





# TUKWILA SCHOOL DISTRICT NEW BUS BARN

## A PORTION OF THE NE 1/4 OF THE NW 1/4 OF SEC. 15, TWN. 23 N., RGE. 04 E. W.M.

### CITY OF TUKWILA, KING COUNTY, WASHINGTON.



2215 North 30th Street, Suite 300 Tacoma, WA 98403  
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Project Title:

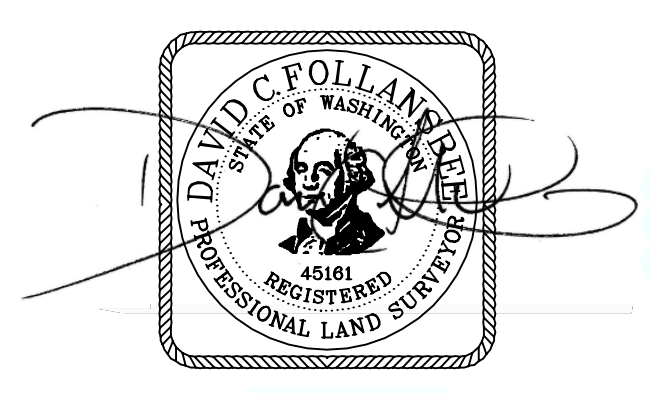
## TUKWILA SCHOOL DISTRICT NEW BUS BARN

Client: **TUKWILA SCHOOL DISTRICT**  
CO: KMB DESIGN GROUPS, INC  
906 COLUMBIA STREET, SUITE 400  
OLYMPIA, WA 98501  
JEFF FEENEY

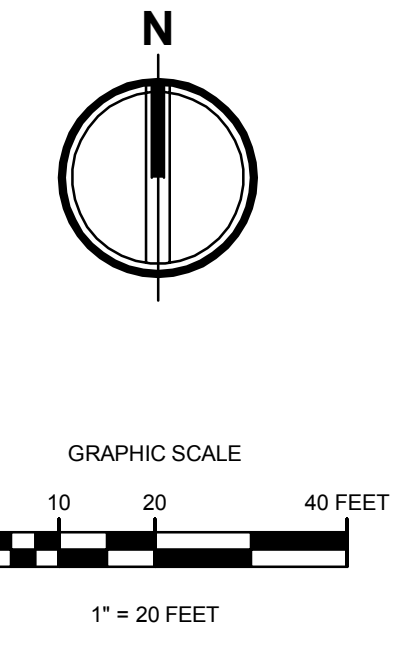
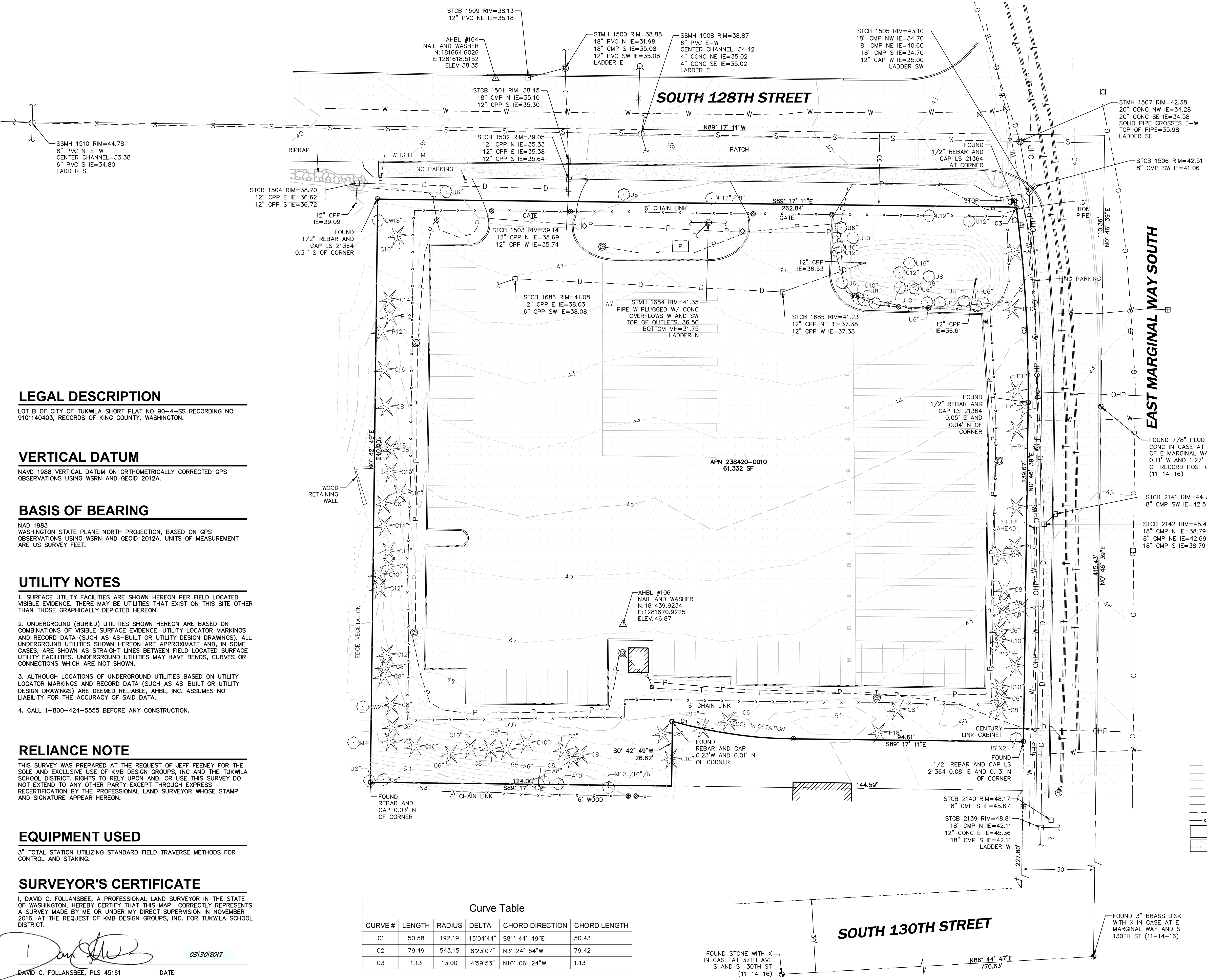
Job No. 2160801.50

Issue Set & Date:

MARCH 30, 2017



**NOTICE**  
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- ### LEGEND
- FOUND MONUMENT AS NOTED
  - SET NAIL AND WASHER
  - SET REBAR AND CAP
  - BOLLARD
  - SIGN AS NOTED
  - SANITARY SEWER CLEANOUT
  - SANITARY SEWER MANHOLE
  - STORM CLEANOUT
  - STORM CATCH BASIN
  - STORM MANHOLE
  - YARD DRAIN
  - GAS VALVE
  - UTILITY POWER POLE
  - JUNCTION BOX
  - POWER METER
  - POWER VAULT
  - LUMINAIRE
  - COMMUNICATIONS MANHOLE
  - TELEPHONE RISER
  - TELEPHONE VAULT
  - FIRE HYDRANT
  - IRRIGATION CONTROL VALVE
  - WATER METER
  - WATER VALVE
  - WATER VAULT
  - C-CEDAR, P-PINE
  - A-Alder, CW-COTTONWOOD, M-MAPLE, U-UNKNOWN
  - STORM LINE
  - SEWER LINE
  - WATER LINE
  - GAS LINE
  - ELECTRICAL LINE
  - COMMUNICATION LINE
  - OVERHEAD UTILITIES
  - FENCE
  - ASPHALT
  - CONCRETE

**LEGAL DESCRIPTION**  
LOT B OF CITY OF TUKWILA SHORT PLAT NO 90-4-SS RECORDING NO 9101140403, RECORDS OF KING COUNTY, WASHINGTON.

