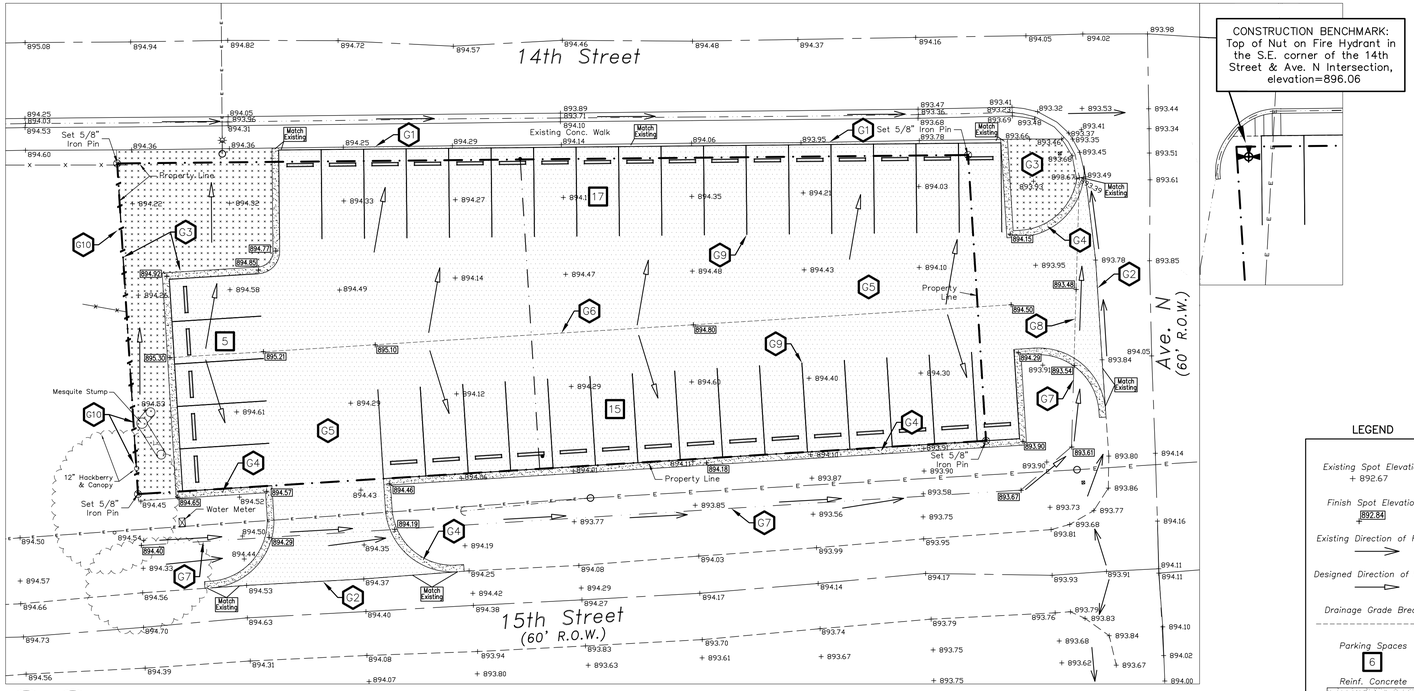


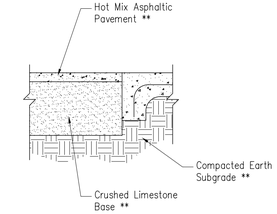
1 **Site Grading & Drainage Plan**
SCALE: 1"=16' ROTATION: Geodetic N.

0 16' 32' 48'

CONSTRUCTION BENCHMARK: Top of Nut on Fire Hydrant in the S.E. corner of the 14th Street & Ave. N Intersection, elevation=896.06

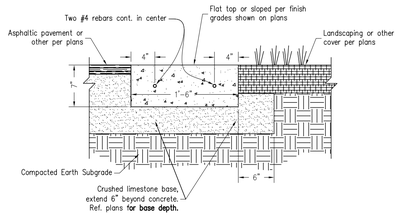
LEGEND

- Existing Spot Elevation + 892.67
- Finish Spot Elevation 892.84
- Existing Direction of Flow
- Designed Direction of Flow
- Drainage Grade Break
- Parking Spaces 6
- Reinf. Concrete
- Asphalt Pavement
- Landscaped Area

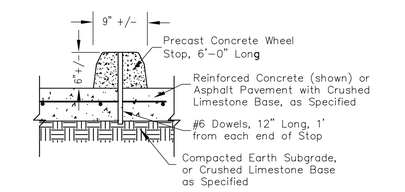


** See drawing notes and/or project specifications regarding depth of asphaltic pavement and limestone base, any required modifications to earth subgrade, and compaction and density **requirements.**

2 **Typical Asphaltic Pavement**
SCALE: 1"=1'



3 **Typical Ribbon Curb**
SCALE: 1"=1'



4 **Typical Concrete Wheel Stop**
SCALE: 1"=1'

GRADING NOTES:

1. Reference GENERAL CONSTRUCTION NOTES on Sheet C1.0.

2. All sitework construction and site grading shall be elevation referenced to the construction benchmark as indicated on this plan sheet. Existing spot elevations contours are not considered to have vertical accuracy suitable for use as benchmarks. If additional vertical reference is needed, contractor shall notify engineer for establishment of a new benchmark.

