

TRANSPORTATION WEST ADMINISTRATION BUILDING PHASE II

BID SET - OCTOBER 19, 2015
ALPINE SCHOOL DISTRICT
337 NORTH 200 WEST
SARATOGA SPRINGS, UT 84045



845 SOUTH 220 EAST
OREM, UTAH 84058
PH: (801) 229-0088 FAX: (801) 229-0089



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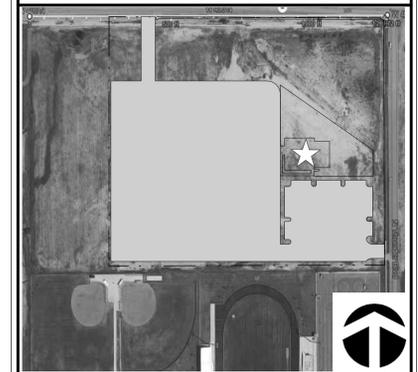
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VICINITY MAP



337 NORTH 200 WEST
SARATOGA SPRINGS, UT 84045

sandstrom ARCHITECTURE
801 229-0088 801 229-0089 www.sandstromarchitecture.com

TRANSPORTATION WEST ADMINISTRATION BUILDING PHASE II

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CIVIL

**GREAT BASIN
ENGINEERING**

5746 SOUTH 1475 EAST, SUITE #200
OGDEN, UT 84403
PHONE: (801) 394-4515 FAX: (801) 392-7544

LANDSCAPE

IN-SITE DESIGN GROUP

495 WEST 30 NORTH
AMERICAN FORK, UT 84003
PHONE: (801) 756-5043 FAX: (801) 756-5279

STRUCTURAL

**BSUMEK MU &
ASSOCIATES**

345 SOUTH 400 EAST
SALT LAKE CITY, UT 84111
PHONE: (801) 575-8223 FAX: (801) 532-3778

MECHANICAL

**VAN BOERUM & FRANK
ASSOCIATES**

330 SOUTH 300 EAST
SALT LAKE CITY, UT 84111
PHONE: (801) 530-3148 FAX: (801) 530-3150

PLUMBING

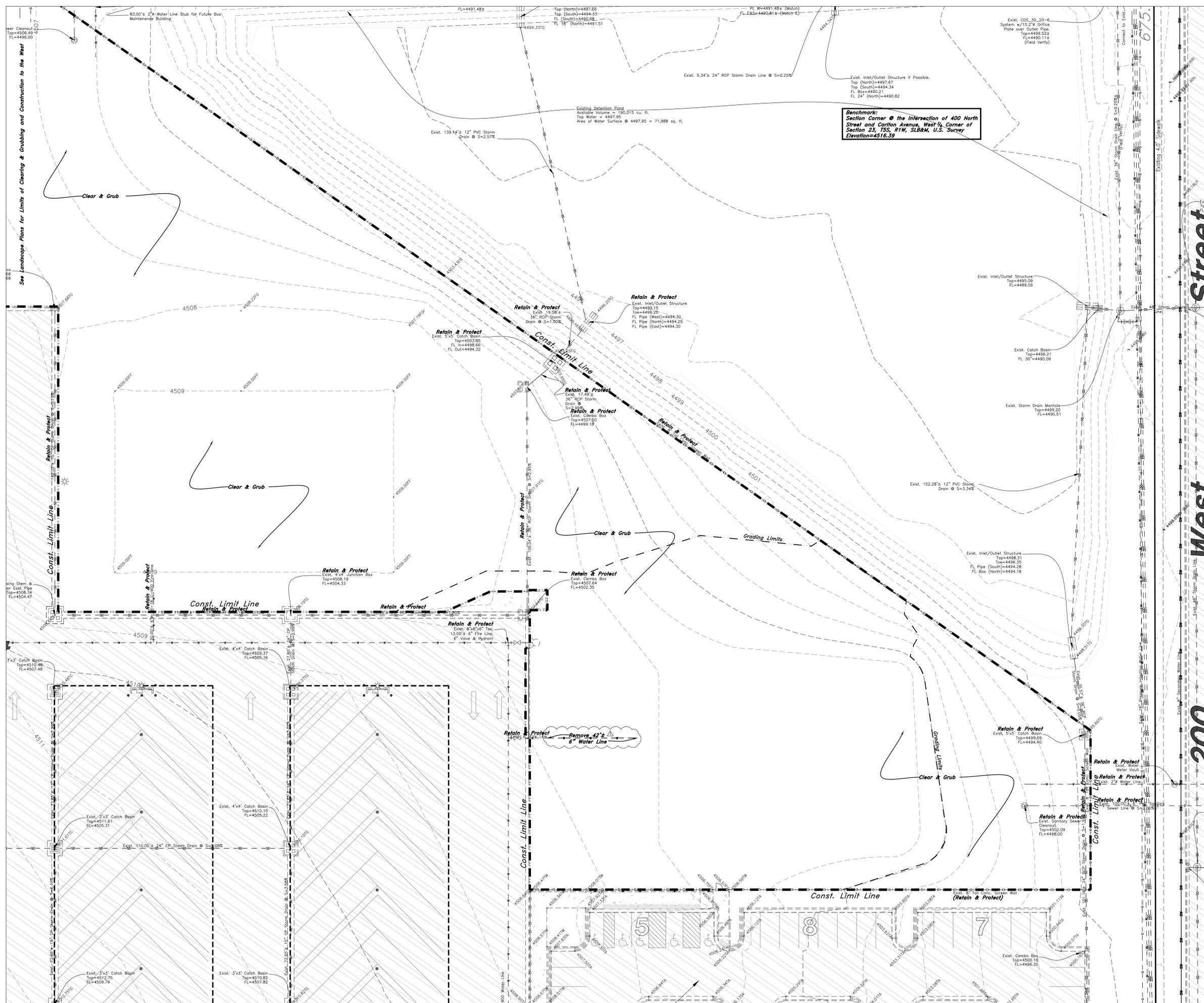
**VAN BOERUM & FRANK
ASSOCIATES**

330 SOUTH 300 EAST
SALT LAKE CITY, UT 84111
PHONE: (801) 530-3148 FAX: (801) 530-3150

ELECTRICAL

NIELSON ENGINEERING

156 NORTH 12TH AVENUE
POCATELLO, ID 83201
PHONE: (208) 232-2577 FAX: (208) 234-0918



Benchmark:
Section Corner @ the intersection of 400 North Street and Carlton Avenue, West 1/4 Corner of Section 23, T5S, R1W, SLB&M, U.S. Survey
Elevation=4516.39



Scale: 1" = 20'



Legend

(Note: All items may not appear on drawing)

- San. Sewer Manhole
- Water Manhole
- Storm Drain Manhole
- Electrical Manhole
- Catch Basins
- Exist. Fire Hydrant
- Exist. Water Valve
- Water Valve
- Sanitary Sewer
- Culinary Water
- Gas Line
- Irrigation Line
- Storm Drain
- Telephone Line
- Secondary Waterline
- Power Line
- Fire Line
- Land Drain
- Power pole
- Power pole w/guy
- Light Pole
- Fence
- Screen Wall
- Flowline of ditch
- Overhead Power line
- Corrugated Metal Pipe
- Concrete Pipe
- Reinforced Concrete Pipe
- Ductile Iron
- Polyvinyl Chloride
- Top of Asphalt
- Edge of Asphalt
- Centerline
- Flowline
- Finish Floor
- Top of Curb
- TWE
- Top of Wall
- TW
- Top of Concrete
- TGN
- Natural Ground
- FC
- Finish Grade
- Fire Department Connection
- FDC
- note: -90°
- Exist. Contour
- Finish Grade
- Exist. Grade
- 95.3374
- 95.7324
- R
- Ridge Line
- Direction of Flow
- Existing Asphalt
- New Heavy Duty Asphalt
- New Asphalt
- Concrete
- Spill
- Curb & Gutter
- Demo Tree

General Demolition Notes:

1. Demolition and site clearing for this contract are to include all areas shown within demolition limits or by limits of removal.
2. Refer to site improvement plans for more details on limits of removal.
3. All curbs, gutters, walks, slabs, walls, fences, flatwork, asphalt, waterlines and meters, gas lines, sewer lines, light poles, buried cables, storm drain piping and structures to be retained and protected on site unless otherwise shown.
4. Clear and grub trees, shrubs, and vegetation within construction limits, disposal to be off-site except where noted otherwise.
5. DO NOT interrupt any services or disrupt the operation of any businesses shown outside the demolition limits.
6. Remove debris, rubbish, and other materials resulting from the demolition and site clearing operations from the site and dispose of in a legal manner.
7. The location and/or elevation of existing utilities as shown on these plans is based on records of the various utility companies and, where possible, measurements taken in the field. The information is not to be relied upon as being exact or complete. Contractor shall contact authorities having jurisdiction for field locations. Contractor shall be responsible for protection of in place and relocated utilities during construction.
8. Stockpiles shall be graded to maintain slopes not greater than 3 horizontal to 1 vertical. Provide erosion control as needed to prevent sediment transport to adjacent drainage ways.
9. Contractor shall be responsible for disposal of all waste material. Disposal shall be at an approved site for such material. Burning onsite is not permitted.
10. Contractor shall verify with city any street removal, curb cuts, and any restoration required for utility line removal or construction.
11. Install traffic warning devices as needed in accordance with local standards.
12. Contractor shall obtain all permits necessary for demolition from City, County, State or Federal Agencies as required.

CAUTION NOTICE TO CONTRACTOR

The contractor is specifically cautioned that the location and/or elevation of existing utilities as shown on these plans are based on records of the various utility companies and, where possible, measurements taken in the field. The information is not to be relied on as being exact or complete. The contractor must call the appropriate utility company at least 48 hours before any excavation to request exact field location of utilities. It shall be the responsibility of the contractor to relocate all existing utilities which conflict with the proposed improvements shown on the plans.

PRIVATE ENGINEER'S NOTICE TO CONTRACTOR

The Contractor agrees that he shall assume sole and complete responsibility for job site conditions during the course of construction of this project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and that the contractor shall defend, indemnify and hold the owner and the engineer harmless from any and all liability, real or alleged, in connection with the performance of the work on this project, excepting for liability arising from the sole negligence of the owner or the engineer.

ALL CONSTRUCTION TO CONFORM TO CITY STANDARDS AND SPECIFICATIONS IN RIGHT OF WAY.

sandstrom ARCHITECTURE
845 South 220 East
Orem, UT 84058
Phone: 801.229.0088 Fax: 801.229.0089
www.sandstromarchitecture.com

Professional Engineer Seal for Mark Eugene Babbitt, License No. 166884, State of Utah, expires 12-2-15.

GREAT BASIN ENGINEERING
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DURHAM, UTAH 84003 MAIN 801.239.4215
S.L.C. 180.1152.1.0222 FAX 801.392.7544
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TRANSPORTATION WEST ADMIN. BLDG. - PHASE II
ALPINE SCHOOL DISTRICT
337 NORTH 200 WEST
SARATOGA SPRINGS, UTAH 84045

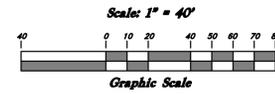
| DATE | REVISION/ISSUE |
|------------------|----------------|
| OCTOBER 26, 2015 | ADDENDUM 1 |

| | |
|-------------------|--------------------|
| PROJECT NO. | SA - 1521 |
| DATE | SEPTEMBER 22, 2015 |
| DRAWN BY | HMA |
| CHECKED BY | MEB |
| SHEET DESCRIPTION | DEMOLITION PLAN |
| SHEET NUMBER | |

C0.01

58 035 0048
Sunset Mountain Properties LP
 13.84 Acres

40 178 0016
Solacium Real Estate Holdings LLC
 10.099 Acres



$\Delta = 89^{\circ}37'19''$
 $R = 15.00'$
 $L = 23.46'$
 $LC = 21.14'$
 $N 44^{\circ}54'21'' W$



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 WWW.GREATBASINENGINEERING.COM

Legend
 (Note: All items may not appear on drawing)

- San. Sewer Manhole
- Water Manhole
- Storm Drain Manhole
- Electrical Manhole
- Catch Basins
- Exist. Fire Hydrant
- Exist. Water Valve
- Water Valve
- Sanitary Sewer
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- Gas Line
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- Telephone Line
- Secondary Waterline
- Power Line
- Fire Line
- Land Drain
- Power pole w/guy
- Power pole
- Light Pole
- Fence
- Screen Wall
- Flowline of ditch
- Overhead Power line
- Corrugated Metal Pipe
- Concrete Pipe
- Reinforced Concrete Pipe
- Ductile Iron
- Polyvinyl Chloride
- Top of Asphalt
- Edge of Asphalt
- Centerline
- Flowline
- Finish Floor
- Top of Curb
- Top of Wall
- Top of Walk
- Top of Concrete
- Natural Ground
- Finish Grade
- Fire Department Connection
- Finish Contour
- Exist. Contour
- Finish Grade
- Exist. Grade
- Ridge Line
- Direction of Flow
- Existing Asphalt
- New Heavy Duty Asphalt
- New Asphalt
- Concrete
- Spill
- Curb & Gutter
- Demo Tree

Nelson, Hal & Halbert
 41 466 0001
 5.304 Acres



Vicinity Map

CITY STANDARD NOTES:

1. Contractor shall field verify locations and invert elevations of existing manholes and other utilities before staking or constructing any new sewer lines.
2. Contractor shall field verify locations and invert elevations of existing storm drain structures and other utilities before staking or constructing any new storm drain lines.
3. All construction shall comply to the Standard Technical Specifications and Drawings for the City of Saratoga Springs, Utah.
4. Existing utilities have been noted to the best of the Engineers knowledge. It is the owners and contractors responsibility to locate utilities in the field and notify Engineer and City if discrepancies exist.
5. Post-approval alterations to lighting plans or intended substitutions for approved lighting equipment shall be submitted to the City for review and approval.
6. The City reserves the right to conduct post-installation inspections to verify compliance with the City's requirements and approved lighting plan commitments, and if deemed appropriate by the City, to require remedial action at no expense to the City.
7. All exterior lighting shall meet IESNA full-cutoff criteria unless otherwise approved by the City.

SITE DATA TABLE

Alpine School District Property = 20.28 Acres
PHASE I (For Reference):
 Bus Facility Property = 12.46 Acres
 Total Project Area = 569,823 SF (13.08 Acres)
 Landscaping Area = 261,207 SF (6.00 Acres)
 Hard Surface Area = 288,723 SF (6.65 Acres)
 Diesel Fuel Tank = 2,400 SF (0.06 Acres)
 *Future Building = 10,920 SF (0.25 Acres)

PHASE II:
 Total Disturbed Area = 104,310 SF (2.39 Acres)
 Landscaping Area = 94,383 SF (2.12 Acres) 90%
 Hard Surface Area = 3,100 SF (0.07 Acres) 3%
 Admin. Building = 6,827 SF (0.16 Acres) 7%
 Existing Parking Stalls = 123
 Existing ADA Stalls = 5
 Existing Van Accessible ADA Stalls = 3

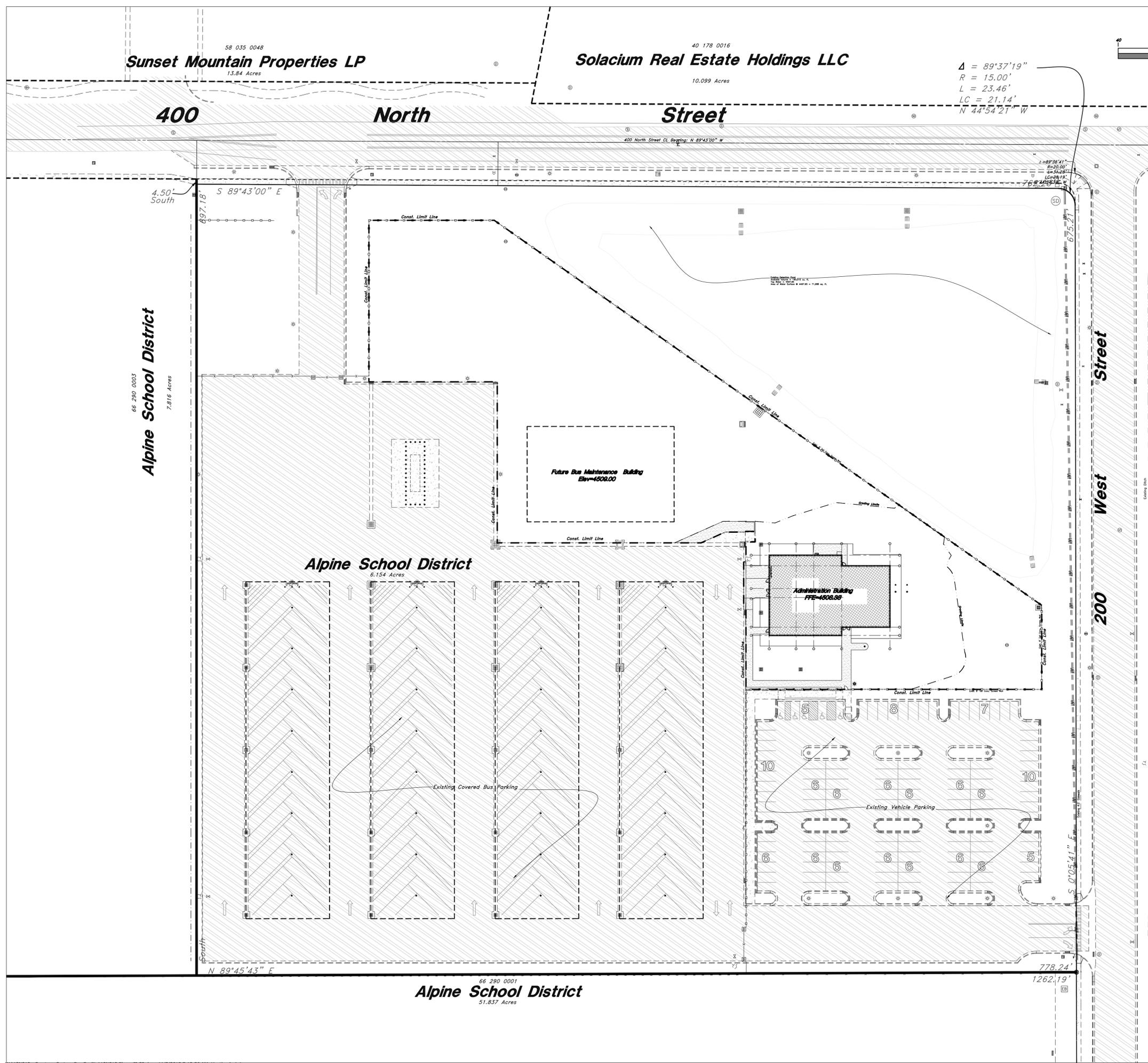
TRANSPORTATION WEST ADMIN. BLDG. - PHASE II

ALPINE SCHOOL DISTRICT
 337 NORTH 200 WEST
 SARATOGA SPRINGS, UTAH 84045

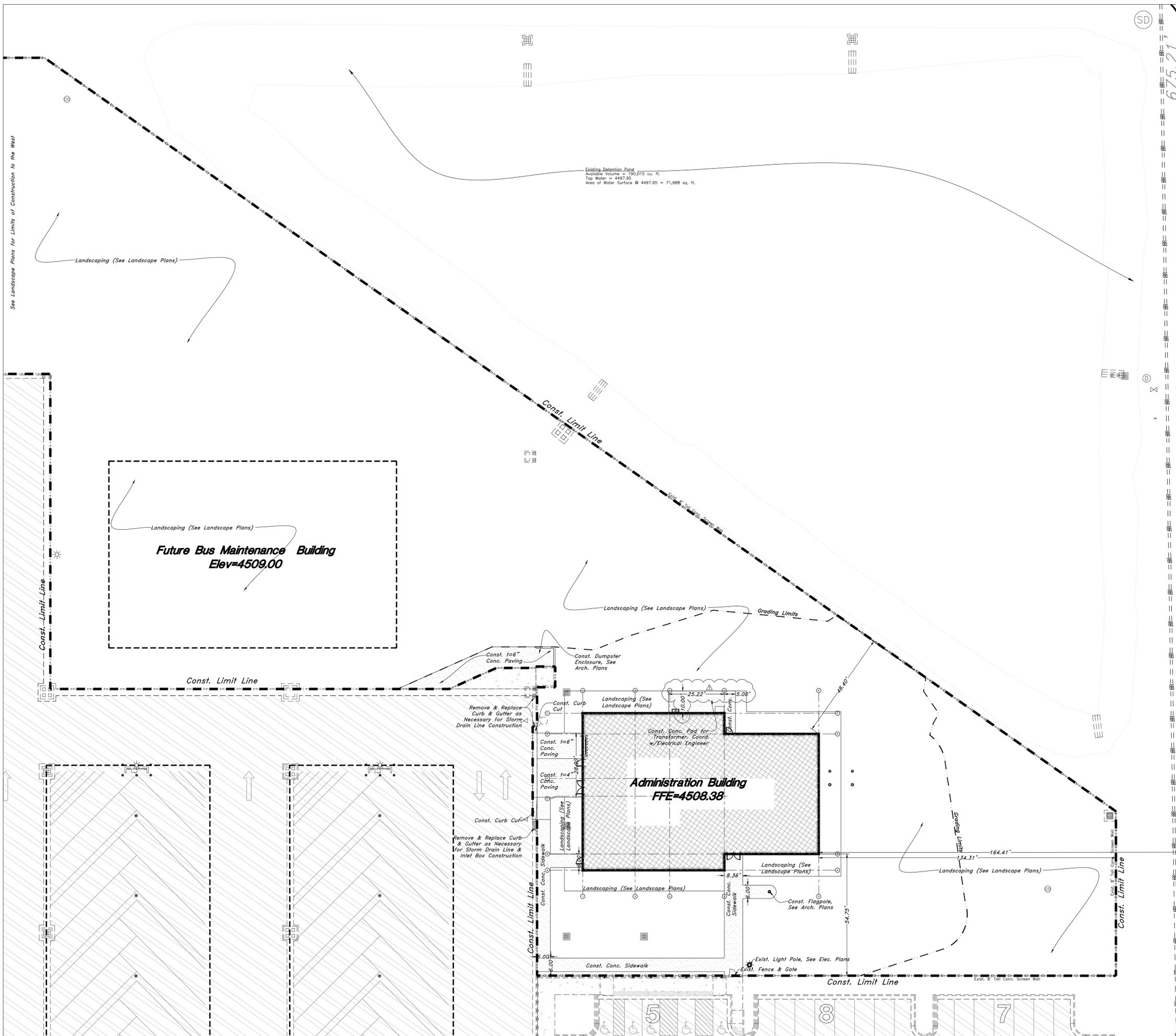
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| OCTOBER 26, 2015 | ADDENDUM 1 |

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| PROJECT NO. | SA - 1521 |
| DATE | SEPTEMBER 22, 2015 |
| DRAWN BY | HMA |
| CHECKED BY | MEB |
| SHEET DESCRIPTION | OVERALL SITE PLAN |
| SHEET NUMBER | |

C1.00



See Landscape Plans for Limits of Construction to the West



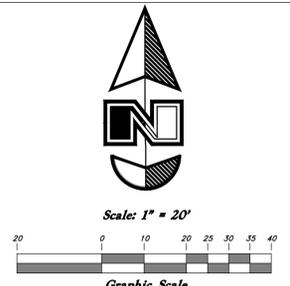
Existing Detention Pond
Available Volume = 190,015 cu. ft.
Top Water @ 4497.95
Area of Water Surface @ 4497.95 = 71,988 sq. ft.

