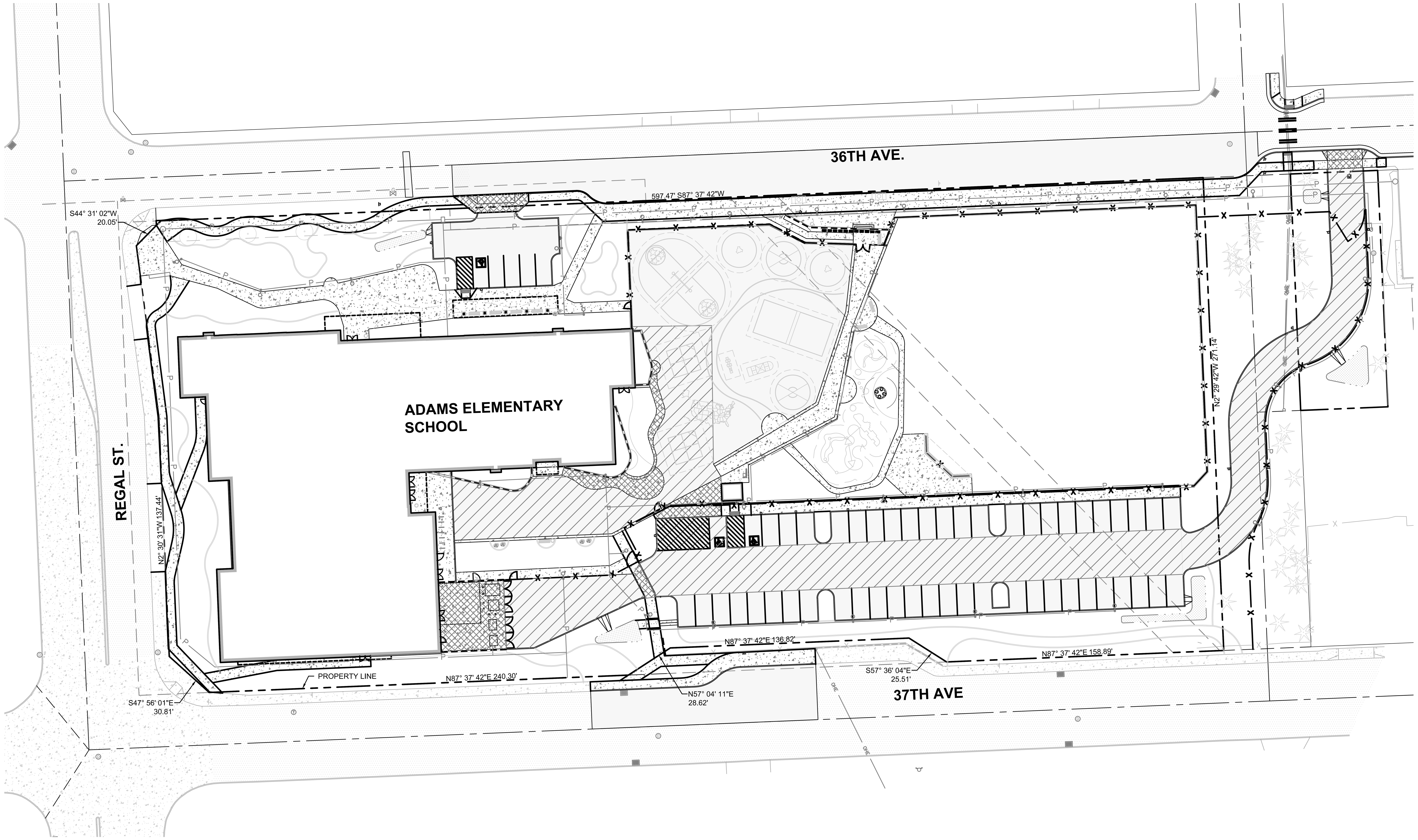
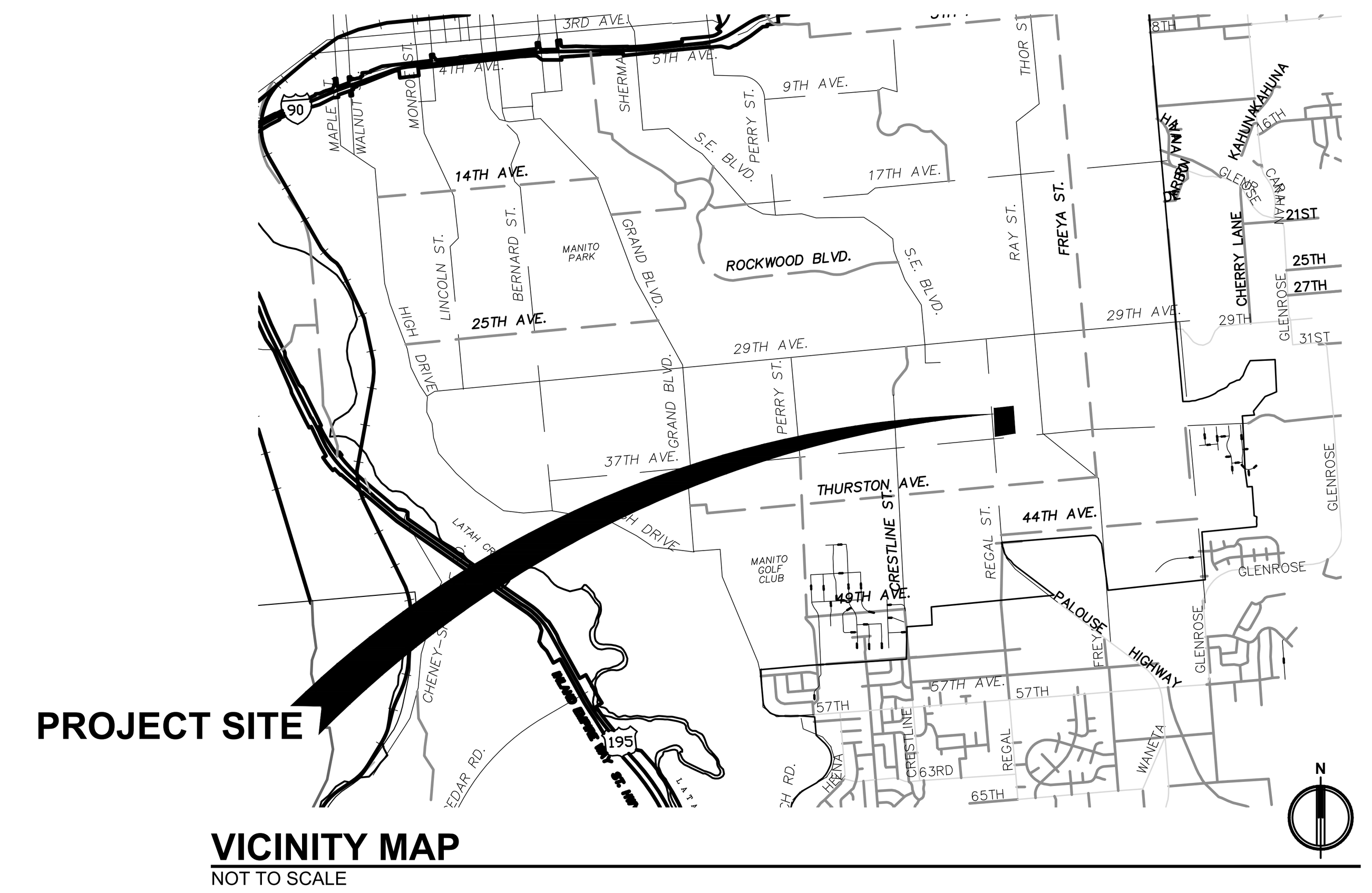
ADAMS ELEMENTARY SCHOOL
SW1/4 SEC 34 T25N, RNG 43 E.W.M.
SPOKANE, WASHINGTON





OWNER
SPOKANE PUBLIC SCHOOLS
2815 EAST GARLAND AVENUE
SPOKANE, WA 99207
CONTACT: JOHN ELDER
PH: (509) 354-5772

SURVEYOR
SANDIS SPOKANE LAND SURVEYORS
708 N. ARGONNE RD. STE. 5
SPOKANE VALLEY, WA 99212
CONTACT: KELLY JOHNSON, PLS
PH: (509) 408-0866

CIVIL ENGINEER
AHBL INC
601 W MAIN AVE, SUITE 305
SPOKANE, WA 99201
CONTACT: ERICK FITZPATRICK, PE
PH: (509) 252-5019

UTILITIES
WATER: CITY OF SPOKANE
SEWER: CITY OF SPOKANE
TELEPHONE: CENTURYLINK
POWER: AVISTA
GAS: AVISTA
ONE CALL: 811
REFUSE: CITY OF SPOKANE WASTE MANAGEMENT

ARCHITECT
NAC ARCHITECTURE
1203 W. RIVERSIDE AVE
SPOKANE, WA 99201
CONTACT: BROOKE HANLEY, AIA
PH: (509) 838-8240

BASIS OF BEARING
NAD 1983/11
WASHINGTON STATE PLANE NORTH PROJECTION, BASED ON GPS OBSERVATIONS USING WSRN AND GEOID 2012A. UNITS OF MEASUREMENT ARE US SURVEY FEET.

