

CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

February 23, 2017

David Aube, P.E.
Design Group
120 Vassar SE, Suite 100
Albuquerque, NM, 87106

RE: **GAHP Silver Downtown**
800 Silver SW
Grading Plan Engineer's Stamp Date: 2/21/2017
Hydrology File: K13D013

Dear Mr. Aube:

Based upon the information provided in your submittal received 2/22/17, the Grading Plan is approved for Building Permit.

It is Hydrology's understanding that the roof drain into the back of the catch basin on Silver will be included with the mini work order and no separate SO-19 permit will be required. If you have any questions, contact me at 924-3695 or dpeterson@cabq.gov.

Sincerely,

Dana Peterson, P.E.
Senior Engineer, Planning Dept.
Development Review Services



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2016)

Project Title: GAHP Sterling Building Permit #: _____ Hydrology File #: K-137 D13
DRB#: _____ EPC#: _____ Work Order#: _____
Legal Description: 800 Silver SW. Now being platted
City Address: 800 Silver SW.

Applicant: The Design Group Contact: Dave Aube
Address: 120 Vassar Street SE
Phone#: 505 998 6430 Fax#: 505 242-6881 E-mail: dave@designgroupnm.com
Other Contact: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

Check all that Apply:

DEPARTMENT:

☒ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION

TYPE OF SUBMITTAL:

☐ ENGINEER/ARCHITECT CERTIFICATION
☐ CONCEPTUAL G & D PLAN
☐ GRADING PLAN
☐ DRAINAGE MASTER PLAN
☒ DRAINAGE REPORT
☐ CLOMR/LOMR
☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ TRAFFIC IMPACT STUDY (TIS)
☐ OTHER (SPECIFY) _____
☐ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

☒ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY
☐ PRELIMINARY PLAT APPROVAL
☐ SITE PLAN FOR SUB'D APPROVAL
☐ SITE PLAN FOR BLDG. PERMIT APPROVAL
☐ FINAL PLAT APPROVAL
☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
☐ FOUNDATION PERMIT APPROVAL
☐ GRADING PERMIT APPROVAL
☐ SO-19 APPROVAL
☐ PAVING PERMIT APPROVAL
☐ GRADING/ PAD CERTIFICATION
☐ WORK ORDER APPROVAL
☐ CLOMR/LOMR

IS THIS A RESUBMITTAL?: ☒ Yes ☐ No

☐ OTHER (SPECIFY) _____

DATE SUBMITTED: 2-22-17 By: Dave Aube

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

February 21, 2017

David Aube, P.E.
Design Group
120 Vassar SE, Suite 100
Albuquerque, NM, 87106

RE: **GAHP Silver Downtown**
800 Silver SW
Grading Plan Engineer's Stamp Date: 1/30/2017
Hydrology File: K13D013

Dear Mr. Aube:

Based upon the information provided in your submittal received 2/10/17, the Grading Plan is not approved for Building Permit. The following comments need to be addressed for approval of the above referenced project:

PO Box 1293

Albuquerque

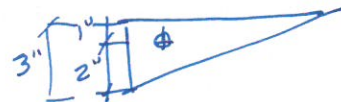
New Mexico 87103

www.cabq.gov

1. The drainage sheets still state conceptual and do not appear to be part of the construction plans. Remove conceptual references to include as part of the submittal.
References to conceptual removed.
2. The SO-19 notes need to be included in construction set, either C101 or C201. Reference standard drawing 2235 and include standard SO-19 notice language.
The SO-19 is called out. Ref to ppe thru curb not applicable.
3. There is a reference to a constrictor plate for the draining the parking lot to the ally, but none is shown on the construction plans. Provide location and details for this.
Constrictor plate no longer used. Setting curb height to limit ponding.
4. It was agreed during the review for SPBP that the wide buffer between the back of curb and the edge of sidewalk would be used to help mitigate nuisance ponding on Silver and 9th Street, by including new curb cuts on the ex. curb. This would help the site achieve the capture of the first flush volume. It needs to be shown on the plan.
No longer possible due to fire marshal requests.
5. The 2" depression in the sidewalk buffer does not account for the running slope along top of curb and along the sidewalk. This means the depression will not retain a uniform 2" deep pool. This area needs to be supplemented with a 5:1 gravel filled swale and curb cuts with shallow ponding to allow in flows from Silver and 9th Street.
9th Street and Silver to have 5:1 swales.
6. The ponding volume for the parking area does not account for the running slope across the parking lot toward the ally. This means the gravel areas will not retain a uniformly deep 2" of water.
and curb opening on 9th Street.
Volumes adjusted. 5:1 slopes added.

Orig: Drainage File

This was adjusted to account for slope. 2" to centroid of volume retained



CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

7. There is a grate elevation shown in area A5. Is there an interior storm drain network or is this to plumb the trash area into the sanitary sewer?

Notes added that this drains to sanitary

If you have any questions, contact me at 924-3695 or dpeterson@cabq.gov.

Sincerely,

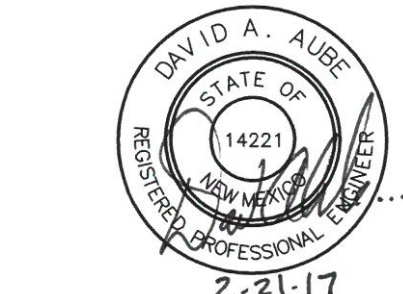
Dana Peterson, P.E.
Senior Engineer, Planning Dept.
Development Review Services

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov


SITE INFORMATION

LEGAL DESCRIPTION

060N M T ADD LOTS 1 AND 2, 18NMT3 X 4 BLK 60 FRACTIONAL OF LOT 3 X 4 BLK 18
RAYNOLDS ADDITION, LOTS 5 & 6 BLK 60 NEW MEXICO TOWN CO ORIGINAL TOWNSITE
& LOTS 5 & 6 BLK 18, 018 RAYNOLDS L18 7X200PORT LTT BLK 60 NMT ADDITION,
009 018 RAYNOLDS X LOT 10, 011 018 RAYNOLDS N PORT L11 L12,
018 RAYNOLDS ADDITION SO PORT OF LOTS 11X12

SURVEY CONTROL MONUMENT DATA

Albuquerque Control Survey Monument "17_ J14"

New Mexico State Plane Coordinates, Central

Zone (NAD83) as published:

Y= 1,458,866.78

X= 1,519,419.32

Ground to grid factor= 0.999683611

Delta Alpha= -00°13'55"

