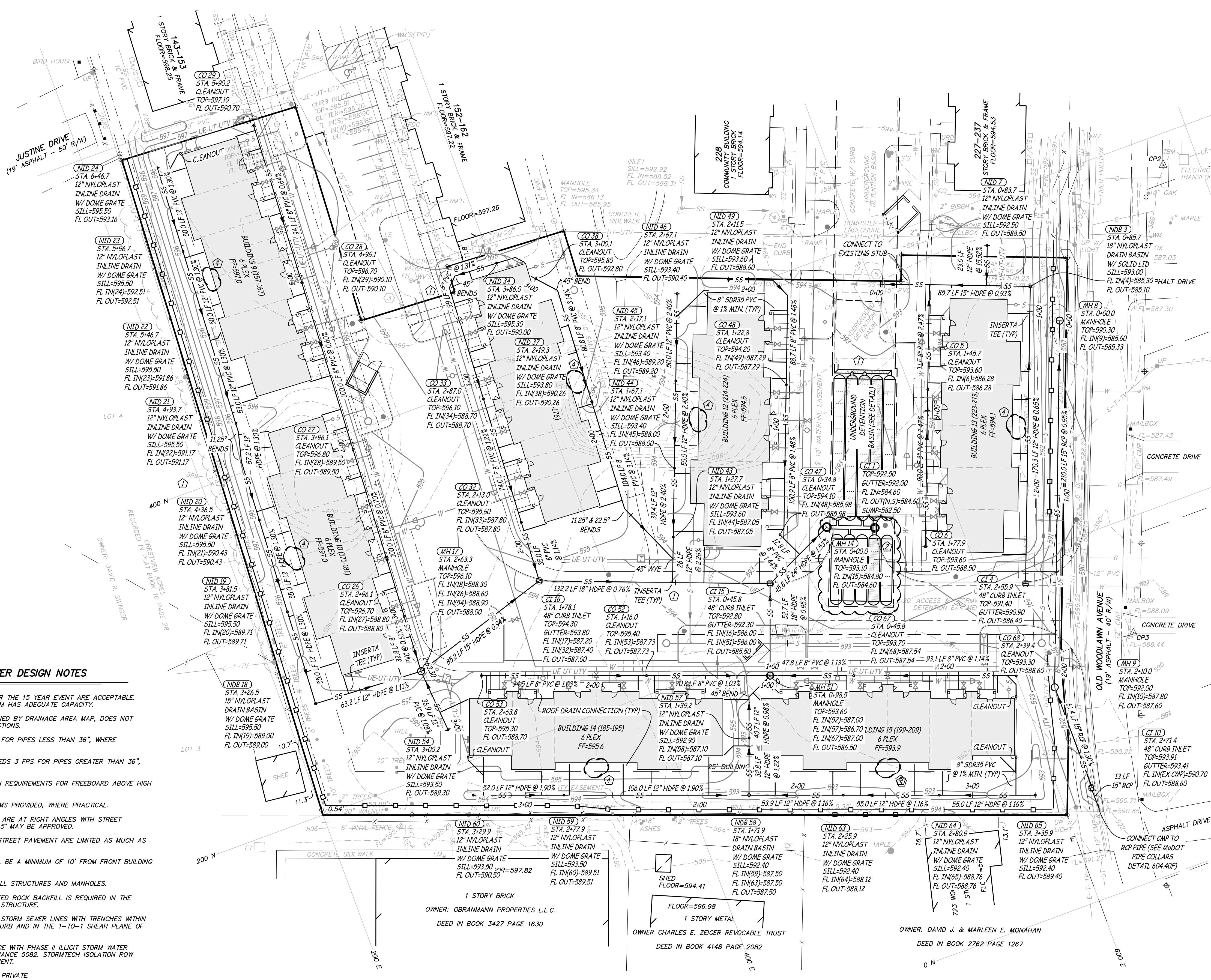
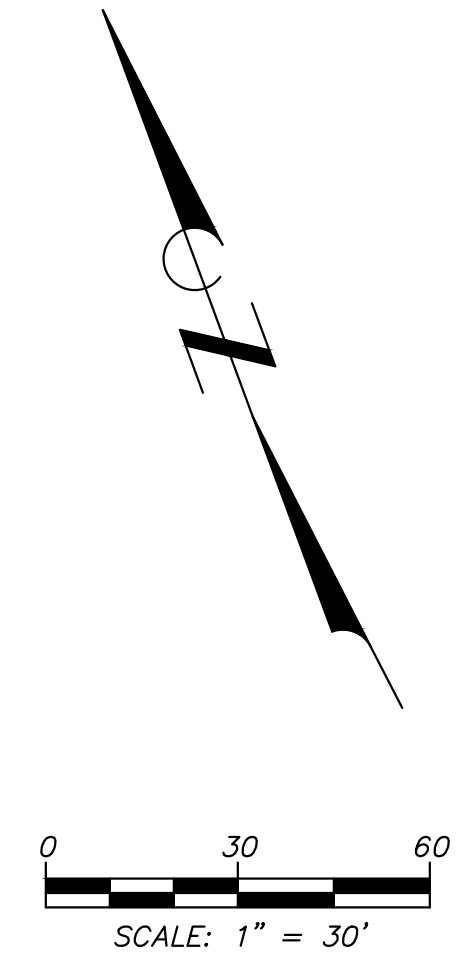


