

# LIBERTY WARD PARKING LOT ADDITION

Liberty, Utah



ARCHITECTS

620 24TH STREET  
OGDEN, UT 84401  
BP-ARCHITECTS.NET  
P 801.394.3033  
F 801.394.9064



## PROJECT TEAM:

### OWNER:

CORPORATION OF THE PRESIDING BISHOP OF  
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS  
A UTAH CORPORATION SOLE  
50 EAST NORTH TEMPLE STREET  
SALT LAKE CITY, UTAH 84150

### ARCHITECT:

BOTT PANTONE ARCHITECTS  
620 24TH STREET  
OGDEN, UTAH 84401  
801.394.3033

### LANDSCAPING:

CACHE-LANDMARK  
95 GOLF COURSE RD #101  
LOGAN, UTAH 84321  
435.713.0099

## SHEET INDEX:

G101 COVER SHEET / GENERAL INFORMATION

SD100 SITE DEMOLITION PLAN  
SD101 SITE IMPROVEMENT PLAN  
SD102 SITE GRADING PLAN  
SD103 SITE UTILITY PLAN  
SD104 EROSION CONTROL PLAN  
SD105 EROSION CONTROL NOTES AND DETAILS  
SD201 SITE DETAILS

L1.0 PLANTING PLAN  
L1.1 PLANTING DETAILS  
L2.0 IRRIGATION PLAN  
L2.1 IRRIGATION DETAILS  
L2.2 IRRIGATION DETAILS

## VICINITY MAP:



## STANDARD SYMBOL LEGEND:

Building/Wall Section Reference Sheet Reference	
Detail Reference Sheet Reference	
Elevation Marker	
Elevation Reference Sheet Reference	
Room Number Door Designation	
Window Designation	
Reflected Ceiling Elevation	
Room Title Room Number	
Partition Type	
Keyed Note	

## STANDARD SYMBOL LEGEND:

	Asphalt		Glass (in elevation)
	Batt Insulation		Gravel / Rock Fill
	Ceramic Tile (in elevation)		Gypsum Board
	Concrete		Particle Board
	Concrete & Plaster (in elevation)		Sand, Plaster, Stucco & Sand Setting Beds
	Concrete Masonry Units		Plywood
	Brick		Rigid Insulation
	Compacted Backfill		Steel
	Earth		Wood Framing (cont. member)
	Finish Lumber		Wood Framing (interrupted member)
	Glass		Metal Studs

## ABBREVIATIONS:

@	At	eb	Expansion Bolt	max	Maximum
Ø	Diameter	elfs	Exterior Insul Fin System	mech	Mechanical
#	Pound or Number	exp jt	Expansion Joint	mfl	Metal
ab	Anchor Bolt	elec	Electrical	mfr	Manufacturer
act	Acoustical Tile	elev	Elevation	min	Minimum
adj	Adjustable	eq	Equal	nic	Not In Contract
aff	Above Finish Floor	equip	Equipment	nts	Not To Scale
alum	Aluminum	ewc	Elec Water Cooler	o.c.	On Center
bd	Board	exist	Existing	pl	Plate
bdg	Building	ext	Exterior	rl	Property Line
bm	Beam	fd	Floor Drain	plas lam	Plastic Laminate
bot	Bottom	fdn	Foundation	plywd	Plywood
brg	Bearing	fecb	Fire Extinguisher Cab	rb	Resilient Base
bur	Built Up Roofing	fin fl	Finish(ed) Floor	re	Reference
cab	Cabinet	ft	Foot or Feet	reinf	Reinforce(d) (ing)
cjt	Control Joint	fig	Footing	rfg	Roofing
clg	Ceiling	fur	Furring	rm	Room
cmu	Concrete Masonry Units	ga	Gauge	sc	Solid Core
col	Column	galv	Galvanized	sch	Schedule
conc	Concrete	gc	General Contractor	sec	Section
const	Construction	gl	Glass	sim	Similar
const jt	Construction Joint	gyp bd	Gypsum Board	spec	Specification
cont	Continuous	hc	Hollow Case	sq	Square
contr	Contractor	hdwd	Hardwood	stl	Steel
corr	Corridor	hdwr	Hardware	temp gl	Tempered Glass
ct	Ceramic Tile	hdrl	Handrail	typ	Typical
det	Detail	hm	Hollow Metal	vct	Vinyl Composition Tile
dim	Dimension	id	Inside Diameter	w/	With
dn	Down	incl	Include(d) (ing)	wd	Wood
dr	Door	insul	Insulation	wdw	Window
ea	Each	int	Interior	w/o	Without
		jt	Joint	wsct	Wainscot

## SITE DEVELOPMENT STATISTICS:

TOTAL LOT SIZE	:	154,753 S.F.
BUILDING & PARKING LOT AREA	:	110,859.78 S.F.
LANDSCAPING AREA	:	43,893.22 S.F.
PARKING STALLS:		
EXISTING STALL COUNT	:	201 STALLS
NET GAIN WITH ADDITION	:	49 STALLS
TOTAL STALL COUNT	:	250 STALLS
HANDICAP STALLS REQUIRED	:	7 STALLS (INCLUDING 2 VAN STALLS)
HANDICAP STALLS PROVIDED	:	10 STALLS (INCLUDING 2 VAN STALLS)

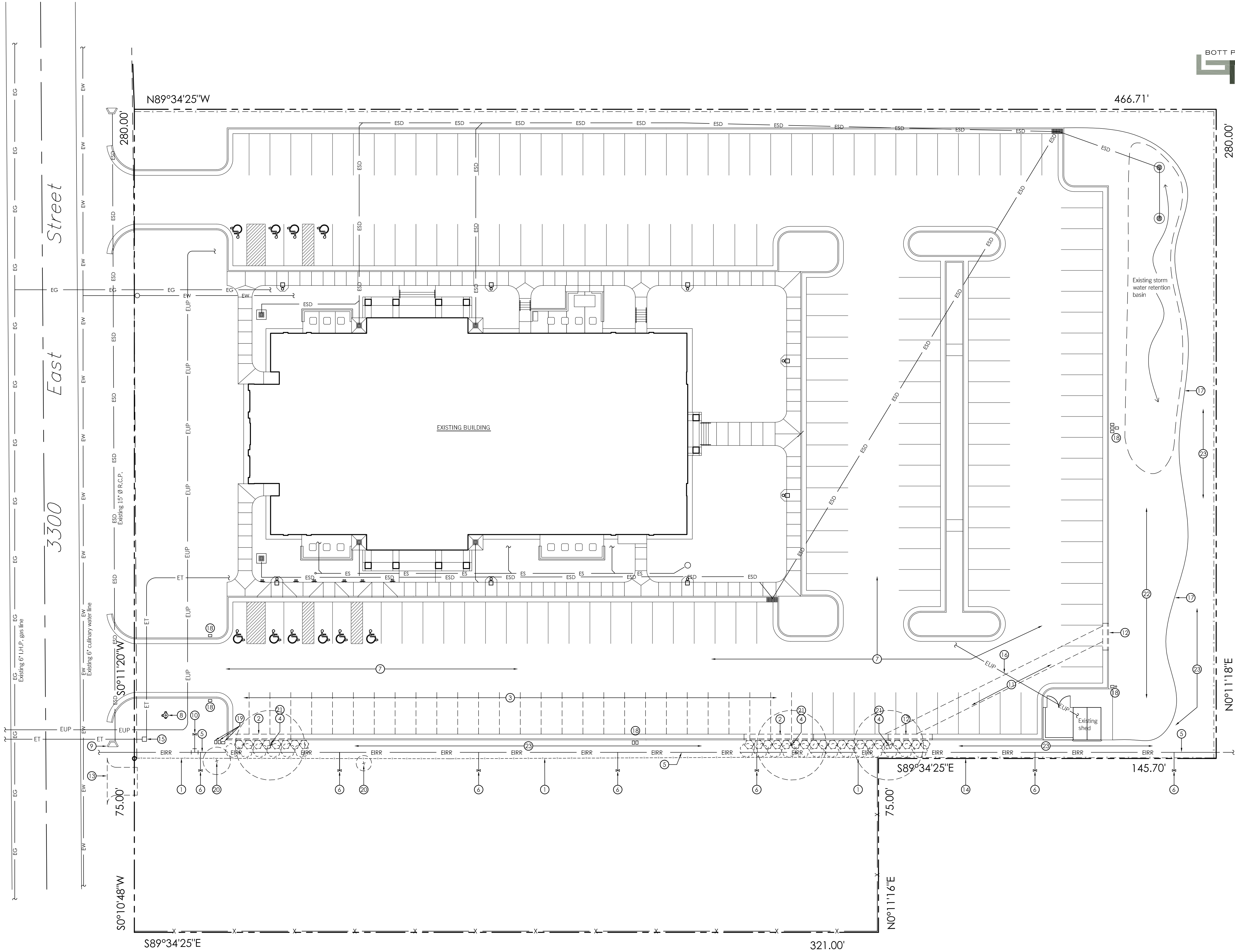
## COVER SHEET / GENERAL INFORMATION

07.15.19  
Project Number: 1922  
Property Number: 538-7388

LIBERTY 1,2 WARD PARKING ADDITION  
4279 N 3300 E  
LIBERTY, UT 84310

G101





BOTT PANTONE ARCHITECTS

620 24TH STREET  
OGDEN, UT 84401  
BP-ARCHITECTS.NET  
P 801.394.3033  
F 801.394.9064

GENERAL NOTES:

- A. Field verify locations of all utilities, improvements, etc.
- B. Retain and protect all existing site improvements except where noted to be removed.

KEYED NOTES: ①

- Remove existing 3-rail vinyl fence and concrete mowstrip at area of new property addition. Rails salvaged in good condition may be re-used in new fencing.
- Saw cut and remove portion of existing concrete curb and gutter at area of new drive lane to new property. Coordinate with site improvement plan SD101.
- Provide black paint over existing parking stripes in preparation for new striping shown on sheet SD101.
- Remove existing shrubs, plants and tree from area of new work. Remove tree roots completely. Coordinate with landscape drawings for modifications to irrigation system in this area. Retain and protect remaining existing trees, plants and shrubs in this planting bed during course of construction.
- Approximate location of existing 6" PVC irrigation waterline to be abandoned in place.
- Remove existing water valve and salvage for re-use.
- Retain and protect existing asphalt-paved parking lot, except where noted otherwise.
- Retain and protect existing fire hydrant.
- Retain and protect existing concrete inlet/outlet.
- Retain and protect existing 2" irrigation connection serving meetinghouse site.
- Saw cut and remove existing asphalt paving as required for installation of new storm drain pipe. See sheet SD103.
- Saw cut and remove portion of existing concrete curb and gutter as required for installation of new storm drain pipe. See sheet SD103.
- Remove existing asphalt/gravel drive approach.
- Retain and protect existing 3-rail vinyl fence beyond area of new work.
- Retain and protect existing telephone pedestal.
- Approximate location of existing power/conduit between meetinghouse and storage shed. Field verify.
- Retain and protect existing metal landscape edging separating planting and turf sod areas.
- Retain and protect existing irrigation valve box.
- See landscape drawings for relocation of existing irrigation valves, filter, etc.
- Remove existing tree, including roots.
- Retain and protect existing 2" meetinghouse irrigation system main line shown on original meetinghouse irrigation drawings to run through this area.
- Remove existing lawn from this area and re-grade for new storm water pump and retention basin. Coordinate with site grading plan and landscape drawings. Retain and protect existing irrigation system impact heads located along the east and west sides of this lawn area.
- Retain and protect existing trees and shrubs in planting area.

SITE SYMBOL LEGEND

— ESD —	existing storm drain
— EW —	existing water line
— ET —	existing telephone line
— ESW —	existing secondary water line
— EUP —	existing underground power line
— EG —	existing gas line

SITE DEMOLITION PLAN

1

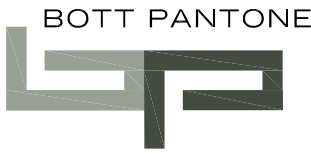
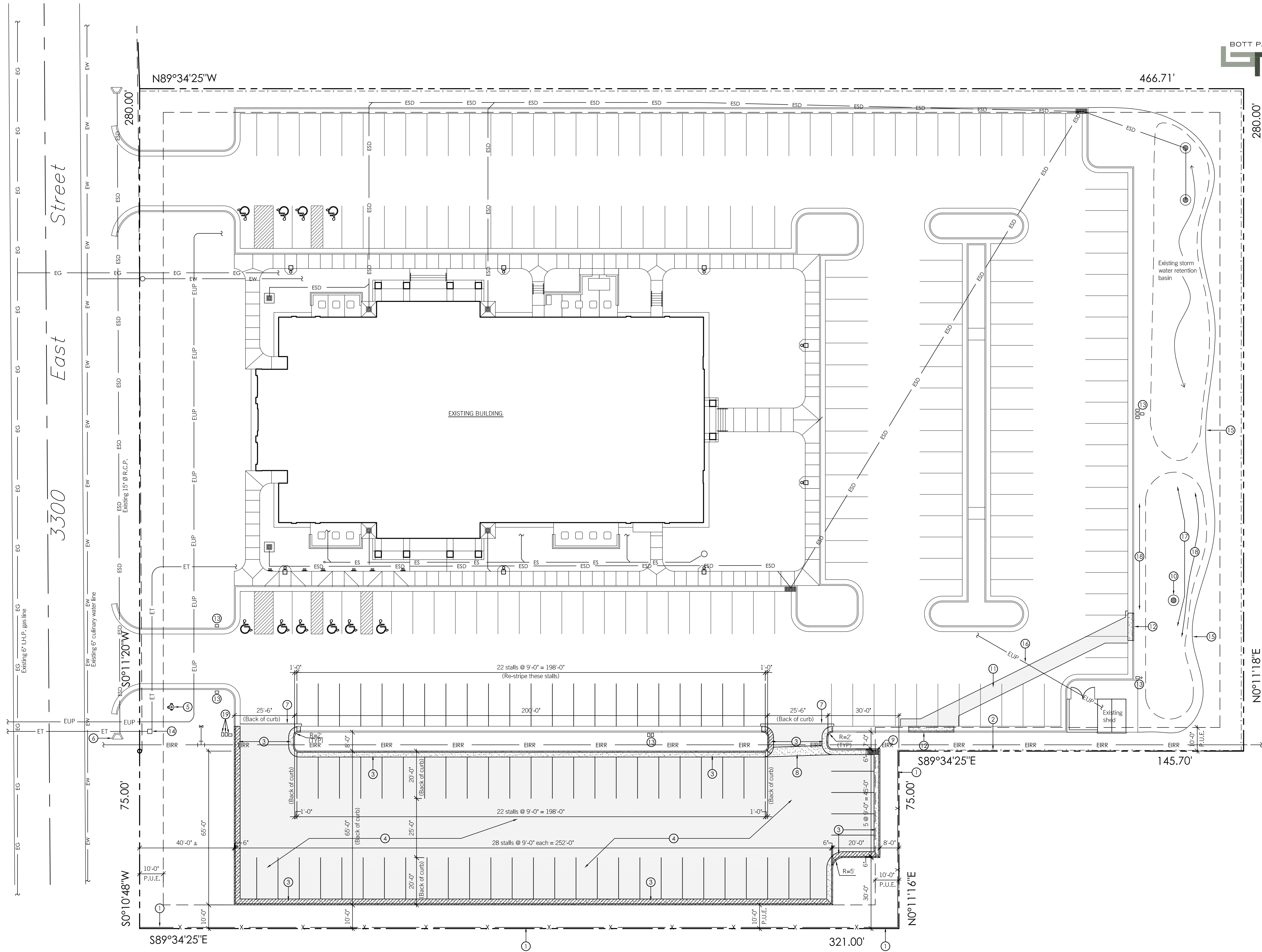
Scale: 1" = 20'-0"

SITE DEMOLITION PLAN

1" = 20'-0"  
07.15.19  
Project Number: 1922  
Property Number: 538-7388

LIBERTY 1,2 WARD PARKING ADDITION  
4279 N 3300 E  
LIBERTY, UT 84310

SD100



ARCHITECTS

620 24TH STREET  
OGDEN, UT 84401  
BP-ARCHITECTS.NET  
P 801.394.3033  
F 801.394.9064

GENERAL NOTES:

- A. Field verify all dimensions.
- B. Field verify locations of all existing utilities, improvements, etc.
- C. Coordinate with sprinkler Contractor for placement of PVC sleeves prior to paving parking lot.
- D. Paint 3" wide white parking stripes as indicated at area of new work.

KEYED NOTES: ①

- 1. Provide 3-rail vinyl fence (to match existing) with concrete mow strip base. Rails salvaged from existing fence removal in good condition may be re-used. See detail 5/SD201.
- 2. Retain and protect existing 3-rail vinyl fence.
- 3. Concrete curb and gutter, see 3 and 4/SD201. Use spill gutter at high side of parking area.
- 4. 3" asphalt paving over 8" compacted base (typical).
- 5. Retain and protect existing fire hydrant.
- 6. Retain and protect existing concrete inlet/outlet.
- 7. Immediately prior to paving, saw cut existing asphalt for clean, straight line between existing and new. Tack vertical edge.
- 8. Concrete waterway, see 9/SD201.
- 9. Concrete catch basin, see 6/SD201.
- 10. Dry sump, see 7/SD201.
- 11. Patch asphalt paving and road base (3" over 8") where removed for new storm water pipe. Re-stripe impacted stall striping. Saw cut edge as required for clean, straight line between existing asphalt and patch.
- 12. Provide concrete curb and gutter where removed to install new storm drain pipe.
- 13. Retain and protect existing irrigation system valves and boxes.
- 14. Retain and protect existing telephone pedestal.
- 15. Retain and protect existing metal landscape edging separating planting and turf sod areas.
- 16. Approximate location of existing power/conduit between meetinghouse and storage shed. Field verify.
- 17. New storm water retention basin. Coordinate with site grading plan, site utility plan and landscape drawings.
- 18. Retain and protect existing irrigation system impact heads along east and west edges of lawn area.
- 19. Relocated irrigation system filter, valves, etc. See landscape drawings.

SITE SYMBOL LEGEND

- work point, control point or datum point
- property line
- new concrete
- new asphalt paving
- existing fire hydrant
- reverse flow curb
- new fence line
- existing storm drain
- existing water line
- existing telephone line
- existing secondary water line
- existing underground power line
- existing gas line

SITE IMPROVEMENT PLAN

1

Scale: 1" = 20'-0"

SITE IMPROVEMENT PLAN

1" = 20'-0"  
07.15.19  
Project Number: 1922  
Property Number: 538-7388

LIBERTY 1,2 WARD PARKING ADDITION  
4279 N 3300 E  
LIBERTY, UT 84310

SD101



GENERAL NOTES:

- Field verify all dimensions.
- Field verify locations of all utilities, improvements, etc.
- Strip approximately 6 inches of top soil from under new parking lot area.
- Upon completion of clearing and grubbing of new parking area, scarify and re-compact top 6" of exposed native soil.
- See 10/SD201 for typical asphalt pavement section.

KEYED NOTES: ①

- Retain and protect existing steel landscape edging separating planting and turf sod areas.
- Fill existing finish grade in this area as required to blend into new grades at new property.

SITE SYMBOL LEGEND

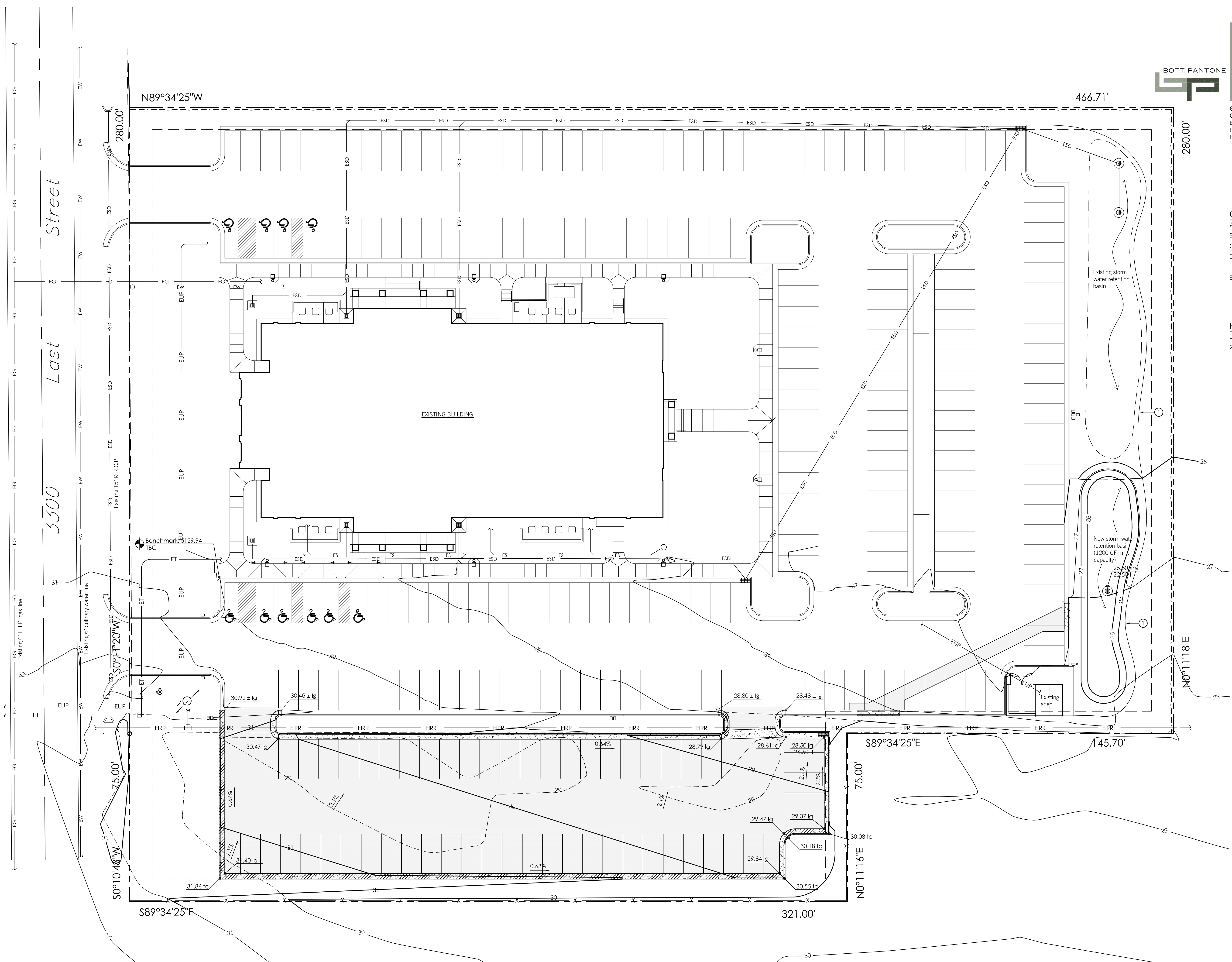
	existing fire hydrant
	work point, control point or datum point
	property line
	new concrete
	new asphalt paving
	new or finish contour
	existing unmodified contour
	existing contour to be modified
	existing spot elevation
	new spot elevation
	existing storm drain
	existing water line
	existing telephone line
	existing secondary water line
	existing underground power line
	existing gas line

SITE GRADING PLAN

1" = 20'-0"  
07.15.19  
Project Number: 1922  
Property Number: 538-7388

LIBERTY 1,2 WARD PARKING ADDITION  
4279 N 3300 E  
LIBERTY, UT 84310

SD102



SITE GRADING PLAN

1 Scale: 1" = 20'-0"



#### GENERAL NOTES:

- Existing utilities are shown on the drawings only to the extent such information has been made available to the Architect. This information is shown for the convenience of the Contractor, it should not be assumed to be either correct or complete. The Contractor shall make his own investigation as necessary to verify the exact location of all utilities and structures.
- Contractor shall contact Blue Stakes @ 1-800-662-4111, at least 48 hours before any excavation begins.
- Excavations or repairs in public right-of-ways shall be in accordance with the regulations of the local governing authority.
- Connect new utility lines to existing in accordance with the regulations of the utility provider.

