





HESS – ROUNTREE, INC. 9831 SOUTH 51ST STREET, SUITE C110

S.DRO | DRN. ANM | CKD.DRO | JOB NO. 2309-04

GRADING AND DRAINAGE **CONSTRUCTION NOTES:**

- 1) INSTALL CONCRETE SIDEWALK (CITY OF PHOENIX STANDARD DETAIL NO. P1230). SEE ARCHITECTURAL DRAWINGS FOR SCORING AND FINISH
- 2 INSTALL CONCRETE VERICAL CURB AND GUTTER (MAG STANDARD DETAIL NO. 220-1, TYPE A).
- 3 INSTALL CONCRETE SINGLE CURB (MAG STANDARD DETAIL NO. 222, TYPE 'A').
- 4 INSTALL ASPHALTIC CONCRETE PAVEMENT (2" A.C. (1/2 INCH) OVER 6" A.B.C. OVER COMPACTED SUBGRADE). TYPICAL FOR AUTO PARKING AND
- (5) INSTALL ASPHALTIC CONCRETE PAVEMENT (3" A.C. (1/2 INCH) OVER 8" A.B.C. OVER COMPACTED SUBGRADE). TYPICAL FOR BUS/TRUCK PARKING
- INSTALL TWO 6" STEPS. SEE ARCHITECTURAL DRAWINGS FOR DETAILS.
- (7) CONSTRUCT SIDEWALK RAMP, TYPE PER PLAN (SEE DETAIL ON SHEET
- 8 INSTALL 8" THICK CONCRETE PAVEMENT (4,000 P.S.I. CONCRETE OVER COMPACTED SUBGRADE).
- (9) MATCH EXISTING ELEVATION AND LOCATION.
- (10) PAINT STRIPE PARKING LOT TO THE ALIGNMENTS INDICATED.
- 11) CONSTRUCT LANDSCAPE CURB (SEE DETAIL ON SHEET C-2)
- (12) INSTALL 30' HIGH CHAIN LINK FENCE BACKSTOP BETWEEN THE LIMITS SHOWN (SEE DETAIL ON SHEET C-2).
- (13) INSTALL NEW DUGOUT (SEE DETAIL ON SHEET C-2).
- [14] INSTALL TWO 10' LONG PATTERSON—WILLIAMS ALUMINUM BENCHES (SEE PATTERSON WILLIAMS PRODUCT MODEL NO. 1103-15G).
- (15) INSTALL HOME PLATE, BASE OR PITCHING RUBBER (SEE DETAIL ON
- (16) INSTALL 4" THICK STABILIZED INFIELD MIX OR APPROVED EQUAL.
- (17) CONSTRUCT CURB TERMINATION (MAG STANDARD DETAIL NO. 222).
- (18) BLACKOUT EXISTING STRIPING.
- (19) CONSTRUCT CONCRETE SPLASHPAD (SEE DETAIL ON SHEET C-2).
- (20) CONSTRUCT CONCRETE RIBBON CURB (MAG STANDARD DETAIL NO. 220-1, TYPE B).
- (21) CONSTRUCT THICKENED PAVEMENT EDGE (MAG STANDARD DETAIL NO. 201. TYPE 'B').
- (22) CONSTRUCT CONCRETE VALLEY GUTTER (MAG STANDARD DETAIL NO. 240, MODIFIED TO BE 3' WIDE).
- STORM DRAIN CONSTRUCTION NOTES:
- INSTALL NEW CATCH BASIN (MAG STANDARD DETAIL NO. 537, SINGLE
- INSTALL NEW 6" H.D.P.E. STORM DRAIN PIPE WITH SMOOTH INTERIOR
- CONSTRUCT DUAL CHAMBER DRYWELL (SEE DETAIL ON SHEET C-2).

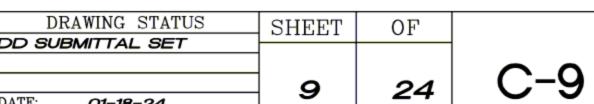
FENCING CONSTRUCTION NOTES:

- INSTALL 6' HIGH BY 30' WIDE WROUGHT IRON SWING GATE. (SEE
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- INSTALL 6' HIGH WROUGHT IRON FENCE (SEE DETAIL ON SHEET C-2)
- (4) INSTALL 6' HIGH 20' WIDE WROUGHT IRON FENCE (SEE DETAIL ON
- INSTALL 30' WIDE AUTOMATIC WROUGHT IRON FENCE ROLL GATE (SEE

