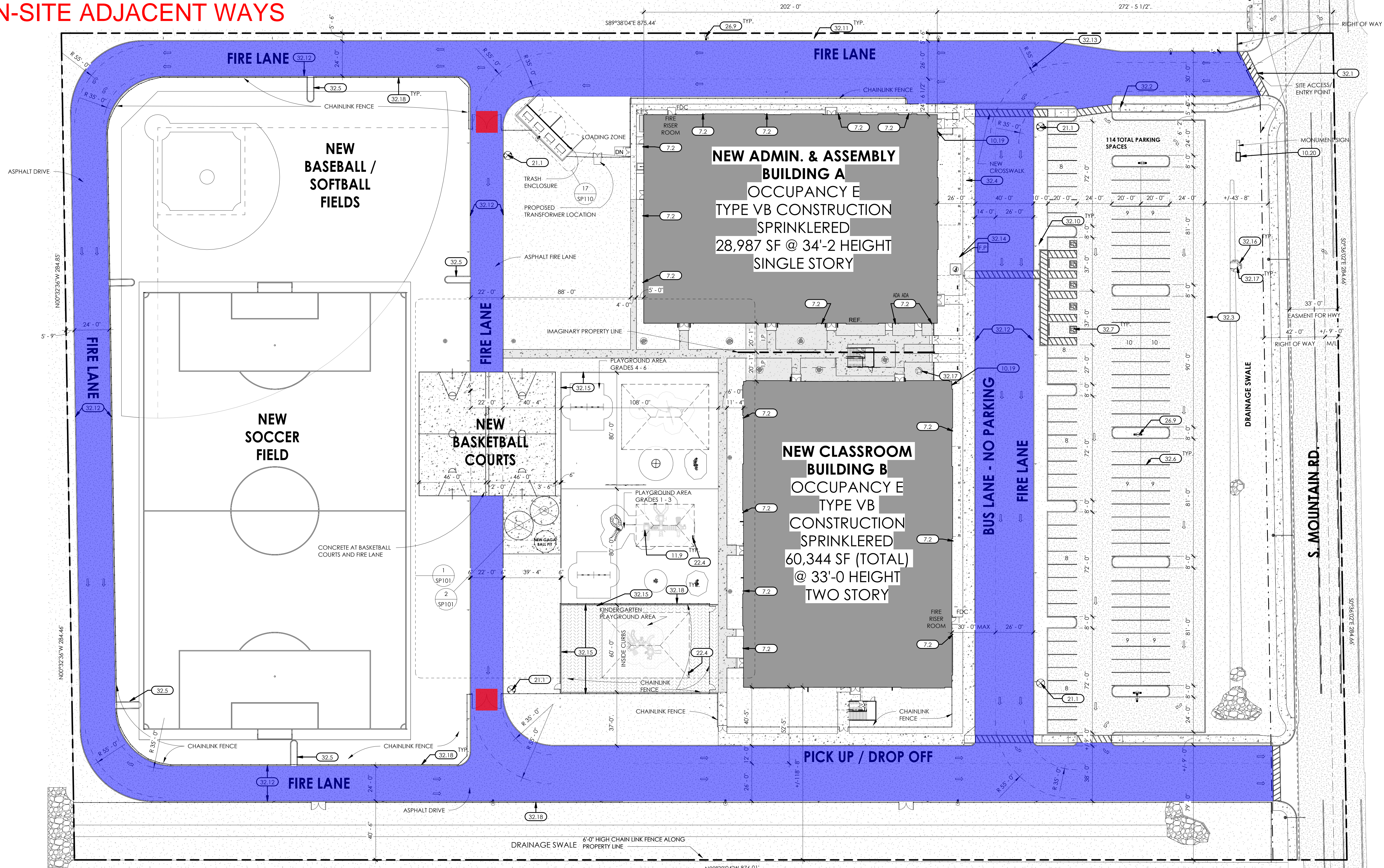


ON-SITE ADJACENT WAYS



SITE DATA

GENERAL: CITY OF MESA ZONING CODE
REFERENCE: RL-43 (PERYU USE IS ALLOWED IN ZONE
ZONING: OR IF VARIANCE IS REQUIRED)
USE: SCHOOL
APN NUMBER: 304-34-059,304-34-060

PARCEL AREA:
GROSS: 304-34-059: 239,921 S.F. (5.51 ACRES)
 304-34-060: 240,019 S.F. (5.51 ACRES)
TOTAL: 479,940 S.F.

LOT COVERAGE (ZONING EXEMPT)
 CLASSROOM BLDG. 30,172 S.F.
 ADMIN/ASSEMBLY BLDG. 28,987 S.F.
ENTRY CANOPY = 1,249 S.F.
TOTAL : 60,408 S.F.

LOT COVERAGE - BLDG = 12%

BUILDING HEIGHT / NUMBER OF STORIES (ZONING EXEMPT):
 BUILDING A - ADMIN/ASSEMBLY BLDG: 34' - 2" (1-STORY)

BUILDING B - CLASSROOM BLDG 33' - 0" (2-STORY)

BUILDING AREA (ZONING EXEMPT)
 BUILDING A
 ADMIN/ASSEMBLY BLDG: 28,987 S.F.

BUILDING B
 CLASSROOM BLDG: FIRST FLOOR 30,172 S.F.
 SECOND FLOOR 30,172 S.F.
TOTAL 60,344 S.F.

TOTAL OF BLDGS 89,331 S.F.
AREA UNDER ENTRY CANOPY: 1,249 S.F.


TOTAL = 90,580 S.F.

SFD - BOMA GROSS SF: = 90,028 S.F.


SITE GENERAL NOTES

1. ALL ON-SITE ACCESSIBLE SIDEWALKS SHALL BE A MINIMUM OF 3'-0" WIDE AND HAVE A MAXIMUM SLOPE OF 1:20 (5%) WITH THE MAXIMUM CROSS SLOPE OF 1:50 (2%). ALL CURBS AND SIDEWALKS SHALL BE ACCESSIBLE RAMP SURFACES PURSUANT TO THE AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS.
2. CONTRACTOR TO VERIFY ALL SITE CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION. NOTIFY ARCHITECT AND OWNER OF ANY AND ALL DISCREPANCIES.
3. CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
4. ANY WORK PERFORMED IN THE PUBLIC RIGHT-OF-WAY SHALL REQUIRE A SEPARATE PERMIT.
5. CONTRACTOR SHALL COORDINATE THE REMOVAL, ABANDONMENT, AND/OR RELOCATION OF EXISTING UTILITIES ABOVE OR BELOW GRADE WITH RESPECTIVE UTILITY COMPANIES.
6. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
7. CONTRACTOR TO REPLACE ANY DAMAGED CURBS, UTILITIES, SIDEWALKS, IRRIGATION COMPONENTS, ETC. DUE TO CONSTRUCTION ACTIVITIES. PROVIDE PROTECTION AS REQUIRED TO AVERT DAMAGE.
8. NOTES APPLY TO ENTIRE PROJECT AREA & SCOPE. COMPLY WITH PLANS, SPECIFICATION & NOTES, WHICH EVER IS MORE RESTRICTIVE. COMPLY WITH GOVERNING AGENCIES APPLICABLE CODES & ORDINANCES.
9. CONTRACTOR TO REVIEW THE CONTRACT DOCUMENTS FOR CONTRACTIBILITY, DRAWINGS FOR CONTRACTIBILITY, IN NATURE & SUBJECT TO ADJUSTMENTS TO AVOID CONFLICTS. ALTERNATE CONSTRUCTION METHODS & CONFIGURATION MAYBE MADE WHERE NECESSARY WITH THE ARCHITECTS PERMISSION. COST FOR SUCH CONTRACTIBILITY REVISION SHALL BE PART OF THE ORIGINAL SCOPE OF WORK. NO ADDITIONAL COMPENSATION IS ALLOWED.
10. DETAILS ARE TYPICAL OR SIMILAR THROUGHOUT THE PROJECT. SUBJECT TO MODIFICATIONS FOR SPECIFIC CONDITIONS.
11. THE PROJECT SCOPE INCLUDES ALL WORK REQUIRED TO PROVIDE FINISHED, FULLY FUNCTIONAL CODE COMPLIANT CONSTRUCTION. CONTRACTOR TO INCLUDE WORK ASSOCIATED WITH UNSEEN EXISTING CONDITIONS THAT ARE TYPICAL TO REMODELING IN SIMILAR EXISTING CONSTRUCTION AREA.
12. COORDINATE ALL LIGHT POLE LOCATIONS WITH ELECTRICAL AND ARCHITECTURAL DRAWINGS. COORDINATE STREET LIGHT PLANS WITH CIVIL PLANS.
13. ALL MECHANICAL AND ELECTRICAL EQUIPMENT SHALL BE SCREENED FROM PUBLIC VIEW.
14. TEMPORARY PEDESTRIAN PROTECTION SHALL BE PROVIDED WHERE REQUIRED BY STUDENT / EMPLOYEE TRAFFIC.
15. ALL SIGNAGE TO BE PROCESSED AS A SEPARATE PERMIT.
16. IT IS THE CONTRACTORS RESPONSIBILITY TO VISIT THE SITE TO DETERMINE FULL EXTENT OF WORK REQUIRED. NO ADDITIONAL COMPENSATION WILL BE PERMITTED FOR FAILURE TO FULLY ASCERTAIN ALL ASPECTS OF DEMOLITION WORK REQUIRED FOR NEW CONSTRUCTION.
17. THE OWNER MAY UTILIZE OTHER SEPARATE CONTRACTORS (I.E. COMPUTER, TELEPHONE, ETC. DURING THE COURSE OF CONSTRUCTION). THE CONTRACTOR, AS A COURTESY TO THE OWNER IS TO COMMUNICATE AND COORDINATE WORK SCHEDULES WITH THE OWNER'S SEPARATE CONTRACTORS TO INSURE NON-CONFLICTING.

SITE HATCH LEGEND

Legend			
	Label	Quantity	Unit
	Fire Lane Asphalt Pavement	91,545.38	sf
	Fire Lane Double Gate Chain Link Fence	2	Count



FIRE CODE CONSTRUCTION NOTES


- | | | |
|---|---|--|
| <p>"COMPLY WITH ALL PROVISIONS AND REQUIREMENTS OF MESA BUILDING CODE (MBC) CHAPTER 33 - SAFEGUARDS DURING CONSTRUCTION, MESA FIRE CODE (MFC) CHAPTER 33 - FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION, AND NFPA 241 FOR ITEMS NOT SPECIFICALLY ADDRESSED BY MFC CHAPTER 33."</p> <p>"FIRE APPARATUS ROADS ARE ESSENTIAL DURING CONSTRUCTION TO ALLOW EMERGENCY RESPONSE TO THE SITE FOR BOTH FIRE AND MEDICAL EMERGENCIES. ACCESS ROADS SHALL BE IN PLACE PRIOR TO THE START OF VERTICAL CONSTRUCTION. IT IS IMPORTANT TO DEVELOP ACCESS ROADS AT AN EARLY STAGE OF CONSTRUCTION TO ALLOW FOR FIRE DEPARTMENT ACCESS TO THE SITE IN THE CASE OF FIRE OR INJURY."</p> |  | <p>KEY NOTES</p> |
| <p>B. "REQUIRED FIRE APPARATUS ACCESS ROAD DURING CONSTRUCTION OR DEMOLITION SHALL COMPLY WITH MESA FIRE AND MEDICAL DEPARTMENT STANDARD DETAIL FPD 330.1". THE ACCESS ROAD SHALL BE A MINIMUM OF 20 FEET WIDE OF THE IMPAVED DRIVING SURFACE, GRADED TO DRAIN STANDING WATER AND ENGINEERED TO BEAR THE WEIGHTED LOADS OF FIRE APPARATUS, 175,000 LBS / 24,000 LBS. FRONT AXLE, 54,000 LBS. REAR AXLE) WHEN ROADS ARE WET.</p> <p>THE ACCESS ROAD SHALL EXTEND TO WITHIN 200 FEET OF ANY COMBUSTIBLE MATERIALS AND/OR ANY LOCATION ON THE JOBSITE WHERE ANY PERSON(S) SHALL BE WORKING FOR A MINIMUM OF FOUR (4) CONTINUOUS HOURS IN A DAY. A CLEARLY VISIBLE SIGN MARKED "FIRE DEPARTMENT ACCESS", IN RED LETTERS, SHALL BE PROVIDED AT THE ENTRY TO THE ACCESS ROAD.</p> <p>ALL OPEN TRENCHES SHALL HAVE STEEL PLATES CAPABLE OF MAINTAINING THE INTEGRITY OF THE ACCESS ROAD DESIGN WHEN THESE TRENCHES CROSS AN ACCESS ROAD.</p> <p>THESE ACCESS ROADS MAY BE TEMPORARY OR PERMANENT. THIS POLICY APPLIES ONLY DURING CONSTRUCTION AND/OR DEMOLITION. PERMANENT ACCESS PER THE FFC SHALL BE IN PLACE PRIOR TO ANY FINAL INSPECTION OR CERTIFICATE OF OCCUPANCY."</p> | | <p>7.2. DOWNSPOUT AT ROOF DRAIN TO CONNECT TO UNDERGROUND PIPING</p> <p>10.19 BUILDING ADDRESS SIGNAGE - ARABIC NUMERALS OF 18" HEIGHT WITH A MINIMUM 3" STROKE WIDTH - COLOR TO BE OF A CONTRASTING COLOR TO THAT OF THE WALL IT IS MOUNTED TO - REFER TO EXTERIOR ELEVATIONS FOR LOCATION.</p> <p>11.20 MONUMENT SIGN</p> <p>11.21 PLAYGROUND EQUIPMENT THROUGH OWNER VENDOR, CONTRACTOR TO COORDINATE.</p> <p>12.1 NEW FIRE HYDRANT, REFER TO CIVIL</p> <p>22.4 OUTDOOR BLEVEL DRINKING FOUNTAIN</p> <p>22.6 NEW LIGHT POLES AND BASES - REFER TO ELECTRICAL AND STRUCTURAL DRAWINGS FOR DETAILS</p> <p>32.1 ADA COMPLIANT CROSSWALK</p> <p>32.2 ADA COMPLIANT CURB RAMP</p> <p>32.3 CONCRETE CURB, REFER TO CIVIL PLANS</p> <p>32.4 CONCRETE SIDEWALK WITH FINISH, REFER TO CIVIL PLANS FOR DETAILS</p> <p>32.5 CONCRETE SPLASHPAD, REFER TO CIVIL PLANS</p> <p>32.6 PARKING SALT STRIPING PER CITY OF MESA REQUIREMENTS (INCLUDING ALL DIRECTIONAL ARROWS AND CROSSWALKS)</p> <p>32.7 HANDICAP PARKING SALT, SALT PAINTING AND SIGNAGE PER CITY OF MESA</p> <p>32.8 HANDICAP PARKING SIGN PER CITY OF MESA</p> <p>32.11 FIRE LANE SIGN PER CITY OF MESA</p> <p>32.12 FIRE LANE CURB PAINTING, STENCILING AND SIGNAGE AS REQUIRED BY CITY OF MESA FIRE DEPARTMENT. PAINT CURB RED TO LOCATE FIRE LANE AND LABEL "FIRE LANE NO PARKING" IN WHITE BLOCK LETTERS 3" HEIGHT WITH 3/8" STROKE ON TOP OF THE SURFACE OF CURB, WHERE THERE ARE NO CURBS, A 9" BAND OF RED PAINT SHALL BE PLACED AT THE EDGE OF THE DRIVING SURFACE. THE WHITE LETTERING SHALL BE PLACED ON THE RED BAND AND EXTEND 12" BEYOND THE RED BAND.</p> <p>32.13 MAINTAIN TURNING RADIUS FOR EMERGENCY VEHICLES WITH WB-50 WHEEL BASE</p> <p>32.14 30FT FLAG POLE</p> <p>32.15 6" MOW CURB</p> <p>32.16 CONCRETE DRAINAGE HEADWALL</p> <p>32.17 RIPRAP</p> <p>32.18 CHAINLINK FENCING @ 6FT, INTERIOR FENCING FOR KINDERGARTEN PLAYGROUND AT 4FT.</p> |