**VERTICAL DATUM**  
NAVD 1988 VERTICAL DATUM ON ORTHOMETRICALLY CORRECTED GPS OBSERVATIONS USING WSRN AND GEOID 2012A.

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

**UTILITY NOTES**

1. SURFACE UTILITY FACILITIES ARE SHOWN HEREON PER FIELD LOCATED VISIBLE EVIDENCE. THERE MAY BE UTILITIES THAT EXIST ON THIS SITE OTHER THAN THOSE GRAPHICALLY DEPICTED HEREON.
2. UNDERGROUND (BURIED) UTILITIES SHOWN HEREON ARE BASED ON COMBINATIONS OF VISIBLE SURFACE EVIDENCE, UTILITY LOCATOR MARKINGS AND RECORD DATA (SUCH AS AS-BUILT OR UTILITY DESIGN DRAWINGS). ALL UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND, IN SOME CASES, ARE SHOWN AS STRAIGHT LINES BETWEEN FIELD LOCATED SURFACE UTILITY FACILITIES. UNDERGROUND UTILITIES MAY HAVE BENDS, CURVES OR CONNECTIONS WHICH ARE NOT SHOWN.
3. ALTHOUGH LOCATIONS OF UNDERGROUND UTILITIES BASED ON UTILITY LOCATOR MARKINGS AND RECORD DATA (SUCH AS AS-BUILT OR UTILITY DESIGN DRAWINGS) ARE DEEMED RELIABLE, AHBL, INC. ASSUMES NO LIABILITY FOR THE ACCURACY OF SAID DATA.
4. CALL 1-800-424-5555 BEFORE ANY CONSTRUCTION.

**RELIANCE NOTE**  
THIS SURVEY WAS PREPARED AT THE REQUEST OF JEFF FEENEY FOR THE SOLE AND EXCLUSIVE USE OF KMB DESIGN GROUPS, INC AND THE TUKWILA SCHOOL DISTRICT. RIGHTS TO RELY UPON AND, OR USE THIS SURVEY DO NOT EXTEND TO ANY OTHER PARTY EXCEPT THROUGH EXPRESS RECERTIFICATION BY THE PROFESSIONAL LAND SURVEYOR WHOSE STAMP AND SIGNATURE APPEAR HEREON.

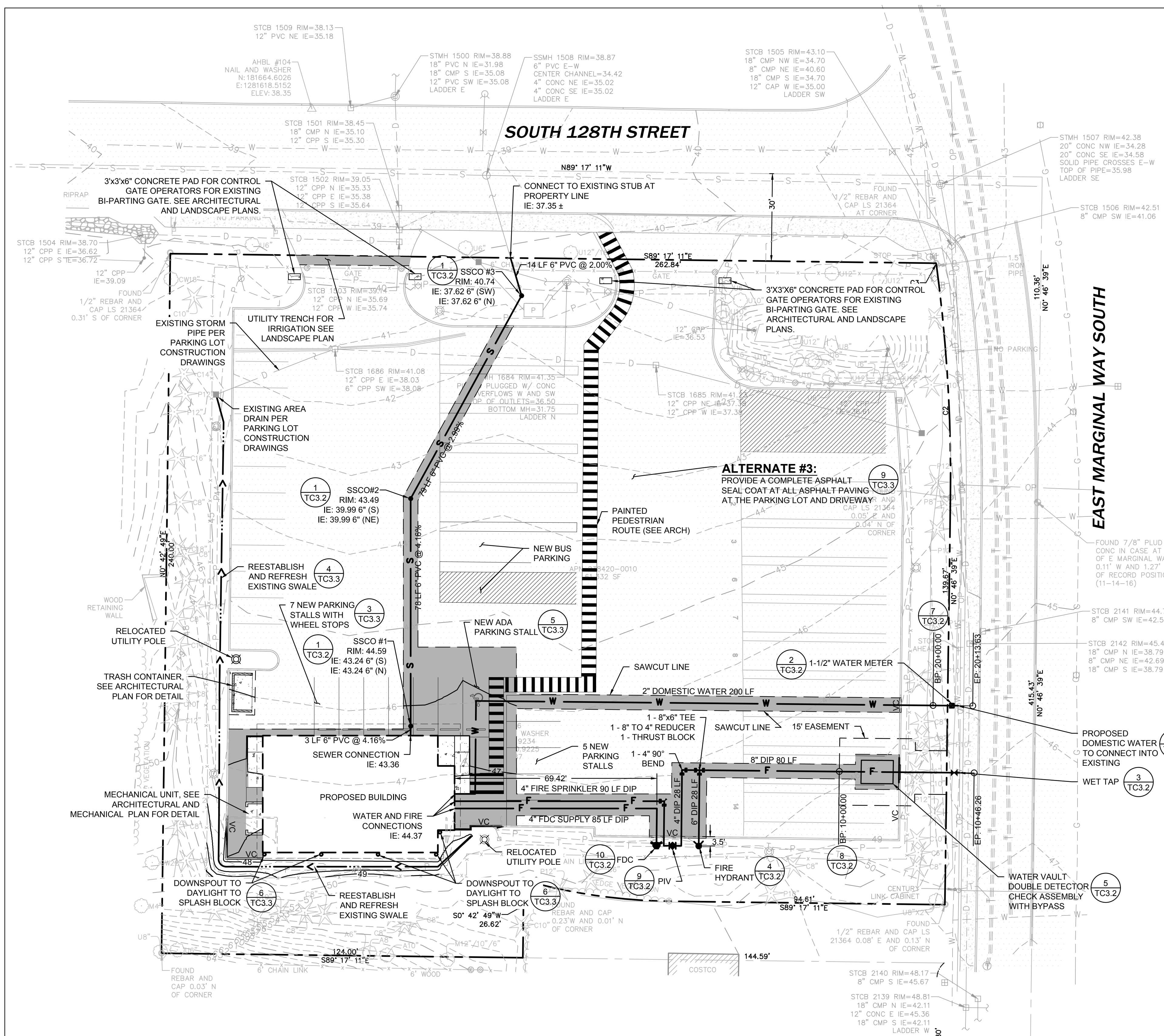
**EQUIPMENT USED**  
3" TOTAL STATION UTILIZING STANDARD FIELD TRAVERSE METHODS FOR CONTROL AND STAKING.

**SURVEYOR'S CERTIFICATE**  
I, DAVID C. FOLLANSBEE, A PROFESSIONAL LAND SURVEYOR IN THE STATE OF WASHINGTON, HEREBY CERTIFY THAT THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION IN NOVEMBER 2016, AT THE REQUEST OF KMB DESIGN GROUPS, INC. FOR TUKWILA SCHOOL DISTRICT.

