


## Planning Commission Staff Report

<b>Project Type:</b>	Site Development Plan
<b>Meeting Date:</b>	July 9, 2018
<b>From:</b>	Cassie Harashe, Planner 
<b>Location:</b>	14905 Clayton Road
<b>Description:</b>	<b>Mobil Mart at Baxter and Clayton (Brite Worx):</b> A Site Development Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design for a 1.72 acre tract of land zoned "PC" Planned Commercial District located on the western corner of the intersection of Clayton Road and Baxter Road.

### PROPOSAL SUMMARY

The request is for a Site Development Plan, Landscape Plan, Lighting Plan, Architectural Elevations and an Architect's Statement of Design for a new 4,020 square foot stand-alone carwash facility at 14905 Clayton Road. The proposed building is to be constructed of EIFS and brick veneer with a stone base and a clear acrylic roof system. Accents include metal fascia, exposed steel ribbing, and clear glass windows. The subject site is zoned "PC" Planned Commercial District and is governed under the terms and conditions of City of Chesterfield [Ordinance 2977](#).

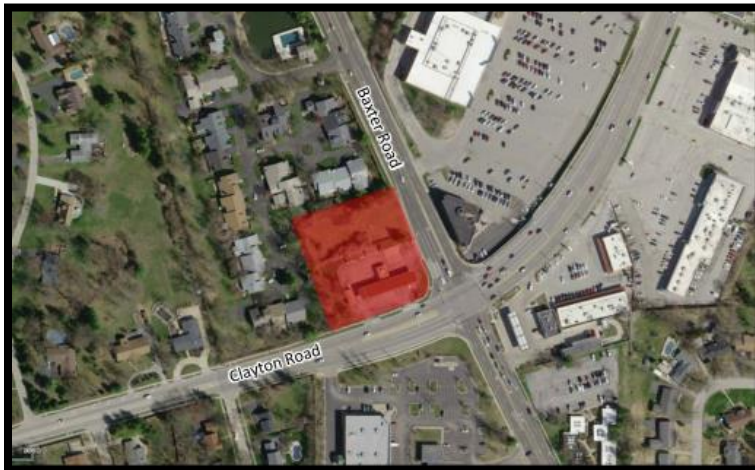


Figure 1: Site Photo

### HISTORY OF SUBJECT SITE

The subject property was originally zoned "C8" Planned Commercial District. In 1998, Arch Energy petitioned to change the zoning to allow for a filling station, a fast food restaurant, and a vehicle washing facility for automobiles. After initially being denied by the City, the zoning was changed to "PC" Planned Commercial District in June 2001 by [Ordinance 1750](#). Ordinance 1750 underwent two amendments

in 2001, ultimately ending with [Ordinance 1803](#). In 2018, the subject site was zoned “PC” Planned Commercial District by City of Chesterfield [Ordinance 2977](#) to establish all new development criteria and uses for the site. The only approved use under this ordinance is a stand-alone car wash. There are several development criteria for this development including screening walls for both acoustic mitigation and aesthetic purposes, stricter lighting standards and restrictive access management standards.

**LAND USE AND ZONING OF SURROUNDING PROPERTIES**

Direction	Zoning	Land Use
North & West	“R3” Residence District (10,000 sq. ft.)	Attached single family residences within the Woodfield Subdivision
South	“PC” Planned Commercial and “C2” Shopping Districts	Pharmacy and Bank located within the Walgreens at Clayton and Baxter Center and No Subdivision Ward 3
East	“C8” Planned Commercial District	Commercial properties within the Baxter Center Subdivision

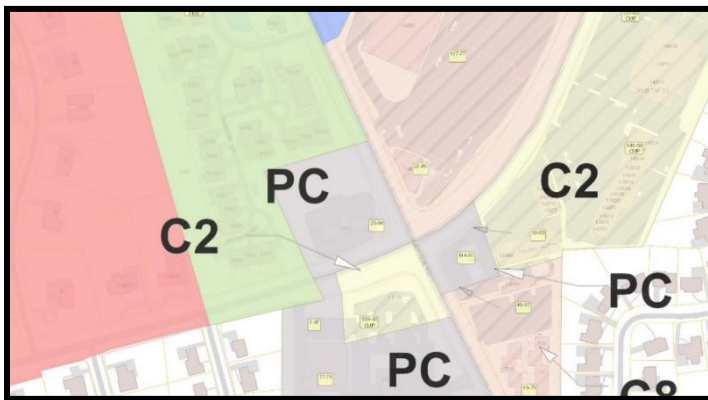


Figure 2: Zoning Map

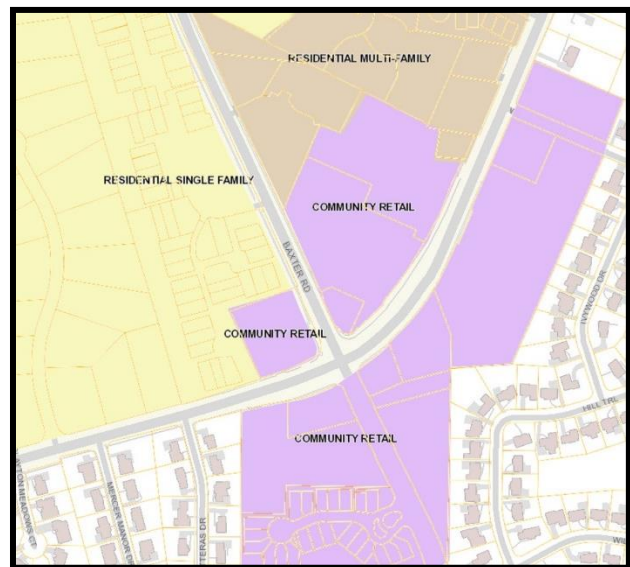


Figure 3: Comprehensive Land Use Plan

**COMPREHENSIVE PLAN ANALYSIS**

The subject site is located within Ward 3 of the City of Chesterfield. The City of Chesterfield Land Use Plan gives this parcel a Community Retail designation. The Plan Policies chapter of the Code calls for:

*“Community Retail development along Highway 340 (Clarkson Road/Olive Boulevard) should be limited to the Urban Core and a select number of high quality, well-planned nodes clustered at the following locations: Baxter Road, Hilltown Center, Woods Mill/Highway 141.”*

More specifically in the Land Use Element chapter, it defines Community Retail as “Serving Multiple Neighborhoods and Neighboring Communities”. It further clarifies locations of Community Retail to include the intersection of Clayton Road and Baxter Road. There are three policies related to Commercial Development laid out in the Comprehensive Plan.

*Policy 3.1 Quality Commercial Development* - Commercial developments should positively affect the image of the City, provide employment opportunities, and offer retail and service options to residents.

This Site Development Plan is for the redevelopment of the Mobil Gas Station to be replaced with a Brite Worx Car Wash. This project offers a different service option to residents.

*Policy 3.1.1 Quality of Design* - Overall design standards should provide for smaller scale, mixed-use, project-oriented developments. Developments should emphasize architectural design, pedestrian circulation, landscaping, open space, innovative parking solutions and landscape buffering between any adjacent residential uses.

The redevelopment of this site is proposing a smaller footprint of impervious surfaces and more open space than a previously approved redevelopment plan. Design elements including elevations, circulation, landscaping and open space are discussed further in this report.

*Policy 3.1.2 Buffering of Neighborhoods* - Development should substantially buffer the neighboring residential uses in all directions by employing good site design, addressing vehicular access, building materials selection, tree preservation, and expanded setbacks.

This development is providing buffering through the use of site design, screening walls, landscaping, tree preservation, and setbacks. These specific areas are discussed later in this report.

This subject site is not located in any sub-area identified by the Comprehensive Plan; therefore there are no additional development guidelines for this site.

## **STAFF ANALYSIS**

### **Circulation System & Access**

The proposed carwash is to be located on a diagonal with the exit of the carwash facing the intersection of Clayton Road and Baxter Road. During the zoning process, the location of the carwash in relationship to the adjacent property owners was discussed at length. The length and the angle of the carwash were located to be as far from the residents as possible while still meeting other requirements such as, throat depths, turning radii, and landscape buffers. This angle also allows the exit of the carwash with the drying system to be located at the end of the carwash closest to the intersection. This puts the loudest portion of the carwash further away from the residents. The carwash will have vacuum stations on the western side that utilize a

central vacuum system; this system will be enclosed within the taller of the two towers on the building, again to minimize the amount of noise the site will generate.

Proposed ingress and egress from the site will be from two right-in/right-out access points, one on Clayton Road and one on Baxter Road, as required by the governing ordinance. Parking is proposed at the vacuum stations and north of the drive aisle along Clayton Road. Vehicles will enter the carwash from the northwest corner and exit at the southeast corner; customers can then turn left to access the vacuum stations.

A sidewalk is already in place along both Clayton and Baxter Roads to provide pedestrian access.

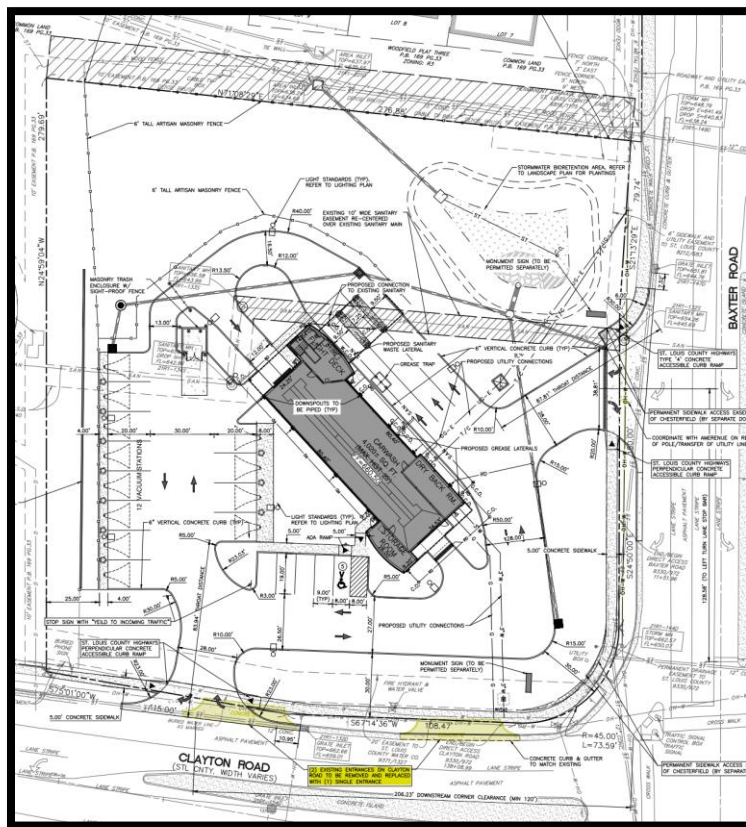


Figure 4: Site Plan

### Topography & Retaining Walls

The subject site has an approximately 15 foot grade change from the northern side of the development to the north property line. One modular block retaining wall is proposed on the western side of the development along an existing wooden fence. This wooden fence will be removed, except the most southern 35'. This portion of the wood fence connects to a 13 foot section of chain link fence that carries over from the neighboring development to the west.

### Architectural Elevations

There are two tower elements, one on the northeast and one on the southwest side of the carwash tunnel. The northeast tower will be 25 feet tall and the southwest tower will be 22' 5"

tall. The carwash tunnel is approximately 116 feet long and 21 feet tall. The tunnel portion of the carwash is a similar scale to the Walgreens to the south and the gas station canopy to the southeast. The scale of the building is broken down by providing various height changes along the east and west elevations, and a logical pattern of materials and windows along the north and south elevations. The applicant is proposing two human entry points which are adjacent to the auto entrance and exits on the narrow ends of the building. Finally, the building is provided with human scale by using horizontal banding to reduce the visual scale of the vertical elements.

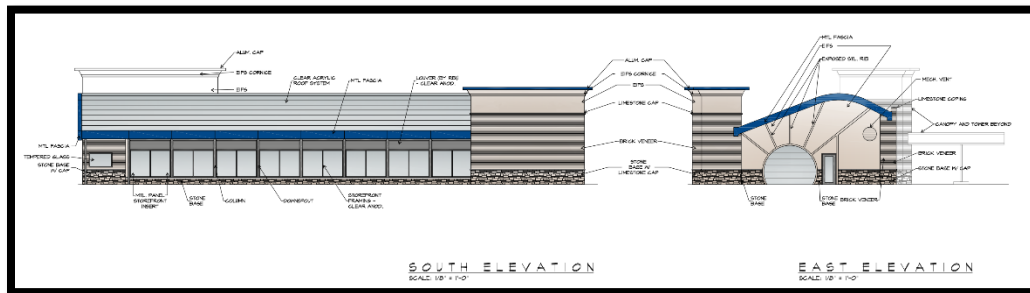


Figure 5: Color Elevations

Materials planned for this proposal include EIFS, brick veneer, stone base, a clear acrylic roof system, metal fascia, exposed steel ribbing, clear glass windows, limestone coping, aluminum gutters and downspouts. The EIFS, brick veneer, and stone base will be in shades of tan with metal fascia accent pieces in Pantone 23, Blue. During the zoning process, different elevations were shown to residents and the Planning and Public Works Committee. The final elevation proposed, Figure 5, does significantly match what was presented at the Planning and Public Works Committee meeting.

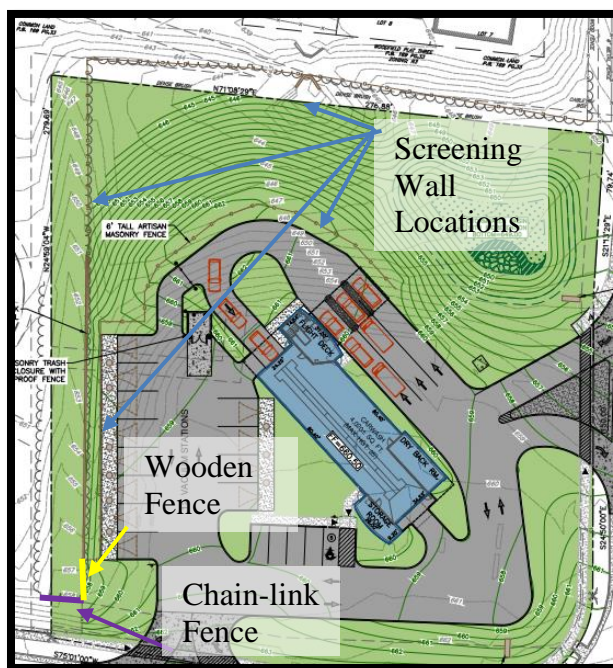


Figure 6: Screening Wall & Fence Locations

### Landscaping, Screening, and Open Space

Landscaping is planned in association with the proposed development as required by the City of Chesterfield. The landscape design provides both deciduous and evergreen trees throughout the site, along with preserving many existing trees along the north and west property lines. Due to the presence of existing overhead utility lines and large sight distance triangles along Clayton Road and Baxter Road, the applicant is proposing a wide variety of low growing species in a meandering pattern to provide a wide variety of textures and colors. Additionally, many of these species have been integrated throughout the site to ensure a variety of seasonal color and texture is present.

Per the requirements of Ordinance 2977, the site should have an artisan concrete screen wall along the western edge of the vacuum station that continues to wrap around the northern side of the drive aisle around the development. The Ordinance also has a requirement that an artisan concrete wall be installed along the northern property line. The Site Development Plan shows the required wall, along with an artisan concrete wall that connects the northern wall to where the wall turns at the vacuum stations, essentially providing a continuous wall along the western and northern property lines. The locations of these walls are indicated by blue arrows in Figure 6.

At the southern end of the vacuum stations, the artisan wall will end and tie into a portion of the existing wood fence. The wooden fence is currently parallel to a large portion of the western property line. This fence will be removed, except for the portion indicated in yellow in Figure 6. This wood fence connects to an existing chain-link fence; approximately 13' of this fence, shown in purple in Figure 6, carries over onto the subject site from the southern property line of the Woodfield Development. The existing conditions of these fences can be seen in Figure 7.

A trash enclosure is planned to be located at the northeast corner of the building. The enclosure is proposed to be the same material as the artisan concrete screening wall with sight proof doors in a similar color.

A minimum of 35% open space is required for this development by [Ordinance 2977](#). The proposal exceeds this requirement with 56.5% proposed open space.



Figure 7: Existing Fencing Conditions

### Lighting

Lighting is planned in association with this development. The proposed lighting plan consists of one (1) light standard at two different heights. Per Ordinance No. 2977, light poles cannot exceed 8' on the north and west sides of the development and 16' elsewhere on the site. The applicant is proposing to use the same utilitarian light fixture on two different pole heights to comply with the Ordinance. The only wall mounted fixtures will be located at the human entry and exit points.

No accent lighting is proposed for this building. The Ordinance also has stricter requirements pertaining to non-security lighting. The applicant has provided five lighting plans, one for the site as a whole during operating hours, one for the site as a whole indicating the security lighting. Since the proposed building design includes a clear roof, they have additionally provided one for inside the tunnel during operating hours at the roof, one for inside the tunnel during operating hours at grade, and one for inside the tunnel at grade indicating security lighting.

### **ARCHITECTURAL REVIEW BOARD INPUT**

This project was reviewed by the Architectural Review Board on May 10, 2018. At that meeting, the Board recommended approval with three conditions.

- **Revise the planting locations along the north property line to provide adequate space for all plantings.**

The applicant has since revised their landscape plan to provide a sufficiently planted 30' landscape buffer and to provide additional space for the proposed trees along the north property line.

- **Provide photos of nighttime conditions to illustrate the appearance of the roofing material while lit at night.**

The applicant has provided photos of their location at Columbia, Illinois to demonstrate the amount of sky glow the clear roofing material would produce. All photos are included in the Commission's packet, and one can be seen in Figure 8, below.

- **Ensure lighting levels as indicated on the lighting plans will be maintained in the future.**

Section VII. Enforcement, Item A. of Ordinance 2977 states 'The City of Chesterfield, Missouri will enforce the conditions of this ordinance in accordance with the Plan approved by the City of



*Figure 8: Columbia, Illinois Brite Worx Location at night*

Chesterfield and the terms of this Attachment 'A'. As a result of this, the City of Chesterfield has the authority to issue a violation should the lighting levels be out of compliance with the approved plan.

### **STAFF RECOMENDATION**

Staff has reviewed the Site Development Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design and found it in compliance with the site specific ordinance, Comprehensive Plan, and City Code requirements. Staff recommends approval of the proposed development of Brite Worx Car Wash Site Development Plan.



*Figure 9: Color Rendering*

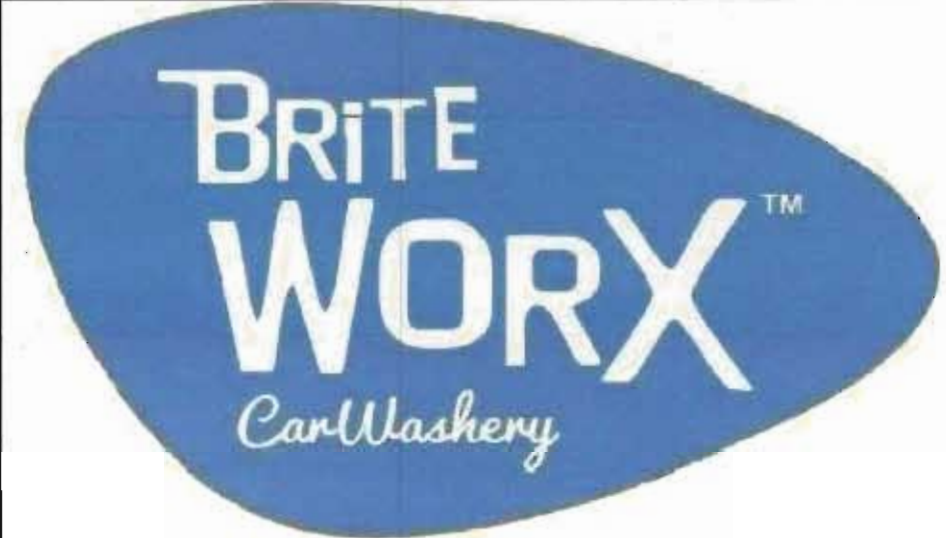
### **MOTION**

The following options are provided to the Planning Commission for consideration relative to this application:

- 1) "I move to approve (or deny) the Site Development Plan, Landscape Plan, Lighting Plan, Architectural Elevations, and Architect's Statement of Design for Brite Worx Car Wash."
- 2) "I move to approve (or deny) the Site Development Plan, Landscape Plan, Lighting Plan, Architectural Elevations, and Architect's Statement of Design for Brite Worx Car Wash with the following conditions..." (Conditions may be added, eliminated, altered, or modified).

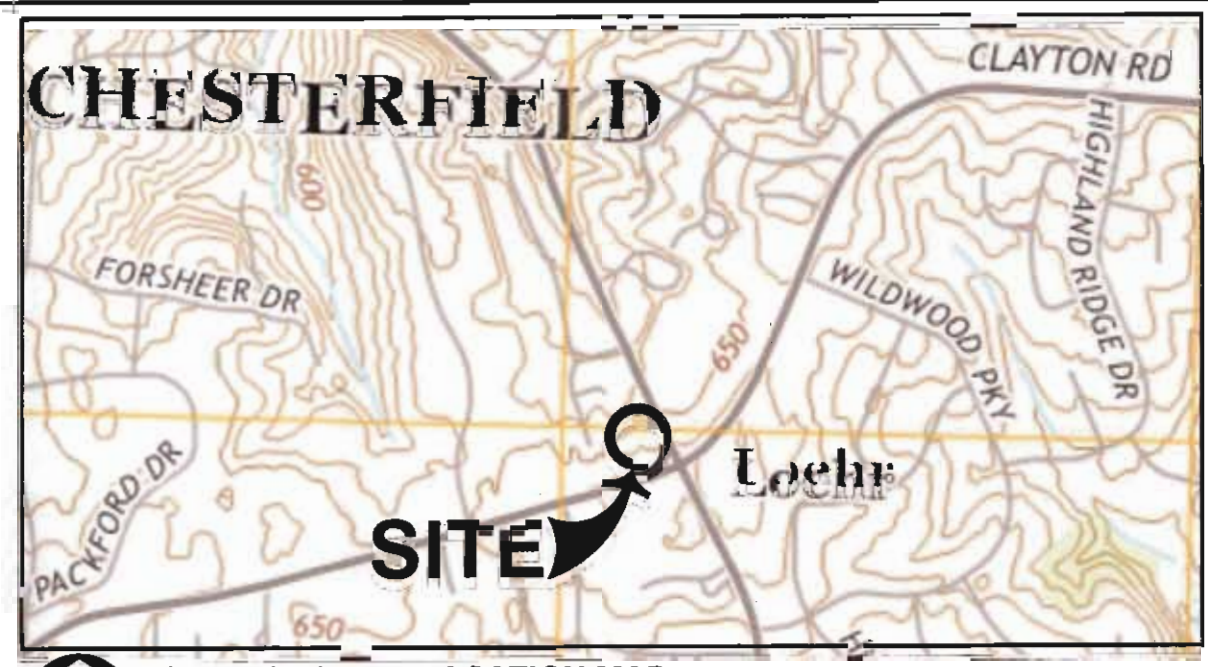
Attachments:     Site Development Plan  
                      Tree Stand Delineation & Tree Preservation Plan  
                      Landscape Plan  
                      Lighting Plans & Cut Sheets  
                      Architect's Statement of Design  
                      Architectural Elevations  
                      Site Elements  
                      Renderings  
                      Night Photos of Columbia, IL location  
                      Emails from Residents





# SITE DEVELOPMENT PLAN FOR A PROPOSED BRITE WORX CARWASHERY

## A TRACT OF LAND BEING PART OF FRACTIONAL SECTION 36, TOWNSHIP 45 NORTH, RANGE 4 EAST CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI



**BENCHMARK**  
PROJECT BENCHMARK: "L" ON THE SOUTHWEST CORNER OF THE SOUTH HEADWALL OF A BOX CULVERT, 100' EAST OF THE CENTER LINE OF BAXTER ROAD AND 31' SOUTH OF MANOR KNOLL DRIVE. ELEV.584.94 (USGS DATUM) AS PUBLISHED IN THE METROPOLITAN ST. LOUIS SEWER DISTRICT ST. LOUIS COUNTY BENCHMARK BOOK (REVISED 6/97) BM4 12-89.  
SITE BENCHMARK: "L" ON THE WEST CORNER AT NORTH END OF 10" CONCRETE WALL AT THE NORTHEAST CORNER OF BAXTER AND CLAYTON ROADS. 45' EAST OF THE CENTERLINE OF BAXTER ROAD AND 125' NORTH OF THE CENTERLINE OF CLAYTON ROAD. ELEV.=661.29



DEPARTMENT OF PLANNING AND DEVELOPMENT SERVICES

### SCRIPT FOR A SITE DEVELOPMENT PLAN

A TRACT OF LAND BEING SITUATED IN FRACTIONAL SECTION 26, TOWNSHIP 45 NORTH, RANGE 4 EAST, CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE WESTERN RIGHT OF WAY LINE OF BAXTER ROAD, AS WIDENED BY DEED RECORDED IN BOOK 8202, PAGE 1238 OF THE ST. LOUIS COUNTY RECORDS WITH THE NORTHERN LINE OF A TRACT OF LAND CONVEYED TO SOCONY MOBIL OIL COMPANY, BY DEED RECORDED IN BOOK 4921, PAGE 476 OF THE ST. LOUIS COUNTY RECORDS; THENCE ALONG SAID WESTERN RIGHT OF WAY LINE, SOUTH 21 DEGREES 13 MINUTES 29 SECONDS EAST, 79.74 FEET TO AN ANGLE POINT THEREIN; THENCE SOUTH 24 DEGREES 50 MINUTES 00 SECONDS EAST, 150.00 FEET TO A POINT OF CURVE; THENCE ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 45.00 FEET AN ARC DISTANCE OF 73.50 FEET (CHORD OF SOUTH 22 DEGREES 02 MINUTES 01 SECONDS WEST, 65.46 FEET) TO A POINT ON THE NORTHERN RIGHT OF WAY LINE OF CLAYTON ROAD, AS WIDENED BY DEED RECORDED IN BOOK 8202, PAGE 1238 AS AFOREMENTIONED; THENCE ALONG SAID NORTHERN LINE, SOUTH 67 DEGREES 14 MINUTES 36 SECONDS WEST, 108.47 FEET TO AN ANGLE POINT THEREIN; THENCE SOUTH 75 DEGREES 01 MINUTES 00 SECONDS WEST, 115.00 FEET TO THE WESTERN LINE OF SAID SOCONY MOBIL OIL COMPANY TRACT; THENCE ALONG SAID WESTERN LINE, NORTH 24 DEGREES 59 MINUTES 01 SECONDS WEST, 279.69 FEET TO THE NORTHWEST CORNER THEREOF; THENCE ALONG THE NORTHERN LINE OF SAID SOCONY MOBIL OIL COMPANY TRACT, NORTH 71 DEGREES 08 MINUTES 29 SECONDS EAST, 276.88 FEET TO THE POINT OF BEGINNING, CONTAINING 76,050 SQUARE FEET.

ARCH ENERGY, LCA, the owner(s) of the property shown on this plan for and in (Name of Owner(s)) consideration of being granted approval of said plan to develop property under the provisions of Section 03-04, PC-PLANNED COMMERCIAL of City of Chesterfield Unified Development (applicable subsection) (present zoning) Code, do hereby agree and declare that said property from the date of recording this plan shall be developed only as shown thereon, unless said plan is amended by the City of Chesterfield, or voided or vacated by order of ordinance of the City of Chesterfield Council.

