

GENERAL NOTES:

- The Contractor shall comply with all applicable safety regulations. All construction shall be completed following current City Standard Specifications and Special Provisions.
- Contractor will be required to provide notice to utility companies a minimum of seventy-two (72) hours prior to any excavation, as follows:
 Kansas One-Call 687-2470
 The Contractor must notify the following in case of an emergency:
 AT&T 1-800-246-8464
 Black Hills Energy 1-800-694-8989
 City of Wichita Water 1-316-268-4555
 City of Wichita Sewer 1-316-268-4073
 City of Wichita Stormwater 1-316-268-4090
 City of Wichita Traffic 1-316-268-4034
 Cox Communications 1-888-249-3530
 Kansas Gas Service 1-888-452-4950
 Westar Energy 1-800-544-4857
- Utility service lines, poles, etc. are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. Existing utilities and their location, as shown on the plans, represent the best information obtainable for design. The Contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.
- Rubble from the removal of miscellaneous structures and excess excavation which is to be wasted shall be disposed of on sites to be provided by the Contractor. These sites shall be approved by the Engineer as to suitability, appearance and site location. Locations, in the opinion of the Engineer, that will leave an unsightly appearance will not be approved. All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a flood plain would require a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps. of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits would require additional archaeological investigations unless buried in a previously approved borrow location.
- Trees and shrubs in public right-of-way which are in direct conflict with proposed new construction shall be removed by the Contractor with the Engineer's approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage.
- The Contractor shall give all property owners and/or tenants of developed property abutting the construction of this project a minimum of ten (10) days notice prior to start of construction.
- The Contractor shall be responsible for preserving property irons. The Contractor will be required to re-establish any property irons which are damaged or destroyed by his construction operations. Such irons shall be re-established by a licensed land surveyor in accordance with state laws.
- The Water Distribution Division shall field locate water valve one time during construction when requested by the Contractor. It shall be the Contractor's responsibility to preserve such field locations during the construction process. Water valves, valve boxes or fire hydrants damaged during construction shall be repaired by Contractor at his own expense. Valve boxes and water meters within the project limits shall be adjusted to match field grades.
- The Contractor shall notify the consultant engineer and Tom Mason with the City at 316-268-4574 with the anticipated construction start date and notify them of project completion. Staking and inspection for this project will be the responsibility of the Contractor.
- If traffic is impacted by construction, a traffic control plan must be submitted and approved by the City Traffic Engineer, Brian Coon at traffic@wichita.gov before construction can begin. The Contractor shall be responsible for all traffic control measures to facilitate construction. All construction zone markings and signage shall conform to the latest version of Manual on Uniform Traffic Control Devices (MUTCD) as published by the US Dept. of Transportation, Federal Highway Administration. All costs associated with construction markings and signage shall be the Contractors responsibility.
- All elevations shown are NAVD 88.
- All areas disturbed during construction that will not be under proposed pavement shall be restored to match existing conditions.
- A portion of excess excavated material shall be mounded around manholes which extend more than one (1) foot above the existing ground. Such mound shall be constructed with new development a six (6) foot diameter flat top with 4 to 1 side slopes down to the original ground. The elevation of the flat top of the mound shall be 0.4 foot below the top to the manhole.
- Geotechnical report available upon request.
- Contractor shall limit the extent of trench openings overnight and weekends to less than 50 feet.
- Contractor shall provide positive drainage away from all manhole covers.
- City maintenance of storm sewer ends at right-of-way last structure within easement or right-of-way line.
- Any sidewalk, drive approach, or street pavement removed to construct project must have a pavement cut permit and be replaced by the City contractor. Permits can be obtained by calling 316-268-4501 or 316-268-4480.
- The inspecting firm shall submit to the City Stormwater Maintenance Division a digital copy of the CCTV inspection of the conduits and structures following construction. The digital file formation shall be compatible with the City input template. A copy of the template is available upon request at 316-268-4090.
- All existing and proposed erosion control measures including silt fencing, erosion control mat, straw bales, inlet barriers, and const. entrance shall be maintained throughout construction by the contractor and until project is accepted by the City of Wichita. The on-site engineer shall complete weekly reports on the status of erosion control measures. The contractor shall be required to comply with maintenance and/or replacement of erosion control measures as determined by the on-site engineer until project is accepted by City of Wichita. Maintenance and/or replacement of erosion control measures to be paid by L.S. bid item "Site Restoration".
- All excess excavation shall remain on-site and shall be stockpiled or spread at a location determined by the engineer.
- All areas disturbed during construction shall be seeded by others (site contractor).
- The Contractor shall not begin work on the project until the Project Inspector is assigned and on site. Any work completed without inspection will be required to be uncovered for inspection at the Contractor's expense.
- The Contractor to locate structures based on noted control points noted on this sheet.

Benchmarks

- BM #1: Mag Nail with Washer, 225' west of East curb Southwest parking lot. Elev. = 1356.17 (NAVD 88)
- BM #2: Mag Nail with Washer, South parking stall in Southeast parking lot, north of football field entrance. Elev. = 1353.64 (NAVD 88)
- BM #3: Mag Nail with Washer, east side of perimeter drive, east side of building. Elev. = 1359.68 (NAVD 88)
- BM #4: "X" Chiseled on Sidewalk, SE corner of 37th & Tyler roads. Elev. = 1352.75 (NAVD 88)

STORM SEWER IMPROVEMENTS

to serve

MAIZE SOUTH CAMPUS ADDITION

Maize Early Childhood Center

3701 NORTH TYLER ROAD

CITY OF WICHITA, KANSAS

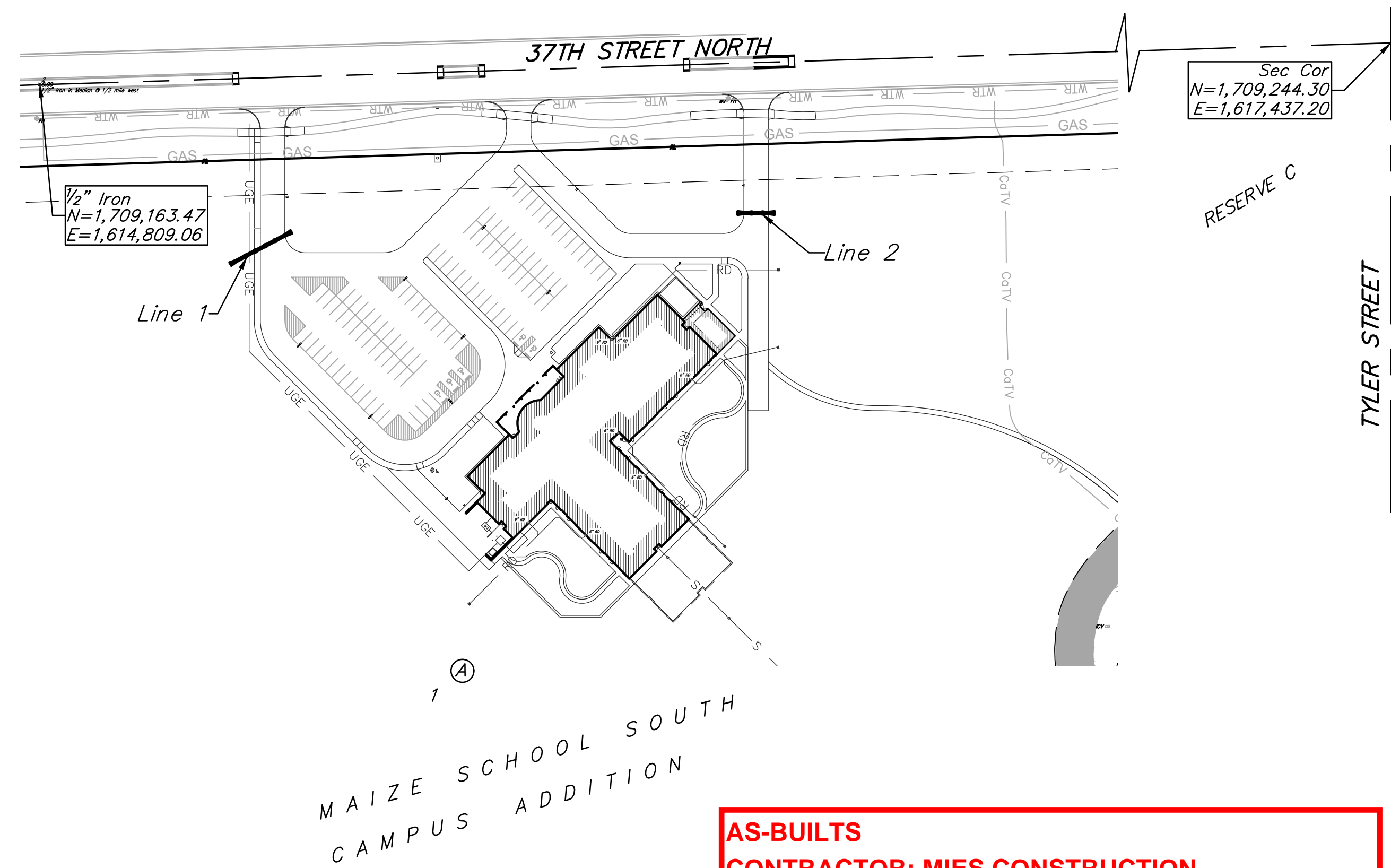
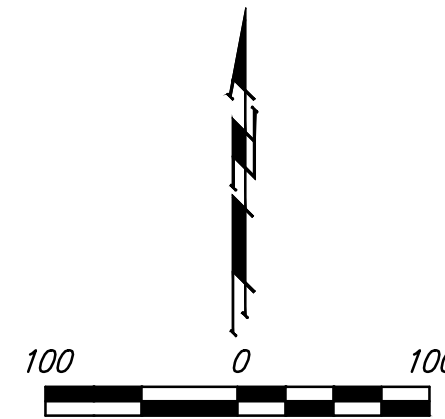
Gary Janzen, P.E. City Engineer