#### KEYED NOTES: (8)

- 12" Ø PVC storm drain, 140 L.F. @ 2.85% slope.
- Dry sump, see 7/SD201.
- Retain and protect existing metal landscape edging separating planting and turf sod areas.
- Retain and protect existing trees and shrubs in this area.
- Approximate location of existing power/conduit between storage shed and meetinghouse. Field verify location.
- Approximate location of existing 6" PVC Irrigation line to be abandoned in place. See sheet SD100.
- Retain and protect existing meetinghouse irrigation service line.
- Provide new 6" (C900 PVC) pressure irrigation pipe with concrete thrust blocks per 8/SD201 at change of direction.

#### SITE SYMBOL LEGEND

ESD	existing storm drain
EW	existing water line
ET	existing telephone line
ESW	existing secondary water line
EUP	existing underground power line
EG	existing gas line
SD	new storm drain line
IRR	new pressure irrigation line

#### STORM WATER CALCULATIONS

1922 - Liberty 1,2 Ward Parking Addition

Date: 07.12.19  
Prepared by: B. Bott  
Method: Rational  
Source: NOAA precipitation frequency estimates for Huntsville, Utah

##### Developed Conditions

Area Type	Area	C
Hard Surface	17,420 S.F.	0.9
Landscape	6,655 S.F.	0.1
Subtotal=	24,075 S.F.	

Total= 1.00  
C average= 0.68

Frequency: 10 year Release Rate (cfs)= 0.10 (retention)

Time (min)	Intensity (in/hr)	Inflow Vol. (c.f.)	Reg. Vol. (c.f.)	Reg. Stor. (c.f.)
15	2.43	788	50	738
30	1.58	1064	99	965
60	0.98	1314	198	1116
120	0.59	1594	396	1198
180	0.43	1737	594	1143
360	0.28	2222	1188	1034

#### SITE UTILITY PLAN

1

Scale: 1" = 20'-0"

#### SITE UTILITY PLAN

1" = 20'-0"  
07.15.19  
Project Number: 1922  
Property Number: 538-7388

LIBERTY 1,2 WARD PARKING ADDITION  
4279 N 3300 E  
LIBERTY, UT 84310

SD103



EROSION CONTROL KEYED NOTES

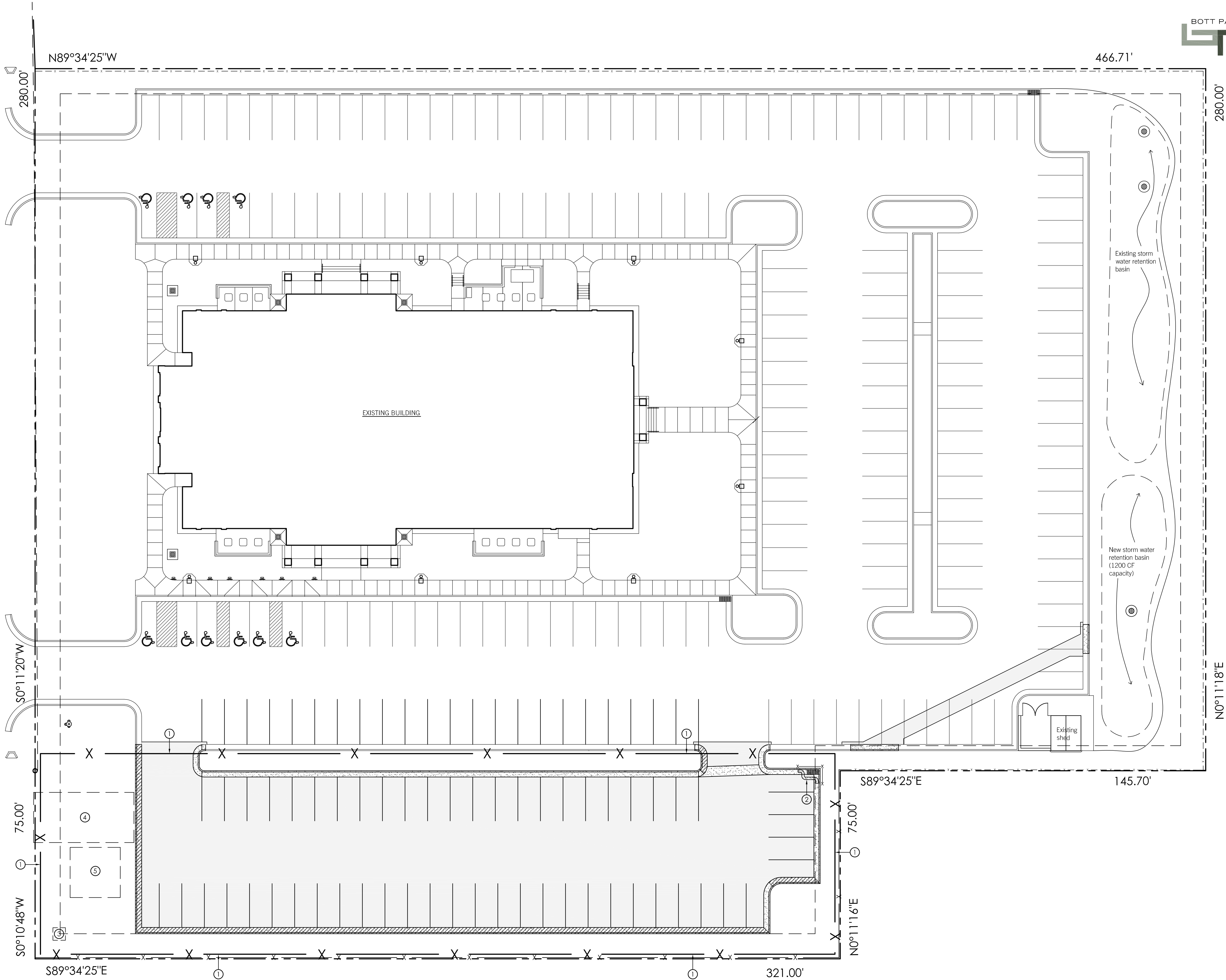
- ① Temporary erosion control (silt) fencing, see 1/SD105.
- ② Temporary catch basin control and silt fence, see 2/SD105.
- ③ Suggested location for temporary sanitary toilet. Provide 10'-0" x 10'-0" x 3" (min.) gravel pad with containment berm around perimeter. Secure toilet against wind.
- ④ Suggested location for temporary construction entrance and vehicle wash down area (shown hatched). Provide 20'-0" x 40'-0" area with 9" of 3" - 6" rock over filter fabric.
- ⑤ Suggested location for concrete wash out area. Provide basin or dumpster (as necessary) with silt fence around perimeter.

EROSION CONTROL PLAN

1" = 20'-0"  
07.15.19  
Project Number: 1922  
Property Number: 538-7388

LIBERTY 1,2 WARD PARKING ADDITION  
4279 N 3300 E  
LIBERTY, UT 84310

SD104

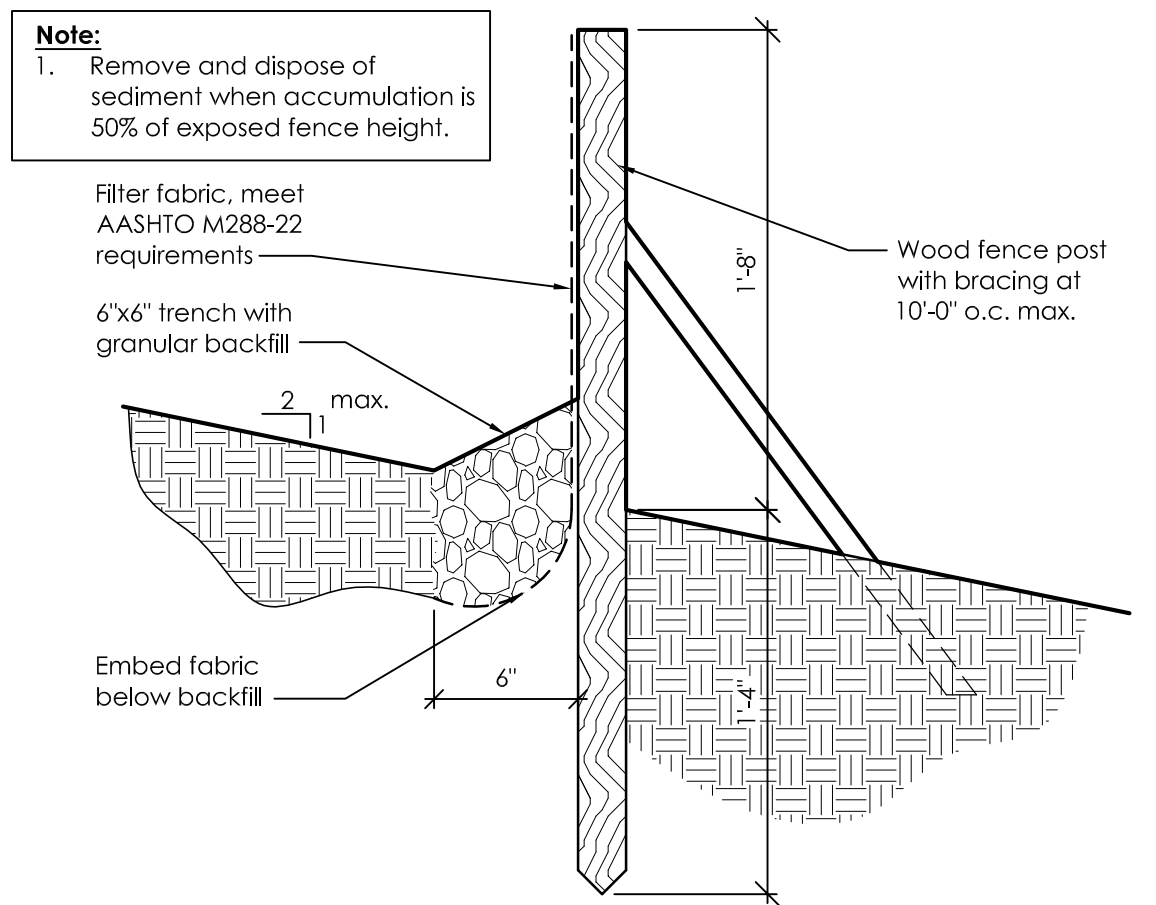


EROSION CONTROL PLAN

1

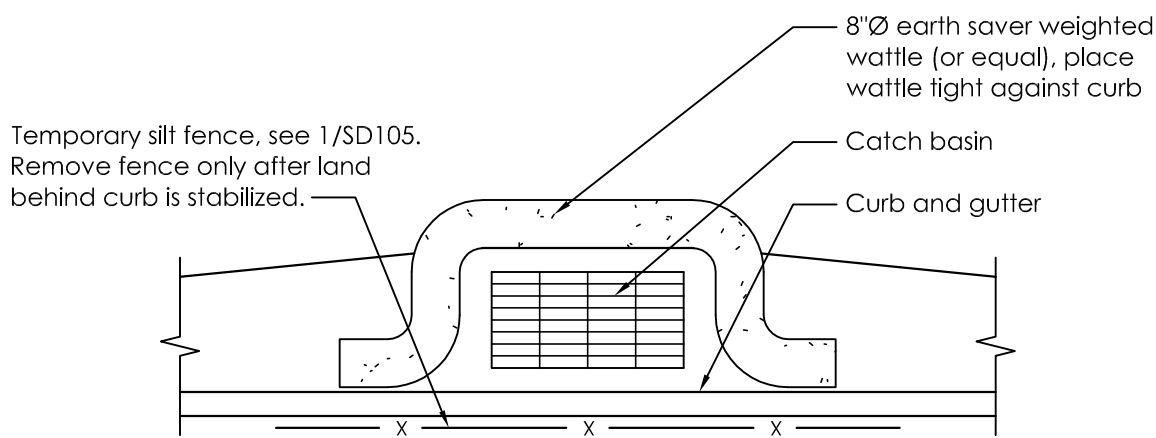
Scale: 1" = 20'-0"





## SILT FENCE (TYP)

1 Scale: none



## CATCH BASIN CONTROL

2 Scale: 1/4" = 1'-0"

**Note:**  
1. Inspect sediment at catch basin after each major storm event or at least bi-weekly. Remove sediment from catch basin immediately once it reaches 50% of wattle height.

## EROSION CONTROL PLAN NOTES

### Construction access

- Contractor shall use vehicle tracking control at all locations where vehicle will enter or exit the site. Control facilities will be maintained while construction is in progress, moved when necessary and removed when the site is paved.
- If the gravel construction entrances are not effective in removing the majority of the dirt or mud from the tires of the construction vehicles, then the tires must be washed before the vehicles enter a public road. If washing is used provisions must be made to intercept the wash water and trap the sediment from being carried off site.
- All materials spilled, dropped, washed, or tracked from vehicles onto the roadways or into storm drains must be removed immediately.
- The construction entrances shall be maintained in a fully functional condition until final stabilization of the site. This may require periodic top dressing of the construction entrances as conditions demand. All erosion and sedimentation control measures shall be checked and repaired by a qualified person at least once every seven calendar days and within 24 hours of the end of a rainfall event.
- Equipment to clean vehicles (brooms, water hose, etc.) must be available on site in order to clean vehicles prior to exiting construction site.

### Storm water pollution prevention notes

- Description of construction activity: site development for an addition to an existing church parking lot.
- Sequence of major activities
  - Stripping of site
  - Rough grading
  - Installation of underground utilities
  - Installation of curb and gutter
  - Finish grading
  - Installation of base and pavement
  - Final landscaping
- Total area of new work: 24,075 S.F.
- Drainage patterns and slopes found on SD102.
- Location of major structures and nonstructural controls found on SD101.

### Erosion control general notes

- No site work shall begin until siltation fences are in place and approved by the county.
  - Take all precautions necessary to prevent erosion and transportation of soils to adjacent properties, streets, sidewalks, and into on-site drainage systems.
  - Repair and correct damage caused by erosion within 48 hours. The surfaces of cut and fill slopes shall be prepared and maintained to control erosion. This may include plantings. The protection for the slopes shall be installed as soon as practicable and before calling for final approval.
- Air quality control general notes**
- All on-site work, throughout the length of the project, must conform with the Utah Division of Air Quality regulations.
  - Contractor shall take all steps necessary to minimize fugitive dust from becoming airborne. Such control may include watering, temporary hydro-seeding and/or chemical stabilization. Keep active areas of construction damp, spray as often as required to prevent fugitive dust. Do not proceed with work during high wind periods if dust can not be controlled.
  - On-site burning of refuse is strictly forbidden.

## EROSION CONTROL NOTES

### Erosion control plan specific notes

- This plan identifies potential sources of pollutants of storm water, presents pollution control measures, and assists in insuring implementation and maintenance of the best management practices (bmp's) indicated herein.
- A notice of intent has been filed with the state of utah water resources control board by the owner so that this construction project may be covered under the state general permit. The permit is national pollution discharge elimination system (npdes) general permit (no. utr 620000) for storm water discharges associated with construction activity.
- In the event of a change in ownership, a new notice of intent shall be filed with the state water resources control board.
- In the event of a release of a reportable quantity of a pollutant, the contractor shall advise the owner to notify the national response center, Weber county and the Architect. If necessary, this pollution prevention plan should be revised to reflect the change in conditions of the construction activity. A reportable quantity is established by 40 code of federal regulations (cfr) 117.3 or 40 cfr 302.4.
- All contractors and their personnel whose work can contribute to or cause pollution of storm water should be made familiar with this pollution prevention plan. Adequate training for implementation of the measures presented herein shall be provided to the contractors and their personnel.
- Changes in construction or in conditions which are not covered by this plan should be brought to the attention of the owner, and county. If necessary, this pollution prevention plan will be revised to reflect the change in construction or in conditions.
- All prevention and clean up measures should be conducted in accordance with Weber county ordinances, as well as state and federal regulations. Waste materials should be disposed of in a legal manner. All dischargers of storm water must comply with the lawful requirements of Weber county and other local agencies regarding the discharges of storm water to storm drains.
- This plan does not cover the removal of hazardous or toxic waste. In the event of a discharge or release of a reportable quantity of toxic waste, work should be stopped until the spill can be assessed and a mitigation report prepared by a qualified environmental consultant, and if necessary, reviewed by Weber county and any other agency having jurisdiction.
- This erosion control plan shall be made available to the public under section 308(b) of the clean water act. Upon request by members of the public, the discharger shall make available for review a copy of this plan either to the regional water board or directly to the requester. This plan must be kept on site during construction activity and made available upon request of a representative of the regional water board and/or the local agency.
- The proposed construction activity is construction of a parking lot addition to an existing meetinghouse site for The Church of Jesus Christ of Latter-Day Saints.

### Erosion control plan general notes

- Prohibition on most non-storm water discharges only storm water from the project site shall be allowed to flow into the on-site storm drain system. Clean, non-chlorinated water from the flushing of fire hydrants, water mains, and storm drains may be discharged to the storm drain if it is not allowed to collect dirt, debris, and trash while flowing to a storm drain inlet.
- Sources of storm water pollutants storm water pollutants include soil sediment and nutrients, oil, grease, toxic pollutants, and heavy metals. Sources of storm water pollutants include but are not limited to soil erosion by water and/or wind; clearing of vegetation; grading; vehicle and equipment refueling and maintenance; washing of concrete trucks, mixers and handling equipment; paints, solvents and adhesives; and landscaping work.
- Erosion and sediment controls
  - Cover exposed stockpiles of soils, construction and landscaping materials with heavy plastic sheeting.
  - In landscaping areas where the vegetation has not established growth and taken hold, construct sandbag or dirt berms around their perimeter to insure that water will be contained inside the landscaping area and that it will not be conveyed to a storm drain inlet.
  - Re-vegetate areas where landscaping has died or not taken hold.
  - Divert storm water runoff around disturbed soils with berms or dirt swales.
- Other controls
  - Waste disposal
    - Keep disposal containers covered.
    - Provide for the weekly (or more frequent, if necessary) disposal of waste containers.
    - Provide containers at convenient locations around the site
  - Sweeping of site
    - Provide weekly sweeping by hand or mechanical means to keep the paved areas of the site free of dust, dirt, and debris.
    - Dispose of accumulated dirt in waste containers, or haul it off the site to a landfill
  - Sanitary/septic disposal portable toilets and other sanitary facilities shall be serviced weekly and pumped clean by a waste disposal company. No toxic or hazardous waste shall be disposed in a portable toilet or in the on-site sanitary sewer.
  - Spills
    - Store adequate absorbent materials, rags, brooms, shovels, and waste containers on the site to clean-up spills of materials such as fuel, paint, solvents, or cleaners. Clean up minor spills immediately.
    - For reportable quantity of hazardous or toxic substance, secure the services of qualified personnel or clean-up and disposal.
  - Control of allowable non-storm water discharges landscaping irrigation, erosion control measures, pipe flushing and testing, and pavement washing are allowed if they cannot feasibly be eliminated, comply with this plan, do not cause or contribute to a violation of water quality standards, and are not required to be permitted by the local regional water quality control board.
  - Vehicles and equipment
    - Fix leaks of fuel, oil and other substances immediately.
    - Perform refueling and service of vehicles or equipment off-site when possible. If refueling or service of equipment is performed on-site, then provide an impervious, contained area where any spills can be contained without flowing to a storm water inlet or into the ground.
    - Use drip pans to catch leaks and small spills.
  - Concrete trucks, mixers and handling equipment
    - Do not dispose of washout from the washing of concrete trucks, mixers, and handling equipment where it will flow into a storm water inlet or into a public street.
    - Provide a holding tank to receive any washout from concrete equipment. Disposal of tank contents should be conducted by a waste handling firm.
    - Provide a designated area for washing any vehicles or equipment. Drainage from this area should flow to the holding tank.
  - Landscaping operations
    - Use only the minimum amount of landscaping fertilizers, nutrients, and other chemicals that are needed.
    - Do not over water fertilized or treated landscape areas. Minimize runoff of irrigation water from landscaping.
  - Storm water inlets  
Keep all on-site storm water inlets clean and free of dirt and debris. In the event that sediment and debris may flow to an inlet, provide an 18-inch (minimum) strain barrier around the inlet to trap the dirt and debris and allow only clean storm water to enter the inlet.

### Inspection

- Regular interval inspection and inspection before and after storm.
  - Visually inspect the site weekly to insure that storm water inlets are free of dirt and debris.
  - Before a storm, inspect the site to insure that storm water pollution control measures are in place.
  - After a storm, inspect all storm water inlets to insure that they are clear of dirt and debris. Clean those storm water inlets that are not clear and free of debris.
  - The regional water board may require the discharger to conduct additional site inspections, submit reports and certifications, or to perform sampling and analysis.
- All dischargers are required to conduct inspections of the construction site prior to anticipated storm events and after actual storm events, to identify areas contributing to a storm water discharge, to evaluate whether measures to reduce pollutant loadings identified in this swppp are adequate, to properly implement in accordance with the terms of the general permit, and to determine whether additional control practices are needed.
- Preparation of reports and retention of records
  - Each discharger must certify annually that its construction activity is in compliance with the requirements of the general permit and this swppp. This certification must be based on the site inspections.
  - The discharger is required to retain records of all monitoring information, copies of all reports required by this general permit, and records of all data used to complete the notice of intent for construction activity for a period of at least three years. This period may be extended by request of the state. With the exception of noncompliance reporting, dischargers are not required to submit the records except upon specific request by the state division of water quality.

### Maintenance of controls

- Maintenance and repair  
all controls and measures indicated on this plan should be maintained in good and effective condition. If any controls or measures are damaged or removed, they should be promptly repaired or restored.
- Plan revisions  
if construction activity or conditions change from those shown in this plan, then this plan shall be revised to reflect the current conditions.
- Final stabilization and post-construction controls
  - After construction has been completed, the site shall be swept clean, storm water inlets (grates and basins) shall be cleaned, and all waste and leftover materials shall be removed from the site.
  - All landscaping and planting areas should be well maintained to prevent erosion. Avoid over watering of landscaping.
  - All paved areas should be swept weekly either by hand or by mechanical means to keep the site clear of dirt, dust, and debris.
  - Waste materials on-site should be stored in covered containers which are cleaned out regularly.
  - Storm drain lines should be checked and cleaned annually to keep them clean and clear of debris.
  - All on-site storm water inlets should be clearly marked "storm water only".