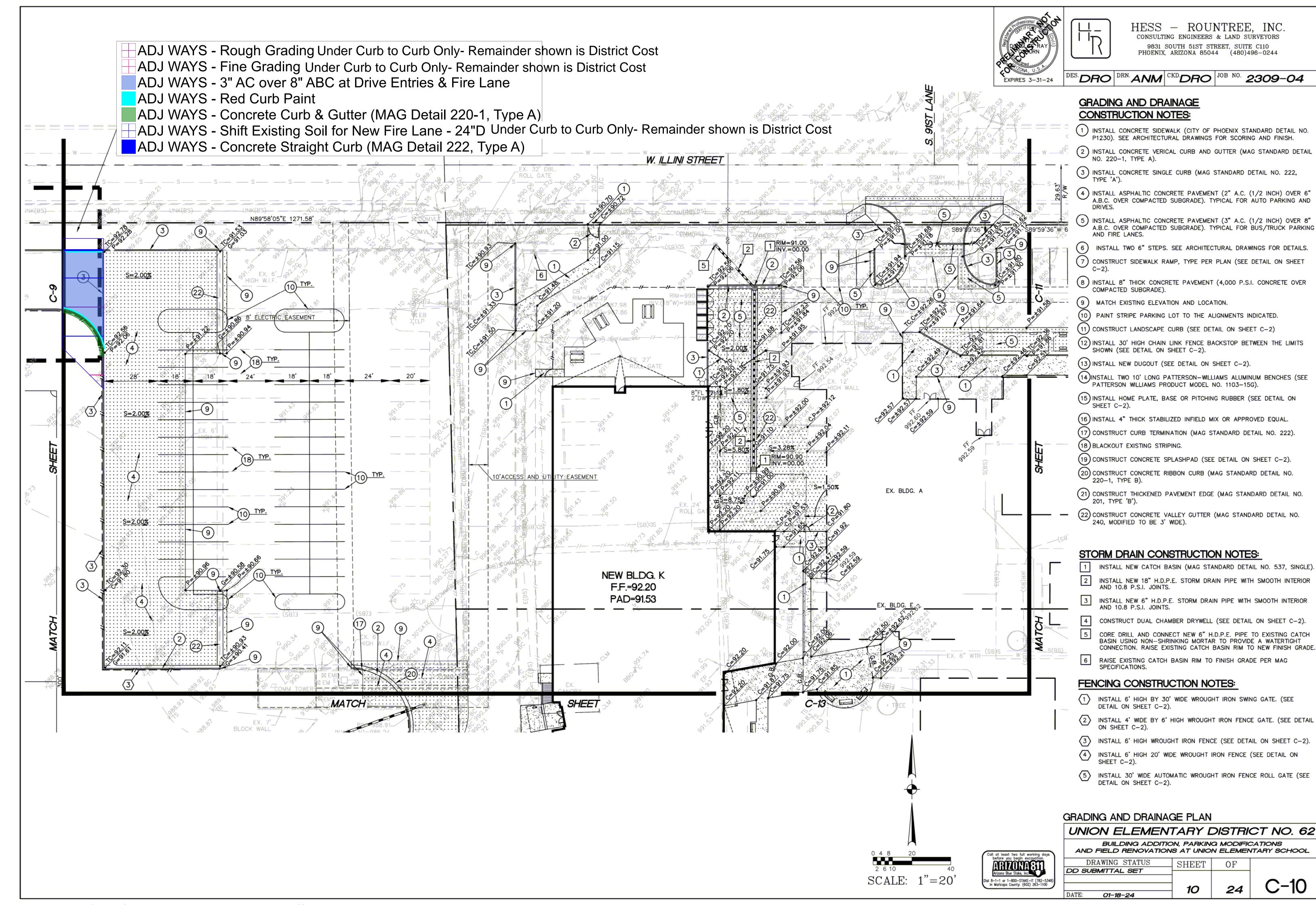
GRADING AND DRAINAGE PLAN

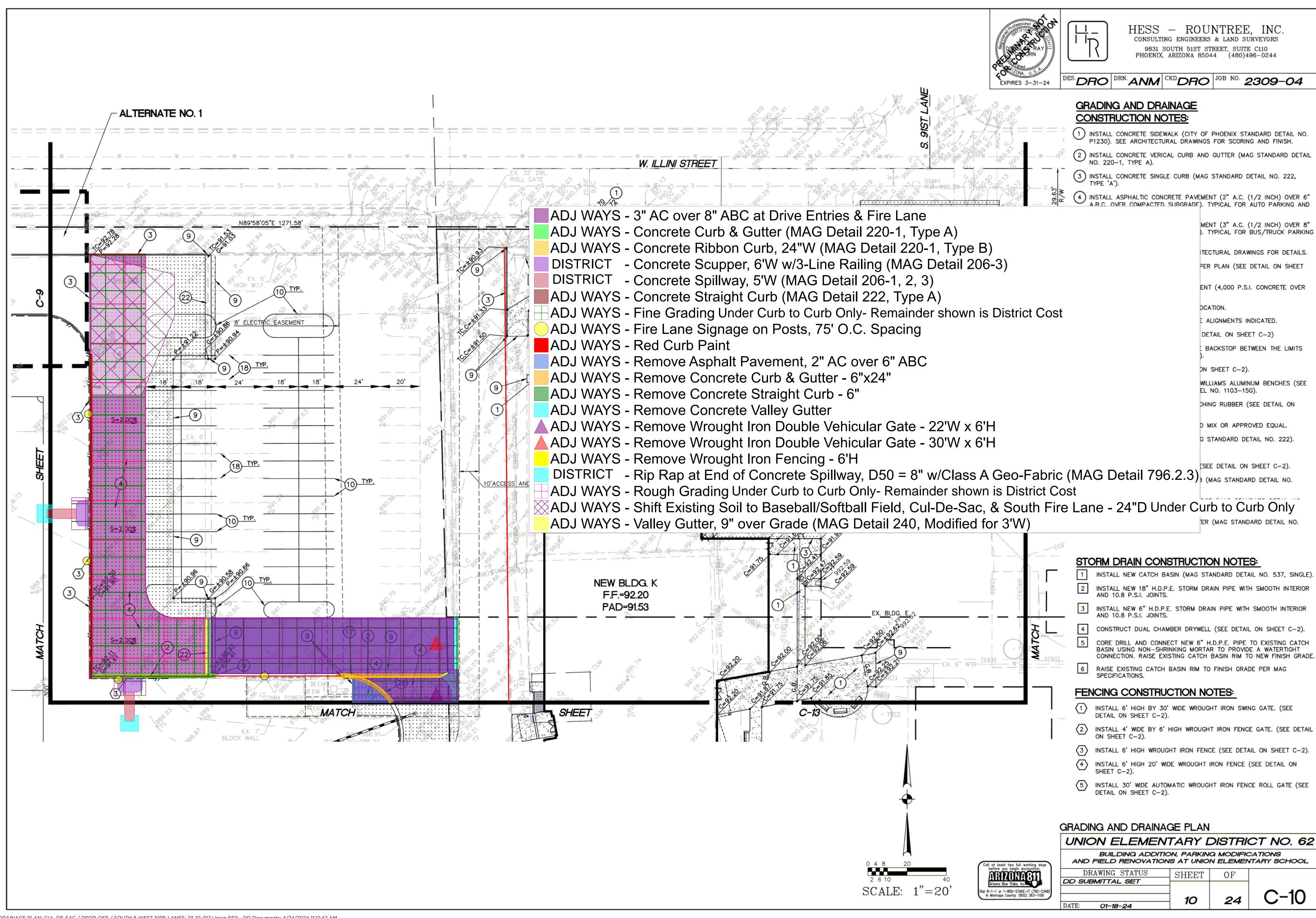
UNION ELEMENTARY DISTRICT NO. 62

