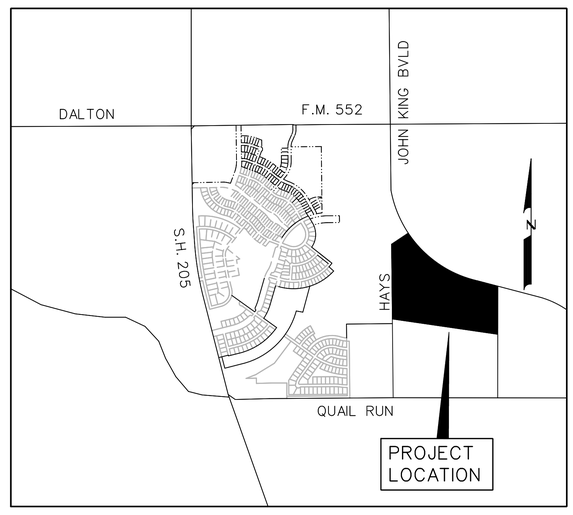
QUAIL HOLLOW PHASE I 22036

DEVELOPMENT PLANS
FOR
QUAIL HOLLOW
PHASE I
CITY OF ROCKWALL, TEXAS



LOCATION MAP

INDEX

PREPARED FOR

QUAIL HOLLOW SF, LTD.

8214 WESTCHESTER DRIVE., SUITE 710, DALLAS, TEXAS 75225

CORWIN ENGINEERING, INC. — CONSULTING ENGINEERS

200 W. BELMONT, SUITE E — TBPELS FIRM #F-5951 — ALLEN, TEXAS 75013

STATE OF TEXAS
WARREN L. CORWIN
57875
REGISTERED PROFESSIONAL ENGINEER

02/22/2023

NOTE:

CITY OF ROCKWALL STANDARDS AND NCTCOG 5th ADDITION STANDARDS SHALL BE USED FOR REFERENCE.

RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

NO.	REVISIONS	DATE

FEBRUARY 2023

LEGAL DESCRIPTION

BEING, a tract of land situated in the P. Bruce Harrison Survey, Abstract No. 97 in the City of Rockwall, Rockwall County, Texas, being part of a 85.7256 acre tract, as described in Clerks File No. in the Deed Records of Rockwall County, Texas being more particularly described as follows:

BEGINNING, at a 1/2 inch iron rod found at the northeast corner of said 85.7256 acre tract and being in the south line of John King Boulevard (120' R.O.W.), also being the northwest corner of Gideon Grove Phase 2, an addition to the City of Rockwall, as recorded in Doc. No. 20220000006324 in the Plat Records of Rockwall County, Texas;

THENCE, South 01° 29'44" East, along the east line of said 85.7256 acre tract and the west line of said Gideon Grove Phase 2, for a distance of 1722.62 feet, to an "X" cut found at the southeast corner of said 85.7256 acre tract and being the southwest corner of said Gideon Grove Phase 2 and being in Quail Run Road (Variable R.O.W.), same being in the north line of L.L. Leonard Addition, an addition to the City of Rockwall, as described in Cab. A, Pg. 336 in said Plat Records;

THENCE, South 88° 45'15" West, along the south line of said 85.7256 acre tract and with said Quail Run Road and along the north line of said L.L. Leonard Addition, at 437.57, passing a 5/8 inch iron rod found with cap stamped "RPLS 3963", on continuing along said south line, for a total distance of 1835.99 feet, to an "X" cut found at the southwest corner of said 85.7256 acre tract and being the southeast corner of Stone Creek Phase VIII, an addition to the City of Rockwall, an addition to the City of Rockwall, as described in Doc. No. 20190000004513 in said Plat Records;

THENCE, North 00° 35'15" West, along the west line of said 85.7256 acre tract and the east line of said Stone Creek Phase VIII, at 1480.61 feet, passing the northeast corner of said Stone Creek Phase VIII same being the southeast corner of Stone Creek Phase IX, an addition to the City of Rockwall, as described in Doc. No. 20190000004513 in said Plat Records, at 1791.72 feet, passing the northeast corner of said Stone Creek Phase IX and being the southeast corner of Stone Creek X, an addition to the City of Rockwall, as described in Doc. No. 20200000028492 in said Plat Records and continuing for a total distance of 2079.19 feet, to a 1/2 inch iron rod found;

THENCE, North 89° 40'38" East, departing the east line of said Stone Creek X and continuing with said west line, for a distance of 28.47 feet, to a 1/2 inch iron rod found;

THENCE, North 00° 21'45" West, continuing along said west line, for a distance of 136.79 feet, to a 5/8 inch iron rod found with cap stamped "Survcon Inc", being on a curve to the right, having a radius of 320.00 feet, a central angle of 38° 06'44";

THENCE, continuing along said west line and with said curve to the right for an arc distance of 212.86 feet (Chord Bearing North 18° 41'37" East- 208.96 feet), to 1/2 inch iron rod found with a cap stamped "RPLS 5664";

THENCE, South 52° 15'01" East, continuing along said west line, for a distance of 24.00 feet, to 1/2 inch iron rod found with a cap stamped "RPLS 5664"

THENCE, North 37° 44'59" East, continuing along said west line, for a distance of 66.65 feet, to 1/2 inch iron rod found with a cap stamped "RPLS 5664";

THENCE, South 87° 02'51" East, continuing along said west line, for a distance of 19.25 feet, to 1/2 inch iron rod found with a cap stamped "RPLS 5664", being the most northerly northwest corner of said 85.7256 acre tract and being in the south line of said John King Boulevard same being on a curve to the left, having a radius of 1260.00 feet, a central angle of 28° 29'34";

THENCE, along the north line of said 85.7256 acre tract and the south line of said John King Boulevard with said curve to the left for an arc distance of 626.56 feet (Chord Bearing South 57° 51'28" East 620.15 feet), to 1/2 inch iron rod found with a cap stamped "RPLS 5664", at the point of tangency;

THENCE, South 72° 06'15" East, continuing along said north and south lines, for a distance of 1168.60 feet, to the POINT OF BEGINNING and containing 85.722 acres of land.

LINE TABLE

LINE NO.	BEARING	DISTANCE
1.	N 61°44'56" W	66.60'
2.	N 72°06'14" E	62.50'
3.	N 89°38'08" E	29.78'
4.	S 52°15'01" E	24.00'
5.	N 37°44'59" E	66.65'
6.	S 30°04'15" E	27.00'
7.	N 89°24'45" E	25.00'
8.	S 45°35'15" E	21.21'
9.	N 45°03'24" E	13.99'
10.	S 27°06'15" E	14.14'
11.	N 62°53'45" E	14.14'
12.	N 62°53'30" E	14.14'
13.	S 27°06'29" E	14.14'
14.	S 27°06'44" E	42.43'
15.	N 62°53'16" E	42.43'
16.	S 36°48'00" E	16.32'
17.	N 53°12'00" E	18.38'
18.	N 43°59'32" E	14.02'
19.	N 88°30'16" E	26.15'
20.	S 46°51'39" E	13.95'
21.	N 71°50'43" E	13.79'
22.	S 27°44'56" E	42.08'
23.	S 45°35'15" E	14.14'
24.	N 44°24'45" E	14.14'
25.	S 45°35'15" E	35.36'
26.	N 44°24'45" E	35.36'
27.	S 89°24'45" E	80.45'
28.	N 31°20'59" E	14.88'
29.	N 17°53'45" E	45.42'
30.	S 00°35'15" E	30.38'
31.	N 42°33'30" E	36.56'
32.	S 54°57'29" W	23.29'
33.	S 45°06'25" E	28.13'
34.	S 44°06'25" E	56.94'
35.	S 81°24'45" W	103.57'
36.	S 20°40'17" E	22.69'
37.	S 20°40'17" E	25.07'
38.	S 29°17'04" W	28.67'
39.	S 38°45'21" W	3.44'
40.	N 40°52'31" E	6.22'
41.	S 89°24'45" W	90.95'
42.	S 00°35'15" E	38.69'
43.	S 25°50'13" E	17.58'
44.	S 25°50'13" E	9.03'