(Signature):  
(Name Typed):

State of \_\_\_\_\_ ) SS.  
County of \_\_\_\_\_ )  
On this \_\_\_\_\_ day of \_\_\_\_\_, A.D., 20\_\_\_\_, before me personally appeared \_\_\_\_\_, to me known, who, being by me sworn in, did say that he/she is the \_\_\_\_\_ of \_\_\_\_\_ a (Officer of Corporation) (Title) (Name of Corporation) corporation in the State of \_\_\_\_\_, and that the seal affixed to the foregoing instruments is the corporate seal of said corporation, and that said instrument was signed on behalf of said corporation by authority of its Board of Directors, and the said \_\_\_\_\_ (Officer of Corporation) acknowledged said instrument to be the free act and deed of said corporation.

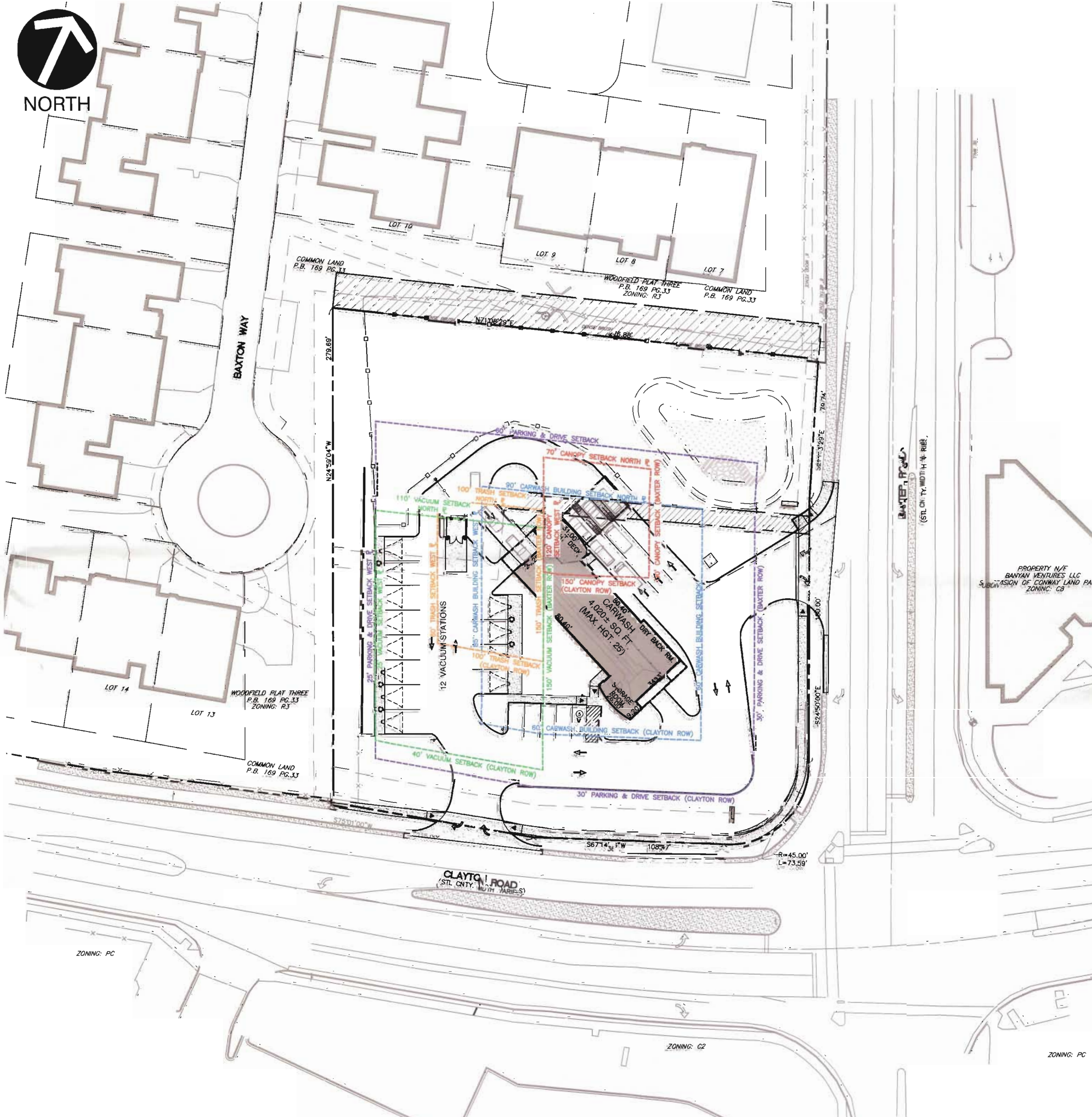
In Testimony Whereof, I have hereunto set my hand and affixed my Notarial Seal at my Office in \_\_\_\_\_, the day and year last above written. (County and State)

My term expires \_\_\_\_\_ (Notary Public)

This Site Development Plan was approved by the City of Chesterfield Planning Commission and duly verified on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by the Chairperson of said Commission, authorizing the recording of this Site Development Plan pursuant to Chesterfield Ordinance Number 200, as attested to by the Director of Planning and Development Services and the City Clerk.

Justin Wyse, AICP  
Director of Planning and Development Services  
City of Chesterfield, Missouri

Vickie Hass, City Clerk  
City of Chesterfield, Missouri



**SITE MAP**  
SCALE 1" = 40'  
SCALE IN FEET

**REFERENCE**  
1. TOPOGRAPHIC SURVEY CONDUCTED BY:  
FRAZIER LAND SURVEYING SERVICES, INC.  
705 BALLANTRAE DRIVE  
WENTZVILLE, MO. 63385  
PHONE: (636) 332-0610  
FAX: (636) 332-0710  
DATED 08/02/11 DRAWING NAME 11-1045 BAXTER CLAYTON.DWG

### DEVELOPMENT NOTES:

- OVERALL AREA OF TRACT: 76,050 SQ.FT. (1.746 ACRES)
- SITE ADDRESS: 14905 CLAYTON ROAD CHESTERFIELD, MO 63017 [LOCATOR ID #21R410960]
- ZONING: PC, PLANNED COMMERCIAL DISTRICT (CITY OF CHESTERFIELD) P.Z. 08-2017 APPROVED JAN 17, 2018; ORDINANCE #2977/BILL #3168
- USE: EXISTING USE - CONVENIENCE STORE, CARWASH & GAS SALES PROPOSED USE - SINGLE USE: TUNNEL CARWASH (HOURS OPERATION 7AM-8PM ALL DAYS)
- OWNER: ARCH ENERGY, LCA 106 E WASHINGTON CUBA, MO 65453
- SETBACKS: REFER TO PLAN, THIS SHEET.
- MAXIMUM BUILDING HEIGHT - 25 FEET
- ALL UTILITY METERS AND SURFACE TRANSFORMER SWITCHING PADS SHALL BE SCREENED.
- SIGNAGE APPROVAL IS BY SEPARATE PROCESS
- ALL NEW UTILITIES SHALL BE LOCATED UNDERGROUND.
- FLOOD PLAN NOTE: ACCORDING TO THE FLOOD INSURANCE RATE MAP OF ST. LOUIS COUNTY, MISSOURI AND INCORPORATED AREAS, MAP NUMBER 231802ZB1K, WITH AN EFFECTIVE DATE OF FEBRUARY 4, 2015, THIS PROPERTY LIES WITHIN SFHA ZONE X. ZONE X IS DEFINED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.
- FENCING PROPOSED SHALL BE OF CEMENTATIUS MATERIAL AND A PRODUCT OF ARTISAN PRECAST OR SIMILAR MANUFACTURER.
- VACUUMS SHALL UTILIZE A CENTRAL VACUUM SYSTEM WITH MOTOR HOUSED WITHIN BUILDING. VACUUMS SHALL BE OPERATIONAL ONLY DURING BUSINESS HOURS AND POWER CENTRAL UNIT SHALL BE TURNED OFF DURING OFF-HOURS. CANISTER VACUUMS AT INDIVIDUAL STATIONS WILL BE PROHIBITED.
- SITE SHALL OBTAIN APPROVAL FROM ST. LOUIS METROPOLITAN SEWER DISTRICT.
- LANDSCAPING WILL BE REQUIRED TO BE PLANTED ON BOTH SIDES OF THE PROPOSED SCREENING WALL.
- ACCESS MANAGEMENT PRINCIPALS TO BE APPLIED TO THIS DEVELOPMENT CAN BE FOUND IN ARTICLE 04-10 OF THE UNIFIED DEVELOPMENT CODE OF THE CITY OF CHESTERFIELD.
- THE DEVELOPER IS ADVISED THAT UTILITY COMPANIES WILL REQUIRE COMPENSATION FOR RELOCATION OF THEIR FACILITIES WITH PUBLIC ROAD RIGHT OF WAY. UTILITY RELOCATION COST SHALL NOT BE CONSIDERED AS AN ALLOWABLE CREDIT AGAINST THE PETITIONERS TRAFFIC GENERATION ASSESSMENT CONTRIBUTIONS. THE DEVELOPER SHOULD ALSO BE AWARE OF EXTENSIVE DELAYS IN UTILITY COMPANY RELOCATION AND ADJUSTMENTS. SUCH DELAYS WILL NOT CONSTITUTE A CAUSE TO ALLOW OCCUPANCY PRIOR TO COMPLETION OF ROAD IMPROVEMENTS.
- US SURVEY CORNERS LOCATED ON OR NEAR THE DEVELOPMENT SITE MUST PROTECTED AND SHALL BE RESTORED IF DISTURBED DUE TO THE CONSTRUCTION.
- NO ONSITE LIGHT STANDARD SHALL EXCEED SIXTEEN (16) FEET IN HEIGHT NOR BE SO SITUATED THAT LIGHT IS CAST DIRECTLY ON ADJOINING PROPERTIES AND/OR PUBLIC ROADWAYS. LIGHT STANDARDS NORTH AND WEST OF THE BUILDING SHALL NOT EXCEED EIGHT (8) FEET IN HEIGHT, SHALL BE DIRECTED TOWARD THE BUILDING, AND SHALL BE A SHOEBOX DESIGN. THE LIGHT STANDARD AT THE ENTRANCE ON CLAYTON ROAD SHALL NOT EXCEED SIXTEEN (16) FEET IN HEIGHT AND SHALL BE A BOX DESIGN (PER ORDINANCE). LIGHTING SHALL BE AS APPROVED BY THE CITY OF CHESTERFIELD, REFER TO PHOTOMETRIC PLAN(S).
- NON-SECURITY LIGHTING SHALL NOT BE ON 30 MINUTES PRIOR TO OPENING OR PAST CLOSING.
- PARKING CALCULATIONS: SELF-SERVICE DRIVE THRU/AUTOMATED CARWASH @ 1 SPACE IN BAY PLUS 3 ADDITIONAL STACKING SPACES. VACUUMS @ 1 SPACE PER VACUUM. STACKING PROVIDED = 3+ SPACES. PARKING PROVIDED = 17 SPACES INCLUSIVE OF 1 ADA VAN-ACCESSIBLE SPACE & 12 VACUUM STATIONS
- NO OFF-SITE GRADING IS ANTICIPATED FOR THE PROPOSED DEVELOPMENT OF THE BRITEWORX PROJECT. IF OFF-SITE GRADING IS NECESSARY FOR THE COMPLETION OF THE PROJECT, A TEMPORARY SLOPE CONSTRUCTION LICENSE WILL BE REQUIRED FROM THE ADJACENT PROPERTY OWNER. NOTE: A TEMPORARY SLOPE CONSTRUCTION LICENSE WILL BE REQUIRED FOR THE OFF-SITE CONSTRUCTION OF THE CEMENTATIUS FENCE, DEMOLITION OF EXISTING FENCE, AND OTHER AMENITIES AS SET FORTH IN THAT AGREEMENT.
- SITE CALCULATIONS:  
F.A.R. CALCULATION: 0.05  
OPEN SPACE CALCULATION: 56.5% (MIN 35%)  
DENSITY: TOTAL LOT SIZE = 76,050 SQ.FT. (1.746 ACRES)  
TOTAL GREEN SPACE = 42,881 (56.4%) (ALL LANDSCAPE AREAS)  
TOTAL PAVEMENT & WALKS = 29,149 (38.3%)  
TOTAL BUILDINGS = 4,020 SQ.FT. (5.3%)

### GEOTECHNICAL CERTIFICATION OF COMPLIANCE

SCIENCE ENGINEERING, INC. HAS PROVIDED GEOTECHNICAL SERVICES FOR THE PROJECT PROPOSED HEREON. A GEOTECHNICAL INVESTIGATION WAS CONDUCTED DURING JULY 2018 FOR THE DEVELOPMENT PROPOSED HEREON. OUR FINDINGS INDICATE THAT THE EARTH-RELATED ASPECTS ARE SUITABLE FOR THE DEVELOPMENT PROPOSED PURSUANT TO THE GEOTECHNICAL RECOMMENDATIONS SET FORTH IN OUR GEOTECHNICAL STUDY DATED JULY 2018.



CALL BEFORE YOU DIG!  
1-800-DIG-RITE  
JULY-20-2018  
ISSUED TICKET#: #11952108  
KEVIN T. KAMP  
2008019870  
\*HAND SIGNATURE ON FILE

### Sheet List Table

SHEET NO.	DRAWING NO.	TITLE
01	C000	COVER
02	C200	SITE AND UTILITY PLAN
03	C300	GRADING PLAN
04	C400	SURVEY

**LANDSCAPE ARCHITECT**  
ACORN LANDSCAPES  
http://www.acornlandscapes.com  
CONTACT: MARY FRANCOIS DEWEESE  
PHONE: (636) 394-0255  
FAX: (636) 527-2828  
EMAIL: deweesem@acornlandscapes.com

**ARCHITECT**  
OSM, INC.  
2190 S. MASON ROAD, SUITE 202  
ST. LOUIS, MO 63131  
PHONE: (314) 394-2210  
CONTACT: STEWART W. MACGREGOR AIA, AIA  
EMAIL: osm@att.net

**DEVELOPER/OWNER**  
WALLIS COMPANIES  
106 E WASHINGTON  
CUBA, MO 65453  
PHONE/FAX: (636)549-1602  
CELL:  
CONTACT: BILL GUFFEY  
EMAIL: Bguffey@mail.wallisco.com

**CIVIL ENGINEER**  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.  
4848 PARK 370 BLVD., SUITE F  
HAZELWOOD, MO 63042  
PH: (314) 656-4566  
FX: (314) 656-4596  
CONTACTS: KEVIN KAMP, PE

**LIGHTING SPECIALIST**  
PEIKER PIATCHEK ASSOCIATES  
ST. LOUIS, MO 63129  
CONTACT: RICH HAYDEN  
PHONE: (314) 892-4646  
EMAIL: rhaydenrep@aol.com

NO.	DATE	DESCRIPTION
1	09/20/18	SUBMITTAL FOR SITE DEVELOPMENT PLAN REVIEW
2	09/20/18	SUBMITTAL FOR PLANNING & PUBLIC WORKS
3	09/20/18	RESUBMITTAL FOR PLANNING COMMISSION
4		
5		
6		
7		
8		

**WALLIS COMPANIES**  
106 EAST WASHINGTON  
CUBA, MO 65453  
(636) 549-1600

**Civil & Environmental Consultants, Inc.**  
CERTIFICATION LICENSE NO. 2002019942  
4848 Park 370 Blvd., Suite F - Hazelwood, MO 63042  
314-656-4566 · 866-250-3679  
www.cetinc.com

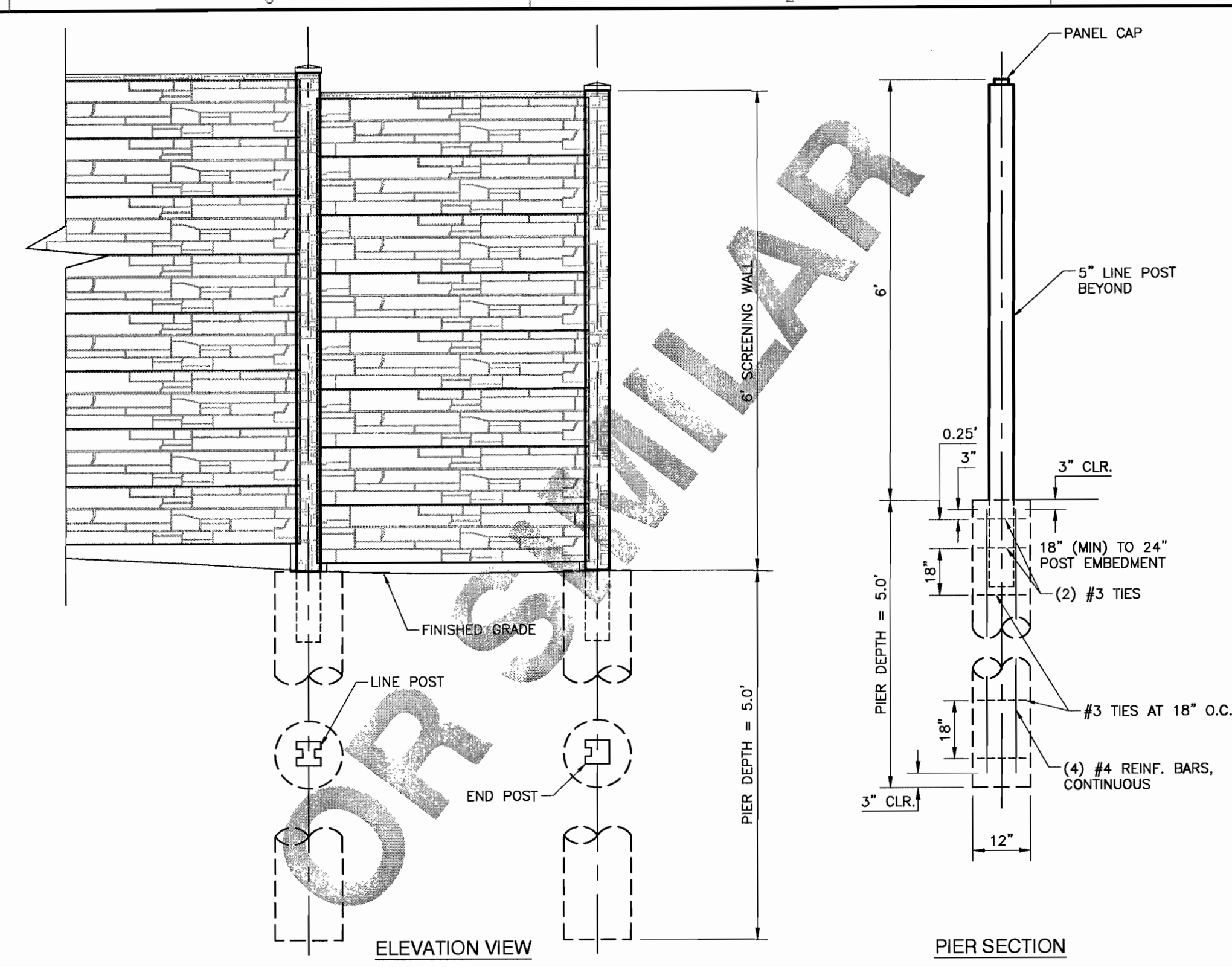
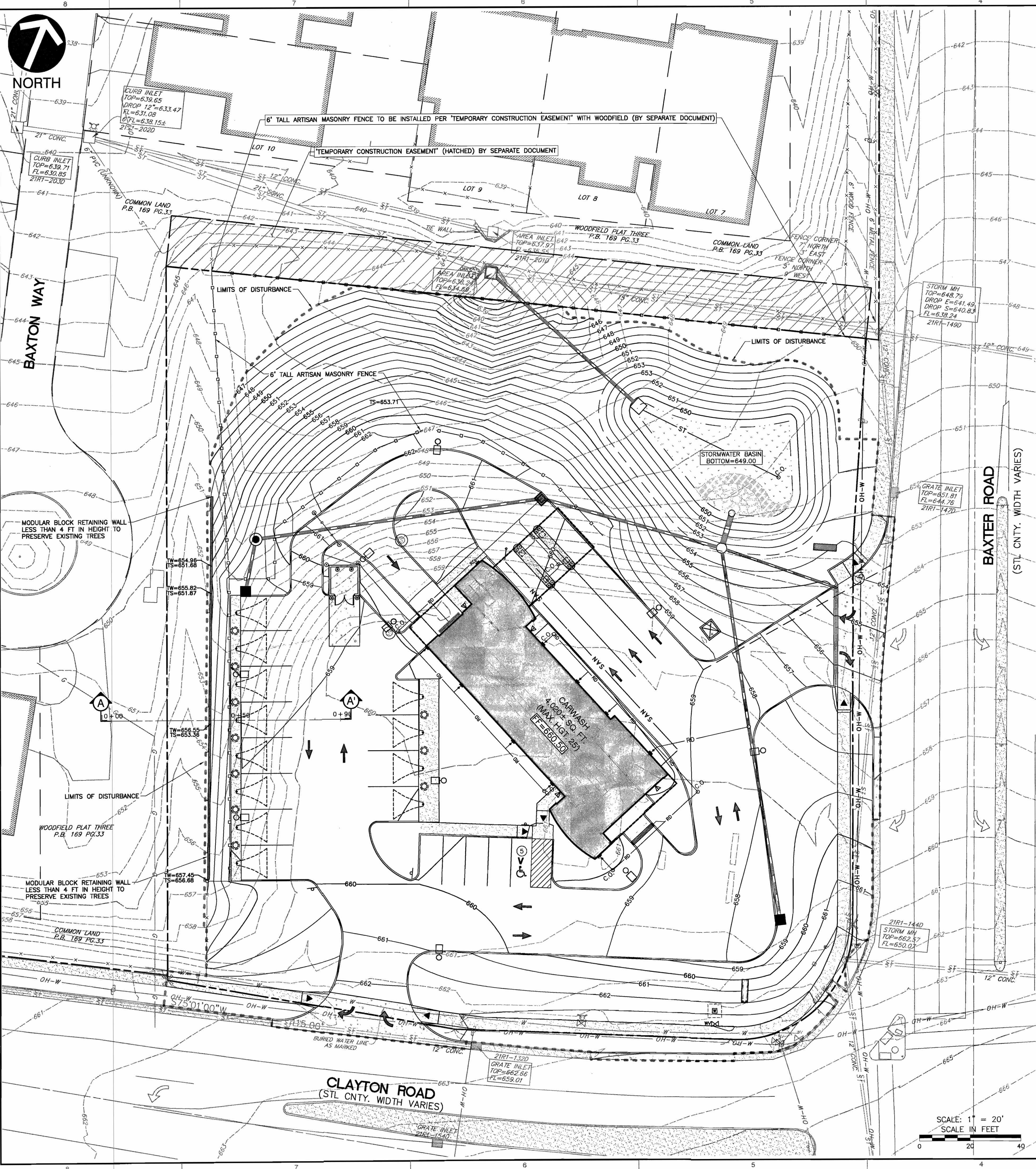
MSD MAP# 21-R  
ZIP-63017  
P-Z-08-2017

**SITE DEVELOPMENT PLAN**  
BRITE WORX CARWASHERY  
COVER  
DATE: FEB 2018 (DRAWN BY: KTK)  
1" = 30' (CHECKED BY: KTK)  
153224  
KTK

DRAWING NO.: **C000**  
SHEET 01 OF 04

I:\BPM-STUDIOS\PROJECTS\1015\13-2241-CADD\DWG\1015-13-2241-CADD-09-SOP\DWG-153224-01.dwg - 6/20/2018 12:18:38 PM - LAST PRINTED BY: MCEL, C:\HW - 6/20/2018 12:24:55 PM

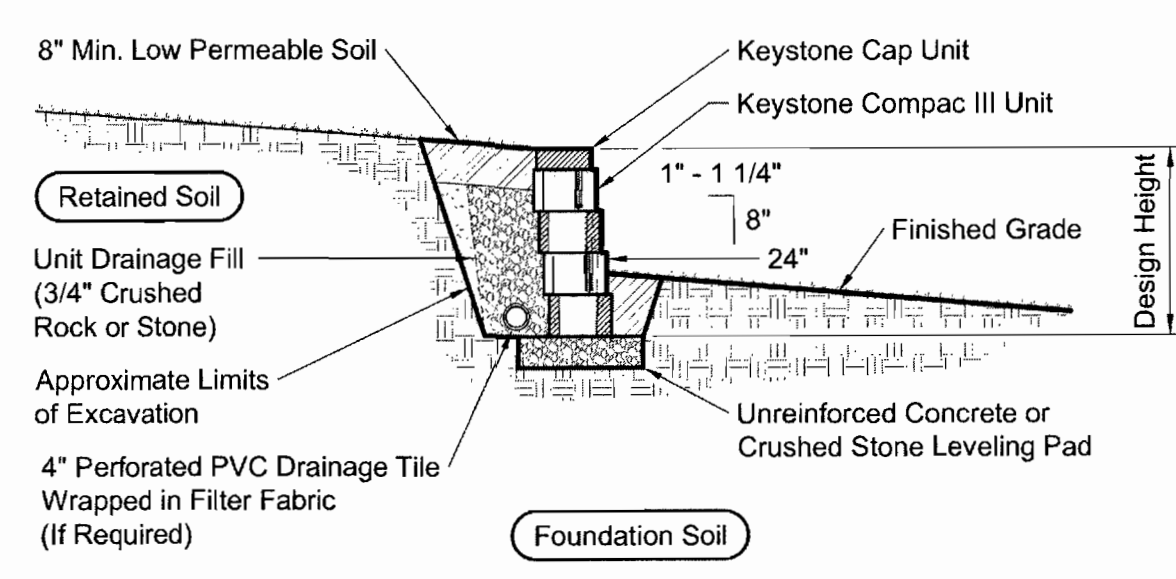




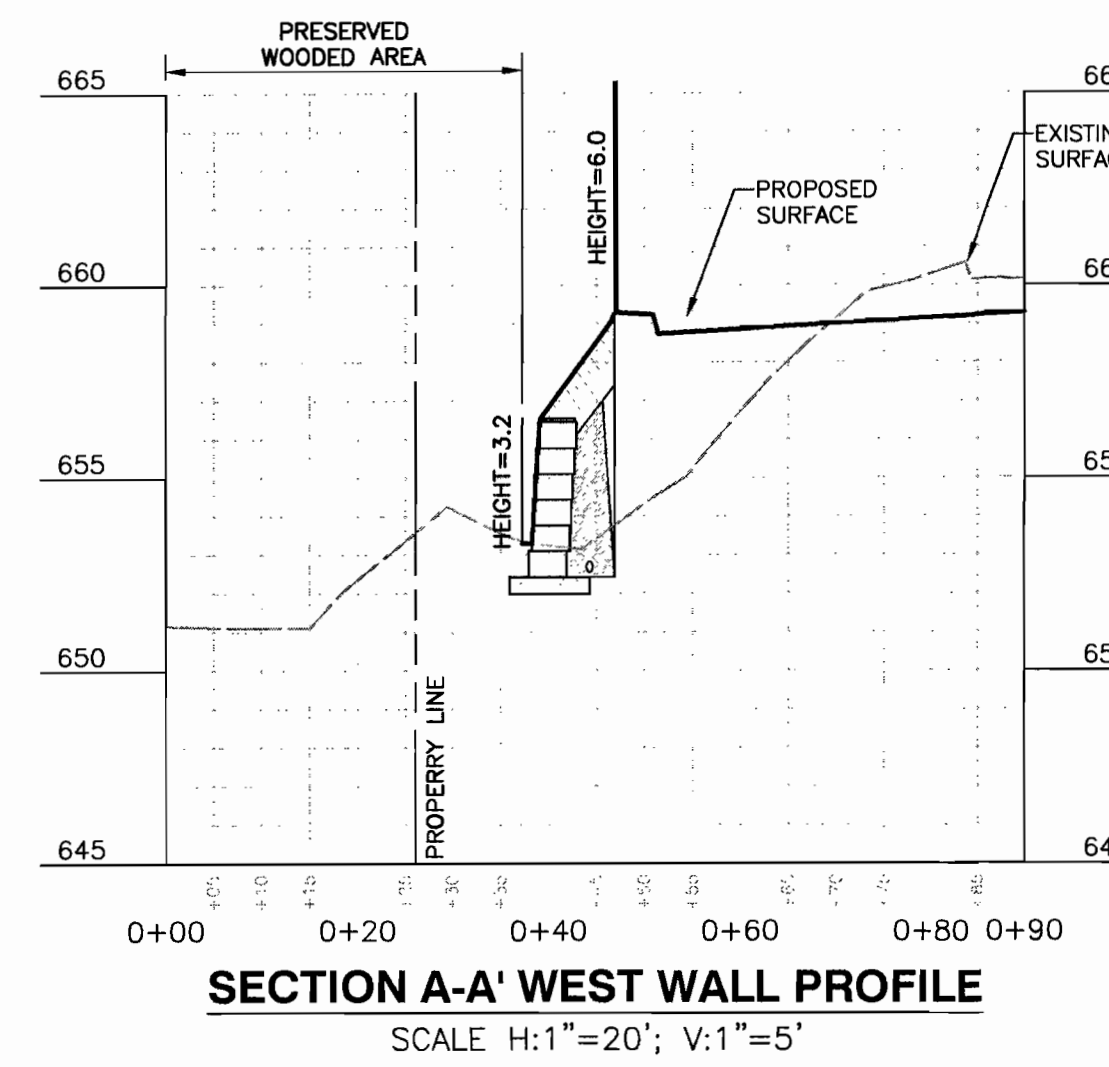
**ARTISAN FENCE  
PRECAST CONCRETE SCREENING WALL**  
NOT TO SCALE

**PRODUCT INFO:**  
 PRODUCT NAME: CHISEL CRETE® ARTISAN PRECAST  
 WEB PAGE: http://www.artisanprecast.com  
 ADDRESS: 5528 OLD BULLARD RD, SUITE 110 TYLER, TX 75703  
 CONTACT NAME: Christopher Miller  
 cmiller@artisanprecast.com  
 936.938.0533 PHONE  
 DETAIL #/ID: ChiselCrete.dwg\*\*  
 \*\*NOTE: CONTACT REPRESENTATIVE FOR COMPLETE CONSTRUCTION AND INSTALLATION DETAILS & REQUIREMENTS