Project Number
0414 PPD (607861)

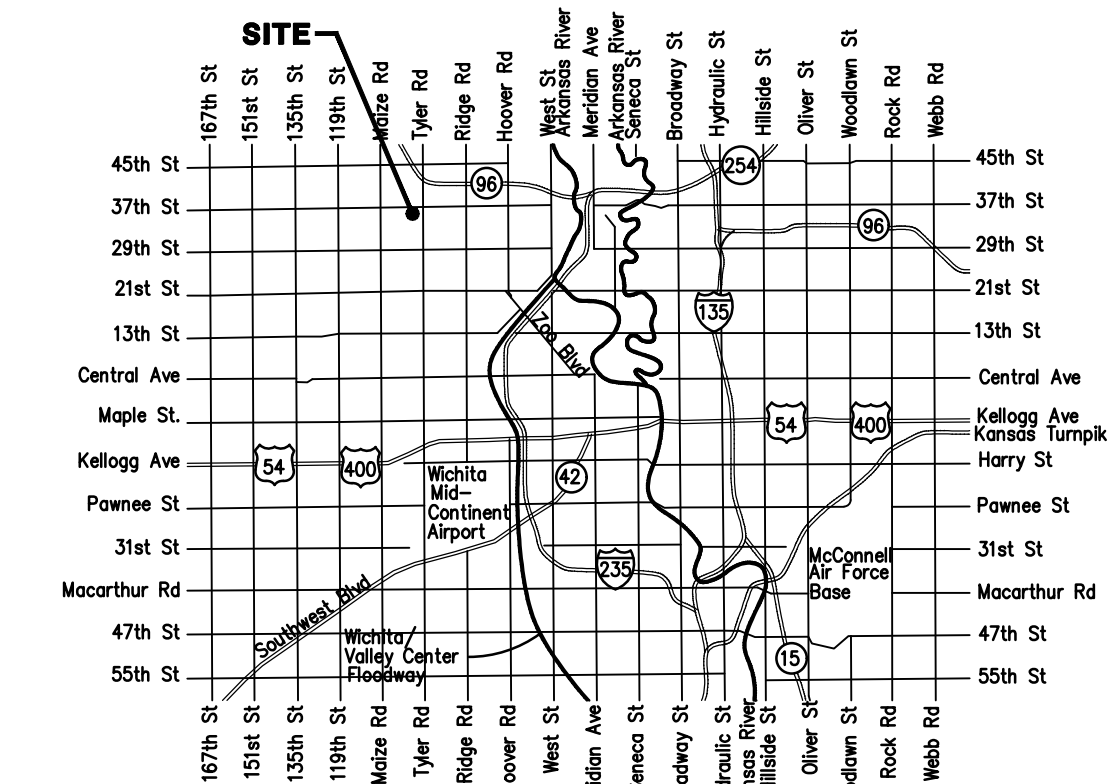
Sheet Index

| | |
|---------------------------------|---|
| Title Sheet | 1 |
| Lines 1 & 2 | 2 |
| Erosion Control Plan | 3 |
| Water Quality/Detention Details | 4 |
| Copy of Plat | 5 |

SWS Detail SW-401 & Erosion Control Details available at City of Wichita web site at <http://www.wichita.gov/Government/Departments/PWU/Pages/Regulations.aspx>



AS-BUILTS
CONTRACTOR: MIES CONSTRUCTION
SUPERINTENDENT: ALBERT WILLIAMS
FOREMAN: JOHN MIES
INSPECTED BY: JACOB MORRIS (SCHWAB EATON)
PDF BY: JM (01/18/17)



Vicinity Map

Stormwater Narrative & Certification

These construction plans were prepared in accordance with the current Stormwater Management Regulations as set forth in the City of Wichita's Stormwater Management Ordinance 16.32 and the policies/guidelines presented in the Wichita/Sedgwick County Stormwater Manual.

Campus Area: 8,838,221 sq. ft. (202.90 Acres)
 Ex. Campus Impervious Area: 1,729,038 sq. ft. (39.69 Acres)

Water Quality Treatment: will be address with existing Wet Detention area in Reserve C, Maize South Campus Addition and a Wetland Area located in Reserve A of Fox Ridge Plaza Addition. This site will have 3 separate projects disturbing the total area noted. In addition to the Maize ECC Center, a building addition to Maize South High School and a Looker Room addition to the Football Field is planned. The second two projects will not be installing any stormwater improvements requiring a PPD Improvements. The areas noted below are a summary of the 3 projects noted.

| Campus Area Improvements | Area Disturbed (ft ²) | Redev. Imperv. (ft ²) | New Imperv. (ft ²) |
|----------------------------|-----------------------------------|-----------------------------------|--------------------------------|
| Maize ECC: | 275,600 | 0 | 125,134 |
| High School Add.: | 22,120 | 5,900 | 6,410 |
| Football Field | | | |
| Looker Room: | 24,140 | 0 | 15,467 |
| Total Improvements: | 321,860 | 5,900 | 147,011. |

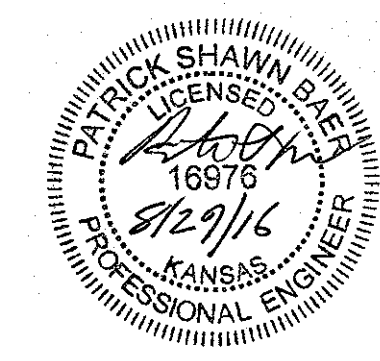
WQv = 42,994 ft³ (See sheet 4 for details)
 Existing WQv capacity in Reserve C Wet Detention Basin (771,000 ft³)

Detention & Downstream Channel Protection: Existing Wet Detention Basins located in Reserve C of Maize South Campus Addition & have been developed to meet detention requirements. Reserve A of Fox Ridge Plaza Add. have been developed to meet detention and downstream channel protection from the anticipated western development of Maize South Campus Addition. See sheet 4 for details.

BMPs used for this development are:
 Wet Detention basins.

APPROVED AS NOTED
 BY WICHITA PUBLIC WORKS ENGINEERING
 AND STORMWATER DIVISION
 Engineering *Rebecca Duff*
 Stormwater *Joe Hilde PE 8/30/16*

NOTE TO CONTRACTORS
 Inspection and testing for this project is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection to be in accordance with the City of Wichita standard construction engineering practices and certified by a Licensed Professional Engineer in the state of Kansas. No work shall be performed by the Contractor without such inspection nor shall any work be commenced without written authorization by City Engineering. All Construction and Materials shall comply with the current City of Wichita Specifications and Standards and Special Provisions (on file and available at Wichita.gov).
 An approved copy of these plans signed by City staff are required on-site.



July 2016



Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149
 ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

