ANNEXATION POLICY PLAN
2019

Adopted: _____

Prepared by the Harrisville City Planning Commission in conjunction with the Administrative Services Department:
Michelle Tait, Mayor
Bill Morris, City Administrator
Jennie Knight, City Recorder
With the assistance of Doug Larsen and Jones & Associates Consulting Engineers

Adopted in accordance with *Utah Code Annotated* §10-2-401.5

municipal services can be provided.

- Give consideration to areas seeking incorporation that may contribute to the City.
- Avoid areas that create an additional tax or financial liability to the taxpayers within the City prior to the time of the annexation.

Areas Subject to Future Annexation

The annexation of the areas below will allow Harrisville City the ability to provide affordable municipal services to each of the areas proposed for annexation. Areas proposed for annexation into the City include:

1. Weber Industrial Park. The unincorporated area of the Weber Industrial Park located along Rulon White Boulevard and surrounding unincorporated properties.
2. Harrisville Park (East). Unincorporated vacant land currently owned by Harrisville City and utilized as an integral part of the Harrisville City Park. The area is located at approximately 1475 North 200 West.
3. 2000 North. Unincorporated vacant and improved land located at approximately 2000 North 100 West.
4. Colonial Springs South. Unincorporated vacant land located at approximately 2175 North 200 West.

Annexation Policy Plan Contents

In accordance with *Utah Code Annotated* §10-2-401.5, this Plan includes:

1. A map of the City's proposed expansion area.
2. A statement of the specific criteria that will guide the City's decision whether or not to grant future annexation petitions, addressing matters relevant to those criteria including:
   a. Character of the community.
   b. Need for municipal services in developed and undeveloped unincorporated areas.
   c. City's plans for extension of municipal services.
   d. How the services will be financed.
   e. An estimate of the tax consequences to residents both currently within the municipal boundaries and in the expansion area.
   f. Interests of all affected entities.
3. Justification for excluding from the expansion area any area containing urban development within one-half (½) mile of the City's boundary.
4. A statement addressing any comments made by affected entities at or within 10 days after the public meeting under *Utah Code Annotated* §10-2-401.5(2)(a)(ii).

Statement of Specific Criteria

1. Character of the Community.

a. **Purpose and Introduction.** The purpose of the Annexation Policy Plan is to comply with *Utah Code Annotated* §10-2-401.5 which requires the City to adopt this Plan before annexing any area to the City. Each proposed and actual annexation has a different character and thus will present the City with varied

ii. Annexation will not leave or create an unincorporated island or unincorporated peninsula, with some exceptions.

iii. Area proposed to be annexed must be in the Annexation Policy Plan.

iv. *Utah Code Annotated* §10-2-418 provides for annexation without a petition.

v. *Utah Code Annotated* §10-2-403 provides for annexation with a petition.

vi. A municipality may not annex an unincorporated area in a specified county for the sole purpose of acquiring municipal revenue or to retard the capacity of another municipality to annex the same or a related area unless the municipality has the ability and intent to benefit the annexed area by providing municipal services to the annexed area.

vii. An annexation petition may not be filed proposing the annexation of an area located in a county that is not the county in which the proposed annexing municipality is located unless the legislative body of the county in which the area is located has adopted a resolution approving the proposed annexation.

viii. Other limitations are very specific as provided in state law.

f. **Annexation Area Character.** The property in the "Area Subject to Future Annexation" is agricultural property with very few homes and industrial area. The property immediately adjacent to the City can easily identify as part of the City as the residents attend the same elementary, junior high, and high schools. The area is also serviced by the same fire and sewer district.

2. **Need for Municipal Services in Unincorporated Area.** The property located in the "Area Subject to Future Annexation" has road maintenance and law enforcement provided by Weber County. Harrisville Police have responded to these areas as they are away from the areas generally serviced by the Weber County Sheriff. In addition, some of the properties will need future or additional sewer services that are available from the City. Future residential areas can also benefit from the City service for residential solid waste collection and disposal, recycling, storm water, flood control, fire hydrants, land use planning, and road improvements; most of which are services presently not offered at all by the county or to the same extent by the county.

3. **Plans and Time Frame for Extension of Municipal Services.** The providing of municipal services such as law enforcement will be immediate upon annexation. Fire protection will be provided by North View Fire District. Culinary water will be provided by the existing culinary water improvement districts. Sewer service can be provided at the time of development for those areas not already serviced by the City. Residential solid waste collection and disposal, recycling, land use planning, public works, storm water services, and flood prevention regulations will occur immediately upon annexation. Other services will be accommodated upon development.

4. **Financing of Services.** All services for the "Area Subject to Future Annexation" will be financed by the City or continue as part of existing special districts. No additional financing resources are anticipated.

Manufacturing and Pleasant View City shared much of the same content, accordingly we will address such collectively as Pleasant View City.

City staff received a few phone calls from businesses in the Weber Industrial Park regarding this Plan that involved simple questions, specifically whether an annexation into Harrisville City would change the zip code or otherwise interfere with mail delivery. The zip code and mail delivery would remain 84404 by annexation into Harrisville City under this Plan. The few businesses who contacted Harrisville City said that they do not want to have the zip code changed from 84404.

Pleasant View City only expressed concern with the inclusion in this Plan of the Weber Industrial Park. Pleasant View City provided Harrisville City with a copy of its "Pleasant View City General Plan" adopted in 2017 which states on pages 47-48 as follows:

> ANNEXATION
>
> The Annexation Plan reflects the needs and desires of the City to expand beyond its current boundaries. There are few areas of the City in which Pleasant View City annexation could occur. It is generally preferable that annexation happen prior to development of property so that City standards for development can be brought to bear as part of the development of that property. Specific areas for potential annexation are noted below:
>
> Weber Industrial Park
>
> The Weber Industrial Park is an area of unincorporated County land that lies to the south of 2700 North and east of the Willowbrook area of the City. This area is largely developed with industrial, manufacturing, and warehousing uses. The area is serviced by the Bona Vista Water District and the Central Weber Sewer Improvement District. The City would provide maintenance of the roads in the area as well as providing emergency response services to the area. (Pages 47-48, Pleasant View City General Plan, 2017).

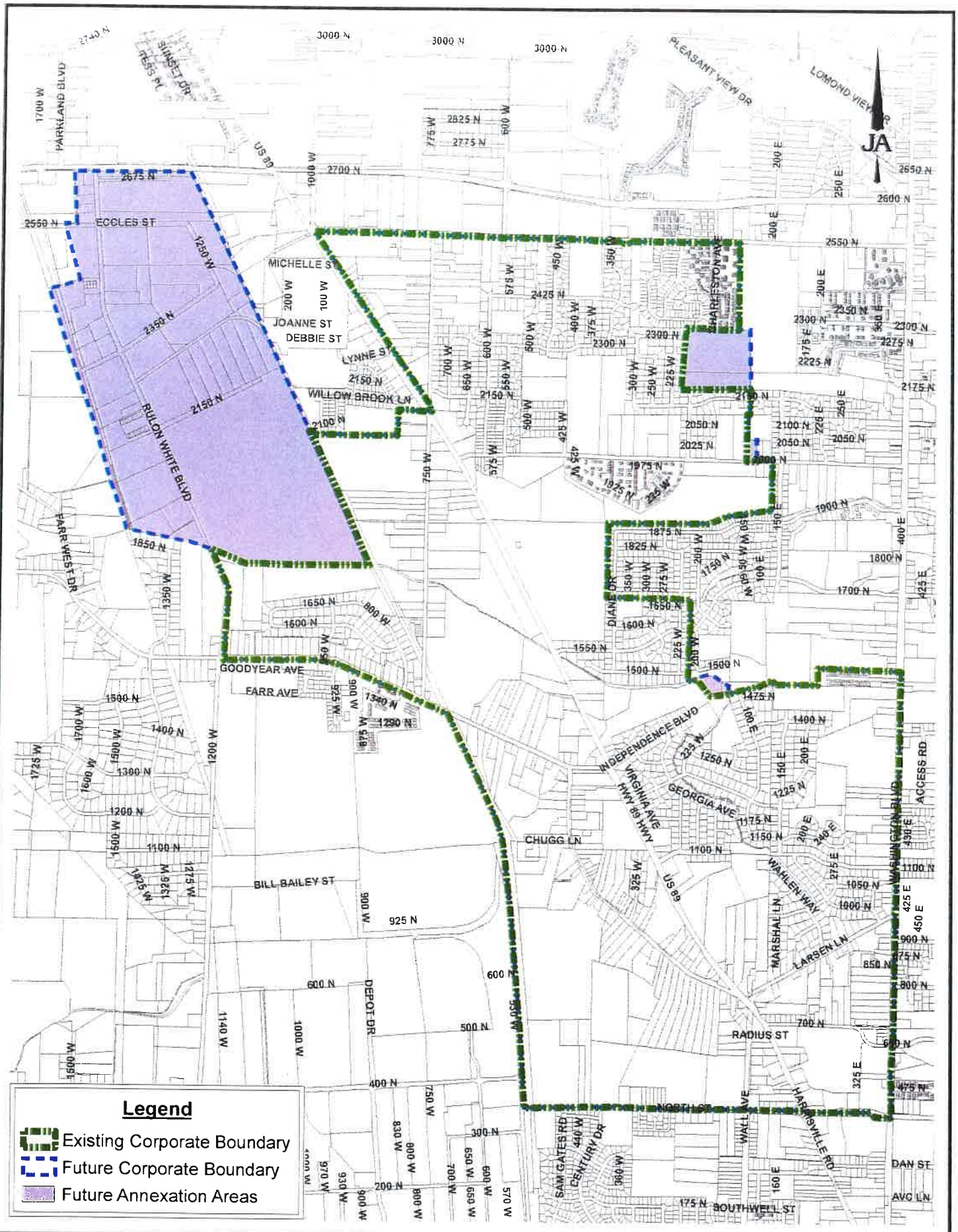
Harrisville City already has a large portion of the Weber Industrial Park included in the 2003 Harrisville Annexation Policy Plan, specifically, the entire southern portion. Harrisville City researched the history of the Weber Industrial Park and found that a large portion of the Weber Industrial Park had been incorporated into Harrisville City at one time. In 1973, as part of an effort in the county to recruit business development, Harrisville City agreed to a Stipulation and Order to the disconnection of a portion of Harrisville City for the formation of the Weber Industrial Park. Harrisville City disconnected its portion of the Weber Industrial Park to support the efforts of the creation of jobs and businesses under the direction of the county at that time.

Industrial Park to the south in areas already located within the border of Harrisville City that provide for growth and new opportunities for this industrial area.

Also, Harrisville City is a voting member of the Board of Trustees of Bona Vista Water Improvement District that provides culinary water service to the Weber Industrial Park. Pleasant View is not a member on the Board of Trustees of the Bona Vista Water Improvement District. This voting status puts Harrisville City at an advantage in supporting the Weber Industrial Park.

Lastly, annexation into Harrisville City would have the least impact for property taxes on property owners in the areas proposed for annexation under this Plan. The property tax increase would be an estimated 2.6% for Harrisville City, verses a higher percentage and property tax rate when compared to North Ogden and Pleasant View.

There was no public comment at the meeting or written comment received in the ten (10) day comment period on any other area proposed for annexation, except the Weber Industrial Park. Based upon the comments, clarification has been added to this Plan to address said comments as outlined in this Plan.



JONES & ASSOCIATES
CONSULTING ENGINEERS
6080 Fashion Point Dr. South Ogden, UT 84403
(801) 476-9767

SCALE: N.T.S.

DATE: 01/18/2019

HARRISVILLE CITY CORPORATION

GENERAL PLAN MAP

ANNEXATION POLICY MAP

Proposed January 2019

SHEET: 1 OF 1 SHEETS

0

HARRISVILLE CITY

363 West Independence • Harrisville, Utah 84404 • (801) 782-4100

MAYOR:

Michelle N. Tait

COUNCIL MEMBERS:

Grover Wilhelmsen
Gary Robinson
Ruth Pearce
Clark Beecher
Steve Weiss

Public Hearing on Annexation Policy Plan

In accordance with Utah Code Section 10-2-401.5, notice is hereby provided that the Harrisville Planning Commission will hold a public hearing on October 9, 2019 at 7:00 p.m., in the Harrisville City Legislative Chambers located at 363 West Independence Blvd, Harrisville, Utah, to take public comment for an against the proposed Annexation Policy Plan. Individuals requiring special accommodation (including auxiliary communicative aids and services) should notify the City Recorder at 801-782-4100 at least three (3) days prior to the hearing.

Certificate Mailing and Posting

I hereby certify that foregoing Notice was duly published in a newspaper of local circulation, mailed to each affected entity, posted on the Utah Public Notice Website, posted on the City website or at three (3) locations in the City as follows: 1) Harrisville City Hall, 2) 2150 North, and 3) Harrisville Cabin.