KEY NOTES


- 7.2 DOWNSPOUT AT ROOF DRAIN TO CONNECT TO UNDERGROUND PIPING
- 11.9 BUILDING ADDRESS SIGNAGE - ARABIC NUMERALS OF 18" HEIGHT WITH A MINIMUM 3" STROKE WIDTH - COLOR TO BE OF A CONTRASTING COLOR TO THAT OF THE WALL IT IS MOUNTED TO - REFER TO EXTERIOR ELEVATIONS FOR LOCATION.
- 10.20 MONUMENT SIGN
- 11.9 PLAYGROUND EQUIPMENT THROUGH OWNER VENDOR. CONTRACTOR TO COORDINATE.
- 21.1 NEW FIRE HYDRANT - REFER TO CIVIL
- 22.4 OUTDOOR BAY-LEVEL DRINKING FOUNTAIN
- 22.4 NEW LIGHT POLES AND BASES - REFER TO ELECTRICAL AND STRUCTURAL DRAWINGS FOR DETAILS
- 32.1 ADA COMPLIANT CURBS - REFLECTOR
- 32.2 ADA COMPLIANT CURB RAMP
- 32.3 CONCRETE CURB, REFER TO CIVIL PLANS
- 32.4 CONCRETE SIDEWALK WITH FINISH. REFER TO CIVIL PLANS FOR DETAILS
- 32.5 CONCRETE SPLASHPAD, REFER TO CIVIL PLANS
- 32.6 PARKING STALL STRIPES PER CITY OF MESA REQUIREMENTS (INCLUDING ALL DIRECTIONAL ARROWS AND CROSSWALKS)
- 32.7 HANDICAP PARKING STALL, STALL PAINTING AND SIGNAGE PER CITY OF MESA
- 32.10 HANDICAP PARKING SIGN PER CITY OF MESA
- 32.11 FIRE LANE PARKING SIGN PER CITY OF MESA
- 32.12 FIRE LANE CURB PAINTING, STENCILING AND SIGNAGE AS REQUIRED BY CITY OF MESA FIRE DEPARTMENT. PAINT CURB TO RED INDICATE FIRE LANE AND LABEL "FIRE LANE NO PARKING" IN WHITE BLOCK LETTERS 3" IN HEIGHT WITH 3/8" STROKE ON TOP OF THE SURFACE OF CURB, WHERE THERE ARE NO CURBS, A 9" BAND OF RED PAINT SHALL BE PLACED AT THE EDGE OF THE DRIVING SURFACE. THE WHITE LETTERING SHALL BE PLACED ON THE RED BAND AS STATED ABOVE.
- 32.13 MAINTAIN TURNING RADIUS FOR EMERGENCY VEHICLES WITH WB-50 WHEEL BASE
- 32.14 30" FLAG POLE
- 32.15 6" MOW CURB
- 32.16 CONCRETE DRAINAGE HEADWALL
- 32.17 RIPRAP
- 32.18 CHAINLINK FENCING @ 6FT. INTERIOR FENCING FOR KINDERGARTEN PLAYGROUND AT 4FT.


SITE LEGEND


 PROPERTY LINE
  CHAINLINK FENCING



 RIGHT-OF-WAY LINE


 SETBACK LINE


 EASEMENT LINE


 ACCESSIBLE ROUTE


 LIGHT POLE

 FIRE HYDRANT
  FLAG POLE

 FIRE DEPARTMENT CONNECTION [BUILDING MOUNTED]

 FIRE DEPARTMENT CONNECTION [FREE-STANDING]

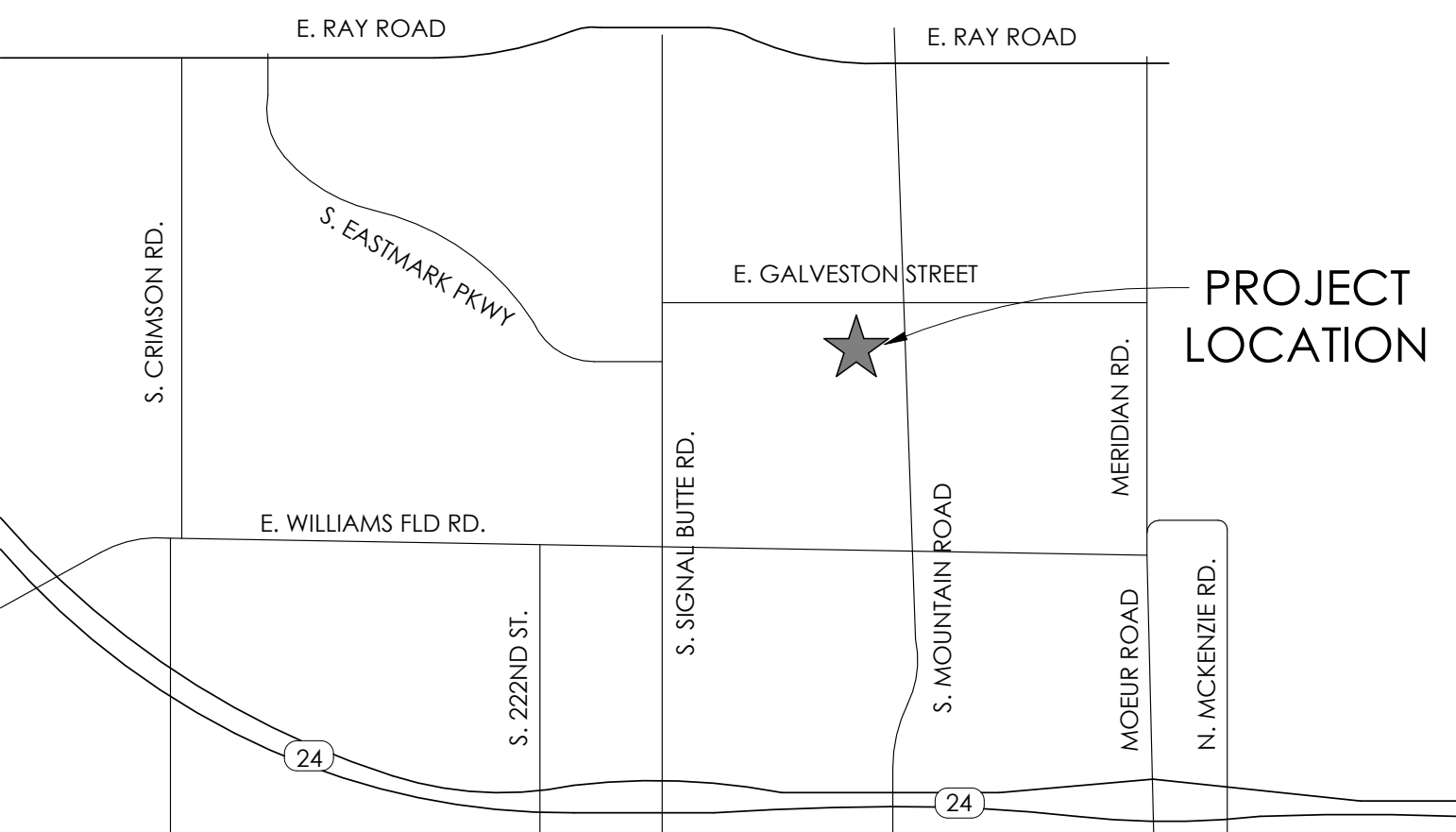
 KNOX BOX [SURFACE-MOUNTED]

 KNOX BOX [RECESSED]

OVERALL SITE PLAN



AERIAL VIEW MAP



VICINITY MAP



THIS DRAWING IS AN INSTRUMENT
OF SERVICE & IS THE PROPERTY
OF SPS+ARCHITECTS LLP & MAY
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REPRODUCTIONS HEREOF USED
WITHOUT WRITTEN PERMISSION.

REVISIONS		
MARK	DATE	DESCRIPTION

REVIEWED BY: Checker
DRAWN BY: Author



100% CD SET
DATE: 01-14-24

IOB No: K2300001

SUBJECT:

SP100

ON-SITE ADJACENT WAYS

Legend		
Label	Quantity	Unit
Fire Hydrant Assembly	4	Count
Fire Line - 8" C900	1,809.2280	ft
Fire Line - 8" Double Check Backflow	2	Count
Fire Line - 8" Valve Box & Cover	7	Count

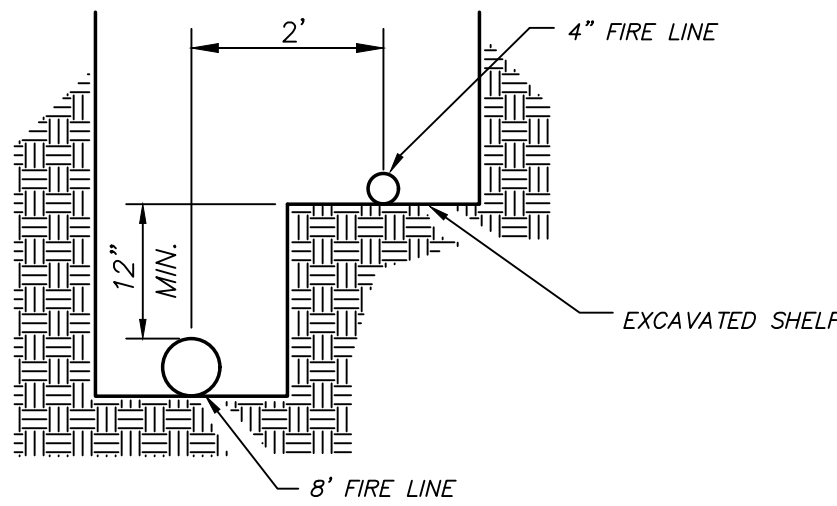
UNDERGROUND UTILITY TRACER WIRE NOTE:

ALL NEW UNDERGROUND FACILITIES/UTILITIES SHALL BE INSTALLED WITH A DETECTABLE UNDERGROUND LOCATION DEVICE. INSTALL A #18 INSULATED TRACER WIRE SECURELY ATTACHED TO EACH UTILITY AT 8- FEET ON CENTER. 12" OF TRACER WIRE SHALL BE ACCESSIBLE ABOVE GRADE AT THE TERMINATION AND SHALL BE SECURELY ATTACHED AT THAT POINT. THE CONTRACTOR SHALL VERIFY WHICH COLOR TO USE FOR STORM DRAIN, WATER, SEWER, ETC., WITH THE CITY OF MESA AND APPROPRIATE UTILITY COMPANIES. THE CONTRACTOR SHALL INCLUDE ALL COSTS ASSOCIATED WITH THIS REQUIREMENT IN THEIR BID.

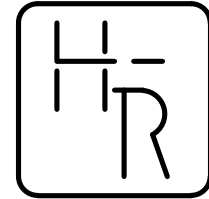
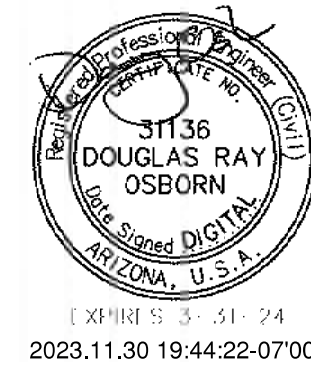
DOMESTIC WATER LINE

THRUST BLOCK NOTE:

ALL THRUST BLOCKS IN THE RIGHT-OF-WAY OR EASEMENT SHALL BE PER M.A.G. S.D. NO. 380. ALL THRUST BLOCKS SHALL BE CONSTRUCTED OF M.A.G. CLASS C CONCRETE. FOR ALL ONSITE DOMESTIC WATER LINE, THRUST BLOCKS SHALL BE INSTALLED AT ALL; CHANGES IN DIRECTION AS AT TEES AND BENDS, CHANGES IN SIZE AS AT REDUCERS, STOPS AS AT DEAD ENDS AND VALVES. THRUST BLOCK SIZING AND INSTALLATION SHALL FOLLOW IAPMO INSTALL STANDARD 8-92 OF THE ARIZONA STATE PLUMBING CODE, WHICH IS BASED ON THE 94 UPC WITH AMENDMENTS.