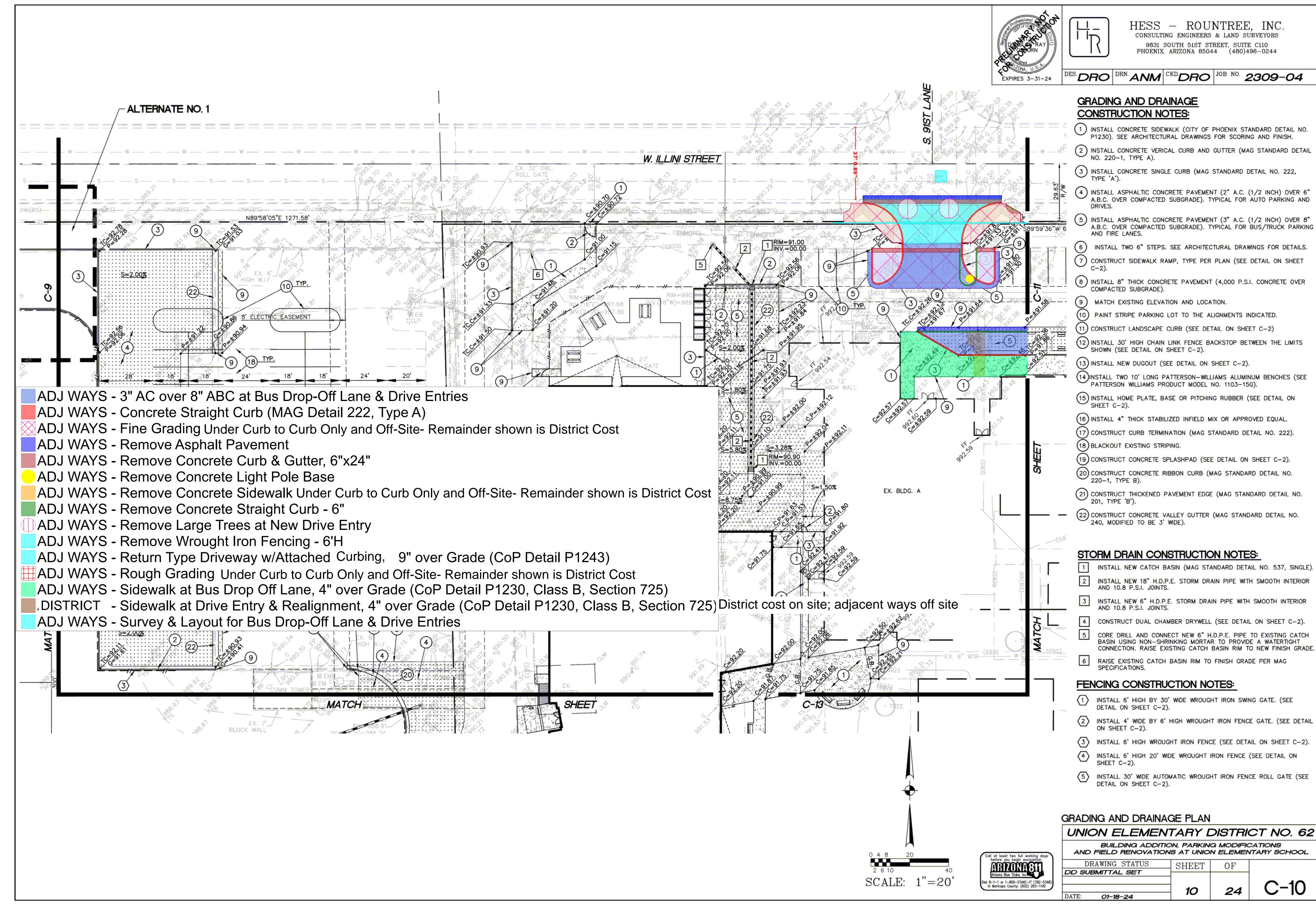
BUILDING ADDITION, PARKING MODIFICATIONS AND FIELD RENOVATIONS AT UNION ELEMENTARY SCHOOL