Laurene Bonnell DATE: 9-25-19

City Official

Automated Geographic Center
State Capitol
Salt Lake City, UT 84114

Bona Vista Water
2020 West 1300 North
Farr West, UT 84404

Central Weber Sewer
2681 W. Pioneer Road
Marriott-Slaterville, UT 84404

Comcast
752 Marshall Way
Layton, UT 84041

Farr West City
1896 North 1800 West
Farr West, UT 84404

North Ogden City
505 E 2600 N
North Ogden, UT 84414

Ogden City
2549 Washington Boulevard
Ogden, UT 84401

Weber County
2380 Washington Boulevard
Ogden, UT 84401

Pleasant View City
520 W Elberta Dr
Pleasant View, UT 84414

Dominion Energy
2947 Washington Boulevard
Ogden, UT 84401

CenturyLink, Inc
100 CenturyLink Dr.
Monroe, LA 71203

Pineview Water Systems
471 W 2nd Street
Ogden, UT 84404

Rocky Mountain Power
PO Box 25308
Salt Lake City, UT 84125

State Office of Planning
5120 State Office Building
Salt Lake City, UT 84114

Western Irrigation Co.
1645 Farr West Dr
Ogden, UT 84404

UDOT
166 Southwell Street
Ogden, UT 84404

United States Post Office
3680 Pacific Avenue
Ogden, UT 84401

Wasatch Front Regional Council
295 N. Jimmy Doolittle Road
Salt Lake City, UT 84116

Weber-Box Elder Conservation District
471 W. 2nd Street
Ogden, Utah 84404

Weber-Morgan Health Dept.
477 23rd Street
Ogden, Utah 84401

North View Fire
315 E 2550 N
North Ogden, UT 84414

Weber School District
5320 Adams Avenue
South Ogden, UT 84403

Kimberly-Clark Worldwide INC
400 Goodys Lane Suite 100
Knoxville, TN 37922

Bertea Corporation
6035 Parkland Blvd
Cleveland OH 44124

Black Sun Properties LLC
2520 N 1500 W Suite A
Ogden, UT 84404

Vasteco Real Estate LLC
2581 N 1500 W
Ogden, UT 84404

Western Coating INC
PO BOX 889
Eugene, OR 97440

United Foods INC
PO BOX 119
Bells, TN 38006

U S Holdings INC
3200 W 84th Street
Hialeah, FL 33018

R & H Christensen Holdings LLC
2250 N 1500 W
Ogden, UT 84404

Intermountain Industrial Park LLC
2331 N 1350 W
Ogden, UT 84404

Keveri Holdings LLC
1071 W Pages Lane
West Bountiful, UT 84087

Foremaster Enterprises LLC
2397 N Rulon White Blvd
Ogden, UT 84404

Taylor Investments LLC
2785 Shamrock Dr
Ogden, UT 84403

Cerro Wire and Cable Co INC
1099 Thompson Rd Se
Hartselle, AL 35640

Sunan Investments LLC
10500 Canada Dr
Jacksonville, FL 32218

Heat Asset Acquisition Corp
103 Gamma Dr Ext
Pittsburg, PA 15238

R&K Investment Company
PO BOX 1492
Ogden, UT 84402

HWJR LLC
1871 N Rulon White Blvd
Ogden, UT 84404

1973 North Rulon White LLC
2600 Cordova St Suite 100
Anchorage, AK 99503

Doug & Susan Oler
687 E 3050 N
North Ogden, UT 84414

Gary & Kaylyn Lyells
961 E 3400 N
North Ogden, UT 84414

G&H Ben Lomond Properties LLC
3065 Washington Blvd
Ogden, UT 84401

LKC Investments LLC
1668 S 1100 W
Ogden, UT 84404

Sor & Sons LLC
927 E 3350 N
North Ogden, UT 84414

QBT LLC
2147 Rulon White Blvd Suite 212
Ogden, UT 84404

Paul Davis
2147 N Rulon White Blvd #207
Ogden, UT 84404

Dancole LLC
1448 W 2100 S
West Haven, UT 84401

Woods Leasing LLC
2147 N Rulon White Blvd #103
Ogden, UT 84404

Subminiature Instrument CORP
2147 Rulon White Blvd #106
Ogden, UT 84404

JSS Properties LLC
2073 S Allen Rd
Taylor, UT 84401

Park, Arka Monterey LLC
9350 Wilshire Blvd #402
Beverly Hills, CA 90212

3 H Leasing
2147 Rulon White #101
Ogden, UT 84404

PJB Properties LLC
1013 Vitt Dr
Ogden, UT 84404

Woods Leasing LLC
2147 Rulon White Blvd #103
Ogden, UT 84404

Cherry Spring Investments Ltd
687 E 3050 N
North Ogden, UT 84414

Pulsers LLC
2437 N Rulon White Blvd #1
Ogden, UT 84404

Ted Grove
2437 N 1500 W #2
Ogden, UT 84404

HABCO Properties LLC
2437 N Rulon White Blvd
Ogden, UT 84404

Lenz Group LLC
2437 Rulon White Blvd
Ogden, UT 84404

WINCO Foods LLC
PO BOX 5756
Boise, Id 83705

Fourstar Investments LLC
2601 Southeast Loop 289
Lubbock, TX 79404

Cutting Edge Investments LLC
189 N Highway 89 Suite C104
North Salt Lake, UT 84054

Jed McCormick
3333 N 425 E
North Ogden, UT 84414

Anthony & Shawna Bown
29310 Castle Hill Dr
Agoura Hills, CA 91301

Victor & Sara Ortiz
116 W 2000 N
North Ogden, UT 84414

Automated Geographic Center
State Capitol
Salt Lake City, UT 84114

Bona Vista Water
2020 West 1300 North
Farr West, UT 84404

Central Weber Sewer
2681 W. Pioneer Road
Marriott-Slaterville, UT 84404

MLJ Investments LLC
3723 W Pioneer Rd
Marriott-Slaterville, UT 84404

Arrow Disposal INC
1871 N Rulon White Blvd
Ogden UT 84404

Kendrick Bros Roofing INC
1871 N Rulon White Blvd
Ogden UT 84404

Tesoro Logistics NorthWest Pipeline LLC
19100 Ridgewood Pkwy
San Antonio TX 78259

Chromalox INC
2150 N Rulon White Blvd
Ogden UT 84404

Steel Concepts, LLC
2331 N 1350 W
Ogden, UT 84404

Steel-Fab, INC
2331 N 1350 W
Ogden UT 84404

USF Fabrication, INC
2382 N Rulon White Blvd
Ogden UT 84404

Parker Hannifin-Berta Division
6035 Parkland Blvd
Cleveland OH 44124

Utah Power & Light Company
825 NE Multonomah St Ste1900
Portland OR 97232

GVH Millennium Dist NW INC
2601 Se Loop 289
Lubbock, TX 79404

Advanced Plumbing & Mech
2437 N Rulon White Blvd
Ogden, UT 84404

Ring Master INC
2437 N Rulon White Blvd
Ogden, UT 84404

Patriot Machine
2437 N 1500 W #2
Ogden, UT 84404

Real Acoustix LLC
2437 Rulon White Blvd
Ogden, UT 84404

Babbott Bearing Resource
2533 N 1500 W
Ogden, UT 84404

Ron Zundel Auto Repair
2513 N Rulon White Blvd
Ogden, UT 84404

Brenkman, Paul D
2147 Rulon White Blvd #102
Ogden, UT 84404

Richard Manufacturing Company
2147 N Rulon White Blvd Ste. 212
Ogden, UT 84404

Wood's Tom Custom Drive Shafts
2147 Rulon White Blvd #103
Ogden, UT 84404

Tsiseats INC
2581 Rulon White Blvd
Ogden, UT 84404

Avparts International LLC
2581 Rulon White Blvd
Ogden, UT 84404

Kings Peak Manufacturing
2581 Rulon White Blvd
Ogden, UT 84404

PCB Solutions INC
2520 N 1500 W, Ste A
Ogden, UT 84404

Pattonair USA, INC
1900 Robotics Place
Fort Worth, TX 76118

Fastenal Company
PO BOX 1206
Winona, MN 55987

Harrisville City Planning Commission
Staff Report

October 9, 2019

Request: Discussion and decision on a site plan amendment for the HHI Corporation Parking Lot Paving Project. The request is to grade and pave the existing loading and parking areas throughout the site and with construct a parking lot along the east side of the site at the Harrisville Road approach.

Type of Decision: Administrative

Applicant: HHI Corporation/Brian Morris

Agenda Date: Wednesday, October 9, 2019

Report Presenter: **Ronda Kippen**

rondakippen@gmail.com

Property Information:

736 W Harrisville Rd

Project Area: 53.37 acres

Zoning: MP-1

Parcel ID: 11-019-0041

Applicable Ordinances

- 11.12 Commercial and Manufacturing Land Use
- 11.13 Commercial and Manufacturing Development Standards
- 11.14 Commercial and Manufacturing Special Use Regulations
- 11.22 Plan Design and Review
- 11.24 Architectural, Landscaping, and Screening

Planning Staff Summary

Staff recommends approval of the site plan amendment for the HHI Corporation parking lot paving project including the request to grade and pave the existing site and construct the parking lot based on the conditions outlined in this report.

HHI Corporation approached the city with plans to grade and pave the current parking lot, driveways and loading areas (see Exhibit A) and install a new parking lot along the east side of the property at the Harrisville Road approach during the Project Management Meeting held on September 12, 2019. The applicant would now like to move forward with the site improvements and has submitted the required information as outlined in the Land Use Ordinance of Harrisville City or "Zoning Ordinance" §11.22 for consideration and approval. The Zoning Ordinance already specifies certain standards necessary for mitigation of harmful impacts to which the proposal must adhere. The proposed site plan is in conformance with the Zoning Ordinance based on the conditions included in the staff report. The following is a brief synopsis of the review criteria and conformance with the Zoning Ordinance.

Analysis

General Plan: The proposal conforms to the 1997 Harrisville City General Plan by promoting clean industrial and manufacturing development which will provide a diversified economic base and will complement local retail, commercial, and industrial establishments.

Zoning: The subject property is in the MP-Zone.

Lot area, frontage/width and yard regulations:

The site development requirements of the MP-1 Zone is:

- Minimum lot area=20,000 square feet
- Minimum lot width =100 feet

The following development standards per §11.13.020(2) for parking lots are:

- Front yard setback: 30 feet
- Side yard (interior) setback: 0 feet
- Side yard (interior next to residential zone) setback: 10 feet
- Side facing street setback: 30 feet
- Rear yard setback: 0 feet
- Rear yard next to residential zone: 10 feet

Based on the proposed parcel configuration, the proposed parcel meets the minimum area and minimum width requirement per Zoning Ordinance Title §11.13.020.

Additional design standards and requirements: Based on the plans, the east parking lot ends at the property line and according to §11.13.020(2) parking lots with an interior side yard next to a residential zone, there shall be a 10-foot setback. The front and side setbacks adjacent to a residential zone per §11.13.040(2)(a) are required to be landscaped with living plant material that shall cover 75% of the setback area. Zoning Ordinance §11.13.030(4)(f)(ii) states that "none of the required setback areas of the respective zones shall be used for parking, storage or buildings". The applicant would like to install xeriscaping in this setback area on the site. According to §11.24.060(3) "Xeriscaping plans, mixed landscaping/xeriscaping, or other alternative forms of landscaping may be approved where irrigation is limited so long as such approval is consistent with the purpose and intent of this chapter". The site has adequate landscaping along Harrisville Road and the applicant has agreed to leave all mature trees in place as part of the approved landscape plan.

The Planning Commission will need to identify what type of landscaping will be acceptable along the side yard eastern border setback of the newly constructed parking lot along the Harrisville Road approach and add it as a condition of approval.

Staff Recommendation

Staff recommends approval of the site plan amendment for the HHI Corporation parking lot paving project including the request to grade and pave the existing site and construct the parking lot based on the following conditions:

1. Provide planning staff with an updated sheet C-203 (Exhibit B) showing the 10-foot setback along the eastern side of the parking lot.
2. Provide planning staff with a landscaping plan for the 10-foot setback area along the east property line of the parking lot.
3. All mature trees along the front of HHI Corporation will remain in place as part of the approved landscape plan.
4. Adherence to all Local, State and Federal statutes.

This recommendation is based on the following findings:

1. The proposed site amendment conforms to the 1997 Harrisville City General Plan.
2. With the recommended conditions, the proposed site plan amendment complies with all previous approvals and the applicable Zoning Ordinances.

Exhibits

A. Paving Plan

HHI CORPORATION

PARKING LOT PAVING PROJECTS
HHI CORPORATION

736 W HARRISVILLE RD
OGDEN, UTAH 84404

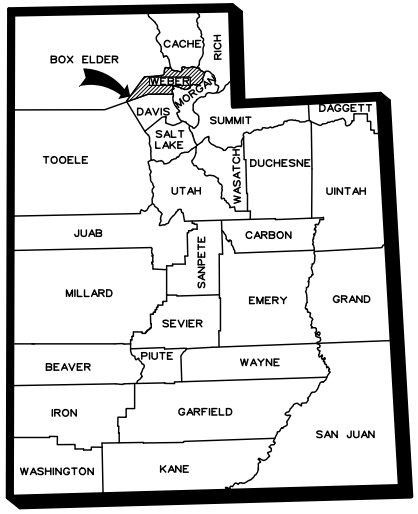
CONTACT
HHI Corporation
Blake Mabey
736 W. Harrisville Road
Ogden, UT 84404
Ph: 801 255-3721
Email:bmabey@hhicorp.com

CIVIL ENGINEER
ESI Engineering, Inc.
Brian F. Campbell, PE
3500 South Main
Salt Lake City, Utah 84115

Ph: 801 263-1752
Fax: 801 263-1780
Email: brian.campbell@esieng.com

PROJECT LOCATION

VICINITY MAP



STATE OF UTAH

GENERAL NOTES

1. CALL BLUE STAKES AND ALL OTHER UTILITY COMPANIES IN THE AREA BEFORE EXCAVATING. LOCATE ALL UTILITIES. NOTIFY ENGINEER IF UTILITIES ARE NOT SHOWN ON PLANS OR SHOWN INCORRECTLY. NOTIFY ENGINEER OF ANY CONFLICTS WITH UTILITY LINES.
2. CONSTRUCTION SHALL CONFORM TO HARRISVILLE CITY STANDARDS.
3. CONSTRUCTION STAKING SHALL BE AT THE CONTRACTOR'S EXPENSE BY A REGISTERED LAND SURVEYOR. STAKES TO BE SET IN THE FIELD AND INSPECTED BY THE ENGINEER BEFORE EXCAVATION OR PIPE LAYING CAN BEGIN.
4. CHANGES TO THE PLANS SHALL BE APPROVED IN WRITING BY THE ENGINEER AND OWNER (HHI CONSTRUCTOIN) BEFORE CONSTRUCTION CHANGES.
5. FOR FIELD REVIEWS CALL ENGINEER AT ESI ENGINEERING.