### Definitions

- "best management practices" ("bmp's") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the united states. Bmp's also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, waste disposal, or drainage from raw material storage.
- Clean water act ("cwa") means the federal water pollution control act enacted by public law 92-500 as amended by public laws 95-217, 95-576, 96-483, and 97-111; 33 usc 1251 et seq.
- "construction site" is the location of the construction activity.
- "non-storm water discharge" means any discharge to storm drain systems that is not composed entirely of storm water except discharge pursuant to an npdes permit and discharges resulting from fire fighting activities.
- "significant materials" includes, but is not limited to raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production hazardous substances designated under section 101(14) of the comprehensive environmental response, compensation, and liability act (cercla); any chemical the facility is required to report pursuant to section 313 of title iii of superfund amendments and reauthorization act (sara); fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with storm water discharges.
- "significant quantities" is the volume, concentrations, or mass of a pollutant in storm water discharge that can cause or threaten to cause pollution, contamination, or nuisance; adversely impact human health or the environment; and cause or contribute to a violation of any applicable water quality standards for the receiving water.
- "storm water" means storm water runoff, snow melt runoff, surface runoff and drainage. It excludes infiltration and runoff from agricultural land.
- Pollution" means the "man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water" (clean water act section 502(19)). Pollution also means "an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either... The waters for beneficial uses... Or facilities which serve these beneficial uses." (california water code section 13050(i)).
- "contamination" means "an impairment of the quality of the waters of the state by waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease...Including any equivalent effect resulting from the disposal of waste, whether or not waters of the state are affected."
- "nuisance" means "anything which meets all of the following requirements: (1) is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life and property; (2) affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal; (3) occurs during or as a result of the treatment or disposal of wastes."
- "local agency" means any agency that is involved with review, approval, or oversight of the construction sites' (a) construction activity, (b) erosion and sediment controls, (c) storm water discharge.

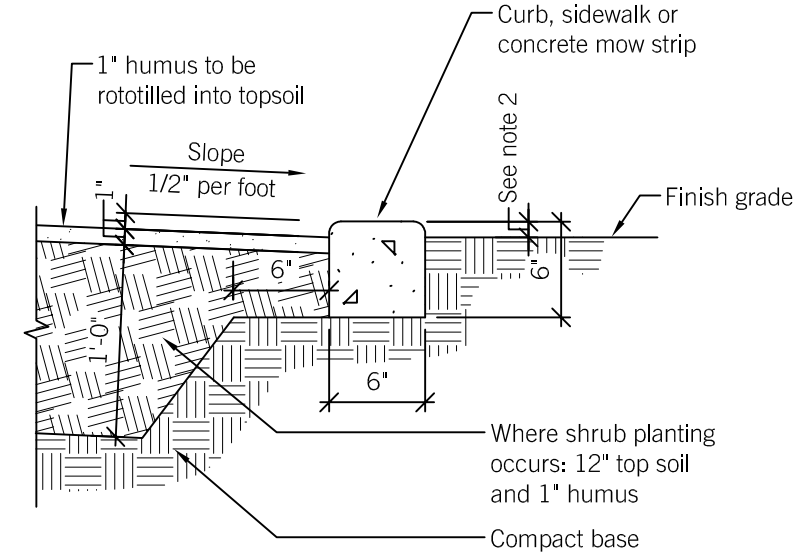
## EROSION CONTROL NOTES

07.15.19  
Project Number: 1922  
Property Number: 538-7388

LIBERTY 1,2 WARD PARKING ADDITION  
4279 N 3300 E  
LIBERTY, UT 84310

SD105

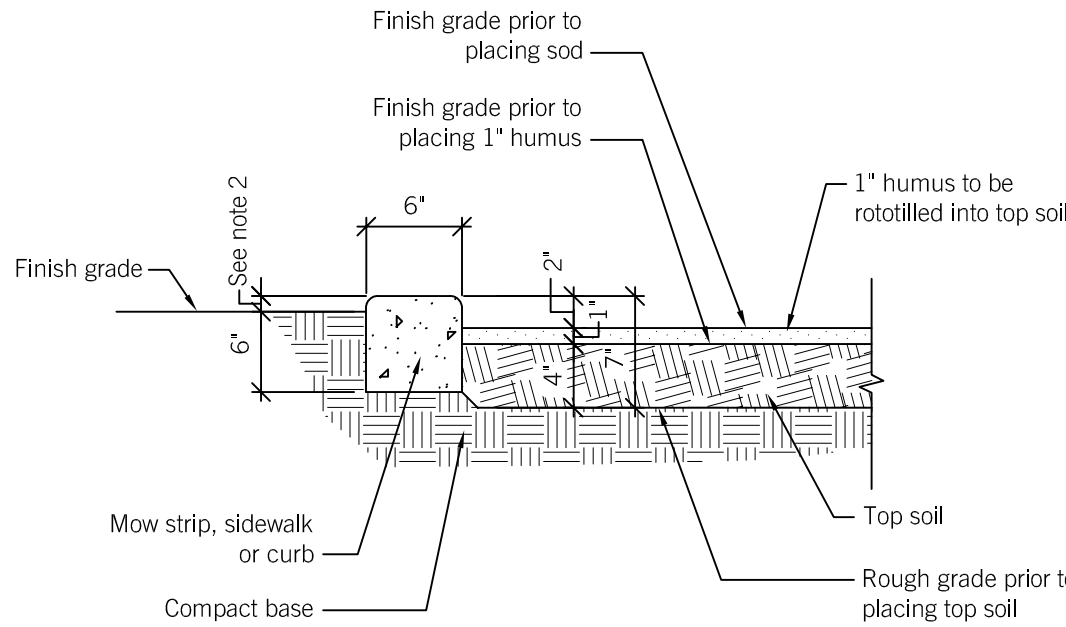




SHRUBS PLANTING  
AREAS - SOIL PROFILE

1

Scale: 1" = 1'-0"



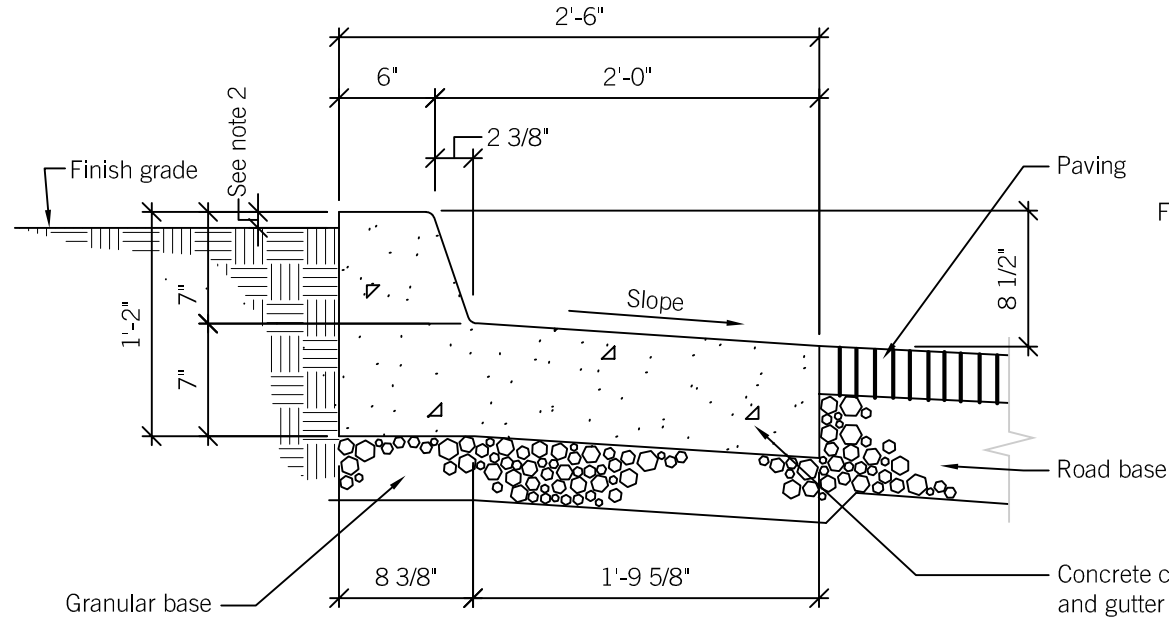
SODDED AREAS -  
SOIL PROFILE

2

Scale: 1" = 1'-0"

General notes:

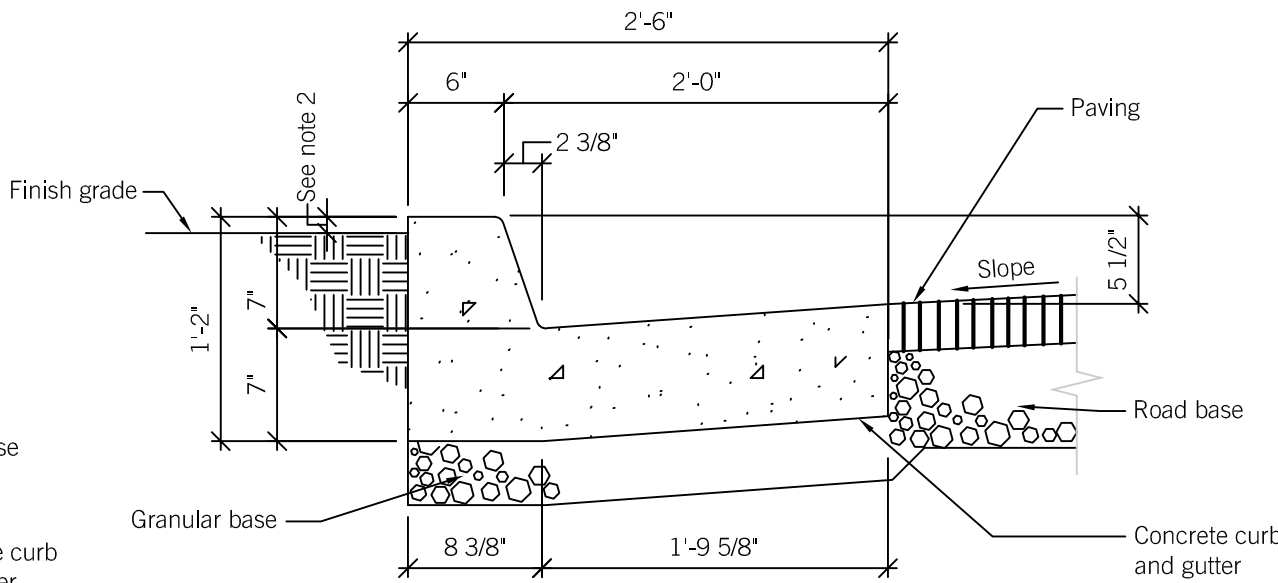
1. See site plan for walk locations and width.
2. 1" prior to seeding or planting (2" prior to sodding)



CURB AND GUTTER DETAIL

3

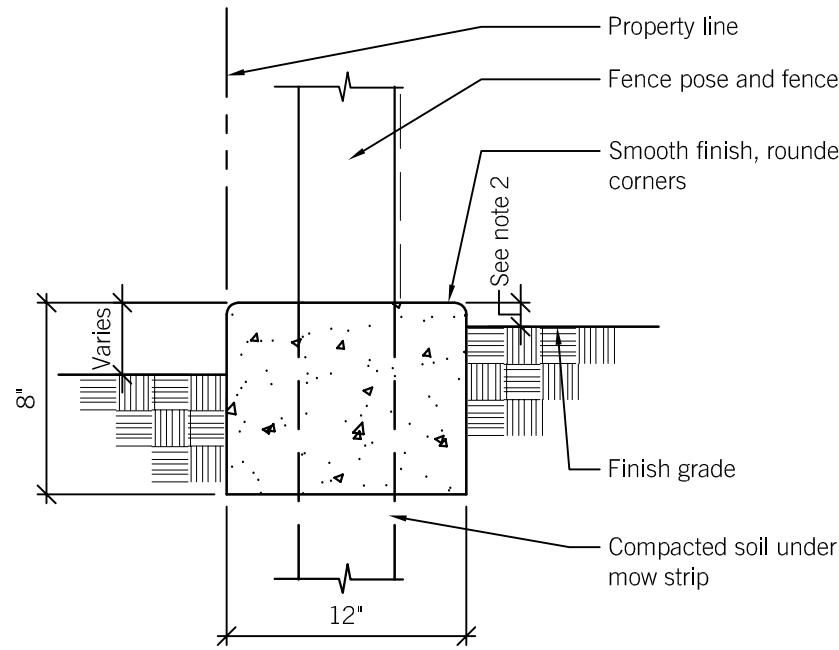
Scale: 1" = 1'-0"



CURB AND GUTTER DEAIL

4

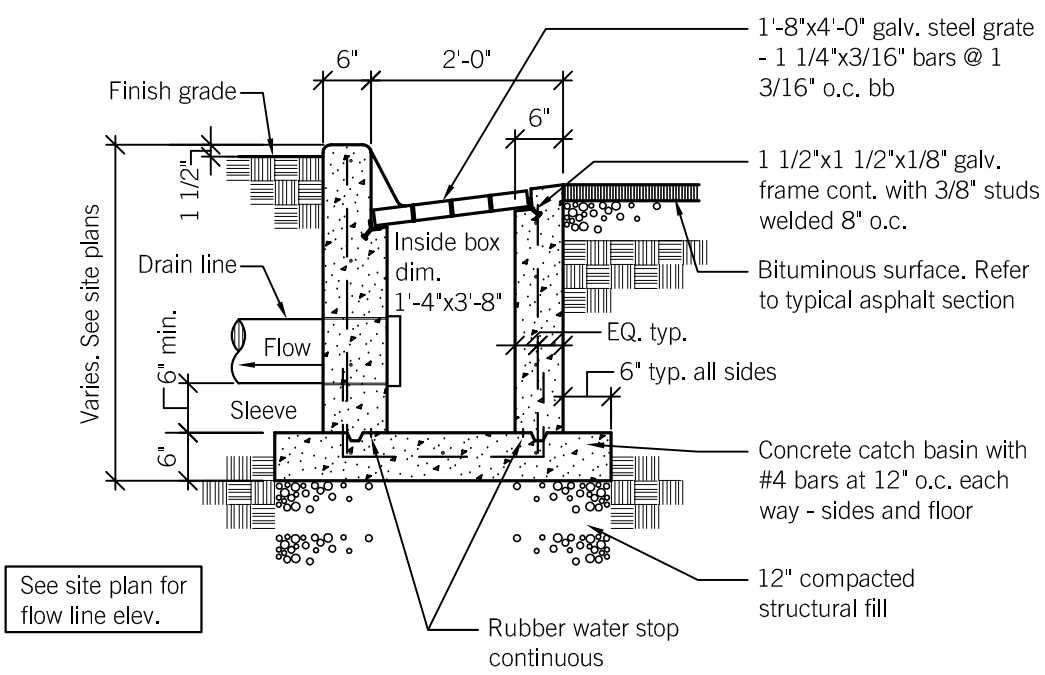
Scale: 1" = 1'-0"



MOW STRIP  
AT FENCE DETAIL

5

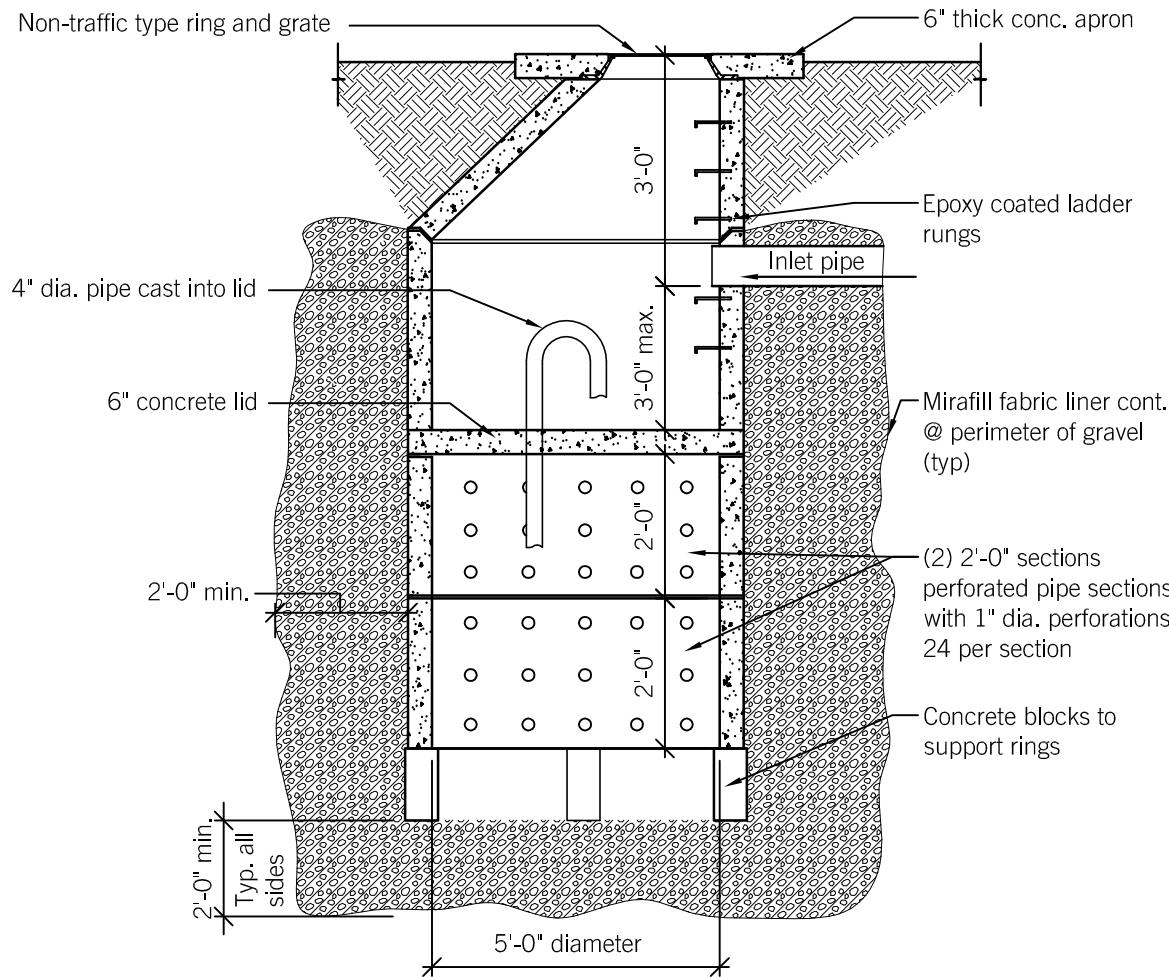
Scale: 1 1/2" = 1'-0"



CATCH BASIN

6

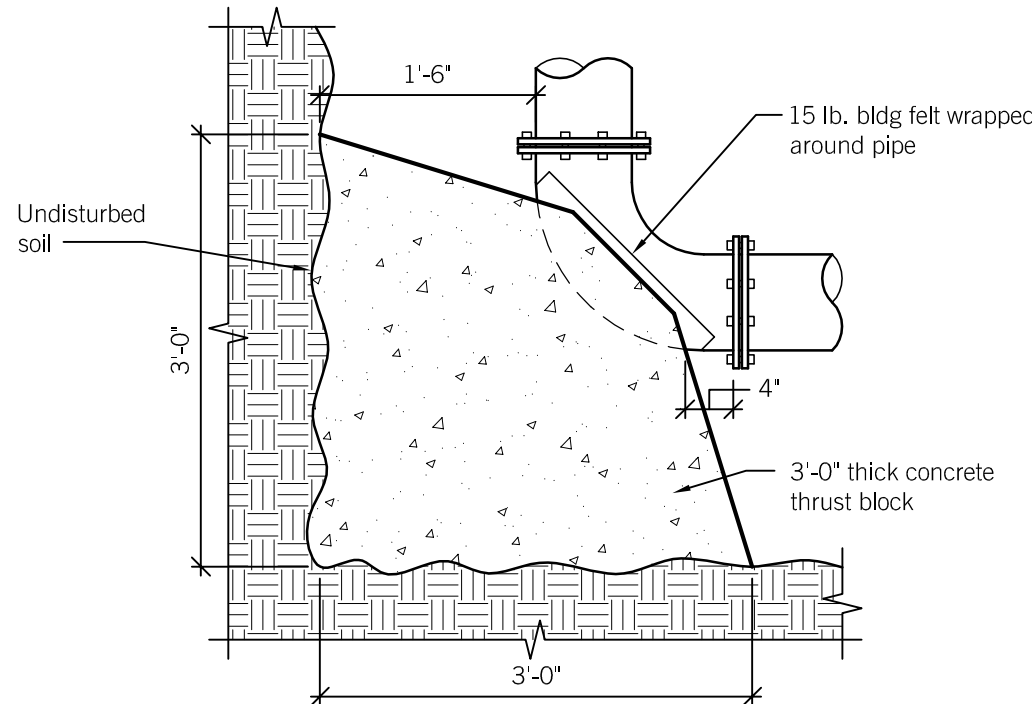
Scale: 1/2" = 1'-0"



