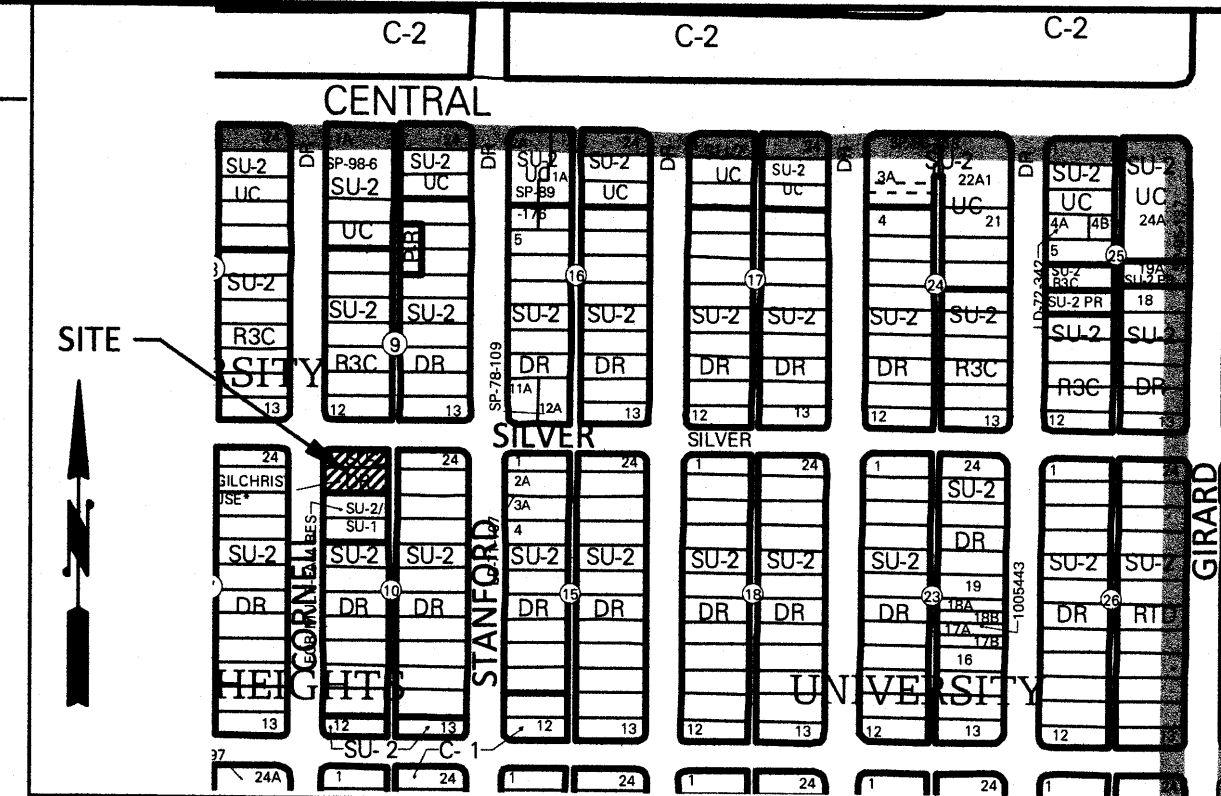


CORNELL AVENUE S.E.
75'R/W

SILVER AVENUE S.E.
60'R/W

LEGEND

- EXISTING CONSTRUCTION
- NEW CONTOUR
- NEW SPOT ELEVATION
- EXISTING WATER LINE
- NEW WATER LINE
- EXIST GAS LINE
- NEW GAS LINE
- EXISTING SAS LINE
- NEW SAS LINE
- PROPERTY LINE
- FINISH FLOOR ELEV



VICINITY MAP - K-16

DRAINAGE

LEGAL: Lots 1 & 2, Block 10, UNIVERSITY HEIGHTS ADDITION

AREA: 14,178 SF (0.3255 acre)

Benchmark: COA BM "5-K16A" located on the north side of Central Avenue and 109' west of Columbia Drive set flush in the north side walk. ELEVATION = 5174.054 (NAVD 1988)

TBM: North rim of existing Silver SAS manhole at alley as shown on plan ELEVATION = 5172.56

SURVEYOR: Harris Surveying dated July, 2014

PRECIPITATION ZONE: 2

FLOOD HAZARD: From FEMA Panel 35001C0353H (dated 8/16/2012), this site is identified as Zone 'X' which is an area determined to be outside the 0.2% annual chance floodplain.