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

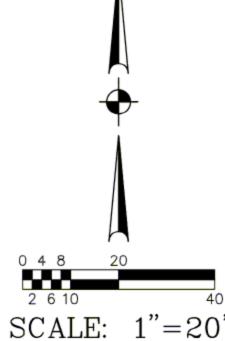
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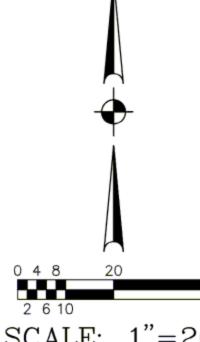
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- 2 INSTALL CONCRETE VERICAL CURB AND GUTTER (MAG STANDARD DETAIL NO. 220-1, TYPE A).
- 3 INSTALL CONCRETE SINGLE CURB (MAG STANDARD DETAIL NO. 222,
- 4 INSTALL ASPHALTIC CONCRETE PAVEMENT (2" A.C. (1/2 INCH) OVER 6" A.B.C. OVER COMPACTED SUBGRADE). TYPICAL FOR AUTO PARKING AND
- 5 INSTALL ASPHALTIC CONCRETE PAVEMENT (3" A.C. (1/2 INCH) OVER 8" A.B.C. OVER COMPACTED SUBGRADE). TYPICAL FOR BUS/TRUCK PARKING
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- (14)INSTALL TWO 10' LONG PATTERSON-WILLIAMS ALUMINUM BENCHES (SEE PATTERSON WILLIAMS PRODUCT MODEL NO. 1103-15G).
- (15) INSTALL HOME PLATE, BASE OR PITCHING RUBBER (SEE DETAIL ON
- (16) INSTALL 4" THICK STABILIZED INFIELD MIX OR APPROVED EQUAL.
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- (19) CONSTRUCT CONCRETE SPLASHPAD (SEE DETAIL ON SHEET C-2).
- CONSTRUCT CONCRETE RIBBON CURB (MAG STANDARD DETAIL NO. 220-1, TYPE B).
- 21) CONSTRUCT THICKENED PAVEMENT EDGE (MAG STANDARD DETAIL NO. 201, TYPE 'B').
- 22) CONSTRUCT CONCRETE VALLEY GUTTER (MAG STANDARD DETAIL NO. 240, MODIFIED TO BE 3' WIDE).

FENCING CONSTRUCTION NOTES:

- INSTALL 6' HIGH BY 30' WIDE WROUGHT IRON SWING GATE. (SEE DETAIL ON SHEET C-2).
- (2) INSTALL 4' WIDE BY 6' HIGH WROUGHT IRON FENCE GATE. (SEE DETAIL
- INSTALL 6' HIGH WROUGHT IRON FENCE (SEE DETAIL ON SHEET C-2).
- (4) INSTALL 6' HIGH 20' WIDE WROUGHT IRON FENCE (SEE DETAIL ON
- INSTALL 30' WIDE AUTOMATIC WROUGHT IRON FENCE ROLL GATE (SEE DETAIL ON SHEET C-2).





S01'35'56"E

GRADING AND DRAINAGE PLAN

UNION ELEMENTARY DISTRICT NO. 62

BUILDING ADDITION, PARKING MODIFICATIONS AND FIELD RENOVATIONS AT UNION ELEMENTARY SCHOOL

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W. ILLINI STREET

8 ELECTRIC EASEMENT

ADJ WAYS - 3" AC over 8" ABC at Bus Drop-Off Lane & Drive Entries

ADJ WAYS - Concrete Straight Curb (MAG Detail 222, Type A)

District cost on site; adjacent ways off site

ADJ WAYS - Remove Asphalt Pavement

ADJ WAYS - Remove Concrete ADA Ramp

ADJ WAYS - Remove Concrete Sidewalk

ADJ WAYS - Remove Concrete Curb & Gutter, 6"x24"

ADJ WAYS - Remove Large Trees at New Drive Entry

ADJ WAYS - Remove Concrete Straight Curb - 6"

