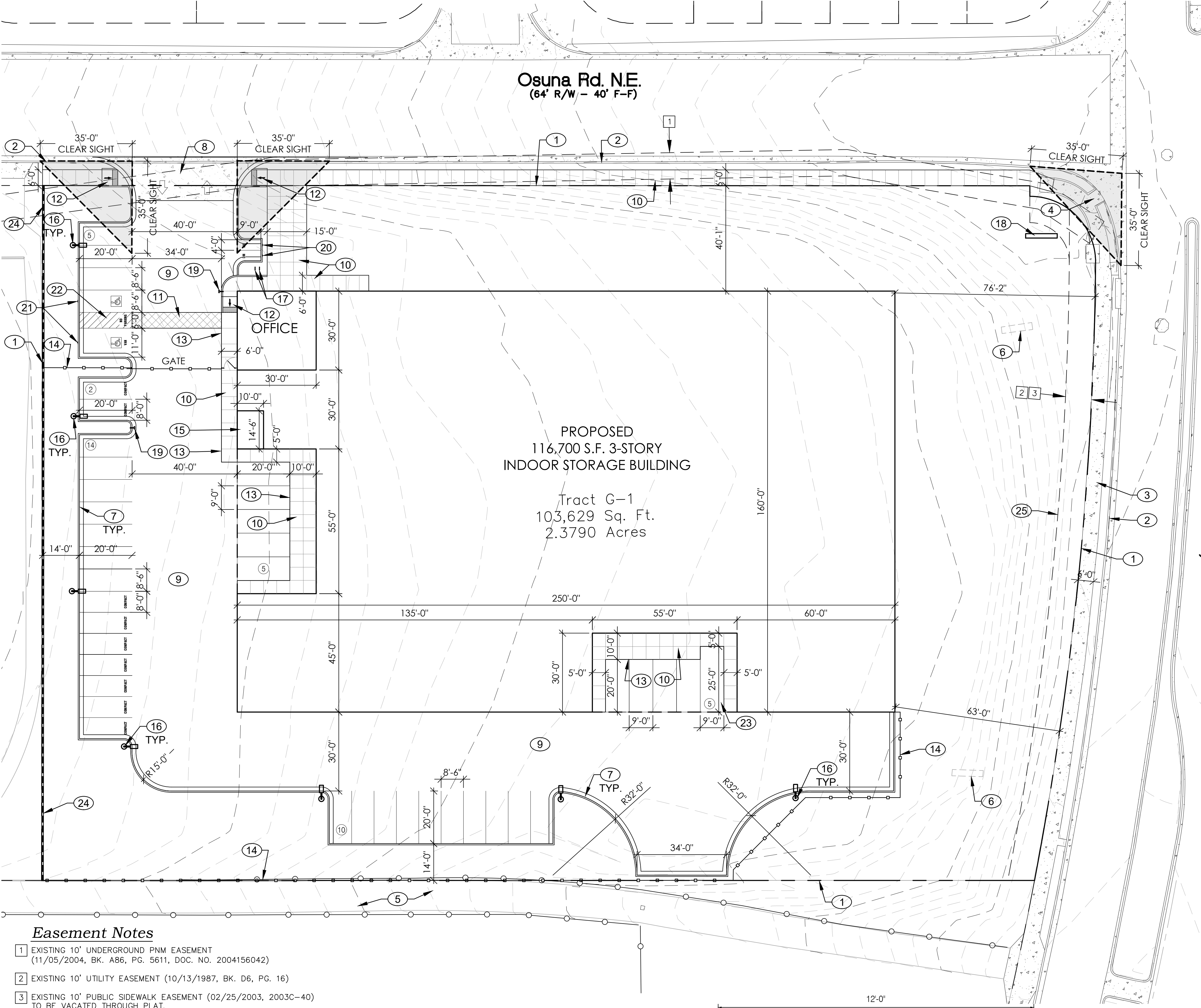
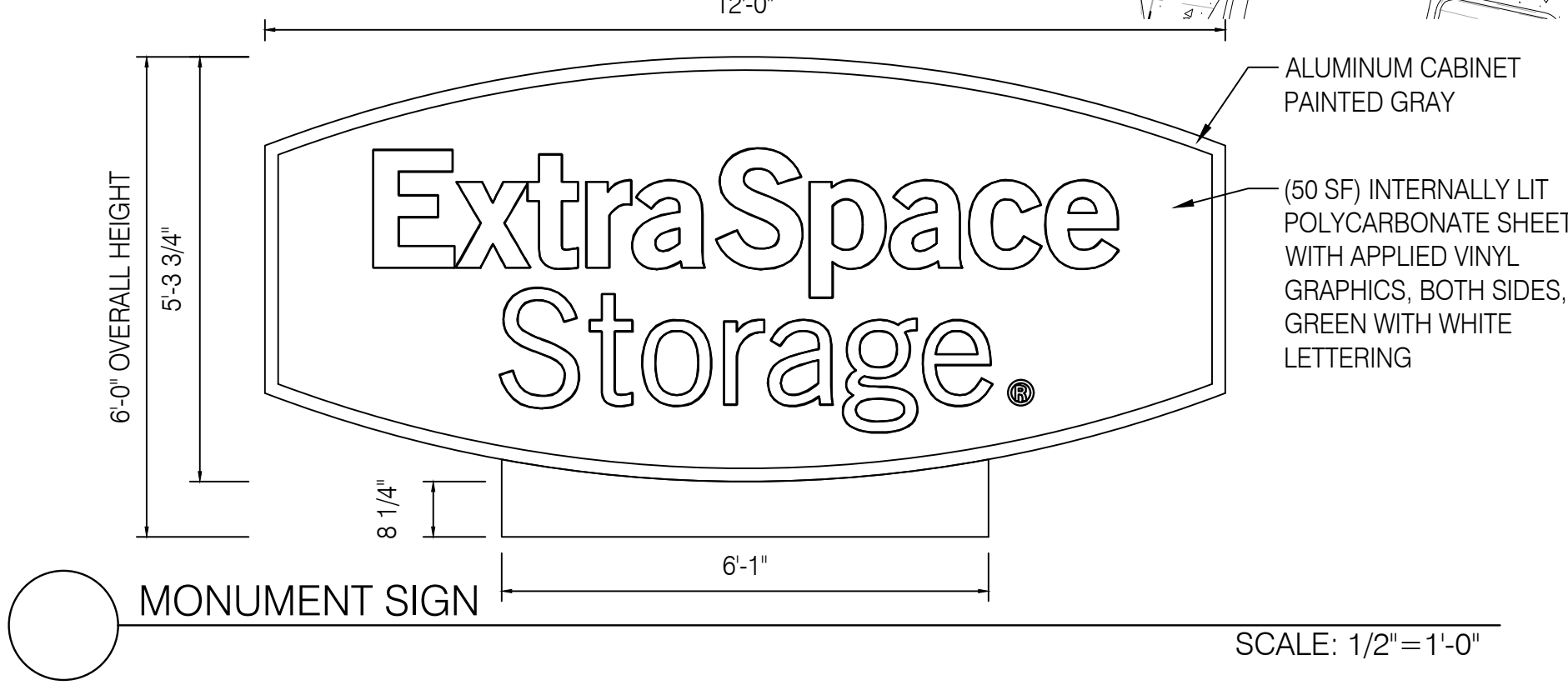
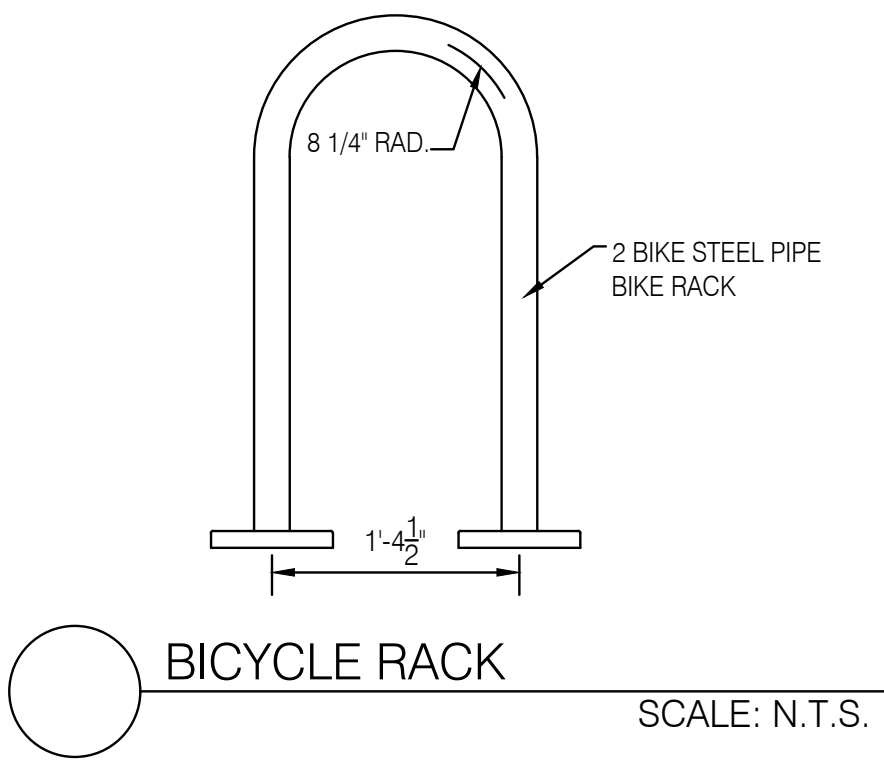




Easement Notes

- 1 EXISTING 10' UNDERGROUND PNM EASEMENT (11/05/2004, BK. A86, PG. 5611, DOC. NO. 2004156042)
- 2 EXISTING 10' UTILITY EASEMENT (10/13/1987, BK. D6, PG. 16)
- 3 EXISTING 10' PUBLIC SIDEWALK EASEMENT (02/25/2003, 2003C-40) TO BE VACATED THROUGH PLAT.



SITE DATA

LEGAL DESCRIPTION: TRACT G-1

SITE AREA: 2.37 AC.

EXISTING ZONING: MX-L

PROPOSED LAND USE: 3-STORY BUILDING FOR SELF-STORAGE USES AS IS CONDITIONALLY ALLOWED IN MX-L ZONE DISTRICT (APPROVED BY ZHE, 5/1/2019, VA-2019-00086; #2019-002184). FACILITY SHALL COMPLY WITH SPECIFIC-USE STANDARDS SECTION 14-16-4-3(D)(28) SELF-STORAGE.

BUILDING AREA: 180,200 SF

MAXIMUM BUILDING HEIGHT: 35 FEET.

PARKING REQUIREMENTS:

OFFICE: 3.5 SPACE PER 1,000 SF GFA
SELF STORAGE: 1 SPACE PER 3,000 SF GFA

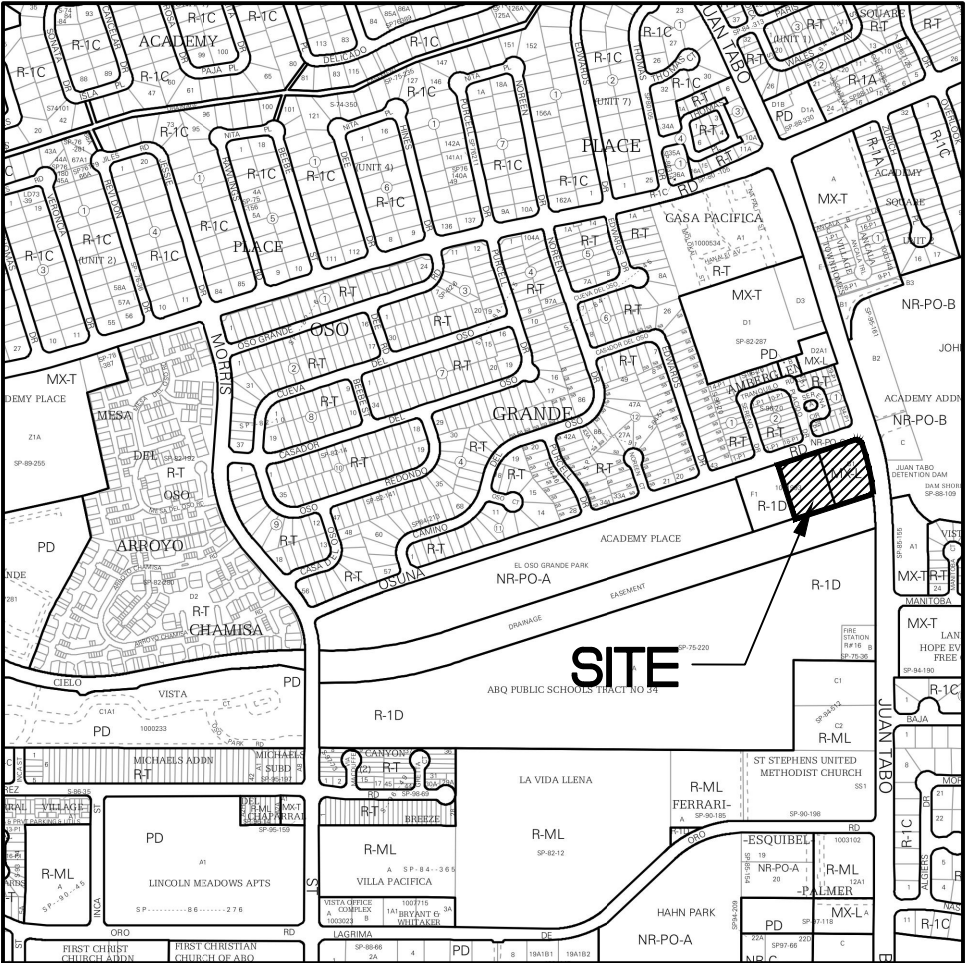
TOTAL PARKING REQUIRED/PROVIDED:	41/41
REQUIRED OFFICE (900 SF):	3
REQUIRED SELF-STORAGE (115,800 SF) :	<u>+38</u>
TOTAL REQUIRED SPACES:	41
PROVIDED STANDARD SPACES:	33
PROVIDED COMPACT SPACES:	<u>+9</u> (21%)
TOTAL PROVIDED SPACES:	41

HANDICAPPED REQUIRED/PROVIDED:	2/2
MOTORCYCLE PARKING REQUIRED/PROVIDED:	2/2
BICYCLE REQUIRED/PROVIDED:	4/4

TRANSIT: BUS ROUTE 1 (JUAN TABO BLVD). THE BUS STOPS ARE LOCATED DIRECTLY ACROSS JUAN TABO BLVD AND APPROXIMATELY 450' NORTH FROM THE SITE.

