

FINAL SITE PLAN, GRADING PLAN AND
PUBLIC SEWER AND PRIVATE STREET IMPROVEMENT PLAN
FOR NARANJA TRAILS

A PORTION OF THE NORTHWEST QUARTER OF SECTION 12,
TOWNSHIP 12 SOUTH, RANGE 13 EAST, OF THE GILA AND
SALT RIVER BASE AND MERIDIAN, PIMA COUNTY, ARIZONA
LOTS 1 THROUGH 64 & COMMON AREAS A1 THROUGH C
CASE# 2202968

AS-BUILT CERTIFICATION: (PAVING & GRADING)
I HEREBY CERTIFY THAT THE "RECORD DRAWING" MEASUREMENTS AS SHOWN HEREON WERE MADE BY UNDER MY SUPERVISION OR AS NOTED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR DATE
REGISTRATION NUMBER EXPIRES

AS-BUILT CERTIFICATION: (SEWER)
I HEREBY CERTIFY THAT THE "AS-BUILT" ANNOTATIONS PROVIDED ON THIS DRAWING WERE BASED ON AN AS-BUILT SURVEY CONDUCTED UNDER MY SUPERVISION AND ACCURATELY DEPICTS EXISTING FIELD CONDITIONS TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR DATE
REGISTRATION NUMBER EXPIRES

ENGINEER'S STANDARD DETAILS DISCLAIMER
COMPLYING WITH THE ARIZONA STATE BOARD OF TECHNICAL REGISTRATION'S SUBSTANTIVE POLICY STATEMENT REGARDING SEALING OF STANDARD DETAILS. THE STANDARD DETAILS USED IN THE DESIGN OF THIS PROJECT HAVE BEEN FORMALLY ADOPTED BY THE AGENCIES THAT PREPARED THEM. IN VIEW OF THEIR LONG HISTORY OF USE, APPLICABILITY, AND/OR SOUNDNESS, THE ENGINEER ACCEPTS THEIR USE FOR THIS PROJECT AND FINDS NO NEED FOR ALTERATION. EXCEPT IN CASES WHERE ITS USE MUST BE MODIFIED BY THE ENGINEER IN ORDER TO WORK WITH PROPOSED DESIGN CONDITIONS. SUCH MODIFICATIONS SHALL BE NOTED ON PLAN AND SEALED BY THE REGISTRANT ACCORDINGLY.

BASIS OF BEARING
BASIS OF BEARING IS ALONG THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 12, T.12S., R.13E. BEING S00°32'11"E WITH A DISTANCE OF 2640.20' FEET.

BASIS OF ELEVATIONS:
THE BASIS OF ELEVATION:
BENCHMARK IS THE NORTHWEST CORNER OF SECTION 12, T.12S., R.13E
ELEVATION=2693.89 FEET

SECONDARY BENCHMARK IS THE WEST QUARTER CORNER OF SECTION 12, T.12S., R.13E
ELEVATION=2581.39 FEET

NOTE:
A FLOOD USE PERMIT IS REQUIRED.

THIS PROJECT IS AFFECTED BY THE ORO VALLEY TOWN CODE CHAPTER 17 FLOODPLAIN AND EROSION HAZARD MANAGEMENT.

PERMITTING DIVISION-BUILDING CODES
THE FOLLOWING CODES AND STANDARDS SHALL BE APPLICABLE TO THIS DEVELOPMENT:

- INTERNATIONAL BUILDING CODES WITH LOCAL AMENDMENTS
- NATIONAL ELECTRIC CODE
- ADA STANDARDS FOR A ACCESSIBLE DESIGN
- 2018 IFC WITH LOCAL AMENDMENTS
- TOWN OF ORO VALLEY POOL CODE
- PAG STANDARDS SPECIFICATIONS AND D DETAILS FOR PUBLIC IMPROVEMENTS
- TOWN OF ORO VALLEY DRAINAGE CRITERIA MANUAL
- TOWN OF ORO VALLEY SUBDIVISION STREET STANDARDS AND POLICIES
- MANUAL TOWN OF ORO VALLEY ZONING CODE, CURRENT REVISED
- ORO VALLEY TOWN CODE, CURRENT REVISED.

PIMA COUNTY RWRD STANDARD DETAILS

104	TYPICAL TRENCH FOR GRAVITY SEWER LINES
108	SEWER/WATER CROSSING DETAILS
111	SEWER EASEMENT TYPICAL SECTION
205	4" DIAMETER MANHOLE CONFIGURATIONS
211	CONCRETE COLLAR FOR PAVED AREAS
212	CONCRETE COLLAR FOR UNPAVED AREAS
213	24" FRAME AND COVER
214	24" WATERTIGHT FRAME AND COVER
215	24" BOLTED WATERTIGHT FRAME AND COVER
216	30" FRAME AND COVER
217	30" WATERTIGHT FRAME AND COVER
218	30" BOLTED WATERTIGHT FRAME AND COVER
304	GRADE ADJUSTMENT FOR EXISTING BRICK MANHOLE
305	GRADE ADJUSTMENT FOR EXISTING PRECAST MANHOLE
306	FLOW CHANNEL COVER
309	MANHOLE RECONSTRUCTION
400	HCS REROUTING
401	HCS CONNECTION TO SEWER LINE
402	HCS CONNECTION TO MANHOLE

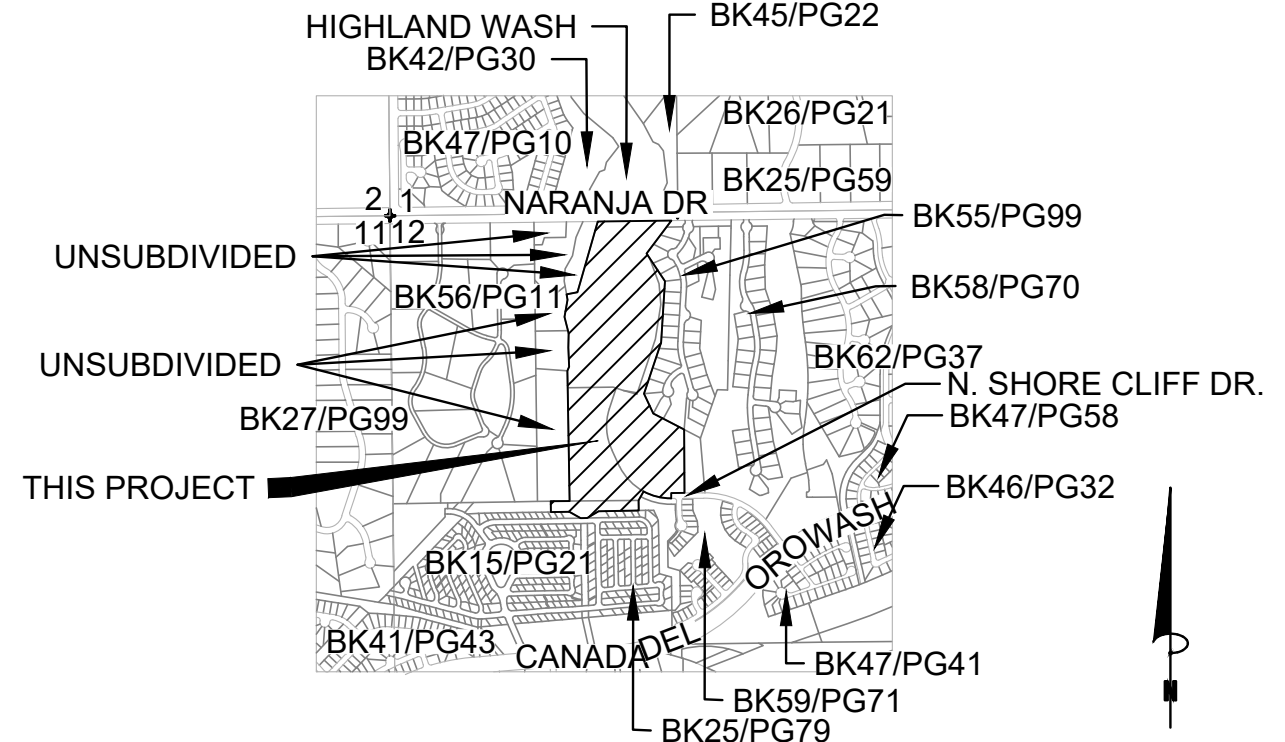
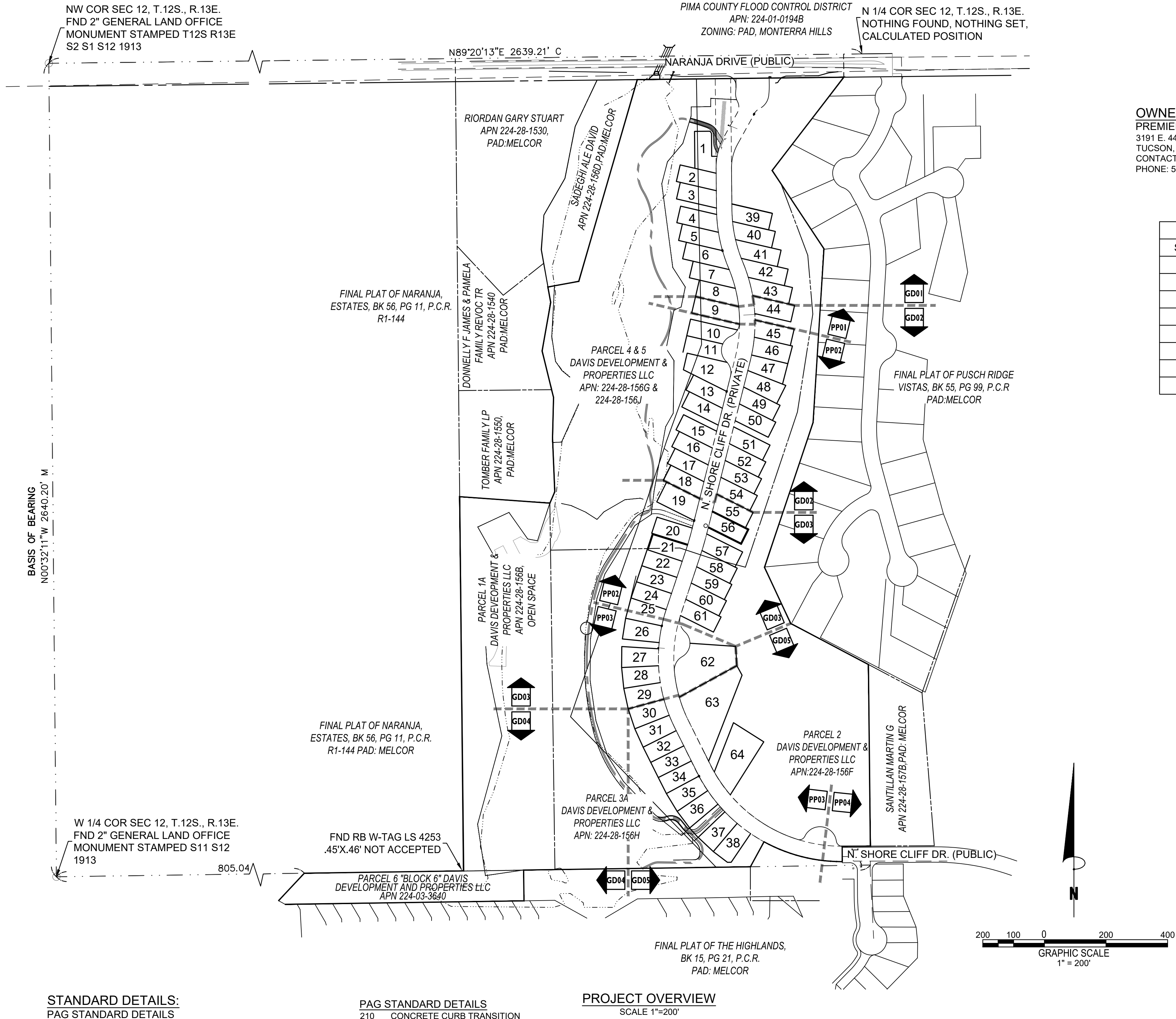
STANDARD DETAILS:
PAG STANDARD DETAILS

103	SURVEY MONUMENT
105	HANDRAIL
200	CONCRETE SIDEWALK
203	CONCRETE SIDEWALK: NEW TO EXISTING CONNECTION
206	DRIVE APRON
207	CURB ACCESS RAMP
209	CONCRETE CURB - TYPE 2
	SINGLE VERTICAL
209	CONCRETE CURB - TYPE 2 WEDGE

PAG STANDARD DETAILS

210	CONCRETE CURB TRANSITION
211	CONCRETE CURB: NEW TO EXISTING CONNECTION
213	CONCRETE HEADER
216	UTILITY TRENCH PAVEMENT PATCHES
302	STORM DRAIN MANHOLE
307	CATCH BASIN - TYPE 1 WING LENGTH AS NOTED
308	CATCH BASIN - TYPE 3
309	CATCH BASIN - TYPE 4 NUMBER OR GRATES AND TYPE AS NOTED
310	CATCH BASIN - TYPE 5

ENGINEERS EARTHWORK ESTIMATE:
RAW CUT: 222,580.63 CY
RAW FILL: 174,222.84 CY
NET CUT: 48,357.8 CY



SECTION 12 TOWNSHIP 12 SOUTH
RANGE 13 EAST
VICINITY MAP
NTS

OWNER PREMIER BUILDING GROUP 3191 E. 44TH STREET TUCSON, AZ 85713 CONTACT: ROD DAVIS PHONE: 520.293.0300	DEVELOPER MERITAGE HOMES 5326 N. LA CHOLLA BLVD. TUCSON, AZ 85741 CONTACT: SCOTT KOLT PHONE: 520.225.6845	CIVIL ENGINEER ATWELL 4700 E SOUTHERN AVE MESA, AZ 85206 CONTACT: MICHAEL PARK, PE PHONE: (602) 350-0311 MIKEPARK@ATWELL-GROUP.COM
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SHEET NUMBER	SHEET TITLE	SHEET DESCRIPTION
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ACCEPTED

BY: _____

PLANING & ZONING ADMINISTRATOR DATE _____

BY: SEE BELOW

TOWN OF ORO VALLEY WATER UTILITY DIRECTOR DATE _____

BY: _____

TOWN ENGINEER DATE _____

Water Utility Director

ACCEPTED (FOR IMPROVEMENT PLAN ELEMENTS)

TOWN OF ORO VALLEY, TOWN ENGINEER DATE _____

ACCEPTED (FOR SEWER ONLY PLAN ELEMENTS)

PIMA COUNTY RWRD DATE _____

ATWELL
866.850.4200 www.atwell-group.com
4700 E. SOUTHERN AVENUE
MESA, AZ 85206
520.268.6322

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LOCATION DESCRIPTION
A PORTION OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 12 SOUTH, RANGE 13 EAST, OF THE GILA AND SALT RIVER BASE AND MERIDIAN TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA

FINAL SITE PLAN, GRADING PLAN AND PUBLIC SEWER AND PRIVATE STREET IMPROVEMENT PLAN
NARANJA TRAILS
LOTS 1 THROUGH 64 & COMMON AREAS A1 THROUGH C
TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA

PM. M. PARK
DR. J. TURPIN
JOB NO. 20000103
DATE: 04-01-2024

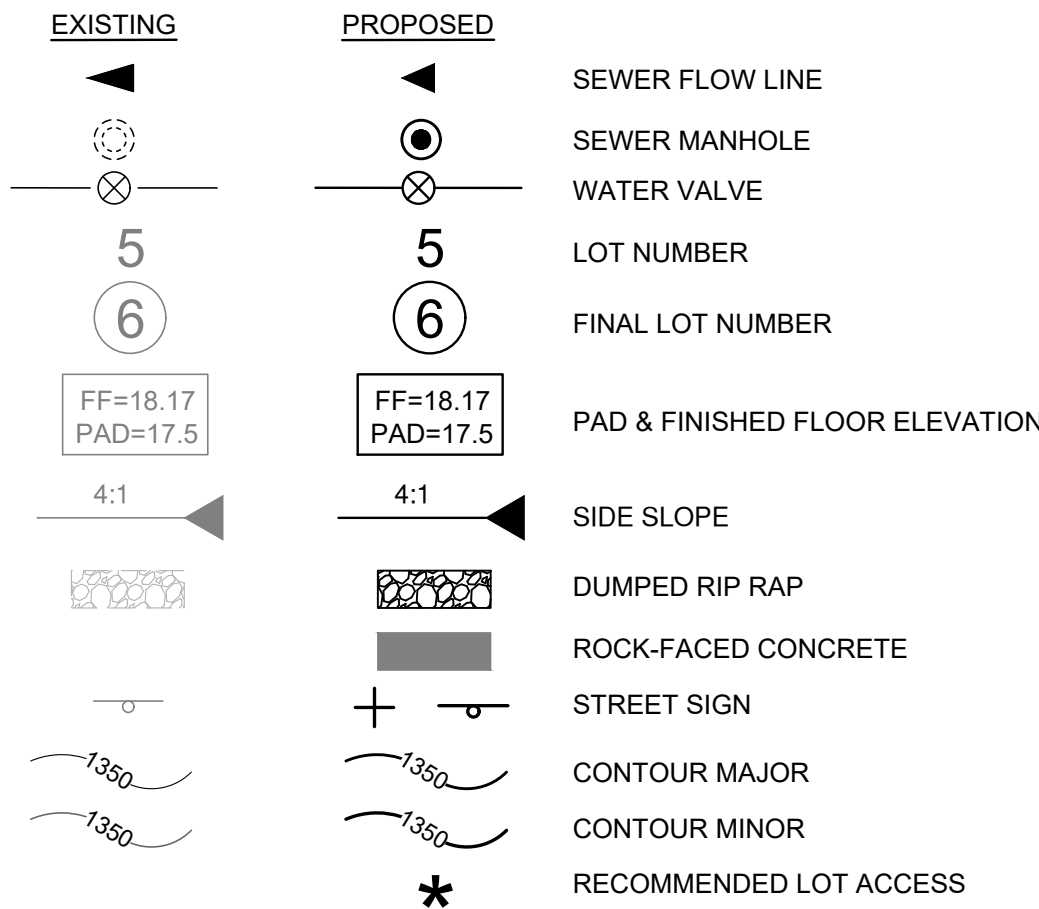
ORO VALLEY CASE No: 2000939, 2002761, 2202968, 2202969, 2202970, 2301593

COVER SHEET
CS01

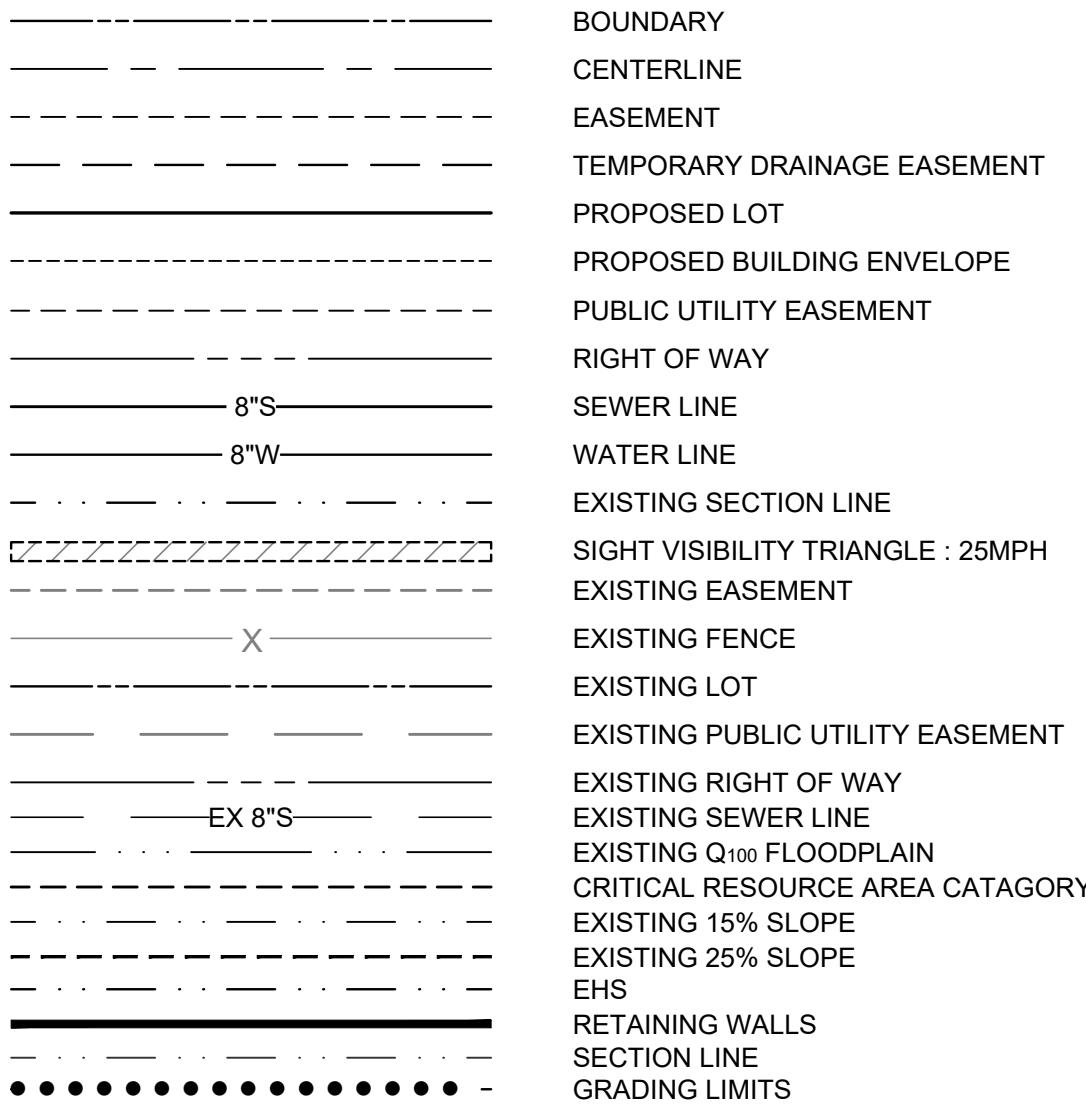
SHEET NO.
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SYMBOL LEGEND



LINE TYPES



GOLDER RANCH FIRE GENERAL NOTES

- FIRE HYDRANTS CONNECTED TO AN APPROVED WATER SUPPLY OF 1000 GPM FOR FIRE PROTECTION MUST BE INSTALLED AND IN SERVICE PRIOR TO COMBUSTIBLE MATERIAL DELIVERY TO THE SITE. TEMPORARY CONSTRUCTION OFFICE TRAILERS ARE CONSIDERED COMBUSTIBLE MATERIAL.
- APPROVED FIRE APPARATUS ACCESS ROADS MUST BE INSTALLED AND IN SERVICE PRIOR TO COMBUSTIBLE MATERIAL DELIVERY TO THE SITE"
- AUTOMATIC FIRE SPRINKLERS ARE REQUIRED IN ALL NEWLY CONSTRUCTED COMMERCIAL BUILDINGS. RESIDENTIAL FIRE SPRINKLERS ARE REQUIRED IN A NEWLY CONSTRUCTED HOME OF 3600 SQUARE FEET OR LESS WHEN THE REQUIRED FIRE FLOW OF 1000GPM IS NOT WITHIN 600 FEET OF THE HOME. HOMES OF 3601+ SQUARE FEET SHALL BE PROVIDED WITH RESIDENTIAL FIRE SPRINKLERS WHEN THE REQUIRED FIRE FLOW PRESCRIBED BY IFC TABLE B105.1 IS NOT AVAILABLE WITHIN 600 FEET OF THE HOME. ALL HOMES, REGARDLESS OF SIZE, WITHIN A SUBDIVISION OF 30 LOTS OR MORE SHALL BE PROVIDED WITH RESIDENTIAL FIRE SPRINKLERS WHEN THERE IS ONLY ONE FIRE APPARATUS ACCESS POINT AVAILABLE TO THE SUBDIVISION.
- TEMPORARY STREET SIGNS MUST BE INSTALLED AT EACH STREET INTERSECTION WHEN CONSTRUCTION OF NEW ROADWAYS ALLOWS PASSAGE OF VEHICLES. ALL STRUCTURES UNDER CONSTRUCTION MUST BE CLEARLY IDENTIFIED WITH AN APPROVED ADDRESS
- THE INSTALLATION OF TRAFFIC CONTROL SIGNALING DEVICES AND/OR ELECTRICALLY OPERATED GATES ON FIRE APPARATUS ACCESS ROADS SHALL INCLUDE PREEMPTIVE CONTROL EQUIPMENT COMPATIBLE WITH THE FIRE DEPARTMENT'S EXISTING SYSTEM
- ROADWAYS SHALL BE SURFACED WITH AN ALL-WEATHER MATERIAL CAPABLE OF SUPPORTING AN IMPOSED LOAD OF 82,000 POUNDS.
- ELECTRIC GATE OPERATORS SHALL BE LISTED IN ACCORDANCE WITH UL 325. GATES INTENDED FOR AUTOMATIC OPERATION SHALL BE DESIGNED, CONSTRUCTED AND INSTALLED TO COMPLY WITH THE REQUIREMENTS OF ASTM F 2200.

WASTEWATER GENERAL NOTES

- PROJECT IS IN CONFORMANCE WITH SECTION J, WASTEWATER, OF THE PIMA COUNTY DEVELOPMENT PLAN REQUIREMENTS AS REFERENCED IN 18.71.030.A.
- ANY RELOCATION, MODIFICATION, ETC., OF THE EXISTING UTILITIES AND/OR PUBLIC IMPROVEMENTS REQUIRED BY THIS DEVELOPMENT WILL BE AT NO EXPENSE TO THE PUBLIC.
- ANY WASTEWATER DISCHARGED INTO THE PUBLIC SANITARY SEWERAGE SYSTEM SHALL MEET THE REQUIREMENTS OF THE INDUSTRIAL WASTE ORDINANCE (PIMA COUNTY ORDINANCE NO. 1991-140, AS AMENDED).
- THE ON-SITE SANITARY SEWAGE COLLECTION LINES WILL BE PUBLIC AND DESIGNED AND CONSTRUCTED TO PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT STANDARDS. ALL BUILDING CONNECTION SEWERS WILL BE PRIVATELY MAINTAINED.
- A PROJECT CONSTRUCTION PERMIT MUST BE SECURED FROM PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT BEFORE BEGINNING ANY WORK ON THIS PROJECT.
- CONSTRUCTION AUTHORIZATION FROM THE PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY IS REQUIRED BEFORE BEGINNING ANY WORK ON THIS PROJECT. APPROVAL OF THIS DEVELOPMENT PLAN DOES NOT CONSTITUTE CONSTRUCTION AUTHORIZATION.

ABBREVIATIONS

(AB)	AS-BUILT
ADOT	ARIZONA DEPARTMENT OF TRANSPORTATION
BC OR B/C	BACK OF CURB
BSL	BUILDING SETBACK LINE
CA	COMMON AREA
CL	CENTERLINE
DE	DRAINAGE EASEMENT
EHS	EROSION HAZARD SETBACK
EL	ELEVATION
EOP	EDGE OF PAVEMENT
ESMT	EASEMENT
EX	EXISTING
FC	FACE OF CURB
FF	FINISH FLOOR
FL	FLOWLINE
FP	FINISHED PAD ELEVATION
G	GUTTER ELEVATION
HP	HIGH POINT
HNP	HINGE POINT
MH	MANHOLE
P	PAVEMENT ELEVATION
P.A.G.	PIMA COUNTY ASSOCIATION OF GOVERNMENTS
PL	PROPERTY LINE
PROP	PROPOSED
PUE	PUBLIC UTILITY EASEMENT
R/W	RIGHT OF WAY
S or SWR	SEWER
S.E.	SEWER EASEMENT
SW	SIDEWALK
STD	STANDARD
SVT	SITE VISIBILITY TRIANGLE
TC	TOP OF CURB
W	WATER
WSEL	WATER SURFACE ELEVATION

GENERAL NOTES

- GROSS AREA: 58.02 ACRES
COMMON AREA "A1" NARANJA TRAILS COMMUNITY ASSOCIATION, MAINTENANCE-HOA AREA: 0.52 ACRES
COMMON AREA "A2" NARANJA TRAILS COMMUNITY ASSOCIATION, MAINTENANCE-HOA AREA: 4.59 ACRES
COMMON AREA "A3" TOWN OF ORO VALLEY, MAINTENANCE-TOWN OF ORO VALLEY AREA: 21.05 ACRES
COMMON AREA "B1" NARANJA TRAILS COMMUNITY ASSOCIATION, MAINTENANCE-HOA AREA: 4.37 ACRES
COMMON AREA "B2" NARANJA TRAILS COMMUNITY ASSOCIATION, MAINTENANCE-HOA AREA: 12.05 ACRES
COMMON AREA "C" PRIVATE STREET, MAINTENANCE-HOA AREA: 3.74 ACRES
UNDISTURBED OPEN SPACE: 29.56 ACRES
- RESIDENTIAL UNITS PER ACRE = 1.10
- RESIDENTIAL LOTS: 64
- TOTAL MILES OF NEW PUBLIC STREET IS 0.0
- TOTAL MILES OF NEW PRIVATE STREETS IS 0.45
- A FLOOD USE PERMIT IS REQUIRED.
- THIS PROJECT IS AFFECTED BY THE ORO VALLEY TOWN CODE CHAPTER 17 FLOODPLAIN AND EROSION HAZARD MANAGEMENT.
- ASSURANCES FOR WATER SERVICE, SITE STABILIZATION AND LANDSCAPING MUST BE POSTED PRIOR TO THE ISSUANCE OF GRADING PERMITS
- ALL TRAIL EASEMENTS INDICATED ARE FOR USE BY THE GENERAL PUBLIC AS PERMANENT, NON-MOTORIZED TRAIL EASEMENT.
- ALL PUBLIC TRAILS AND SIGNAGE MUST BE CONSTRUCTED BY THE DEVELOPER TO PIMA REGIONAL TRAIL SYSTEM MASTER PLAN STANDARDS IN CONSULTATION WITH THE TOWN PARKS AND RECREATION DEPARTMENT.
- TRAIL LOCATION, AS INDICATED ON THESE PLANS, MUST BE FIELD VERIFIED BY TOWN STAFF PRIOR TO CONSTRUCTION AND ARE SUBJECT TO ADJUSTMENT. SIGNS SHALL BE LOCATED APPROXIMATELY EVERY 100 FEET ALONG THE TRAIL AND SHALL BE PER SEPARATE PERMIT BY ORO VALLEY. INFORMATION ON SIGNS SHALL BE AS DIRECTED PER ORO VALLEY.
- TRAILS MUST BE POSITIONED IN A MANNER TO AVOID VEGETATION AND MINIMIZE POTENTIAL FOR EROSION.
- FOR RESIDENTIAL DEVELOPMENTS, CONSTRUCTION OF ALL RECREATIONAL AMENITIES AND PUBLIC OR PRIVATE TRAILS WITHIN THE PROJECT LIMITS MUST BE COMPLETED BY THE TIME 35% OF BUILDING PERMITS ARE ISSUED PER SECTION 26.5 OF THE ZONING CODE.
- ALL PUBLIC TRAILS SHALL BE OWNED AND MAINTAINED BY ORO VALLEY.

PLANNING GENERAL NOTES

- MAXIMUM ALLOWED BUILDING HEIGHT: 25' MAX AND NOT TO EXCEED 2 STORIES.
- NO PROPOSED LOTS ARE AFFECTED BY CRITICAL/SIGNIFICANT RESOURCE AREAS.
- TOTAL AMOUNT OF OPEN SPACE REQUIRED: 334,402 SF
- TOTAL AMOUNT OF OPEN SPACE PROVIDED: 1,860,291 SF
- TOTAL AMOUNT OF LANDSCAPED COMMON AREAS: 572,302 SF
- OPEN SPACE TO REMAIN AS NATURAL OPEN SPACE: 1,287,989 SF
- BUILDING SETBACKS REQUIRED: 15' FRONT MINIMUM; HOWEVER, A 20-FOOT DRIVEWAY IS REQUIRED TO NOT IMPEDE REQUIRED SIDEWALKS. NO REQUIRED SIDE YARD EXCEPT WHEN ADJACENT TO A STREET (10') AND A 15' MINIMUM REAR YARD.
- ALL COMMON AREAS WILL BE OWNED AND MAINTAINED BY THE HOA AS NOTED IN PLANS.
- THE EXISTING ZONING FOR THIS DEVELOPMENT IS: PAD: RIVER'S EDGE (MELCOR)
- ALL SIGNAGE AND LIGHTING TO BE ADDRESSED AS PART OF A SEPARATE REVIEW AND APPROVAL PROCESS
- ALL NAMING AND SIGNAGE OF STREETS SHALL CONFORM TO PIMA COUNTY'S ADDRESSING ORDINANCE AND POLICIES, SECTIONS 18.83.060 THROUGH 18.83.080.

ENGINEERING GENERAL NOTES

- DESIGN SPEED IS 25 MPH. THE DESIGN VEHICLE IS SU-30.
- ALL NEW PUBLIC ROADS WITHIN AND ADJACENT TO THIS PROJECT WILL BE CONSTRUCTED IN ACCORDANCE WITH APPROVED PLANS. SEPARATE PUBLIC IMPROVEMENT AND CONSTRUCTION PLANS WILL BE SUBMITTED TO THE TOWN ENGINEER'S OFFICE FOR REVIEW AND APPROVAL.
- ANY RELOCATION OR MODIFICATION OF EXISTING UTILITIES AND/OR PUBLIC IMPROVEMENTS NECESSITATED BY THE PROPOSED DEVELOPMENT WILL BE AT NO EXPENSE TO THE PUBLIC

ORO VALLEY WATER UTILITY GENERAL NOTES

- THIS DEVELOPMENT MUST COMPLY WITH THE ORO VALLEY WATER UTILITY SPECIFICATIONS MANUAL DURING ALL PHASES OF CONSTRUCTION
- THIS PROJECT WILL BE SERVED BY ORO VALLEY WATER UTILITY WHICH HAS BEEN DESIGNATED AS HAVING AN ASSURED 100 YEAR WATER SUPPLY BY THE DIRECTOR OF WATER RESOURCES. ANY AND ALL WELLS MUST BE ABANDONED PER ADWR REGULATIONS
- A LINE EXTENSION AGREEMENT MUST BE IN PLACE PRIOR TO ANY WORK ON THE WATER INFRASTRUCTURE FOR THIS PROJECT BEGINS.
- ORO VALLEY WATER UTILITY WILL BE THE WATER SERVICE PROVIDER




GENERAL UTILITY GENERAL NOTES

- SHOULD AN EASEMENT BE IN CONFLICT WITH ANY PROPOSED BUILDING LOCATION, VACATION OF THE EASEMENT IS TO OCCUR PRIOR TO ISSUANCE OF BUILDING PERMITS.
- ALL DRAINAGE STRUCTURES SHALL BE INSPECTED AND A SUMMARY REPORT PREPARED AT A MINIMUM OF ONCE EACH YEAR IN ACCORDANCE WITH THE PROCEDURES IN THE APPROVED DRAINAGE REPORT. COPIES OF THE ANNUAL INSPECTION REPORTS SHALL BE MADE AVAILABLE TO THE TOWN UPON REQUEST.
- ALL DRAINAGE STRUCTURES SHALL BE INSPECTED AND A SUMMARY REPORT PREPARED BY AN ARIZONA REGISTERED CIVIL ENGINEER A MINIMUM OF ONCE EACH FIVE YEARS IN ACCORDANCE WITH THE PROCEDURES IN THE APPROVED DRAINAGE REPORT. COPIES OF THE ANNUAL INSPECTION REPORTS SHALL BE MADE AVAILABLE TO THE TOWN UPON REQUEST.

DRAINAGE GENERAL NOTES

- DEVELOPER WILL COVENANT TO HOLD THE TOWN OF ORO VALLEY, ITS SUCCESSORS AND ASSIGNS, HARMLESS IN THE EVENT OF FLOODING.
- DRAINAGE WILL NOT BE ALTERED, DISTURBED, OR OBSTRUCTED WITHOUT THE APPROVAL OF THE ORO VALLEY TOWN COUNCIL.
- DRAINAGE STRUCTURES MUST BE CONSTRUCTED AND INSTALLED ACCORDING TO TOWN STANDARDS AND PAID FOR BY THE DEVELOPER.
- ALL DRAINAGE STRUCTURES MUST BE DESIGNED TO CONVEY A Q100 FLOW.
- ALL DRAINAGE FACILITIES WILL BE CONSTRUCTED ACCORDING TO APPROVED PLANS PRIOR TO THE ISSUANCE OF ANY CERTIFICATES OF OCCUPANCY FROM THE BUILDING OFFICIAL FOR ALL AFFECTED BUILDINGS.
- THE DEVELOPER WILL ACCEPT RESPONSIBILITY FOR MAINTENANCE, CONTROL, SAFETY AND LIABILITY OF PRIVATE DRAINAGEWAYS, DRAINAGE EASEMENTS, AND COMMON AREAS UNTIL OWNERSHIP IS TRANSFERRED TO THE HOA.
- ALL DRAINAGE WAYS WILL BE CONSTRUCTED ACCORDING TO APPROVED PLANS PRIOR TO THE ISSUANCE OF ANY PERMITS FROM THE TOWN ENGINEER AND/OR BUILDING OFFICIAL FOR PARCELS AFFECTED. AFFECTED PARCELS MUST BE SPECIFICALLY IDENTIFIED EITHER BY NUMBER IN NOTE OR OUTLINE ON THE DEVELOPMENT PLAN.
- DRAINAGE MUST BE COLLECTED AND RELEASED FROM A PROPOSED DEVELOPMENT AT THE LOCATIONS AND THE MANNER EXISTING PRIOR TO DEVELOPMENT.
- DRAINAGE WAYS MUST BE PROVIDED WHERE NECESSARY TO CARRY DRAINAGE FLOWS THROUGH OR FROM THE DEVELOPMENT AND SUCH DRAINAGE WAYS MUST BE DEDICATED AND MAINTAINED BY THE PROPERTY OWNERS OR PROPERTY OWNERS ASSOCIATION.
- DRAINAGE WAYS MUST BE DESIGNED TO NOT DISCHARGE ONTO PAVED STREETS, EASEMENTS OR PARKING AREAS.
- PARKING AREAS MUST NOT BE USED AS DETENTION BASINS. ORO VALLEY WATER GENERAL NOTES.
- "ALL DRAINAGE WAYS WILL BE CONSTRUCTED ACCORDING TO APPROVED PLANS PRIOR TO THE ISSUANCE OF ANY PERMITS FROM THE TOWN ENGINEER AND/OR BUILDING OFFICIAL FOR PARCELS AFFECTED." PARCELS AFFECTED BY REGULATORY FLOODPLAIN MUST BE SPECIFICALLY IDENTIFIED EITHER BY NUMBER, IN NOTE OR BY OUTLINE ON THE DEVELOPMENT PLAN.
- DRAINAGE MUST BE COLLECTED AND RELEASED FROM A PROPOSED DEVELOPMENT AT THE LOCATIONS AND IN THE MANNER EXISTING PRIOR TO DEVELOPMENT.
- DRAINAGE WAYS MUST BE PROVIDED WHERE NECESSARY TO CARRY DRAINAGE FLOWS THROUGH OR FROM THE DEVELOPMENT AND SUCH DRAINAGE WAYS MUST BE DEDICATED AND MAINTAINED BY PROPERTY OWNERS OR PROPERTY OWNER'S ASSOCIATION.
- ALL DRAINAGE WAYS, DRAINAGE STRUCTURES AND DETENTION BASINS ARE PROVIDED WITH ADEQUATE MAINTENANCE ACCESS AND ARE INCLUDED AS PART OF ANY DRAINAGE EASEMENT.
- DRAINAGE WAYS MUST BE DESIGNED TO NOT DISCHARGE ONTO PAVED STREETS, EASEMENTS OR PARKING AREAS.
- PARKING AREAS MUST NOT BE USED AS DETENTION BASINS.
- THE FOLLOWING LOTS ARE AFFECTED BY THE TOWN OF ORO VALLEY FLOODPLAIN REGULATIONS: 2,3,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,55,56,57,58,59,60,61,62, AND 64.
- A FLOODPLAIN USE PERMIT AND/OR FINISHED FLOOR ELEVATION CERTIFICATES ARE REQUIRED FOR THE FOLLOWING LOTS: 2,3,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,55,56,57,58,59,60,61,62, AND 64.