Exhibit A

PROJECT DRAWINGS INDEX

SHEET NO.	DESCRIPTION
G 001	COVER SHEET
G 002	LEGEND, ABBREVIATIONS & NOTES
C 101	OVERALL SITE PLAN
C 201	PHASE I NORTH GRADING PLAN
C 202	PHASE I SOUTH GRADING PLAN
C 203	PHASE II GRADING PLAN

NO	BY	DATE	REMARKS

REVISIONS

ESI ENGINEERING
CONSULTING ENGINEERS AND LAND SURVEYORS
SALT LAKE CITY, UTAH

DESIGN	PSB	09/19	CHECK	BFC	09/19
DRAWN	PSB	09/19	CHECK	BFC	09/19
QUANT.	BFC	09/19	CHECK	BFC	09/19

REVIEW
R/W

APPROVAL RECOMM. DATE PROJ. DESIGN ENGINEER
APPROVED DATE HHI CORPORATION

WEBER COUNTY

PROJECT NUMBER 19-123

SHEET NO. 1 OF 6

Exhibit A

LEGEND

SECTION CORNER
MONUMENT
ADA PARKING
LIGHT POLE
POWER POLE
TELEPHONE POLE
UTILITY POLE
STREET SIGN
MAIL BOX
TREE
ELECTRICAL MANHOLE
WATER MANHOLE
WATER METER
FIRE HYDRANT
VALVE
IRRIGATION METER
IRRIGATION VALVE
SEWER MANHOLE
STORM DRAIN MANHOLE
CATCH BASIN
POWER BOX
SURVEY CONTROL POINT
EG = 4610.42 EXISTING SPOT ELEVATION
FG=4610.42 PROPOSED SPOT ELEVATION
2.0% DOWNWARD GRADE
3:1 HORIZONTAL:VERTICAL SLOPE
PROPOSED CONCRETE
LANDSCAPE AREA
PROPOSED ASPHALT
4258 EXISTING INDEX CONTOUR
EXISTING MINOR CONTOUR
4258 PROPOSED CONTOUR
PROPOSED MINOR CONTOUR
LOT OR BOUNDARY LINE
EXISTING FENCE
EDGE OF PAVED ROAD
EXISTING CURB & GUTTER
PROPOSED CURB & GUTTER
SUBDRAIN
FIBER OPTIC
EXISTING WATER LINE
PROPOSED WATER LINE
IRRIGATION LINE
PROPOSED IRRI SLEEVE
VEGETATION LINE
SEWER LINE
STORM DRAIN
CABLE TV LINE
EXISTING NATURAL GAS
PROPOSED NATURAL GAS
ELECTRICAL
OVERHEAD POWER
UNDERGROUND POWER

ABBREVIATIONS

°	DEGREES
'	MINUTES, FEET
"	SECONDS, INCHES
ADA	AMERICAN DISABILITIES ACT
ARCH	ARCHITECT, ARCHITECTURAL
BH	BORE HOLE
BLDG	BUILDING POINT
BM	BENCHMARK
BOB	BOTTOM OF BANK
BOW	BOTTOM OF WALL
BOXCULV	BOX CULVERT
BS	BLUE STAKE
BW	BROKEN WHITE STRIPE
CB	CATCH BASIN
CG	CURB AND GUTTER
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
COB	CLEANOUT BOX
COMBO	COMBINATION (BOX)
CONC	CONCRETE
CPP	CORRUGATED PLASTIC PIPE
CW	CURB WALL
DA	DRIVE APPROACH
DIA	DIAMETER
DRIVE	DRIVEWAY
DW	DOUBLE WHITE STRIP
DY	DOUBLE YELLOW STRIPE
E	EAST, ELECTRICITY, ELECTRICAL
EB	ELECTRICAL BOX
EBL	EAST BOUND LANE
ECB	ELECTRIC CONTROL BOX
EG	EXISTING GRADE
ELEC	ELECTRICAL
EOA	EDGE OF ASPHALT
EOB	EDGE OF BRUSH
EOC	EDGE OF CONCRETE
EOG	EDGE OF GRASS
EOGR	EDGE OF GRAVEL
EOL	EDGE OF LANE
EOW	EDGE OF WALK
EX	EXISTING
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FNC	FENCE
FT	FEET
GAS	GAS, NATURAL GAS
GB	GRADE BREAK
GR	GUARD RAIL
GV	GAS VALVE
HDPE	HIGH-DENSITY POLYETHYLENE PIPE
H2O	WATER
IE	INVERT ELEVATION
IR	IRRIGATION
IRRBOX	IRRIGATION (SPRINKLER) BOX
IRRVLV	IRRIGATION VALVE
L	LENGTH
LIP	LIP OF GUTTER
LF	LINEAL FEET
LP	LIGHT POLE
MH	MANHOLE
MHGAS	NATURAL GAS MANHOLE
MHSD	STORM DRAIN MANHOLE
MHSS	SANITARY SEWER MANHOLE
MHTELE	TELEPHONE MANHOLE
MHWTR	WATER MANHOLE
MON	MONUMENT
N	NORTH
NBL	NORTHBOUND LANE
NE	NORTHEAST
NG	NATURAL GROUND
NOTE	NOTE TO FOLLOW (ATTRIBUTE)
NW	NORTHWEST
PC	CONTROL CODE: STARTS A TANGENTIAL CURVE
PCC	POINT OF COMPOUND CURVATURE
PI	POINT OF INTERSECTION
PL	PROPERTY LINE
PP	POWER POLE
PROP	PROPERTY
PT	CONTROL CODE: ENDS A TANGENTIAL CURVE
R	RADIUS
RAMP	FREEWAY ON/OFF RAMP
RC	REBAR & CAP
RCP	REINFORCED CONCRETE PIPE
RMP	ROCKY MOUNTAIN POWER
ROW	RIGHT OF WAY
RW	RETAINING WALL
RWM	RIGHT OF WAY MARKER
S	SOUTH
SD	STORM DRAIN
SE	SOUTHEAST
SEC	SECTION
SF	SQUARE FEET
SPEC	SPECIFICATION
SPECS	SPECIFICATIONS
SS	SANITARY SEWER
STD	STANDARD
STDS	STANDARDS
SW	SOUTHWEST, SOLID WHITE STRIPE
SY	SOLID YELLOW STRIPE
TBC	TOP BACK OF CURB
TBS	TOP BACK OF SIDEWALK
TBW	TOP BACK OF WATER WAY
TELE	TELEPHONE
TFS	TOP FRONT OF SIDEWALK
TL	TRAVEL LANE
TOA	TOP OF ASPHALT
TOB	TOP OF BANK
TOC	TOP OF CONCRETE
TOE	BREAKLINE
TOR	TOP OF RAIL
TOS	TOE OF STEP
TOW	TOP OF WALL
TYP	(TYPICAL) REPRSENTATIVE OF ALL SIMILARLY NOTED ITEMS
UTIL	UTILITY
UP	UTILITY POLE
W	WEST, WATER
WALK	SIDEWALK
WBL	WEST BOUND LANE
WG	WALK & GUTTER (CONCRETE POURED AS ONE UNIT)
WM	WATER METER
WV	WATER VALVE

GENERAL NOTES

1. ALL IMPROVEMENTS SHALL COMPLY WITH THE STANDARDS AND REGULATIONS OF THE LOCAL GOVERNING MUNICIPALITY. CONTACT THE PUBLIC WORKS OFFICE BEFORE BEGINNING.

2. CONTRACTOR TO FIELD VERIFY LOCATION, SIZE, AND AVAILABILITY OF EXISTING UTILITIES. UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE. SEE UTILITY NOTE 3.

3. ALL DIMENSIONS ARE IN FOOT UNITS AND ARE TO THE TOP BACK OF CURB UNLESS SHOWN OR NOTED OTHERWISE.

4. PROVIDE HANDICAP RAMPS AT ENDS OF WALKWAYS. END 0.1' ABOVE FLOWLINE OF CURB.

5. CURB AND GUTTER SHALL BE AS SPECIFIED IN DETIAL SHEET.

6. UTILITY INFORMATION INDICATED ON DRAWING IS BASED UPON VISUAL OBSERVATION OR INFORMATION FURNISHED BY MUNICIPAL AUTHORITIES WHICH MAY NOT BE VALID. LATERAL LOCATIONS AND ELEVATIONS ARE ASSUMED. SEE UTILITY NOTE 3.

7. ALL GRADING SHALL BE DONE UNDER THE SUPERVISION OF A QUALIFIED SOILS ENGINEER WHO SHALL VERIFY THAT ALL FILL HAS BEEN PLACED IN ACCORDANCE WITH PROVISIONS IN CURRENT INTERNATIONAL BUILDING CODE. SEE GRADING NOTES.

8. COMPACTION TEST REPORTS SHALL BE MADE AVAILABLE TO THE ENGINEER WITHIN 24 HOURS OF A REQUEST. FINAL REPORTS AS SPECIFIED IN CURRENT INTERNATIONAL BUILDING CODE SHALL BE SUBMITTED TO THE ENGINEER WITHIN TEN DAYS AFTER COMPLETION OF GRADING.

9. ALL STORM DRAIN PIPE SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS AND THE LOCAL GOVERNING MUNICIPALITY'S STANDARDS AND SPECIFICATIONS.

10. STORM DRAIN PIPE WITHIN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO THE RIGHT-OF-WAY OWNER'S SPECIFICATIONS.
PRIVATE STORM DRAIN PIPE OPTIONS SHALL CONSIST IF THE FOLLOWING MATERIALS.
1. PVC PIPE, ASTM D3034, SDR 35, BELL & SPIGOT TYPE.
2. RCP PIPE, CLASS 3, BELL & SPIGOT TYPE.
3. HIGH DENSITY CORRUGATED POLYETHYLENE SMOOTH INTERIOR PIPE, ASTM D3350 WITH WATERTIGHT JOINTS.

11. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CHECK CONDITIONS AT THE SITE BEFORE STARTING WORK AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

12. TYPICAL DETAILS SHALL APPLY IN GENERAL CONSTRUCTION UNLESS SPECIFICALLY DETAILED. WHERE NO DETAILS ARE GIVEN, CONSTRUCTION WILL BE AS FOR SIMILAR WORK. DO NOT SCALE DRAWINGS.

13. ANY OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH ANY WORK INVOLVED.

14. PIPE BEDDING SHALL BE 3/8" MAXIMUM AGGREGATE. USE 3/4" MAXIMUM SIZE ROAD BASE FOR BACKFILL MATERIAL. COMPACT TO 95% STANDARD PROCTOR DENSITY. MAXIMUM LIFT 8 INCHES.

15. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PUBLIC AND OSHA STANDARDS.

16. ALL WORK SHALL COMPLY WITH THE AMERICAN PUBLIC WORKS ASSOCIATION UTAH CHAPTER (APWA) MANUAL OF STANDARD SPECIFICATIONS 2017 EDITION WITH ALL PERTINENT SUPPLEMENTS AND AMENDMENTS AND THE MANUAL OF STANDARD PLANS 2017 EDITION. SAID STANDARD SPECIFICATIONS AND PLANS SHALL BE THE REQUIREMENTS.

17. IT IS INTENDED THAT THESE PLANS AND SPECIFICATIONS REQUIRE ALL LABOR AND MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THE WORK TO BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY REGARDING ANY DISCREPANCIES OR AMBIGUITIES WHICH EXIST IN THE PLANS OR SPECIFICATIONS. THE ENGINEER'S INTERPRETATION THEREOF SHALL BE CONCLUSIVE. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORITY FROM THE OWNER AND/OR ENGINEER.

18. THE CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF FULL-SIZE AS-BUILT RECORD DRAWINGS SHOWING THE FINAL LOCATION AND LAYOUT OF ALL MECHANICAL; ELECTRICAL AND INSTRUMENTATION EQUIPMENT; PIPING AND CONDUITS; STRUCTURES AND OTHER FACILITIES. THE AS-BUILTS OF THE ELECTRICAL SYSTEM SHALL INCLUDE THE STREET LIGHT LAYOUT PLAN SHOWING LOCATION OF LIGHTS, CONDUITS, CONDUCTORS, POINTS OF CONNECTIONS TO SERVICES, PULLBOXES, AND WIRE SIZES. AS-BUILT RECORD DRAWINGS SHALL REFLECT CHANGE ORDERS, ACCOMMODATIONS, AND ADJUSTMENTS TO ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR.

19. PRIOR TO ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO ENGINEER, ONE SET OF NEATLY MARKED AS-BUILT RECORD DRAWINGS SHOWING THE INFORMATION REQUIRED ABOVE. AS-BUILT RECORD DRAWINGS SHALL BE REVIEWED AND THE COMPLETE AS-BUILT RECORD DRAWING SET SHALL BE CURRENT WITH ALL CHANGES AND DEVIATIONS REDLINED AS A PRECONDITION TO THE FINAL PROGRESS PAYMENT APPROVAL AND/OR FINAL ACCEPTANCE.

20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY SCHEDULING INSPECTION AND TESTING OF ALL FACILITIES CONSTRUCTED UNDER THIS CONTRACT. ALL TESTING SHALL CONFORM TO THE REGULATORY AGENCY'S STANDARD SPECIFICATIONS. ALL TESTING AND INSPECTION SHALL BE PAID FOR BY THE OWNER; ALL RE-TESTING AND/OR REINSPECTION SHALL BE PAID FOR BY THE CONTRACTOR.