DAVID C. FOLLANSBEE, PLS 45161 DATE 03/30/2017

| Curve Table |        |        |           |                 |              |
|-------------|--------|--------|-----------|-----------------|--------------|
| CURVE #     | LENGTH | RADIUS | DELTA     | CHORD DIRECTION | CHORD LENGTH |
| C1          | 50.58  | 192.19 | 15°04'44" | S81° 44' 49"E   | 50.43        |
| C2          | 79.49  | 543.15 | 8°23'07"  | N3° 24' 54"W    | 79.42        |
| C3          | 1.13   | 13.00  | 4°59'53"  | N10° 06' 24"W   | 1.13         |





**WATER DISTRICT NO.125 STANDARD NOTES:**

- APPROXIMATE LOCATIONS OF EXISTING UTILITIES HAVE BEEN OBTAINED FROM AVAILABLE RECORDS AND ARE SHOWN FOR CONVENIENCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF LOCATION SHOWN AND FOR DISCOVERY OF POSSIBLE ADDITIONAL UTILITIES NOT SHOWN SO AS TO AVOID DAMAGE OR DISTURBANCE. THE CONTRACTOR SHALL CONTACT THE UTILITIES UNDERGROUND LOCATION CENTER (1-800-424-5555) PRIOR TO CONSTRUCTION. THE OWNER OR HIS REPRESENTATIVE SHALL BE CONTACTED IF A UTILITY CONFLICT EXISTS.
- CONTRACTOR SHALL NOTIFY DISTRICT ENGINEER A MINIMUM OF 48 HOURS IN ADVANCE OF ALL REQUESTS FOR STAKING, TESTING OR INSPECTION.
- CONTRACTOR IS RESPONSIBLE FOR CONTROL AT THE TIME OF STAKING.
- CONTRACTOR SHALL FURNISH SHOP DRAWINGS FOR APPROVAL WHERE REQUIRED BY THE DETAIL SPECIFICATIONS AND FOR VARIATION FROM THE ENGINEER'S DESIGN.
- CONTRACTOR SHALL INSTALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, AND WD #125 SPECIFICATIONS. CONTRACTOR SHALL FURNISH ALL MATERIALS.
- ALL WATERMAIN PIPE SHALL BE DUCTILE IRON CLASS 52, PUSH-ON JOINT OR MECHANICAL JOINT, CEMENT LINED (ANSI A21.4), EXTERIOR COATED WITH MANUFACTURER'S RECOMMENDATIONS. ALL FITTINGS SHALL BE CAST IRON AND SHALL CONFORM TO APPLICABLE PORTIONS OF ANSI STANDARD A21.10, A21.11, B16.2, B16.4 AND A21.53, WITH A MINIMUM PRESSURE RATING OF 150 PSI AND WILL BE CEMENT LINED.
- ALL GATE VALVES TO BE MUELLER. ALL HYDRANTS TO BE MUELLER.
- CUT-INS AND LIVE TAPS TO BE MADE BY CONTRACTOR. WD #125 SUPERINTENDENT AND ENGINEER MUST BE NOTIFIED 48 HOURS IN ADVANCE.
- CAST IRON MECHANICAL JOINT SLEEVE COUPLINGS REQUIRED.
- TAPPING SLEEVES SHALL BE MUELLER CAST IRON, JCM EPOXY COATED STEEL, OR ROMAC SST WITH STAINLESS STEEL FLANGE.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING PIPE TYPES AND SIZES FOR COUPLINGS, CONNECTIONS, CUT-INS, AND LIVE TAPS.
- 3 1/2 FOOT MINIMUM COVER OVER ALL WATERMAIN PIPES.
- DEVELOPER TO PAY FOR STATE, COUNTY AND CITY INSPECTION FEES.
- ALL METER LOCATIONS TO BE COORDINATED WITH WATER DISTRICT NO. 125 SUPERINTENDENT.
- ALL EXISTING FIRE HYDRANTS AND MAINS TO BE OPERATIONAL PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- NO CHANGES ARE TO BE MADE WITHOUT WRITTEN APPROVAL BY THE WD #125 SUPERINTENDENT OR DISTRICT ENGINEER.
- REFER TO WD #125 CONDITIONS AND STANDARDS, FOR ALL REMAINING NOTES AND DETAILS.
- PROVIDE 3/4" SERVICE LINE AND TAP CONNECTIONS FOR EACH EXISTING WATER METER.
- MAXIMUM ALLOWABLE OPEN TRENCH SHALL BE 80'.
- STOCK PILES SHALL BE COVERED DURING ALL PERIODS OF PRECIPITATION.
- MODIFIED PROCTOR COMPACTION AND MOISTURE CONTROL TEST REQUIRED AND COPIES OF TEST REPORTS SUBMITTED TO THE DISTRICT ENGINEER. ALL COMPACTION UNDER PAVED AND TRAFFIC AREAS SHALL BE 95% MAXIMUM DENSITY MODIFIED PROCTOR PER ASTM D-1557. ALL OTHER AREAS TO BE 90% MAXIMUM DENSITY MODIFIED PROCTOR.
- ALL VALVES, FIRE HYDRANTS AND SERVICES TO THE METER STOP TO BE INCLUDED AS PART OF ALL PRESSURE AND PURITY TESTS. NO EXCEPTIONS.
- TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH CITY OF TUKWILA REQUIREMENTS.
- ALL PIPE AND APPURTENANCES TO BE TESTED WITHIN 10 FEET OF ANY CONNECTION POINTS UNLESS OTHERWISE APPROVED BY ENGINEER.
- CONCRETE THRUST BLOCKING SHALL BE PROVIDED AT ALL BENDS, TEES, VALVES OR OTHER APPURTENANCES WHERE INTERNAL FORCES REQUIRE RESTRAINT. BLOCKING SHALL BE IN ACCORDANCE WITH WATER DISTRICT NO. 125 STANDARDS.
- THE TESTING AND DISINFECTION OF THE WATER SYSTEM SHALL BE WITNESSED BY WATER DISTRICT NO 125.

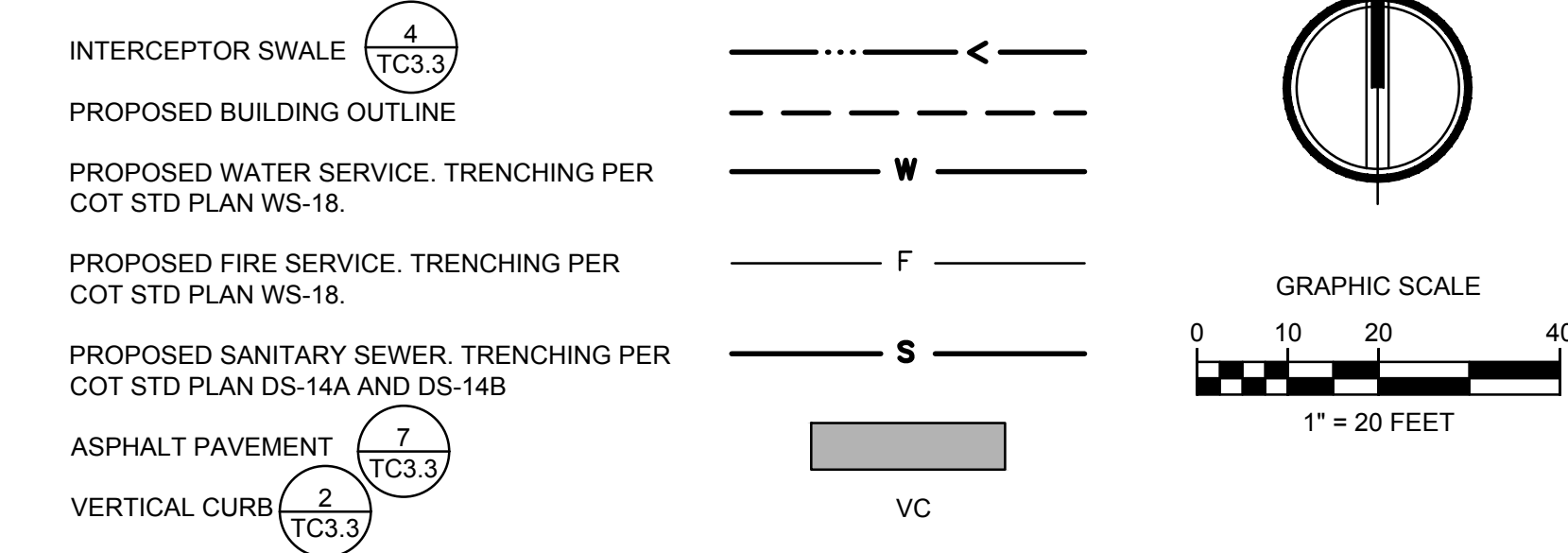
**UTILITIES NOTES:**

- ALL TRENCH EXCAVATION OPERATIONS SHALL MEET OR EXCEED ALL APPLICABLE SHORING LAWS FOR TRENCHES OVER 4-FEET DEEP. ALL TRENCH SAFETY SYSTEMS SHALL MEET WISHA REQUIREMENTS.
- POWER, CABLE, FIBER OPTICS, AND TELEPHONE LINES SHALL BE IN A TRENCH WITH A 5' MINIMUM HORIZONTAL SEPARATION FROM OTHER UNDERGROUND UTILITIES.
- ADJUST ALL MANHOLES, CATCH BASINS, AND VALVES IN PUBLIC RIGHTS-OF-WAY OR EASEMENTS AFTER ASPHALT PAVING.
- UTILITY TRENCHING BEDDING AND BACKFILL SHALL BE PER DETAIL 8 ON SHEET TC3.3.