COMMON TRENCH DETAIL
NOT TO SCALE



HESS - ROUNTREE, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
9831 SOUTH 51ST STREET, SUITE C110
PHOENIX, ARIZONA 85044 (480)496-0244

DES: **DRO** DRN: **ANM** CKD: **DRO** JOB NO. **2302-12**

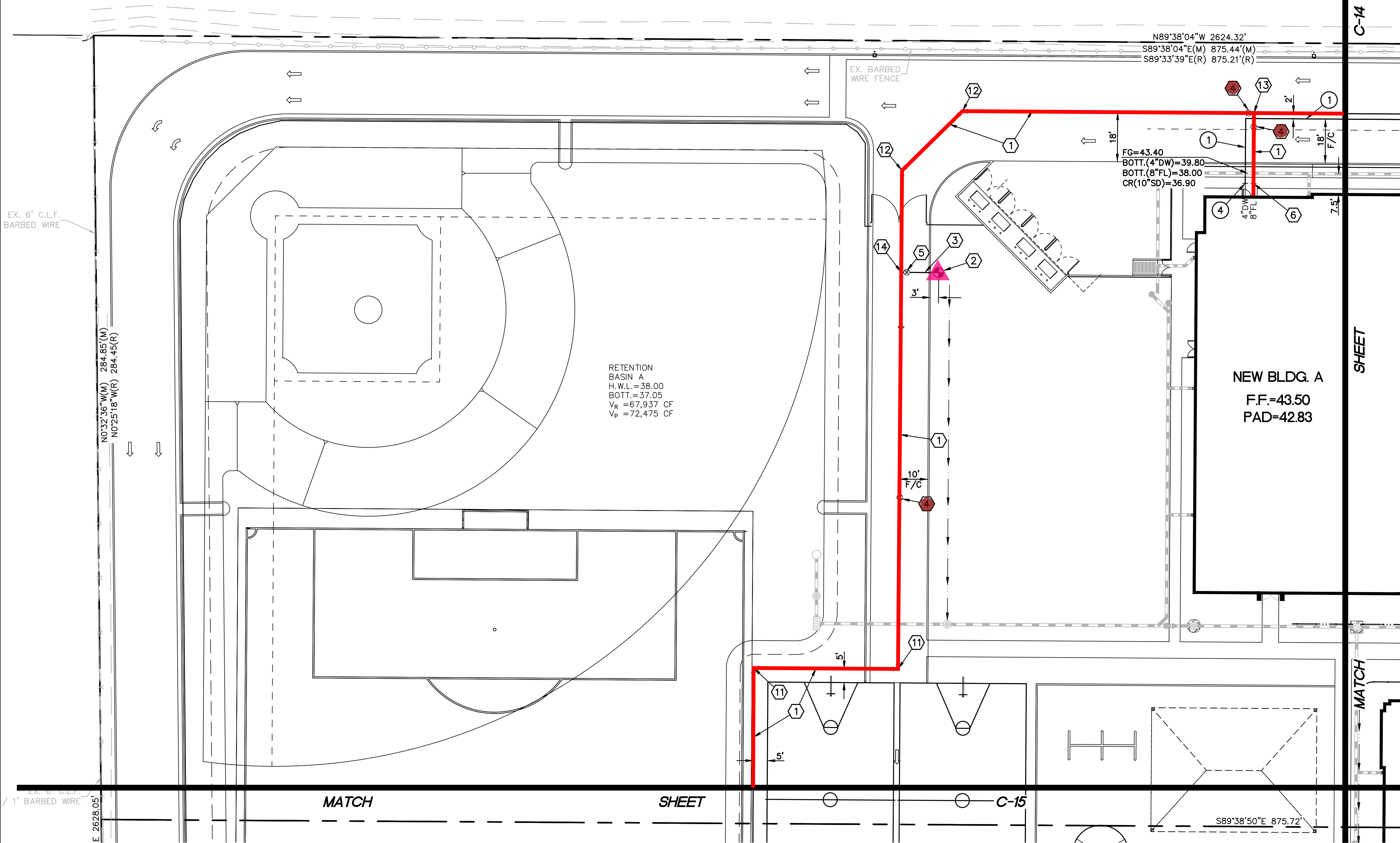
PRIVATE SANITARY SEWER LINE

CONSTRUCTION NOTES:

- 1 INSTALL 5' DIAMETER SEWER MANHOLE WITH 30" DIAMETER FRAME AND COVER (MAG STANDARD DETAIL NO.'S 420-1, 420-2, 420-3 AND 423-2).
- 2 INSTALL SANITARY SEWER CLEANOUT. (SEE DETAIL ON SHEET C-2).
- 3 CONNECT TO BUILDING SEWER LINE WITH NECESSARY AND APPROPRIATE FITTINGS. SEE BUILDING PLUMBING DRAWINGS FOR EXACT LOCATION, ELEVATION AND CONTINUATION.
- 4 INSTALL 8" P.V.C. (ASTM D3034, SDR-35) SEWER LINE.
- 5 INSTALL 6" P.V.C. (ASTM D3034, SDR-35) SEWER LINE.
- 6 POTHOLE AND FIELD VERIFY THE EXACT ELEVATION AND LOCATION OF THE EXISTING UTILITY PRIOR TO CONSTRUCTION. NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES.
- 7 CORE DRILL AND CONNECT TO EXISTING SEWER MANHOLE WITH A WATERTIGHT CONNECTION. REMOVE AND REFORM BASE AS NEEDED. FIELD VERIFY ELEVATION AND LOCATION OF EXISTING SEWER LINE PRIOR TO CONSTRUCTION.
- 8 SAWCUT REMOVE AND REPLACE EXISTING A.C. PAVEMENT (CITY OF MESA STANDARD DETAIL NO.S 19.04.1 AND 19.04.2).
- 9 CONNECT TO PROPOSED GREASE INTERCEPTOR WITH NECESSARY AND APPROPRIATE FITTINGS. SEE PLUMBING DRAWINGS FOR EXACT LOCATION, ELEVATION AND CONTINUATION.
- 10 INSTALL 4" P.V.C. (ASTM D3034, SDR-35) SEWER LINE.
- 11 INSTALL A 6" TO 4" REDUCER.

PRIVATE FIRE LINE CONSTRUCTION NOTES:

- 1 INSTALL 8" P.V.C. (AWWA C-900, DR-18 CLASS 235) WATER LINE INCLUDING ALL BENDS, TEES, FITTINGS AND THRUST BLOCKS.
- 2 INSTALL FIRE HYDRANT (MAG STANDARD DETAIL NO.'S 360-1 AND 360-3).
- 3 INSTALL 6" POLYWRAPPED DUCTILE IRON (A.W.W.A. C-150, PRESSURE CLASS 350) WATER LINE INCLUDING ALL BENDS, TEES, FITTINGS AND THRUST BLOCKS.
- 4 INSTALL 8" GATE VALVE WITH VALVE BOX AND COVER (MAG STANDARD DETAIL NO. 391-1, TYPE 'C').
- 5 INSTALL 6" GATE VALVE WITH VALVE BOX AND COVER (MAG STANDARD DETAIL NO. 391-1, TYPE 'C').
- 6 SEE PLUMBING AND FIRE SPRINKLER DRAWINGS FOR CONTINUATION.
- 7 INSTALL 16" X 8" TAPPING SLEEVE AND 8" GATE VALVE WITH VALVE BOX AND COVER (MAG STANDARD DETAIL NO. 340 AND MAG STANDARD DETAIL NO. 391-1, TYPE 'C').
- 8 POTHOLE AND FIELD VERIFY THE EXACT ELEVATION AND LOCATION OF THE EXISTING UTILITY PRIOR TO CONSTRUCTION. NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES.
- 9 INSTALL 8" REDUCED PRESSURE PRINCIPAL BACKFLOW PREVENTER (CITY OF MESA STANDARD DETAIL NO. M-31.01).
- 10 SAWCUT REMOVE AND REPLACE EXISTING A.C. PAVEMENT (CITY OF MESA STANDARD DETAIL NO.S 19.04.1 AND 19.04.2).
- 11 INSTALL 8"-90° BEND.
- 12 INSTALL 8"-45° BEND.
- 13 INSTALL 8" TEE.
- 14 INSTALL 8" X 6" TEE.
- 15 CONSTRUCT VERTICAL REALIGNMENT (MAG STANDARD DETAIL NO. 381).
- 16 INSTALL 8" POLYWRAPPED DUCTILE IRON (A.W.W.A. C-150, CLASS 350) WATER LINE.



PRIVATE FIRE LINE THRUST BLOCK NOTE:

ALL THRUST BLOCKS SHALL BE CONSTRUCTED OF M.A.G. CLASS C CONCRETE. FOR ALL PRIVATE FIRE LINE THRUST BLOCKS THE AREA OF BEARING FACE SHALL BE PER NFPA-24. THE FOLLOWING CHART IS FROM NFPA-24. SEE DOMESTIC WATER LINE THRUST BLOCK GENERAL NOTE FOR THRUST BLOCKS WITHIN THE RIGHT-OF-WAY.

PIPE SIZE (IN.)	90° BEND (SQ.FT.)	45° BEND (SQ.FT.)	TEES, PLUGS, CAPS AND HYDRANTS (SQ.FT.)
4	2	2	2
6	5	3	4
8	13	7	6
10	18	10	9
12	25	14	13
14	32	18	18
16			23

NOTE:

ALL NEW ONSITE UNDERGROUND UTILITIES (WATER, SEWER, FIRE AND STORM DRAIN LINES) SHALL BE BEDDED WITH A.B.C., PER MAG SECTION 702, FROM 4" (MIN.) BELOW THE BOTTOM OF THE PIPE TO 12" (MIN.) ABOVE THE TOP OF THE PIPE. BEDDING WITHIN THE RIGHT-OF-WAY SHALL CONFORM TO CITY OF MESA AND MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION STANDARDS, WHICHEVER IS MORE STRINGENT.

PRIVATE DOMESTIC WATER LINE

CONSTRUCTION NOTES:

- 1 INSTALL 4" P.V.C. (RING TITE, CLASS 200) WATER LINE WITH CAST IRON BENDS AND FITTINGS.
- 2 INSTALL 2" REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLY (CITY OF MESA STANDARD DETAIL NO. M-31.03). INSTALL WITH SECURITY CAGE AND CONCRETE PAD.
- 3 INSTALL 4" GATE VALVE WITH VALVE BOX AND COVER (MAG STANDARD DETAIL NO. 391-1, TYPE "C").
- 4 CONNECT TO BUILDING DOMESTIC WATER LINE WITH NECESSARY AND APPROPRIATE FITTINGS. SEE PLUMBING DRAWINGS FOR EXACT LOCATION AND CONTINUATION.
- 5 INSTALL NEW 2" DOMESTIC WATER SERVICE, AND 2" WATER METER WITH METER BOX AND COVER (CITY OF MESA STANDARD DETAIL NOS. M-49.01, .02 AND .03). SERVICES WILL BE PARALLEL PER CITY OF MESA STANDARD DETAIL NO. M-29.02.

- 6 INSTALL NEW 2" LANDSCAPE WATER SERVICE, AND 2" WATER METER WITH METER BOX AND COVER (CITY OF MESA STANDARD DETAIL NOS. M-49.01, .02 AND .03).
- 7 INSTALL 4" POLYWRAPPED DUCTILE IRON (A.W.W.A. C-150, CLASS 350) WATER LINE.
- 8 SEE LANDSCAPING PLANS FOR CONTINUATION
- 9 CONSTRUCT VERTICAL REALIGNMENT (MAG STANDARD DETAIL NO. 381).
- 10 SAWCUT REMOVE AND REPLACE EXISTING A.C. PAVEMENT (CITY OF MESA STANDARD DETAIL NO.S 19.04.1 AND 19.04.2).
- 11 POTHOLE AND FIELD VERIFY THE EXACT ELEVATION AND LOCATION OF THE EXISTING UTILITY PRIOR TO CONSTRUCTION. NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES.



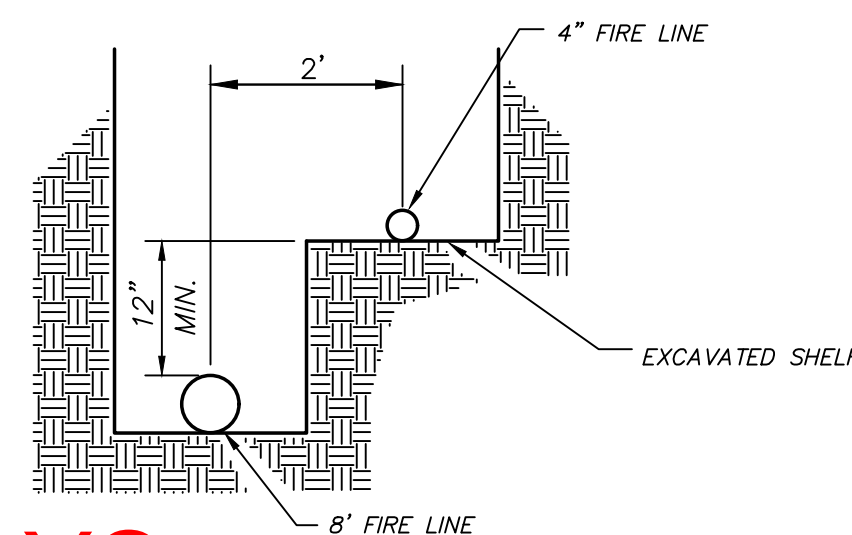
PRIVATE DOMESTIC WATER, SANITARY SEWER AND FIRE LINE PLAN

QUEEN CREEK UNIFIED SCHOOL DISTRICT NO. 95


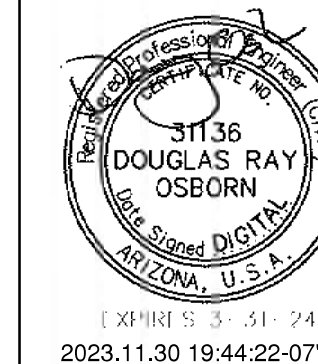
IMPROVEMENT PLANS FOR
QUEEN CREEK ELEMENTARY SCHOOL #10

DRAWING STATUS	SHEET	OF	
1ST CITY SUBMITTAL SET			
	13	18	C-13
DATE:	11-30-23		

ALL THRUST BLOCKS IN THE RIGHT-OF-WAY OR EASEMENT SHALL BE PER M.A.G. S.U.S. NO. 380. ALL THRUST BLOCKS SHALL BE INSTRUCTED OF M.A.G. CLASS 150 CONCRETE. FOR ONE AND DOMESTIC WASTE LINE. THRUST BLOCKS SHALL BE INSTALLED AT ALL; CHANGES IN DIRECTION AS AT TEES AND BENDS, CHANGES IN SIZE AS AT REDUCERS, STOPS AS AT DEAD ENDS AND VALVES. THRUST BLOCK SIZING AND INSTALLATION SHALL FOLLOW IAPMO INSTALL STANDARD 8-92 OF THE ARIZONA STATE PLUMBING CODE, WHICH IS BASED ON THE 94 UPC WITH AMENDMENTS.