BIKE PATH: BEAR CANYON ARROYO TRAIL RUNS PARALLEL TO THE SOUTHERN PROPERTY BOUNDARY.

- KEY NOTES:
- PROPERTY BOUNDARY
 - EXISTING CURB AND GUTTER TO REMAIN
 - EXISTING SIDEWALK TO REMAIN
 - EXISTING ACCESSIBLE RAMP TO REMAIN
 - EXISTING ASPHALT TRAIL TO REMAIN
 - EXISTING OFF-PREMISE SIGN TO BE REMOVED
 - CONCRETE CURB AND GUTTER
 - CONCRETE DRIVEPAD
 - ASPHALT PAVING
 - CONCRETE SIDEWALK
 - CONCRETE CROSSWALK
 - ADA CONCRETE RAMP
 - SIDEWALK FLUSH WITH ASPHALT
 - 8' HEIGHT TUBULAR STEEL FENCE, COLOR: BLACK
 - REFUSE ENCLOSURE LOCATED IN BUILDING WITH ROLL UP DOOR AND ROLL OUT CONTAINER
 - SITE LIGHTING, 20' HEIGHT MAX, LOCATIONS SHOW ARE CONCEPTUAL AND MAY BE ADJUSTED
 - BICYCLE RACK
 - MONUMENT SIGN
 - ELECTRIC GATE KEY PAD
 - "MOTORCYCLE PARKING ONLY" SIGN
 - "HANDICAP PARKING ONLY" SIGN WITH "VAN ACCESSIBLE" SIGN
 - ADA ACCESS AISLE. AISLE SHALL HAVE THE WORDS "NO PARKING" IN CAPITAL LETTERS, EACH OF WHICH SHALL BE AT LEAST ONE FOOT HIGH AND AT LEAST TWO INCHES WIDE, PLACED AT THE REAR OF THE PARKING SPACE SO AS TO BE CLOSE TO WHERE AN ADJACENT VEHICLE'S REAR TIRE WOULD BE PLACED. (66-1-2.1.B NMSA 1978)
 - 9' X 25' OFF-STREET LOADING SPACE
 - 6' HEIGHT CMU WALL, 3' BLOCK WALL ON TOP OF 3' RETAINING WALL OR ENGINEERED APPROVED EQUAL
 - 10' OF ADDITIONAL RIGHT-OF-WAY TO BE DEDICATED THROUGH PLAT



VICINITY MAP
MAP NO. F-21-Z

GRAPHIC SCALE
0 50 100 FEET

GENERAL NOTES

- ALL LIGHTING SHALL COMPLY WITH THE CITY INTEGRATED DEVELOPMENT ORDINANCE (IDO) §14-16-5-8 OUTDOOR LIGHTING REGULATIONS. PARKING LOT SITE LIGHTING SHALL BE A MAXIMUM 20 FEET.
- FUTURE CHANGES TO PROPOSED SIGNAGE CAN BE AMENDED ADMINISTRATIVELY. SIGNAGE WILL COMPLY WITH 5-12(F)(2) OF THE IDO.
- ROOF-MOUNTED MECHANICAL EQUIPMENT SHALL BE SCREENED.
- ALL SCREENING AND VEGETATION SURROUNDING GROUND-MOUNTED TRANSFORMERS AND UTILITY PADS SHALL ALLOW 10 FEET OF CLEARANCE IN FRONT OF THE EQUIPMENT DOOR AND 5-6 FEET OF CLEARANCE ON THE REMAINING THREE SIDES FOR SAFE OPERATION, MAINTENANCE, AND REPAIR PURPOSES.
- PNM COORDINATION: DEVELOPMENT SHALL ABIDE BY ALL CONDITIONS OR TERMS OF UTILITY EASEMENTS PRIOR TO DEVELOPMENT. CONTACT SHALL BE MADE TO PNM'S NEW SERVICE DELIVERY DEPARTMENT TO COORDINATE ELECTRIC SERVICE AND OPTIONS FOR THE LOCATION OF ELECTRIC SERVICE CONNECTION.
- ALL SIDEWALKS, RAMPS (INCLUDING REQUIRED TRUNCATED DOMES) CURB CUTS, AND CURB AND GUTTER SHALL BE BUILT PER C.O.A STANDARD DRAWINGS; SIDEWALK (2430), RAMPS (2440), CURB CUTS (2426), CURB AND GUTTER (2417A). CLEAR SIGHT DISTANCE: LANDSCAPING AND SIGNAGE WILL NOT INTERFERE WITH CLEAR SIGHT REQUIREMENTS. THEREFORE, SIGNS, WALLS, TREES, AND SHRUBBERY BETWEEN 3 AND 8 FEET TALL (AS MEASURED FROM THE GUTTER PAN) WILL NOT BE ALLOWED IN THIS AREA (SEE LANDSCAPE PLAN, SHEET 2, FOR SIGHT TRIANGLE).
- HOURS OF OPERATION: OFFICE AND GATE ACCESS - 7:00 TO 5:30 PM; GATE ONLY ACCESS IS ALLOWED UNTIL 7:00 PM.

PROJECT NUMBER: _____
Application Number: _____

Is an Infrastructure List required? () Yes () No If yes, then a set of approved DRC plans with a work order is required for any construction within Public Right-of-Way or for construction of public improvements.

DRB SITE DEVELOPMENT PLAN SIGNOFF APPROVAL:

Traffic Engineering, Transportation Division	Date
ABCWUA	Date
Parks and Recreation Department	Date
City Engineer/Hydrology	Date
Code Enforcement	Date
*Environmental Heath Department (conditional)	Date
Solid Waste Management	Date
DRB Chairperson, Planning Department	Date

GUARDIAN STORAGE OSUNA ROAD

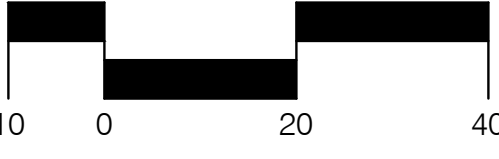
SITE PLAN - DRB

Prepared for:
Guardian Storage VI, LLC
9221 Eagle Ranch Rd NW
Albuquerque, NM 87114

Prepared by:
Consensus Planning, Inc.
302 Eighth Street SW
Albuquerque, NM 87102

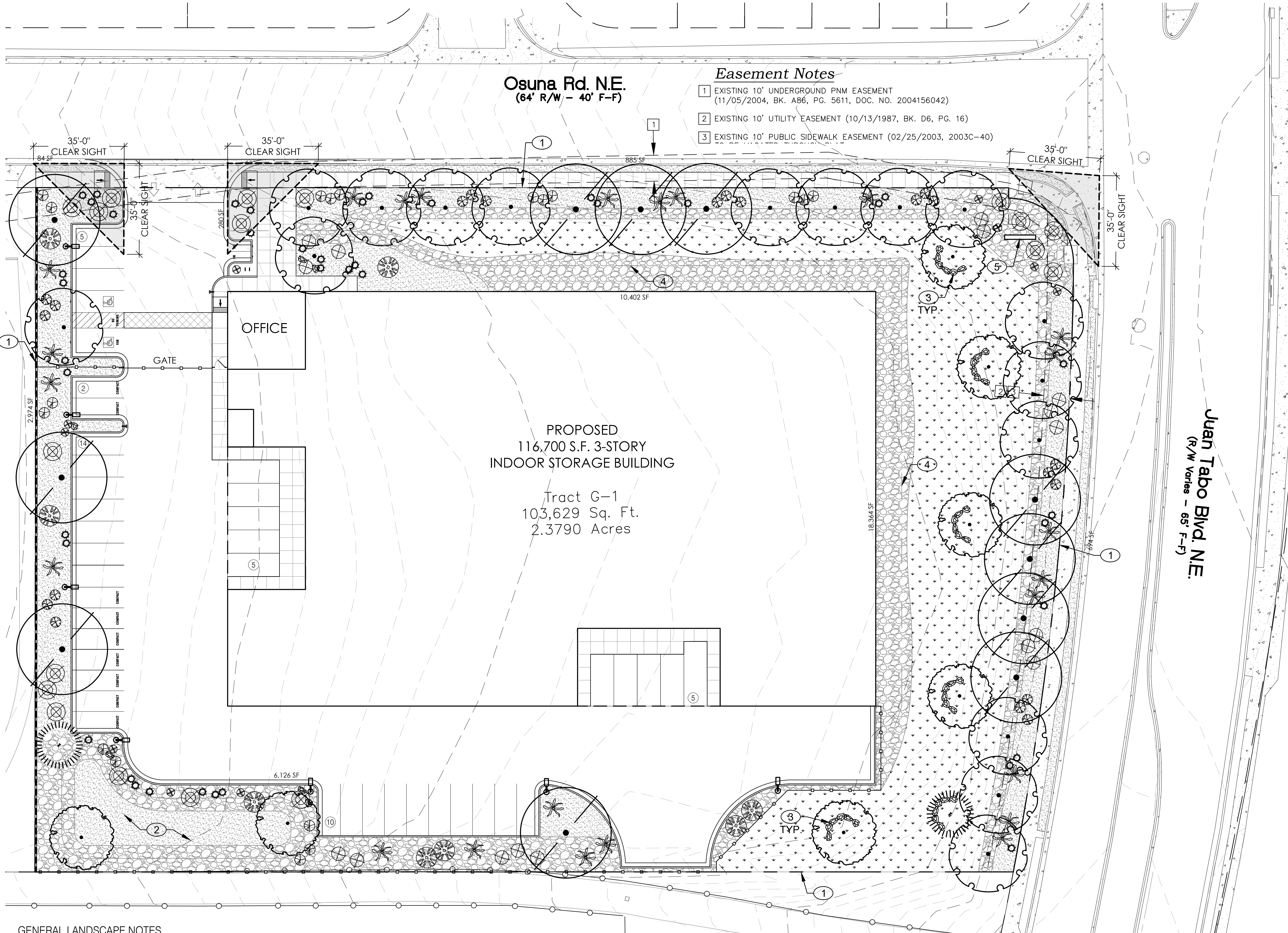


Scale: 1" = 20'



January 10, 2020

Sheet 1 of 7



GENERAL LANDSCAPE NOTES

IRRIGATION
IRRIGATION SYSTEM STANDARDS OUTLINED IN THE WATER CONSERVATION LANDSCAPING AND WATER WASTE ORDINANCE SHALL BE STRICTLY ADHERED TO. A FULLY AUTOMATED IRRIGATION SYSTEM WILL BE USED TO IRRIGATE TREE, SHRUB AND GROUND COVER PLANTING AREAS. THE IRRIGATION SYSTEM SHALL BE DESIGNED TO SOLATE PLANT MATERIAL ACCORDING TO SOLAR EXPOSURE AND WILL BE SET UP BY PLANT ZONES ACCORDING TO WATER REQUIREMENTS. THE TREES WILL BE PROVIDED WITH (6) 2 GPH EMITTERS, WITH THE ABILITY TO BE EXPANDED TO ACCOMMODATE THE GROWTH OF THE TREE. SHRUBS AND GROUNDCOVERS WILL BE PROVIDED WITH (2) 1 GPH EMITTERS. TREES, SHRUBS AND GROUNDCOVERS WILL BE GROUPED ON THE SAME VALVE.

RESPONSIBILITY OF MAINTENANCE
MAINTENANCE OF ALL PLANTING AND IRRIGATION, INCLUDING THOSE WITHIN THE PUBLIC R.O.W., SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER.

METHOD FOR COMPLYING WITH WATER CONSERVATION ORDINANCE
THE PLANT PALETTE IS PREDOMINANTLY COMPRISED OF PLANTS WITH LOW TO MEDIUM WATER USE REQUIREMENTS, THEREBY MINIMIZING IRRIGATION NEEDS WHILE ENSURING THE VIABILITY OF THE PLANTS.