**Keystone Retaining Wall Systems  
Typical Wall Details**

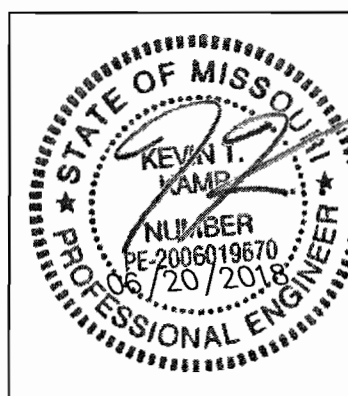


**Typical Gravity Wall Section  
Compac III Unit - 1\"/>**



**SECTION A-A' WEST WALL PROFILE**  
SCALE: H:1"=20'; V:1"=5'

CALL BEFORE YOU DIG!  
1-800-DIG-RITE  
JULY-20-2011  
ISSUED TICKET#: #111952108



REVISION RECORD		
NO.	DATE	DESCRIPTION
1	08/08/2017	SUBMITTAL FOR SITE DEVELOPMENT PLAN REVIEW
2	08/08/2017	SUBMITTAL TO PLANNING & PUBLIC WORKS
3	08/08/2017	REVISIONS FOR PLANNING COMMISSION
4		
5		
6		
7		
8		

**WALLIS COMPANIES**  
106 EAST WASHINGTON  
CUBA, MO 65453  
(636) 549-1600

**Civil & Environmental Consultants, Inc.**  
CERTIFICATION/LICENSE NO. 2020213942  
4848 Park 370 Blvd., Suite F - Hazelwood, MO 63042  
314-656-4566 - 866-250-3679  
www.cesirc.com

PZ-08-2017 MSD MAP# 21-R ZIP-63017

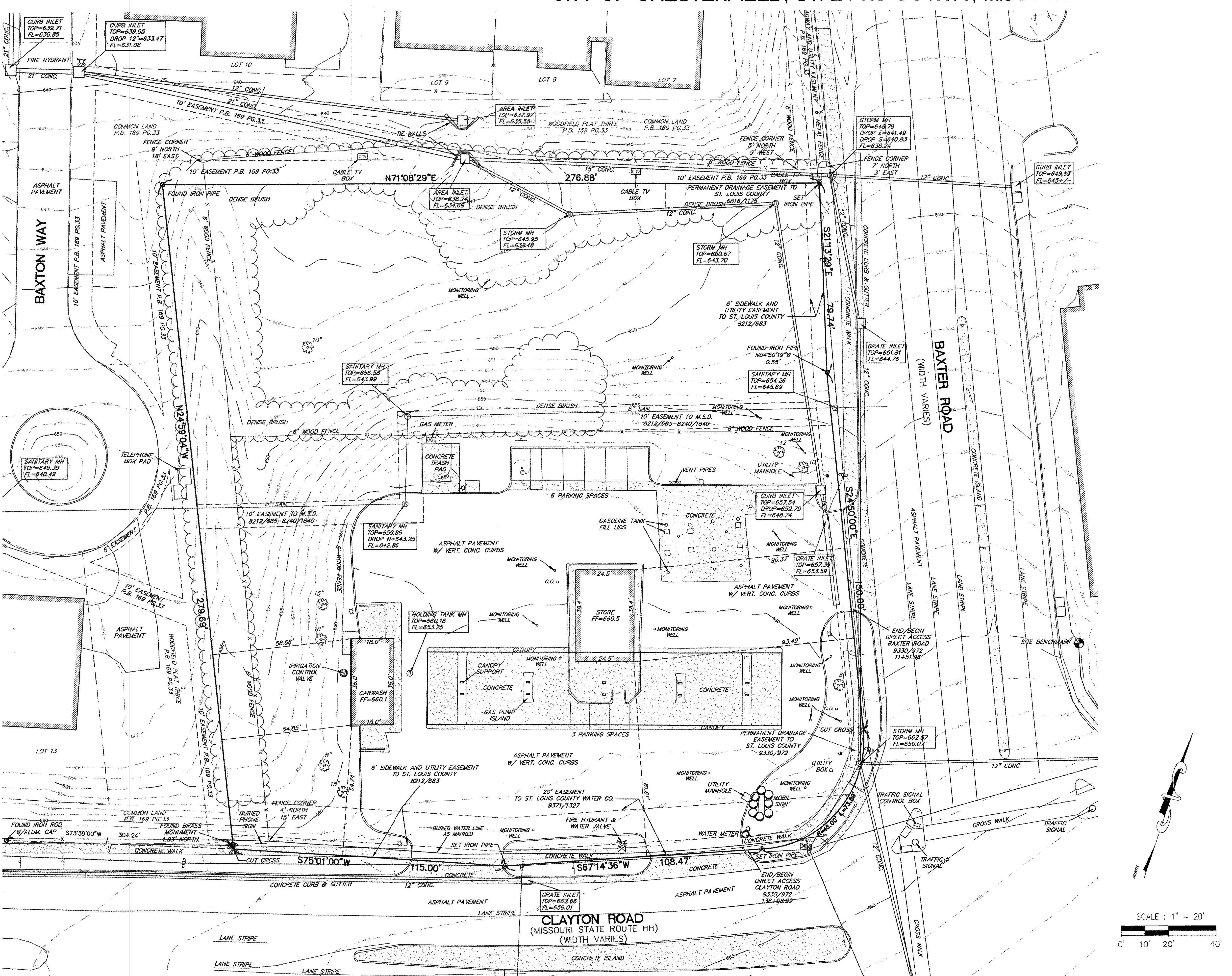
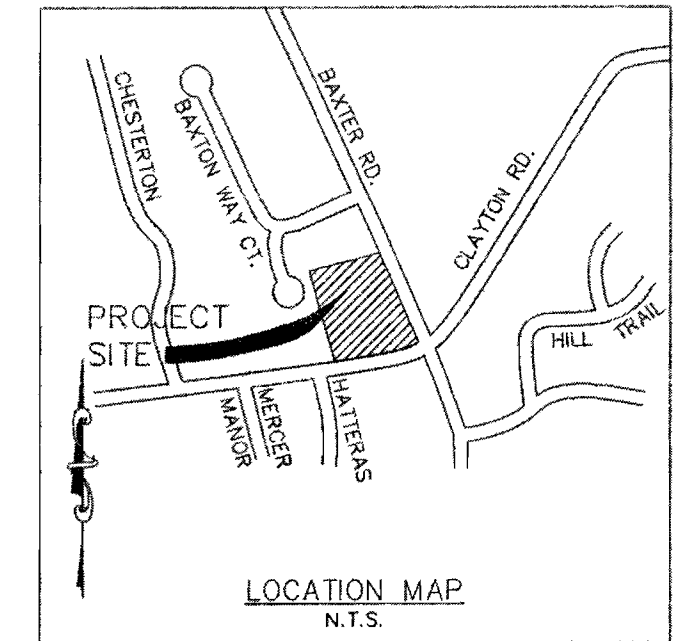
**SITE DEVELOPMENT PLAN**  
BRITE WORK CARWASHERY  
14905 CLAYTON ROAD  
GRADING PLAN

KEVIN T. KAMP  
2006019670  
\*HAND SIGNATURE ON FILE

DATE: FEB. 2018 DRAWN BY: CAC  
DWG SCALE: KTK  
PROJECT NO.: 153-224  
CHECKED BY: KTK  
APPROVED BY: KTK

DRAWING NO.: **C300**  
SHEET 03 OF 04

**A TRACT OF LAND BEING PART OF FRACTIONAL SECTION 26,  
TOWNSHIP 45 NORTH, RANGE 4 EAST OF THE FIFTH PRINCIPAL MERIDIAN,  
CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI**



- GENERAL NOTES:**
- BASIS OF BEARINGS FOR THIS SURVEY WAS ADOPTED FROM THE DEED RECORDED IN BOOK 10024, PAGE 199, TRACT 12, OF THE ST. LOUIS COUNTY RECORDS.
  - THIS PROPERTY IS CURRENTLY VESTED IN THE NAME OF THE ARCH ENERGY, LC ACCORDING TO THE DEED RECORDED IN BOOK 10024, PAGE 199 OF THE ST. LOUIS COUNTY RECORDS.
  - ALL TIES ARE PERPENDICULAR TO THE PROPERTY LINES UNLESS OTHERWISE NOTED.
  - ACCORDING TO THE FLOOD INSURANCE RATE MAP OF ST. LOUIS COUNTY, MISSOURI AND INCORPORATED AREAS, MAP NUMBER 29189C0256H, WITH AN EFFECTIVE DATE OF AUGUST 2, 1995, THIS PROPERTY LIES WITHIN SFHA ZONE X, ZONE IS DEFINED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAN.
  - UTILITY LOCATIONS BASED ON FIELD MARKINGS BY MISSOURI ONE CALL, TICKET #11192108, AND ABOVE GROUND OBSERVED EVIDENCE. ALL LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY, OTHERS MAY EXIST AND SHOULD BE VERIFIED BEFORE ANY CONSTRUCTION BEGINS.
  - A CURRENT TITLE COMMITMENT WAS NOT FURNISHED FOR THE EXECUTION OF THE SURVEY. THEREFORE THIS PLAT IS SUBJECT TO ALL THE CONDITIONS AND EXCEPTIONS THAT A CURRENT TITLE COMMITMENT MAY REVEAL, INCLUDING, BUT NOT LIMITED TO THE FOLLOWING:
    - EASEMENTS OF RECORD.
    - EASEMENTS OR CLAIMS OF EASEMENTS NOT REVEALED IN THE PUBLIC RECORDS.
    - RIGHTS OR CLAIMS OF RIGHTS OF PARTIES IN POSSESSION NOT SHOWN BY THE PUBLIC RECORD, IF ANY.
    - DEFECTS, ENCUMBRANCES, ADVERSE CLAIMS OR OTHER MATTERS, IF ANY, THIS SURVEY IS ALSO SUBJECT TO ANY CONVEYANCES OR TAKINGS, NOT REVEALED BY THE COUNTY ASSESSOR'S OFFICE, RIGHTS OF WAY, SETBACK LINES, COVENANTS, RESTRICTIONS AND ZONING ORDINANCES.
  - PROJECT BENCHMARK: "1" ON THE SOUTHWEST CORNER OF THE SOUTH HEADWALL OF A BOX CULVERT, 100' EAST OF THE CENTER LINE OF BAXTER ROAD AND 31' SOUTH OF MANOR KNOLL DRIVE. ELEV.584.94 (USGS DATUM) AS PUBLISHED IN THE METROPOLITAN ST. LOUIS SENIOR DISTRICT ST. LOUIS COUNTY BENCHMARK BOOK (REVISED 6/97) BM4 12-89.

SITE BENCHMARK: "1" ON THE WEST CORNER AT NORTH END OF 10' CONCRETE WALL AT THE NORTHEAST CORNER OF BAXTER AND CLAYTON ROADS, 45' EAST OF THE CENTERLINE OF BAXTER ROAD AND 125' NORTH OF THE CENTERLINE OF CLAYTON ROAD. ELEV.=661.29

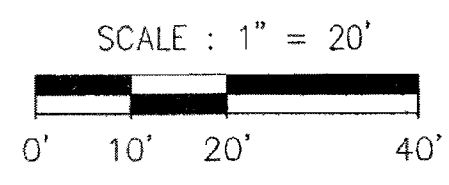
**LEGAL DESCRIPTION**  
A TRACT OF LAND BEING SITUATED IN FRACTIONAL SECTION 26, TOWNSHIP 45 NORTH, RANGE 4 EAST, CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE WESTERN RIGHT OF WAY LINE OF BAXTER ROAD, AS WIDENED BY DEED RECORDED IN BOOK 8202, PAGE 1238 OF THE ST. LOUIS COUNTY RECORDS WITH THE NORTHERN LINE OF A TRACT OF LAND CONVEYED TO SOCONY MOBIL OIL COMPANY, BY DEED RECORDED IN BOOK 4921, PAGE 476 OF THE ST. LOUIS COUNTY RECORDS; THENCE ALONG SAID WESTERN RIGHT OF WAY LINE, SOUTH 21 DEGREES 13 MINUTES 29 SECONDS EAST, 79.74 FEET TO AN ANGLE POINT THEREIN; THENCE SOUTH 24 DEGREES 50 MINUTES 00 SECONDS EAST, 150.00 FEET TO A POINT OF CURVE; THENCE ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 45.00 FEET AN ARC DISTANCE OF 73.59 FEET (CHORD OF SOUTH 22 DEGREES 02 MINUTES 01 SECONDS WEST, 65.66 FEET) TO A POINT ON THE NORTHERN RIGHT OF WAY LINE OF CLAYTON ROAD, AS WIDENED BY DEED RECORDED IN BOOK 8202, PAGE 1238 AS AFOREMENTIONED; THENCE ALONG SAID NORTHERN LINE, SOUTH 67 DEGREES 14 MINUTES 36 SECONDS WEST, 108.47 FEET TO AN ANGLE POINT THEREIN; THENCE SOUTH 75 DEGREES 01 MINUTES 00 SECONDS WEST, 115.00 FEET TO THE WESTERN LINE OF SAID SOCONY MOBIL OIL COMPANY TRACT; THENCE ALONG SAID WESTERN LINE, NORTH 24 DEGREES 59 MINUTES 04 SECONDS WEST, 279.69 FEET TO THE NORTHWEST CORNER THEREOF; THENCE ALONG THE NORTHERN LINE OF SAID SOCONY MOBIL OIL COMPANY TRACT, NORTH 71 DEGREES 08 MINUTES 29 SECONDS EAST, 276.88 FEET TO THE POINT OF BEGINNING, CONTAINING 76,000 SQUARE FEET.

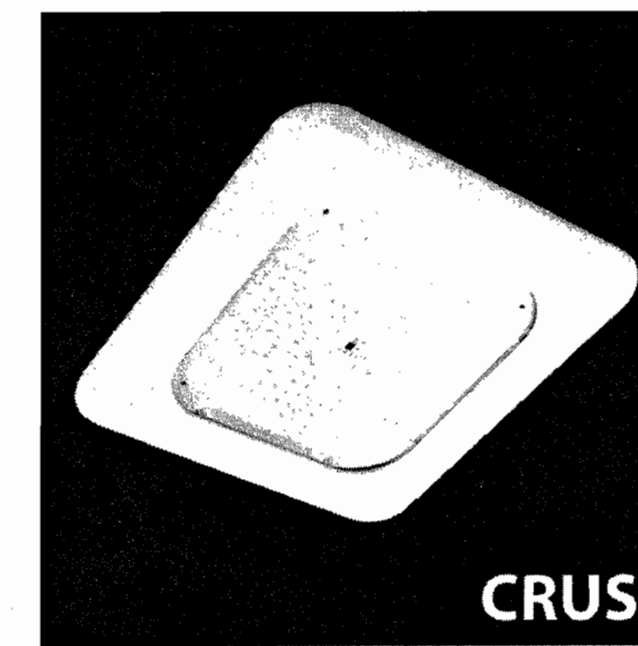
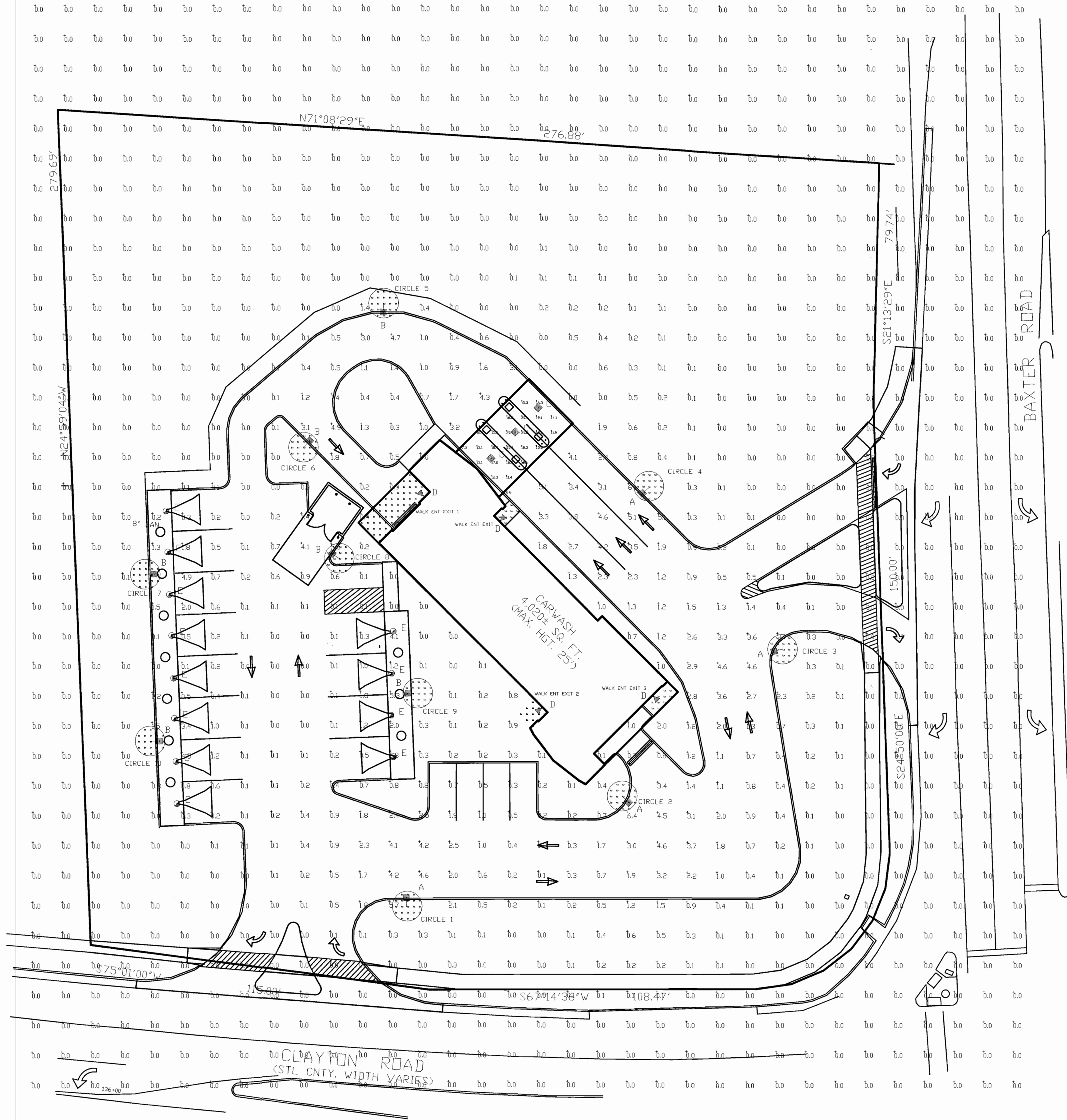
**SURVEYOR'S CERTIFICATE**

THIS IS TO CERTIFY THAT WE HAVE, DURING THE MONTH OF AUGUST 2011, BY THE ORDER OF CIVIL & ENVIRONMENTAL CONSULTANTS, INC. EXECUTED A PROPERTY BOUNDARY AND TOPOGRAPHIC SURVEY ON A TRACT OF LAND BEING PART OF FRACTIONAL SECTION 26, TOWNSHIP 45 NORTH, RANGE 4 EAST OF THE FIFTH PRINCIPAL MERIDIAN, CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI. THIS SURVEY WAS EXECUTED IN ACCORDANCE WITH THE CURRENT MISSOURI PROFESSIONAL STANDARDS FOR PROPERTY BOUNDARY SURVEYS FOR URBAN PROPERTY.

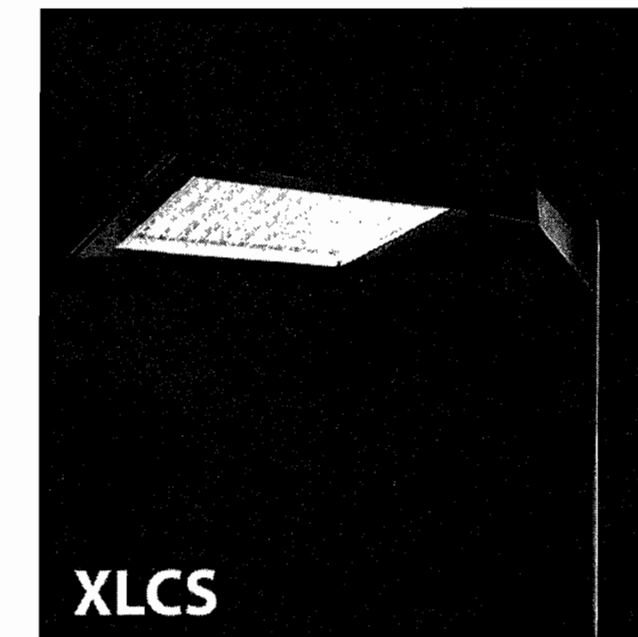
Dennis C. Frazier  
 MISSOURI PROFESSIONAL LAND SURVEYOR #200200047



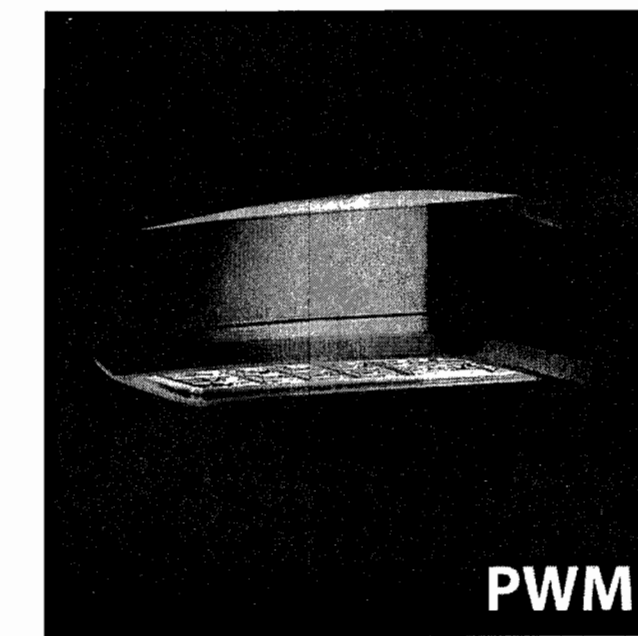
PREPARED FOR: CIVIL & ENVIRONMENTAL CONSULTANTS, INC. 4848 PARK 370 BLVD., SUITE F HAZELWOOD, MO. 63042	DATE: 08/02/11 SCALE: 1"=20' PROJECT NO.: 11-1045 FILE NAME: 11-1045.DWG	<b>PROPERTY BOUNDARY AND TOPOGRAPHIC SURVEY</b>
DRAWING NO.: <b>C400</b>	REV-1: REV-2: REV-3: REV-4:	FRAZIER LAND SURVEYING SERVICES, INC. 705 BALLANTRAE DRIVE WENTZVILLE, MO. 63385 PHONE: 636-332-0610 FAX: 636-332-0710
SHEET 04 OF 04	1 OF 1 SHEET	



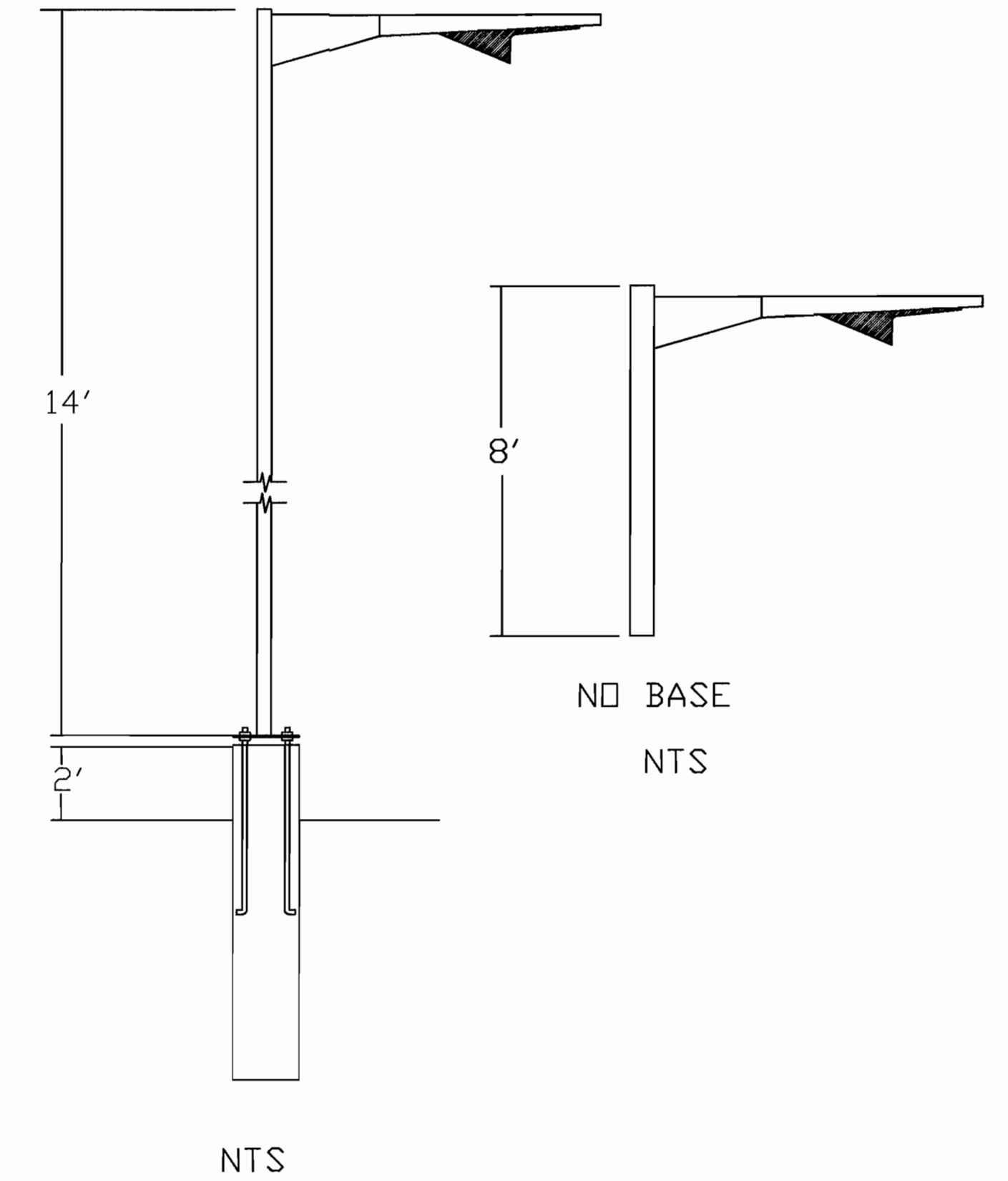
CRUS



XLCS



PWM



THIS IS NOT AN LSI RECOMMENDED LIGHTING DESIGN.