**STORM DRAINAGE NOTES:**

- ALL METHODS AND MATERIALS SHALL MEET CITY OF TUKWILA DEVELOPMENT GUIDELINES AND DESIGN AND CONSTRUCTION STANDARDS, AND THE ADOPTED KING COUNTY SURFACE WATER DESIGN MANUAL, UNLESS OTHERWISE APPROVED.
- MARK ALL STORM DRAIN INLETS WITH "DUMP NO WASTE" AND EITHER "DRAINS TO STREAMS", "DRAINS TO WETLANDS", OR "DRAINS TO GROUNDWATER", AS APPLICABLE.
- DRIVEWAY CULVERTS SHALL BE OF SUFFICIENT LENGTH TO PROVIDE A MINIMUM 3:1 SLOPE FROM THE EDGE OF THE DRIVEWAY TO THE BOTTOM OF THE DITCH. CULVERTS SHALL HAVE BEVELED END SECTIONS THAT MATCH THE SIDE SLOPE.

**CIVIL LEGEND**



**TUKWILA PUBLIC SCHOOLS  
AUXILIARY PROJECTS PACKAGE #1  
TRANSPORTATION BUILDING**  
12801 EAST MARGINAL WAY SOUTH, TUKWILA, WA 98168

OWNER: **TUKWILA SCHOOL DISTRICT**  
4640 S 144TH ST.  
TUKWILA, WA 98168  
TEL: (206) 979-9370

| REVISION | DATE |
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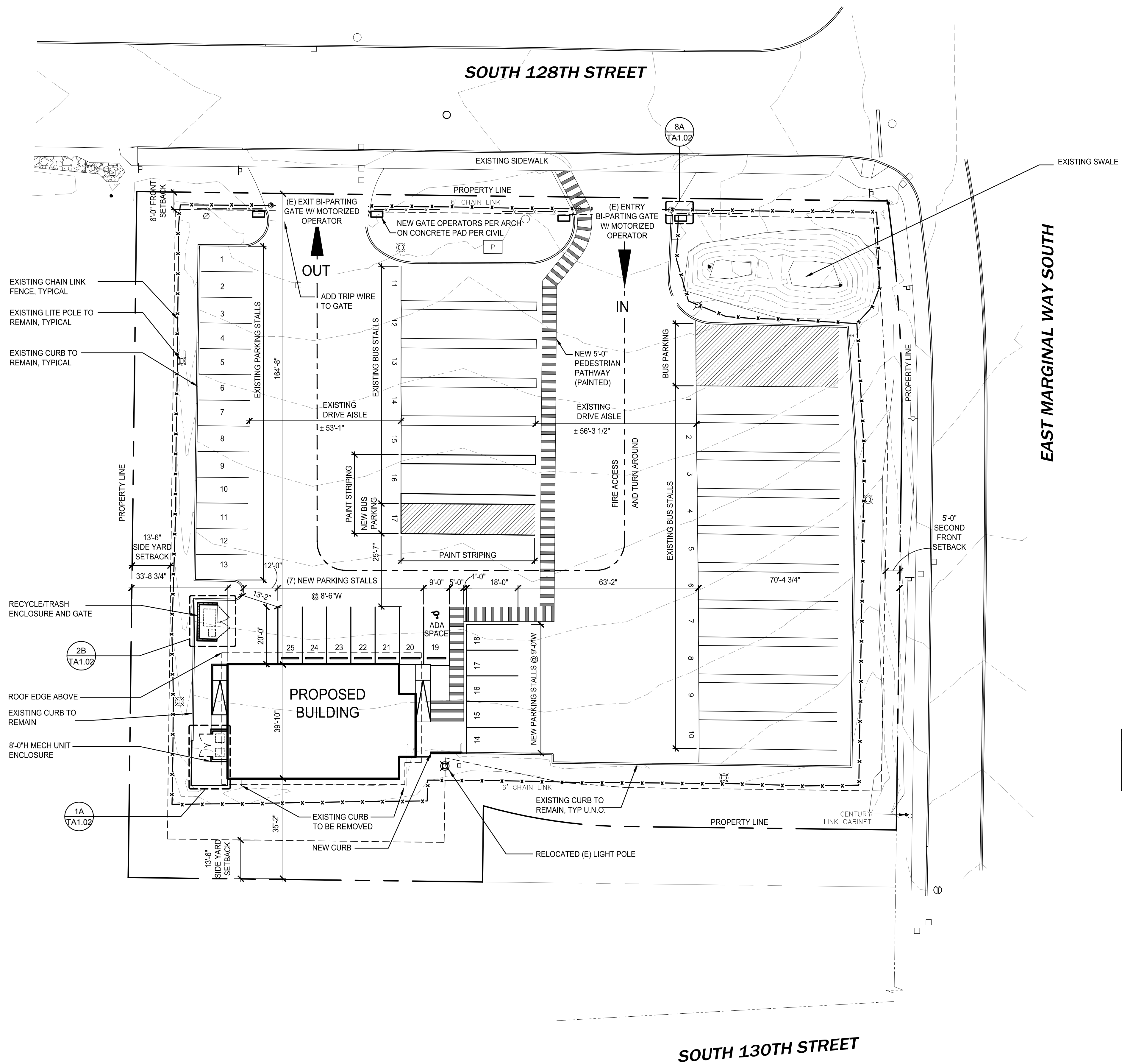
Design: Jared McDonald  
Drawn: Jared McDonald  
Checked: Doug Tapp  
Project No. 331-16-01

Issuance  
**CUP UPDATES**  
Date: 4/10/2017  
Drawing Title  
**CIVIL SITE PLAN**

Drawing Number  
**TC3.0**

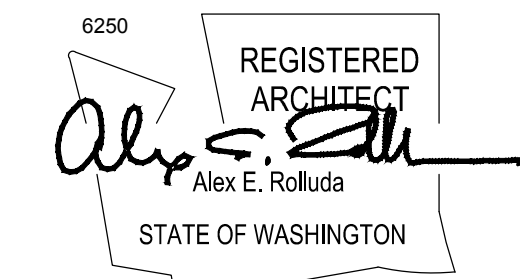






| PROPOSED PARKING |           |
|------------------|-----------|
| BUS              | 18        |
| STANDARD         | 22        |
| COMPACT          | 2         |
| ADA              | 1         |
| <b>TOTAL</b>     | <b>43</b> |

- GENERAL SITE NOTES:**
- PATCH AND REPAIR EXISTING PAVEMENT DAMAGE PRIOR TO RESURFACING ENTIRE PARKING SURFACE
  - RE-STRIPE ENTIRE PARKING SURFACE, MATCHING EXISTING LAYOUT. STRIPE NEW LAYOUT AS INDICATED.
  - SEE LANDSCAPE & CIVIL DRAWINGS FOR ADDITIONAL INFORMATION