UTILITY NOTES

1. ALL SERVICE LATERALS SHALL BE EXTENDED 2 FEET PAST THE 10 FOOT P.U.E.

2. ALL CONSTRUCTION SHALL COMPLY WITH LOCAL GOVERNING MUNICIPALITY DESIGN STANDARDS AND CONSTRUCTION SPECIFICATIONS

3. LOCATIONS OF ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE LOCATIONS. CONTRACTOR IS TO FIELD VERIFY CONNECTION POINTS WITH EXISTING UTILITIES, INCLUDING LOCATIONS AND INVERT ELEVATIONS OF ALL EXISTING STRUCTURES OR PIPES, BEFORE STAKING OR CONSTRUCTING ANY NEW UTILITIES. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO EXISTING UTILITIES AND UTILITY STRUCTURE THAT ARE TO REMAIN.

4. CONTRACTOR IS RESPONSIBLE TO EXPOSE ALL UTILITY SERVICES STUBBED INTO PROJECT PROPERTY AND GIVE ESI ENGINEERING 48 HOURS PRIOR NOTICE SO ESI ENGINEERING CAN VERIFY DEPTHS AND INVERT ELEVATIONS TO DETERMINE IF CONFLICTS EXIST. ALSO ANY EXISTING UTILITIES THAT RUN ACROSS PROJECT PROPERTY WHICH MAY CAUSE POTENTIAL CONFLICT NEED TO BE EXPOSED AND LOCATED BOTH HORIZONTALLY AND VERTICALLY. CONTRACTOR PROCEEDS AT OWN RISK IF ESI IS NOT NOTIFIED TO FIELD VERIFY THE ABOVE MENTIONED CONDITIONS.

5. CONTRACTOR IS TO COORDINATE ALL UTILITIES WITH MECHANICAL DRAWINGS WHERE APPLICABLE.

6. NO GROUNDWATER OR DEBRIS TO BE ALLOWED TO ENTER THE NEW PIPE DURING CONSTRUCTION. THE OPEN END OF ALL PIPES IS TO BE COVERED AND EFFECTIVELY SEALED AT THE END OF EACH DAYS WORK.

7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSTALL PIPE OF ADEQUATE CLASSIFICATION WITH SUFFICIENT BEDDING TO MEET ALL REQUIREMENTS AND RECOMMENDATIONS FOR H-20 LOAD REQUIREMENTS.

8. ALL NEW SANITARY SEWER CONSTRUCTION TO BE DONE IN ACCORDANCE WITH LOCAL GOVERNING MUNICIPALITY STANDARDS & SPECIFICATIONS.

9. ALL SEWER LINES AND LATERALS ARE TO BE SDR 35 PVC PIPE.

10. SEWER LATERALS WILL BE INSTALLED AT A UNIFORM SLOPE OF NOT LESS THAN 2% GRADE AND THEY SHALL HAVE A MINIMUM OF 4 FEET OF COVER, UNLESS OTHERWISE NOTED.

11. ALL NEW CULINARY AND IRRIGATION WATER CONSTRUCTION TO BE DONE IN ACCORDANCE WITH LOCAL GOVERNING MUNICIPALITY STANDARDS & SPECIFICATIONS.

12. WATER LINES TO BE PVC C-900. WATER LINES SHALL BE A MINIMUM OF 10' HORIZONTALLY FROM SEWER MAINS. CROSSINGS SHALL MEET STATE HEALTH STANDARDS. (MECHANICAL JOINTS REQUIRED WHEN LESS THAN 18" VERTICAL OR 10' HORIZONTAL SEPARATION FROM SEWER LINES.)

13. ALL WATER LINES SHALL BE 8" MINIMUM SIZE AND SERVICE LATERALS SHALL BE 1-1/2" MINIMUM UNLESS OTHERWISE NOTED.

14. WATER SERVICE LATERALS TO INCLUDE ALL BRASS SADDLE; CORP. STOP LATERAL, DOUBLE CHECK VALVE AND BACKFLOW PREVENTION DEVICE, AND SHUTOFF VALVE IN BOX NEAR BUILDING EDGE.

15. ALL WATER LINES SHALL BE A MINIMUM 48" BELOW FINISH GROUND TO TOP OF PIPE. ALL VALVE BOXES AND MANHOLES SHALL BE RAISED OR LOWERED TO FINISH GRADE AND SHALL INCLUDE A CONCRETE COLLAR IN PAVED AREAS.

16. CONTRACTOR TO NOTIFY PUBLIC UTILITIES FOR CHLORINE TEST PRIOR TO FLUSHING LINES, CHLORINE LEFT IN PIPE 24 HOURS MINIMUM WITH 25 PPM RESIDUAL. ALL TURNING OF MAINLINE VALVES, CHLORINATION, FLUSHING, PRESSURE TESTING, BACTERIA TESTING, ETC. TO BE COORDINATED WITH LOCAL GOVERNING MUNICIPALITY. ALL TESTS TO BE IN ACCORDANCE WITH AWWA STANDARDS.

17. BOTTOM FLANGE OF FIRE HYDRANTS TO BE SET TO APPROXIMATELY 4" INCHES ABOVE BACK OF CURB ELEVATION, HYDRANTS TO INCLUDE TEE, 6" LINE VALVE, AND HYDRANT COMPLETE TO MEET CITY STANDARDS.

18. ALL NEW STORM DRAIN/LAND DRAIN CONSTRUCTION TO BE DONE IN ACCORDANCE WITH LOCAL GOVERNING MUNICIPALITY STANDARDS & SPECIFICATIONS.

19. ALL STORM WATER CONVEYANCE PIPING TO BE RCP - CLASS 3 OR EQUAL, UNLESS OTHERWISE NOTED. STANDARDS AND SPECIFICATIONS:

GRADING NOTES

1. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE SOILS REPORT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ALL SOFT, YIELDING OR UNSUITABLE MATERIALS AND REPLACING IT WITH SUITABLE MATERIALS AS SPECIFIED IN THE SOILS REPORT. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM TEST D-1557 EXCEPT UNDER BUILDING FOUNDATION WHERE IT SHALL BE 95% MIN. OF MAXIMUM DENSITY. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL NOT EXCEED 2% ABOVE NOR 3% BELOW OPTIMUM. CONTRACTOR SHALL SUBMIT A COMPACTION REPORT PREPARED BY A QUALIFIED REGISTERED SOILS ENGINEER, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED, HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECS AND THE RECOMMENDATIONS SET FORTH IN THE SOILS. REPORT.

2. THE CONTRACTOR IS TO USE BEST MANAGEMENT PRACTICES FOR PROVIDING EROSION CONTROL FOR CONSTRUCTION OF THE PROJECT. SPECIFIC DETAILS SHOWN SHALL BE USED IN COMBINATION WITH OTHER ACCEPTED LOCAL PRACTICES.

3. EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF CONTRACTOR'S FAILURE TO VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT.

4. IF AT ANY TIME DURING CONSTRUCTION ANY UNFAVORABLE GEOLOGICAL CONDITIONS ARE ENCOUNTERED, WORK IN THAT AREA WILL STOP UNTIL APPROVED CORRECTIVE MEASURES ARE OBTAINED FROM THE ENGINEER.

5. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING HIS OWN ESTIMATE OF EARTHWORK QUANTITIES.

6. WHERE NEW CURB AND GUTTER IS BEING CONSTRUCTED ADJACENT TO EXISTING ASPHALT OF CONCRETE PAVEMENT, THE FOLLOWING SHALL APPLY: PRIOR TO PLACEMENT OF ANY CONCRETE THE CONTRACTOR SHALL HAVE A LICENSED SURVEYOR VERIFY THE GRADE AND CROSS SLOPE OF THE CURB AND GUTTER FORMS, THE CONTRACTOR SHALL SUBMIT THE SLOPE AND GRADES TO THE ENGINEER FOR APPROVAL PRIOR THE PLACEMENT OF CONCRETE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY SECTION WHICH DOES NOT CONFORM TO THE DESIGN OR TYPICAL CROSS SECTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CURB AND GUTTER POURS WITHOUT THE APPROVAL OF THE ENGINEER.

EROSION CONTROL

1. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE STANDARDS AND REGULATIONS OF THE LOCAL GOVERNING MUNICIPALITY.

2. ALL SEDIMENT CONTROL MEASURES TO BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND CONSTRUCTED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON BALANCE OF SITE.

3. DAILY INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES MUST BE PROVIDED TO INSURE INTENDED PURPOSE IS ACCOMPLISHED. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SEDIMENT LEAVING THE PROPERTY. SEDIMENT CONTROL MEASURES SHALL BE IN WORKING CONDITION AT THE END OF EACH WORKING DAY.

4. ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS WILL BE PROTECTED TO PREVENT TRACKING OF MUD ONTO PUBLIC WAYS.

5. ALL SEDIMENT WILL BE PREVENTED FROM ENTERING ANY STORM DRAINAGE SYSTEM THROUGH THE USE OF SANDBAGS, STRAW BALES, SILT FENCES, GRAVEL, BOARDS, AND OTHER APPLICABLE METHODS.

6. ALL DISTURBED AREAS OUTSIDE OF ROADWAYS, PARKING LOTS, SIDEWALKS AND OR BUILDING FOOTPRINTS SHALL BE SEEDED, SODDED AND/OR MULCHED.

7. IF SITE IS READY TO RECEIVE FINAL COVER DURING THE NON-PLANTING SEASON, THEN IT SHALL BE PROTECTED BY MULCHING. THE MULCH WILL REMAIN UNTIL THE NEXT PLANTING SEASON AS DEFINED BY THE LOCAL GOVERNING MUNICIPALITY.

8. RE-VEGETATE ALL DENUDED AREAS AS PER THE STANDARDS AND REGULATIONS OF THE LOCAL GOVERNING MUNICIPALITY.

9. THE CONTRACTOR AGREES THAT:

A. THEY SHALL BE RESPONSIBLE TO CLEAN THE JOB SITE AT THE END OF EACH PHASE OF WORK.

B. THEY SHALL BE RESPONSIBLE TO REMOVE AND DISPOSE OF ALL TRASH, SCRAP AND UNUSED MATERIAL AT THEIR OWN EXPENSE IN A TIMELY MANNER.

C. THEY SHALL BE RESPONSIBLE TO MAINTAIN THE SITE IN A NEAT, SAFE AND ORDERLY MANNER AT ALL TIMES.

D. THEY SHALL BE RESPONSIBLE TO KEEP MATERIALS, EQUIPMENT, AND TRASH OUT OF THE WAY OF OTHER CONTRACTORS SO AS NOT TO DELAY THE JOB. FAILURE TO DO SO WILL RESULT IN A DEDUCTION FOR THE COST OF CLEAN UP FROM FINAL PAYMENT.

E. THEY SHALL BE RESPONSIBLE FOR THEIR OWN SAFETY, TRAFFIC CONTROL, PERMITS, RETESTING AND REINSPECTION AT THEIR OWN EXPENSE.

F. UNLESS OTHERWISE NOTED ALL EXCESS SOILS AND MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE LAWFULLY DISPOSED OF OFF SITE AT THE CONTRACTOR'S EXPENSE.

G. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, BARRICADES, SIGNS, FLAG-MEN OR OTHER DEVICES NECESSARY FOR PUBLIC SAFETY.

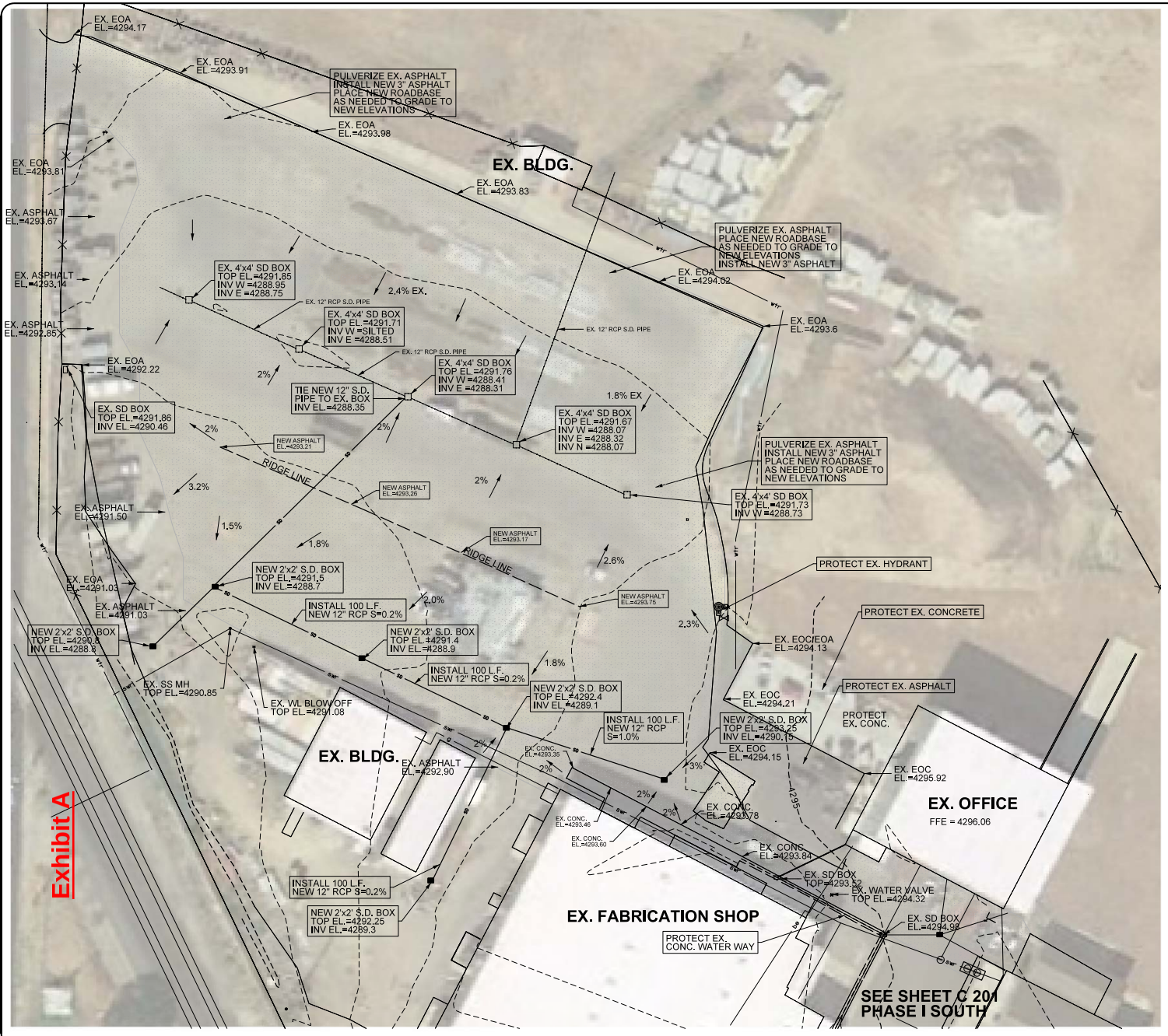
DESCRIPTION	DATE	APPR	MARK

ESI
DESIGNED BY: BFC
DRAWN BY: PSB
CHECKED BY: KLC
DATE: 09-05-2019

ESI ENGINEERING
CONSULTING ENGINEERS AND LAND SURVEYORS
3500 SOUTH MAIN SUITE 206
SOUTH SALT LAKE CITY, UT 84115
801-263-1752 - FAX 801-263-1780

HHI CAMPUS PAVING PROJECT
736 WEST HARRISVILLE ROAD
HARRISVILLE, UTAH

G-002
GENERAL NOTES
PROJECT #
19-123



NOTES:

1. ALL CONSTRUCTION IN CITY RIGHT-OF-WAY SHALL CONFORM TO CITY STANDARDS
2. PULVERIZE ALL EXISTING ASPHALT AS SHOWN. GRADE PULVERIZED MATERIAL AND NEW ROADBASE AS NEEDED TO ACCOMPLISH DESIGN GRADES AND FLOW TO THE STORM DRAIN BOXES.
3.
4.