ADJ WAYS - Remove Wrought Iron Fencing - 6'H

ADJ WAYS - ADA Sidewalk Ramp at Bus Drop Off Lane, 4" over Grade (MAG Detail 238-1)

ADJ WAYS - Fine Grading Under Curb to Curb Only and Off-Site- Remainder shown is District Cost

ADJ WAYS - Return Type Driveway w/Attached Curbing, 9" over Grade (CoP Detail P1243)

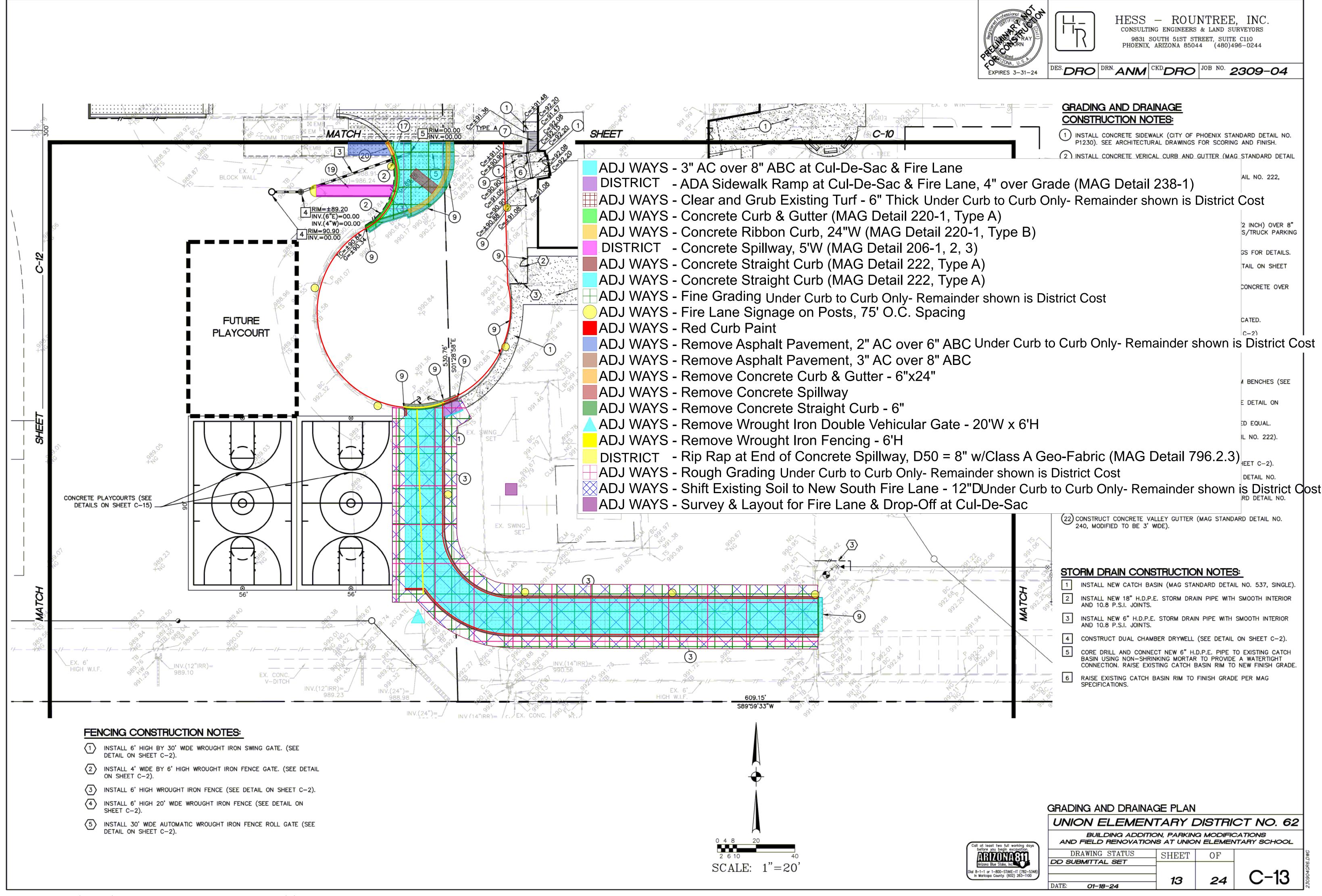
ADJ WAYS - Rough Grading Under Curb to Curb Only and Off-Site- Remainder shown is District Cost

ADJ WAYS - Sidewalk at Bus Drop Off Lane, 4" over Grade (CoP Detail P1230, Class B, Section 725)

DISTRICT - Sidewalk at Drive Entry & Realignment, 4" over Grade (CoP Detail P1230, Class B, Section 725)

C-14

9°59'36"W 607.71



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

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.

