

PROJECT TITLE

I-30 SELF STORAGE

PROJECT PROPERTY OWNER

STUART FINLEY

PROJECT LOCATION

25300 I-30 North, Bryant, AR

PROJECT DESCRIPTION

The proposed self-storage facility development is located on High-way I-30 in the city of Bryant, Arkansas. The total development area for the first phase is 3.62 acres.

DRAINAGE ANALYSIS

On Site Drainage- Rational method was used to determine the existing and proposed flows from proposed site. Detailed drainage calculations considering the future expected development have been conducted. Summary of the calculations are below:

- Pre-development area: 8.80 acres.
- Post-development area: 7.65 acres.
- Pre-development runoff coefficient: 0.47.
- Post-development runoff coefficient: 0.70.

Peak flows for Pre and post development phase of onsite area have been tabulated below-

| | Pre-Development | Post-Development |
|----------|-----------------|------------------|
| | Peak Flow (cfs) | Peak Flow (cfs) |
| 2-Year | 15.27 | 23.75 |
| 10-Year | 20.02 | 30.52 |
| 25-Year | 23.00 | 34.89 |
| 50-Year | 26.23 | 39.69 |
| 100-Year | 27.94 | 42.09 |

CONCLUSION

The onsite drainage calculation for pre and post condition has been provided.