11/20000103 - naranja trails-dwg\plan set\final site plan\20000103-02-cv02.dwg P:\data\6/6/2024

 866.850.4200 www.atwell-group.com 4700 E. SOUTHERN AVENUE MESA, AZ 85206 520.268.6322			
 Know what's below. Call before you dig.		LOCATION DESCRIPTION A PORTION OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 12 SOUTH, RANGE 13 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA	
FINAL SITE PLAN, GRADING PLAN AND PUBLIC SEWER AND PRIVATE STREET IMPROVEMENT PLAN NARANJA TRAILS LOTS 1 THROUGH 64 & COMMON AREAS A1 THROUGH C TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA		PM. M. PARK	
		DR. J.TURPIN	
		JOB NO. 20000103	
		DATE. 04-01-2024	
ORO VALLEY CASE No: 2000939, 2002761, 2202968 2202969, 2202970, 2301593		SHEET NO.	
LEGEND & NOTES		02 OF 23	
CS02			

GRADING PERMIT #2202968

GENERAL PAVING & GRADING NOTES

1. ALL MATERIALS AND WORKMANSHIP ARE TO BE IN ACCORDANCE WITH PIMA ASSOCIATION OF GOVERNMENTS STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS (PAG SSP), EDITION OF 2015, EXCEPT AS MODIFIED HEREBY.
2. ALL CONSTRUCTION AND TESTING METHODS SHALL BE IN CONFORMANCE WITH PAG SSP, EDITION OF 2015, EXCEPT AS MODIFIED HEREBY.
3. EXCAVATION AND BACKFILL FOR STRUCTURES SHALL CONFORM TO PAG SSP, SECTION 203-5.
4. EARTHWORK, EXCEPT AS MODIFIED BY THE SOILS REPORT OF RECORD, SHALL CONFORM TO PAG SSP, SECTION 203.
5. AGGREGATE BASE COURSE SHALL CONFORM TO PAG SSP, SECTION 303.
6. ASPHALTIC CONCRETE SHALL CONFORM TO PAG SSP, SECTION 406, ASPHALTIC CONCRETE MIXTURE NO. 2 SPECIFICATIONS.
7. ALL CONCRETE SHALL CONFORM TO PAG SSP, SECTION 1006, CLASS S, 3,000 PSI COMPREHENSIVE STRENGTH AT 28 DAYS, UNLESS OTHERWISE SPECIFIED.
8. A STAMPED SET OF APPROVED PLANS SHALL BE KEPT IN AS EASILY ACCESSIBLE LOCATION ON THE JOB SITE AT ALL TIMES OR DURING CONSTRUCTION.
9. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS.
10. CONTRACTOR SHALL CALL BLUE STAKE (ARIZONA 811) TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION, A MINIMUM OF TWO (2) FULL WORKING DAYS PRIOR TO EXCAVATION.
11. CONTRACTOR SHALL OBTAIN PERMITS REQUIRED BY GOVERNMENTAL AGENCIES.
12. CONTRACTOR SHALL INSTALL STREET SIGNS IN ACCORDANCE WITH THE TOWN OF ORO VALLEY SUBDIVISION STREET STANDARDS - SIGNAGE POLICY.
13. PAVING CONTRACTOR SHALL ADJUST BOTH EXISTING AND NEW WATER VALVES, BOX COVERS, WATER METER BOXES, SANITARY SEWER MANHOLES AND CLEANOUT RINGS AND COVERS, TELEPHONE AND ELECTRIC MANHOLE RING AND COVERS TO THE NEW FINISHED GRADE.
14. UPON COMMENCEMENT OF WORK, TRAFFIC CONTROL DEVICES SHALL BE POSTED AND MAINTAINED BY THE CONTRACTOR UNTIL SUCH TIME AS THE WORK IS COMPLETED. ALL WARNING SIGNS, BARRICADES, ETC., SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES ADOPTED BY THE STATE OF ARIZONA PURSUANT TO A.R.S. 28-650.
15. IF UNANTICIPATED CONDITIONS ARE ENCOUNTERED DURING THE COURSE OF CONSTRUCTION AND ARE BEYOND THE SCOPE OF THE DESIGN, THE ENGINEER SHALL SUBMIT THE NECESSARY REVISED OR SUPPLEMENTAL IMPROVEMENT PLANS FOR REVIEW AND APPROVAL BY THE TOWN OF ORO VALLEY PRIOR TO SUCH REVISIONS/CHANGES BEING MADE IN THE FIELD.
16. ALL STATIONING SHOWN ON THE PLAN AND PROFILE ARE ALONG CONSTRUCTION CENTERLINE UNLESS OTHERWISE NOTED.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CARE AND MAINTENANCE OF EXISTING IMPROVEMENTS AND VEGETATION IN THE WORK AREA. PAVEMENT, CURBS, CART PATHS ANY OTHER OBSTRUCTIONS DAMAGED DURING CONSTRUCTION ARE TO BE REPLACED BY THE CONTRACTOR. ANY UNDERGROUND PIPES, IRRIGATION LINES, IRRIGATION CONTROLS, DRAINS, STRUCTURES, OR OBSTRUCTIONS NOT SHOWN ON THESE PLANS SHALL BE MOVED, ALTERED, OR REPAIRED BY THE CONTRACTOR WHEN ENCOUNTERED, AS DIRECTED BY THE ENGINEER AND IS A DEFINE PART OF THIS PROJECT.
18. ACCEPTANCE OF THESE PLANS DOES NOT CONSTITUTE OR IMPLY ACCEPTANCE OF ANY OF THE FOLLOWING:
 - a. WALL(S), RETAINING OR OTHER TYPE(S)
 - b. ANY REINFORCED CONCRETE STRUCTURE(S)
 - c. ANY EMBANKMENT(S) WHOSE PRIMARY PURPOSE IS TO FUNCTION AS A RETENTION/DETENTION STRUCTURETHE ITEMS LISTED ABOVE ARE APPROVED FOR LOCATION ONLY. SEPARATE PLAN CHECKS AND PERMITS ARE REQUIRED. ALL IN ACCORDANCE WITH THE APPLICABLE CODES OF THE TOWN OF ORO VALLEY.
19. THE CONTRACTOR SHALL GIVE FORTY-EIGHT (48) HOURS NOTICE WHEN THEY SHALL REQUIRE THE SERVICES OF THE ENGINEER OR ANY OTHER PERSON PROPERLY AUTHORIZED FOR SUCH PURPOSE FOR LAYING OUT ANY PORTION OF THE WORK. THEY SHALL ALSO DIG ALL STAKE HOLES NECESSARY TO GIVE LINE AND LEVELS AND SHALL PROVIDE ASSISTANCE CALLED FOR BY THE ENGINEER OR THEIR ASSISTANTS UPON ANY PART OF THE WORK WHENEVER SO REQUESTED, AND SHALL PRESERVE ALL STAKES SET FOR THE LINES, LEVELS OR MEASUREMENTS OF THE WORK IN THEIR PROPER PLACES UNTIL AUTHORIZED TO REMOVE THEM BY THE ENGINEERS. ANY EXPENSE INCURRED IN REPLACING ANY STAKES WHICH THE CONTRACTOR OR THEIR SUBORDINATES MAY HAVE FAILED TO PRESERVE SHALL BE CHARGED TO THE CONTRACTOR.
20. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FURNISH, HAUL AND APPLY ALL WATER REQUIRED FOR COMPACTION AND FOR THE CONTROL OF DUST FROM CONSTRUCTION ACTIVITY. THE COST THEREOF IS TO BE INCLUDED IN THE GRADING CONSTRUCTION PRICE.
21. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FULLY COMPLY WITH ADEQ STORMWATER POLLUTION PREVENTION PERMITS IN ACCORDANCE WITH THE REPORT AND POLLUTION PLANS PREPARED BY THE ENGINEER. THE COST THEREOF TO BE INCLUDED IN THE GRADING CONSTRUCTION PRICE.
22. BUILDING SITES SHALL BE CONSTRUCTED TO WITHIN 0.10 FEET OF FINISH BUILDING PAD ELEVATIONS AS STAKED BY THE ENGINEER. STREETS AND PARKING AREAS SHALL BE CONSTRUCTED TO WITHIN +0.10 FEET OF FINISH SUBGRADE AS STAKED BY THE ENGINEER.
23. A REPORT OF SOILS INVESTIGATION, INCLUDING RECOMMENDATIONS FOR GRADING PROCEDURES HAS BEEN PREPARED BY "GEOTECHTICAL ENGINEERING EVALUATION" DATED JULY 21, 2020. JOB # 20-P264. ALL EARTHWORK SHALL CONFORM TO THE RECOMMENDATIONS CONTAINED IN SAID REPORT AND ANY AMENDMENTS MADE THERETO.
24. THE SOILS ENGINEER SHALL OBSERVE, INSPECT AND TEST ALL CONSTRUCTION OPERATIONS, INCLUDING BUT NOT LIMITED TO: CLEARING, GRUBBING, SUBGRADE PREPARATION, STRUCTURAL, TRENCH EXCAVATION AND BACKFILL, MATERIAL TESTING, TOGETHER WITH PLACEMENT OF FILL. SAID ENGINEER SHALL CERTIFY IN WRITING, THAT ALL SOILS OPERATIONS AND MATERIALS USED FOR THIS DEVELOPMENT WERE PERFORMED IN ACCORDANCE WITH THE RECOMMENDATIONS AS SET FORTH IN THE GEOTECHNICAL INVESTIGATION OF RECORD AND ARE IN CONFORMANCE WITH THE ACCEPTED PLANS AND SPECIFICATIONS. CERTIFICATION, IN WRITING, IS TO BE RECEIVED BY THE TOWN OF ORO VALLEY PRIOR TO THE REQUEST FOR FINAL INSPECTION AND RELEASE OF ASSURANCES.
25. GRADING BOUNDARIES SHALL BE CLEARLY MARKED, AND ALL WORK WILL BE CONFINED TO APPROVED PROJECT LIMITS AS SHOWN ON THESE PLANS.
26. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE SURVEYOR PROVIDING THE CONSTRUCTION LAYOUT TO VERIFY THE BENCHMARK AND COMPARE THE SITE CONDITIONS WITH THE PLANS AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES OBSERVED. SHOULD ANY BENCHMARK, GRADE OR DESIGN INDICATED ON THE PLANS BE SUSPECT, THE ENGINEER SHALL BE NOTIFIED OF SAID BENCHMARK, GRADE OR DESIGN PROBLEM AT LEAST TWENTY-FOUR HOURS BEFORE CONSTRUCTION IS SCHEDULED TO BEGIN ON THE AFFECTED AREA.

27. IT SHALL BE THE SOLE RESPONSIBILITY OF THE OWNER(S), THEIR SUCCESSORS OR ASSIGNS, (AND/OR THEIR CONTRACTOR, THEIR SUCCESSORS OR ASSIGNS AS APPLICABLE) TO PURSUE ANY NEGOTIATIONS, OBTAIN ANY AGREEMENTS AND/OR PERMITS, ETC., FROM ALL NECESSARY OWNERS, PRIVATE AND/OR GOVERNMENTAL AGENCIES IN CHARGE OF PROPERTIES AND/OR RIGHTS-OF-WAY ADJACENT TO (OR NEIGHBORING) THIS PROJECT, THAT MAY BE REQUIRED TO DO ANY WORK (CONSTRUCTION, ACCESS, MODIFICATIONS, GRADING, DRAINAGE, STRUCTURES, ROADS, ETC.) ENCRORACHING OR AFFECTING - DIRECTLY OR INDIRECTLY - ON THESE ADJACENT PROPERTIES AND RIGHTS-OF-WAY IN ANY CONCEIVABLE MANNER, REGARDLESS OF WHETHER OR NOT THIS WORK IS SHOWN OR DESCRIBED ON THESE PLANS (OR) ON THIS PLAT.
28. THE PROFESSIONAL ENGINEER OF RECORD SHALL SUBMIT AS-BUILT RECORD DRAWINGS AND CERTIFY IN WRITING THAT ALL IMPROVEMENTS, WHETHER PRIVATE OR PUBLIC, HAVE BEEN CONSTRUCTED, PLACED, INSTALLED, ETC. IN SUBSTANTIAL CONFORMANCE WITH THE ACCEPTED PLANS FOR THIS DEVELOPMENT. CERTIFICATIONS IN WRITING AND THE AS-BUILT RECORD DRAWINGS ARE TO BE RECEIVED BY THE TOWN OF ORO VALLEY A MINIMUM OF TWO (2) WEEKS PRIOR TO THE REQUEST FOR CERTIFICATES OF OCCUPANCY AND/OR FINAL INSPECTION BY THE DEPARTMENT OF PUBLIC WORKS AND THE RELEASE OF ASSURANCES, EXCEPT FOR MODEL HOMES INTENDED TO BE USED FOR SALES PURPOSES. IF THE PROJECT IS PHASED THE ABOVE PERTAINS TO EACH PHASE.
29. THE TOWN OF ORO VALLEY WILL, UPON RECEIPT OF ALL NECESSARY CERTIFICATIONS AS OUTLINED ON THE IMPROVEMENT PLANS AND FINAL PLAT, PERFORM A FIELD REVIEW OF THE DEVELOPMENT. FIELD CONDITIONS, DESIGN OVERSIGHTS, ETC., MAY REQUIRE ADDITIONAL WORK AND/OR IMPROVEMENTS AS A RESULT OF SAID REVIEW.
30. ALL EASEMENTS MUST BE ACQUIRED BY OWNER/BUILDER PRIOR TO CONSTRUCTION.
31. ANY PROPOSED REVISION OR MODIFICATION TO THIS APPROVED PLAN SHALL BE SUBMITTED TO THE TOWN ENGINEER'S OFFICE FOR REVIEW AND APPROVAL PRIOR TO SUCH CHANGES BEING MADE IN THE FIELD.
32. ALL TRAIL ALIGNMENTS MUST BE FIELD VERIFIED & DEDICATED BY FINAL PLAT.
33. LANDSCAPING SHALL BE LIMITED IN AREAS WHERE STORM DRAIN PIPES AND STRUCTURES ARE LOCATED.
34. ALL ARCHAEOLOGICAL MITIGATION SHALL BE APPROVED AND IMPLEMENTED TO THE SATISFACTION OF THE PLANNING AND ZONING ADMINISTRATION PRIOR TO ISSUANCE OF ANY GRADING PERMITS BY THE TOWN.
35. ALL WORK SHALL BE IN CONFORMANCE TO GRADING STANDARDS, CHAPTER 27-SECTION 27.9 OF THE ORO VALLEY ZONING CODE REVISED, YEAR 2005.
36. ALL GENERAL NOTES, SITE DESIGN, AND CONDITIONS OF OV1600017 FINAL SITE PLAN AND LANDSCAPE PLAN APPROVAL APPLY.
37. ALL EXPOSED CUT SLOPES SHALL BE TREATED WITH A RESTORATIVE AGENT AND REVEGETATED TO REFLECT EXISTING NATIVE VEGETATION AND DENSITIES IN ADJACENT NATURAL AREAS. ALL AREAS OF DISTURBANCE SHALL BE RECONTOURED TO MIMIC EXISTING GRADES, PER THE APPROVED GRADING EXCEPTION.


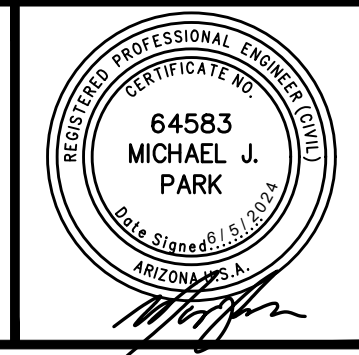

PUBLIC SEWER NOTES

1. VERTICAL CONTROL - "BASIS OF ELEVATION"
2. HORIZONTAL CONTROL - "BASIS OF BEARING"
3. ALL DESIGN STANDARDS, MATERIALS AND WORKMANSHIP FOR PUBLIC SANITARY SEWERS SHALL BE IN ACCORDANCE WITH PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT (PCRWWD) ENGINEERING DESIGN STANDARDS 2016 (EDS 2016) AND THE STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (SSDC 2016). SAID DOCUMENTS ARE AVAILABLE THROUGH THE PCRWWD WEBSITE (WWW.PIMA.GOV/WASTEWATERRECLAMATION).
4. SEWER PLANS THAT BEAR THE PIMA COUNTY DEVELOPMENT SERVICES DEPARTMENT (DSD) APPROVAL STAMP OR THE PIMA COUNTY RWRD ACCEPTANCE SIGNATURE SHALL ONLY BE USED FOR THE CONSTRUCTION OF PUBLIC SANITARY SEWER FACILITIES. APPROVED PLANS REQUIRING DESIGN REVISIONS SHALL BE RESUBMITTED TO PIMA COUNTY FOR REVIEW AND RE-APPROVAL PRIOR TO START OF THE REVISED SEWER WORK.
5. SEWER CONSTRUCTION SHALL NOT COMMENCE UNTIL: (A) THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (ADEQ) OR ITS DELEGATED AUTHORITY HAS ISSUED A CONSTRUCTION AUTHORIZATION FOR THIS PROJECT; (B) THE CONTRACTOR HAS OBTAINED A PCRWWD PUBLIC SEWER CONSTRUCTION PERMIT (CONTACT THE PCRWWD PERMITS SECTION AT (520) 724-6649 FOR PERMIT APPLICATION REQUIREMENTS); (C) THE CONTRACTOR'S FLOW MANAGEMENT PLAN HAS BEEN SUBMITTED THIRTY (30) CALENDAR DAYS PRIOR TO THE PRE-CONSTRUCTION MEETING AND APPROVED BY PCRWWD FIELD ENGINEERING; AND (D) A PRE-CONSTRUCTION MEETING WITH THE ASSIGNED PIMA COUNTY PROJECT FIELD INSPECTOR IS SCHEDULED AT LEAST THREE (3) FULL BUSINESS DAYS PRIOR TO COMMENCING WITH SEWER CONSTRUCTION.
6. IMMEDIATELY REPORT ANY OF THE FOLLOWING TO THE PCRWWD OPERATIONS CONTROL CENTER (OCC) AT (520) 724-6500: ANY RELEASE OF SEWAGE, ANY DAMAGE TO PUBLIC SANITARY SEWER SYSTEM, OR THE DROPPING OF DEBRIS INTO A PUBLIC SANITARY SEWER MANHOLE. A PCRWWD REPRESENTATIVE WILL BE DISPATCHED TO THE SITE. THE CONTRACTOR SHALL TAKE IMMEDIATE ACTION TO CONTAIN A SANITARY SEWER OVERFLOW (SSO). THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS TO REPAIR THE SYSTEM, MITIGATE THE RELEASE OF SEWAGE, DISINFECT THE RELEASE AREAS, AND ANY REGULATORY PENALTIES LEVIED ON PCRWWD FOR SEWAGE ENTERING A NATURAL DRAINAGE WAY OR STORM WATER DRAINAGE SYSTEM. THE CONTRACTOR SHALL REPAIR ALL DAMAGE AS DIRECTED AND APPROVED BY A PCRWWD FIELD REPRESENTATIVE.
7. STORM WATER AND SEDIMENT CONTROL MEASURES SHALL BE PROPERLY INSTALLED TO PROTECT PCRWWD MANHOLES AT THE BEGINNING OF CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONSTANTLY MAINTAIN STORM WATER AND SEDIMENT CONTROL MEASURES THAT PROTECT PCRWWD FACILITIES UNDER ALL CONDITIONS FOR THE DURATION OF THE PROJECT. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR ALLOW STORM WATER, SEDIMENT, OR POTENTIAL POLLUTANTS FROM A CONSTRUCTION SITE TO ENTER A PCRWWD MANHOLE. THE CONTRACTOR SHALL ENSURE THAT THEIR FLOW MANAGEMENT OPERATIONS INCLUDE CONTROLS TO PREVENT ANY INTRODUCTION OF STORM WATER, SEDIMENT, OR POLLUTANTS INTO THE PUBLIC SANITARY SEWER SYSTEM. FAILURE TO CONFORM TO THESE REQUIREMENTS SHALL RESULT IN CANCELLATION OF THE SEWER CONSTRUCTION PERMIT.
8. SPECIAL CARE SHALL BE TAKEN TO ENSURE DESIGN SLOPES ARE MAINTAINED. SEWERS CONSTRUCTED AT INSUFFICIENT SLOPES WILL NOT BE ACCEPTED BY PCRWWD FIELD ENGINEERING AND/OR ADEQ. CORRECTIVE ACTION, INCLUDING RE-CONSTRUCTION OF THE SEWER(S), WILL BE AT THE SOLE EXPENSE OF THE PROJECT OWNER/CONTRACTOR.
9. THE CONTRACTOR SHALL ADJUST OR RECONSTRUCT ALL SANITARY SEWER MANHOLES TO FINISHED GRADE. ALL FRAMES AND COVER ADJUSTMENTS SHALL BE IN ACCORDANCE WITH PCRWWD SSDC 2016, DETAIL NOS. RWRD 211, 212, 304 OR 305 (AS APPLICABLE). THE CONTRACTOR SHALL PROTECT THE BENCH AND FLOW CHANNELS WITH A COVER PER PCRWWD SSDC 2016, DETAIL NO. RWRD 306. PRIOR TO COMMENCING ANY WORK TO THE MANHOLE AND REMOVE THE COVER AFTER ALL WORK IS COMPLETED. THE CONTRACTOR SHALL ENSURE THAT FRAMES AND COVERS ARE CLEAN AND FREE FROM ANY AND ALL ATTACHED MATERIALS (ASPHALT, CONCRETE, ETC.) AND THAT ALL VENT HOLES ARE OPEN AND CLEAR OF OBSTRUCTIONS, AS APPROVED BY THE PCRWWD FIELD ENGINEER. EXISTING FRAMES AND/OR COVERS THAT ARE DAMAGED OR CANNOT BE COMPLETELY CLEANED SHALL BE REPLACED WITH A NEW FRAME AND COVER IN ACCORDANCE WITH PCRWWD SSDC 2016, DETAIL NO. RWRD 213 - 218. COSTS ASSOCIATED WITH EXISTING FRAMES AND COVERS THAT ARE LOST OR DAMAGED DUE TO THE CONTRACTORS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
10. ANY CONSTRUCTION ACTIVITY HAVING THE POTENTIAL TO DAMAGE EXISTING PUBLIC SANITARY SEWERS OR ANY ACTIVITY THAT REQUIRES MATERIALS OR EQUIPMENT TO ENTER EXISTING PUBLIC SANITARY SEWERS SHALL REQUIRE A PIMA COUNTY RWRD SEWER CONSTRUCTION PERMIT PRIOR TO COMMENCING THAT ACTIVITY.
11. THE CONTRACTOR SHALL SUBMIT A FLOW MANAGEMENT PLAN (FMP) TO PCRWWD FIELD ENGINEERING FOR APPROVAL BEFORE PROCEEDING WITH ANY WORK THAT MAY AFFECT LIVE SEWERS. THE FMP SHALL IDENTIFY AND INCLUDE ALL FLOW MANAGEMENT COSTS IN THE CONSTRUCTION BID. THE FMP SHALL BE SUBMITTED THIRTY (30) CALENDAR DAYS PRIOR TO THE SEWER PRE-CONSTRUCTION MEETING. FIELD ENGINEERING WILL REVIEW THE FMP WITHIN TEN (10) BUSINESS DAYS TO ACCOMMODATE REVIEW AND REVISION CYCLES. REFER TO PCRWWD SSDC 2016, SECTION 2 FOR FMP REQUIREMENTS. PLEASE CONTACT PCRWWD FIELD ENGINEERING AT (520) 724-2651 FOR ANY QUESTIONS REGARDING FLOW MANAGEMENT.
12. THE CONTRACTOR SHALL FURNISH, OPERATE AND MAINTAIN ALL EQUIPMENT AND LABOR NECESSARY TO PROVIDE CONTINUOUS 24 HOURS PER DAY SANITARY SEWER SERVICE TO ALL PARTIES TRIBUTARY TO A LIVE SEWER TO WHICH A CONNECTION IS TO BE MADE. THE PCRWWD CONVEYANCE DIVISION SHALL BE NOTIFIED AT (520) 724-3400 A MINIMUM OF TWO (2) BUSINESS DAYS PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITIES THAT IMPACTS THE FLOW WITHIN A LIVE SANITARY SEWER SYSTEM OR INVOLVES CONNECTING TO A LIVE SANITARY SEWER. SEE PCRWWD SSDC 2016, SECTION 2 FOR MOR INFORMATION.
13. THE INSPECTION OF THE CONTRACTOR'S WORK BY AN AGENCY AND/OR PCRWWD STAFF SHALL IN NO WAY RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR COMPLIANCE WITH THE REQUIREMENTS OF THE APPROVED CONTRACT DOCUMENTS. IF THE DESIGN ENGINEER OR PCRWWD STAFF FAIL TO POINT OUT A DEFECT, DEFICIENCY OR ERROR IN THE WORK FROM LACK OF DISCOVERY OR ANY OTHER REASON, IT SHALL IN NO WAY PREVENT LATER REJECTION OR RELIEVE THE CONTRACTOR OF PERFORMING CORRECTIONS TO THE UNSATISFACTORY WORK WHEN DISCOVERED. THE CONTRACTOR SHALL NOT FILE A CLAIM FOR LOSSES SUFFERED DUE TO ANY NECESSARY REMOVALS OR REPAIRS RESULTING FROM THE UNSATISFACTORY WORK.
14. ANY SEWER CONSTRUCTION WORK THAT IS NOT INCLUDED IN THE APPROVED SEWER PLANS WILL NOT BE ACCEPTED BY PCRWWD. SEE PCRWWD SSDC 2016, SECTION 1.4.5 REGARDING THE APPROVAL OF FIELD CHANGES.
15. THE CONTRACTOR SHALL CONTACT "ARIZONA 811" (DIAL 811 OR 1-800-782-5348) A MINIMUM OF TWO (2) BUSINESS DAYS PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL KEEP ALL UNDERGROUND FACILITY LOCATION REQUESTS UP-TO-DATE AND COMPLY WITH ARIZONA STATUTES (A.R.S.), TITLE 40, CHAPTER 1, ARTICLE 6.3, SECTION 40-360.22. CONCERNS REGARDING THE ACCURACY BETWEEN THE UNDERGROUND FACILITY MARKINGS AND THE PROJECT PLANS SHALL BE IMMEDIATELY REPORTED TO THE DESIGN ENGINEER.
16. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL SANITARY SEWER MANHOLES AT ALL TIMES.
17. THE CONTRACTOR SHALL FIELD-VERIFY EXISTING SEWER LINE ELEVATIONS AND ALIGNMENTS PRIOR TO CONSTRUCTION. VERIFICATION MAY REQUIRE POT-HOLING.
18. ANY HOUSE CONNECTION SEWER (HCS) OR BUSINESS CONNECTION SEWER (BCS) LINES ENCOUNTERED DURING CONSTRUCTION SHALL BE PROTECTED, REPAIRED, OR REROUTED, AS THE SITUATION DICTATES. PER PCRWWD SSDC 2016 DETAIL NO. RWRD 400 AND AT NO EXPENSE TO THE PROPERTY OWNER OR PCRWWD. HCS AND BCS LINES ARE NOT OWNED OR MAINTAINED BY PCRWWD. PRIVATE CONNECTION SEWERS CONSTRUCTED PRIOR TO JANUARY 2006 ARE NOT REQUIRED TO BE LOCATED AND MARKED.
19. SURVEY LAYOUT AND SURVEY CONTROL SHALL BE PERFORMED BY, OR UNDER THE DIRECT SUPERVISION OF AN ARIZONA RLS.
20. SURVEY CUT SHEETS SHALL BE PREPARED IN ACCORDANCE WITH PCRWWD SSDC 2016, SECTION 3.2.3(A)(I). CERTIFIED CUT SHEETS SHALL BE SUBMITTED TO THE PCRWWD FIELD ENGINEER PRIOR TO COMMENCEMENT OF SEWER CONSTRUCTION. CUT SHEETS ARE FOR PCRWWD REFERENCE ONLY AND SHALL NOT DELAY SEWER CONSTRUCTION DUE TO REVIEW OF THE DELIVERABLE. ANY ERRORS OR OMISSIONS RESULTING IN IMPROPER SEWER CONSTRUCTION SHALL NOT BE THE RESPONSIBILITY OF PCRWWD. REFER TO PCRWWD SSDC 2016, SECTION 3.2.3(A)(II) FOR CONSTRUCTION SURVEY STAKING REQUIREMENTS.

21. THE DEVELOPER OR CONTRACTOR SHALL RETAIN AN ARIZONA-REGISTERED LAND SURVEYOR (RLS) FOR PREPARATION OF THE SEWER AS-BUILT PLANS. SEWER AS-BUILT PLANS SHALL CONFORM TO SSDC 2016, SECTION 1.4.7 AND ARE REQUIRED FOR FINAL ACCEPTANCE OF SEWER CONSTRUCTION BY PCRWWD. THE DEVELOPER OR CONTRACTOR SHALL SUBMIT TWO FULL-SIZE COPIES, AND AN ELECTRONIC VERSION, OF THE AS-BUILT SEWER PLANS TO THE PCRWWD FIELD ENGINEER.
22. NEW PUBLIC SANITARY SEWER FACILITIES MUST BE TESTED, INSPECTED AND AUTHORIZED FOR DISCHARGE BY PCRWWD AND ADEQ, OR IT'S DELEGATE, PRIOR TO DISCHARGING INTO THE EXISTING PUBLIC SANITARY SEWER SYSTEM.
23. THE CONTRACTOR SHALL COMPLY WITH APPLICABLE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS AT ALL TIMES.
24. PRIOR TO THE INSTALLATION OF SANITARY SEWERS, ALL ROUGH GRADING, INCLUDING FILL, SHALL BE COMPLETED TO A MINIMUM OF 4 FEET OVER THE TOP OF THE SEWER PIPE. BEDDING, SHADING, AND TRENCH BACKFILL COMPACTION SHALL BE PERFORMED IN ACCORDANCE WITH PCRWWD SSDC 2016, DETAIL NO. RWRD 104, OR AS SHOWN ON THE PLANS. SHOULD GROUND WATER OR UNANTICIPATED SOIL CONDITIONS BE ENCOUNTERED, THE BEDDING SHALL BE MODIFIED BY THE DESIGN ENGINEER AND APPROVED BY THE PCRWWD FIELD ENGINEER. WHEN THE NEW SEWER IS LOCATED WITHIN A PUBLIC SEWER EASEMENT, COMPACTION OF BACKFILL SHALL BE IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS OR AS OTHERWISE DIRECTED BY PCRWWD. WHEN THE NEW SEWER IS LOCATED WITHIN RIGHT-OF-WAY, COMPACTION OF BACKFILL SHALL BE IN ACCORDANCE WITH THE RIGHT-OF-WAY AGENCY HAVING JURISDICTION.
25. SANITARY SEWER CONSTRUCTION SHALL START AT THE LOWEST DOWNSTREAM POINT AND PROCEED UPSTREAM, REGARDLESS OF THE STATIONING SHOWN ON THE PLANS. IF CONSTRUCTION CANNOT BE PERFORMED IN THIS MANNER, THE CONTRACTOR SHALL PROVIDE AN OUT-OF-SEQUENCE LETTER FOR APPROVAL BY THE PCRWWD FIELD ENGINEER PRIOR TO THE START OF SEWER CONSTRUCTION.
26. THE HORIZONTAL AND VERTICAL SEPARATIONS BETWEEN PUBLIC WATER MAINS AND PUBLIC SEWER LINES SHALL COMPLY WITH ARIZONA ADMINISTRATIVE CODE (A.A.C.) R18-5-502 AND PCRWWD SSDC 2016, DETAIL NO. RWRD 108.
27. PLANTING WITHIN PUBLIC SEWER EASEMENTS SHALL ONLY BE ALLOWED WITH SPECIAL APPROVAL. TREES AND BRANCHES OR ROOTS HAVING THE POTENTIAL TO EXTEND INTO PUBLIC SEWER EASEMENTS SHALL BE AVOIDED. IN SPECIAL CASES, WHERE THE PUBLIC SEWERS MUST BE LOCATED OUTSIDE PAVED OR STABILIZED AREAS, LANDSCAPING AND PLANTING SHALL ADHERE TO GUIDELINES IN PCRWWD EDS 2016, SECTION 7.7 AND PCRWWD SSDC 2016, DETAIL NO. RWRD 111.
28. ALL PROJECT ACTIVITIES MUST BE KEPT WITHIN THE PROJECT AREAS. CONCERNING HUMAN BURIAL REMAINS, ARCHAEOLOGICAL CLEARANCE RECOMMENDATIONS DO NOT EXEMPT THE DEVELOPMENT FROM COMPLYING WITH STATE BURIAL PROTECTION LAWS. IN THE EVENT THAT HUMAN REMAINS, INCLUDING HUMAN SKELETAL REMAINS, CREMATIONS, CEREMONIAL OBJECTS OR FUNERARY OBJECTS, ARE FOUND DURING EXCAVATION OR CONSTRUCTION, GROUND DISTURBING ACTIVITIES MUST CEASE IN THE IMMEDIATE VICINITY OF THE DISCOVERY. ARIZONA STATE LAWS A.R.S. 41-844 AND 41-865 REQUIRE THAT THE ARIZONA STATE MUSEUM BE NOTIFIED OF THE DISCOVERY AT (520) 621-4795 SO THAT CULTURAL GROUPS WHO CLAIM CULTURAL OR RELIGIOUS AFFINITY TO THE REMAINS CAN MAKE APPROPRIATE ARRANGEMENTS FOR THE REPATRIATION AND REBURIAL OF THE REMAINS. THE HUMAN REMAINS WILL BE REMOVED FROM THE SITE BY A PROFESSIONAL ARCHAEOLOGIST PENDING CONSULTATION AND REVIEW BY THE ARIZONA STATE MUSEUM AND THE CONCERNED CULTURAL GROUPS.
29. ONSITE SANITARY SEWERS WILL BE PUBLIC AND WILL BE DESIGNED AND CONSTRUCTED TO PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT STANDARDS.
30. ALL ONSITE SANITARY SEWERS WILL BE DESIGNED TO PROVIDE GRAVITY FLOW.
31. IN ACCORDANCE WITH R18-9-E301(D)(2)(C) SEWER LINES AND RELATED PARTS CROSSING OR LOCATED IN THE FLOOD ZONE SHALL REQUIRE SPECIAL DESIGN.
32. IN ACCORDANCE WITH R18-9-E301(D)(3)(D) MANHOLE COVERS ARE DESIGNED TO RESTRICT OR ELIMINATE STORM WATER RUNOFF IN AREAS SUBJECTED TO MORE THAN INCIDENTAL RAINFALL.
33. IN ACCORDANCE WITH R18-9-E301(D)(2)(I) FLEXIBLE GRAVITY SEWER LINES MUST BE DELINEATION-TESTED.
34. IN ACCORDANCE WITH R18-9-E301(D)(2)(J) SEWER LINES MUST BE LEAKAGE-TESTED (ASTM F1417 FOR PVC GRAVITY SEWER MAINS, ETC.).
35. IN ACCORDANCE WITH R18-9-E301(D)(2)(K) SEWER LINES WILL HAVE A UNIFORM SLOPE TEST.
36. IN ACCORDANCE WITH R18-9-E301(D)(3)(E) MANHOLES SHALL BE LEAKAGE TESTED PER ASTM C1244.
37. IN ACCORDANCE WITH R18-9-E301(D)(1)(D) THE PROPOSED SEWER COLLECTION SYSTEM AND DRINKING WATER SYSTEM COMPONENTS SHALL MEET SEPARATION REQUIREMENTS PER 18 A.A.C., ARTICLE 5.
38. IN ACCORDANCE WITH R18-9-E301(D)(2)(B) THE MINIMUM SEWER BURIAL DEPTH SHALL BE 3 (THREE) FEET.
39. THE FOLLOWING LOTS WILL REQUIRE BACKWATER VALVES: _____

GENERAL SIGNING NOTES

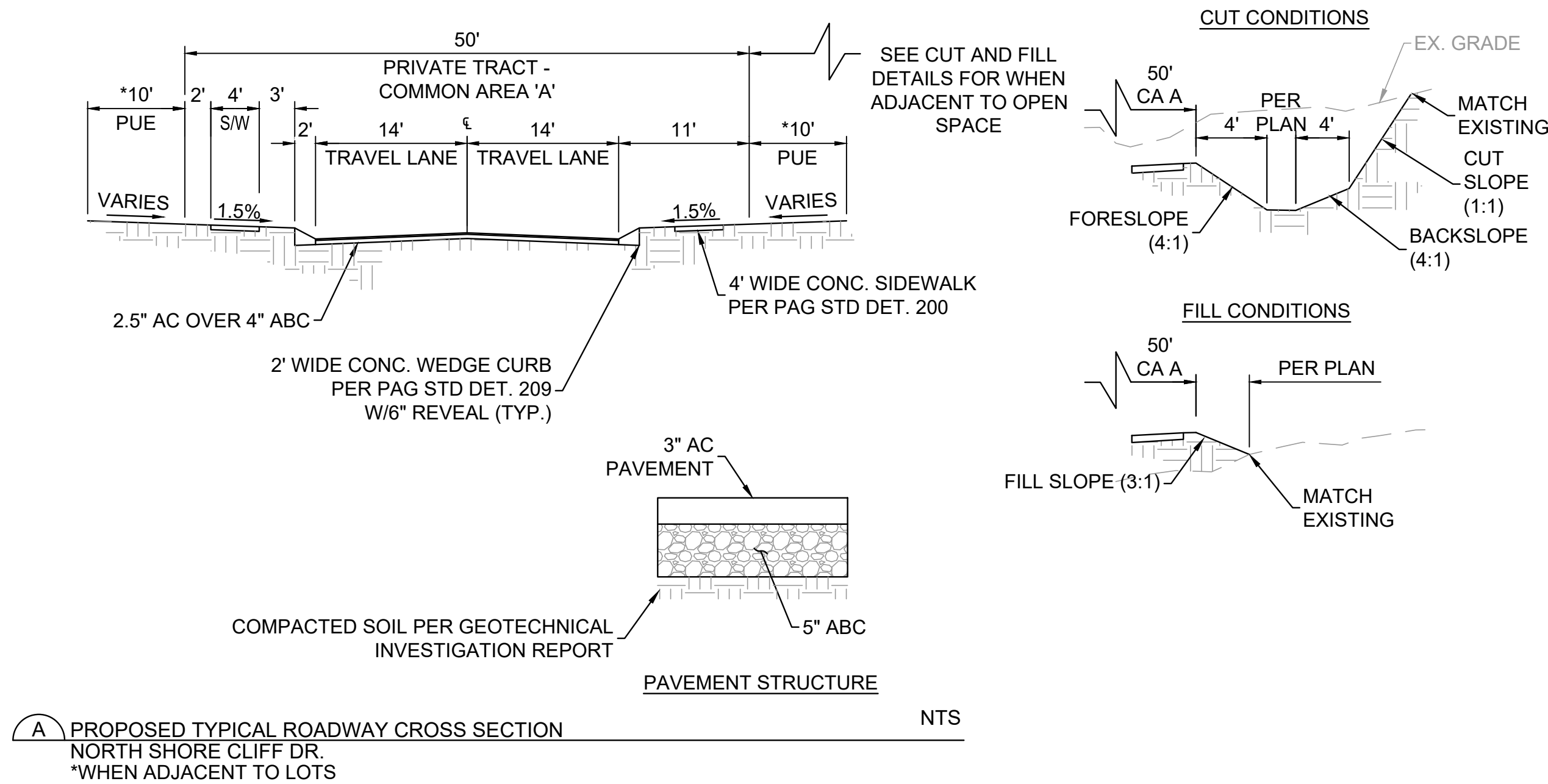
1. ALL SIGNS SHALL BE IN COMPLIANCE WITH THE 2009 EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2020 EDITION OF THE PIMA COUNTY AND CITY OF TUCSON TRAFFIC SIGNING DESIGN MANUAL (FIRST EDITION), THE CURRENT SUPPLEMENTAL SPECIFICATIONS, THESE PLANS AND THE SPECIAL PROVISIONS.
2. SIGNS MAY BE MODIFIED AND LOCATIONS ADJUSTED TO FIT CONDITIONS AS DIRECTED BY THE ENGINEER.
3. POST LENGTHS INDICATED ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ACTUAL POST LENGTHS.
4. ALL NEW AND EXISTING SIGNS SHALL BE INSTALLED ON PERFORATED POST (SQUARE) AND SHALL BE INSTALLED IN A CONCRETE FOUNDATION, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
5. ALL SIGN STATION LOCATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ACTUAL SIGN LOCATIONS WITH THE ENGINEER PRIOR TO THE INSTALLATION OF ALL SIGNS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK WITH BLUE STAKE AND FOR INSTALLING ALL TRAFFIC SIGNS IN THE FIELD.
7. SPEED LIMIT SIGNS AND STOP SIGNS SHALL BE TYPE IX (DIAMOND GRADE) SHEETING. ALL OTHER WARNING AND REGULATORY SIGNS SHALL BE TYPE III (HIGH INTENSITY) SHEETING UNLESS OTHERWISE DETERMINED BY THE JURISDICTION ENGINEER. STREET NAME SIGNS (D3) SHALL BE FABRICATED USING TYPE III (HIGH INTENSITY) SHEETING AND ADVANCE STREET NAME SIGNS (TE9) SHALL BE FABRICATED USING TYPE III SHEETING. NO PARKING SIGNS SHALL BE TYPE II SHEETING. ALL SCHOOL ZONE SIGNS SHALL BE FLUORESCENT YELLOW-GREEN, DIAMOND GRADE SHEETING. ALL OVERHEAD SIGNS SHALL BE DIAMOND GRADE SHEETING.
8. ALL NEW SIGNS SHALL HAVE ALUMINUM BACKING, UNLESS OTHERWISE SPECIFIED.
9. ANY SALVAGED SIGN THAT IS TO BE REUSED SHALL BE TEMPORARILY STORED IN A SAFE LOCATION UNTIL REINSTALLATION.
10. THE DESIGN SPEED FOR THIS DEVELOPMENT IS: 25 M.P.H. AND THE DESIGN VEHICLE IS: SU-30. THE POSTED SPEED LIMIT FOR NARANJA DRIVE IS: 45 M.P.H.
11. FINAL INSPECTION/ACCEPTANCE OF SIGNING SHALL BE PERFORMED BY THE ENGINEER.