CONTACT TO ENGINEERS FOR BENCHMARK INFORMATION.

GEOTECHNICAL ENGINEER
STRATA, INC.
10020 E. KNOX AVENUE, SUITE 200
SPOKANE, WA 99206
CONTACT: VANCE M. SMITH
PH: (509) 851-1904

VERTICAL DATUM
NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AS OBSERVED FROM THE WASHINGTON STATE REFERENCE NETWORK USING GNSS RTK MEASUREMENTS

PARCEL NO.
35342.0001, 35342.2901, 35342.3022

SITE ADDRESS
2909 EAST 37TH AVE
SPOKANE, WA 99223

SHEET INDEX

SHEET NUMBER	SHEET TITLE
C001	COVER & INDEX
C002	GENERAL NOTES
C003	TOPOGRPHIC SURVEY
C100	TESC & DEMOLITION PLAN
C101	TESC & DEMOLITION NOTES
C200	CIVIL SITE PLAN
C201	CIVIL FIRE SUMMARY
C202	CIVIL SITE DETAILS
C300	GRADING & DRAINAGE PLAN
C301	GRADING & DRAINAGE DETAILS
C400	UTILITY PLAN
C401	UTILITY DETAILS

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N
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0 15 30 60
1" = 30 FEET

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ERICK MATTHEW FITZPATRICK
STATE OF WASHINGTON
51556
REGISTERED
PROFESSIONAL ENGINEER
11/10/2023

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nacarchitecture.com
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CHECKED	EMF
DATE	11/10/23

COVER & INDEX

CD
C001

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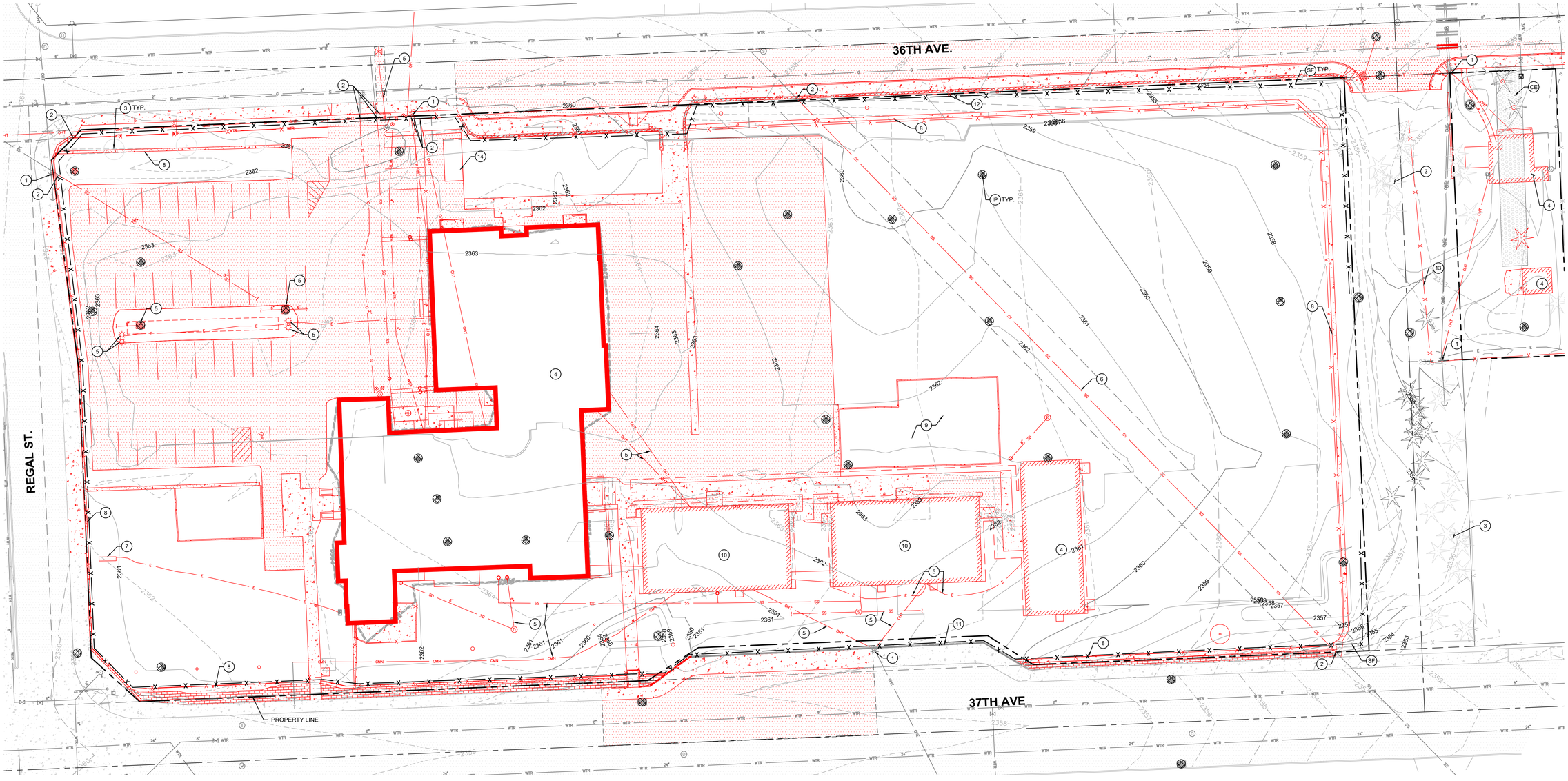

DEMOLITION NOTES

1. CONTRACTOR SHALL ATTEND A PRECONSTRUCTION CONFERENCE TO REVIEW SCOPE OF WORK.
2. CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL UTILITIES HAVE BEEN DISCONNECTED PRIOR TO COMMENCING DEMOLITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLETELY COORDINATE UTILITY DEMOLITION WITH NEW CONSTRUCTION. CONTRACTOR SHALL ENSURE THAT ADEQUATE FIRE PROTECTION IN ACCORDANCE WITH THE FIRE MARSHAL'S REQUIREMENTS IS PROVIDED.
3. DEMOLITION: IT IS THE INTENT OF THE WORK UNDER THIS CONTRACT TO INCLUDE THE DEMOLITION INDICATED BY THIS DRAWING AND AS REQUIRED FOR NEW CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FULLY REVIEW THE SITE CONDITIONS AND TO CORRELATE THESE OBSERVATIONS WITH THE PROJECT WORK AND INCLUDE ALL NECESSARY DEMOLITION, WHETHER SHOWN OR NOT, AND INCLUDE ALL SUCH COSTS IN THE BASE BID.
4. REFER TO ARCHITECTURE DRAWINGS FOR ADDITIONAL DEMOLITION ITEMS.
5. CLEARING: IT IS THE INTENT OF THE WORK UNDER THIS CONTRACT TO CONDUCT ALL CLEARING NECESSARY TO BE ABLE TO COMPLETE ALL THE WORK OF THIS PROJECT.
6. CONTRACTOR SHALL LEGALLY DISPOSE OF THE OWNER'S PROPERTY, ALL DEMOLISHED AND REMOVED MATERIALS, UNLESS INDICATED OTHERWISE.
7. COORDINATE POWER DEMOLITION WITH ELECTRICAL JURISDICTION AND ELECTRICAL PLANS. CONTRACTOR TO ENSURE THAT DEMOLITION OF LINES WILL NOT COMPROMISE POWER TO OTHER AREAS.
8. THIS PLAN IS TO BE USED IN CONJUNCTION WITH THE SWPPP AND CONSTRUCTION STORMWATER GENERAL PERMIT. THE MEASURES SHOWN ARE THE RECOMMENDED TESC METHODS. CONTRACTOR MAY IMPLEMENT THEIR OWN METHODS PROVIDED THEY MEET THE REQUIREMENTS OF THE SWPPP AND THE CSWGP.
9. THE CLEARING LIMITS DEPICTED ON THESE PLANS REPRESENT THE EDGE OF CIVIL-RELATED WORK SUCH AS GRADING, UTILITY, STORM DRAINAGE, AND PAVING IMPROVEMENTS.
10. CONTRACTOR SHALL COORDINATE ANY UTILITY SHUTDOWN WITH OWNER AT LEAST 1 WEEK PRIOR TO THE WORK BEING PERFORMED.
11. CONTRACTOR TO NEATLY SAWCUT ALONG LINE OF EXISTING PAVEMENT THAT IS TO REMAIN BEFORE REMOVING PAVEMENT.
12. TEST PIT LOCATIONS SHALL BE BACKFILLED AND COMPACTED PER THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT.
13. ALL TREES TO REMAIN SHALL HAVE TREE PROTECTION FENCING INSTALLED PRIOR TO ANY SITE/DEMOLITION WORK.
14. DEMOLITION WORK MAY OCCUR OUTSIDE OF PROJECT LIMITS.
15. ASPHALT REMOVAL AND REPAIR TO CONFORM WITH JURISDICTION'S REGIONAL PAVEMENT CUT POLICY.
16. REMOVAL OF STREET TREES REQUIRES A LICENSED, CERTIFIED ARBORIST WITH AN APPROVED TREE PERMIT. AT NO TIME SHALL EQUIPMENT BE USED TO DEMOLISH STREET TREES.
17. APPURTENANCES ASSOCIATED WITH EXISTING UTILITIES TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY. ALL BACKFILL OF APPURTENANCES AND UTILITY TRENCHES SHOULD FOLLOW RECOMMENDATIONS OF THE GEOTECHNICAL REPORT DATED APRIL 21, 2023 BY STRATA
18. TREE GROVE SHOWN ON PLANS IS AN ESTIMATION OF SIZE AND LOCATION. CONTRACTOR TO FIELD VERIFY PRIOR TO DEMO.
19. PER THE GEOTECHNICAL REPORT DATED APRIL 21, 2023 BY STRATA; UNDOCUMENTED FILL IS PRESENT ON SITE AND MUST BE REMOVED ENTIRELY. PER THE REPORT ALL FILL MUST BE PROPERLY DISCARDED AND REPLACED WITH STRUCTURAL FILL. UNDOCUMENTED FILL MAY BE USED AD STRUCTURAL FILL IF AND ONLY IT HAS BEEN TESTED AND PASSES ALL SPECIFICATION REQUIREMENTS.