Future Bus Maintenance Building
Elev=4509.00

Administration Building
FFE=4508.38

SD
675.21'

Street
West
200



Legend

(Note: All items may not appear on drawing)

- San. Sewer Manhole
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- Concrete Pipe
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- Top of Asphalt
- Edge of Asphalt
- Centerline
- Flowline
- Finish Floor
- Top of Curb
- Top of Wall
- Top of Walk
- Top of Concrete
- Natural Ground
- Finish Grade
- Fire Department Connection
- Finish Contour
- Exist. Contour
- Finish Grade
- Exist. Grade
- Ridge Line
- Direction of Flow
- Existing Asphalt
- New Heavy Duty Asphalt
- New Asphalt
- Concrete
- Spill
- Curb & Gutter
- Demo Tree

- General Site Notes:**
- All applicable elements of the Saratoga Springs Ordinance section 19.09.07 shall be adhered to.
 - Building sidewalks, ramps, and bollards are building contractor responsible items. See architectural plans.
 - All dimensions are to back of curb unless otherwise noted.

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ALL CONSTRUCTION TO CONFORM TO CITY STANDARDS AND SPECIFICATIONS IN RIGHT OF WAY.

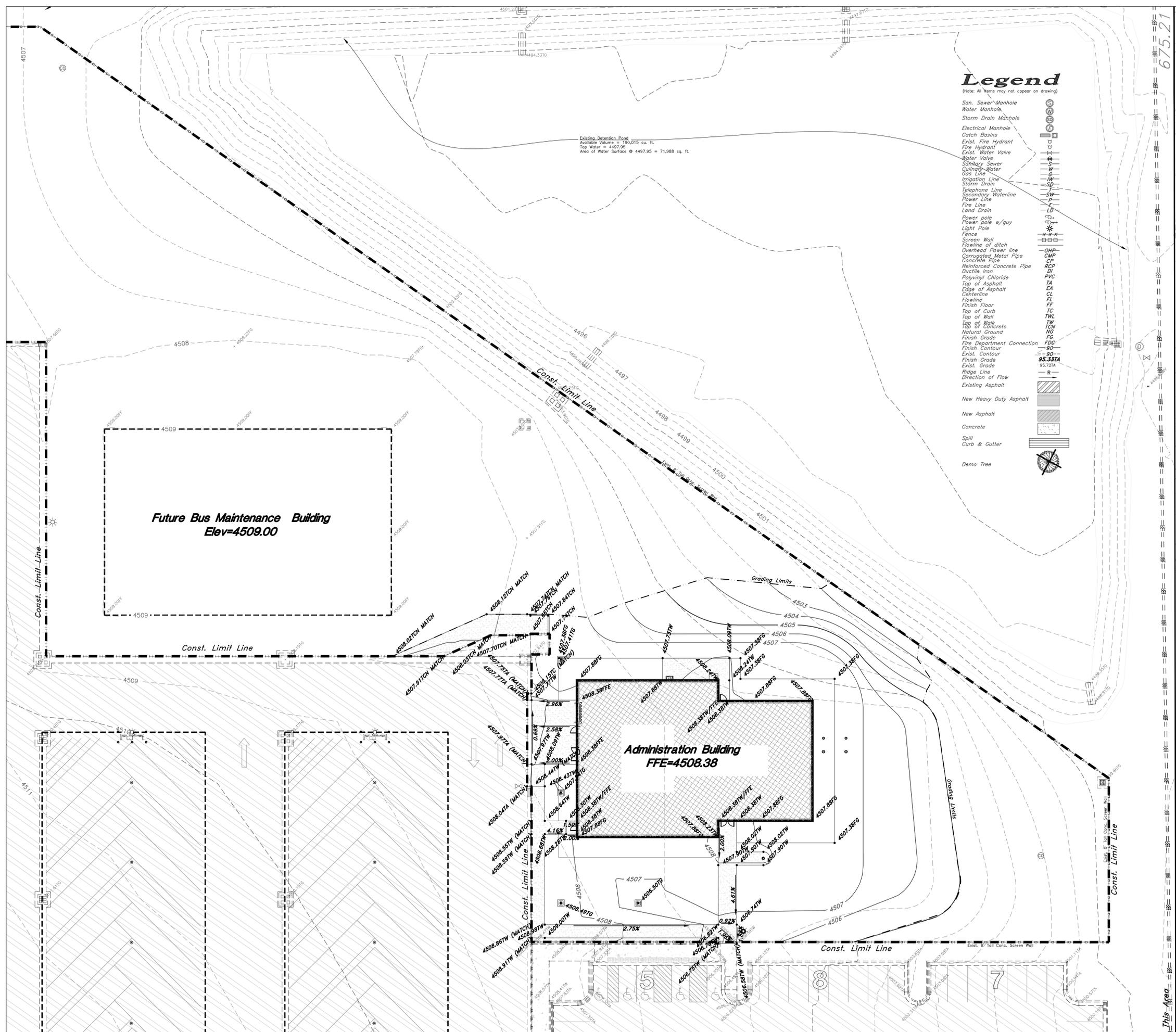
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OREM, UTAH 84058 MAIN 801.229.4215
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TRANSPORTATION WEST ADMIN. BLDG. - PHASE II

ALPINE SCHOOL DISTRICT
337 NORTH 200 WEST
SARATOGA SPRINGS, UTAH 84045

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| OCTOBER 26, 2015 | ADDENDUM 1 |
| PROJECT NO. | SA - 1521 |
| DATE | SEPTEMBER 22, 2015 |
| DRAWN BY | HMA |
| CHECKED BY | MEB |
| SHEET DESCRIPTION | SITE PLAN |
| SHEET NUMBER | C1.01 |

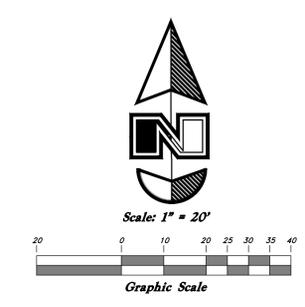


Legend

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- Finish Contour
- Exist. Contour
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- Existing Asphalt

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- New Asphalt
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- Curb & Gutter
- Demo Tree



Street West 200

- General Grading Notes:**
- All work shall be in accordance with the City Public Works Standard.
 - Cut slopes shall be no steeper than 2 horizontal to 1 vertical.
 - Fill slopes shall be no steeper than 2 horizontal to 1 vertical.
 - Fills shall be compacted per the recommendations of the geotechnical report prepared for the project and shall be certified by the geotechnical engineer.
 - Areas to receive fill shall be properly prepared and approved by the City inspector and geotechnical engineer prior to placing fill.
 - Fills shall be benched into competent material as per specifications and geotechnical report.
 - All trench backfill shall be tested and certified by the site geotechnical engineer per the grading code.
 - A geotechnical engineer shall perform periodic inspections and submit a complete report and map upon completion of the rough grading.
 - The final compaction report and certification from the geotechnical engineer shall contain the type of field testing performed. Each test shall be identified with the method of obtaining the in-place density, whether sand cone or drive ring and shall be so noted for each test. Sufficient maximum density determinations shall be performed to verify the accuracy of the maximum density curves used by the field technician.
 - Dust shall be controlled by watering.
 - The location and protection of all utilities is the responsibility of the permittee.
 - Approved protective measures and temporary drainage provisions must be used to protect adjoining properties during the grading project.
 - All public roadways must be cleared daily of all dirt, mud and debris deposited on them as a result of the grading operation. Cleaning is to be done to the satisfaction of the city engineer.
 - The site shall be cleared and grubbed of all vegetation and deleterious matter prior to grading.
 - The contractor shall provide staking in accordance with OSHA requirements for trench walls.
 - Aggregate base shall be compacted per the geotechnical report prepared for the project.
 - Elevations shown on this plan are finish grades. Rough grades are the subgrades of the improvements shown hereon.
 - The recommendations in the following Geotechnical Engineering Report by Earthtec Testing and Engineering, P.C. are included in the requirements of grading and site preparation. The report dated November 27, 2006 is titled: "Geotechnical Study, High School" 1215 West 7600 North Saratoga Springs, Utah
 - As part of the construction documents, owner has provided contractor with a topographic survey performed by manual or aerial means. Such survey was prepared for project design purposes and is provided to the contractor as a courtesy. It is expressly understood that such survey may not accurately reflect existing topographic conditions.
 - Erosion Control: Protect all inlet boxes, catch basins, etc. with straw bales or other approved method to strain the storm water during construction. Protect surrounding properties and streets from site runoff with sandbags and earth berms.
- ADA Notes:**
- Contractor must maintain a running slope on Accessible routes no steeper than 5.0% (1:20). The cross slope for Accessible routes must be no steeper than 2.0% (1:50). All Accessible routes must have a minimum clear width of 36". If grades on plans do not meet this requirement notify Consultants immediately.
- The Client, Contractor, and Subcontractor should immediately notify the Consultant of any conditions of the project that they believe do not comply with the current state of the ADA and/or FHAA.
- Earthwork Calculations:**
- Cut: 21 cubic yards
 Fill: 809 cubic yards
 Net: 686 cubic yards IMPORT
- CAUTION NOTICE TO CONTRACTOR**
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- ALL CONSTRUCTION TO CONFORM TO CITY STANDARDS AND SPECIFICATIONS IN RIGHT OF WAY.**
- Benchmark:**
 Section Corner @ the intersection of 400 North Street and Carlton Avenue, West 1/4 Corner of Section 23, T5S, R1W, SLB&M, U.S. Survey Elevation=4516.39

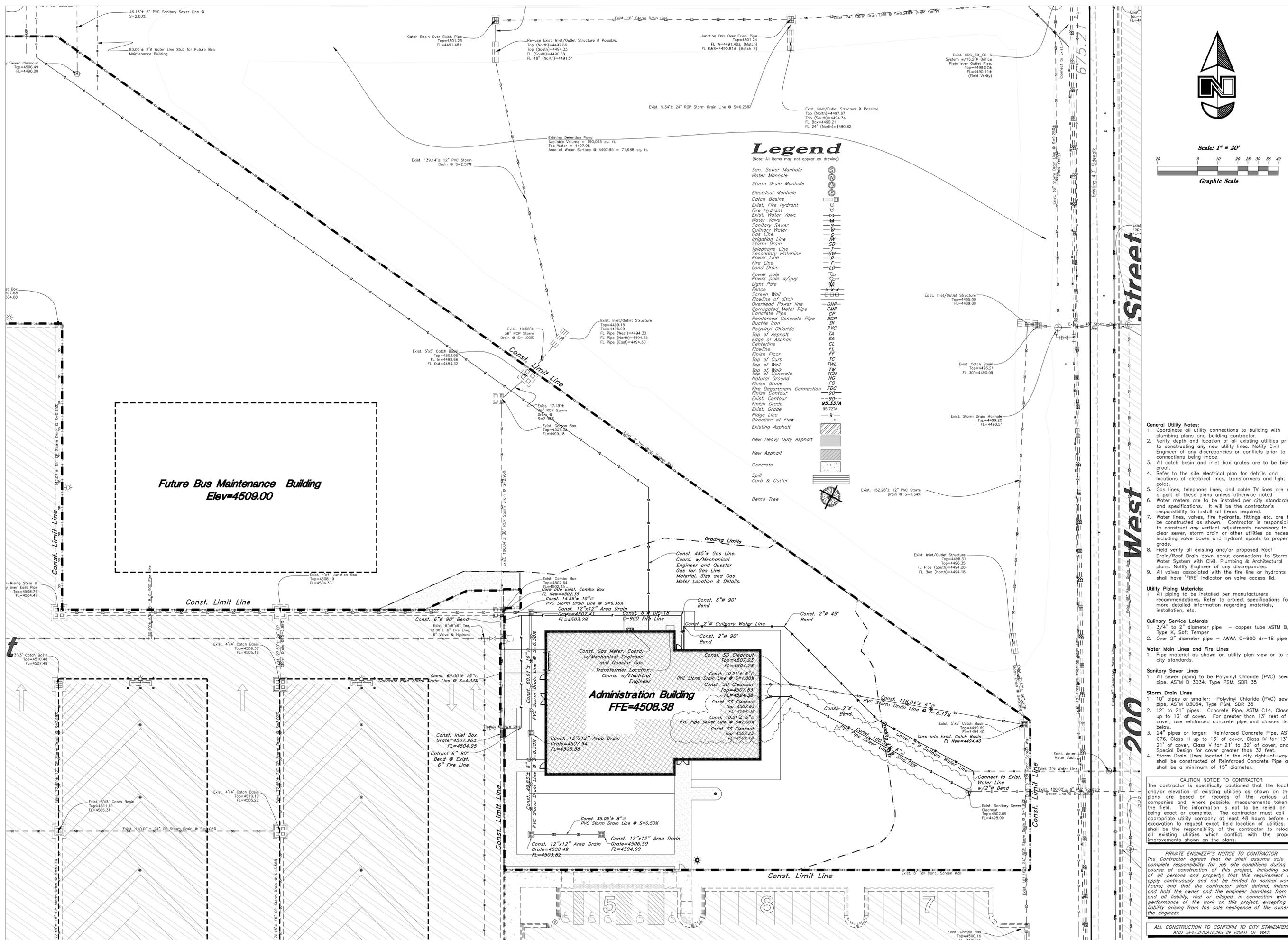
sandstrom ARCHITECTURE
 845 South 220 East
 Orem, UT 84058
 Phone: 801.229.0088 Fax: 801.229.0089
 www.sandstromarchitecture.com

Professional Engineer Seal for Mark Eugene Babbitt, State of Utah, License No. 166484, dated 1-2-15.

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TRANSPORTATION WEST ADMIN. BLDG. - PHASE II
 ALPINE SCHOOL DISTRICT
 337 NORTH 200 WEST
 SARATOGA SPRINGS, UTAH 84045

| | |
|-------------------|-------------------------|
| DATE | REVISION/ISSUE |
| | |
| PROJECT NO. | SA - 1521 |
| DATE | SEPTEMBER 22, 2015 |
| DRAWN BY | HMA |
| CHECKED BY | MEB |
| SHEET DESCRIPTION | GRADING & DRAINAGE PLAN |
| SHEET NUMBER | C2.00 |



TRANSPORTATION WEST ADMIN. BLDG. - PHASE II
 ALPINE SCHOOL DISTRICT
 337 NORTH 200 WEST
 SARATOGA SPRINGS, UTAH 84045

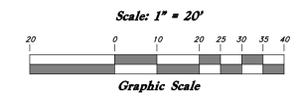
| DATE | REVISION/ISSUE |
|------------------|----------------|
| OCTOBER 26, 2015 | ADDENDUM 1 |

| | |
|-------------------|--------------------|
| PROJECT NO. | SA - 1521 |
| DATE | SEPTEMBER 22, 2015 |
| DRAWN BY | HMA |
| CHECKED BY | MEB |
| SHEET DESCRIPTION | UTILITY PLAN |
| SHEET NUMBER | |

C3.00

Legend
 (Note: All items may not appear on drawing)

- San. Sewer Manhole
- Water Manhole
- Storm Drain Manhole
- Electrical Manhole
- Catch Basins
- Exist. Fire Hydrant
- Fire Hydrant
- Exist. Water Valve
- Water Valve
- Sanitary Sewer
- Culinary Water
- Gas Line
- Irrigation Line
- Storm Drain
- Telephone Line
- Secondary Waterline
- Power Line
- Fire Line
- Land Drain
- Power pole
- Power pole w/guy
- Light Pole
- Fence
- Screen Wall
- Flowline of ditch
- Overhead Power line
- Corrugated Metal Pipe
- Concrete Pipe
- RCP
- Ductile Iron
- Polyvinyl Chloride
- Top of Asphalt
- EA
- CL
- FL
- Centerline
- Flowline
- Finish Floor
- Top of Curb
- TC
- Top of Wall
- TW
- Top of Concrete
- NG
- Natural Ground
- FC
- Finish Grade
- Fire Department Connection
- FDC
- Finish Contour
- Exist. Contour
- Finish Grade
- 95.337A
- 95.721A
- Ridge Line
- Direction of Flow
- Existing Asphalt
- New Heavy Duty Asphalt
- New Asphalt
- Concrete
- Spill
- Curb & Gutter
- Demo Tree



- General Utility Notes:**
- Coordinate all utility connections to building with plumbing plans and building contractor.
 - Verify depth and location of all existing utilities prior to constructing any new utility lines. Notify Civil Engineer of any discrepancies or conflicts prior to any connections being made.
 - All catch basin and inlet box grates are to be bicycle proof.
 - Refer to the site electrical plan for details and locations of electrical lines, transformers and light poles.
 - Gas lines, telephone lines, and cable TV lines are not a part of these plans unless otherwise noted.
 - Water meters are to be installed per city standards and specifications. It will be the contractor's responsibility to install all items required.
 - Water lines, valves, fire hydrants, fittings etc. are to be constructed as shown. Contractor is responsible to construct any vertical adjustments necessary to clear sewer, storm drain or other utilities as necessary including valve boxes and hydrant spools to proper grade.
 - Field verify all existing and/or proposed Roof Drain/Roof Drain down spout connections to Storm Water System with Civil, Plumbing & Architectural plans. Notify Engineer of any discrepancies.
 - All valves associated with the fire line or hydrants shall have "FIRE" indicator on valve access lid.
- Utility Piping Materials:**
- All piping to be installed per manufacturers recommendations. Refer to project specifications for more detailed information regarding materials, installation, etc.
- Culinary Service Laterals**
- 3/4" to 2" diameter pipe - copper tube ASTM B, Type K, Soft Temper
 - Over 2" diameter pipe - AWWA C-900 dr-18 pipe
- Water Main Lines and Fire Lines**
- Pipe material as shown on utility plan view or to meet city standards.
- Sanitary Sewer Lines**
- All sewer piping to be Polyvinyl Chloride (PVC) sewer pipe, ASTM D 3034, Type PSM, SDR 35
- Storm Drain Lines**
- 10" pipes or smaller: Polyvinyl Chloride (PVC) sewer pipe, ASTM D3034, Type PSM, SDR 35
 - 12" to 21" pipes: Concrete Pipe, ASTM C14, Class III up to 13" of cover. For greater than 13" feet of cover, use reinforced concrete pipe and classes listed below.
 - 24" pipes or larger: Reinforced Concrete Pipe, ASTM C76, Class III up to 13" of cover, Class IV for 13" to 21" of cover, Class V for 21" to 32" of cover, and Special Design for cover greater than 32 feet.
 - Storm Drain Lines located in the city right-of-way shall be constructed of Reinforced Concrete Pipe and shall be a minimum of 15" diameter.

CAUTION NOTICE TO CONTRACTOR
 The contractor is specifically cautioned that the location and/or elevation of existing utilities as shown on these plans are based on records of the various utility companies and, where possible, measurements taken in the field. The information is not to be relied on as being exact or complete. The contractor must call the appropriate utility company at least 48 hours before any excavation to request exact field location of utilities. It shall be the responsibility of the contractor to relocate all existing utilities which conflict with the proposed improvements shown on the plans.

PRIVATE ENGINEER'S NOTICE TO CONTRACTOR
 The Contractor agrees that he shall assume sole and complete responsibility for job site conditions during the course of construction of this project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and that the contractor shall defend, indemnify, and hold the owner and the engineer harmless from any and all liability, real or alleged, in connection with the performance of the work on this project, excepting for liability arising from the sole negligence of the owner or the engineer.

ALL CONSTRUCTION TO CONFORM TO CITY STANDARDS AND SPECIFICATIONS IN RIGHT OF WAY.



sandstrom
ARCHITECTURE

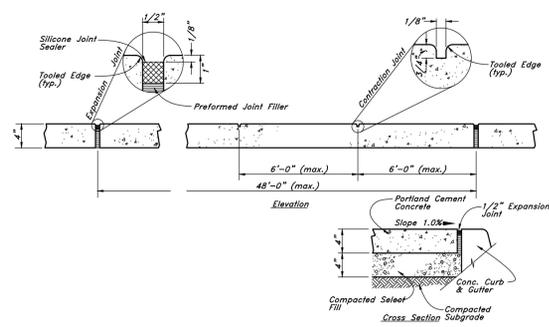
845 South 220 East
Orem, UT 84058
Phone: 801.229.0088 Fax: 801.229.0089
www.sandstromarchitecture.com



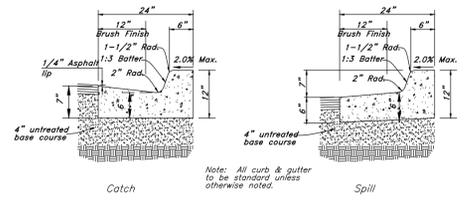
GREAT BASIN
ENGINEERING

5746 SOUTH 1475 EAST SUITE 200
OREM, UTAH 84058 MAIN 801.229.4215
FAX 801.392.7544
WWW.GREATBASINENGINEERING.COM

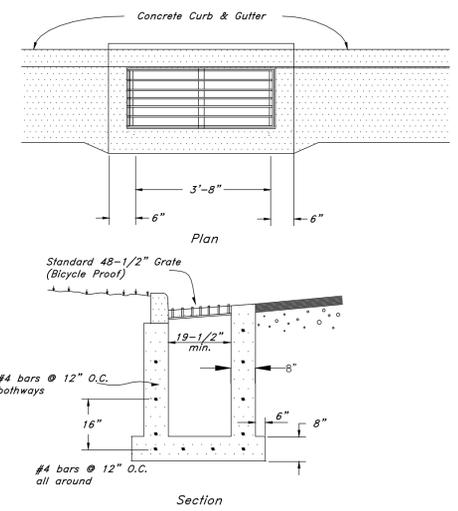
TRANSPORTATION WEST ADMIN. BLDG. - PHASE II
ALPINE SCHOOL DISTRICT
337 NORTH 200 WEST
SARATOGA SPRINGS, UTAH 84045



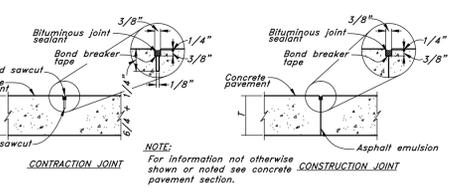
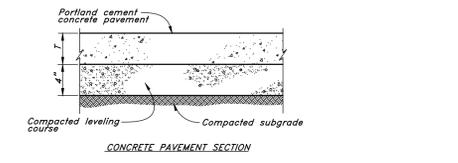
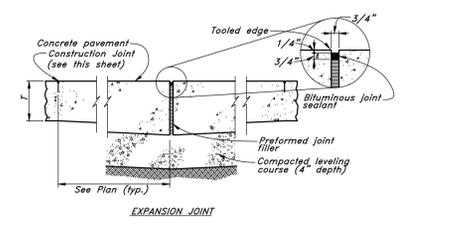
2 Concrete Sidewalk & Plaza Areas
Not to Scale



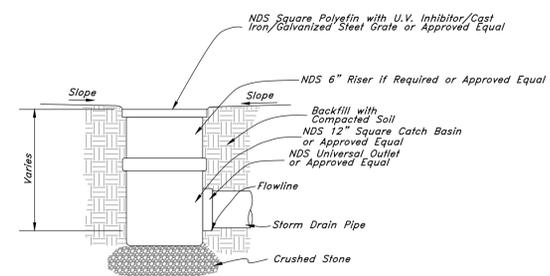
5 Typical Section - 24\"/>



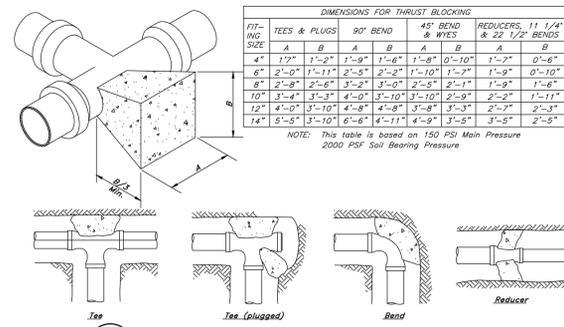
8 Typical Inlet Box
in curb & gutter
Not to Scale