LEGEND

- WATER VALVE & LINE (wtr)
- POWER POLE & LINE (e)
- SEWER MANHOLE & LINE (swr)
- TELEPHONE PEDESTAL & LINE (tel)
- STORM DRAIN MANHOLE & LINE (sd)
- GAS VALVE & LINE (g)
- IRRIGATION VALVE & LINE (ir)
- CURB & GUTTER
- SIDEWALK
- BUILDING
- STRIPING PAINT
- FENCE
- EXISTING CURB & GUTTER
- FIRE HYDRANT
- LIGHT POLE
- TREE
- WATER METER

SCALE: 1"=30'
PRINTED 24"x36"
-30 0 30 60 90

DESCRIPTION	DATE	APPR	MARK

REGISTERED PROFESSIONAL ENGINEER No. 343584 BRIAN T. CAMPBELL 07/09/19 STATE OF UTAH

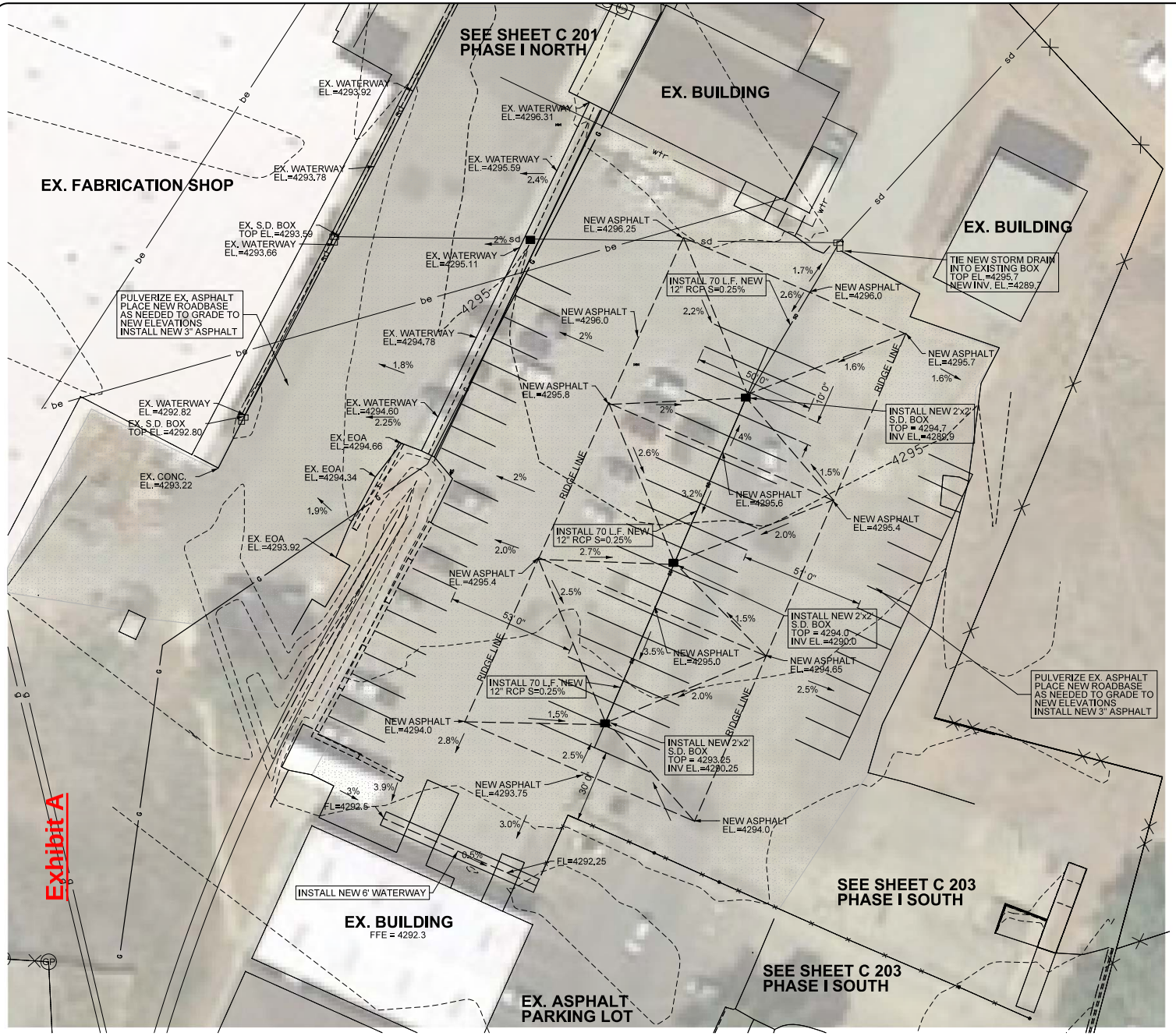
ESI ENGINEERING
CONSULTING ENGINEERS AND LAND SURVEYORS
3300 SOUTH MAIN SUITE 206
SOUTH SALT LAKE CITY, UT 84115
801-263-1782 FAX 801-263-1780

DESIGNED BY: MC
DRAWN BY: FG
CHECKED BY: MC
DATE: 06-06-2019

HHI CAMPUS PAVING PROJECT

736 WEST HARRISVILLE ROAD
HARRISVILLE, UTAH

C-201
PHASE I (N) GRADING PLAN
PROJECT # 19-123



NOTES:

1. ALL CONSTRUCTION IN CITY RIGHT-OF-WAY SHALL CONFORM TO CITY STANDARDS
2.
3.
4.

LEGEND

- WATER VALVE & LINE
- POWER POLE & LINE
- SEWER MANHOLE & LINE
- TELEPHONE PEDESTAL & LINE
- STORM DRAIN MANHOLE & LINE
- GAS VALVE & LINE
- IRRIGATION VALVE & LINE
- CURB & GUTTER
- SIDEWALK
- BUILDING
- STRIPING PAINT
- FENCE
- EXISTING CURB & GUTTER
- FIRE HYDRANT
- LIGHT POLE
- TREE
- WATER METER

SCALE: 1"=20'
PRINTED 24"x36"
-20 0 20 40 60

DESCRIPTION	DATE	APPR	MARK

REGISTERED PROFESSIONAL ENGINEER No. 343584 BRIAN F. CAMPBELL 07/29/19 STATE OF UTAH

ESI ENGINEERING
CONSULTING ENGINEERS AND LAND SURVEYORS
3300 SOUTH MAIN SUITE 206
SOUTH SALT LAKE CITY, UT 84115
801-263-1782 - FAX 801-263-1780

DESIGNED BY: BFC
DRAWN BY: FCB
CHECKED BY: BJC
DATE: 06-06-2019

HHI CAMPUS PAVING PROJECT

736 WEST HARRISVILLE ROAD
HARRISVILLE, UTAH

C-202
PHASE I (S) GRADING PLAN
PROJECT # 19-123

NOTES:

1. ALL CONSTRUCTION IN CITY RIGHT-OF-WAY SHALL CONFORM TO CITY STANDARDS
2.

LEGEND

- WATER VALVE & LINE — wtr
- POWER POLE & LINE — e
- SEWER MANHOLE & LINE — swr
- TELEPHONE PEDESTAL & LINE — tel
- STORM DRAIN MANHOLE & LINE — sd
- GAS VALVE & LINE — g
- IRRIGATION VALVE & LINE — ir
- CURB & GUTTER
- SIDEWALK
- BUILDING
- STRIPING PAINT
- FENCE
- EXISTING CURB & GUTTER
- FIRE HYDRANT
- LIGHT POLE
- TREE
- WATER METER

Detention Volume Calculations

Rational Formula

Project	HHI Paving Project PH. II		
Project No.	19-123	Date:	Sept. 22, 2019
Location:	736 W. Harrisville Rd.	Prepared By:	BFC
	Harrisville, UT	Checked By:	BFC

Input Data

	Area	Runoff Coeff.	Weighted Runoff Coeff.	C_wA
	square feet	C	C_w	square feet
Roof	0	0.85		
Pavement	28,000	0.85		
Landscape	13,000	0.15		
Total	41,000		0.75	30,750
Total acres	0.94			
Allowable Release Rate	0.10	cfs/acre		
Storm Frequency	25.00	year		

Analysis

Storm Interval	Precipitation	C_wA	Accumulated Flow	Allowable Discharge	Required Storage
minutes	inches	square feet	cubic feet	cubic feet	cubic feet
15	0.717	30,750	1,837	85	1,753
30	0.966	30,750	2,475	169	2,306
60	1.200	30,750	3,075	339	2,736
120	1.360	30,750	3,485	678	2,807
180	1.420	30,750	3,639	1,017	2,622
360	1.730	30,750	4,433	2,033	2,400
720	2.170	30,750	5,561	4,066	1,495
1440	2.520	30,750	6,458	8,132	-1,675

REQUIRED STORAGE	2,807	cubic feet
MAXIMUM RELEASE RATE	0.09	cfs

SCALE: 1"=20'
PRINTED 24"x36"
-20 0 20 40 60

DESCRIPTION	DATE	APPR	MARK

REGISTERED PROFESSIONAL ENGINEER No. 3435841 BRIAN F. CAMPBELL 09/09/19 STATE OF UTAH

ESI ENGINEERING
CONSULTING ENGINEERS AND LAND SURVEYORS
3500 SOUTH MAIN SUITE 206
SOUTH SALT LAKE CITY, UT 84115
801-263-1752 - FAX 801-263-1780

DESIGNED BY: BFC
DRAWN BY: BFC
CHECKED BY: NJC
DATE: 09-09-2019

HHI CAMPUS PAVING PROJECT
736 WEST HARRISVILLE ROAD
HARRISVILLE, UTAH

C-203
PHASE II GRADING PLAN
PROJECT # 19-123

M E M O R A N D U M

JONES & ASSOCIATES CONSULTING ENGINEERS

TO: Harrisville City Planning Commission

FROM: Matthew Robertson, P.E.
City Engineer

RE: HHI PARKING LOTS
Amended Site Plan Review

Date: October 2, 2019

HHI Corporation, located at 736 W. Harrisville Road, is proposing to make modifications to their site. The proposed improvements include replacing existing asphalt surfaces and adding some employee parking on the site. The work will all occur on HHI's property but does have some minor storm drain impact to the City system. Our office has completed a review of the site plan for the referenced project and we have the following comments:

1. City Code requires a 10' interior yard setback when a commercial or manufacturing lot abuts a residential zone. Adjust the curb and gutter for the new parking area to provide this 10' buffer.
2. Show details on the plans of how runoff enters the detention basin from the parking lot and of the emergency overflow to ensure that the neighboring property won't be affected if the pond overtops.
3. Verify size and slope of existing outlet pipe from the detention basin and replace the pipe to the City's inlet box if necessary.