PNM COORDINATION
COORDINATION WITH PNM'S NEW SERVICE DELIVERY DEPARTMENT IS NECESSARY REGARDING PROPOSED TREE LOCATION AND HEIGHT, SIGN LOCATION AND HEIGHT, AND LIGHTING HEIGHT IN ORDER TO ENSURE SUFFICIENT SAFETY CLEARANCES. SCREENING WILL BE DESIGNED TO ALLOW FOR ACCESS TO ELECTRIC UTILITIES. IT IS NECESSARY TO PROVIDE ADEQUATE CLEARANCE OF TEN FEET IN FRONT AND AT LEAST 5 FEET ON THE REMAINING THREE SIDES SURROUNDING ALL GROUND-MOUNTED EQUIPMENT FOR SAFE OPERATION, MAINTENANCE AND REPAIR PURPOSES.

CLEAR SIGHT DISTANCE:
LANDSCAPING AND SIGNAGE WILL NOT INTERFERE WITH CLEAR SIGHT REQUIREMENTS. THEREFORE, SIGNS, WALLS, TREES, AND SHRUBBERY BETWEEN 3 AND 8 FEET TALL (AS MEASURED FROM THE GUTTER PAN) WILL NOT BE ACCEPTABLE IN THE AREA.

LANDSCAPE AREA COVERAGE

TOTAL SITE AREA (2.37 AC.): 103,629 SF
BUILDING AREA: -40,000 SF
NET AREA: 63,629 SF

REQUIRED LANDSCAPE AREA (15% OF NET AREA): 9,544 SF
PROVIDED LANDSCAPE AREA: 39,809 SF (63%)

LANDSCAPE LIVE VEGETATIVE COVERAGE

LANDSCAPE COVERAGE REQUIREMENTS SPECIFY TREE CANOPIES AND GROUND-LEVEL PLANTS SHALL COVER A MINIMUM OF 75%. A MINIMUM OF 25% SHALL BE PROVIDED AS GROUND-LEVEL PLANTS (SHRUBS, GRASSES, ETC.) OF THE REQUIRED VEGETATIVE COVERAGE.

REQUIRED LIVE VEGETATIVE MATERIAL COVERAGE: 29,856 SF
PROVIDED LIVE VEGETATIVE MATERIAL COVERAGE: 81,154 SF (203%)

REQUIRED GROUND-LEVEL PLANT COVERAGE: 9,952 SF
PROVIDED GROUND-LEVEL PLANT COVERAGE: 18,877 SF (47%)

PARKING LOT AREA

AT LEAST 10% OF THE PARKING LOT AREA OF LOTS CONTAINING 50 OR FEWER SPACES, AND AT LEAST 15% OF THE PARKING LOT AREA OF LOTS CONTAINING 50 OR MORE SPACES, SHALL BE LANDSCAPED.

THE PROJECT IS PROVIDING 41 PARKING SPACES.
TOTAL PARKING LOT AREA: 25,415 SF
LANDSCAPE AREA: 9,380 SF (36%)

Easement Notes

- EXISTING 10' UNDERGROUND PNM EASEMENT (11/05/2004, BK. A86, PG. 5611, DOC. NO. 2004156042)
- EXISTING 10' UTILITY EASEMENT (10/13/1987, BK. D6, PG. 16)
- EXISTING 10' PUBLIC SIDEWALK EASEMENT (02/25/2003, 2003C-40)

PARKING LOT TREES

PARKING LOT TREE REQUIREMENTS ARE BASED UPON 1 TREE PER 10 SPACES.

THE PROJECT IS PROVIDING 41 PARKING SPACES.
PARKING LOT TREES REQUIRED: 4
PARKING LOT TREES PROVIDED: 5

STREET TREES

STREET TREE REQUIREMENTS SPECIFY THE SPACING BETWEEN STREET TREES, SHALL BE INSTALLED AT A FREQUENCY OF 25 FEET PER LINEAR FOOT OF STREET FRONTAGE.

OSUNA ROAD FRONTAGE IS 380 LF.
REQUIRED/PROVIDED STREET TREES: 14/14 (2 TREES HAVE BEEN LOCATED IN OTHER LANDSCAPED FRONT YARD AREAS PER 5-6(C)(7)(b)(i))

JUAN TABO BOULEVARD IS 253 LF
REQUIRED/PROVIDED STREET TREES: 10/10

KEY NOTES:

- PROPERTY BOUNDARY
- PONDING, SEE CONCEPTUAL GRADING AND DRAINAGE PLAN
- LANDSCAPE BOULDER RETENTION BASINS AT TREES ON SLOPE, SEE TREE PLANTING ON SLOPE DETAIL
- SWALE, SEE CONCEPTUAL GRADING AND DRAINAGE PLAN
- MONUMENT SIGN, SEE DRB SITE PLAN

LANDSCAPE BOULDERS AND GRAVEL MULCH

56 MOSS ROCK BOULDERS (MIN. 27CF)
11,980 SF 1" BUILDLOGY BROWN ROCK MULCH (3" DEPTH OVER FILTER FABRIC)
13,345 SF 2"-4" DESERT BRONZE COBBLE MULCH (6" DEPTH OVER FILTER FABRIC)

PLANT LEGEND

QTY.	SYMBOL	SCIENTIFIC NAME (WATER USE) COMMON NAME	SIZE	MATURE SIZE
TREES				
7		CHILOPSIS LINEARIS (RW)	24" BOX MS	25' HT. X 25' SPR.
11		GLEDTISIA TRIACANTHOS 'SHADEMASTER' (M)	2" B&B	45' HT. X 35' SPR.
2		SHADEMASTER HONEYLOCUST PINUS ELДАРICA (RW)	B&B	35' HT. X 18' SPR.
16		AFGAN PINE PISTACIA CHINENSIS (M)	2" B&B	35' HT. X 30' SPR.
SHRUBS/GROUNDCOVERS				
41		ARISTIDA LONGISETA (RW)	5-GAL.	2' HT. X 2' SPR.
16		PURPLE THREEAWN BUDELLIA DAVIDI (M)	5-GAL.	5' HT. X 5' SPR.
10		COMMON BUTTERFLY BUSH DASYLIUM WHEELERI (L)	5-GAL.	3' HT. X 3' SPR.
18		BLUE SOTOL FALLUGIA PARADOXA (RW)	5-GAL.	4' HT. X 4' SPR.
24		APACHE PLUME JUNIPERUS HORIZONTALIS (L+)	5-GAL.	9' HT. X 6' SPR.
8		BAR HARBOR JUNIPER PINUS MUCO JUNIPER (M)	5-GAL.	8' HT. X 8' SPR.
18		MUJGO PINE RHUS TRILOBATA AUTUMN AMBER* (RW)	5-GAL.	18' HT. X 7' SPR.
21		CREeping THREE LEAF SUMAC SPIREA BUMALDA (M)	5-GAL.	3' HT. X 4' SPR.

REVEGETATIVE SEEDING

QTY.	SYMBOL	SCIENTIFIC NAME/COMMON NAME	#PLS/AC
15,124 SF		BOUTELLOUA GRACILIS HAQITA/BLUE GRAMA	7.0
		BOUTELLOUA CURTIPLUNDULA 'NINER/SIDEOTS' GRAMA	5.0
		STIPA NEOMEXICANA/NEEDLE AND THREAD GRASS	2.0
		ORYZOPSIS HYMENOIDES/INDIAN RICE GRASS	2.0
		KOELEHERA MACRANTHA/JUNE GRASS	1.0
		PLEURAPHIA JAMESII YAVA/GALLETIA	1.0
		KRASCHENNINIKOVIA LANATA/WINTERFAT	.25
		PSILOSTROPHE COOPERI/PAPER FLOWER	.25
		ERIOGONUM JAMESII VAR/SULPHUR BUCKWHEAT	.25
		GAILLARDIA ARISTATA/BLANKET FLOWER	.25
		SPHAERALCEA PARVIFOLIA/NELSON GLOBEMALLOW	.25
		OENOTHERA PALLIDA/WHITE EVENING PRIMROSE	.25
		BAILEYA MULTIRADIATA/DESERT MARIGOLD	.25
		CASTILLEJA INTEGRA/INDIAN PAINTBRUSH	.25

NOTES:

- THE WATER RETENTION BASIN SHALL BE TWICE THE PLANTING PIT DIAMETER.
- THE EDGES OF THE WATER RETENTION BASIN SHALL BE SMOOTHLY FORMED WITH NO OBTRUSIVE EDGES.
- REMOVE ROPE AND BURLAP AFTER PLANTING.

TREE PLANTING DETAIL

SCALE: N.T.S.

NOTES:

- THE WATER RETENTION BASIN SHALL BE TWICE THE PLANTING PIT DIAMETER.
- THE EDGES OF THE WATER RETENTION BASIN SHALL BE SMOOTHLY FORMED WITH NO OBTRUSIVE EDGES.
- REMOVE ROPE AND BURLAP AFTER PLANTING.

TREE PLANTING ON SLOPE DETAIL

SCALE: N.T.S.

GUARDIAN STORAGE

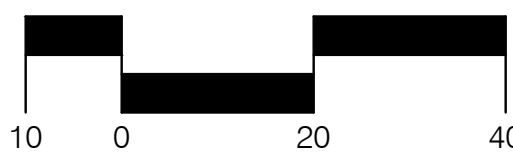
LANDSCAPE PLAN

Prepared for:
Guardian Storage VI, LLC
9221 Eagle Ranch Rd NW
Albuquerque, NM 87114

Prepared by:
Consensus Planning, Inc.
302 Eighth Street SW
Albuquerque, NM 87102

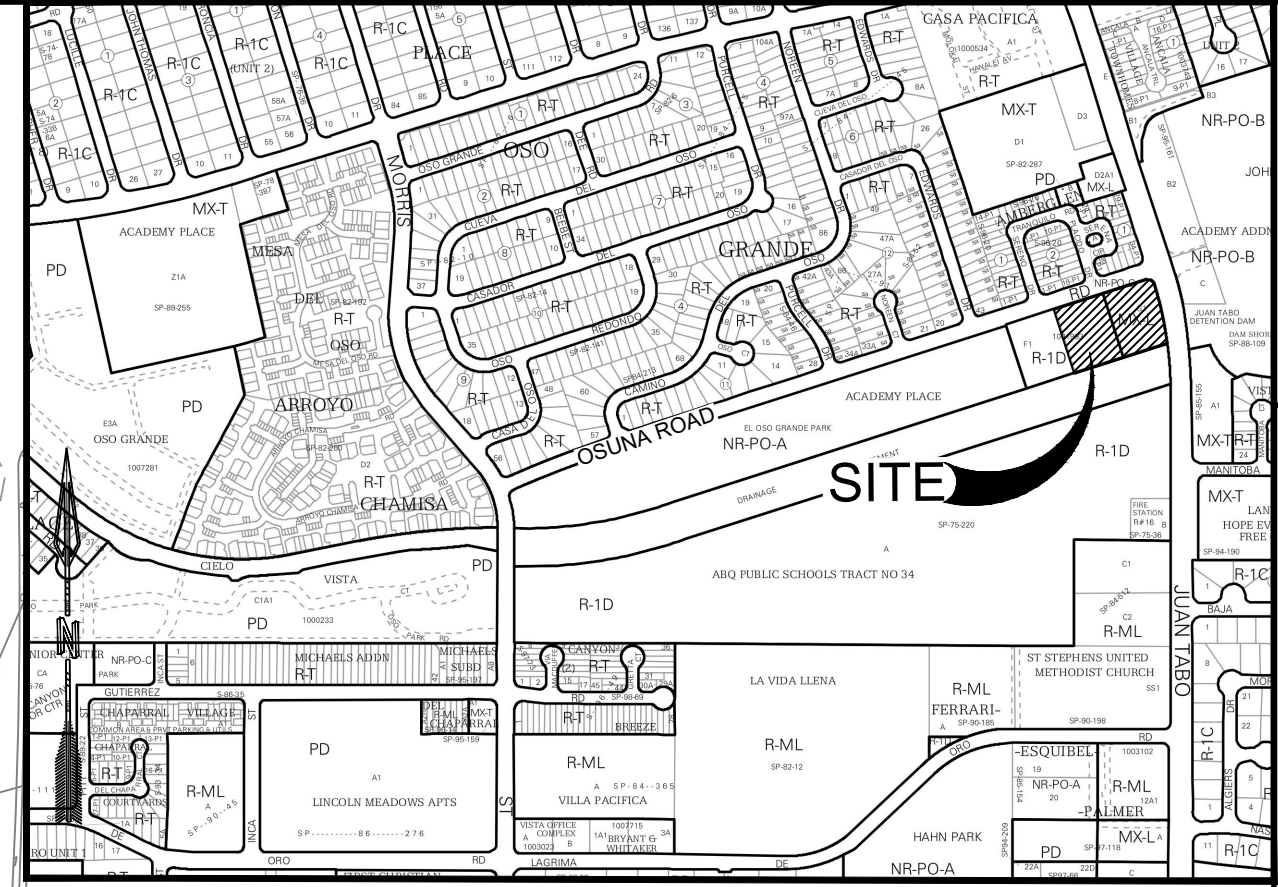
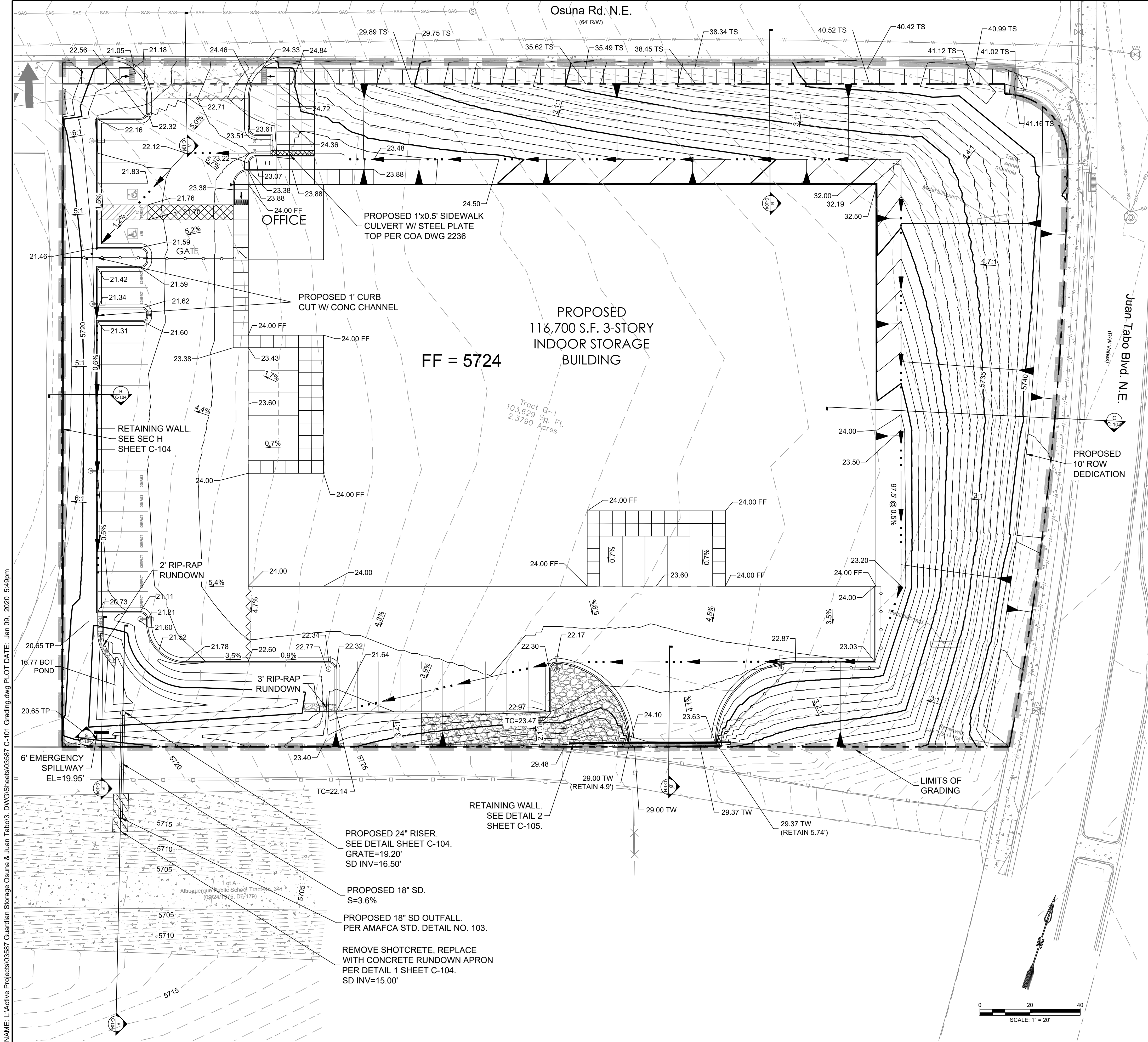


