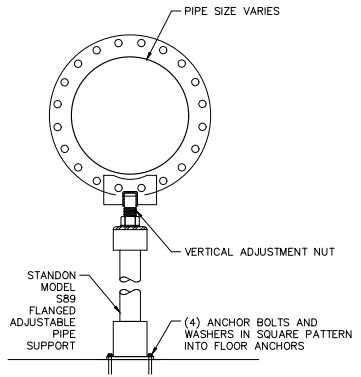
DEPT 393	STANDARD DETAIL ENGLISH	WATER VALVE EXTENSION	REVISION 01-01-2021	DETAIL NO. 393
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3 WATER VALVE EXTENSION  
CD-04 NTS



DEPT 404-1	STANDARD DETAIL ENGLISH	WATER AND SANITARY SEWER SEPARATION/PROTECTION	REVISION 01-01-2020	DETAIL NO. 404-1
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4 WATER AND SANITARY SEWER SEPARATION/PROTECTION  
CD-04 NTS



5 ADJUSTABLE PIPE FLANGE SUPPORT  
CD-04 NTS

REVISIONS:	
ADDENDUM NO. 1	
PLAN NAME	
CONSTRUCTION DETAILS	
ENGINEER INFORMATION	
7740 N 16TH ST, SUITE 300, PHOENIX, AZ 85021   602-244-5500	
COB PERMITTING APPROVED SEAL	COB ENGINEERING APPROVED SEAL
AS-BUILT SEAL	DESIGN SEAL
ORIGINAL PLAN DATE	LATEST REVISION DATE
8/26/2022	8/26/2022
PROJECT NUMBER	SHEET NUMBER / SHEET
191342029	34 OF 44 CD-04
CD# PLAN TRACKING #	SUBMITTAL
CD# PERMIT #	100% SUBMITTAL
ENCCIP-22-003	



REVISIONS:	
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PLAN NAME	
ENGINEER INFORMATION	
	
COB PERMITTING APPROVED SEAL	COB ENGINEERING APPROVED SEAL
AS-BUILT SEAL	DESIGN SEAL
ORIGINAL PLAN DATE	LATEST REVISION DATE
PROJECT NUMBER	SHEET NUMBER
SUBMITTAL	
COB PLAN TRACKING #	
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