CURVE TABLE

CURVE NO.	DELTA	RADIUS	LENGTH	CHORD	BEARING
1.	02°21'04"	650.00'	26.67'	26.67'	N31°37'51"E
2.	10°21'35"	225.00'	40.68'	40.63'	N66°55'44"W
3.	38°06'44"	320.00'	212.86'	208.96'	N18°41'37"E
4.	165°15'13"	50.00'	144.21'	99.17'	N45°10'10"E
5.	18°29'00"	250.00'	80.65'	80.30'	S81°20'45"E
6.	144°20'54"	50.00'	125.97'	95.20'	S36°48'00"E
7.	19°23'29"	250.00'	84.61'	84.21'	S81°48'00"E
8.	32°02'21"	625.00'	349.49'	344.96'	N14°31'26"E
9.	10°21'19"	250.00'	45.18'	45.12'	S66°55'36"E
10.	18°29'00"	965.00'	311.30'	309.96'	S81°20'45"E
11.	18°29'00"	1225.00'	404.86'	403.10'	S81°20'45"E
12.	18°29'00"	1110.00'	358.08'	356.53'	S81°20'45"E
13.	15°38'09"	1400.00'	382.06'	380.87'	S79°55'20"E
14.	60°26'58"	60.00'	313.69'	60.41'	S49°45'35"E
15.	62°16'58"	60.00'	311.77'	62.06'	N82°53'44"E
16.	18°29'00"	820.00'	264.53'	263.38'	N81°20'45"W
17.	12°13'05"	596.00'	127.09'	126.85'	N36°45'51"E
18.	08°10'23"	611.00'	87.16'	87.08'	S38°46'08"W
19.	17°21'28"	639.00'	193.58'	192.85'	N39°10'07"E
20.	15°02'40"	654.00'	171.72'	171.23'	S40°19'43"E
21.	08°36'44"	1030.50'	154.89'	154.75'	N51°01'59"E
22.	58°33'56"	1045.50'	156.30'	156.5'	S50°36'13"W
23.	50°10'39"	262.50'	229.89'	222.61'	S66°09'26"E
24.	51°56'53"	277.50'	251.60'	243.07'	N65°16'13"W
25.	24°03'19"	55.00'	23.09'	22.92'	N77°23'05"E
26.	27°29'49"	160.00'	76.79'	76.05'	N15°32'10"E
27.	29°52'19"	140.00'	72.99'	72.17'	N14°20'55"E
28.	125°01'22"	54.00'	117.83'	95.81'	N23°45'19"W
29.	61°34'42"	104.00'	111.77'	106.47'	N55°28'39"W
30.	114°26'11"	61.00'	121.83'	102.57'	S81°54'24"E
31.	119°16'22"	49.00'	102.00'	84.56'	N18°49'40"W
32.	63°44'03"	66.00'	73.42'	69.69'	N46°31'50"W
33.	126°34'51"	87.00'	192.20'	155.43'	N77°57'13"W

OWNER'S CERTIFICATE

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS:
STATE OF TEXAS
COUNTY OF ROCKWALL
We the undersigned owner"s" of the land shown on this plat, and designated herein as the QUAIL HOLLOW PHASE I, subdivision to the City of Rockwall, Texas, and whose name is subscribed hereto, hereby dedicate to the use of the public forever all streets, alleys, parks, water courses, drains, easements and public places thereon shown on the purpose and consideration therein expressed. We further certify that all other parties who have a mortgage or lien interest in the QUAIL HOLLOW PHASE I, subdivision have been notified and signed this plat.

We understand and do hereby reserve the easement strips shown on this plat for the purposes stated and for the mutual use and accommodation of all utilities desiring to use or using same. We also understand the following:

1. No buildings shall be constructed or placed upon, over, or across the utility easements as described herein.

2. Any public utility shall have the right to remove and keep removed all or part of any buildings, fences, trees, shrubs, or other growths or improvements which in any way endanger or interfere with construction, maintenance or efficiency of their respective system on any of these easement strips; and any public utility shall at all times have the right of ingress or egress to, from and upon the said easement strips for purpose of construction, reconstruction, inspecting, patrolling, maintaining, and either adding to or removing all or part of their respective system without the necessity of, at any time, procuring the permission of anyone.

3. The City of Rockwall will not be responsible for any claims of any nature resulting from or occasioned by the establishment of grade of streets in the subdivision.

4. The developer and subdivision engineer shall bear total responsibility for storm drain improvements.

5. The developer shall be responsible for the necessary facilities to provide drainage patterns and drainage controls such that properties within the drainage area are not adversely affected by storm drainage from the development.

6. No house dwelling unit, or other structure shall be constructed on any lot in this addition by the owner or any other person until the developer and/or owner has complied with all requirements of the Subdivision Regulations of the City of Rockwall regarding improvements with respect to the entire block on the street or streets on which property abuts, including the actual installation of streets with the required base and paving, curb and gutter, water and sewer, drainage structures, storm structures, storm sewers, and alleys, all according to the specifications of the City of Rockwall; or

Until an escrow deposit, sufficient to pay for the cost of such improvements, as determined by the city's engineer and/or city administrator, computed on a private commercial rate basis, has been made with the city secretary, accompanied by an agreement signed by the developer and/or owner, authorizing the city to make such improvements at prevailing private commercial rates, or have the same made by a contractor and pay for the same out of the escrow deposit, should the developer and/or owner fail or refuse to install the required improvements within the time stated in such written agreement, but in no case shall the City be obligated to make such improvements itself. Such deposit may be used by the owner and/or developer as progress payments as the work progresses in making such improvements by making certified requisitions to the city secretary, supported by evidence of work done; or

Until the developer and/or owner files a corporate surety bond with the city secretary in a sum equal to the cost of such improvements for the designated area, guaranteeing the installation thereof within the time stated in the bond, which time shall be fixed by the city council of the City of Rockwall.

We further acknowledge that the dedications and/or exaction's made herein are proportional to the impact of the Subdivision upon the public services required in order that the development will comport with the present and future growth needs of the City; we, our successors and assigns hereby waive any claim, damage, or cause of action that we may have as a result of the dedication of exactions made herein.

QUAIL HOLLOW SF, LTD.
a Texas limited partnership
By: QUAIL HOLLOW GP Corporation,
a Texas corporation, its General Partner

_____
John Arnold
Director

_____
Mortgage or Lien Interest

STATE OF TEXAS
COUNTY OF DALLAS
Before me, the undersigned authority, on this day personally appeared JOHN ARNOLD, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purpose and consideration therein stated. Given upon my hand and seal of office this _____day of _____, 2024.

Notary Public in and for the State of Texas My Commission Expires:_____

STATE OF TEXAS
COUNTY OF DALLAS
Before me, the undersigned authority, on this day personally appeared _____ known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purpose and consideration therein stated. Given upon my hand and seal of office this _____day of _____, 2024.

Notary Public in and for the State of Texas My Commission Expires: _____

NOTE: It shall be the policy of the City of Rockwall to withhold issuing building permits until all streets, water, sewer and storm drainage systems have been accepted by the City. The approval of a plat by the City does not constitute any representation, assurance or guarantee that any building within such plat shall be approved, authorized or permit therefore issued, nor shall such approval constitute any representation, assurance or guarantee by the City of the adequacy and availability for water for personal use and fire protection within such plat, as required under Ordinance 83-54.

Recommended for Final Approval:

_____ _____
Planning & Zoning Commission Date

APPROVED
I hereby certify that the above and foregoing plat of an addition to the City of Rockwall, Texas, was approved by the City Council of the City of Rockwall on the_____day of_____, 2024.

This approval shall be invalid unless the approved plat for such addition is recorded in the office of the Count Clerk of Rockwall, County, Texas, within one hundred eighty (180) days from said date of final approval.

WITNESS OUR HANDS, this_____day of_____, 2024.

_____ _____ _____
Mayor, City of Rockwall City Secretary City Engineer

SURVEYOR CERTIFICATE

I, WARREN L. CORWIN, do hereby certify that the plat shown hereon accurately represents the results of an on-the-ground survey made under my direction and supervision and all corners are as shown thereon and there are no encroachments, conflicts, protrusions or visible utilities on the ground except as shown and said plat has been prepared in accordance with the platting rules and regulations of the City Plan Commission of the City of Rockwall, Texas.

DATED the this_____day of_____, 2023.

_____
WARREN L. CORWIN
R.P.L.S. No. 4621

THE STATE OF TEXAS
COUNTY OF COLLIN

BEFORE ME, the undersigned, a Notary Public in and for the State of Texas, on this day personally appeared WARREN L. CORWIN, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same in the capacity therein stated and for the purposes and considerations therein expressed.

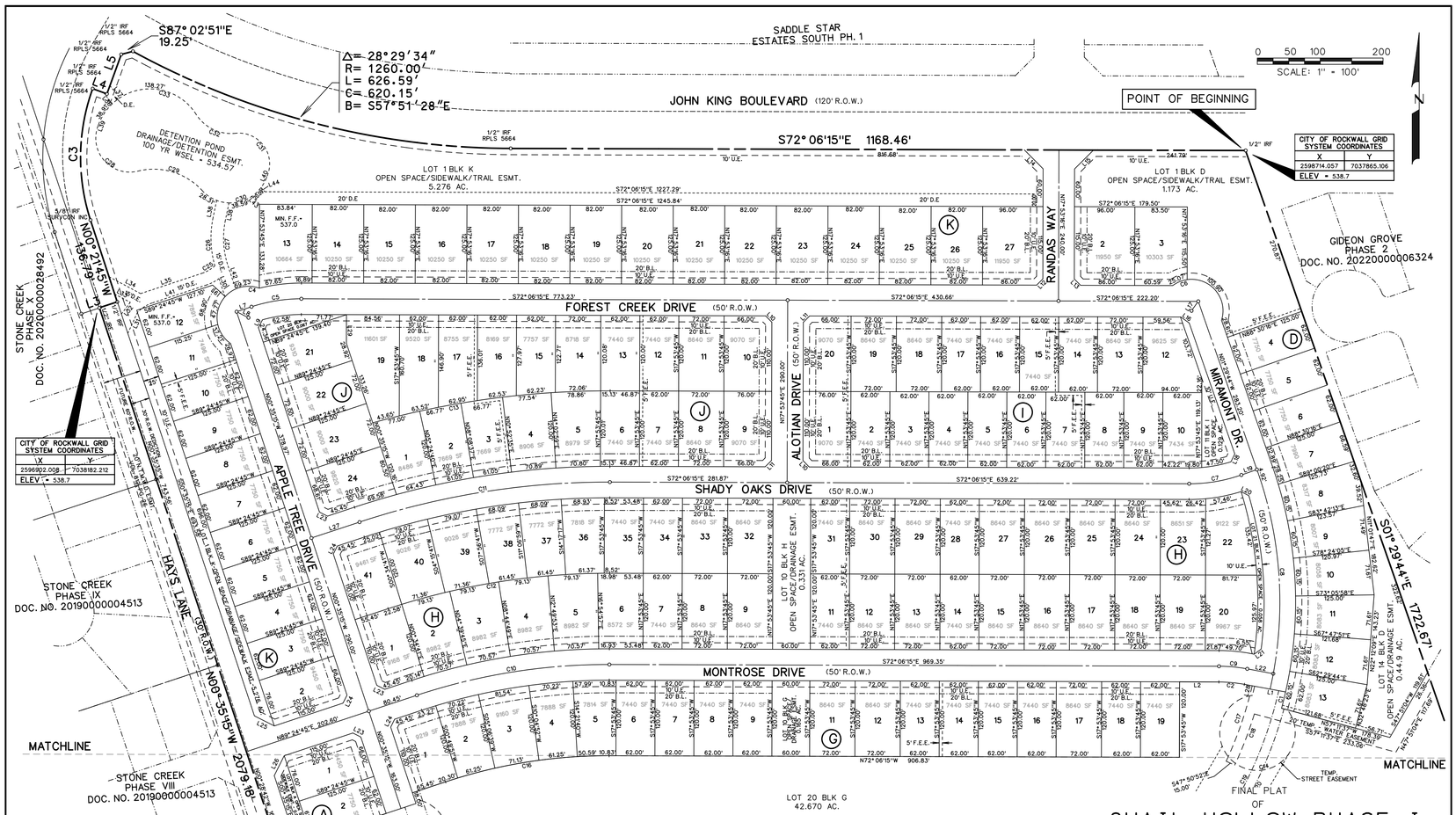
WITNESS MY HAND AND SEAL OF OFFICE, this the_____day of _____, 2023.