EXISTING CONDITIONS: The existing site was developed as two residential structures which have both been removed from the site. It is located at the southeast corner of Silver and Cornell Avenue NE. The site slopes down from the southeast to the northwest at 1.5-3%. Existing site drainage is discharged to the adjacent public streets.

PROPOSED IMPROVEMENTS: The proposed improvements include four town home lots. A paved access is proposed along the south side of the lots that connects Cornell Avenue to the paved alley running along the east side of the site.

OFFSITE FLOWS: The south half of the adjacent alley to the east and a small roof area east of the alley discharges flow to the site. The offsite alley and roof area is 16'x50' + 12'x20' = 1,040 SF and with impervious surface $Q = (.024)(4.7) = 0.1$ CFS which will continue to be accepted onsite and carried west to Cornell via the paved accessway.

DRAINAGE APPROACH: The drainage plan will follow historic drainage patterns. The roof runoff will be directed to the front yard areas which will be depressed slightly to detain runoff onsite.

FIRST FLUSH: The front yards are proposed to be depressed to provide the first flush volume:
 $V = (0.34/12)(10,200) = 289$ CF
VOLUME PROVIDED IS $(70)(2) + 60 + 95 = 295$ CF

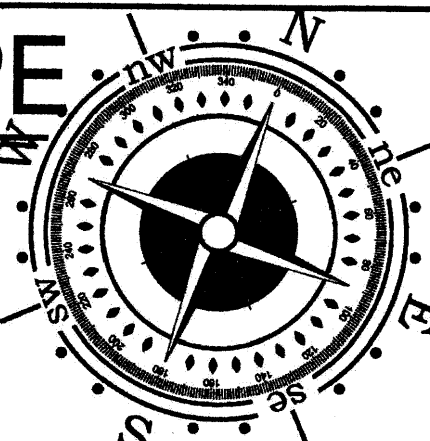
Existing land treatment: 20% B, 32% C, 48% D (typical previous residential development)
 $Q = (0.3255)(3.72) = 1.2$ CFS

Proposed land treatment: 16% B, 16% C & 68% D
 $Q = (0.3255)(4.06) = 1.3$ CFS

The additional runoff rate of 0.1 CFS is minimal and is less than a 10% increase. There will be no adverse impact to downstream drainage facilities.

Scott M McGee PE

9700 Tanoan Dr NE
Albuquerque, NM 87111
505.263.2905
scottmmcgee@gmail.com



PROJECT TITLE

SILVER AVENUE TOWN HOMES
202 CORNELL SE, ALBUQUERQUE, NEW MEXICO

SHEET TITLE

MASTER GRADING & UTILITY PLAN

PROJECT NO.

1410

DATE

08/18/2016

SHEET NO.