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Design: AC  
Drawn: JL, JC  
Checked: AC  
Project No. 331-16-01

Issuance  
**CUP UPDATES**

Date: 4/10/2017

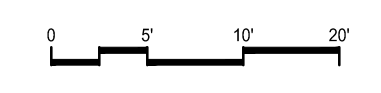
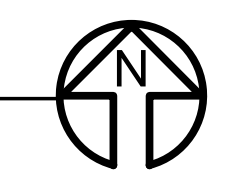
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**SITE PLAN**

Drawing Number

**TA1.01**

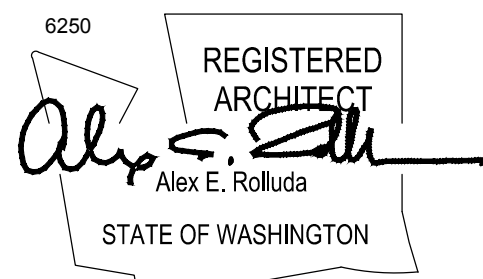
**1 SITE PLAN**  
SCALE: 1" = 20'-0"

A1.01.TB SITE PLAN









**TUKWILA PUBLIC SCHOOLS  
AUXILIARY PROJECTS PACKAGE #1  
TRANSPORTATION BUILDING**  
12801 EAST MARGINAL WAY SOUTH, TUKWILA, WA 98168

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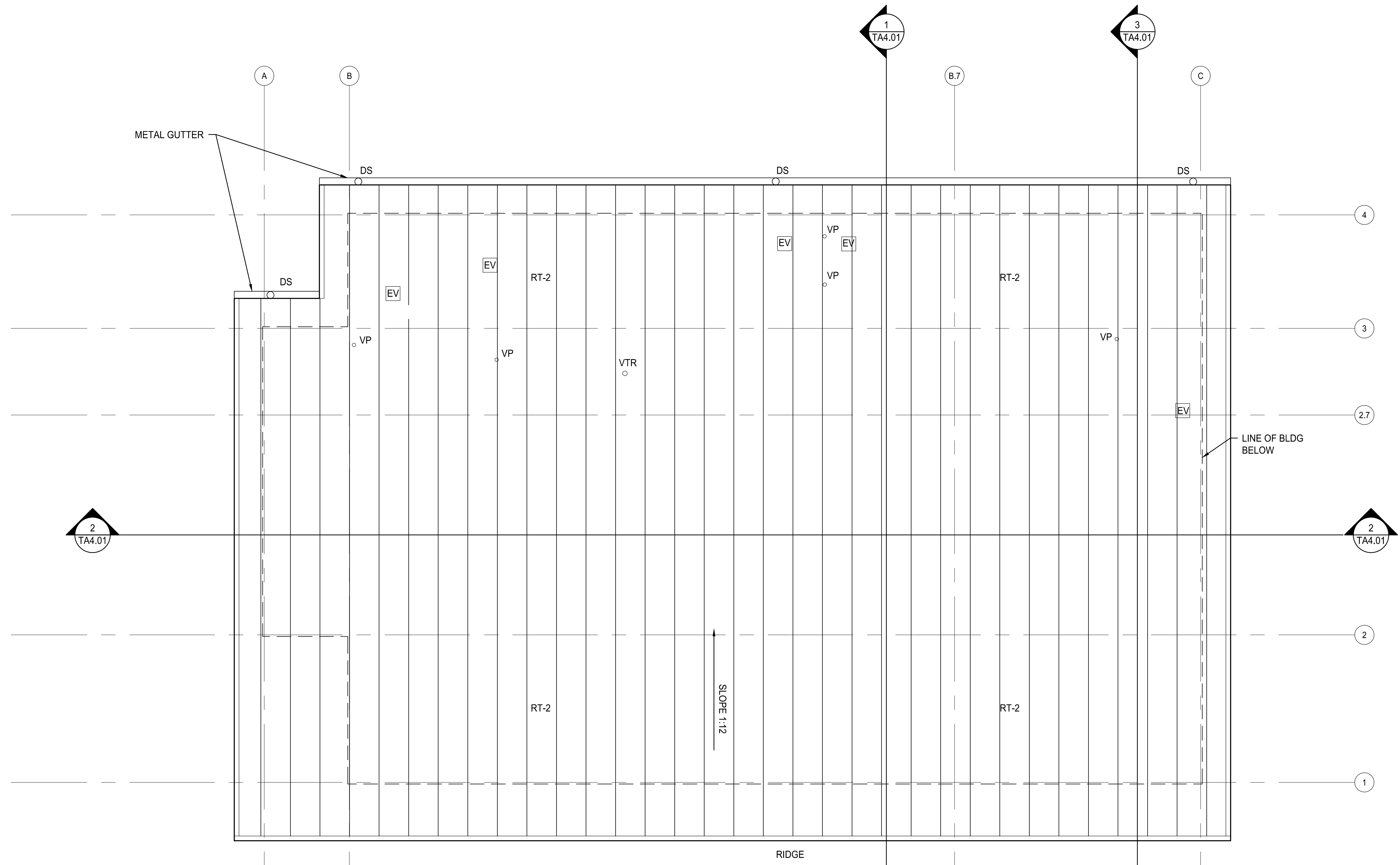
Design: AC  
Drawn: JL  
Checked: AC  
Project No. 331-16-01

Issuance  
**CUP UPDATES**

Date: 4/10/2017

Drawing Title  
**ROOF PLAN**

Drawing Number  
**TA2.02**



- RCP NOTES**
- SEE SHEET TA9.02 FOR EAVE DETAILS/OVERHANGS
  - SEE MECHANICAL FOR ROOF VENT SIZES AND LAYOUT
  - SEE TA6.01 FOR FINISH CODES