City of Harrisville

Site Plan Application
09/18/2019 11:52 AM

Site Plan Requirements

Site Plan Application

Date / Time
2019-09-18 00:00:00
Developer's Full Name
HHI Corporation
Email Address
brian@hhicorp.com
City
Harrisville
Zip Code
84404

Parcel #
Developer's Engineer
ESI Engineering
Engineer's Phone
801-953-4814

Please upload a digital copy of your engineered site plan.
See attached: Concept Plan Set.pdf

Type of Site Plan
Amendment to Existing Site Plan
Phone Number
385-33-4400
Mailing Address
736 West Harrisville Road
State
Utah
Title of Project
Parking Lot Paving Projects
Approximate Address of Site
736 West Harrisville Road, Harrisville, Utah 84404
Contact Person
Brian Campbell
Engineer's Email Address
brian.campbell@esieng.com
Signature

HHI CORPORATION

PARKING LOT PAVING PROJECTS
HHI CORPORATION

736 W HARRISVILLE RD
OGDEN, UTAH 84404

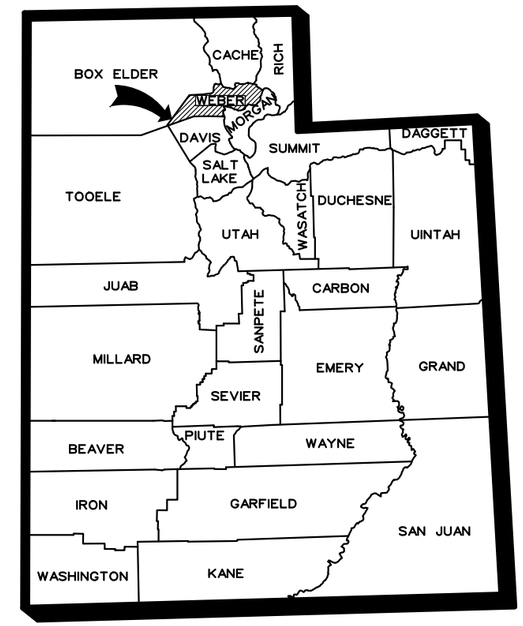
CONTACT
HHI Corporation
Blake Mabey
736 W. Harrisville Road
Ogden, UT 84404
Ph: 801 255-3721
Email:bmabey@hhicorp.com

CIVIL ENGINEER
ESI Engineering, Inc.
Brian F. Campbell, PE
3500 South Main
Salt Lake City, Utah 84115

Ph: 801 263-1752
Fax: 801 263-1780
Email: brian.campbell@esieng.com

PROJECT LOCATION

VICINITY MAP



STATE OF UTAH

GENERAL NOTES

1. CALL BLUE STAKES AND ALL OTHER UTILITY COMPANIES IN THE AREA BEFORE EXCAVATING. LOCATE ALL UTILITIES. NOTIFY ENGINEER IF UTILITIES ARE NOT SHOWN ON PLANS OR SHOWN INCORRECTLY. NOTIFY ENGINEER OF ANY CONFLICTS WITH UTILITY LINES.
2. CONSTRUCTION SHALL CONFORM TO HARRISVILLE CITY STANDARDS.
3. CONSTRUCTION STAKING SHALL BE AT THE CONTRACTOR'S EXPENSE BY A REGISTERED LAND SURVEYOR. STAKES TO BE SET IN THE FIELD AND INSPECTED BY THE ENGINEER BEFORE EXCAVATION OR PIPE LAYING CAN BEGIN.
4. CHANGES TO THE PLANS SHALL BE APPROVED IN WRITING BY THE ENGINEER AND OWNER (HHI CONSTRUCTOIN) BEFORE CONSTRUCTION CHANGES.
5. FOR FIELD REVIEWS CALL ENGINEER AT ESI ENGINEERING.

PROJECT DRAWINGS INDEX

SHEET NO.	DESCRIPTION
G 001	COVER SHEET
G 002	LEGEND, ABBREVIATIONS & NOTES
C 101	OVERALL SITE PLAN
C 201	PHASE I NORTH GRADING PLAN
C 202	PHASE I SOUTH GRADING PLAN
C 203	PHASE II GRADING PLAN

NO	BY	DATE	REMARKS

REVISIONS

ESI ENGINEERING
CONSULTING ENGINEERS AND LAND SURVEYORS
SALT LAKE CITY, UTAH

DESIGN	PSB 09/19	CHECK	BFC 09/19	REVIEW
DRAWN	PSB 09/19	CHECK	BFC 09/19	
QUANT.	BFC 09/19	CHECK	BFC 09/19	R/W
APPROVAL RECOMM.	DATE	PROJ. DESIGN ENGINEER		
APPROVED	DATE	HHI CORPORATION		WEBER COUNTY
PROJECT NUMBER	19-123			SHEET NO. 1 OF 6

LEGEND

- SECTION CORNER
- MONUMENT
- ADA PARKING
- LIGHT POLE
- POWER POLE
- TELEPHONE POLE
- UTILITY POLE
- STREET SIGN
- MAIL BOX
- TREE
- ELECTRICAL MANHOLE
- WATER MANHOLE
- WATER METER
- FIRE HYDRANT
- VALVE
- IRRIGATION METER
- IRRIGATION VALVE
- SEWER MANHOLE
- STORM DRAIN MANHOLE
- CATCH BASIN
- POWER BOX
- SURVEY CONTROL POINT
- EG = 4610.42 — EXISTING SPOT ELEVATION
- FG=4610.42 — PROPOSED SPOT ELEVATION
- 2.0% — DOWNWARD GRADE
- 3:1 — HORIZONTAL:VERTICAL SLOPE
- PROPOSED CONCRETE
- LANDSCAPE AREA
- PROPOSED ASPHALT
- 4258 — EXISTING INDEX CONTOUR
- EXISTING MINOR CONTOUR
- 4258 — PROPOSED CONTOUR
- PROPOSED MINOR CONTOUR
- LOT OR BOUNDARY LINE
- EXISTING FENCE
- EDGE OF PAVED ROAD
- EXISTING CURB & GUTTER
- PROPOSED CURB & GUTTER
- SUBDRAIN
- FIBER OPTIC
- EXISTING WATER LINE
- PROPOSED WATER LINE
- IRRIGATION LINE
- PROPOSED IRRI SLEEVE
- VEGETATION LINE
- SEWER LINE
- STORM DRAIN
- CABLE TV LINE
- EXISTING NATURAL GAS
- PROPOSED NATURAL GAS
- ELECTRICAL
- OVERHEAD POWER
- UNDERGROUND POWER

ABBREVIATIONS

°	DEGREES
'	MINUTES, FEET
"	SECONDS, INCHES
ADA	AMERICAN DISABILITIES ACT
ARCH	ARCHITECT, ARCHITECTURAL
BH	BORE HOLE
BLDG	BUILDING POINT
BM	BENCHMARK
BOB	BOTTOM OF BANK
BOW	BOTTOM OF WALL
BOXCULV	BOX CULVERT
BS	BLUE STAKE
BW	BROKEN WHITE STRIPE
CB	CATCH BASIN
CG	CURB AND GUTTER
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
COB	CLEANOUT BOX
COMBO	COMBINATION (BOX)
CONC	CONCRETE
CPP	CORRUGATED PLASTIC PIPE
CW	CURB WALL
DA	DRIVE APPROACH
DIA	DIAMETER
DRIVE	DRIVEWAY
DW	DOUBLE WHITE STRIP
DY	DOUBLE YELLOW STRIPE
E	EAST, ELECTRICITY, ELECTRICAL
EB	ELECTRICAL BOX
EBL	EAST BOUND LANE
ECB	ELECTRIC CONTROL BOX
EG	EXISTING GRADE
ELEC	ELECTRICAL
EOA	EDGE OF ASPHALT
EOB	EDGE OF BRUSH
EOC	EDGE OF CONCRETE
EOG	EDGE OF GRASS
EOGR	EDGE OF GRAVEL
EOL	EDGE OF LANE
EOW	EDGE OF WALK
EX	EXISTING
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FNC	FENCE
FT	FEET
GAS	GAS, NATURAL GAS
GB	GRADE BREAK
GR	GUARD RAIL
GV	GAS VALVE
HDPE	HIGH-DENSITY POLYETHYLENE PIPE
H2O	WATER
IE	INVERT ELEVATION
IR	IRRIGATION
IRRBOX	IRRIGATION (SPRINKLER) BOX
IRRVLV	IRRIGATION VALVE
L	LENGTH
LIP	LIP OF GUTTER
LF	LINEAL FEET
LP	LIGHT POLE
MH	MANHOLE
MHGAS	NATURAL GAS MANHOLE
MHSD	STORM DRAIN MANHOLE
MHSS	SANITARY SEWER MANHOLE
MHTELE	TELEPHONE MANHOLE
MHWTR	WATER MANHOLE
MON	MONUMENT
N	NORTH
NBL	NORTHBOUND LANE
NE	NORTHEAST
NG	NATURAL GROUND
NOTE	NOTE TO FOLLOW (ATTRIBUTE)
NW	NORTHWEST
PC	CONTROL CODE; STARTS A TANGENTIAL CURVE
PCC	POINT OF COMPOUND CURVATURE
PI	POINT OF INTERSECTION
PL	PROPERTY LINE
PP	POWER POLE
PROP	PROPERTY
PT	CONTROL CODE; ENDS A TANGENTIAL CURVE
R	RADIUS
RAMP	FREEWAY ON/OFF RAMP
RC	REBAR & CAP
RCP	REINFORCED CONCRETE PIPE
RMP	ROCKY MOUNTAIN POWER
ROW	RIGHT OF WAY
RW	RETAINING WALL
RWM	RIGHT OF WAY MARKER
S	SOUTH
SD	STORM DRAIN
SE	SOUTHEAST
SEC	SECTION
SF	SQUARE FEET
SPEC	SPECIFICATION
SPECS	SPECIFICATIONS
SS	SANITARY SEWER
STD	STANDARD
STDS	STANDARDS
SW	SOUTHWEST, SOLID WHITE STRIPE
SY	SOLID YELLOW STRIPE
TBC	TOP BACK OF CURB
TBS	TOP BACK OF SIDEWALK
TBW	TOP BACK OF WATER WAY
TELE	TELEPHONE
TFS	TOP FRONT OF SIDEWALK
TL	TRAVEL LANE
TOA	TOP OF ASPHALT
TOB	TOP OF BANK
TOC	TOP OF CONCRETE
TOE	BREAKLINE
TOR	TOP OF RAIL
TOS	TOE OF STEP
TOW	TOP OF WALL
TYP	(TYPICAL) REPRSENTATIVE OF ALL SIMILARLY NOTED ITEMS
UTIL	UTILITY
UP	UTILITY POLE
W	WEST, WATER
WALK	SIDEWALK
WBL	WEST BOUND LANE
WG	WALK & GUTTER (CONCRETE POURED AS ONE UNIT)
WM	WATER METER
WV	WATER VALVE

GENERAL NOTES

1. ALL IMPROVEMENTS SHALL COMPLY WITH THE STANDARDS AND REGULATIONS OF THE LOCAL GOVERNING MUNICIPALITY. CONTACT THE PUBLIC WORKS OFFICE BEFORE BEGINNING.

2. CONTRACTOR TO FIELD VERIFY LOCATION, SIZE, AND AVAILABILITY OF EXISTING UTILITIES. UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE. SEE UTILITY NOTE 3.

3. ALL DIMENSIONS ARE IN FOOT UNITS AND ARE TO THE TOP BACK OF CURB UNLESS SHOWN OR NOTED OTHERWISE.

4. PROVIDE HANDICAP RAMPS AT ENDS OF WALKWAYS, END 0.1' ABOVE FLOWLINE OF CURB.

5. CURB AND GUTTER SHALL BE AS SPECIFIED IN DETIAL SHEET.

6. UTILITY INFORMATION INDICATED ON DRAWING IS BASED UPON VISUAL OBSERVATION OR INFORMATION FURNISHED BY MUNICIPAL AUTHORITIES WHICH MAY NOT BE VALID. LATERAL LOCATIONS AND ELEVATIONS ARE ASSUMED. SEE UTILITY NOTE 3.

7. ALL GRADING SHALL BE DONE UNDER THE SUPERVISION OF A QUALIFIED SOILS ENGINEER WHO SHALL VERIFY THAT ALL FILL HAS BEEN PLACED IN ACCORDANCE WITH PROVISIONS IN CURRENT INTERNATIONAL BUILDING CODE. SEE GRADING NOTES.

8. COMPACTION TEST REPORTS SHALL BE MADE AVAILABLE TO THE ENGINEER WITHIN 24 HOURS OF A REQUEST. FINAL REPORTS AS SPECIFIED IN CURRENT INTERNATIONAL BUILDING CODE SHALL BE SUBMITTED TO THE ENGINEER WITHIN TEN DAYS AFTER COMPLETION OF GRADING.

9. ALL STORM DRAIN PIPE SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS AND THE LOCAL GOVERNING MUNICIPALITY'S STANDARDS AND SPECIFICATIONS.

10. STORM DRAIN PIPE WITHIN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO THE RIGHT-OF-WAY OWNER'S SPECIFICATIONS.
PRIVATE STORM DRAIN PIPE OPTIONS SHALL CONSIST IF THE FOLLOWING MATERIALS.
1. PVC PIPE, ASTM D3034, SDR 35, BELL & SPIGOT TYPE.
2. RCP PIPE, CLASS 3, BELL & SPIGOT TYPE.
3. HIGH DENSITY CORRUGATED POLYETHYLENE SMOOTH INTERIOR PIPE, ASTM D3350 WITH WATERTIGHT JOINTS.

11. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CHECK CONDITIONS AT THE SITE BEFORE STARTING WORK AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

12. TYPICAL DETAILS SHALL APPLY IN GENERAL CONSTRUCTION UNLESS SPECIFICALLY DETAILED. WHERE NO DETAILS ARE GIVEN, CONSTRUCTION WILL BE AS FOR SIMILAR WORK. DO NOT SCALE DRAWINGS.

13. ANY OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH ANY WORK INVOLVED.

14. PIPE BEDDING SHALL BE 3/8" MAXIMUM AGGREGATE, USE 3/4" MAXIMUM SIZE ROAD BASE FOR BACKFILL MATERIAL. COMPACT TO 95% STANDARD PROCTOR DENSITY. MAXIMUM LIFT 8 INCHES.

15. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PUBLIC AND OSHA STANDARDS.

16. ALL WORK SHALL COMPLY WITH THE AMERICAN PUBLIC WORKS ASSOCIATION UTAH CHAPTER (APWA) MANUAL OF STANDARD SPECIFICATIONS 2017 EDITION WITH ALL PERTINENT SUPPLEMENTS AND AMENDMENTS AND THE MANUAL OF STANDARD PLANS 2017 EDITION. SAID STANDARD SPECIFICATIONS AND PLANS SHALL BE THE REQUIREMENTS.