SUMP DETAIL

7

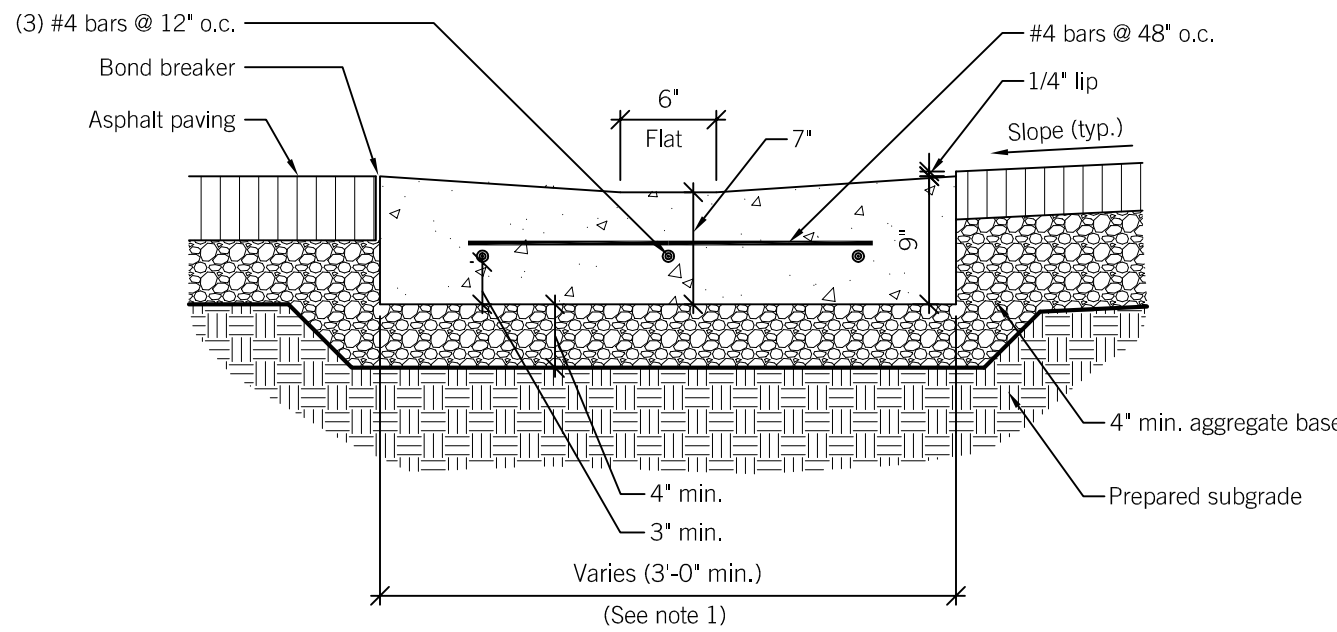
Scale: none



THRUST BLOCK DETAIL

8

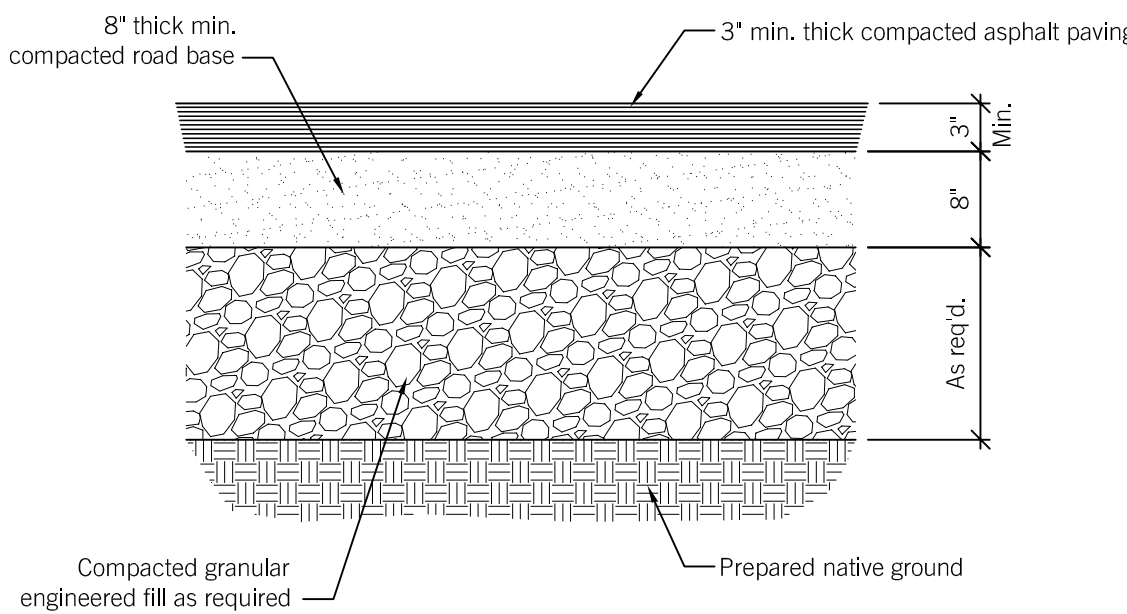
Scale: 3/4" = 1'-0"



CONCRETE WATERWAY -  
FLAT DRAINAGE STRUCTURE

9

Scale: none



ASPHALT PAVING SECTION

10

Scale: none

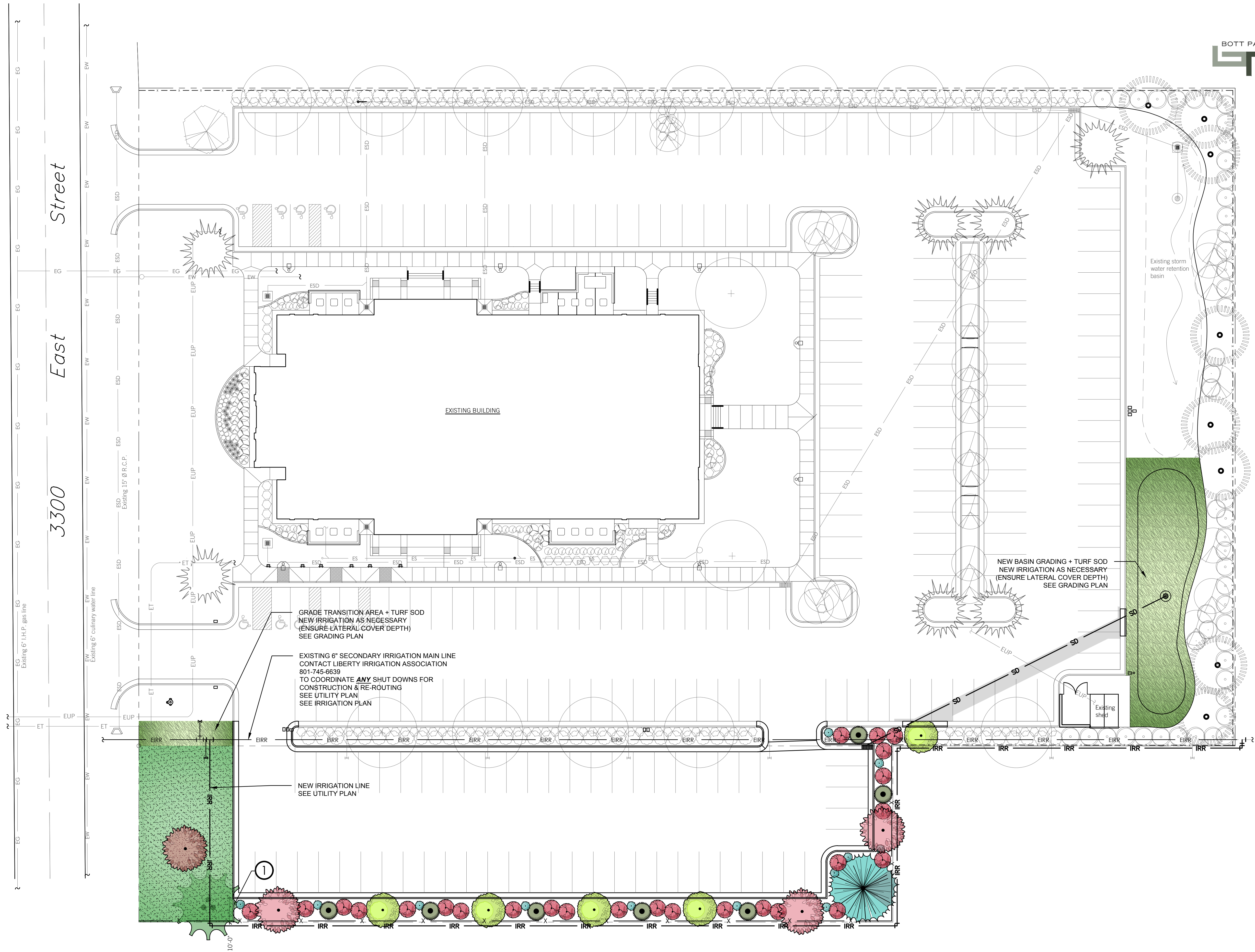
SITE DETAILS

07.15.19  
Project Number: 1922  
Property Number: 538-7388

LIBERTY 1,2 WARD PARKING ADDITION  
4279 N 3300 E  
LIBERTY, UT 84310

SD201





620 24TH STREET  
OGDEN, UT 84401  
BP-ARCHITECTS.NET  
P 801.394.3033  
F 801.394.9064

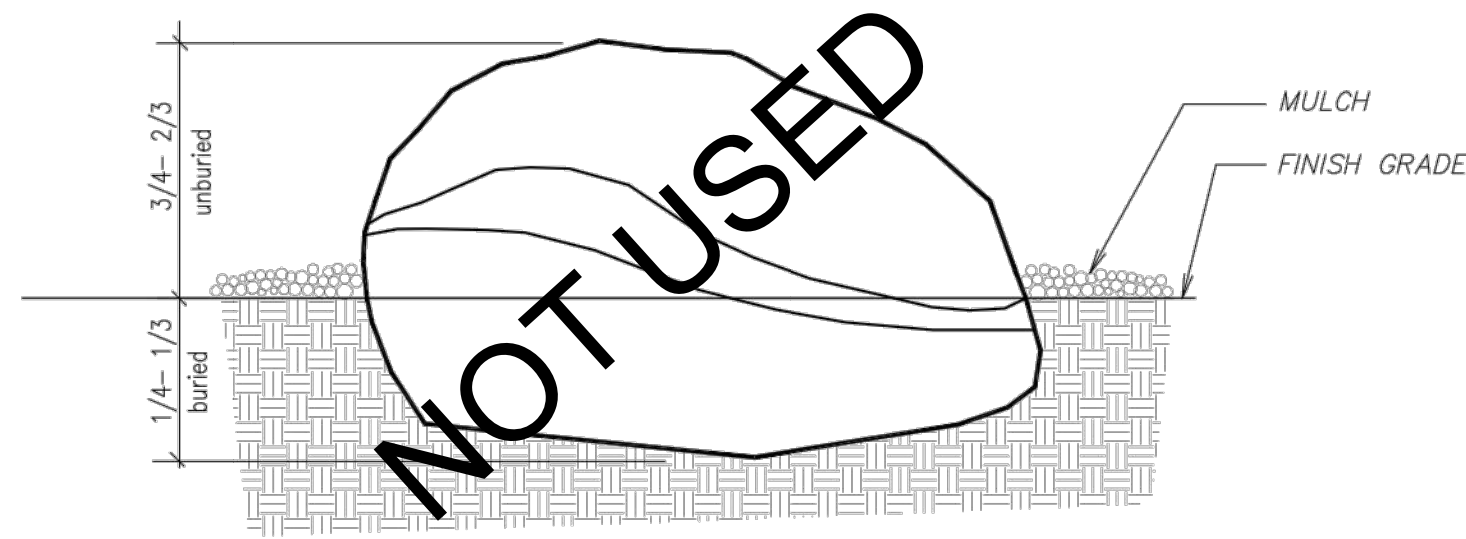
- GENERAL PLANTING NOTES:
- A. PLANTING PLAN IS DIAGRAMMATIC. CONTRACTOR SHALL VERIFY PLANT QUANTITIES AND NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES BETWEEN PLANT SYMBOLS AND QUANTITIES PRIOR TO PURCHASE ORDER.
  - B. THE LANDSCAPE PLAN IS TO BE USED IN CONJUNCTION WITH THE IRRIGATION, CIVIL, MECHANICAL, ELECTRICAL AND ARCHITECTURAL PLANS TO FORM COMPLETE INFORMATION REGARDING THIS SITE. CONTRACTOR TO COORDINATE ALL UTILITIES WITH PLANTINGS AS SHOWN HERE.
  - C. ALL PLANTING BEDS TO RECEIVE 3" DEPTH OF SHREDDED BARK MULCH, OVER APPROVED WEED BARRIER FABRIC, UNLESS OTHERWISE INDICATED ON PLAN AND SCHEDULE. FABRIC SHALL BE INSTALLED AFTER PRE-EMERGENT HAS BEEN APPLIED - SEE SPECIFICATIONS.
  - D. CONTRACTOR TO REFER TO DETAILS L & M ON SHEET L1.1 FOR PLANT SIZING STANDARDS AND TERMINOLOGY.
  - E. SEE SCHEDULE NOTES AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

- KEYED NOTES: #
- 1. PROVIDE 6" MOWCURB, SEE DETAIL D, SHEET L1.1

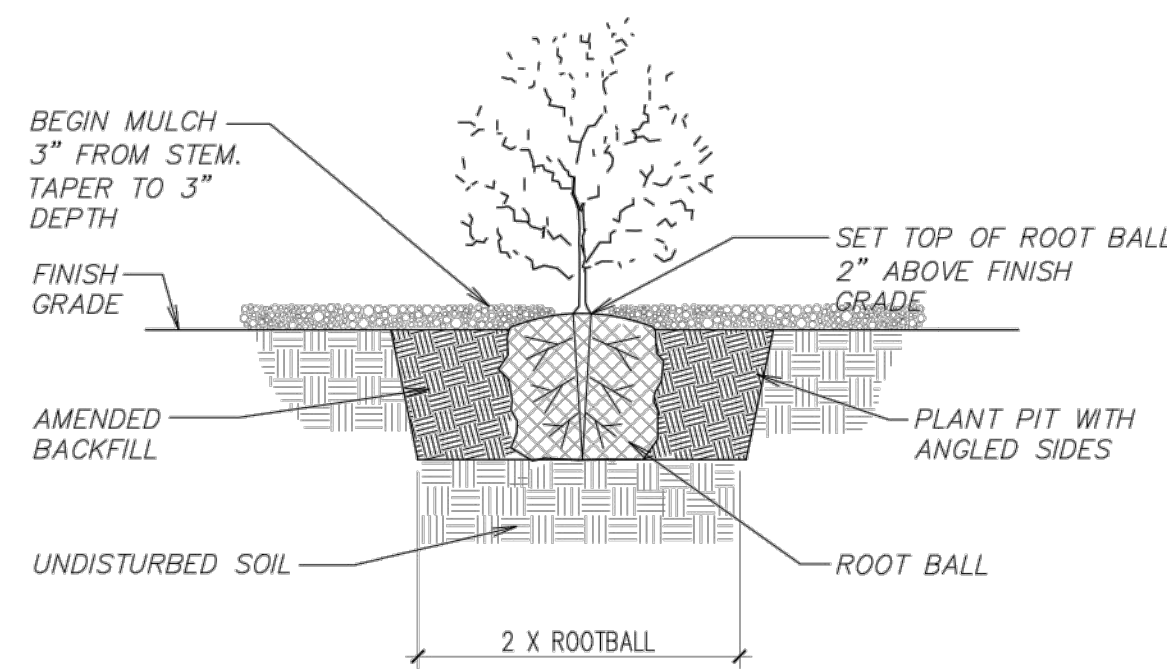
PLANT SCHEDULE				
TREES	BOTANICAL NAME	COMMON NAME	QTY	
	ACER GINNALA 'FLAME'	FLAME AMUR MAPLE	4	15 GAL/2" CAL DETAILS E-G/L1.1 (AS APPLICABLE)
	RHUS TRILOBATA	3-LEAF SUMAC	4	
	PICEA PUNGENS 'GLAUCA'	COLORADO BLUE SPRUCE	1	B&B DETAIL K/L1.1
	PINUS NIGRA	AUSTRIAN BLACK PINE	1	
SHRUBS	BOTANICAL NAME	COMMON NAME	QTY	
	JUNIPERUS SQAMATA 'BLUE STAR'	BLUE STAR JUNIPER	12	
	PINUS MUGO 'PUMILIO'	MUGO PINE	6	5 GAL DETAIL B/L1.1
	RHUS AROMATICA 'AUTUMN AMBER'	AUTUMN AMBER SUMAC	25	
GROUND COVERS	DESCRIPTION		QTY	
	SOD: REGRADE + SOD (SEE GRADING)		3,742 SF	DETAIL N/L1.1
	TURF: SOD LOCAL DROUGHT TOLERANT		3,000 SF	

TURF AREA VS. SHRUB AREA (NEW PLANTING AREA ONLY)		
TOT AREA	TURF AREA	% OF TOT
6708 SF	3000 SF	50%

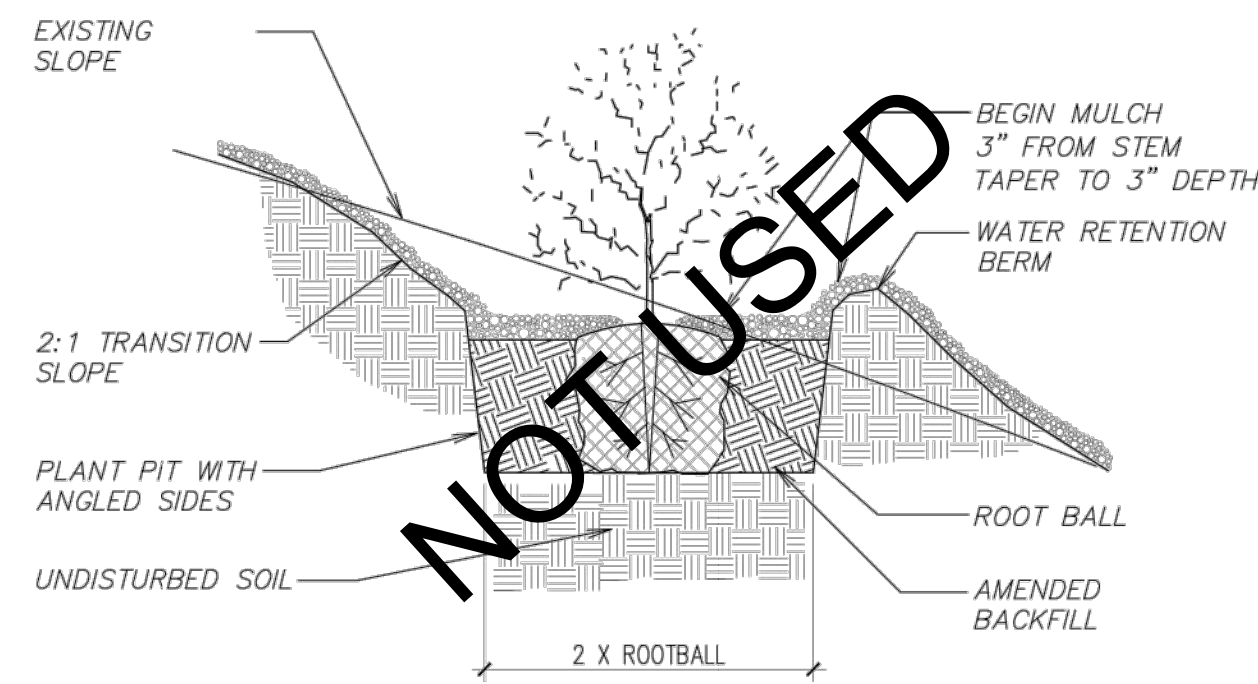




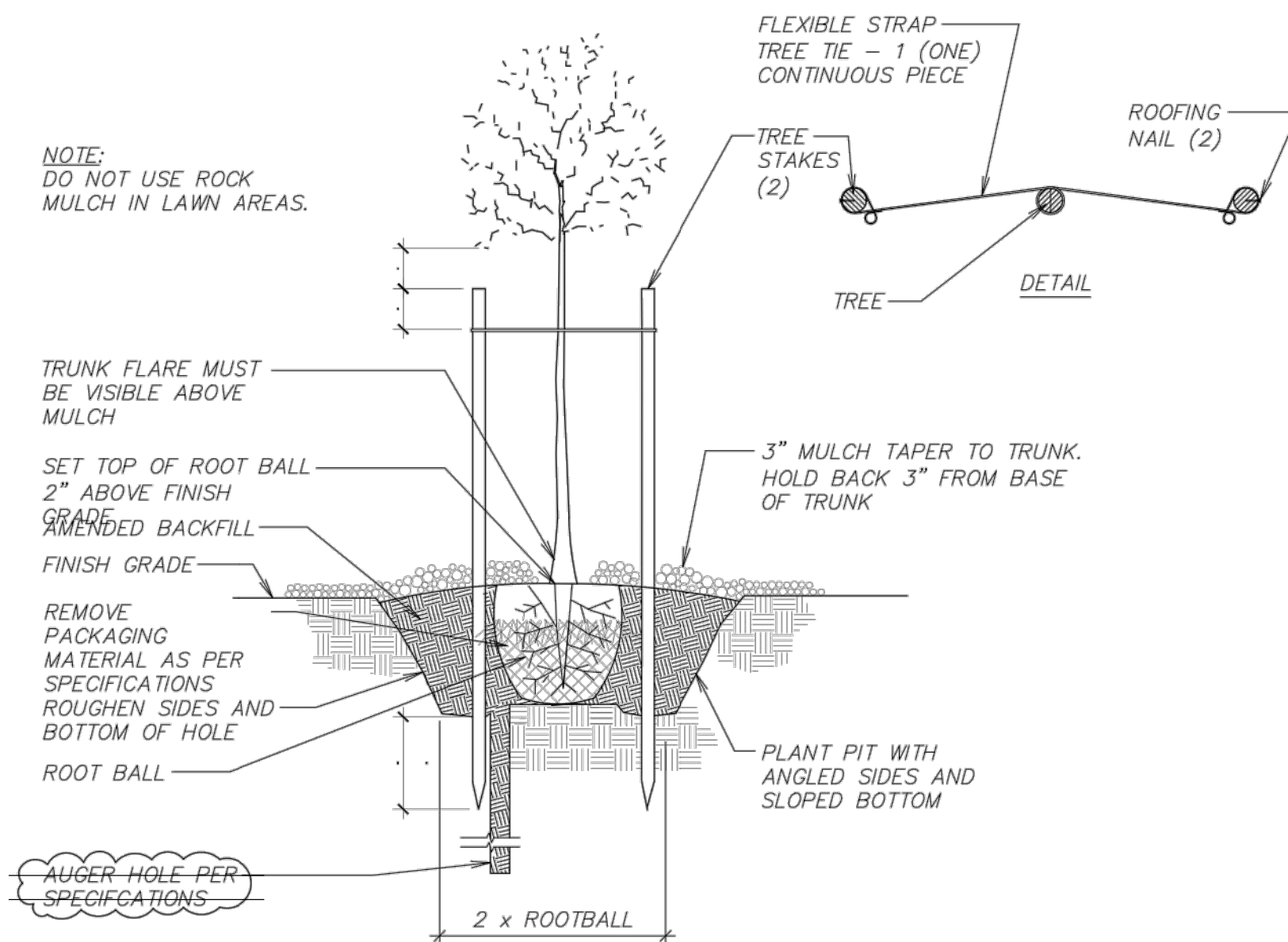
**A BOULDER PLACEMENT DETAIL**  
NOT TO SCALE