**1 ROOF PLAN**  
SCALE: 1/4" = 1'-0"













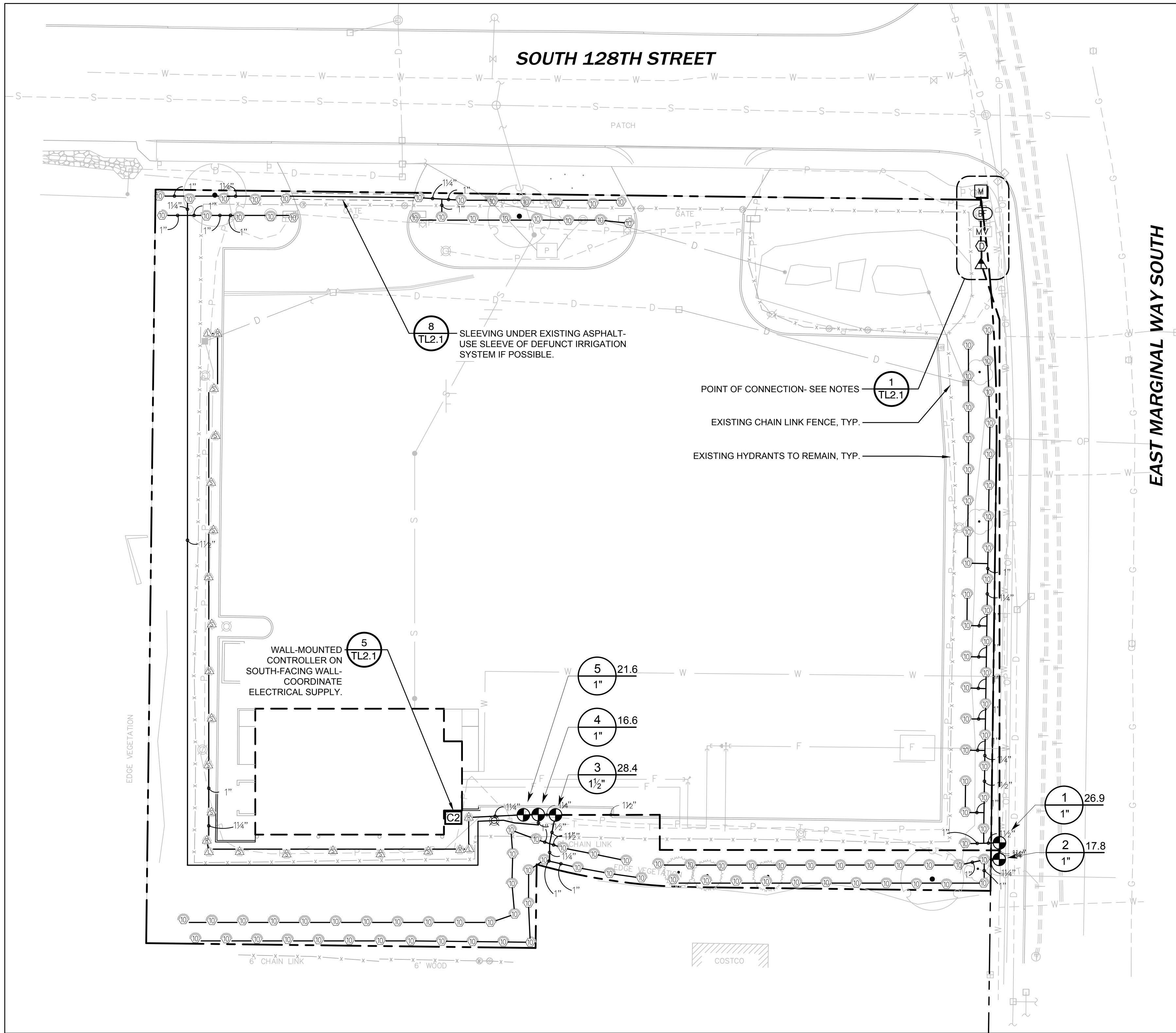








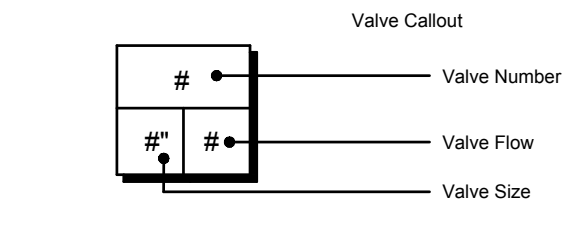




**IRRIGATION SCHEDULE**

| SYMBOL              | MANUFACTURER/MODEL/DESCRIPTION  | PSI |
|---------------------|---|-----|
| EST LCS RCS CST SST | RAIN BIRD 1812 15 STRIP SERIES SHRUB SPRAY 12.0" POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. SIDE AND BOTTOM INLET. 1/2" NPT FEMALE THREADED INLET. | 30  |
| Q T H F             | RAIN BIRD 1812 10 SERIES MPR SHRUB SPRAY 12.0" POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. SIDE AND BOTTOM INLET. 1/2" NPT FEMALE THREADED INLET.   | 30  |

| SYMBOL | MANUFACTURER/MODEL/DESCRIPTION   |
|--------|--|
| ●      | RAIN BIRD PGA ANGLE 1", 1-1/2", 2" ELECTRIC REMOTE CONTROL VALVE, ANGLE.   |
| MV     | RAIN BIRD 300-BPE GLOBE 3" 3" BRASS MASTER VALVE, WITH GLOBE CONFIGURATION.  |
| D      | DRAIN VALVE  |
| ▲      | PRESSURE REDUCING VALVE PRESSURE LIMITED TO 46.16 PSI  |
| BF     | EXISTING BACKFLOW PREVENTER TO REMAIN  |
| C2     | RAINBIRD TM2-6-120V 6-ZONE ESP-TM2 CONTROLLER  |
| ---    | IRRIGATION LATERAL LINE: PVC SCHEDULE 40 PVC SCHEDULE 40 IRRIGATION PIPE.  |
| ---    | IRRIGATION MAINLINE: PVC SCHEDULE 40   |
| ---    | PIPE SLEEVE: PVC SCHEDULE 40 TYPICAL PIPE SLEEVE FOR IRRIGATION PIPE. PIPE SLEEVE SIZE SHALL ALLOW FOR IRRIGATION PIPING AND THEIR RELATED COUPLINGS TO EASILY SLIDE THROUGH SLEEVING MATERIAL. EXTEND SLEEVES 18 INCHES BEYOND EDGES OF PAVING OR CONSTRUCTION. |



**CRITICAL ANALYSIS**

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P.O.C. NUMBER: 01  
Water Source Information:

FLOW AVAILABLE  
Water Meter Size: 1-1/2"  
Flow Available: 75.00 gpm

PRESSURE AVAILABLE  
Static Pressure at POC: 120.00 psi  
Elevation Change: 5.00 ft  
Service Line Size: 2"  
Length of Service Line: 20.00 ft  
Pressure Available: 117.00 psi

DESIGN ANALYSIS  
Maximum Station Flow: 28.43 gpm  
Flow Available at POC: 75.00 gpm  
Residual Flow Available: 46.57 gpm

Critical Station: 5  
Design Pressure: 30.00 psi  
Friction Loss: 4.84 psi  
Fittings Loss: 0.48 psi  
Elevation Loss: 0.00 psi  
Loss through Valve: 5.58 psi  
Pressure Req. at Critical Station: 40.91 psi  
Loss for Fittings: 0.51 psi  
Loss for Main Line: 5.07 psi  
Loss for POC to Valve Elevation: 0.00 psi  
Loss for Backflow: 6.50 psi  
Loss for Master Valve: 6.60 psi  
Loss for Water Meter: 0.96 psi  
Critical Station Pressure at POC: 60.55 psi  
Pressure Available: 117.00 psi  
Residual Pressure Available: 56.45 psi