3. Construction of this project will not change any existing drainage patterns on the surrounding streets.

4. Under pre-construction conditions, a 25-year rain event will generate a storm water flow of 1.553 CFS, whereas the post-construction flow rate is 2.518 CFS. The additional runoff rate of 0.965 CFS is insignificant.

5. Total area for construction of this project, including re-grading of the existing bar ditch, is less than 0.5 acres, well below the 1 acre minimum permitting requirement for Construction General Permit TXR150000 as regulated by the Texas Commission on Environmental Quality. As such, storm water filtration and siltation control measures are not required for this project. However, it is strongly recommended that the Contractor use all prudent measures, including construction of a temporary stone construction entrance if necessary, to minimize the tracking of mud or other debris onto adjoining paved streets, as dictated by site conditions during construction.

DRAINAGE CALCULATIONS, PRE-DEVELOPMENT & POST-DEVELOPMENT CONDITIONS

PRE-DEVELOPMENT
Total Acres=0.372; Grassed=0.206, Impervious=0.166

Weighted "C":
From City of San Antonio Chapter 5, Hydrology,
Table 5.5.3A, 0-1% Slope:
Grass = 0.37, Densely Developed = 0.85
C=((0.206*0.37)+(0.166*0.85))/0.372
=(0.07622+0.1411)/0.372
=0.58

A=0.372 Acres Weighted C=0.58 Tc=15 Min.
From City of San Antonio Hydrology,
Table 5.5.1.A: I25=7.200 in/hr

Q=CIA
=0.58(7.20)(0.372)
=1.553cfs

POST-DEVELOPMENT
Total Acres=0.372; Landscaped=0.037, Impervious=0.335

Weighted "C":
From City of San Antonio Hydrology,
Table 5.5.3A, 0-1% Slope:
Gravel Landscaping = 0.85, Impervious = 0.95
C=((0.037*0.85)+(0.335*0.95))/0.372
=(0.03145+0.31825)/0.372
=0.94

A=0.372 Acres Weighted C=0.94 Tc=15 Min.
From City of San Antonio Hydrology,
Table 5.5.1.A: I25=7.200 in/hr

Q=CIA
=0.94(7.20)(0.372)
=2.518cfs

SITE KEYED NOTES:

(G1) Match new asphaltic pavement to existing conc. sidewalk all along.

(G2) Saw-cut existing asphalt all along new driveways and match new asphalt to existing. Remove and replace any existing asphalt as required to provide a stable connecting point for new asphalt.

(G3) In the two landscaped areas on the west and northeast sections of the lot, install 3" of river rock landscaping on top of heavy duty porous weed block plastic sheeting to allow for percolation of storm water while minimizing the growth of vegetation. Excavate existing base as required to match top of river rock to existing grade along the western and southern property lines. In remaining areas, match top of river rock to existing or new concrete.

(G4) Prior to installing asphalt pavement, install 18" x 7" concrete ribbon curb all along areas that are to be paved to provide long-term protection for outer edges of asphalt. Ref. Detail (3) on this sheet and dimensions on sheet C1.0.

(G5) Install asphaltic pavement per detail on this sheet, and to meet or exceed specifications; ref. General Construction Notes on sheet C1.0.

(G6) Install pavement with a shallow ridge per spot elevations as shown, to shed storm water to the north and south.

(G7) Re-grade the existing bar ditch per spot elevations as shown, to provide for consistent drainage along the N. side of 15th St. and north toward 14th St.

(G8) Install pavement in the eastern driveway with a shallow swale to allow for drainage of storm water from the re-graded bar ditch to discharge at the existing concrete gutter.

(G9) Paint stripe all parking spaces and install a concrete wheel stop in every parking space as shown; ref. dimensions on sheet C1.0.

(G10) Per City of Hondo UDC 7.6b, install a 6' high opaque fence all along the western property line. Coordinate fence design and structural support, and any necessary removal of trees or stumps with County of Medina.

PLAN SHEET INDEX:

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STATE OF TEXAS
CHARLES W. ROTHE
5277
REGISTERED PROFESSIONAL ENGINEER

JULY 15, 2021
TEXAS REGISTERED ENGINEERING FIRM F-12243

Site Plan for New Parking Lot, City of Hondo, Medina County, Texas
West of Ave. N Between 14th & 15th Streets

Prepared For:
County of Medina
1100 16th Street
Hondo, TX 78861
(830)741-6000

ISSUE DATE:	JUNE 07, 2021
REVISION "1":	JULY 15, 2021
REVISIONS:	
REVISIONS:	
REVISIONS:	

SITE GRADING & DRAINAGE

C1.1