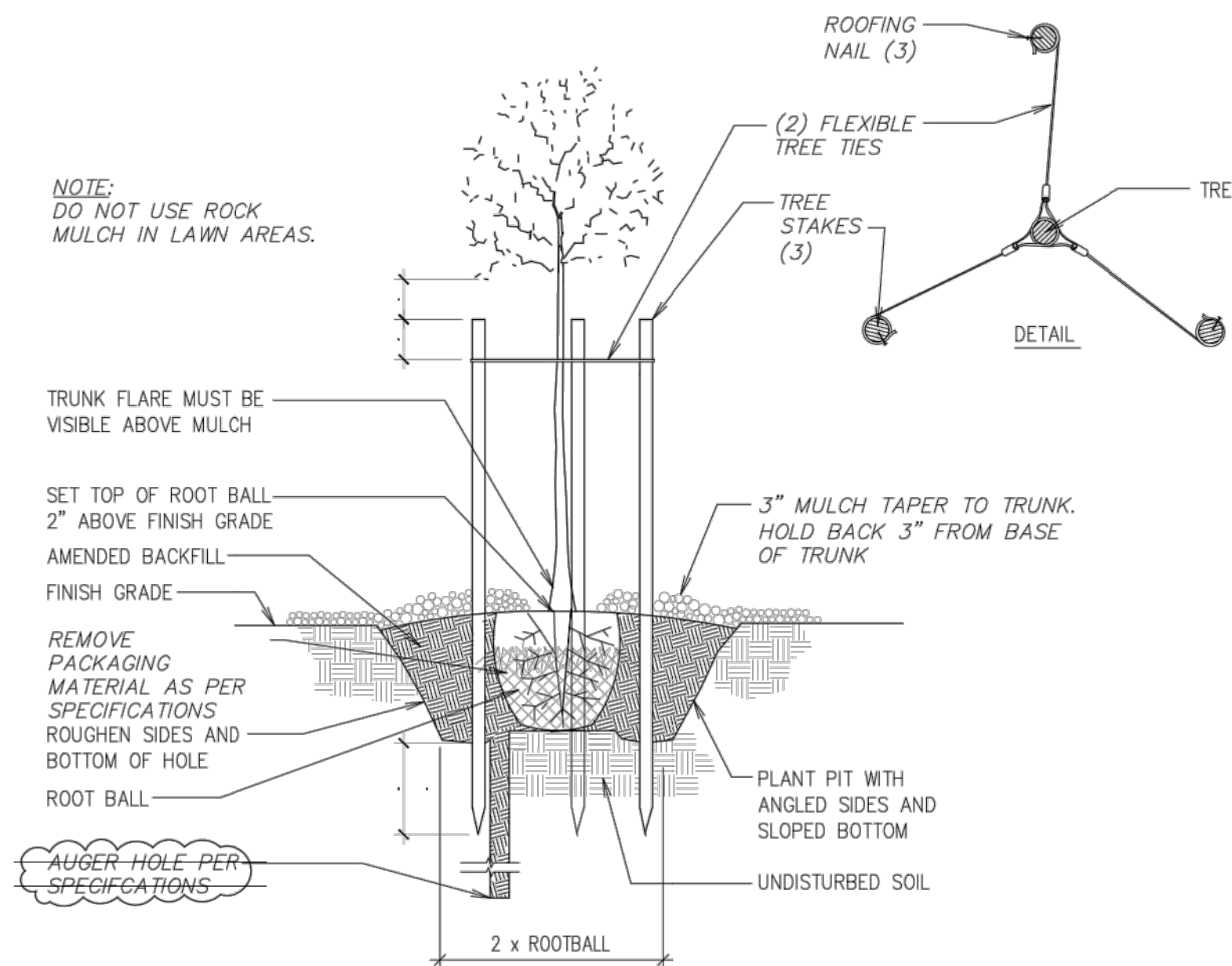
**B SHRUB PLANTING DETAIL**  
NOT TO SCALE



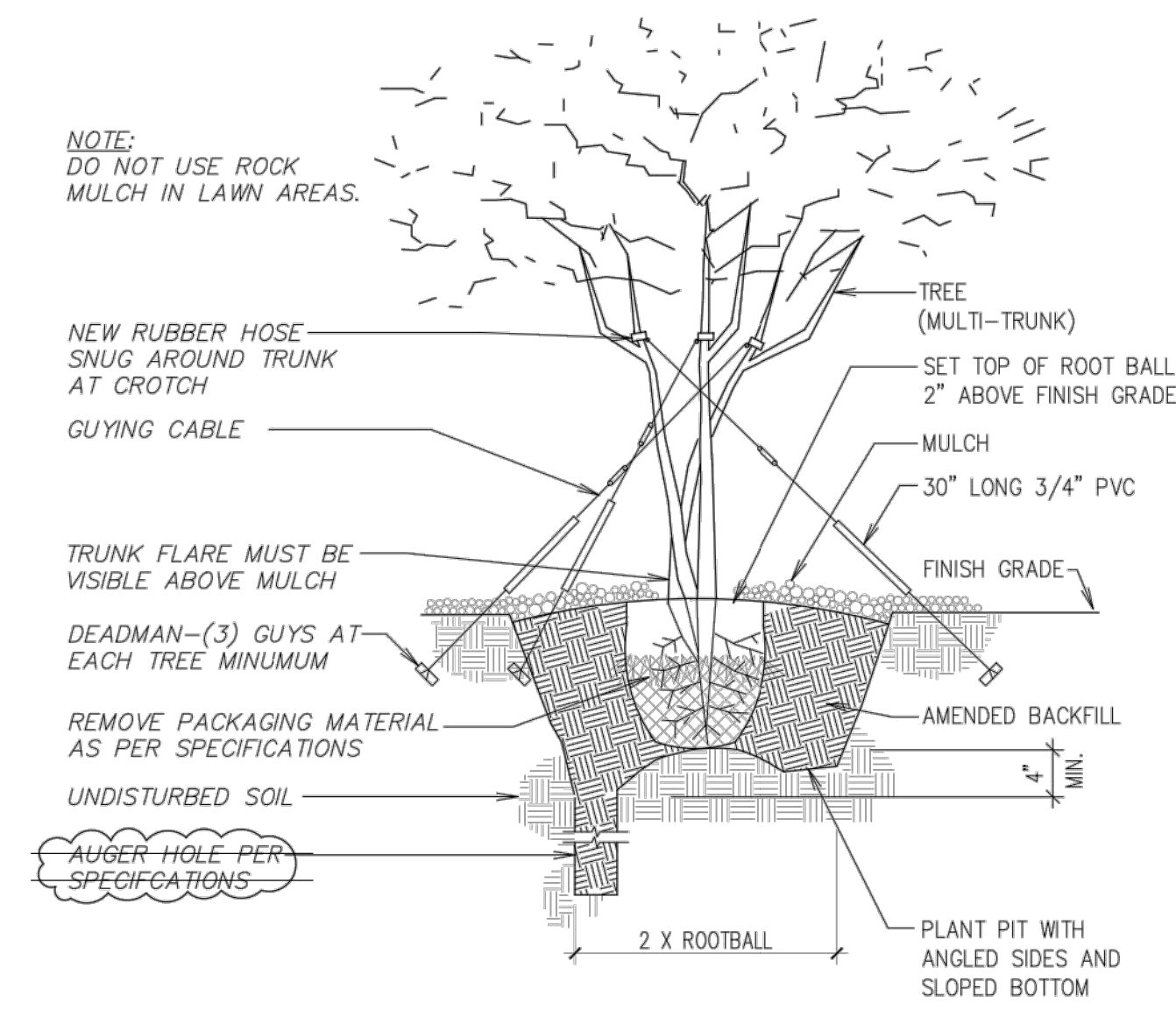
**C SLOPE PLANTING**  
NOT TO SCALE



**E TREE PLANTING AND STAKING**  
NOT TO SCALE

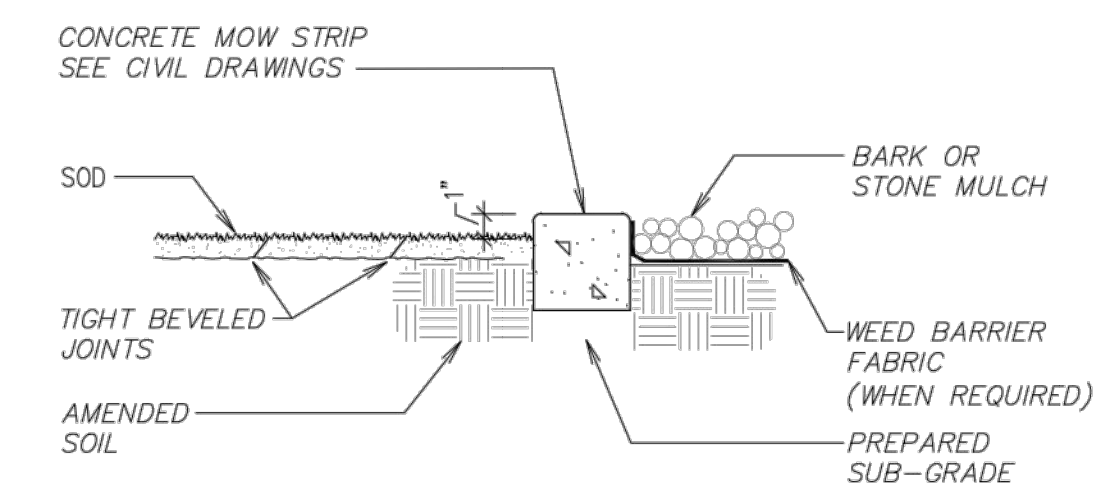


**F TREE PLANTING AND STAKING (FOR WINDY AREAS ONLY)**  
NOT TO SCALE

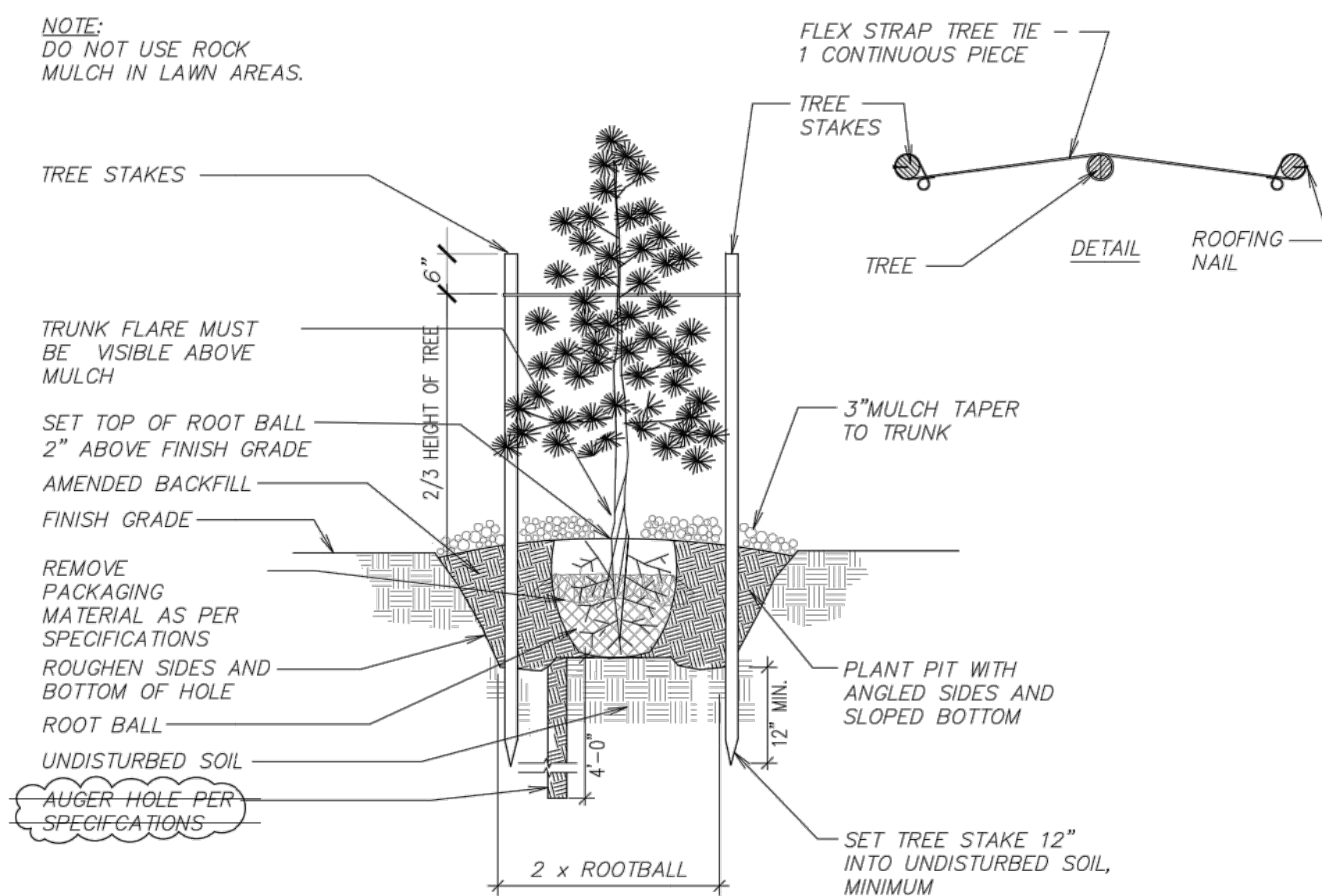


**G TREE GUYING (MULTI-TRUNK TREE)**  
NOT TO SCALE

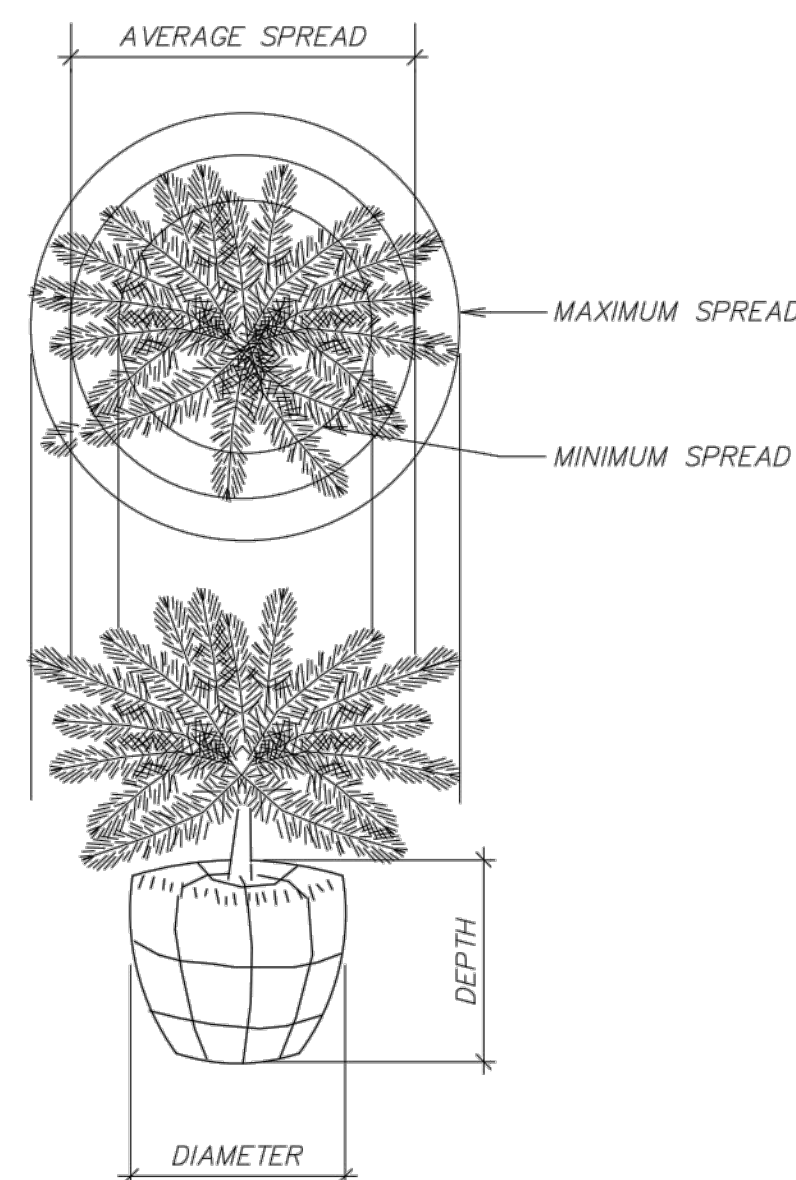
- NOTES:**
1. MOW STRIP TO BE CAST-IN-PLACE AND POURED USING TYPICAL WEIGHT STRUCTURAL CONCRETE.
  2. CONTRACTOR TO ENSURE POSITIVE DRAINAGE AROUND MOW STRIPS-DO NOT CREATE A DAM EFFECT WITH PLACEMENT OF MOW STRIP.
  3. MAXIMUM 1/2" WIDTH VARIATION.
  4. PRECISELY FOLLOW LAYOUT AS SHOWN ON MOW STRIP/EDGING DIMENSION PLAN.
  5. RAISE THE LAWN GRADE 1" WHEN SEEDING.



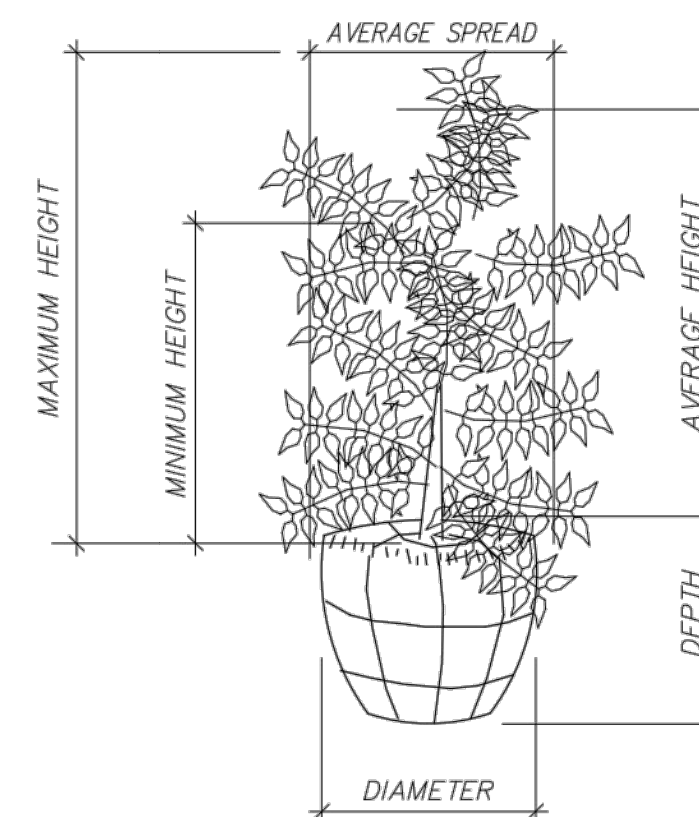
**D CONCRETE MOW STRIP**  
NOT TO SCALE



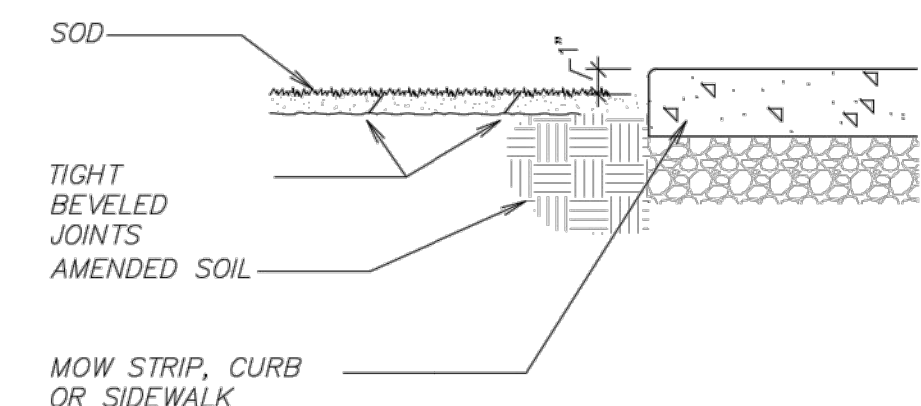
**K CONIFER PLANTING AND STAKING**  
NO SCALE



**L TYPICAL MEASUREMENT FOR PROSTRATE TYPE PLANTS**  
NOT TO SCALE



**M TYPICAL MEASUREMENT FOR BROAD UPRIGHT TYPE**  
NOT TO SCALE
















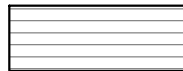







**N SOD INSTALLATION**  
NOT TO SCALE



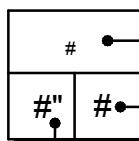
GENERAL PLANTING NOTES:

1. THIS PLAN IS DIAGRAMMATIC. SOME SYSTEM COMPONENTS ARE SHOWN IN PAVED AREAS AND BUILDINGS FOR CLARITY AND LEGIBILITY. ALL IRRIGATION EQUIPMENT AND COMPONENTS ARE TO BE INSTALLED IN LANDSCAPE AREAS.
2. CONTRACTOR TO BEST FIT IRRIGATION HEADS AS SHOWN IN DESIGN DRAWINGS TO ACTUAL SITE CONDITIONS. SOME AREAS MAY VARY DUE TO ACTUAL ON-SITE CONDITIONS. CONTRACTOR TO COORDINATE ALL NECESSARY SLEEVING ACCORDINGLY. CONTRACTOR TO ENSURE HEAD-TO-HEAD COVERAGE AND SHALL ADD/REMOVE OR ADJUST HEAD AS NECESSARY FOR FIELD CONDITIONS.
3. DUE TO ONSITE VARIATIONS SOME AREAS TO RECEIVE SPRAY HEADS MAY RECEIVE ADJUSTABLE ARC NOZZLE TO REPLACE FIXED ARC NOZZLES. CONTRACTOR TO FIELD VERIFY CONDITIONS AND REPLACE AS NECESSARY. ANY PROPOSED REPLACEMENT OF 5 OR MORE NOZZLES PER ZONE TO BE REVIEWED AND APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
4. THIS SYSTEM IS BASED UPON AN AVAILABLE WORKING PRESSURE OF 40 PSI MINIMUM AT THE WORST CASE HEAD AND 50-65 PSI MINIMUM PRIOR TO EACH VALVE. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION. CONTACT LANDSCAPE ARCHITECT IMMEDIATELY IF THESE PRESSURES ARE NOT ATTAINABLE.
5. ALL VALVE BOXES TO BE PLACED IN SHRUB BEDS AND EASILY ACCESSED AND MAINTAINED (WITHIN 12" FROM BACK OF CURB, SIDEWALK OR MOWSTRIP). REFER TO IRRIGATION **DETAILS F/G/H - SHEET L2.1** & SPECIFICATION FOR MORE INFORMATION INCLUDING COLOR AND PLACEMENT.
6. CONTRACTOR TO LOCATE SLEEVES WHERE MAINLINE AND LATERAL IRRIGATION LINES CROSS UNDER ANY PAVED SURFACE AS SHOWN ON PLAN. SLEEVES SHALL BE TWO SIZES LARGER THAN PIPES TO BE SLEEVED. MULTIPLE SLEEVES MAY BE PLACED IN A SINGLE TRENCH. SLEEVES TO EXTEND 6" BEYOND PAVED SURFACE ON EACH SIDE. WIRES ARE TO BE SLEEVED UNDER PAVED SURFACES. **SEE DETAILS A/B/C, SHEET L2.1.**
7. IT IS RECOMMENDED THAT ALL IRRIGATION SYSTEM INSTALLATION WORK BE COMPLETED UNDER DIRECTION OF A FOREMAN OR SUPERVISOR WITH FIVE YEARS MINIMUM EXPERIENCE IN IRRIGATION SYSTEM INSTALLATION.
8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL PRODUCTS AND MATERIALS INSTALLED ARE IN ACCORDANCE WITH CURRENT LAWS AND LOCAL REGULATIONS.
9. ALL IRRIGATION SYSTEM PIPING TO BE GRADED SO THE SYSTEM CAN BE COMPLETELY DRAINED OR BLOWN OUT WITH COMPRESSED AIR, TO ENSURE THE PROPER WINTERIZATION OF THE IRRIGATION SYSTEM.
10. CONTRACTOR TO ADHERE TO ALL PROCEDURES FOR INSTALLATION AS DESCRIBED IN THE PROJECT SPECIFICATION MANUAL.
11. CONTRACTOR SHALL USE NO PIPE SMALLER THAN 1" FOR ANY WATER DELIVERY PORTIONS OF THE IRRIGATION SYSTEM AND NO LATERAL DELIVERY LINES SMALLER THAN 1" SHALL BE USED ON ANY DRIP ZONE.
12. PIPE SIZE RELATES TO THE ACCUMULATION OF HEADS AND THE FLOW NEEDS OF EACH HEAD. GENERALLY THE PIPE SIZE IS LARGEST NEAR THE VALVE AND GETS SMALLER AS IT MOVES TOWARD THE END-LINE SPRINKLER HEADS.
13. CONTRACTOR TO USE TREE-DRIP FOR ALL PROPOSED DECIDUOUS AND EVERGREEN TREES THAT ARE IN PLANTER BEDS ONLY NOT REQUIRED FOR TREES IN TURF AREAS. THIS CONFIGURATION MAY BE USED IN CONJUNCTION WITH DRIP TUBING SYSTEM. USE CARE IN APPLICATION. DO NOT WATER AREAS WHERE NO SHRUBS OR TREES ARE PROPOSED. LANDSCAPE ARCHITECT TO VERIFY DRIP TUBING PLACEMENT PRIOR TO MULCH APPLICATION.