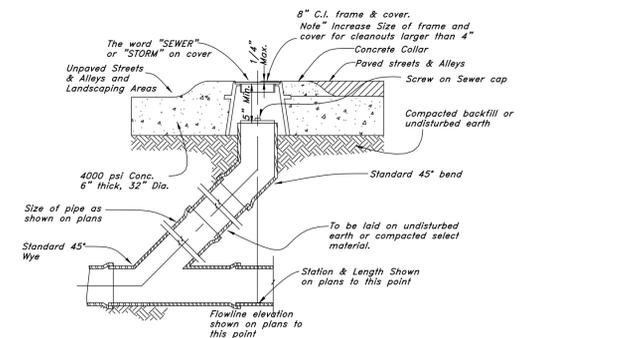
1 Portland Cement Concrete Pavement
Not to Scale



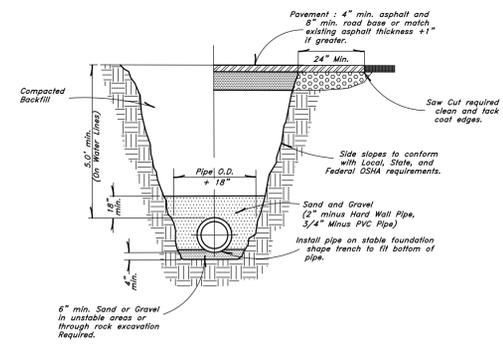
4 12\"/>



7 Thrust Blocking Details
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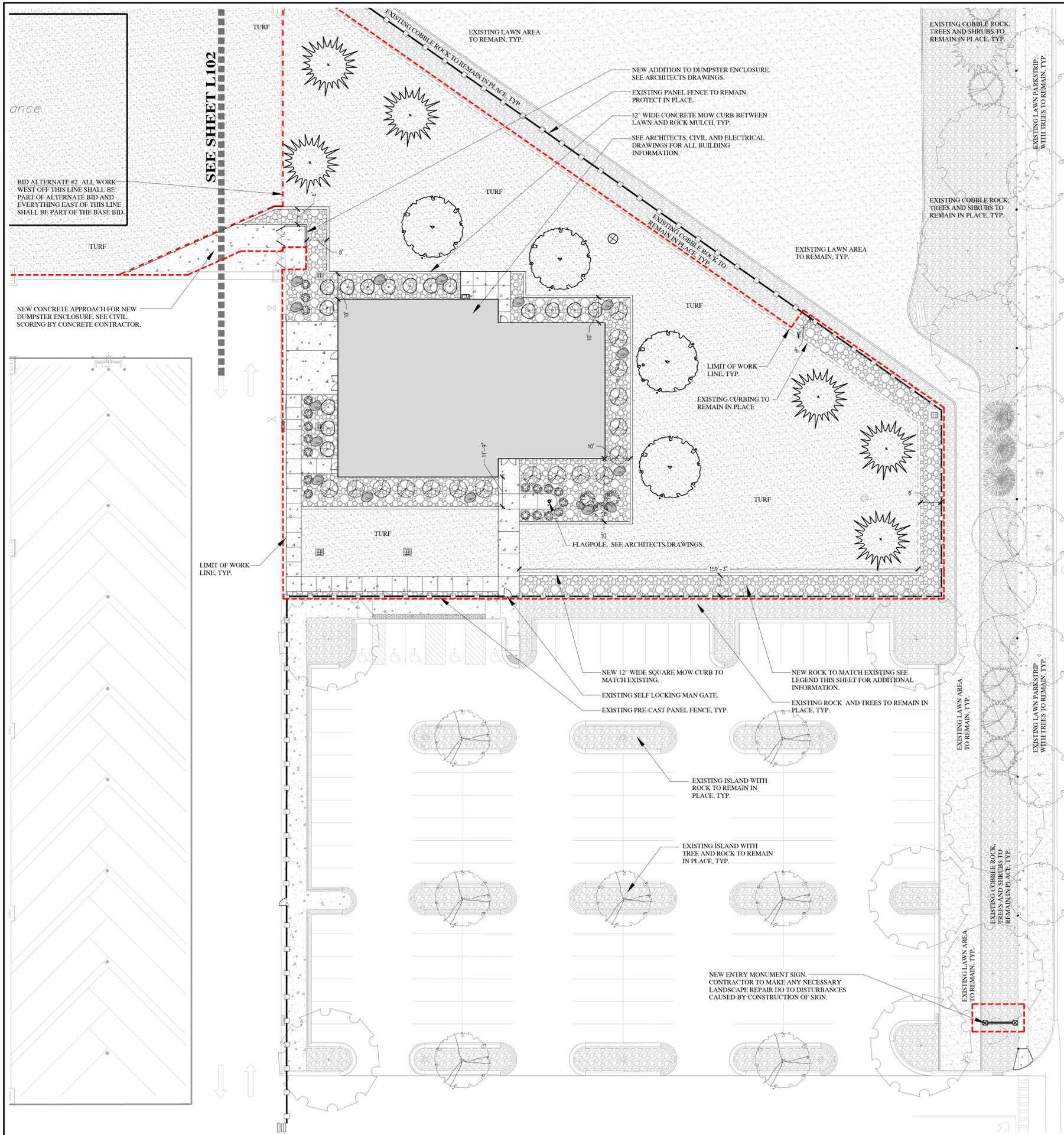
3 Sewer, Storm, and Roof Drain Cleanout Detail
Not to Scale



6 Typical Trench Detail
Not to Scale

| DATE | REVISION/ISSUE |
|-------------------|--------------------|
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| | |
| | |
| PROJECT NO. | SA - 1521 |
| DATE | SEPTEMBER 22, 2015 |
| DRAWN BY | HMA |
| CHECKED BY | MEB |
| SHEET DESCRIPTION | DETAIL SHEET |
| SHEET NUMBER | |

C4.00



GENERAL NOTES

- SEE CIVIL PLANS FOR ALL GRADING, DRAINAGE, CURB, GUTTER, SIDEWALKS, ETC.
- SEE LANDSCAPE SHEETS L101 THROUGH L102 FOR ALL PLANT SPECIES AND QUANTITIES.
- SEE IRRIGATION SHEETS L201 THROUGH L202 FOR ALL LANDSCAPE IRRIGATION.
- SEE SHEETS L301 FOR PLANTING DETAILS AND SHEETS L401 AND L402 FOR IRRIGATION DETAILS.
- SEE BID ALTERNATE #2 LINE FOR SEPARATION OF PROJECT. ALL LABOR AND MATERIALS EAST OF LINE SHALL BE PART OF BASE BID. ALL ITEMS WEST OF LINE ARE PART OF BID ALTERNATE #2. SEE ARCHITECT, CIVIL AND ELECTRICAL DRAWING FOR CORRESPONDING BID ALTERNATE ITEMS.

DECIDUOUS TREE LEGEND

| SYMBOL | BOTANICAL NAME/COMMON NAME | SIZE | QTY. |
|--------|---|----------------|------|
| | FRAXINUS AMERICANA 'AUTUMN APPLAUSE' AUTUMN APPLAUSE ASH | 2 1/2" CALIPER | 4 |

EVERGREEN TREE LEGEND

| SYMBOL | BOTANICAL NAME/COMMON NAME | SIZE | QTY. |
|--------|---------------------------------------|----------|------|
| | PINUS NIGRA ** AUSTRIAN BLACK PINE | 10' TALL | 6 |

DECIDUOUS SHRUB LEGEND

| SYMBOL | BOTANICAL NAME/COMMON NAME | SIZE | QTY. |
|--------|---|----------|------|
| | CORNUS ALBA 'ELEGANTISSIMA' VARIEGATED DOGWOOD | 5 GALLON | 15 |
| | RHUS AROMATICA 'GRO-LOW' ** GRO-LOW SUMAC | 5 GALLON | 17 |
| | SPIREA BIMALDA 'LIMEMOUND' LIMEMOUND SPIREA | 5 GALLON | 19 |

EVERGREEN SHRUB LEGEND

| SYMBOL | BOTANICAL NAME/COMMON NAME | SIZE | QTY. |
|--------|--|----------|------|
| | PINUS M. MUGUS 'SLOWMOUND' ** SLOWMOUND MUGO PINE | 5 GALLON | 3 |

GRASS LEGEND

| SYMBOL | BOTANICAL NAME/COMMON NAME | QTY. |
|--|---|-----------|
| | KENTUCKY BLUE GRASS BLEND SOD, THREE VARIETIES MIN. PER SPECS. | 79,272 SF |
| PHASE 1 LAWN AREA = 86,188 S.F. | | |
| PHASE 2 LAWN AREA = 79,272 S.F. | | |
| TOTAL LAWN AREA = 165,460 S.F. (~3.8 ACRES) | | |
| TOTAL SITE AREA = ~13.08 ACRES | | |
| TOTAL LAWN AREA (Phase 1 and 2 including parkstrips) = ~3.80 ACRES | | |
| TOTAL LAWN PERCENTAGE = ~29% | | |

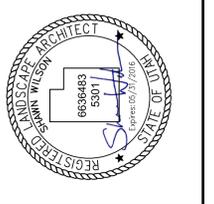
INERT LANDSCAPE MATERIALS

| SYMBOL | DESCRIPTION | QTY. |
|--------|---|----------|
| | 6" DEPTH MINIMUM OF MATCHING ROCK (ROCK TO BE DOUBLE WASHED PRIOR TO PLACING ROCK ON TOP OF WEED BARRIER FABRIC. SEE DETAIL 'G', SHEET L5301 FOR ADDITIONAL INSTALLATION NOTES. CONTACT LANE AT 801-819-9089 TO ORDER ROCK. CONTRACTOR SHALL ENSURE SOIL, CONSTRUCTION AND EXCAVATION WASTE IS COMPLETELY REMOVED FROM ROCK PRIOR TO PLACING IT ON TOP OF FABRIC. | 171 C.Y. |

LANDSCAPE NOTES

- ALL SITE LAYOUT INFORMATION WAS OBTAINED FROM ARCHITECT AND CIVIL ENGINEER. REFER TO ARCHITECTS AND CIVIL ENGINEERS DRAWING IF ANY DISCREPANCY ARISE. ADJUST LOCATION OF TREES, TURF AND IRRIGATION COMPONENTS ACCORDINGLY.
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- PLANT MATERIAL TO BE INSTALLED PER PLANT LEGEND. ANY SUBSTITUTIONS TO BE APPROVED BY OWNER AND/OR LANDSCAPE ARCHITECT.
- NEW AUTOMATIC UNDERGROUND IRRIGATION SYSTEM TO BE INSTALL PER PLANS. SEE IRRIGATION PLANS FOR EXACT LAYOUT.
- FINE LEVEL ALL AREAS PRIOR TO LAYING SOD. EXCAVATE AND REMOVE EXISTING SOILS AS NECESSARY. RE-GRADE AS NECESSARY FOR NEW LANDSCAPE AREAS. SEE CIVIL ENGINEERS DRAWINGS FOR MORE INFORMATION.
- IMPORTED TOPSOIL TO BE IMPLEMENTED AT RATES INDICATED IN THE SPECIFICATIONS (4" IN LAWN AREAS AND 12" IN PLANTER AREAS AROUND SHRUBS).
- ALL LANDSCAPE AREAS WITHIN THE PROJECT LIMIT LINES SHALL BE CLEARED AND GRUBBED OF ALL WEEDS AND OTHER DEBRIS. THE LANDSCAPE CONTRACTOR SHALL APPLY A HERBICIDE TO THE WEEDS MIN. OF 96 HRS. PRIOR TO GRUBBING. REMOVE ALL GRUBBED MATERIAL FROM THE SITE. SEE CIVIL PLANS AND SPECS FOR ADDITIONAL INFORMATION REGARDING SITE CLEARING REQUIREMENTS.
- ** INDICATES WATER-WISE PLANTS IN TREE AND SHRUB LEGENDS.

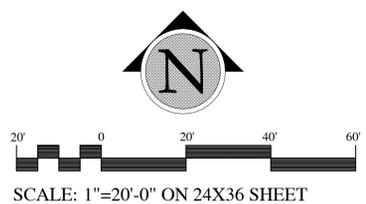
200 WEST STREET



TRANSPORTATION WEST ADMIN. BLDG. - PHASE II

ALPINE SCHOOL DISTRICT
337 NORTH 200 WEST
SARATOGA SPRINGS, UTAH 84045

| DATE | ISSUE/REVISION |
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| PROJECT NO. | SA-1521 |
| DATE | 16 SEPT. 2015 |
| DRAWN BY | SEW |
| CHECKED BY | CBW |
| SHEET DESCRIPTION | PLANTING PLAN |
| SHEET NUMBER | L101 |



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TRANSPORTATION WEST ADMIN. BLDG. - PHASE II

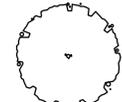
ALPINE SCHOOL DISTRICT
337 NORTH 200 WEST
SARATOGA SPRINGS, UTAH 84045

| DATE | ISSUE/REVISION |
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| PROJECT NO. | SA-1521 |
| DATE | 16 SEPT, 2015 |
| DRAWN BY | SEW |
| CHECKED BY | CBW |
| SHEET DESCRIPTION | PLANTING PLAN |
| SHEET NUMBER | L102 |

GENERAL NOTES

- SEE CIVIL PLANS FOR ALL GRADING, DRAINAGE, CURB, GUTTER, SIDEWALKS, ETC.
- SEE LANDSCAPE SHEETS L101 THROUGH L102 FOR PLANT SPECIES AND QUANTITIES.
- SEE IRRIGATION SHEETS L201 THROUGH L202 FOR ALL LANDSCAPE IRRIGATION.
- SEE SHEETS L301 FOR PLANTING DETAILS AND SHEETS L401 AND L402 FOR IRRIGATION DETAILS.
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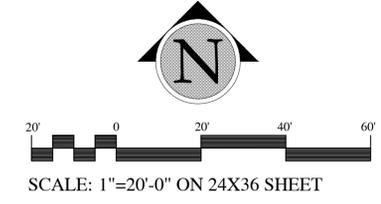
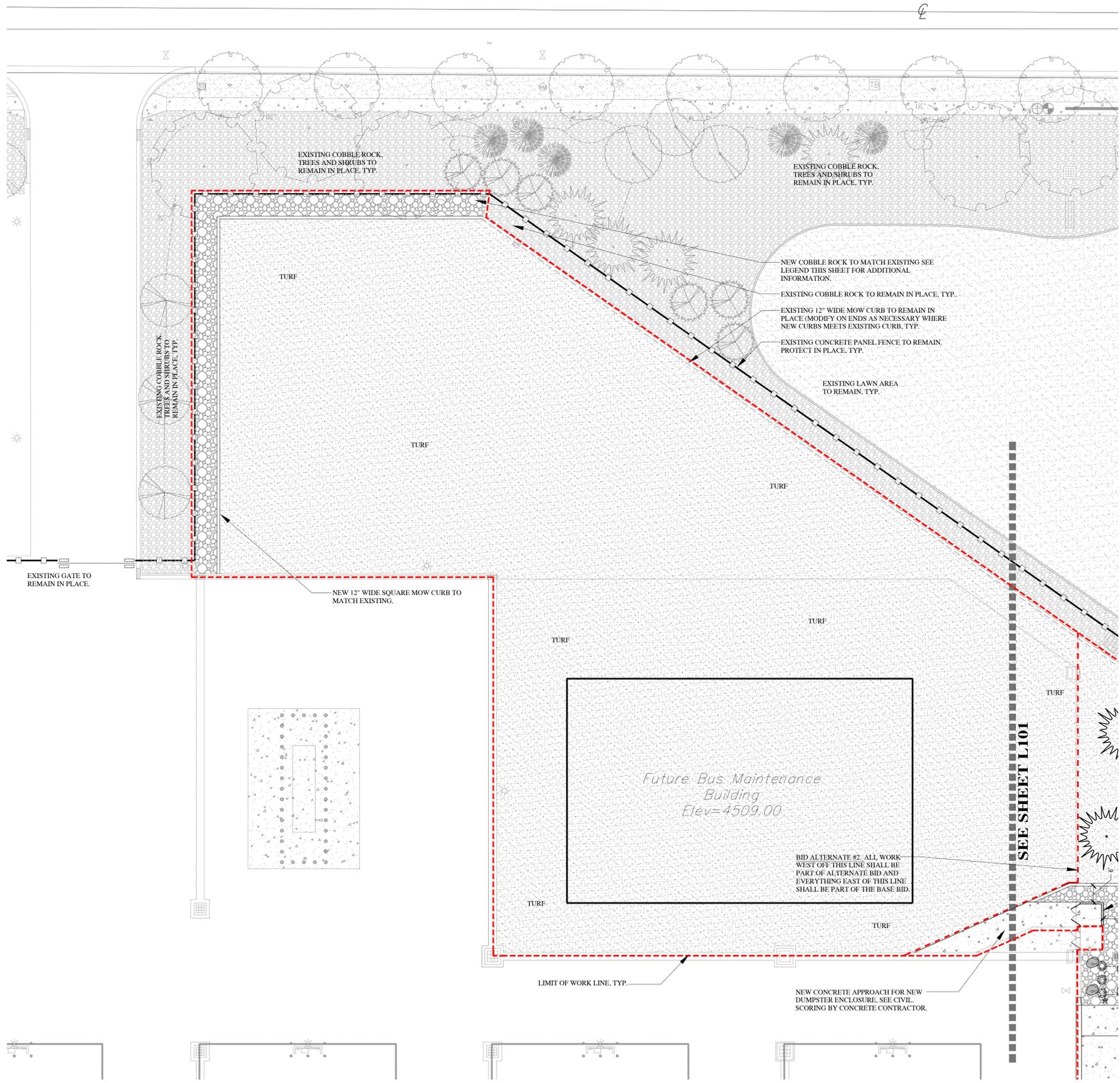
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INERT LANDSCAPE MATERIALS

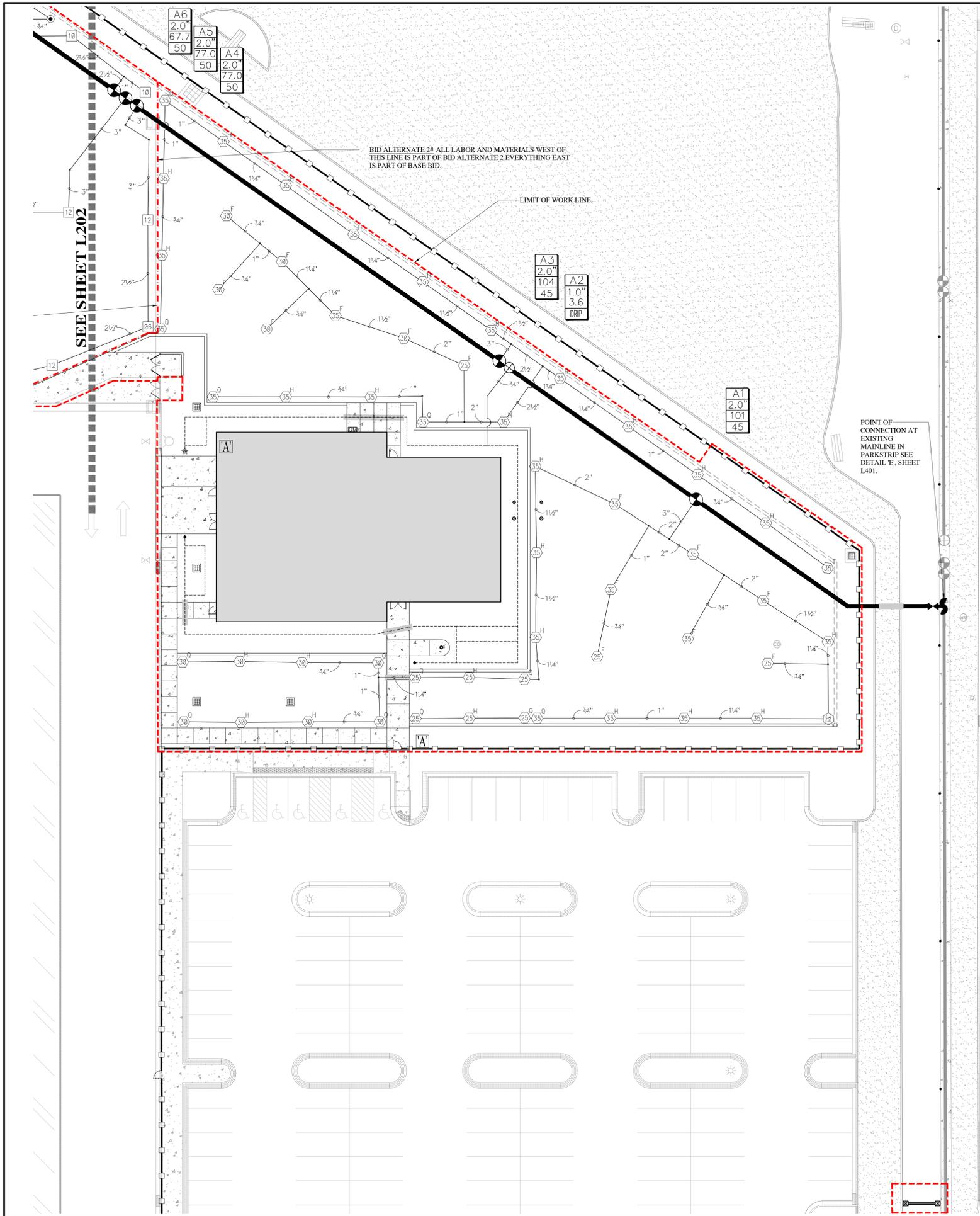
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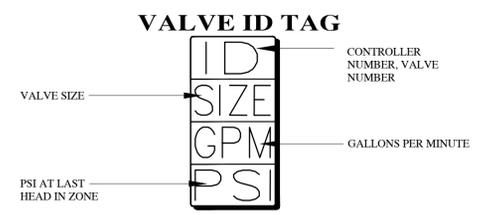


In Site
DESIGN GROUP
Landscape Architecture Land Planning
17 North 470 West American Fork, Utah 84003
801.756.5043 www.in-sitedesigngroup.com