Legend			
	Label	Quantity	Unit
▲	Fire Hydrant Assembly	4	Count
—	Fire Line - 8" C900	1,809.2280	ft
◆	Fire Line - 8" Double Check Backflow	2	Count
●	Fire Line - 8" Valve Box & Cover	7	Count



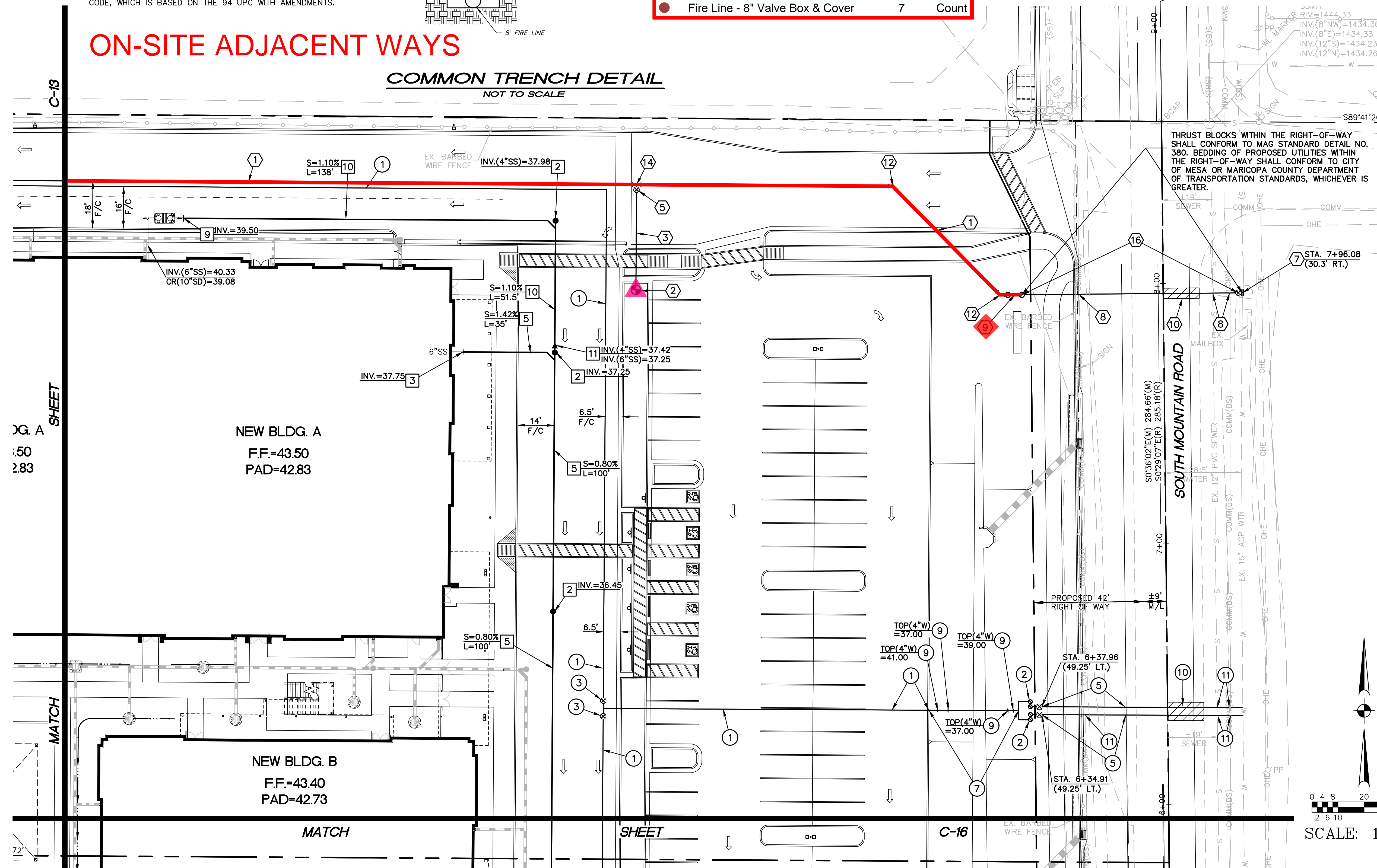
HESS - ROUNTREE, INC
CONSULTING ENGINEERS & LAND SURVEYORS
9831 SOUTH 51ST STREET, SUITE C110
PHOENIX, ARIZONA 85044 (480)496-0244

DES. <i>DRO</i>	DRN. <i>ANM</i>	CKD. <i>DRO</i>	JOB NO. <i>2302-12</i>
-----------------	-----------------	-----------------	------------------------

- 1 INSTALL 5" DIAMETER SEWER MANHOLE WITH 30" DIAMETER FRAME AND COVER (MAG STANDARD DETAIL NO.'S 420-1, 420-2, 420-3 AND 423-2).
- 2 INSTALL SANITARY SEWER CLEANOUT. (SEE DETAIL ON SHEET C-2).
- 3 CONNECT TO BUILDING SEWER LINE WITH NECESSARY AND APPROPRIATE FITTINGS. SEE BUILDING PLUMBING DRAWINGS FOR EXACT LOCATION, ELEVATION AND CONTINUATION.
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- 5 INSTALL 6" P.V.C. (ASTM D3034, SDR-35) SEWER LINE.
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- 7 CORE DRILL AND CONNECT TO EXISTING SEWER MANHOLE WITH A WATERTIGHT CONNECTION. REMOVE AND REFORM BASE AS NEEDED. FIELD VERIFY ELEVATION AND LOCATION OF EXISTING SEWER LINE PRIOR TO CONSTRUCTION.
- 8 SAWCUT REMOVE AND REPLACE EXISTING A.C. PAVEMENT (CITY OF MESA STANDARD DETAIL NO.'S 19.04.1 AND 19.04.2).
- 9 CONNECT TO PROPOSED GREASE INTERCEPTOR WITH NECESSARY AND APPROPRIATE FITTINGS. SEE PLUMBING DRAWINGS FOR EXACT LOCATION, ELEVATION AND CONTINUATION.
- 10 INSTALL 4" P.V.C. (ASTM D3034, SDR-35) SEWER LINE.
- 11 INSTALL A 6" TO 4" REDUCER.

- 1 INSTALL 8" P.V.C. (AWWA C-900, DR-18 CLASS 235) WATER LINE INCLUDING ALL BENDS, TEES, FITTINGS AND THRUST BLOCKS.
- 2 INSTALL FIRE HYDRANT (MAG STANDARD DETAIL NO.'S 360-1 AND 360-3).
- 3 INSTALL 6" POLYWRAPPED DUCTILE IRON (A.W.W.A. C-150, PRESSURE CLASS 350) WATER LINE INCLUDING ALL BENDS, TEES, FITTINGS AND THRUST BLOCKS.
- 4 INSTALL 8" GATE VALVE WITH VALVE BOX AND COVER (MAG STANDARD DETAIL NO. 391-1, TYPE 'C').
- 5 INSTALL 6" GATE VALVE WITH VALVE BOX AND COVER (MAG STANDARD DETAIL NO. 391-1, TYPE 'C').
- 6 SEE PLUMBING AND FIRE SPRINKLER DRAWINGS FOR CONTINUATION.
- 7 INSTALL 16" X 8" TAPPING SLEEVE AND 8" GATE VALVE WITH VALVE BOX AND COVER (MAG STANDARD DETAIL NO. 340 AND MAG STANDARD DETAIL NO. 391-1, TYPE 'C').
- 8 POTHOLE AND FIELD VERIFY THE EXACT ELEVATION AND LOCATION OF THE EXISTING UTILITY PRIOR TO CONSTRUCTION. NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES.
- 9 INSTALL 8" REDUCED PRESSURE PRINCIPAL BACKFLOW PREVENTER (CITY OF MESA STANDARD DETAIL NO. M-31.01).
- 10 SAWCUT REMOVE AND REPLACE EXISTING A.C. PAVEMENT (CITY OF MESA STANDARD DETAIL NO.S 19.04.1 AND 19.04.2).
- 11 INSTALL 8"-90" BEND.
- 12 INSTALL 8"-45" BEND.
- 13 INSTALL 8" TEE.
- 14 INSTALL 8" X 6" TEE.
- 15 CONSTRUCT VERTICAL REALIGNMENT (MAG STANDARD DETAIL NO. 381).
- 16 INSTALL 8" POLYWRAPPED DUCTILE IRON (A.W.W.A. C-150, CLASS 350) WATER LINE.

COMMON TRENCH DETAIL
NOT TO SCALE



ALL THRUST BLOCKS SHALL BE CONSTRUCTED OF M.A.G. CLASS C CONCRETE. FOR ALL PRIVATE FIRE LINE THRUST BLOCKS THE AREA OF BEARING FACE SHALL BE PER NFPA-24. THE FOLLOWING CHART IS FROM NFPA-24. SEE DOMESTIC WATER LINE THRUST BLOCK GENERAL NOTE FOR THRUST BLOCKS WITHIN THE RIGHT-OF-WAY.

PIPE SIZE (IN.)	90° BEND (SQ.FT.)	45° BEND (SQ.FT.)	TEES, PLUGS, CAPS AND HYDRANTS (SQ.FT.)
4	2	2	2
6	5	3	4
8	8	5	6
10	13	7	9
12	18	10	13
14	25	14	18
16	32	18	23

ALL NEW UNDERGROUND FACILITIES/UTILITIES SHALL BE INSTALLED WITH A DETECTABLE UNDERGROUND LOCATION DEVICE, INSTALL A #18 INSULATED TRACER WIRE SECURELY ATTACHED TO EACH UTILITY AT 8'-FEET ON CENTER. 12" OF TRACER WIRE SHALL BE ACCESSIBLE ABOVE GRADE AT THE TERMINATION AND SHALL BE SECURELY ATTACHED AT THAT POINT. THE CONTRACTOR SHALL VERIFY WHICH COLOR TO USE FOR STORM DRAIN, SANITARY SEWER, ETC. WITH THE CITY OF MESA AND ASPH/CONCRETE UTILITIES COMPANIES. THE CONTRACTOR SHALL INCLUDE ALL COSTS ASSOCIATED WITH THIS REQUIREMENT IN THEIR BID.

ALL NEW ONSITE UNDERGROUND UTILITIES (WATER, SEWER, FIRE AND STORM DRAIN LINES) SHALL BE BEDDED WITH A.B.C., PER MAG SECTION 702, FROM 4" (MIN.) BELOW THE BOTTOM OF THE PIPE TO 12" (MIN.) ABOVE THE TOP OF THE PIPE. BEDDING WITHIN THE RIGHT-OF-WAY SHALL CONFORM TO CITY OF MESA AND MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION STANDARDS. WHICHEVER IS MORE STRINGENT.

1. INSTALL 4" P.V.C. (RING TITE, CLASS 200) WATER LINE WITH CAST IRON BENDS AND FITTINGS.
2. INSTALL 2" REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLY (CITY OF MESA STANDARD DETAIL NO. M-31.03). INSTALL WITH SECURITY CAGE AND CONCRETE PAD.
3. INSTALL 4" GATE VALVE WITH VALVE BOX AND COVER (MAG STANDARD DETAIL NO. 391-1, TYPE "C").
4. CONNECT TO BUILDING DOMESTIC WATER LINE WITH NECESSARY AND APPROPRIATE FITTINGS. SEE PLUMBING DRAWINGS FOR EXACT LOCATION AND CONTINUATION.
5. INSTALL NEW 2" DOMESTIC WATER SERVICE, AND 2" WATER METER WITH METER BOX AND COVER (CITY OF MESA STANDARD DETAIL NOS. M-49.01, .02 AND .03). SERVICES WILL BE PARALLEL PER CITY OF MESA STANDARD DETAIL NO. M-29.02.