Elevation= 4957.484 (NAVD88)

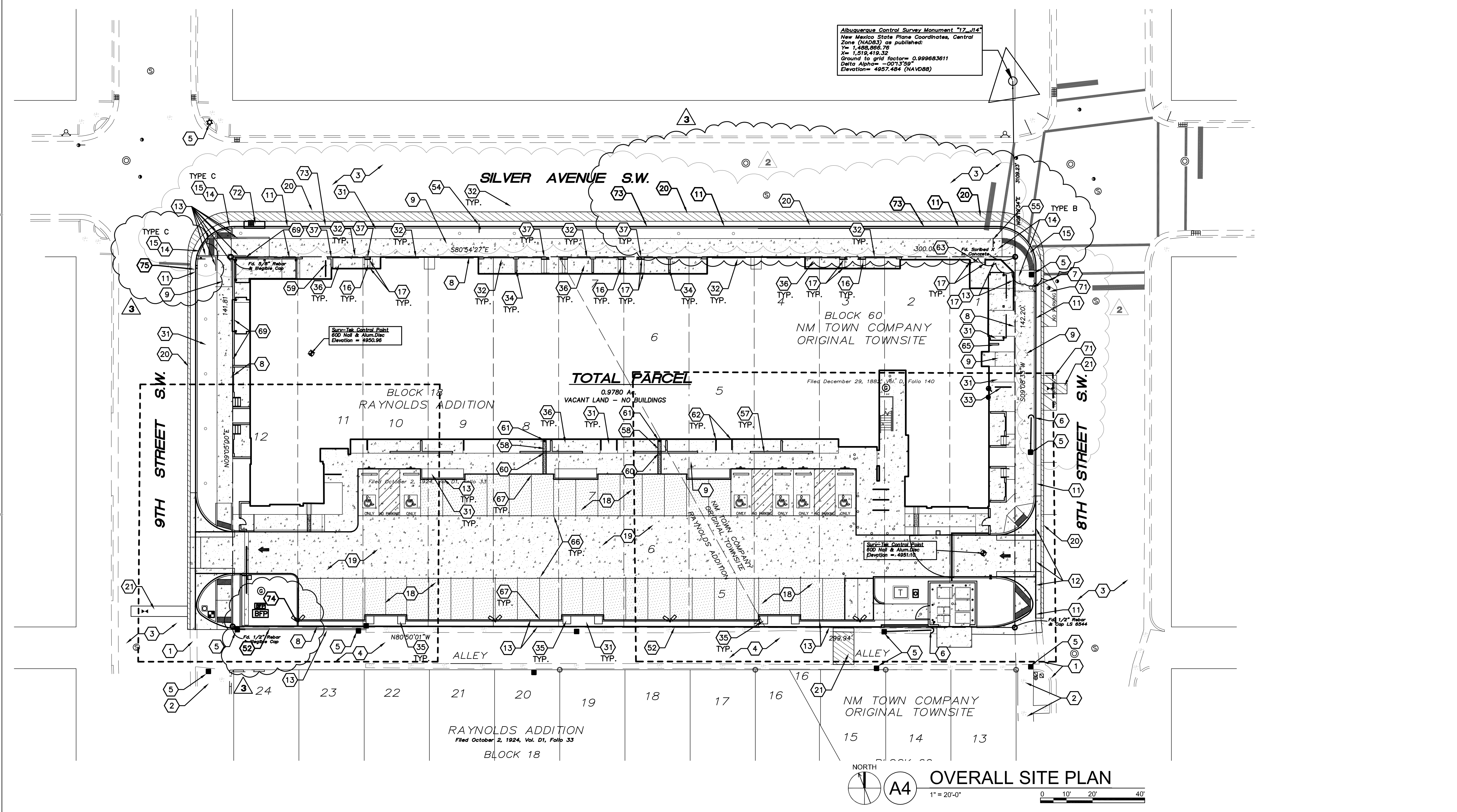
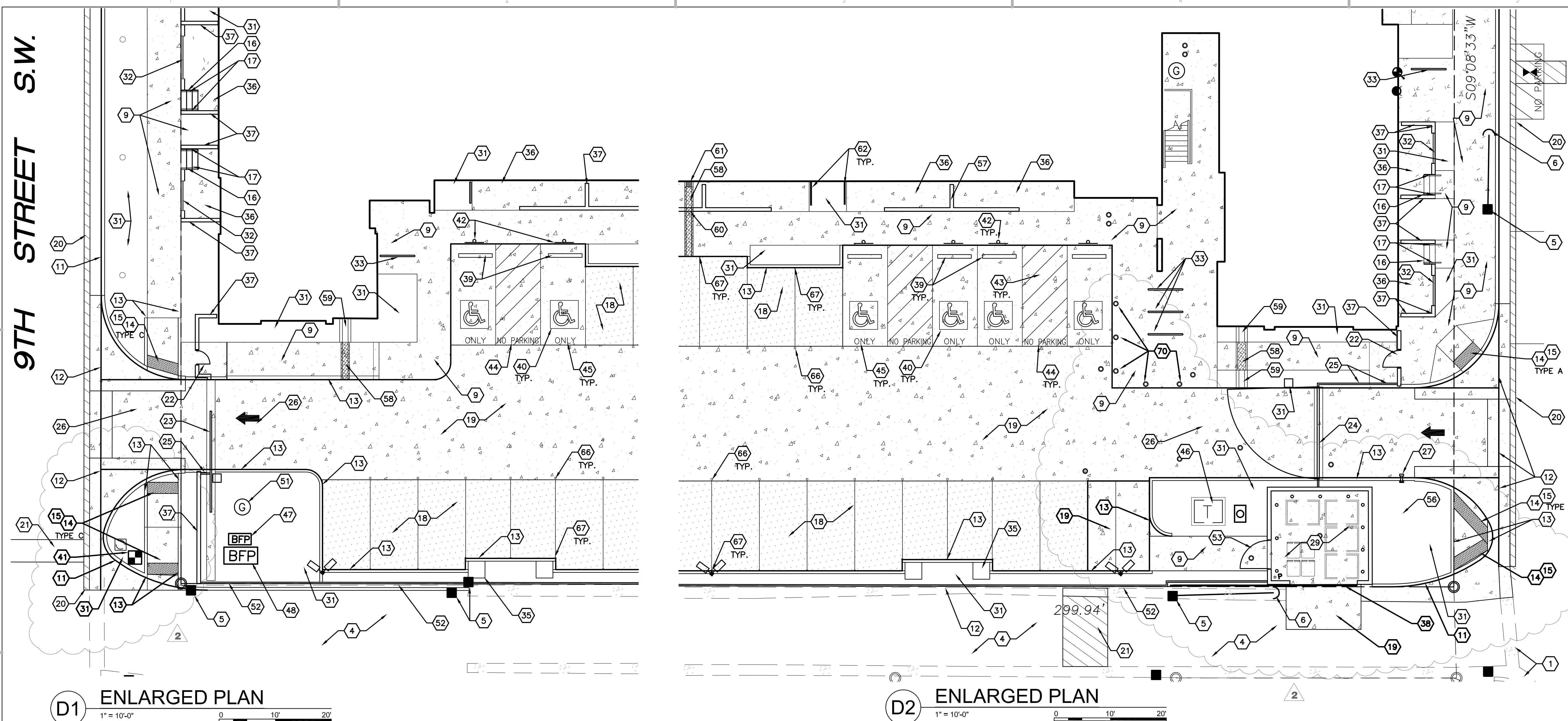
GENERAL SHEET NOTES