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL	QTY	PSI	DETAIL
    	RAIN BIRD 1804-PRS 15 SERIES MPR	28	30	 DETAIL K&L L2.2
    	RAIN BIRD 1806-PRS 15 STRIP SERIES	6	30	 DETAIL K&L L2.2
SYMBOL	MANUFACTURER/MODEL	QTY		DETAIL
	RAIN BIRD XCZ-100-PRB-COM	2		DETAIL G L2.2
	AREA TO RECEIVE DRILINE RAIN BIRD XFCV-09-18 (18)	1,681 SF		DETAIL F L2.2
	TREE DRILINE CIRCLE AREA			DETAIL A L2.2
SYMBOL	MANUFACTURER/MODEL	QTY		DETAIL
	RAINBIRD PESB-PRS-B SERIES VALVE	2		DETAIL F L2.2
	SHUT OFF VALVE	1		
	POINT OF CONNECTION, 2"	1		
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40	1,179 LF		
	IRRIGATION MAINLINE: PVC SCHEDULE 40	465.0 LF		
	PIPE SLEEVE: POLYETHYLENE AND PVC CLASS 200	28.6 L.F.		

VALVE CALLOUT

	VALVE NUMBER
	VALVE FLOW
	VALVE SIZE

KEYED NOTES: #

1. AREA TO BE REGRADED FOR RETENTION BASIN AND/OR NEW STORM DRAIN LINE. PATCH AND REPAIR EXISTING IRRIGATION PIPE IN THIS AREA AS REQUIRED TO MATCH GRADE. AS NECESSARY READJUST/RESET HEADS AGAINST EXISTING METAL EDGING OR CURBING, ENSURING HEAD TO HEAD COVERAGE & LATERAL PIPE COVER DEPTHS.
2. PROVIDE SLEEVING. SEE GENERAL NOTES AND DETAILS. IF EXISTING IRRIGATION LINES ARE DAMAGED IN NEW CONSTRUCTION, PATCH AND REPAIR AS REQUIRED AND PROVIDE NEW SLEEVING, SEE UTILITY & SITE PLAN.

IRRIGATION PLAN

1

Scale: 1" = 20'-0"