17. IT IS INTENDED THAT THESE PLANS AND SPECIFICATIONS REQUIRE ALL LABOR AND MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THE WORK TO BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY REGARDING ANY DISCREPANCIES OR AMBIGUITIES WHICH EXIST IN THE PLANS OR SPECIFICATIONS. THE ENGINEER'S INTERPRETATION THEREOF SHALL BE CONCLUSIVE. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORITY FROM THE OWNER AND/OR ENGINEER.

18. THE CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF FULL-SIZE AS-BUILT RECORD DRAWINGS SHOWING THE FINAL LOCATION AND LAYOUT OF ALL MECHANICAL; ELECTRICAL AND INSTRUMENTATION EQUIPMENT; PIPING AND CONDUITS; STRUCTURES AND OTHER FACILITIES. THE AS-BUILTS OF THE ELECTRICAL SYSTEM SHALL INCLUDE THE STREET LIGHT LAYOUT PLAN SHOWING LOCATION OF LIGHTS, CONDUITS, CONDUCTORS, POINTS OF CONNECTIONS TO SERVICES, PULLBOXES, AND WIRE SIZES. AS-BUILT RECORD DRAWINGS SHALL REFLECT CHANGE ORDERS, ACCOMMODATIONS, AND ADJUSTMENTS TO ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR.

19. PRIOR TO ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO ENGINEER, ONE SET OF NEATLY MARKED AS-BUILT RECORD DRAWINGS SHOWING THE INFORMATION REQUIRED ABOVE. AS-BUILT RECORD DRAWINGS SHALL BE REVIEWED AND THE COMPLETE AS-BUILT RECORD DRAWING SET SHALL BE CURRENT WITH ALL CHANGES AND DEVIATIONS REDLINED AS A PRECONDITION TO THE FINAL PROGRESS PAYMENT APPROVAL AND/OR FINAL ACCEPTANCE.

20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY SCHEDULING INSPECTION AND TESTING OF ALL FACILITIES CONSTRUCTED UNDER THIS CONTRACT. ALL TESTING SHALL CONFORM TO THE REGULATORY AGENCY'S STANDARD SPECIFICATIONS. ALL TESTING AND INSPECTION SHALL BE PAID FOR BY THE OWNER; ALL RE-TESTING AND/OR REINSPECTION SHALL BE PAID FOR BY THE CONTRACTOR.

UTILITY NOTES

1. ALL SERVICE LATERALS SHALL BE EXTENDED 2 FEET PAST THE 10 FOOT P.U.E.

2. ALL CONSTRUCTION SHALL COMPLY WITH LOCAL GOVERNING MUNICIPALITY DESIGN STANDARDS AND CONSTRUCTION SPECIFICATIONS

3. LOCATIONS OF ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE LOCATIONS. CONTRACTOR IS TO FIELD VERIFY CONNECTION POINTS WITH EXISTING UTILITIES, INCLUDING LOCATIONS AND INVERT ELEVATIONS OF ALL EXISTING STRUCTURES OR PIPES, BEFORE STAKING OR CONSTRUCTING ANY NEW UTILITIES. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO EXISTING UTILITIES AND UTILITY STRUCTURE THAT ARE TO REMAIN.

4. CONTRACTOR IS RESPONSIBLE TO EXPOSE ALL UTILITY SERVICES STUBBED INTO PROJECT PROPERTY AND GIVE ESI ENGINEERING 48 HOURS PRIOR NOTICE SO ESI ENGINEERING CAN VERIFY DEPTHS AND INVERT ELEVATIONS TO DETERMINE IF CONFLICTS EXIST. ALSO ANY EXISTING UTILITIES THAT RUN ACROSS PROJECT PROPERTY WHICH MAY CAUSE POTENTIAL CONFLICT NEED TO BE EXPOSED AND LOCATED BOTH HORIZONTALLY AND VERTICALLY. CONTRACTOR PROCEEDS AT OWN RISK IF ESI IS NOT NOTIFIED TO FIELD VERIFY THE ABOVE MENTIONED CONDITIONS.

5. CONTRACTOR IS TO COORDINATE ALL UTILITIES WITH MECHANICAL DRAWINGS WHERE APPLICABLE.

6. NO GROUNDWATER OR DEBRIS TO BE ALLOWED TO ENTER THE NEW PIPE DURING CONSTRUCTION. THE OPEN END OF ALL PIPES IS TO BE COVERED AND EFFECTIVELY SEALED AT THE END OF EACH DAYS WORK.

7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSTALL PIPE OF ADEQUATE CLASSIFICATION WITH SUFFICIENT BEDDING TO MEET ALL REQUIREMENTS AND RECOMMENDATIONS FOR H-20 LOAD REQUIREMENTS.

8. ALL NEW SANITARY SEWER CONSTRUCTION TO BE DONE IN ACCORDANCE WITH LOCAL GOVERNING MUNICIPALITY STANDARDS & SPECIFICATIONS.

9. ALL SEWER LINES AND LATERALS ARE TO BE SDR 35 PVC PIPE.

10. SEWER LATERALS WILL BE INSTALLED AT A UNIFORM SLOPE OF NOT LESS THAN 2% GRADE AND THEY SHALL HAVE A MINIMUM OF 4 FEET OF COVER, UNLESS OTHERWISE NOTED.

11. ALL NEW CULINARY AND IRRIGATION WATER CONSTRUCTION TO BE DONE IN ACCORDANCE WITH LOCAL GOVERNING MUNICIPALITY STANDARDS & SPECIFICATIONS.

12. WATER LINES TO BE PVC C-900. WATER LINES SHALL BE A MINIMUM OF 10' HORIZONTALLY FROM SEWER MAINS, CROSSINGS SHALL MEET STATE HEALTH STANDARDS. (MECHANICAL JOINTS REQUIRED WHEN LESS THAN 18" VERTICAL OR 10' HORIZONTAL SEPARATION FROM SEWER LINES.)

13. ALL WATER LINES SHALL BE 8" MINIMUM SIZE AND SERVICE LATERALS SHALL BE 1-1/2" MINIMUM UNLESS OTHERWISE NOTED.

14. WATER SERVICE LATERALS TO INCLUDE ALL BRASS SADDLE; CORP. STOP LATERAL, DOUBLE CHECK VALVE AND BACKFLOW PREVENTION DEVICE, AND SHUTOFF VALVE IN BOX NEAR BUILDING EDGE.

15. ALL WATER LINES SHALL BE A MINIMUM 48" BELOW FINISH GROUND TO TOP OF PIPE. ALL VALVE BOXES AND MANHOLES SHALL BE RAISED OR LOWERED TO FINISH GRADE AND SHALL INCLUDE A CONCRETE COLLAR IN PAVED AREAS.

16. CONTRACTOR TO NOTIFY PUBLIC UTILITIES FOR CHLORINE TEST PRIOR TO FLUSHING LINES, CHLORINE LEFT IN PIPE 24 HOURS MINIMUM WITH 25 PPM RESIDUAL. ALL TURNING OF MAINLINE VALVES, CHLORINATION, FLUSHING, PRESSURE TESTING, BACTERIA TESTING, ETC. TO BE COORDINATED WITH LOCAL GOVERNING MUNICIPALITY. ALL TESTS TO BE IN ACCORDANCE WITH AWWA STANDARDS.

17. BOTTOM FLANGE OF FIRE HYDRANTS TO BE SET TO APPROXIMATELY 4" INCHES ABOVE BACK OF CURB ELEVATION. HYDRANTS TO INCLUDE TEE, 6" LINE VALVE, AND HYDRANT COMPLETE TO MEET CITY STANDARDS.

18. ALL NEW STORM DRAIN/LAND DRAIN CONSTRUCTION TO BE DONE IN ACCORDANCE WITH LOCAL GOVERNING MUNICIPALITY STANDARDS & SPECIFICATIONS.

19. ALL STORM WATER CONVEYANCE PIPING TO BE RCP - CLASS 3 OR EQUAL, UNLESS OTHERWISE NOTED. STANDARDS AND SPECIFICATIONS:

GRADING NOTES

1. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE SOILS REPORT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ALL SOFT, YIELDING OR UNSUITABLE MATERIALS AND REPLACING IT WITH SUITABLE MATERIALS AS SPECIFIED IN THE SOILS REPORT. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM TEST D-1557 EXCEPT UNDER BUILDING FOUNDATION WHERE IT SHALL BE 95% MIN. OF MAXIMUM DENSITY. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL NOT EXCEED 2% ABOVE NOR 3% BELOW OPTIMUM. CONTRACTOR SHALL SUBMIT A COMPACTION REPORT PREPARED BY A QUALIFIED REGISTERED SOILS ENGINEER, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED, HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECS AND THE RECOMMENDATIONS SET FORTH IN THE SOILS, REPORT.

2. THE CONTRACTOR IS TO USE BEST MANAGEMENT PRACTICES FOR PROVIDING EROSION CONTROL FOR CONSTRUCTION OF THE PROJECT. SPECIFIC DETAILS SHOWN SHALL BE USED IN COMBINATION WITH OTHER ACCEPTED LOCAL PRACTICES.

3. EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF CONTRACTOR'S FAILURE TO VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT.

4. IF AT ANY TIME DURING CONSTRUCTION ANY UNFAVORABLE GEOLOGICAL CONDITIONS ARE ENCOUNTERED, WORK IN THAT AREA WILL STOP UNTIL APPROVED CORRECTIVE MEASURES ARE OBTAINED FROM THE ENGINEER.

5. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING HIS OWN ESTIMATE OF EARTHWORK QUANTITIES.

6. WHERE NEW CURB AND GUTTER IS BEING CONSTRUCTED ADJACENT TO EXISTING ASPHALT OF CONCRETE PAVEMENT, THE FOLLOWING SHALL APPLY: PRIOR TO PLACEMENT OF ANY CONCRETE THE CONTRACTOR SHALL HAVE A LICENSED SURVEYOR VERIFY THE GRADE AND CROSS SLOPE OF THE CURB AND GUTTER FORMS. THE CONTRACTOR SHALL SUBMIT THE SLOPE AND GRADES TO THE ENGINEER FOR APPROVAL PRIOR THE PLACEMENT OF CONCRETE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY SECTION WHICH DOES NOT CONFORM TO THE DESIGN OR TYPICAL CROSS SECTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CURB AND GUTTER POURS WITHOUT THE APPROVAL OF THE ENGINEER.

Know what's below. 811
Call 811 before you dig.
BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111

EROSION CONTROL

1. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE STANDARDS AND REGULATIONS OF THE LOCAL GOVERNING MUNICIPALITY.

2. ALL SEDIMENT CONTROL MEASURES TO BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND CONSTRUCTED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON BALANCE OF SITE.

3. DAILY INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES MUST BE PROVIDED TO INSURE INTENDED PURPOSE IS ACCOMPLISHED. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SEDIMENT LEAVING THE PROPERTY. SEDIMENT CONTROL MEASURES SHALL BE IN WORKING CONDITION AT THE END OF EACH WORKING DAY.

4. ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS WILL BE PROTECTED TO PREVENT TRACKING OF MUD ONTO PUBLIC WAYS.

5. ALL SEDIMENT WILL BE PREVENTED FROM ENTERING ANY STORM DRAINAGE SYSTEM THROUGH THE USE OF SANDBAGS, STRAW BALES, SILT FENCES, GRAVEL, BOARDS, AND OTHER APPLICABLE METHODS.

6. ALL DISTURBED AREAS OUTSIDE OF ROADWAYS, PARKING LOTS, SIDEWALKS AND OR BUILDING FOOTPRINTS SHALL BE SEEDED, SODDED AND/OR MULCHED.

7. IF SITE IS READY TO RECEIVE FINAL COVER DURING THE NON-PLANTING SEASON, THEN IT SHALL BE PROTECTED BY MULCHING. THE MULCH WILL REMAIN UNTIL THE NEXT PLANTING SEASON AS DEFINED BY THE LOCAL GOVERNING MUNICIPALITY.

8. RE-VEGETATE ALL DENUDED AREAS AS PER THE STANDARDS AND REGULATIONS OF THE LOCAL GOVERNING MUNICIPALITY.

9. THE CONTRACTOR AGREES THAT:

A. THEY SHALL BE RESPONSIBLE TO CLEAN THE JOB SITE AT THE END OF EACH PHASE OF WORK.

B. THEY SHALL BE RESPONSIBLE TO REMOVE AND DISPOSE OF ALL TRASH, SCRAP AND UNUSED MATERIAL AT THEIR OWN EXPENSE IN A TIMELY MANNER.

C. THEY SHALL BE RESPONSIBLE TO MAINTAIN THE SITE IN A NEAT, SAFE AND ORDERLY MANNER AT ALL TIMES.

D. THEY SHALL BE RESPONSIBLE TO KEEP MATERIALS, EQUIPMENT, AND TRASH OUT OF THE WAY OF OTHER CONTRACTORS SO AS NOT TO DELAY THE JOB. FAILURE TO DO SO WILL RESULT IN A DEDUCTION FOR THE COST OF CLEAN UP FROM FINAL PAYMENT.

E. THEY SHALL BE RESPONSIBLE FOR THEIR OWN SAFETY, TRAFFIC CONTROL, PERMITS, RETESTING AND REINSPECTION AT THEIR OWN EXPENSE.

F. UNLESS OTHERWISE NOTED ALL EXCESS SOILS AND MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE LAWFULLY DISPOSED OF OFF SITE AT THE CONTRACTOR'S EXPENSE.

G. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, BARRICADES, SIGNS, FLAG-MEN OR OTHER DEVICES NECESSARY FOR PUBLIC SAFETY.