Scale: 1" = 20'



January 10, 2020

Sheet 2 of 7



- ### GRADING NOTES
- CONTRACTOR TO FIELD VERIFY LOCATION AND ELEVATION OF ALL EXISTING DRY AND WET UTILITIES PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY ISSUES. UTILITY RELOCATION MAY BE REQUIRED.
 - PARKING LOT STRIPING HAS BEEN SCREENED BACK FOR VISUAL CLARITY.
 - GRADES SHOWN ARE FINAL SURFACE GRADES AFTER COMPLETION OF SURFACE IMPROVEMENTS.
 - GRADE AREAS AT SITE PERIMETER TO MATCH GRADES OF ADJACENT PARCELS.
 - REMOVE EXCESS SOIL FROM SITE AND DISPOSE OF PROPERLY IN ACCORDANCE WITH APPLICABLE REGULATIONS.
 - PROVIDE TEMPORARY GRADING FEATURES SUCH AS BERMS, SWALES, SUMPS AND BASINS TO MANAGE INTERIM STORM WATER RUNOFF DURING CONSTRUCTION PROCESS. STORM WATER RUNOFF LEAVING THE SITE SHALL MEET ALL FEDERAL, STATE AND LOCAL QUALITY REQUIREMENTS.
 - ALL DISTURBED AREAS TO BE RE-SEEDDED PER LANDSCAPE PLAN PROVIDED BY OTHERS.
 - ALL AREAS WITH SLOPES GREATER THAN 3:1 SHALL BE LANDSCAPED WITH 3/4" MINUS ALL FACED FRACTURED GRAVEL AND SEPARATION FABRIC.
- ### LEGEND
- EXISTING PROPERTY LINE
 - EXISTING MAJOR CONTOUR
 - EXISTING MINOR CONTOUR
 - PROPOSED MAJOR CONTOUR
 - PROPOSED MINOR CONTOUR
 - LIMITS OF GRADING
 - PROPOSED WATER BLOCK
 - PROPOSED SWALE
 - SLOPE ARROW
 - PROPOSED 3/4" FRACTURED ALL-FACE GRAVEL
- ### RIP RAP SPECIFICATIONS / NOTES
- RIP RAP SHALL BE OVER FILTER MATERIAL AND CONSIST OF RIP RAP AND CRUSHED ROCK MEETING THE FOLLOWING GRADATION OR ENGINEER-APPROVED EQUAL:
- | MAX DIMENSION | % SMALLER |
|---------------|-----------|
| 12" | 100 |
| 9" | 50-60 |
| 6" | 35-45 |
| 3" | 10 |
- FILTER MATERIAL SHALL CONSIST OF CRUSHED ROCK MEETING THE FOLLOWING GRADATION OR ENGINEER-APPROVED EQUAL:
- | U.S. STANDARD SIEVE SIZE | % PASS BY WT |
|--------------------------|--------------|
| 1" | 100 |
| 3/4" | 45-65 |
| #4 | 25-45 |
| #40 | 0-20 |
| #200 | 0-5 |
- FILTER MATERIAL SHALL BE PLACED UNDER THE RIP RAP CHANNEL AND COMPACTED INTO SURFACE VOIDS OF THE RIP RAP. THE SUBGRADE SHALL BE PROCESSED TO A 12" MIN. DEPTH AND COMPACTED TO 95% MIN. RELATIVE DENSITY PER ASTM D 1557. THE FILTER MATERIAL SHALL BE TAMPED AND SHAPED TO FORM A SMOOTH, EVEN, AND FIRM FOUNDATION FOR THE OVERLAYING RIP RAP. THE CONTRACTOR'S OPERATIONS AND METHODS OF PLACING SHALL PREVENT SEGREGATION OF THE MATERIALS. THE FILTER MATERIAL SHALL BE PLACED AND TAMPED IN THE VOIDS OF THE RIP RAP.

NAME: L:\Active Projects\03587 Guardian Storage Osuna & Juan Tabo\3. DWG\Sheets\03587 C-101 Grading.dwg PLOT DATE: Jan 09, 2020 5:49pm

© Copyright 2020 RESPEC - All Rights Reserved

DESIGNED: JL	DRAWN: JMT	CHECKED: SEG	DATE: 1.09.2020
REVISION			
STAMP			
SHELDON E. GREER NEW MEXICO 17154 1/09/2019 REGISTERED PROFESSIONAL ENGINEER			
THIS DRAWING IS INCOMPLETE AND NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS STAMPED, SIGNED AND DATED			
nm811 Know what's below. Call before you dig.			
PROJECT NAME: GUARDIAN STORAGE			
SHEET TITLE: CONCEPTUAL GRADING PLAN			
SUBMITTED FOR: DRB REVIEW			
SHEET NUMBER: C-101			

DRAINAGE SUMMARY

Background

Tract G-1 contains approximately 2.38 acres. The site is located on the south west corner of Osuna Rd- and Juan Tabo Blvd in Albuquerque, New Mexico. The site does not receive any offsite runoff from developed areas and, in general, surface drains from east to west. The existing site is currently an undeveloped lot. A 120,000 SF self-storage facility is proposed to be installed with an asphalt paved parking lot. The site is proposed to free discharge into the Bear Canyon Arroyo.

Methodology

The development assumptions and criteria including land treatment types and impervious areas, as well as the hydrologic analyses for the site were performed in accordance with the City of Albuquerque Development Process Manual (DPM). AHYMO-S4 (April 2018) was used to develop peak flow rates for the 100-year 24-hour design storm in accordance with Section 22.2 of the DPM. Hydraulic calculations were performed using Section 22.3 of the DPM.

Existing Conditions

The existing site is currently undeveloped with moderate vegetation and no impervious area. The site has mild to steep slopes from east to west. The eastern side of the property has 3:1 down slopes setting the property approximately 12 feet lower than Juan Tabo Blvd. The remainder of the property contains east-west slopes ranging from 3% to 7%. The site appears to surface sheet flow to its western property line and discharges to the adjacent property to the west. The site does not appear to receive any offsite flows. There is a concrete arroyo to the south called Bear Canyon. The 100-year 24-hour peak runoff discharge is 4.54 cfs.

Proposed Conditions

The site is located immediately downstream of John Robert Dam which protects the site from, at a minimum, the upstream flows in the 100-year design storm. It is not impacted by the primary spillway, however, in a storm event substantial enough to result in flow over the emergency spillway the site would certainly be impacted by this flow. The magnitude of this impact is dependent upon the magnitude of the storm event. In the event of dam failure the site almost certainly would be substantially impacted and inundated.

The proposed site development will consist of asphalt and concrete paving for parking and driving surfaces and an indoor self-storage building. The site will contain approximately 62% impervious area with the remaining portion to be landscaped. The site drainage will include surface sheet flows and swales concentrating flows to a low point south west of the storage facility that will discharge into a water quality pond located at the south west corner of the property.

Subbasin A is 2.291 acres and generates 10.02 cfs. This subbasin consists of the majority of the site including the proposed building and asphalt parking lot. The site drainage will include surface sheet flow and swales concentrating flows to low spots on the southwest side of the parking lot. A water quality pond will be installed at the southwest side of the site, where two (2) curb openings will allow the surface flows from Subbasin A to enter the water quality pond. An 18" overflow storm drain will convey any additional flow above the water quality pond volume and discharge into the Black Canyon Arroyo to the south.

Subbasin B is 0.089 acres and generates 0.29 cfs. This subbasin consists primarily of landscaping. The drainage from this subbasin will flow west in the direction of the neighboring property as it has historically. The existing site discharged 4.54 cfs into the neighboring property, so we will reduce the existing drainage impacting the neighboring property by 4.25 cfs.

Subbasin C is 0.243 acres and generates 1.24 cfs. This subbasin consists primarily of existing asphalt on Osuna Rd NE as well as proposed sidewalk. The drainage from this subbasin will flow southwest in the direction of the existing curb and gutter as it has historically. The Manning Formula table and graph summarizes the water surface elevation in the existing gutter and street during the 100-yr 24-hr design storm.

Hydrology calculations are shown on this sheet to the right of this summary. The water quality ponding table summarizes the water quality volumes required and provided. Sufficient ponding has been provided.