_____
Notary Public in and for the State of Texas

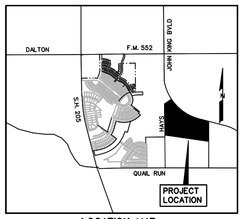
FINAL PLAT
OF
QUAIL HOLLOW PHASE I
139 LOTS, BEING 85.722 ACRES
OUT OF THE
P. BRUCE HARRISON SURVEY, ABSTRACT NO. 97
IN THE
CITY OF ROCKWALL
ROCKWALL COUNTY, TEXAS
OWNER
QUAIL HOLLOW SF, LTD.
8214 WESTCHESTER DRIVE, SUITE 900
DALLAS, TEXAS 75225
214-522-4945
PREPARED BY
CORWIN ENGINEERING, INC.
TBPELS #F-5951
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013
972-396-1200
FEBRUARY 2023

MASTER PLAT P2022-53
PRE PLAT P2022-37
CASE NO. P2023-002

SHEET 3 OF 3



CORWIN JOB #17039



LOCATION MAP
N.T.S.

NOTES

1. Bearings are referenced to a 85.7256 acre tract, as recorded in Deed No. in the Deed Records of Rockwall County, Texas.
2. All lot lines are radial or perpendicular to the street unless otherwise noted by bearing.
3. 1/2" iron rods with "CORWIN ENGR. INC." caps set at all boundary corners, block corners, points of curvature, points of tangency, and angle points in public right-of-way unless otherwise noted.
4. B.L. - Building Line.
   U.E. - Utility Easements.
   C.M. - Controlling Monument.
   D.E. - Drainage Easement.
   S.S.E. - Sanitary Sewer Easement.
   F.E.E. - Farmers Electric Easement.
5. The HOA will be responsible for maintaining repairing or replacing the open space/drainage easement lots.
6. All non-standard decorative street signs, light poles/post, hardware, attachments, foundations, etc. shall be owned, maintained, repaired and replaced by the HOA.
7. All landscape, drainage and detention easements are to be owned, maintained, repaired and replaced by the Homeowners Association.

OWNER
QUAIL HOLLOW SF, LTD.
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DALLAS, TEXAS 75225
214-522-4945

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FEBRUARY 2023 SCALE 1" = 100'

MASTER PLAT P2022-53
PRE PLAT P2022-37
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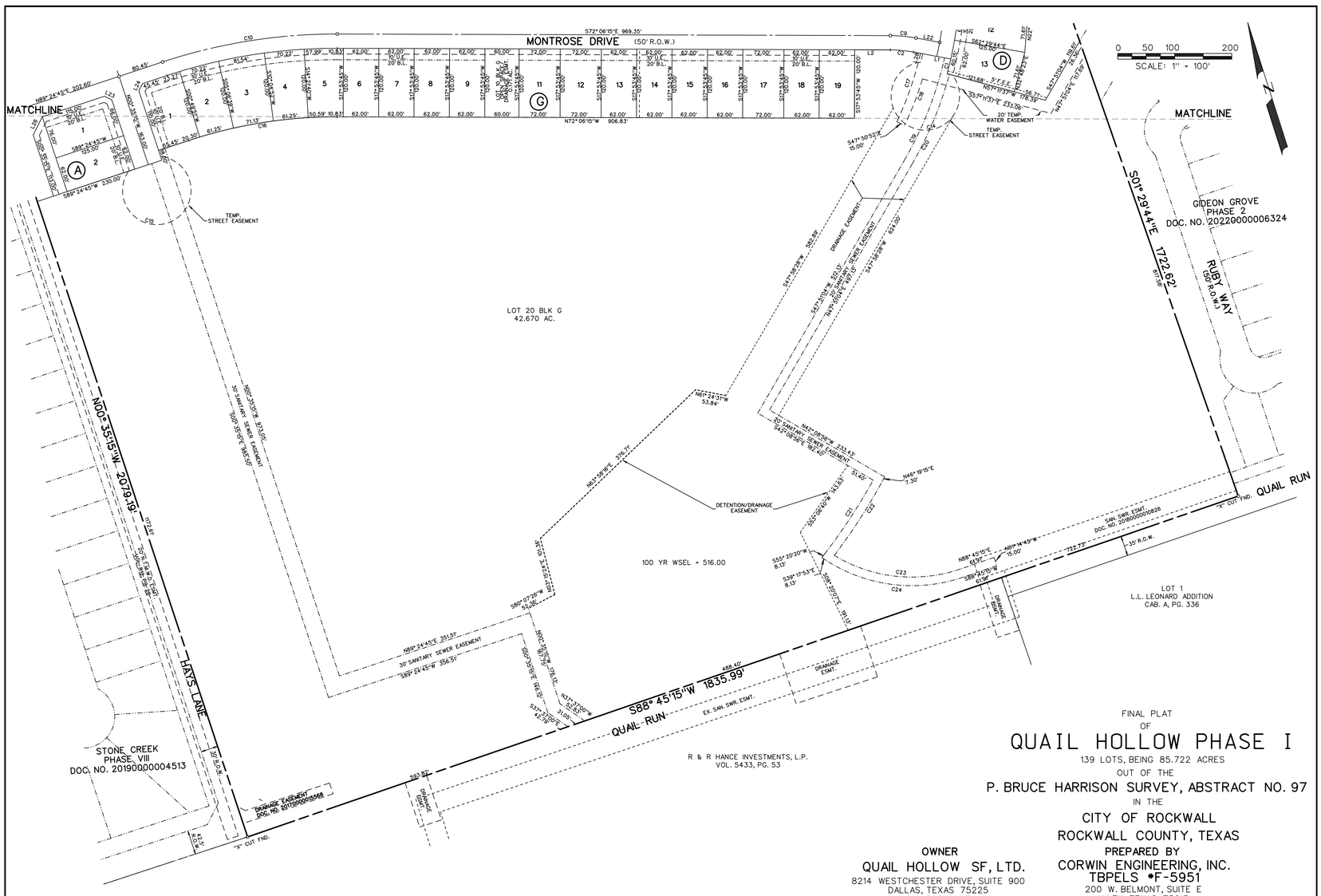
SHEET 1 OF 3



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FEBRUARY 2023

MASTER PLAT P2022-53
PRE PLAT P2022-37
CASE NO. P2023-002

GENERAL ITEMS

1. All construction shall conform to the requirements set forth in the City of Rockwall's Engineering Department's "Standards of Design and Construction" and the "Standard Specifications for Public Works Construction" by the North Texas Central Council of Governments, 5th edition amended by the City of Rockwall. The CONTRACTOR shall reference the latest City of Rockwall standard details provided in the Rockwall Engineering Departments "Standards of Design and Construction" manual for details not provided in these plans. The CONTRACTOR shall possess one set of the NCTCOG Standard Specifications and Details and the City of Rockwall's "Standards of Design and Construction" manual on the project site at all times
2. Where any conflicting notes, details or specifications occur in the plans the City of Rockwall General Construction Notes, Standards, Details and Specifications shall govern unless detail or specification is more strict.
3. The City of Rockwall Engineering Departments "Standards of Design and Construction" can be found online at: http://www.rockwall.com/engr.asp
4. All communication between the City and the CONTRACTOR shall be through the Engineering Construction Inspector and City Engineer or designated representative only. It is the responsibility of the CONTRACTOR to contact the appropriate department for inspections that do not fall under this approved engineering plan set.
5. Prior to construction, CONTRACTOR shall have in their possession all necessary permits, plans, licenses, etc.
6. The CONTRACTOR shall have at least one original stamped and signed set of approved engineering plans and specifications on-site and in their possession at all times. A stop work order will be issued if items are not on-site. Copies of the approved plans will not be substituted for the required original "approved plans to be on-site".
7. All material submittals, concrete batch designs and shop drawings required for City review and approval shall be submitted by the CONTRACTOR to the City sufficiently in advance of scheduled construction to allow no less than 10 business days for review and response by the City.
8. All site dimensions are referenced to the face of curb or edge of pavement unless otherwise noted.
9. The City requires ten (10%) percent-two (2) year maintenance bond for paving, paving improvements, water systems, wastewater systems, storm sewer systems including detention systems, and associated fixtures and structures which are located within the right-of-ways or defined easements. The two (2) year maintenance bond is to state "from date of City acceptance" as the starting time.
10. A review of the site shall be conducted at twenty (20) months into the two (2) year maintenance period. The design engineer or their designated representative and the CONTRACTOR shall be present to walk the site with the City of Rockwall Engineering Inspection personnel.