THIS DESIGN DOES NOT MEET RECOGNIZED INDUSTRY LIGHTING STANDARDS FOR THIS APPLICATION.

[Click image to open Product Page](#)

Photometric data for fixture type 'E' is based upon another manufacturer's test and as a result can not be verified by LSI Industries for this calculation.

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
ALL CALC POINTS AT GRADE	Illuminance	Fc	0.32	6.4	0.0	N.A.	N.A.
CIRCLE 1	Illuminance	Fc	3.98	7.0	0.4	9.95	17.50
CIRCLE 10	Illuminance	Fc	1.44	6.9	0.0	N.A.	N.A.
CIRCLE 2	Illuminance	Fc	3.90	7.2	0.4	9.75	18.00
CIRCLE 3	Illuminance	Fc	3.85	7.2	0.3	12.83	24.00
CIRCLE 4	Illuminance	Fc	3.82	7.3	0.5	7.64	14.60
CIRCLE 5	Illuminance	Fc	3.21	8.0	0.0	N.A.	N.A.
CIRCLE 6	Illuminance	Fc	3.22	8.0	0.3	10.73	26.67
CIRCLE 7	Illuminance	Fc	3.24	8.0	0.3	10.80	26.67
CIRCLE 8	Illuminance	Fc	3.29	7.9	0.3	10.97	26.33
CIRCLE 9	Illuminance	Fc	2.96	7.7	0.3	9.87	25.67
PAY CANOPY	Illuminance	Fc	15.26	21.2	6.6	2.31	3.21
WALK ENT EXIT	Illuminance	Fc	5.56	6.1	4.5	1.24	1.36
WALK ENT EXIT_1	Illuminance	Fc	1.57	5.0	0.2	7.85	25.00
WALK ENT EXIT_2	Illuminance	Fc	3.56	4.9	2.1	1.70	2.33
WALK ENT EXIT_3	Illuminance	Fc	4.38	5.4	3.3	1.33	1.64
PARKING AREA	Illuminance	Fc	1.95	8.0	0.0	N.A.	N.A.

Symbol	Qty	Label	Arrangement	Description	LLF	Arr. Lum. Lumens	Arr. Watts
[Symbol]	4	A	SINGLE	XLCS-FT-LED-SS-CW-HSS-SINGLE-14'POLE+2'BASE DIMMED 30%	0.700	9099	95.8
[Symbol]	6	B	SINGLE	XLCS-FT-LED-SS-CW-HSS-SINGLE-8'POLE NO BASE DIMMED 80%	0.200	9099	95.8
[Symbol]	3	C	SINGLE	CRUS-SC-LED-VLW-50 - 14" MH DIMMED 20%	0.800	9055	60.9
[Symbol]	4	D	SINGLE	PWM-S-LED-LW-CW MTD @ 10'	1.000	1440	15.1
[Symbol]	12	E	SINGLE	FREE VAC SIGN MTD @ 7'	1.000	53	1.4

Total Project Watts  
Total Watts = 1217.9

Lighting Proposal LD-141527-4

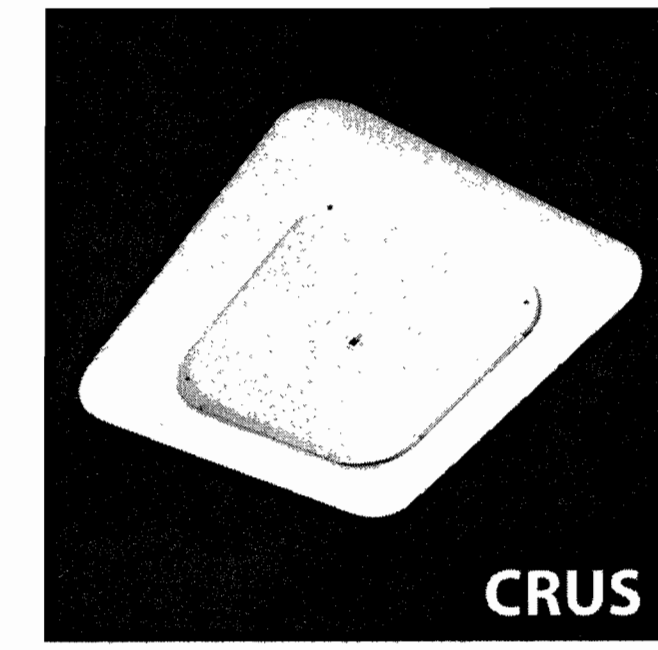
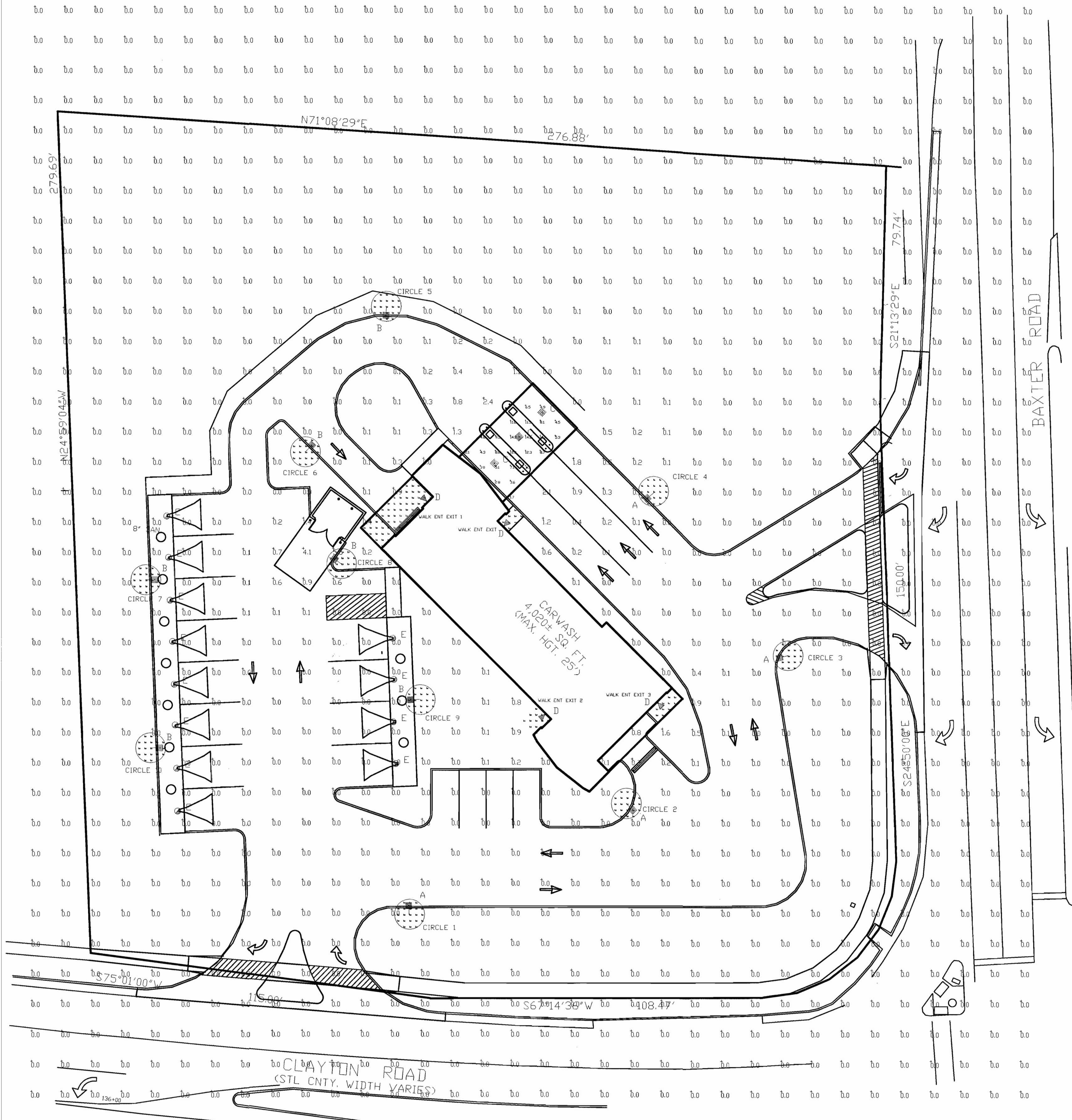
BRIGHT WORK  
14995 CLAYTON RD  
CHESTERFIELD, MO

DATE: 8/18 REV: 28-16 SHEET 1 OF 1

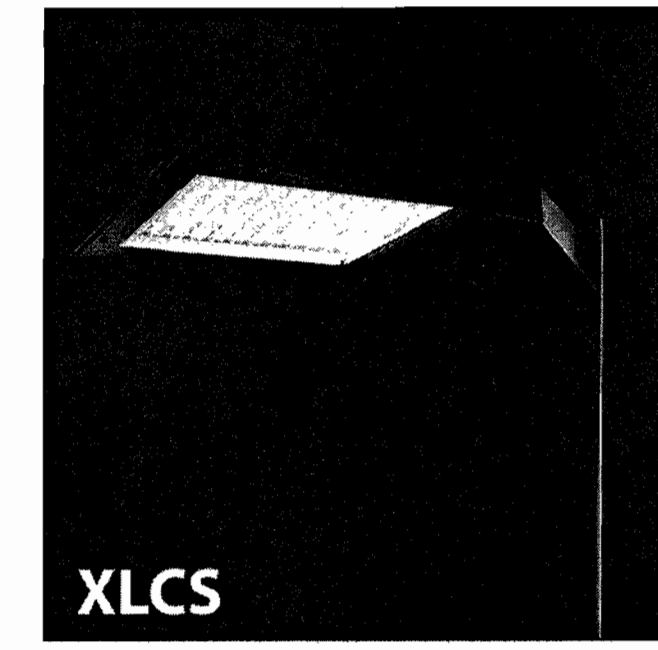
SCALE: 1"=20'

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine the applicability of the layout to existing or future field conditions.

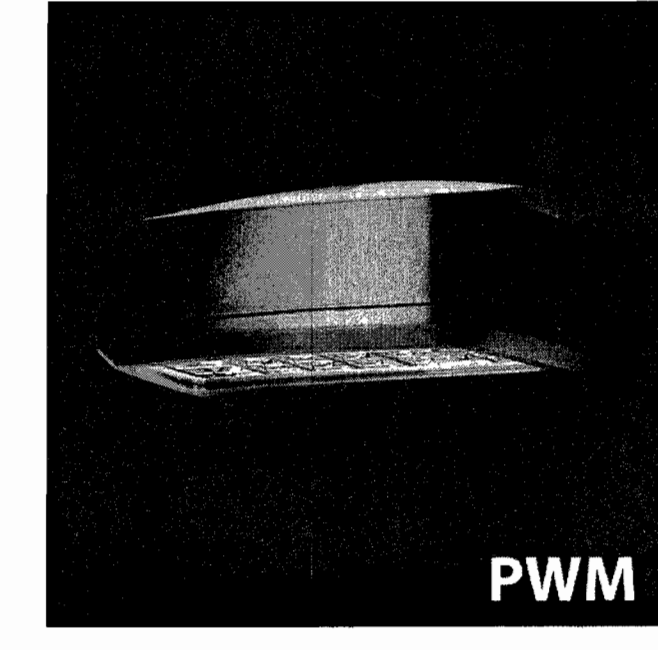
This lighting plan represents illumination levels calculated from laboratory data taken under controlled conditions in accordance with The Illuminating Engineering Society (IES) approved methods. Actual performance of any manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in lamps/LED's and other variable field conditions. Calculations do not include obstructions such as buildings, curbs, landscaping, or any other architectural elements unless noted. Fixture nomenclature noted does not include mounting hardware or poles. This drawing is for photometric evaluation purposes only and should not be used as a construction document or as a final document for ordering product.



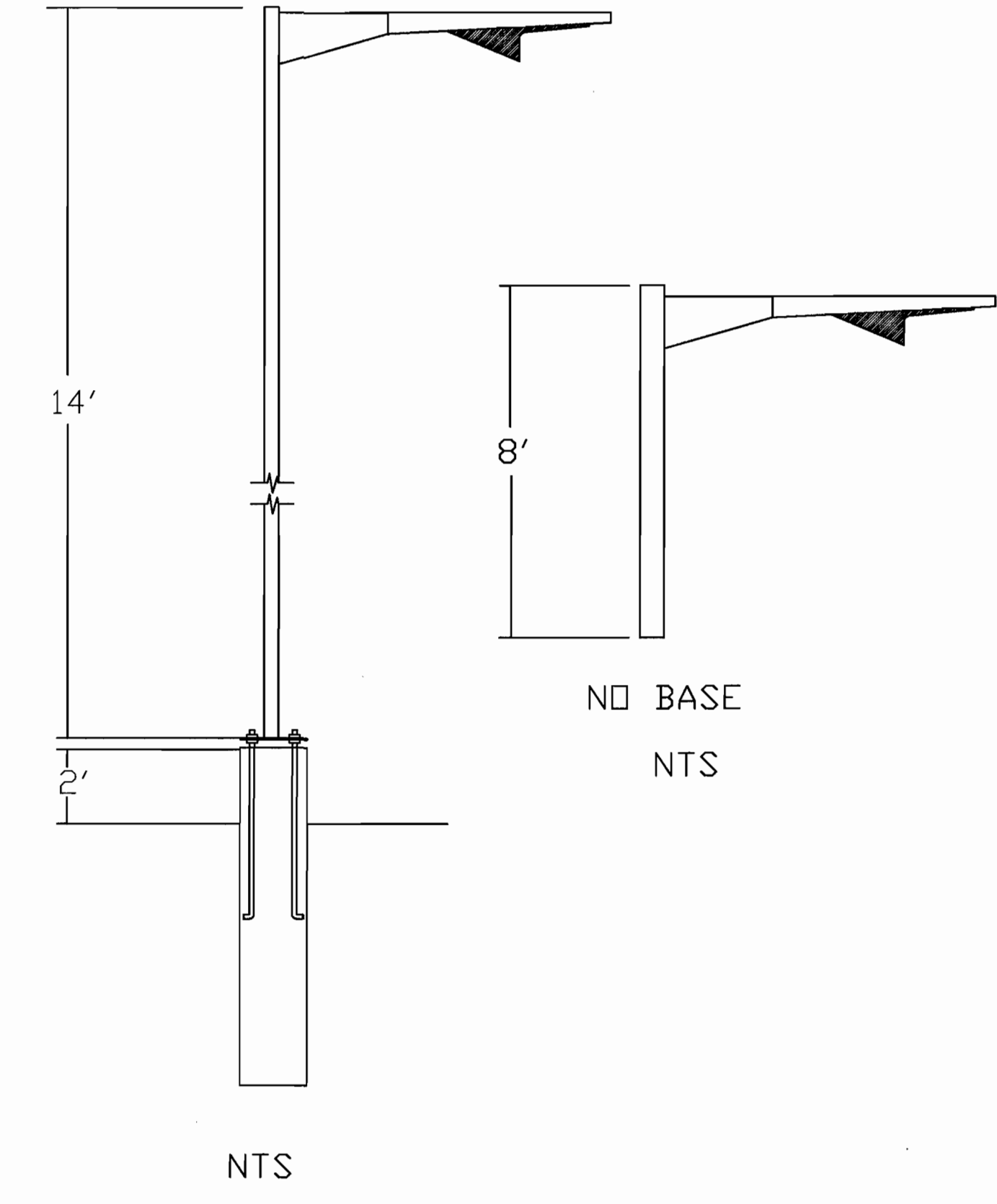
CRUS



XLCS



PWM



THIS IS NOT AN LSI RECOMMENDED LIGHTING DESIGN.  
THIS DESIGN DOES NOT MEET RECOGNIZED INDUSTRY LIGHTING STANDARDS FOR THIS APPLICATION.

Click image to open Product Page

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
ALL CALC POINTS AT GRADE	Illuminance	Fc	0.04	5.5	0.0	N.A.	N.A.
CIRCLE 1	Illuminance	Fc	0.00	0.0	0.0	N.A.	N.A.
CIRCLE 10	Illuminance	Fc	0.00	0.0	0.0	N.A.	N.A.
CIRCLE 2	Illuminance	Fc	0.00	0.0	0.0	N.A.	N.A.
CIRCLE 3	Illuminance	Fc	0.00	0.0	0.0	N.A.	N.A.
CIRCLE 4	Illuminance	Fc	0.08	0.1	0.0	N.A.	N.A.
CIRCLE 5	Illuminance	Fc	0.00	0.0	0.0	N.A.	N.A.
CIRCLE 6	Illuminance	Fc	0.00	0.0	0.0	N.A.	N.A.
CIRCLE 7	Illuminance	Fc	0.00	0.0	0.0	N.A.	N.A.
CIRCLE 8	Illuminance	Fc	3.28	7.9	0.3	10.93	26.33
CIRCLE 9	Illuminance	Fc	0.00	0.0	0.0	N.A.	N.A.
PAY CANDPY	Illuminance	Fc	7.33	14.6	1.7	4.31	8.59
WALK ENT EXIT	Illuminance	Fc	4.26	5.3	3.2	1.33	1.66
WALK ENT EXIT_1	Illuminance	Fc	1.55	5.0	0.2	7.75	25.00
WALK ENT EXIT_2	Illuminance	Fc	3.56	4.9	2.1	1.70	2.33
WALK ENT EXIT_3	Illuminance	Fc	3.63	4.8	2.0	1.82	2.40
PARKING AREA	Illuminance	Fc	0.28	7.9	0.0	N.A.	N.A.

Symbol	Qty	Label	Arrangement	Description	LLF	Arr. Lum. Lumens	Arr. Watts
[Symbol]	4	A	SINGLE	XLCS-FT-LED-SS-CW-HSS-SINGLE-14'POLE+2'BASE DIMMED 30%	0.700	9099	95.8
[Symbol]	6	B	SINGLE	XLCS-FT-LED-SS-CW-HSS-SINGLE-8'POLE NO BASE DIMMED 80%	0.200	9099	95.8
[Symbol]	3	C	SINGLE	CRUS-SC-LED-VLW-50 - 14' MH	1.000	9055	60.9
[Symbol]	4	D	SINGLE	PWM-S-LED-LW-CW MTD @ 10'	1.000	1440	15.1
[Symbol]	12	E	SINGLE	FREE VAC SIGN MTD @ 7'	1.000	53	1.4

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine the applicability of the layout to existing or future field conditions.

This lighting plan represents illumination levels calculated from laboratory data taken under controlled conditions in accordance with The Illuminating Engineering Society (IES) approved methods. Actual performance of any manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in lamps/LED's and other variable field conditions. Calculations do not include obstructions such as buildings, curbs, landscaping, or any other architectural elements unless noted. Fixture nomenclature noted does not include mounting hardware or poles. This drawing is for photometric evaluation purposes only and should not be used as a construction document or as a final document for ordering product.

Total Project Watts  
Total Watts = 2171



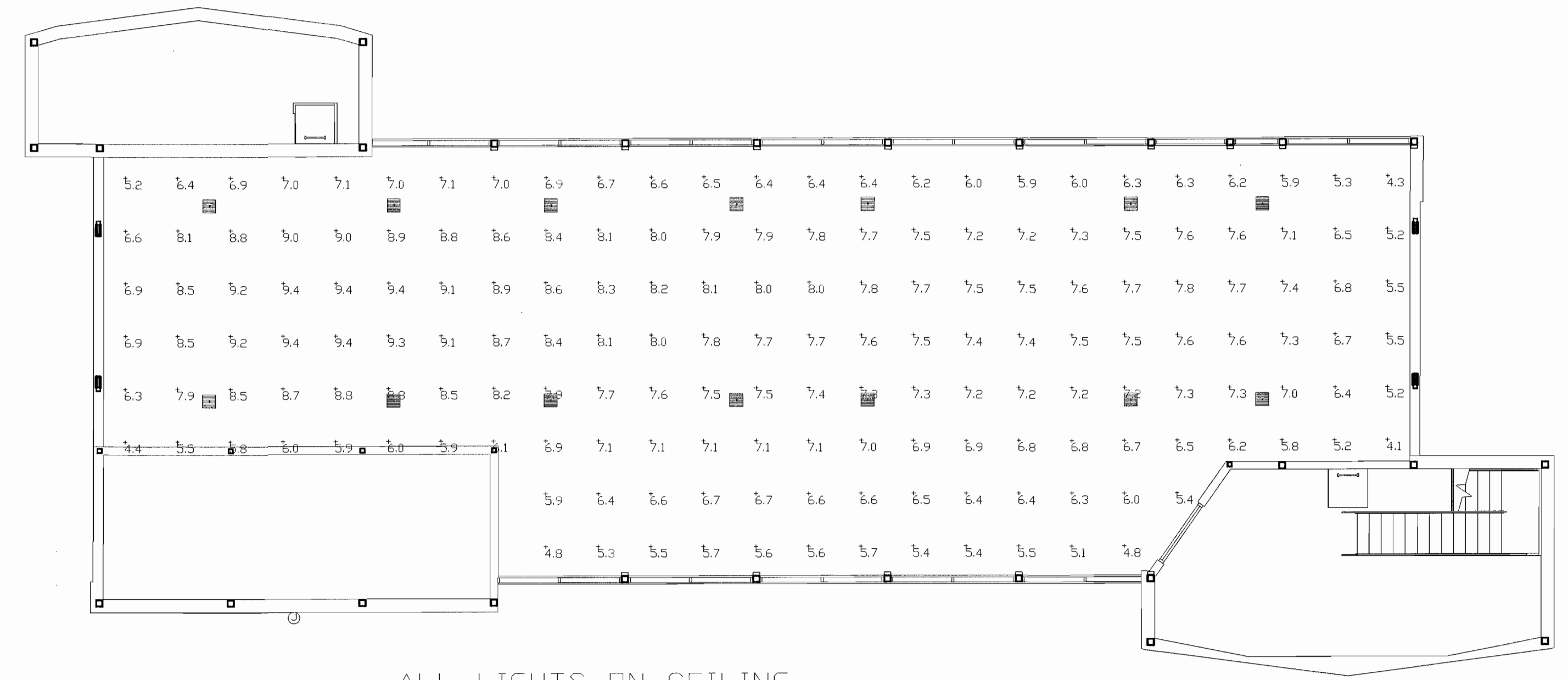
LIGHTING PROPOSAL LD-141527-4A  
BRIGHT WORK SECURITY  
14905 CLAYTON RD  
CHESTERFIELD, MD

SCALE: 1"=20'  
SHEET 1 OF 1

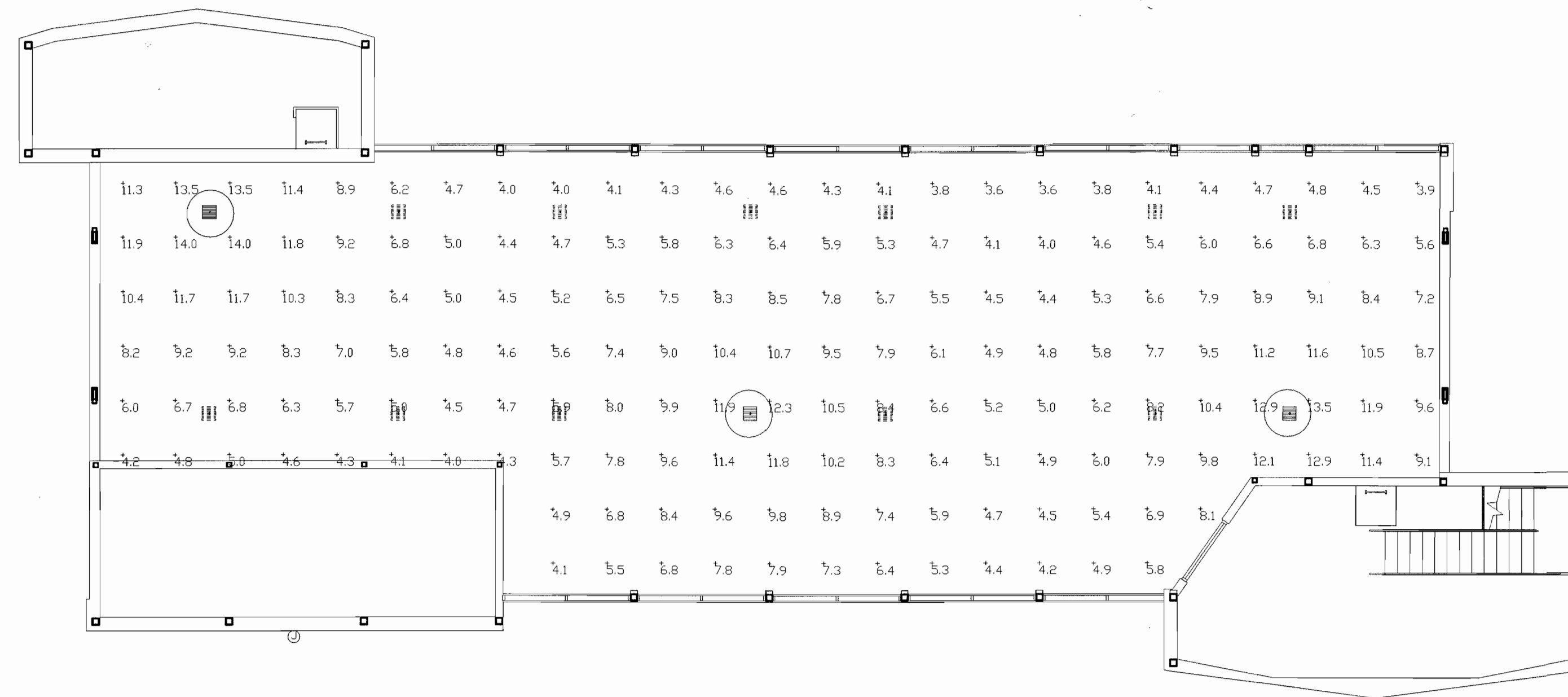
NIGHT SECURITY LIGHTING



ALL LIGHTS AT GRADE



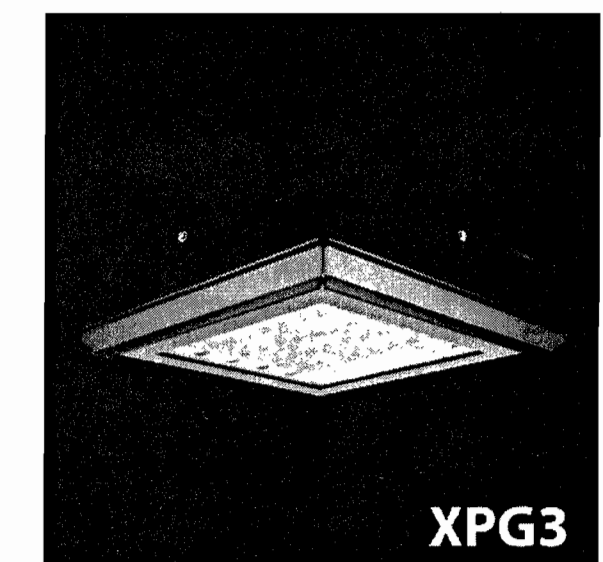
ALL LIGHTS ON CEILING



AFTER HOURS INTERIOR LIGHTING ONLY ILLUMINATION

○ SECURITY LIGHTS

Footcandle levels at grade.  
 Reflectances: Ceiling-80% Walls-50% Floor-20%  
 Room Height: 21'  
 Fixture Mtg: 15'



Click image to enable slide show & use tool bar to navigate

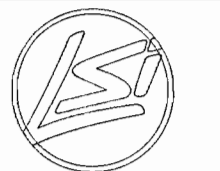
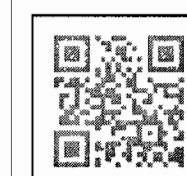
Luminaire Schedule											
Symbol	Qty	Label	Arrangement	Description	LLD	LDD	BF	LLF	Lumens/Lamp	Arr. Lum. Lumens	Arr. Watts
	42	A	SINGLE	XPG3P-S-LED-68-450-CW-UE	1.000	1.000	1.000	1.000	N.A.	9580	97.8

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
ALL LIGHTS AT GRADE_Floor	Illuminance	Fc	33.95	43.6	18.8	1.81	2.32
ALL LIGHTS ON CEILING_Ceiling	Illuminance	Fc	7.10	9.4	4.1	1.73	2.29
SECURITY LIGHTS ONLY_Floor	Illuminance	Fc	7.14	14.0	3.6	1.98	3.89

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine the applicability of the layout to existing or future field conditions.