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





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9831 SOUTH 51ST STREET, SUITE C110 PHOENIX, ARIZONA 85044 (480)496-0244

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^{ES.}DRO | DRN. ANM | CKD.DRO | JOB NO. 2309-04

PRIVATE DOMESTIC WATER LINE **CONSTRUCTION NOTES:**

- INSTALL 2-1/2" P.V.C. (SCHEDULE 40) WATER LINE WITH SCHEDULE 80 FITTINGS AND CONCRETE THRUST BLOCKS.
- INSTALL 2" REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLY (CITY OF PHOENIX STANDARD DETAIL NO. P1354). INSTALL COPPER TYPE 'K' WATER LINE BETWEEN METER AND BACKFLOW PREVENTER. INSTALL LIFT OFF GUARDSHACK ENCLOSURE MODEL GS-3.3 (16"W X 30"H X 30"L), OR ENGINEER APPROVED EQUAL ON A 4" THICK MAG CLASS "B" CONCRETE PAD.
- CONNECT TO BUILDING DOMESTIC WATER LINE WITH NECESSARY AND APPROPRIATE FITTINGS. SEE PLUMBING DRAWINGS FOR EXACT LOCATION AND CONTINUATION.
- INSTALL NEW 2" DOMESTIC WATER SERVICE, AND 2" WATER METER WITH METER BOX AND COVER. ACTUAL INSTALLATION OF SERVICE AND METER BY CITY OF PHOENIX FORCES AFTER APPLICATION AND PAYMENT OF PREVAILING FEES BY THE CONTRACTOR. CONTRACTOR TO INSTALL METER BOX PER CITY OF PHOENIX STANDARD DETAIL P1315.
- SAWCUT, REMOVE AND REPLACE EXISTING A.C. PAVEMENT (MAG SPECIFICATION SECTION 336 AND CITY OF PHOENIX STANDARD DETAIL NO. P1200, TYPE B, OR IN KIND, WHICHEVER IS GREATER).
- POTHOLE AND FIELD VERIFY THE EXACT ELEVATION AND LOCATION OF THE EXISTING UTILITY PRIOR TO CONSTRUCTION. NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES.
- SAWCUT, REMOVE AND REPLACE EXISTING CONCRETE SIDEWALK TO THE NEAREST SCORE MARK OR JOINT (CITY OF PHOENIX STANDARD DETAIL
- SAWCUT, REMOVE AND REPLACE EXISTING CONCRETE VERTICAL CURB AND GUTTER (MAG STANDARD DETAIL NO. 220-1, TYPE A).
- APPLY TYPE IV SLURRY SEAL PER THE CITY OF PHOENIX REQUIREMENTS TO THE FULL WIDTH OF W. ILLINI STREET IMPACTED BY PAVEMENT REMOVAL AND REPLACEMENT. THE TREATMENT AREA SHALL EXIST 25' IN BOTH DIRECTIONS FROM THE PAVEMENT CUTS. CRACK FILL AND SEAL BETWEEN EXISTING AND NEW PAVEMENT AREAS PRIOR TO ANY PAVEMENT TREATMENT. RE-STRIPE TO MATCH EXISTING STRIPING PER CITY OF PHOENIX REQUIREMENTS.
- (10) BORE UNDERNEATH EXISTING SEWER LINE (MAG STANDARD DETAIL NO. 440-3). ROTATE WYE TO VERTICAL.
- INSTALL 2-1/2"" P.V.C. (SCHEDULE 40) WATER LINE WITH SCHEDULE 80 FITTINGS AND CONCRÈTE THRUST BLOCKS.
- 12 CONNECT TO EXISTING WATER LINE. COORDINATE WITH THE DISTRICT PRIOR TO CONSTRUCTION FOR SHUTTING OFF THE WATER TO INSTALL