DEMOLITION LEGEND

REMOVE		PROTECT
	VEGETATION	
	CONCRETE	
	ASPHALT	
	SAWCUT	
	CURB	

TESC LEGEND

CE	CONSTRUCTION ENTRANCE (CE C101)
IP	INLET PROTECTION (IP C101)
SF	SILT FENCE (SF C101)
CL	PROJECT CLEARING LIMITS

KEYNOTES

1. PROTECT EXISTING UTILITIES IN PLACE.
2. UTILITY TO BE REMOVED TO PROPERTY LINE AND CAPPED.
3. TREES IN EXISTING GROVE IS ESTIMATED. CONTRACTOR TO FIELD VERIFY LOCATIONS PRIOR TO DEMOLITION. SEE LANDSCAPE PLANS FOR DEMO AND PROTECTION DETAILS. (TP C101)
4. BUILDING TO BE DEMOLISHED ENTIRELY. FOUNDATION AND ALL OTHER SUBSURFACE INFRASTRUCTURE TO BE REMOVED. UTILITIES TO BE DEMOLISHED AND CAPPED AT PROPERTY LINE.
5. UTILITY TO BE REMOVED ENTIRELY
6. EXISTING SEWER FORCE MAIN TO BE REMOVED WHERE FOUND; IF NO MAIN IS LOCATED THE MAIN SHOULD BE ABANDONED IN PLACE
7. MONUMENT SIGN TO BE REMOVED
8. WALL TO BE DEMOLISHED
9. PLAYGROUND SO BE REMOVED AND SALVAGED FOR REINSTALLATION
10. MOBILE CLASSROOM TO BE PROTECTED AND RELOCATED OFF SITE; CONTRACTOR TO COORDINATE WITH OWNER
11. PROTECT EXISTING WALL IN PLACE
12. POWER POLE TO BE REMOVED; POWER LINES TO BE RELOCATED UNDERGROUND
13. EXISTING FENCE TO BE DEMOLISHED
14. STORAGE CONTAINER TO BE PROTECTED AND RELOCATED OFF SITE; CONTRACTOR TO COORDINATE WITH OWNER

N

HORIZONTAL SCALE
0 10 20 40
1" = 20 FEET

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TESC & DEMOLITION PLAN

CD
C100

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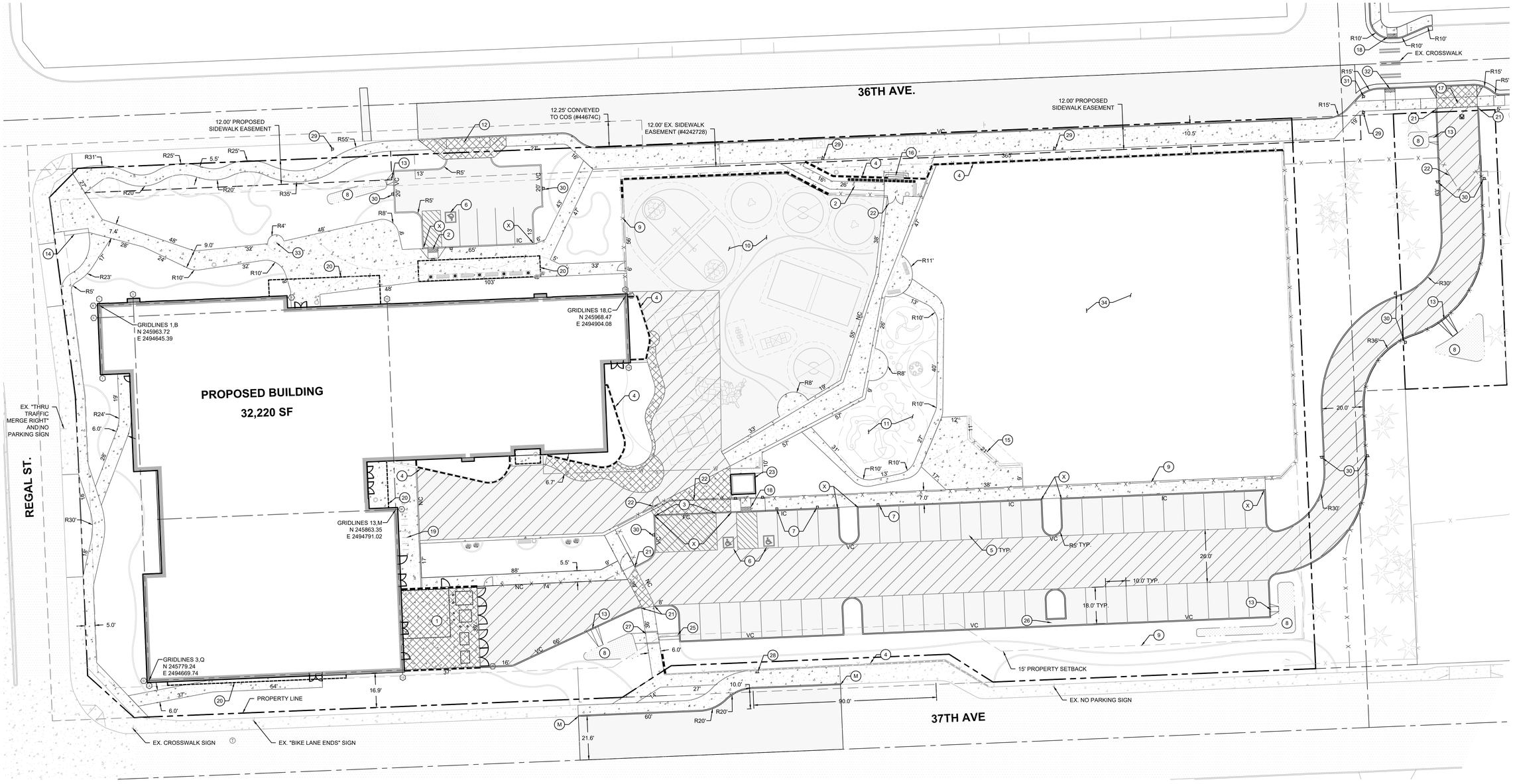