CACHE LANDMARK ENGINEERING  
95 GOLF COURSE ROAD SUITE 101  
435.713.0099

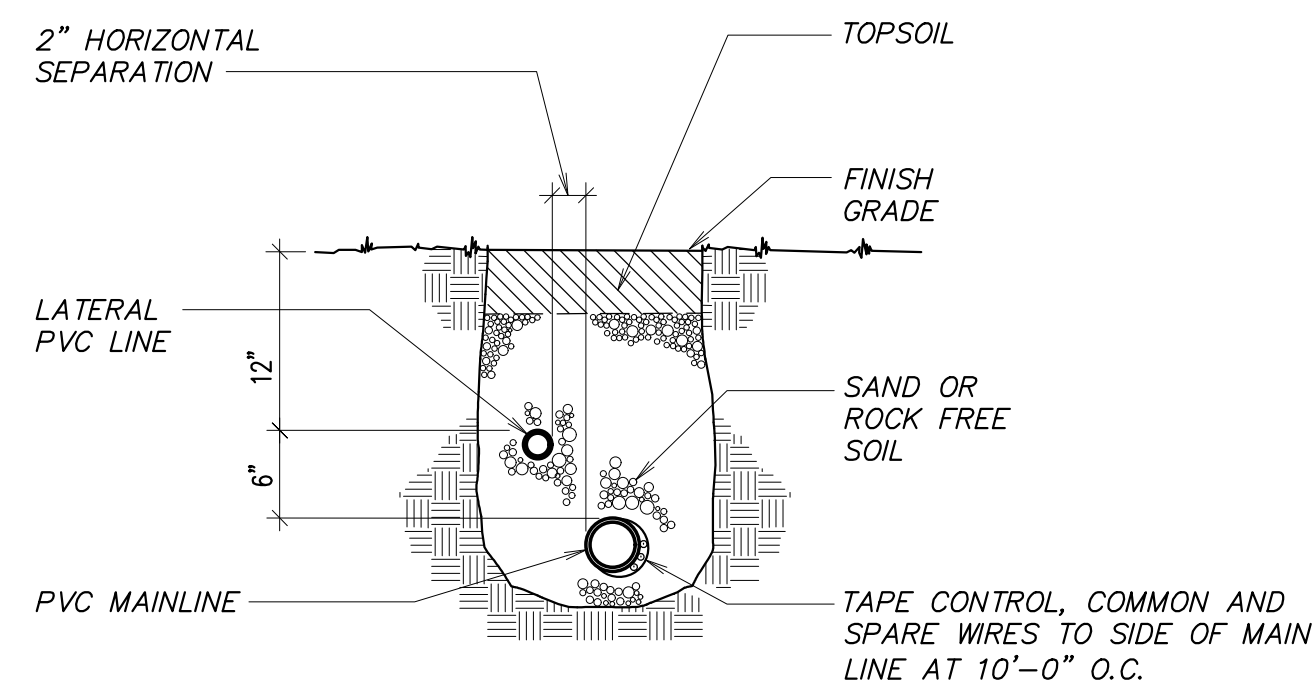


1" = 20'-0"  
07.15.19  
Project Number: 1922  
Property Number: 538-7388

LIBERTY 1.2 WARD PARKING ADDITION  
4150 N 3300 E  
LIBERTY, UT 84310

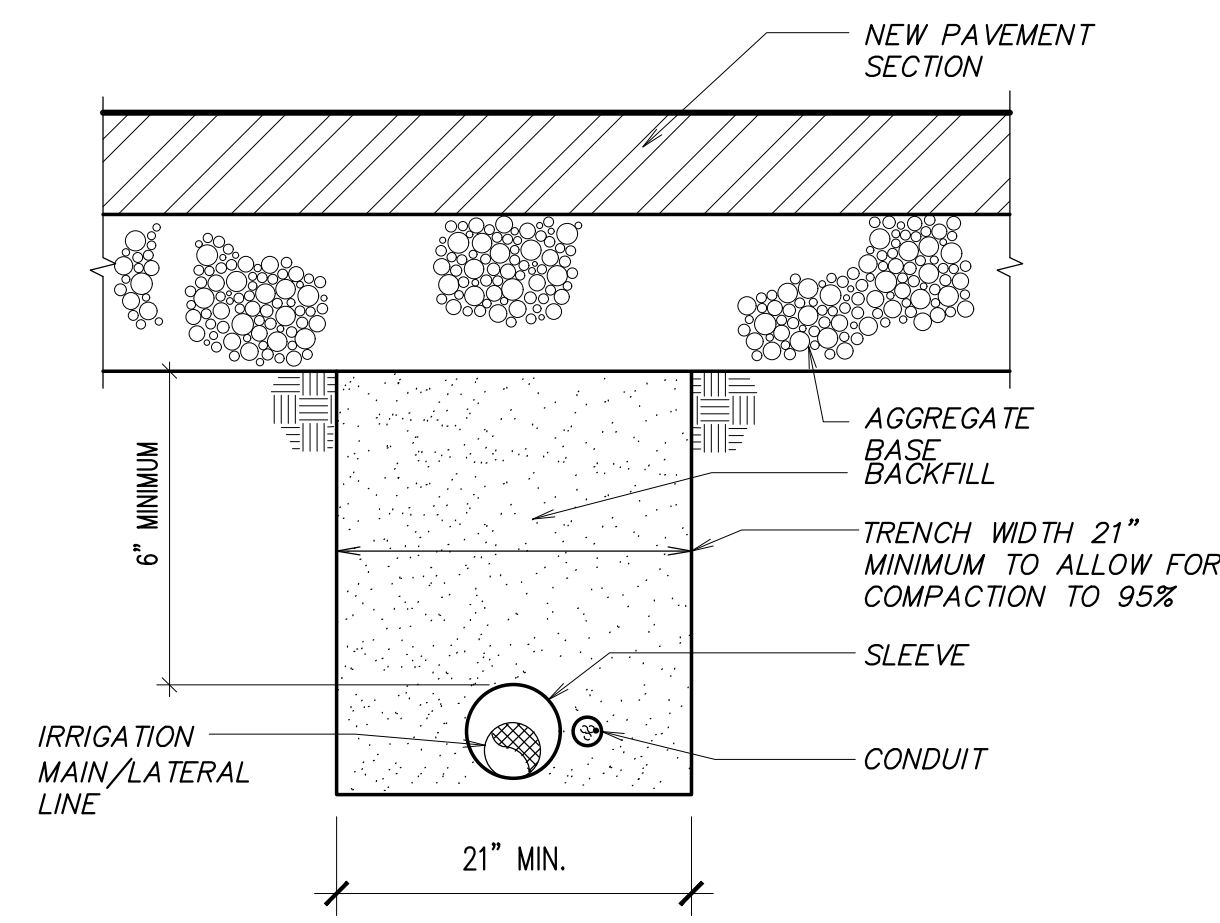
L2.0



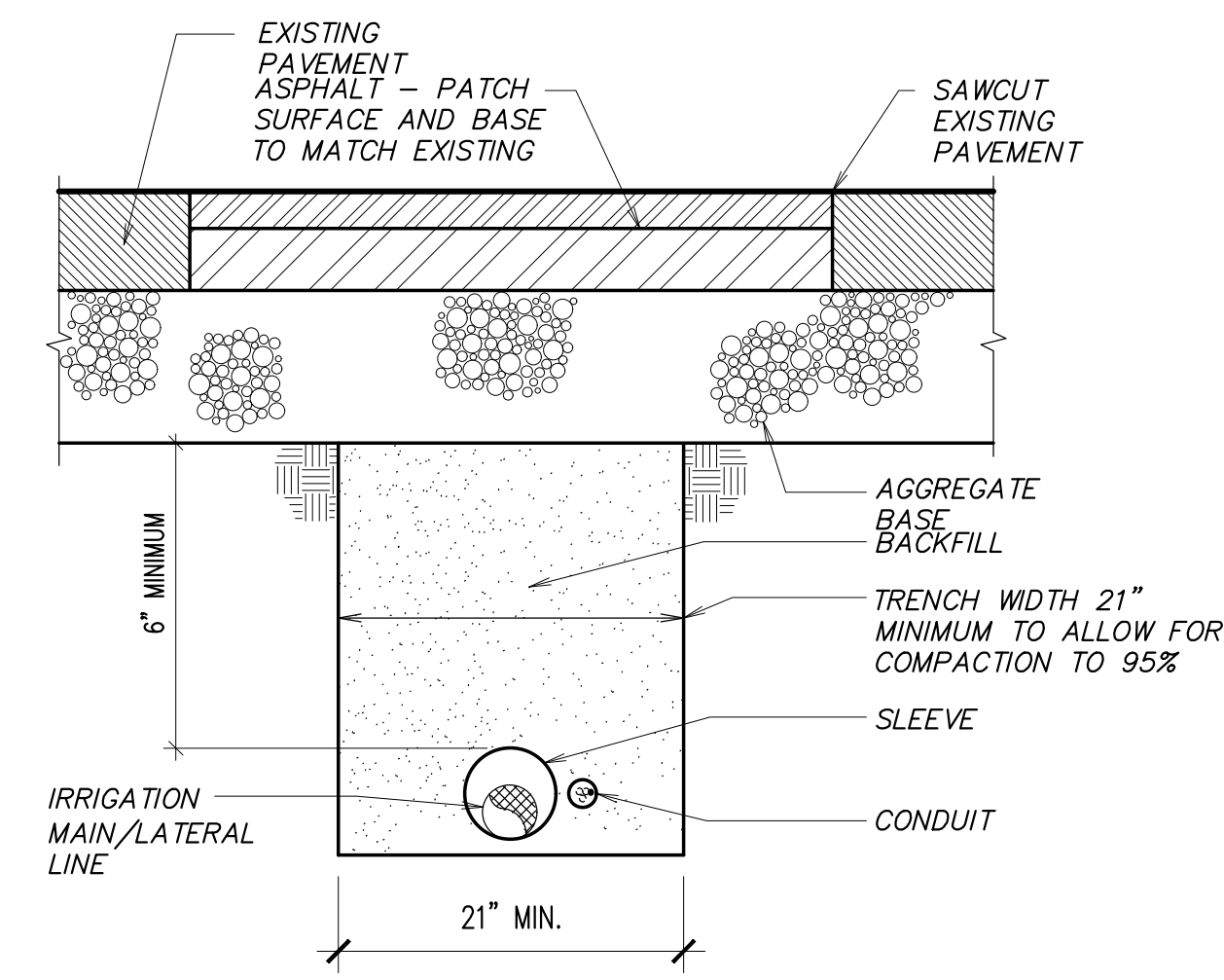


**CONVENTIONAL WIRE SYSTEM**

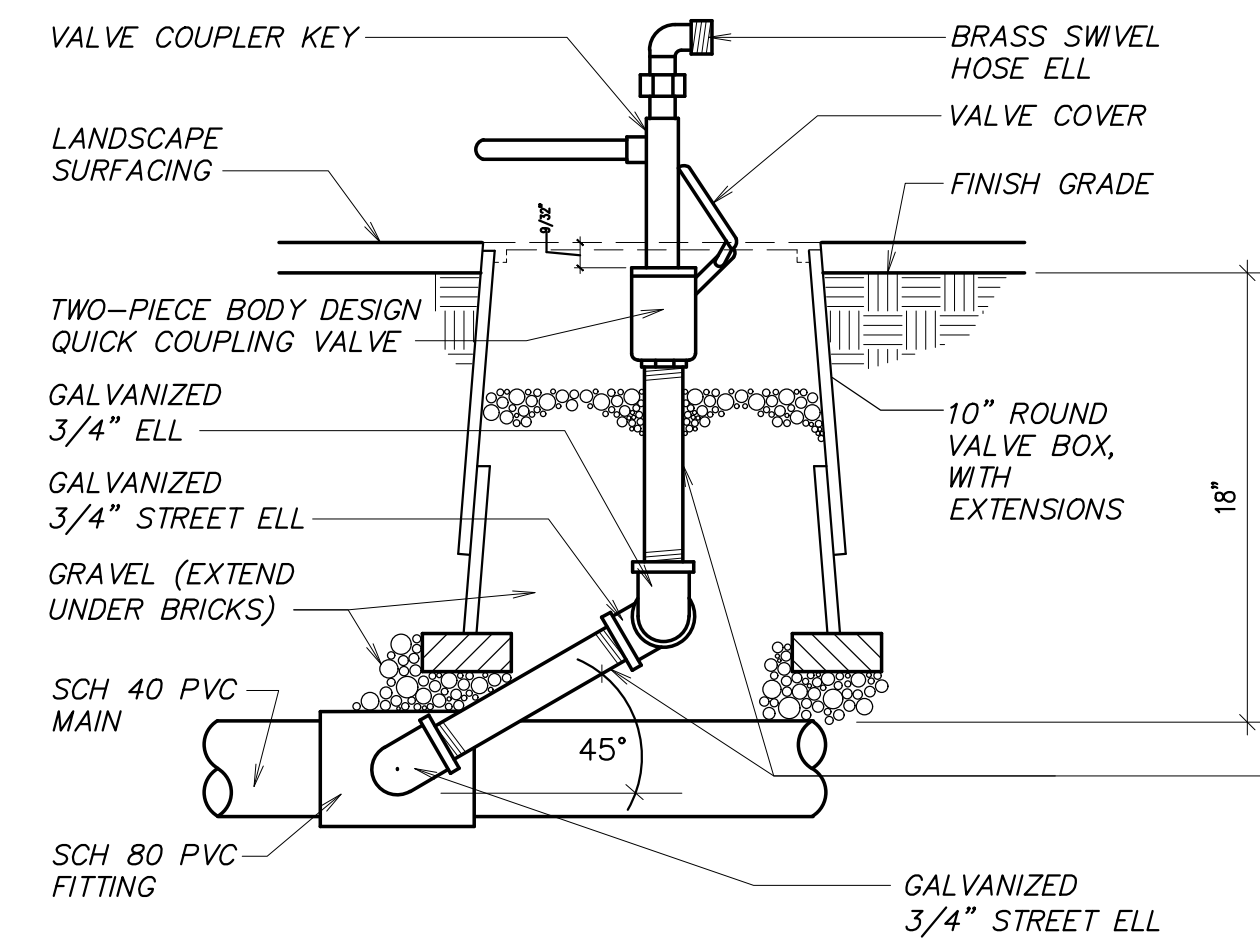
**A TRENCH SECTION**  
NO SCALE



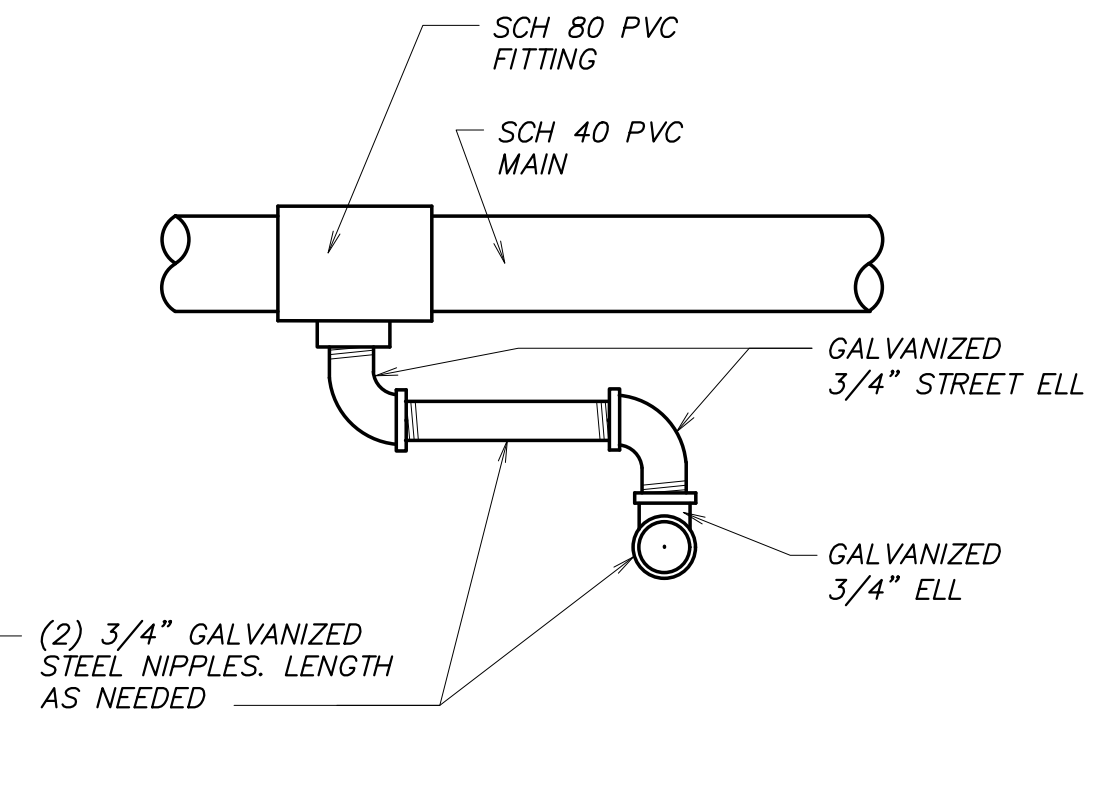
**B MISC. PIPE TRENCH DETAIL  
NEW PAVEMENT AREAS**  
NO SCALE



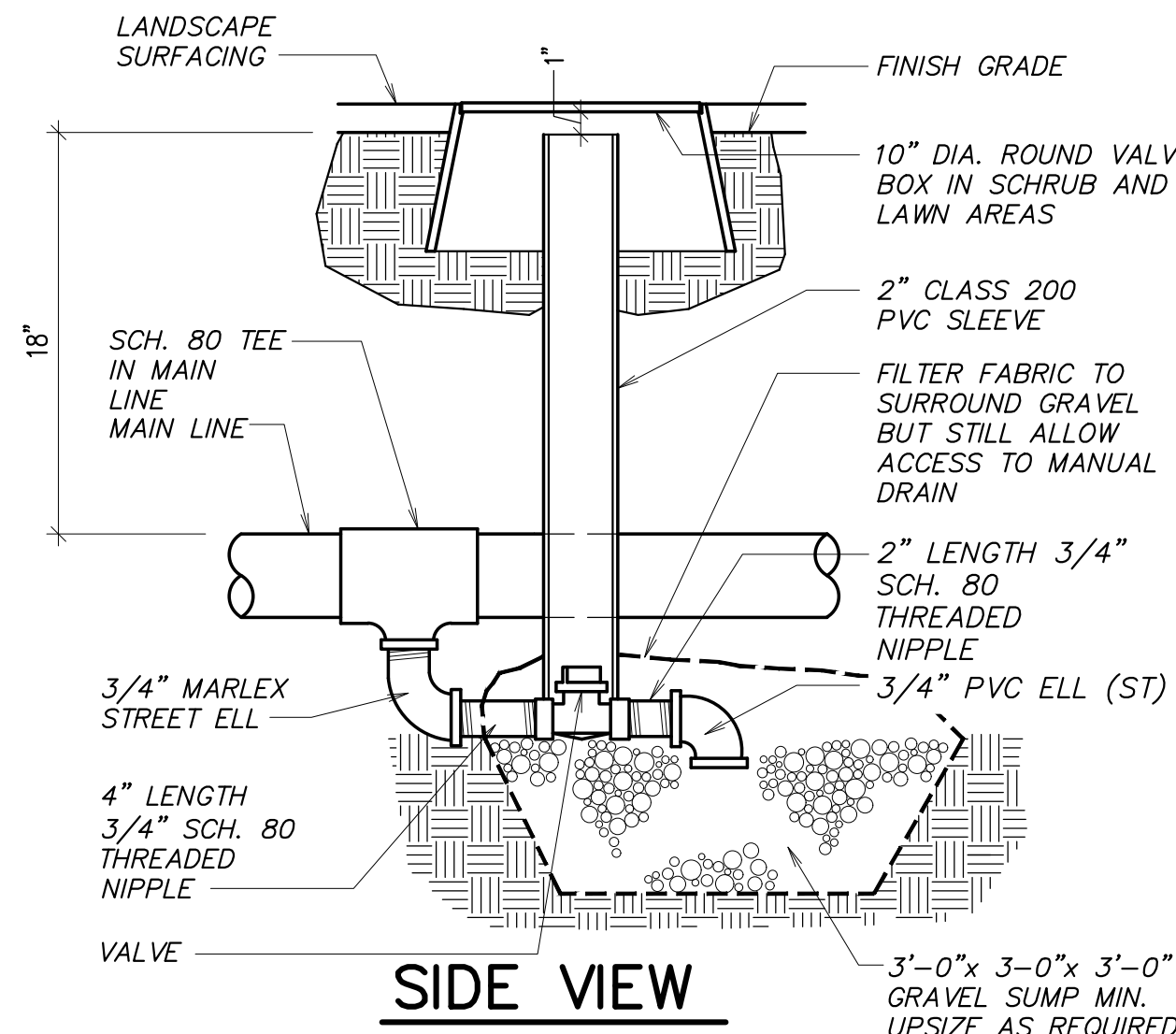
**C MISC. PIPE TRENCH DETAIL  
EXIST. PAVEMENT AREAS**  
NO SCALE



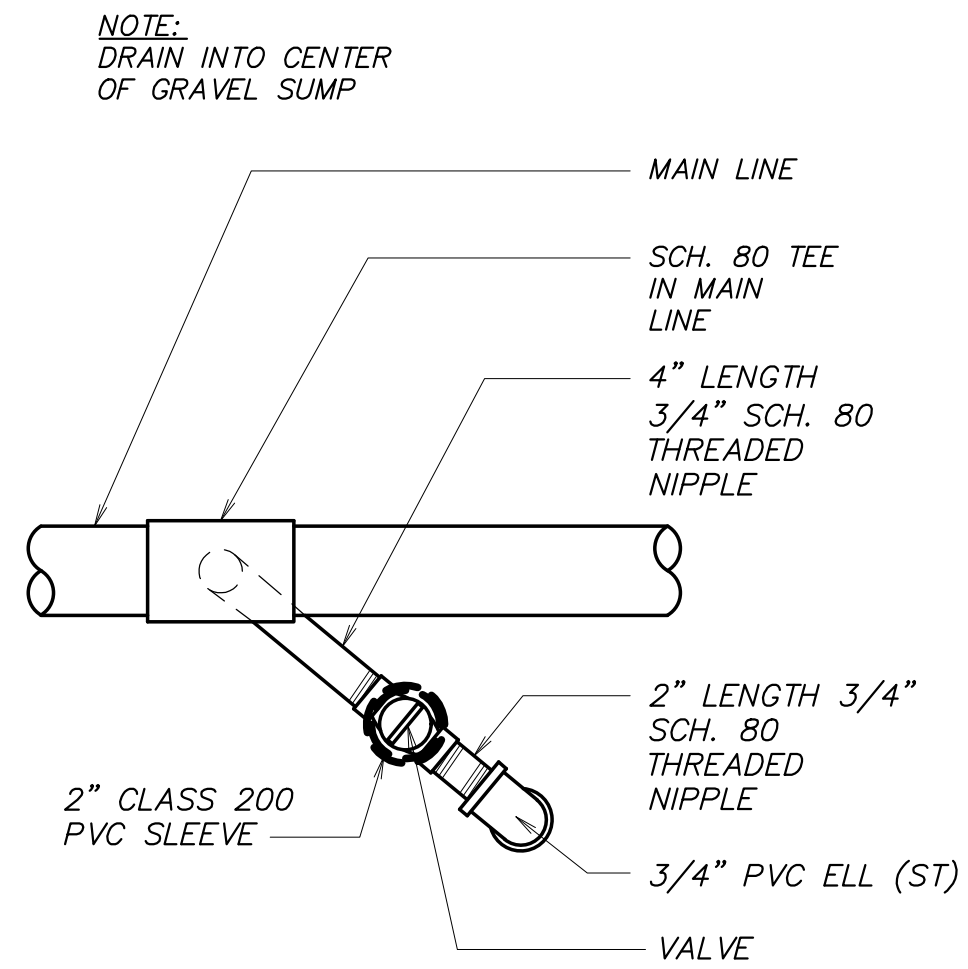
**SIDE VIEW**



**TOP VIEW**



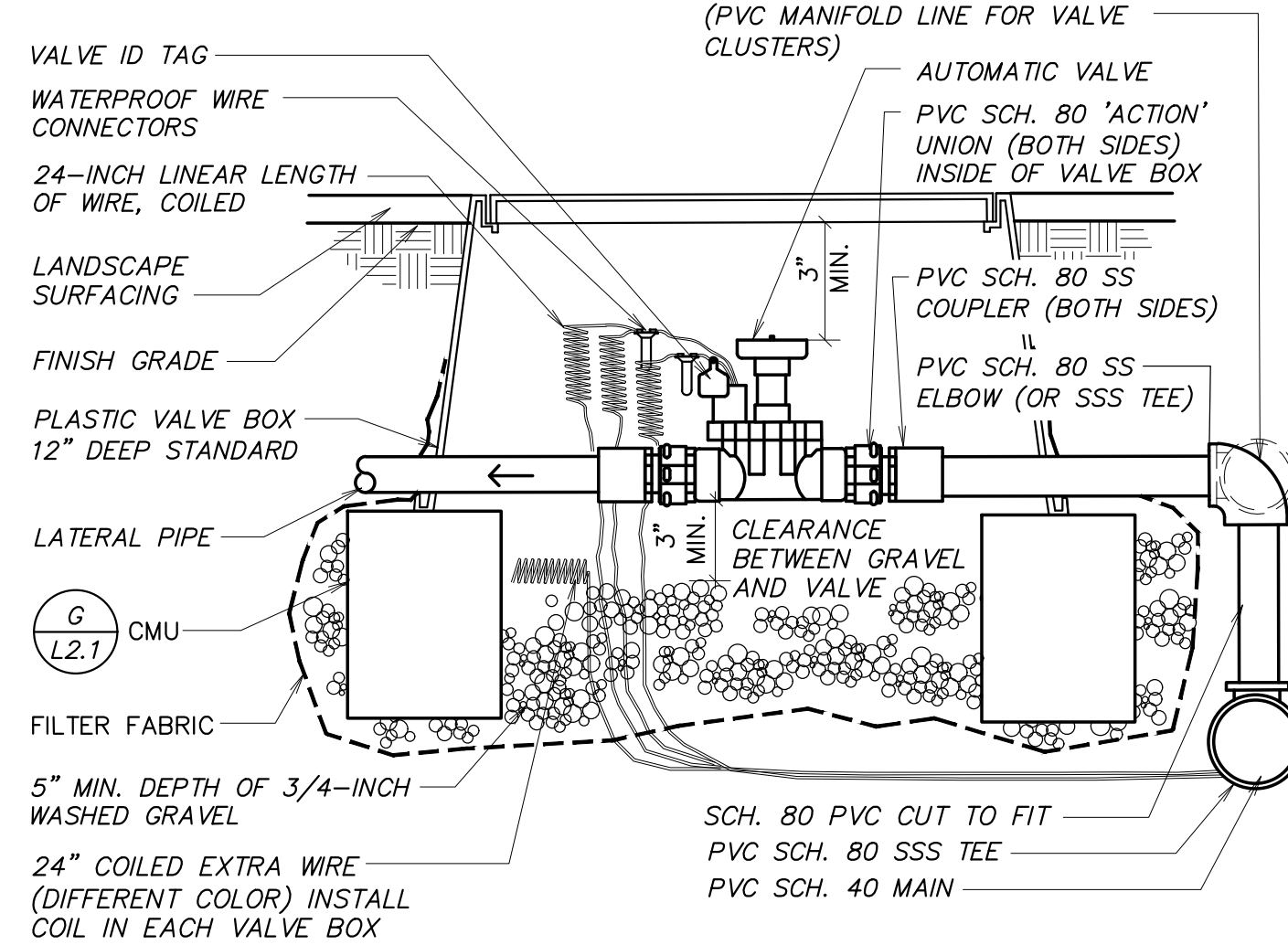
**SIDE VIEW**



**TOP VIEW**

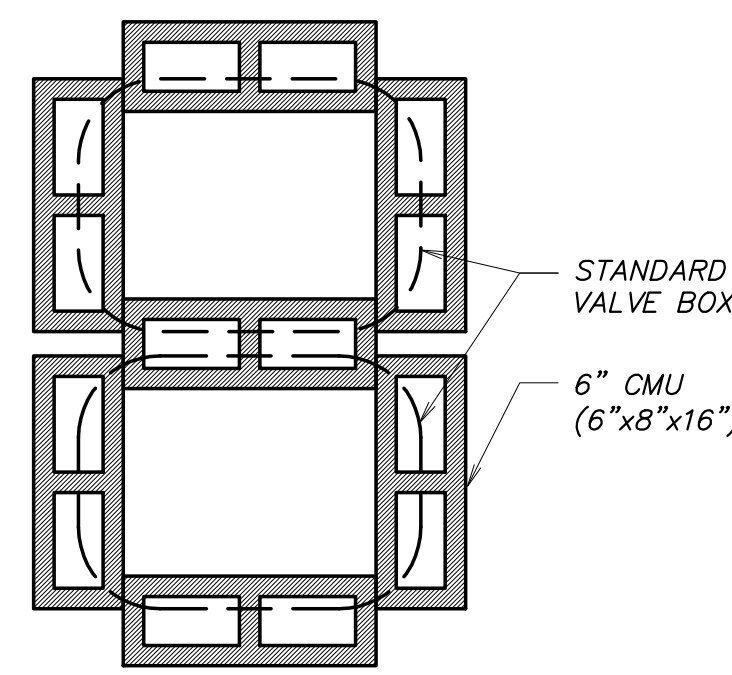
**E MAIN LINE  
MANUAL DRAIN VALVE**  
NO SCALE  
USE AT EVERY LOW SPOT  
ON MAINLINE

NOTES:  
1. LIMIT 1 VALVE PER BOX.  
2. 10" MIN. LATERAL LINE DEPTH AT VALVE BOX, 12" MIN. LATERAL LINE DEPTH EVERYWHERE ELSE.  
3. PROVIDE MIN. 2" CLEARANCE BETWEEN WIRE AND CMU BLOCK.

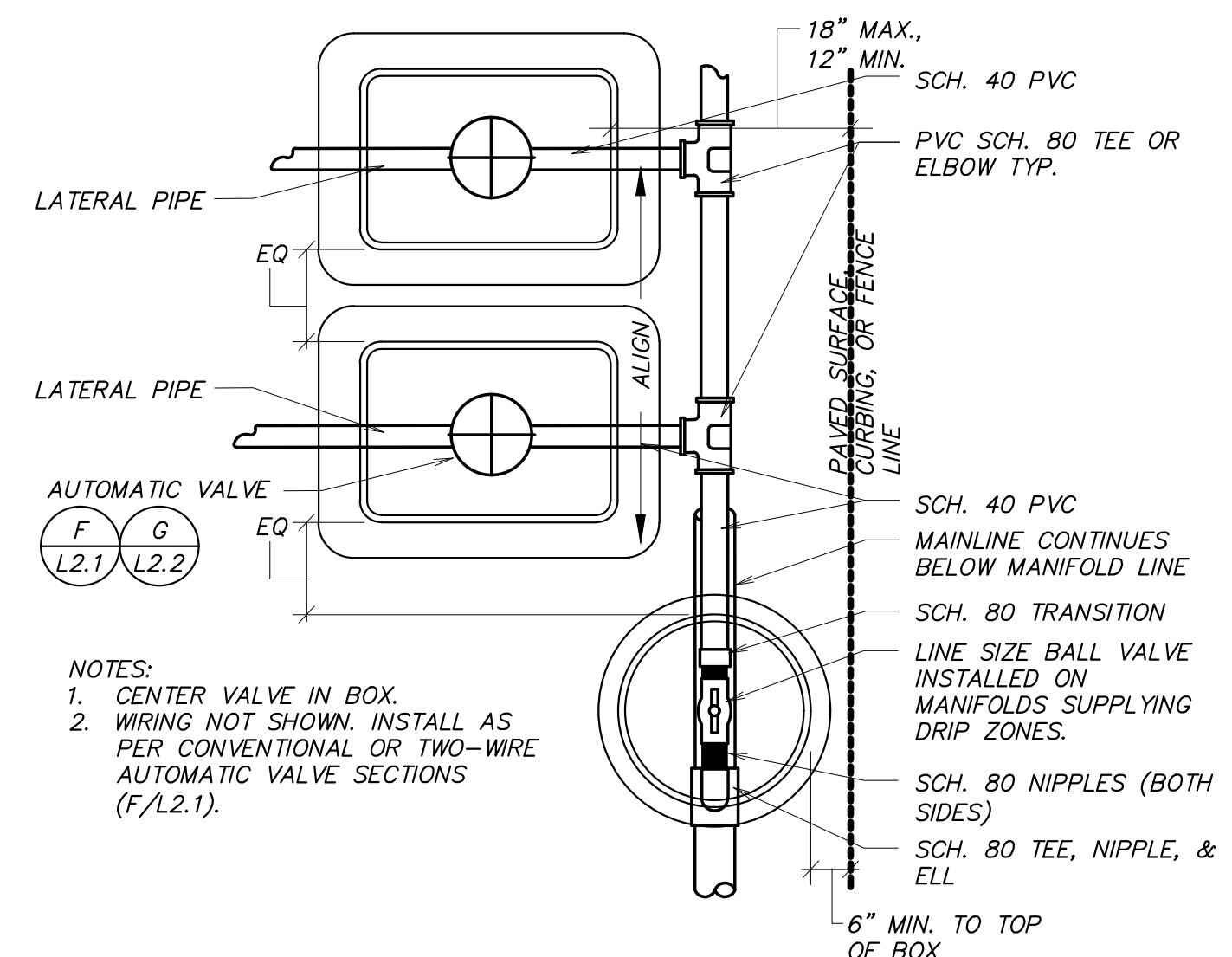


**F AUTOMATIC VALVE WITH  
CONVENTIONAL WIRE SYSTEM**  
NO SCALE

NOTES:  
1. VALVE BOX TO REST ON (4) CMU BLOCKS (ONE FOR EACH SIDE).  
2. CLUSTERED VALVE BOXES MAY SHARE A CMU BLOCK.