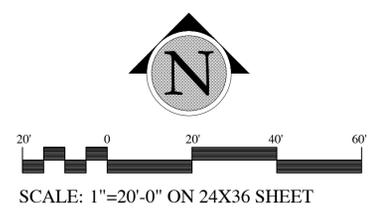


IRRIGATION LEGEND

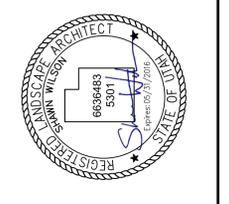
| SYMBOL | MANUFACTURER-MODEL NUMBER | PAT. | RD. | PSI | GPM | | | | | DRIP GPH | DTL | REMARKS | |
|--------|---|----------|-----|-----|------|------|------|----|----|----------|-----|---------|---|
| | | | | | Q | T | H | TT | F | | | | |
| | RAINBIRD 5004-R MPR ROTORS 25 SERIES | Q.T.H.F | 25 | 45 | 1.0 | 1.38 | 1.98 | -- | -- | 3.82 | -- | H | |
| | RAINBIRD 5004-R MPR ROTORS 30 SERIES | Q.T.H.F | 30 | 45 | 1.40 | 1.83 | 2.96 | -- | -- | 5.78 | -- | H | |
| | RAINBIRD 5004-R MPR ROTORS 35 SERIES | Q.T.H.F | 35 | 45 | 1.92 | 2.46 | 3.81 | -- | -- | 7.58 | -- | H | |
| | RAINBIRD 1724 FIXED ROTARY | Q.H.F | 23 | 45 | -- | 1.84 | -- | -- | -- | 3.67 | -- | I | ADJUST HEADS AND NOZZLES AS NEEDED TO KEEP WATER OFF SIDEWALK, ASPHALT, FENCING AND BUILDING. |
| | RAINBIRD R-VAN 1724 ROTARY | VARIABLE | 23 | 45 | 91 | -- | 1.83 | -- | -- | 2.73 | -- | I | |
| | RAINBIRD FALCON 6504 (F4-PC-SS) ROTORS | Q | 49 | 50 | 5.5 | -- | -- | -- | -- | -- | -- | H | |
| | RAINBIRD FALCON 6504 (F4-PC-SS) ROTORS | T | 53 | 50 | -- | 9.1 | -- | -- | -- | -- | -- | H | |
| | RAINBIRD FALCON 6504 (F4-PC-SS) ROTORS | H | 55 | 50 | -- | -- | -- | -- | -- | -- | -- | H | |
| | RAINBIRD FALCON 6504 (F4-PC-SS) ROTORS | F | 55 | 50 | -- | -- | -- | -- | -- | 11.0 | -- | H | |
| | RELOCATE EXISTING RAINBIRD CONTROLLER TO NEW LOCATION SHOWN. EXTEND WIRES FROM EXISTING CONTROLLER LOCATION TO NEW LOCATION AS NECESSARY. ADD MODULES AS REQ. FOR NEW VALVES. | | | | | | | | | | | A | INSTALL PER MANUFACTURER SPEC. |
| | QUICK COUPLER: RAINBIRD 44NP. THE BID SHALL INCLUDE 1 QUICK COUPLER. COORDINATE LOCATION WITH OWNER. | | | | | | | | | | | E.I | STANDARD VALVE BOX |
| | 3" WATEROUS BRAND FLANGED GATE VALVE | | | | | | | | | | | N | REFERENCE DETAILS |
| | REMOTE CONTROL VALVE: RAINBIRD PESB-PRS-D AUTOMATIC CONTROL VALVE (SIZE AS NOTED ON PLAN). | | | | | | | | | | | J.K | JUMBO VALVE BOX |
| | DRILL CONTROL VALVE KIT: RAINBIRD XZC-100-BCOM COMMERCIAL KIT. | | | | | | | | | | | O.P | JUMBO VALVE BOX |
| | FLUSH VALVE: 1/2" BALL VALVE. INSTALL AT END OF ALL DRIP LINES IN 10" ROUND VALVE BOX. | | | | | | | | | | | O | REFERENCE DETAILS |
| | POPP UP FLAG: SPRAY BODY WITH 50 NOZZLE TURNED OFF. | | | | | | | | | | | O | REFERENCE DETAILS |
| | MAINLINE: 3" SCHEDULE 40 PVC WITH SCHEDULE 80 FITTINGS | | | | | | | | | | | B.C.E.L | REFERENCE DETAILS |
| | LATERAL LINE: SCHEDULE 40 PVC, 3/4" UNLESS OTHERWISE NOTED, 18" MIN. COVER | | | | | | | | | | | B.C | -- |
| | DRIP LINE HEADER: RAINBIRD XT-700 OR XBS-100 TUBING WITH 1/4" TUBING TO EMITTER | | | | | | | | | | | O.P | -- |
| | CLASS 200 SLEEVE (SIZE PER PLAN). | | | | | | | | | | | F | -- |
| | SCH 80 WIRE CHASE TO BE INSTALLED BETWEEN ALL VALVE BOXES. SIZE 2X DIAMETER OF WIRE BUNDLE. | | | | | | | | | | | F | -- |
| | NOT SHOWN | | | | | | | | | | | B.C | -- |
| | NOT SHOWN | | | | | | | | | | | B.C | -- |



- ### IRRIGATION NOTES
- LANDSCAPE CONTRACTOR (L.C.) SHALL PROVIDE AND INSTALL SLEEVES FOR ALL PIPES AND WIRES UNDER PAVEMENT AND SIDEWALKS. SLEEVES SHALL BE 2 SIZES LARGER THAN PIPE INSIDE. ALL WIRE SHALL BE IN SEPARATE SLEEVES (WIRE CONDUIT IS NOT SHOWN). ALL CONTROL WIRE SHALL BE INSTALLED IN SCH. 80 ELECTRICAL CONDUIT. PLACE JUNCTION BOXES WHERE NECESSARY TO MINIMIZE LONG RUNS OR AT DIRECTIONAL CHANGES AS NECESSARY.
 - PROVIDE A CAD AS-BUILT, REPRODUCIBLE DRAWING TO LANDSCAPE ARCHITECT AND OWNER PER SPECS. SHOWING ALL DRAINS, HEADS, VALVES, AND PIPES. PROVIDE INSTRUCTIONS TO MAINTENANCE PERSONNEL FOR WINTERIZATION. SPRINKLER SYSTEM TO BE BLOWN OUT WITH AN AIR COMPRESSOR EACH FALL. PLACE PIPES, VALVE BOXES AND ALL OTHER SPRINKLER CONSTRUCTION IN LANDSCAPE AREAS. ALL PIPES SHALL BE ON PROPERTY OF OWNER. MODIFY LOCATION OF VALVE BOXES AND PIPING AS NECESSARY IN ORDER TO AVOID UTILITIES, TREES, SHRUBS AND OTHER UTILITIES PER PLANS. DO NOT LOCATE VALVE BOXES IN LAWN AREAS IF POSSIBLE.
 - CONTRACTOR SHALL HAVE ALL UTILITIES BLUE STAKED BEFORE DIGGING. ANY DAMAGE TO THE UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR WITH NO EXTRA COST TO THE OWNER.
 - IRRIGATION MAINLINE SHALL BE 3" SCHEDULE 40 PVC WITH SCHEDULE 80 FITTINGS (UNLESS OTHERWISE NOTED ON PLANS). LATERAL LINES SHALL BE NO SMALLER THAN 3/4" UNLESS NOTED ON PLAN. PIPES SHALL CARRY NO MORE THAN THE FOLLOWING: 1/2" MAX. 4 GPM, 3/4" PIPE MAX. 8GPM, 1" PIPE MAX. 13GPM AND 1-1/4" PIPE MAX. 23GPM, 1-1/2" MAX 30 GPM AND 2" PIPE MAX. 51 GPM, 2.5" PIPE MAX 76 GPM AND 3" PIPE MAX. 110 GPM.
 - LATERALS AND MAINLINES SHALL BE A MIN. OF 12" AWAY FROM ALL WALLS, WALKS, CURBS, ETC.
 - INSTALL ALL HEADS 4" AWAY FROM ALL WALKS AND WALLS. VALVE BOXES SHALL BE INSTALLED 6" MIN. FROM WALKS AND WALLS SQUARED WITH THE WALK.
 - CONTRACTOR SHALL ONLY USE COMMERCIAL GRADE PRODUCTS AND IS RESPONSIBLE FOR ENSURING ACCURATE COUNTS AND QUANTITIES OF ALL IRRIGATION MATERIALS FOR BIDDING AND INSTALLATION PURPOSES.
 - CONTRACTOR SHALL BUILD IRRIGATION SYSTEM WITH HEAD TO HEAD COVERAGE FOR ALL LAWN AREAS. VAN, HE-EVAN AND/OR U-SERIES NOZZLES SHALL BE USED WHERE NECESSARY TO PROVIDED HEAD TO HEAD COVERAGE AND/OR TO MINIMIZE OVERSPRAY ONTO STREETS, SIDEWALKS AND/OR BUILDINGS. ALL SPRINKLERS SHALL BE ADJUSTED ON-SITE AS NECESSARY TO AVOID ANY WATER SPRAYING ONTO STREETS, SIDEWALKS AND BUILDINGS.
 - ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE CITY AND/OR COUNTY CODES. THE L.C. SHALL APPLY AND PAY FOR ALL NECESSARY PERMITS.
 - ACTUAL INSTALLATION OF IRRIGATION SYSTEM MAY VARY SOMEWHAT FROM PLANS. CONTRACTOR IS RESPONSIBLE TO MAKE NECESSARY ADJUSTMENTS AS NEEDED TO ENSURE PROPER COVERAGE OF ALL LANDSCAPED AREAS WHILE AVOIDING LIGHT POLES, FIRE HYDRANTS, UTILITY PADS, UTILITY BOXES, AND OTHER OBSTACLES.
 - QUICK COUPLERS TO BE INSTALLED AT NEW POINT OF CONNECTION AND IN OTHER LOCATIONS PER PLANS IN ORDER TO BLOW SYSTEM OUT WITH AN AIR COMPRESSOR EACH FALL.
 - ALL SLEEVES INSTALLED SHALL BE DUCT TAPED TO PREVENT DIRT OR OTHER DEBRIS ENTERING PIPE. ALL SLEEVES SHALL BE IDENTIFIED BY WOOD OR PVC STAKES AND BE SPRAY PAINTED WITH MARKING PAINT. REMOVE STAKES ONCE IRRIGATION SYSTEM IS COMPLETE.
 - LANDSCAPE ARCHITECT OR OWNER SHALL VISUALLY INSPECT ALL TRENCHES PRIOR TO BACKFILLING. IRRIGATION CONTRACTOR SHALL GIVE LANDSCAPE ARCHITECT MIN. 72 HR. NOTICE BEFORE INSPECTION IS TO BE MADE. IRRIGATION CONTRACTOR SHALL PRESSURE TEST MAINLINE FOR LEAKS PRIOR TO BACKFILLING.
 - LANDSCAPE CONTRACTOR SHALL MATCH PRECIPITATION RATES AS MUCH AS POSSIBLE FOR ALL LANDSCAPED AREAS. REFER TO SPECS FOR ADDITION TESTING INFORMATION.
 - THE IRRIGATION SYSTEM HAS BEEN DESIGNED WITH A MINIMUM OF 75 STATIC PSI AT THE POINT OF CONNECTION. CONTRACTOR SHALL TEST THE WATER SUPPLY AND PROVIDE DOCUMENTATION TO LANDSCAPE ARCHITECT OF THE RESULTS PRIOR TO BEGINNING WORK ON THE SYSTEM.
 - USE A DIELECTRIC UNION WHEREVER A COPPER-BASED METAL (COPPER, BRASS, BRONZE) IS JOINED TO AN IRON-BASED METAL (IRON, GALVANIZED STEEL, STAINLESS STEEL).



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TRANSPORTATION WEST ADMIN. BLDG. - PHASE II

ALPINE SCHOOL DISTRICT
337 NORTH 200 WEST
SARATOGA SPRINGS, UTAH 84045

| DATE | ISSUE/REVISION |
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| PROJECT NO. | SA-1521 |
| DATE | 16 SEPT, 2015 |
| DRAWN BY | SEW |
| CHECKED BY | CBW |
| SHEET DESCRIPTION | IRRIGATION PLAN |
| SHEET NUMBER | L201 |



TRANSPORTATION WEST ADMIN. BLDG. - PHASE II

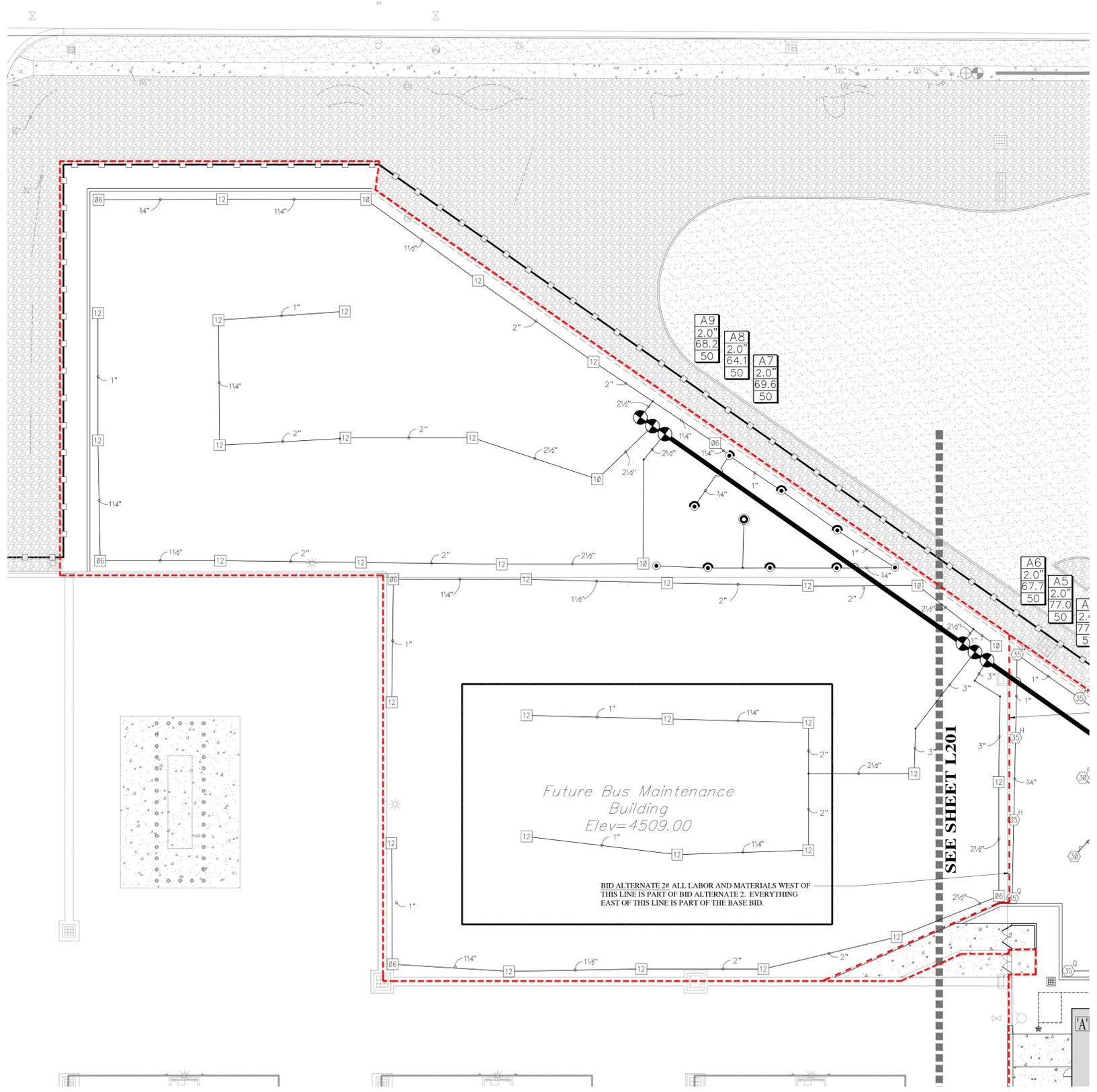
ALPINE SCHOOL DISTRICT
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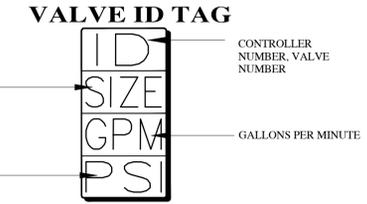
L202

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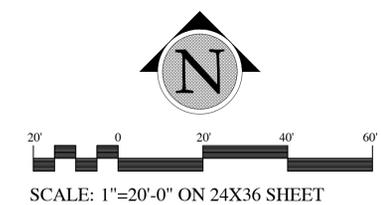
IRRIGATION LEGEND

| SYMBOL | MANUFACTURER-MODEL NUMBER | PAT. | RD. | PSI | GPM | | | | | | | DRIP' GPH | DTL | REMARKS |
|--------|---|----------|-----|-----|------|------|------|----|----|------|----|-----------|---|---------|
| | | | | | Q | T | H | T | TQ | F | | | | |
| | RAINBIRD 5004-R MPR ROTORS 25 SERIES | Q.T.H.F | 25' | 45 | 1.0 | 1.38 | 1.98 | -- | -- | 3.82 | -- | H | | |
| | RAINBIRD 5004-R MPR ROTORS 30 SERIES | Q.T.H.F | 30' | 45 | 1.40 | 1.85 | 2.96 | -- | -- | 5.78 | -- | H | | |
| | RAINBIRD 5004-R MPR ROTORS 35 SERIES | Q.T.H.F | 35' | 45 | 1.92 | 2.46 | 3.81 | -- | -- | 7.58 | -- | H | | |
| | RAINBIRD 1724 FIXED ROTARY | Q.H.F | 23' | 45 | 92 | -- | 1.84 | -- | -- | 3.67 | -- | I | ADJUST HEADS AND NOZZLES AS NEEDED TO KEEP WATER OFF SIDEWALK, ASPHALT, FENCING AND BUILDING. | |
| | RAINBIRD R-VAN 1724 ROTARY | VARIABLE | 23' | 45 | 91 | -- | 1.83 | -- | -- | 2.73 | -- | I | | |
| | RAINBIRD FALCON 6504 (F4-PC-SS) ROTORS | Q | 49' | 50 | 5.5 | -- | -- | -- | -- | -- | -- | H | | |
| | RAINBIRD FALCON 6504 (F4-PC-SS) ROTORS | T | 53' | 50 | -- | 9.1 | -- | -- | -- | -- | -- | H | | |
| | RAINBIRD FALCON 6504 (F4-PC-SS) ROTORS | H | 55' | 50 | -- | -- | 11.0 | -- | -- | -- | -- | H | | |
| | RAINBIRD FALCON 6504 (F4-PC-SS) ROTORS | F | 55' | 50 | -- | -- | -- | -- | -- | 11.0 | -- | H | | |
| | RELOCATE EXISTING RAINBIRD CONTROLLER TO NEW LOCATION SHOWN. EXTEND WIRES FROM EXISTING CONTROLLER LOCATION TO NEW LOCATION AS NECESSARY. ADD MODULES AS REQ. FOR NEW VALVES. | | | | | | | | | | | A | INSTALL PER MANUFACTURER SPEC. | |
| | QUICK COUPLER. RAINBIRD 48NP. THE BID SHALL INCLUDE 1 QUICK COUPLER. COORDINATE LOCATION WITH OWNER. | | | | | | | | | | | E.I | STANDARD VALVE BOX | |
| | 3" WATEROUS BRAND FLANGED GATE VALVE. | | | | | | | | | | | N | REFERENCE DETAILS | |
| | REMOTE CONTROL VALVE. RAINBIRD PESB-PRS-D AUTOMATIC CONTROL VALVE (SIZE AS NOTED ON PLAN). | | | | | | | | | | | J.K | JUMBO VALVE BOX | |
| | DRIP CONTROL ZONE KIT. RAINBIRD XZC-100-BCOM COMMERCIAL KIT. | | | | | | | | | | | O.P | JUMBO VALVE BOX | |
| | FLUSH VALVE. 1/2" BALL VALVE. INSTALL AT END OF ALL DRIP LINES IN 10" ROUND VALVE BOX. | | | | | | | | | | | O | REFERENCE DETAILS | |
| | POPP UP FLAG. SPRAY BODY WITH 50 NOZZLE TURNED OFF. | | | | | | | | | | | O | REFERENCE DETAILS | |
| | MAINLINE: 3" SCHEDULE 40 PVC WITH SCHEDULE 80 FITTINGS | | | | | | | | | | | B.C.E.L | REFERENCE DETAILS | |
| | LATERAL LINE: SCHEDULE 40 PVC. 3/4" UNLESS OTHERWISE NOTED. 18" MIN. COVER | | | | | | | | | | | O.P | -- | |
| | DRIP LINE HEADER: RAINBIRD XT-700 OR XBS-100 TUBING WITH 1/4" TUBING TO EMITTER | | | | | | | | | | | O.P | -- | |
| | CLASS 200 SLEEVE (SIZE PER PLAN). | | | | | | | | | | | F | COORD. WITH HARDSCAPE | |
| | SCH. 80 WIRE CHASE TO BE INSTALLED BETWEEN ALL VALVE BOXES. SIZE 2X DIAMETER OF WIRE WIRE BUNDLE. | | | | | | | | | | | F | -- | |
| | 14 GAUGE SOLID COPPER SINGLE STRAND. | | | | | | | | | | | B.C | -- | |



IRRIGATION NOTES

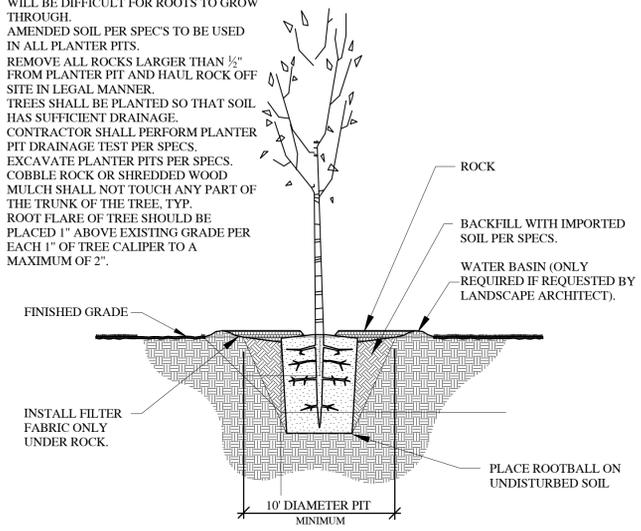
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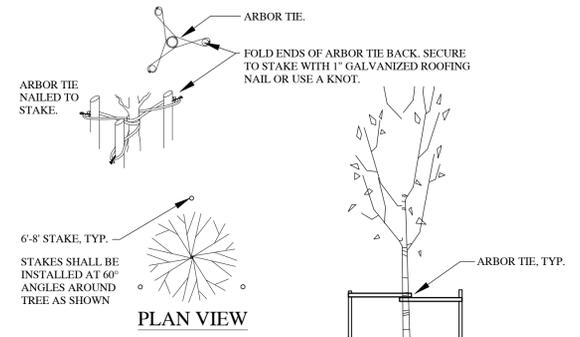
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 17 North 470 West American Fork, Utah 84003
 801.756.5043 www.in-sitedesigngroup.com

NOTES:

1. SCARIFY SIDES OF PLANTER PIT PRIOR TO PLANTING TREE SO AS TO AVOID ANY GLAZING OR HARDENED AREAS THAT WILL BE DIFFICULT FOR ROOTS TO GROW THROUGH.
2. AMENDED SOIL PER SPECS TO BE USED IN ALL PLANTER PITS.
3. REMOVE ALL ROCKS LARGER THAN 1/2" FROM PLANTER PIT AND HAUL ROCK OFF SITE IN LEGAL MANNER.
4. TREES SHALL BE PLANTED SO THAT SOIL HAS SUFFICIENT DRAINAGE.
5. CONTRACTOR SHALL PERFORM PLANTER PIT DRAINAGE TEST PER SPECS.
6. EXCAVATE PLANTER PITS PER SPECS.
7. COBBLE ROCK OR SHREDDED WOOD MULCH SHALL NOT TOUCH ANY PART OF THE TRUNK OF THE TREE, TYP.
8. ROOT FLARE OF TREE SHOULD BE PLACED 1" ABOVE EXISTING GRADE PER EACH 1" OF TREE CALIPER TO A MAXIMUM OF 2".



DECIDUOUS TREE PLANTING DETAIL SCALE: NTS

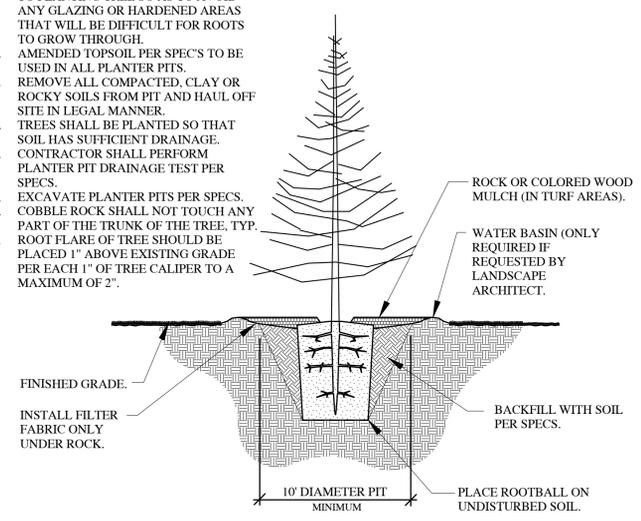


- NOTES:** IF TREE STAKING IS REQUIRED, THE FOLLOWING IS RECOMMENDED:
1. ALLOW FOR SOME TRUNK MOVEMENT. ATTACH ARBOR TIE TO TREE AND STAKE.
 2. REMOVE ALL WRAPPING MATERIAL FROM ROOTBALL PRIOR TO PLANTING.
 3. INSTALL THREE STAKES PER TREE, SPACED EVENLY AROUND THE TRUNK.
 4. REMOVE ALL STAKING AS SOON AS THE TREE IS STABLE.
 5. CONTRACTOR SHALL PROVIDE TREE STAKING AS PART OF THE BASE BID.
 6. CONTRACTOR TO REMOVE NURSERY TREE STAKE FROM ROOTBALL AT TIME OF PLANTING (TYP.).