This lighting plan represents illumination levels calculated from laboratory data taken under controlled conditions in accordance with The Illuminating Engineering Society (IES) approved methods. Actual performance of any manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in lamps/LED's and other variable field conditions. Calculations do not include obstructions such as buildings, curbs, landscaping, or any other architectural elements unless noted. Fixture nomenclature noted does not include mounting hardware or poles. This drawing is for photometric evaluation purposes only and should not be used as a construction document or as a final document for ordering product.

Total Project Watts  
 Total Watts = 3031.801



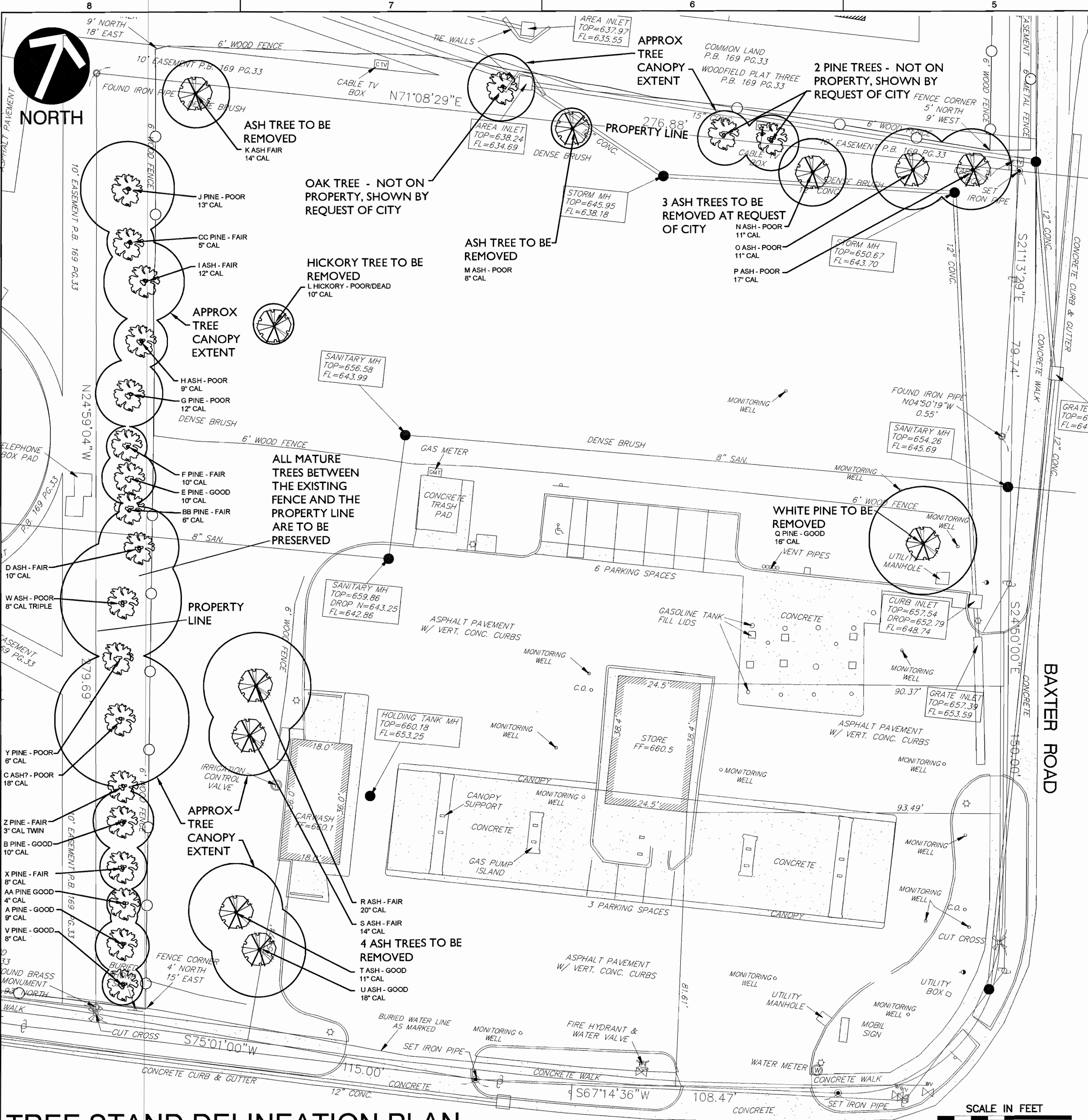
WWW.ALLENEX.CO. CHESTERFIELD, OHIO 45024 USA  
 (513) 793-3200 • FAX (513) 793-0622

LIGHTING PROPOSAL LD-142294-1

BRITE WORK CAR WASH  
 14905 CLAYTON ROAD  
 CHESTERFIELD, MO

DATE: 4-06-18 REV: 0-16-18 SHEET 1 OF 1

SCALE: 1"=8' 0 8



**TREE STAND DELINEATION PLAN**

TOTAL SITE AREA = 1.746 ACRES

WOODLAND CALCULATIONS (TOTAL TREE CANOPY NOT INCLUDING TREES TO BE REMOVED AT THE REQUEST OF THE CITY.)  
 TOTAL TREE CANOPY = 8510 SF  
 TREE CANOPY REQUIRED TO BE PRESERVED 30%  
 TOTAL TREE CANOPY TO BE PRESERVED = 5148 SF = 60%

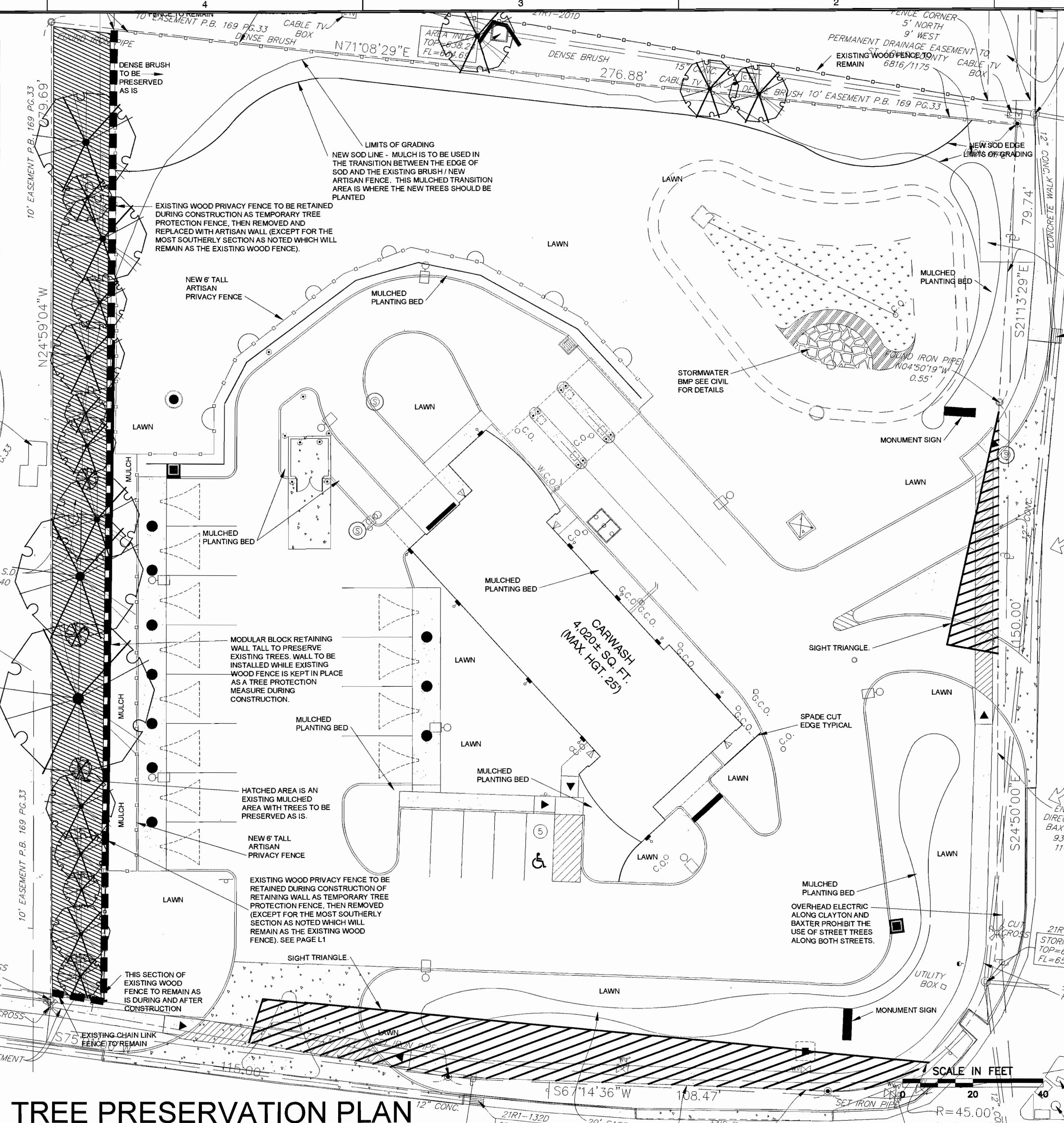
INDIVIDUAL TREE PRESERVATION CALCULATIONS  
 EXISTING TREES ON SITE 24 TREES (NOT INCLUDING TREES TO BE REMOVED AT THE REQUEST OF THE CITY.)  
 TREES TO BE REMOVED = 6 TREES  
 TREES TO BE PRESERVED AND PROTECTED = 18 TREES = 75%

NOTE: ON FEBRUARY 24, 2017, KATIE ASTROTH (ENVIRONMENTAL BIOLOGIST) FROM CEC ASSESSED THE PROPERTY LOCATED AT 14905 CLAYTON RD, CHESTERFIELD, MISSOURI FOR TREE CANOPY COVER. TREES AND VEGETATION BOUNDARIES WERE GEOREFERENCED WITH A TRIMBLE GEOTX GPS UNIT AND PHOTOGRAPHED. BELOW IS A BRIEF DESCRIPTION OF THE FINDINGS.

THE NORTHERN PORTION OF THE PROPERTY (NORTH OF THE PARKING LOT) CONTAINS PRIMARILY DENSE BUSH HONEYSUCKLE AND INVASIVE VINES. WITHIN THIS AREA, THERE ARE ONLY 5 TREES (ASH TREES) OVER 6 INCHES IN DIAMETER. THESE TREES RANGED FROM FAIR TO VERY POOR CONDITION.

ALONG THE WESTERN EDGE OF THE PROPERTY (WEST OF THE PRIVACY FENCE) ARE MATURE TREES WITHIN A WELL MAINTAINED LANDSCAPED AREA. CANOPY COVER WITHIN THIS AREA IS APPROXIMATELY 80%. TREES CONSISTED OF PINE, ASH, OAK, SWEETGUM, AND PEAR. ALL TREES APPEARED TO BE IN GOOD CONDITION.

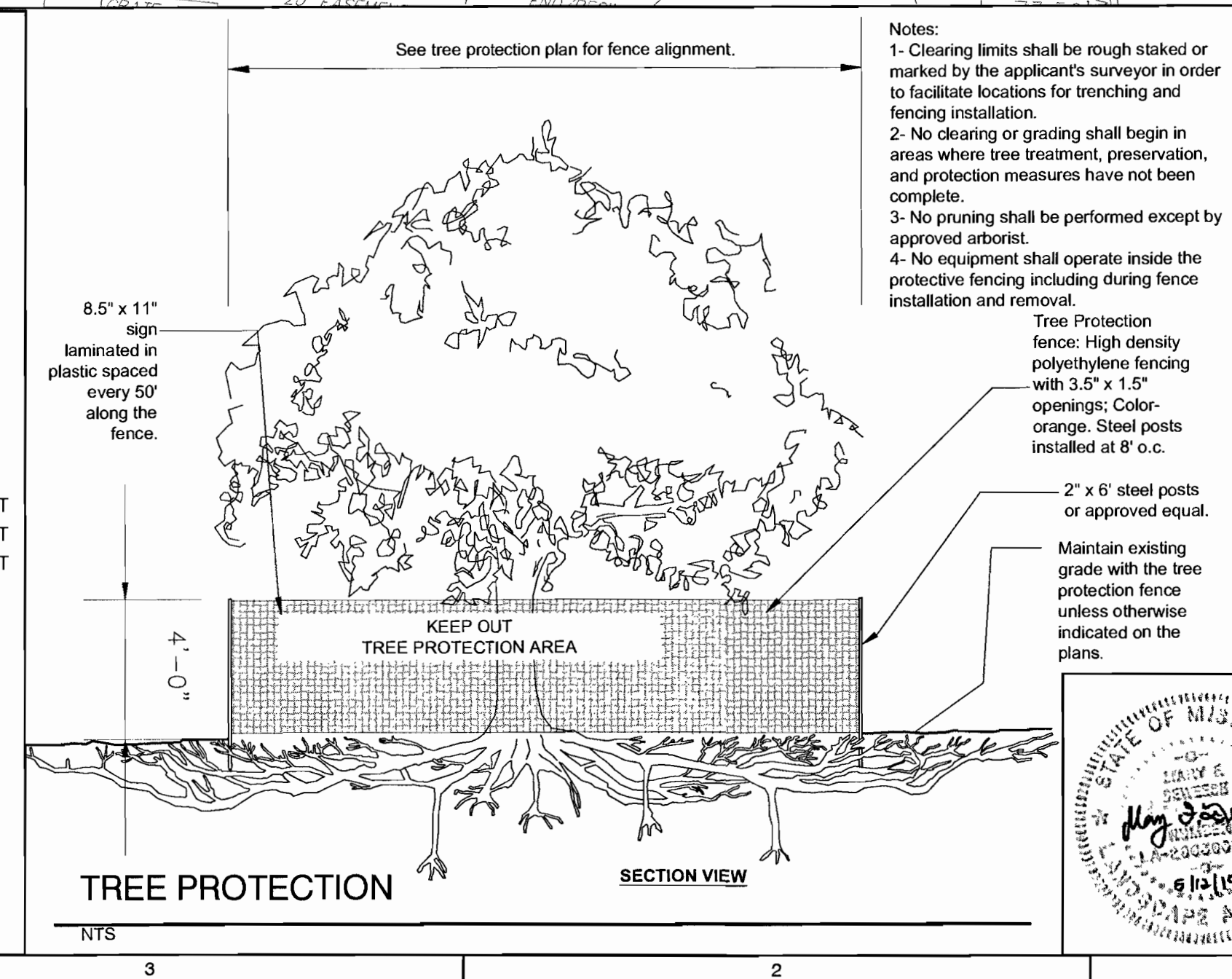
SIX INDIVIDUAL TREES WERE ALSO LOCATED ALONG THE PERIMETER OF THE PARKING LOT. ONE PINE LOCATED NEAR THE NORTHEAST CORNER AND FIVE ASH LOCATED ALONG THE PARKING LOT'S WESTERN EDGE. ALL FIVE TREES WERE IN GOOD CONDITION.



**TREE PRESERVATION PLAN**

EXISTING TREE DATA

Tree ID	Caliper	Canopy Radius	Species	Condition	To Be Removed
A	9"	8'	PINE	GOOD	
B	10"	9'	PINE	GOOD	
C	18"	20'	ASH?	POOR	
D	10"	12'	ASH	FAIR	
E	11"	8'	PINE	GOOD	
F	10"	6'	PINE	FAIR	
G	12"	10'	PINE	POOR	
H	9"	8'	ASH	FAIR	
I	12"	12'	ASH	FAIR	
J	13"	14'	PINE	POOR	
K	14"	10'	ASH	FAIR	YES
L	10"	6'	HICKORY	POOR	YES
M	8"	6'	ASH	POOR	YES
N	11"	10'	ASH	POOR	YES, BY CITY REQUEST
O	11"	12'	ASH	POOR	YES, BY CITY REQUEST
P	17"	12'	ASH	POOR	YES, BY CITY REQUEST
Q	10"	16'	PINE	GOOD	YES
R	5"	16'	ASH	FAIR	YES
S	14"	12'	ASH	FAIR	YES
T	11"	14'	ASH	GOOD	YES
U	18"	14'	ASH	GOOD	YES
V	8"	6'	PINE	GOOD	
W	8" TRIPLET	18'	ASH	POOR	
X	4"	5'	PINE	GOOD	
Y	3"	3'	PINE	POOR	
Z	6"	3'	PINE	FAIR	
AA	4"	5'	PINE	GOOD	
BB	5"	3'	PINE	FAIR	
CC	6"	7'	PINE	FAIR	



**REVISION RECORD**

NO.	DATE	DESCRIPTION
1	08/08/17	ISSUED FOR PERMITS
2	08/08/17	ISSUED FOR PERMITS
3	08/08/17	ISSUED FOR PERMITS
4	08/08/17	ISSUED FOR PERMITS
5	08/08/17	ISSUED FOR PERMITS
6	08/08/17	ISSUED FOR PERMITS
7	08/08/17	ISSUED FOR PERMITS
8	08/08/17	ISSUED FOR PERMITS

**ZIP - 63017**

**Wallis Companies**  
 106 EAST WASHINGTON  
 CUBA, MO 65453  
 (636) 549-1600

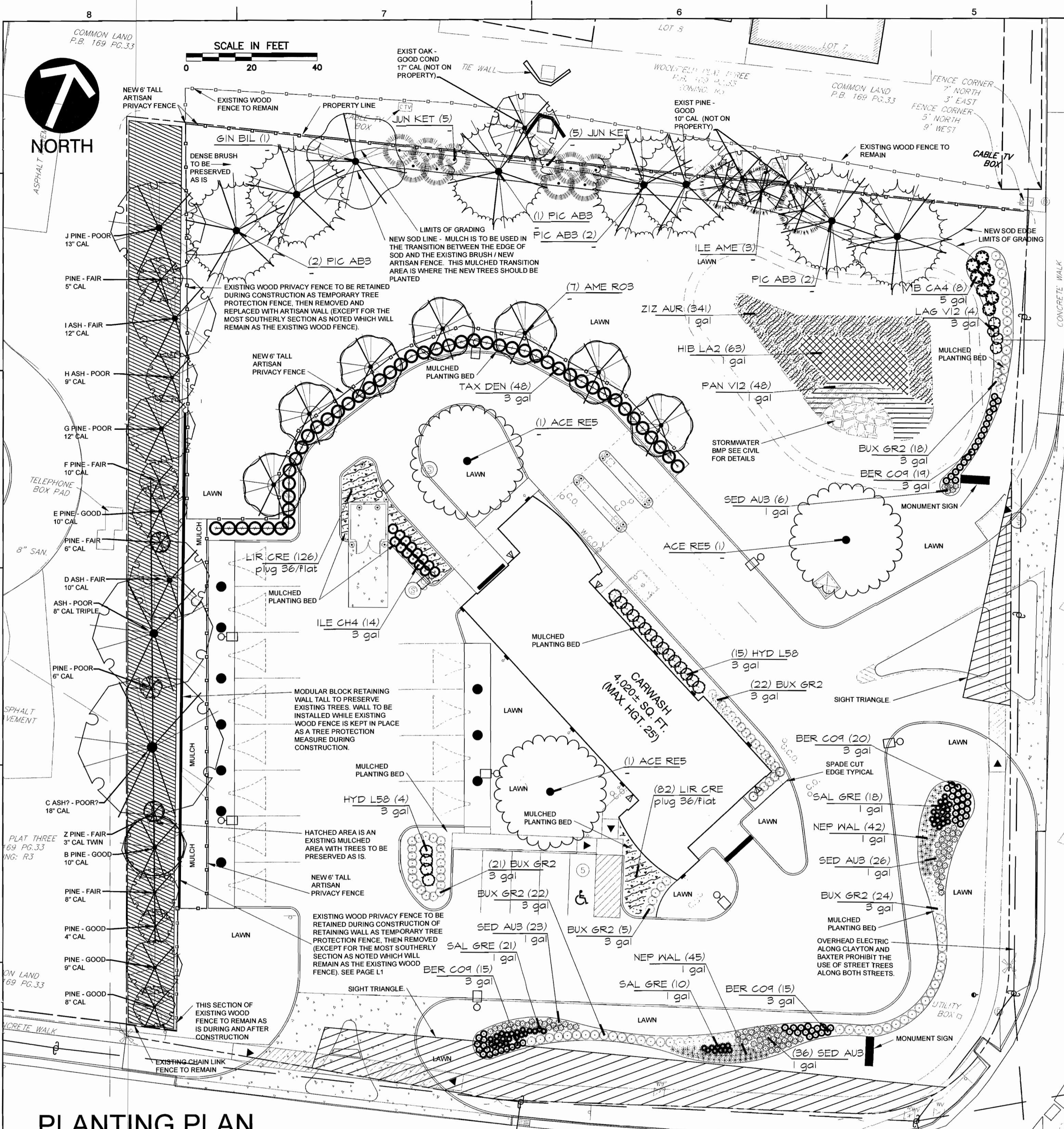
**Civil & Environmental Consultants, Inc.**  
 CERTIFICATION/LICENSE NO. 2002013942  
 4848 Park 370 Blvd., Suite F - Hazelwood, MO 63042  
 314-656-4566 • 866-250-3879  
 www.cecinc.com

**PZ-08-2017 MSD MAP# 21-R**

**SITE DEVELOPMENT PLAN**  
 BRITE WORK CARWASHERY  
 14905 CLAYTON ROAD  
 TSD & TTP

DRAWING NO. **L1**  
 SHEET **01** OF **03**



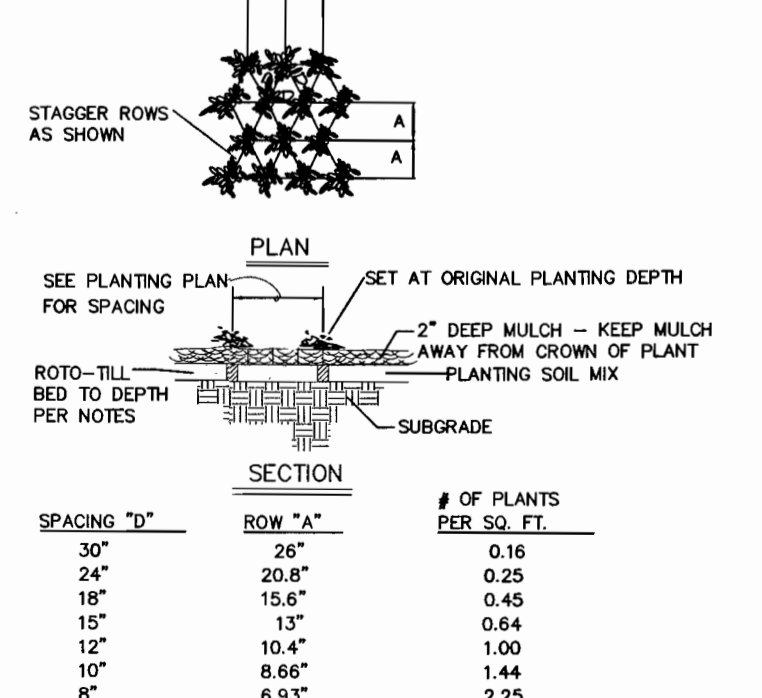


**PLANTING PLAN**

PLANTING, WATER and MULCH REQUIREMENTS FOR BIO-RETENTION AREA					
WATER AVAILABILITY	REQUIRED PLANTING PERIOD	MINIMUM CONTAINER SIZE	WATER REQUIREMENT FIRST 3 WEEKS *	WATER REQUIREMENT AFTER 3 WEEKS *	MAXIMUM MULCH DEPTH
ONLY USED IF RAIN GARDEN IS INSTALLED BEFORE THE IRRIGATION SYSTEM	NO AVAILABILITY TO WATER AFTER LATE FEB. OR APRIL ONLY	2.25"x3.75" OR LARGER	WATER EACH PLUG IMMEDIATELY		1.5" FOR PLUGS
THIS PROJECT TO HAVE AUTOMATED IRRIGATION INSTALLED	MANUAL WATERING WITH STANDARD SPRINKLER	4.5"x5" QT OR LARGER IN SUMMER & FALL	1" (60 MIN.) EVERY 4 DAYS	1" (60 MIN.) EVERY 7 DAYS UNTIL PLANTS ESTABLISHED ***	1.5" FOR PLUGS 2.5" FOR QUARTS
	AUTOMATIC IRRIGATION (SET TO WATER MORE FREQUENTLY THAN NORMAL DURING FIRST TWO MONTHS AFTER PLANTING)	LATE FEB. - EARLY OCTOBER	2.25"x3.75" PLUG OR LARGER IN SPRING AND FALL 4.5"x5" QT OR LARGER IN SUMMER & FALL	1" (60 MIN.) EVERY 4 DAYS IN SPRING AND FALL 1" (60 MIN.) EVERY 3 DAYS IN SUMMER	1" (60 MIN.) EVERY 7 DAYS UNTIL PLANTS ESTABLISHED *** 1.5" FOR PLUGS 2.5" FOR QUARTS

\* THIS WATER AMOUNT INCLUDES NATURAL RUNOFF. IF YOU GET 1/2" OF RAIN, THEN YOU WILL NEED TO ADD 1/2" OF WATER TO MEET THE 1" REQUIREMENT.  
 \*\* REQUIRES TRANSPORT OF WATER TO THE PLANTING SITE IN LARGE CONTAINERS AND POURING ENOUGH WATER ONTO EACH PLANT (AFTER PLANTING) TO MOISTEN THE ENTIRE PLANTING PIT.  
 \*\*\* PLANTS ARE ESTABLISHED WHEN ROOTS HAVE GROWN OUT OF THE CONTAINER SOIL AND INTO THE NATIVE SOIL BY 3"-5". THIS NORMALLY TAKES 3-4 MONTHS FOR MOST PERENNIALS AND GRASSES AND UP TO 6-7 MONTHS FOR MOST TREES AND SHRUBS.