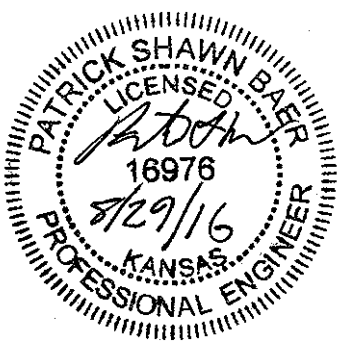
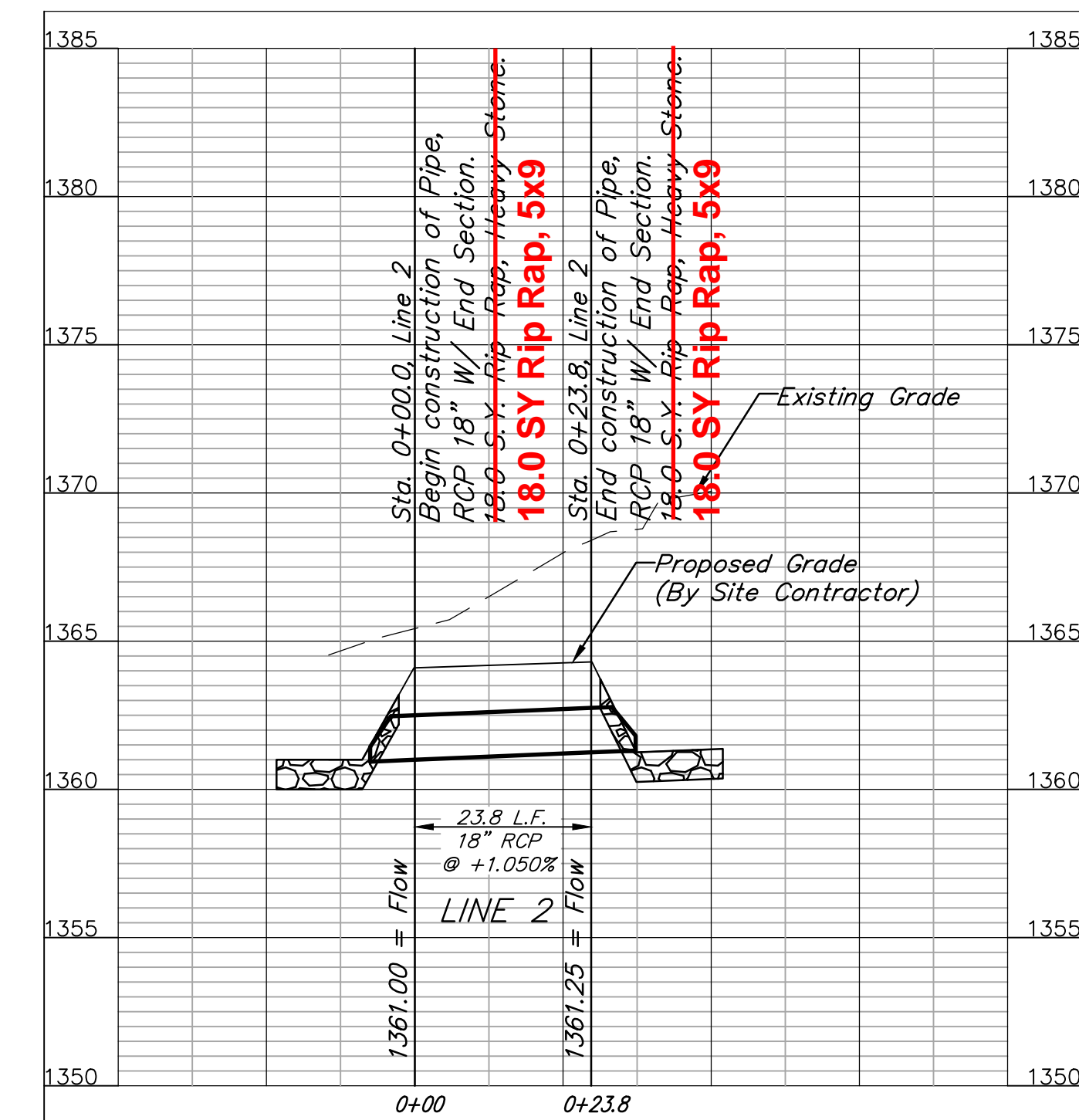
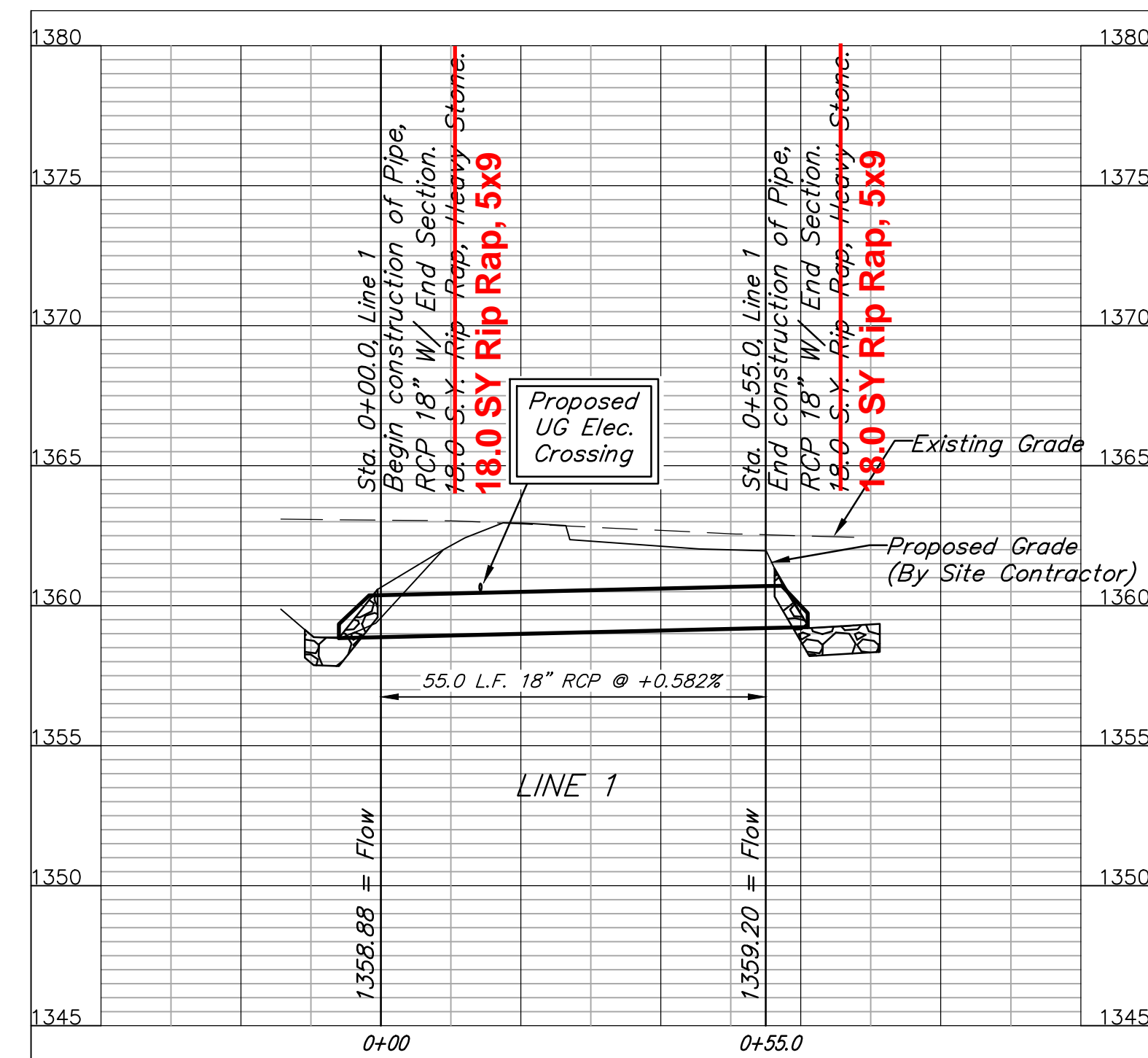
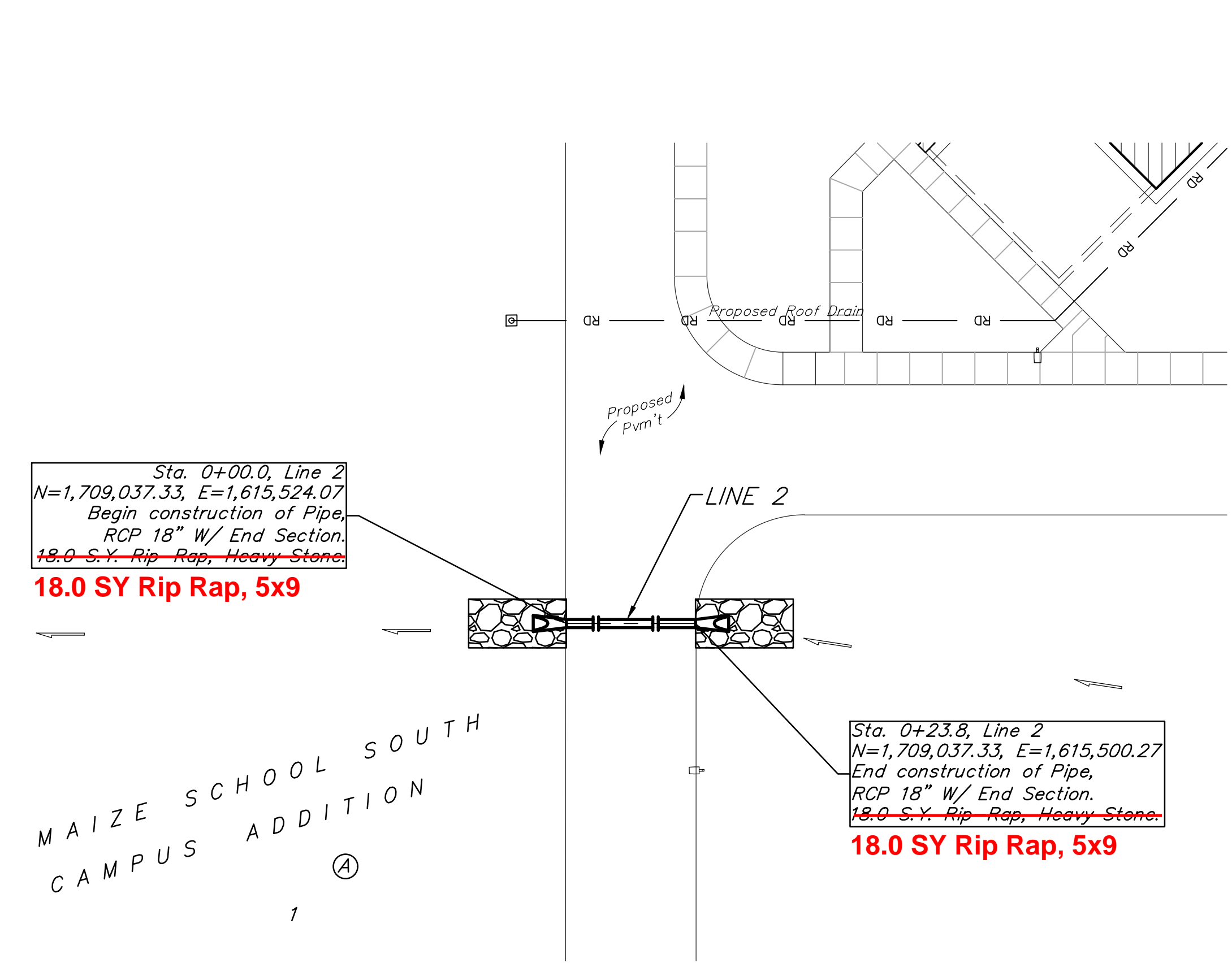
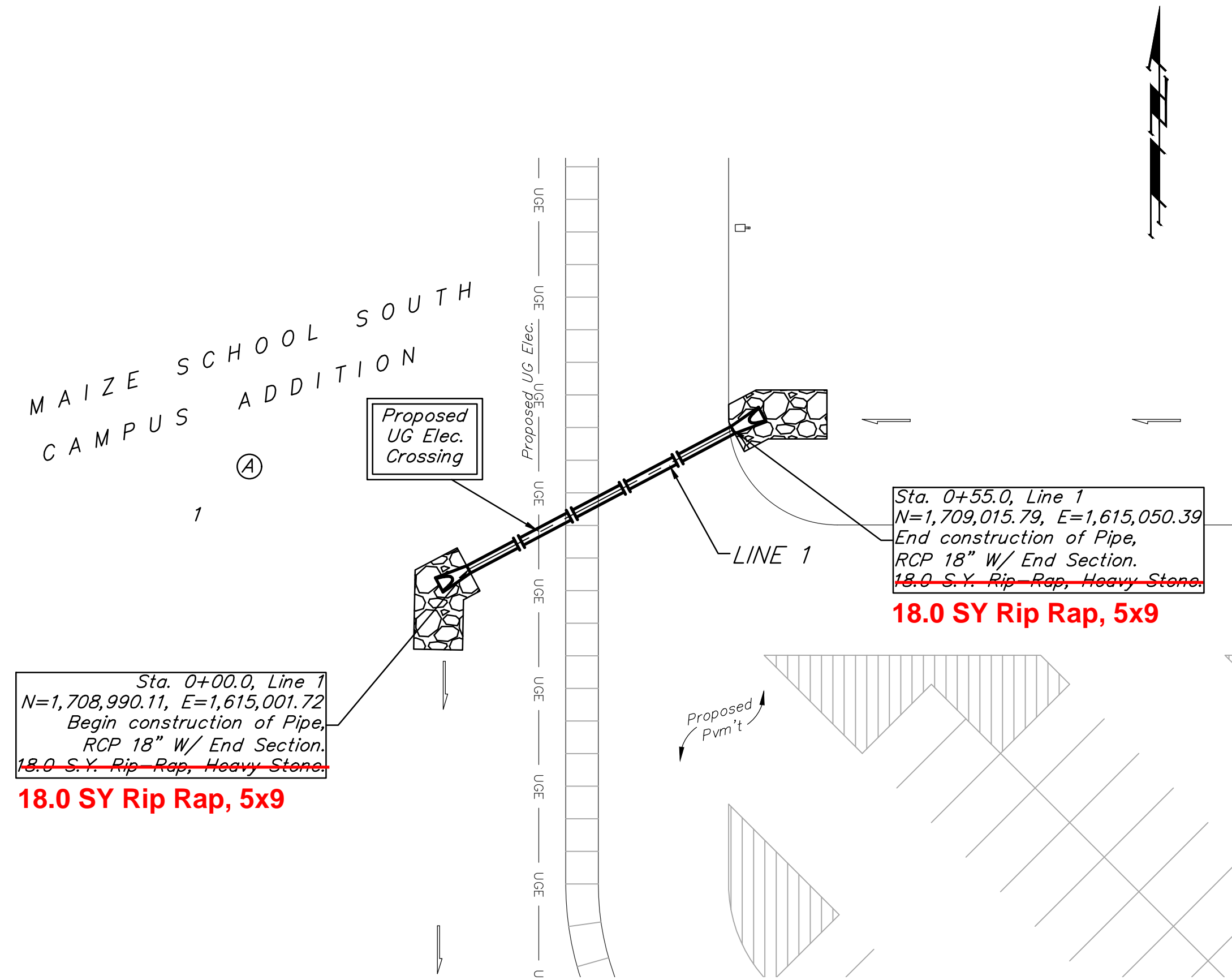
BENCHMARKS:

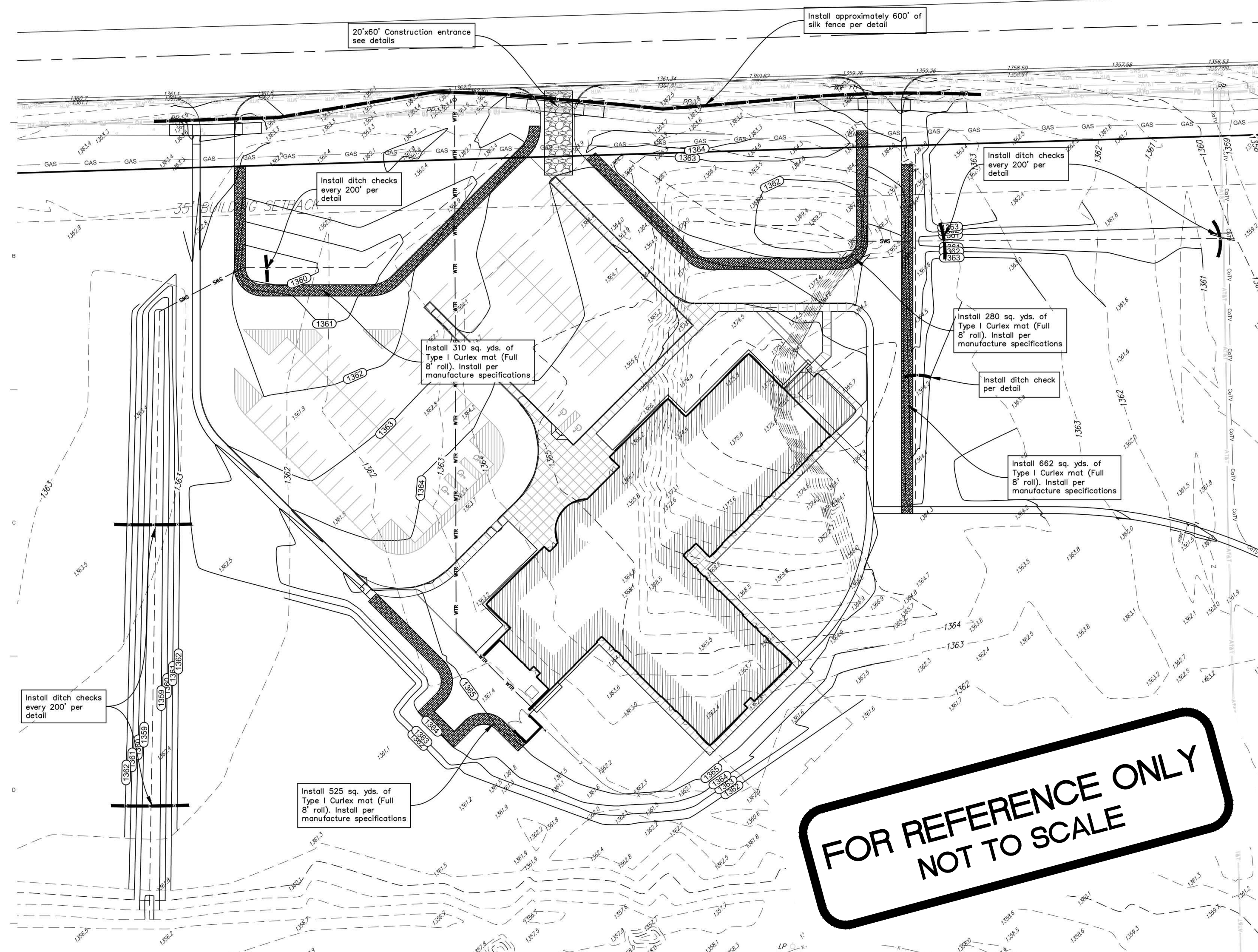
BM #1: Mag Nail with Washer, 225' west of East curb Southwest parking lot. Elev. = 1356.17 (NAVD 88)

BM #2: Mag Nail with Washer, South parking stall in Southeast parking lot, north of football field entrance. Elev. = 1353.64 (NAVD 88)