 866.850.4200 www.atwell-group.com			
 Know what's below. Call before you dig.		LOCATION DESCRIPTION A PORTION OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 12 SOUTH, RANGE 13 EAST, OF THE GILA AND SALT RIVER BASE AND MERIDIAN TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA	
FINAL SITE PLAN, GRADING PLAN AND PUBLIC SEWER AND PRIVATE STREET IMPROVEMENT PLAN NARANJA TRAILS LOTS 1 THROUGH 64 & COMMON AREAS A1 THROUGH C TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA		PM. M. PARK	
		DR. J.TURPIN	
		JOB NO. 20000103	
		DATE. 04-01-2024	
ORO VALLEY CASE No. 2000939, 2002761, 2202868 2202969, 2202970, 2301593		SHEET NO. 03 OF 23	

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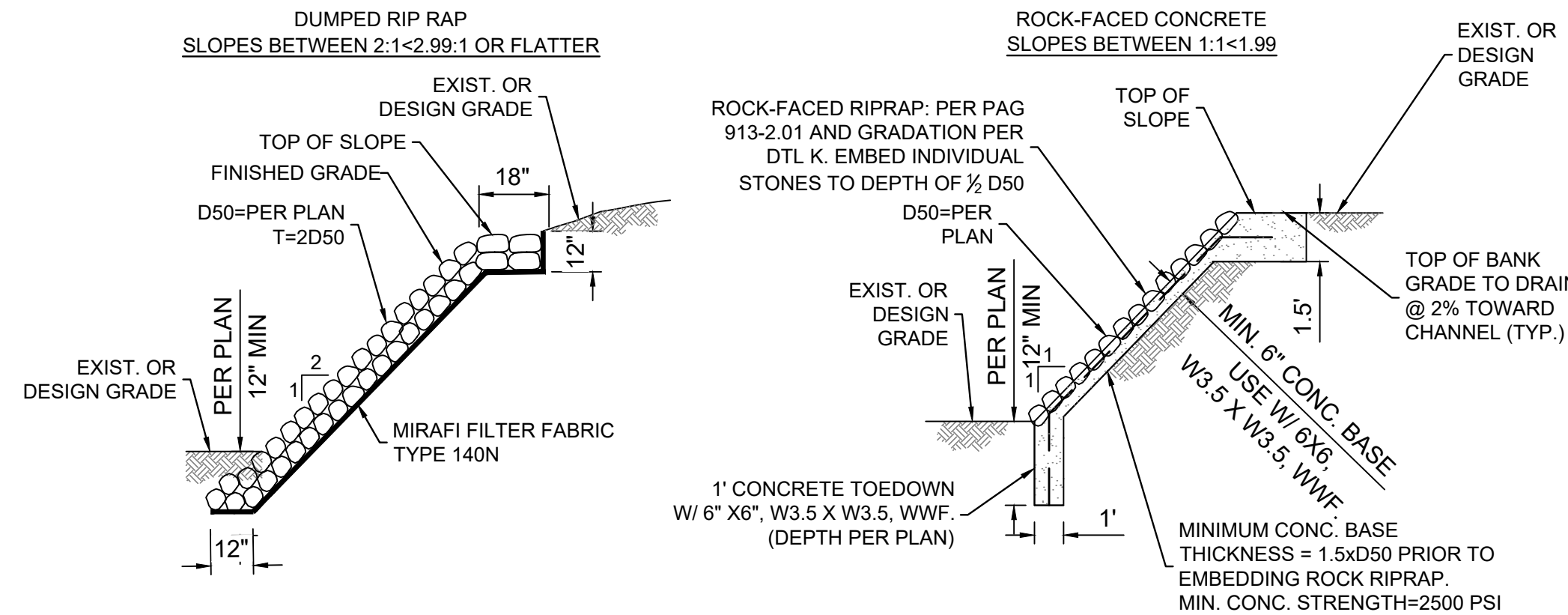
GENERAL NOTES FOR WEIR AND CHANNEL STRUCTURES:

- ENGINEERING DESIGN COMPLIES WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, LATEST EDITION.
- CONSTRUCTION SHALL COMPLY WITH PAG STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS, LATEST EDITION.
- STANDARD DETAILS REFERRED TO ON PLANS SHALL BE IN ACCORDANCE WITH PAG STANDARD DETAILS FOR PUBLIC IMPROVEMENTS, LATEST EDITION.
- CONTRACTOR SHALL VERIFY CONDITIONS AND DIMENSIONS AT THE JOBSITE PRIOR TO COMMENCING WORK AND SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER.
- DIMENSIONS SHALL NOT BE SCALED FROM DRAWINGS.
- FOUNDATIONS FOR WEIR STRUCTURE AND CONCRETE DRAINAGE CHANNEL SHALL BEAR ON SCARIFIED AND COMPACTED NATIVE SOILS. SCARIFY SOIL TO MINIMUM DEPTH OF 8 INCHES AND COMPACT TO 95 PERCENT OF MAXIMUM DRY DENSITY PER STANDARD PROCTOR ASTM D698.
- MATERIALS OF CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING:
 - CONCRETE - ASTM C150, TYPE V, CLASS "S", $F'_c=3,000$ PSI.
 - REINFORCING STEEL - ASTM A 615, GRADE 60.
- REINFORCING STEEL BENDS AND HOOKS SHALL COMPLY WITH AASHTO SECTION 5.10.2. SPLICE BARS 40 BAR DIAMETERS, UNLESS NOTED OTHERWISE.
- CHAMFER ALL EXPOSED CORNERS OF WEIR STRUCTURE CONCRETE WALL $\frac{3}{4}$ INCH.
- CONSTRUCTION JOINT: FOR THE CONCRETE DRAINAGE CHANNELS, PROVIDE EXPANSION JOINTS AT 45-FOOT INTERVALS AND WEAKENED PLANE JOINTS AT 15-FOOT INTERVALS EVENLY SPACED BETWEEN EXPANSION JOINTS, IN ACCORDANCE WITH SECTION 912-3.06 OF THE STANDARD SPECIFICATIONS. HORIZONTAL WEAKENED PLANE JOINTS SPACED VERTICALLY ALONG THE FACE OF THE SLOPE PAVING OR CHANNEL LINING ARE NOT REQUIRED.
- CONCRETE FINISHES: FOR THE WEIR STRUCTURE, EXPOSED CONCRETE WALL SURFACES SHALL RECEIVE A CLASS II FINISH IN ACCORDANCE WITH SECTION 601-3.05 OF THE STANDARD SPECIFICATIONS. FOR THE DRAINAGE CHANNEL STRUCTURE, EXPOSED SURFACES SHALL RECEIVED A CLASS I FINISH.
- HANDRAIL SHALL BE PAINTED WITH GARDENING DUNN EDWARDS #DE5570 - FEDERAL STANDARD 595B COLOR MATCH #34533.



SLOPE GRADIENT	SLOPE PROTECTION
3:1 OR FLATTER	REVEGETATE WITH NATIVE SPECIES PER LANDSCAPE PLAN
STEEPER THAN 3:1 TO 2:1	RIP-RAP WITH FILTER FABRIC CLOTH, JUTE, OR EXCELSIOR NETTING AND THEN REVEGETATE WITH NATIVE SPECIES OR PROVIDE OTHER GROUND COVERS.
STEEPER THAN 2:1 TO 1:1	GROUTED OR WIRE-TIED RIP RAP
STEEPER THAN 1:	STABILITY ANALYSIS OR RETAINING WALL DESIGNED BY A STRUCTURAL ENGINEER.

*REFERENCE GEOTECHNICAL EVALUATION FOR THE NARANJA TRAILS, PROJECT NUMBER 20-098 PER PATTISON ENGINEERING, L.L.C.

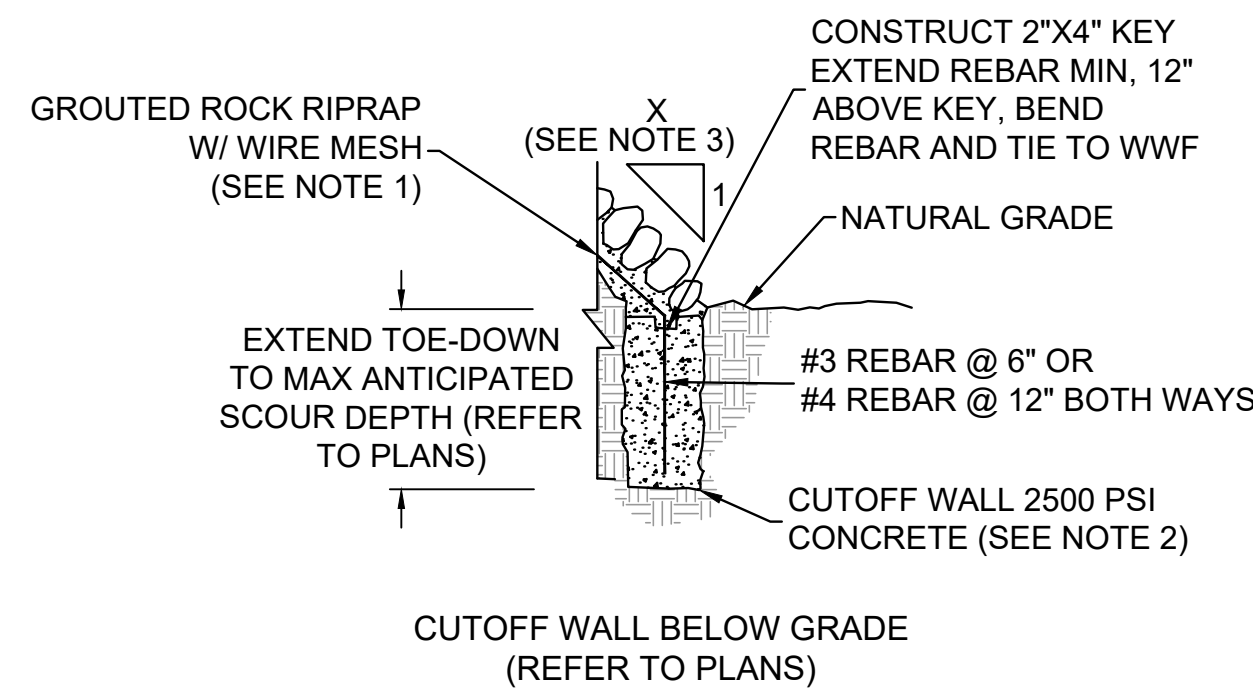


NOTES

- IN AREAS OF CUT, WHERE HAMMERING OR CARVING ROCK IS REQUIRED, ADDITIONAL RIP RAP OR BOULDER WALL CONSTRUCTION MAY NOT BE REQUIRED, AS DETERMINED BY THE SOILS ENGINEER. STACKED BOULDER WALLS MAY BE UTILIZED AS DIRECTED BY THE STRUCTURAL ENGINEER.
- GROUTED ROCK RIP RAP IS REQUIRED IN ALL AREAS CONCENTRATED FLOW REGARDLESS OF SLOPE.
- ALL MATERIALS AND INSTALLATION PER PAG STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS, CURRENT EDITION.

ONSITE SLOPE STABILIZATION DETAILS

NTS

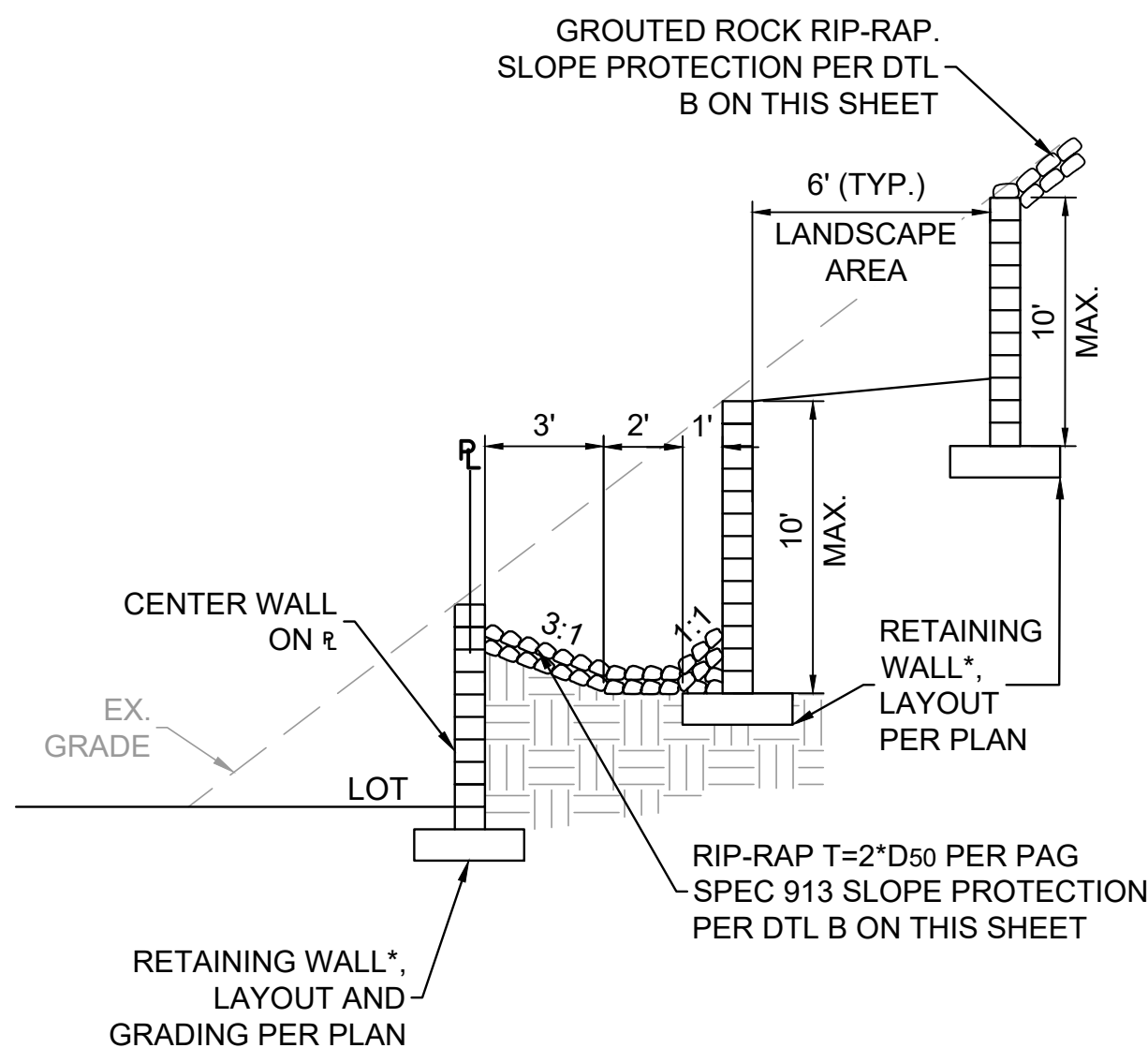


NOTES

- FOR D50 = 6", USE W3.5XW3.5. FOR D50 = 9" AND GREATER, USE W5.5XW5.5.
- UNLESS NOTED OTHERWISE ON THE PLANS, ALL MATERIAL & INSTALLATION PER PAG STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS, CURRENT ED.
- HORIZONTAL COMPONENT OF SLOPE (I.E. "X") SHALL NOT EXCEED 1.5 WITHOUT THE CONFIRMATION OF A GEOTECHNICAL ENGINEER LICENSED BY THE STATE OF ARIZONA. IN NO CASE SHALL THE VALUE OF X BE LESS THAN 1.
- ALL GROUT SHALL BE NATURAL DESERT COLORED.

ROCK-FACED CONCRETE SLOPE PAVING

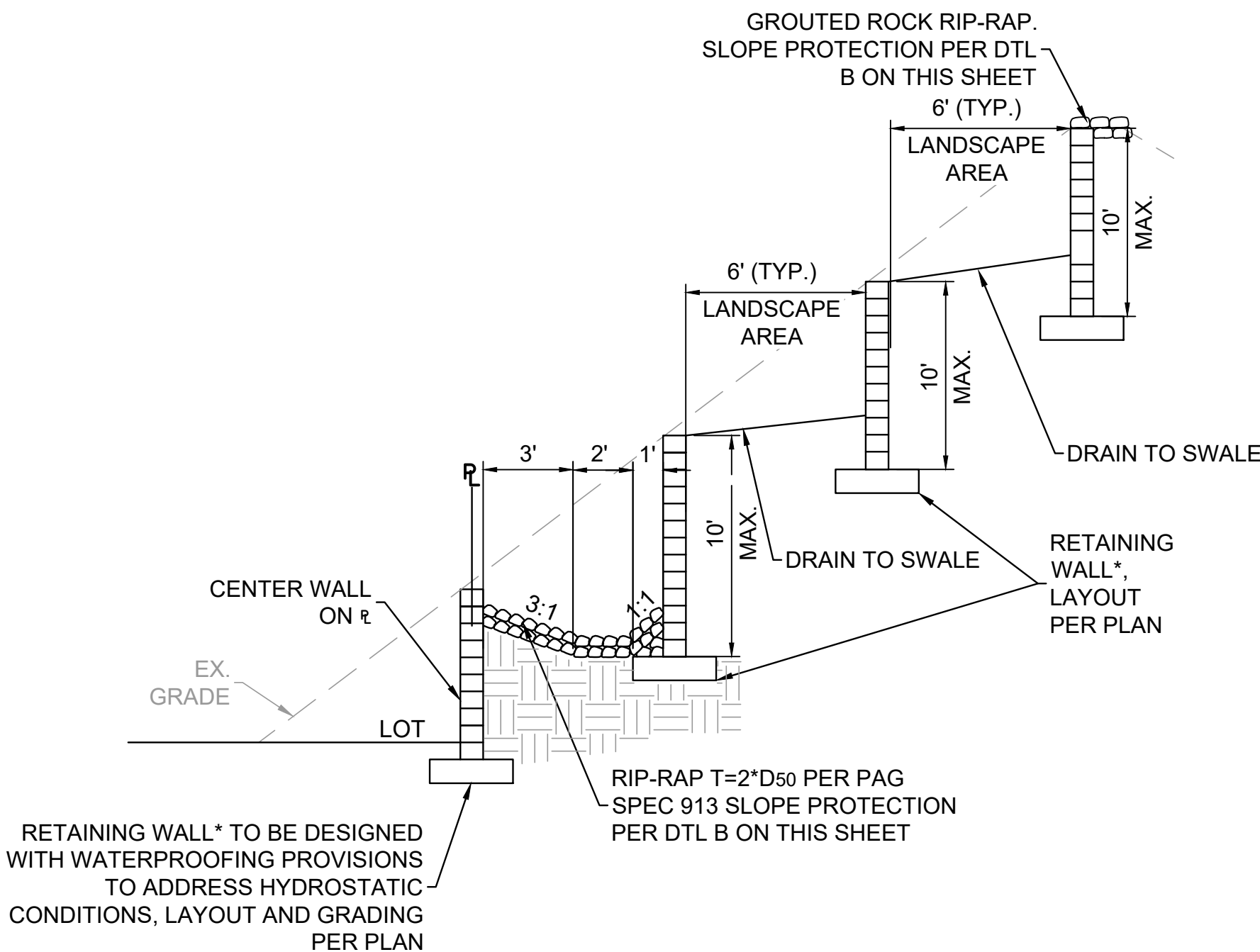
NTS



* RETAINING WALLS SHALL BE DESIGNED BY OTHERS AND PERMITTED SEPARATELY.

REAR LOT TO EXISTING HILL SIDE IN CUT

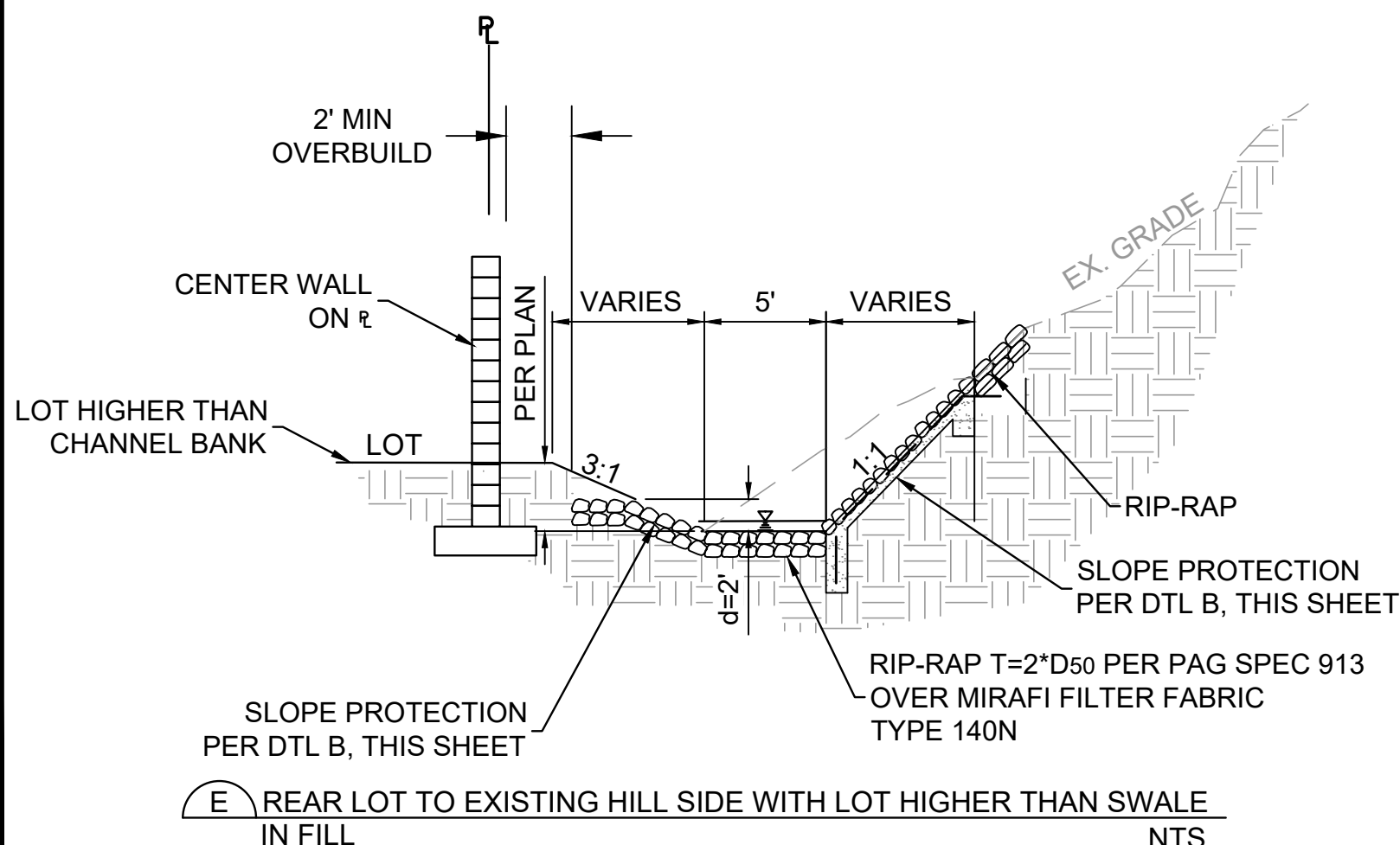
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* RETAINING WALLS SHALL BE DESIGNED BY OTHERS AND PERMITTED SEPARATELY.

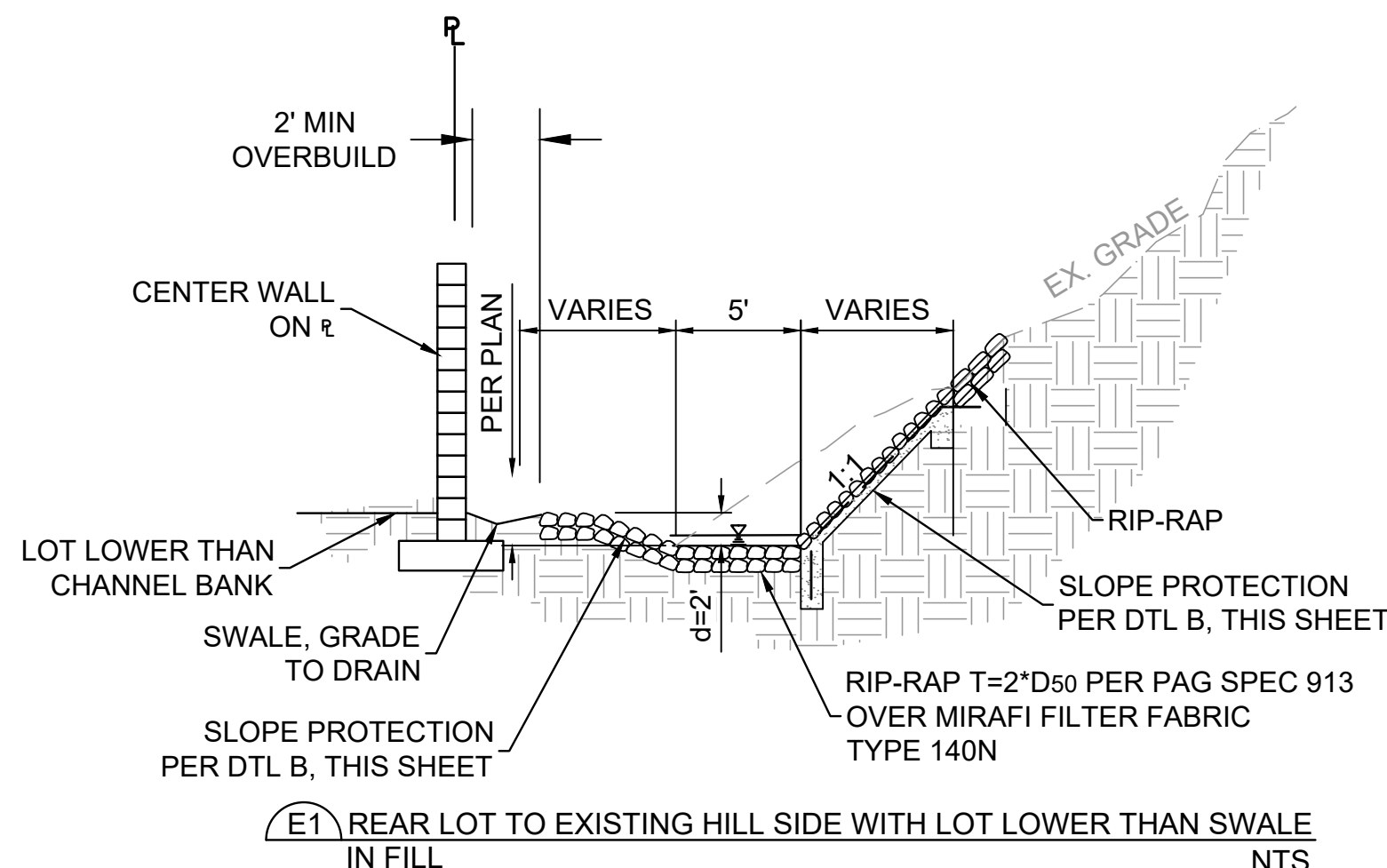
REAR LOT TO EXISTING HILL SIDE IN CUT

NTS



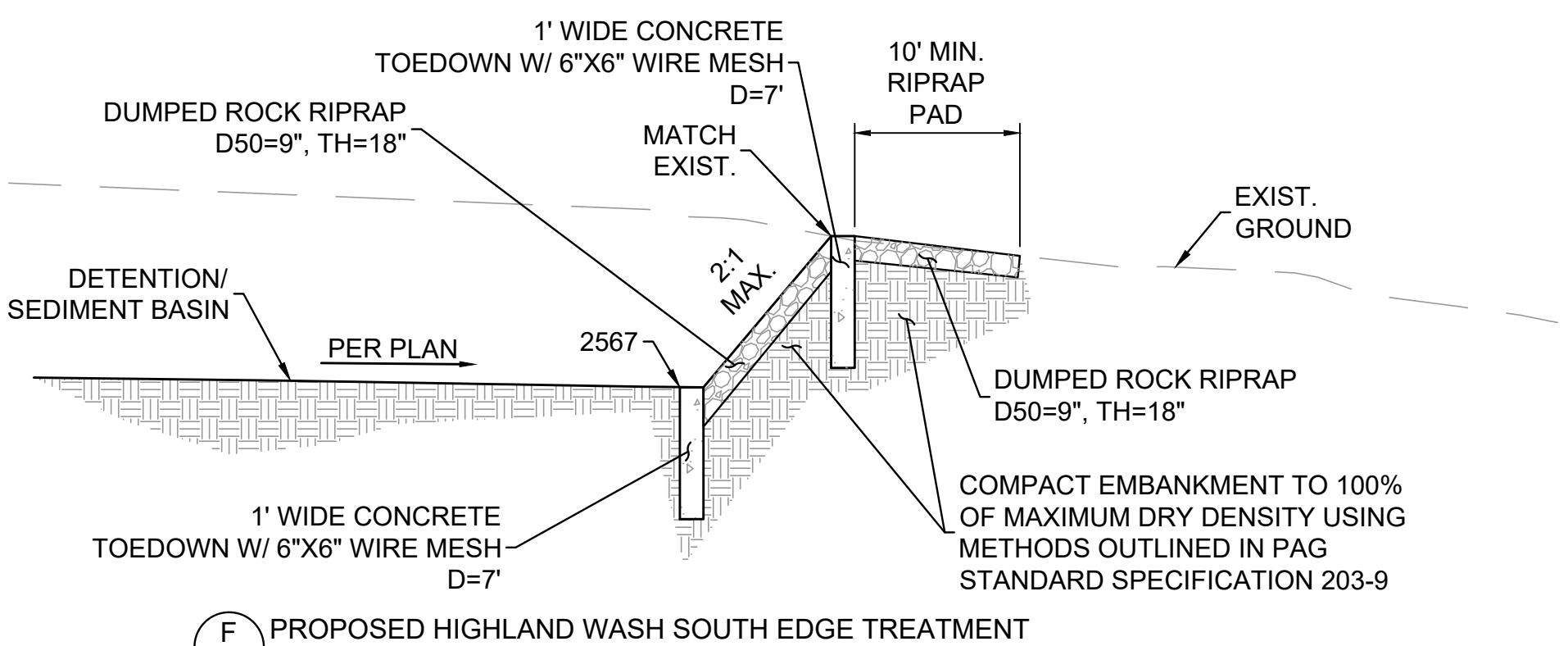
REAR LOT TO EXISTING HILL SIDE WITH LOT HIGHER THAN SWALE IN FILL

NTS



REAR LOT TO EXISTING HILL SIDE WITH LOT LOWER THAN SWALE IN FILL

NTS



PROPOSED HIGHLAND WASH SOUTH EDGE TREATMENT

NTS



4700 E. SOUTHERN AVENUE
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NARANJA TRAILS
LOTS 1 THROUGH 64 & COMMON AREAS A1 THROUGH C TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA

PM. M. PARK
DR. J. TURPIN
JOB NO. 20000103
DATE. 04-01-2024

ORO VALLEY CASE No: 2000939, 2002761, 2202968, 2202969, 2202970, 2301593

DETAILS

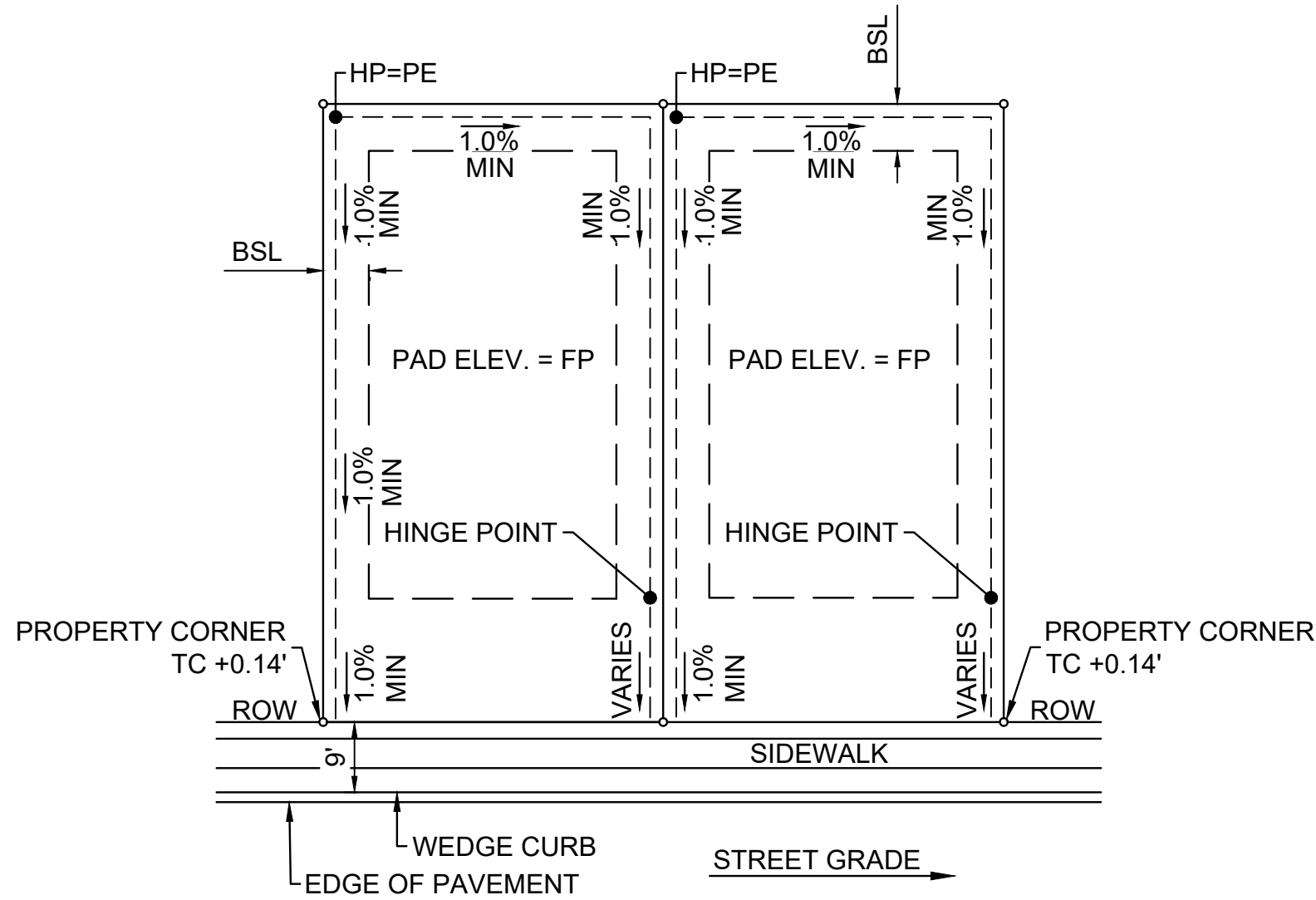
DT01

SHEET NO.