QUEEN CREEK UNIFIED SCHOOL DISTRICT NO. 95

IMPROVEMENT PLANS FOR
QUEEN CREEK ELEMENTARY SCHOOL #10

DRAWING STATUS		SHEET	OF	C-14
1ST CITY SUBMITTAL SET				
		18	16	
DATE: 11-30-23				

DATE: 11-30-23

18

16

C-14

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UNDERGROUND UTILITY TRACER WIRE NOTE:

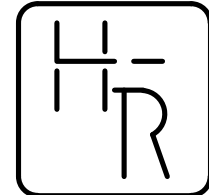
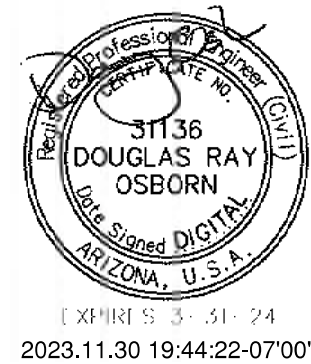
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DOMESTIC WATER LINE

THRUST BLOCK NOTE:

ALL THRUST BLOCKS IN THE RIGHT-OF-WAY OR EASEMENT SHALL BE PER M.A.G. S.D. NO. 380. ALL THRUST BLOCKS SHALL BE CONSTRUCTED OF M.A.G. CLASS C CONCRETE. FOR ALL ONSITE DOMESTIC WATER LINE, THRUST BLOCKS SHALL BE INSTALLED AT ALL; CHANGES IN DIRECTION AS AT TEES AND BENDS, CHANGES IN SIZE AS AT REDUCERS, STOPS AS AT DEAD ENDS AND VALVES. THRUST BLOCK SIZING AND INSTALLATION SHALL FOLLOW IAPMO INSTALL STANDARD 8-92 OF THE ARIZONA STATE PLUMBING CODE, WHICH IS BASED ON THE 94 UPC WITH AMENDMENTS.

Legend			
Label	Quantity	Unit	
Fire Hydrant Assembly	4	Count	
Fire Line - 8" C900	1,809.2280	ft	
Fire Line - 8" Double Check Backflow	2	Count	
Fire Line - 8" Valve Box & Cover	7	Count	



HESS - ROUNTREE, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
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PHOENIX, ARIZONA 85044 (480)496-0244

DES: **DRO** DRN: **ANM** CKD: **DRO** JOB NO: **2302-12**

PRIVATE SANITARY SEWER LINE

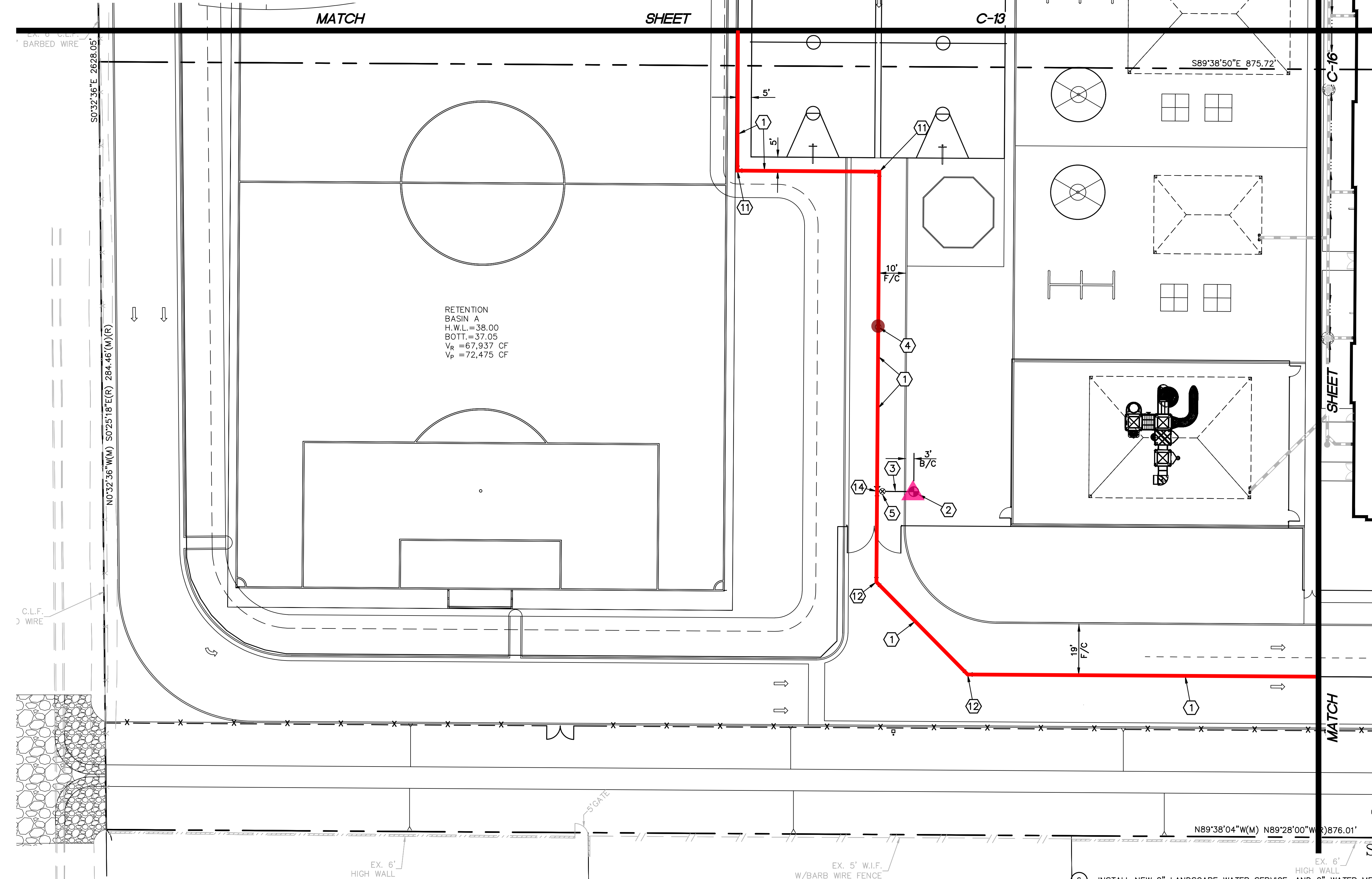
CONSTRUCTION NOTES:

- 1 INSTALL 5' DIAMETER SEWER MANHOLE WITH 30" DIAMETER FRAME AND COVER (MAG STANDARD DETAIL NO.'S 420-1, 420-2, 420-3 AND 423-2).
- 2 INSTALL SANITARY SEWER CLEANOUT. (SEE DETAIL ON SHEET C-2).
- 3 CONNECT TO BUILDING SEWER LINE WITH NECESSARY AND APPROPRIATE FITTINGS. SEE BUILDING PLUMBING DRAWINGS FOR EXACT LOCATION, ELEVATION AND CONTINUATION.
- 4 INSTALL 8" P.V.C. (ASTM D3034, SDR-35) SEWER LINE.
- 5 INSTALL 6" P.V.C. (ASTM D3034, SDR-35) SEWER LINE.
- 6 POTHOLE AND FIELD VERIFY THE EXACT ELEVATION AND LOCATION OF THE EXISTING UTILITY PRIOR TO CONSTRUCTION. NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES.
- 7 CORE DRILL AND CONNECT TO EXISTING SEWER MANHOLE WITH A WATERTIGHT CONNECTION. REMOVE AND REFORM BASE AS NEEDED. FIELD VERIFY ELEVATION AND LOCATION OF EXISTING SEWER LINE PRIOR TO CONSTRUCTION.
- 8 SAWCUT REMOVE AND REPLACE EXISTING A.C. PAVEMENT (CITY OF MESA STANDARD DETAIL NO.S 19.04.1 AND 19.04.2).
- 9 CONNECT TO PROPOSED GREASE INTERCEPTOR WITH NECESSARY AND APPROPRIATE FITTINGS. SEE PLUMBING DRAWINGS FOR EXACT LOCATION, ELEVATION AND CONTINUATION.
- 10 INSTALL 4" P.V.C. (ASTM D3034, SDR-35) SEWER LINE.
- 11 INSTALL A 6" TO 4" REDUCER.

PRIVATE FIRE LINE CONSTRUCTION NOTES:

- 1 INSTALL 8" P.V.C. (AWWA C-900, DR-18 CLASS 235) WATER LINE INCLUDING ALL BENDS, TEES, FITTINGS AND THRUST BLOCKS.
- 2 INSTALL FIRE HYDRANT (MAG STANDARD DETAIL NO.'S 360-1 AND 360-3).
- 3 INSTALL 6" POLYWRAPPED DUCTILE IRON (A.W.W.A. C-150, PRESSURE CLASS 350) WATER LINE INCLUDING ALL BENDS, TEES, FITTINGS AND THRUST BLOCKS.
- 4 INSTALL 8" GATE VALVE WITH VALVE BOX AND COVER (MAG STANDARD DETAIL NO. 391-1, TYPE 'C').
- 5 INSTALL 6" GATE VALVE WITH VALVE BOX AND COVER (MAG STANDARD DETAIL NO. 391-1, TYPE 'C').
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- 7 INSTALL 16" X 8" TAPPING SLEEVE AND 8" GATE VALVE WITH VALVE BOX AND COVER (MAG STANDARD DETAIL NO. 340 AND MAG STANDARD DETAIL NO. 391-1, TYPE 'C').
- 8 POTHOLE AND FIELD VERIFY THE EXACT ELEVATION AND LOCATION OF THE EXISTING UTILITY PRIOR TO CONSTRUCTION. NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES.
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- 10 SAWCUT REMOVE AND REPLACE EXISTING A.C. PAVEMENT (CITY OF MESA STANDARD DETAIL NO.S 19.04.1 AND 19.04.2).
- 11 INSTALL 8"-90° BEND.
- 12 INSTALL 8"-45° BEND.
- 13 INSTALL 8" TEE.
- 14 INSTALL 8" X 6" TEE.
- 15 CONSTRUCT VERTICAL REALIGNMENT (MAG STANDARD DETAIL NO. 381).
- 16 INSTALL 8" POLYWRAPPED DUCTILE IRON (A.W.W.A. C-150, CLASS 350) WATER LINE.

ON-SITE ADJACENT WAYS



PRIVATE FIRE LINE THRUST BLOCK NOTE:

ALL THRUST BLOCKS SHALL BE CONSTRUCTED OF M.A.G. CLASS C CONCRETE. FOR ALL PRIVATE FIRE LINE THRUST BLOCKS THE AREA OF BEARING FACE SHALL BE PER NFPA-24. THE FOLLOWING CHART IS FROM NFPA-24. SEE DOMESTIC WATER LINE THRUST BLOCK GENERAL NOTE FOR THRUST BLOCKS WITHIN THE RIGHT-OF-WAY.

PIPE SIZE (IN.)	90° BEND (SQ.FT.)	45° BEND (SQ.FT.)	TEES, PLUGS, CAPS AND HYDRANTS (SQ.FT.)
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10	13	7	9
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14	25	14	18
16	32	18	23

NOTE:

ALL NEW ONSITE UNDERGROUND UTILITIES (WATER, SEWER, FIRE AND STORM DRAIN LINES) SHALL BE BEDDED WITH A.B.C., PER MAG SECTION 702, FROM 4" (MIN.) BELOW THE BOTTOM OF THE PIPE TO 12" (MIN.) ABOVE THE TOP OF THE PIPE. BEDDING WITHIN THE RIGHT-OF-WAY SHALL CONFORM TO CITY OF MESA AND MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION STANDARDS, WHICHEVER IS MORE STRINGENT.

PRIVATE DOMESTIC WATER LINE

CONSTRUCTION NOTES:

- 1 INSTALL 4" P.V.C. (RING TITE, CLASS 200) WATER LINE WITH CAST IRON BENDS AND FITTINGS.
- 2 INSTALL 2" REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLY (CITY OF MESA STANDARD DETAIL NO. M-31.03). INSTALL WITH SECURITY CAGE AND CONCRETE PAD.
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- 8 SEE LANDSCAPING PLANS FOR CONTINUATION
- 9 CONSTRUCT VERTICAL REALIGNMENT (MAG STANDARD DETAIL NO. 381).
- 10 SAWCUT REMOVE AND REPLACE EXISTING A.C. PAVEMENT (CITY OF MESA STANDARD DETAIL NO.S 19.04.1 AND 19.04.2).
- 11 POTHOLE AND FIELD VERIFY THE EXACT ELEVATION AND LOCATION OF THE EXISTING UTILITY PRIOR TO CONSTRUCTION. NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES.



PRIVATE DOMESTIC WATER, SANITARY SEWER AND FIRE LINE PLAN

QUEEN CREEK UNIFIED SCHOOL DISTRICT NO. 95

IMPROVEMENT PLANS FOR
QUEEN CREEK ELEMENTARY SCHOOL #10

DRAWING STATUS	SHEET	OF	
1ST CITY SUBMITTAL SET			
	15	18	C-15
DATE:	11-30-23		

UNDERGROUND UTILITY TRACER WIRE NOTE:

ALL NEW UNDERGROUND FACILITIES/UTILITIES SHALL BE INSTALLED WITH A DETECTABLE UNDERGROUND LOCATION DEVICE. INSTALL A #18 INSULATED TRACER WIRE SECURELY ATTACHED TO EACH UTILITY AT 8-FEET ON CENTER. 12" OF TRACER WIRE SHALL BE ACCESSIBLE ABOVE GRADE AT THE TERMINATION AND SHALL BE SECURELY ATTACHED AT THAT POINT. THE CONTRACTOR SHALL VERIFY WHICH COLOR TO USE FOR STORM DRAIN, WATER, SEWER, ETC., WITH THE CITY OF MESA AND APPROPRIATE UTILITY COMPANIES. THE CONTRACTOR SHALL INCLUDE ALL COSTS ASSOCIATED WITH THIS REQUIREMENT IN THEIR BID.