- SEE CIVIL PLANS FOR ADDITIONAL GRADING, DRAINAGE AND UTILITY INFORMATION.
- ALL FIXTURES AND DESIGN SHALL COMPLY WITH THE NEW MEXICO NIGHT SKY PROTECTION ACT AND THE COA ZONING CODE SECTION 14-16-3-9 AREA LIGHTING REGULATIONS.
- LIGHTING WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE SUBJECT TO THE STANDARDS AND REVIEW OF PNM, UNLESS MAINTENANCE FOR THE RIGHT-OF-WAY LIGHTING IS THE FULL RESPONSIBILITY OF OTHER PARTIES.
- STANDARD PARKING SPACE IS 8'-0" W x 18'-0" L.
- COMPACT PARKING SPACE IS 8'-0" W x 15'-0" L.
- SURFACE FEATURES RELATED TO UTILITIES ARE SHOWN FOR CLARITY. SEE UTILITY SHEET C301 FOR CONSTRUCTION NOTES.

SHEET KEYED NOTES

- EXISTING CURB, GUTTER, AND STREET TO REMAIN
- EXISTING SIDEWALK TO REMAIN
- EXISTING ASPHALT TO REMAIN
- EXISTING PAVED ALLEY
- EXISTING POWER POLE
- EXISTING GUY WIRE TO REMAIN
- EXISTING FIRE HYDRANT TO REMAIN
- PROPERTY LINE
- CONCRETE SIDEWALK, RE: B4/C501
- CONCRETE JOINT PATTERN, RE: B4/C501
- STANDARD CONCRETE CURB AND GUTTER, PER COA STD DWG 2415A
- CONCRETE VALLEY GUTTER, PER COA STD DWG 2420
- CONCRETE HEADER CURB, PER COA STD DWG 2416B
- CONCRETE CURB RAMP, RE: A1/C501
- DETECTABLE WARNING SURFACE, RE: A3/C501
- CONCRETE STAIR, RE: E3/C502
- METAL HANDRAIL, RE: A3/C502
- GRAVEL PARKING LOT WITH GRAVEL PAVE 2, RE: E4/C501
- CONCRETE PAVEMENT, RE: E3/C501
- MINIMUM 12" WIDE STRIP OF ASPHALT PER COA STD DWG 2465
- UTILITY PATCH ASPHALT PER COA STD DWG 2465
- CONTROLLED ACCESS MAN GATE, RE: A6/C503
- 16" WIDE CONTROLLED ACCESS SLIDING GATE, RE: E4/C503
- 16" WIDE CONTROLLED ACCESS SWING GATE, RE: E4/C503
- DECORATIVE WROUGHT IRON FENCE 6' TALL, RE: D1/C503
- LOOP DETECTOR PER ELECTRICAL PLANS
- KEY PAD FOR ACCESS CONTROL GATE PER ELECTRICAL PLANS
- DECORATIVE MASONRY PRIVACY WALL, 1'-8" HIGH FROM FINISH FLOOR
- REFUSE AREA WITH MASONRY ENCLOSURE, SEE ENLARGED PLAN ON SHEET C504 AND SECTION C2/C504
- ADA ACCESSIBLE CONCRETE RAMP, RE: B4/C501
- LANDSCAPE AREA
- METAL PICKET FENCE 4'-0" TALL, COLOR: DARK GRAY, ALSO REFER TO AE201, AE202, AE203, AND SPEC SECTION 05-0213
- BICYCLE RACK, 7 BIKE CAPACITY, RE: D3/C503
- 4'-8" TALL BURNISHED CLOCK CMU SCREEN WALL, SIMILAR TO DETAIL D1/C502 WITH TOP COURSE TO ALIGN WITH 6' TALL SECTION ALONG STREET EDGE
- 2'X2' GABION BASKET, FILLED WITH 3" COBBLES, TOP OF BASKET SET AT TOP OF PARKING LOT CURB
- CONCRETE PATIO SLAB, SLOPE AWAY FROM BUILDING AT 1/2" PER FOOT
- 6' TALL BURNISHED BLOCK CMU SCREEN WALL, RE: C5/C502
- REFUSE ENCLOSURE GATES, RE: A4/C502
- CONCRETE PARKING BLOCK, RE: D3/C501
- RESERVED PARKING SYMBOL, RE: E3/C501
- DOMESTIC WATER METER, SEE SHEET C301
- VAN ACCESSIBLE RESERVED PARKING SIGN AND POST, RE: E5/C501 AND A1/C502
- STRIPED UNLOADING ZONE FOR RESERVED PARKING STALLS
- 12" TALL WHITE LETTERS "NO PARKING"
- 12" TALL WHITE LETTERS "ONLY"
- TRANSFORMER, SEE ELECTRICAL PLANS
- IRRIGATION BACKFLOW PREVENTER AND INSULATED ENCLOSURE, SEE SHEET C301 FOR CONSTRUCTION DETAILS
- DOMESTIC WATER BACKFLOW PREVENTER AND INSULATED ENCLOSURE, SEE SHEET C301 FOR CONSTRUCTION DETAILS
- 4" WIDE WHITE TRAFFIC MARKING
- 4" STEEL BOLLARD, RE: D4/C502
- NATURAL GAS METER, SEE SHEET C301 FOR CONSTRUCTION DETAILS
- 8" TALL HEADER CURB TO CONFINED DRAINAGE AND 6' TALL AMERISTAR DECORATIVE WIRE FENCE, RE: D4/C502
- 5' WIDE PEDESTRIAN GATE SIMILAR TO DETAIL A5/C502, FRAME ATTACHED IS CMU WALL, LATCH WITH PAD LOCK, PERFORATED PANEL NOT REQUIRED
- EXISTING 18 MPH SPEED LIMIT SIGN TO REMAIN
- EXISTING STOP SIGN TO REMAIN
- 6'-8" TALL CMU SCREEN WALL AROUND REFUSE ENCLOSURE, RE: D3/C502
- 3'-4" TALL BURNISHED BLOCK CMU SCREEN WALL, RE: D5/C502
- 12" WIDE SIDEWALK CULVERT, RE: B3/C502
- 12" WIDE CONCRETE RUNDOWN, RE: A4/C502
- PROVIDE 8" TALL X 12" WIDE OPENING IN BLOCK WALL FOR SIDEWALK CULVERT
- PROVIDE 12" X 12" BAR GRATE AT SIDEWALK CULVERT UNDER DOWNSPOUT
- LANDSCAPING SCREEN, SEE SHEET LP101
- CONCRETE STAIR WITH REFLECTIVE METAL NOSING SIMILAR TO DETAIL B3/C502
- NOT USED
- WALL MOUNTED SIGN, SEE SHEETS AE201 AND AE203, ADDITIVE ALTERNATE #1
- PROVIDE 4" ROUND REFLECTOR ATTACHED TO THE CONCRETE AS PARKING SPACE INDICATOR
- PROVIDE 4" ROUND REFLECTOR ATTACHED TO THE FACE OF THE HEADER CURB AS PARKING SPACE INDICATOR
- LIGHT POLE AND FOUNDATION, SEE ELECTRICAL SHEET E3101
- 16" TALL, 8" WIDE BONCO WALL, RE: E1/C501
- SPHERE BOLLARD, RE: B6/C504
- PROVIDE STRIPING AT WALL INDICATOR VALVE, FIRE DEPARTMENT CONNECTION AND FIRE HYDRANT, VERIFY EXACT LIMITS WITH FIRE DEPARTMENT PRIOR TO APPLICATION, INCLUDE 12" TALL RED NO PARKING LETTERS ON ASPHALT AND 6' TALL "NO PARKING FIRE LANE" ON FACE OF CURB.
- TYPE "A" STORM DRAIN CATCH BASIN PER COA STD DWG 2201, SEE UTILITY SHEET C301 FOR MORE INFORMATION
- 6' TALL RED "NO PARKING FIRE LANE" ON FACE OF CURB PER FIRE DEPARTMENT REQUIREMENTS.