KEYNOTES

1. MECHANICAL YARD; SEE ARCHITECTURAL PLAN FOR DETAILS
2. TYPE 1 CURB RAMP PER COS STD PLAN F-105
3. 6" THICK RED PAVEMENT MARKING. IN WHITE PAINT, STENCIL "NO PARKING FIRE LANE"
4. SITE WALL; SEE LANDSCAPE PLAN FOR DETAILS
5. STANDARD PARKING STALL
6. VAN ACCESSIBLE BARRIER FREE PARKING STALL PER COS STD PLAN G-80A AND G-54
7. EV PARKING STATION; SEE ELECTRICAL PLANS FOR DETAILS
8. STORMWATER POND
9. CHAINLINK FENCE; SEE LANDSCAPE PLANS FOR DETAILS
10. HARD TOP PLAY AREA; SEE LANDSCAPE PLAN FOR DETAILS
11. SOFT TOP PLAY AREA; SEE LANDSCAPE PLAN FOR DETAILS
12. DRIVEWAY DROP PER COS STD PLAN F-103; W=20'
13. CURB INLET PER COS STD PLAN F-109
14. MONUMENT SIGN. SEE LANDSCAPE PLAN FOR DETAILS.
15. BACKSTOP FENCING. SEE LANDSCAPE PLAN FOR DETAILS.
16. (5) 7" STAIRS; SEE LANDSCAPE PLAN FOR DETAILS
17. DRIVEWAY DROP PER COS STD PLAN F-104A
18. TYPE 2 CURB RAMP PER COS STD PLAN F-105B
19. BIKE RACK; SEE LANDSCAPE PLAN FOR DETAILS
20. ENTRANCE CANOPY; SEE ARCHITECTURAL AND STRUCTURAL PLAN FOR DETAILS
21. CURBNOSE DOWN (5/C202)
22. GATE WITH KNOX BOX; SEE LANDSCAPE PLAN FOR DETAILS
23. STORAGE SHED; SEE ARCHITECTURAL PLAN FOR DETAILS
24. SITE WALL; SEE C300 FOR VARYING HEIGHTS
25. 3' CONCRETE "V" GUTTER PER COS STD PLAN F-106A
26. CUSTOM CURB AND GUTTER PASSTHROUGH (4/C202)
27. CURB INLET TYPE 2 PER SPOKANE COUNTY STD PLAN B-9
28. PROPOSED SIGN, "NO PARKING EXCEPT SCHOOL BUS 8AM-5PM"
29. PROPOSED SIGN, "NO PARKING LOADING ZONE " PER MUTCD R7-6
30. PROPOSED SIGN, "NO PARKING FIRE LANE" TYPE D PER IFC APPENDIX D103.6
31. PROPOSED CROSSWALK SIGN AND ARROW PER MUTCD S1-1 AND W16-79
32. TYPE 3 CURB RAMP PER COS STD PLAN F-105D
33. FLAGPOLE; SEE LANDSCAPE PLAN FOR DETAILS
34. GRASS PLAY; SEE LANDSCAPE PLANS FOR SOIL NOTES AND IRRIGATION

SURFACING LEGEND

- CONCRETE SIDEWALK (2/C202)
- HEAVY DUTY CONCRETE (3/C202)
- HMA PAVEMENT (1/C202)
- HEAVY DUTY HMA PAVEMENT (1/C202)

- VC VERTICAL CURB
- IC INTEGRAL CURB
- NC NO CURB
- FC FLUSH CURB
- (X) CHANGE IN CURB TYPE
- (M) MATCH EXISTING CURB TYPE

SITE PLAN NOTES

1. REFER TO SHEET C002 FOR CIVIL STANDARD NOTES.
2. CONTACT SANDIS FOR TEMPORARY BENCH MARKS (TBM) SHOWN.
3. REFER TO LANDSCAPE AND ARCHITECTURAL PLANTING PLANS FOR ADDITIONAL HORIZONTAL CONTROL, SITE FURNISHINGS, CONCRETE SCORING, PLANTING SCHEDULE, AND RELATED DETAILS NOT SHOWN ON THIS PLAN.
4. ALL DIMENSIONS TO FACE OF CURB UNLESS NOTED OTHERWISE.
5. ALL SIGNS TO BE INSTALLED PER CITY OF SPOKANE STANDARD PLANS G-10, G-10A, & G-20A. CONTRACTOR HAS OPTION TO INSTALL SIGNS PER STANDARD PLAN G-10E.
6. ALL NEW SIDEWALKS AND CONNECTIONS TO EXISTING SIDEWALKS SHALL BE BARRIER FREE PATHWAYS (I.E. ADA COMPLIANT).
7. VERIFY LOCATION OF ALL STRIPING WITH OWNER PRIOR TO INSTALLING. ALL STRIPING SHALL BE YELLOW PAINT UNLESS NOTED OTHERWISE.
8. PAVEMENT PATCHING WITHIN THE RIGHT OF WAY SHALL BE IN ACCORDANCE WITH THE CITY OF SPOKANE'S REGIONAL PAVEMENT CUT POLICY.
9. VERTICAL CURB SHALL BE PER COS STD PLAN F-106.
10. INTEGRAL CURB AND GUTTER SHALL BE EITHER "ADJACENT TO CURB" OR "MONOLITHIC CEMENT CONCRETE CURB AND SIDEWALK" PER WSDOT STD PLAN F-30.10-04 OR "INTEGRAL CONCRETE CURB &GUTTER" PER COS STD PLAN F-102A.
11. CURB & GUTTER SHALL BE PER COS STD PLAN F-106.
12. SEE ELECTRICAL PLANS FOR SITE LIGHTING DETAILS AND INFORMATION.
13. SITE IMPROVEMENTS SHALL COMPLY WITH RECOMMENDATIONS FROM APRIL 21, 2023 "GEOTECHNICAL EVALUATION REPORT" BY STRATA.
14. ALL SIDEWALKS, CURBS, AND DRIVEWAY APPROACHES ADJACENT TO THE PROPERTY WILL BE REVIEWED AT THE END OF THE PROJECT WHEN A CERTIFICATE OF OCCUPANCY IS REQUESTED. IF ANY ARE FOUND TO BE BROKEN, HEAVED, SUNK, OR MISSING, THEY MUST BE REPAIRED/REPLACED WHETHER THE DAMAGE WAS EXISTING OR CAUSED BY CONSTRUCTION. IF YOU WOULD LIKE A SIDEWALK INSPECTION PRIOR TO REQUESTING OCCUPANCY, PLEASE CONTACT THE CITY OF SPOKANE AT (509)625-6300 TO ARRANGE A SITE VISIT.
15. PROPOSED SIDEWALKS WITHIN THE RIGHT OF WAY OR PROPOSED SIDEWALK EASEMENT MUST ADHERE WITH COS STD PLAN F-102.
16. PATCHED PAVEMENTS TO MATCH EXISTING HMA SECTION OR HEAVY DUTY HMA SECTION, WHICHEVER IS THICKER.

N

HORIZONTAL SCALE
0 10 20 40
1" = 20 FEET

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2909 EAST 36TH AVE, SPOKANE, WA 99207

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SPOKANE WA 99201
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CIVIL SITE PLAN

CD

C200

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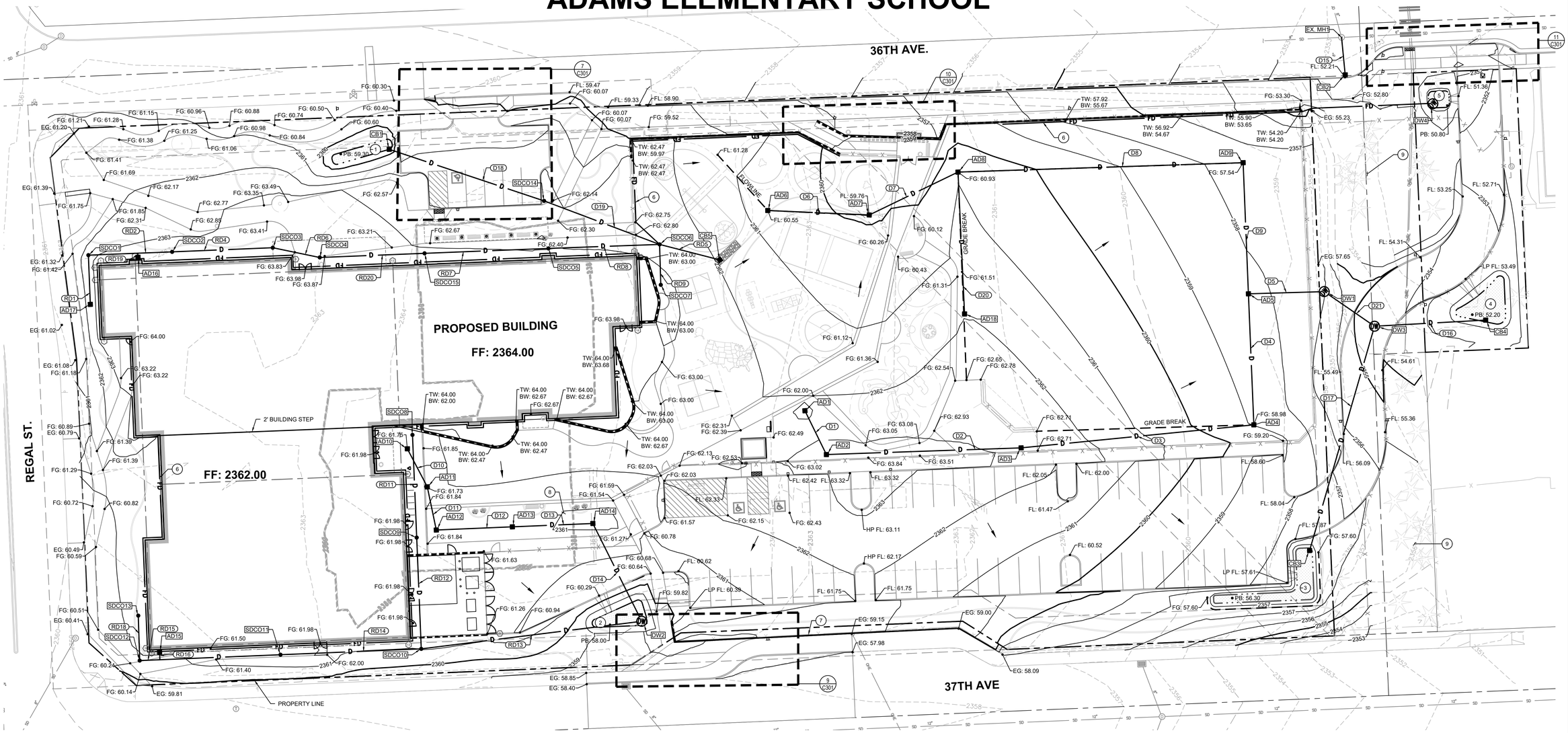