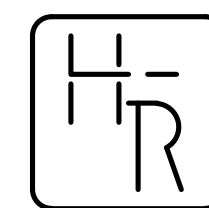
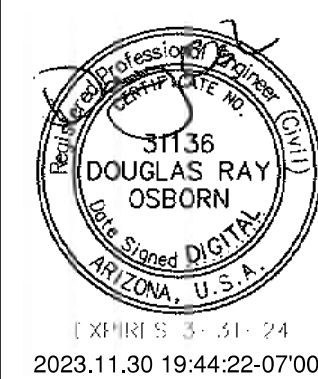
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ON-SITE ADJACENT WAYS

E. RAY ROAD

Legend			
Label	Quantity	Unit	
Fire Hydrant Assembly	4	Count	
Fire Line - 8" C900	1,809.2280	ft	
Fire Line - 8" Double Check Backflow	2	Count	
Fire Line - 8" Valve Box & Cover	7	Count	



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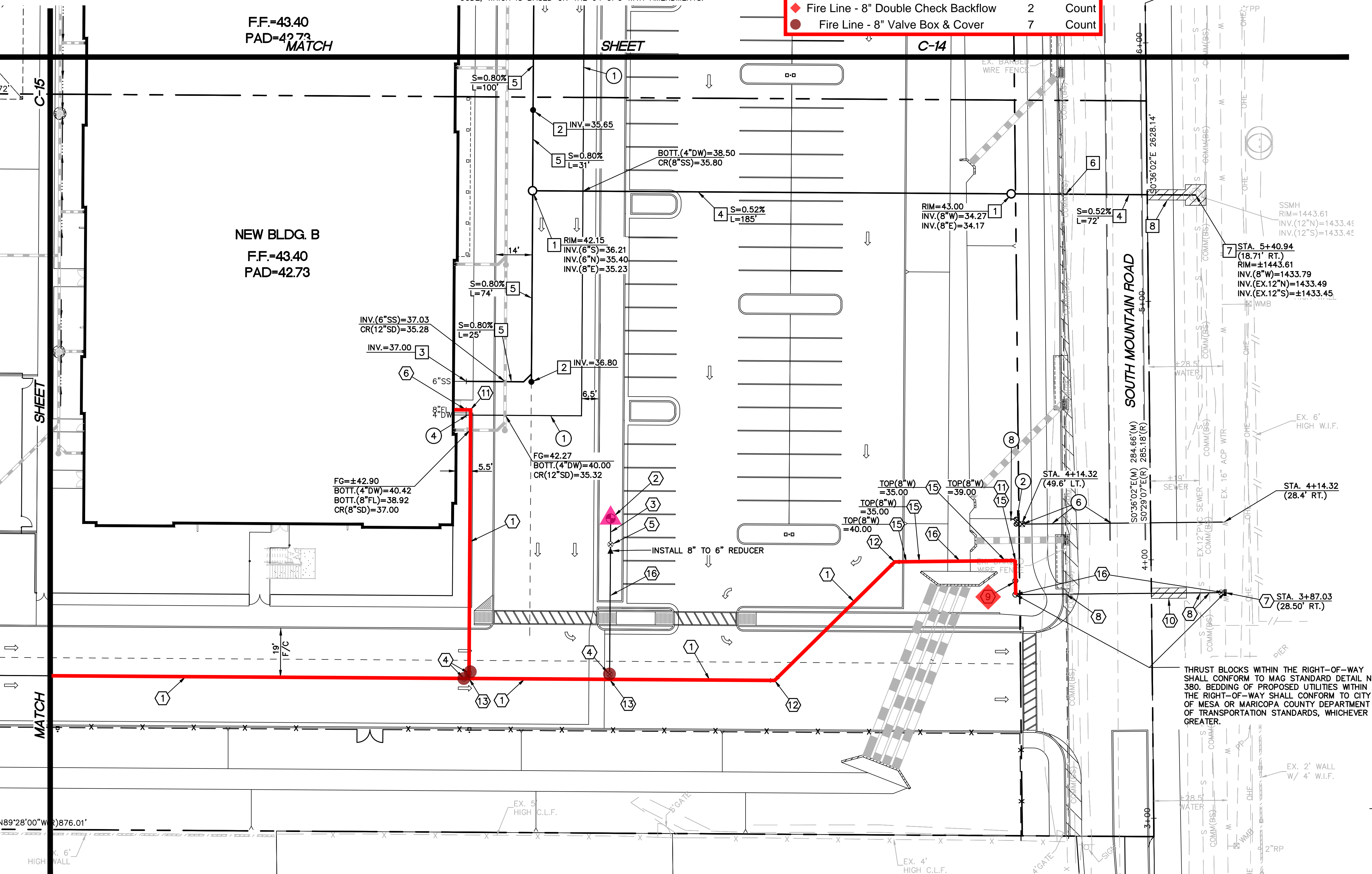
DES. **DRO** DRN. **ANM** CKD **DRO** JOB NO. **2302-12**

PRIVATE SANITARY SEWER LINE CONSTRUCTION NOTES:

- INSTALL 5' DIAMETER SEWER MANHOLE WITH 30" DIAMETER FRAME AND COVER (MAG STANDARD DETAIL NO.S 420-1, 420-2, 420-3 AND 423-2).
- INSTALL SANITARY SEWER CLEANOUT. (SEE DETAIL ON SHEET C-2).
- CONNECT TO BUILDING SEWER LINE WITH NECESSARY AND APPROPRIATE FITTINGS. SEE BUILDING PLUMBING DRAWINGS FOR EXACT LOCATION, ELEVATION AND CONTINUATION.
- INSTALL 8" P.V.C. (ASTM D3034, SDR-35) SEWER LINE.
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- INSTALL 8" P.V.C. (AWWA C-900, DR-18 CLASS 235) WATER LINE INCLUDING ALL BENDS, TEES, FITTINGS AND THRUST BLOCKS.
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- INSTALL 16" X 8" TAPPING SLEEVE AND 8" GATE VALVE WITH VALVE BOX AND COVER (MAG STANDARD DETAIL NO. 340 AND MAG STANDARD DETAIL NO. 391-1, TYPE 'C').
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- INSTALL 8"-90° BEND.
- INSTALL 8"-45° BEND.
- INSTALL 8" TEE.
- INSTALL 8" X 6" TEE.
- CONSTRUCT VERTICAL REALIGNMENT (MAG STANDARD DETAIL NO. 381).
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PRIVATE FIRE LINE THRUST BLOCK NOTE:

ALL THRUST BLOCKS SHALL BE CONSTRUCTED OF M.A.G. CLASS C CONCRETE. FOR ALL PRIVATE FIRE LINE THRUST BLOCKS THE AREA OF BEARING FACE SHALL BE PER NFPA-24. THE FOLLOWING CHART IS FROM NFPA-24. SEE DOMESTIC WATER LINE THRUST BLOCK GENERAL NOTE FOR THRUST BLOCKS WITHIN THE RIGHT-OF-WAY.

PIPE SIZE (IN.)	90° BEND (SQ.FT.)	45° BEND (SQ.FT.)	TEES, PLUGS, CAPS AND HYDRANTS (SQ.FT.)
4	2	2	2
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8	8	5	6
10	13	7	9
12	18	10	13
14	25	14	18
16	32	18	23

NOTE:

ALL NEW ON-SITE UNDERGROUND UTILITIES (WATER, SEWER, FIRE AND STORM DRAIN LINES) SHALL BE BEDDED WITH A.B.C., PER MAG SECTION 702, FROM 4" (MIN.) BELOW THE BOTTOM OF THE PIPE TO 12" (MIN.) ABOVE THE TOP OF THE PIPE. BEDDING WITHIN THE RIGHT-OF-WAY SHALL CONFORM TO CITY OF MESA AND MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION STANDARDS, WHICHEVER IS MORE STRINGENT.

PRIVATE DOMESTIC WATER LINE CONSTRUCTION NOTES:

- INSTALL 4" P.V.C. (RING TITE, CLASS 200) WATER LINE WITH CAST IRON BENDS AND FITTINGS.
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- INSTALL 4" GATE VALVE WITH VALVE BOX AND COVER (MAG STANDARD DETAIL NO. 391-1, TYPE 'C').
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- INSTALL NEW 2" DOMESTIC WATER SERVICE, AND 2" WATER METER WITH METER BOX AND COVER (CITY OF MESA STANDARD DETAIL NOS. M-49.01, .02 AND .03). SERVICES WILL BE PARALLEL PER CITY OF MESA STANDARD DETAIL NO. M-29.02.

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- SEE LANDSCAPING PLANS FOR CONTINUATION
- CONSTRUCT VERTICAL REALIGNMENT (MAG STANDARD DETAIL NO. 381).
- SAWCUT REMOVE AND REPLACE EXISTING A.C. PAVEMENT (CITY OF MESA STANDARD DETAIL NO.S 19.04.1 AND 19.04.2).
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SCALE: 1"=20'

PRIVATE DOMESTIC WATER, SANITARY SEWER AND FIRE LINE PLAN

QUEEN CREEK UNIFIED SCHOOL DISTRICT NO. 95

IMPROVEMENT PLANS FOR QUEEN CREEK ELEMENTARY SCHOOL #10

DRAWING STATUS	SHEET	OF	
1ST CITY SUBMITTAL SET	16	18	C-16
DATE:	11-30-23		



- 1 - Concrete Vertical Curb and Gutter (Onsite AW) 824.07 LF
- 2 - Concrete Single Curb (Onsite A W) 802.78 LF
- 21 - Concrete Valley Gutter 129.69 SF

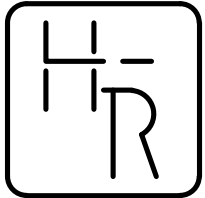
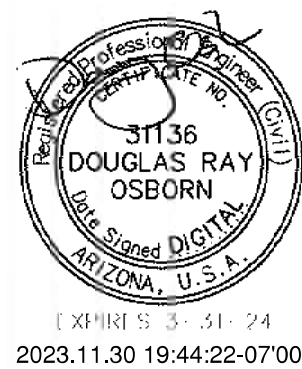
ON-SITE ADJACENT WAYS

STORM DRAIN CONSTRUCTION NOTES:

- 18 INSTALL 4" H.D.P.E. STORM DRAIN PIPE WITH SMOOTH INTERIOR AND 10.8 P.S.I. JOINTS.
- 19 CONNECT PROPOSED STORM DRAIN TO NEW DRINKING FOUNTAIN USING NECESSARY AND APPROPRIATE FITTINGS. SEE PLUMBING DRAWINGS FOR DRINKING FOUNTAIN DETAILS.

ALTERNATE NO. 1

CONCRETE SIDEWALK WITHIN THE COURTYARD AREA AND THE WEST SIDE OF THE PROPOSED BUILDINGS MAY BE REPLACED WITH STABILIZED DECOMPOSED GRANITE WALKWAYS IN THE AMOUNT OF A 9,410 SQUARE FOOT AREA. CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT TO DETERMINE IF THE ALTERNATE WILL BE USED IN CONSTRUCTION.

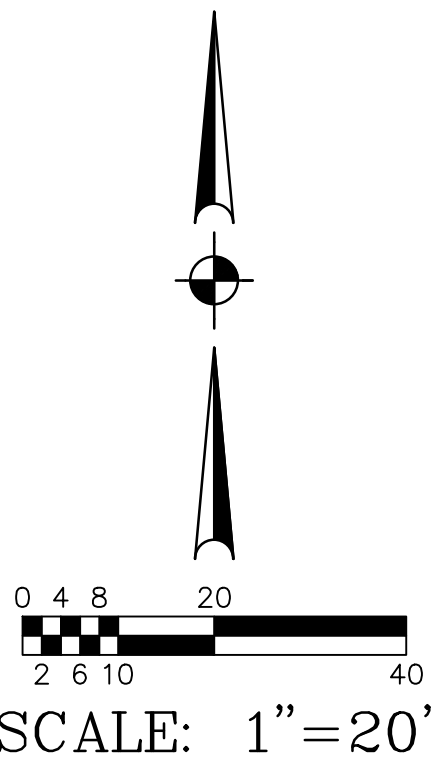


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DES: **DRO** DRN: **ANM** CKD: **DRO** JOB NO. **2302-12**

GRADING AND DRAINAGE CONSTRUCTION NOTES:

- 1 INSTALL CONCRETE VERTICAL CURB AND GUTTER (MAG STANDARD DETAIL NO. 220-1, TYPE A).
- 2 INSTALL CONCRETE SINGLE CURB (MAG STANDARD DETAIL NO. 222, TYPE 'A').
- 3 INSTALL A.C. PAVEMENT (2-1/2" A.C. (TYPE 1/2") OVER 7" A.B.C. OVER COMPACTED SUBGRADE) IN HEAVY TRAFFIC AREAS.
- 4 INSTALL A.C. PAVEMENT (2" A.C. (TYPE 1/2") OVER 7" A.B.C. OVER COMPACTED SUBGRADE) IN PARKING AND LIGHT TRAFFIC AREAS.
- 5 INSTALL CONCRETE SIDEWALK (MAG STANDARD DETAIL NO. 230). SEE ARCHITECTURAL DRAWINGS FOR SCORING AND FINISH.
- 6 INSTALL CONCRETE SPLASHPAD (SEE DETAIL ON SHEET C-2).
- 7 CONSTRUCT CURB TERMINATION (MAG STANDARD DETAIL NO. 222).
- 8 CONSTRUCT SIDEWALK RAMP, TYPE PER PLAN (SEE DETAIL ON SHEET C-2).
- 9 PAINT STRIPE PARKING LOT TO THE ALIGNMENTS INDICATED (INCLUDING ALL DIRECTIONAL ARROWS, CROSSWALKS, PARKING STALLS, HANDICAP STRIPING, ETC.).
- 10 CONSTRUCT NEW GAGA BALL PIT (SEE PLAYGROUND PLANS FOR DETAILS).
- 11 INSTALL 6" HIGH CHAIN LINK FENCE.
- 12 MATCH EXISTING ELEVATION AND LOCATION.
- 13 INSTALL 6" THICK MAG AA CONCRETE (4,000 P.S.I. @ 28 DAYS).
- 14 INSTALL NEW FENCE/GATES (SEE ARCHITECTURAL PLANS FOR DETAILS).
- 15 INSTALL 18" DEEP BY 6" WIDE CONCRETE SIDEWALK TURNDOWN BETWEEN THE LIMITS SHOWN.
- 16 INSTALL ROLL GATE (SEE ARCHITECTURAL PLANS FOR DETAILS).
- 17 INSTALL 12" THICKNESS OF ANGULAR RIP-RAP (D50=6"). COLOR TO MATCH EXISTING. INSTALL MIRAFI 180N FILTER FABRIC BENEATH RIP-RAP.
- 18 INSTALL 6" HIGH BY 10' WIDE CHAIN LINK FENCE DOUBLE SWING GATE.
- 19 CONSTRUCT NEW TRASH ENCLOSURE (SEE ARCHITECTURAL PLANS FOR DETAILS).
- 20 INSTALL HANDICAP PARKING SIGN PER CITY OF MESA STANDARD DETAIL NO. M-23.06. POST AND BASE PER CITY OF MESA STANDARD DETAIL NO. M-39.
- 21 INSTALL CONCRETE VALLEY GUTTER (MAG STANDARD DETAIL NO. 240, WIDTH PER PLAN).
- 22 INSTALL PRECAST SAFETY CURB (MAG STANDARD DETAIL NO. 150, TYPE B-3).
- 23 INSTALL 1-3' X 3' XL GABION BASKET W/ ROCK RIP-RAP D50=4.5', MACAFERRI MESH TYPE 8 X 10, WIRE DIA. 0.12", GALVANIZED, OR APPROVED EQUAL.
- 24 INSTALL 6" THICK RENO MATTRESS W/ ROCK RIP-RAP D50=3" MACAFERRI MESH TYPE 8 X 10 WIRE DIA. 0.12", GALVANIZED, OR APPROVED EQUAL. INSTALL MIRAFI 140NL FILTER FABRIC OR APPROVED EQUAL.
- 25 INSTALL DRAIN THROUGH LANDSCAPE AREA (SEE DETAIL ON SHEET C-3).