EROSION CONTROL & VEGETATION

1. The CONTRACTOR or developer shall be responsible, as the entity exercising operational control, for all permitting as required by the Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ). This includes, but is not limited to, preparation of the Storm Water Pollution Prevention Plan (SWPPP), the Construction Site Notice (CSN), the Notice of Intent (NOI), the Notice of Termination (NOT) and any Notice of Change (NOC) and is required to pay all associated fees
2. Erosion control devices as shown on the erosion control plan for the project shall be installed prior to the start of land disturbing activities.
3. All erosion control devices are to be installed in accordance with the approved plans, specifications and Storm Water Pollution Prevention Plan (SWPPP) for the project. Erosion control devices shall be placed and in working order prior to start of construction. Changes are to be reviewed and approved by the design engineer and the City of Rockwall prior to implementation.
4. If the Erosion Control Plans and Storm Water Pollution Prevention Plan (SWPPP) as approved cannot appropriately control erosion and off-site sedimentation from the project, the erosion control plan and/or the SWPPP is required to be revised and any changes reported to the Texas Commission on Environmental Quality (TCEQ), when applicable.
5. All erosion control devices shall be inspected weekly by the CONTRACTOR and after all major rain events, or more frequently as dictated in the project Storm Water Pollution Prevention Plan (SWPPP). CONTRACTOR shall provide copies of inspection's reports to the engineering inspection after each inspection.
6. The CONTRACTOR shall not dispose of waste and any materials into streams, waterways or floodplains. The CONTRACTOR shall secure all excavation at the end of each day and dispose of all excess materials.
7. CONTRACTOR shall take all available precautions to control dust. CONTRACTOR shall control dust by sprinkling water or other means as approved by the City Engineer.
8. CONTRACTOR shall establish grass and maintain the seeded area, including watering, until a "Permanent Stand of Grass" is obtained at which time the project will be accepted by the City. A "Stand of Grass" (not winter rye or weeds) shall consist of 75% to 80% coverage of all disturbed areas and a minimum of one-inch (1") in height as determined by the City. No bare spots will be allowed. Re-seeding will be required in all washed areas and areas that don't grow.
9. All City right-of-ways shall be sodded if disturbed. No artificial grass is allowed in any City right-of-way and/or easements.
10. All adjacent streets/alleys shall be kept clean at all times
11. CONTRACTOR shall keep construction site clean at all times, immediately contain all debris and trash, all debris and trash shall be removed at the end of each work day, and all vegetation on the construction site 10-inches or taller in height must be cut immediately.
12. Suspension of all construction activities for the project will be enforced by the City if any erosion control requirements are not meet. Work may commence after deficiency has been rectified.
13. During construction of the project, all soil stockpiles and borrow areas shall be stabilized or protected with sediment trapping measures. The CONTRACTOR is responsible for the temporary protection and permanent stabilization of all soil stockpiles on-site as well as borrow areas and soil intentionally transported from the project site.
14. Where construction vehicles access routes intersect paved or public roads/alleys, construction entrances shall be installed to minimize the transport of sediment by vehicular tracking onto paved surfaces. Where sediment is transferred onto paved or public surfaces, the surface shall be immediately cleaned. Sediment shall be removed from the surface by shoveling or sweeping and transported to a sediment disposal area. Pavement washing shall be allowed only after sediment is removed in this manner.
15. All drainage inlets shall be protected from siltation, ineffective or unmaintained protection devices shall be immediately replaced and the inlet and storm system cleaned. Flushing is not an acceptable method of cleaning.
16. During all dewatering operations, water shall be pumped into an approved filtering device prior to discharge into a receiving outlet.

TRAFFIC CONTROL

1. All new Detouring or Traffic Control Plans are required to be submitted to the City for review and approval a minimum of 21 calendar days prior to planned day of implementation.
2. When the normal function of the roadway is suspended through closure of any portion of the right-of-way, temporary construction work zone traffic control devices shall be installed to effectively guide the motoring public through the area. Consideration for road user safety, worker safety, and the efficiency of road user flow is an integral element of every traffic control zone.
3. All traffic control plans shall be prepared and submitted to the Engineering Department in accordance with the standards identified in Part VI of the most recent edition of the TMUTCD. Lane closures will not occur on roadways without an approval from the Rockwall Engineering Department and an approved traffic control plan. Traffic control plans shall be required on all roadways as determined by the City Engineer or the designated representative.
4. All traffic control plans must be prepared, signed, and sealed by an individual that is licensed as a professional engineer in the State of Texas. All traffic control plans and copies of work zone certification must be submitted for review and approval a minimum of three (3) weeks prior to the anticipated temporary traffic control.
5. The CONTRACTOR executing the traffic control plan shall notify all affected property owners two (2) weeks prior to any the closures in writing and verbally.
6. Any deviation from an approved traffic control plan must be reviewed by the City Engineer or the designated representative. If an approved traffic control plan is not adhered to, the CONTRACTOR will first receive a verbal warning and be required to correct the problem immediately. If the deviation is not corrected, all construction work will be suspended, the lane closure will be removed, and the roadway opened to traffic.
7. All temporary traffic control devices shall be removed as soon as practical when they are no longer needed. When work is suspended for short periods of time at the end of the workday, all temporary traffic control devices that are no longer appropriate shall be removed or covered. The first violation of this provision will result in a verbal warning to the construction foreman. Subsequent violations will result in suspension of all work at the job site for a minimum of 48 hours. All contractors working on City funded projects will be charged one working day for each 24 hour closure.
8. Lane closures on any major or minor arterial will not be permitted between the hours of 6:00 am to 9:00 am and 3:30 pm to 7:00 pm. Where lane closures are needed in a school area, they will not be permitted during peak hours of 7:00 am – 9:00 am and 3:00 pm to 5:00 pm. Closures may be adjusted according to the actual start-finish times of the actual school with approval by the City Engineer. The first violation of this provision will result in a verbal warning to the construction foreman. Subsequent violations will result in suspension of all work at the job site for a minimum of 48 hours. All contractors working on City funded projects will be charged one working day for each 24 hour closure of a roadway whether they are working or not.
9. No traffic signs shall be taken down without permission from the City.
10. No street/roadway will be allowed to be fully closed.

UTILITY LINE LOCATES

1. It is the CONTRACTOR's responsibility to notify utility companies to arrange for utility locates at least 48 hours prior to beginning construction. The completeness and accuracy of the utility data shown on the plans is not guaranteed by the design engineer or the City. The CONTRACTOR is responsible for verifying the depth and location of existing underground utilities proper to excavating, trenching, or drilling and shall be required to take any precautionary measures to protect all lines shown and .or any other underground utilities not on record or not shown on the plans.
2. The CONTRACTOR shall be responsible for damages to utilities
3. CONTRACTOR shall adjust all City of Rockwall utilities to the final grades.
4. All utilities shall be placed underground.
5. CONTRACTOR shall be responsible for the protection of all existing main lines and service lines crossed or exposed by construction operations. Where existing mains or service lines are cut, broken or damaged, the CONTRACTOR shall immediately make repairs to or replace the entire service line with same type of original construction or better. The City of Rockwall can and will intervene to restore service if deemed necessary and charge the CONTRACTOR for labor, equipment, material and loss of water if repairs aren't made in a timely manner by the CONTRACTOR.
6. The City of Rockwall (City utilities) is not part of the Dig Tess or Texas one Call – 811 – line locate system. All City of Rockwall utility line locates are to be scheduled with the City of Rockwall Service Center. 972-771-7730. A 48-hour advance notice is required for all non-emergency line locates.
7. Underground utility lines shall be installed in accordance with the following standards in addition to other applicable criteria:
   a. No more than 500 linear feet of trench may be opened at one time.
   b. Material used for backfilling trenches shall be properly compacted to 95% standard density in order to minimize erosion, settlement, and promote stabilization that the geotechnical engineer recommends.
   c. Applicable safety regulations shall be complied with.
11. This plan details pipes up to 5 feet from the building. Refer to the building plans for building connections. CONTRACTOR shall supply and install pipe adapters as necessary.
12. All underground lines shall be installed, inspected, and approved prior to backfilling.
13. All concrete encasement shall have a minimum of 28 days compressive strength at 3,000 psi (min. 5.5 sack mix).