KEYNOTES

1. BIO-INFILTRATION POND #1 — POND AREA: 150SF; DEPTH: 0.8'; POND ELEVATION: 2359.3' — 3/C301
2. BIO-RETENTION POND #2 — POND AREA: 220SF; DEPTH: 2.0'; POND ELEVATION: 2358.0' — 6/C301
3. BIO-RETENTION POND #3 — POND AREA: 360SF; DEPTH: 1.3'; POND ELEVATION: 2356.3' — 6/C301
4. BIO-RETENTION POND #4 — POND AREA: 320SF; DEPTH: 1.3'; POND ELEVATION: 2352.2' — 6/C301
5. BIO-INFILTRATION POND #5 — POND AREA: 78SF; DEPTH: 0.8'; POND ELEVATION: 2350.80' — 3/C301
6. FOUNDATION DRAIN — 1/C301
7. EXISTING WALL TO CONNECT WITH PROPOSED CONTINUATION OF WALL; EXISTING ELEVATIONS TO BE FIELD VERIFIED BY CONTRACTOR.
8. 6" DEPRESSION; GRADE 5:1 OFF THE EDGE OF PAVEMENT
9. EXISTING TREE GROVE TO NOT BE DISTURBED

SPOT GRADE KEYNOTES

EG	EXISTING GROUND ELEVATION
FG	FINISH GROUND ELEVATION
FF	FINISH FLOOR ELEVATION
FL	FLOWLINE ELEVATION
HP	HIGH POINT ELEVATION
LP	LOW POINT ELEVATION
TW	TOP WALL ELEVATION
BW	BOTTOM WALL ELEVATION

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STORM DRAINAGE NOTES

1. DRYWELLS SHALL BE EITHER TYPE 1 OR TYPE 2 PER COS STD PLAN B-102C AND B-102D. DRYWELLS SHALL HAVE AN OVERFLOW GRATE AND FRAME PER COS STD PLAN B-113.
2. TYPE 1 CATCH BASINS SHALL BE PER COS STD PLAN B-101C AND SHALL HAVE A TYPE 1 FRAME AND GRATE PER COS STD PLAN TYPE 1.
3. CLEANOUTS SHALL BE THE SAME SIZE AS THE PIPING SERVED BY THE CLEANOUT. CLEANOUTS SHALL BE SPACED NO MORE THAN 100 FEET APART, WHERE THERE IS A HORIZONTAL CHANGE OF DIRECTION GREATER THAN 45°, A CLEANOUT SHALL BE INSTALLED AT THE CHANGE OF DIRECTION. WHERE MORE THAN ONE CHANGE OF DIRECTION GREATER THAN 45° OCCURS WITHIN 40 FEET, THE CLEANOUT INSTALLED FOR THE FIRST CHANGE OF DIRECTION SHALL SERVICE AS THE CLEANOUT FOR ALL CHANGES IN DIRECTION WITHIN THAT 40 FEET.
4. ALL STORM SEWER PIPING SHALL BE SOLID WALL SDR35 PVC STORM SEWER PIPE UNLESS NOTED OTHERWISE.
5. COORDINATE ROOF DRAIN DOWNSPOUT CONNECTIONS WITH ARCHITECTURAL, PLUMBING, AND STRUCTURAL PLANS.
6. ALL STORM SEWER STRUCTURE RIMS, GRATES, AND LIDS SHALL BE BOLT-DOWN.
7. CATCH BASIN RIMS SHALL BE RECESSED ONE INCH BELOW ADJACENT HARDSCAPE.
8. DRYWELLS SHALL BE INSTALLED TO THE ELEVATIONS INDICATED ON THE PLANS. FINISHED TOPSOIL ADJACENT TO THE DRYWELL SHALL BE AT-LEAST 2 INCHES BELOW THE DRYWELL RIM.
9. STORM SEWER PIPE TRENCHES SHALL COMPLY WITH COS STD PLAN A-1 - A-3.
10. BIO-INFILTRATION SWALES SHALL HAVE A MAXIMUM TREATMENT DESIGN DEPTH (FROM SWALE BOTTOM TO ELEVATION OF DRYWELL GRATE OR FIRST OVERFLOW/OUTFLOW MECHANISM) OF 6 INCHES, UNLESS NOTED OTHERWISE. EITHER ORGANIC MATTER CONTENT OR CATION EXCHANGE CAPACITY (CEC) TESTING SHALL BE COMPLETED IN ORDER TO SUBSTANTIATE THE TREATMENT SOIL COMPOSITION. THE TESTS SHALL BE PERFORMED ON COMPOSITE SAMPLES TAKEN FROM THE TREATMENT SOIL LAYER FROM THE CONSTRUCTED SWALE BOTTOM. A COMPOSITE SAMPLE CONSISTS OF WELL-MIXED SOIL OBTAINED FROM AT LEAST FOUR CORES, TO A DEPTH OF AT LEAST 12 INCHES, RANDOMLY DISTRIBUTED OVER THE SWALE BOTTOM TEST AREA. STOCKPILE SAMPLES FROM ON-SITE OR A MATERIAL SUPPLIER CAN BE TESTED FOR INFORMATIONAL PURPOSES TO DETERMINE INITIAL SUITABILITY AND POSSIBLE SOIL AMENDMENTS, BUT WILL NOT BE ACCEPTED IN-LIEU OF IN-PLACE TESTING. A MINIMUM OF ONE TEST SHALL BE PERFORMED FOR EACH BIO-INFILTRATION SWALE 1,500 SQUARE FEET OR LESS, WITH ONE ADDITIONAL TEST FOR EACH ADDITIONAL FOUR CORE SAMPLES TAKEN AS DESCRIBED ABOVE. TESTING RESULTS SHALL BE SUBMITTED AS PART OF THE CONSTRUCTION CERTIFICATION SUBMITTAL REQUIRED FOR RELEASE OF SURETY POSTED ON PROJECT.
11. IF, DURING FINAL INSPECTION, IT IS FOUND THAT THE CONSTRUCTED SWALE DOES NOT CONFORM TO THE ACCEPTED DESIGN, THE SYSTEM SHALL BE RE-CONSTRUCTED AT THE COST OF THE CONTRACTOR SO THAT IT DOES COMPLY.
12. CONCRETE APRONS ARE REQUIRED AT THE INLET INTO ANY SWALE AND SHALL EXTEND TO AT LEAST 6 INCHES ABOVE THE SWALE BOTTOM. THE INTENTION IS TO ALLOW STORMWATER RUNOFF TO ENTER THE SWALE UNOBSTRUCTED, WITHOUT BACKING UP INTO THE STREET AND GUTTER DUE TO SOD OVERGROWTH.
13. UNLINED BIOINFILTRATION SWALE BOTTOMS ARE EXPECTED TO INFILTRATE VIA THE SWALE FLOOR, AND THEREFORE, SHALL NOT BE HEAVILY COMPACTED; EQUIPMENT TRAFFIC SHALL BE MINIMIZED ON THE SWALE BOTTOMS. THE FACILITY SUBGRADE SHALL BE A MEDIUM-TO-WELL DRAINING MATERIAL, WITH A MINIMUM THICKNESS OF 48 INCHES AND A MINIMUM INFILTRATION RATE OF 0.15 IN/HR. THE FACILITY SHALL DRAIN WITHIN 72 HOURS OF A STORM EVENT. IF THE SWALE ALSO SERVES AS A WATER QUALITY TREATMENT FACILITY, THE TREATMENT ZONE (SOD AND 6 INCHES OF TREATMENT SOIL) SHALL BE A MEDIUM-TO-WELL DRAINING MATERIAL, WITH A MINIMUM INFILTRATION RATE OF 0.25-0.50 IN/HR.; SILTY LOAM OR LOAMY SILTS ARE PRESUMED TO HAVE AN INFILTRATIVE RATE THAT FALLS WITHIN THIS RANGE. SCARIFY THE FINISH GRADE OF THE SWALE BOTTOM PRIOR TO HYDROSEEDING/SODDING. TESTING THAT VERIFIES SUBGRADE MINIMUM INFILTRATION RATE IS REQUIRED BY THE LOCAL JURISDICTION PRIOR TO CONSTRUCTION CERTIFICATION TO ENSURE ADEQUATE DRAINAGE. INFILTRATIVE TESTING OF THE TREATMENT ZONE IS ONLY REQUIRED IF SOILS OTHER THAN SILTY LOAM OR LOAMY SOILS ARE PROPOSED
14. STORM SEWER PIPES AND DRYWELLS , AS MEASURED FROM THE OUTER SIDE OF THE PIPE/STRUCTURE, SHALL BE SEPARATED AT LEAST 10 FEET HORIZONTALLY FROM WATER MAINS. CROSSINGS OF WATER MAINS AND SEWER SYSTEMS SHALL HAVE A MINIMUM 18-INCH VERTICAL SEPARATION. ANY ANTICIPATED SEPARATION LESS THAN MINIMUM STANDARDS CONTAINED HEREIN, SHALL CONFORM COS STD PLAN A-5.
15. STORMWATER FACILITIES, INCLUDING DRYWELLS, CATCH BASINS, PIPES, INFILTRATION GALLERIES, AND OTHER STORM ITEMS, MUST BE CONSTRUCTED UNDER THE SUPERVISION OF THE THE WASTEWATER MANAGEMENT (WWM) DIVISION. STORMWATER TREATMENT FACILITIES SHALL BE INSPECTED PRIOR TO PLACEMENT OF TOPSOIL, PLANTINGS OR GRASS. THE CONTRACTOR SHALL CONTACT WWM OFFICE AT (509)625-7905 OR (509)625-7912 IN ORDER TO ARRANGE A MUTUALLY AGREEABLE INSPECTION SCHEDULE.