CONTRACTOR TO PROVIDE SIGNED AND SEALED SHOP DRAWINGS TO BE APPROVED BY THE PROJECT ENGINEER AND MSD. CONTACT MSD AT 314/335-2072.



BIO-RETENTION PLANTING DETAIL  
N.T.S.

**PLANT SCHEDULE**

TREES	BOTANICAL NAME / COMMON NAME	CONT	CAL	SIZE	QTY
	<i>Acer rubrum</i> / Red Maple	-	2.5 cal.		3
	<i>Amelanchier x grandiflora</i> 'Robin Hill' / Apple Serviceberry Single Stem	-	2.5 cal.		7
	<i>Ginkgo biloba</i> / Maidenhair Tree MALE VARIETY ONLY	-	2.5 cal.		1
	<i>Ilex opaca</i> / American Holly	-	6' tall		3
	<i>Juniperus chinensis</i> 'Keteleeri' / Keteleeri Chinese Juniper	-	6' tall		10
	<i>Picea abies</i> / Norway Spruce	-	6' tall		7
SHRUBS	BOTANICAL NAME / COMMON NAME	CONT	QTY		
	<i>Berberis thunbergii</i> 'Concorde' / Concorde Barberry	3 gal	69		
	<i>Buxus</i> x 'Green Velvet' / Boxwood	3 gal	112		
	<i>Hydrangea paniculata</i> 'Little Lime' / Little Lime Hydrangea	3 gal	19		
	<i>Ilex</i> x <i>meserveae</i> 'China Girl' TM / China Girl Holly	3 gal	14		
	<i>Lagerstroemia indica</i> 'Victor' / Grape Myrtle	3 gal	4		
	<i>Nepeta</i> x <i>faassenii</i> 'Walkers Low' / Walkers Low Catmint	1 gal	27		
	<i>Salvia greggii</i> / Autumn Sage	1 gal	49		
	<i>Sedum</i> x 'Autumn Joy' / Autumn Joy Sedum	1 gal	91		
	<i>Taxus</i> x <i>media</i> 'Densiformis' / Dense Yew	3 gal	48		
	<i>Viburnum dilatatum</i> 'Cardinal Candy' / Cardinal Candy Viburnum	5 gal	8		
GROUND COVERS	BOTANICAL NAME / COMMON NAME	CONT	SPACING	QTY	
	<i>Liriope spicata</i> / Creeping Lily Turf <i>Liriope 'Muscaria'</i> of any variety MAY NOT be used as a substitution.	plug 36/flat	16" o.c.	208	
	<i>Liriope spicata</i> / Creeping Lily Turf <i>Liriope 'Muscaria'</i> of any variety MAY NOT be used as a substitution.	plug 36/flat	16" o.c.	208	
BIO-RETENTION PLANTS	BOTANICAL NAME / COMMON NAME	CONT	SPACING	QTY	
	<i>Hibiscus lasiocarpus</i> / Rosemallow	1 gal	30" o.c.	63	
	<i>Panicum virgatum</i> / Switch Grass	1 gal	30" o.c.	48	
	<i>Zizia aurea</i> / Golden Alexander	1 gal	18" o.c.	341	

**NOTE:**  
 ALL BIO-RETENTION DETAILS AND SPECIFICATIONS ARE INCLUDED ON THIS PAGE.  
 FOR ALL OTHER LANDSCAPING OUTSIDE OF THE BIO-RETENTION AREA SEE PAGE 13 FOR PLANTING DETAILS AND SPECIFICATIONS.  
 ALL LANDSCAPE NEW PLANTING BEDS AND LAWN TO BE IRRIGATED WITH AN IN-GROUND MECHANICAL IRRIGATION SYSTEM.

**Maintenance plan @ rain garden AND/OR bio-retention basin:**

Routine inspections and attention to maintenance needs are required in both rain gardens and bio-retention basins if they are to function properly and as designed. As the plant material matures, however, the amount of maintenance decreases. A properly trained team of lawn maintenance contractors should be able to maintain the system properly. The bottom line: rain gardens and bio-retention basins do not require as much maintenance as a lawn.

The primary maintenance involves inspecting the beds on a regular basis and repairing damage and/or replacing plant material as needed. Each of these areas require minimal use of pesticides, fertilizers and supplemental watering. Over time, the plant growth, root establishment and organic decomposition will create a natural soil horizon. This will result in the need for less maintenance and a longer life span.

After installation of all plant material, water the plants daily for at least two weeks. Thereafter, the system will need about 1" of natural rainfall or supplemental watering until it is established. Initially, weeding (bi-weekly) of new rain gardens/bio-retention basins is critical for the first few months after the planting is completed. Mulch will help to keep weed germination and erosion issues to a minimum. It is very important to re-mulch all void areas and to maintain a good coverage.

Accumulation of sediment is a sign that the system is working properly. However, sediment and debris removal (approximately twice a year), especially at the point of inflow, will be the most important task thereafter to maintain the rain gardens and bio-retention basins. Replacement of dead plant material, repair of soil erosions, annual re-mulching with pea gravel, unclogging drains and the repair of the overflow structures may be necessary as they develop and mature. Unfortunately, over the span of about ten (10) years, the soils may need to be replaced due to the exchange capacity of the cells as they become closed and the drainage qualities will deteriorate.

Dense shrub growth will increase the filtering capacity. Scruffy or discolored plants should be cut back after the spring growth is 6" tall. If possible, raising a mower deck to a height of 6" will make this job easier. By deadheading the flowers, new growth will result. Leaving seed heads and fruit should be encouraged to provide winter interest, bird food and wildlife coverage.

Soil testing should be done before planting operations and, thereafter, every twelve (12) months to determine the Ph (acidity) level and the nutrient levels. A Ph range of 5.2 to 7.6 is appropriate for the plants chosen. To treat low Ph, add iron sulfate and sulphur.

Use controlled burning as a tool only under the approval and supervision of the fire department/district.

No fertilization is required or desirable; the rain gardens and bio-retention basins should be self-sustaining with the help of the organic material in the topsoil. In fact, the presence of fertilizer will encourage weed growth.

Additional maintenance might include treatment or removal of plants presenting diseases and/or fungal problems, removal of litter and larger debris, seed collections and harvesting cuttings, moving rocks that may divert water flow, planting more of a successful species, build-up of areas needing more protection, etc.

**Tasks schedule:**

**Immediate tasks:** water plant material for fourteen (14) consecutive days unless sufficient rainfall is recorded.

**Weekly:** weed beds. Inspect for mosquito larva (after four (4) days of standing water). Re-mulch any void areas by hand. Water during extreme drought periods, early in the morning, as needed.

**Monthly:** visually inspect and repair erosion. Also visually inspect for pest infestation and/or disease (use least toxic approach). Inspect drainage paths and cells to assure proper dissipation of water.

**Twice a year:** remove excess sediment and debris. Apply fresh mulch layer. Between march 15TH-April 30TH and again between October 1ST-November 30TH, remove and replace all dead and diseased vegetation considered beyond treatment.

**Once a year:** check the Ph. Prune excess growth and recycle any removed vegetation material if no disease is present. Remove any stakes and wires that remain on trees.

**Every two to three years:** remove old mulch layer before applying a new layer.

ZIP- 63017

PZ- 08-2017 MSD MAP# 21-R

**WALLIS COMPANIES**  
 106 EAST WASHINGTON  
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 (636) 549-1600

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 314-656-4566 - 866-250-3679  
 www.wallisinc.com

**SITE DEVELOPMENT PLAN**  
 BRITE WORX CARWASH ROAD  
 PLANTING PLAN

DATE: FEB. 2018 DRAWN BY: MFD  
 DWG. SCALE: 1" = 20' CHECKED BY: KTK  
 PROJECT NO.: 153-224  
 APPROVED BY: KTK\*

DRAWING NO.: **L2**

SHEET 02 OF 03

**REVISION RECORD**

NO.	DATE	DESCRIPTION
1	02/18/18	REVISION AS PER CITY
2	02/18/18	REVISION AS PER CITY
3		
4		
5		
6		
7		
8		

# LED CANOPY LIGHT - LEGACY™ (CRUS)



## DOE LIGHTING FACTS

Department of Energy has verified representative product test data and results in accordance with its Lighting Facts Program. Visit [www.lightingfacts.com](http://www.lightingfacts.com) for specific catalog strings.



## Consult Factory

**Class 1, Division 2** – Available on LW and SS

**T5 Temperature Classification** – The surface temperature of this product will not rise above 100°C., within a 40°C ambient.

**Gas Groups A,B,C, and D** – Group A: Acetylene / Group B: Hydrogen / Group C: Propane and Ethylene / Group D: Benzene, Butane, Methane & Propane.

**US & Int'l. patents pending.**

**HOUSING** - Low profile, durable die-cast, aluminum construction, providing a reliable weather-tight seal.

**LEDS** - Features an array of select, mid-power, high brightness, high efficiency LED chips; 5000K color temperature, 70 CRI (nominal).

**DRIVE CURRENT** - Choice of Very Low Wattage (VLW), Low Wattage (LW), Super Saver (SS), High Output (HO) or Very High Output (VHO).

**OPTICS / DISTRIBUTION** - Choice of Symmetrical or Asymmetrical, which directs light through a clear tempered glass lens, to provide a uniform distribution of light to vertical and horizontal surfaces.

**OPTICAL UNIT** - Features an ultra-slim 7/8" profile die-cast housing, with a flat glass lens. Unit is water-resistant, sealed to an IP67 rating. Integral designed heat sink does not trap dirt and grime, ensuring cool running performance over the life of the fixture.

**PRESSURE STABILIZING VENT** - Luminaire assembly incorporates a pressure stabilizing vent breather to prevent seal fatigue and failure.

**HAZARDOUS LOCATION** - Designed for lighter than air fuel applications. Product is suitable for Class 1 Division 2 only when properly installed per LSI installation instructions (consult factory).

**DRIVER** - State-of-the-art driver technology superior energy efficiency and optimum light output. Driver components are fully encased in potting for moisture resistance. Complies with IEC and FCC standards. 0-10 V dimming supplied standard with all drive currents.

**DRIVER HOUSING** - Die-cast aluminum, wet location rated driver/electrical enclosure is elevated above canopy deck to prevent water entry, provide easy "knock-out" connection of primary wiring and contributes to attaining the lowest operating temperatures available. Seals to optical housing via one-piece molded silicone gasket.

**OPERATING TEMPERATURE** - -40°C to 50°C (-40°F to +122°F)

**ELECTRICAL** - Universal voltage power supply, 120-277 VAC, 50/60 HZ input. Drivers feature two-stage surge protection (including separate surge protection built into electronic driver) meets IEEE C62.41.2-2002, Scenario 1, Location Category C.

**FINISH** - Standard color is white and is finished with LSI's DuraGrip® polyester powder coat process. DuraGrip withstands extreme weather changes without cracking or peeling.

**INSTALLATION** - One person installation. No additional sealant required. Installs in a 12" or 16" deck pan. Deck penetration consists of a 4" hole, simplifying installation and water sealing. Unit is designed to quickly retrofit into existing Scottsdale (4") hole as well as openings for Encore and Encore Top Access and to reconnect wiring for the SC/ECTA without having to relocate the conduit. Retro panels are available for existing Encores (see back page) as well as kits for recessed and 2x2 installations (see separate spec sheets). Support brackets are provided standard, to prevent sagging of deck.

**SHIPPING WEIGHT** - 27 pounds (single pack), 48 pounds (double pack).

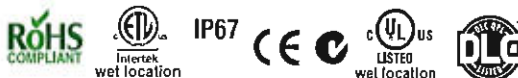
**EXPECTED LIFE** - Minimum 60,000 to 100,000 hours depending upon the ambient temperature of the installation location. See LSI web site for specific guidance.

**WARRANTY** - Limited 5-year warranty.

**LISTING** - UL and ETL listed to UL 1598, UL 8750 and other U.S. and International safety standards. Suitable for wet locations.

**PHOTOMETRICS** - Please visit our web site at [www.lsi-industries.com](http://www.lsi-industries.com) for detailed photometric data.

This product, or selected versions of this product, meet the standards listed below. Please consult factory for your specific requirements.



Project Name \_\_\_\_\_ Fixture Type \_\_\_\_\_  
Catalog # \_\_\_\_\_

08/28/17  
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LSI INDUSTRIES INC.

# LED CANOPY LIGHT - LEGACY™ (CRUS)

## LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: **CRUS SC LED HO 50 UE WHT**

Prefix	Distribution <sup>1</sup>	Light Source	Drive Current	Color Temperature	Input Voltage	Finish	Options
CRUS	SC - Standard Symmetric AC - Asymmetric	LED	VLW - Very Low Watt LW - Low Watt SS - Super Saver HO - High Output VHO - Very High Output	50 - 5000K	UE - Universal Voltage (120-277V)  347 - 480V	WHT - White BRZ - Bronze BLK - Black	HL - Hazardous location available on LW and SS

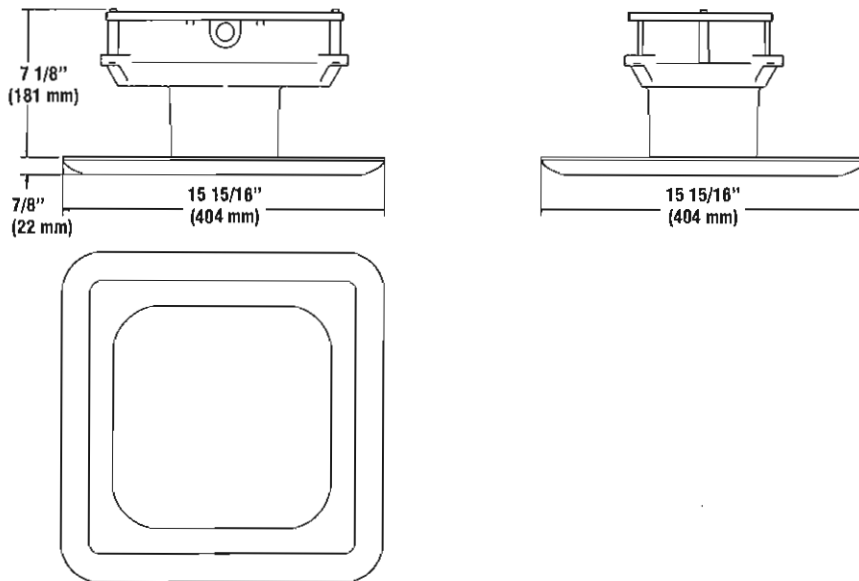
### FOOTNOTES:

1- AC distribution utilizes a reflector which alters the look from a standard S distribution.

## ACCESSORY ORDERING INFORMATION (Accessories are field installed)

Description	Order Number	Description	Order Number
Retrofit Panels - EC / ECTA / SCF to CRU, for 16" Deck Panel	525946	Kit - Hole Plugs and Silicone (enough for 25 retrofits) <sup>1</sup>	1320540
Retrofit Panels - ECTA / SCF to CRU, for 12" Deck Panel	530281	1- Consists of (25) 7/8" hole plugs and (1) 10.3 oz tube of RTV	
Retrofit 2x2 Cover Panel Blank (no holes)	357282		
Retrofit RIC Cover Panel Blank (no holes)	354702		

## DIMENSIONS



## LIGHT OUTPUT - CRUS

		Lumens		Watts	LPW	
		SC	AC	SC/AC	SC	AC
Cool White	VLW - Very Low Watt	9055	7632	61	148	125
	LW - Low Watt	10525	8884	74	142	120
	SS - Super Saver	13674	11595	98	140	118
	HO - High Output	18633	15145	132	141	115
	VHO - Very High Output	22418	17262	159	141	109



Project Name \_\_\_\_\_ Fixture Type \_\_\_\_\_  
 Catalog # \_\_\_\_\_

08/28/17  
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 LSI INDUSTRIES INC.

# LED WALL SCONCE (PWM)



## DOE LIGHTING FACTS

Department of Energy has verified representative product test data and results in accordance with its Lighting Facts Program. Visit [www.lightingfacts.com](http://www.lightingfacts.com) for specific catalog strings.

LIGHT OUTPUT - PWM			
Distribution/Lumens (Nominal)			
		Type S	Watts
Cool White	LW	1400	15
	HO	5200	56
Neutral White	LW	1300	15
	HO	4900	56

LED Chips are frequently updated therefore values may increase.

## US & Int'l. patents pending

**ENERGY SAVING CONTROL OPTIONS** – DIM – 0-10 volt dimming enabled with controls by others.

**EXPECTED LIFE** - Minimum 60,000 hours to 100,000 hours depending upon the ambient temperature of the installation location. See LSI web site for specific guidance.

**LEDS** - Available with select high-brightness LEDs in Cool White (5000K) or Neutral White (4000K) color temperature, 70 CRI.

**DISTRIBUTION/PERFORMANCE** - Type S (Standard Symmetric). Exceptional uniformity creates bright environment at lower light levels.

**HOUSING** - One-piece die-cast aluminum housing is smoothly contoured rectangular shape. Mounting hardware is stainless steel or electro-zinc plated steel. Housing and optical unit are sealed with extruded silicone gasket; supply conductors with molded EPDM bushing.

**OPTICAL UNIT** - Clear tempered optical-grade flat glass lens sealed to the aluminum optic housing creates an IP65 rated unit. Pressure stabilizing breather allows super-tight protection while preventing cycling from building up internal pressures and vacuums that can stress optical unit seals.

**WALL MOUNTING** - Galvanized-steel universal wall mounting plate easily mounts directly to 4" octagonal or square junction box. EPDM gasket is supplied to be installed between mounting plate and junction box, sealing junction box from entrance of water. Universal plate permits fixture to be mounted in uplighting (indoor only) or downlighting position.

**POLE MOUNTING** - XPMA (for square) or XPMAR (for round) allows mounting to poles in single and D180 configurations. Use with 3" reduced drilling pattern.

**ELECTRICAL** - Two-stage surge protection (including separate surge protection built into electronic driver) meets IEEE C62.41.2-2002, Location Category C. Available with universal voltage power supply 120-277VAC (50/60Hz input) or 347-480VAC.

**DRIVER** - Available in Low Wattage (LW) and High Output (HO) drive currents (Drive currents are factory programmed). Components are fully encased in potting material for moisture resistance. Driver complies with FCC standards. Driver can be easily accessed and removed. Optional 0-10V dimming available with controls by others.

**OPERATING TEMPERATURE** - -40°C to +50°C (-40°F to +122°F)

**FINISH** - Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling.

**WARRANTY** - LSI LED fixtures carry a limited 5-year warranty.

**PHOTOMETRICS** - Please visit our web site at [www.lsi-industries.com](http://www.lsi-industries.com) for detailed photometric data.

**SHIPPING WEIGHT (in carton)** - 27 lbs./12.2Kg

**LISTING** - UL listed to ANSI/UL1598, UL8750 and other U.S. and international safety standards. Suitable for wet locations in downlight position. For a list of the specific products in this series that are DLC listed, please consult the LED Lighting section of our website or the Design Lights website at [www.designlights.org](http://www.designlights.org).

This product, or selected versions of this product, meet the standards listed below. Please consult factory for your specific requirements.



Project Name \_\_\_\_\_ Fixture Type \_\_\_\_\_  
 Catalog # \_\_\_\_\_

07/28/16  
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# LED WALL SCONCE (PWM)

## LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: **PWM S LED HO CW UE WHT PCI 120**

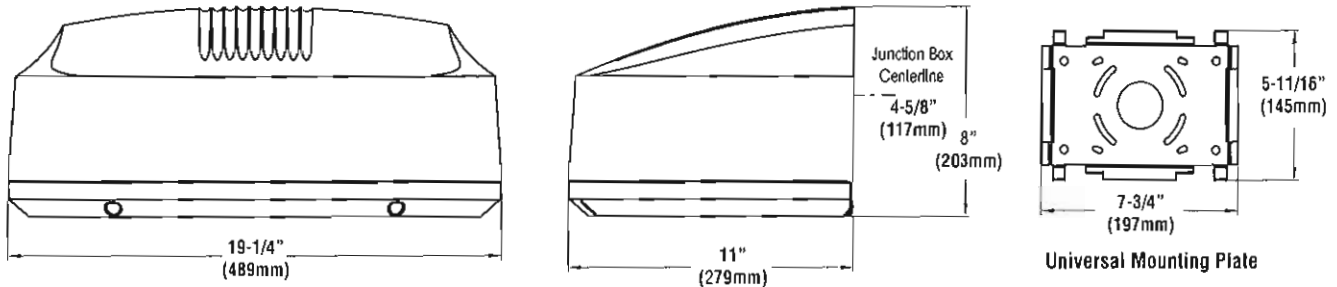
Prefix	Distribution	Light Source	Drive Current	Color Temperature	Input Voltage	Finish	Optional Controls	Optional Sensor/Options
PWM - LED Wall Sconce	S - Standard Symmetrical	LED	LW - Low Watt HO - High Output	CW - Cool White (5000K) NW - Neutral White (4000K)	UE - Universal Voltage (120-277)  347-480  120 <sup>1</sup>	BLK - Black BRZ - Bronze GPT - Graphite MSV - Metallic Silver PLP - Platinum Plus SVG - Satin Verde Green WHT - White	<b>Wireless Control System</b> <sup>2,3</sup> (blank) - None PCM - Platinum Control System PCMH - Host/Satellite Platinum Control System GCM - Gold Control System GCMH - Host/Satellite Gold Control System DIM - 0-10 volt dimming (required for satellite fixtures)  <b>Stand-Alone Control</b> (blank) - None DIM - 0-10 volt dimming (from external signal)	<b>Sensor</b> PCI120 - 120V Button-Type Photocell PCI208 - 208V Button-Type Photocell PCI240 - 240V Button-Type Photocell PCI277 - 277V Button-Type Photocell PCI347 - 347V Button-Type Photocell  <b>Options</b> XPMA - Pole Mounting Adaptor w/ Fixture Back Plate for Use with Square Poles <sup>4</sup> XPMAR4 - Pole Mounting Adaptor w/ Fixture Back Plate for Use with 4" O.D. Round Poles <sup>4</sup> XPMAR5 - Pole Mounting Adaptor w/ Fixture Back Plate for Use with 5" O.D. Round Poles <sup>4</sup>

ACCESSORY ORDERING INFORMATION <sup>2</sup> (Accessories are field installed)			
Description	Order Number	Description	Order Number
PWM Polycarbonate Shield	244657	DFK208, 240 - Double Fusing	DFK208,240 <sup>5</sup>
PWM SW BLK - Surface Wiring Box (Available in black only)	356915BLK	DFK48D - Double Fusing	DFK480 <sup>5</sup>
FK120 - Single Fusing	FK120 <sup>5</sup>	FK347 - Single Fusing	FK347 <sup>5</sup>
FK277 - Single Fusing	FK277 <sup>5</sup>		

### FOOTNOTES:

- 1- On Low Watt (LW) drive current, 120V only is DLC qualified. Specify 120 in place of UE.
- 2- For wireless controls information and accessories, see Controls section.
- 3- Requires a SiteManager and override switch.
- 4- Designed with 3" reduced drilling pattern. For S or D180 mounting configuration only.
- 5- Fusing to be installed in a compatible junction box supplied by contractor.

## DIMENSIONS



## BUG LISTING

### PWM - TYPE S

Drive Current	Color Temp.*	Lumens	Watts	LER	BUG Rating
HO	CW	5184	56	93	B2-U0-G1
	NW	4917	56	88	B2-U0-G1
SS	CW	1439	15	95	B1-U0-G0
	NW	1310	15	85	B1-U0-G0

\* Color Temperature: NW-4000K, CW-5000K



Project Name \_\_\_\_\_ Fixture Type \_\_\_\_\_  
Catalog # \_\_\_\_\_

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# LED GEN3 PARKING GARAGE LIGHT (XPG3)



US patent D603081 & D611188 & 7828456 and US & Int'l. patents pending

## SMARTTEC™ ENERGY SAVING FEATURES:

**THERMAL CONTROL** -LSI drivers feature integral sensor which reduces drive current, when ambient temperatures exceed rated temperature.

**OCCUPANCY SENSING (IMS)** - Optional internal passive infrared motion sensor activated switching of luminaire light levels. High level light is activated when automobile or passerby enters sensor target zone. High light level is increased to full bright in 1-2 seconds upon detection. Low light level (30% of maximum drive current) is activated when target zone is absent of motion activity for ~ 2 minutes. Upon inactivity, light level is gradually ramped down (10-15 sec.) to low level to allow eyes time to adjust. Two sensor detection optics are available. The wide optic has a coverage range of 40 feet diameter at mounting heights of 8 feet to 12 feet. The narrow optic has a coverage range of 20 feet diameter at a mounting height of 8 feet to 12 feet.

**DIMMING (DIM)** - Optional 0-10 volt dimming enabled, with controls.

**BI-LEVEL SWITCHING (BLS)** - Optional bi-level switching responds to external line voltage signal from separate controller or sensor, with low light level decreased to 30% maximum drive current.

**EXPECTED LIFE** - Minimum 60,000 hours to 100,000 hours depending upon the ambient temperature of the installation location. See LSI web site for specific guidance.

**LEDS** - Two LED array choices; 50 and 68. Each feature high-brightness LEDs in Cool White (5000K) or Neutral White (4000K) color temperature, 70 CRI.

**DRIVER CURRENT OPTIONS** - Available in 350mA, 450mA or 550mA drive currents.

**DISTRIBUTION/PERFORMANCE** - Ultra-high efficiency reflectors provide solid performance for typical spacings and heights, exceptional uniformity with vertical illumination and full cutoff. Ideal when maximum spacing is desired without sacrificing desired lumen levels. Meets RP20 recommendations while delivering unique control of distribution to minimize glare. Optional diffused lens available to reduce visibility of diodes.

**HOUSING/OPTICAL UNIT** - The XPG3 features a slim 7-1/8" profile. Housing is die-formed aluminum with a gasketed clear flat tempered glass lens providing a water-resistant seal. Weather-tight aluminum enclosure contains factory prewired driver to ensure no water entry and to eliminate need to open fixture completely. Optical unit is IP67 rated.

**MOUNTING** - Not intended for recessed mounting in enclosed ceilings. Standard mounting is rigid 3/4" pendant mount or direct surface mount to 4" (102mm) octagon box (box by others). Pendant and direct mount standard with 48" leads and 8" leads respectively. Direct mount features standard quick mount plate with elongated key hole slots to allow alignment of fixtures.