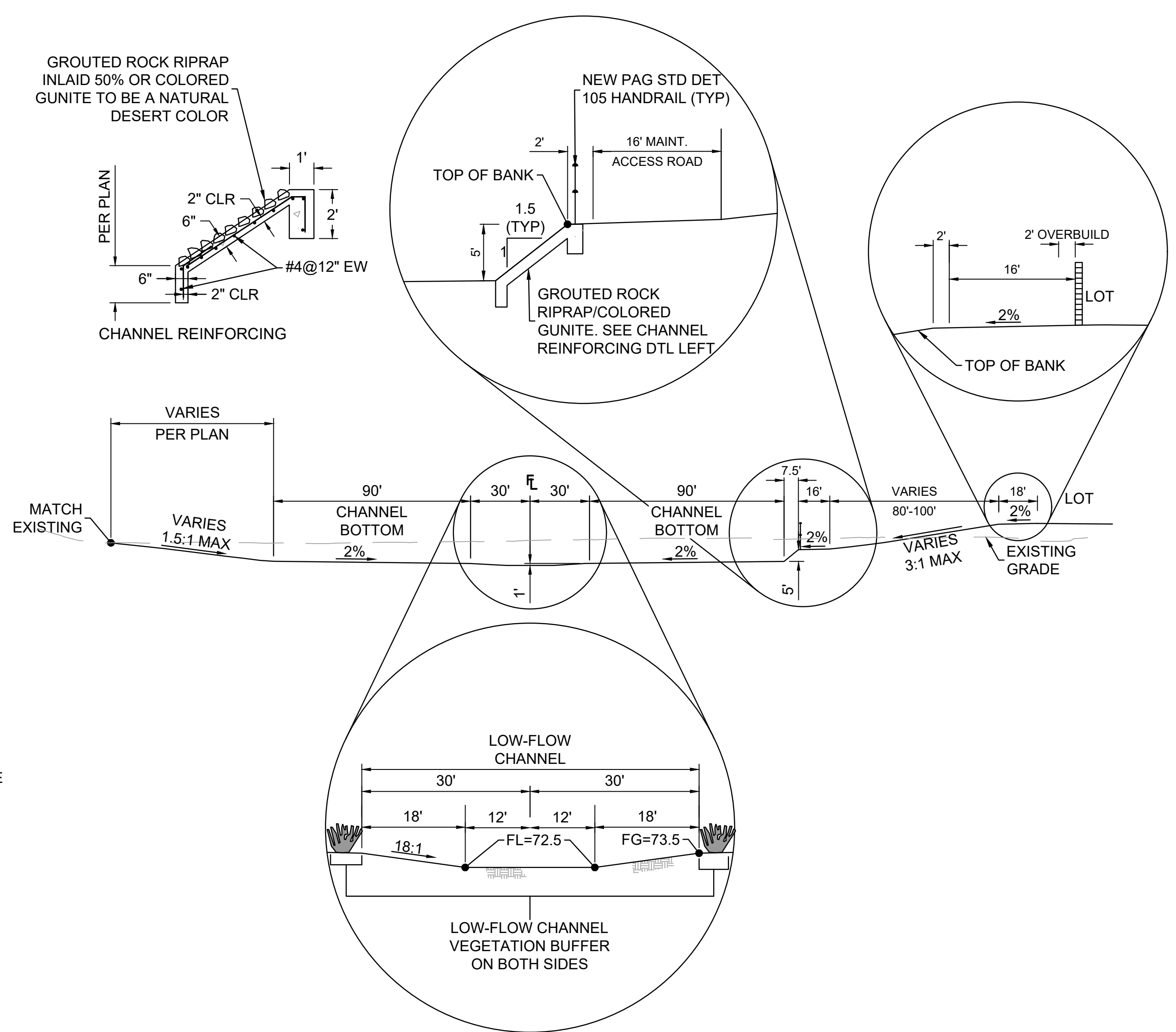
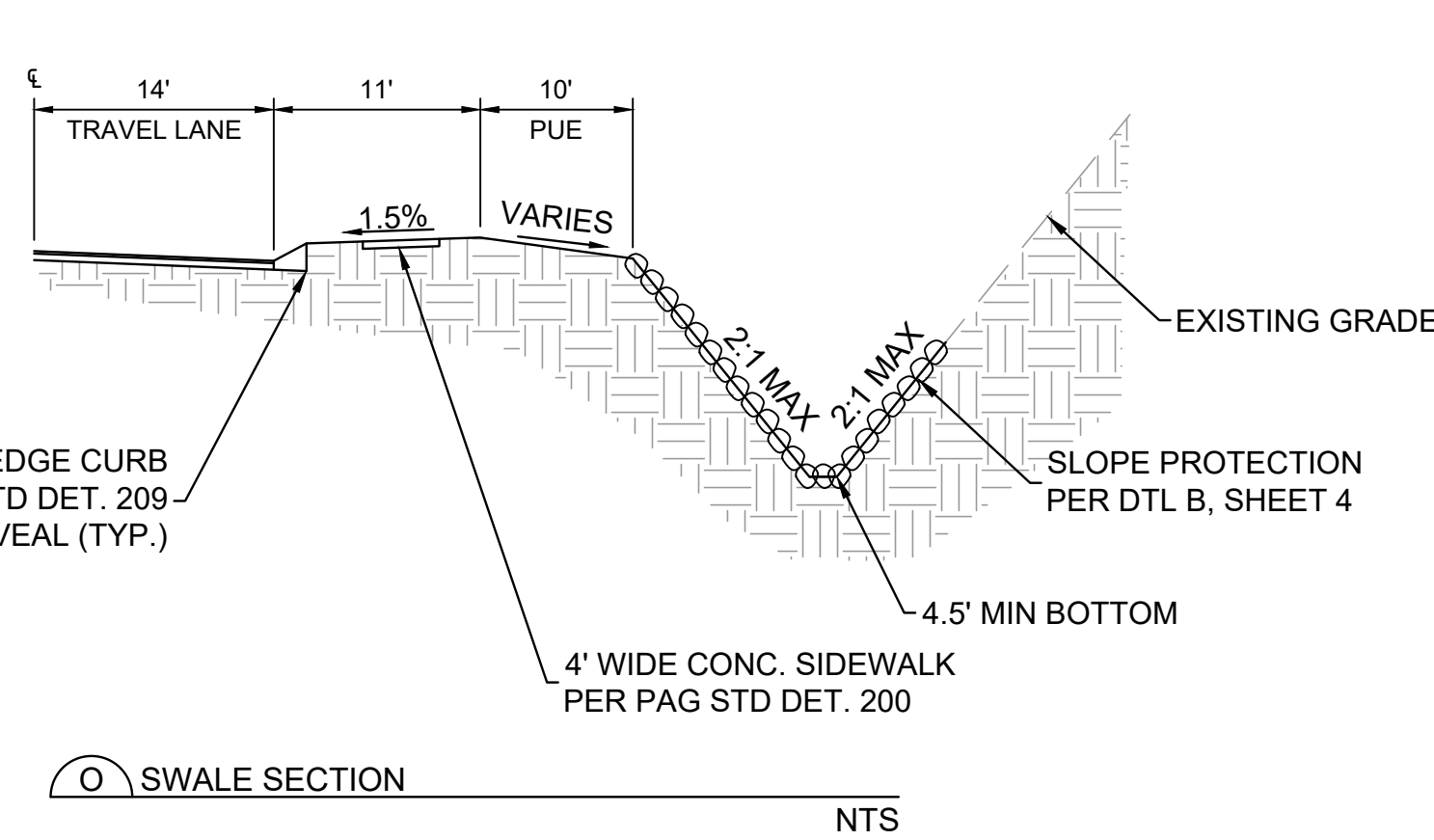
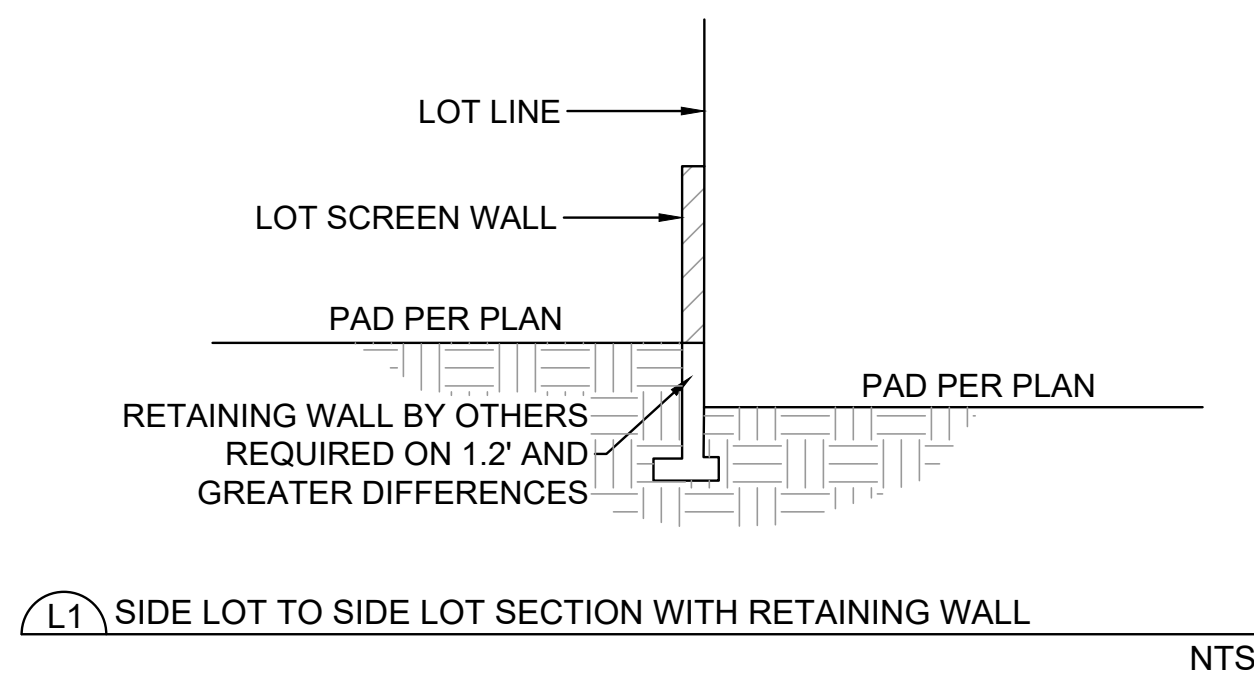
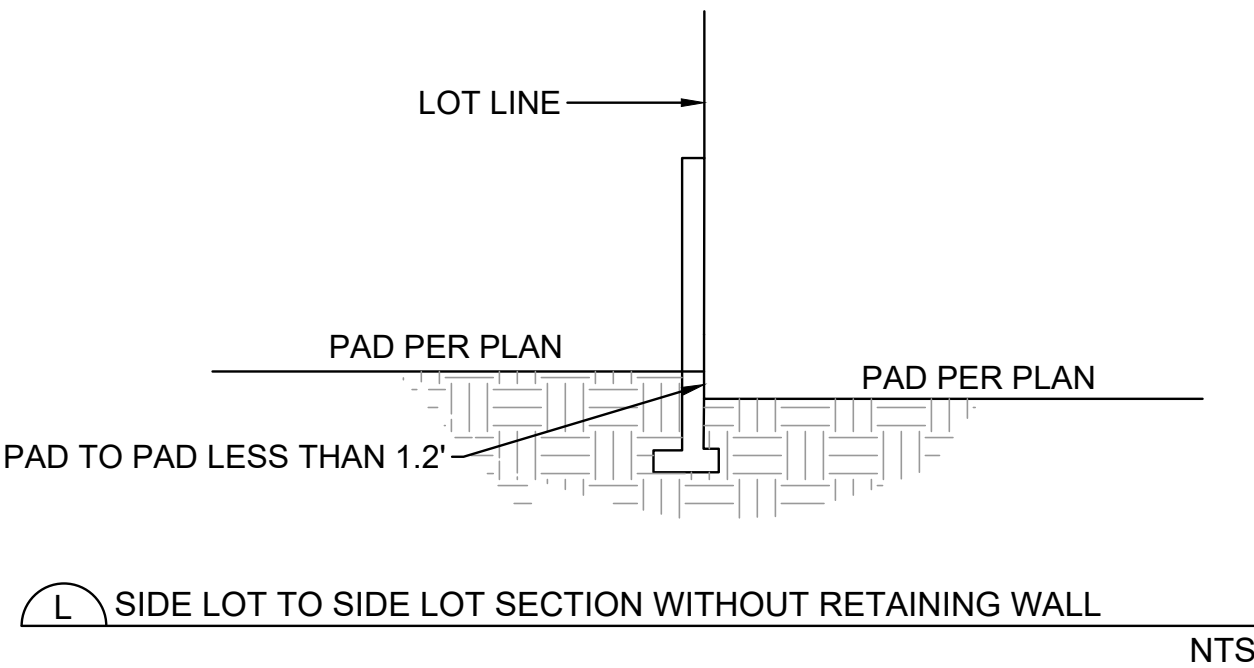
04 OF 23

1:2/2024/102 - naranja_trails/wash/wash_south_edge_treatment.dwg Plot Date: 6/16/2024

GRADING PERMIT #2202968

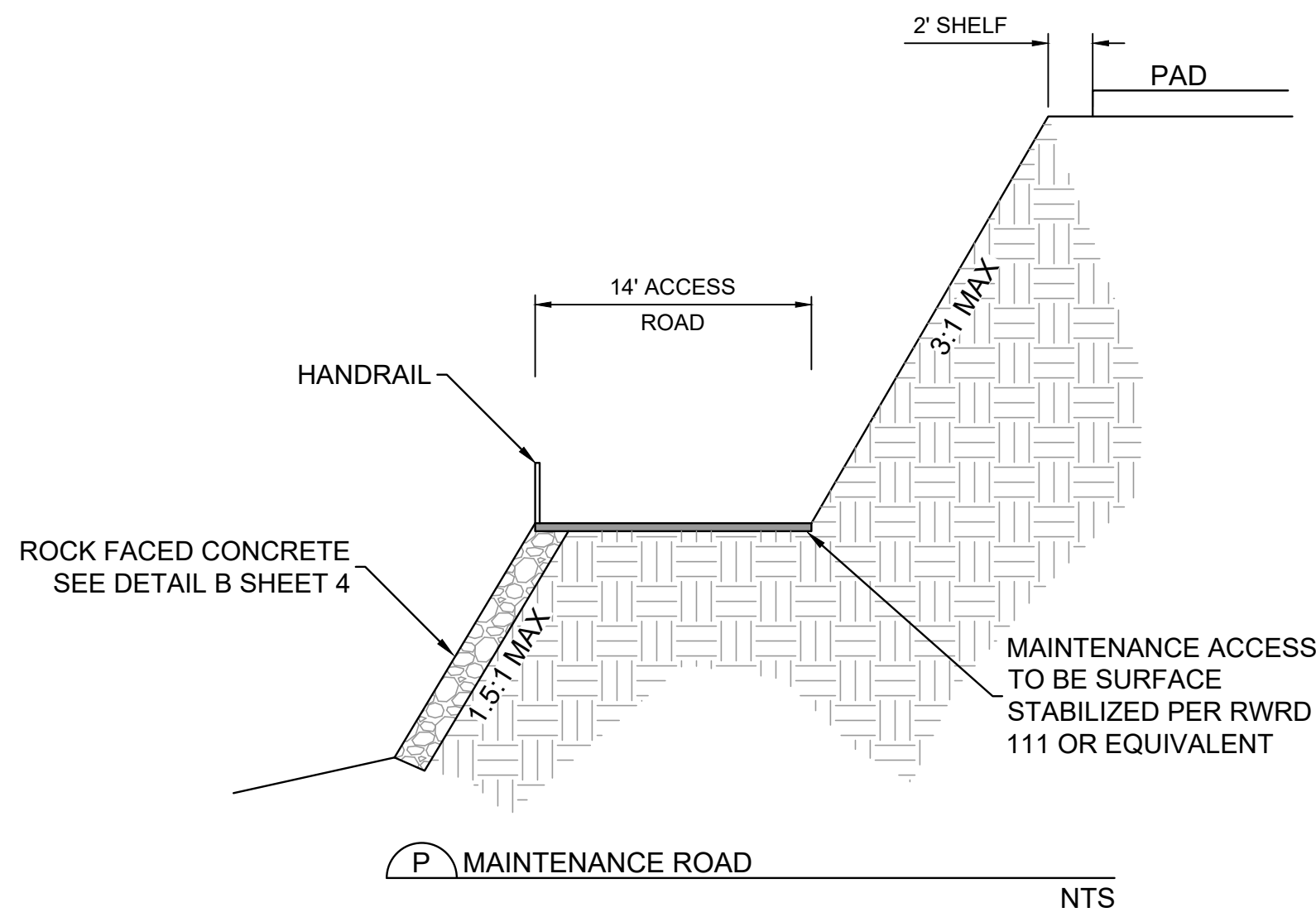
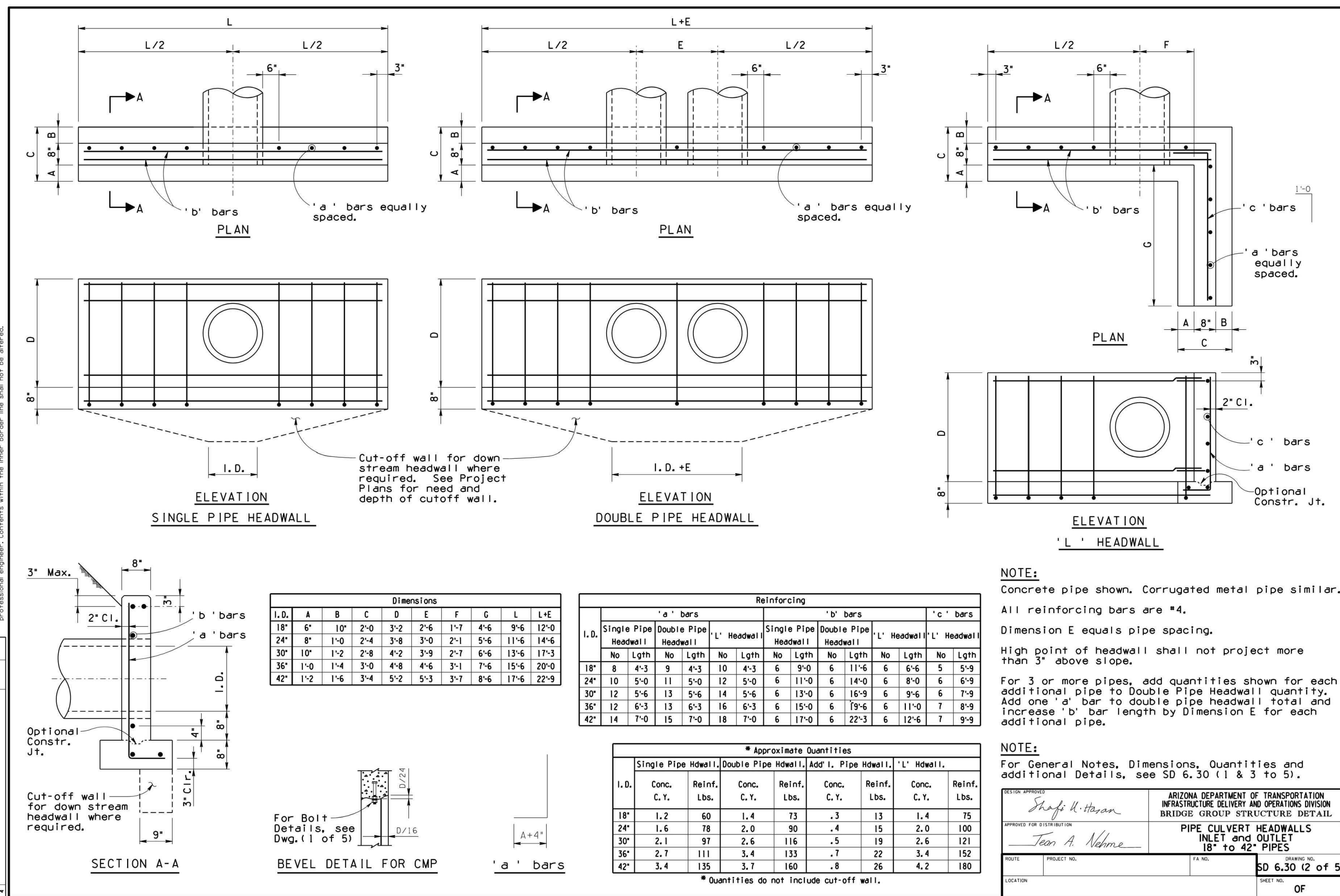


K TYPICAL LOT GRADING



N PROPOSED HIGHLAND WASH CHANNEL TYPICAL SECTION

NTS



P MAINTENANCE ROAD

NTS

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520.268.6322

REGISTERED PROFESSIONAL ENGINEER
64583
MICHAEL J. PARK
STATE OF ARIZONA

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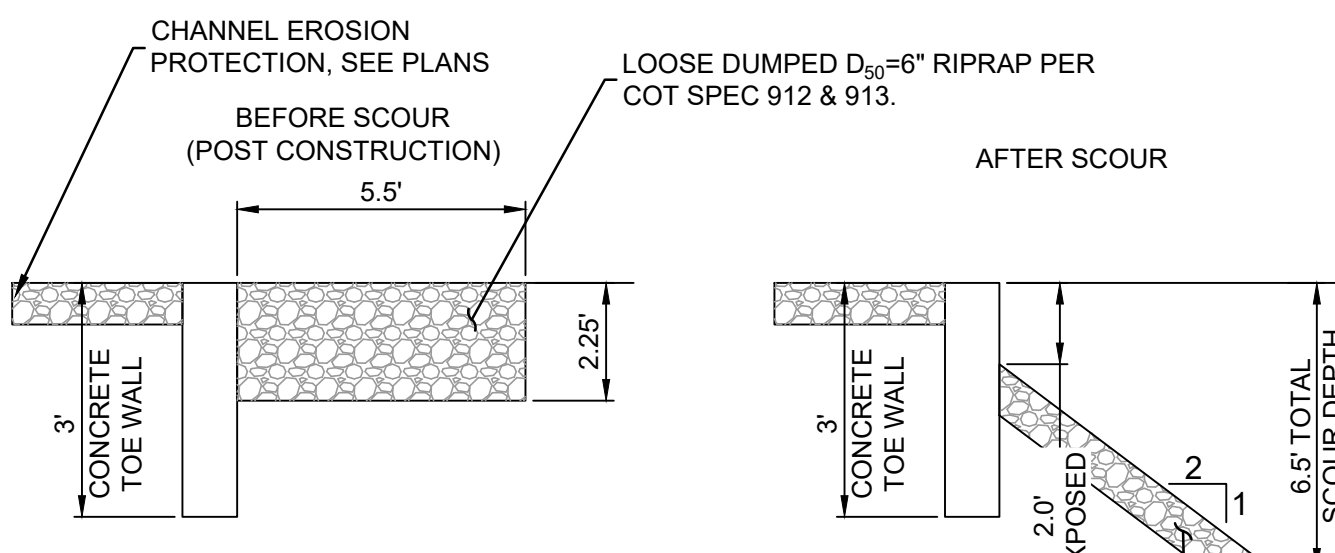
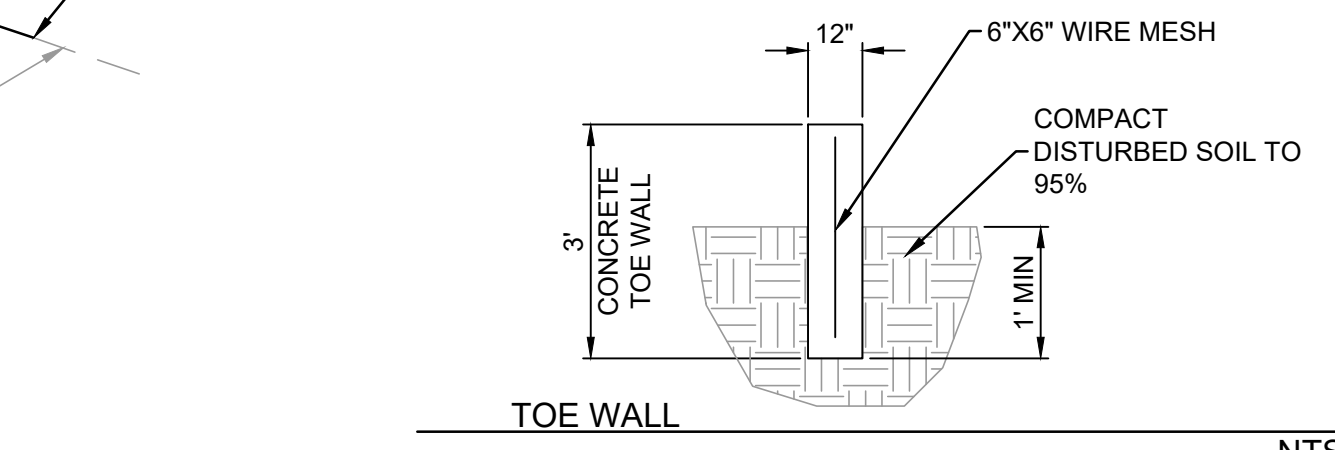
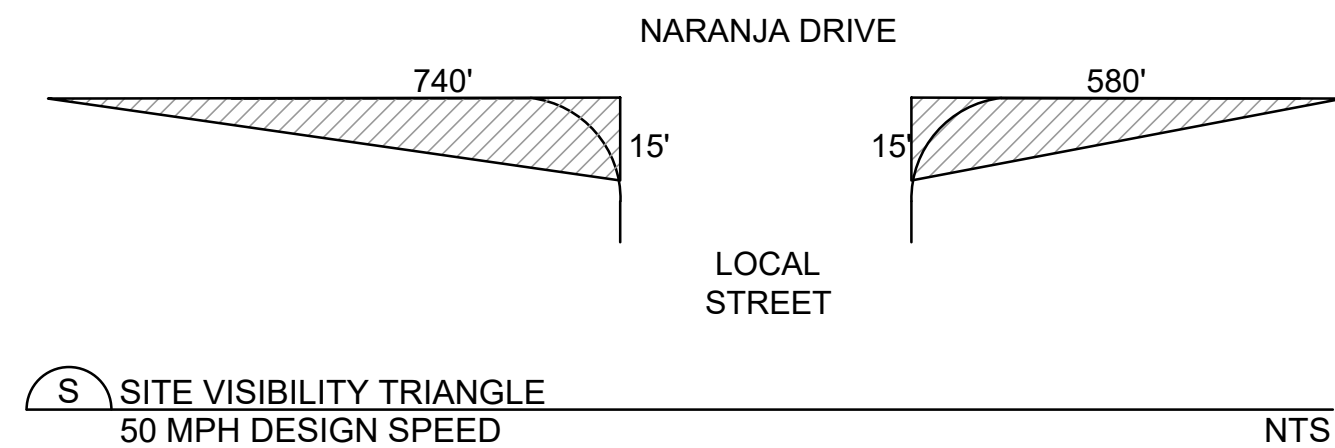
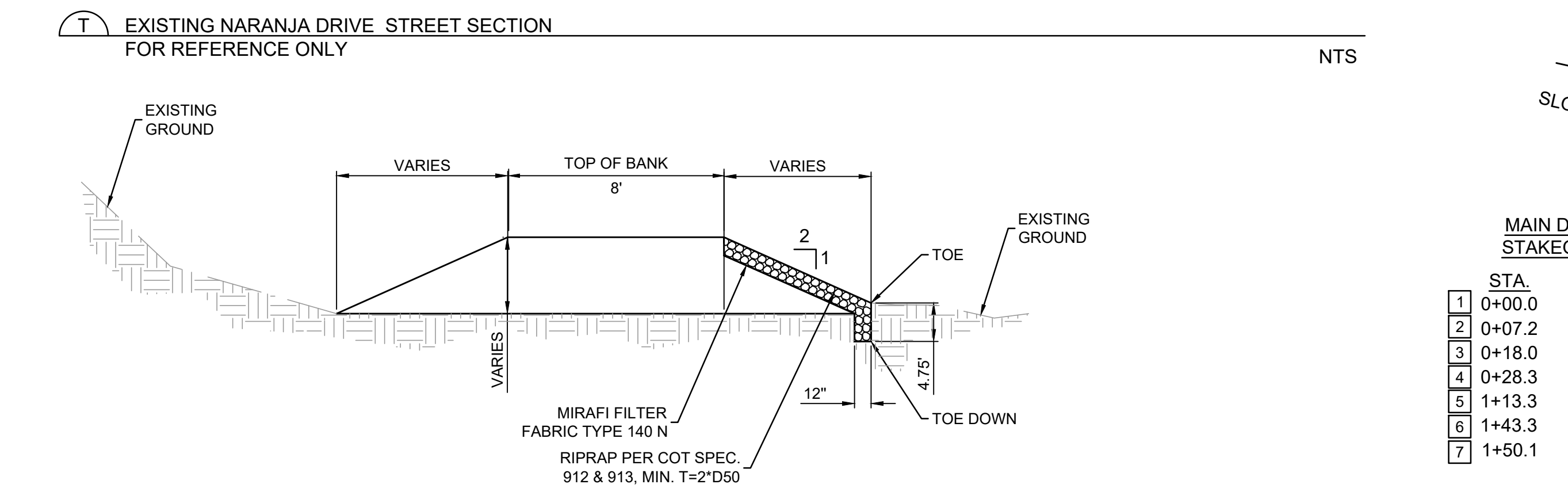
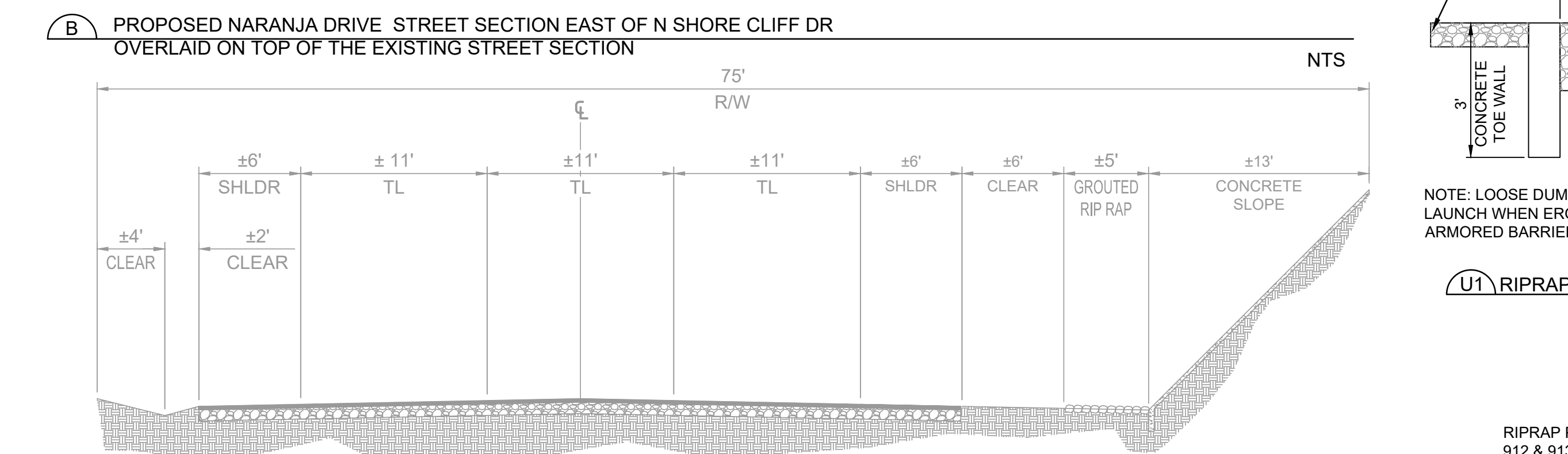
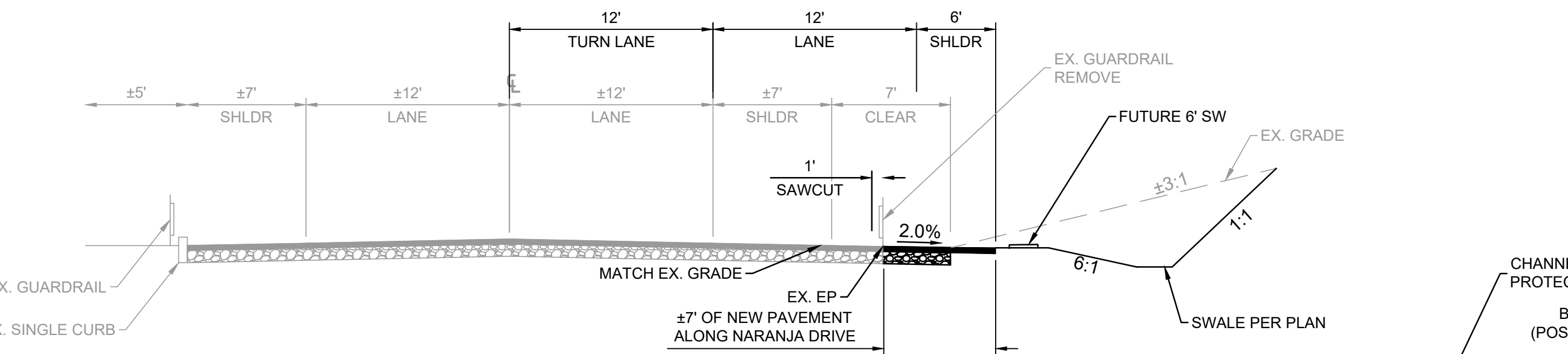
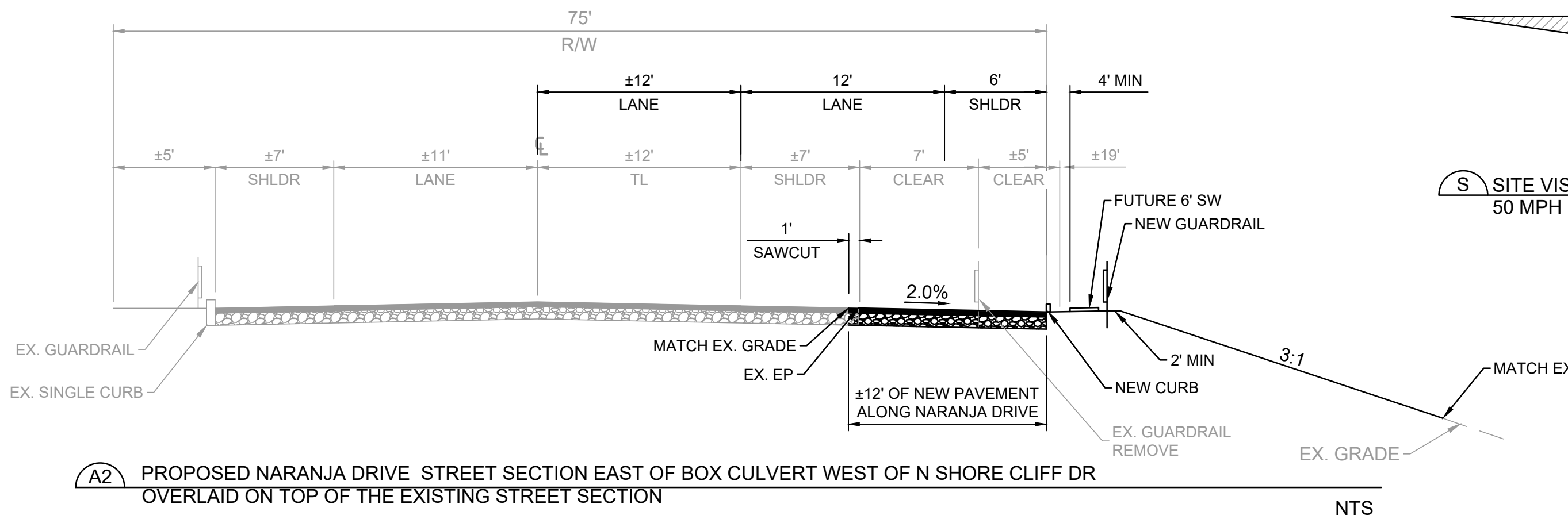
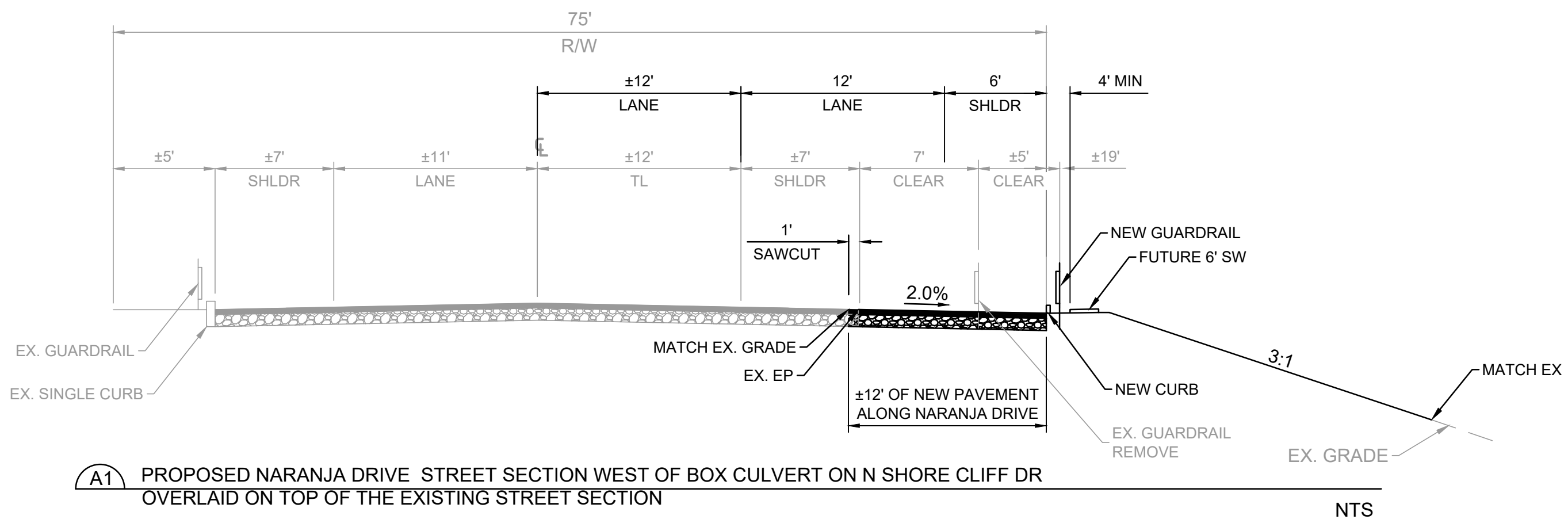
FINAL SITE PLAN, GRADING PLAN AND PUBLIC SEWER AND PRIVATE STREET IMPROVEMENT PLAN
NARANJA TRAILS
LOTS 1 THROUGH 64 & COMMON AREAS A1 THROUGH C TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA

PM. M. PARK
DR. J. TURPIN
JOB NO. 20000103
DATE: 04-01-2024

ORO VALLEY CASE No: 2000939, 2002761, 2202968, 2202969, 2202970, 2301593

DETAILS
DT02

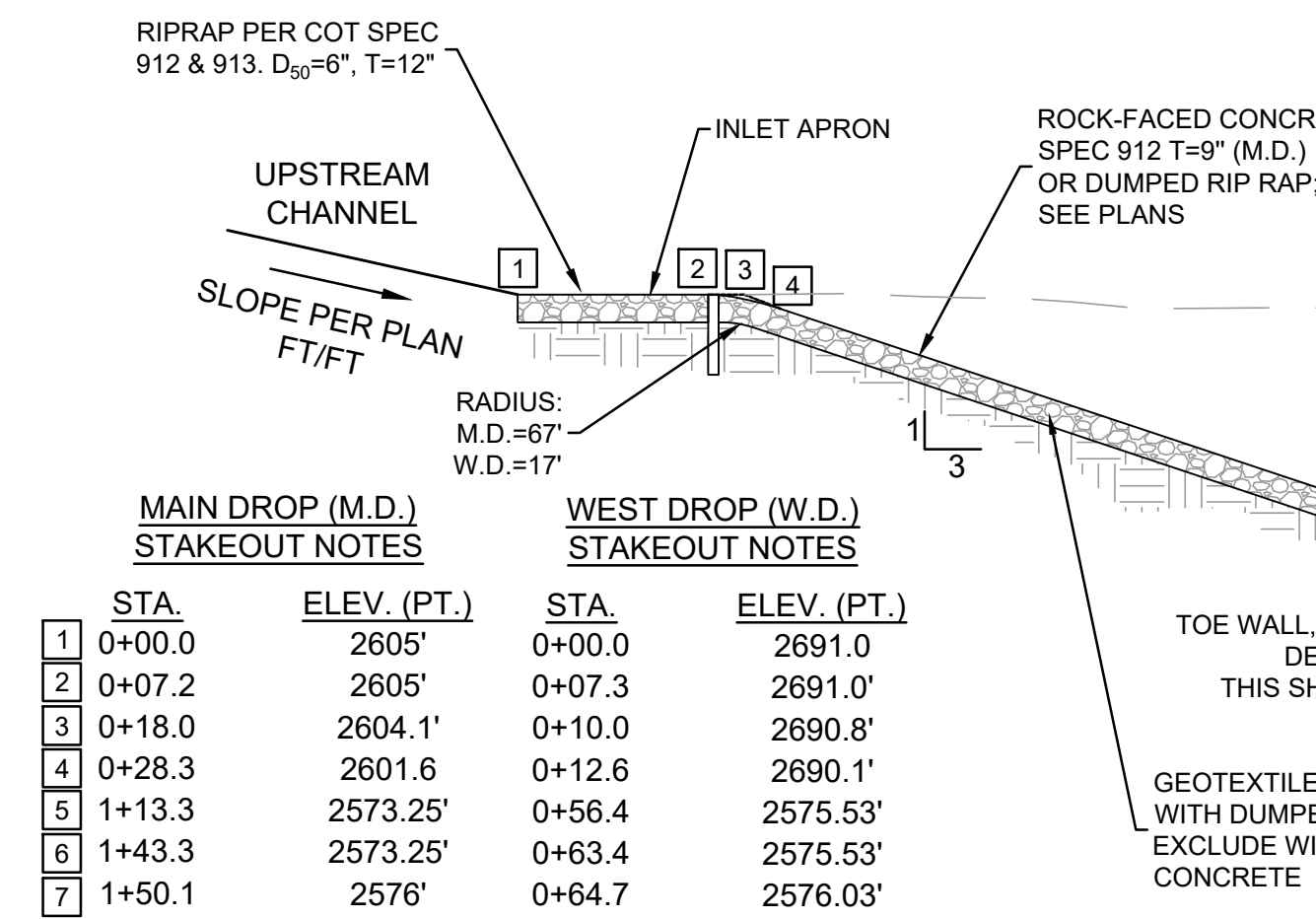
SHEET NO.
05 OF 23



NOTE: LOOSE DUMPED RIPRAP IS DESIGNED TO LAUNCH WHEN EROSION OCCURS, CREATING AN ARMORED BARRIER DOWN BELOW SCOUR DEPTH.

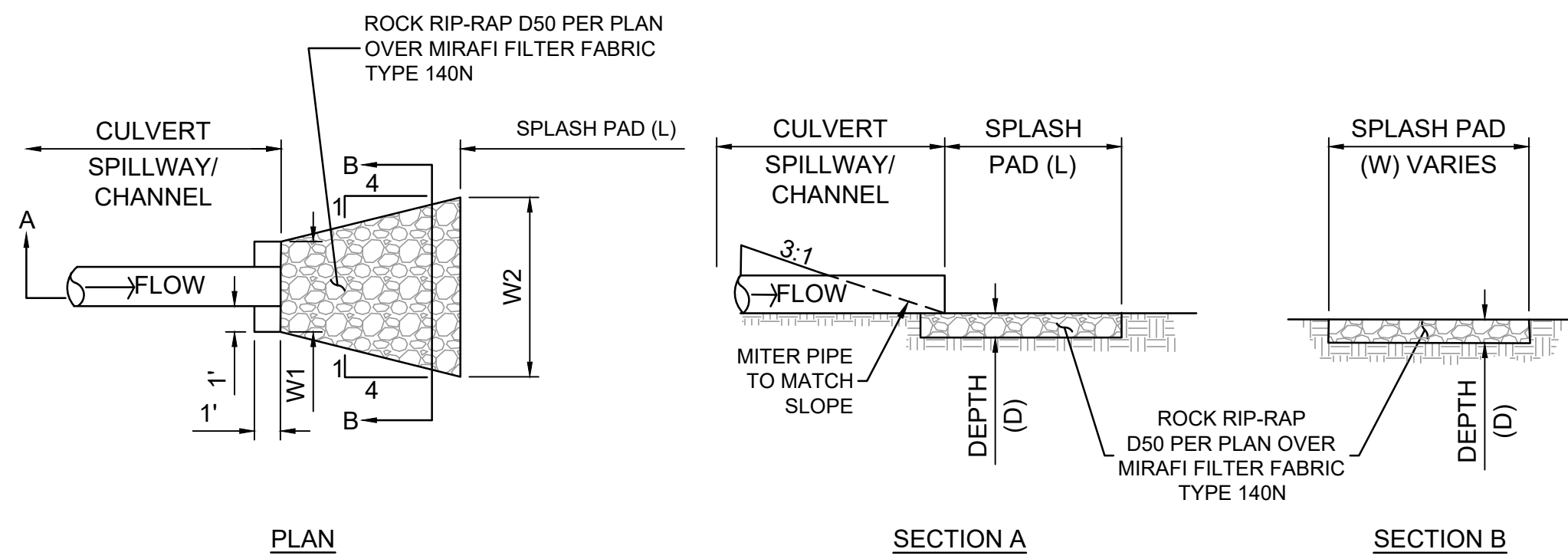
U1 RIPRAP TOE PROTECTION

NTS



W SECTION AT EXISTING WASH

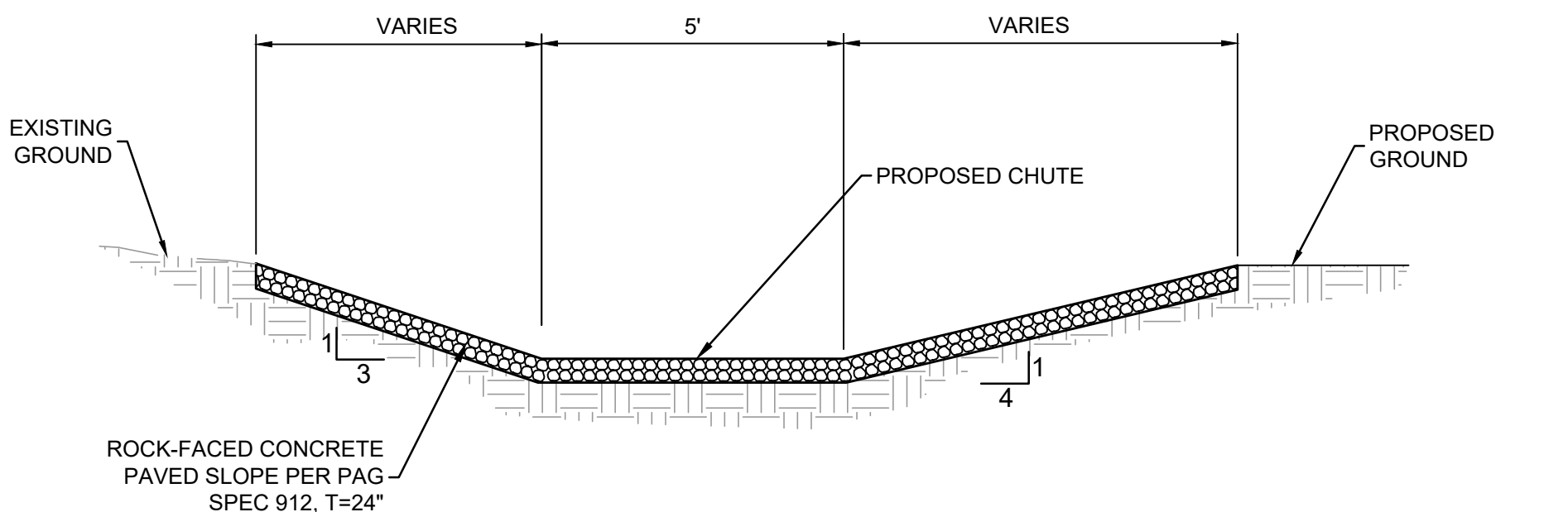
NTS



RIP-RAP APRON DIMENSIONS						
STORM DRAIN SYSTEM IDENTIFICATION	OUTLET ID	PIPE DIAMETER (FT)	DESIGN RIPRAP SIZE D ₅₀ (IN)	LENGTH OF SCOUR BASIN (FT)	RIPRAP APRON WIDTH (FT)	DESIGN APRON THICKNESS, (FT)
CULVERT-1	FE2	2	9	6.3	3.2	1.5
SD 1	FE4	2.5	6	10.2	4	1
SD 2	FE6	2.5	6	11.7	4.8	1
SD 3	FE8	2.5	6	11.4	4.8	1
SD 4	FE10	2.5	6	10.7	4.4	1
SD 5	FE12	2	6	4.7	1.9	1
CULVERT-2	HW2	4	6	20.1	7.3	1

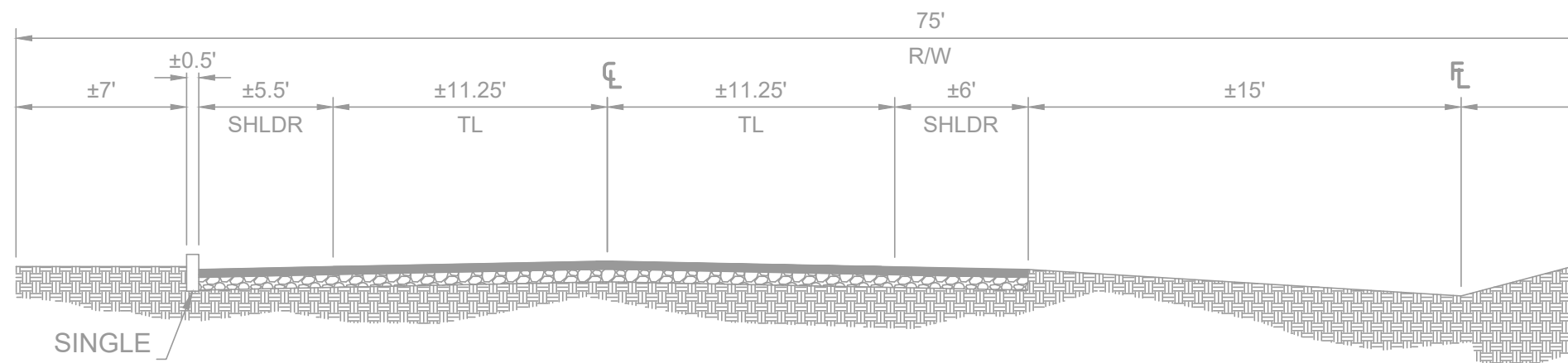
X SPLASH PAD @ STORM DRAIN OUTLETS

NTS



V DRAINAGE CHUTE SECTION AT EXISTING WASH

NTS



Y EXISTING NARANJA DRIVE STREET SECTION FOR REFERENCE ONLY

NTS

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PM. M. PARK
DR. J. TURPIN
JOB NO. 20000103
DATE: 04-01-2024

SHEET NO.
06 OF 23

DT03

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NW COR SEC 12, T.12S., R.13E.
FND 2" GENERAL LAND OFFICE
MONUMENT STAMPED T12S R13E
S2 S1 S12 1913

FINAL PLAT OF NARANJA,
ESTATES, BK 56, PG 11, P.C.R.
R1-144

DONNELLY F. JAMES
& PAMELA
FAMILY REVOC TR FL 68
APN 224-28-1540
PAD, MELCOR

COMMON AREA "A1"

TOMBER FAMILY LP
APN 224-28-1550,
PAD, MELCOR

UPPER HIGHLAND WASH END
CONTROL PER SCE ENGINEERING'S
HIGHLAND WASH CHANNEL & BASIN
IMPROVEMENTS HORIZONTAL
GEOMETRY PLAN
STA: 29+00.00
N=511,929.1845
E=991,242.6989

FINAL PLAT OF NARANJA,
ESTATES, BK 56, PG 11, P.C.R.
R1-144 PAD: MELCOR

W 1/4 COR SEC 12, T.12S., R.13E.
FND 2" GENERAL LAND OFFICE
MONUMENT STAMPED S11 S12

PARCEL 6 "BLOCK 6" DAVIS DEVELOPMENT
AND PROPERTIES LLC
APN 224-03-3640

N89°10'27"E 1714.28' FL48

UPPER HIGHLAND WASH
BEGIN CONTROL
PER SCE ENGINEERING'S
HIGHLAND WASH CHANNEL & BASIN
IMPROVEMENTS HORIZONTAL
GEOMETRY PLAN
STA: 14+90.00
N=510,519.5497
E=991,257.2989

FINAL PLAT OF THE HIGHLANDS,
BK 15, PG 21, P.C.R.
PAD: MELCOR

GRAPHIC SCALE
1" = 160'



FINAL PLAT OF PUSCH RIDGE
VISTAS, BK 55, PG 99, P.C.R.
PAD, MELCOR

COMMON AREA "B2"

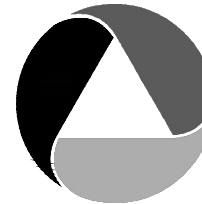
SANTILLAN MARTIN G
APN 224-28-157B, PAD: MELCOR

N. SHORE CLIFF DR

LINE TABLE		
LINE #	DIRECTION	LENGTH
FL1	S42°57'23"E	80.10'
FL2	S44°40'49"W	39.23'
FL3	S22°58'49"E	111.22'
FL4	S10°35'37"W	212.55'
FL5	S39°52'28"W	152.67'
FL6	S19°02'05"W	165.49'
FL7	S25°43'11"E	28.59'
FL8	S01°08'06"E	30.64'
FL9	S19°45'17"W	51.33'
FL10	S18°30'56"E	107.60'
FL11	S05°45'20"W	59.89'
FL12	S16°11'48"E	58.36'
FL13	S87°07'28"E	27.69'
FL14	S02°42'06"W	67.53'
FL15	S17°49'36"W	37.57'
FL16	S28°14'49"E	25.94'
FL17	S17°18'04"E	47.84'
FL18	S46°19'07"E	15.88'
FL19	N06°44'59"E	52.22'
FL20	S83°38'27"E	10.61'
FL21	S03°03'38"E	70.44'
FL22	S51°05'12"E	59.97'
FL23	S05°48'14"W	55.36'
FL24	S12°31'12"W	55.96'
FL25	S28°52'44"W	67.69'

LINE TABLE		
LINE #	DIRECTION	LENGTH
FL26	S59°26'29"W	80.39'
FL27	S36°27'13"W	152.06'
FL28	S16°45'16"W	154.86'
FL29	S08°24'04"W	99.96'
FL30	S02°14'05"W	99.26'
FL31	S03°55'55"E	102.10'
FL32	S10°05'54"E	98.03'
FL33	S16°15'54"E	69.80'
FL34	S44°18'07"E	182.51'
FL35	S21°46'00"E	62.58'
FL36	S04°31'00"E	81.71'
FL37	S60°13'32"E	59.19'
FL38	N87°02'27"E	97.76'
FL39	S05°07'15"E	32.83'
FL40	S82°57'47"W	150.98'
FL41	S36°26'42"W	53.68'
FL42	S41°24'25"E	25.64'
FL43	S89°10'27"W	375.05'
FL44	S00°38'05"E	100.00'
FL45	S89°10'27"W	134.64'
FL46	N63°05'10"W	45.12'
FL47	N00°46'47"E	22.55'
FL48	N83°22'25"E	76.54'
FL49	N89°26'22"E	95.54'
FL50	N32°19'12"E	29.16'

LINE TABLE		
LINE #	DIRECTION	LENGTH
FL51	N13°40'55"W	105.29'
FL52	N05°11'18"E	105.29'
FL53	N24°03'31"E	80.87'
FL54	N17°02'34"E	179.35'
FL55	N11°40'44"W	60.26'
FL56	N06°32'59"W	100.00'
FL57	N01°25'14"W	100.00'
FL58	N03°42'31"E	100.00'
FL59	N08°48'06"E	100.00'
FL60	N13°53'41"E	100.00'
FL61	N44°50'33"E	60.24'
FL62	N88°36'12"E	41.69'
FL63	N29°25'56"E	63.98'
FL64	N06°20'41"E	312.06'
FL65	N24°16'09"E	185.73'
FL66	N50°13'20"W	98.29'
FL67	N37°00'43"W	36.63'
FL68	N08°54'50"W	77.42'
FL69	N05°01'00"E	143.81'
FL70	N08°09'57"W	85.12'
FL71	N15°08'04"E	323.32'
FL72	N03°27'53"E	75.57'
FL73	N30°31'28"E	162.02'
FL74	N63°02'36"E	75.45'
FL75	N53°05'34"E	127.22'



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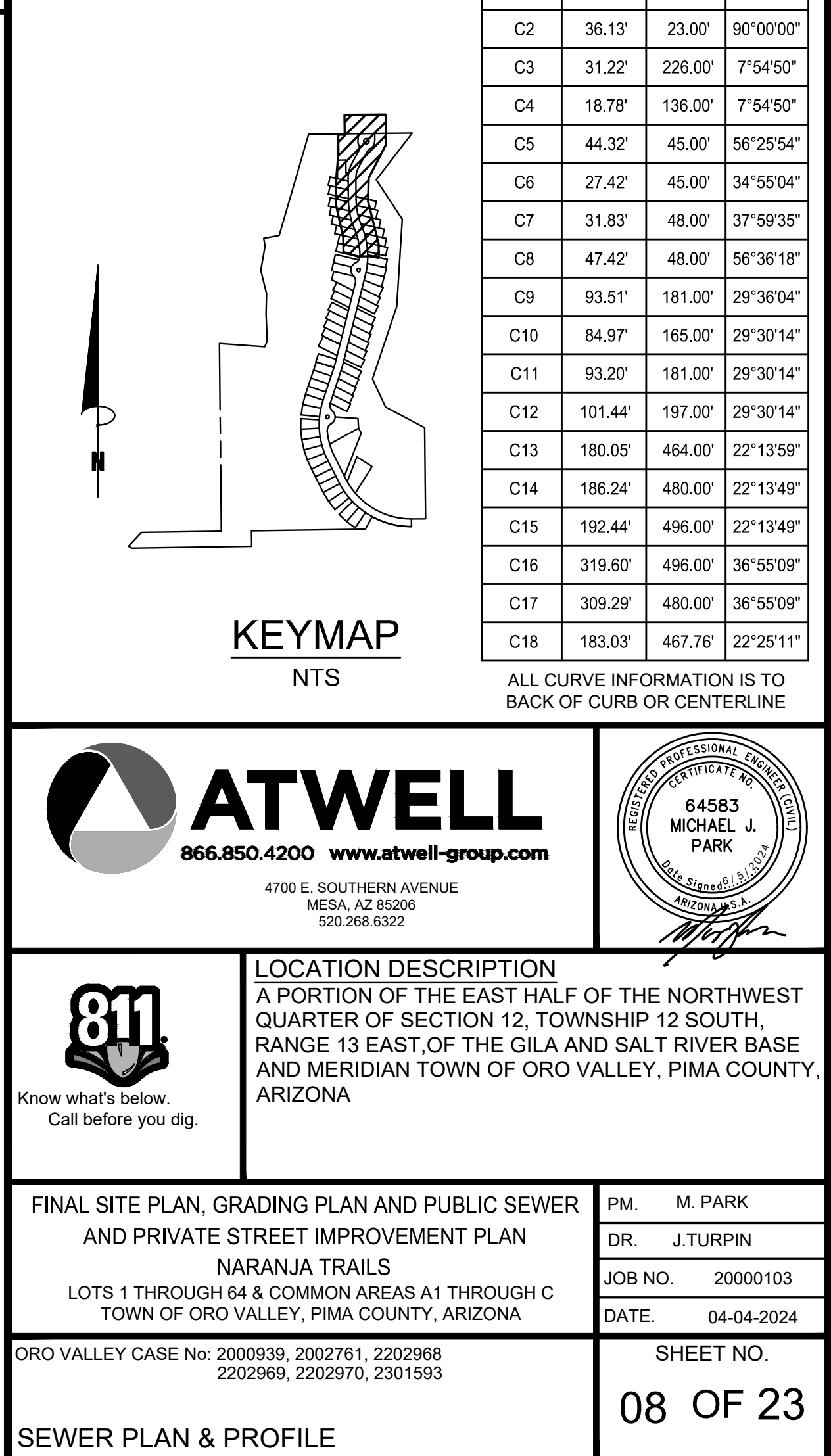
HORIZONTAL CONTROL

07 OF 23

HC01

s:\2000103 - naranja trails\dwg\plan_solid\final site plan\2000103\07-hor1.dwg Plotdate:6/6/2024




GRADING PERMIT #2202968

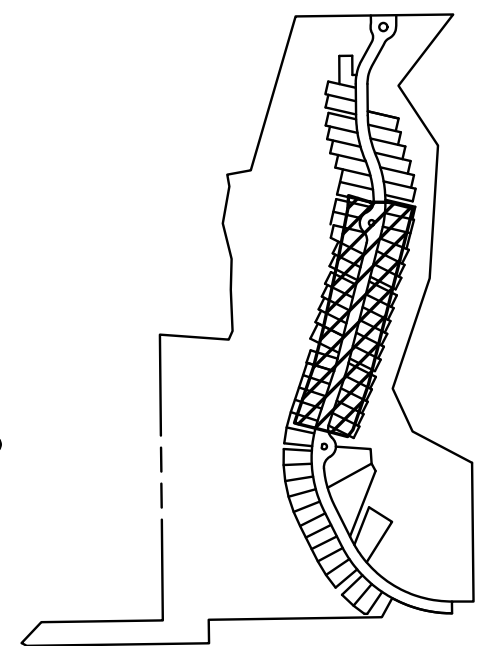
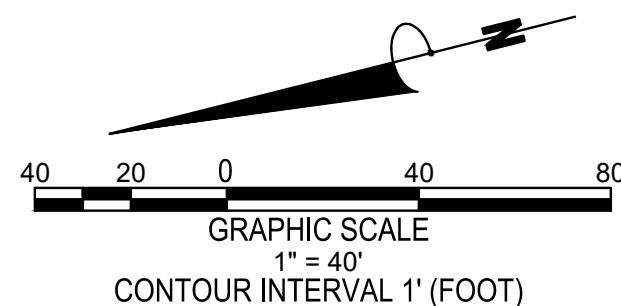


NOTE:

ALL STATIONING IS ALONG SHORE CLIFF CONSTRUCTION CENTERLINE.

ALL FILL AREAS ARE TO BE COMPACTED TO 95% OF MAXIMUM DRY CAPACITY.

 <div data-bbox="2551 1557 2603 1606"> <h1>ATWELL</h1> <p>866.850.4200 www.atwell-group.com</p> </div>	<p>4700 E. SOUTHERN AVENUE MESA, AZ 85206 520.268.6322</p>	
 <p>Know what's below. Call before you dig.</p>	<h2>LOCATION DESCRIPTION</h2> <p>A PORTION OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 12 SOUTH, RANGE 13 EAST, OF THE GILA AND SALT RIVER BASE AND MERIDIAN TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA</p>	
<h3>FINAL SITE PLAN, GRADING PLAN AND PUBLIC SEWER AND PRIVATE STREET IMPROVEMENT PLAN</h3> <h4>NARANJA TRAILS</h4> <p>LOTS 1 THROUGH 64 & COMMON AREAS A1 THROUGH C</p> <p>TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA</p>		<p>PM. M. PARK</p> <p>DR. J. TURPIN</p> <p>JOB NO. 20000103</p> <p>DATE: 04-04-2024</p>
<p>ORO VALLEY CASE No: 2000993, 2002761, 2202968 2202969, 2202970, 2301593</p>		<p>SHEET NO.</p> <h1>08 OF 23</h1>
<h2>SEWER PLAN & PROFILE</h2>		

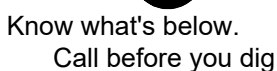


KEYMAP

NTS

CURVE DATA			
CURVE #	LENGTH	RADIUS	DELTA
C16	319.60'	496.00'	36°55'09"
C17	309.29'	480.00'	36°55'09"
C19	67.92'	59.00'	65°57'29"
C20	80.13'	41.00'	111°59'05"
C21	62.14'	59.00'	60°20'32"
C22	75.55'	1016.00'	4°15'37"
C23	74.36'	1000.00'	4°15'37"
C24	73.17'	984.00'	4°15'37"

BACK OF CURB OR CENTERLINE



LOCATION DESCRIPTION
A PORTION OF THE EAST HALF OF THE NORTHWEST
QUARTER OF SECTION 12, TOWNSHIP 12 SOUTH,
RANGE 13 EAST, OF THE GILA AND SALT RIVER BASE
AND MERIDIAN TOWN OF ORO VALLEY, PIMA COUNTY,
ARIZONA

PM.	M. PARK
DR.	J.TURPIN
JOB NO.	20000103
DATE.	04-04-2024

SHEET NO.
09 OF 23

SEWER PLAN & PROFILE

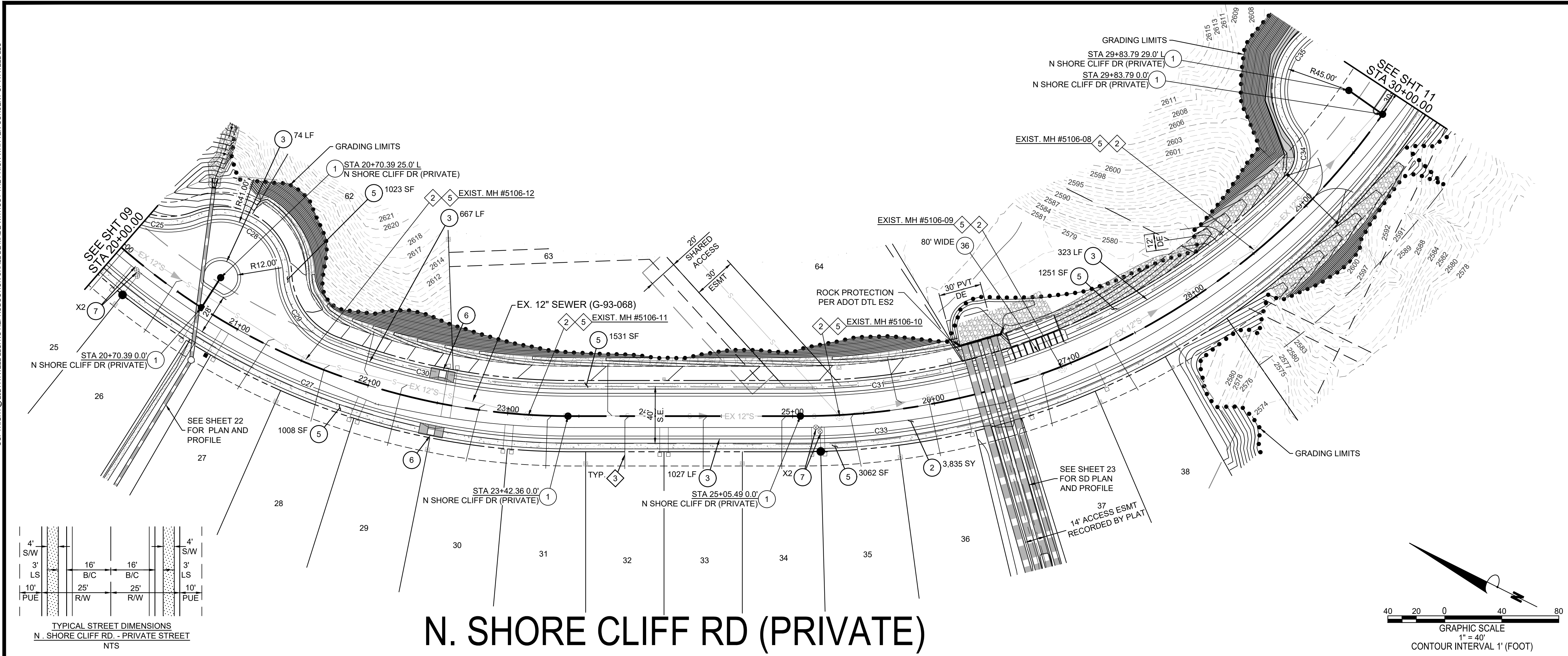
CONSTRUCTION NOTES		
PAVING CONSTRUCTION NOTES		
1	INSTALL SURVEY MONUMENT PER P.A.D. STD. DTL. 103	6 EA
2	CONSTRUCT 3" A/C ON 5" ABC PAVEMENT SECTION. SEE DETAIL SHEET 4	3482 SY
3	CONSTRUCT WEDGE CURB (H=6") PER P.A.G. STD. DTL. 209	1949 LF
5	CONSTRUCT 5' SIDEWALK PER P.A.G. STD. DTL. 200	7984 SF
6	CONSTRUCT CURB ACCESS RAMP (TYPE 3) PER P.A.G. STD. DTL. 207	2 EA
7	CONSTRUCT VALVE BOX IN CONCRETE PER OVWU-300	2 EA
SEWER CONSTRUCTION NOTES		
2	RECONSTRUCT EXIST. MH TO FINISHED GRADE PER RWRD 309	4 EA
3	CONSTRUCT HCS CONNECTION PER RWRD 401	1 EA
5	CONSTRUCT CONCRETE COLLAR FOR PAVED AREA PER RWRD 211	4 EA

NOTE:

ALL STATIONING IS ALONG SHORE CLIFF CONSTRUCTION CENTERLINE

ALL FILL AREAS ARE TO BE COMPACTED TO 95% OF MAXIMUM DRY CAPACITY

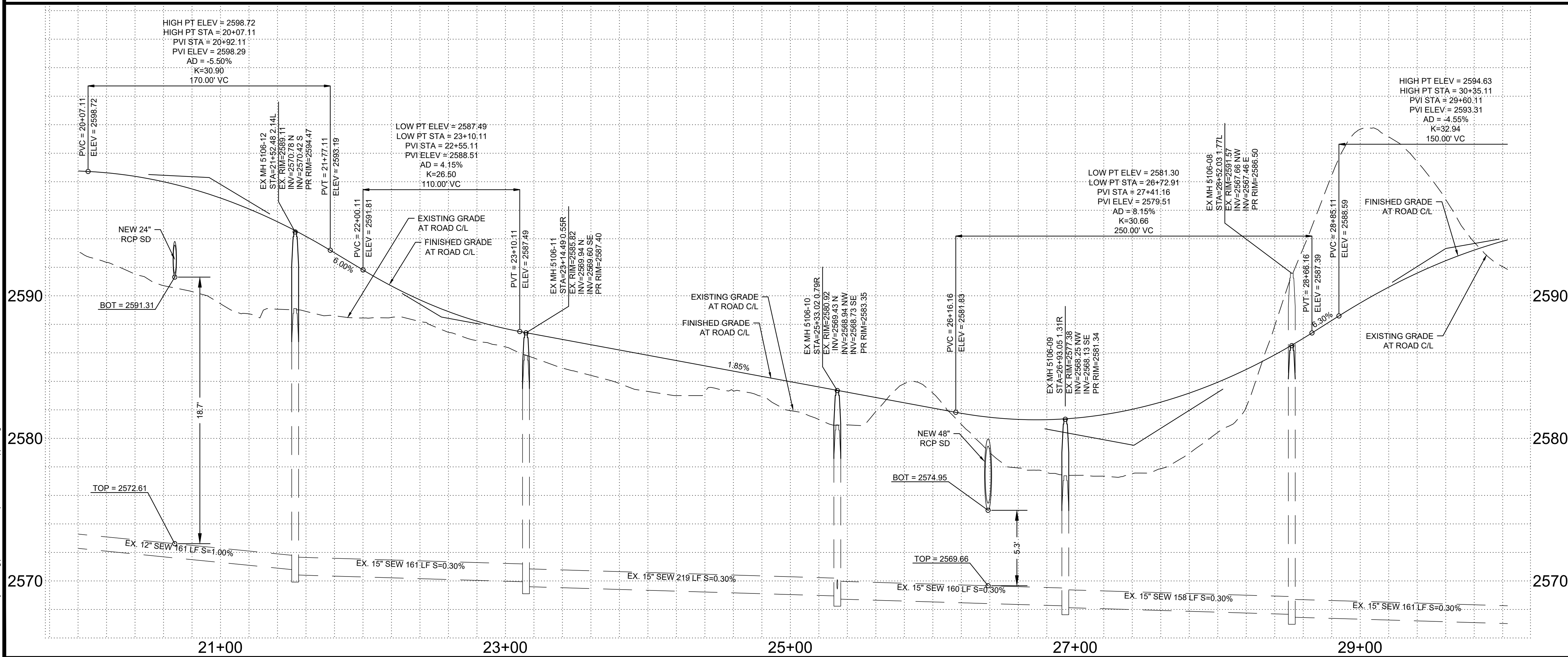
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N. SHORE CLIFF RD (PRIVATE)

CONSTRUCTION NOTES			
PAVING CONSTRUCTION NOTES			
1	INSTALL SURVEY MONUMENT PER P.A.D. STD. DTL. 103	6	EA
2	CONSTRUCT 3" A/C ON 5" ABC PAVEMENT SECTION. SEE DETAIL SHEET 4	3835	SY
3	CONSTRUCT WEDGE CURB (H=6") PER P.A.G. STD. DTL. 209	2091	LF
5	CONSTRUCT 5' SIDEWALK PER P.A.G. STD. DTL. 200	7875	SF
6	CONSTRUCT CURB ACCESS RAMP (TYPE 3) PER P.A.G. STD. DTL. 207	2	EA
7	CONSTRUCT VALVE BOX IN CONCRETE PER OVWU-300	2	EA
36	INSTALL SCUPPER PER P.A.G. STD. DTL 205.5 WIDTH PER PLAN	1	EA
SEWER CONSTRUCTION NOTES			
2	RECONSTRUCT EXIST. MH TO FINISHED GRADE PER RWRD 309	5	EA
3	CONSTRUCT HCS CONNECTION PER RWRD 401	1	EA
5	CONSTRUCT CONCRETE COLLAR FOR PAVED AREA PER RWRD 211	5	EA

NOTE:
ALL STATIONING IS ALONG SHORE CLIFF CONSTRUCTION CENTERLINE.
ALL FILL AREAS ARE TO BE COMPACTED TO 95% OF MAXIMUM DRY CAPACITY.



CURVE DATA			
CURVE #	LENGTH	RADIUS	DELTA
C25	67.92'	59.00'	65°57'29"
C26	374.47'	480.00'	44°41'55"
C27	386.98'	496.00'	44°42'10"
C28	77.83'	41.00'	108°45'31"
C29	67.92'	59.00'	65°57'43"
C30	169.09'	464.00'	20°52'48"
C31	388.31'	484.00'	45°58'08"
C32	555.46'	500.00'	63°39'03"
C33	573.23'	516.00'	63°39'02"
C34	40.37'	28.00'	82°35'54"
C35	115.86'	45.00'	147°30'52"

ALL CURVE INFORMATION IS TO BACK OF CURB OR CENTERLINE

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MESA, AZ 85206
520.268.6322

64583
MICHAEL J. PARK
REGISTERED PROFESSIONAL ENGINEER
STATE OF ARIZONA
EXPIRATION DATE 12/31/2024

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Call before you dig.