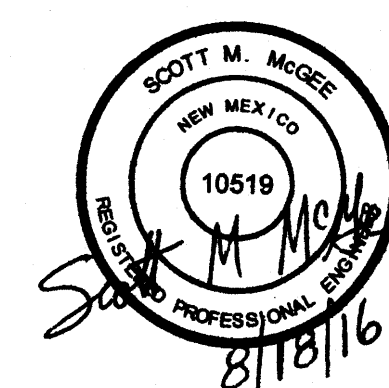
C101

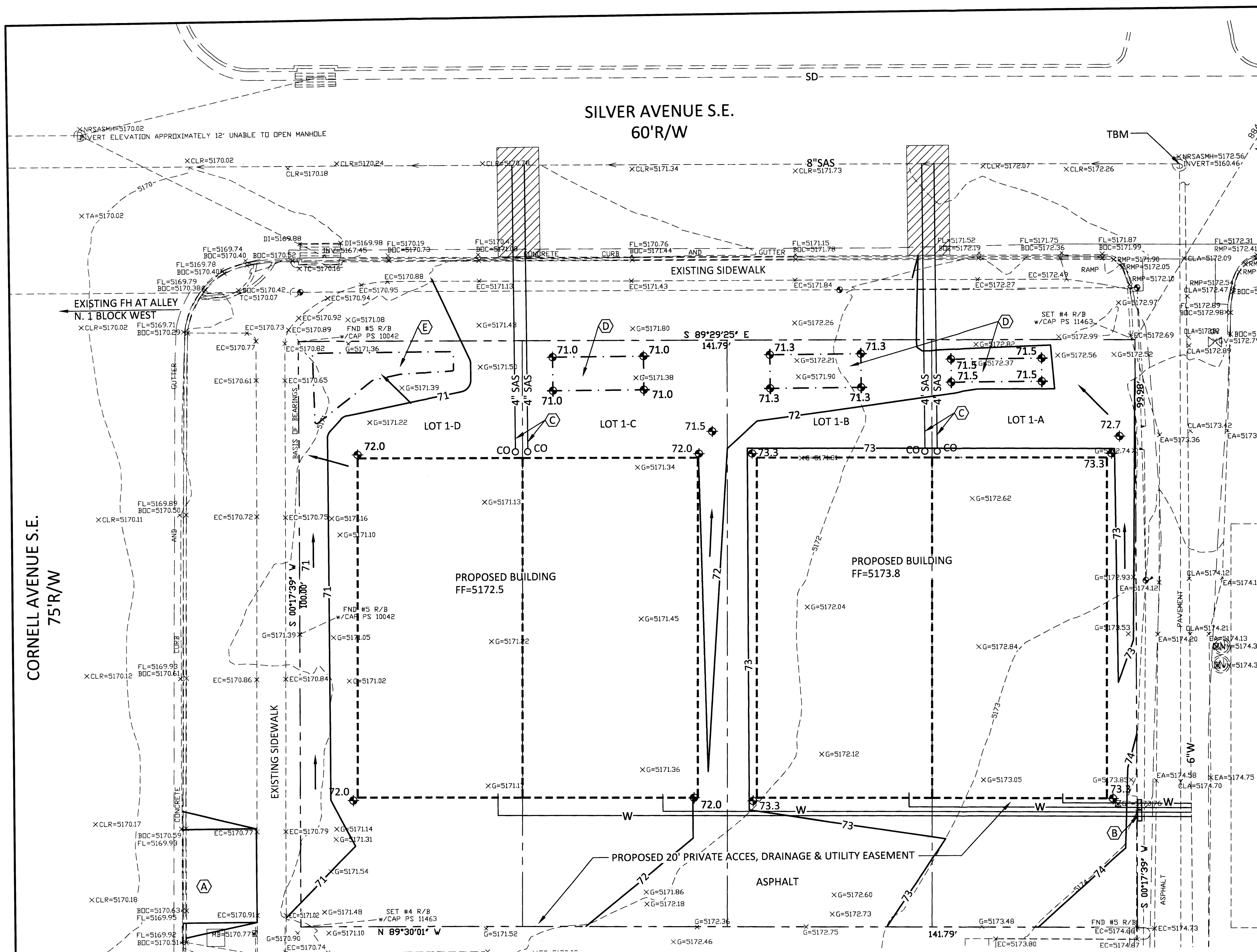
MASTER GRADING & UTILITY PLAN

1" = 10'

0 10' 20'