**GENERAL IRRIGATION NOTES**

- ALL IRRIGATION WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE WSDOT STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, AND MUNICIPAL CONSTRUCTION AS REVISED OR SUPPLEMENTED BY THE SPECIAL PROVISIONS FOR THIS PROJECT.
- NO SUBSTITUTIONS OF EQUIPMENT OR DESIGN CHANGES SHALL BE PERMITTED UNLESS APPROVED BY THE OWNER.
- IRRIGATION LINES AND VALVES MAY BE SHOWN IN HARD SURFACE AREAS OR OUTSIDE LANDSCAPE AREAS FOR GRAPHIC CLARITY. LOCATE ALL IRRIGATION LINES IN LANDSCAPE AREAS OR IN SLEEVES UNDER PAVEMENT.
- IRRIGATION CONTRACTOR SHALL COORDINATE INSTALLATION OF IRRIGATION CONDUIT AND SLEEVES UNDER HARD SURFACES WITH RESPECTIVE CONTRACTORS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL TESTS, AND INSPECTIONS REQUIRED FOR THE IRRIGATION SYSTEM.
- CALL FOR LOCATES PRIOR TO DIGGING AT 811. CONTRACTOR IS RESPONSIBLE TO VERIFY UTILITY LOCATIONS. IF UTILITIES ARE DAMAGED IN THE COURSE OF WORK, CONTRACTOR SHALL INFORM THE OWNER AND MAKE ANY REPAIRS REQUIRED, AT NO COST TO THE OWNER.
- ALL SLEEVING SHALL BE MARKED, SEALED AND STAKED. ALL SLEEVES SHALL BE TWICE THE SIZE OF THE LINE OR COMBINED LINES. MINIMUM SLEEVE SIZE SHALL BE 4-INCHES IF LOCATED UNDER ROADWAY OR DRIVE AISLE.
- COORDINATE SLEEVING LOCATIONS WITH ELECTRICAL CONDUIT.
- INSTALL CONCRETE THRUST BLOCKS ON MAINLINE 2-1/2" AND LARGER, FOR ALL CHANGES IN PIPE DIRECTION OVER 15-DEGREES.
- SPLICE CONTROL WIRES WITHIN VALVE BOXES ONLY, USING 3M-DBY, OR APPROVED SPLICE KITS, AND PROVIDE A 24" EXPANSION LOOP FOR ALL CONTROL WIRES WITHIN EACH VALVE BOX.
- VALVE BOXES SHALL BE COMMERCIAL-GRADE POLYETHYLENE OR HDPE AND SUITABLE FOR LIGHT DUTY APPLICATIONS.
- INSTALLER TO ADJUST ALL ZONE CONTROL VALVES TO THE CORRECT OPERATING PRESSURE. SEE VALVE SCHEDULE FOR OPERATING PSI.
- VERIFY AT LEAST A 15PSI DIFFERENCE BETWEEN PRS DEVICES. IF PRESSURE DIFFERENCES IS LESS THAN 15PSI, NOTIFY L.A. IMMEDIATELY.
- CONTRACTOR SHALL HAND TRENCH IRRIGATION DITCHES WHEN WITHIN 20 FEET, OR WITHIN A DELINEATED TREE PROTECTION AREA, OF EXISTING TREES TO REMAIN. AVOID CUTTING ANY ROOTS OVER 3" - 4" IN DIAMETER WITHIN THE TREE PROTECTION AREA.
- INSTALLER SHALL BE RESPONSIBLE FOR KEEPING EXACT ACCURATE NOTES AND "AS-BUILTS" FOR THE CREATION OF THE "RECORD DRAWINGS" OF THE INSTALLED SYSTEM.
- CONTRACTOR SHALL PROVIDE IRRIGATION MAINTENANCE THROUGH THE PLANT ESTABLISHMENT PERIOD INCLUDING WINTERIZATION(S) AND SPRING START-UP(S).

**IRRIGATION SYSTEM DESIGN NOTES**

- WATER PURVEYOR: WATER DISTRICT NO. 25. CONTACT INFORMATION: SHANE YOUNG, (206) 242-9547, SHANEYOUNG@WATERDISTRICT125.COM
- THIS DESIGN ADDS A NEW IRRIGATION SYSTEM FOR THE AREAS AFFECTED BY CONSTRUCTION OF THE CODE REQUIRED LANDSCAPING AND SEEDED SWALE.
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING IRRIGATION AND WINDOW WASHING HYDRANTS IMPACTED BY THE CONSTRUCTION OF THIS PROJECT PRIOR TO CONSTRUCTION.
- PROVIDE TEMPORARY WATER SUPPLY TO WINDOW WASHING HYDRANTS DURING CONSTRUCTION OF IRRIGATION SYSTEM.

**POINT OF CONNECTION NOTES**

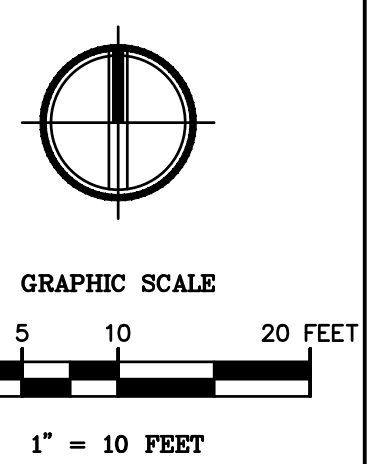
- CONTRACTOR TO REUSE EXISTING 1 1/2" METER AND BACKFLOW PREVENTER. CONTRACTOR SHALL VERIFY EXISTING STATIC PRESSURE AT THE METER AND SUBMIT WRITTEN VERIFICATION TO THE LANDSCAPE ARCHITECT. NOTIFY THE LANDSCAPE ARCHITECT OF DISCREPANCIES GREATER THAN 5 POUNDS OF DESIGN PRIOR TO INSTALLATION OF ANY IRRIGATION EQUIPMENT.
- CONTRACTOR TO INSTALL PRESSURE REDUCING VALVE IF REQUIRED.
- THE SYSTEM DESIGN IS BASED ON OPERATING 1 ZONE AT A TIME USING AN EXISTING IRRIGATION METER ON A 1-1/2" SCH. 40 PVC SUPPLY LINE. CONTRACTOR SHALL FIELD VERIFY SIZE AND LOCATION.
- NOTIFY THE OWNER IMMEDIATELY IF THE POINT OF CONNECTION ASSUMPTIONS MADE HERE DO NOT MATCH FIELD CONDITIONS.

**CONTROLLER NOTES**

- CONTROLLER: INSTALL NEW WALL MOUNTED CONTROLLER ON WALL OF BUILDING. PROVIDE COMBINATION LOCK FOR CABINET AND SEND COMBINATION TO SCHOOL REPRESENTATIVE. CONFIRM LOCATIONS WITH OWNER AND COORDINATE ELECTRICAL CONNECTION PRIOR TO INSTALLATION.
  - PROVIDE 120V FROM ELECTRICAL SERVICE PER LOCAL UTILITY REQUIREMENTS AND APPLICABLE CODES. SEE ELECTRICAL PLAN FOR MORE INFORMATION.
  - PROVIDE COMMUNICATION CONNECTION FROM CONTROLLER TO MASTER VALVE.
  - CONTROL WIRE SHALL BE INSTALLED IN 2" SCH. 40 ELECTRICAL CONDUIT. PROVIDE SWEEPS OR JUNCTION BOXES AT CHANGES IN DIRECTION.
  - INSTALL SPARE CONTROL WIRE (ORANGE COLOR) FROM CONTROLLER TO FARTHEST VALVE.

**VALVE SCHEDULE**

| NUMBER | MODEL               | SIZE   | TYPE        | GPM   | PSI   | PSI @ POC | PRECIP    |
|--------|---------------------|--------|-------------|-------|-------|-----------|-----------|
| 1      | RAIN BIRD PGA ANGLE | 1"     | SHRUB SPRAY | 26.86 | 38.10 | 57.22     | 1.40 in/h |
| 2      | RAIN BIRD PGA ANGLE | 1"     | SHRUB SPRAY | 17.77 | 36.60 | 52.31     | 1.34 in/h |
| 3      | RAIN BIRD PGA ANGLE | 1-1/2" | SHRUB SPRAY | 28.43 | 33.83 | 57.34     | 1.40 in/h |
| 4      | RAIN BIRD PGA ANGLE | 1"     | SHRUB SPRAY | 16.55 | 39.54 | 56.18     | 1.32 in/h |
| 5      | RAIN BIRD PGA ANGLE | 1"     | SHRUB SPRAY | 21.58 | 40.91 | 60.55     | 1.77 in/h |



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**TUKUWA PUBLIC SCHOOLS  
AUXILIARY PROJECTS PACKAGE #1  
TRANSPORTATION BUILDING**  
12801 EAST MARGINAL WAY SOUTH, TUKUWA, WA 98168

OWNER: TUKUWA SCHOOL DISTRICT  
4840 S 144TH ST.  
TUKUWA, WA 98168  
TEL: (206) 979-9370

| REVISION | DATE |
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Design: JM  
Drawn: MS  
Checked: CS, KC  
Project No. 331-16-01