LOCATION DESCRIPTION
A PORTION OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 12 SOUTH, RANGE 13 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA

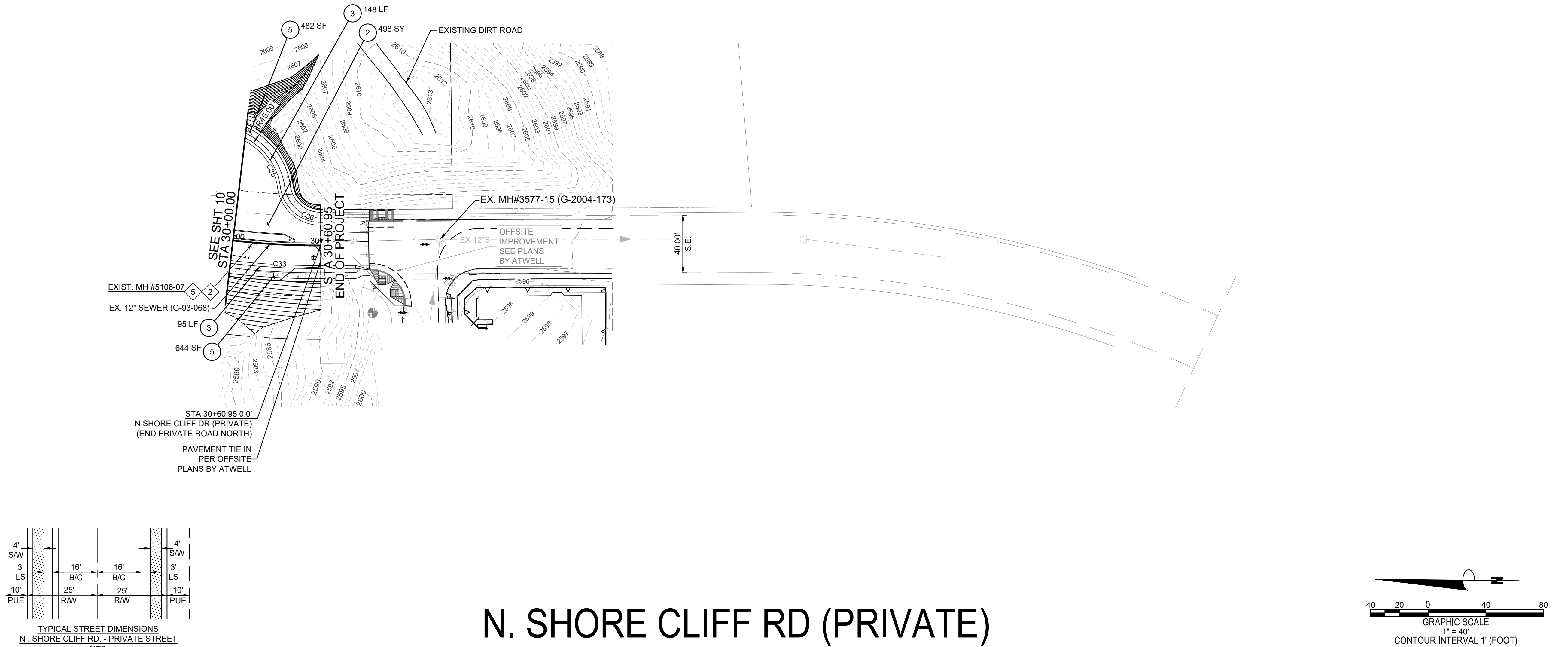
FINAL SITE PLAN, GRADING PLAN AND PUBLIC SEWER AND PRIVATE STREET IMPROVEMENT PLAN NARANJA TRAILS LOTS 1 THROUGH 64 & COMMON AREAS A1 THROUGH C TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA ORO VALLEY CASE No: 2000939, 2002761, 2202968 2202969, 2202970, 2301593	PM. M. PARK
	DR. J. TURPIN
	JOB NO. 20000103
	DATE. 04-04-2024
SEWER PLAN & PROFILE	SHEET NO. 10 OF 23

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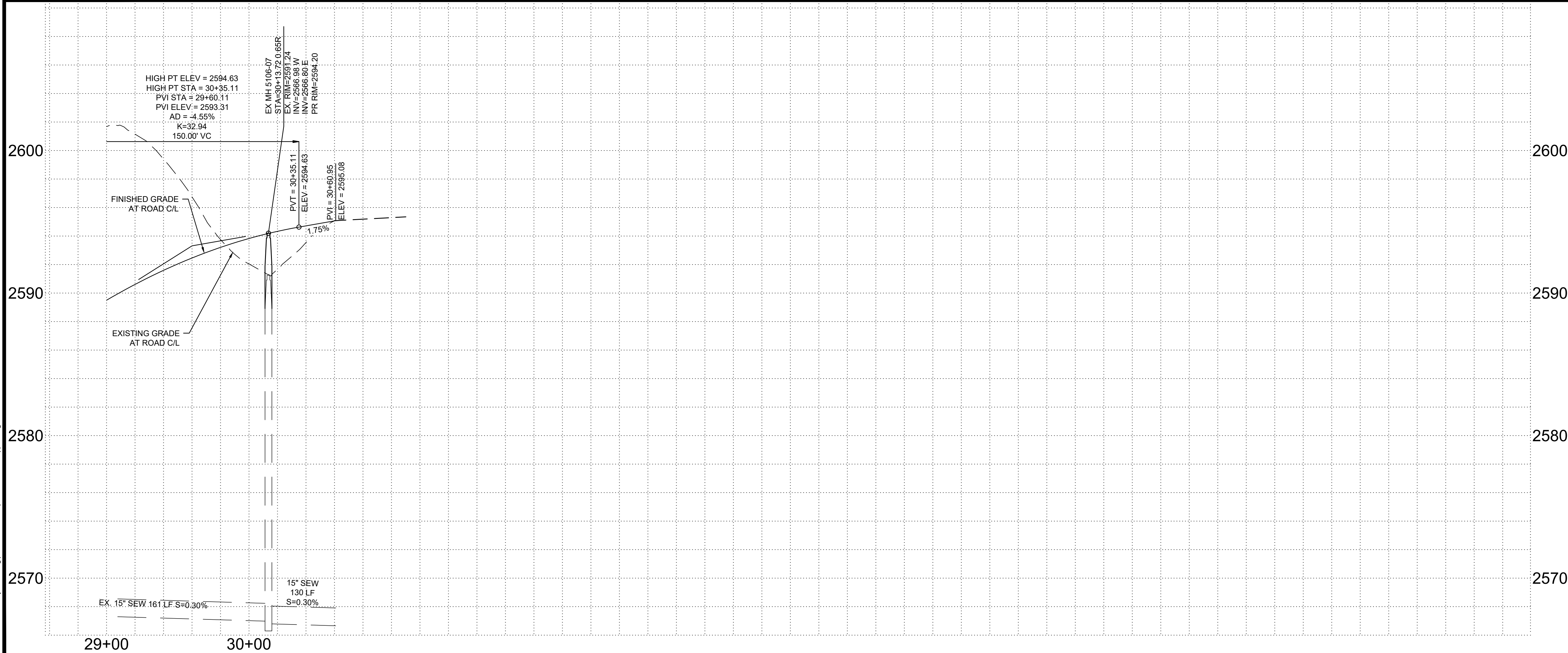
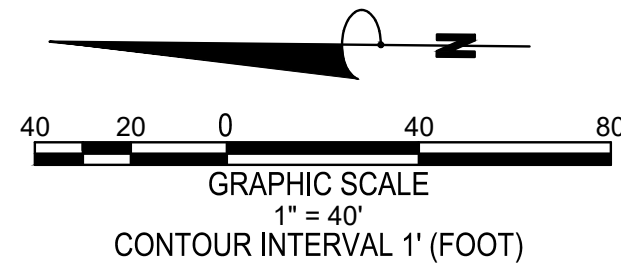
GRADING PERMIT #2202968

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1:\20000103 - naranja trails\dwg\plan set\final site plan\20000103-11-pp04.dwg, Pldate: 6/6/2024



N. SHORE CLIFF RD (PRIVATE)



CONSTRUCTION NOTES

PAVING CONSTRUCTION NOTES

498	CONSTRUCT 3" A/C ON 5" ABC PAVEMENT SECTION. SEE DETAIL SHEET 4	2	CIR
243	CONSTRUCT WEDGE CURB (H=6") PER P.A.G. STD. DTL. 209	3	CIR
1126	CONSTRUCT 5' SIDEWALK PER P.A.G. STD. DTL. 200	5	CIR

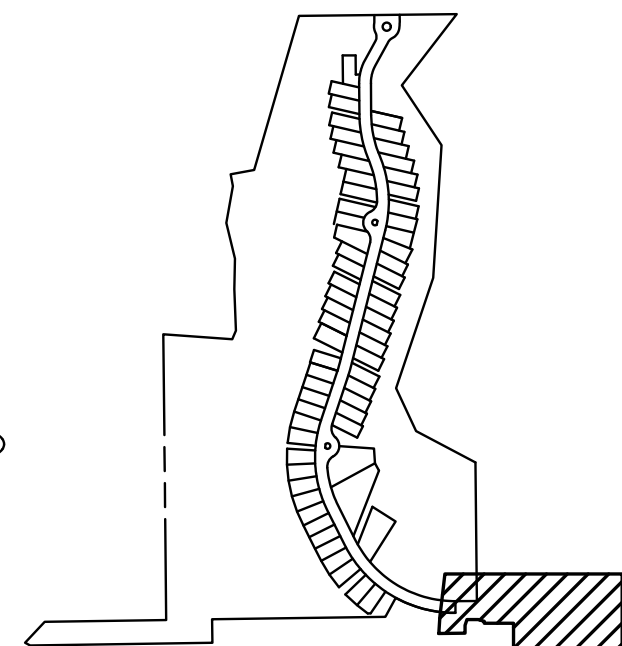
SEWER CONSTRUCTION NOTES

1	RECONSTRUCT EXIST. MH TO FINISHED GRADE PER RWRD 309	2	DIA
1	CONSTRUCT CONCRETE COLLAR FOR PAVED AREA PER RWRD 211	5	DIA

NOTE:

ALL STATIONING IS ALONG SHORE CLIFF CONSTRUCTION CENTERLINE.

ALL FILL AREAS ARE TO BE COMPACTED TO 95% OF MAXIMUM DRY CAPACITY.



KEYMAP NTS

CURVE DATA			
CURVE #	LENGTH	RADIUS	DELTA
C33	573.23'	516.00'	63°39'02"
C35	115.86'	45.00'	147°30'52"
C36	40.37'	28.00'	82°35'54"

ALL CURVE INFORMATION IS TO
BACK OF CURB OR CENTERLINE



LOCATION DESCRIPTION
A PORTION OF THE EAST HALF OF THE NORTHWEST
QUARTER OF SECTION 12, TOWNSHIP 12 SOUTH,
RANGE 13 EAST OF THE GILA AND SALT RIVER BASE
AND MERIDIAN TOWN OF ORO VALLEY, PIMA COUNTY,
ARIZONA

FINAL SITE PLAN, GRADING PLAN AND PUBLIC SEWER
AND PRIVATE STREET IMPROVEMENT PLAN
NARANJA TRAILS
LOTS 1 THROUGH 64 & COMMON AREAS A1 THROUGH C
TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA

PM. M. PARK
DR. J. TURPIN
JOB NO. 20000103
DATE. 04-04-2024

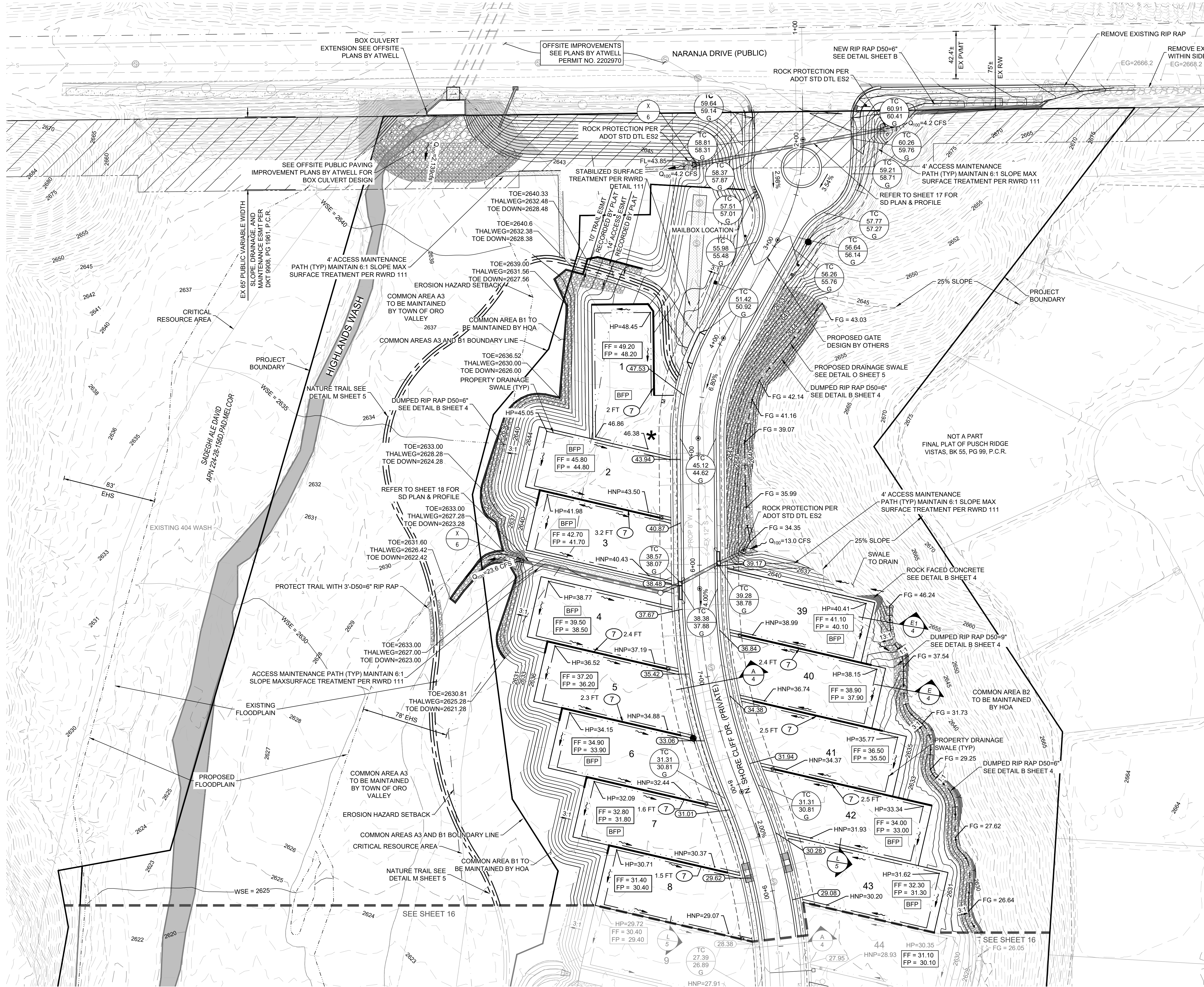
ORO VALLEY CASE No: 2000939, 2002761, 2202968,
2202969, 2202970, 2301593

SHEET NO.

11 OF 23

SEWER PLAN & PROFILE

GRADING PERMIT #2202968

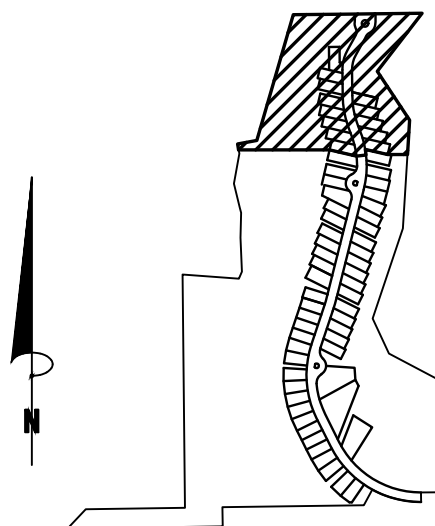


GRADING CONSTRUCTION NOTES

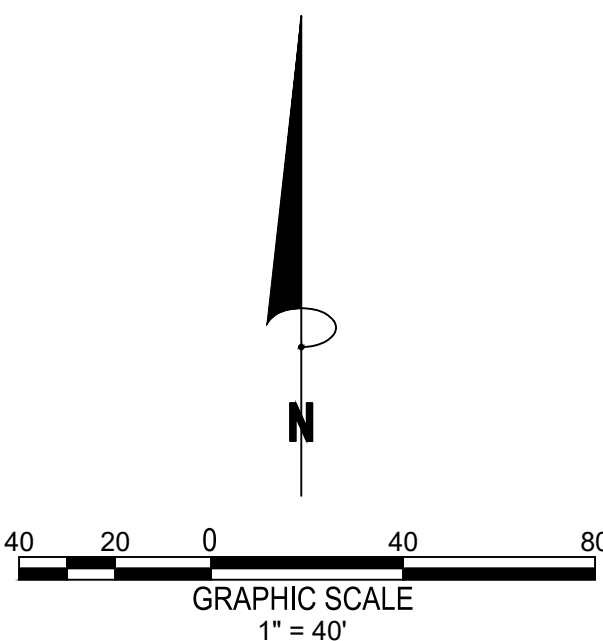
7 INSTALL RETAINING WALL, (HEIGHT PER PLAN)

BFP = HCS BACK FLOW PREVENTER

HIGHLANDS WASH LOT FILL TABLE			
LOT #	EXIST. 100-YR CWSEL	PROP. 100-YR CWSEL	PAD ELEV.
2	2635.8	2635.51	2644.70
3	2633.62	2633.25	2641.60



KEYMAP
NTS



Know what's below.
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LOCATION DESCRIPTION
A PORTION OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 12 SOUTH, RANGE 13 EAST, OF THE GILA AND SALT RIVER BASE AND MERIDIAN TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA

FINAL SITE PLAN, GRADING PLAN AND PUBLIC SEWER AND PRIVATE STREET IMPROVEMENT PLAN
NARANJA TRAILS

LOTS 1 THROUGH 64 & COMMON AREAS A1 THROUGH C
TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA

ORO VALLEY CASE No: 2000939, 2002761, 2202968
2202969, 2202970, 2301593

PM. M. PARK

DR. J. TURPIN

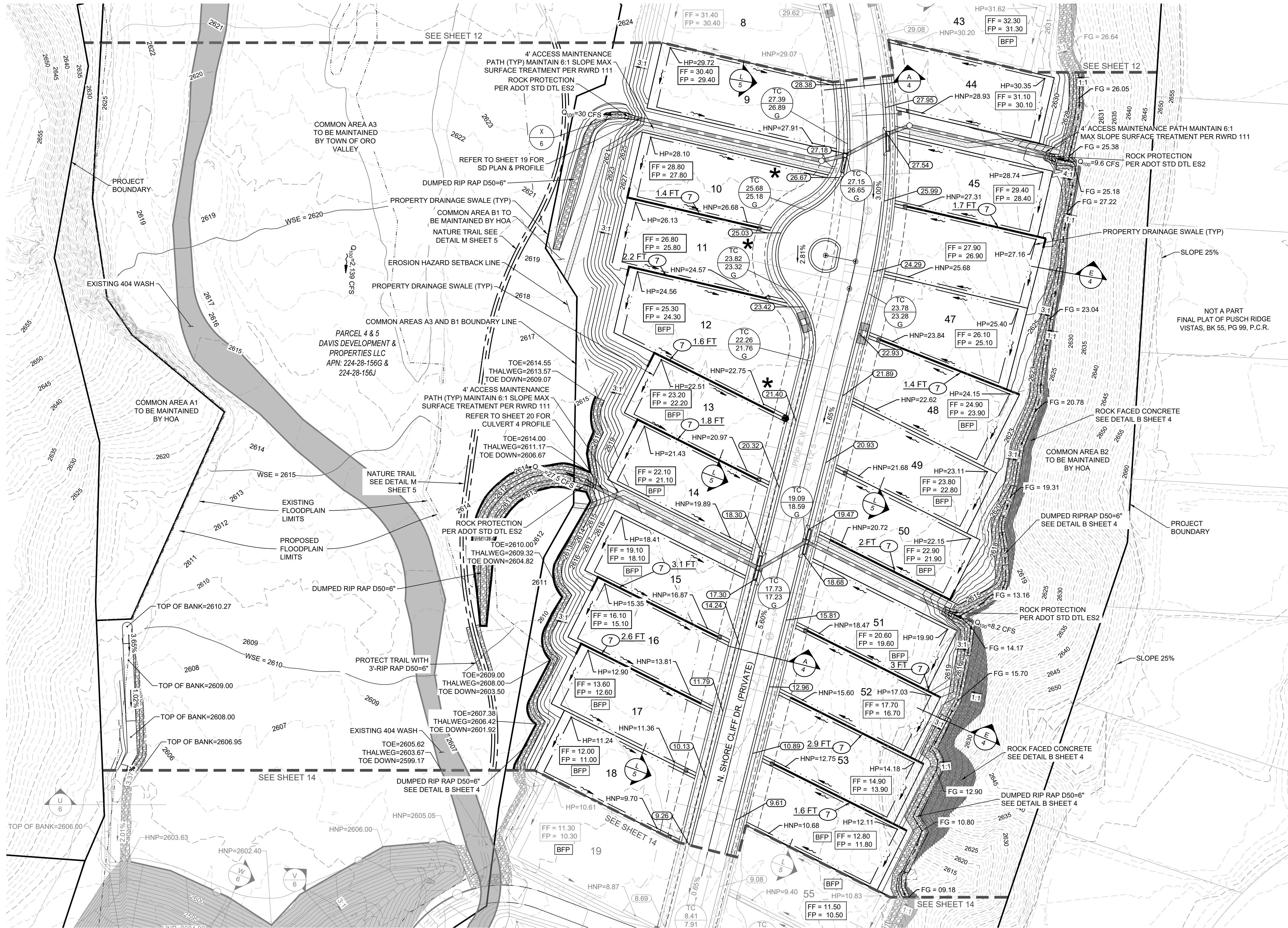
JOB NO. 20000103

DATE. 04-01-2024

SHEET NO.

12 OF 23

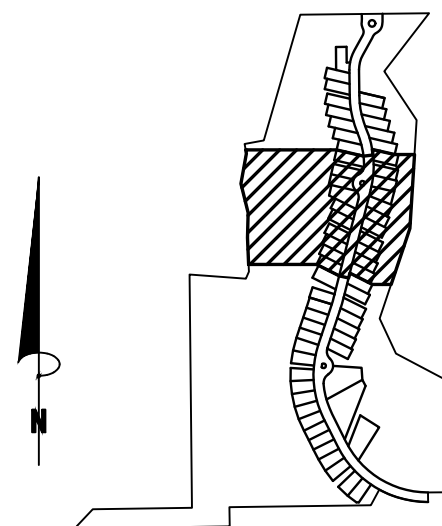
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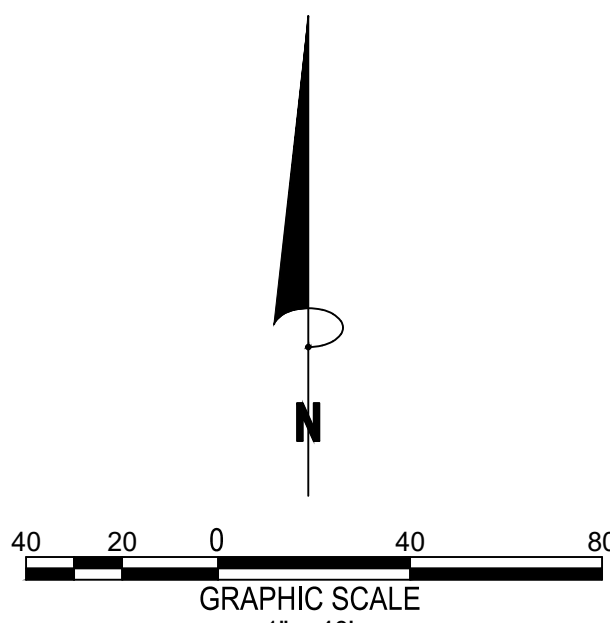
GRADING CONSTRUCTION NOTES

- 7 INSTALL RETAINING WALL. HEIGHT PER PLAN

HIGHLANDS WASH LOT FILL TABLE			
LOT #	EXIST. 100-YR CWSEL	PROP. 100-YR CWSEL	PAD ELEV.
17	2609.71	2609.35	2612.60
18	2607.60	2608.66	2611.40



KEYMAP
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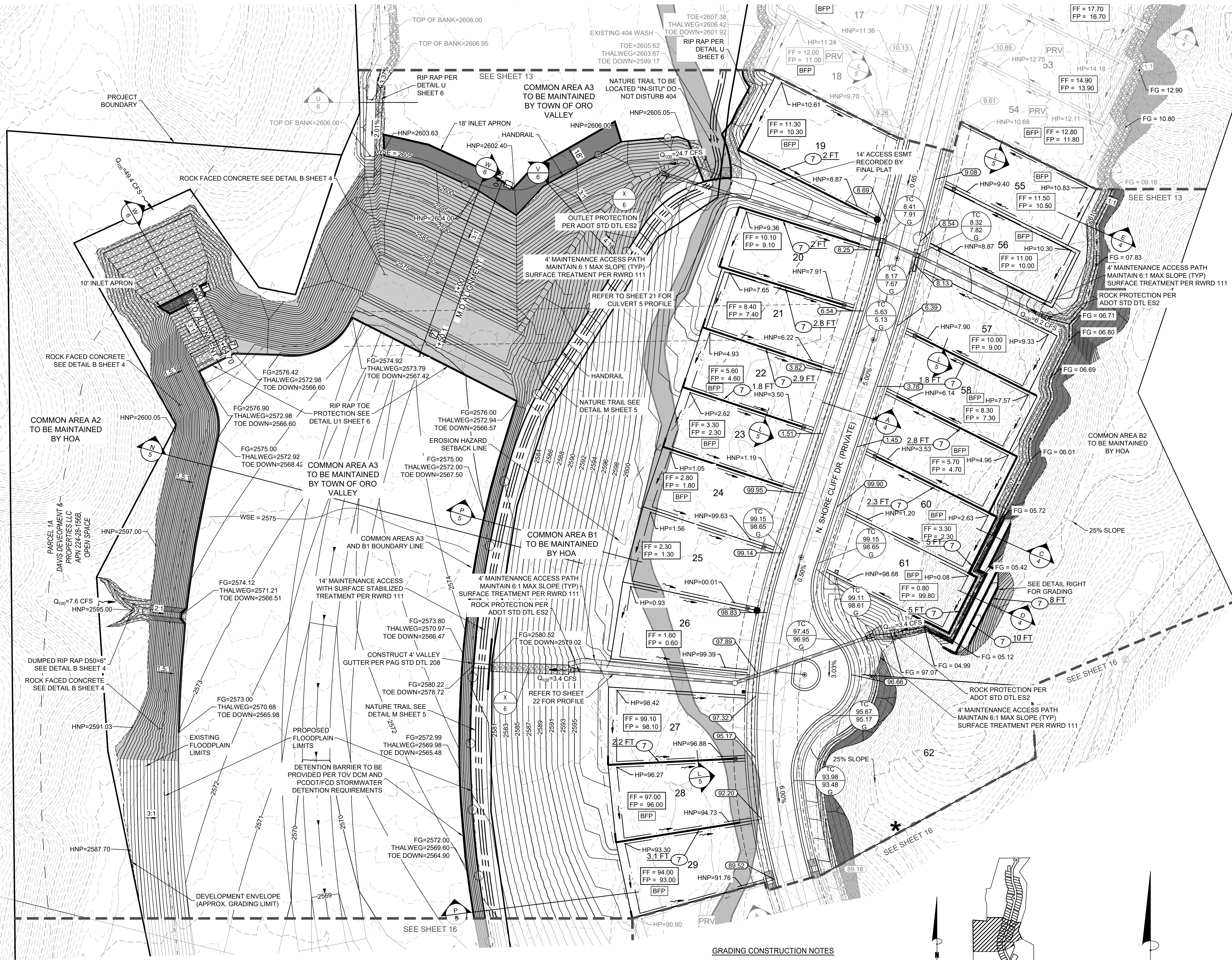
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NARANJA TRAILS
LOTS 1 THROUGH 64 & COMMON AREAS A1 THROUGH C
TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA
ORO VALLEY CASE No: 2000939, 2002761, 2202968, 2202969, 2202970, 2301593

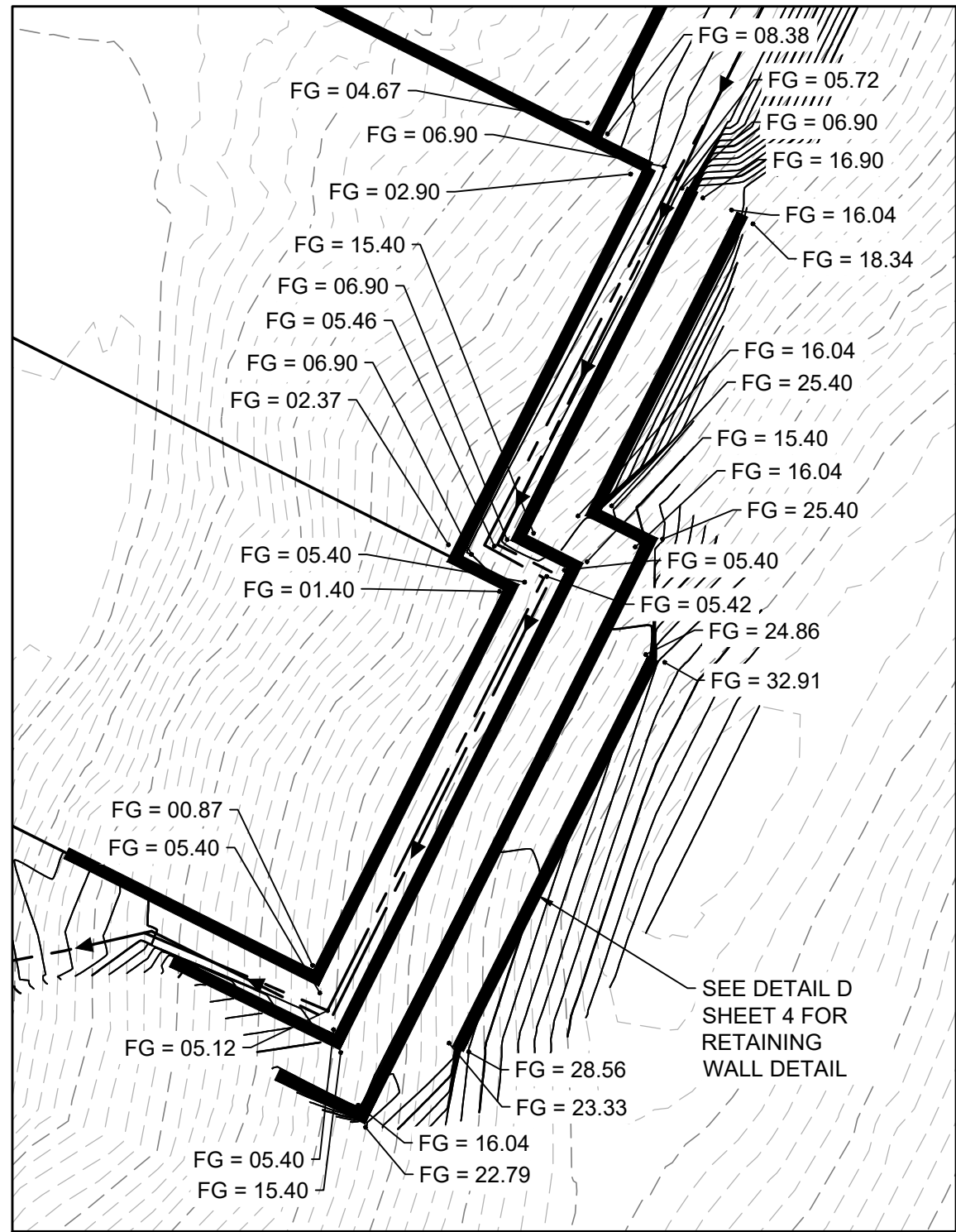
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JOB NO. 20000103
DATE. 04-01-2024

SHEET NO.
13 OF 23

GD02



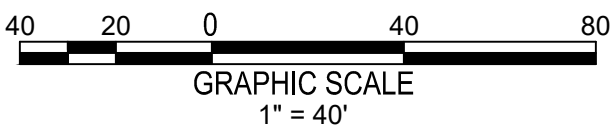
HIGHLANDS WASH LOT FILL TABLE			
LOT #	EXIST. 100-YR CWSEL	PROP. 100-YR CWSEL	PAD ELEV.
19	2606.87	2608.08	2610.80
20	2604.73	2597.90	2609.00
21	2603.08	2589.18	2607.30
22	2601.50	2581.28	2604.50
23	2599.81	2577.32	2602.80
24	2598.29	2576.20	2601.20
25	2596.68	2575.43	2600.40
26	2594.98	2574.80	2600.10
27	2592.30	2574.50	2598.00
28	2590.49	2574.42	2595.90
29	2588.12	2574.06	2592.90
54	2601.58	2606.57	2610.50
57	2600.85	2589.18	2608.90
58	2599	2581.28	2607.20
59	2598.31	2577.32	2604.50
60	2597.50	2576.20	2602.30
61	2596.21	2575.43	2601.40
62	2592.29	2574.52	
64	2590.56	2590.61	



GRADING DETAIL
SCALE 1" = 20'

GRADING CONSTRUCTION NOTES
⑦ INSTALL RETAINING WALL. HEIGHT PER PLAN

KEYMAP
NTS



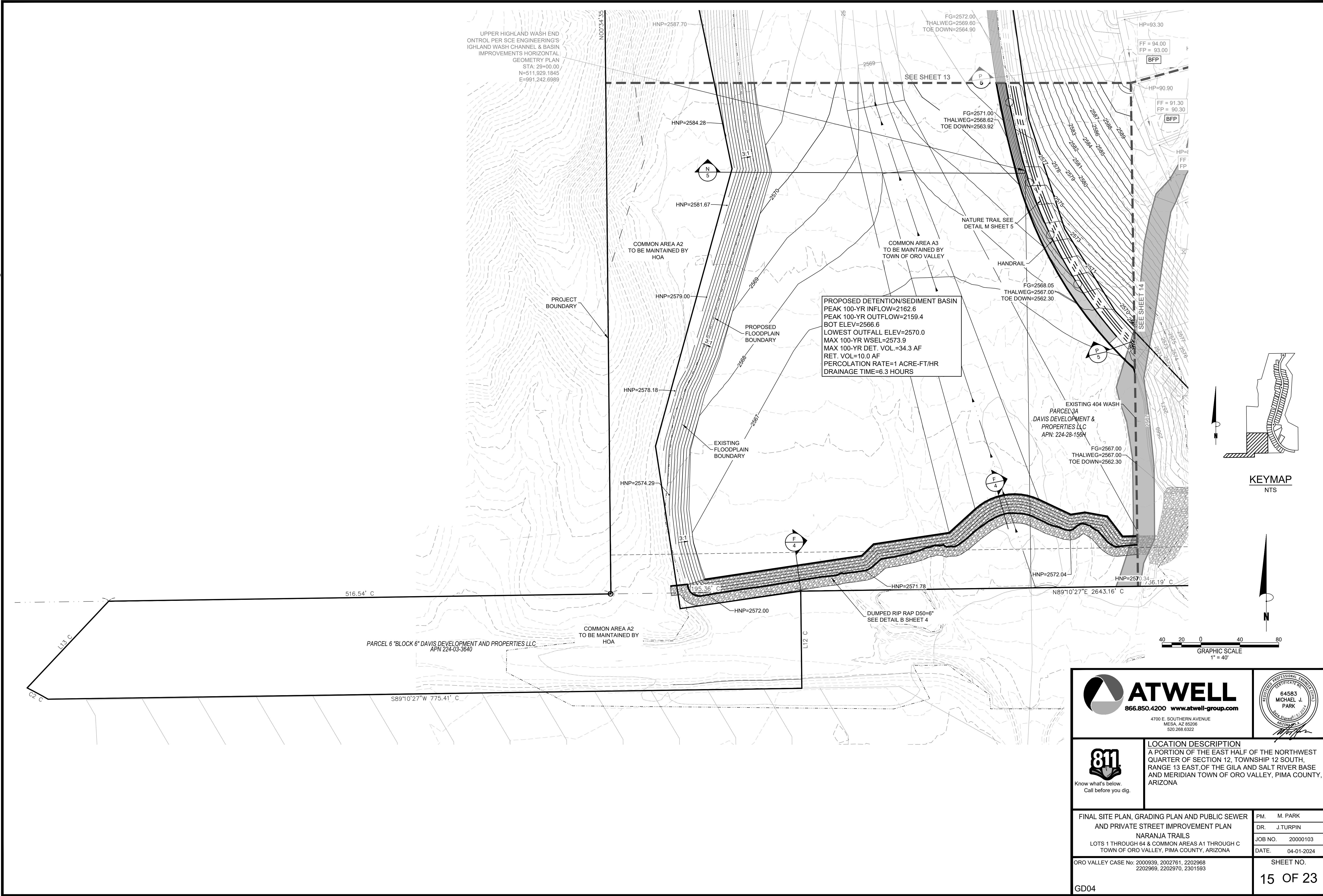
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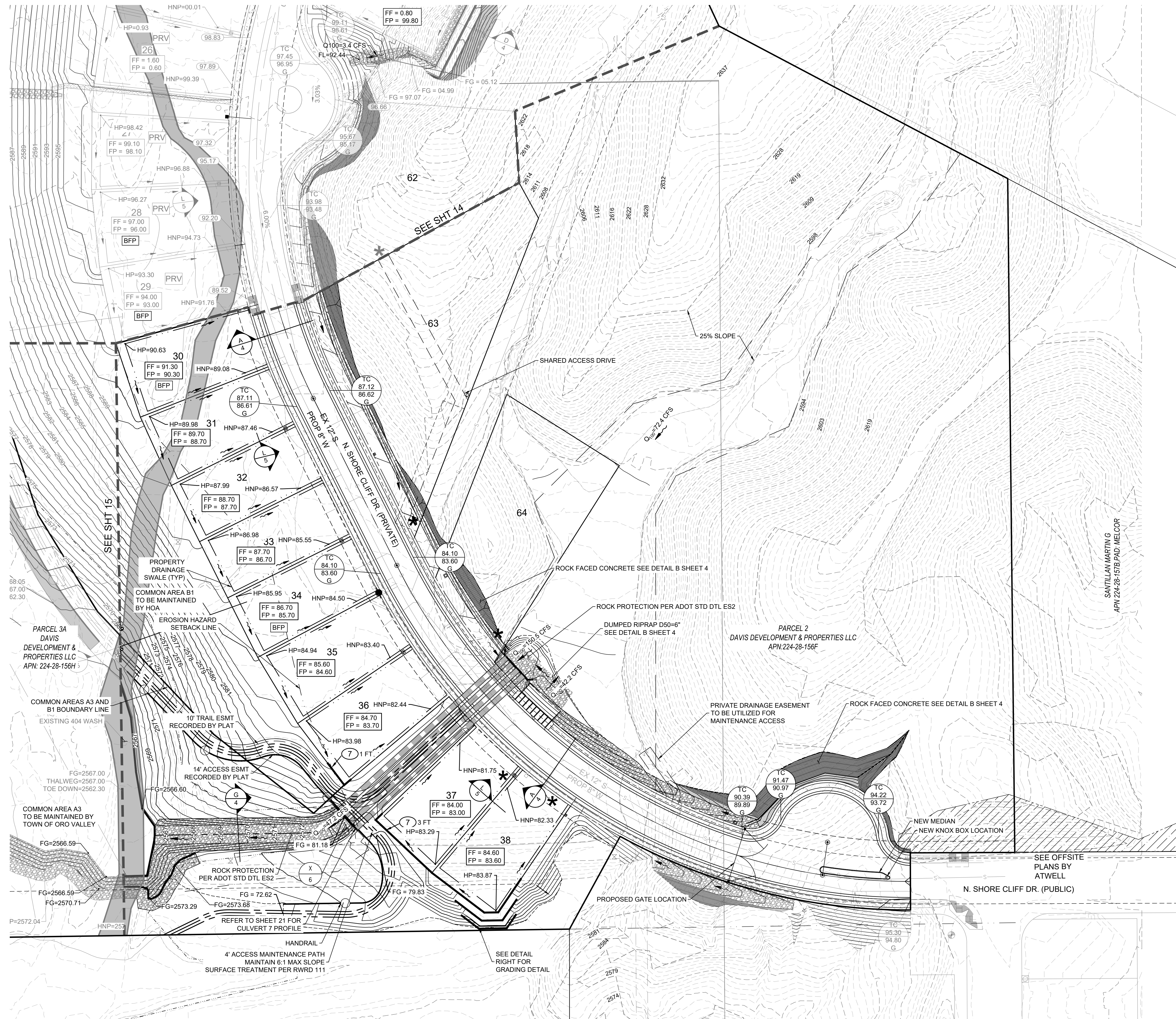
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A PORTION OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 12 SOUTH, RANGE 13 EAST, OF THE GILA AND SALT RIVER BASE AND MERIDIAN TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA

FINAL SITE PLAN, GRADING PLAN AND PUBLIC SEWER AND PRIVATE STREET IMPROVEMENT PLAN
NARANJA TRAILS
LOTS 1 THROUGH 64 & COMMON AREAS A1 THROUGH C TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA
ORO VALLEY CASE No: 2000939, 2002761, 2202968, 2202969, 2202970, 2301593

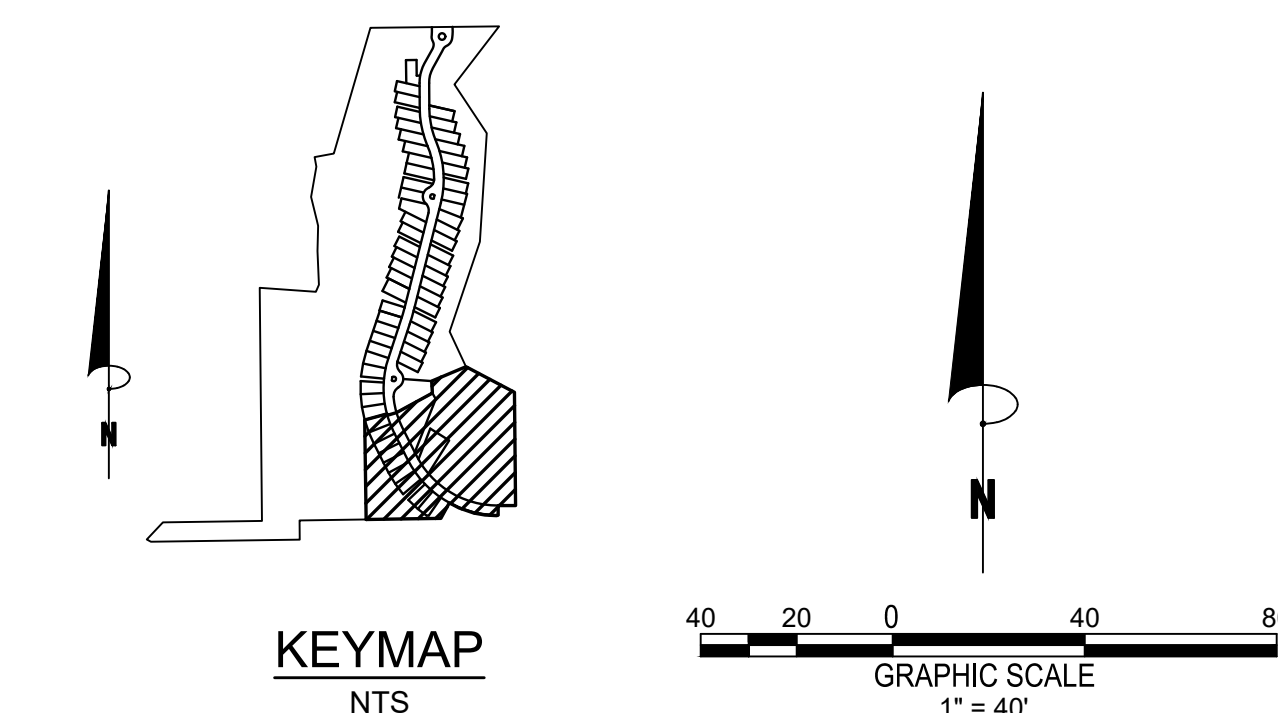
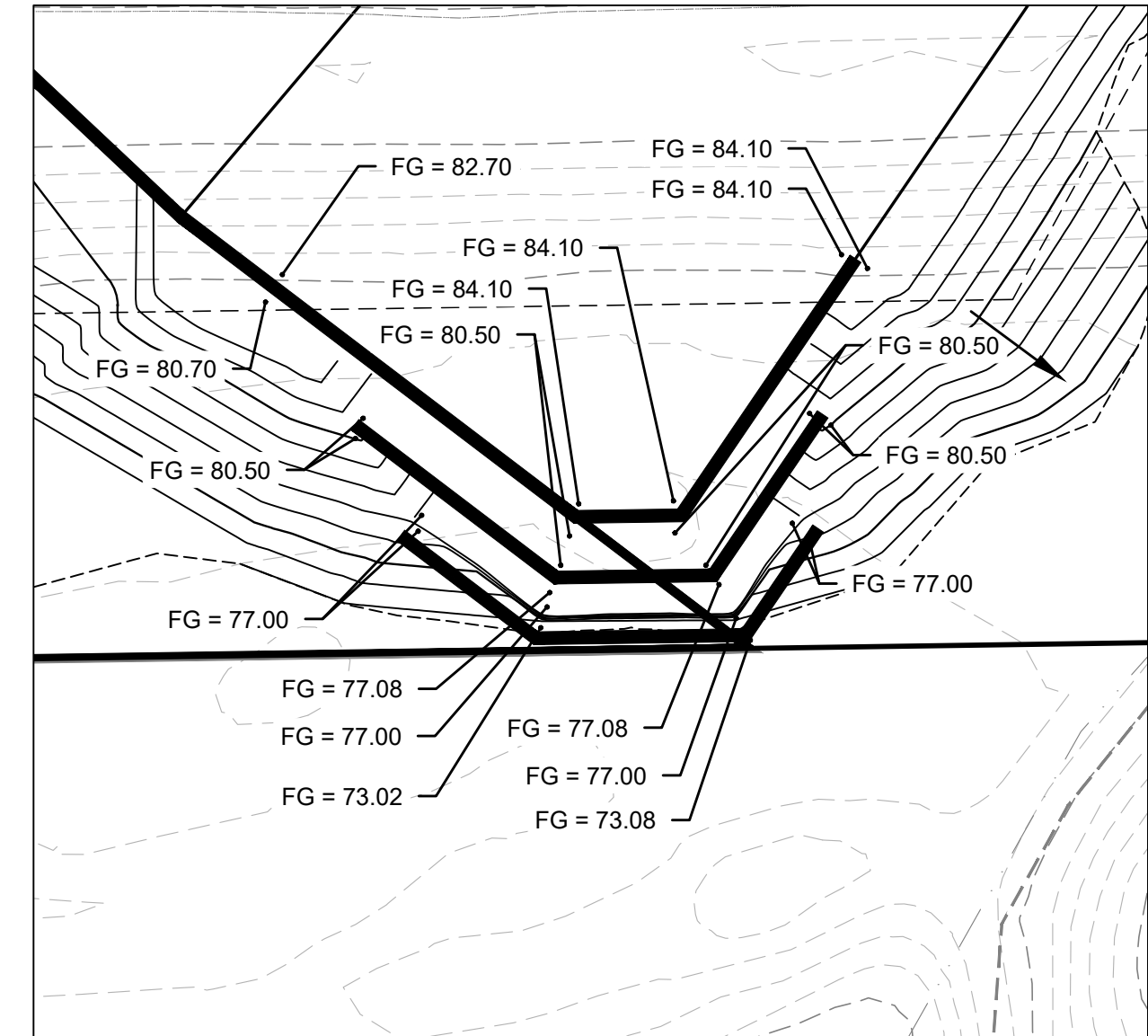
PM. M. PARK
DR. J. TURPIN
JOB NO. 20000103
DATE. 04-01-2024
SHEET NO.
14 OF 23





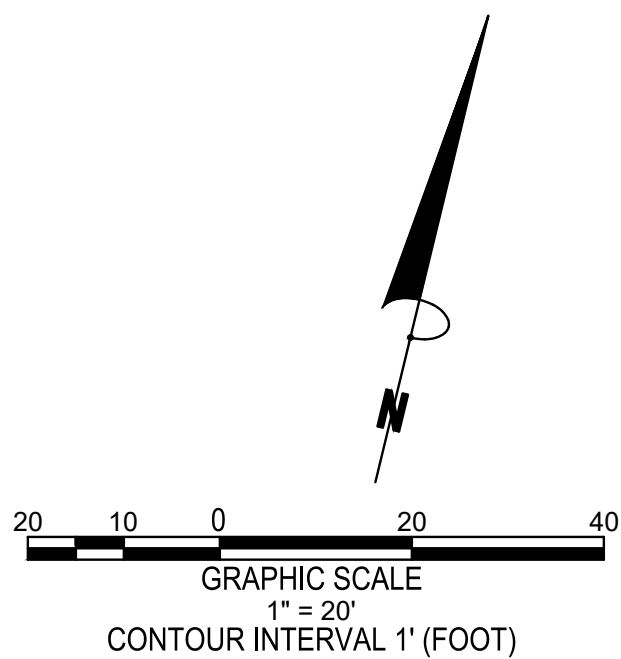
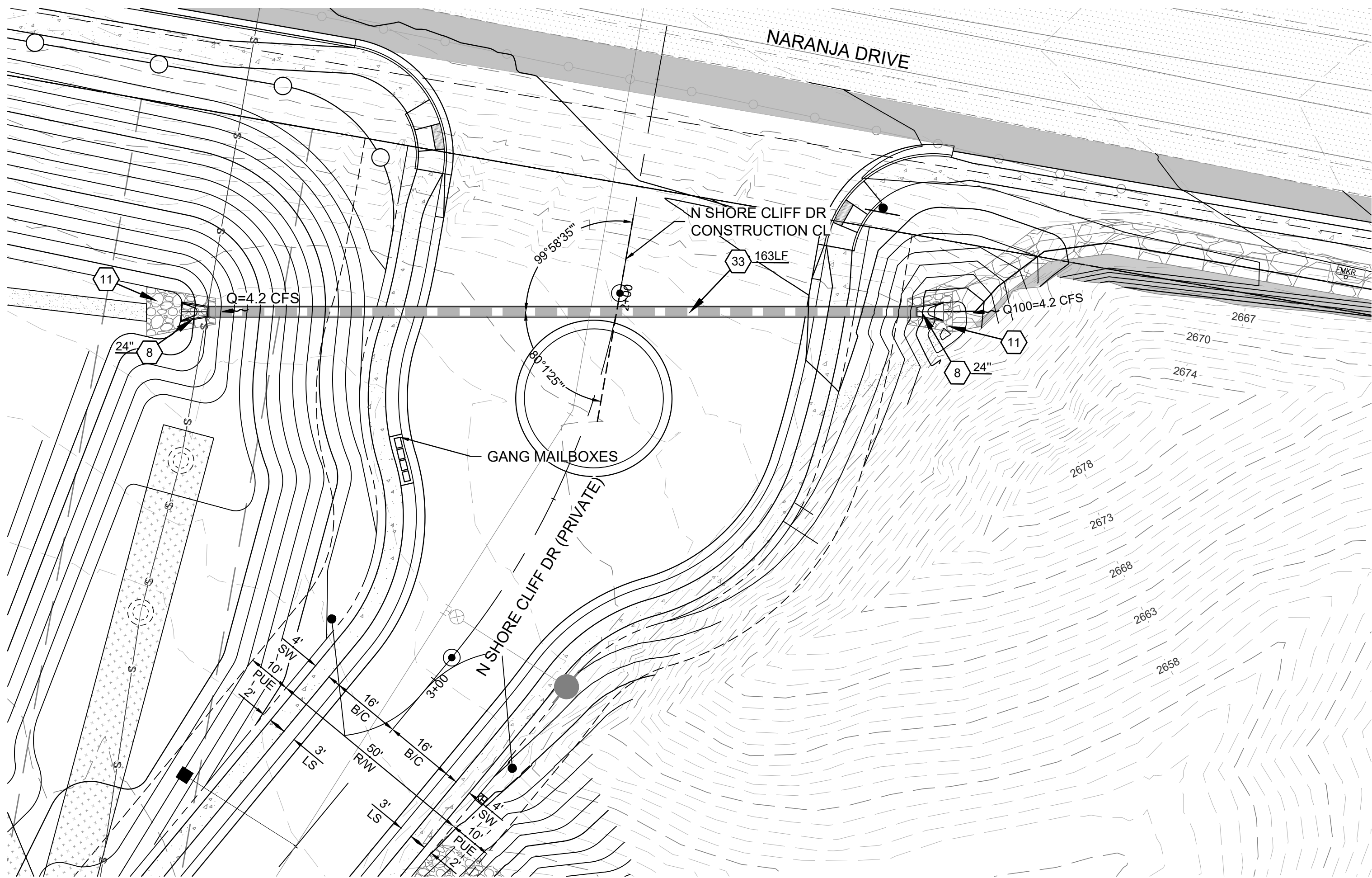
LEGEND
EXISTING SLOPES >25%

GRADING CONSTRUCTION NOTES
⑦ INSTALL RETAINING WALL. HEIGHT PER PLAN

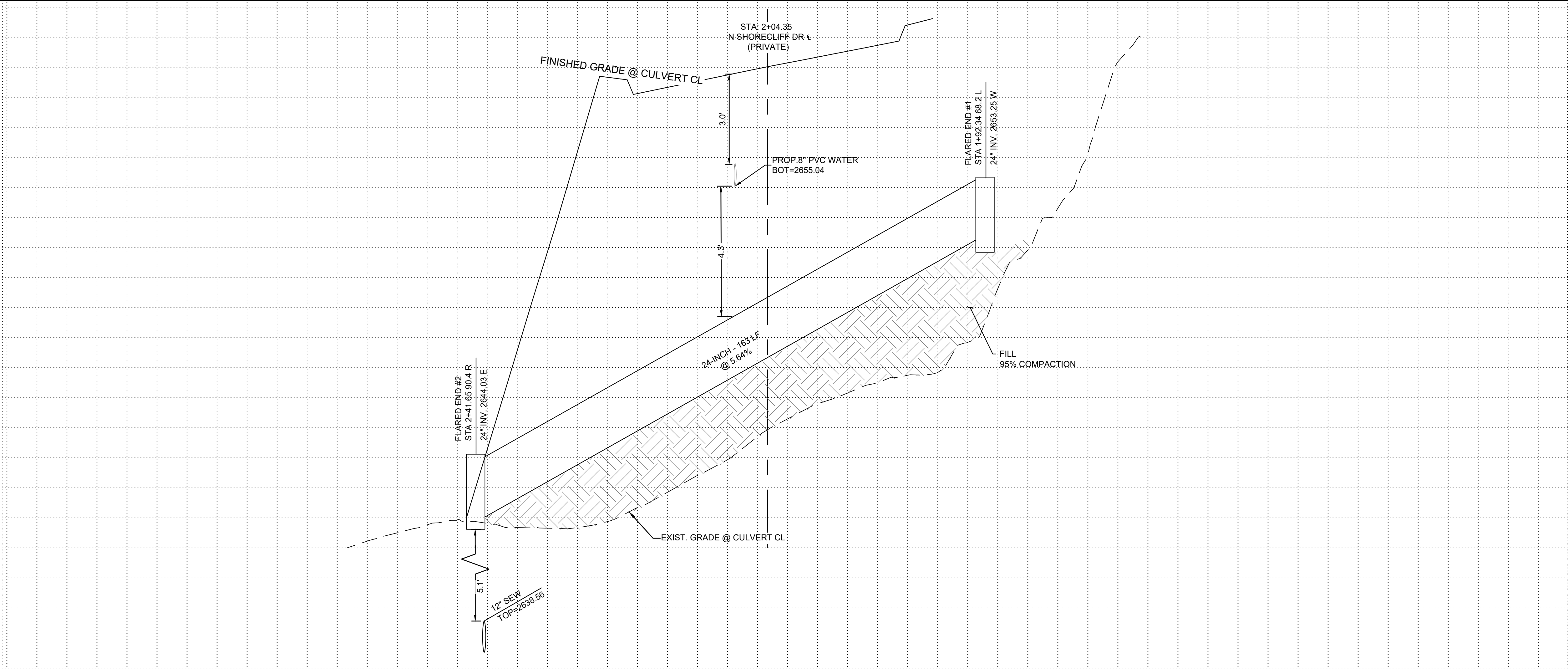


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FINAL SITE PLAN, GRADING PLAN AND PUBLIC SEWER AND PRIVATE STREET IMPROVEMENT PLAN NARANJA TRAILS LOTS 1 THROUGH 64 & COMMON AREAS A1 THROUGH C TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA		PM. M. PARK DR. J. TURPIN JOB NO. 20000103 DATE. 04-01-2024
ORO VALLEY CASE No: 2000939, 2002761, 2202968, 2202969, 2202970, 2301593		SHEET NO. 16 OF 23

GRADING PERMIT #2202968



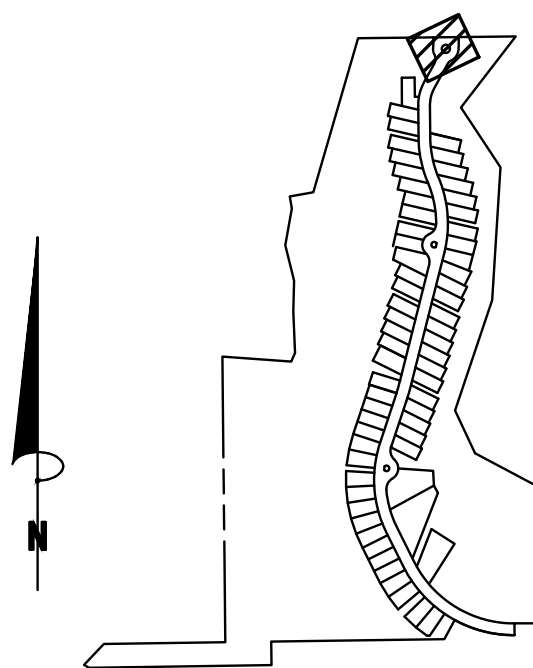
CULVERT - 1



CONSTRUCTION NOTES

STORM DRAIN CONSTRUCTION NOTES

- 8 INSTALL FLARED END SECTION PER MANUFACTURER DETAILS ON SHEET 6.
SIZE PER PLAN. RIPRAP AND TRASH SCREEN PER DTL ON SHEET 6.
- 11 LOOSE RIP RAP TYPE 1 D50=6" THICKNESS=12" WITH FILTER FABRIC SEE SHEET 6
- 33 INSTALL 24" HDPE STORM DRAIN PIPE



KEYMAP
NTS



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520.268.6322



LOCATION DESCRIPTION
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NARANJA TRAILS
LOTS 1 THROUGH 64 & COMMON AREAS A1 THROUGH C
TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA

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DATE. 04-04-2024

ORO VALLEY CASE No: 2000939, 2002761, 2202968, 2202969, 2202970, 2301593

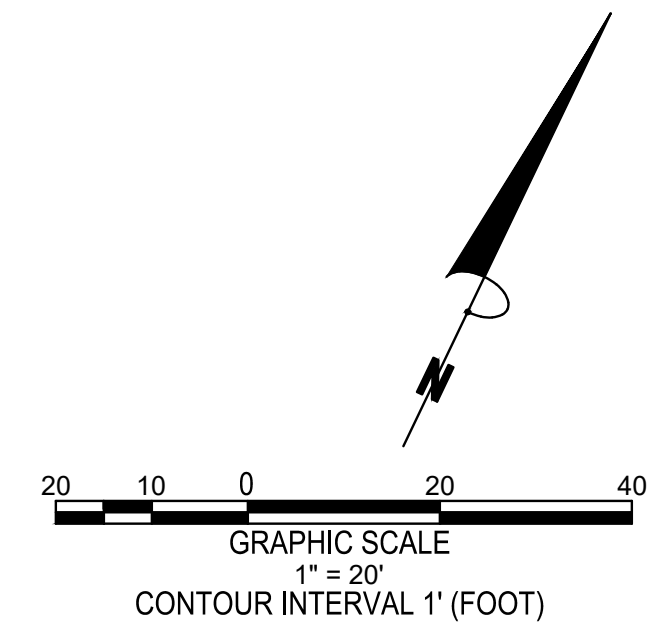
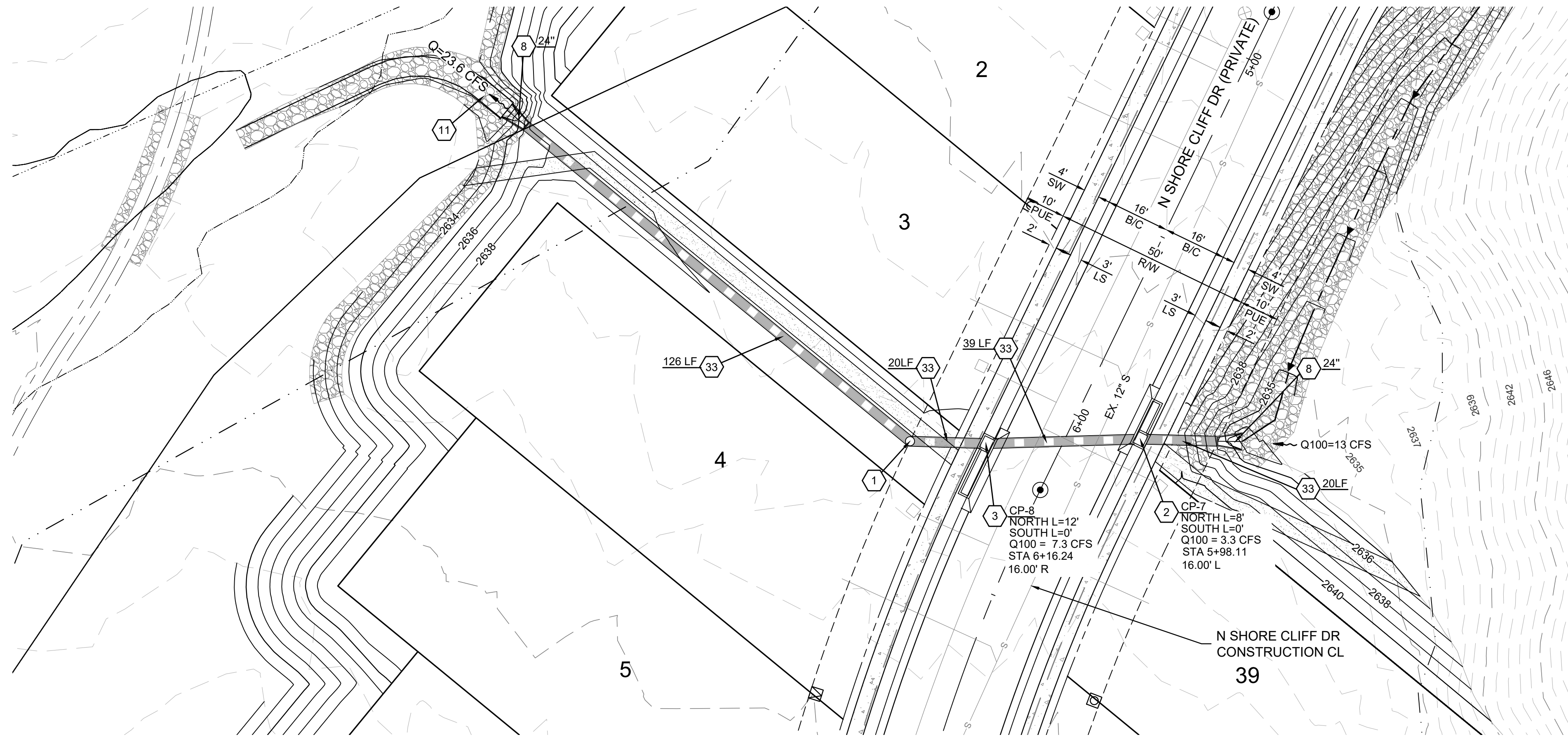
SHEET NO.

SD PLAN & PROFILE

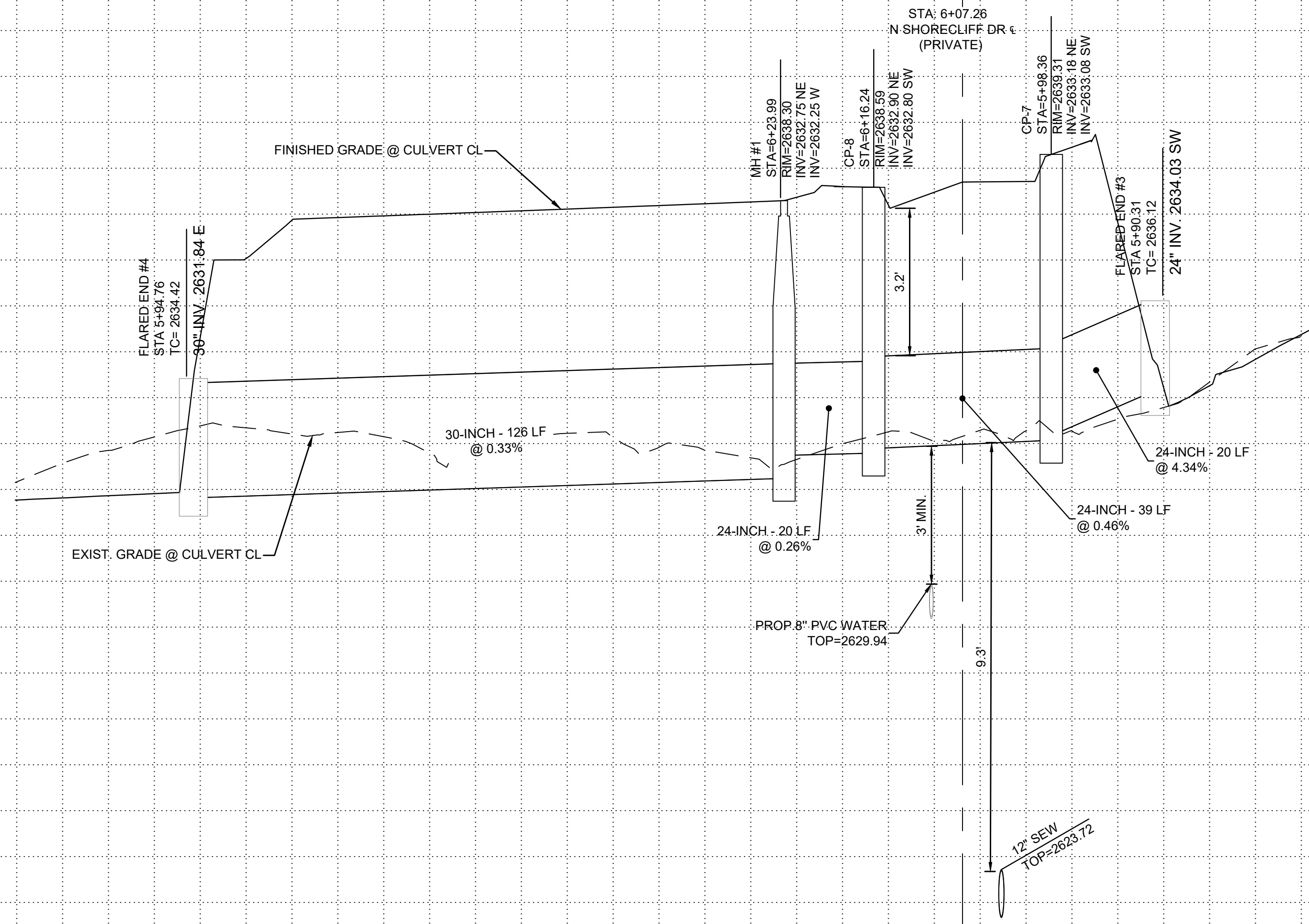
17 OF 23

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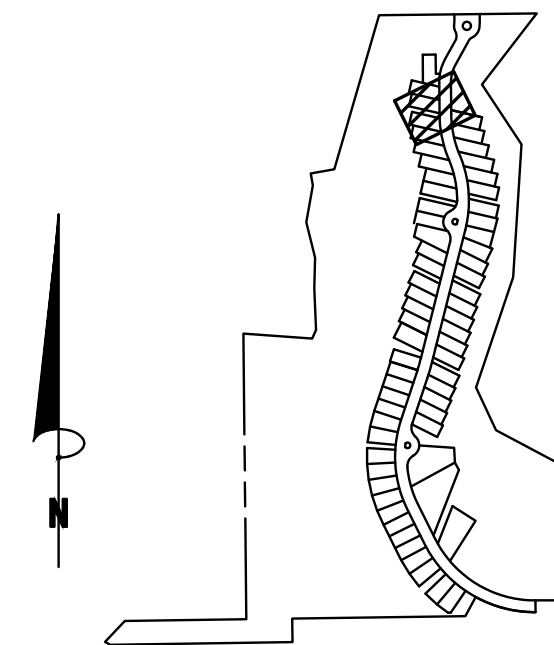


SD1



CONSTRUCTION NOTES

- STORM DRAIN CONSTRUCTION NOTES
- 1 INSTALL 48-INCH STORM DRAIN MANHOLE PER PAG SDT. DTL. 300 & 302. FRAME AND COVER PER PAG STD. DTL. 304.
 - 2 CATCH BASIN TYPE 3 PER P.A.G. STD. DTL. 308 WING LENGTH PER PLAN, WITH BICYCLE FRIENDLY GRATE (NON-PARALLEL TO CURBLINE).
 - 3 CATCH BASIN TYPE 5 PER P.A.G. STD. DTL. 310 WING LENGTH PER PLAN, WITH BICYCLE FRIENDLY GRATE (NON-PARALLEL TO CURBLINE).
 - 8 INSTALL FLARED END SECTION PER MANUFACTURER DETAILS ON SHEET 6. SIZE PER PLAN. RIPRAP AND TRASH SCREEN PER DTL ON SHEET 6.
 - 11 LOOSE RIP RAP TYPE 1 D50=6" THICKNESS=12" WITH FILTER FABRIC SEE SHEET 6
 - 33 INSTALL 24" HDPE STORM DRAIN PIPE



KEYMAP
NTS

ATWELL
866.850.4200 www.atwell-group.com
4700 E. SOUTHERN AVENUE
MESA, AZ 85206
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NARANJA TRAILS
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TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA

PM. M. PARK
DR. J. TURPIN
JOB NO. 20000103
DATE: 04-04-2024

ORO VALLEY CASE No: 2000939, 2002761, 2202968, 2202969, 2202970, 2301593

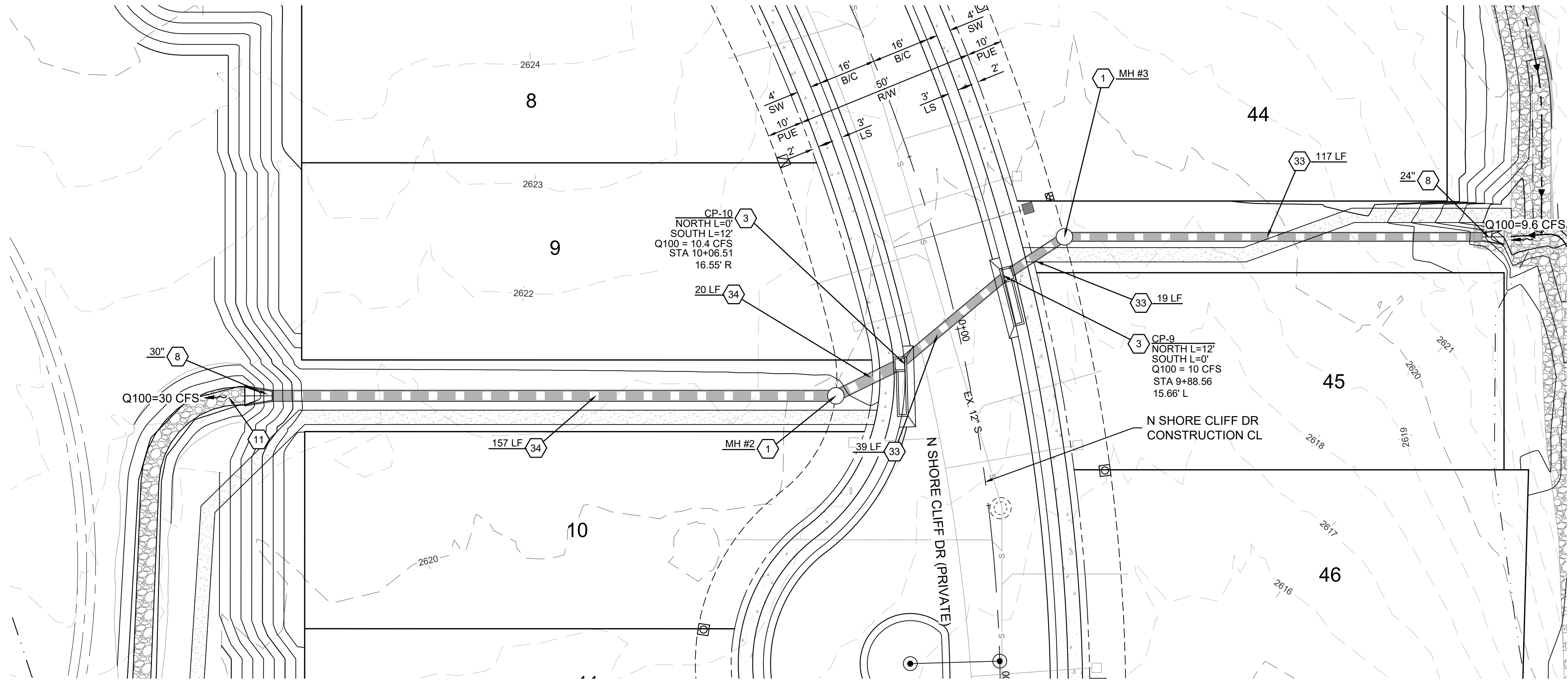
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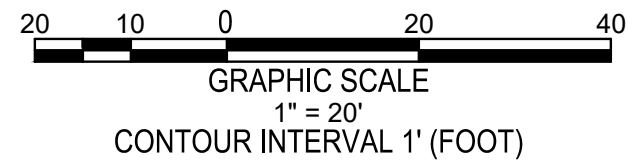
SD PLAN & PROFILE

GRADING PERMIT #2202968

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SD2



2630

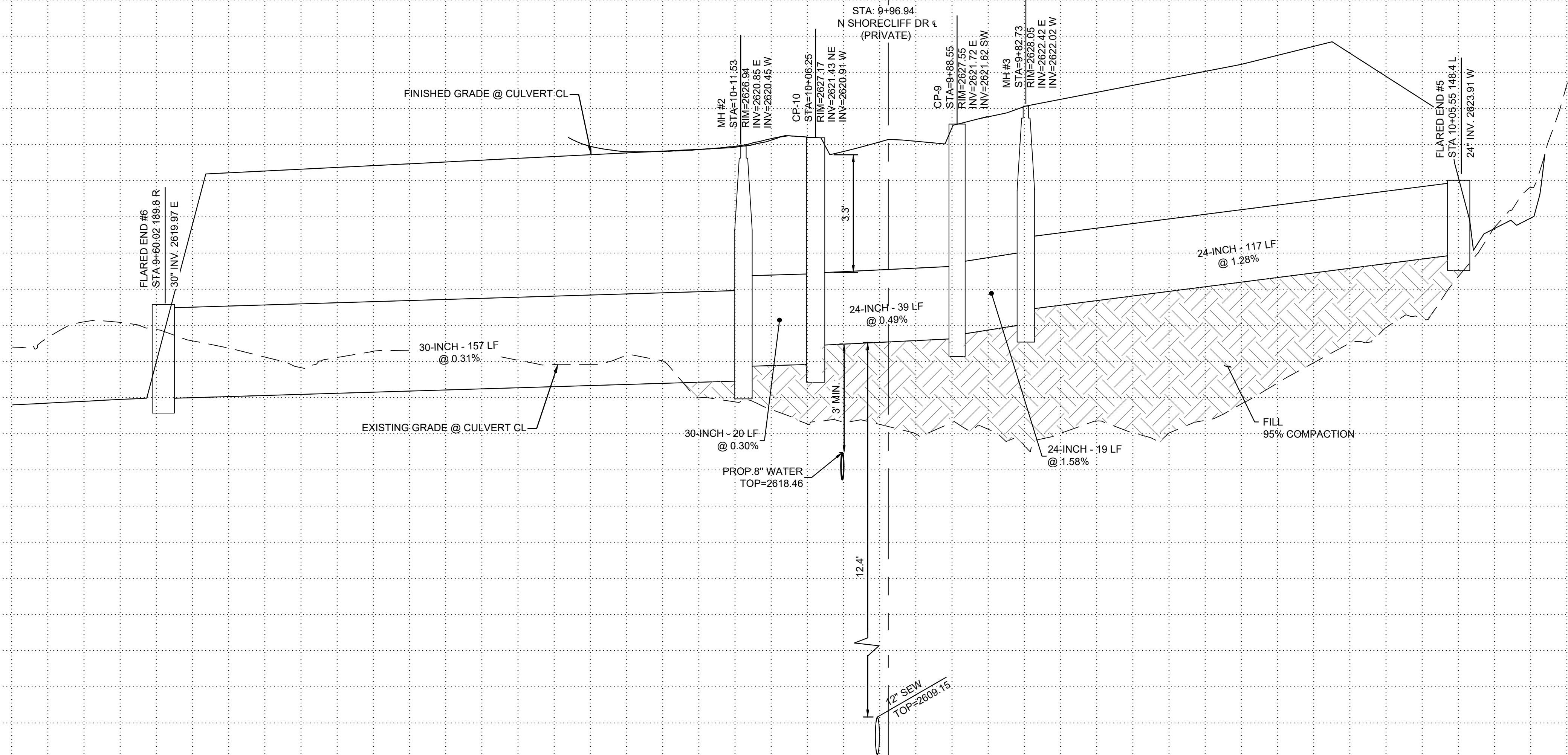
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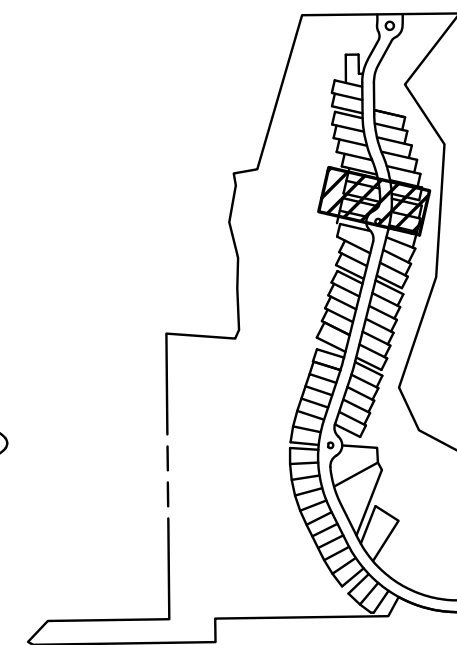
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CONSTRUCTION NOTES

STORM DRAIN CONSTRUCTION NOTES

1. INSTALL 48-INCH STORM DRAIN MANHOLE PER PAG SDT. DTL. 300 & 302. FRAME AND COVER PER PAG STD. DTL. 304.
3. CATCH BASIN TYPE 5 PER P.A.G. STD. DTL. 310 WING LENGTH PER PLAN, WITH BICYCLE FRIENDLY GRATE (NON-PARALLEL TO CURBLINE). SIZE PER PLAN. RIPRAP AND TRASH SCREEN PER DTL ON SHEET 6.
8. INSTALL FLARED END SECTION PER MANUFACTURER DETAILS ON SHEET 6.
11. LOOSE RIP RAP TYPE 1 D50=6" THICKNESS=12" WITH FILTER FABRIC SEE SHEET 6.
33. INSTALL 24" HDPE STORM DRAIN PIPE
34. INSTALL 30" HDPE STORM DRAIN PIPE



KEYMAP
NTS



Know what's below.
Call before you dig.