1040 SF imp.

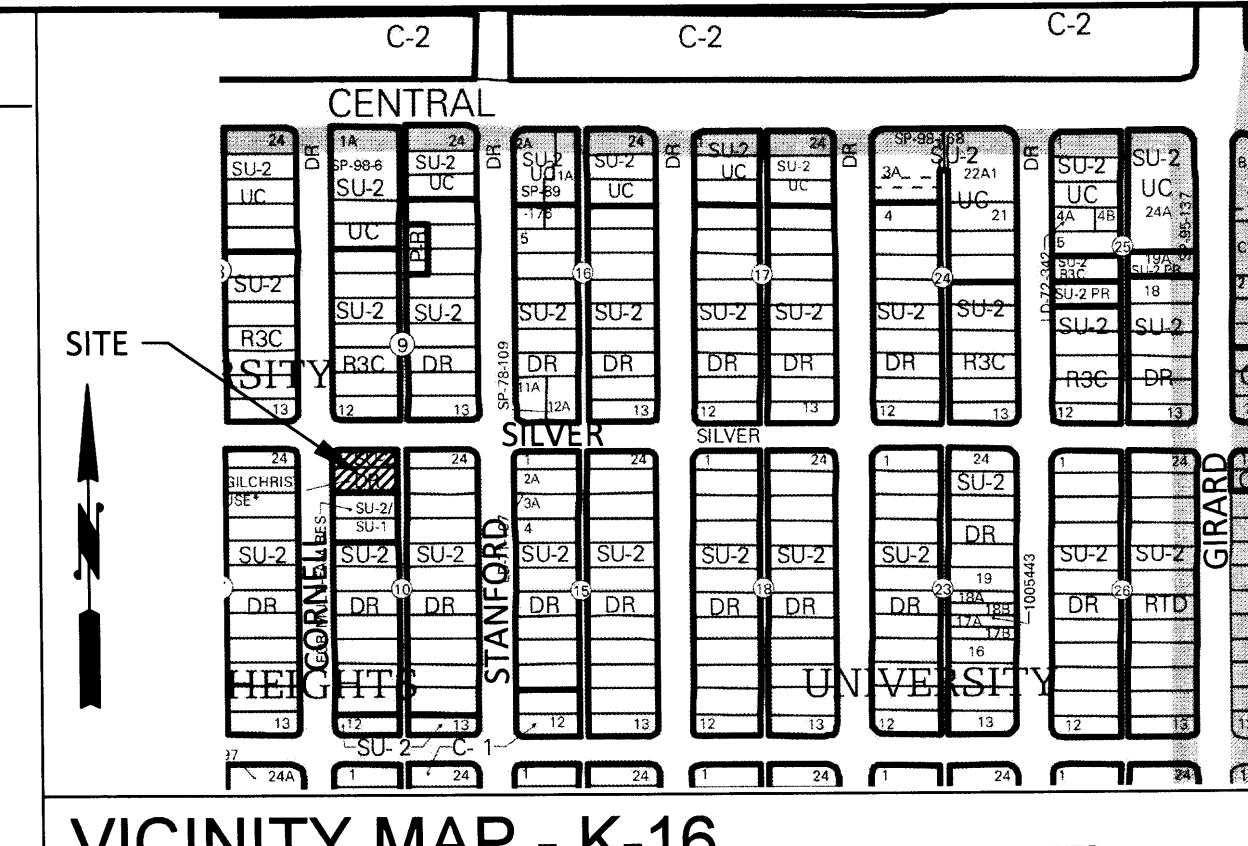




LEGEND

- EXISTING CONSTRUCTION
- REMOVE AND REPLACE PAVING
- NEW CONTOUR
- NEW SPOT ELEVATION
- EXISTING WATER LINE
- NEW WATER LINE
- EXIST GAS LINE
- NEW GAS LINE
- EXISTING SAS LINE
- NEW SAS LINE
- PROPERTY LINE
- FINISH FLOOR ELEV

- KEYED NOTES**
- A. NEW 16' CURB CUT & DRIVE PAD PER COA STD DRAWING #2425.
 - B. TWO NEW DOUBLE WATER METER BOXES AND SERVICES (PER STD DWGS # 2362 & 2368) FROM WATER MAIN IN ALLEY TO PROPERTY LINE.
 - C. NEW 4" SANITARY SEWER SERVICE PER ABCWUA STD DRAWING #2125 TYPICAL OF 4.
 - D. CREATE DEPRESSED LANDSCAPE AREA WITH 3:1 SLOPED SIDES 8' x 15' x 0.5' (V = 60 CF).
 - E. CREATE DEPRESSED LANDSCAPE AREA WITH 3:1 SLOPED SIDES 0.5' DEEP WITH V = 95 CF.