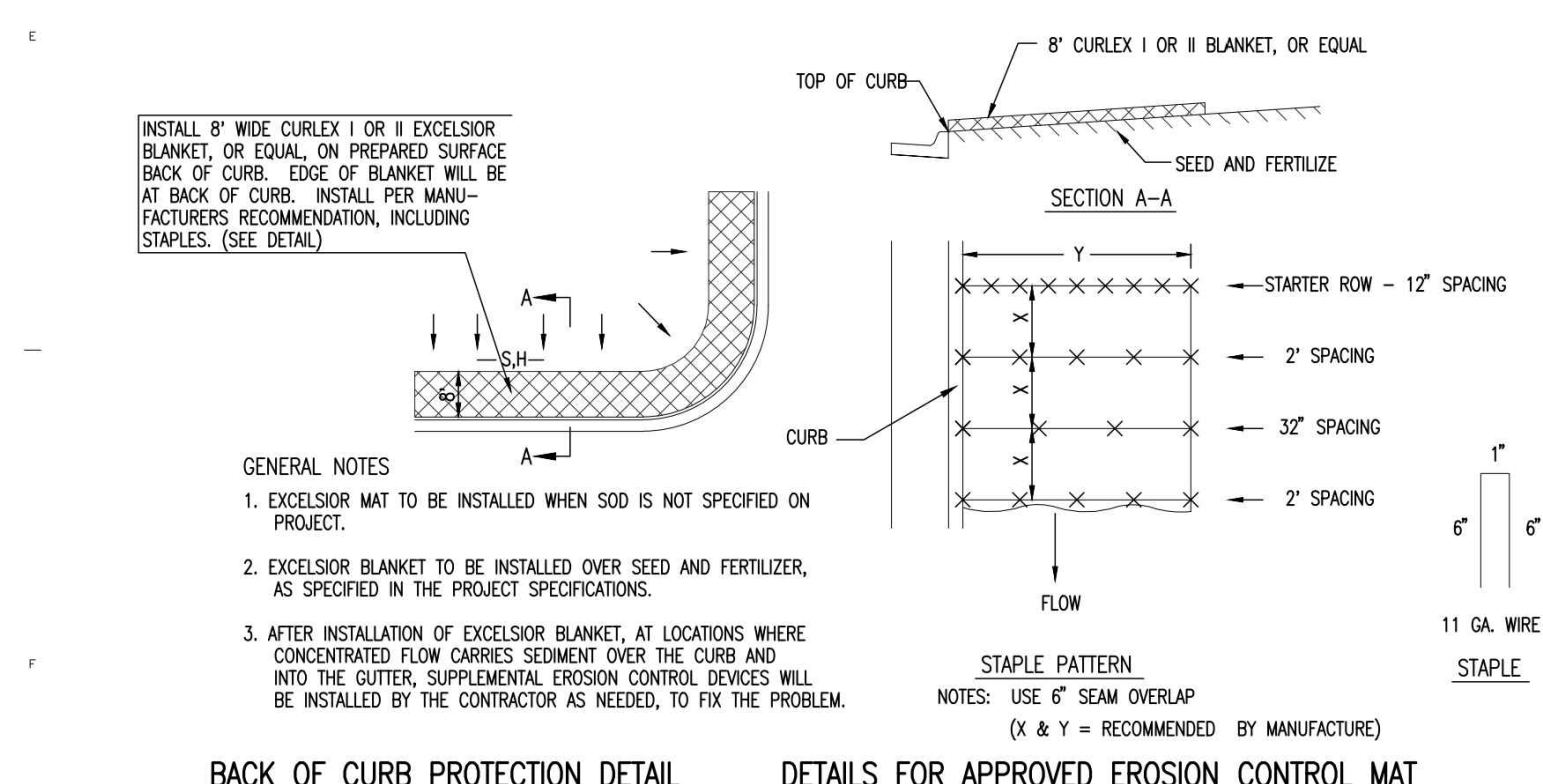
BM #3: Mag Nail with Washer, east side of perimeter drive, east side of building. Elev. = 1359.68 (NAVD 88)

BM #4: "X" Chiseled on Sidewalk, SE corner of 37th & Tyler roads. Elev. = 1352.75 (NAVD 88)

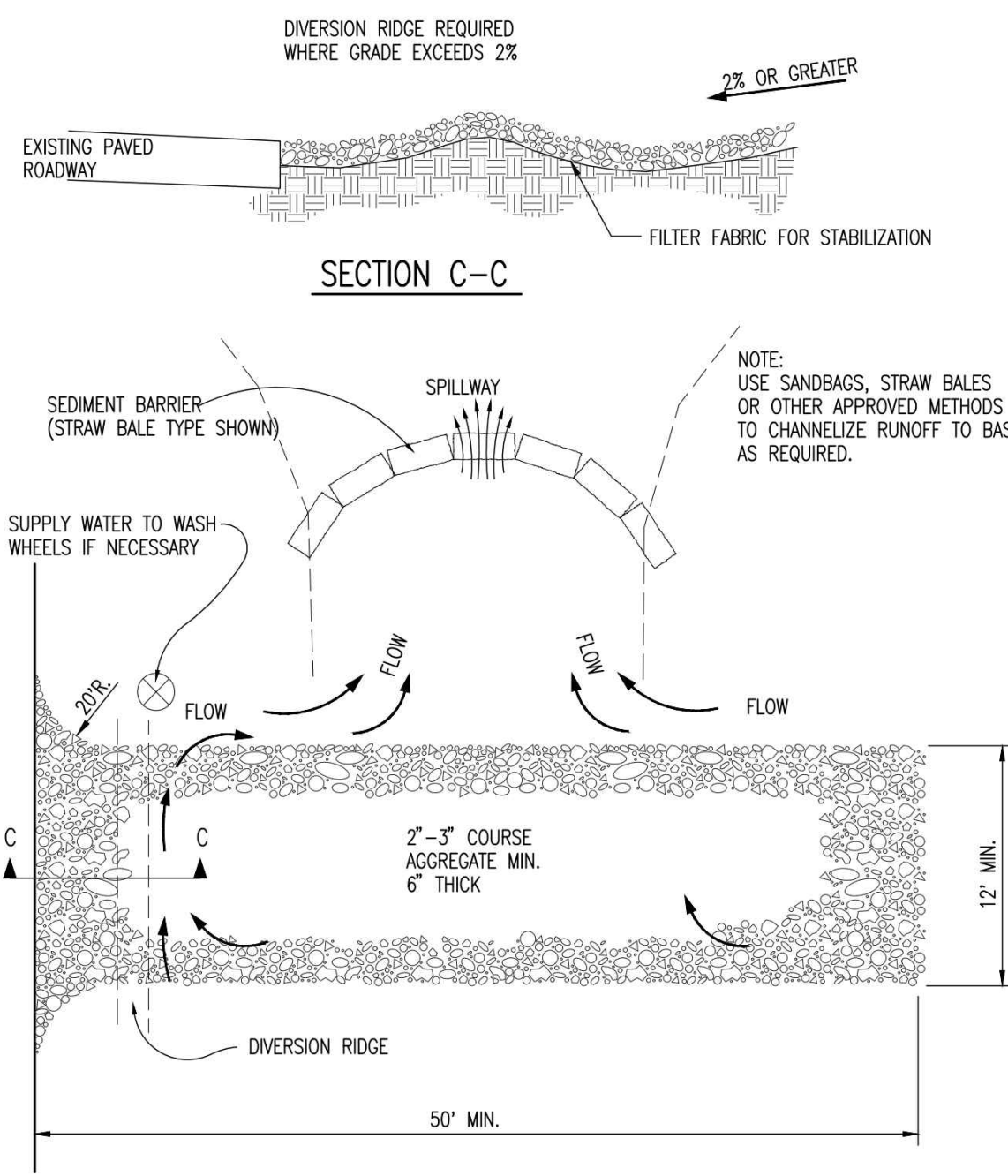




EROSION CONTROL PLAN
Scale 1" = 20'-0"



2 TURF REINFORCEMENT MAT
NOT TO SCALE

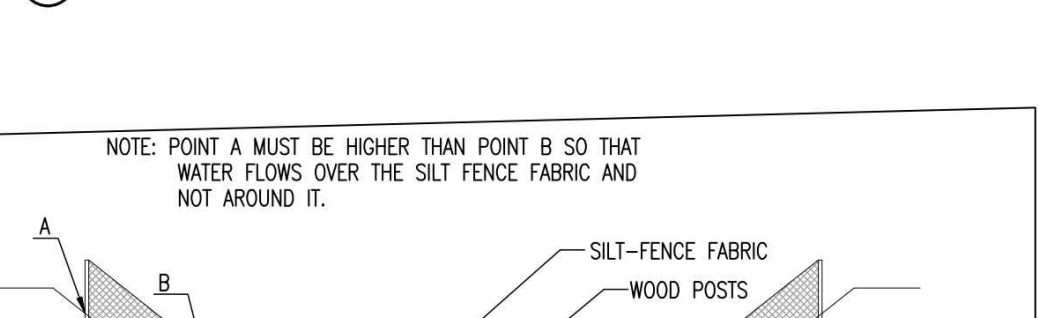
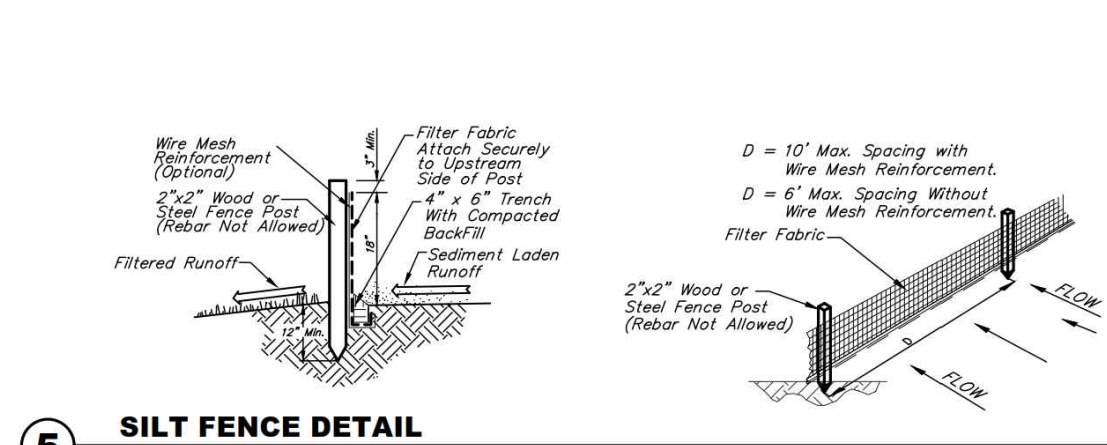