**ELECTRICAL** - Universal voltage power supply (120-277 VAC, 50/60 Hz). Two-stage surge protection (including separate surge protection built into electronic driver) meets IEEE C62.41.2-2002, Scenario 1, Location Category C. Emergency LED battery back-up/driver operates 10 LEDs for a minimum of 90 minutes when primary AC power failure occurs.

**DRIVER** - Proprietary, state-of-the-art SmartTec driver technology designed specifically for LSI LED light sources provides unsurpassed system efficiency. Driver will operate with input of 120V thru 277V (50/60 Hz). LSI components are fully encased in potting material for IP65 moisture resistance. Driver complies with IEC and FCC standards.

**OPERATING TEMPERATURE** - -40°C to +50°C (-40°F to +122°F).

**FINISH** - Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling.

**WARRANTY** - Limited 5-year warranty.

**PHOTOMETRICS** - Please visit our web site at [www.lsi-industries.com](http://www.lsi-industries.com) for detailed photometric data.

**SHIPPING WEIGHT** - Standard fixture 21 lbs. (9.5 kg). Fixtures with battery back-up 28 lbs. (13 kg)

**LISTING** - ETL listed to U.S. and International safety standards. Suitable for wet locations. For a list of the specific products in this series that are DLC listed, please consult the LED Lighting section of our website or the Design Lights website at [www.designlights.org](http://www.designlights.org).

## DOE LIGHTING FACTS

Department of Energy has verified representative product test data and results in accordance with its Lighting Facts Program. Visit [www.lightingfacts.com](http://www.lightingfacts.com) for specific catalog strings.

LIGHT OUTPUT - XPG3				
	# of LEDs	Lumens (Nominal)		Watts
		Type 5	Type S	
Cool White	350 mA	50	4718	56
		68	5814	75
	450 mA	50	5743	73
		68	7082	98
550 mA	50	6656	90	
	68	8397	125	
Neutral White	350 mA	50	4245	56
		68	5695	75
	450 mA	50	5137	73
		68	6919	98
	550 mA	50	5950	90
		68	7875	125

LED Chips are frequently updated therefore values may increase.

This product, or selected versions of this product, meet the standards listed below. Please consult factory for your specific requirements.



Project Name \_\_\_\_\_ Fixture Type \_\_\_\_\_  
 Catalog # \_\_\_\_\_

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# LED GEN3 PARKING GARAGE LIGHT (XPG3)

## LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: **XPG3P 5W LED 68 450 CW UE WHT DIM**

Prefix	Distribution	Light Source	# of LEDs	Drive Current	Color Temperature	Input Voltage	Finish	Optional Controls	Optional Sensors/Options
XPG3D Direct Mount	5W - Type 5 Wide S - Symmetric	LED	50 68	350 - 350mA 450 - 450mA 550 - 550mA	CW - Cool White (5000K) NW - Neutral White (4000K)	UE - Universal Electronic (120-277)  347 - 347 volt  480 - 480 volt	WHT - White BLK - Black MSV - Metallic Silver	<u>Wireless Control System</u> <sup>2,3</sup> (blank) - None PCM - Platinum Control System PCMH - Host / Satellite Platinum Control System GCM - Gold Control System GCMH - Host / Satellite Gold Control System <sup>4</sup> DIM - 0-10 volt dimming (required for satellite fixtures)  <u>Stand-Alone Control</u> (blank) - None DIM <sup>5</sup> - 0-10V Dimming (from external signal) BLS <sup>6</sup> - Bi-level Switching (from external signal - required 120-277v controls system voltage)	<u>Sensor</u> IMS - Integral Motion Sensor <sup>7,8</sup>  <u>Options</u> BB - Battery Backup <sup>9</sup> CWBB - Cold Weather BB <sup>9</sup> DFL - Diffused Lens <sup>10</sup>
XPG3P <sup>1</sup> Pendant Mount									

### ACCESSORY ORDERING INFORMATION

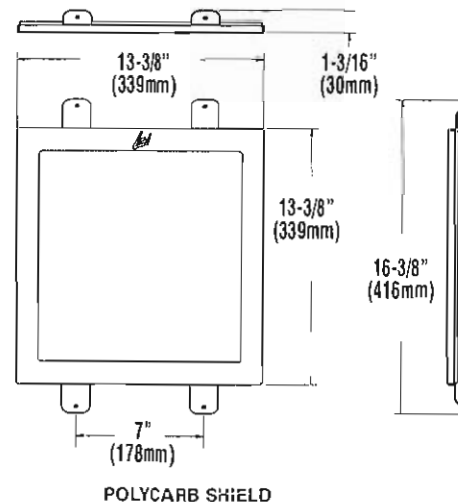
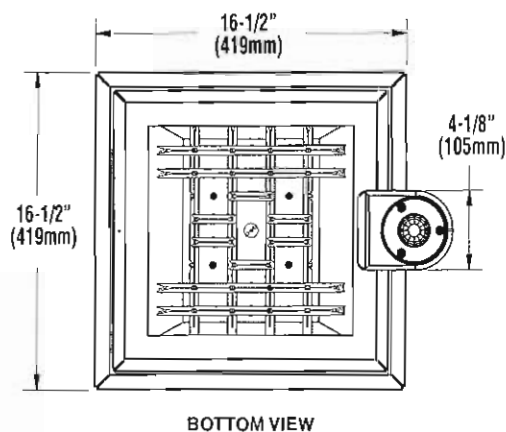
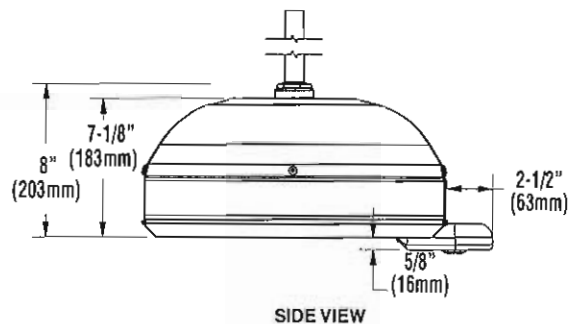
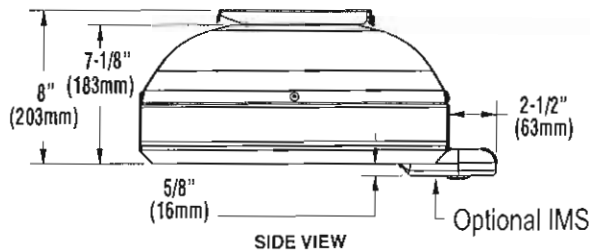
(Accessories are field installed)

Description	Order Number	Description	Order Number
XPG3 Bird Guard	XPG3 BG	RPSB120 - WL Remote Box with 120V External Photocell	C/F <sup>11</sup>
Polycarb Shield	XPG PCS <sup>8</sup>	RPSB208-277 - WL Remote Box with 208-277V External Photocell	C/F <sup>11</sup>
ROSB120 - WL Remote Box with 120V Occupancy Sensor	C/F <sup>11</sup>		
ROSB277 - WL Remote Box with 277V Occupancy Sensor	C/F <sup>11</sup>		

### FOOTNOTES:

- Pendant stems must be ordered separately; specify length.
- For wireless controls information and accessories, see Controls section.
- Requires a SiteManager and override switch. Not compatible with BLS or IMS option.
- Consult factory for available configurations.
- Not compatible with IMS or BLS option.
- Not compatible with wireless controls system, DIM or IMS option.
- Not compatible with wireless controls system, DIM or BLS option.
- Polycarbonate Shield not available with IMS
- Battery Backup & cold weather battery backup available in UE only. Not available with PCM or GCM wireless controls.
- Diffused lens reduces light output. Consult factory.
- Includes PCM or GCM. To be used in conjunction with PCM or GCM options in the fixture. Consult factory.

### DIMENSIONS



Project Name \_\_\_\_\_ Fixture Type \_\_\_\_\_  
 Catalog # \_\_\_\_\_

# LED AREA LIGHTS - LSI SLICE SMALL (XLCS)



US & Int'l. patents pending

**SMARTTEC™** - LSI drivers feature integral sensor which reduces drive current, when ambient temperatures exceed rated temperature.

**ENERGY SAVING CONTROL OPTION - DIM** - 0-10 volt dimming enabled with controls by others.

**EXPECTED LIFE** - Minimum 60,000 hours to 100,000 hours depending upon the ambient temperature of the installation location. See LSI web site for specific guidance.

**LEDS** - Select high-brightness LEDs in Cool White (5000K), or Neutral White (4000K) color temperature, 70 CRI.

**DISTRIBUTION/PERFORMANCE** - Types 3, FT, 5 and enhanced 5E and FTE. Exceptional uniformity creates bright environment at lower light levels. Internal Louver (IL) option available for improved backlight control without sacrificing street side performance for FT distribution.

**HOUSING** - One-piece, die-formed aluminum housing contains factory prewired driver. Wiring access door (with safety lanyard) located underneath.

**OPTICAL UNIT** - Clear tempered flat glass lens permanently sealed to weather-tight aluminum optic frame creates an IP65 rated optical unit (includes pressure-stabilizing breather).

**MOUNTING** - Tapered rear design allows fixtures to be mounted in 90° and 120° configurations without the need for extension arms. Use with 3" reduced drilling pattern. A round pole plate is required for mounting to round poles. Wall mount available by ordering wall mounting bracket (BKS-XBO-WM-\* -CLR). Proprietary pole quick mount accessories available with horizontal mounting or fixed 15° angled mounting (PQMH-KIT-CLR and PQM15-KIT-CLR) for mounting to square poles. See Accessory Ordering Information chart for all brackets.

**ELECTRICAL** - Two-stage surge protection (including separate surge protection built into electronic driver) meets IEEE C62.41.2-2002, Location Category C. Available with universal voltage power supply 120-277 VAC (50/60Hz input), and 347-480 VAC. Optional button-type photocells (PCI) are available in 120, 208, 240, 277 or 347 volt (supply voltage must be specified).

**DRIVER** - Available in SS (Super Saver) and HO (High Output) drive currents. Components are fully encased in potting material for moisture resistance. Driver complies with FCC standards. Driver and key electronic components can easily be accessed.

**OPERATING TEMPERATURE** - -40°C to +50°C (-40°F to +122°F)

**FINISH** - Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Available in black, bronze and white. Other standard LSI finishes available. Consult factory.

**WARRANTY** - LSI LED fixtures carry a limited 5-year warranty.

**PHOTOMETRICS** - Please visit our web site at [www.lsi-industries.com](http://www.lsi-industries.com) for detailed photometric data.

**SHIPPING WEIGHT (in carton)** - One fixture: 17.5 lbs. (7.9 kg). Packed two per carton: 30 lbs. (13.6 kg).

**LISTING** - UL listed to U.S. and international safety standards. Suitable for wet locations. For a list of the specific products in this series that are DLC listed, please consult the LED Lighting section of our website or the Design Lights website at [www.designlights.org](http://www.designlights.org).

## DOE LIGHTING FACTS

Department of Energy has verified representative product test data and results in accordance with its Lighting Facts Program. Visit [www.lightingfacts.com](http://www.lightingfacts.com) for specific catalog strings.

LIGHT OUTPUT - XLCS							
		Lumens (Nominal)				TypeFTE	Watts (Nominal)
		Type 3	Type FT	Type 5	Type5E		
Cool White	SS	10100	11400	11400	8200	7800	97
	HO	14000	15500	15700	11600	10600	140
Neutral White	SS	9700	10400	10800	7900	7500	97
	HO	13400	14700	15200	11000	10500	140

LED Chips are frequently updated therefore values may increase.



This product, or selected versions of this product, meet the standards listed below. Please consult factory for your specific requirements.



Fixtures comply with ANSI C136.31-2010 American National Standard for Roadway Lighting Equipment - Luminaire Vibration 1.5G requirements.



Project Name \_\_\_\_\_ Fixture Type \_\_\_\_\_  
 Catalog # \_\_\_\_\_

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# LED AREA LIGHTS - LSI SLICE SMALL (XLCS)

## LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: **XLCS S LED SS 50 UE BLK PCR**

Prefix	Distribution	Light Source	Drive Current	Color Temperature	Input Voltage	Finish	Options
XLCS	3 - Type III 5 - Type V FT - Forward Throw SE - Type V Enhanced FTE - Forward Throw Enhanced	LED	SS - Super Saver HD - High Output	50 - 5000K 40 - 4000K	UE - Universal Voltage (120-277V)  347-480 Universal Voltage (347-480V)	BLK - Black BRZ - Bronze WHT - White	DIM - 0-10V Dimming (from external signal) Button Type Photocells PCI120 - 120V PCI208-277V - 208-277V PCI347 - 347V IL - Internal Louver (available with FT distribution only) PCR 7P - Photoelectric Control Receptacle <sup>3</sup>

### LUMINAIRE EPA CHART - PLCS

Horizontal Mounting Only	
Single	0.4
D180°	0.8
D90°	0.6
T90°	1.4
TN120°	1.4
Q90°	1.6

Note: House Side Shield adds to fixture EPA. Consult Factory.

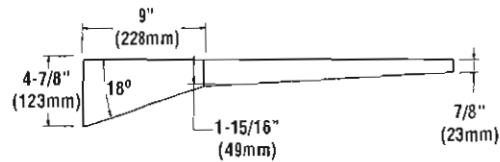
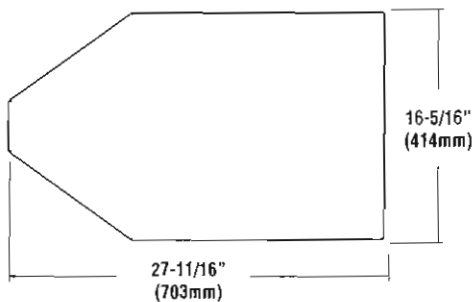
### ACCESSORY ORDERING INFORMATION (Accessories are field installed)

Description	Order Number	Description	
8KS-X80-WM-* - CLR Wall Mount Bracket	382132CLR	DFK208, 240 Double Fusing (208V, 240V)	DFK208, 240 <sup>2</sup>
XLCS-3/FT-HSS (Black only)	603162BLK <sup>1</sup>	DFK480 Double Fusing (480V)	DFK480 <sup>2</sup>
X3RPP Round Pole Plate for 3' RTP Poles	408273CLR	FK347 Single Fusing (347V)	FK347 <sup>2</sup>
X4RPP Round Pole Plate for 4' Poles	379967CLR	PQMH-KIT-CLR Square Pole Quick Mount Horizontal Bracket	582328CLR
X5RPP Round Pole Plate for 5' Poles	379968CLR	PQM15-KIT-CLR Square Pole Quick Mount Bracket w/fixed 15° Angle	582329CLR
FK120 Single Fusing (120V)	FK120 <sup>2</sup>	ALSC UNV TL5 - AirLink 5 Pin Twist Lock Controller	661409
FK120 Single Fusing (120V)FK	FK277 <sup>2</sup>	ALSC UNV TL7 - AirLink 7 Pin Twist Lock Controller	661410

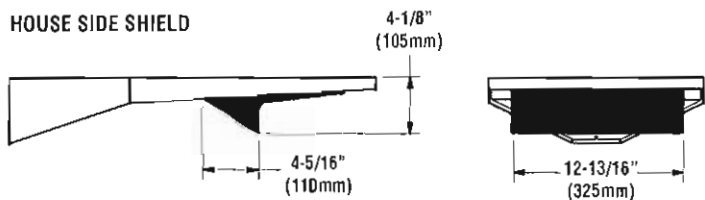
#### FOOTNOTES

- 1 - House Side Shields add to fixture EPA. Consult factory.
- 2 - Fusing must be located in the hand hole of pole.
- 3 - Photocell must be ordered separately. 7 pin standard. See Accessories.

### DIMENSIONS



#### HOUSE SIDE SHIELD



Project Name \_\_\_\_\_ Fixture Type \_\_\_\_\_  
Catalog # \_\_\_\_\_

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# LED AREA LIGHTS - LSI SLICE SMALL (XLCS)

## BUG LISTING

### XLCS - Type 3

Drive Current	Color Temp.*	Lumens	Watts	LER	BUG Rating
HO	CW	14,020	143	98	B3-U0-G2
	CW-HSS	8815	146	60	B2-U0-G2
	NW	13,421	143	94	B3-U0-G2
SS	CW	10,126	97	105	B3-U0-G2
	NW	9719	97	101	B3-U0-G2

### XLCS - Type 5E

Drive Current	Color Temp.*	Lumens	Watts	LER	BUG Rating
HO	CW	11,581	146	79	B4-U0-G2
	NW	10,996	146	75	B4-U0-G2
SS	CW	8202	96	85	B3-U0-G2
	NW	7908	96	82	B3-U0-G2

### XLCS - Type 5

Drive Current	Color Temp.*	Lumens	Watts	LER	BUG Rating
HO	CW	15,674	138	113	B4-U0-G2
	NW	15,184	146	104	B4-U0-G2
SS	CW	11,449	96	119	B3-U0-G2
	NW	10,762	96	112	B3-U0-G1

### XLCS - Type FTE

Drive Current	Color Temp.*	Lumens	Watts	LER	BUG Rating
HO	CW	10585	141	75	B2-U0-G2
	CW-HSS	7810	146	53	B1-U0-G2
	NW	10,499	146	72	B2-U0-G2
	NW-HSS	7721	146	53	B1-U0-G2
SS	CW	7752	96	81	B1-U0-G2
	CW-HSS	5676	96	59	B1-U0-G2
	NW	7493	96	78	B1-U0-G2
	NW-HSS	5517	96	57	B1-U0-G2

### XLCS - Type FT

Drive Current	Color Temp.*	Lumens	Watts	LER	BUG Rating
HO	CW	15,535	139	112	B3-U0-G2
	CW-HSS	12,489	139	90	B1-U0-G2
	CW-IL	14,384	138	104	B3-U0-G2
	NW	14,694	146	100	B3-U0-G2
	NW-HSS	10,499	144	73	B1-U0-G2
	NW-IL	12,763	144	89	B2-U0-G2
SS	CW	11,383	96	118	B2-U0-G2
	CW-HSS	9099	96	95	B1-U0-G2
	CW-IL	10,509	96	109	B2-U0-G2
	NW	10,410	96	108	B2-U0-G2
	NW-HSS	7699	99	78	B1-U0-G2
	NW-IL	9328	98	95	B2-U0-G2

\* Color Temperature: NW-4000K, CW-5000K





Architecture Planning Construction Management  
www.osmarchitecture.com



April 23, 2018

Ms. Cassie Harashe, AICP  
Project Planner  
City of Chesterfield  
690 Chesterfield Parkway West  
Chesterfield, Missouri, 63017

RE: Brite WorX, 14905 Clayton Road

Dear Cassie,

Per your request, I am submitting this Architect's Statement of Design for review and comment.

Section C:

- (1) The submittal provides a site relationship with maximum buffer to surrounding properties while also maintaining a higher than minimum street frontage buffer providing a gentle transition from street to the development.
- (2) The submittal provides safe movement of all types throughout the site with separate and distinct pathways. The orientation of the building on site takes advantage of solar angles and creates pockets of visual interest throughout the site experience. Parking is primarily oriented away from the intersection view to the side and rear of the development.
- (3) The submittal uses the existing topography, as much as practical, to maintain the existing character. Topographical changes required complement the existing topography.
- (4) The submittal attempts use topography changes to minimize retaining wall use. Where retaining walls are proposed, they are intended to be low (less than 4') and used to protect existing mature trees to maintain a landscape buffer between the site and neighboring buildings.

Section D:

- (1) The submittal shares building scale compatibility and elements with the Walgreens opposite the site at the larger element and with the Petro-Mart and office building at the intersection at the smaller element. Human scale is achieved through use of recognizable scale materials and horizontal banding to reduce the visual scale of the vertical elements. Generic scale is achieved by site orientation and building massing to enhance the rhythm along the street.
- (2) The submittal relies on articulated vertical elements (towers) to physically and visually contrast the main building's low, linear form. Roof top screening is integral to the design elements, in contrast to the surrounding properties. Overhangs and tower element offsets at the entry and exit provide a transition into the facility. Highly efficient lighting combined with the building orientation with respect to the solar angles provides better energy efficiency.

- (3) The submittal's use of different and compatible materials provides visual interest, reduces visual scale and are complimentary to the adjacent properties visible from the intersection. All materials proposed are durable to reduce maintenance requirements. Contrasting pavement color is incorporated into the proposal.
- (4) The submittal preserves many existing mature trees, primarily along the buffer/perimeter of the site. The additional perimeter landscaping follows the rhythm and theme of the existing. Landscape screening has been provided along the perimeter of the site and screening is provided internally to the landscaping to provide a visual barrier from off site. The internal screening material is masonry and complimentary to the building material. Building landscaping is grouped in clusters, primarily shrubs, to provide visual interest and soften the hard edges at ground level. Additional individual trees are proposed to add points of interest. Street landscaping is also clustered and varied to provide interest and focal points along the street. Parking and drive landscaping is fully protected from vehicular and pedestrian traffic. Trash enclosure materials are complimentary to the building materials and also screened by landscaping.
- (5) The signage will be reviewed under a separate process to comply with City requirements.
- (6) The lighting will be reviewed under a separate process to comply with City requirements.

I believe this submittal meets the Chesterfield Architectural Guidelines for the reasons stated above. If you have any questions, please call.

Sincerely,



Stewart W. MacGregor  
President/CEO  
OSM, Inc.



PRELIM

*Car Washery*

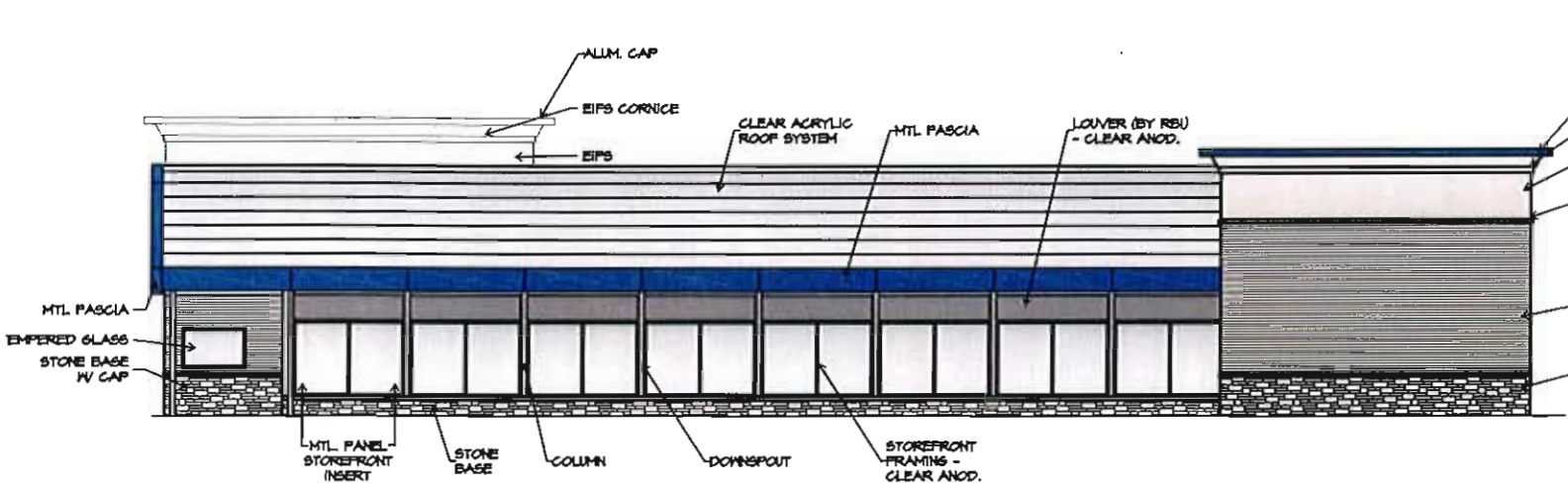
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 CAR WASH  
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 CHESTERFIELD, MISSOURI 63077



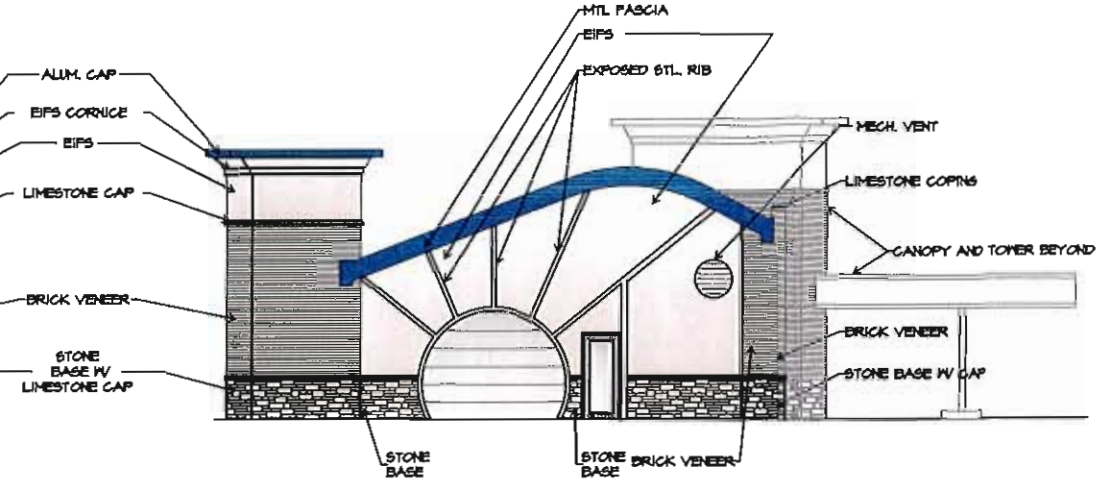
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 City of Chesterfield  
 Department of Public Services

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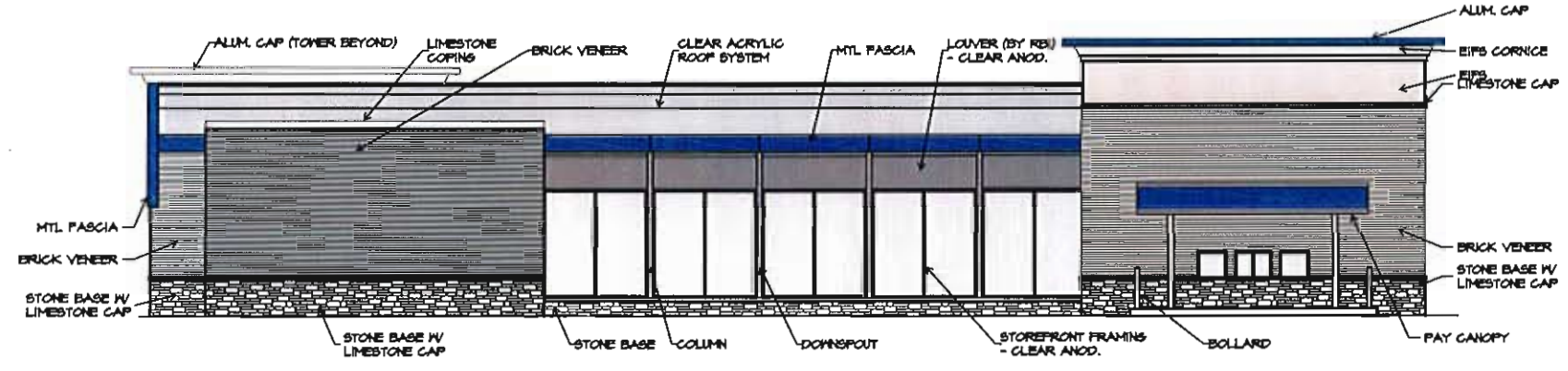
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 EXTERIOR ELEVATIONS