WATER LINE NOTES

1. The CONTRACTOR shall maintain existing water service at all times during construction.
2. Proposed water lines shall be AWWA C900-16 PVC Pipe (blue in color) for all sizes, DR 14 (PC 305) for pipeline sizes 12-inch and smaller, and DR 18 (PC 235) for 14-inch and larger water pipelines unless otherwise shown on water plan and profiles sheets. Proposed water lines shall be constructed with minimum cover of 4 feet for 6-inch through 8-inch, 5 feet for 12-inch through 18-inch and 6 feet for 20-inch and larger.
3. Proposed water line embedment shall be NCTCOG Class 'B-3' as amended by the City of Rockwall's engineering standards of design and construction manual.
4. CONTRACTOR shall coordinate the shutting down of all water lines with the City of Rockwall Engineering Inspector and Water Department. The City shall operate all water valves. Allow 5 business days from the date of notice to allow City personnel time to schedule a shut down. Two additional days are required for the CONTRACTOR to notify residents in writing of the shut down after the impacted area has been identified. Water shut downs impacting businesses during their normal operation hours is not allowed. CONTRACTOR is required to coordinate with the Rockwall Fire Department regarding any fire watch requirements as well as any costs incurred when the loss of fire protection to a structure occurs.
5. CONTRACTOR shall furnish and install gaskets on water lines between all dissimilar metals and at valves (both existing and proposed).
6. All fire hydrants and valves removed and salvaged shall be returned to the City of Rockwall Municipal Service Center.
7. Blue EMS pads shall be installed at every change in direction, valve, curb stop and service tap on the proposed water line and every 250'.
8. All water valve hardware and valve extensions, bolts, nuts and washers shall be 316 stainless steel.
9. All fire hydrants bolts, nuts and washers that are buried shall be 316 stainless steel.
10. Abandoned water lines to remain in place shall be cut and plugged and all void spaces within the abandoned line shall be filled with grout, flowable fill or an expandable permanent foam product. Valves to be abandoned in place shall have any extensions and the valve box removed and shall be capped in concrete.
11. All fire hydrants will have a minimum of 5 feet of clearance around the appurtenance including but not limited to parking spaces and landscaping.
12. All joints are to be megalug joints with thrust blocking.
13. Water and sewer mains shall be kept 10 feet apart (parallel) or when crossing 2 feet vertical clearance.
14. CONTRACTOR shall maintain a minimum of 4 feet of cover on all water lines.
15. All domestic and irrigation services are required to have a testable backflow device with a double check valve installed per the City of Rockwall regulations at the property line and shown on plans.

WASTEWATER LINE NOTES

1. The CONTRACTOR shall maintain existing wastewater service at all times during construction.
2. Wastewater line for 4-inch through 15-inch shall be Green PVC – SDR 35 (ASTM D3034) [less 10 ft cover] and SDR 26 (ASTM D3034) [10 ft or more cover]. For 18-inch and lager wastewater line shall be Green PVC – PS 46 (ASTM F679) [less 10 ft cover] and PS 115 (ASTM F679) [10 ft or more cover]. No services will be allowed on a sanitary sewer line deeper than 10 feet.
3. Proposed wastewater line embedment shall be NCTCOG Class 'H' as amended by the City of Rockwall's public works standard design and construction manual.
4. Green EMS pads shall be installed at every 250', manhole, clean out and service lateral on proposed wastewater lines.
5. CONTRACTOR shall CCTV all existing wastewater lines that are to be abandoned to ensure that all laterals are accounted for and transferred to proposed wastewater lines prior to abandonment.
6. All abandoned wastewater and force main lines shall be cut and plugged and all void spaces within the abandoned line shall be filled with grout, flowable fill or an expandable permanent foam product.
7. Existing manholes and cleanouts not specifically called to be relocated shall be adjusted to match final grades.
8. All wastewater pipes and public services shall be inspected by photographic means (television and DVD) prior to final acceptance and after franchise utilities are installed. The CONTRACTOR shall furnish a DVD to the Engineering Construction Inspector for review. Pipes shall be cleaned prior to TV inspection of the pipes. Any sags, open joints, cracked pipes, etc. shall be repaired or removed by the CONTRACTOR at the CONTRACTOR's expense. A television survey will be performed as part of the final testing in the twentieth (20th) month of the maintenance period.
9. All manholes (public or private) shall be fitted with inflow prevention. The inflow prevention shall conform to the measures called out in standard detail R-5031.
10. All new or existing manholes being modified shall have corrosion protection being Raven Liner 405 epoxy coating, ConShield, or approved equal.. Consheild must have terracotta color dye mixed in the precast and cast-in-place concrete. Where connections to existing manholes are made the CONTRACTOR shall rehab manhole as necessary and install a 125 mil thick coating of Raven Liner 405 or approved equal.
11. All new or existing manholes that are to be placed in pavement shall be fitted with a sealed (gasketed) rim and cover to prevent inflow.
12. If an existing wastewater main or trunk line is called out to be replaced in place a wastewater bypassing pump plan shall be required and submitted to the Engineering Construction Inspector and City Engineer for approval prior to implementation. Bypass pump shall be fitted with an auto dialer and conform to the City's Noise Ordinance. Plan shall be to the City sufficiently in advance of scheduled construction to allow no less than 10 business days for review and response by the City.
13. CONTRACTOR shall maintain a minimum of 4 feet of cover on all wastewater lines.

GENERAL CONSTRUCTION NOTES
Sheet 1 of 2
October 2020

CITY OF ROCKWALL
ENGINEERING DEPARTMENT

385 S. Goliad
Rockwall, Texas 75087

P (972) 771-7746
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DEMOLITION, REMOVAL, DISPOSAL AND EXCAVATION NOTES

1. All pavements to be removed and replaced shall be saw cut to full depth along neat squared lines shown in the plans.
2. Proposed concrete pavement shall be constructed with longitudinal butt construction joints at all connections to existing concrete pavement.
3. All public concrete pavement to be removed and replaced shall be full panel replacement, 1-inch thicker and on top of 6-inch thick compacted flexbase.
4. No excess excavated material shall be deposited in low areas or along natural drainage ways without written permission from the affected property owner and the City of Rockwall. No excess excavation shall be deposited in the City Limits without a permit from the City of Rockwall. If the CONTRACTOR places excess materials in these areas without written permission, the CONTRACTOR will be responsible for all damages resulting from such fill and shall remove the material at their own cost.

PAVING AND GRADING

1. All detention systems are to be installed and verified for design compliance along with the associated storm sewer and outflow structures, prior to the start of any paving operations (including building foundations). Erosion protection shall be placed at the pond outflow structures, silt fence along the perimeter of the pond along with any of the associated erosion BMPs noted on the erosion control plan, and the sides and bottom of the detention system shall have either sod or anchored seeded curlex installed prior to any concrete placement.
2. All paving roadway, driveways, fire lanes, drive-isles, parking, dumpster pads, etc. sections shall have a minimum thickness, strength, reinforcement, joint type, joint spacing and subgrade treatment shall at a minimum conform to the City standards of Design and Construction and table below.

Street/Pavement Type	Minimum Thickness (inches)	Strength 28-Day (psi)	Minimum Cement (sacks / CY)		Steel Reinforcement	
			Machine placed	Hand Placed	Bar #	Spacing (O.C.E.W.)
Arterial	10”	3,600	6.0	6.5	#4 bars	18”
Collector	8”	3,600	6.0	6.5	#4 bars	18”
Residential	6”	3,600	6.0	6.5	#3 bars	24”
Alley	7”-5”-7”	3,600	6.0	6.5	#3 bars	24”
Fire Lane	6”	3,600	6.0	6.5	#3 bars	24”
Driveways	6”	3,600	6.0	6.5	#3 bars	24”
Barrier Free Ramps	6”	3,600	N/A	6.5	#3 bars	24”
Sidewalks	4”	3,000	N/A	5.5	#3 bars	24”
Parking Lot/Drive Aisles	5”	3,000	5.0	5.5	#3 bars	24”
Dumpster Pads	7”	3,600	6.0	6.5	#3 bars	24”