- HEADER CURB UP TO 12" TALL ABOVE GRADE, SEE SHEET C201 FOR TOP OF CURB AND FLOW LINE INFORMATION, HEADER CURB SIMILAR TO DETAIL A4/C501.
- PROVIDE 12" WIDE OPENING IN CURB TO ALLOW DRAINAGE FROM STREET TO ENTER LANDSCAPING STRIP.

VICINITY MAP




REVISIONS	
△	
△	
△	
△	Addendum #3 2-20-17
△	Addendum #2 2-1-17

DRAWN BY	DAA
REVIEWED BY	DAA
DATE	November 18, 2016
PROJECT NO.	16-0078
DRAWING NAME	

OVERALL
GRADING PLAN

SITE INFORMATION

LEGAL DESCRIPTION

060N M T ADD LOTS 1 AND 2, 18NMT3 X 4 BLK 60 FRACTIONAL OF LOT 3 X 4 BLK 18 RAYNOLDS ADDITION, LOTS 5 & 6 BLK 60 NEW MEXICO TOWN CO ORIGINAL TOWNSITE & LOTS 5 & 6 BLK 18, 018 RAYNOLDS LITS 7X8PORT LIT 7 BLK 60 NMT ADDITION, 009 018 RAYNOLDS X LOT 10, 011 018 RAYNOLDS N PORT L1 L12, 018 RAYNOLDS ADDITION SO PORT OF LOTS 11X12

SURVEY CONTROL MONUMENT DATA

Albuquerque Control Survey Monument "17_J14"

New Mexico State Plane Coordinates, Central Zone (NAD83) as published:
Y= 1,468,866.76
X= 1,519,419.32
Ground to grid factor= 0.999683611
Delta Alpha= -00°13'59"
Elevation= 4957.484 (NAVD88)