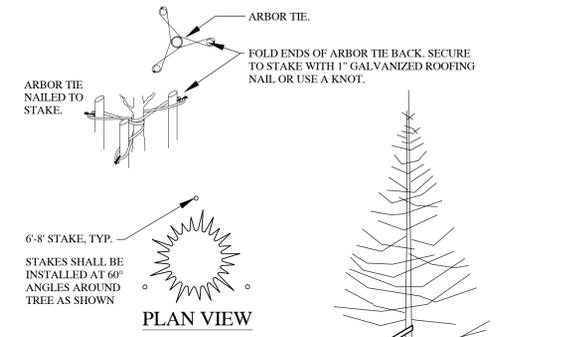
DECIDUOUS TREE STAKING SCALE: NTS

NOTES:

1. SCARIFY SIDES OF PLANTER PIT PRIOR TO PLANTING TREE SO AS TO AVOID ANY GLAZING OR HARDENED AREAS THAT WILL BE DIFFICULT FOR ROOTS TO GROW THROUGH.
2. AMENDED TOPSOIL PER SPECS TO BE USED IN ALL PLANTER PITS.
3. REMOVE ALL COMPACTED, CLAY OR ROCKY SOILS FROM PIT AND HAUL OFF SITE IN LEGAL MANNER.
4. TREES SHALL BE PLANTED SO THAT SOIL HAS SUFFICIENT DRAINAGE.
5. CONTRACTOR SHALL PERFORM PLANTER PIT DRAINAGE TEST PER SPECS.
6. EXCAVATE PLANTER PITS PER SPECS.
7. COBBLE ROCK SHALL NOT TOUCH ANY PART OF THE TRUNK OF THE TREE, TYP.
8. ROOT FLARE OF TREE SHOULD BE PLACED 1" ABOVE EXISTING GRADE PER EACH 1" OF TREE CALIPER TO A MAXIMUM OF 2".

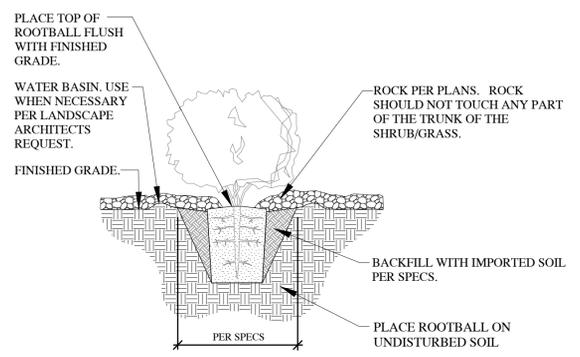


EVERGREEN PLANTING DETAIL SCALE: NTS



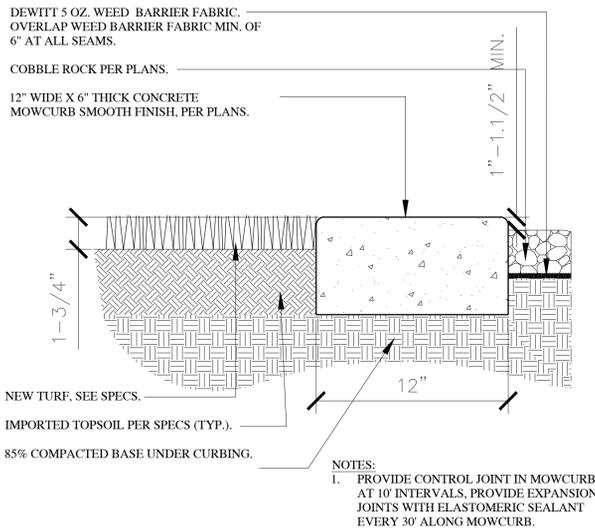
- NOTES:** IF TREE STAKING IS REQUIRED, THE FOLLOWING IS RECOMMENDED:
1. ALLOW FOR SOME TRUNK MOVEMENT. ATTACH ARBOR TIE TO TREE AND STAKE.
 2. REMOVE ALL WRAPPING MATERIAL FROM ROOTBALL PRIOR TO PLANTING.
 3. INSTALL THREE STAKES PER TREE, SPACED EVENLY AROUND THE TRUNK.
 4. REMOVE ALL STAKING AS SOON AS THE TREE IS STABLE.
 5. CONTRACTOR SHALL PROVIDE TREE STAKING AS PART OF THE BASE BID.

EVERGREEN TREE STAKING SCALE: NTS



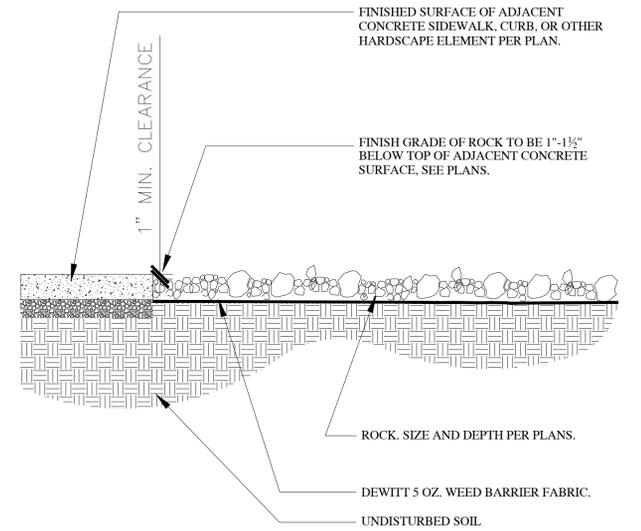
- NOTES:**
1. SCARIFY SIDES OF PLANTER PIT PRIOR TO PLANTING SHRUB/GRASS SO AS TO AVOID ANY GLAZING OR HARDENED AREAS THAT WILL BE DIFFICULT FOR ROOTS TO GROW THROUGH.
 2. IMPORTED & AMENDED SOIL PER SPECS TO BE USED IN ALL PLANTER PITS.
 3. REMOVE ALL ROCKS LARGER THAN 1/2" FROM PLANTER PIT AND HAUL ROCK OFF SITE IN LEGAL MANNER.
 4. CONTRACTOR SHALL PERFORM PLANTER PIT DRAINAGE TEST PER SPECS.
 5. EXCAVATE PLANTER PITS PER SPECS.

SHRUB PLANTING DETAIL SCALE: NTS



- NOTES:**
1. PROVIDE CONTROL JOINT IN MOWCURB AT 10' INTERVALS, PROVIDE EXPANSION JOINTS WITH ELASTOMERIC SEALANT EVERY 30' ALONG MOWCURB.

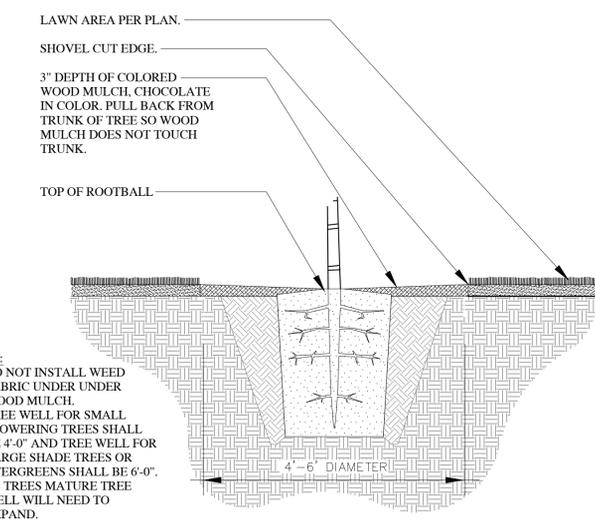
MOWCURB DETAIL SCALE: NTS



- NOTES:**
1. BEFORE PLACING ROCK, APPLY A PRE-EMERGENT HERBICIDE TO TOP OF FABRIC. AFTER PLACING ROCK, RAKE ROCK SMOOTH, WET ROCK TO ENTIRE DEPTH, ALLOW TO DRY, THEN APPLY A SECONDARY APPLICATION OF PRE-EMERGENT HERBICIDE TO TOP OF ROCK. KEEP TOP OF ROCK 1"-1 1/2" BELOW ADJACENT WALKS AND CURBS. DO NOT ALLOW COBBLE ROCK TO TOUCH THE TRUNK OF ANY PLANT. INSTALL ROCK AFTER INSTALLATION OF WEED BARRIER FABRIC AND PLANT MATERIAL.
 2. CONTRACTOR TO ENSURE THAT TOP OF WEED BARRIER FABRIC IS FREE OF SOILS AND DEBRIS PRIOR TO PLACING COBBLE ROCK.
 3. SEE LANDSCAPE PLANS FOR ROCK TYPE AND DEPTH.
 4. ROCK TO BE SCREENED AND DOUBLE WASHED PRIOR TO INSTALLATION.

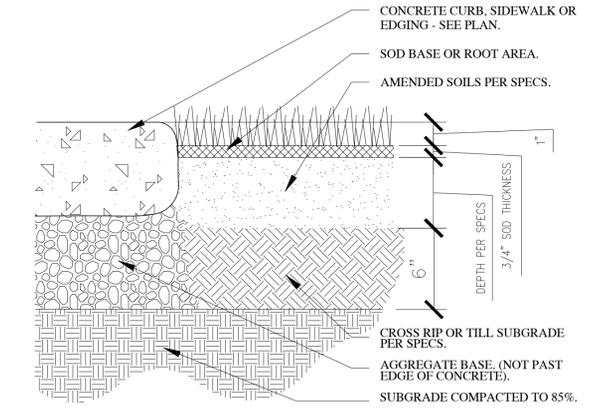
- WEED FABRIC NOTE:** INSTALL 6" SOIL STAPLE IN WEED BARRIER FABRIC AT 5' O.C. TRIANGULAR SPACING. INSTALL 6" SOIL STAPLE AT 12" O.C. ALONG ALL WEED BARRIER FABRIC SEAMS. OVERLAP FABRIC MIN. OF 6" AT ALL SEAMS AS SHOWN BELOW. INSTALL SOIL STAPLE 6" O.C. ALONG EDGES & 2 AT EACH CORNER.
- WEED BARRIER FABRIC:** SOIL STAPLE AT 12" O.C. ALONG SEAM.
- FINISH GRADE PRIOR TO INSTALLING WEED BARRIER FABRIC AND COBBLE ROCK.**

COBBLE ROCK AND WEED BARRIER FABRIC DETAIL SCALE: NTS



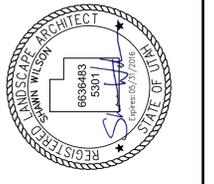
- NOTES:**
1. DO NOT INSTALL WEED FABRIC UNDER WOOD MULCH.
 2. TREE WELL FOR SMALL FLOWERING TREES SHALL BE 4'-0" AND TREE WELL FOR LARGE SHADE TREES OR EVERGREENS SHALL BE 6'-0". AS TREES MATURE TREE WELL WILL NEED TO EXPAND.

TREE WELL IN TURF AREA SCALE: NTS



- NOTES:**
1. ENSURE FINISH GRADE IS 1" BELOW TOP OF CURB, WALK, OR EDGING.
 2. SEE SOD SPECS FOR ADDITIONAL INFORMATION.
 3. TURF IS THE MOST HEALTHY AND WATER EFFICIENT WHEN MOWED AT A MIN. HEIGHT OF 2 1/2" - 3".

SOD LAYING AND EDGE DETAIL SCALE: NTS

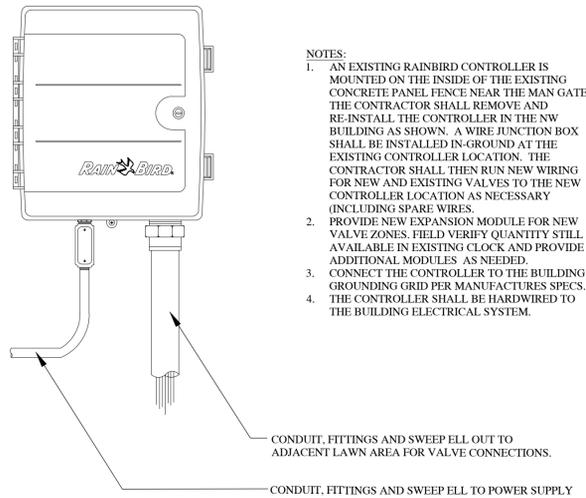


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| PROJECT NO. | SA-1521 |
| DATE | 16 SEPT, 2015 |
| DRAWN BY | SEW |
| CHECKED BY | CBW |
| SHEET DESCRIPTION | PLANTING DETAILS |

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|--------------|-------------|
| SHEET NUMBER | L301 |
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- NOTES:**
1. AN EXISTING RAINBIRD CONTROLLER IS MOUNTED ON THE INSIDE OF THE EXISTING CONCRETE PANEL FENCE NEAR THE MAN GATE. THE CONTRACTOR SHALL REMOVE AND RE-INSTALL THE CONTROLLER IN THE NW BUILDING AS SHOWN. A WIRE JUNCTION BOX SHALL BE INSTALLED IN-GROUND AT THE EXISTING CONTROLLER LOCATION. THE CONTRACTOR SHALL THEN RUN NEW WIRING FOR NEW AND EXISTING VALVES TO THE NEW CONTROLLER LOCATION AS NECESSARY (INCLUDING SPARE WIRES).
 2. PROVIDE NEW EXPANSION MODULE FOR NEW VALVE ZONES. FIELD VERIFY QUANTITY STILL AVAILABLE IN EXISTING CLOCK AND PROVIDE ADDITIONAL MODULES AS NEEDED.
 3. CONNECT THE CONTROLLER TO THE BUILDING GROUNDING GRID PER MANUFACTURERS SPECS. THE CONTROLLER SHALL BE HARDWIRED TO THE BUILDING ELECTRICAL SYSTEM.

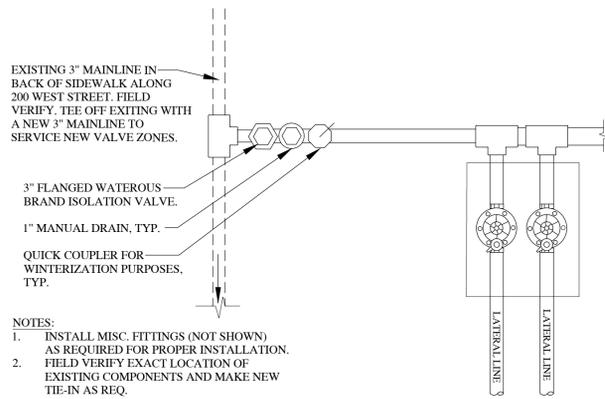
CONDUIT, FITTINGS AND SWEEP ELL OUT TO ADJACENT LAWN AREA FOR VALVE CONNECTIONS.

CONDUIT, FITTINGS AND SWEEP ELL TO POWER SUPPLY

(EXISTING) CONTROLLER DETAIL

SCALE: NTS

A



EXISTING 3" MAINLINE IN BACK OF SIDEWALK ALONG 200 WEST STREET. FIELD VERIFY. TIE OFF EXISTING WITH A NEW 3" MAINLINE TO SERVICE NEW VALVE ZONES.

3" FLANGED WATEROUS BRAND ISOLATION VALVE.

1" MANUAL DRAIN, TYP.

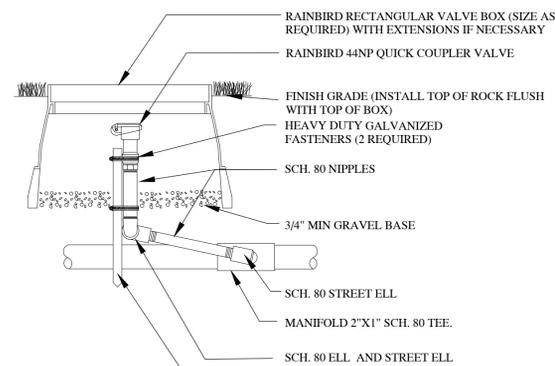
QUICK COUPLER FOR WINTERIZATION PURPOSES, TYP.

- NOTES:**
1. INSTALL MISC. FITTINGS (NOT SHOWN) AS REQUIRED FOR PROPER INSTALLATION.
 2. FIELD VERIFY EXACT LOCATION OF EXISTING COMPONENTS AND MAKE NEW TIE-IN AS REQ.
 3. FIELD VERIFY THAT THE EXISTING MAINLINE IS 3" IN SIZE.
 4. PATCH AND REPAIR SOD AND OTHER EXISTING LANDSCAPE DISTURBANCES AND IRRIGATION AS NECESSARY IN ORDER TO INSTALL THE MAINLINE FROM THIS LOCATION TO PROJECT SITE PER PLAN.

POINT OF CONNECTION DETAIL

SCALE: NTS

E



RAINBIRD RECTANGULAR VALVE BOX (SIZE AS REQUIRED) WITH EXTENSIONS IF NECESSARY

RAINBIRD 44NP QUICK COUPLER VALVE

FINISH GRADE (INSTALL TOP OF ROCK FLUSH WITH TOP OF BOX)

HEAVY DUTY GALVANIZED FASTENERS (2 REQUIRED)

SCH. 80 NIPPLES

3/4" MIN GRAVEL BASE

SCH. 80 STREET ELL

MANIFOLD 2"X1" SCH. 80 TEE.

SCH. 80 ELL AND STREET ELL

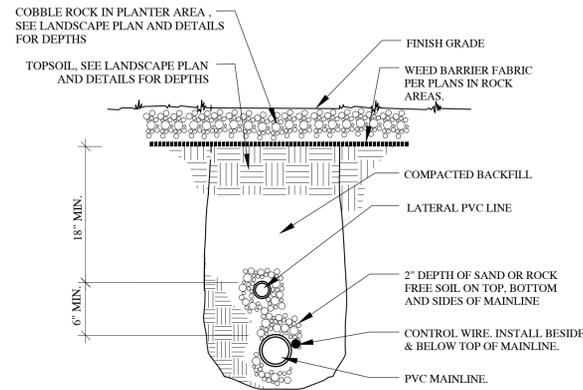
30" X 1" GALVANIZED ANGLE IRON STAKE

- NOTES:**
1. FLUSH ALL PIPING PRIOR TO INSTALLING VALVE.
 2. WRAP ALL THREADS WITH TEFLON TAPE. 1.1/2 TO 2 WRAPS MAXIMUM.
 3. COMPACT SOILS AROUND VALVE BOX TO 80% OF ORIGINAL DRY DENSITY.
 4. INSTALL GEOFABRIC UNDER VALVE BOXES AND TAPE TO PIPE NIPPLES AND VALVE BOX.
 5. BOX COLOR - GREEN IN TURF AND TAN IN PLANTER AREAS.
 6. INSTALL VALVE BOXES 1/2" ABOVE GRADE IN LAWN AREAS AND FLUSH WITH TOP OF COBBLE ROCK IN PLANTER AREAS.
 7. IRRIGATION SYSTEM TO BE BLOWN OUT WITH AIR COMPRESSOR THROUGH QUICK COUPLERS BEFORE FREEZING TEMPERATURES OCCUR, TYP.
 8. INSTALL GALV. FITTINGS FOR THE QUICK COUPLER AT THE P.O.C. ALL OTHER FITTINGS FOR OTHER QUICK COUPLERS (IF ANY ARE REQUESTED BY THE OWNER) MAY BE SCH. 80 PVC.

QUICK COUPLER VALVE DETAIL

SCALE: NTS

I



COBBLE ROCK IN PLANTER AREA. SEE LANDSCAPE PLAN AND DETAILS FOR DEPTHS

TOPSOIL. SEE LANDSCAPE PLAN AND DETAILS FOR DEPTHS

FINISH GRADE

WEED BARRIER FABRIC PER PLANS IN ROCK AREAS

COMPACTED BACKFILL

LATERAL PVC LINE

2" DEPTH OF SAND OR ROCK FREE SOIL ON TOP, BOTTOM AND SIDES OF MAINLINE.

CONTROL WIRE. INSTALL BESIDE & BELOW TOP OF MAINLINE.

PVC MAINLINE.

18" MIN.

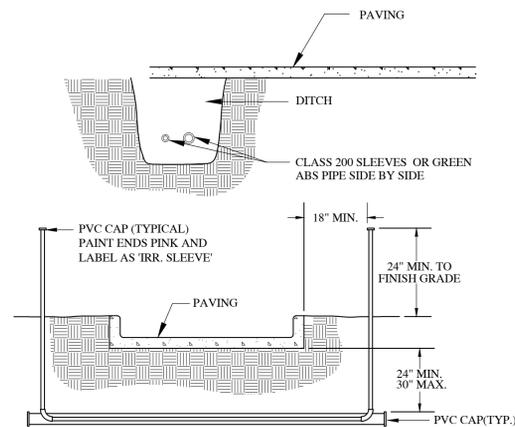
6" MIN.

- NOTES:**
1. PROVIDE SLACK IN CONTROL WIRES AT ALL CHANGES IN DIRECTION.
 2. MAINLINE DEPTH SHALL BE 18"-24".

TRENCH SECTION

SCALE: NTS

B



PAVING

DITCH

CLASS 200 SLEEVES OR GREEN ABS PIPE SIDE BY SIDE

18" MIN.

24" MIN. TO FINISH GRADE

24" MIN. 30" MAX.

PVC CAP (TYP.) PAINT ENDS PINK AND LABEL AS 'IRR. SLEEVE'

PAVING

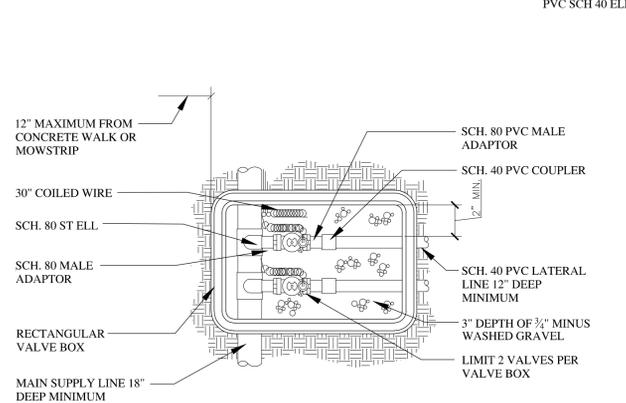
PVC CAP (TYP.)

- NOTE:**
1. WHERE THERE IS MORE THAN ONE SLEEVE, EXTEND THE SMALLER SLEEVE TO 24-INCHES MINIMUM ABOVE FINISH GRADE.
 2. ALL SLEEVES INSTALLED SHALL BE DUCT TAPED TO PREVENT DIRT OR OTHER DEBRIS ENTERING PIPE. ALL SLEEVES SHALL BE IDENTIFIED BY WOOD OR PVC STAKES AND BE SPRAY PAINTED WITH MARKING PAINT. REMOVE STAKES ONCE IRRIGATION SYSTEM IS COMPLETE.