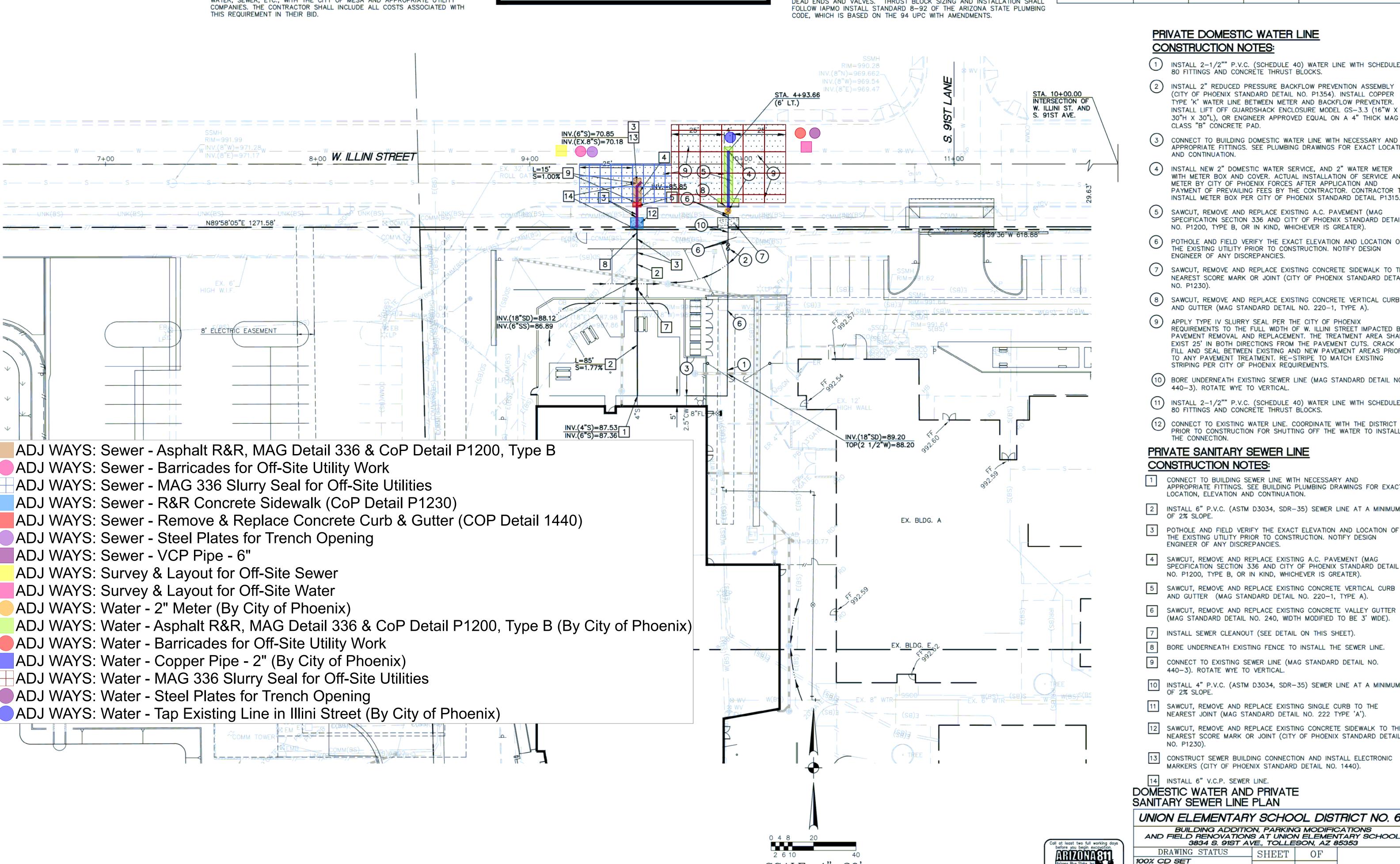
PRIVATE SANITARY SEWER LINE CONSTRUCTION NOTES:

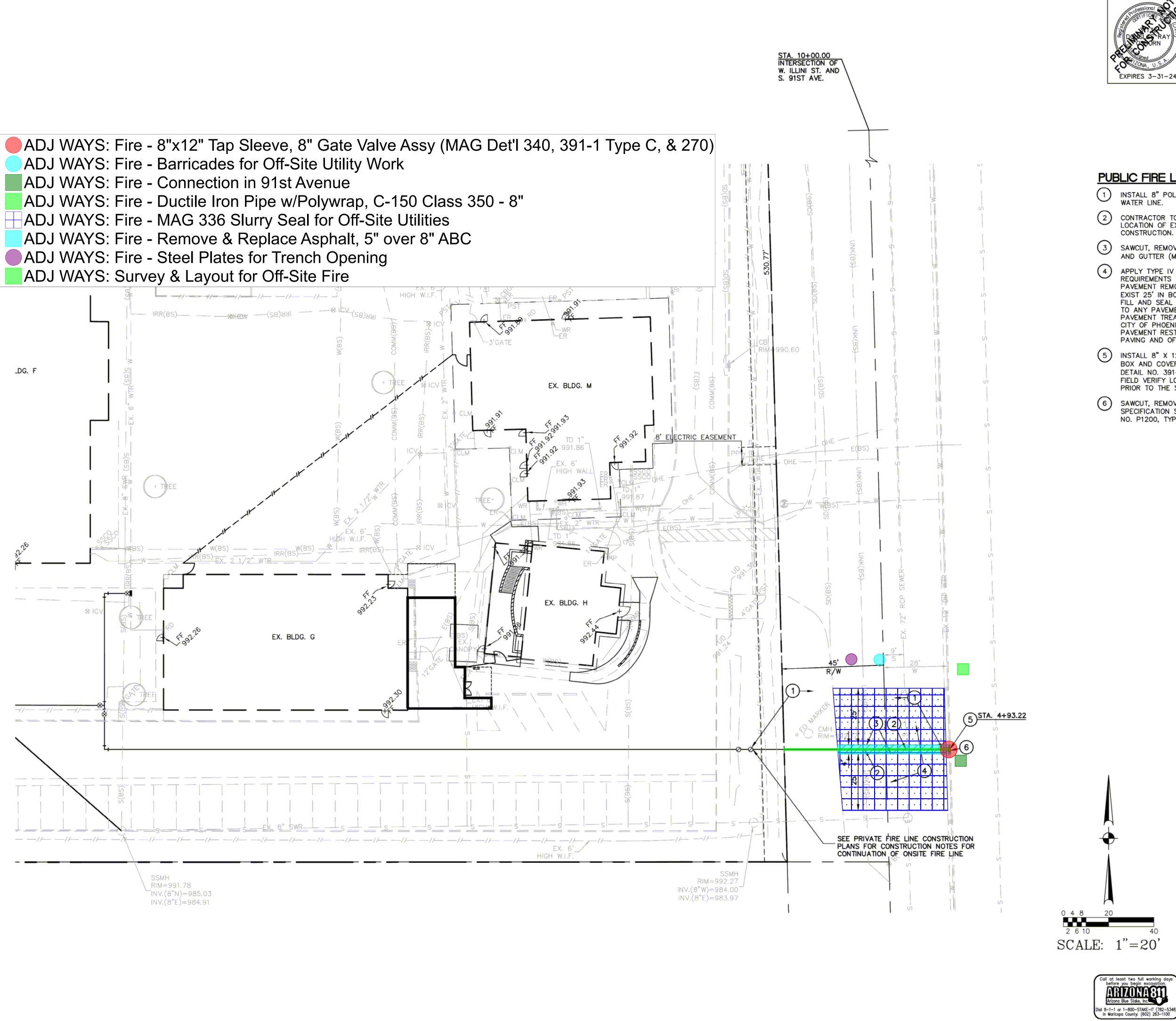
- POTHOLE AND FIELD VERIFY THE EXACT ELEVATION AND LOCATION OF THE EXISTING UTILITY PRIOR TO CONSTRUCTION. NOTIFY DESIGN
- SAWCUT, REMOVE AND REPLACE EXISTING A.C. PAVEMENT (MAG SPECIFICATION SECTION 336 AND CITY OF PHOENIX STANDARD DETAIL
- SAWCUT, REMOVE AND REPLACE EXISTING CONCRETE VERTICAL CURB AND GUTTER (MAG STANDARD DETAIL NO. 220-1, TYPE A).
- INSTALL SEWER CLEANOUT (SEE DETAIL ON THIS SHEET)
- UNDERNEATH EXISTING FENCE TO INSTALL THE SEWER LINE
- CONNECT TO EXISTING SEWER LINE (MAG STANDARD DETAIL NO. 440-3). ROTATE WYE TO VERTICAL
- 10 INSTALL 4" P.V.C. (ASTM D3034, SDR-35) SEWER LINE AT A MINIMUM
- SAWCUT, REMOVE AND REPLACE EXISTING SINGLE CURB TO THE NEAREST JOINT (MAG STANDARD DETAIL NO. 222 TYPE 'A').
- SAWCUT, REMOVE AND REPLACE EXISTING CONCRETE SIDEWALK TO THE
- CONSTRUCT SEWER BUILDING CONNECTION AND INSTALL ELECTRONIC MARKERS (CITY OF PHOENIX STANDARD DETAIL NO. 1440).
- INSTALL 6" V.C.P. SEWER LINE. DOMESTIC WATER AND PRIVATE

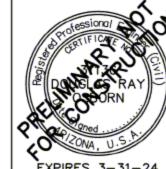
SANITARY SEWER LINE PLAN

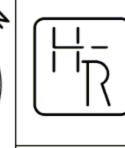
UNION ELEMENTARY SCHOOL DISTRICT NO. 62 BUILDING ADDITION. PARKING MODIFICATIONS

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PUBLIC FIRE LINE CONSTRUCTION NOTES:

- 1 INSTALL 8" POLYWRAPPED DUCTILE IRON (A.W.W.A. C-150, CLASS 350)
- CONTRACTOR TO POTHOLE AND FIELD VERIFY EXACT ELEVATION AND LOCATION OF EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION. NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES
- SAWCUT, REMOVE AND REPLACE EXISTING CONCRETE VERTICAL CURB AND GUTTER (MAG STANDARD DETAIL NO. 220-1, TYPE A).
- FILL AND SEAL BETWEEN EXISTING AND NEW PAVEMENT AREAS PRIOR TO ANY PAVEMENT TREATMENT. RE-STRIPE AREAS PRIOR TO ANY PAVEMENT TREATMENT. RE-STRIPE TO MATCH EXISTING STRIPING PER CITY OF PHOENIX REQUIREMENTS. SEE OFFSITE PAVING PLANS FOR PAVEMENT RESTORATION REQUIREMENTS ASSOCIATED WITH NEW OFFSITE PAVING AND OFFSITE WATER LINE WORK.
- DETAIL NO. 391-1, TYPE "C" AND MAG STANDARD DETAIL NO. 270). FIELD VERIFY LOCATION AND ELEVATION OF EXISTING WATER LINE PRIOR TO THE START OF CONSTRUCTION.
- SAWCUT, REMOVE AND REPLACE EXISTING A.C. PAVEMENT (MAG SPECIFICATION SECTION 336 AND CITY OF PHOENIX STANDARD DETAIL NO. P1200, TYPE B, OR MATCH EXISTING, WHICHEVER IS GREATER).

OFFSITE FIRE LINE PLAN

UNION ELEMENTARY DISTRICT NO. 62

BUILDING ADDITION, PARKING MODIFICATIONS AND FIELD RENOVATIONS AT UNION ELEMENTARY SCHOOL



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