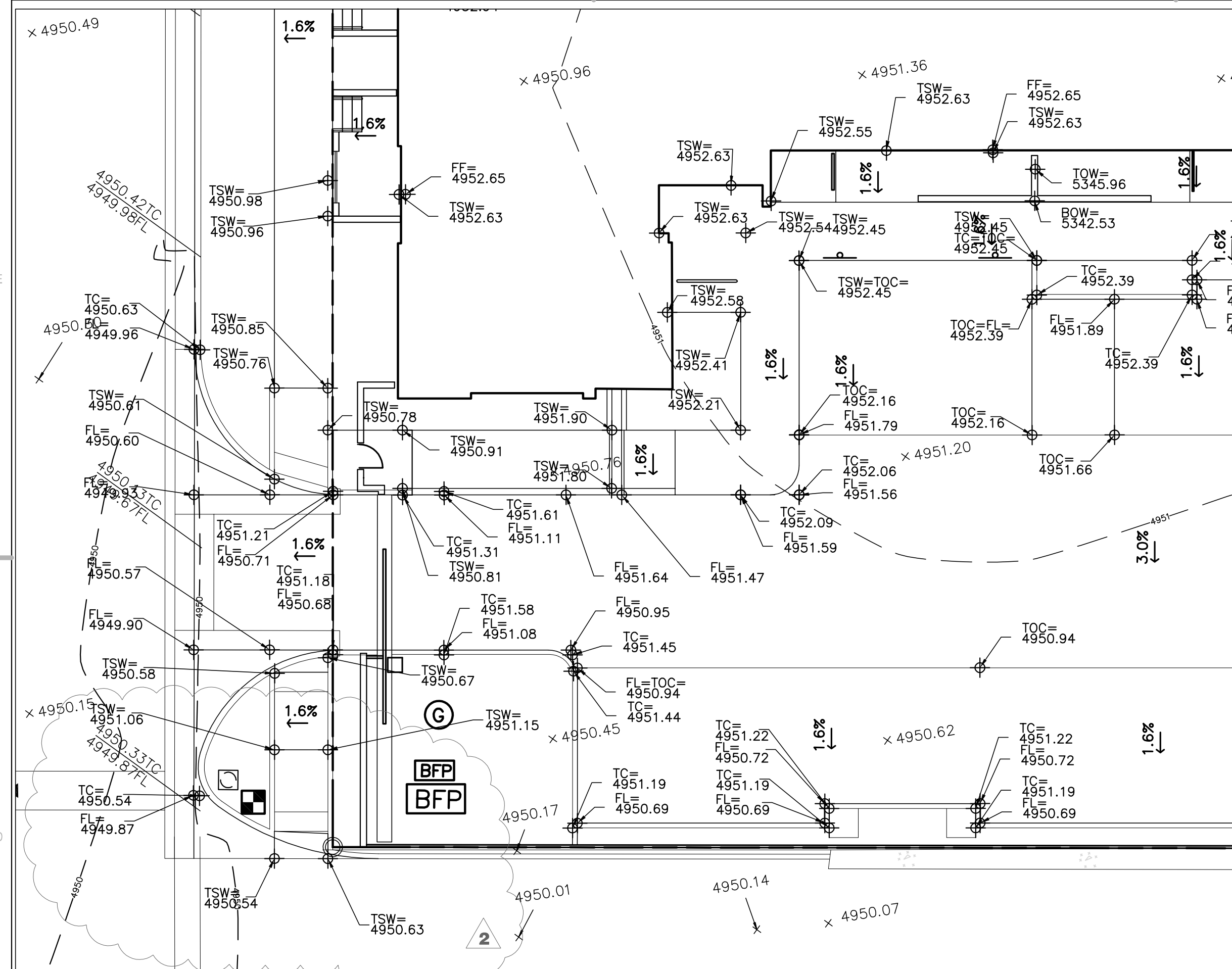
GENERAL SHEET NOTES

1. REFER TO CIVIL PAVING DRAWINGS FOR ON-SITE BUILDING LOCATION, CURBS AND GUTTERS DIMENSIONS, AND OTHER DIMENSIONS NOT SHOWN ON THIS SHEET.

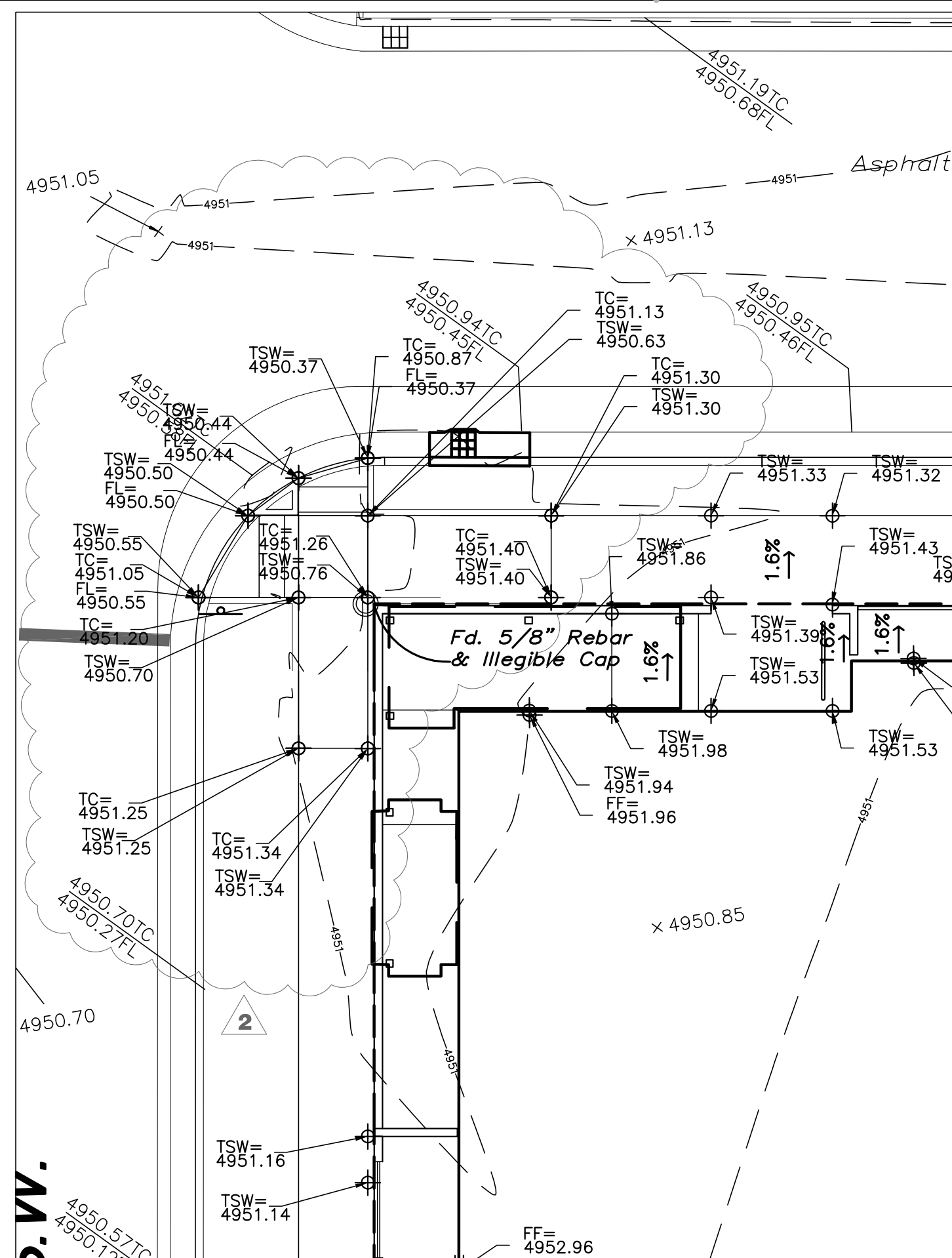
Stair	Number	Top Elev	Bot Elev	Riser
A*	3	4952.54	4950.98	0.52
B*	3	4952.86	4951.14	0.57
C	2	4952.63	4951.56	0.53
D	2	4952.63	4951.63	0.50
E	2	4952.63	4951.64	0.49
F	2	4952.63	4951.81	0.41
G	2	4952.63	4951.83	0.40
H	2	4952.63	4951.91	0.36
J	2	4952.63	4951.93	0.35
K	2	4952.63	4951.72	0.45
L	2	4952.63	4951.74	0.45
M	2	4952.63	4951.61	0.51
N	2	4952.63	4951.58	0.53
O*	1	4951.81	4951.31	0.50
P*	2	4952.53	4951.42	0.55
Q*	2	4952.53	4951.40	0.57