DRAINAGE

LEGAL: Lots 1 & 2, Block 10, UNIVERSITY HEIGHTS ADDITION

AREA: 14,178 SF (0.3255 acre)

Benchmark: COA BM "5-K16A" located on the north side of Central Avenue and 109' west of Columbia Drive set flush in the north side walk. ELEVATION = 5174.054 (NAVD 1988)

TBM: North rim of existing Silver SAS manhole at alley as shown on plan ELEVATION = 5172.56

SURVEYOR: Harris Surveying dated July, 2014

PRECIPITATION ZONE: 2

FLOOD HAZARD: From FEMA Panel 35001C0353H (dated 8/16/2012), this site is identified as Zone 'X' which is an area determined to be outside the 0.2% annual chance floodplain.

EXISTING CONDITIONS: The existing site was developed as two residential structures which have both been removed from the site. It is located at the southeast corner of Silver and Cornell Avenue NE. The site slopes down from the southeast to the northwest at 1.5-3%. Existing site drainage is discharged to the adjacent public streets.

PROPOSED IMPROVEMENTS: The proposed improvements include four town home lots. A paved access is proposed along the south side of the lots that connects Cornell Avenue to the paved alley running along the east side of the site.

OFFSITE FLOWS: The south half of the adjacent alley to the east and a small roof area east of the alley discharges flow to the site. The offsite alley and roof area is 16'x50' + 12'x20' = 1,040 SF and with impervious surface $Q = (.024)(4.7) = 0.1$ CFS which will continue to be accepted onsite and carried west to Cornell via the paved accessway.

DRAINAGE APPROACH: The drainage plan will follow historic drainage patterns. The roof runoff will be directed to the front yard areas which will be depressed slightly to detain runoff onsite.

FIRST FLUSH: The front yards are proposed to be depressed to provide the first flush volume:
 $V = (0.34/12)(9,623 \text{ SF impervious}) = 273 \text{ CF}$ Volume provided is $(60)(3) + 95 = 275 \text{ CF}$.

Existing land treatment: 20% B, 32% C, 48% D (typical previous residential development)
 $Q = (0.3255)(3.72) = 1.2 \text{ CFS}$

Proposed land treatment: 16% B, 16% C & 68% D
 $Q = (0.3255)(4.06) = 1.3 \text{ CFS}$

The additional runoff rate of 0.1 CFS is minimal and is less than a 10% increase. There will be no adverse impact to downstream drainage facilities.