HYDROLOGY CALCULATIONS

AHYMO INPUT: EXISTING CONDITIONS

Subbasin	Area (ac)	Treatment Type Area (ac)				Treatment Type Area (%)			
		A	B	C	D	A	B	C	D
Existing	2.380	2.38	0	0	0	100.00%	0.00%	0.00%	0.00%

AHYMO INPUT: PROPOSED CONDITIONS

Subbasin	Area (ac)	Treatment Type Area (ac)				Treatment Type Area (%)			
		A	B	C	D	A	B	C	D
Subbasin A	2.291	0.000	0.405	0.405	1.481	0.0%	17.7%	17.7%	64.6%
Subbasin B	0.089	0.000	0.045	0.045	0.000	0.0%	50.0%	50.0%	0.0%
Subbasin C	0.243	0.000	0.000	0.000	0.243	0.0%	0.0%	0.0%	100.0%

AHYMO OUTPUT: EXISTING CONDITIONS

Subbasin	A (ac)	Q (cfs)	V (acft)	Q/A (cfs/ac)
Existing	2.38	4.54	0.13	1.9

AHYMO OUTPUT: PROPOSED CONDITIONS

Subbasin	A (ac)	Q (cfs)	V (acft)	Q/A (cfs/ac)
Subbasin A	2.291	10.02	2.23	4.4
Subbasin B	0.089	0.29	0.01	3.3
Subbasin C	0.243	1.24	0.06	5.1

WATER QUALITY PONDING

Area (ac)	% Imp.	Imp. Area (ac)	WQ Depth (in)	Required WQ Vol (cu ft)	Provided WQ Vol (cu ft)
2.381	62.2%	1.481	0.34	1828	2516

Weir Flow Calcs: Emergency Overflow

$Q_w = 3.3P(h)^{1.5}$

P = Perimeter (ft) 6

h = Head (ft) 0.7

3.3 = coefficient of discharge

Q_w = Capacity (cfs) 11.6

Orifice Flow Calcs: 24" SD w/ Grate

$Q_o = .6A\sqrt{2gh}$

A = Open area of grate (sq. ft) 2.1

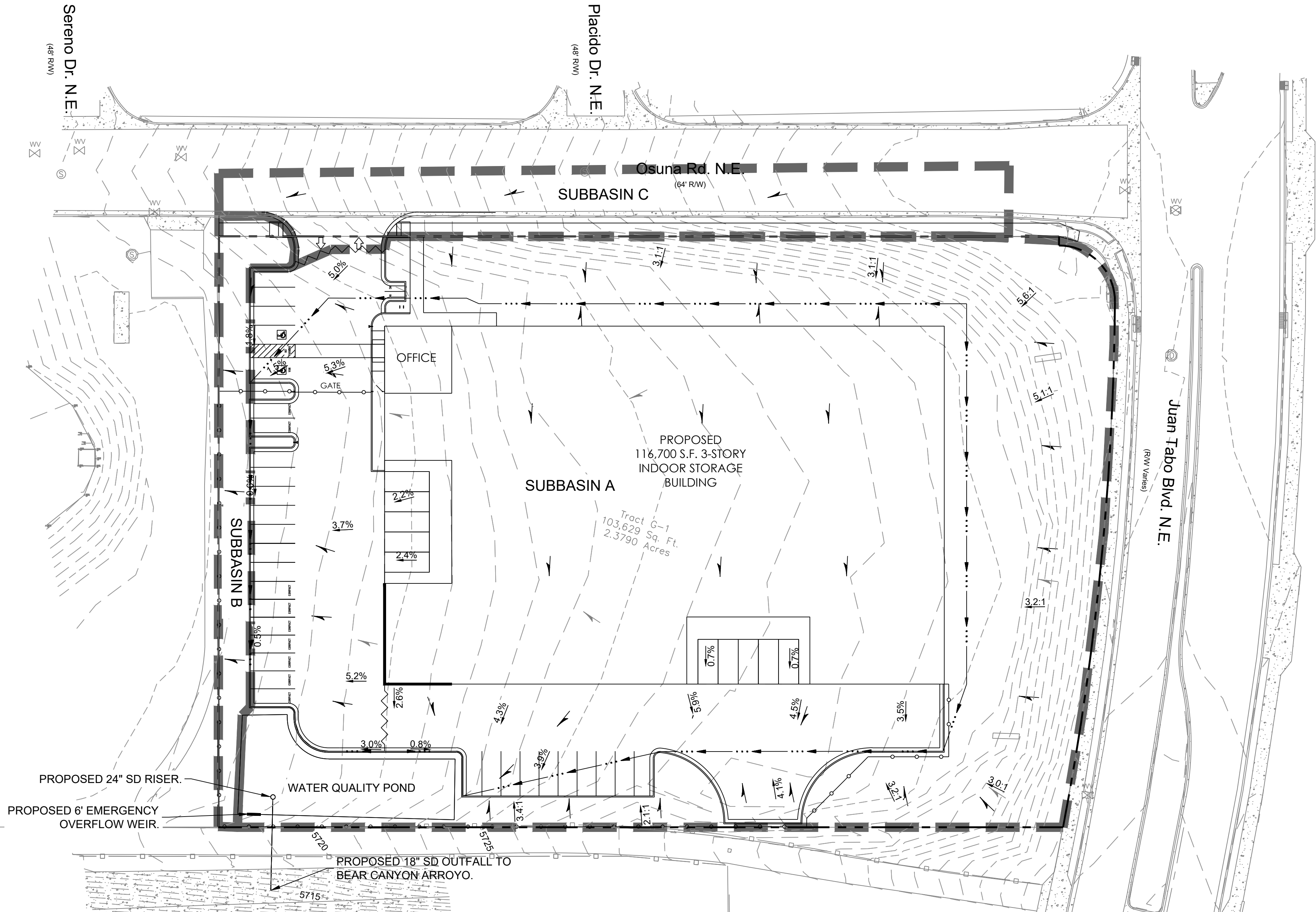
g = 32.2 (ft/s²)

h = Head (ft) 1.5

Q_o = Capacity (cfs) 12.4

LEGEND

- SUBBASIN BOUNDARY
- EXISTING FLOW ARROW
- PROPOSED FLOW ARROW
- PROPOSED WATER BLOCK
- PROPOSED SWALE



Manning Formula: Osuna Road NE Driveway Section

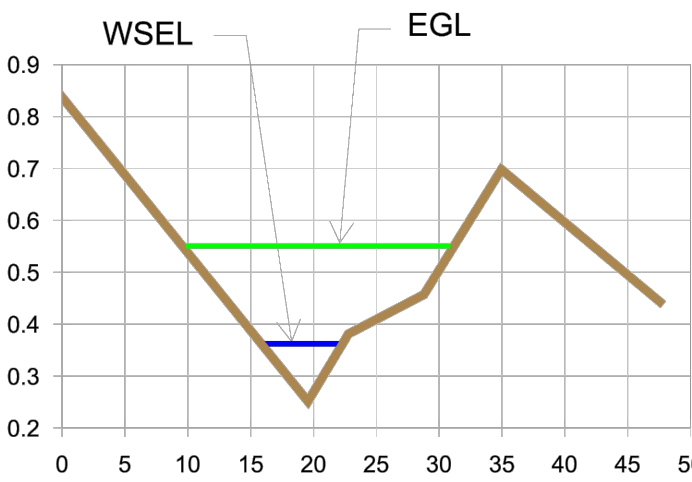
Irregular Section Input

Flow Slope 1.24 cfs 0.075 ft/ft

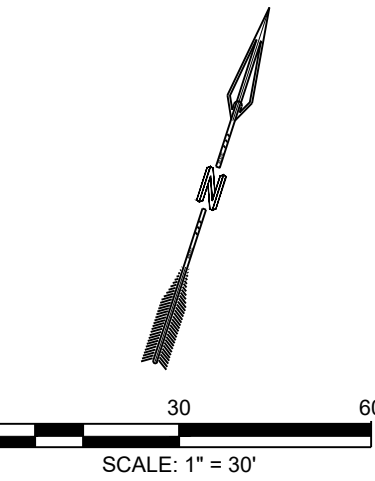
Sta	Elev	n	Sta	Elev	n	Sta	Elev	n	Sta	Elev	n
0	0.837	0.017	19.56	0.251	0.017	22.78	0.381	0.017	28.79	0.457	0.017
34.96	0.698	0.017	47.56	0.443	0.017						

Output

WSElev 0.362 ft
Flow Area 0.357 sf
Velocity 3.48 fps
Velocity Head 0.188 ft
Top Width 6.44 ft
Froude Number 2.60
Critical WSElev 0.415 ft
Critical Slope ft/ft



Driveway Analysis.mxd 12/19/2019
ManningSolver v1.019
Copyright (c) 2000 Current Applications



NAME: L:\Active Projects\03587 Guardian Storage Osuna & Juan Tabo\3. DWG\Streets\03587 C-102 Drainage.dwg PLOT DATE: Dec 20, 2019 2:46pm

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DESIGNED: JL
DRAWN: JMT
CHECKED: SEG
DATE: 12/20/2019

RESPEC
5971 Jefferson Street Suite 101
Albuquerque, NM 87110
Water and Natural Resources
respec.com 505.253.9718

RESPEC

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SHELDON E. GREER
NEW MEXICO
17154
12/20/2019
PROFESSIONAL SEAL

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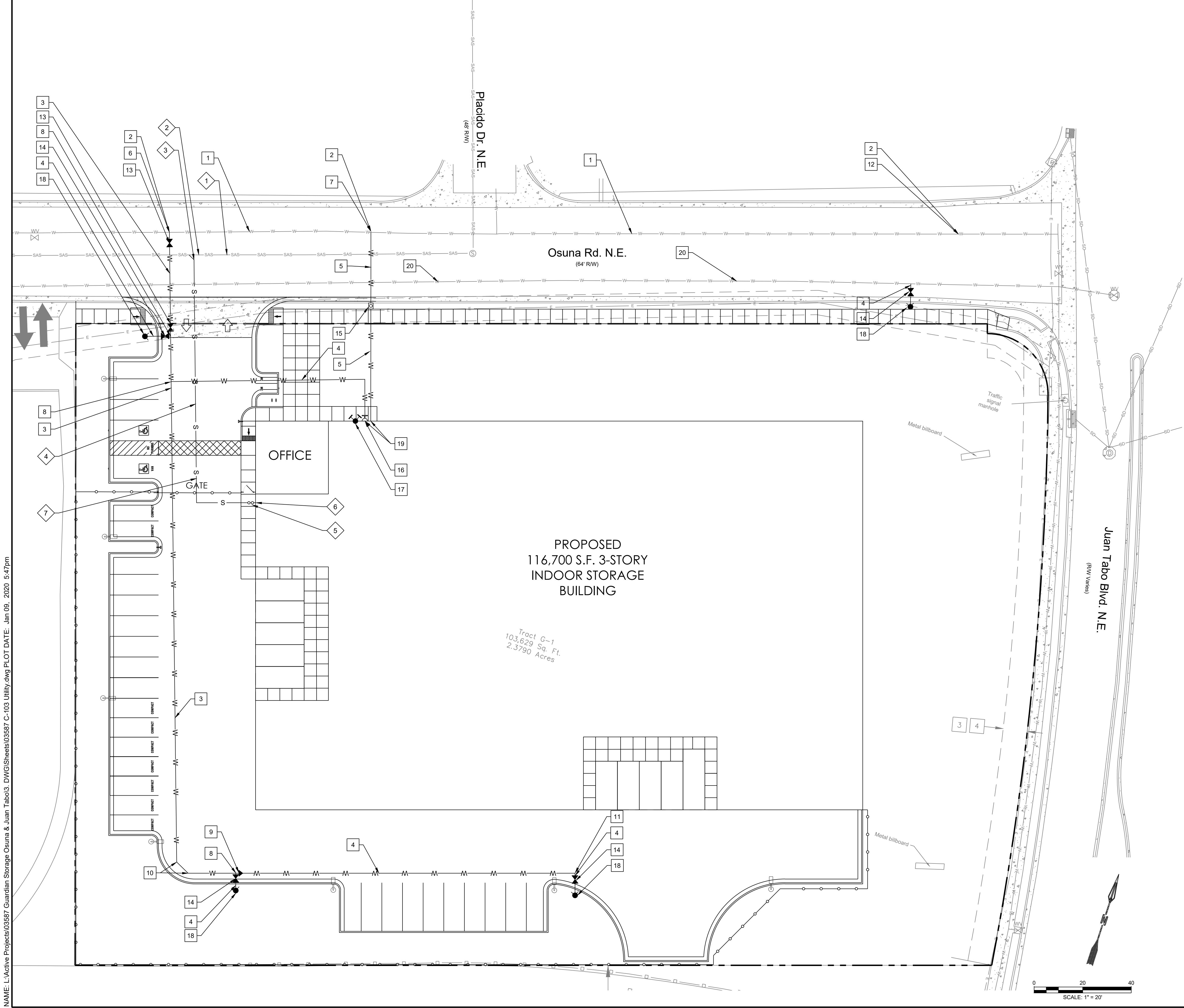
PROJECT NAME:
GUARDIAN STORAGE

SHEET TITLE:
CONCEPTUAL
DRAINAGE PLAN

SUBMITTED FOR:
DRB REVIEW

SHEET NUMBER:
C-102

NAME: L:\Active Projects\03587 Guardian Storage Osuna & Juan Tabo\3. DWG\Streets\03587 C-103 Utility.dwg PLOT DATE: Jan 09, 2020 5:47pm