Engineering Surveys and Services
 Consulting Engineers, Scientists, and Land Surveyors
 Analytical and Material Laboratories
 1113 Ely Street, Columbia, Missouri 65201
 573-449-2846 - www.ess-inc.com
 Other Offices:
 Jefferson City, Missouri - Sedalia, Missouri
 Missouri Engineering Corporation # 200400518

WOODBURY PLACE II
 721 WOODLAWN AVENUE
 OFALLON, ST. CHARLES COUNTY, MISSOURI



- 1 INLET
SILL=596.46
FL IN=590.07
FL OUT=589.85
- 2 INLET
SILL=596.82
FL IN(N)=590.06
FL IN(W)=589.42
FL OUT=589.11
- 3 CURB INLET
TOP=594.67
GUTTER=594.16
FL OUT=589.91
- 4 INLET
SILL=592.85
FL IN=587.61
FL OUT=587.53
- 5 CURB INLET
TOP=594.82
GUTTER=591.36
FL IN=584.31
FL OUT=584.06

THIS DOCUMENT WAS INTENDED TO BE DIGITALLY SIGNED. IF SIGNATURE AND VALIDATION ARE NOT PRESENT THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT.

4/20/2015

STATE OF MISSOURI
 MATTHEW AARON KRIEIE
 NUMBER
 PE-2007002811
 PROFESSIONAL ENGINEER

MATTHEW A. KRIEIE
 PROFESSIONAL ENGINEER
 PE-2007002811

Date
MAY 23, 2014

Revised

- 1 JULY 18, 2014
- 2 AUGUST 13, 2014
- 3 APRIL 20, 2015

Design: TOC Drawn: BR

STORM SEWER PLAN

Sheet

C4.01

ES&S PROJECT NO. 12660

STORM SEWER DESIGN NOTES

1. DEPTHS TO HYDRAULIC GRADE FOR THE 15 YEAR EVENT ARE ACCEPTABLE. THE OFFSITE STORM SEWER SYSTEM HAS ADEQUATE CAPACITY.
2. STORM WATER FLOW, AS DETERMINED BY DRAINAGE AREA MAP, DOES NOT EXCEED 1 CFS THROUGH INTERSECTIONS.
3. AT LEAST 1% SLOPE IS PROVIDED FOR PIPES LESS THAN 36", WHERE PRACTICAL.
4. MINIMUM VELOCITY OF FLOW EXCEEDS 3 FPS FOR PIPES GREATER THAN 36", WHERE PRACTICAL.
5. CULVERT MEETS CITY OF OFALLON REQUIREMENTS FOR FREEBOARD ABOVE HIGH WATER ELEVATION.
6. 36" OF COVER FOR STORM SYSTEMS PROVIDED, WHERE PRACTICAL.
7. PIPES WHEN CROSSING PAVEMENT ARE AT RIGHT ANGLES WITH STREET PAVEMENT. OFFSETS OF UP TO 15" MAY BE APPROVED.
8. RUNS AND CONNECTIONS UNDER STREET PAVEMENT ARE LIMITED AS MUCH AS POSSIBLE.
9. PLACEMENT OF SEWER LINE SHALL BE A MINIMUM OF 10' FROM FRONT BUILDING LINE.
10. 0.20' DROP PROVIDED THROUGH ALL STRUCTURES AND MANHOLES.
11. FOR DROP STRUCTURES, COMPACTED ROCK BACKFILL IS REQUIRED IN THE DISTURBED GROUND AROUND THE STRUCTURE.
12. PROVIDE GRANULAR FILL AROUND STORM SEWER LINES WITH TRENCHES WITHIN 10' OF THE EDGE OF PAVEMENT CURB AND IN THE 1-TO-1 SHEAR PLANE OF THE ROAD.
13. THIS SITE SHALL BE IN COMPLIANCE WITH PHASE II ILLICIT STORM WATER DISCHARGE GUIDELINES PER ORDINANCE 5082. STORMTECH ISOLATION ROW PROVIDES WATER QUALITY TREATMENT.
14. ALL STORM SEWERS ON SITE ARE PRIVATE.
15. SIGHT DISTANCE MEASURED 3 1/2' ABOVE PAVEMENT. OBJECTS GREATER THAN 2 FEET IN HEIGHT ABOVE BACK OF CURB AT THE INTERSECTION ARE PROHIBITED.

NOTE: 1
 REVISED STORM SEWERS & DETENTION BASIN