Scott M McGee PE

9700 Tanoan Dr NE
Albuquerque, NM 87111
505.263.2905
scottmmcgee@gmail.com

PROJECT TITLE
SILVER AVENUE TOWN HOMES
202 CORNELL SE, ALBUQUERQUE, NEW MEXICO

SHEET TITLE
MASTER GRADING & UTILITY PLAN

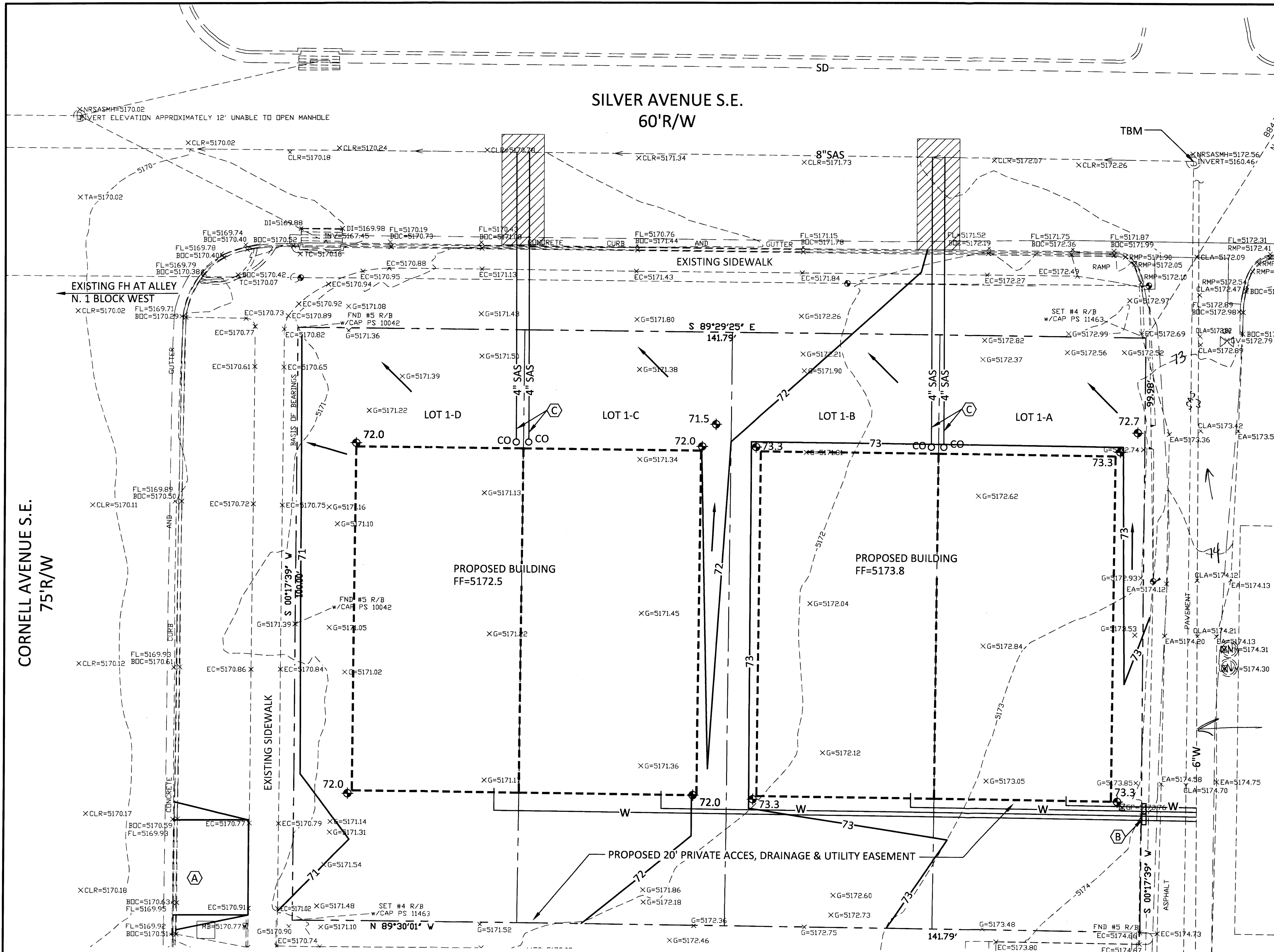
PROJECT NO. 1410

DATE 09/18/2014

SHEET NO.