Notes:

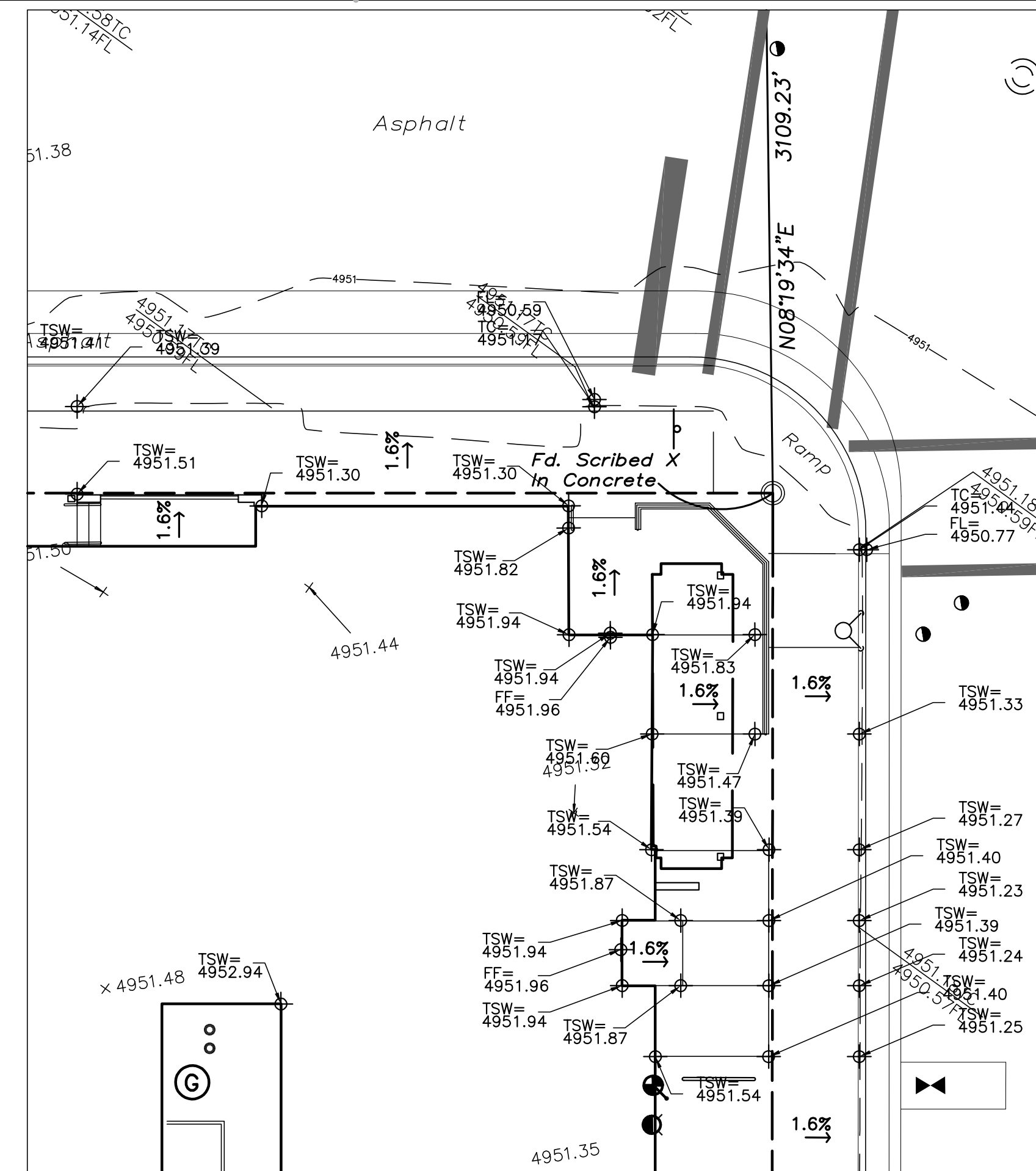
1. Typical stair treads follow the slope of the lower sidewalk slope toward street of 1.6%.
2. Stairs with "*" have level treads.