SLEEVING DETAIL

SCALE: NTS

F



12" MAXIMUM FROM CONCRETE WALK OR MOWSTRIP

SCH. 80 PVC MALE ADAPTOR

SCH. 40 PVC COUPLER

30" COILED WIRE

SCH. 80 ST ELL

SCH. 80 MALE ADAPTOR

RECTANGULAR VALVE BOX

MAIN SUPPLY LINE 18" DEEP MINIMUM

SCH. 80 PVC LATERAL LINE 12" DEEP MINIMUM

3" DEPTH OF 3/4" MINUS WASHED GRAVEL

LIMIT 2 VALVES PER VALVE BOX

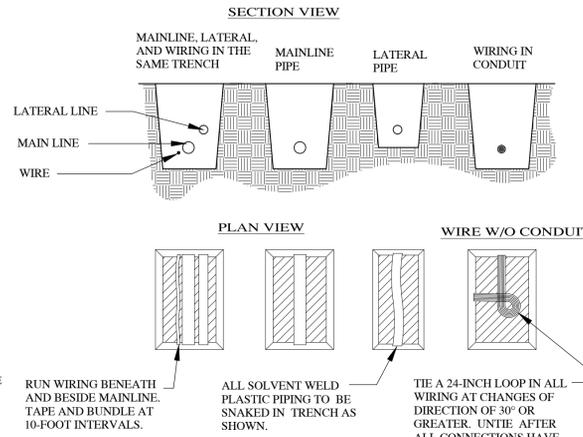
12" MIN.

- NOTE:**
1. ADD PRE-PRINTED CHRISTY I.D. TAGS TO ALL NEW CONTROL VALVES AND CONTROL ZONE KITS. COORDINATE AND LABEL ALL CONTROL WIRE AT CONTROLLER WITH EACH VALVE IN THE FIELD, TYP.

VALVE ASSEMBLY

SCALE: NTS

J



SECTION VIEW

MAINLINE, LATERAL, AND WIRING IN THE SAME TRENCH

MAINLINE PIPE

LATERAL PIPE

WIRING IN CONDUIT

LATERAL LINE

MAIN LINE

WIRE

PLAN VIEW

WIRE W/O CONDUIT

RUN WIRING BENEATH AND BESIDE MAINLINE. TAPE AND BUNDLE AT 10-FOOT INTERVALS.

ALL SOLVENT WELD PLASTIC PIPING TO BE SNAKED IN TRENCH AS SHOWN.

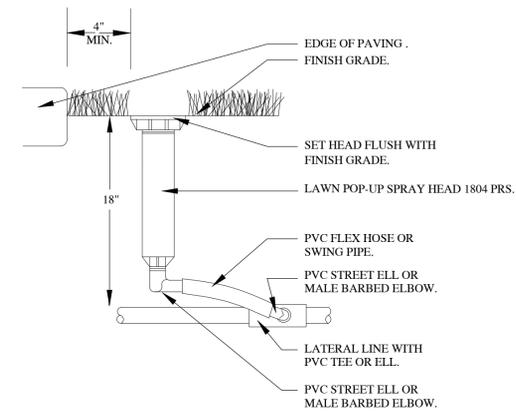
TIE A 24-INCH LOOP IN ALL WIRING AT CHANGES OF DIRECTION OF 30° OR GREATER. UNTIE AFTER ALL CONNECTIONS HAVE BEEN MADE.

- NOTES:**
1. SLEEVE BELOW ALL HARDSCAPE ELEMENTS (WITH CLASS 200 OR SCH. 40 OR SCH. 80 PER SPECS.) TWICE THE DIAMETER OF THE PIPE OR WIRE BUNDLE WITHIN.
 2. FOR PIPE AND WIRE BURIAL DEPTHS, SEE NOTES AND SPECS.
 3. NO LINE VOLTAGE WIRING SHALL BE ALLOWED IN IRRIGATION TRENCHES.

PIPE, WIRE, AND TRENCH DETAIL

SCALE: NTS

C



4" MIN.

EDGE OF PAVING. FINISH GRADE.

SET HEAD FLUSH WITH FINISH GRADE.

LAWN POP-UP SPRAY HEAD 1804 PRS.

18"

PVC FLEX HOSE OR SWING PIPE.

PVC STREET ELL OR MALE BARBED ELBOW.

LATERAL LINE WITH PVC TEE OR ELL.

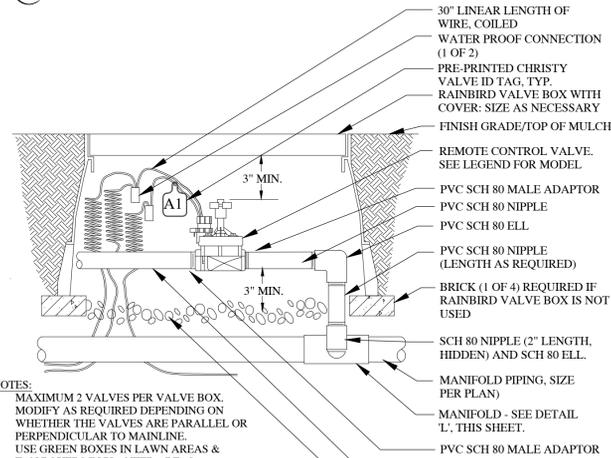
PVC STREET ELL OR MALE BARBED ELBOW.

- NOTES:**
1. CONTRACTOR SHALL INSTALL 4" POP UP SPRAYS IN ALL TURF AREAS.
 2. INSTALL ROTARY NOZZLES ON POP-UP SPRAY HEADS PER PLANS WITH P-45 SPRAY BODY.
 3. INSTALL RVAN NOZZLES AS NECESSARY TO MINIMIZE WATER OVERSPRAY.

POP-UP SPRAY DETAIL

SCALE: NTS

G



30" LINEAR LENGTH OF WIRE, COILED

WATER PROOF CONNECTION (1 OF 2)

PRE-PRINTED CHRISTY VALVE ID TAG, TYP.

RAINBIRD VALVE BOX WITH COVER: SIZE AS NECESSARY

FINISH GRADE/TOP OF MULCH

REMOTE CONTROL VALVE. SEE LEGEND FOR MODEL

3" MIN.

PVC SCH 80 MALE ADAPTOR

PVC SCH 80 NIPPLE

PVC SCH 80 ELL

PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)

BRICK (1 OF 4) REQUIRED IF RAINBIRD VALVE BOX IS NOT USED

SCH 80 NIPPLE (2" LENGTH, HIDDEN) AND SCH 80 ELL.

MANIFOLD PIPING, SIZE PER PLAN

MANIFOLD - SEE DETAIL 'L' THIS SHEET.

PVC SCH 80 MALE ADAPTOR

PVC LATERAL PIPE

3" MINIMUM DEPTH OF 3/4" MINUS WASHED GRAVEL

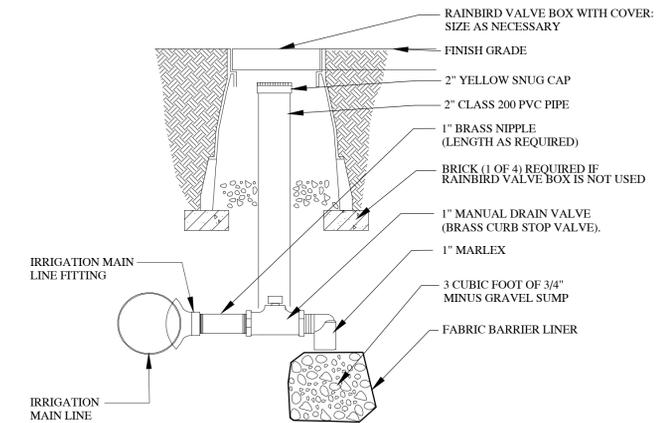
- NOTES:**
1. MAXIMUM 2 VALVES PER VALVE BOX.
 2. MODIFY AS REQUIRED DEPENDING ON WHETHER THE VALVES ARE PARALLEL OR PERPENDICULAR TO MAINLINE.
 3. USE GREEN BOXES IN LAWN AREAS & TAN BOXES IN PLANTER AREAS.
 4. THE PRS-D OPTION IS NOT REQUIRED IF THE PRESSURE AT THE FIRST ROTOR HEAD AFTER THE VALVE IS LESS THAN 75 PSI FOR 5000 SERIES HEADS. THE PRS-D OPTION IS REQUIRED FOR ALL FALCON ZONES.

CONTROL VALVE DETAIL

SCALE: NTS

K

- NOTE:**
1. INSTALL MANUAL DRAINS AT THE POINT OF CONNECTION.
 2. PROVIDE OWNER WITH (2) VALVE KEYS.
 3. AT CONTRACTORS DISCRETION, THE MANUAL DRAIN AS WELL AS THE ISOLATION VALVE MAY BE INSTALLED IN (1) 24" DIAMETER PVC PIPE WITH A CAST IRON LID. INSTALL MIN. 12" DEPTH OF GRAVEL IN BASE 24" DIAMETER SLEEVE.
 4. INSTALL 3" DEPTH OF WASHED GRAVEL IN THE BOTTOM OF THE VALVE BOX.



RAINBIRD VALVE BOX WITH COVER: SIZE AS NECESSARY

FINISH GRADE

2" YELLOW SNUG CAP

2" CLASS 200 PVC PIPE

1" BRASS NIPPLE (LENGTH AS REQUIRED)

BRICK (1 OF 4) REQUIRED IF RAINBIRD VALVE BOX IS NOT USED

1" MANUAL DRAIN VALVE (BRASS CURB STOP VALVE).

1" MARLEX

3 CUBIC FOOT OF 3/4" MINUS GRAVEL SUMP

FABRIC BARRIER LINER

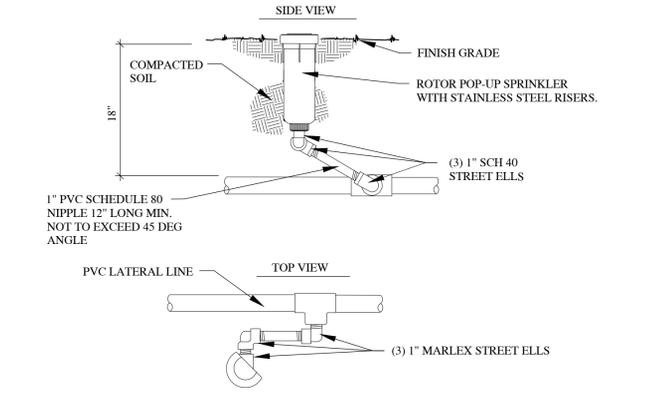
IRRIGATION MAIN LINE FITTING

IRRIGATION MAIN LINE

MANUAL DRAIN DETAIL

SCALE: NTS

D



SIDE VIEW

FINISH GRADE

COMPACTED SOIL

ROTOR POP-UP SPRINKLER WITH STAINLESS STEEL RISERS.

18"

(3) 1" SCH 40 STREET ELLS

1" PVC SCHEDULE 80 NIPPLE 12" LONG MIN. NOT TO EXCEED 45 DEG ANGLE

TOP VIEW

PVC LATERAL LINE

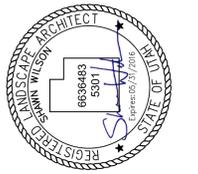
(3) 1" MARLEX STREET ELLS

- NOTES:**
1. INSTALL ROTORS 4" AWAY FROM HARDSCAPE PAVING AND 12" AWAY FROM WALLS, BUILDINGS, FENCES OR OTHER STRUCTURES.
 2. ALL ROTORS TO HAVE STAINLESS STEEL RISERS.
 3. FOR ROTORS WITH FLOWS LESS THAN 8 GPM, STREET ELLS, TEES AND NIPPLES MAY BE 1/2" IN SIZE.

ROTOR DETAIL

SCALE: NTS

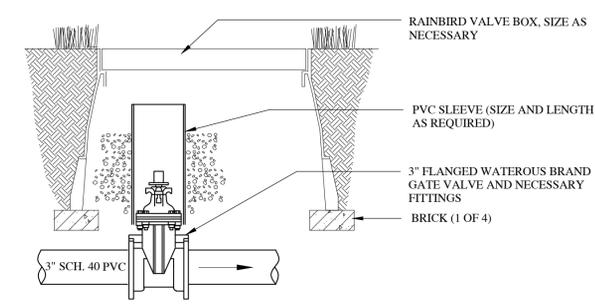
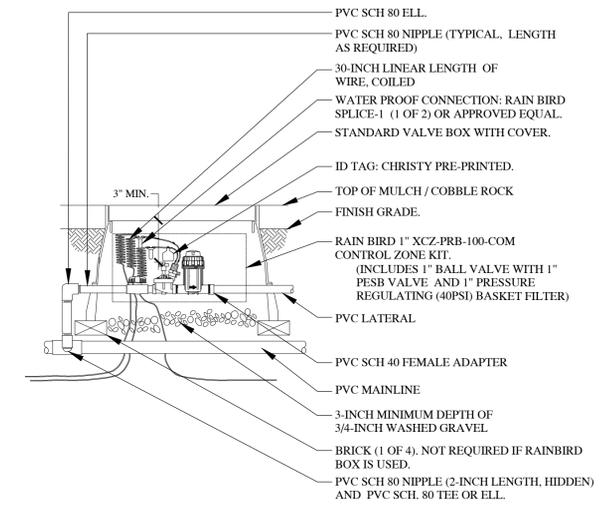
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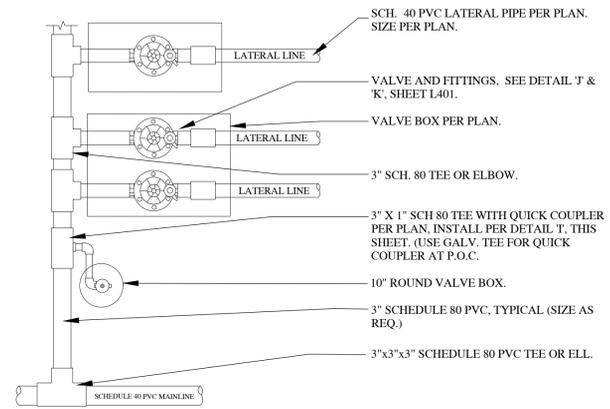
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| PROJECT NO. | SA-1521 |
| DATE | 16 SEPT, 2015 |
| DRAWN BY | SEW |
| CHECKED BY | CBW |
| SHEET DESCRIPTION | IRRIGATION DETAILS |
| SHEET NUMBER | |



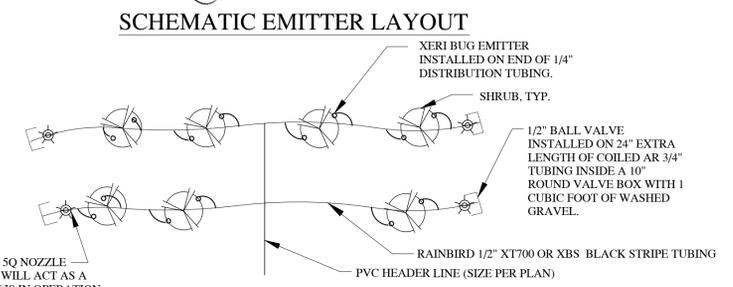
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| | |
| PROJECT NO. | SA-1521 |
| DATE | 16 SEPT, 2015 |
| DRAWN BY | SEW |
| CHECKED BY | CBW |
| SHEET DESCRIPTION | IRRIGATION DETAILS |
| SHEET NUMBER | L402 |



- NOTES:
- PROVIDE SCHOOL DISTRICT WITH (2) OPERATING KEYS.
 - INSTALL MISC. FITTINGS TO CONNECT FLANGE TO PIPING/FITTINGS AS NECESSARY.



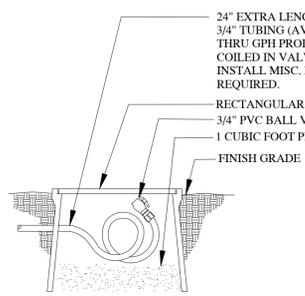
- NOTES:
- ALL VALVE MANIFOLD PIPING AND FITTINGS TO BE 3" SCH. 80 FITTINGS EXCEPT FOR FLOWS LESS THAN 75 GPM MAY HAVE 2-1/2" MANIFOLD FITTINGS.
 - MODIFY MANIFOLD AS NECESSARY DEPENDING ON HOW MANY VALVES ARE IN A CLUSTER.
 - MODIFY AS REQUIRED DEPENDING ON WHETHER THE VALVES ARE PARALLEL OR PERPENDICULAR TO MAINLINE.



- POP-UP SPRAY BODY WITH 5Q NOZZLE TURNED OFF. THIS POP UP WILL ACT AS A FLAG SHOWING DRIP ZONE IS IN OPERATION. INSTALL AT END OF DRIP RUNS PER PLANS.

DRIP IRRIGATION NOTES

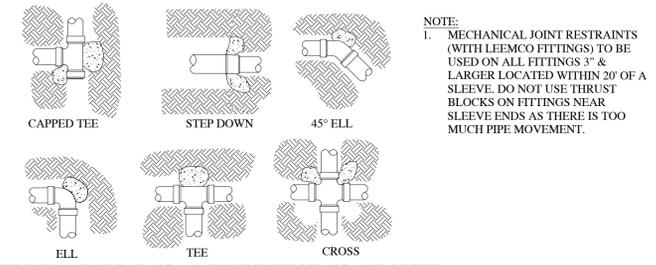
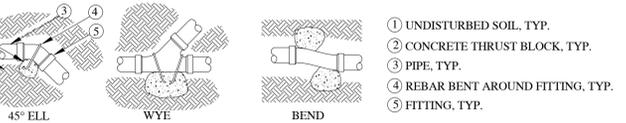
- USE RAIN BIRD XERI-TUBE DRIP SYSTEM IRRIGATION PRODUCTS FOR THE DRIP SYSTEM
- USE CONTROL ZONE KITS AS SPECIFIED IN LEGEND.
- USE RAIN BIRD TUBING AS SPECIFIED IN LEGEND. SPACE EMITTERS EVENLY AROUND ROOTBALL OF TREES, SHRUBS AND PERENNIALS.
- ALL SUPPLY LINES ARE TO BE SIZED PER PLAN SCHEDULE 40 PVC UNLESS OTHERWISE NOTED ON PLAN.
- RUN TUBING PARALLEL TO CONTOURS WHEN POSSIBLE.
- INSTALL EMITTERS PER EMITTER LEGEND. ON-SITE ADJUSTMENTS TO DRIP SYSTEM MAY BE NECESSARY DUE TO DIFFERING SOIL CONDITIONS. LANDSCAPE CONTRACTOR SHALL MAKE NECESSARY ADJUSTMENTS TO ENSURE PROPER WATERING OF ENTIRE DRIP SYSTEM.
- PVC LATERAL TO BE INSTALLED WHERE DRIPLINE RUNS UNDER SIDEWALKS OR OTHER PAVED AREAS AS INDICATED ON PLANS.
- FLOW THROUGH XBS PIPE SHALL NOT EXCEED 4 GPM.
- L.C. SHALL INSTALL PC DIFFUSER CAPS ON PC-05 EMITTERS PER MANUFACTURER'S SPECS.
- WHEN NATIVE PLANTS MATURE EMITTERS MAY BE ABLE TO BE DOWNSIZED DUE TO REDUCED WATER REQUIREMENTS OF NATIVE PLANTS. SCHOOL DISTRICT WILL BE RESPONSIBLE FOR ADJUSTING QUANTITY AND/OR SIZE OF EMITTERS AS PLANTS MATURE.
- DUE TO OVER SPRAY OF LAWN AREAS INTO PLANTER AREAS, SOME PLANTS MAY NOT NEED AS MANY DRIP EMITTERS AS REQUESTED OR THE EMITTERS MAY BE ABLE TO BE DOWNSIZED OR ELIMINATED ALTOGETHER. CONTRACTOR SHALL MAKE ADJUSTMENTS AS NECESSARY SO THAT PLANTS DO NOT GET OVER OR UNDER WATERED.



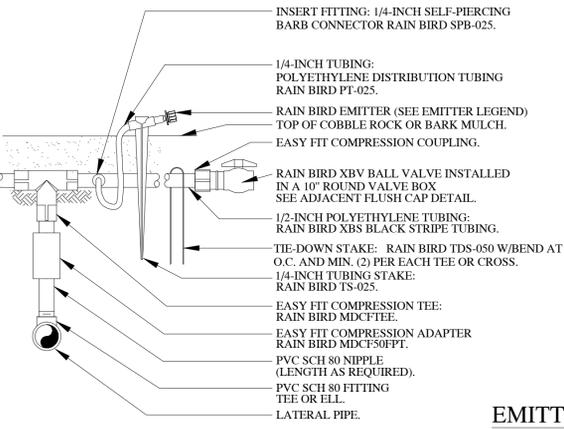
FLUSH CAP BOX DETAIL

EMITTER LEGEND

| PLANT TYPE | # OF EMITTERS | TYPE OF EMITTER |
|------------|---------------|-----------------|
| SHRUBS | 2 | XB-20PC |



THRUST BLOCK DETAIL



- NOTE:
- USE XERIMAN TOOL XM-TOOL TO INSERT CONNECTOR DIRECTLY INTO 1/2-INCH POLYETHYLENE TUBING.

XERI TUBE DETAIL





GENERAL NOTES

- A. COORDINATE WITH PLUMBING, CIVIL, ELECTRICAL, AND SPECIFICATIONS. FOR ADDITIONAL ITEMS.
- B. COORDINATE WITH LANDSCAPE FOR ADDITIONAL DETAILS AND ALT-2

SHEET NOTES

- 1 FLAG POLE SEE DETAIL 7/AS0.2
- 2 SOD AREAS SEE LANDSCAPE DRAWINGS.
- 3 4" CONCRETE WALK. SEE CIVIL DRAWINGS FOR DETAILS.
- 4 POWER TRANSFORMER AND CONCRETE PAD. SIZE VERIFY WITH UTILITY POWER COMPANY. ALSO SEE CIVIL AND ELECTRICAL.
- 5 GAS METER AND CONCRETE SLAB VERIFY SIZE AND ALL CLEARANCES
- 6 LANDSCAPE BED. SEE LANDSCAPE DRAWINGS.
- 7 CONCRETE MOW STRIP. SEE LANDSCAPE FOR DETAILS.
- 8 DENOTES FDC - VERIFY WITH SPECS AND FIRE FLOW ANALYSIS PRIOR TO INSATLLATION.
- 9 MONUMENT SIGN DETAIL. SEE DETAIL 2/AS0.2.
- 10 POLE FOR SECURITY CAMARAS, SEE ELECTRICAL.
- 11 PAINTED CONCRETE FILLED PIPE BOLLARDS, SEE DETAILS 6/AS0.2.
- 12 PROVIDED MATCHING BRICK DUMPSTER ENCLOSURES ATTACHED TO EXISTING DUMPSTER. PROVIDE 6" CONCRETE SLAB, TOP OF WALL FLASHING, AND 4 BACK BOLLARDS DUMPSTER STOPS. CONCRETE FOOTING AND FOUNDATION AND LOCKING GATE TO MATCH EXISTING ENCLOSURE.
- 13 EXISTING DUMPSTER TO REMAIN.
- 14 HATCHED AREA INDICATES EXISTING PARKING TO REMAIN.
- 15 EXISTING CONCRETE WALL.