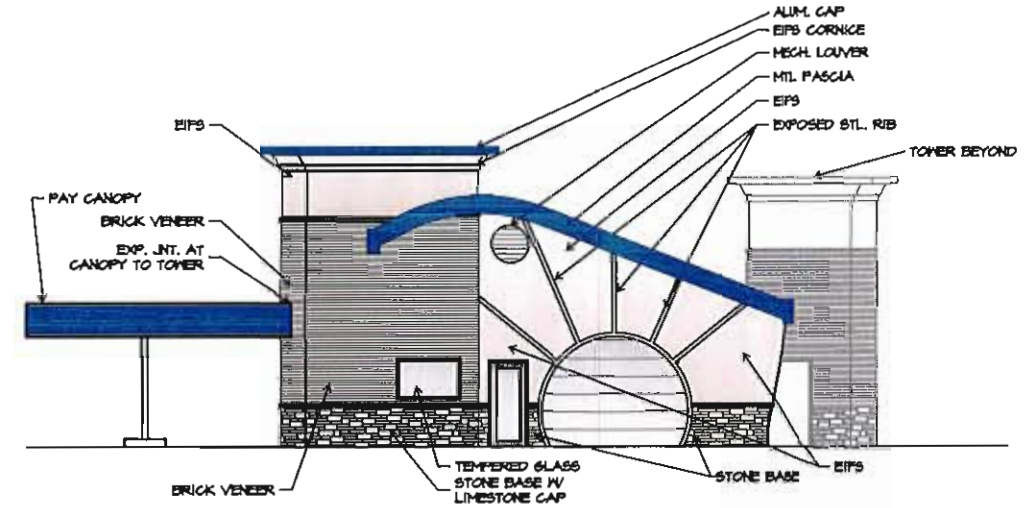
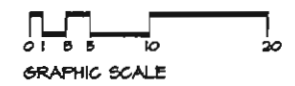
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 SCALE: 1/8" = 1'-0"



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

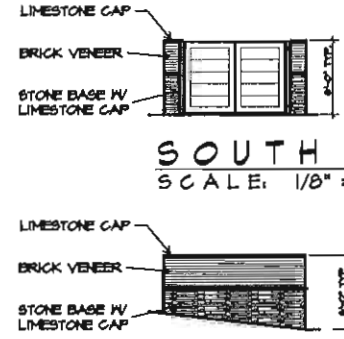


**NORTH ELEVATION**  
 SCALE: 1/8" = 1'-0"

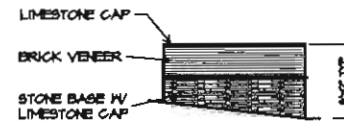


**WEST ELEVATION**  
 SCALE: 1/8" = 1'-0"

EXTERIOR FINISH LEGEND				
STONE BASE: ELDORADO STONE STYLE: EUROPEAN LEDGE COLOR: LINEN (OR EQUAL)	Limestone SILL: INDIANA Limestone STYLE: ROCK FACED CUT COLOR: OFF WHITE (OR EQUAL)	EIFS: DRYVIT STYLE: DRYVIT PLUS, SANDBLAST TEXTURE COLOR: #111 PRAIRIE CLAY (OR EQUAL)	ALUMINUM STOREFRONT, KAMNEER COLOR: CLEAR ANODIZED ALUMINUM FINISH (OR EQUAL)	PREFINISHED MTL. FASCIA, REI COLOR: PANTONE 25, BLUE (OR EQUAL)
BRICK VENEER: MERIDIAN BRICK STYLE: CANADA ARCHITECTURAL SERIES COLOR: ADELAIDE SMOOTH IRONSPOT MORTAR TO MATCH BRICK (OR EQUAL)	Limestone CAP/COPING: INDIANA Limestone STYLE: SMOOTH FACED CUT COLOR: OFF WHITE (OR EQUAL)	TUNNEL ROOF, ACRYLIC STYLE: CLEAR (OR EQUAL)	PREFINISHED MTL. COPING: PETERSON COLOR: PANTONE 25, BLUE (OR EQUAL)	



**SOUTH ELEVATION TRASH**  
 SCALE: 1/8" = 1'-0"



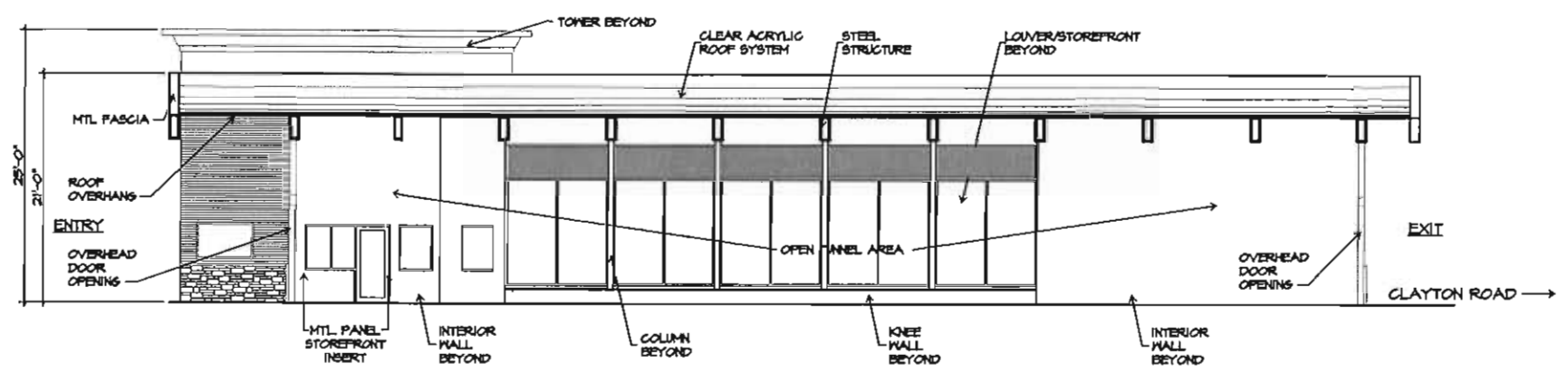
**EAST-WEST ELEVATION TRASH**  
 SCALE: 1/8" = 1'-0"

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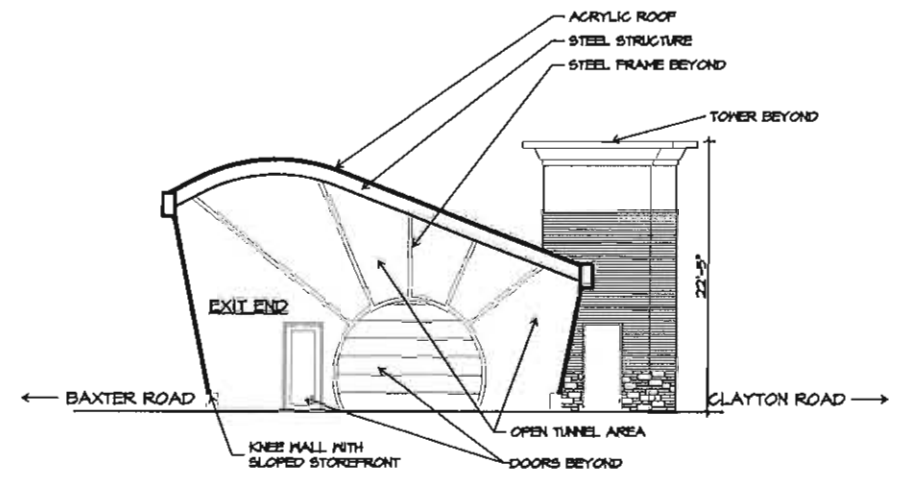
PRELIM

*Car Washery*

**BRITE WORX**  
 CAR WASH  
ARCHITECTURAL PARTS



SECTION LOOKING NORTH  
 SCALE: 1/8" = 1'-0"



SECTION LOOKING EAST  
 SCALE: 1/8" = 1'-0"

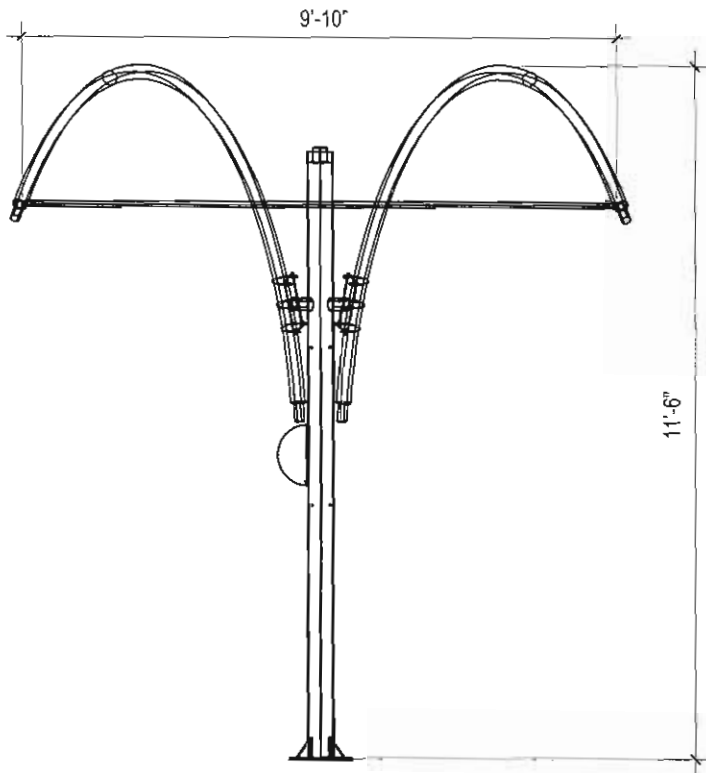


PROJECT NUMBER: 1706  
 DATE: 11-30-17  
 DRAWN BY: JVP  
 CHECKED BY: SWM  
 REVISION: 4-27-18

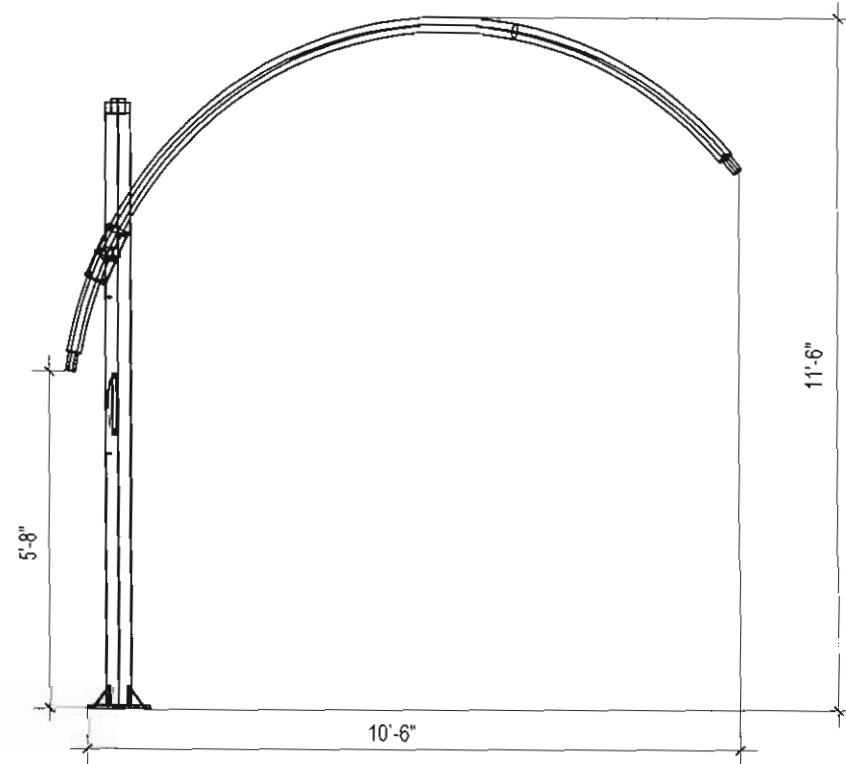
**A5.3**  
**BUILDING SECTIONS**

# VACUUM: ELEVATIONS

Revised January 2017

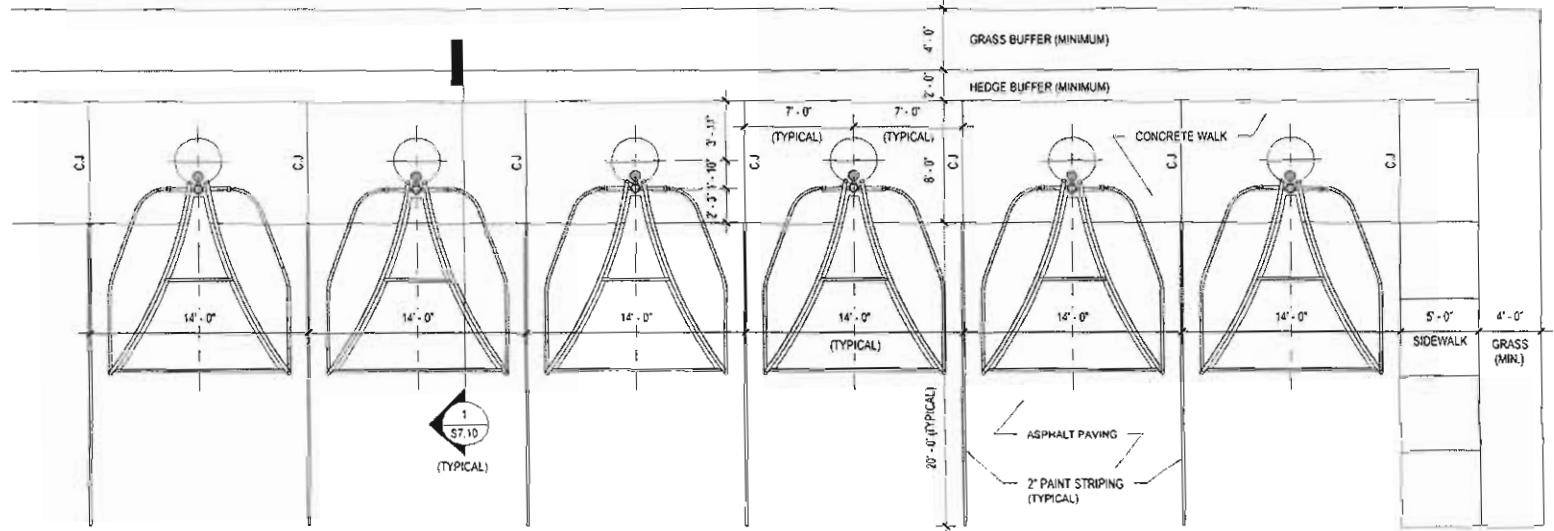


FRONT ELEVATION



SIDE ELEVATION





NUMBER OF VACUUM SPACES VARIES  
 SEE SPECIFIC PROJECT REQUIREMENTS.

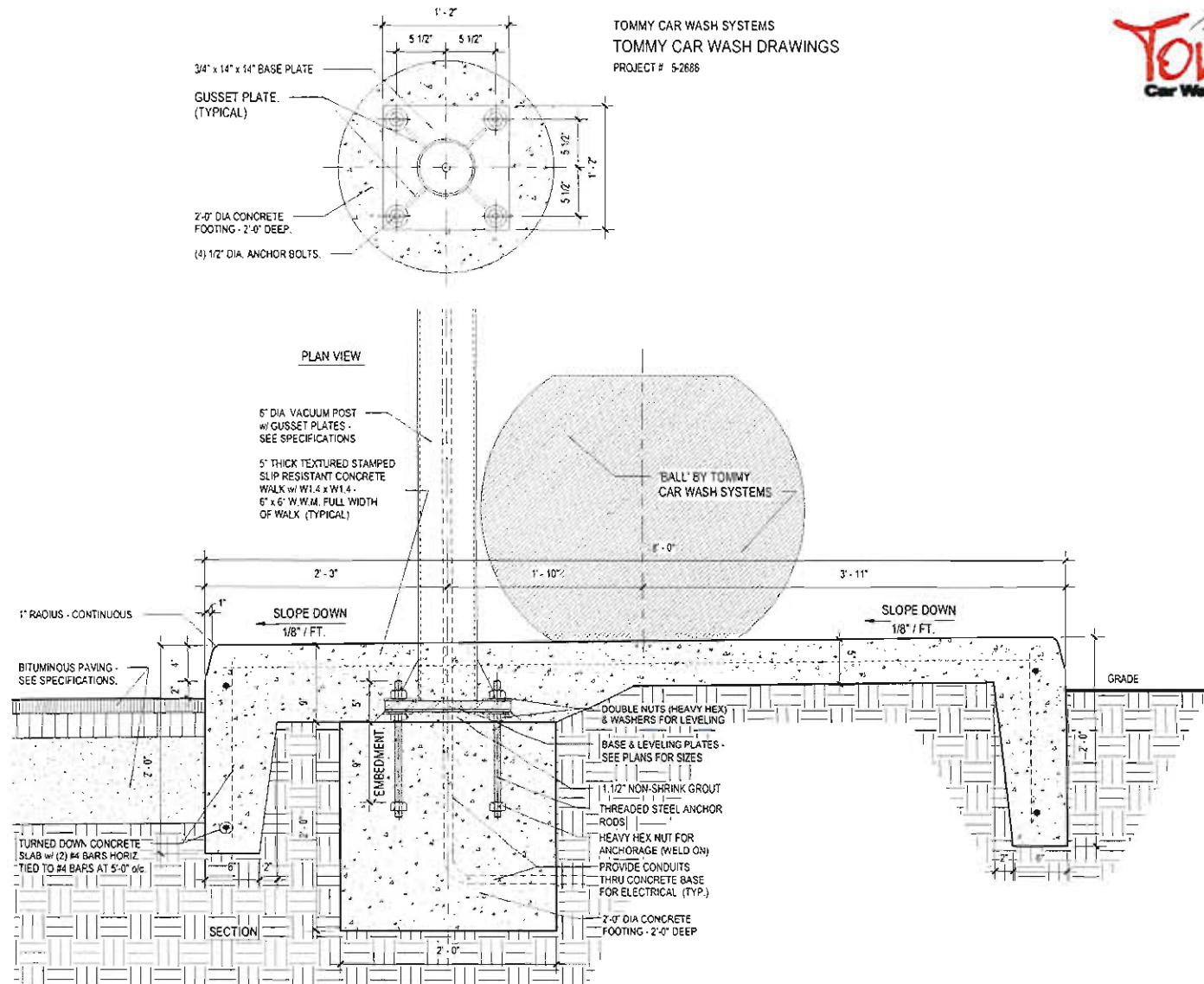
VACUUM / SIDEWALK PLAN

1/8" = 1'-0"





TOMMY CAR WASH SYSTEMS  
 TOMMY CAR WASH DRAWINGS  
 PROJECT # 5-2686



1 VACUUM BASE & CURB DETAIL  
 1" = 1'-0"

DRAWING #: S7.10  
 DATE: 02/21/13

SITE ELEMENT EXAMPLES

RETAINING WALL



ARTISAN FENCE



TRASH ENCLOSURE



ARCHITECTURAL  
BUILDING MATERIALS

Chesterfield Brite Worx Materials



Dryvit, 111 Prairie Clay

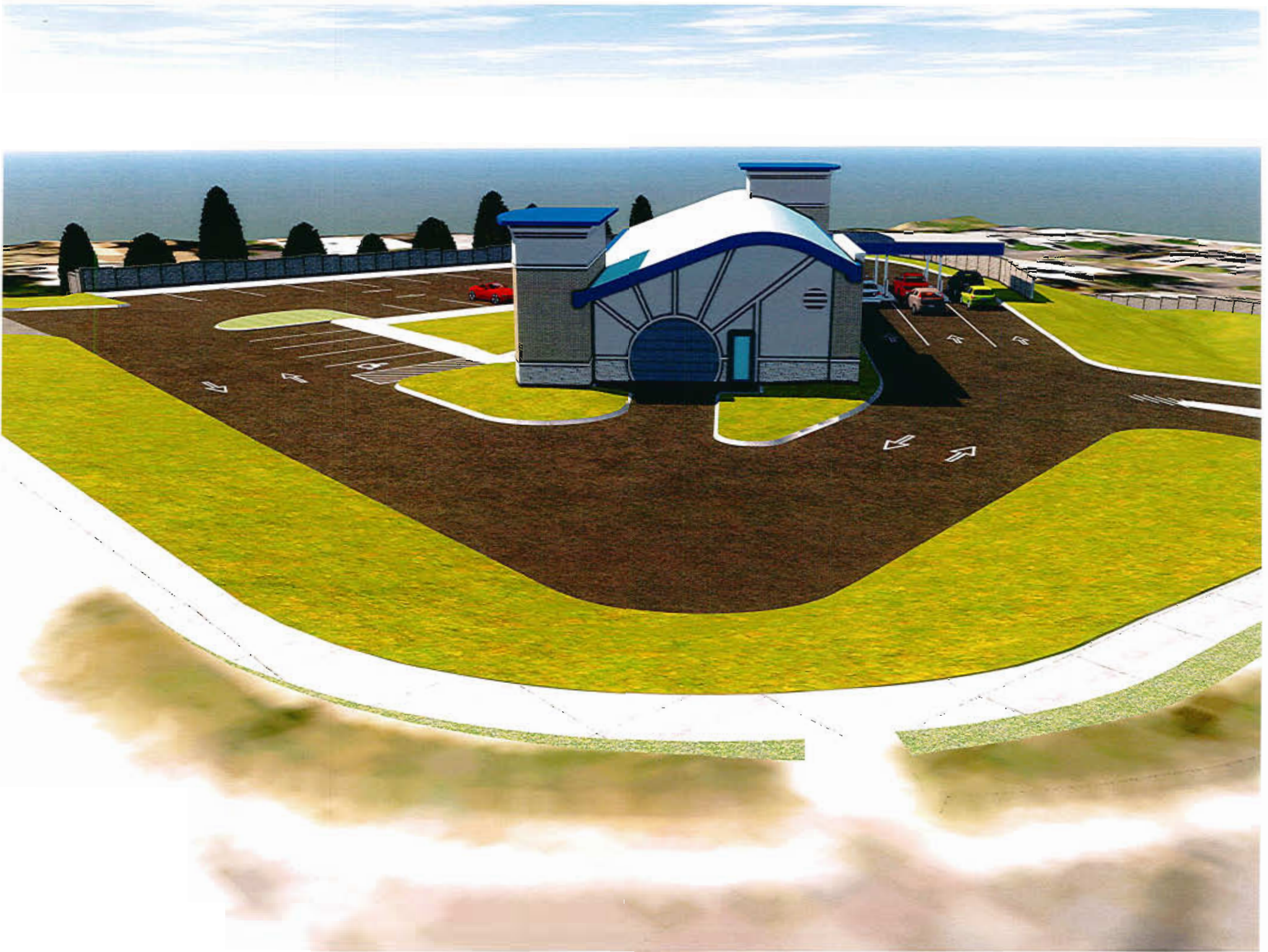


Meridian Brick, Canada Architectural Series, Adelaide Smooth Ironspot



Eldorado Stone, European Ledge, Linen



















Cassandra Harashe

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Subject: FW: Briteworx Carwash

From: Debbie Berger [mailto:  
Sent: Wednesday, May 16, 2018 4:33 PM  
To: Barbara McGuinness <BMcGuinness@chesterfield.mo.us>; Dan Hurt <DHurt@chesterfield.mo.us>; Cassandra Harashe <CHarashe@chesterfield.mo.us>  
Cc: Robert Goldsmith < >  
Subject: Re: Briteworx Carwash

Cassie, Chesterfield City Council

My wife and I attended the architectural review meeting Thursday May 10 and witnessed the presentation by the Wallis group for the Briteworx carwash.

We have been part of almost every meeting as this has progressed and we were disappointed in what the final renderings offered.

From the very first meeting we had with the Wallis Company we were led to believe this Briteworx Carwash would look like the carwash on Lindbergh road. We visited it several times and thought it was too garish for our neighborhood. Several meetings later where we had residents and councilmen they told us when asked about the architecture that they had no idea what this new Briteworx would look like. They indicated they would build it to fit our neighborhood. We assumed they would be true to their word and tone it down. They even said they would try to make it look like the strip mall at Clayton and Henry roads. But It basically looks exactly like the Briteworx on Lindbergh Blvd.

All along it has been our hope that if this was to go through, at least it would be designed in such a way that it would blend into the neighborhood. Two sides of the carwash abut to residential areas, and the other commercial businesses

on the corners are all neutral structures.

Their presentation did address some of the issues and included earth tone brick and stone which fit into the area. The amount of stone they are using is very minimal. We are concerned about the blue. It really needs to be eliminated.

We had made it clear to Wallis that the bright blue trim needed to be reduced or eliminated completely, but we see it is still predominate in the rendering.

This might be needed to attract attention had this been on Lindbergh or Manchester Road, but not on Clayton and Baxter. Look at the WaterWay Wash on Clayton and Woodsmill, it is brick with very little accent colors.

We had hoped that the only blue would be part of the signage on the property.

Speaking of signage, we did not see where they presented anything on signage. We would hope that the architectural committee would require that the signage be presented for review.

If present and past behavior is any indication of how the Wallis Company will treat this property we have to make certain they start from the beginning with an aesthetically pleasing building. You only have to look at how poorly the Wallis Company has maintained the Mobil station to understand our concerns are serious.

Respectfully,

Dean and Debbie Berger

Cassandra Harashe

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Subject: FW: Letter of concern  
Attachments: Article for West County Magazine.docx  
Importance: High

From: Richard Goldbaum [mailto:]  
Sent: Tuesday, May 22, 2018 3:42 PM  
To: Michael Moore <MMoore@chesterfield.mo.us>; Barbara McGuinness <BMcGuinness@chesterfield.mo.us>; Dan Hurt <DHurt@chesterfield.mo.us>  
Cc: Cassandra Harashe <CHarashe@chesterfield.mo.us>; 'Debbie Berger' <>; Bob Goldsmith <>  
Subject: Letter of concern  
Importance: High

The Dan Hurt, Michael Moore and Barbara McGuinness,  
As a residents of Woodfield subdivision, we have made it our responsibility to stay informed about the proposed changes to the Baxter and Clayton property which is now a Mobil station. The proposed car wash has been a point of concern for Woodfield residents for a long time. We and many of our neighbors have spent many hours going to meetings related to the Wallis Company's efforts to build a Briteworx Carwash on that corner. With the outstanding help from our City Councilmen, Dan Hurt and Randy Logan, many substantial changes were finally made to the first proposal.

Now it has come to our attention that significant architectural changes that we thought had been agreed to are not reflected in the proposed architectural renderings for the project. Specifically, we are concerned that the proposed structure will be totally out of context to the architectural integrity of Clayton Rd. As we mentioned in our letter to the editor of the West County Magazine, Clayton Rd. is an iconic treasure in West St. Louis County. A trip from 141 to Clarkson Rd. takes one through both commercial and residential neighborhoods. Churches and schools are also proudly positioned along that prestigious roadway. There are even other car washes on that stretch of Clayton Rd. They easily blend into the environment, to a point that some drive by them not even realizing they are there. All we are asking is that Briteworx be designed to complement the Clayton Rd. architectural culture.

Please require that they reduce, if not eliminate, the gaudy bright blue trim. Add more brick similar to those used in the commercial buildings on the south west corner of Clayton and Henry. The rendering of the Clayton and Baxter Briteworx does not reflect what the signage will look like and where it will be located. That is an important factor that needs your review.

We thank you for your consideration and commitment to keeping Chesterfield and Clayton Rd a place we can all be proud of.

Sincerely,

**Dick & Jo Ann**

Richard and Jo Ann Goldbaum  
2371 Baxton Way  
Chesterfield, MO 63017