3. Reinforcing steel shall be tied (100%). Reinforcing steel shall be set on plastic chairs. Bar laps shall be minimum 30 diameters. Sawed transverse dummy joints shall be spaced every 15 feet or 1.25 time longitudinal butt joint spacing whichever is less. Sawing shall occur within 5 to 12 hours after the pour, including sealing. Otherwise, the section shall be removed and longitudinal butt joint constructed.
4. No sand shall be allowed under any paving.
5. All concrete mix design shall be submitted to the City for review and approval prior to placement.
6. Fly ash may be used in concrete pavement locations provided that the maximum cement reduction does not exceed 20% by weight per C.Y. of concrete. The fly ash replacement shall be 1.25 lbs. per 1.0 lb. cement reduction.
7. All curb and gutter shall be integral (monolithic) with the pavement.
8. All fill shall be compacted by sheep's foot roller to a minimum 95% standard proctor. Maximum loose lift for compaction shall be 8 inches. All lifts shall be tested for density by an independent laboratory. All laboratory compaction reports shall be submitted to the City Engineering Construction Inspector once results are received. All reports will be required prior to final acceptance.
9. All concrete compression tests and soil compaction/density tests are required to be submitted to the City’s Engineering Inspector immediately upon results.
10. All proposed sidewalks shall include barrier free ramps at intersecting streets, alleys, etc. Barrier free ramps (truncated dome plate in Colonial or brick red color) shall meet current City and ADA requirements and be approved by the Texas Department of Licensing and Regulation (TDLR).
11. All public sidewalks shall be doweled into pavement where it abuts curbs and driveways. Expansion joint material shall be used at these locations.
12. All connection of proposed concrete pavement to existing concrete pavement shall include a longitudinal butt joint as the load transfer device. All longitudinal butt joints shall be clean, straight and smooth (not jagged in appearance)
13. Cracks formed in concrete pavement shall be repaired or removed by the CONTRACTOR at the City's discretion. CONTRACTOR shall replace existing concrete curbs, sidewalk, paving, a gutters as indicated on the plans and as necessary to connect to the existing infrastructure, including any damage caused by the CONTRACTOR.
14. All residential lots will require individual grading plans submitted during the building permit process that correspond with the engineered grading and drainage area plans.
15. Approval of this plan is not an authorization to grade adjacent properties when the plans or field conditions warrant off-site grading. Written permission must be obtained and signed from the affected property owner(s) and temporary construction easements may be required. The written permission shall be provided to the City as verification of approval by the adjacent property owner(s). Violation of this requirement will result in suspension of all work at the job site until issue has been rectified.
16. All cut or fill slopes of non-paved areas shall be a maximum of 4:1 and minimum of 1%.
17. CONTRACTOR agrees to repair any damage to property and the public right-of-way in accordance with the City Standards of Design and Construction.
18. CONTRACTOR shall protect all monuments, iron pins/rods, and property corners during construction.
19. CONTRACTOR shall ensure positive drainage so that runoff will drain by gravity flow to new or existing drainage inlets or sheet flow per these approved plans.

DRAINAGE / STORM SEWER NOTES

1. The CONTRACTOR shall maintain drainage at all times during construction. Ponding of water in streets, drives, trenches, etc. will not be allowed. Existing drainage ways shall not be blocked or removed unless explicitly stated in the plans or written approval is given by the City.
2. All structural concrete shall be 4200 psi compressive strength at 28 days minimum 7.0 sack mix, air entrained, unless noted otherwise. Fly ash shall not be allowed in any structural concrete.
3. Proposed storm sewer embedment shall be NCTCOG Class 'B' as amended by the City of Rockwall's Engineering Department Standards of Design and Construction Manual.
4. All public storm pipe shall be a minimum of 18-inch reinforced concrete pipe (RCP), Class III, unless otherwise noted.
5. All storm pipe entering structures shall be grouted to assure connection at the structure is watertight.
6. All storm structures shall have a smooth uniform poured mortar invert from invert in to invert out.
7. All storm sewer manholes in paved areas shall be flush with the paving grade, and shall have traffic bearing ring and covers.
8. All storm sewer pipes and laterals shall be inspected by photographic means (television and DVD) prior to final acceptance and after franchise utilities are installed. The CONTRACTOR shall furnish a DVD to the Engineering Construction Inspector for review. Pipes shall be cleaned prior to TV inspection of the pipes. Any sags, open joints, cracked pipes, etc. shall be repaired or removed by the CONTRACTOR at the CONTRACTOR’s expense. A television survey will be performed as part of the final testing in the twentieth (20th) month of the maintenance period.

RETAINING WALLS

1. All retaining walls, regardless of height, will be reviewed and approved by the City Engineering Department
2. All retaining walls (including foundation stem walls), regardless of height, will be constructed of rock/stone/brick or rock/stone/brick faced. No smooth concrete walls are allowed. Wall materials shall be the same for all walls on the project.
3. All portions, including footings, tie-backs, and drainage backfill, of the wall shall be on-site and not encroach into any public easements or right-of-way. The entire wall shall be in one lot and shall not be installed along a lot line.
4. All walls 3 feet and taller will be designed and signed/sealed by a registered professional engineer in the State of Texas. The wall design engineer is required to inspect the wall construction and supply a signed/sealed letter of wall construction compliance to the City of Rockwall along with wall as-builts prior to City Engineering acceptance.
5. No walls are allowed in detention easements. A variance to allow retaining walls in a detention easement will require approval by the Planning and Zoning Commission with appeals being heard by the City Council.

FINAL ACCEPTANCE AND RECORD DRWINGS/AS-BUILTS

1. Final Acceptance shall occur when all the items on the Checklist for Final Acceptance have been completed and signed-off by the City. An example of the checklist for final acceptance has been included in the Appendix of the Standards of Design and Construction. Items on the checklist for final acceptance will vary per project and additional items not shown on the check list may be required.
2. After improvements have been constructed, the developer shall be responsible for providing to the City “As Built” or “Record Drawings”. The Design Engineer shall furnish all digital files of the project formatted in Auto Cad 14, or 2000 format or newer and Adobe Acrobat (.pdf) format with a CD-ROM disk or flash drive. The disk or drive shall include a full set of plans along with any landscaping, wall plans, and details sheets.
3. Submit 1-set of printed drawings of the “Record Drawings” containing copies of all sheets to the Engineering Construction Inspector for the project. The printed sheets will be reviewed by the inspector PRIOR to producing the “Record Drawing” digital files on disk or flash drive. This will allow any revisions to be addressed prior to producing the digital files.
4. Record Drawing Disk drawings shall have the Design Engineers seal, signature and must be stamped and dated as “Record Drawings” or “As Built Drawings” on all sheets.
5. The City of Rockwall will not accept any Record Drawing disk drawings which include a disclaimer. A disclaimer shall not directly or indirectly state or indicate that the design engineer or the design engineer’s surveyor/surveyors did not verify grades after construction, or that the Record Drawings were based solely on information provided by the construction contractor/contractors. Any Record Drawings which include like or similar disclaimer verbiage will not be accepted by the City of Rockwall.
6. Example of Acceptable Disclaimer: “To the best of our knowledge ABC Engineering, Inc., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.”

GENERAL CONSTRUCTION NOTES
Sheet 2 of 2
October 2020

CITY OF ROCKWALL
ENGINEERING DEPARTMENT

385 S. Goliad
Rockwall, Texas 75087

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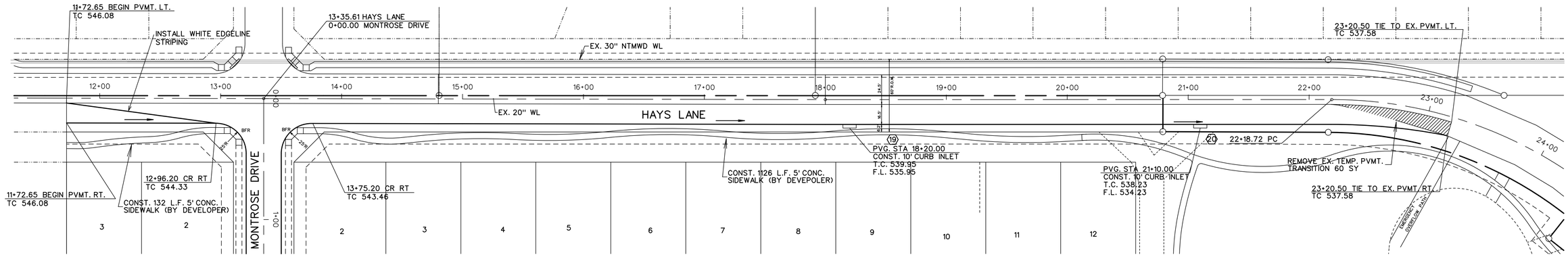
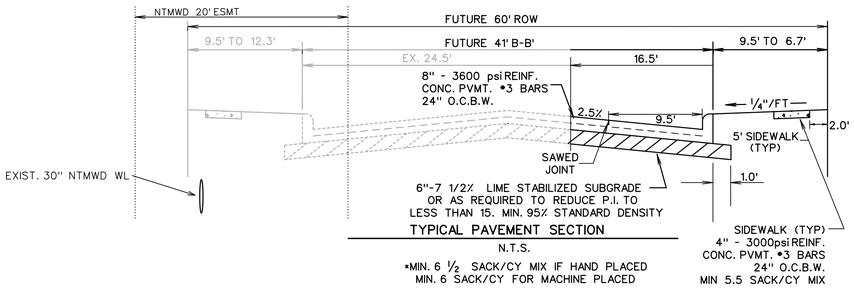




TYPICAL PAVEMENT SECTION

N.T.S.