GRADING NOTES

1. THE CONTRACTOR SHOULD TAKE PRECAUTIONS TO PROTECT THE INFILTRATION CAPACITY OF STORMWATER FACILITIES (E.G. LINE THE FACILITY WITH FILTER FABRIC, OVER-EXCAVATE UPON COMPLETION OF THE INFRASTRUCTURE, ETC.)
2. EXCAVATION TO COMPLY WITH MARCH 23, 2021 "GEOTECHNICAL ENGINEERING EVALUATION" BY STRATA.
3. CONTRACTOR SHALL HAVE A MINIMUM (4) TEMPORARY BENCHMARKS (TBMS) WITHIN THE PROJECT AREA WHILE PERFORMING EXCAVATION AND EMBANKMENT. TBMS SHALL HAVE ELEVATIONS NOTED ON LATHE AND BE AVAILABLE FOR INDEPENDENT GRADE VERIFICATION.
4. ALL SPOT ELEVATIONS ARE RELATIVE TO 2300'.
5. ALL UNDOCUMENTED FILL ON SITE SHOULD BE REMOVED ENTIRELY AND REPLACED WITH STRUCTURAL FILL PER GEOTECHNICAL REPORT PROVIDED BY STRATA. THE UNDOCUMENTED FILL MAY BE REUSED AS STRUCTURAL FILL IF ITS CONTENTS ARE SCREENED, TESTED, AND MEET NECESSARY SPECIFICATIONS.
6. ALL SLOPES STEEPER THAN 3H:1V AND GREATER THAN 5 VERTICAL FEET REQUIRE SURFACE ROUGHENING TO A DEPTH OF 2 TO 4 INCHES PRIOR TO SEEDING. SLOPES WITH A STABLE ROCK FACE DO NOT REQUIRE ROUGHENING.

STORM PIPE TABLE

D1	24 LF 4" PERF PIPE @ 1.00%	D21	30 LF 6" SDR35 @ 0.00%
D2	94 LF 4" PERF PIPE @ 1.00%	RD1	24 LF 6" SDR35 @ 1.26%
D3	113 LF 4" PERF PIPE @ 1.83%	RD2	17 LF 6" SDR35 @ 1.50%
D4	64 LF 6" SDR35 @ 2.66%	RD3	24 LF 6" SDR35 @ 1.50%
D5	37 LF 6" SDR35 @ 4.38%	RD4	49 LF 6" SDR35 @ 1.50%
D6	49 LF 4" SDR35 @ 1.50%	RD5	30 LF 8" SDR35 @ 0.80%
D7	48 LF 4" SDR35 @ 1.00%	RD6	23 LF 6" SDR35 @ 1.50%
D8	138 LF 4" SDR35 @ 1.32%	RD7	60 LF 6" SDR35 @ 1.06%
D9	64 LF 6" SDR35 @ 1.00%	RD8	54 LF 6" SDR35 @ 1.02%
D10	21 LF 4" SDR35 @ 1.00%	RD9	20 LF 6" SDR35 @ 24.06%
D11	21 LF 4" SDR35 @ 1.00%	RD11	50 LF 6" SDR35 @ 5.64%
D12	37 LF 4" SDR35 @ 1.00%	RD12	54 LF 6" SDR35 @ 0.59%
D13	39 LF 4" SDR35 @ 1.00%	RD13	108 LF 8" SDR35 @ 1.56%
D14	53 LF 6" SDR35 @ 2.96%	RD14	68 LF 6" SDR35 @ 2.03%
D15	18 LF 8" SDR35 @ 2.00%	RD15	10 LF 6" SDR35 @ 1.50%
D16	54 LF 8" SDR35 @ 1.85%	RD16	4 LF 4" SDR35 @ 1.87%
D17	113 LF 8" SDR35 @ 3.80%	RD17	59 LF 6" SDR35 @ 2.32%
D18	79 LF 8" SDR35 @ 1.00%	RD18	22 LF 6" SDR35 @ 1.00%
D19	60 LF 8" SDR35 @ 1.00%	RD19	2 LF 4" SDR35 @ 28.54%
D20	69 LF 8" SDR35 @ 1.00%	RD20	51 LF 6" SDR35 @ 1.20%