GRADING AND DRAINAGE PLAN			
QUEEN CREEK UNIFIED SCHOOL DISTRICT NO. 95			
IMPROVEMENT PLANS FOR			
QUEEN CREEK ELEMENTARY SCHOOL #10			
DRAWING STATUS	SHEET	OF	C-10
1ST CITY SUBMITTAL SET			
DATE: 11-30-23	10	18	



STB PROJECT #70295000-9999-019N

- 1 - Concrete Vertical Curb and Gutter (Onsite AW) 454.31 LF
- 2 - Concrete Single Curb (Onsite AW) 814.12 LF
- 21 - Concrete Valley Gutter 204.10 SF

ON-SITE
ADJACENT
WAYS

STORM DRAIN CONSTRUCTION NOTES:

- 1 CONNECT TO DOWNSPOUT WITH SQUARE TO ROUND FITTING. SEE PLUMBING DRAWINGS FOR CONTINUATION.
- 2 INSTALL NEW STORM DRAIN CLEANOUT (SEE DETAIL ON SHEET C-2).
- 3 INSTALL AREA DRAIN (SEE DETAIL ON SHEET C-2).
- 4 INSTALL NEW 24" H.D.P.E. STORM DRAIN PIPE WITH SMOOTH INTERIOR AND 10.8 P.S.I. JOINTS.
- 5 CONSTRUCT DUAL CHAMBER DRYWELL (SEE DETAIL ON SHEET C-2).
- 6 INSTALL NEW 18" H.D.P.E. STORM DRAIN PIPE WITH SMOOTH INTERIOR AND 10.8 P.S.I. JOINTS.
- 7 INSTALL NEW 12" H.D.P.E. STORM DRAIN PIPE WITH SMOOTH INTERIOR AND 10.8 P.S.I. JOINTS.
- 8 INSTALL NEW 10" H.D.P.E. STORM DRAIN PIPE WITH SMOOTH INTERIOR AND 10.8 P.S.I. JOINTS.
- 9 INSTALL NEW 8" H.D.P.E. STORM DRAIN PIPE WITH SMOOTH INTERIOR AND 10.8 P.S.I. JOINTS.
- 10 INSTALL NEW CATCH BASIN (MAG STANDARD DETAIL NO. 537, DOUBLE).
- 11 INSTALL 30" H.D.P.E. STORM DRAIN PIPE WITH SMOOTH INTERIOR AND 10.8 P.S.I. JOINTS.
- 12 INSTALL 24" TO 18" REDUCER.
- 13 INSTALL NEW CATCH BASIN (MAG STANDARD DETAIL NO. 537, SINGLE).
- 14 INSTALL 12" DUCTILE IRON PIPE (PRESSURE CLASS 350) UNDER BUILDING OVERHANG.
- 15 INSTALL 36" H.D.P.E. STORM DRAIN PIPE WITH SMOOTH INTERIOR AND 10.8 P.S.I. JOINTS.
- 16 CONSTRUCT HEADWALL (MAG STANDARD DETAIL NO.'S 501-1 AND 501-2). INSTALL HANDRAIL ON HEADWALL (MAG STANDARD DETAIL NO. 145, TYPE 1). HEADWALL DETAIL SHALL BE MODIFIED SO THAT THERE

IS ONE FOOT SEPARATION BETWEEN THE 36" PIPES FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER (L5=4'-6"). INSTALL TRASH RACK ON HEADWALL (CITY OF PHOENIX STANDARD DETAIL NO.'S P1562 AND P1563).

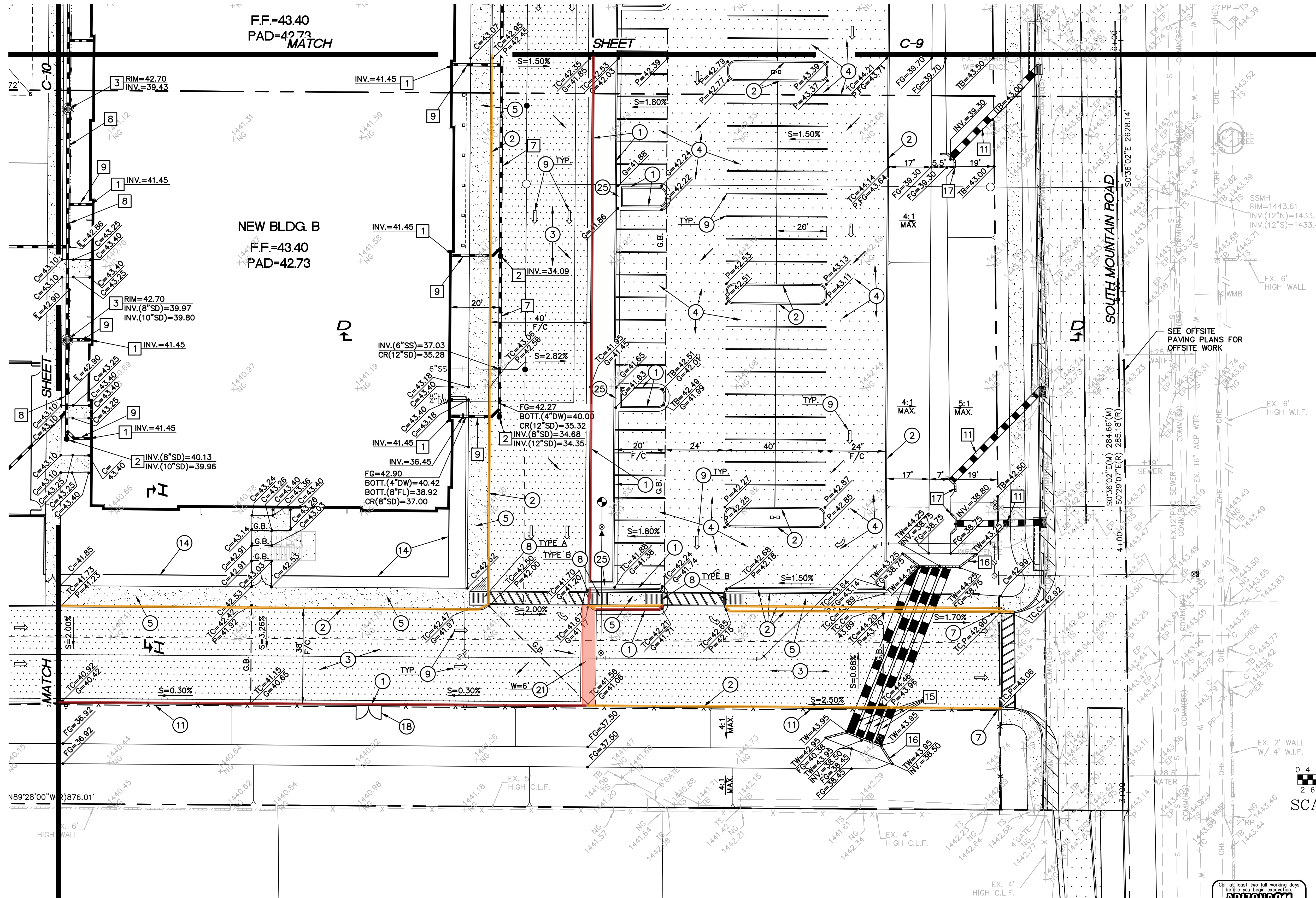
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18 INSTALL 4" H.D.P.E. STORM DRAIN PIPE WITH SMOOTH INTERIOR AND 10.8 P.S.I. JOINTS.

19 CONNECT PROPOSED STORM DRAIN TO NEW DRINKING FOUNTAIN USING NECESSARY AND APPROPRIATE FITTINGS. SEE PLUMBING DRAWINGS FOR DRINKING FOUNTAIN DETAILS.

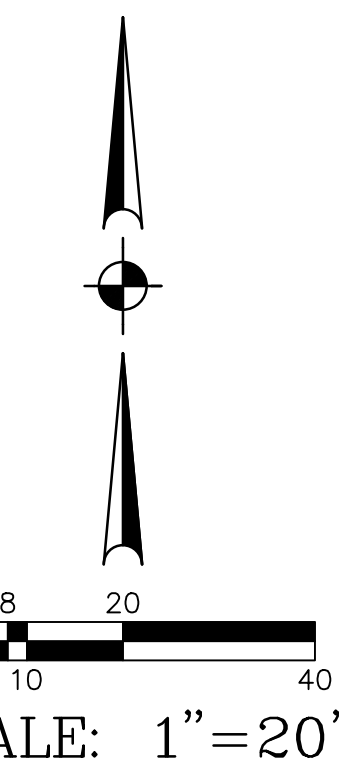
ALTERNATE NO. 1

CONCRETE SIDEWALK WITHIN THE COURTYARD AREA AND THE WEST SIDE OF THE PROPOSED BUILDINGS MAY BE REPLACED WITH STABILIZED DECOMPOSED GRANITE WALKWAYS IN THE AMOUNT OF A 9,410 SQUARE FOOT AREA. CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT TO DETERMINE IF THE ALTERNATE WILL BE USED IN CONSTRUCTION.



GRADING AND DRAINAGE
CONSTRUCTION NOTES:

- 1 INSTALL CONCRETE VERTICAL CURB AND GUTTER (MAG STANDARD DETAIL NO. 220-1, TYPE A).
- 2 INSTALL CONCRETE SINGLE CURB (MAG STANDARD DETAIL NO. 222, TYPE 'A').
- 3 INSTALL A.C. PAVEMENT (2-1/2" A.C. (TYPE 1/2") OVER 7" A.B.C. OVER COMPACTED SUBGRADE) IN HEAVY TRAFFIC AREAS.
- 4 INSTALL A.C. PAVEMENT (2" A.C. (TYPE 1/2") OVER 7" A.B.C. OVER COMPACTED SUBGRADE) IN PARKING AND LIGHT TRAFFIC AREAS.
- 5 INSTALL CONCRETE SIDEWALK (MAG STANDARD DETAIL NO. 230). SEE ARCHITECTURAL DRAWINGS FOR SCORING AND FINISH.
- 6 INSTALL CONCRETE SPLASHPAD (SEE DETAIL ON SHEET C-2).
- 7 CONSTRUCT CURB TERMINATION (MAG STANDARD DETAIL NO. 222).
- 8 CONSTRUCT SIDEWALK RAMP, TYPE PER PLAN (SEE DETAIL ON SHEET C-2).
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- 11 INSTALL 6" HIGH CHAIN LINK FENCE.
- 12 MATCH EXISTING ELEVATION AND LOCATION.
- 13 INSTALL 6" THICK MAG AA CONCRETE (4,000 P.S.I. @ 28 DAYS).
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- 16 INSTALL ROLL GATE (SEE ARCHITECTURAL PLANS FOR DETAILS).
- 17 INSTALL 12" THICKNESS OF ANGULAR RIP-RAP (D50=6"). COLOR TO MATCH EXISTING. INSTALL MIRAFI 180N FILTER FABRIC BENEATH RIP-RAP.
- 18 INSTALL 6" HIGH BY 10" WIDE CHAIN LINK FENCE DOUBLE SWING GATE.
- 19 CONSTRUCT NEW TRASH ENCLOSURE (SEE ARCHITECTURAL PLANS FOR DETAILS).
- 20 INSTALL HANDICAP PARKING SIGN PER CITY OF MESA STANDARD DETAIL NO. M-23.06. POST AND BASE PER CITY OF MESA STANDARD DETAIL NO. M-39.
- 21 INSTALL CONCRETE VALLEY GUTTER (MAG STANDARD DETAIL NO. 240, WIDTH PER PLAN).
- 22 INSTALL PRECAST SAFETY CURB (MAG STANDARD DETAIL NO. 150, TYPE B-3).
- 23 INSTALL 1'-3" X 3' XL GABION BASKET W/ ROCK RIP-RAP D₅₀=4.5", MACAFERRI MESH TYPE 8 X 10, WIRE DIA. 0.12", GALVANIZED, OR APPROVED EQUAL.
- 24 INSTALL 6" THICK RENO MATTRESS W/ ROCK RIP-RAP D₅₀=3", MACAFERRI MESH TYPE 8 X 10 WIRE DIA. 0.12", GALVANIZED, OR APPROVED EQUAL. INSTALL MIRAFI 140NL FILTER FABRIC OR APPROVED EQUAL.
- 25 INSTALL DRAIN THROUGH LANDSCAPE AREA (SEE DETAIL ON SHEET C-3).