STABILIZED CONSTRUCTION ENTRANCE

GENERAL NOTES

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN, AS SHOWN ABOVE.
4. DRIVE ENTRANCES ONTO RESIDENTIAL LOTS WILL NOT BE REQUIRED TO HAVE THE SEDIMENT BARRIER SHOWN, BUT WHEEL WASHING MAY BE REQUIRED IF STABILIZED ENTRANCE IS NOT SUFFICIENT TO KEEP MUD FROM BEING TRACKED ONTO ADJACENT STREET. ENTRANCE SHALL EXTEND FROM BACK OF CURB TO DWELLING.

1 CONSTRUCTION ENTRANCE
NOT TO SCALE



SILT FENCE DITCH CHECKS (STREAM PROTECTION)

MATERIAL SPECIFICATION:

SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION. THE POSTS USED TO SUPPORT THE SILT FENCE FABRIC SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. SILT FENCE FABRIC SHOULD BE ATTACHED TO THE WOODEN POSTS WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

PLACEMENT:

PLACE SILT FENCE IN DITCHES WHERE IT IS UNLIKELY THAT IT WILL BE OVERTOPPED. WATER SHOULD FLOW THROUGH A SILT FENCE DITCH CHECK, NOT OVER IT. SILT FENCE DITCH CHECKS OFTEN FAIL WHEN OVERTOPPED.

SILT FENCE DITCH CHECKS SHOULD BE PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH. THE SILT FENCE SHOULD EXTEND FAR ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE FENCE IS HIGHER THAN THE TOP OF THE LOW POINT OF THE FENCE. THIS PREVENTS WATER FROM FLOWING AROUND THE CHECK.

SILT FENCE DITCH CHECKS SHOULD NOT BE PLACED IN DITCHES WHERE HIGH FLOWS ARE EXPECTED. ROCK CHECKS SHOULD BE USED INSTEAD.

SILT FENCE SHOULD BE PLACED IN DITCHES WITH SLOPES OF 6% OR LESS. FOR SLOPES STEEPER THAN 6%, ROCK CHECKS SHOULD BE USED.

SITE INFORMATION

| | |
|------------------|-----------------------------------|
| Total Area: | 7,829,653 sq. ft. (±179.74 acres) |
| Disturbed Area: | 279,202 sq. ft. (±6.41 acres) |
| Impervious Area: | 144,351 sq. ft. (±3.31 acres) |
| PerVIOUS Area: | 134,651 sq. ft. (±3.10 acres) |

LEGAL DESCRIPTION

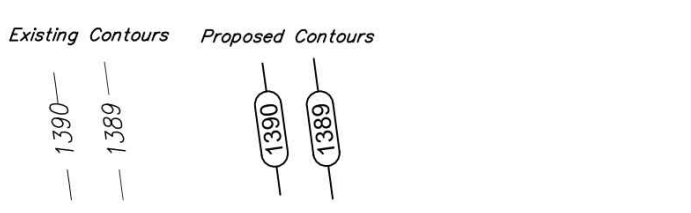
3701 North Tyler Road, Lot 1, Block A, Maize School South Campus Addition, Wichita, Sedgewick County Kansas.

BENCHMARKS

- SITE BENCHMARK #3**
Mag Noll with Washer, 225' west of East curb Southwest parking lot. Elevation=1356.17 (NAVD 88)
- SITE BENCHMARK #4**
Mag Noll with Washer, South parking stall in Southeast parking lot, north of football field entrance. Elevation=1353.64 (NAVD 88)
- SITE BENCHMARK #5**
Mag Noll with Washer, east side of perimeter drive, east side of building. Elevation=1359.68 (NAVD 88)
- SITE BENCHMARK #7**
"X" Chiselled on Sidewalk, SE corner of 3701 & Tyler roads. Elevation=1352.75 (NAVD 88)

LAYOUT LEGEND

| Existing Utilities | |
|---------------------|-------------------------|
| USE - USE | Electric Underground |
| USE - USE | Electric Overhead |
| WTR - WTR | Water Line |
| GAS - GAS | Gas Line |
| PIPELINE - PIPELINE | Petroleum Pipeline |
| SWS - SWS | Storm Water Sewer Pipe |
| SS - SS | Sanitary Sewer Line |
| TELE - TELE | Telecommunication (A&T) |
| CATV - CATV | Telecommunication (Cox) |



EROSION CONTROL NOTES

1. No land clearing or grading shall begin until all applicable erosion control measures have been installed. This project is subject to this SWPP Plan. The Contractor shall comply with any unusual requirements or necessary for the site to be in compliance during construction, per this plan and City specs (See #11).
2. All exposed areas shall be seeded as specified within 21 days of final GRADING. Seed is to include straw mulch, crimped in place per industry standards.
3. Should construction stop for longer than 14 days, the site shall be seeded as specified.
4. Maintain erosion control measures after each rain and at least once a week.
5. This plan shall not be considered all inclusive as the contractor shall take all necessary precautions to prevent soil sediment from leaving the site.
6. Contractor shall comply with all state and local ordinances that apply.
7. Additional erosion and sediment control measures will be installed if deemed necessary by an site inspection.
8. Land disturbing activities shall not commence until approval to do so has been received by governing authorities.
9. If installation of storm drainage system should be interrupted by weather or nightfall, the pipe ends shall be covered with filter fabric.
10. All disturbed R/W areas not intended for pavement or sidewalk construction shall be hydroseeded with a Bermuda / Perennial Rye Grass Seed Mix. See Mass Grading specification sheet for seed mixture rate requirements.
11. This SWPP Plan should be in job trailer and/or on site at all times. The Contractor is responsible for any needed changes, updates or maintenance to BMP's on site. This plan may change and updates need to be recorded and documented on the plan. This plan is a flexible plan, due to changing site conditions and weather. Please inform Landscape Architect and/or Engineer of changes to plan.
12. ANY substitutions for the sediment control devices shown, must be approved by the Landscape Architect and/or Engineer prior to any uses on site.
13. An NPDES Permit Application will not be submitted for this property.
14. SILT Fence is to be constructed to encompass 15' outside the Fair Cloth Skimmers at Sediment Basins 1, 2, & 3. Install Fair Cloth Skimmer per manufactures specifications. Install maintain skimmer & silt fence per SWPPP requirements.
15. The Contractor is NOT allowed to import or export soil from this site. See site plans for stock pile requirements for this site.
16. Contractor is responsible to maintain existing temporary and permanent erosion control measure during construction. If the existing channels have evidence of erosion, contractor is to restore channel to proposed grades and install curlex type I TRM to maintain channel until permanent vegetation is establish.
17. All areas disturbed shall be permanently seeded and fertilized as follows: K-31 Fescue Seed @ 8#/1,000 sq. ft. & Fertilizer 12-24-12 @ 1#/1,000 sq. ft. Seeding areas shall be prepared per industry standards.

EROSION CONTROL LEGEND

| | |
|--|-------------------------------|
| | = Silt Fence |
| | = Curb Inlet Sediment Barrier |
| | = Area Inlet Sediment Barrier |
| | = Construction Entrance |
| | = Curlex mat |

SJCF architecture
Enterprise Center | 357 N. Broadway | Wichita, Kansas 67202-3303 | 316.684.0171
sjcf.com

MAIZE SOUTH HIGH SCHOOL ADDITIONS & REMODELS
3701 NORTH TYLER ROAD, WICHITA, KS 67205

©2015
Schaaf Johnson Cox Pava Architecture, Inc.
All Rights Reserved.
These drawings and their contents, including, but not limited to, all concepts, designs, & ideas are the exclusive property of Schaaf Johnson Cox Pava Architecture, Inc. and may not be used or reproduced in any way without the express consent of SJCF.