LAND DEVELOPMENT SECTION

C101

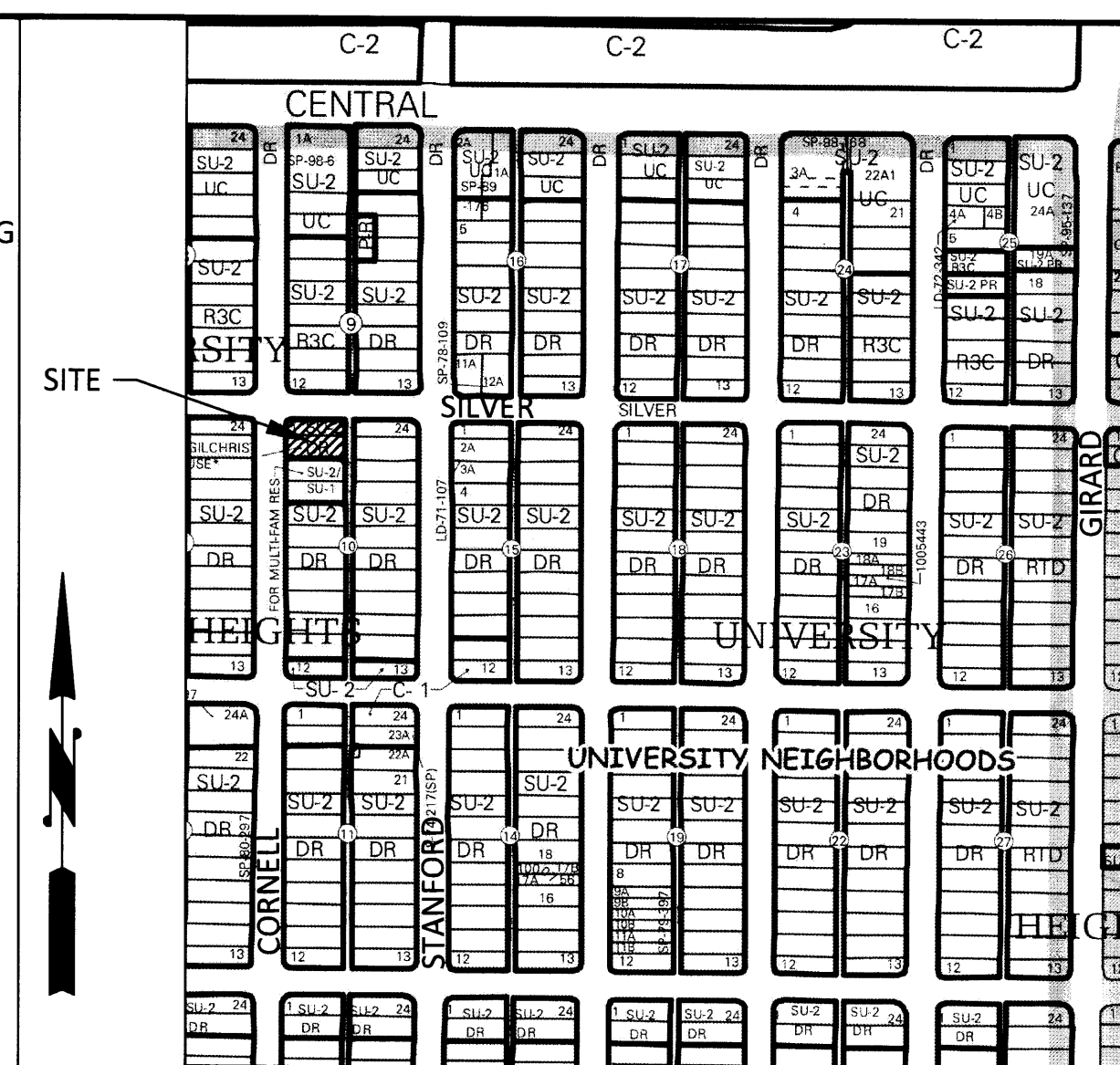


LEGEND

- EXISTING CONSTRUCTION
- REMOVE AND REPLACE PAVING
- NEW CONTOUR
- 71.1 NEW SPOT ELEVATION
- W EXISTING WATER LINE
- W NEW WATER LINE
- GAS EXIST GAS LINE
- GAS NEW GAS LINE
- SAS EXISTING SAS LINE
- SAS NEW SAS LINE
- PROPERTY LINE
- FF FINISH FLOOR ELEV

KEYED NOTES

- NEW 16" CURB CUT & DRIVE PAD PER COA STD DRAWING #2425.
- TWO NEW DOUBLE WATER METER BOXES AND SERVICES (PER STD DWGS # 2362 & 2368) FROM WATER MAIN IN ALLEY TO PROPERTY LINE.
- NEW 4" SANITARY SEWER SERVICE PER ABCWUA STD DRAWING #2125 TYPICAL OF 4.