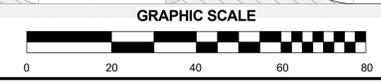
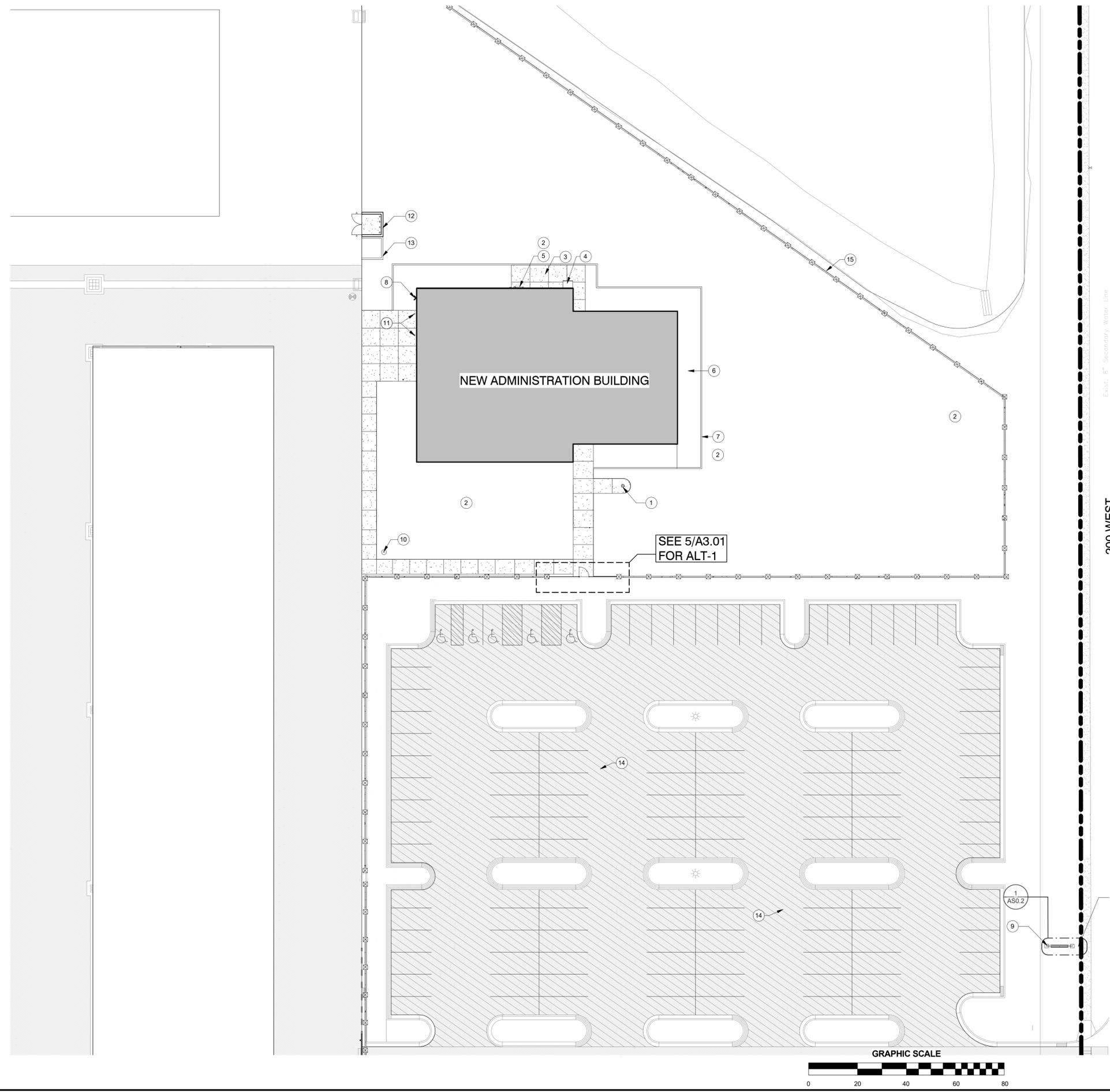
TRANSPORTATION WEST ADMIN. BLDG. - PHASE II

ALPINE SCHOOL DISTRICT
337 NORTH 200 WEST
SAFATOGA SPRINGS, UT 84045

| DATE | REVISION/ISSUE |
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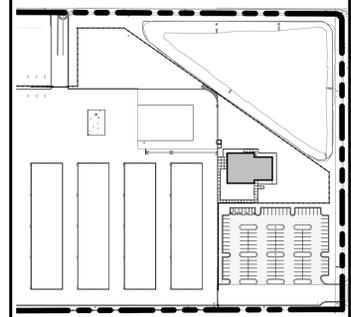
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| PROJECT NO. | SA - 1521 |
| DATE | SEPTEMBER 23, 2015 |
| DRAWN BY | JHB |
| CHECKED BY | GDK |
| SHEET DESCRIPTION | ARCHITECTURAL SITE PLAN |
| SHEET NUMBER | |

AS0.1



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

1



KEY PLAN
NOT SCALE

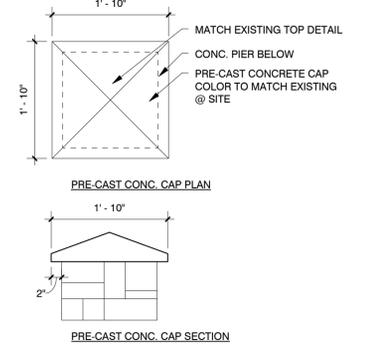
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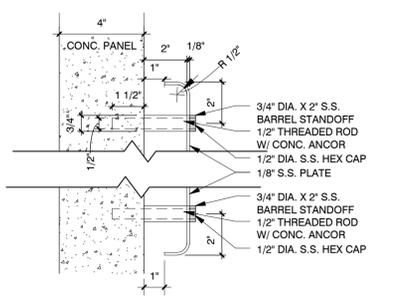
TRANSPORTATION WEST ADMIN. BLDG. - PHASE II
 ALPINE SCHOOL DISTRICT
 337 NORTH 200 WEST
 SAFATOGA SPRINGS, UT 84045

| DATE | REVISION/ISSUE |
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| PROJECT NO. | SA - 1521 |
| DATE | SEPTEMBER 23, 2015 |
| DRAWN BY | JHB/SW |
| CHECKED BY | DV |
| SHEET DESCRIPTION ARCHITECTURAL SITE DETAILS | |
| SHEET NUMBER | |

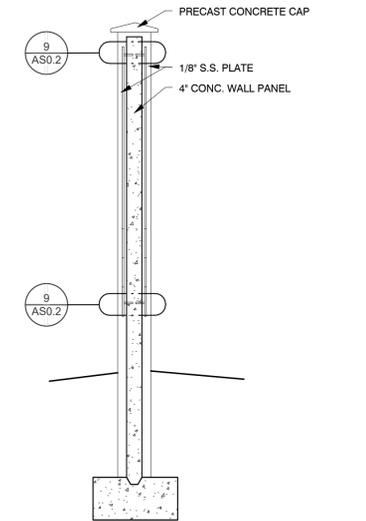
AS0.2



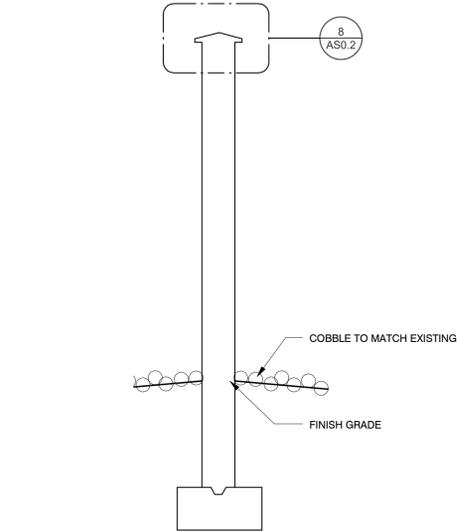
PRECAST CONCRETE CAP
SCALE: 3/4" = 1'-0" 8



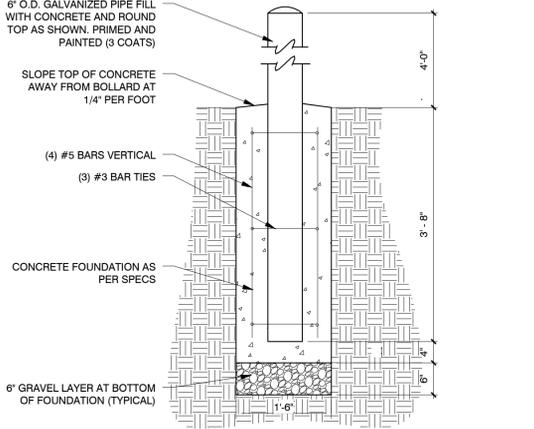
S.S. PLATE CONNECTION DETAIL
SCALE: 3" = 1'-0" 9



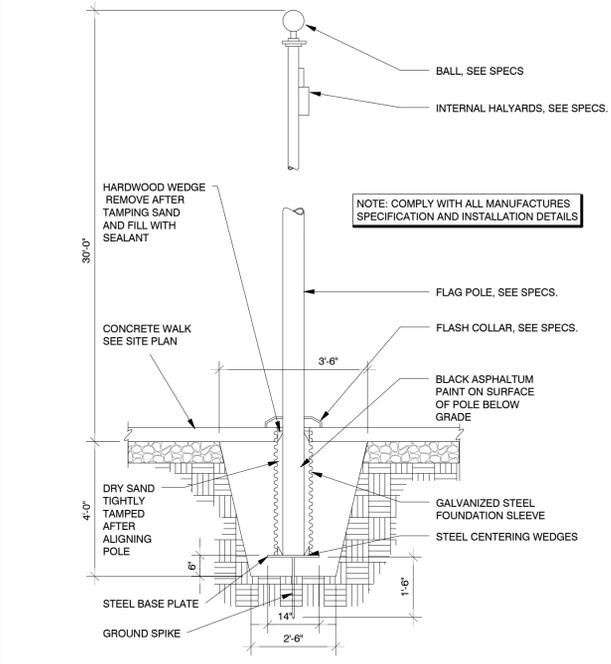
PIER SECTION
SCALE: 1/2" = 1'-0" 4



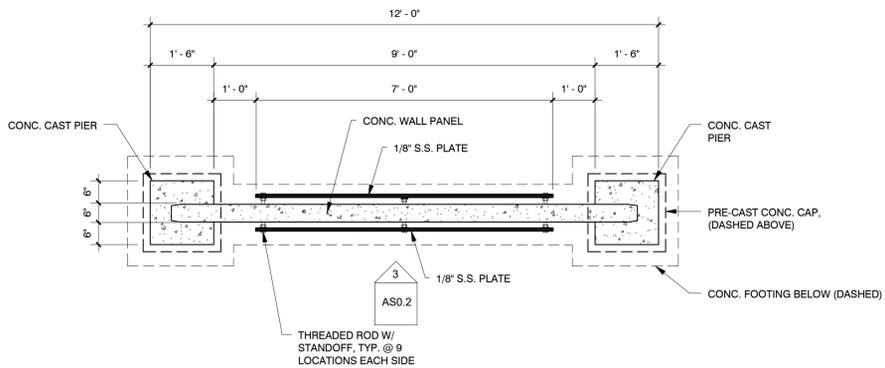
PIER SECTION 2
SCALE: 1/2" = 1'-0" 5



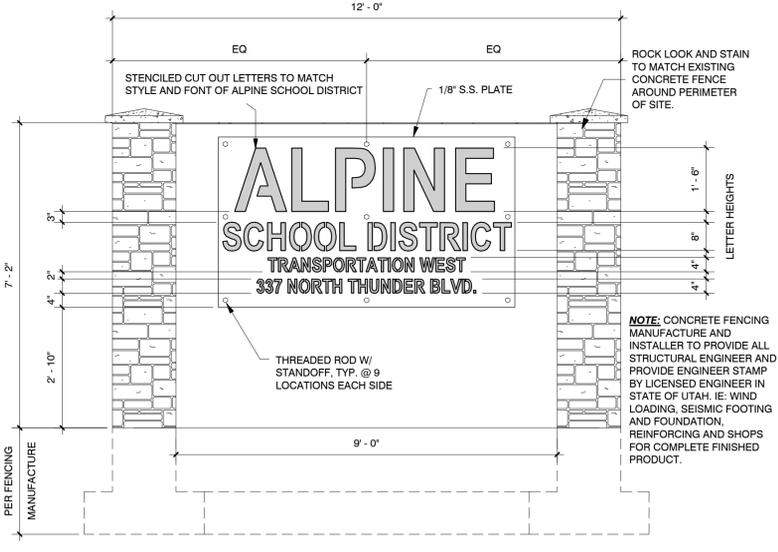
BOLLARD DETAIL
SCALE: 3/4" = 1'-0" 6



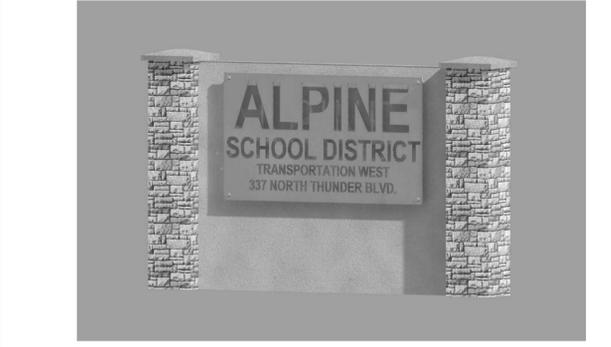
Flag Pole Footing
SCALE: 1/2" = 1'-0" 7



SIGN PLAN
SCALE: 1/2" = 1'-0" 1



SIGN ELEVATION
SCALE: 1/2" = 1'-0" 2



ENTRY SIGN RENDERING
SCALE: 1/2" = 1'-0" 3

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| ROOM OCCUPANCY SCHEDULE | | | | | |
|-------------------------|--------------------|---|--------------------------|--------|---------------|
| RM. # | RM. NAME | OCCUPANCY CLASSIFICATION | AREA PER OCCUPANT (P.O.) | AREA | OCCUPANT LOAD |
| 101 | DATA / ELEC | ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT | 300 SF | 82 SF | 1 |
| 102 | OFFICE | OFFICE | 100 SF | 110 SF | 2 |
| 103 | OFFICE | OFFICE | 100 SF | 141 SF | 2 |
| 104 | OFFICE | OFFICE | 100 SF | 86 SF | 1 |
| 105 | OFFICE | OFFICE | 100 SF | 84 SF | 1 |
| 106 | OFFICE | OFFICE | 100 SF | 86 SF | 1 |
| 107 | CONFERENCE | ASSEMBLY: WITHOUT FIXED SEATS: UNCONCENTRATED (TABLES AND CHAIRS) | 15 SF | 171 SF | 12 |
| 108 | OPEN TRAINING AREA | ASSEMBLY: WITHOUT FIXED SEATS: UNCONCENTRATED (TABLES AND CHAIRS) | 15 SF | 468 SF | 32 |
| 109 | RECEPTION | OFFICE | 100 SF | 191 SF | 2 |
| 110 | OFFICE | OFFICE | 100 SF | 99 SF | 1 |
| 111 | OFFICE | OFFICE | 100 SF | 91 SF | 1 |
| 113 | STOR. | ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT | 300 SF | 28 SF | 1 |
| 117 | CUSTODIAL | ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT | 300 SF | 90 SF | 1 |
| 121 | LOUNGE | ASSEMBLY: WITHOUT FIXED SEATS: UNCONCENTRATED (TABLES AND CHAIRS) | 15 SF | 394 SF | 27 |
| 122 | STORAGE | ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT | 300 SF | 582 SF | 2 |
| 124 | CLASSROOM | EDUCATIONAL: CLASSROOM AREA | 20 SF | 948 SF | 48 |
| 125 | CLASSROOM | EDUCATIONAL: CLASSROOM AREA | 20 SF | 900 SF | 45 |
| TOTAL OCCUPANT LOAD | | | | | 180 |

GRAPHIC SYMBOLS

| | | | |
|-----------------------------|----------------------|------------------------|------------|
| RIGID INSULATION | ASPHALT | ENGINEERED FILL | WALL TYPES |
| PLYWOOD | SYNTHETIC STUCCO | CONCRETE | |
| FINISHED HARDWOOD | BATT INSULATION | MASONRY | |
| BLOCKING | EARTH | NEW SPOT ELEVATION | |
| GLASS | METAL STUDS | EXISTG. SPOT ELEVATION | |
| SECTION/ EXTERIOR ELEVATION | GYPSUM BOARD | PROPERTY LINE | |
| DETAIL/ ENLARGED PLAN | WINDOW TYPE | MARKER/TACK BOARD | |
| | CEILING TYPE/ HEIGHT | DOOR NUMBER | |
| INTERIOR ELEVATION | ELEVATION MARKER | SHEET NOTE | |

PLUMBING FIXTURES

| GROUP OCCUPANCY | E - EDUCATIONAL | |
|-------------------------------|-----------------|--------------|
| AREA SQ. FT. / | 6,827 SQ. FT. | |
| OCCUPANT FACTOR | VARIES | |
| ACTUAL OCCUPANCY | 180 OCCUPANTS | |
| | MENS (50%) | WOMENS (50%) |
| REQUIRED # WATER CLOSETS | 2 (1/50) | 2 (1/50) |
| REQUIRED # LAVATORIES | 4 (1/50) | |
| REQUIRED # DRINKING FOUNTAINS | 2 (1/100) | |
| | REQ. | PROV. |
| WATER CLOSETS | 4 | 9 |
| LAVATORIES | 4 | 6 |
| DRINKING FOUNTAINS | 2 | 2 |

CODE ANALYSIS - IBC 2012

| ALPINE SCHOOL DISTRICT WEST TRANSPORTATION ADMIN BLDG. | |
|--|----------------------------|
| OCCUPANCY SECTION 305 | E - EDUCATIONAL |
| CONSTRUCTION TYPE SECTION 601 | TYPE IIB |
| BASIC ALLOWABLE AREA PER TABLE 503 | 9,500 SQ. FT. |
| BUILDING HEIGHT | SINGLE STORY |
| FIRE SPRINKLER SYSTEM SECTION 903 | YES |
| ROOF COVERING TABLE 1505 | CLASS A |
| EGRESS REQUIREMENTS TABLE 1015.1 | 180 OCCUPANTS - 2 REQUIRED |
| ACTUAL BUILDING AREA | 6,827 SQ. FT. |

DEFERRED SUBMITTALS

THE STATE FIRE MARSHAL IS THE ONLY JURISDICTION THAT REQUIRES DEFERRED SUBMITTALS. THOSE SUBMITTALS ARE AS FOLLOWS:

- FIRE ALARM DRAWINGS.
- FIRE PROTECTION AND SPRINKLER DRAWINGS AND SPECIFICATIONS.

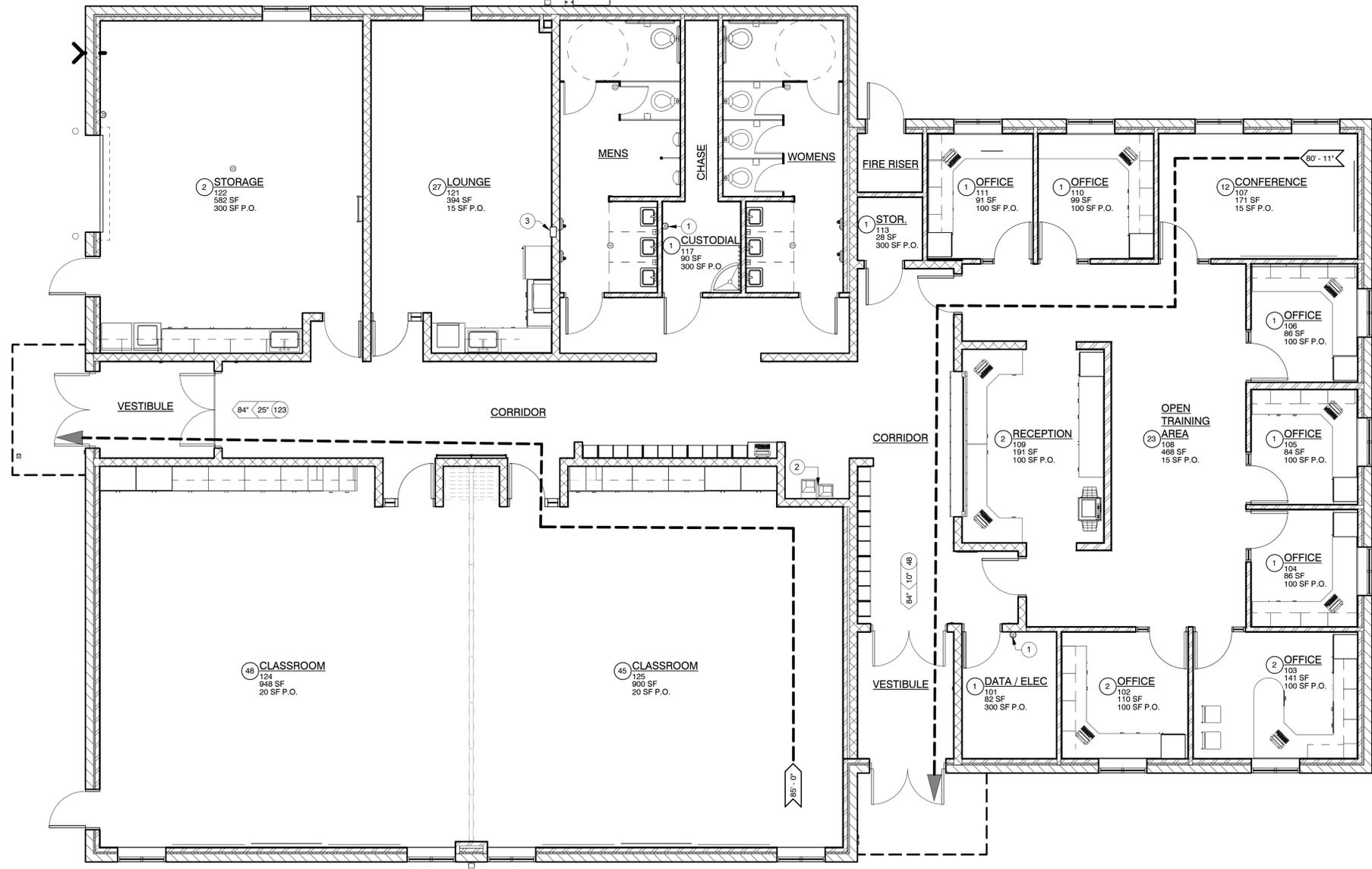
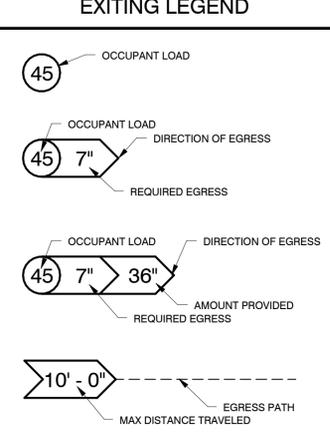
THESE DEFERRED DRAWING SUBMITTALS WILL BE SUBMITTED TO THE FIRE MARSHAL IN APPROX. 3-4 WEEKS FOR REVIEW AND FINAL APPROVAL.

GENERAL NOTES

- FILL VOIDS BETWEEN ROOM SEPARATION WALLS AND ROOF DECK WITH PRE-FORMED MINERAL WOOL OR SLOD GROUT OR SPRAY FIRE SMOKE STOPPING.
- THIS PROJECT SHALL BE INSTALLED ACCORDING TO THE LATEST EDITION OF THE FOLLOWING STANDARDS AND AMENDMENTS TO THEM AS ADOPTED BY THE AUTHORITY HAVING JURISDICTION.
 - A. 2012 NEC (NATIONAL ELECTRICAL CODE)
 - B. NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)
 - C. UL (UNDERWRITERS LABORATORIES, INC.)
 - D. NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOC.)
 - E. IBC 2012 (INTERNATIONAL BUILDING CODE)
 - F. IFCC 2012 (INTERNATIONAL FIRE CODE)
 - G. 2012 IECC (INTERNATIONAL ENERGY CONSERVATION CODE)
 - H. 2012 IEC (INTERNATIONAL ELECTRICAL CODE)
 - J. STATE AND LOCAL BUILDING AUTHORITY AND CODES
 - K. ASHRAE 90.1 (2010)
- REFER TO SPECIFICATION SECTION 078413-7 THRU 078413-10 FOR PENETRATION AND FIRE STOPPING REQUIREMENTS.
- THE CONTRACTOR SHALL PROVIDE FIRE SPRINKLING FOR THE NEW CONSTRUCTION. SEE SPECIFICATIONS.
- SEE ALTERNATE SHEETS FOR ALTERNATE PLANS AND DETAILS.