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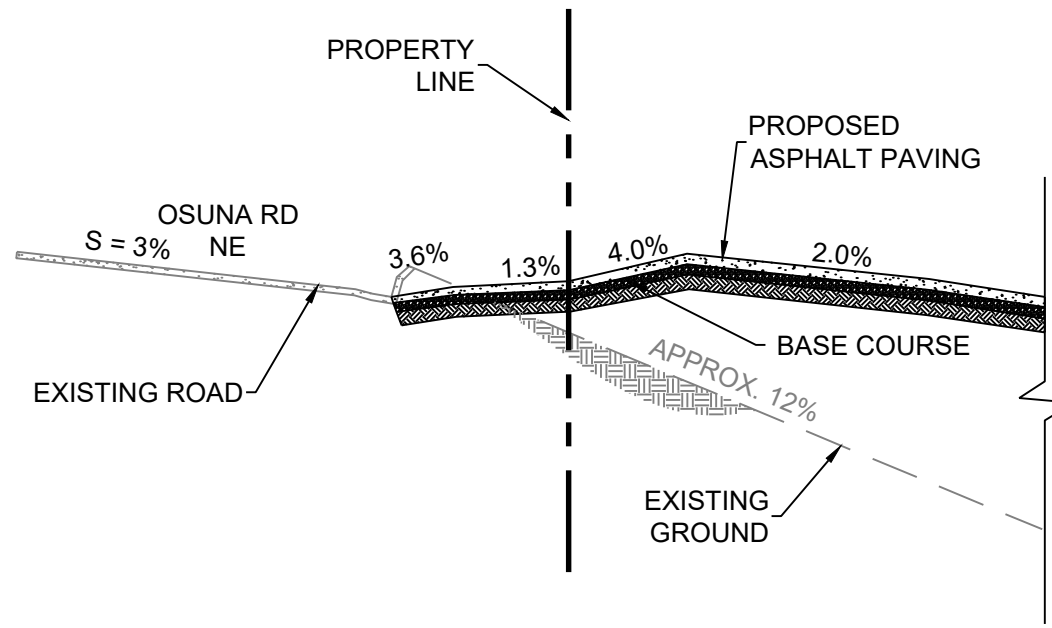
LEGEND		
ITEM	EXISTING	PROPOSED
FIRE HYDRANT		
WATER VALVE		
SEWER MANHOLE		
STORM SEWER MANHOLE		
DROP INLET		
WATER METER		
WATER LINE	W	W
SANITARY SEWER LINE	S	S
STORM DRAIN LINE	SD	SD
UNDERGROUND ELECTRIC	E	E
CURB AND GUTTER		
ELECTRICAL TRANSFORMER	T	
GATE		
SIGN		
TRAFFIC SIGNAL MANHOLE		
METAL FENCE		
SUBJECT BOUNDARY LINE		
BOUNDARY ADJOINER LINE		
EASMENT LINE		

WATER CONSTRUCTION NOTES	
I.D.#	DESCRIPTION
1	EXISTING 6" D.I. PIPE
2	CONNECT NEW WATERLINE TO EXISTING WATERLINE (NON PRESSURIZED CONNECTION)
3	INSTALL 8" WATERLINE
4	INSTALL 6" WATERLINE
5	INSTALL 1" WATERLINE
6	INSTALL 6"X8"X8" TEE
7	INSTALL SADDLE CONNECTION
8	INSTALL 8"X8"X6" TEE
9	INSTALL 8"X6" REDUCER
10	INSTALL 8" 45° BEND
11	INSTALL 6" 90° BEND
12	INSTALL 6" TEE
13	INSTALL 8" GATE VALVE AND VALE BOX, PER COA STD. DTL. 2326, 2328, AND/OR 2329
14	INSTALL 6" GATE VALVE AND VALE BOX, PER COA STD. DTL. 2326, 2328, AND/OR 2329
15	INSTALL 1" SINGLE WATER SERVICE, PER COA STD. DTL. 2362 AND 2368
16	INSTALL WALL INDICATOR VALVE
17	INSTALL FDC
18	INSTALL FIRE HYDRANT, PER COA STD. DTL. 2340
19	SEE INTERIOR BUILDING PLANS FOR CONTINUATION
20	EX. 16" D.I. TRANSMISSION MAIN (NON-POTABLE) TO BE AVOIDED.

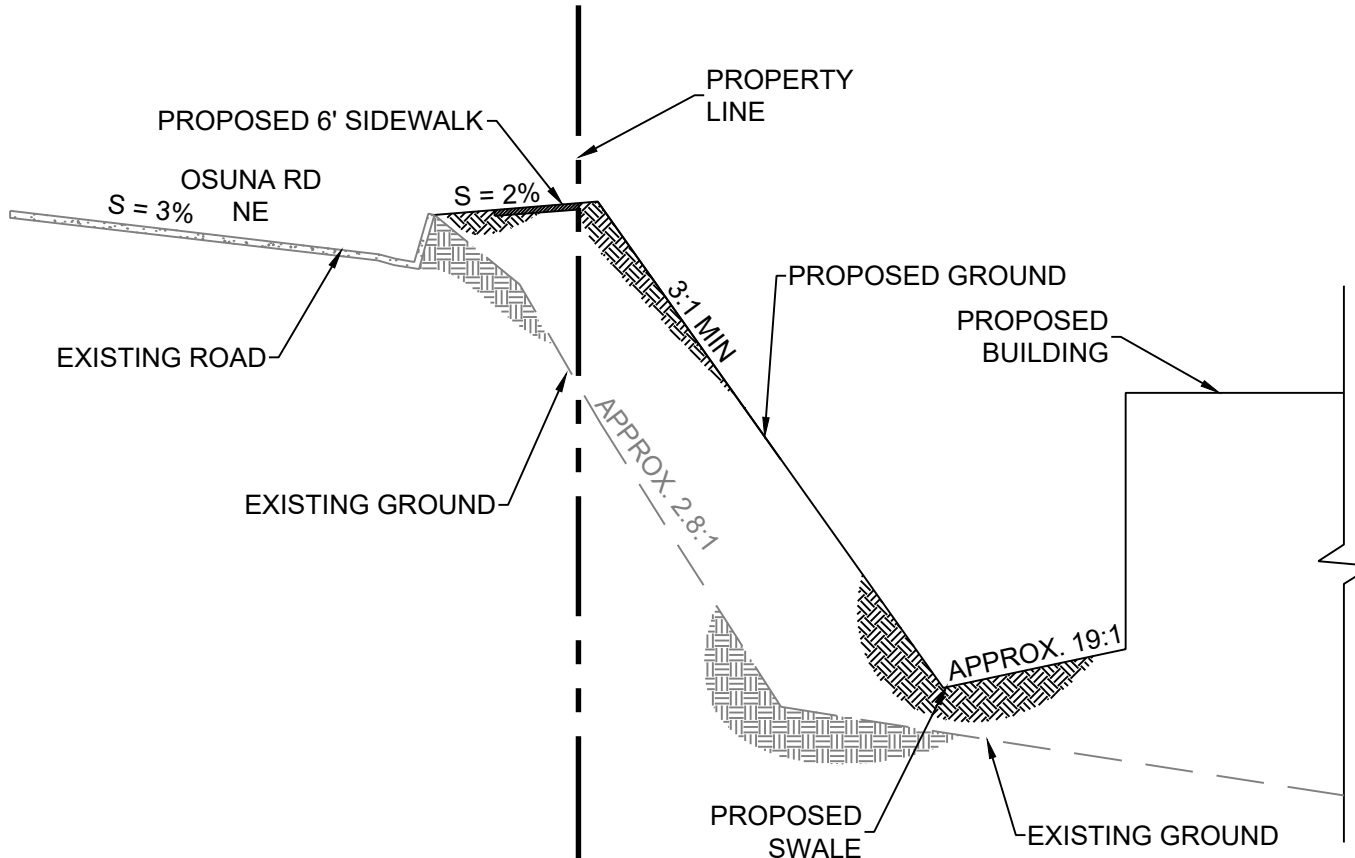
SEWER CONSTRUCTION NOTES	
I.D.#	DESCRIPTION
1	EXISTING 8" PVC SANITARY SEWER LINE
2	SANITARY SEWER SERVICE CONNECTION PER COA STD. DTL. 2125. CONTRACTOR TO FIELD VERIFY SIZE AND TYPE OF SAS MAIN AND NOTIFY ENGINEER OF ANY CONFLICTS PRIOR TO CONSTRUCTION
3	INSTALL 4" WYE CONNECTION
4	INSTALL 4" SANITARY SEWER LINE
5	INSTALL DOUBLE CLEANOUTS
6	SEE INTERIOR BUILDING PLANS FOR CONTINUATION
7	INSTALL 4" 90° BEND

- NOTES:
- CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITY LOCATIONS, DEPTHS, AND TYPE OF MATERIAL AND NOTIFY ENGINEER OF ANY CONFLICTS PRIOR TO ANY CONSTRUCTION.
 - ALL UTILITIES TO BE INSTALLED PER CITY OF ALBUQUERQUE SPECIFICATIONS.
 - ALL SANITARY SEWER BENDS AND WYE CONNECTIONS TO INCLUDE DOUBLE CLEANOUTS.
 - REDUCE PRESSURE BACKFLOW PREVENTERS FOR DOMESTIC WATER LINES AND FIRE LINES TO BE INTERNAL TO THE BUILDINGS.
 - ALL ON-SITE FIRE HYDRANTS TO BE PRIVATE AND PAINTED SAFETY ORANGE.

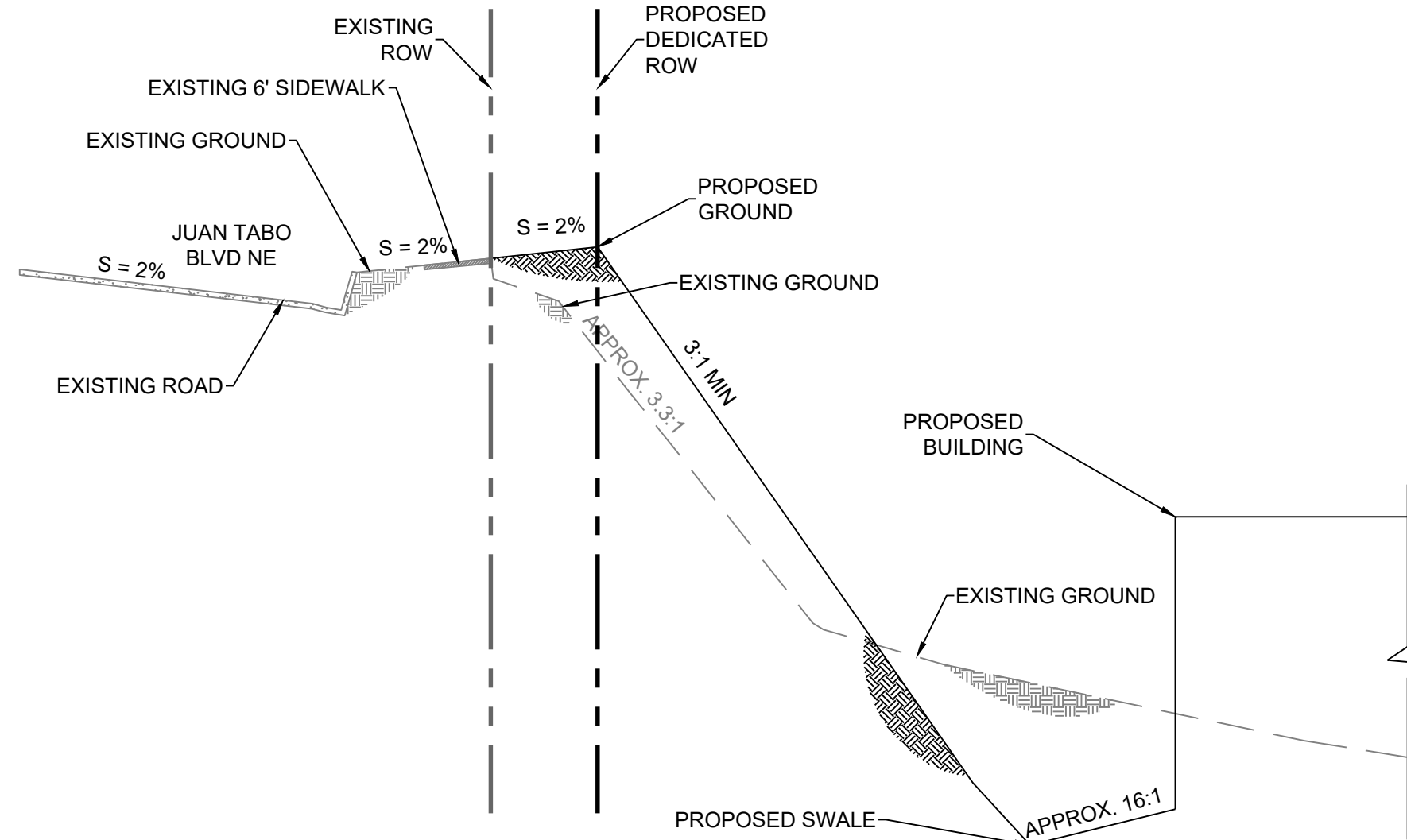
DESIGNED JL	DRAWN JMT	CHECKED SEG	DATE 1.09.2020
RESPEC			
5971 Jefferson Street Suite 101 Albuquerque, NM 87110 Water and Natural Resources respec.com 505.253.7718			
STAMP			
SHELDON E. GREER NEW MEXICO 17154 1/09/2020 REGISTERED PROFESSIONAL ENGINEER			
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PROJECT NAME: GUARDIAN STORAGE			
SHEET TITLE: CONCEPTUAL UTILITY PLAN			
SUBMITTED FOR: DRB REVIEW			
SHEET NUMBER: C-103			