POWER
TELEPHONE & TV
GAS
SEWER
WATER
IRRIGATION
TWO WORKING DAYS BEFORE YOU DIG CALL
1-800-662-4111
UTAH TOLL FREE, OR
801-208-2100
SALT LAKE
IT'S THE LAW TO CALL

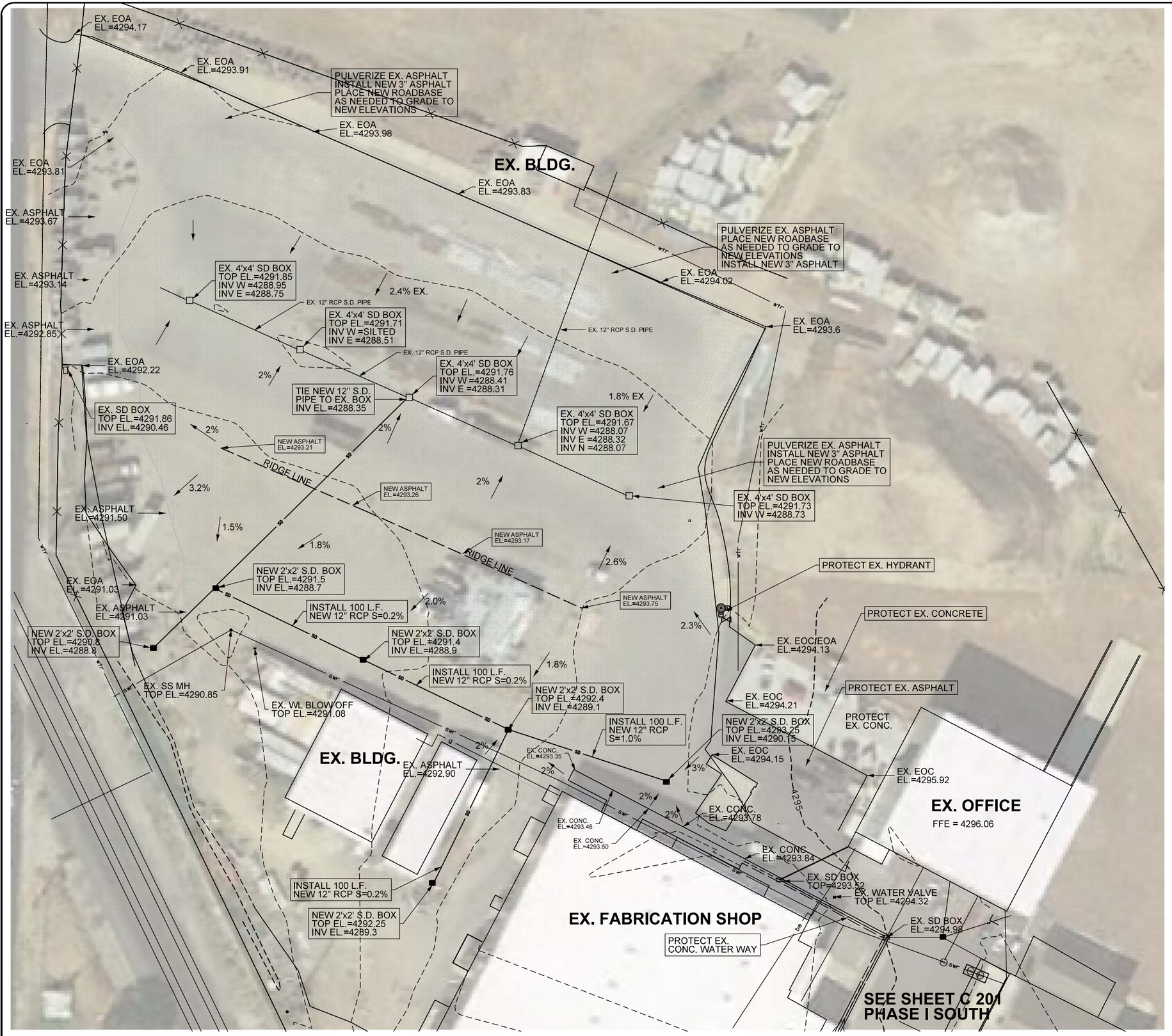
DATE	APPR	MARK	DESCRIPTION

ESI ENGINEERING
CONSULTING ENGINEERS AND LAND SURVEYORS
3500 SOUTH MAIN SUITE 206
SOUTH SALT LAKE CITY, UT 84115
801-263-1752 - FAX 801-263-1780

DESIGNED BY: BFC
DRAWN BY: PSB
CHECKED BY: KJC
DATE: 09-05-2019

HHI CAMPUS PAVING PROJECT
736 WEST HARRISVILLE ROAD
HARRISVILLE, UTAH

G-002
GENERAL NOTES
PROJECT # 19-123



NOTES:

1. ALL CONSTRUCTION IN CITY RIGHT-OF-WAY SHALL CONFORM TO CITY STANDARDS
2. PULVERIZE ALL EXISTING ASPHALT AS SHOWN. GRADE PULVERIZED MATERIAL AND NEW ROADBASE AS NEEDED TO ACCOMPLISH DESIGN GRADES AND FLOW TO THE STORM DRAIN BOXES.
3.
4.

LEGEND

- WATER VALVE & LINE — wtr
- POWER POLE & LINE — e
- SEWER MANHOLE & LINE — swr
- TELEPHONE PEDESTAL & LINE — tel
- STORM DRAIN MANHOLE & LINE — sd
- GAS VALVE & LINE — g
- IRRIGATION VALVE & LINE — ir
- CURB & GUTTER
- SIDEWALK
- BUILDING
- STRIPING PAINT
- FENCE
- EXISTING CURB & GUTTER
- FIRE HYDRANT
- LIGHT POLE
- TREE
- WATER METER

SCALE: 1"=30'
PRINTED 24"x36"

-30 0 30 60 90

DESCRIPTION	DATE	APPR	MARK

REGISTERED PROFESSIONAL ENGINEER
Brian F. Campbell
No. 343584
BRIAN F. CAMPBELL
07/29/19
STATE OF UTAH

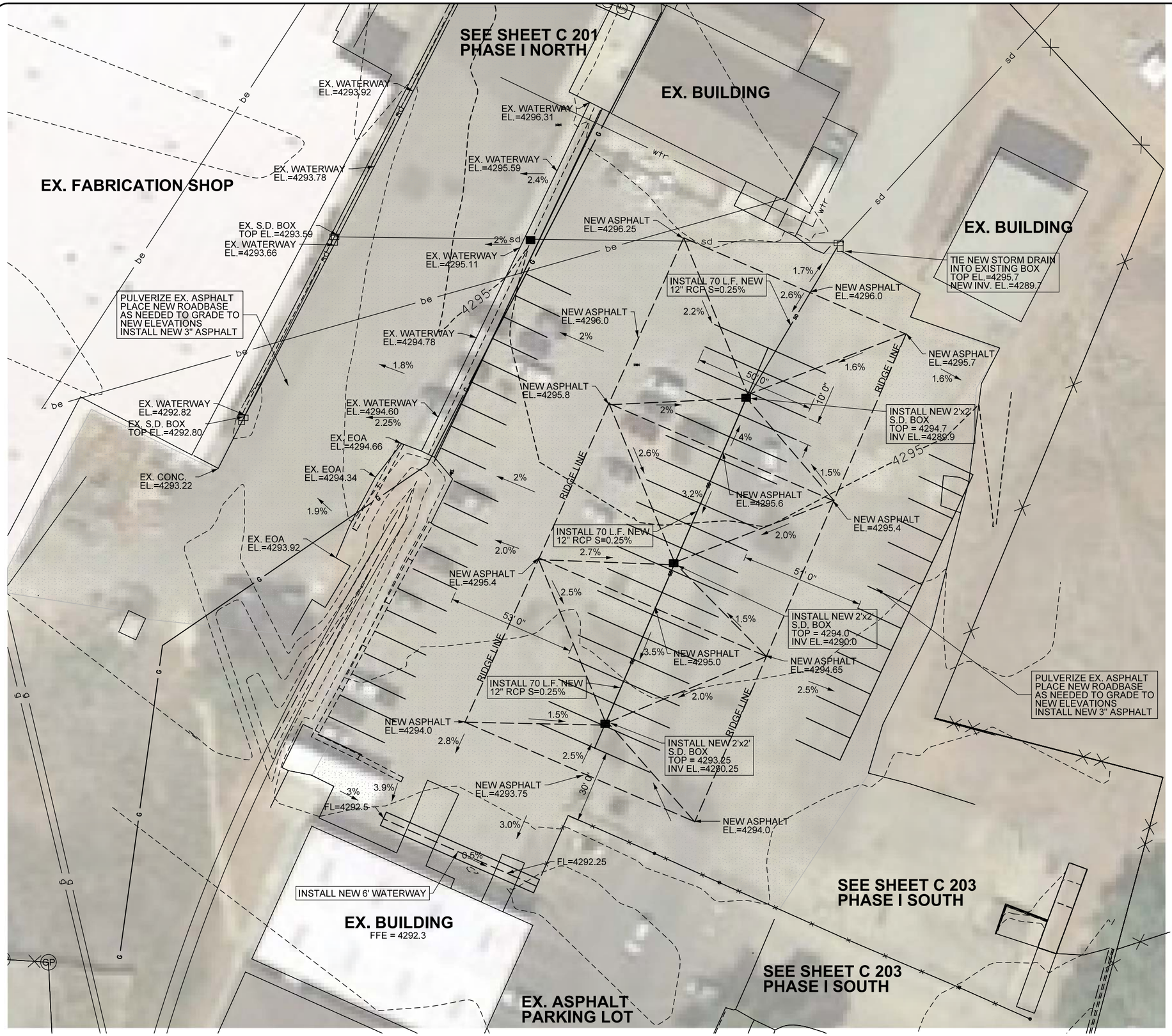
ESI ENGINEERING
CONSULTING ENGINEERS AND LAND SURVEYORS
3500 SOUTH MAIN SUITE 206
SOUTH SALT LAKE CITY, UT 84115
801-263-1752 - FAX 801-263-1760

DESIGNED BY: BFC
DRAWN BY: PSB
CHECKED BY: KJC
DATE: 06-05-2019

HHI CAMPUS PAVING PROJECT

736 WEST HARRISVILLE ROAD
HARRISVILLE, UTAH

C-201
PHASE I (N) GRADING PLAN
PROJECT # 19-123



NOTES:

1. ALL CONSTRUCTION IN CITY RIGHT-OF-WAY SHALL CONFORM TO CITY STANDARDS
2.
3.
4.

LEGEND

- WATER VALVE & LINE — wtr
- POWER POLE & LINE — e
- SEWER MANHOLE & LINE — swr
- TELEPHONE PEDESTAL & LINE — tel
- STORM DRAIN MANHOLE & LINE — sd
- GAS VALVE & LINE — g
- IRRIGATION VALVE & LINE — ir
- CURB & GUTTER
- SIDEWALK
- BUILDING
- STRIPING PAINT
- FENCE
- EXISTING CURB & GUTTER
- FIRE HYDRANT
- LIGHT POLE
- TREE
- WATER METER

SCALE: 1"=20'
PRINTED 24"x36"
−20 0 20 40 60

DESCRIPTION	DATE	APPR	MARK

REGISTERED PROFESSIONAL ENGINEER
Brian F. Campbell
No. 343584
BRIAN F. CAMPBELL
07/29/19
STATE OF UTAH

ESI ENGINEERING
CONSULTING ENGINEERS AND LAND SURVEYORS
3500 SOUTH MAIN SUITE 206
SOUTH SALT LAKE CITY, UT 84115
801-263-1752 - FAX 801-263-1760

DESIGNED BY: BFC
DRAWN BY: PFB
DATE: 06-05-2019
CHECKED BY: KJC

HHI CAMPUS PAVING PROJECT

736 WEST HARRISVILLE ROAD
HARRISVILLE, UTAH

C-202
PHASE I (S) GRADING PLAN
PROJECT # 19-123

NOTES:

1. ALL CONSTRUCTION IN CITY RIGHT-OF-WAY SHALL CONFORM TO CITY STANDARDS
2.

LEGEND

- WATER VALVE & LINE — wtr
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Detention Volume Calculations

Rational Formula

Project	HHI Paving Project PH. II		
Project No.	19-123	Date:	Sept. 22, 2019
Location:	736 W. Harrisville Rd.	Prepared By:	BFC
	Harrisville, UT	Checked By:	BFC

Input Data

	Area	Runoff Coeff.	Weighted Runoff Coeff.	C_wA
	square feet	C	C_w	square feet
Roof	0	0.85		
Pavement	28,000	0.85		
Landscape	13,000	0.15		
Total	41,000		0.75	30,750
Total acres	0.94			
Allowable Release Rate	0.10	cfs/acre		
Storm Frequency	25.00	year		

Analysis

Storm Interval	Precipitation	C_wA	Accumulated Flow	Allowable Discharge	Required Storage
minutes	inches	square feet	cubic feet	cubic feet	cubic feet
15	0.717	30,750	1,837	85	1,753
30	0.966	30,750	2,475	169	2,306
60	1.200	30,750	3,075	339	2,736
120	1.360	30,750	3,485	678	2,807
180	1.420	30,750	3,639	1,017	2,622
360	1.730	30,750	4,433	2,033	2,400
720	2.170	30,750	5,561	4,066	1,495
1440	2.520	30,750	6,458	8,132	-1,675

REQUIRED STORAGE	2,807	cubic feet
MAXIMUM RELEASE RATE	0.09	cfs

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3500 SOUTH MAIN SUITE 206
SOUTH SALT LAKE CITY, UT 84115
801-263-1752 - FAX 801-263-1780

DESIGNED BY: BFC
DRAWN BY: PSB
CHECKED BY: KJC
DATE: 09-05-2019

HHI CAMPUS PAVING PROJECT
736 WEST HARRISVILLE ROAD
HARRISVILLE, UTAH

C-203
PHASE II
GRADING
PLAN
PROJECT #
19-123