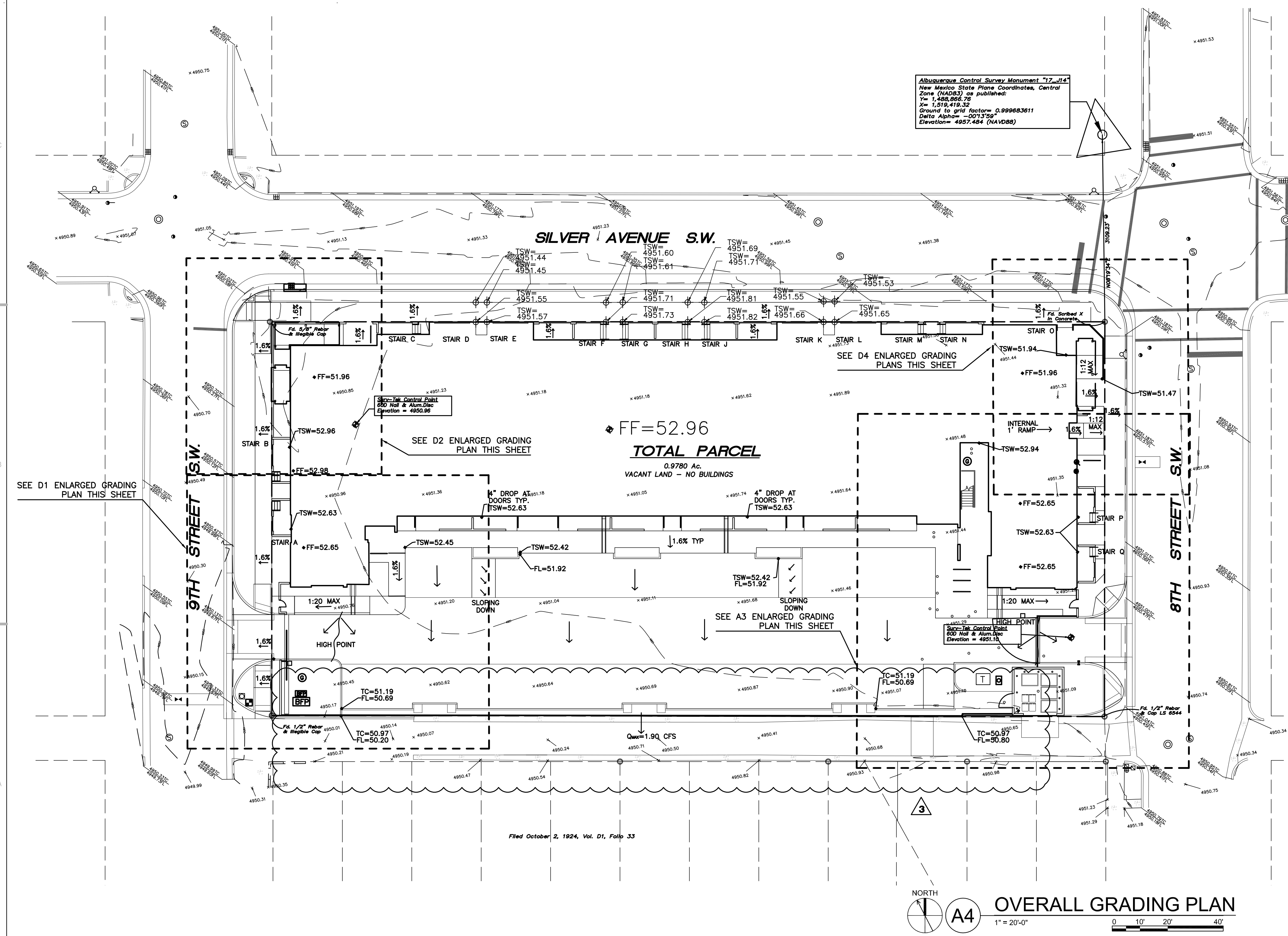
D1 ENLARGED GRADING PLAN
1" = 10'-0"



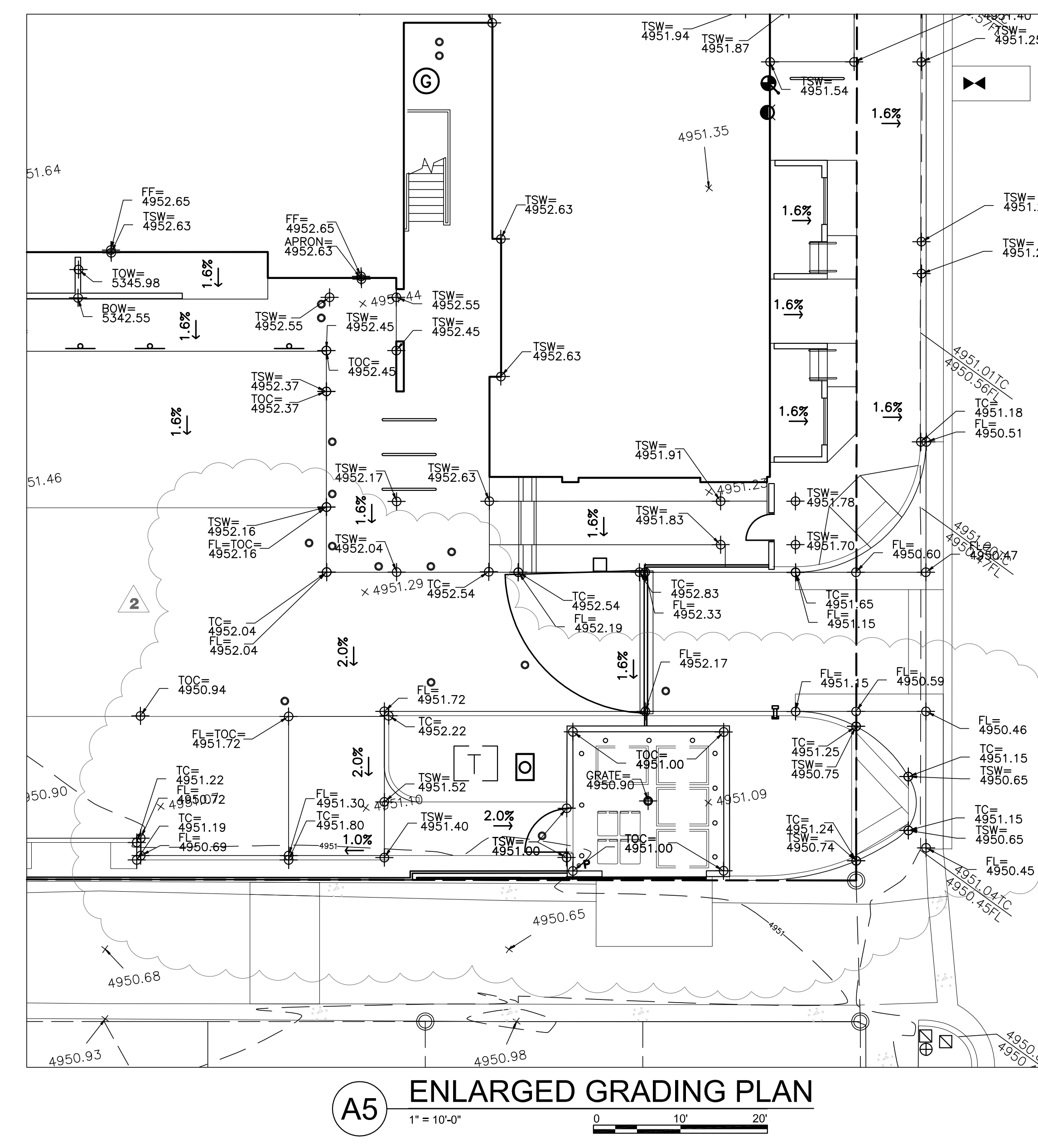
D2 ENLARGED GRADING PLAN
1" = 10'-0"



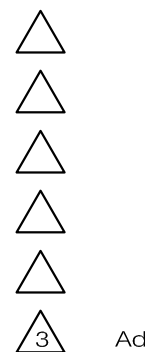
D4 ENLARGED GRADING PLAN
1" = 10'-0"



A4 OVERALL GRADING PLAN
1" = 20'-0"



A5 ENLARGED GRADING PLAN
1" = 10'-0"