VICINITY MAP - K-16

DRAINAGE

LEGAL: Lots 1 & 2, Block 10, UNIVERSITY HEIGHTS ADDITION

AREA: 14,178 SF (0.3255 acre)

Benchmark: COA BM "5-K16A" located on the north side of Central Avenue and 109' west of Columbia Drive set flush in the north side walk.
ELEVATION = 5174.054 (NAVD 1988)

TBM: North rim of existing Silver SAS manhole at alley as shown on plan
ELEVATION = 5172.56

SURVEYOR: Harris Surveying dated July, 2014

PRECIPITATION ZONE: 2

FLOOD HAZARD: From FEMA Panel 35001C0353H (dated 8/16/2012), this site is identified as Zone 'X' which is an area determined to be outside the 0.2% annual chance floodplain.

EXISTING CONDITIONS: The existing site was developed as two residential structures which have both been removed from the site. It is located at the southeast corner of Silver and Cornell Avenue NE. The site slopes down from the southeast to the northwest at 1.5-3%. Existing site drainage is discharged to the adjacent public streets.

PROPOSED IMPROVEMENTS: The proposed improvements include four town home lots. A paved access is proposed along the south side of the lots that will be connect from Cornell Avenue to the paved alley running along the east side of the site.

DRAINAGE APPROACH: The drainage plan will follow historic drainage patterns. The runoff increase will be 'D'.

Existing land treatment: 20% B, 32% C, 48% D (typical previous residential development)
 $Q = (0.3255)(3.72) = 1.2$ CFS

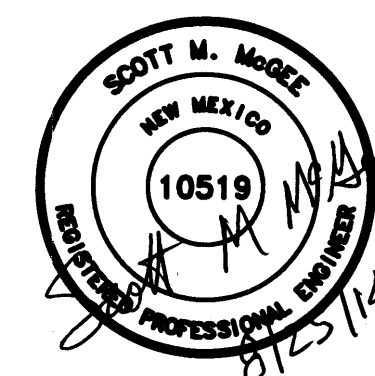
Proposed land treatment: 16% B, 16% C & 68% D
 $Q = (0.3255)(4.06) = 1.3$ CFS

The additional runoff rate of 0.1 CFS is minimal and is less than a 10% increase. There will be no adverse impact to downstream drainage facilities.

MASTER GRADING & UTILITY PLAN

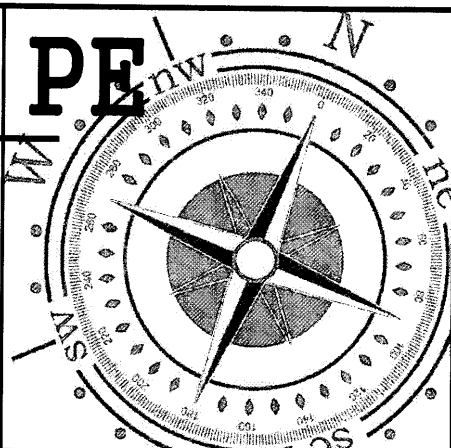
1" = 10'

0 10' 20'



Scott M McGee PE

9700 Tanoan Dr NE
Albuquerque, NM 87111
505.263.2905
scottmmcgee@gmail.com



PROJECT TITLE
SILVER AVENUE TOWN HOMES
202 CORNELL SE, ALBUQUERQUE, NEW MEXICO

SHEET TITLE
MASTER GRADING & UTILITY PLAN

PROJECT NO.
1410

DATE
08/2014

SHEET NO.

C101