LOCATION DESCRIPTION
A PORTION OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 12 SOUTH, RANGE 13 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA

FINAL SITE PLAN, GRADING PLAN AND PUBLIC SEWER AND PRIVATE STREET IMPROVEMENT PLAN
NARANJA TRAILS
LOTS 1 THROUGH 64 & COMMON AREAS A1 THROUGH C
TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA

PM. M. PARK
DR. J. TURPIN
JOB NO. 20000103
DATE. 04-04-2024

ORO VALLEY CASE No: 2000939, 2002761, 2202968, 2202969, 2202970, 2301593

SHEET NO.

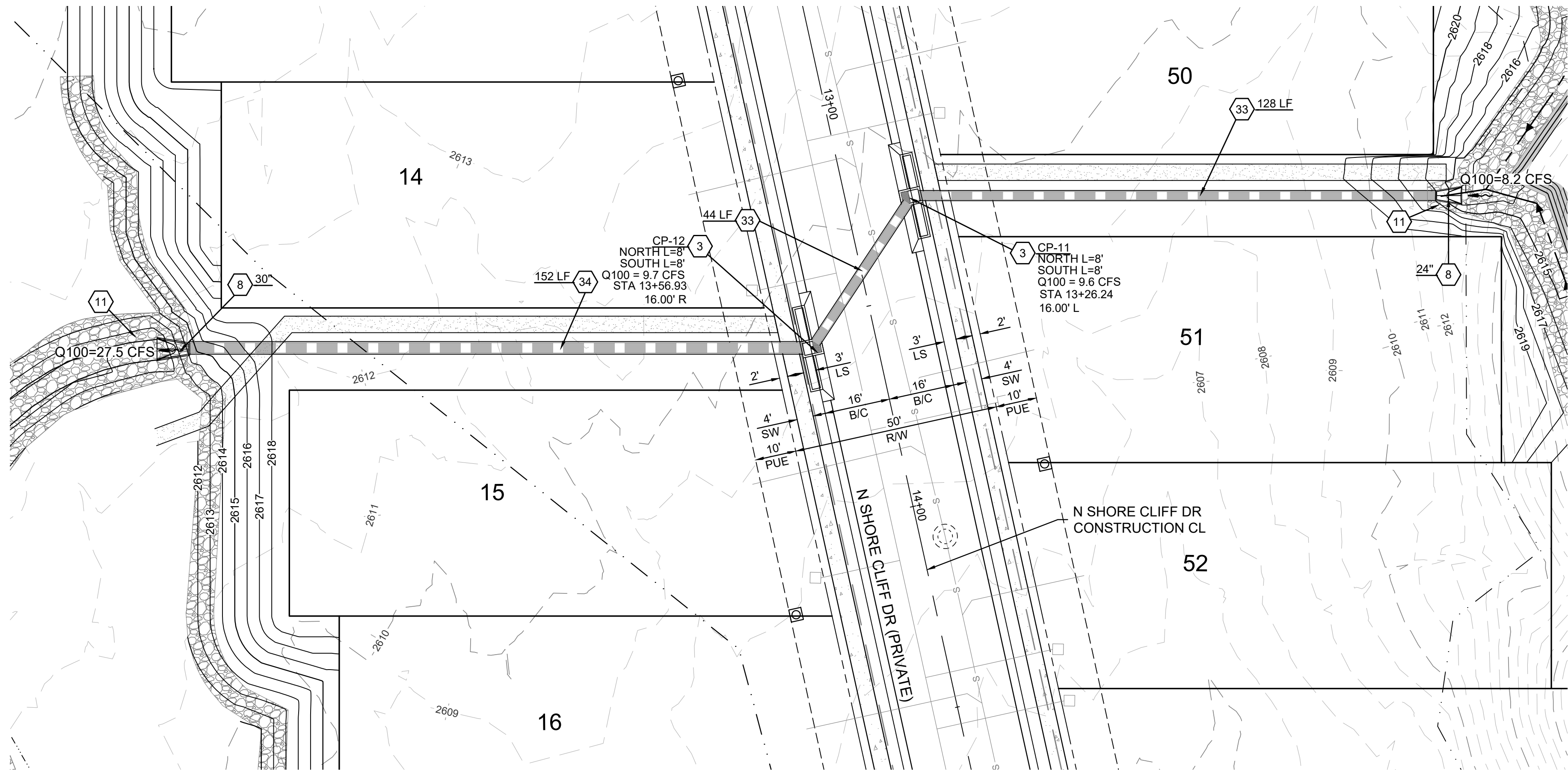
SD PLAN & PROFILE

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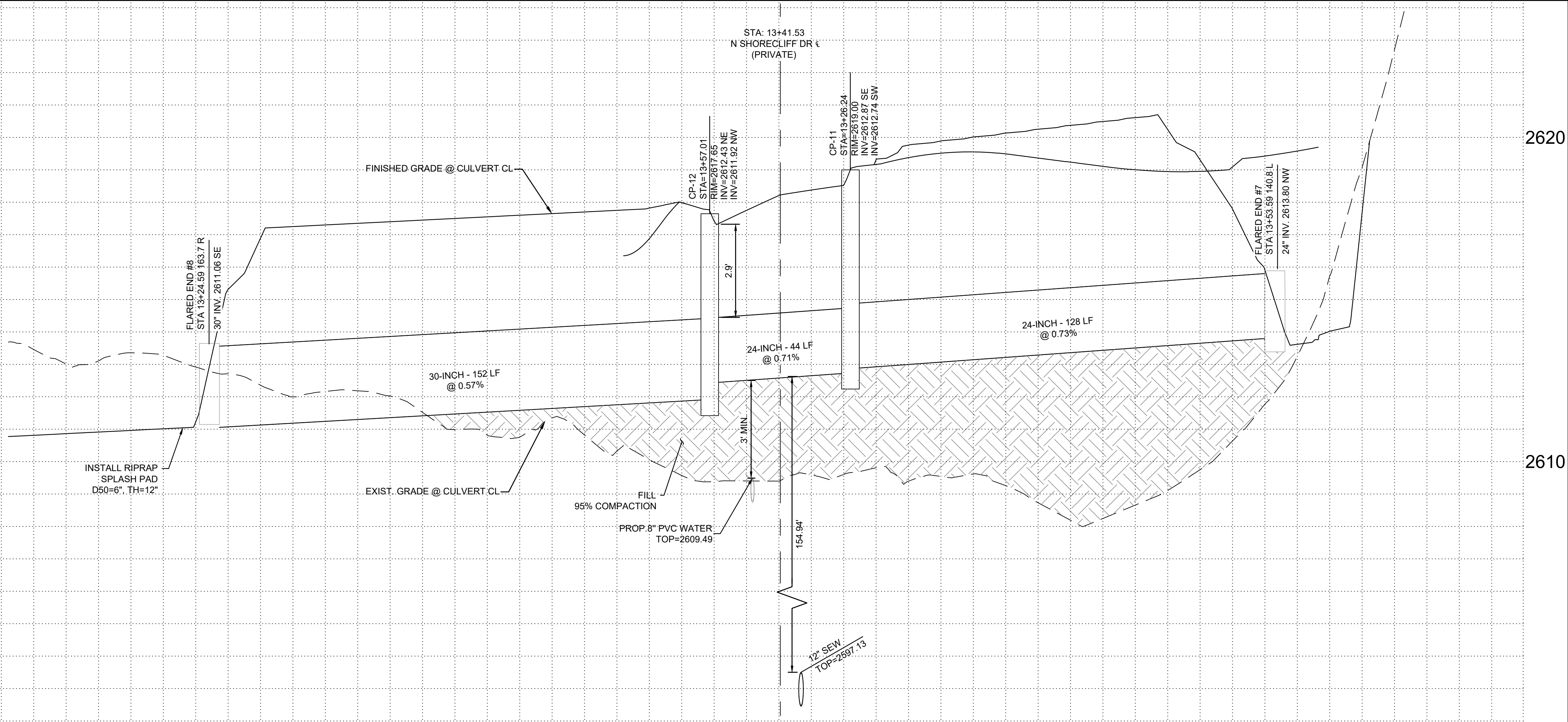
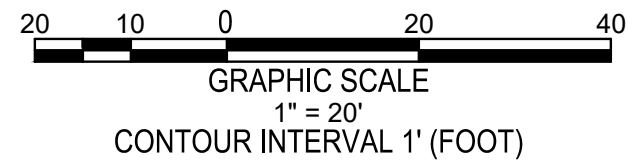
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GRADING PERMIT #2202968

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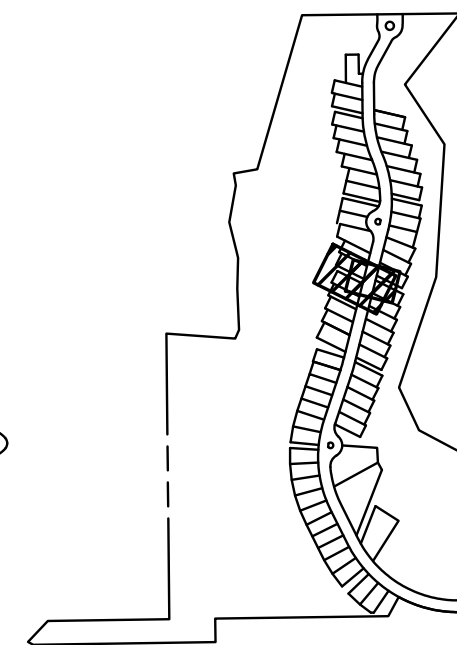


SD3



CONSTRUCTION NOTES

- STORM DRAIN CONSTRUCTION NOTES
- 3 CATCH BASIN TYPE 5 PER P.A.G. STD. DTL. 310 WING LENGTH PER PLAN, WITH BICYCLE FRIENDLY GRATE (NON-PARALLEL TO CURBLINE).
 - 8 INSTALL FLARED END SECTION PER MANUFACTURER DETAILS ON SHEET 6. SIZE PER PLAN. RIPRAP AND TRASH SCREEN PER DTL ON SHEET 6.
 - 11 LOOSE RIP RAP TYPE 1 D50=6" THICKNESS=12" WITH FILTER FABRIC SEE SHEET 6
 - 33 INSTALL 24" HDPE STORM DRAIN PIPE
 - 34 INSTALL 30" HDPE STORM DRAIN PIPE



KEYMAP
NTS



Know what's below.
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LOCATION DESCRIPTION
A PORTION OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 12 SOUTH, RANGE 13 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA

FINAL SITE PLAN, GRADING PLAN AND PUBLIC SEWER AND PRIVATE STREET IMPROVEMENT PLAN
NARANJA TRAILS
LOTS 1 THROUGH 64 & COMMON AREAS A1 THROUGH C
TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA

PM. M. PARK
DR. J. TURPIN
JOB NO. 20000103
DATE: 04-04-2024

ORO VALLEY CASE No: 2000939, 2002761, 2202968, 2202969, 2202970, 2301593

SHEET NO.

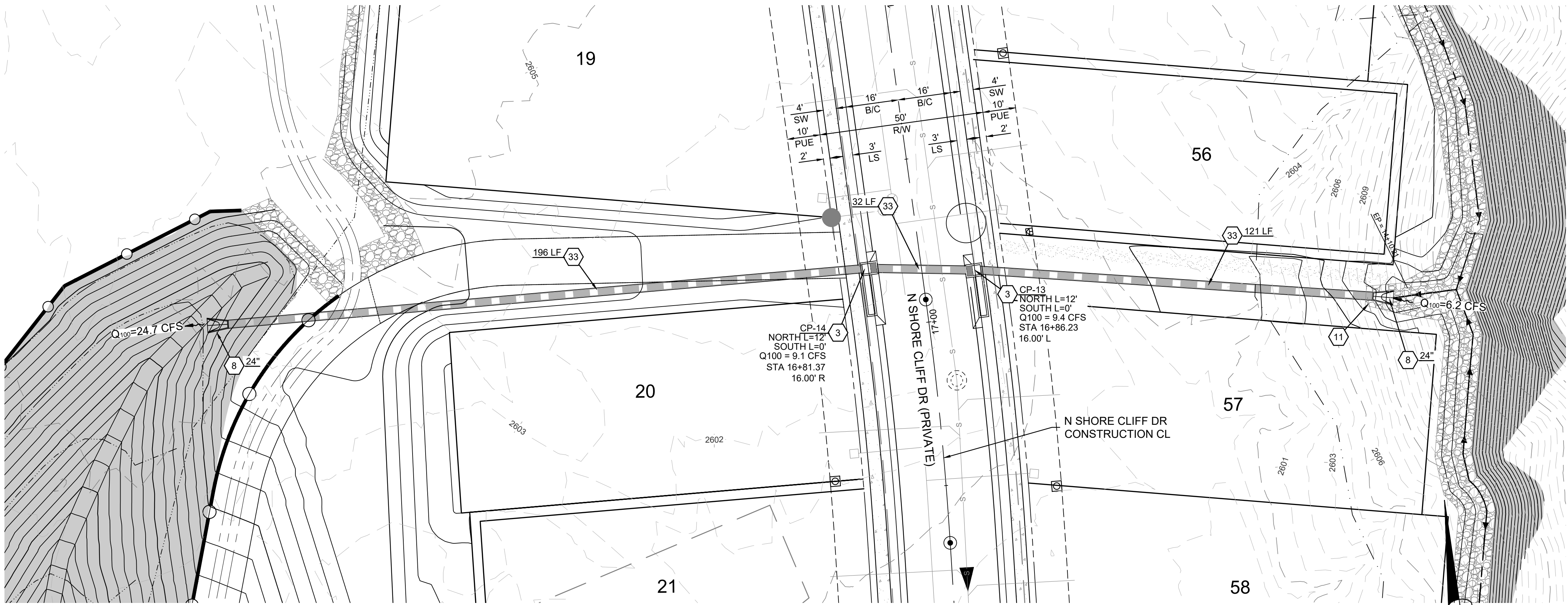
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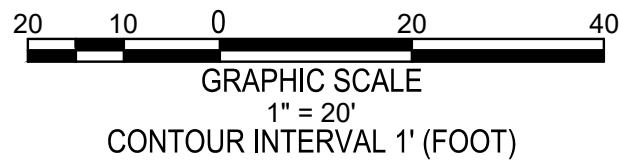
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SD 4



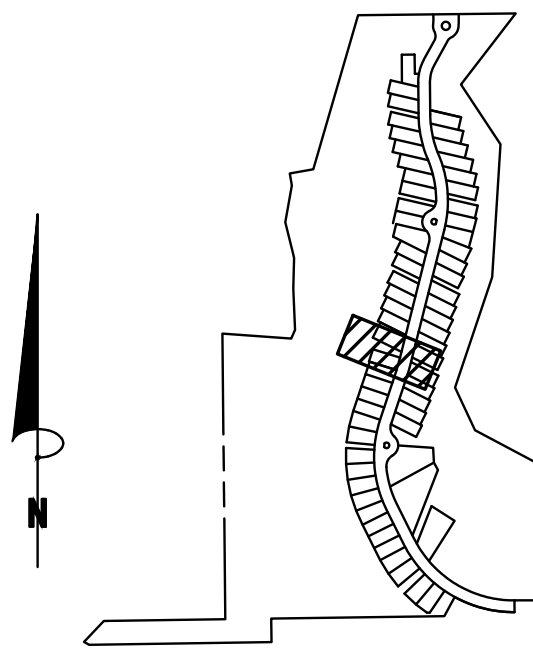
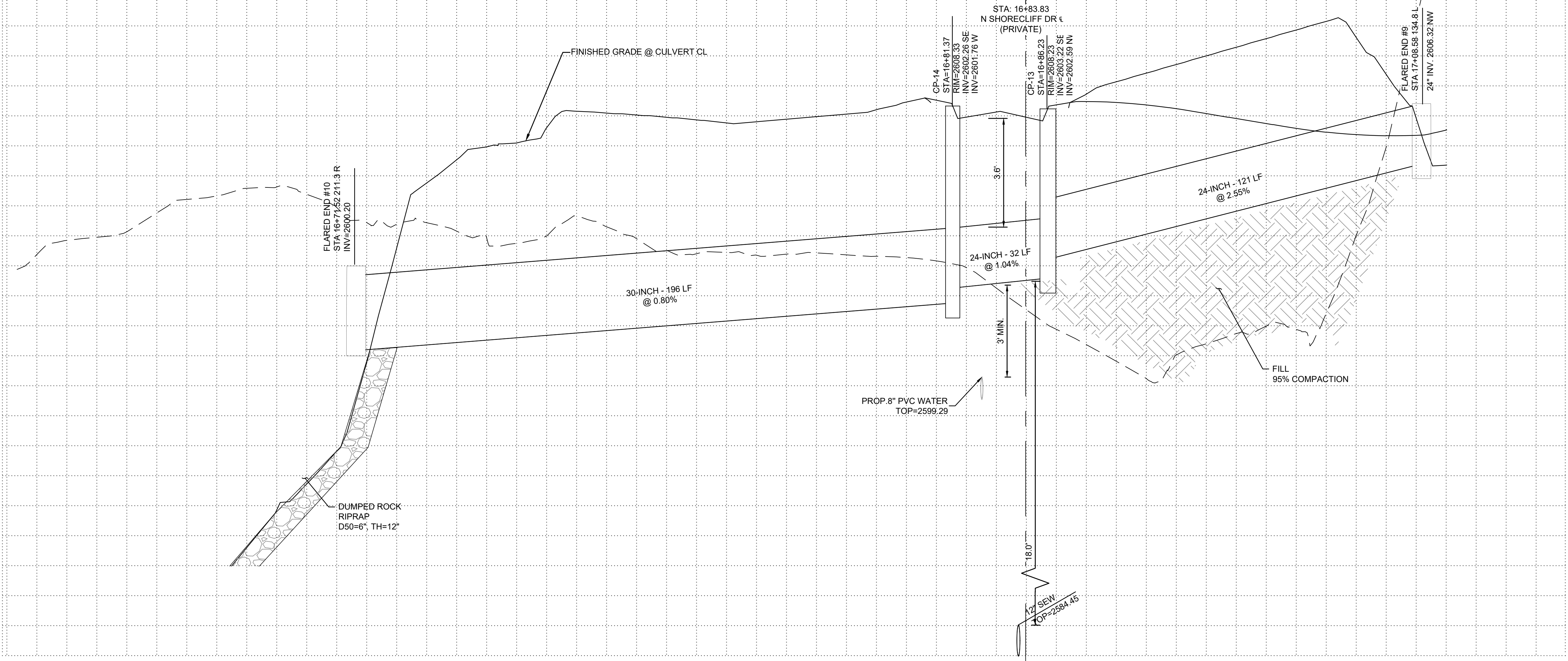
CONSTRUCTION NOTES

STORM DRAIN CONSTRUCTION NOTES

- 3 CATCH BASIN TYPE 5 PER P.A.G. STD. DTL. 310 WING LENGTH PER PLAN, WITH BICYCLE FRIENDLY GRATE (NON-PARALLEL TO CURBLINE).
- 8 INSTALL FLARED END SECTION PER MANUFACTURER DETAILS ON SHEET 6. SIZE PER PLAN. RIPRAP AND TRASH SCREEN PER DTL ON SHEET 6.
- 11 LOOSE RIP RAP TYPE 1 D50=6" THICKNESS=12" WITH FILTER FABRIC SEE SHEET 6
- 33 INSTALL 24" HDPE STORM DRAIN PIPE

2610

2600



KEYMAP
NTS



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LOCATION DESCRIPTION
A PORTION OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 12 SOUTH, RANGE 13 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA

FINAL SITE PLAN, GRADING PLAN AND PUBLIC SEWER AND PRIVATE STREET IMPROVEMENT PLAN
NARANJA TRAILS
LOTS 1 THROUGH 64 & COMMON AREAS A1 THROUGH C
TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA

PM. M. PARK
DR. J. TURPIN
JOB NO. 20000103
DATE: 04-04-2024

ORO VALLEY CASE No: 2000939, 2002761, 2202968, 2202969, 2202970, 2301593

SHEET NO.

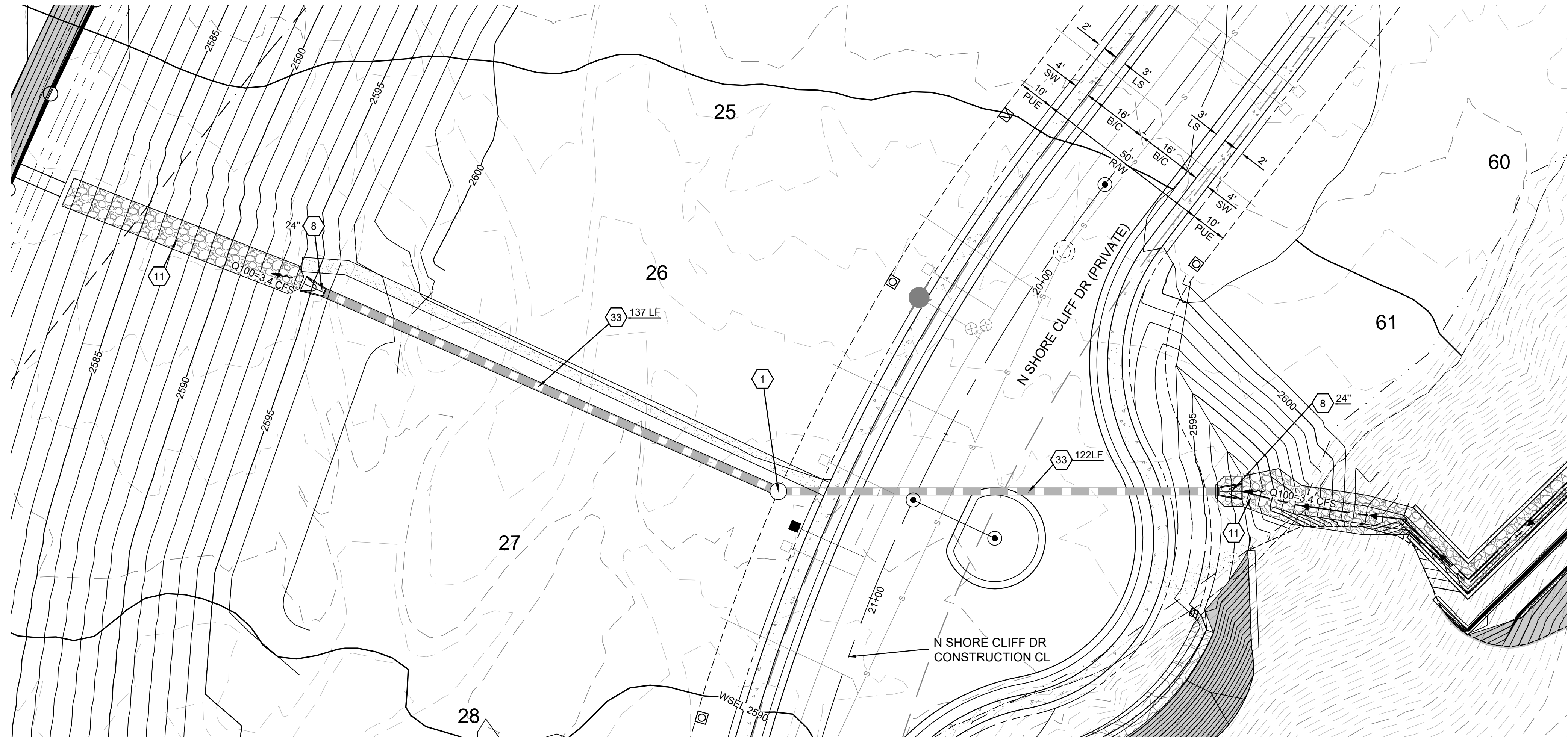
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SD PLAN & PROFILE

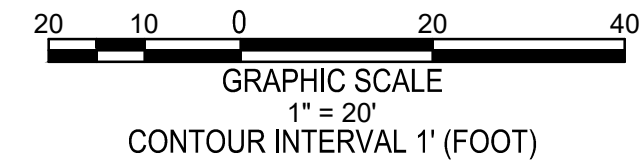
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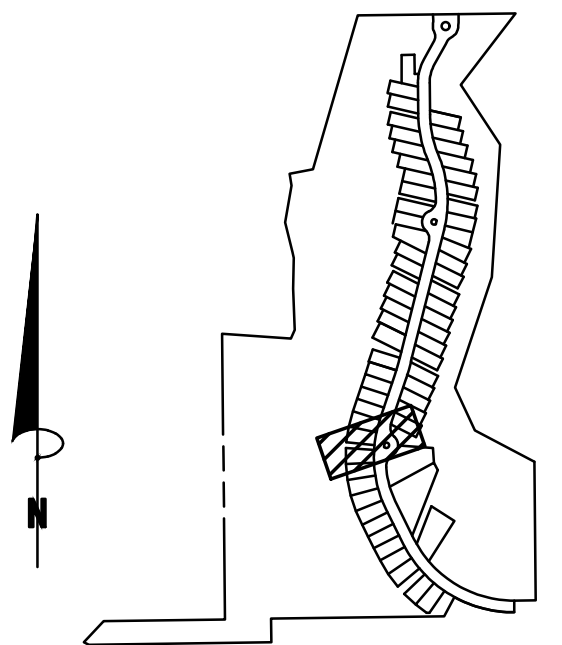
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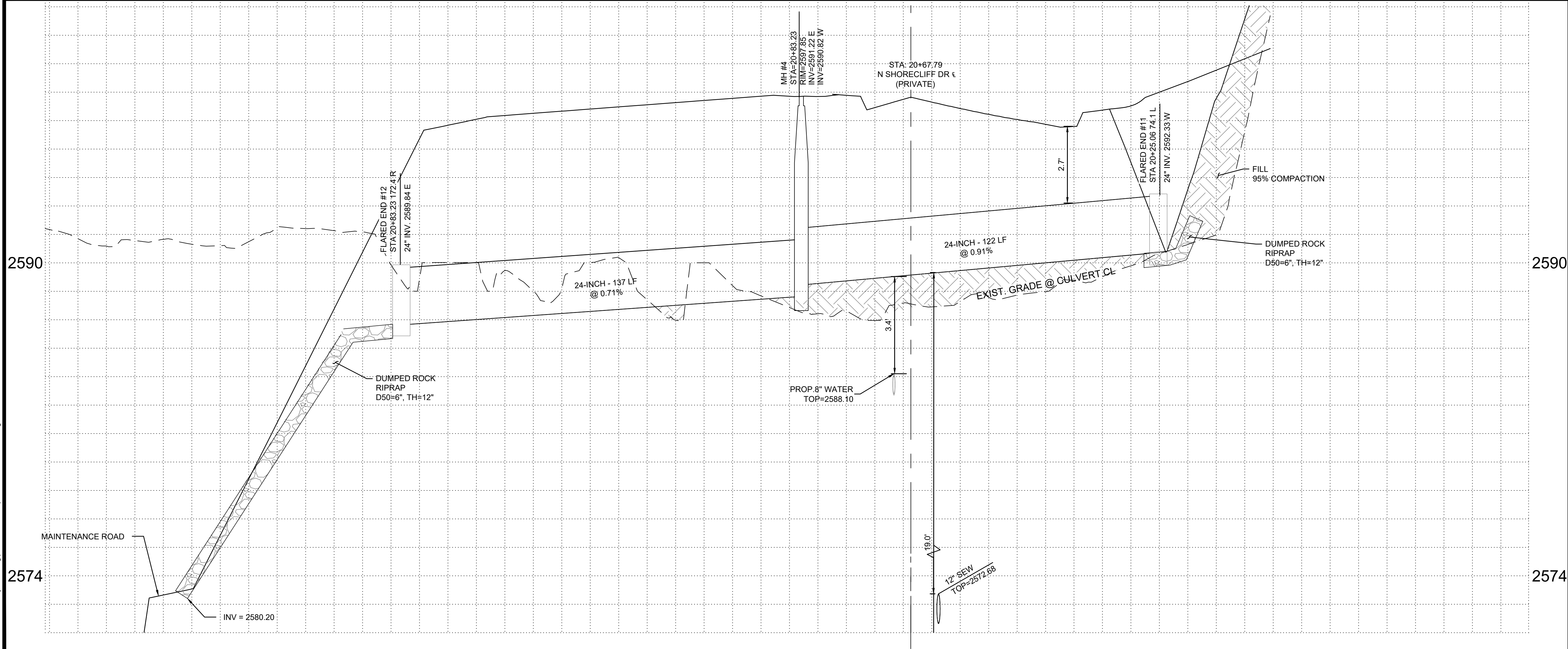
CONSTRUCTION NOTES

STORM DRAIN CONSTRUCTION NOTES

- 1 INSTALL 48-INCH STORM DRAIN MANHOLE PER PAG SDT. DTL. 300 & 302. FRAME AND COVER PER PAG STD. DTL. 304.
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- 11 LOOSE RIP RAP TYPE 1 D50=6" THICKNESS=12" WITH FILTER FABRIC SEE SHEET 6
- 33 INSTALL 24" HDPE STORM DRAIN PIPE



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LOCATION DESCRIPTION
A PORTION OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 12 SOUTH, RANGE 13 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA

FINAL SITE PLAN, GRADING PLAN AND PUBLIC SEWER AND PRIVATE STREET IMPROVEMENT PLAN
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LOTS 1 THROUGH 64 & COMMON AREAS A1 THROUGH C
TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA

PM. M. PARK
DR. J. TURPIN
JOB NO. 20000103
DATE 04-04-2024

ORO VALLEY CASE No: 2000939, 2002761, 2202968, 2202969, 2202970, 2301593

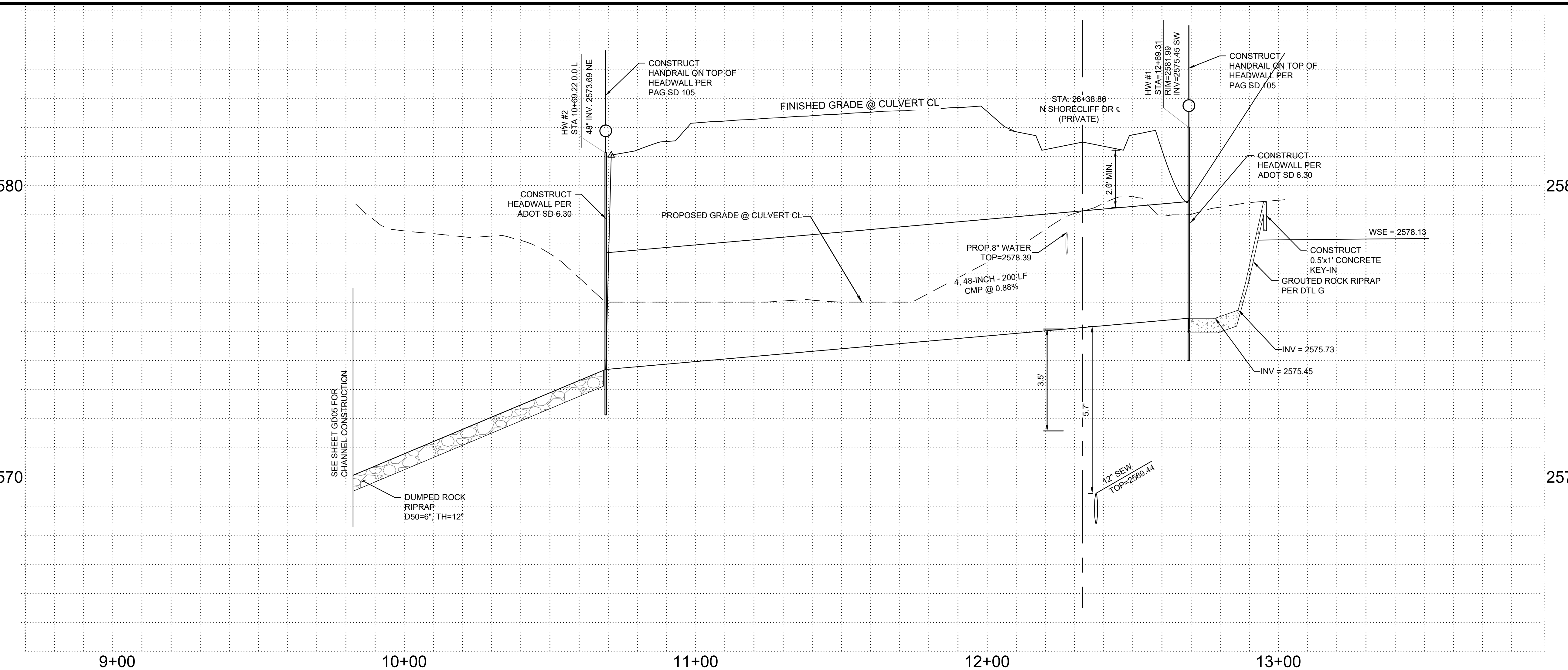
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SD PLAN & PROFILE

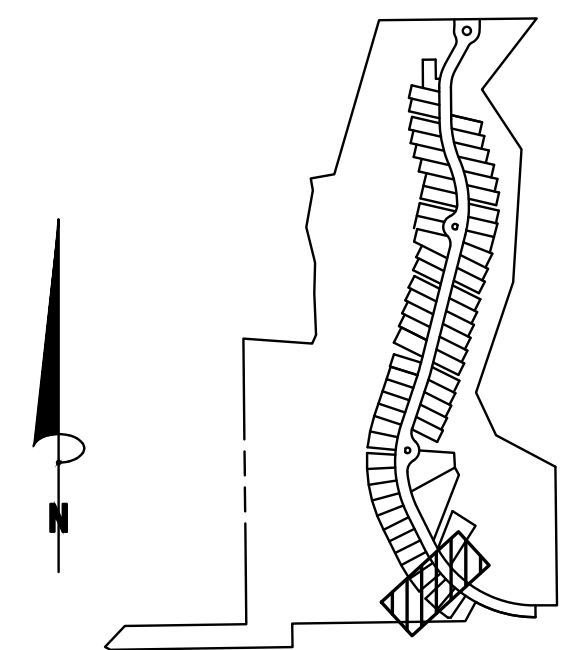
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GRADING PERMIT #2202968



STORM DRAIN CONSTRUCTION NOTES

5	INSTALL HEADWALL PER ADOT SD 6.30 (SEE SHEET 5 FOR DETAIL)
11	LOOSE RIP RAP TYPE 1 D50=6" THICKNESS=12" WITH FILTER FABRIC SEE SHEET 6
35	INSTALL 36" HDPE STORM DRAIN PIPE



KEYMAP



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A PORTION OF THE EAST HALF OF THE NORTHWEST
QUARTER OF SECTION 12, TOWNSHIP 12 SOUTH,
RANGE 13 EAST, OF THE GILA AND SALT RIVER BASE
AND MERIDIAN TOWN OF ORO VALLEY, PIMA COUNTY,
ARIZONA

FINAL SITE PLAN, GRADING PLAN AND PUBLIC SEWER AND PRIVATE STREET IMPROVEMENT PLAN NARANJA TRAILS LOTS 1 THROUGH 64 & COMMON AREAS A1 THROUGH C TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA	PI DI JC DA
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PM.	M. PARK
DR.	J.TURPIN
JOB NO.	20000103
DATE.	04-04-2024

ORO VALLEY CASE No: 2000939, 2002761, 2202968
2202969, 2202970, 2301593

SHEET NO.

SD PLAN & PROFILE

SHEET NO.
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