SITE INFORMATION

LEGAL DESCRIPTION

060N M T ADD LOTS 1 AND 2, 18NMT3 X 4 BLK 60 FRACTIONAL OF LOT 3 X 4 BLK 18 RAYNOLDS ADDITION, LOTS 5 & 6 BLK 60 NEW MEXICO TOWN CO ORIGINAL TOWNSHIP & LOTS 5 & 6 BLK 18, 018 RAYNOLDS L1S 7X20PORT L1T BLK 60 NMT ADDITION, 009 018 RAYNOLDS X LOT 10, 011 018 RAYNOLDS N PORT L1 L12, 018 RAYNOLDS ADDITION SO PORT OF LOTS 11X12

GROSS BUILDING AREA (GBA):

BUILDING (GROUND FLOOR) = 20,413 SF

TOTAL (ALL FLOORS) = 80,435 SF

TOTAL SITE AREA: 42,613 SF = .98 AC

DRAINAGE MANAGEMENT

The project site is located just west of downtown Albuquerque between 8th and 9th Streets SW and between Silver Avenue SW and the alley lot on south. The site is currently utilized as a parking lot. A small portion of the site (approx 15%) is exposed soil with the remainder being asphalt pavement.

The site is approximately 0.98 acres and generally drains from north east to the south west. Currently no formal storm management facilities exist on the site. The excess runoff flows directly out into the surrounding streets and alley to the south.

This area has a restricted runoff rate to reduce drainage problems in the surround neighborhood. The allowable runoff is 2.75 cfs/acre. The 0.98 acre site is allowed a peak runoff rate of 2.70 cfs.

The sub-basins for defining runoff rates have been established similar to the previously approved Conceptual Drainage Plans prepared in 2013. The building and a majority of the parking lot will drain toward the southern property line along the public alley. These two basins generate a peak runoff of 3.65 cfs. Runoff from the building will be directed toward two gravel surfaced parking areas. The parking area closest to the building will have a storage volume of 105 cubic feet of water within the gravel surface. This was computed based on the area of the parking lot, average depth of water that will be contained by the concrete driveway up the center and the porosity of 0.25. The second gravel parking area is located south of the center driveway and has a capacity of 145 cubic feet of water without any water above the gravel surface itself. Once the gravel parking surface material is filled, the water will back up within the parking areas approximately 2 additional inches during the 100 year storm event. This will provide 583 cubic feet of water storage above the parking lot surface.

Sub-basins 3 through 8 will generate a combined peak runoff rate of 0.52 cfs. Basins 3, 4, 6 and 7 will flow directly into the public street and create 0.36 cfs. The remaining basins 5, and 8 (0.16 cfs) will flow into a depressed landscaping area between the sidewalk and curb. These depressed areas have a available volume of 337 cubic feet and would fully contain any runoff from these basins into the public street. This volume will be used in conjunction with the First Flush volumes.

The allowable discharge for the site is limited to 2.70 cfs total. After removing the 0.36 cfs identified above, the allowable discharge from the point is 2.70 - 0.36 = 2.34 cfs. This discharge rate will be controlled by a restrictor plate at a small concrete wall (tall header curb) along the north edge of the alley.

There is a narrow landscaping strip between the back of curb and the alley. This landscaping strip will be surrounded by a header curb to harvest the first flush water when available from storm events. The area of this landscaping strip is 600 sf and will hold an average of 0.52 of water from the surrounding alley and parking. This will provide 300 cubic feet of retention and will reduce excess runoff.

The total peak runoff for this site is 4.17 cfs and generates an excess runoff volume of 5755 cubic feet 0.1321 ac-ft. Once the 0.36 that drains directly into the street is removed the peak runoff entering the gravel parking areas and eventually the landscaping strip is 3.85 cfs. Once the runoff is routed through the parking area and allowed to be released at 2.34 cfs, a detention volume of 1540 cubic feet. First we need to remove the First Flush Volume of 930 cubic feet throughout the site. This leaves 610 cf of additional runoff that needs to be detained in the parking lot area. With a surface area of 218x16 the ponding water would be an average of 2" deep (max depth 3"). Part of this water would be contained within the gravel section as described above, but surface ponding would be required during the 100 year 6 hour storm event.

The MVSSEL will be 50.94 (FL at curb is 50.69 plus 2" of average depth (centroid of triangular cross section is 2/3 from long side, therefore 1" down from top water surface) for ponding water in parking area) and will provide the required 1540 cubic feet total (650 First Flush retention and 610 cubic feet detention in parking area) of storm water management volume available on site.

The header curb between the landscaping and alley will be used as the first pond edge. With the water held in first Flush ponds and the water held in the parking/landscaping strip the final discharge into the alley was computed to be 1.90 cfs. Water will overtop the header curb into the alley over the full length of the curb. The alley is fully paved and will then drain toward 8th or 9th Streets.

In summary, the first flush and landscaping strip along the southern property line will provide the required storage to reduce the peak runoff rate to below the 2.75 cfs per acre.

VICINITY MAP



Drainage Summary

Project	Drainage Direction	278					
Project Number	278						
Date	11/1/16						
By	DAA						
Site Location	2 Per Table A-1 COA DPR Section 22.2						
Existing summary							
Basin Name	Ex-1						
Area (sf)	41853						
Area (acres)	0.96						
1/4 Land treatment	0						
1/2 Land treatment	0						
3/4 Land treatment	0						
100% Land treatment	0						
Peak Discharge (cfs)	4.24						
100 y	2.75						
20 y	1.50						
Proposed summary							
Basin Name	Pro-1	Pro-2	Pro-3	Pro-4	Pro-5	Pro-6	Pro-7
Area (sf)	10853	10853	10853	10853	10853	10853	10853
Area (acres)	0.25	0.25	0.25	0.25	0.25	0.25	0.25
1/4 Land treatment	0	0	0	0	0	0	0
1/2 Land treatment	0	0	0	0	0	0	0
3/4 Land treatment	0	0	0	0	0	0	0
100% Land treatment	0	0	0	0	0	0	0
Peak Discharge (cfs)	4.24	4.24	4.24	4.24	4.24	4.24	4.24
100 y	2.75	2.75	2.75	2.75	2.75	2.75	2.75
20 y	1.50	1.50	1.50	1.50	1.50	1.50	1.50
First Flush Ponding Volume (sf)	583	583	583	583	583	583	583
First Flush Area (sf)	600	600	600	600	600	600	600
Total First Flush Required	3015	3015	3015	3015	3015	3015	3015