GRADING AND DRAINAGE PLAN			
QUEEN CREEK UNIFIED SCHOOL DISTRICT NO. 95			
IMPROVEMENT PLANS FOR QUEEN CREEK ELEMENTARY SCHOOL #10			
DRAWING STATUS	SHEET	OF	C-11
1ST CITY SUBMITTAL SET	11	18	
DATE:	11-30-23		



- 1 - Concrete Vertical Curb and Gutter (Onsite AW) 676.12 LF
- 2 - Concrete Single Curb (Onsite AW) 1024.91 LF
- 21 - Concrete Valley Gutter 134.84 SF

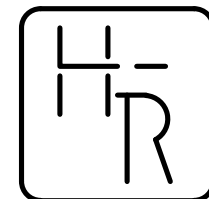
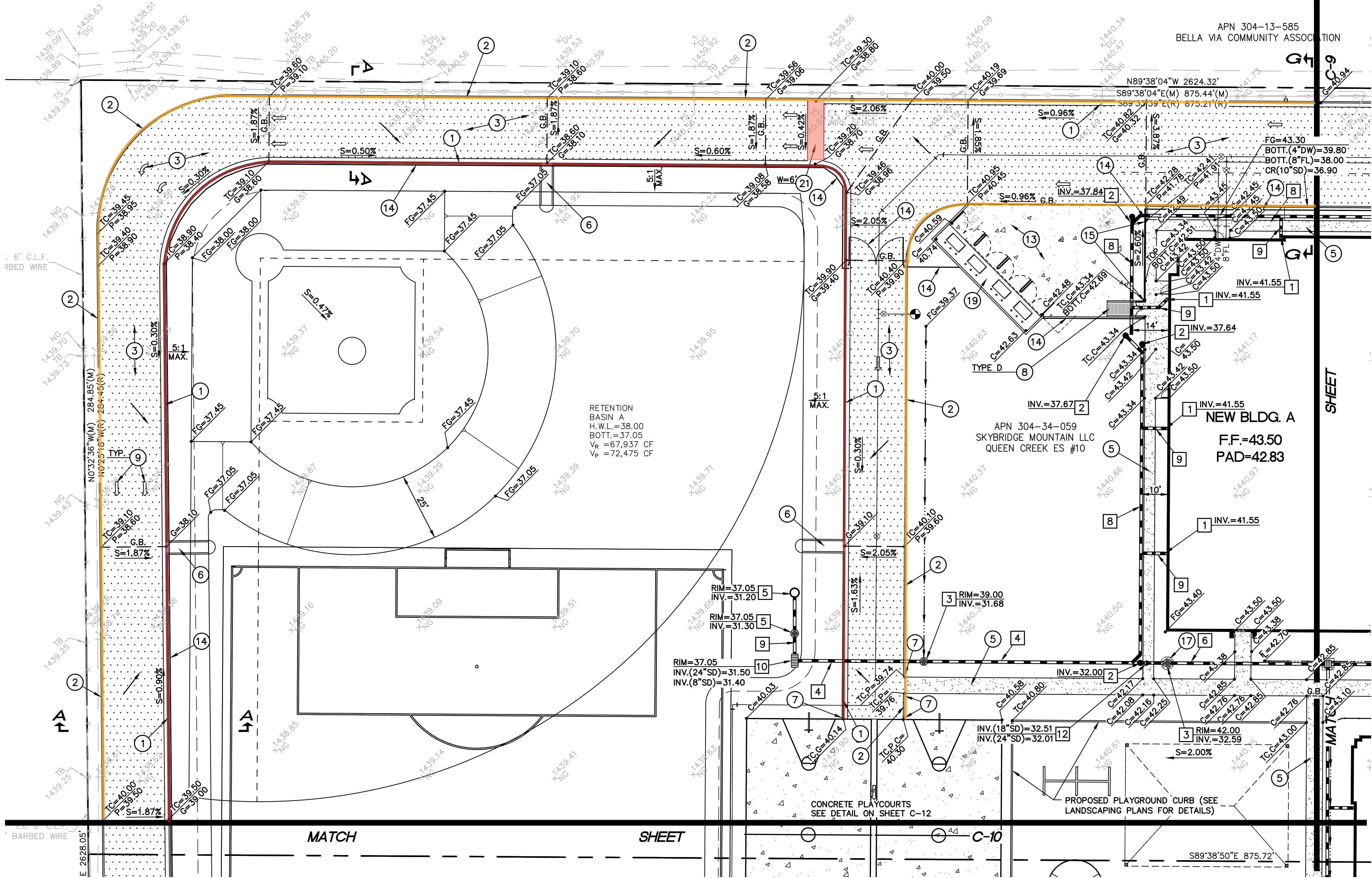
STORM DRAIN CONSTRUCTION NOTES:

- CONNECT TO DOWNSPOUT WITH SQUARE TO ROUND FITTING. SEE PLUMBING DRAWINGS FOR CONTINUATION.
- INSTALL NEW STORM DRAIN CLEANOUT (SEE DETAIL ON SHEET C-2).
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- INSTALL NEW CATCH BASIN (MAG STANDARD DETAIL NO 537, DOUBLE).
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ALTERNATE NO. 1

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ON-SITE ADJACENT WAYS



HESS - ROUNTREE, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
9831 SOUTH 51ST STREET, SUITE C110
PHOENIX, ARIZONA 85044 (480)496-0244

DSS: **DRO** DRN: **ANM** CKD: **DRO** JOB NO. **2302-12**

GRADING AND DRAINAGE
CONSTRUCTION NOTES:

- INSTALL CONCRETE VERTICAL CURB AND GUTTER (MAG STANDARD DETAIL NO. 220-1, TYPE A).
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- INSTALL CONCRETE SIDEWALK (MAG STANDARD DETAIL NO. 230). SEE ARCHITECTURAL DRAWINGS FOR SCORING AND FINISH.
- INSTALL CONCRETE SPLASHPAD (SEE DETAIL ON SHEET C-2).
- CONSTRUCT CURB TERMINATION (MAG STANDARD DETAIL NO. 222).
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- INSTALL 6' HIGH CHAIN LINK FENCE.
- MATCH EXISTING ELEVATION AND LOCATION.
- INSTALL 6" THICK MAG AA CONCRETE (4,000 P.S.I. @ 28 DAYS).
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- INSTALL CONCRETE VALLEY GUTTER (MAG STANDARD DETAIL NO. 240, WIDTH PER PLAN).
- INSTALL PRECAST SAFETY CURB (MAG STANDARD DETAIL NO. 150, TYPE B-3).
- INSTALL 1-3' X 3' XL GABION BASKET W/ ROCK RIP-RAP D₅₀=4.5", MACAFERRI MESH TYPE 8 X 10, WIRE DIA. 0.12", GALVANIZED, OR APPROVED EQUAL.
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- INSTALL DRAIN THROUGH LANDSCAPE AREA (SEE DETAIL ON SHEET C-3).

GRADING AND DRAINAGE PLAN

QUEEN CREEK UNIFIED SCHOOL DISTRICT NO. 95

IMPROVEMENT PLANS FOR
QUEEN CREEK ELEMENTARY SCHOOL #10

DRAWING STATUS	SHEET	OF	
1ST CITY SUBMITTAL SET			
DATE: 11-30-23	8	18	C-8



SFB PROJECT #70295000-9999-019N

230212GRD.DWG

- 1 - Concrete Vertical Curb and Gutter (Onsite AW) 590.96 LF
- 2 - Concrete Single Curb (Onsite A W) 529.03 LF
- 21 - Concrete Valley Gutter 337.92 SF

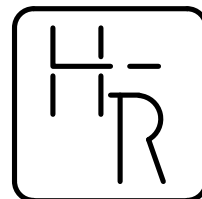
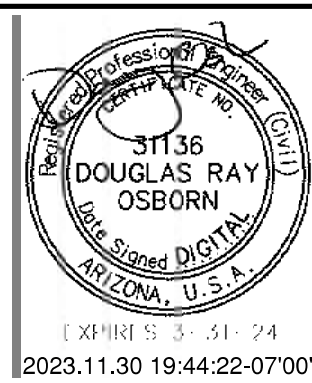
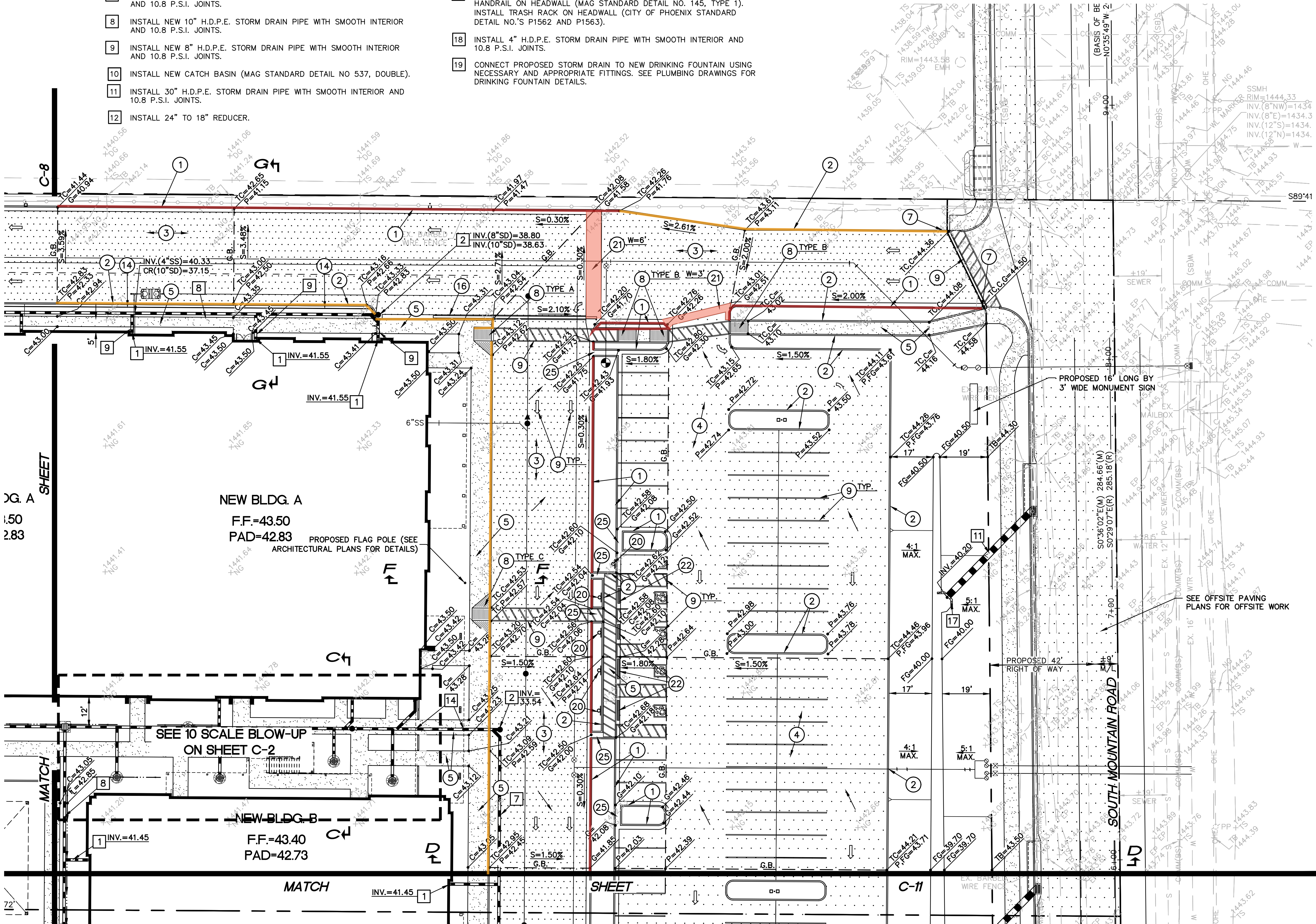
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ON-SITE ADJACENT WAYS

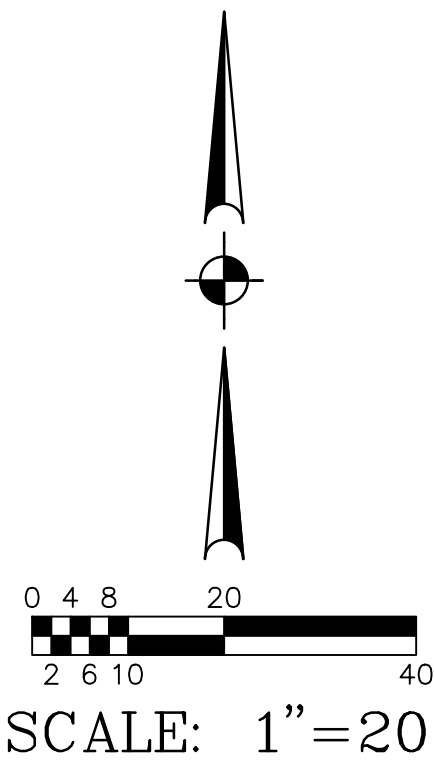


HESS - ROUNTREE, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
9831 SOUTH 51ST STREET, SUITE C110
PHOENIX, ARIZONA 85044 (480)496-0244

DRAWN BY: **DRO** DESIGNED BY: **ANM** CHECKED BY: **DRO** JOB NO.: **2302-12**

GRADING AND DRAINAGE CONSTRUCTION NOTES:

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- MATCH EXISTING ELEVATION AND LOCATION.
- INSTALL 6" THICK MAG AA CONCRETE (4,000 P.S.I. @ 28 DAYS).
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GRADING AND DRAINAGE PLAN

QUEEN CREEK UNIFIED SCHOOL DISTRICT NO. 95

IMPROVEMENT PLANS FOR
QUEEN CREEK ELEMENTARY SCHOOL #10

DRAWING STATUS	SHEET	OF	
1ST CITY SUBMITTAL SET			
DATE: 11-30-23	9	18	C-9



SFB PROJECT #70295000-9999-019N