Issuance  
**CUP Submittal**

Date: 4/10/2017

Drawing Title  
**IRRIGATION PLAN**

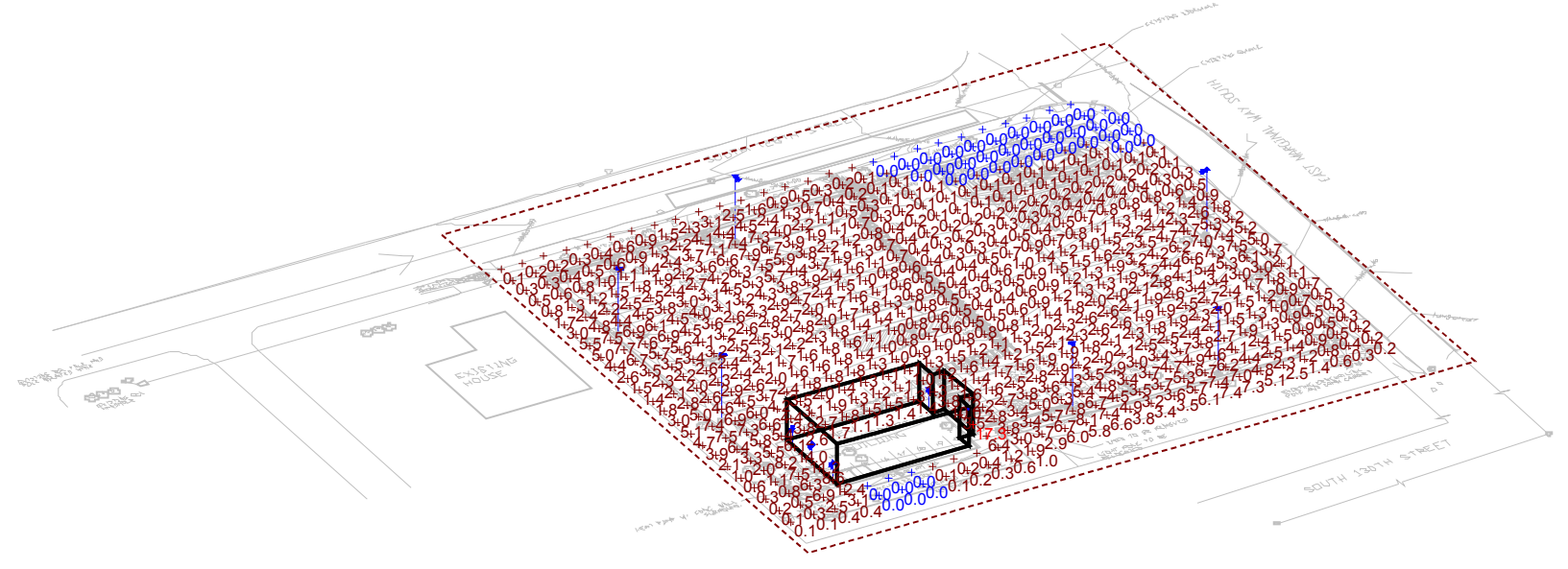
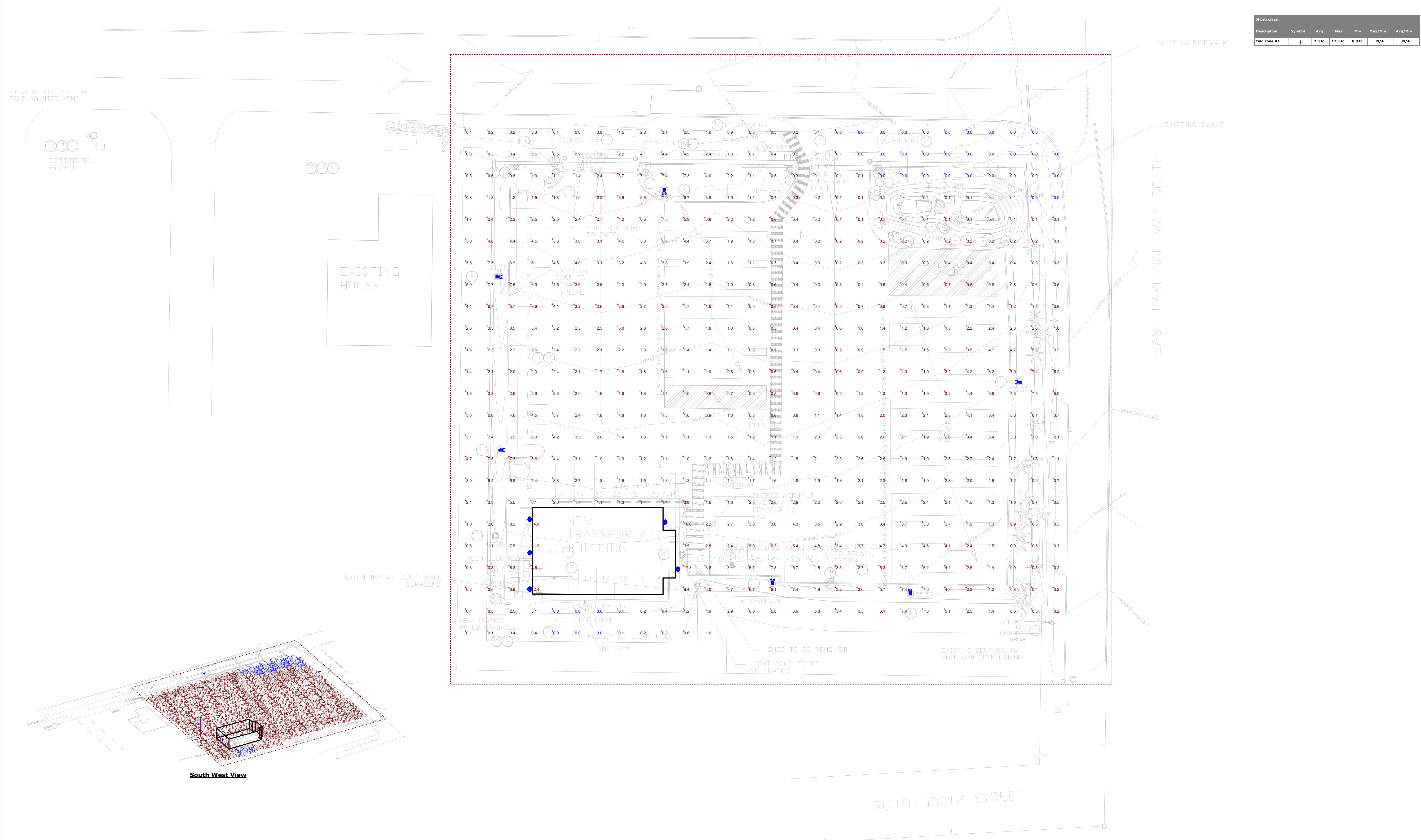
Drawing Number

**TL3.0**



| Symbol | Label    | Quantity | Manufacturer                  | Catalog Number             | Description  | Lamp   | Number Lamps | Filename                       | Lumens Per Lamp | Light Loss Factor | Wattage |
|--------|----------|----------|-------------------------------|----------------------------|--|--|--------------|--------------------------------|-----------------|-------------------|---------|
|        | (E) POLE | 6        | COOPER LIGHTING - STREETWORKS | TRU40PXX4F                 | ARCHITECTURAL AREA LUMINAIRE - TYPE IV   | 400 WATT PULSE-START CLEAR ED-28 HORIZONTAL BURN | 1            | TRU40P4F.ies                   | 40000           | 0.9               | 452     |
|        | WE       | 5        | Lithonia Lighting             | WST LED P2 40K VW MVOLT VG | WST LED, Performance package 2, 4000 K, visual comfort wide, MVOLT, vandal guard | LED  | 1            | WST_LED_P2_40K_VW_MVOLT_VG.ies | 3232            | 0.9               | 25      |

| Statistics   |        |        |         |        |         |         |
|--------------|--------|--------|---------|--------|---------|---------|
| Description  | Symbol | Avg    | Max     | Min    | Max/Min | Avg/Min |
| Calc Zone #1 | +      | 2.3 fc | 17.3 fc | 0.0 fc | N/A     | N/A     |



South West View

Plan View  
Scale - 1" = 25'