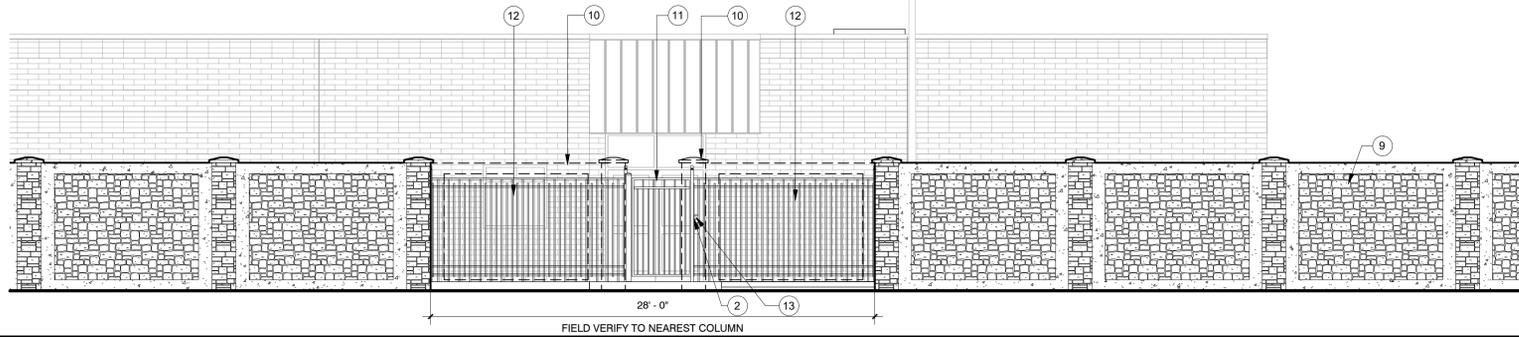
SHEET NOTES

- BRACKET MOUNTED FIRE EXTINGUISHER. COORDINATE LOCATIONS WITH ARCHITECTURAL/FIRE PROTECTION PLANS.
- DRINKING FOUNTAIN, 1 EACH HIGH/LOW. SEE PLUMBING AND ELECTRICAL PLANS.
- FIRE EXTINGUISHER AND SEMI RECESSED CABINET SEE DETAIL 10/A7.01.

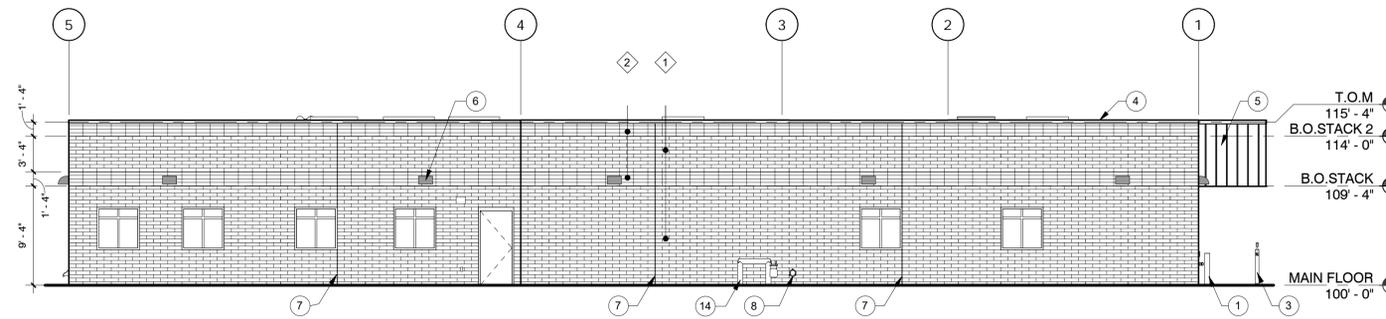


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 337 NORTH 200 WEST
 SAFATOGA SPRINGS, UT 84045

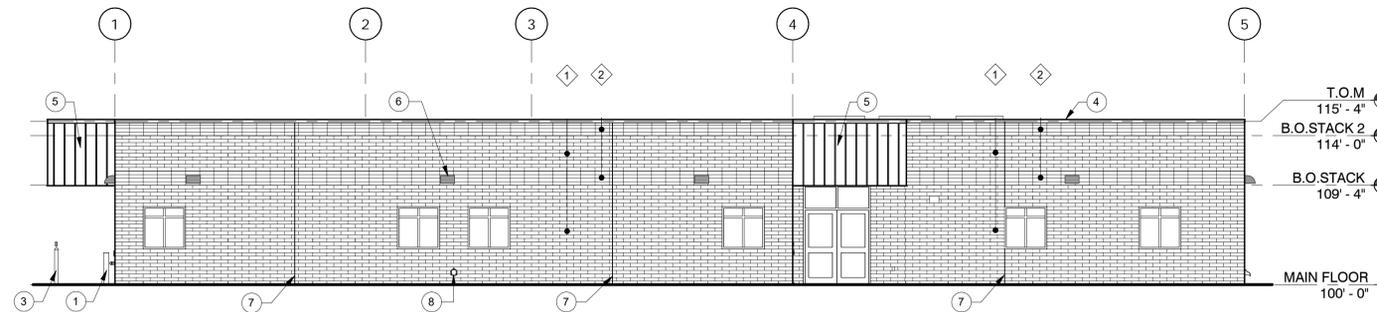
| DATE | REVISION/ISSUE |
|-------------------|----------------------|
| | |
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| | |
| PROJECT NO. | SA - 1521 |
| DATE | SEPTEMBER 23, 2015 |
| DRAWN BY | JHB |
| CHECKED BY | GDK |
| SHEET DESCRIPTION | CODE COMPLIANCE PLAN |
| SHEET NUMBER | |



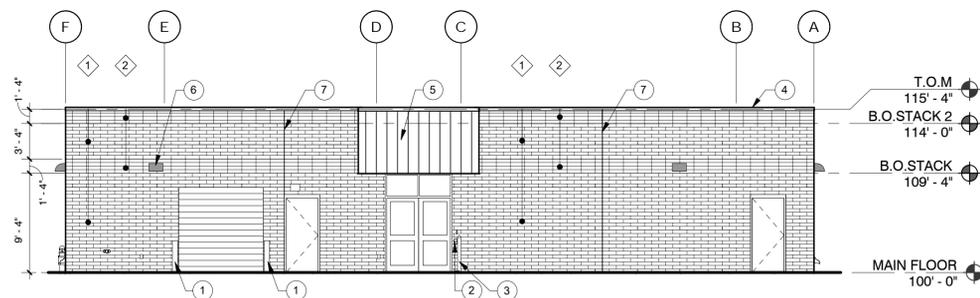
ALTERNATE 1, FRONT GATE
SCALE: 3/16" = 1'-0" 5



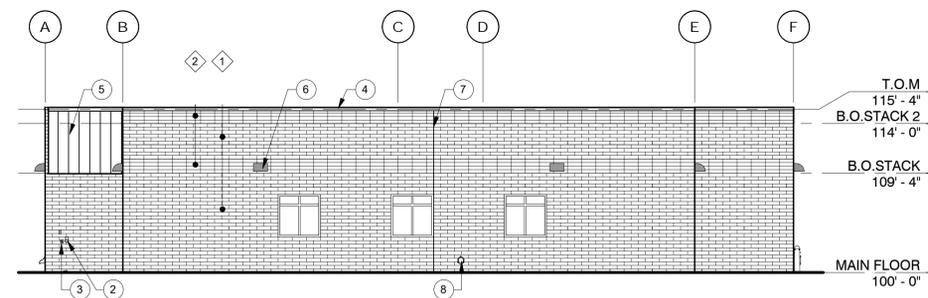
EAST EXTERIOR ELEVATION
SCALE: 1/8" = 1'-0" 4



WEST EXTERIOR ELEVATION
SCALE: 1/8" = 1'-0" 3



SOUTH EXTERIOR ELEVATION
SCALE: 1/8" = 1'-0" 2



NORTH EXTERIOR ELEVATION
SCALE: 1/8" = 1'-0" 1

GENERAL NOTES

- A. CONTRACTOR TO PROVIDE BRICK MOCK-UP FOR DISTRICT APPROVAL PRIOR TO CONSTRUCTION.
- B. MASONRY EXPANSION JOINTS 30' - 0" O.C. MAX.

EXT. MASONRY LEGEND

| # | TYPE | BOND | FINISH | COLOR |
|---|-------|---------|--------|--------------|
| 1 | ATLAS | RUNNING | MATTE | MOUNTAIN RED |
| 2 | ATLAS | STACKED | MATTE | TUMBLEWEED |

SHEET NOTES

- 1 METAL CONC. FILLED PIPE BOLLARDS, PAINTED (TYP.) EACH SIDE OF BAY DOORS. SEE DETAIL 6/ASO.2.
- 2 CARD READER 42" (AFF) RUN CONDUIT AND BOXES TO LOCATIONS.
- 3 ADA OPENER ACTUATOR MOUNTED AT 36" HIGH (ON POST WHERE OCCURS) SEE DETAIL 12/A7.01.
- 4 PRE-FINISHED METAL CAP FLASHING AND DRIP EDGE.
- 5 PRE-FINISHED METAL FASCIA PANEL. SEE SPECS.
- 6 EXTERIOR LIGHT SEE ELECTRICAL DRAWINGS.
- 7 CONTROL JOINTS AT 30' - 0" MAX.
- 8 OVERFLOW DAYLIGHT LOCATION - COORDINATE W/ MECHANICAL.
- 9 EXISTING PRECAST SCREEN WALL.
- 10 EXISTING PRECAST SCREEN WALL PANELS AND COLUMNS TO BE REMOVED AND RETURNED TO OWNER.
- 11 RE-USE EXISTING GATE.
- 12 NEW DECROITIVE FENCE TO MATCH EXISTING.
- 13 REUSE EXISTING CARD READER.
- 14 GAS METER AND CONCRETE SLAB VERIFY SIZE AND ALL CLEARANCES.

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| DATE | REVISION/ISSUE |
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| | |
| | |
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PROJECT NO. SA - 1521
 DATE SEPTEMBER 23, 2015
 DRAWN BY CWP
 CHECKED BY GK
 SHEET DESCRIPTION EXTERIOR ELEVATIONS

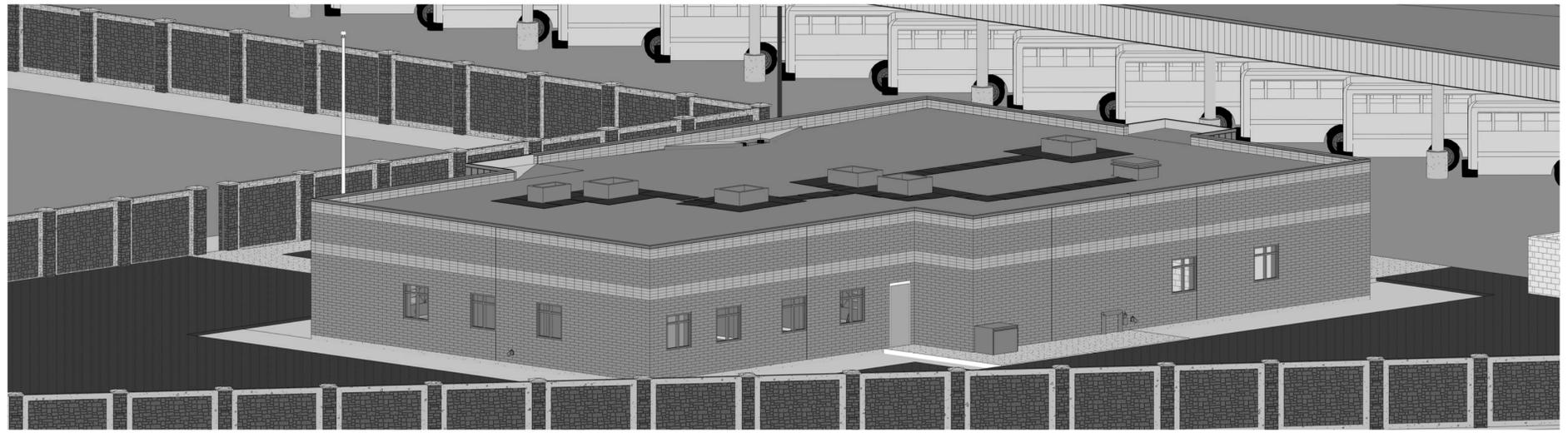
SHEET NUMBER
A3.01

10/8/2015 4:24:42 PM C:\Users\jburton\SANDSTROM\F03\BIB\Desktop\CURRENT_JOBS\DESIGN\1521 WEST TRANSPORTATION ADMIN BLDG. - PHASE II\jburton.rvt



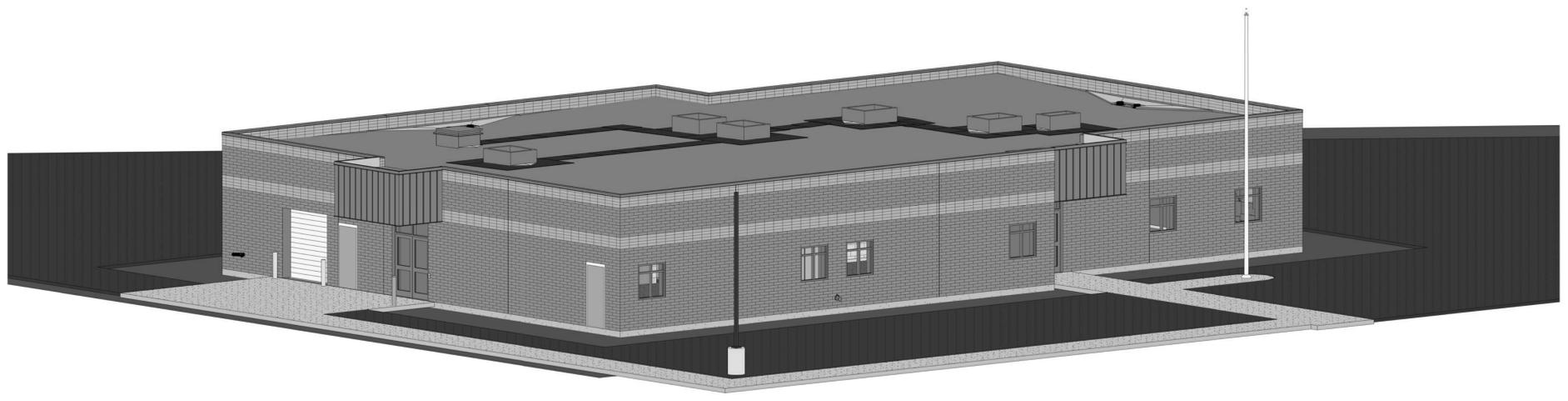
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FRONT RIGHT PERSPECTIVE
SCALE:

2



BACK LEFT PERSPECTIVE
SCALE:

1

TRANSPORTATION WEST ADMIN. BLDG. - PHASE II

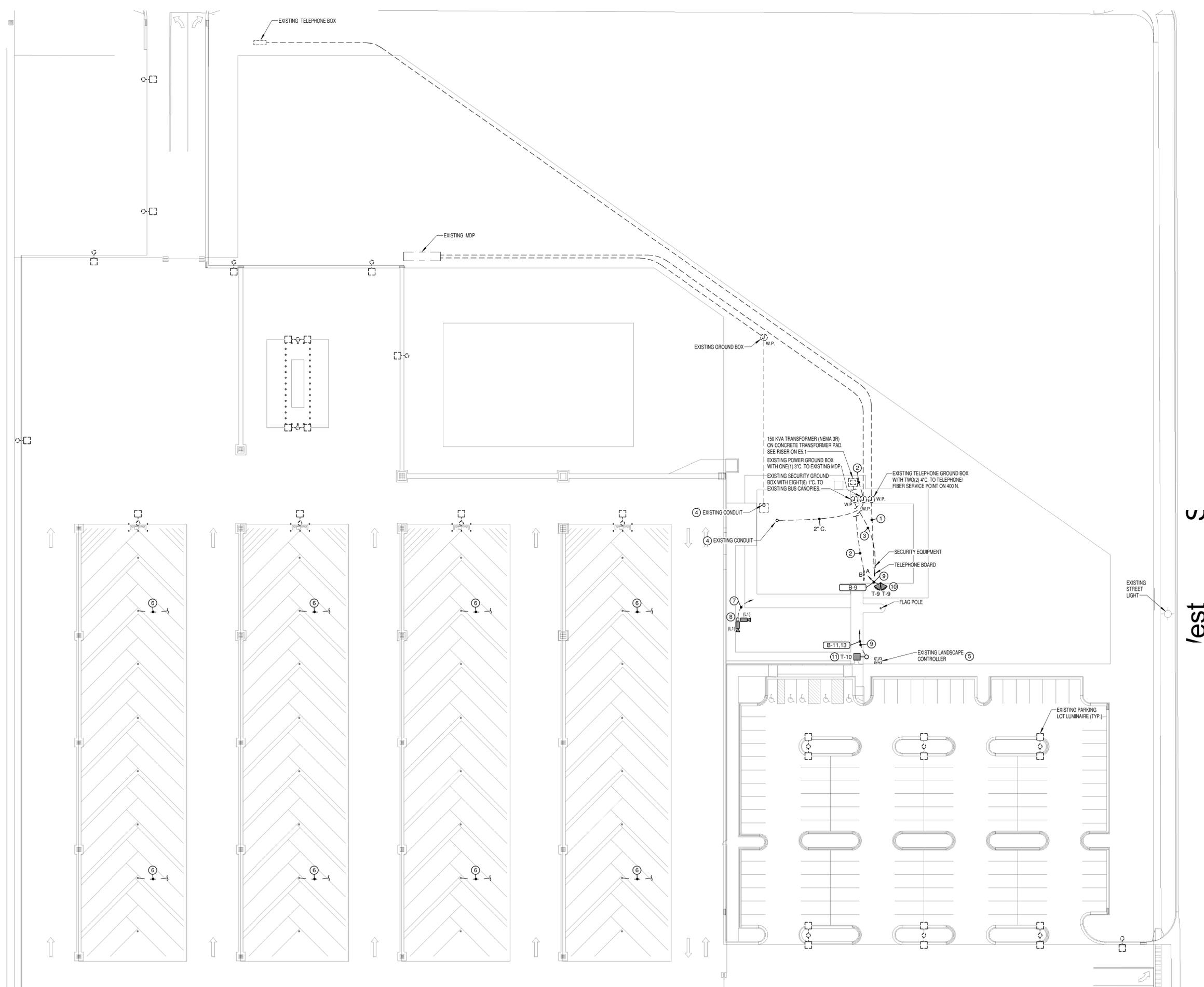
ALPINE SCHOOL DISTRICT
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SAFATOGA SPRINGS, UT 84045

| DATE | REVISION/ISSUE |
|------|----------------|
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| PROJECT NO. | SA - 1521 |
| DATE | SEPTEMBER 23, 2015 |
| DRAWN BY | Author |
| CHECKED BY | Checker |
| SHEET DESCRIPTION: PERSPECTIVES | |

SHEET NUMBER
A3.02

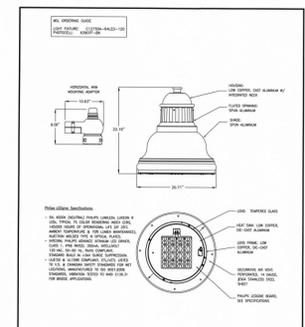
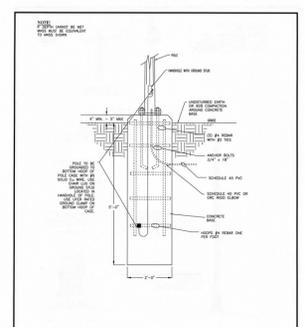
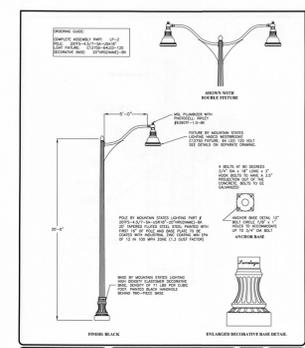
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E1.0 KEY NOTES

- 1 PROVIDE AND INSTALL TWO (2) CONDUITS FROM EXISTING GROUND BOX TO TELEPHONE BOARD. VERIFY EXACT LOCATION OF GROUND BOX IN FIELD. PRIOR TO BID. RELOCATE GROUND BOX AS REQUIRED IF EXISTING LOCATION INTERFERES WITH NEW CONSTRUCTION.
- 2 PROVIDE AND INSTALL A 3" CONDUIT FROM EXISTING GROUND BOX TO 150 KVA TRANSFORMER AND THEN TWO (2) 2 1/2" CONDUITS TO PANEL "A". VERIFY EXACT LOCATION OF GROUND BOX IN FIELD. PRIOR TO BID. RELOCATE GROUND BOX AS REQUIRED IF EXISTING LOCATION INTERFERES WITH NEW CONSTRUCTION.
- 3 PROVIDE AND INSTALL EIGHT (8) 1" CONDUITS FROM EXISTING GROUND BOX TO SECURITY EQUIPMENT IN BUILDING. VERIFY EXACT LOCATION OF GROUND BOX IN FIELD. PRIOR TO BID. RELOCATE GROUND BOX AS REQUIRED IF EXISTING LOCATION INTERFERES WITH NEW CONSTRUCTION.
- 4 EXISTING CONDUIT STUBBED UP FOR FUTURE USE. REWORK CONDUIT TO NORTH SIDE OF CONCRETE AND MARK LOCATION ON PLAN.
- 5 RELOCATE EXISTING LANDSCAPE CONTROLLER TO STORAGE ROOM 121 (NORTH OF OVERHEAD DOOR) AS DIRECTED BY OWNER. VERIFY EXACT LOCATION OF EXISTING CONTROLLER IN FIELD. PRIOR TO BID.
- 6 EXISTING 1" CONDUIT FROM BUS CANOPY TO EXISTING SECURITY GROUND BOX.
- 7 PROVIDE AND INSTALL TWO (2) CAT. 6 CABLES AND AN 18-4 TWISTED PAIR CABLE IN 1 1/4" C. FROM POLE TO SECURITY EQUIPMENT IN DATA/ELEC ROOM.
- 8 PROVIDE AND INSTALL A 25 FT. BLACK, STEEL, LIGHT POLE FOR SECURITY CAMERAS. INSTALL CAMERAS ON POLE AT 24'-0". AIM AS DIRECTED BY OWNER. INSTALL BASE AS INDICATED IN DETAIL 1/ED-1.
- 9 ROUTE CIRCUIT THROUGH LIGHTING CONTACTOR #1 ADJACENT TO PANEL.
- 10 PROVIDE AND INSTALL FLAG POLE LIGHTS ON BUILDING AS INDICATED IN ARCHITECTURAL ELEVATIONS.
- 11 PROVIDE AND INSTALL POLE BASE PER SARATOGA SPRINGS CITY DETAIL "LP-2B".
- 12 POST-APPROVAL ALTERATIONS TO LIGHTING PLANS OR INTENDED SUBSTITUTIONS FOR APPROVED LIGHTING EQUIPMENT SHALL BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL.
- 13 THE CITY RESERVES THE RIGHT TO CONDUCT POST-INSTALLATION INSPECTIONS TO VERIFY COMPLIANCE WITH THE CITY'S REQUIREMENTS AND APPROVED LIGHTING PLAN COMMITMENTS, AND IF DEEMED APPROPRIATE BY THE CITY, TO REQUIRE REMEDIAL ACTION AT NO EXPENSE TO THE CITY.
- 14 ALL EXTERIOR LIGHTING SHALL MEET IESNA FULL CUTOFF CRITERIA UNLESS OTHERWISE APPROVED BY THE CITY.

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TRANSPORTATION WEST ADMIN. BLDG. - PHASE II

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SARATOGA SPRINGS, UTAH 84045

| DATE | REVISION/ISSUE |
|-------------------|----------------------|
| | |
| PROJECT NO. | 1539 |
| DATE | September 2015 |
| DRAWN BY | MJE |
| CHECKED BY | MSI |
| SHEET DESCRIPTION | ELECTRICAL SITE PLAN |
| SHEET NUMBER | E1.0 |

ELECTRICAL SITE PLAN
1" = 30'-0" 1