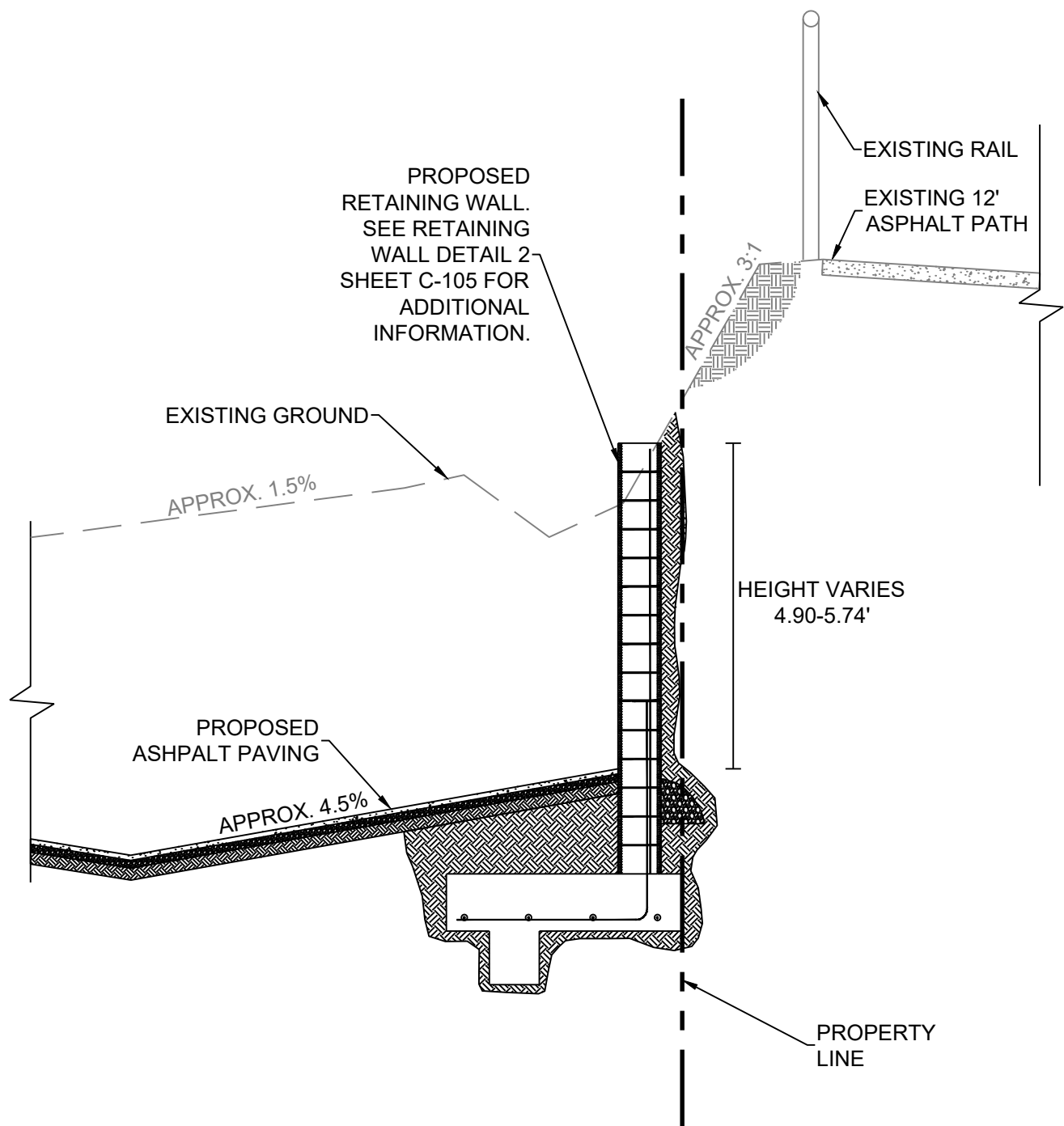
A DRIVEWAY
SCALE: NTS



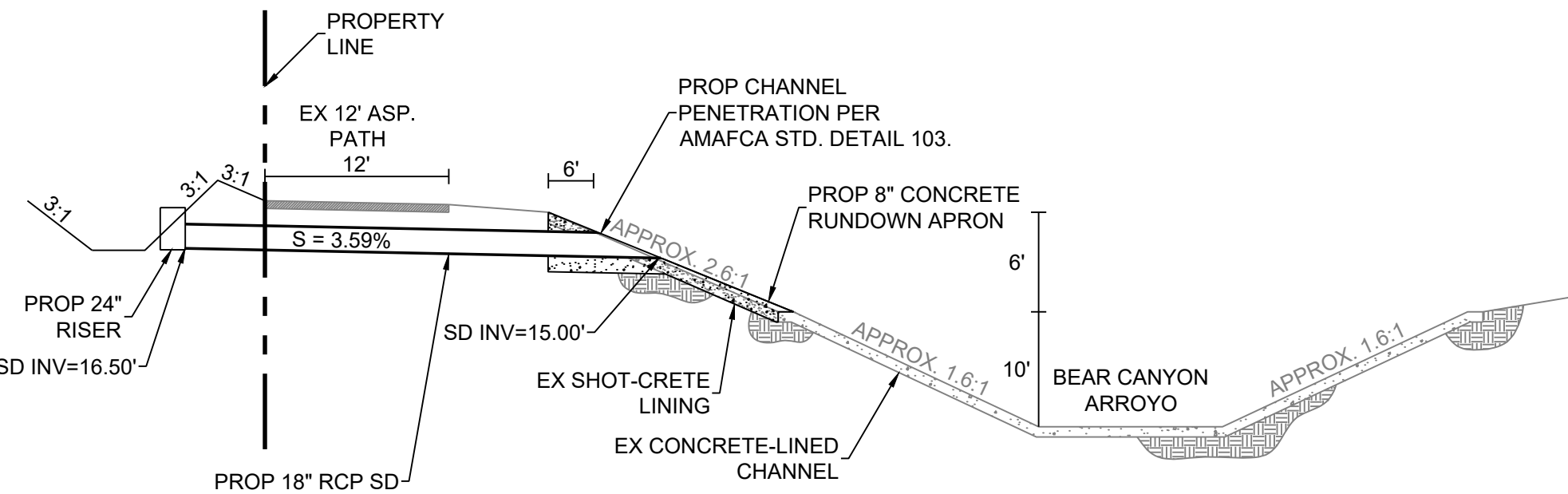
B NORTH PROPERTY LINE SECTION
SCALE: NTS



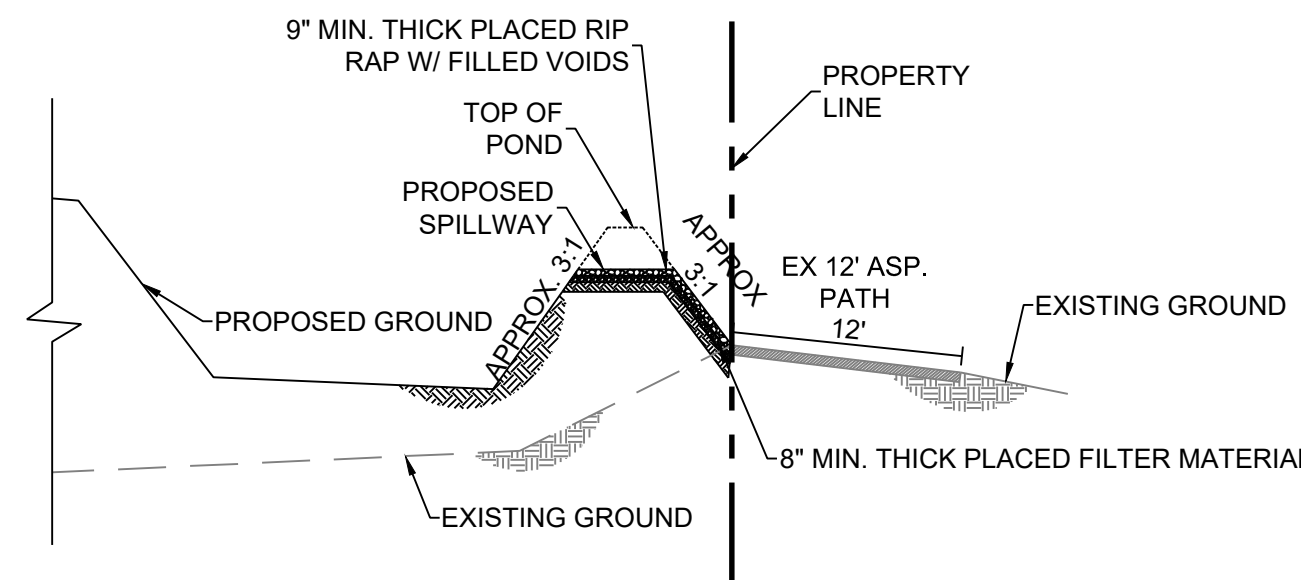
C EAST PROPERTY LINE SECTION
SCALE: NTS



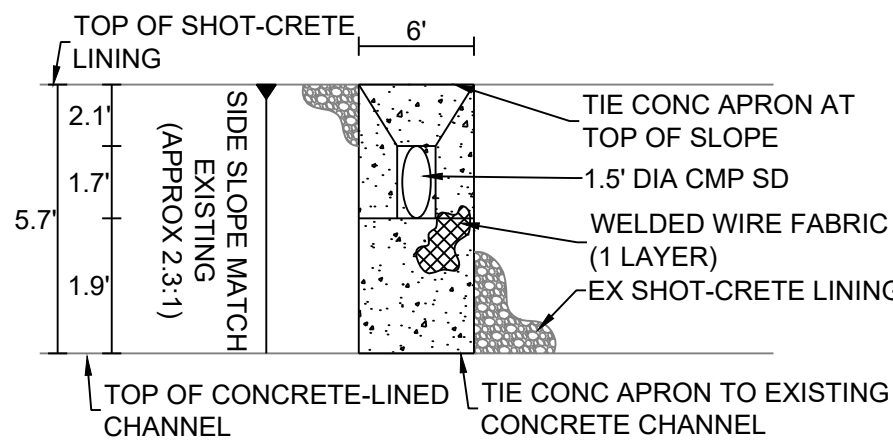
D SOUTH PROPERTY LINE SECTION
SCALE: NTS



E OUTFALL DETAIL
SCALE: NTS

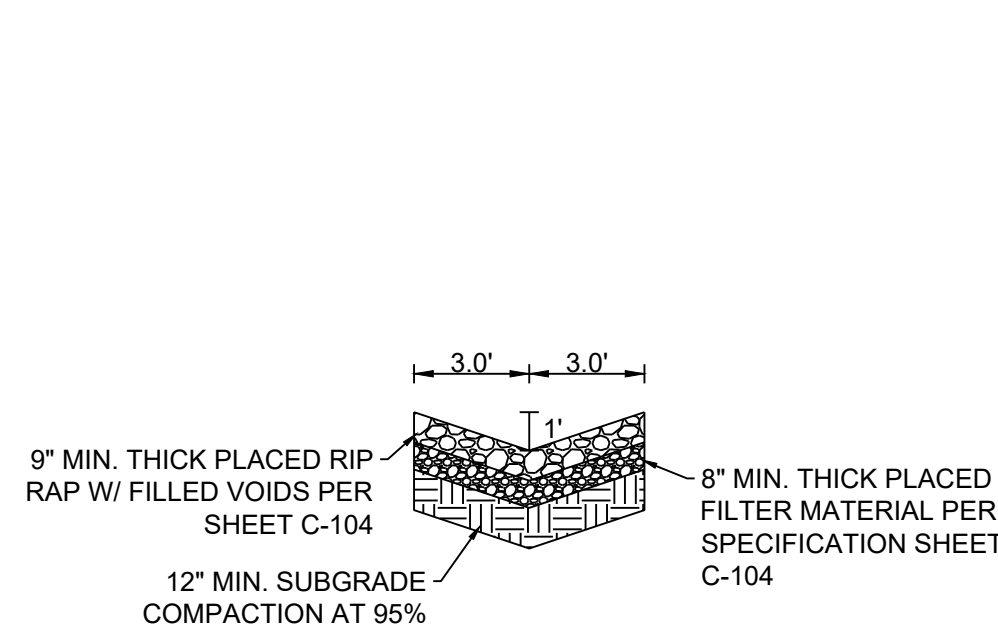


F SPILLWAY DETAIL
SCALE: NTS



1 PIPE PENETRATION
SCALE: NTS

- NOTES:
1. RUNDOWN APRON TO BE 8" THICK 3000 PSI CONCRETE
 2. CONTRACTOR TO CUT ANY CHANNEL REINFORCING BARS AT PIPE PENETRATION. FIELD BEND CUT BARS INTO PROPOSED CONCRETE ENCASEMENT AND MAINTAIN 3" CLEAR AT ALL SIDES
 3. WELDED WIRE FABRIC TO BE 6x6 W2.9x2.9. FABRIC TO BE CENTERED IN 8" THICK CONCRETE RUNDOWN APRON.