STORM STRUCTURE TABLE

AD1	AREA DRAIN N: 245894.24 E: 2494986.68 RIM 2361.62 IE 2358.75 (4" SE)	AD10	AREA DRAIN N: 245875.77 E: 2494793.87 RIM 2361.75 IE 2358.75 (4" SE)	CB1	TYPE 1 N: 246020.98 E: 2494785.10 RIM 2359.56 IE 2356.50 (6" E)	EX. MH1	MANHOLE N: 246075.25 E: 2495246.93 RIM 2349.01 IE 2348.64 (8" S)	SDCO9	RD POC N: 245832.72 E: 2494798.40 RIM 2361.92 IE 2354.08 (6" N) IE 2354.08 (6" S)
AD2	AREA DRAIN N: 245872.98 E: 2494997.09 RIM 2363.70 IE 2358.51 (4" NW) IE 2358.51 (4" E)	AD11	AREA DRAIN N: 245857.32 E: 2494803.54 RIM 2361.77 IE 2358.54 (4" NW) IE 2358.54 (4" S)	CB2	TYPE 1 N: 246057.08 E: 2495248.69 RIM 2352.32 IE 2349.01 (8" N)	SDCO1	CLEANOUT N: 245969.65 E: 2494639.19 RIM 2362.42 IE 2358.60 (6" S) IE 2358.60 (6" E)	SDCO10	CLEANOUT N: 245778.76 E: 2494800.62 RIM 2361.03 IE 2354.40 (6" W) IE 2354.08 (8" E) IE 2354.40 (6" N)
AD3	AREA DRAIN N: 245876.22 E: 2495091.52 RIM 2362.77 IE 2357.57 (4" E) IE 2357.57 (4" W)	AD12	AREA DRAIN N: 245836.39 E: 2494807.91 RIM 2361.32 IE 2358.33 (4" N) IE 2358.33 (4" E)	CB3	TYPE 1 N: 245826.44 E: 2495231.41 RIM 2356.30 IE 2352.30 (8" N)	SDCO2	RD POC N: 245971.26 E: 2494679.81 RIM 2363.31 IE 2357.99 (6" E) IE 2357.99 (6" W)	SDCO11	CLEANOUT N: 245775.92 E: 2494732.35 RIM 2361.80 IE 2355.79 (6" W) IE 2355.79 (6" E)
AD4	AREA DRAIN N: 245887.39 E: 2495204.38 RIM 2358.98 IE 2355.50 (6" N) IE 2355.50 (4" W)	AD13	AREA DRAIN N: 245837.93 E: 2494844.78 RIM 2361.11 IE 2357.96 (4" W) IE 2357.96 (4" E)	CB4	TYPE 1 N: 245938.18 E: 2495316.79 RIM 2352.20 IE 2348.70 (8" W)	SDCO3	CLEANOUT N: 245973.27 E: 2494728.61 RIM 2363.48 IE 2357.26 (6" E) IE 2357.26 (6" W)	SDCO12	CLEANOUT N: 245773.08 E: 2494664.07 RIM 2360.48 IE 2357.30 (6" N) IE 2357.30 (6" E)
AD5	AREA DRAIN N: 245950.92 E: 2495201.75 RIM 2358.23 IE 2353.81 (6" N) IE 2353.81 (6" E) IE 2353.81 (6" S)	AD14	AREA DRAIN N: 245839.56 E: 2494883.84 RIM 2360.90 IE 2357.57 (4" W) IE 2357.57 (6" SE)	CB5	TYPE 1L N: 245967.38 E: 2494945.38 RIM 2362.91 IE 2354.87 (8" W)	SDCO4	RD POC N: 245968.54 E: 2494751.38 RIM 2363.88 IE 2356.91 (6" E) IE 2356.91 (6" W)	SDCO13	RD POC N: 245794.87 E: 2494663.37 RIM 2361.31 IE 2357.52 (6" S)
AD6	AREA DRAIN N: 245991.32 E: 2494968.66 RIM 2360.55 IE 2357.50 (4" E)	AD15	AREA DRAIN N: 245777.24 E: 2494673.70 RIM 2361.29 IE 2357.22 (4" S)	DW1	TYPE 1 N: 245951.99 E: 2495238.51 RIM 2357.54 IE 2352.20 (6" W) IE 2349.00 (6" SE)	SDCO5	CANOPY POC N: 245972.93 E: 2494862.28 RIM 2362.93 IE 2355.66 (6" E) IE 2355.66 (6" W)	SDCO14	CANOPY POC N: 245995.96 E: 2494860.21 RIM 2362.34 IE 2355.71 (6" W) IE 2355.71 (6" E)
AD7	AREA DRAIN N: 245989.15 E: 2495017.87 RIM 2359.74 IE 2356.76 (4" NE) IE 2356.76 (4" W)	AD16	AREA DRAIN N: 245968.64 E: 2494663.25 RIM 2363.36 IE 2358.80 (4" N)	DW2	TYPE 2 N: 245792.14 E: 2494907.53 RIM 2359.00 IE 2352.40 (8" W) IE 2356.00 (6" NW)	SDCO6	CLEANOUT N: 245974.87 E: 2494916.19 RIM 2362.70 IE 2355.11 (6" W) IE 2355.11 (6" S) IE 2355.11 (6" E) IE 2355.11 (6" W)	SDCO15	CANOPY POC N: 245970.55 E: 2494802.22 RIM 2363.28 IE 2356.30 (6" E) IE 2356.30 (6" W)
AD8	AREA DRAIN N: 246009.95 E: 2495060.91 RIM 2360.93 IE 2356.28 (4" SW) IE 2356.28 (4" E) IE 2356.28 (8" S)	AD17	AREA DRAIN N: 245794.79 E: 2494640.13 RIM 2362.46 IE 2358.90 (6" N)	DW3	TYPE 1 N: 245935.19 E: 2495262.91 RIM 2355.59 IE 2347.70 (8" E) IE 2348.00 (8" S) IE 2349.00 (6" NW)	SDCO7	RD POC N: 245955.26 E: 2494916.77 RIM 2363.28 IE 2359.83 (6" N)		
AD9	AREA DRAIN N: 246014.50 E: 2495199.19 RIM 2357.54 IE 2354.45 (4" W) IE 2354.45 (6" S)	AD18	AREA DRAIN N: 245941.16 E: 2495064.09 RIM 2361.95 IE 2356.97 (8" N)	DW4	TYPE 1 N: 246043.06 E: 2495291.19 RIM 2351.30	SDCO8	CLEANOUT N: 245882.50 E: 2494796.36 RIM 2361.89 IE 2356.89 (6" S)		

HORIZONTAL SCALE
0 10 20 40
1" = 20 FEET

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REVISIONS

PERMIT SET

SPOKANE PUBLIC SCHOOLS
ADAMS ELEMENTARY SCHOOL
2909 EAST 36TH AVE, SPOKANE, WA 99207

11/10/2023

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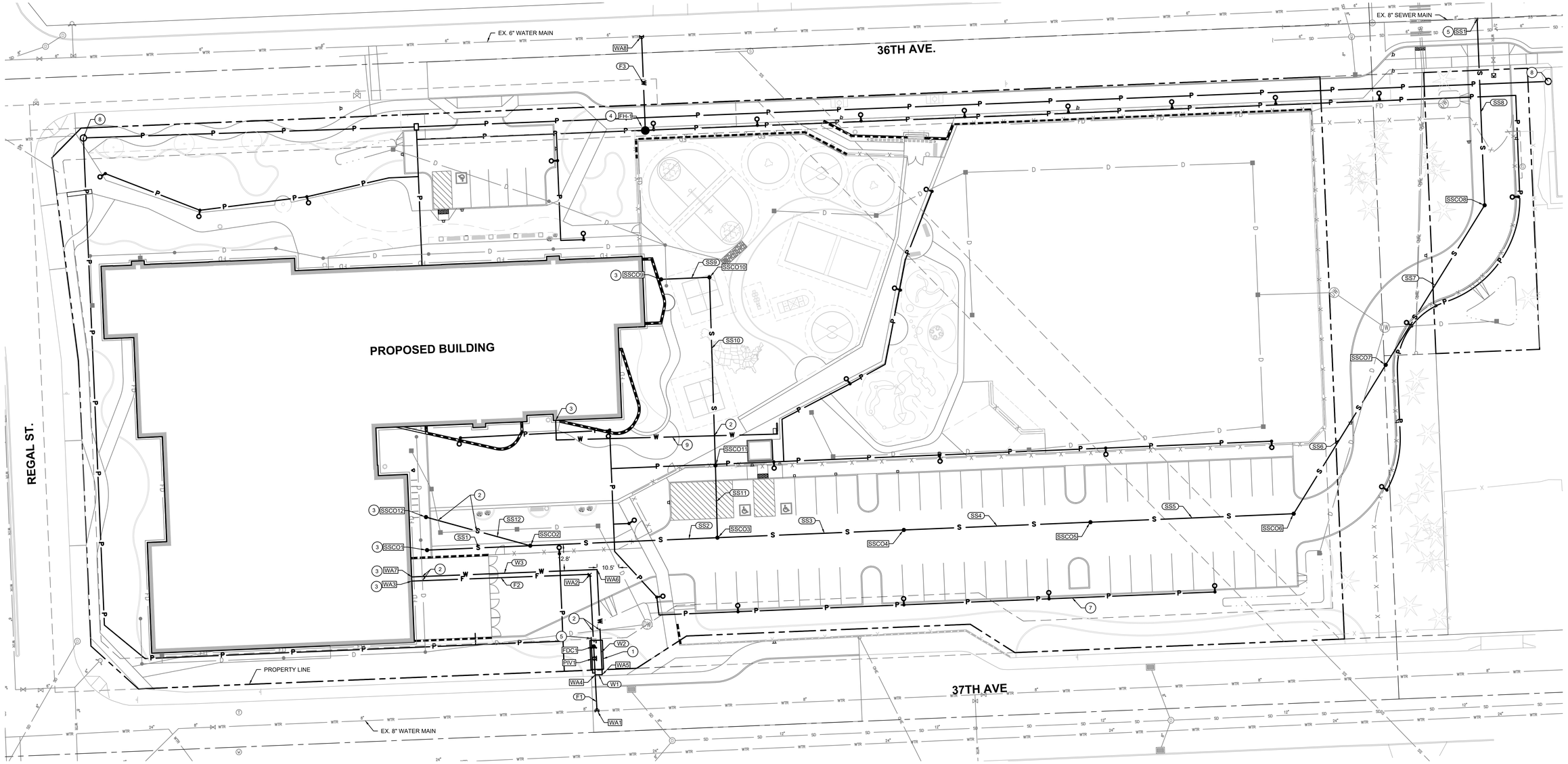
nacarchitecture.com
1203 WEST RIVERSIDE AVE
SPOKANE WA 99201
P:509.838.8240