Revisions

| | |
|--------|---|
| 4-4-16 | △ |
| △ | △ |
| △ | △ |
| △ | △ |
| △ | △ |
| △ | △ |

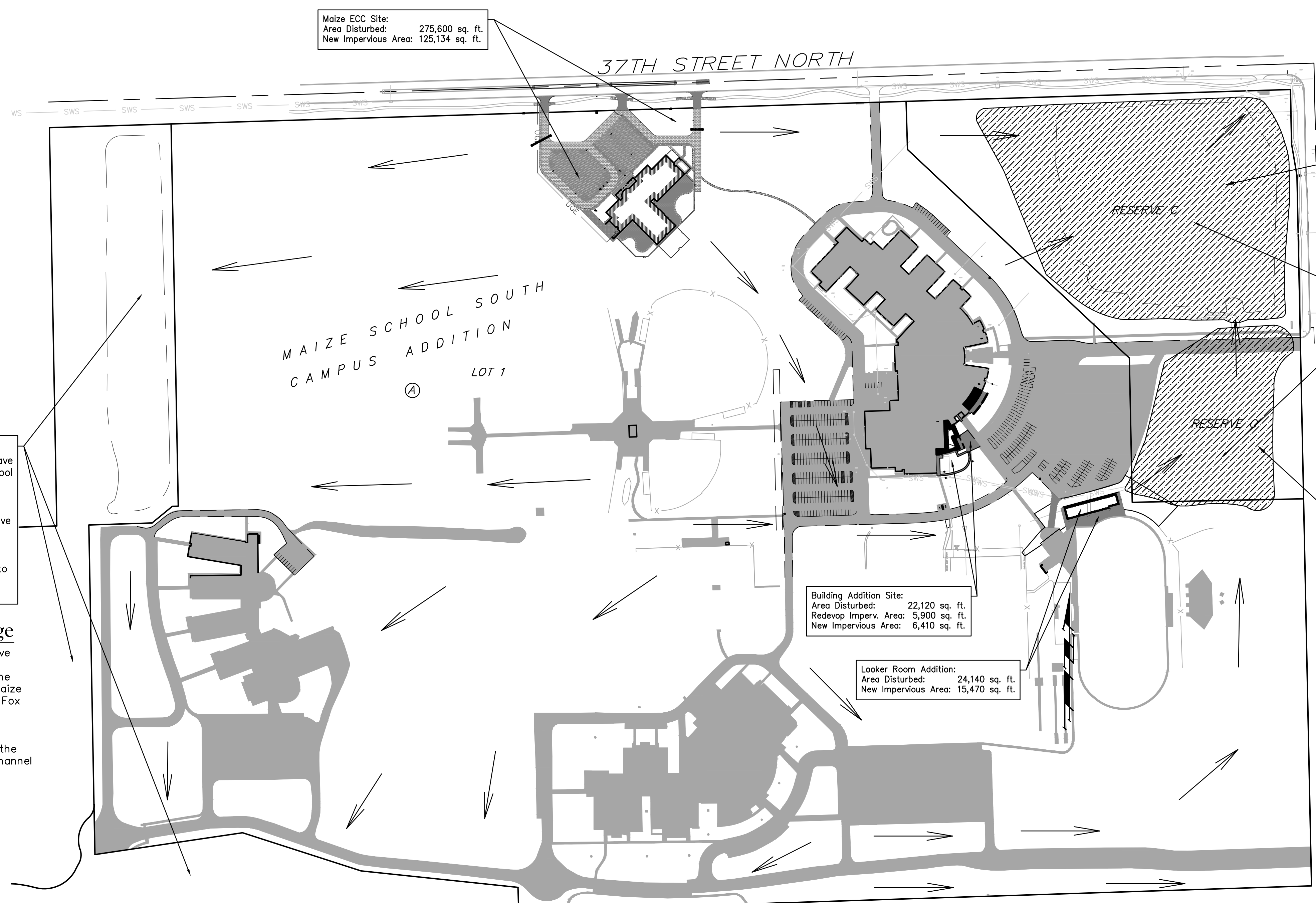
Project Number
SJCF 5135.00

Date
28 JUNE 2016

EROSION CONTROL PLAN

1" = 20"

C21.0



Maize ECC Site:
Area Disturbed: 275,600 sq. ft.
New Impervious Area: 125,134 sq. ft.

37TH STREET NORTH

MAIZE SCHOOL SOUTH
CAMPUS ADDITION
LOT 1

**North Basin,
Detention Basin (Reserve C)**
Outfall: 2-18" RCP @ 1341.0

| Basin Size | | |
|------------|---------|-----------|
| Elevation | Area | Volume |
| 1341.0 | 391,100 | 0 |
| 1342.0 | 453,520 | 422,910 |
| 1343.0 | 506,250 | 902,500 |
| 1344.0 | 566,050 | 1,438,320 |

| Basin Discharge (Line 5) | | |
|--------------------------|-----------------|---------------------------|
| Peak Flow (cfs) | Elev. (Navd 88) | Volume (ft ³) |
| Q1 = 4.3 | 1341.70 | 283,830 |
| Q2 = 7.4 | 1341.90 | 389,470 |
| Q3 = 12.4 | 1342.30 | 556,670 |
| Q4 = 15.1 | 1342.50 | 682,740 |
| Q5 = 18.3 | 1342.90 | 856,420 |
| Q50 = 20.6 | 1343.20 | 1,020,960 |
| Q100 = 23.0 | 1343.60 | 1,221,020 |

RESERVE C, MAIZE SOUTH CAMPUS ADDITION:
Existing wet detention basin (north side of main entrance) and dry detention basin (south side of main entrance) have been designed to receive runoff from school property. Per drainage plan, these basins have been designed for a future school property development with a total impervious area to not exceed 24% (calculation based on Rational Curve Numbers noted on Drainage Plan). The current average impervious area, draining to this area is 21.2%, below the designed impervious area.

**South Basin,
Detention Basin (Reserve C)**
Outfall: 2-24" RCP @ 1343.0 (to N. Basin)

| Basin Size | | |
|------------|---------|---------|
| Elevation | Area | Volume |
| 1343.5 | 140,000 | 24,250 |
| 1344.5 | 146,000 | 167,220 |
| 1345.5 | 152,300 | 316,350 |
| 1346.5 | 158,600 | 471,770 |
| 1347.5 | 185,000 | 643,380 |

| Basin Discharge (Line 5) | | |
|--------------------------|-----------------|---------------------------|
| Peak Flow (cfs) | Elev. (Navd 88) | Volume (ft ³) |
| Q1 = 15.5 | 1344.20 | 130,440 |
| Q2 = 22.2 | 1344.70 | 198,800 |
| Q3 = 30.4 | 1345.50 | 312,840 |
| Q4 = 36.9 | 1346.00 | 394,730 |
| Q5 = 44.0 | 1346.70 | 505,740 |
| Q50 = 108.6 | 1346.90 | 547,410 |
| Q100 = 168.0 | 1347.10 | 570,630 |

FOX RIDGE PLAZA ADDITION:
Existing wetland and wet detention basins have been developed to receive runoff from school property. Per approved drainage plan, the basins have been designed for a future school property development with a total impervious area to not exceed an SCS curve number of 92. This calculates to allow impervious area to not exceed 60% of the School area draining to these basins. The current average impervious area, draining to this area is 21.2%, below the designed impervious area.

Fox Ridge Plaza Drainage
Reserve A of Fox Ridge Plaza Add. have been developed to meet detention and downstream channel protection from the anticipated western development of Maize South Campus Addition. See approved Fox Ridge Plaza Drainage Plan.

Downstream Channel Protection: Per the approved drainage plan, downstream channel protection has been accounted for.

Building Addition Site:
Area Disturbed: 22,120 sq. ft.
Redevop Imperv. Area: 5,900 sq. ft.
New Impervious Area: 6,410 sq. ft.

Looker Room Addition:
Area Disturbed: 24,140 sq. ft.
New Impervious Area: 15,470 sq. ft.

TYLER ROAD

**Maize South Campus Addition.
Stormwater Drainage Analysis.**

These construction plans were prepared in accordance with the current Stormwater Management Regulations as set forth in the City of Wichita's Stormwater Management Ordinance 16.32 and the policies/guidelines presented in the Wichita/Sedgwick County Stormwater Manual.

Site Area: 8,838,221 sq. ft. (202.90 Acres)
Site Impervious Area:
Existing: 1,729,038 sq. ft. (39.69 Acres) 19.6%
New: 147,011 sq. ft. (3.37 Acres)
Post Const: 1,876,049 sq. ft. (43.07 Acres) 21.2%

Water Quality Treatment: will be address with existing Wet Detention areas in Reserve C, Maize South Campus Addition and a Wetland Area located in Reserve A of Fox Ridge Plaza Addition. This site will have 3 projects noted. The second two projects will not be installing any stormsewer improvements requiring a PPD Improvements.

See Table 1 for WQV calculations.

Detention & Downstream Channel Protection: See analysis for Sunstone Plaza & Reserve C, noted on this sheet.

A Detention Basin O&M Plan has been developed for the existing Detention Basin located with Reserve C, per City of Wichita Stormwater Department request.