G SPILLWAY RIP RAP RUNDOWN
SCALE: NTS

RIP RAP NOTES

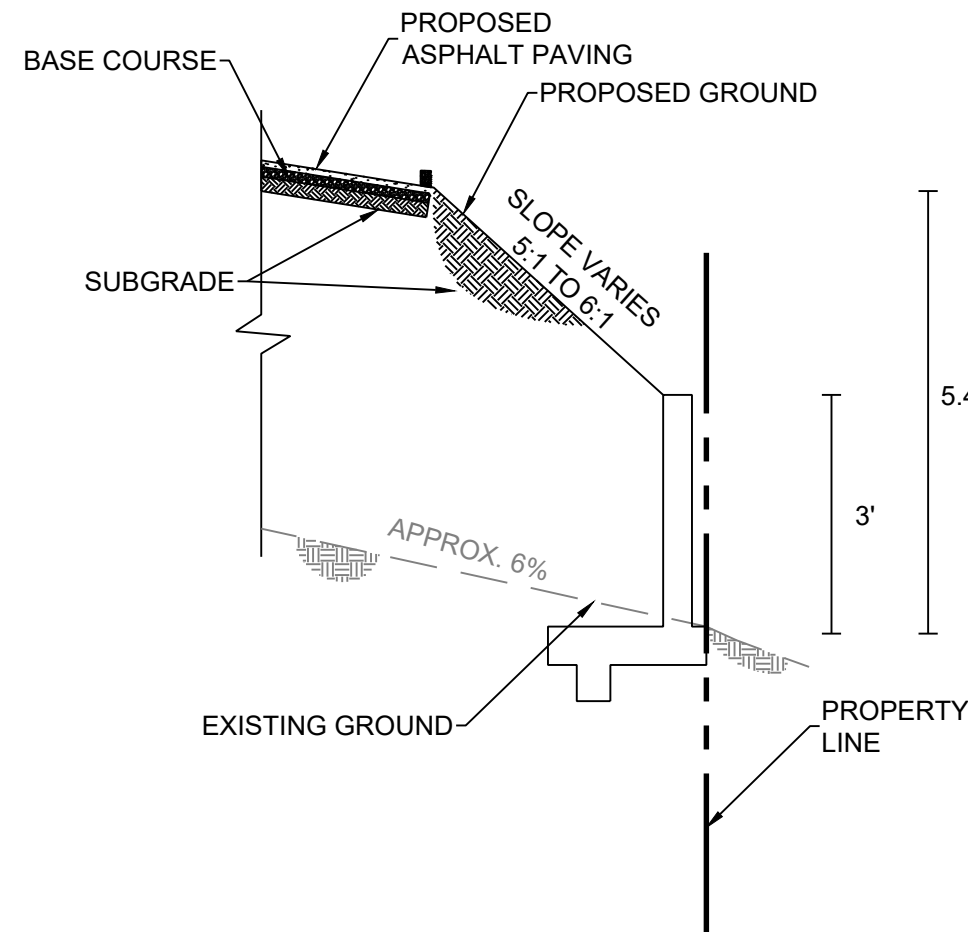
RIP RAP SHALL BE OVER FILTER MATERIAL AND CONSIST OF RIP RAP AND CRUSHED ROCK MEETING THE FOLLOWING GRADATION OR ENGINEER-APPROVED EQUAL:

MAX DIMENSION	% SMALLER
12"	100
9"	50-60
6"	35-45
3"	10

FILTER MATERIAL SHALL CONSIST OF CRUSHED ROCK MEETING THE FOLLOWING GRADATION OR ENGINEER-APPROVED EQUAL:

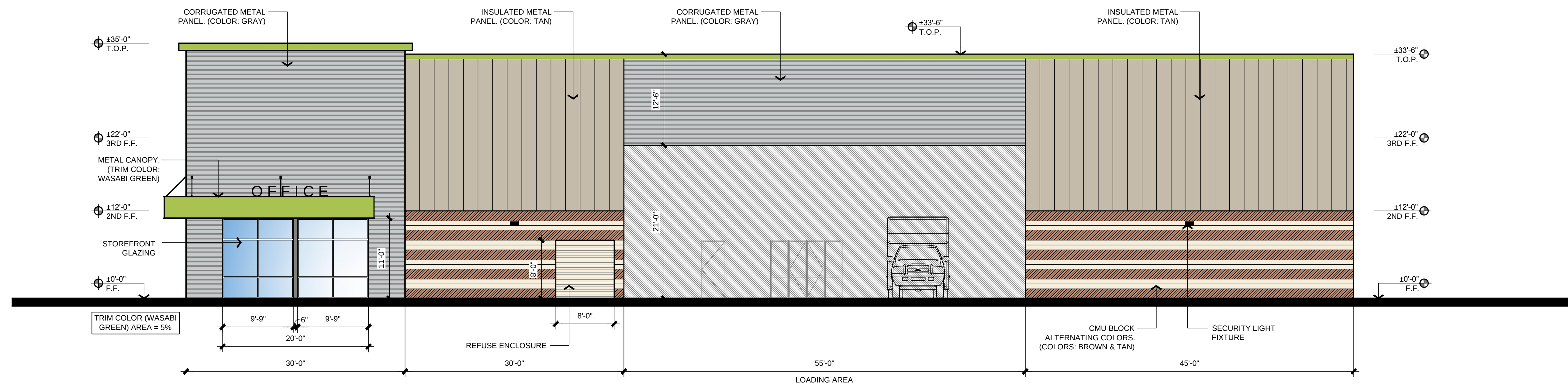
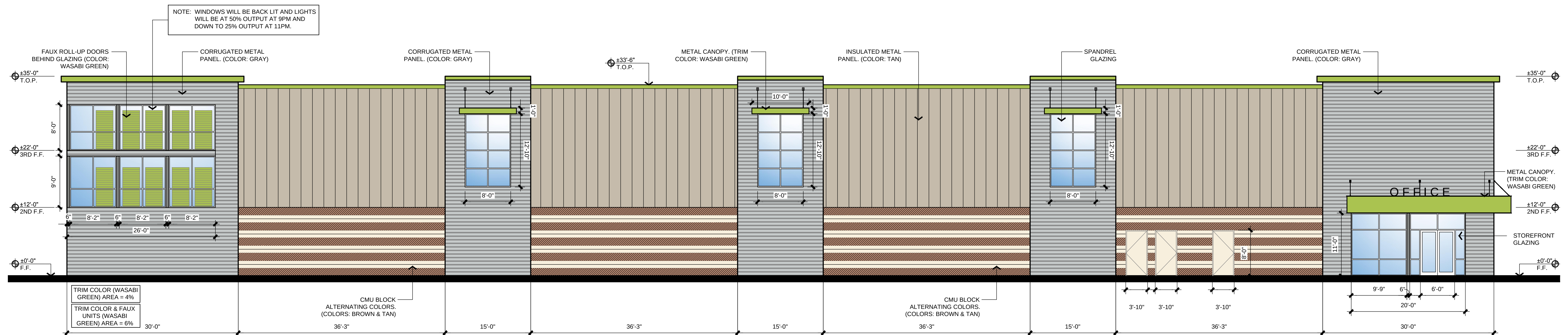
U.S. STANDARD SIEVE SIZE	% PASS BY WT
1"	100
3/4"	45-65
#4	25-45
#40	0-20
#200	0-5

FILTER MATERIAL SHALL BE PLACED UNDER THE RIP RAP CHANNEL AND COMPACTED INTO SURFACE VOIDS OF THE RIP RAP. THE SUBGRADE SHALL BE PROCESSED TO A 12" MIN. DEPTH AND COMPACTED TO 95% MIN. RELATIVE DENSITY PER ASTM D 1557. THE FILTER MATERIAL SHALL BE TAMPED AND SHAPED TO FORM A SMOOTH, EVEN, AND FIRM FOUNDATION FOR THE OVERLAYING RIP RAP. THE CONTRACTOR'S OPERATIONS AND METHODS OF PLACING SHALL PREVENT SEGREGATION OF THE MATERIALS. THE FILTER MATERIAL SHALL BE PLACED AND TAMPED IN THE VOIDS OF THE RIP RAP.



H WEST PROPERTY LINE SECTION
SCALE: NTS

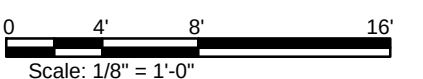
DESIGNED: JL	DRAWN: JMT	CHECKED: SEG	DATE: 1.09.2020
RESPEC 9971 Jefferson Street Suite 101 Albuquerque, NM 87109 Water and Natural Resources respec.com 505.253.9718			
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SHEET TITLE:		DETAILS	
SUBMITTED FOR:		DRB REVIEW	
SHEET NUMBER:		C-104	



MATERIAL COLOR & REFLECTANCE LEGEND

	McELROY METAL (COLOR: ASH GRAY) CORRUGATED METAL PANEL - LRV 39		SHERWIN-WILLIAMS (TRIM COLOR - WASABI GREEN) LRV 45		SPLIT FACE CMU BLOCK (COLOR: TAN) NOTE: BLOCK ELEMENTS ARE INTEGRAL AND WILL NOT EXCEED IDO LRV REQUIREMENTS
	METAL PANEL (COLOR: BENJAMIN MOORE - STONE HEARTH) INSULATED METAL PANEL - LRV 48.85		SPLIT FACE CMU BLOCK (COLOR: BROWN) NOTE: BLOCK ELEMENTS ARE INTEGRAL AND WILL NOT EXCEED IDO LRV REQUIREMENTS		

WEST ELEVATION 2
1/8" = 1'-0"



GUARDIAN STORAGE

ALBUQUERQUE, NEW MEXICO

ALBUQUERQUE, NEW MEXICO

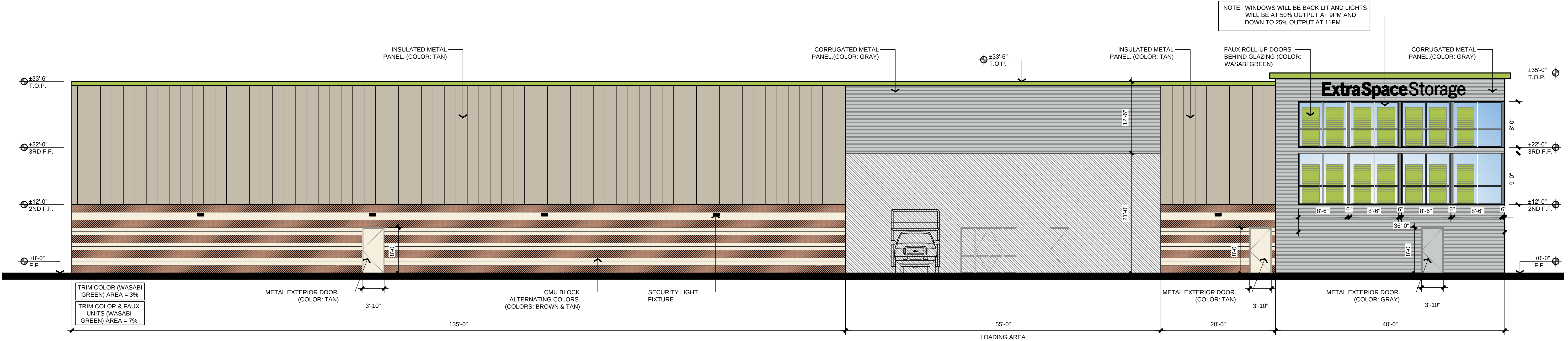
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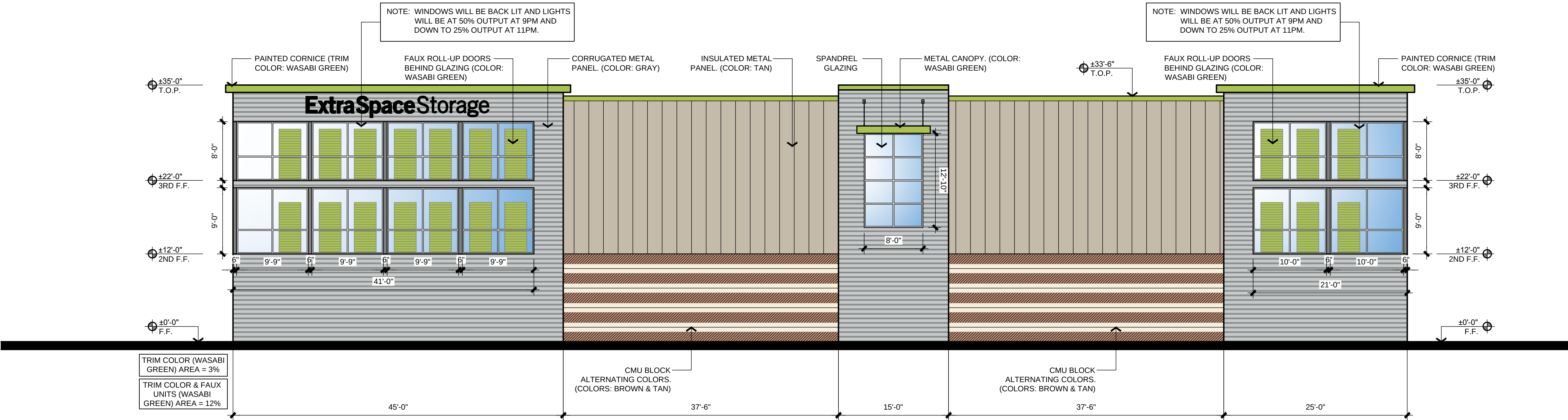
JOB NUMBER: 19-202
AS NOTED
DATE: 01/09/2020

jordan
ARCHITECTS, INC.

**131 CALLE IGLESIA, SUITE 100
SAN CLEMENTE,
CA 92672-7541**
Telephone 949/388-8090
Facsimile 949/388-8290



SOUTH ELEVATION ①
1/8" = 1'-0"



EAST ELEVATION ②
1/8" = 1'-0"

MATERIAL COLOR & REFLECTANCE LEGEND		

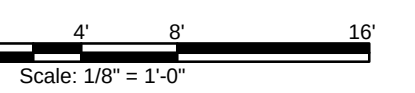
GUARDIAN STORAGE

ALBUQUERQUE, NEW MEXICO

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Facsimile 949.388-8290