NAC NO	
DRAWN	KTM
CHECKED	EMF
DATE	11/10/23

GRADING & DRAINAGE PLAN

CD C300

ADAMS ELEMENTARY SCHOOL



KEYNOTES

1. 6' X 14' WATER VAULT PER COS STD PLAN Y-117
2. UTILITY CROSSING PER COS STD PLAN A-5
3. BUILDING CONNECTION; SEE MEP PLANS FOR CONTINUATION
4. HYDRANT ASSEMBLY PER COS STD PLAN Y-101
5. IRRIGATION POC; SEE LANDSCAPE PLANS FOR CONTINUATION
6. SIDE SEWER CONNECTION PER COS STD PLAN Z-116
7. PROVIDE TRENCH, BEDDING, AND BACKFILL FOR DRY UTILITY LINES. COORDINATE TRENCH LOCATION WITH RELEVANT DISCIPLINE.
8. POWER POLE AND UNDERGROUND LINES TO BE COORDINATED WITH AVISTA AND RELEVANT DISCIPLINES.
9. 1" TYPE K COPPER PIPE TO DRINKING FOUNTAIN

SANITARY SEWER NOTES

1. UNLESS SHOWN OTHERWISE ON THE PLANS, PIPE MATERIAL FOR SEWER MAIN AND SIDE SEWER SHALL BE PVC CONFORMING TO ASTM D 3034, SDR35. SIDE SEWER SHALL BE INSTALLED AT A 2.00% MINIMUM SLOPE. SIDE SEWERS WITH A SLOPE LESS THAN 2.00% SHALL BE SURVEYED TO VERIFY A MINIMUM SLOPE OF 0.60% IS MAINTAINED.
2. SANITARY SEWER CLEANOUTS SHALL BE PER COS STD PLAN Z-114A AND THE SAME SIZE AS THE PIPING SERVED BY THE CLEANOUT. CLEANOUTS SHALL BE SPACED NO MORE THAN 100 FEET APART. WHERE THERE IS A HORIZONTAL CHANGE OF DIRECTION GREATER THAN 45°, A CLEANOUT SHALL BE INSTALLED AT THE CHANGE OF DIRECTION. WHERE MORE THAN ONE CHANGE OF DIRECTION GREATER THAN 45° OCCURS WITHIN 40 FEET, THE CLEANOUT INSTALLED FOR THE FIRST CHANGE OF DIRECTION SHALL SERVICE AS THE CLEANOUT FOR ALL CHANGES IN DIRECTION WITHIN THAT 40 FEET.
3. UTILITY SEPARATIONS, INCLUDING WATER AND SEWER OR STORM CROSSINGS, SHALL BE IN ACCORDANCE WITH THE COS STD PLANS A-4, A-5, A-6, & A-7.
4. THE CONTRACTOR MUST CONTACT CITY OF SPOKANE WASTEWATER MANAGEMENT DIVISION OFFICE IN ORDER TO ARRANGE A MUTUALLY AGREEABLE INSPECTION SCHEDULE. ALL FACILITIES MUST BE UNCOVERED AT THE TIME OF THE INSPECTION.

811 Know what's **below.** **Call** before you dig.

SEWER STRUCTURE TABLE

SS1	SADDLE TAP N: 246083.8594 E: 2495307.4176 RIM 2341.70 IE 2341.16 (6" S)
SSCO1	CLEANOUT N: 245827.8770 E: 2494801.4474 RIM 2361.89 IE 2356.50 (6" E)
SSCO2	CLEANOUT N: 245830.0150 E: 2494851.1864 RIM 2361.54 IE 2355.45 (6" W) IE 2355.45 (6" E) IE 2355.45 (6" W)
SSCO3	CLEANOUT N: 245833.8824 E: 2494941.3593 RIM 2361.60 IE 2354.00 (6" W) IE 2354.00 (6" E) IE 2354.00 (6" N)
SSCO4	CLEANOUT N: 245837.6015 E: 2495031.1768 RIM 2362.46 IE 2351.88 (6" W) IE 2351.88 (6" E)
SSCO5	CLEANOUT N: 245841.3393 E: 2495121.0992 RIM 2360.96 IE 2349.76 (6" W) IE 2349.76 (6" E)
SSCO6	CLEANOUT N: 245845.4225 E: 2495219.0141 RIM 2358.09 IE 2347.45 (6" W) IE 2347.45 (6" NE)
SSCO7	CLEANOUT N: 245917.1331 E: 2495263.3537 RIM 2354.70 IE 2345.46 (6" SW) IE 2345.46 (6" NE)
SSCO8	CLEANOUT N: 245994.0732 E: 2495311.0259 RIM 2353.19 IE 2343.30 (6" SW) IE 2343.30 (6" N)
SSCO9	CLEANOUT N: 245958.3719 E: 2494914.2372 RIM 2363.25 IE 2359.25 (6" E)
SSCO10	CLEANOUT N: 245959.3382 E: 2494937.5217 RIM 2362.34 IE 2358.00 (6" W) IE 2358.00 (6" S)
SSCO11	CLEANOUT N: 245868.6943 E: 2494940.3945 RIM 2362.75 IE 2355.36 (6" N) IE 2355.36 (6" S)
SSCO12	CLEANOUT N: 245843.7974 E: 2494800.9336 RIM 2361.86 IE 2358.50 (6" E)

SEWER PIPE TABLE

SS1	50 LF 6" SDR35 @ 2.11%
SS2	90 LF 6" SDR35 @ 1.61%
SS3	90 LF 6" SDR35 @ 2.36%
SS4	90 LF 6" SDR35 @ 2.36%
SS5	98 LF 6" SDR35 @ 2.36%
SS6	84 LF 6" SDR35 @ 2.36%
SS7	91 LF 6" SDR35 @ 2.39%
SS8	90 LF 6" SDR35 @ 2.38%
SS9	23 LF 6" SDR35 @ 5.36%
SS10	91 LF 6" SDR35 @ 2.91%
SS11	35 LF 6" SDR35 @ 3.91%
SS12	52 LF 6" SDR35 @ 5.85%

WATER STRUCTURE TABLE

FDC1	FIRE DEPARTMENT CONNECTION (2/C401) N: 245781.4641 E: 2494881.7366 RIM 2359.00
FH-1	HYDRANT ASSEMBLY N: 246030.0763 E: 2494906.6097 RIM 2359.71 IE 2357.29 (6" DI CL52 N)
PIV1	POST INDICATOR VALVE N: 245775.6801 E: 2494882.0301 (1/C401) RIM 2358.91
WA1	6"X8" TEE (MJ) N: 245750.4319 E: 2494883.3114 RIM 2357.49 IE 2356.95 (6" DIP CL52 N)
WA2	6" 90° BEND N: 245816.2171 E: 2494879.9730 RIM 2360.85 IE 2356.95 (6" DIP CL52 S) IE 2355.88 (6" DIP CL52 W)
WA3	BUILDING CONNECTION N: 245812.9717 E: 2494794.1956 RIM 2356.43 IE 2355.88 (6" DIP CL52 E)
WA4	3" SADDLE TAP N: 245767.7592 E: 2494882.4321 RIM 2357.64 IE 2357.29 (3" CPEP E)
WA5	3" 90° BEND N: 245767.8794 E: 2494885.8533 RIM 2357.64 IE 2357.29 (3" CPEP N) IE 2357.29 (3" CPEP W)
WA6	3" 90° BEND N: 245818.5270 E: 2494883.3409 RIM 2360.88 IE 2357.29 (3" CPEP S) IE 2356.29 (4" CPEP W)
WA7	BUILDING CONNECTION N: 245814.9708 E: 2494794.1125 RIM 2356.66 IE 2356.29 (4" CPEP E)
WA8	6"X6" TEE (MJ) N: 246075.3888 E: 2494904.8169 RIM 2357.80 IE 2357.29 (6" DI CL52 S)

WATER PIPE TABLE

F1	66 LF 6" DI CL52
F2	86 LF 6" DI CL52
F3	45 LF 6" DI CL52
W1	3 LF 3" HDPE
W2	51 LF 3" HDPE
W3	89 LF 3" HDPE

N

HORIZONTAL SCALE

0 10 20 40

1" = 20 FEET

DATE: November 9, 2023 FILENAME: Q:\2022\2220832\10_CIV\CAD\2220832-SH-UTIL.dwg

REVISIONS

PERMIT SET

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11/10/2023

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NAC NO	
DRAWN	KTM
CHECKED	EMF
DATE	11/10/23

UTILITY PLAN

CD
C400

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