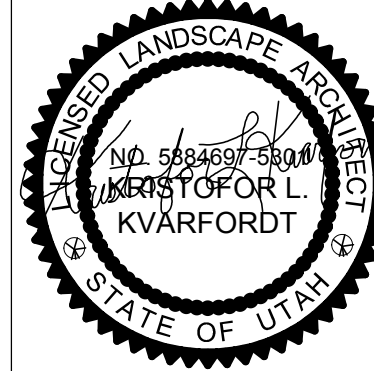
**G CMU PLACEMENT**  
NO SCALE



**H MANIFOLD & VALVE  
ASSEMBLY**  
NO SCALE  
USE AT VALVE CLUSTERS



CACHE LANDMARK ENGINEERING  
95 GOLF COURSE ROAD SUITE 101  
435.713.0099



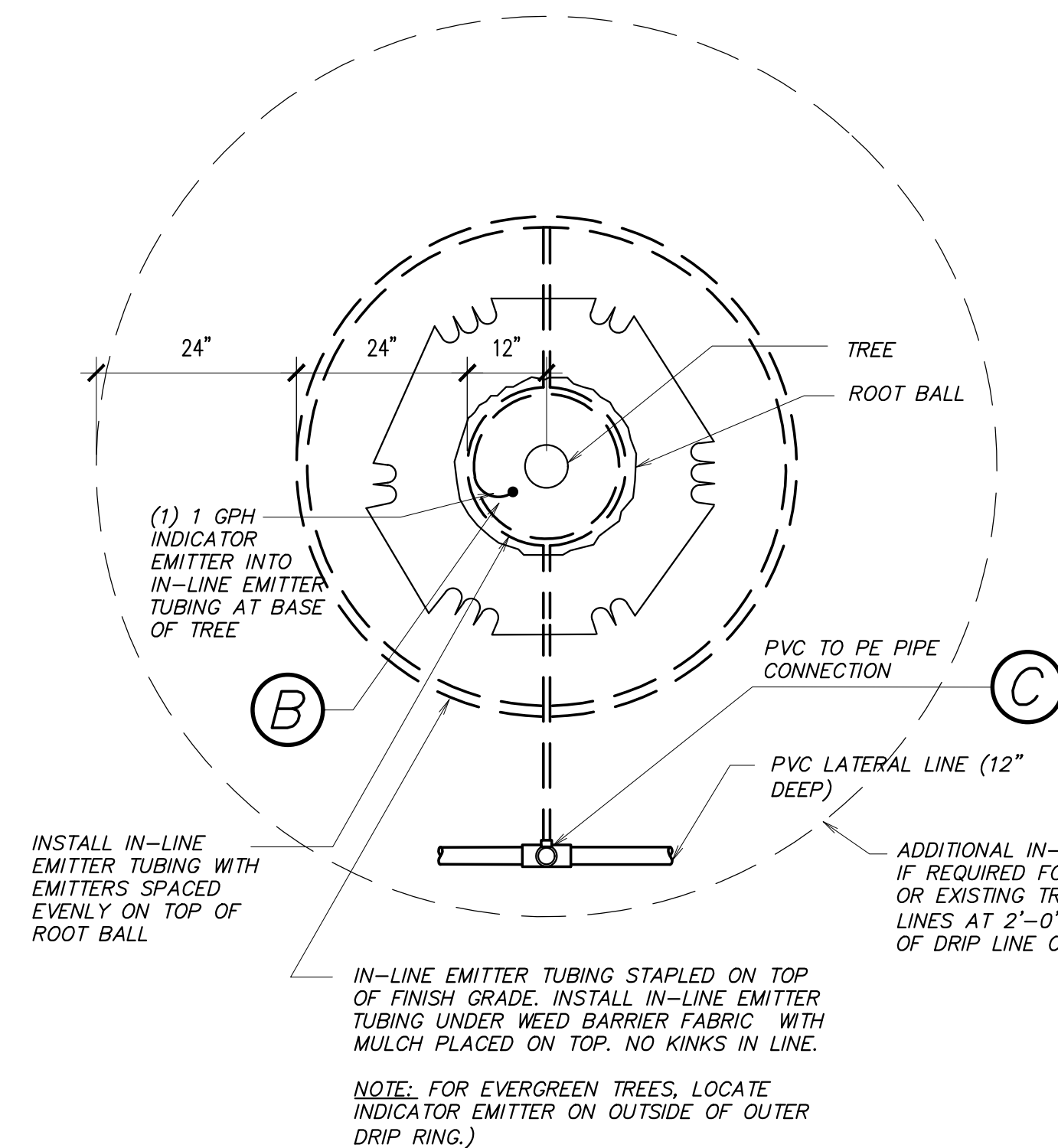
**IRRIGATION DETAILS**

1" = 20'-0"  
07.15.19  
Project Number: 1922  
Property Number: 538-7388

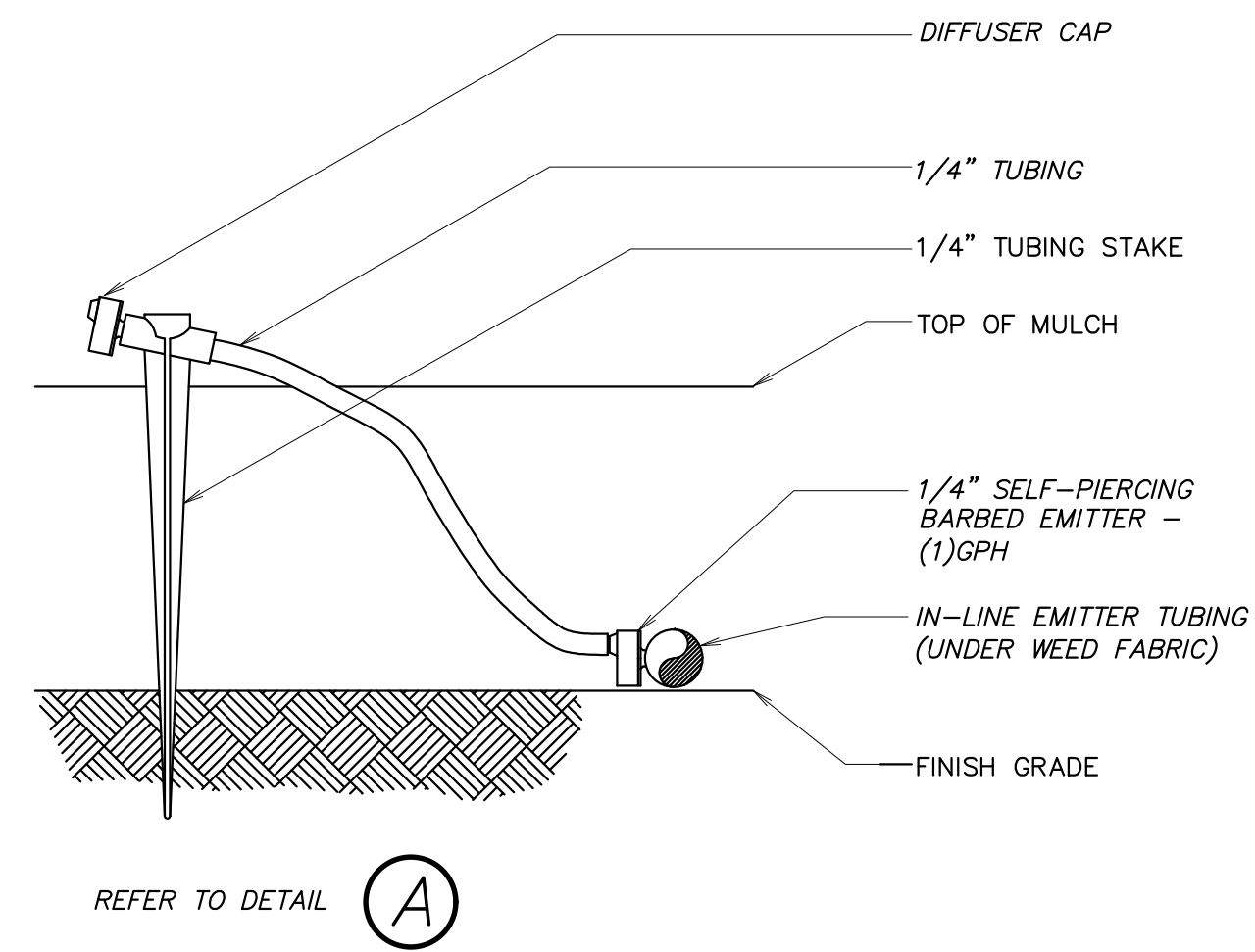
LIBERTY 1,2 WARD PARKING ADDITION  
4150 N 3300 E  
LIBERTY, UT 84310

**L2.1**

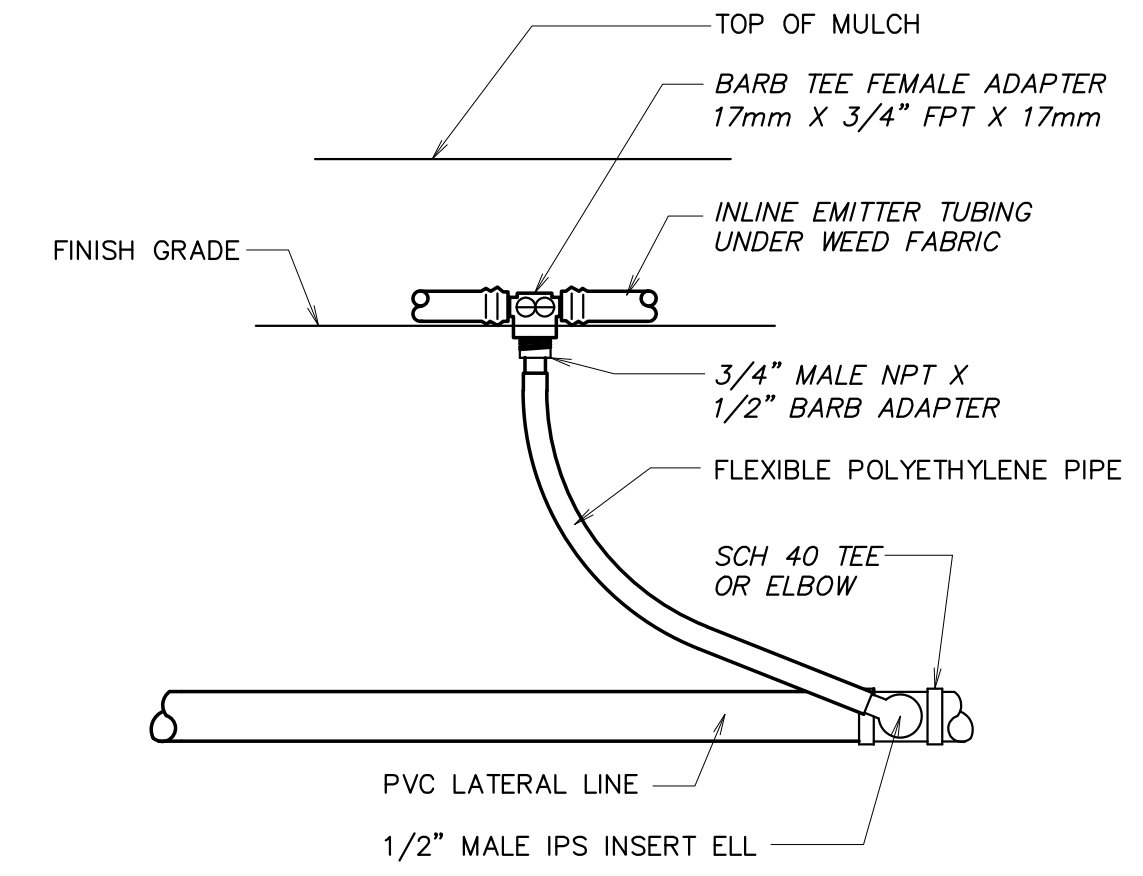




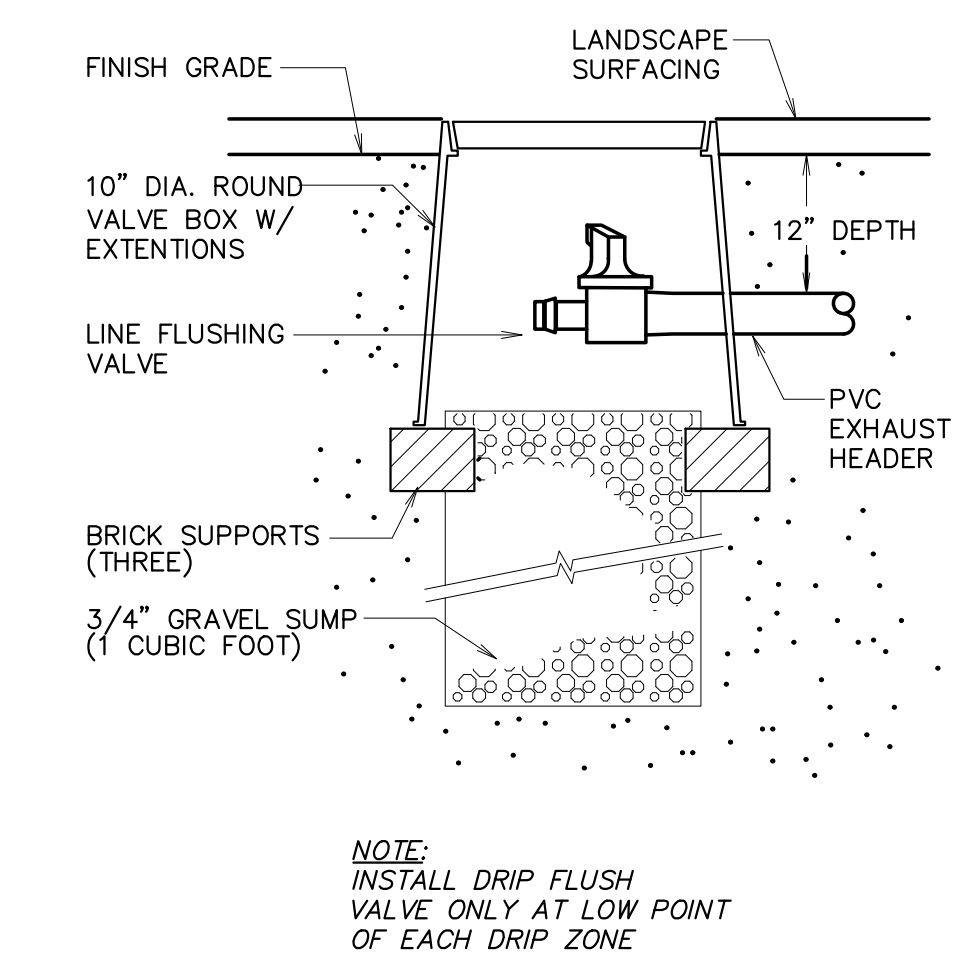
**A TREE DRIP-PLAN VIEW (Planter Areas)**  
NO SCALE  
NOTE: ALL FITTINGS TO IN-LINE DRIP TUBING TO BE COMPRESSION FITTINGS. IF MALE INSERTS ARE NEEDED, INSTALL WITH OETICKER CLAMPS.



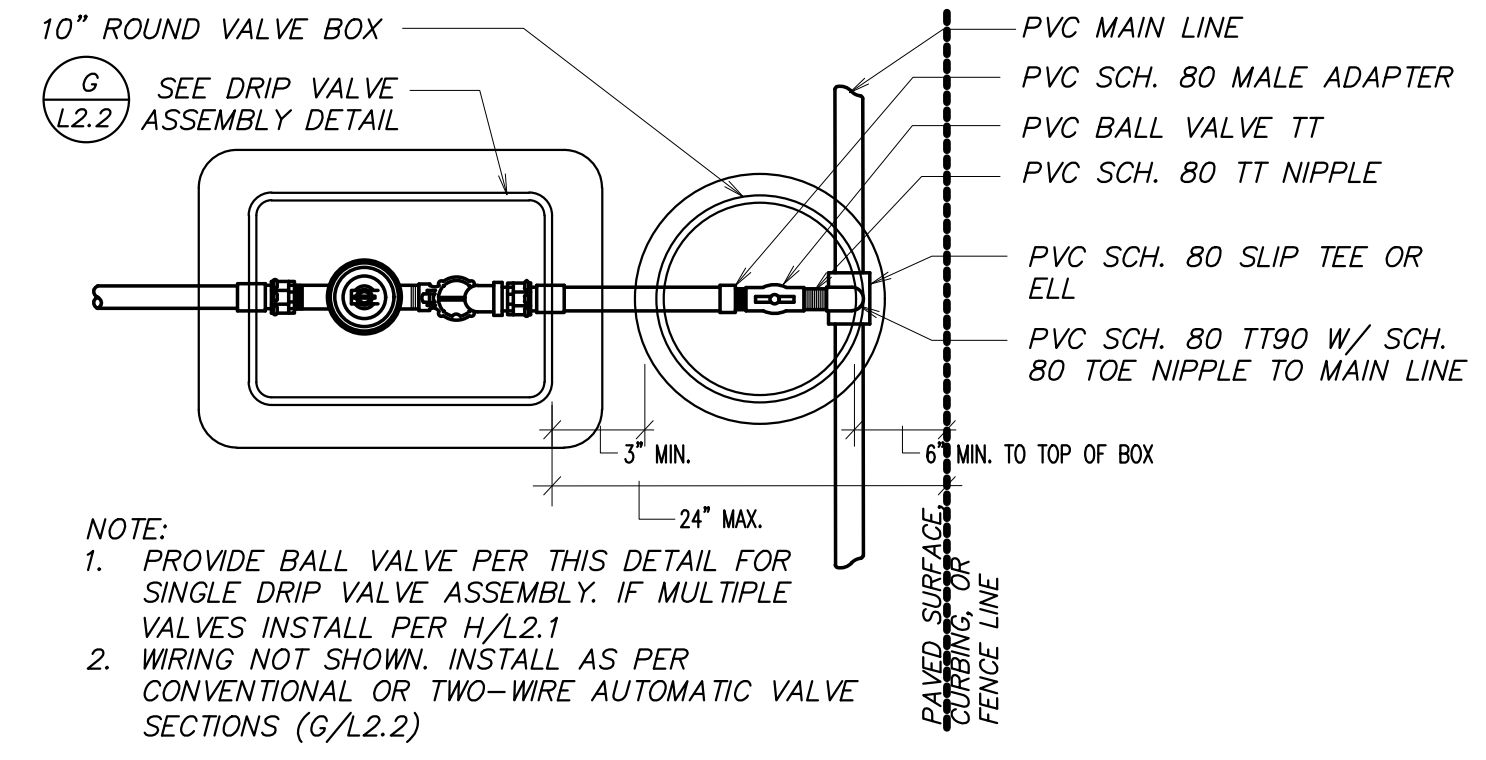
**B INDICATOR EMITTER**  
NO SCALE  
NOTE:  
1. CONNECT SELF-PIERCING EMITTER DIRECTLY INTO IN-LINE EMITTER TUBING.  
2. THIS IS AN INDICATOR ONLY EMITTER TO BE USED AT EACH TREE RING AND AREA WHERE IN-LINE EMITTER TUBING IS INSTALLED.  
3. 1/4" TUBING LENGTH: MINIMUM 14", MAXIMUM 24".



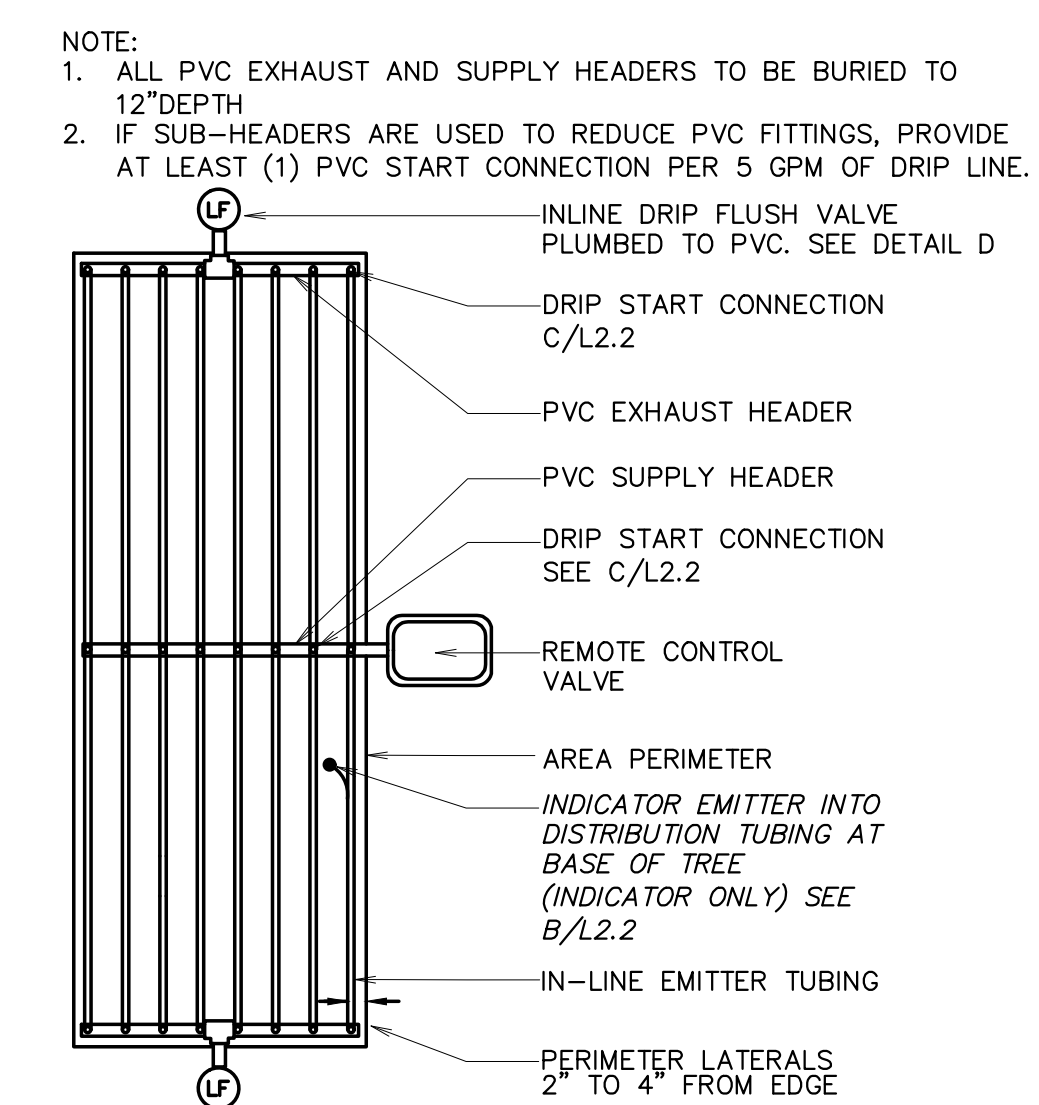
**C PVC TO IN-LINE EMITTER**  
NO SCALE  
NOTE:  
1. USE AT TREE RINGS ONLY.



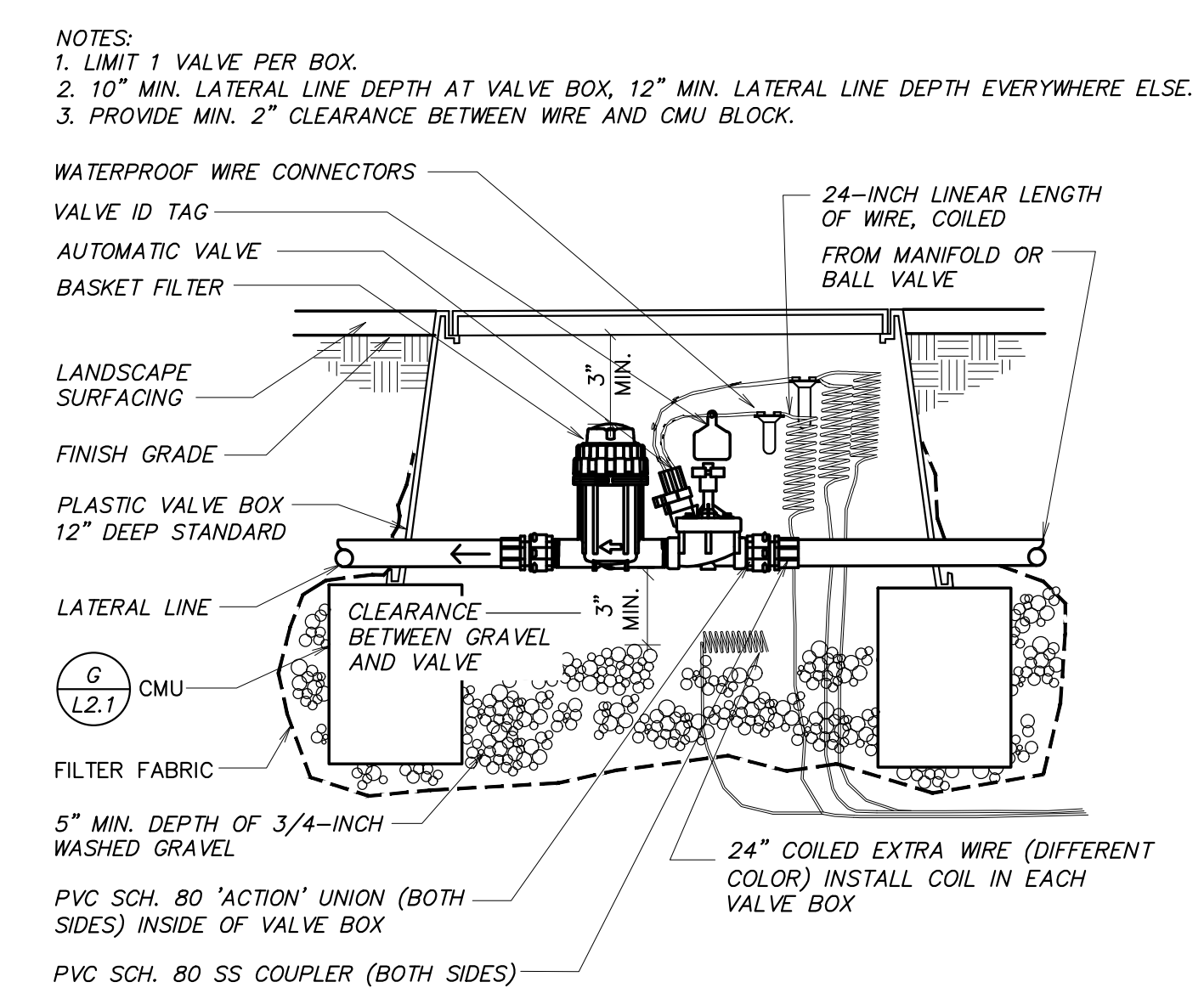
**D IN-LINE DRIP FLUSH VALVE**  
NO SCALE  
NOTE:  
INSTALL DRIP FLUSH VALVE ONLY AT LOW POINT OF EACH DRIP ZONE



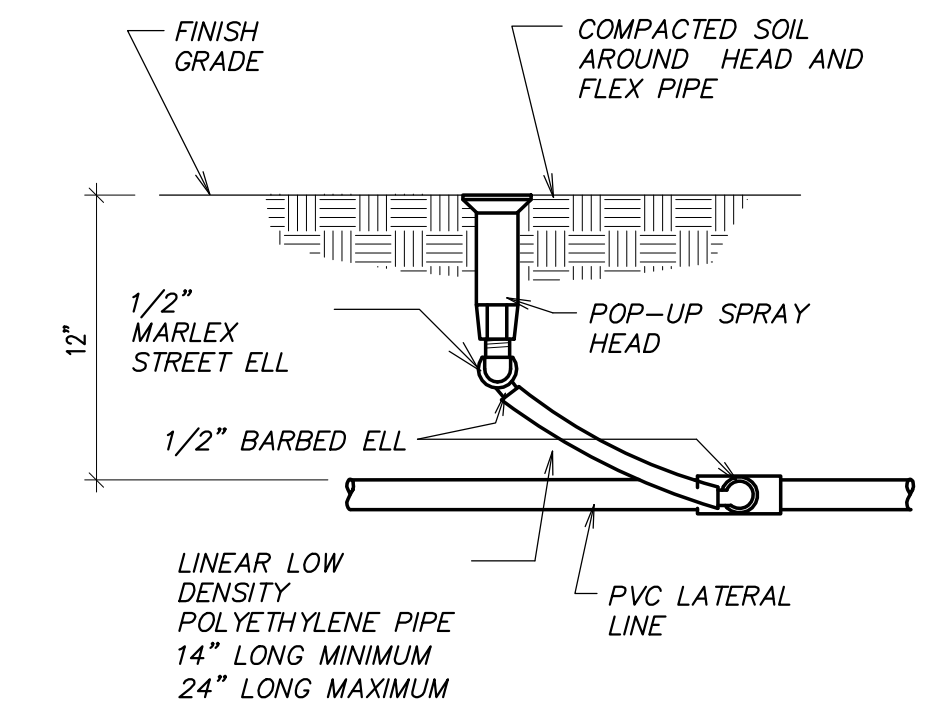
**E DRIP VALVE ASSEMBLY**  
NO SCALE



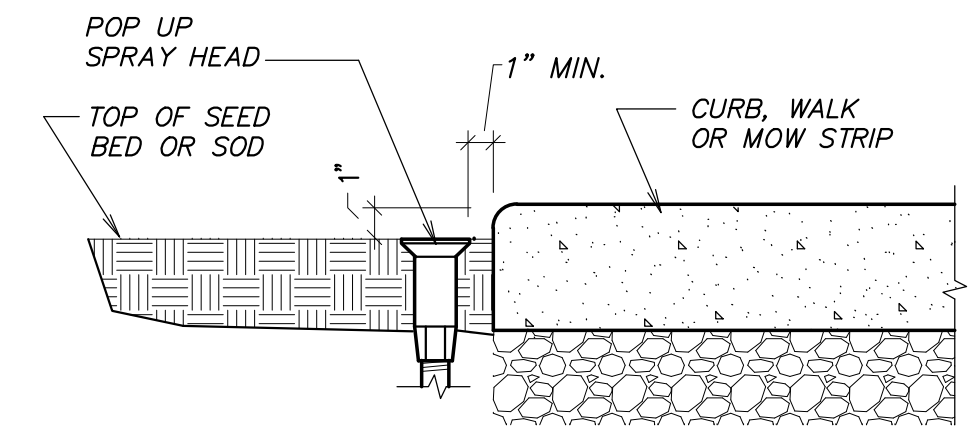
**F IN-LINE DRIP CENTER FEED LAYOUT**  
NO SCALE



**G DRIP VALVE ASSEMBLY-SECTION CONVENTIONAL WIRE SYSTEM**  
NO SCALE



**K SPRAY AND ROTARY HEAD ASSEMBLY**  
NO SCALE



**L SPRAY HEAD OR ROTOR NEXT TO CURB OR WALK**  
NO SCALE