TABLE 1: Water Quality Calculations

| Land Use | Hydrologic Soil Group | | | | Land Use | Hydrologic Soil Group | | | |
|-------------------------|-----------------------|------|------|------|-------------------------|-----------------------|----|----|----|
| | A | B | C | D | | A | B | C | D |
| Undisturbed | 0.02 | 0.03 | 0.04 | 0.05 | Undisturbed | 55 | 71 | 80 | 84 |
| Turf or Disturbed Soils | 0.15 | 0.20 | 0.22 | 0.25 | Turf or Disturbed Soils | 71 | 80 | 84 | 88 |
| Impervious Cover | 0.95 | 0.95 | 0.95 | 0.95 | Impervious Cover | 98 | 98 | 98 | 98 |

| Basin # | Weighted Volumetric Runoff Coef. (R _v) (eq. 4-24') | | | | | | | | | | WQ, ft ³ eq. 4-25' |
|---------------|----------------------------------------------------------------|-----------------------|---------------------------|--------------------------|----------------------------|-------|-------|------------|-------|------------------|-------------------------------|
| | Undist. ft ² | Dist. ft ² | Red. Imp. ft ² | New Imp. ft ² | Total Area ft ² | U % | D % | Redev. I % | I % | R _v % | |
| Basin to Pond | 8,510,461 | 174,849 | 5,900 | 147,011 | 8,838,221 | 0.029 | 0.004 | 0.000 | 0.016 | 0.0486 | 42,994 |

*Basin includes the existing Fossil Rm residential that drains into the existing pond. Assumed 70% impervious in the subbasin.

| Basin | Pond Volume Below Static Pool | | | |
|----------------|-------------------------------|------------------|------------|-----------------|
| | At Outfall Elev Sq. Ft. | Bottom Area Acre | Depth Feet | Volume Acre-FT. |
| East Basin | 393100 | 9.0 | 377000 | 8.7 |
| Totals: | | 9.0 | | 17.7 |

| Pond | Pond Volume > WQv | |
|------|-------------------|-------|
| | WQv | Check |
| 17.7 | 1.0 | Yes |

Basin volumes are the volumes of storage under the outfall elevation. The pond has adequate volume under its static elevation to store the contributing basins storm water quality volume.

**Maize South Campus
Drainage Analysis**

200 0 200 Scale 1" = 200' 0"

Reserve C Drainage Analysis

Reserve C Detention Analysis: Existing wet detention basin (north side of main entrance) and dry detention basin (south side of main entrance) have been identified on the recorded drainage plan. Noted is the calculated runoff coefficients identified per the Rational Method. Per the drainage plan, these basins have been designed for a future school property development with a net runoff 100 year coefficient of 0.61 for 117.6 acres. Based on soil conditions of B & C and Wichita Standard Rational Runoff Coefficients noted in Volume 1, Appendix C, the total impervious area to not exceed 24% of the drainage area. The current average impervious area, draining to this area is 21.2%. The proposed development is below the designed impervious area.

An Analysis of the existing two basins, based on current topographic data and using a SCS Method modeled in Hydroflow modeling software was completed. Accounting for a SCS Curve number of 81

A Detention Basin O&M Plan has been developed for the existing Detention Basin located with Reserve C, per City of Wichita.

Downstream Channel Protection: Stormwater Department request. Existing Wet Detention Basin located in Reserve C of Maize South Campus Addition have been developed to not over-inundate existing downstream COW drainage facilities located in public right of way.



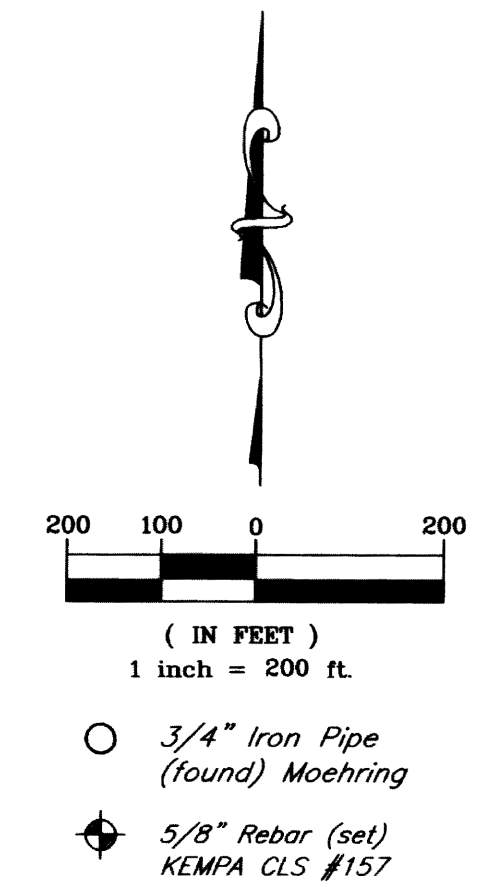
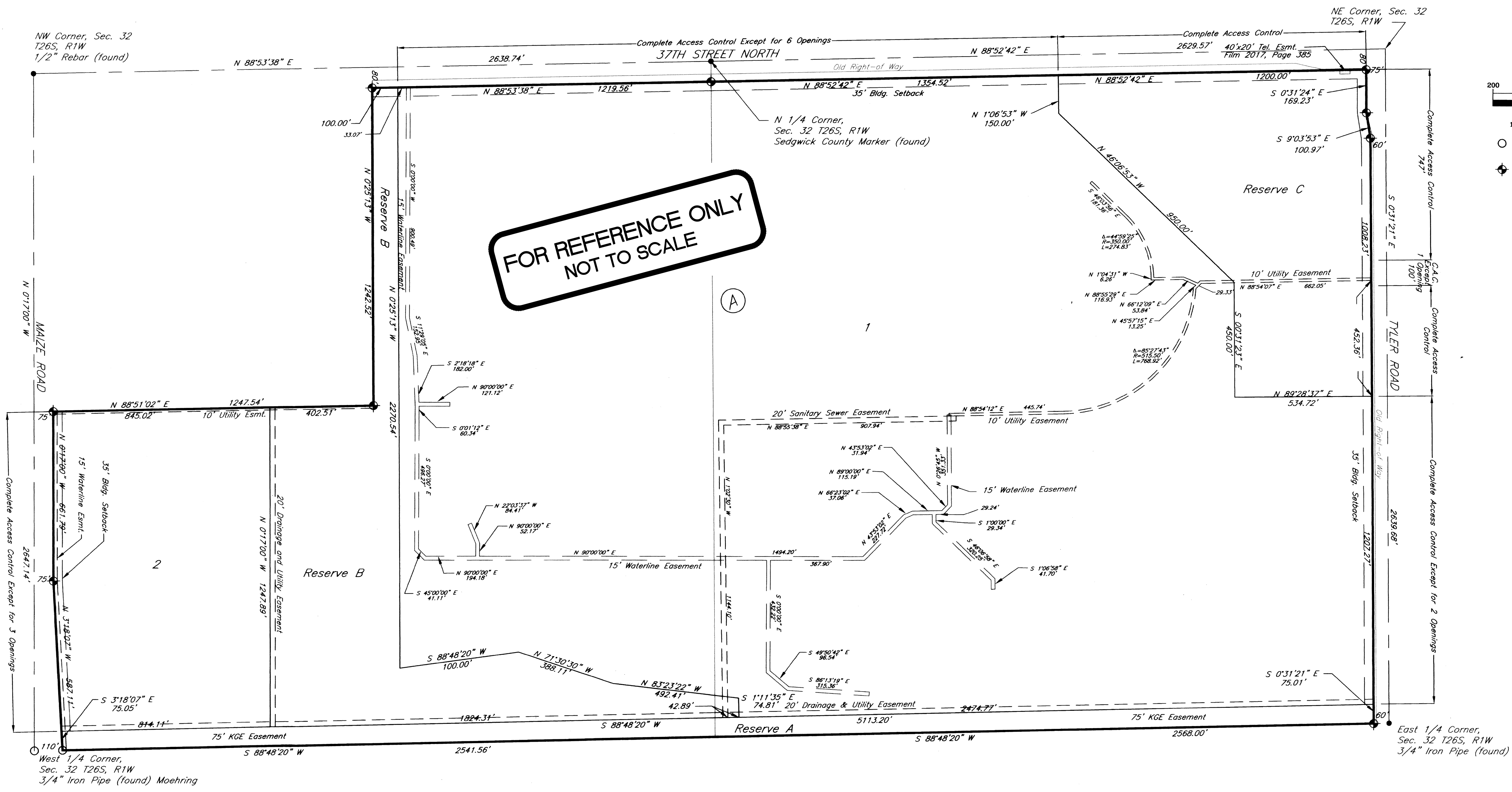
Baughman Company, P.A.
115 E. Main, Wichita, KS 67211 P: 620.262.2171 F: 620.262.0449
KANSAS PROFESSIONAL ENGINEERING BOARD LICENSE NO. 16976
Baughman

MAIZE EARLY CHILDHOOD CENTER
Water Quality & Detention Calculations
STORM WATER SEWER IMPROVEMENTS

MAIZE SCHOOL SOUTH CAMPUS ADDITION

WICHITA, SEDGWICK COUNTY, KANSAS

Part of the North 1/2, Section 32, Township 26 South, Range 1 West of the 6th. P.M.



MAIZE EARLY CHILDHOOD CENTER
Baughman Company, P.A.
115 E. Main, Wichita, KS 67211 P 316-262-2111 F 316-262-0449
www.baughman.com

Copy of PLAT

Filename: 07081 Maize South Campus\dwg\Maize South Campus Final Plat.dwg 2 0

kemiller
engineering

516 S. Market, Wichita, KS 67202 316/264-0242