*MIN. 6 1/2 SACK/CY MIX IF HAND PLACED
MIN. 6 SACK/CY FOR MACHINE PLACED

NOTE:
ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

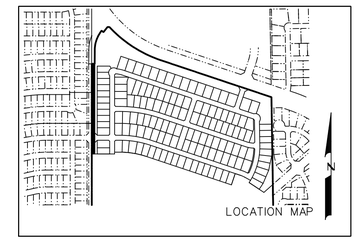
- - - - - - - SIDEWALK BY HOMEBUILDER

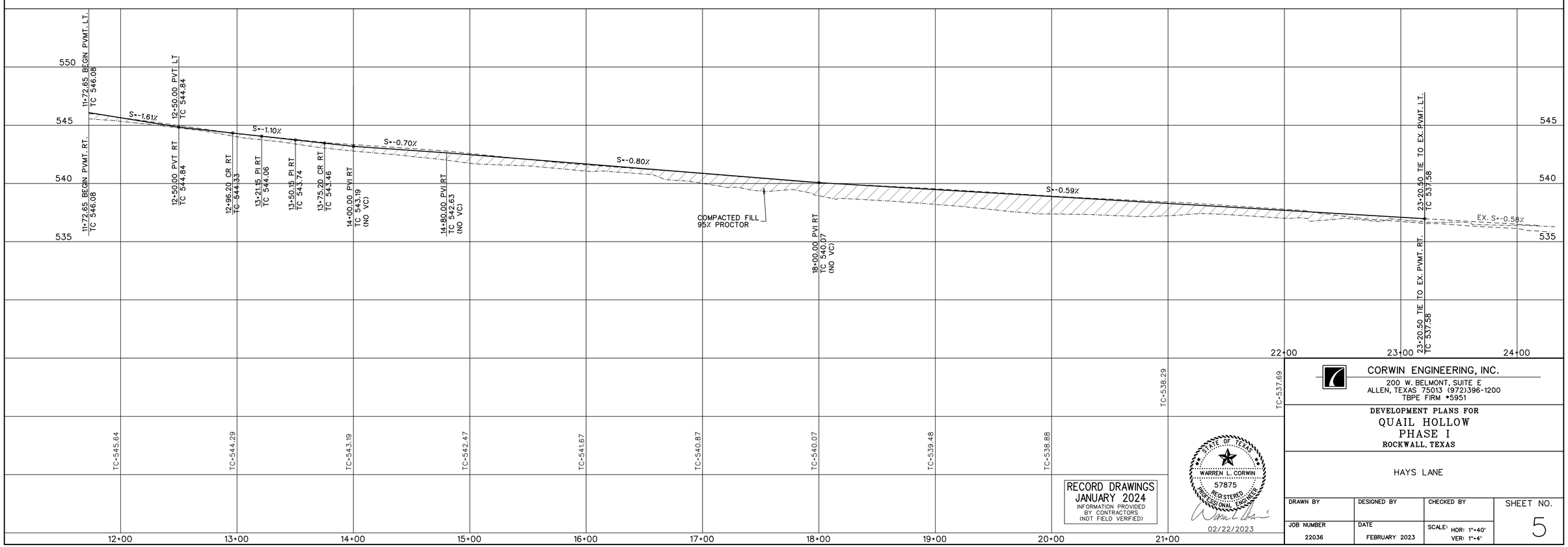
_____ SIDEWALK BY DEVELOPER

ALL ADA RAMPS TO BE BUILT BY DEVELOPER.

PAVING NOTES:

1. Street pavement cement content to be no less than 6 sacks per cubic yard for machine placed and not less than 6.5 sacks per cubic for hand placed.
2. Sidewalk cement content of not less than 5.5 per cubic yard.
3. No sand allowed under pavement or sidewalks.
4. Minimum lime content shall be 6% of dry weight of material (at least 27 lbs.SY) compacted to 95% standard density.





RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

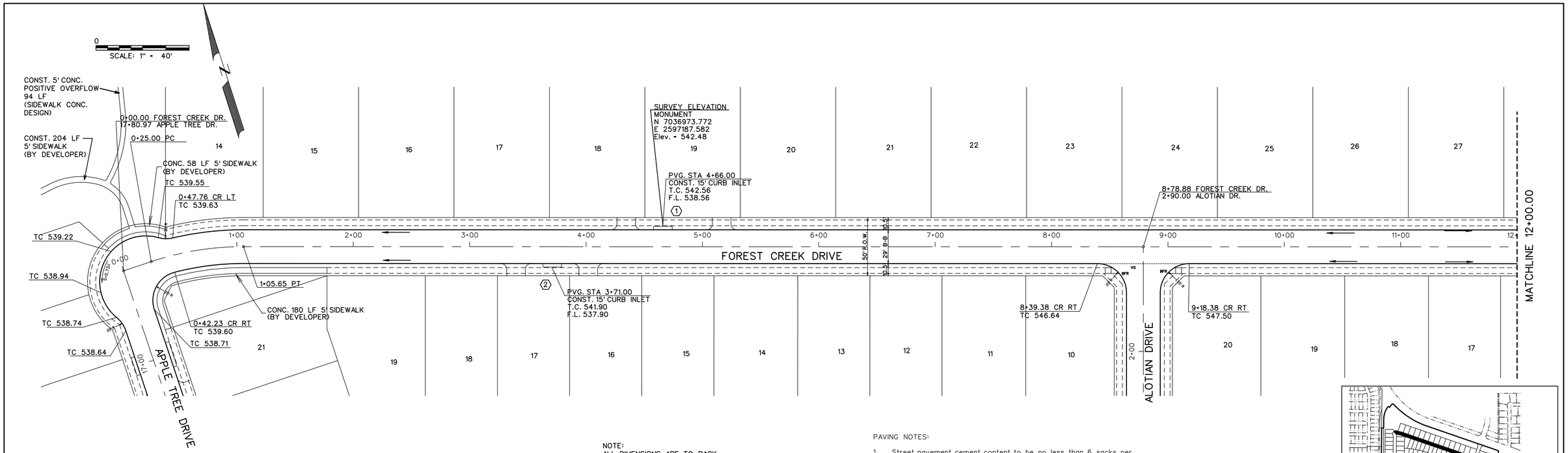
STATE OF TEXAS
WARREN L. CORWIN
57875
REGISTERED PROFESSIONAL ENGINEER
02/22/2023

CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

HAYS LANE

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	5



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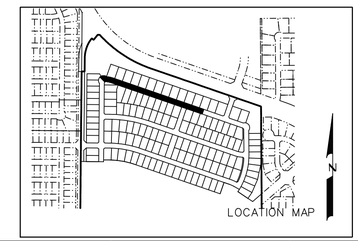
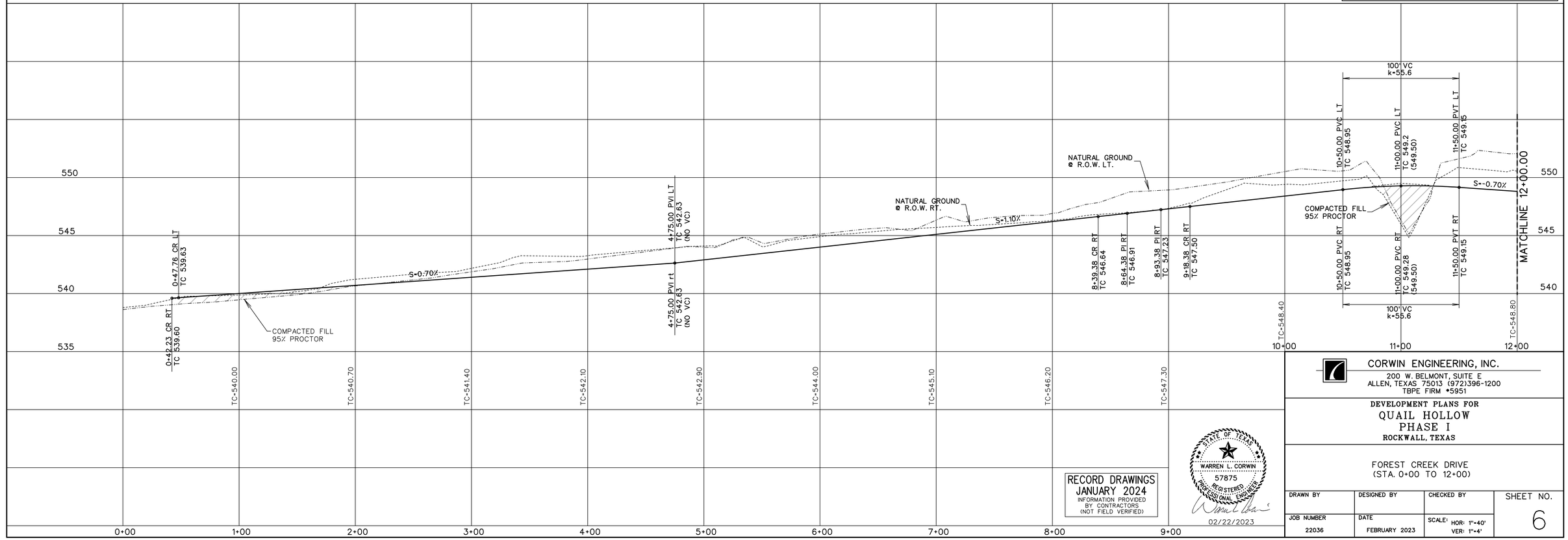




RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

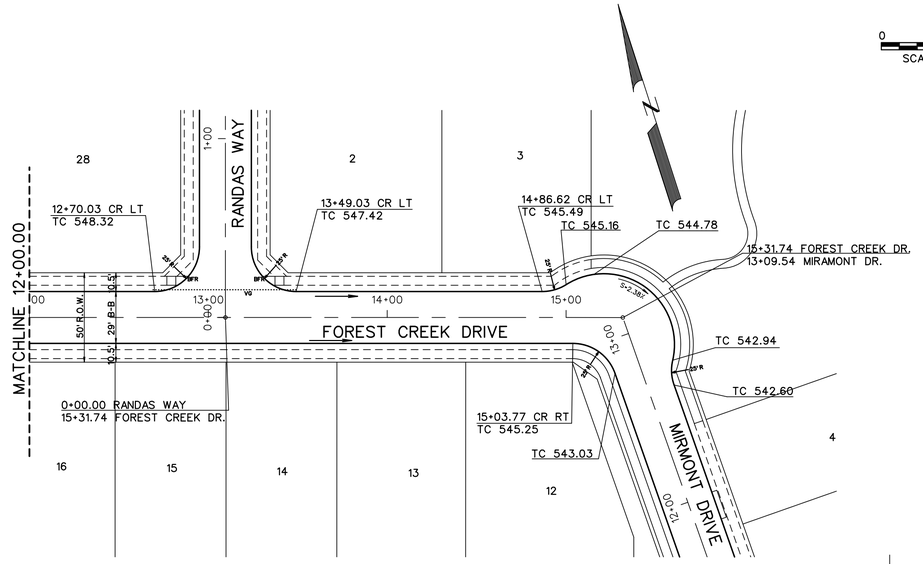
STATE OF TEXAS
WARREN L. CORWIN
57875
REGISTERED PROFESSIONAL ENGINEER
02/22/2023

CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

FOREST CREEK DRIVE
(STA. 0+00 TO 12+00)

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	6



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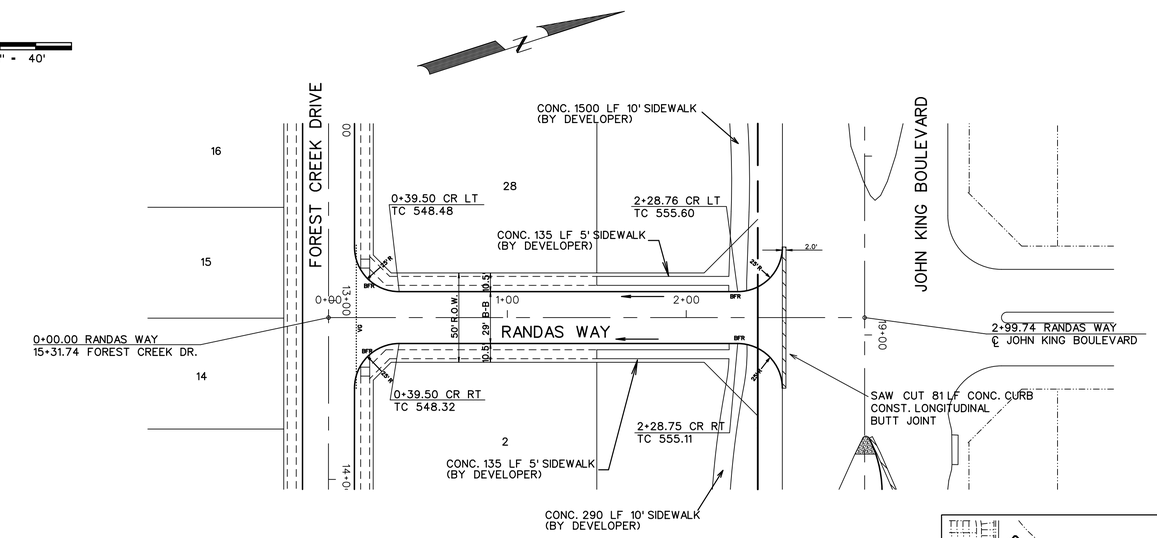
SCALE: 1" = 40'



PAVING NOTES:

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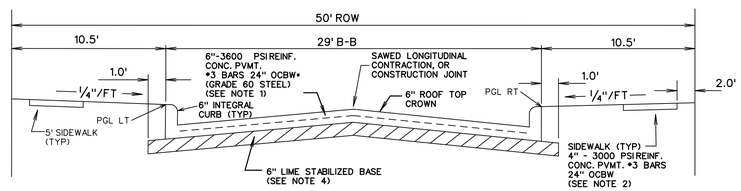
3. No sand allowed under pavement or sidewalks.
4. Minimum lime content shall be 6% of dry weight of material (at least 27 lbs.SY) compacted to 95% standard density.

NOTE:
ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

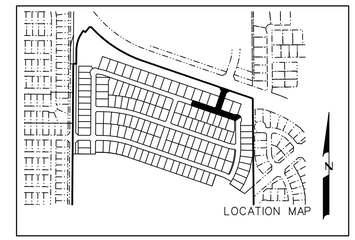
- - - - - - - - - SIDEWALK BY HOMEBUILDER
- - - - - - - - - SIDEWALK BY DEVELOPER

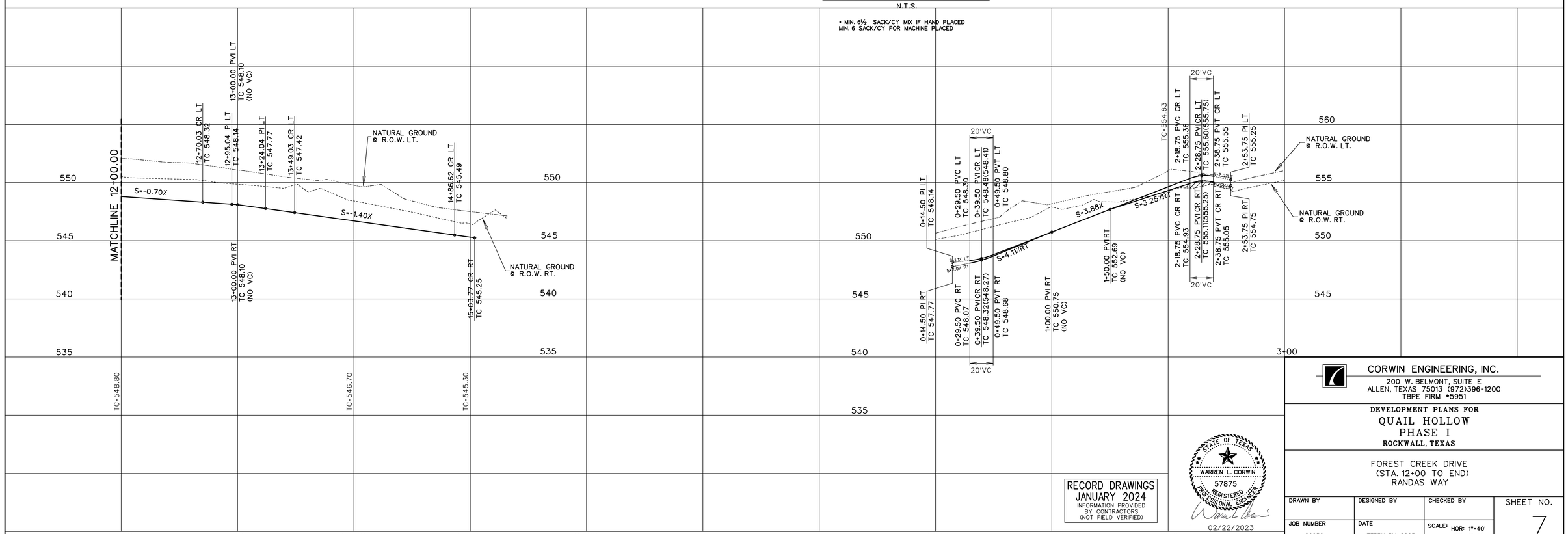
ALL ADA RAMPS TO BE BUILT BY DEVELOPER.



TYPICAL PAVEMENT SECTION (29' B-B)
N.T.S.

* MIN. 6½ SACK/CY MIX IF HAND PLACED
MIN. 6 SACK/CY FOR MACHINE PLACED





RECORD DRAWINGS
JANUARY 2024
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WARREN L. CORWIN
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CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
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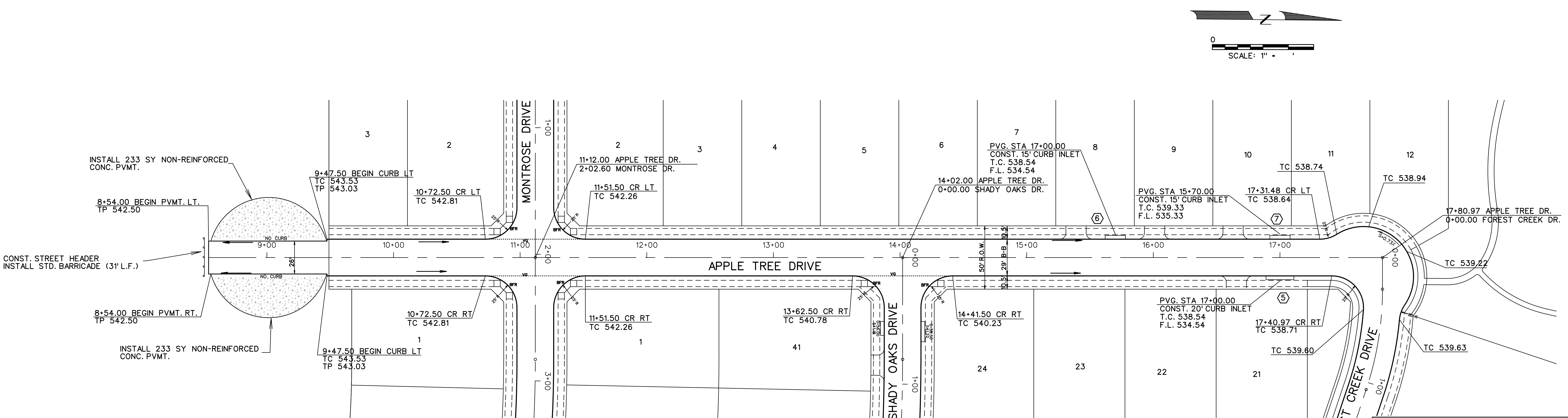
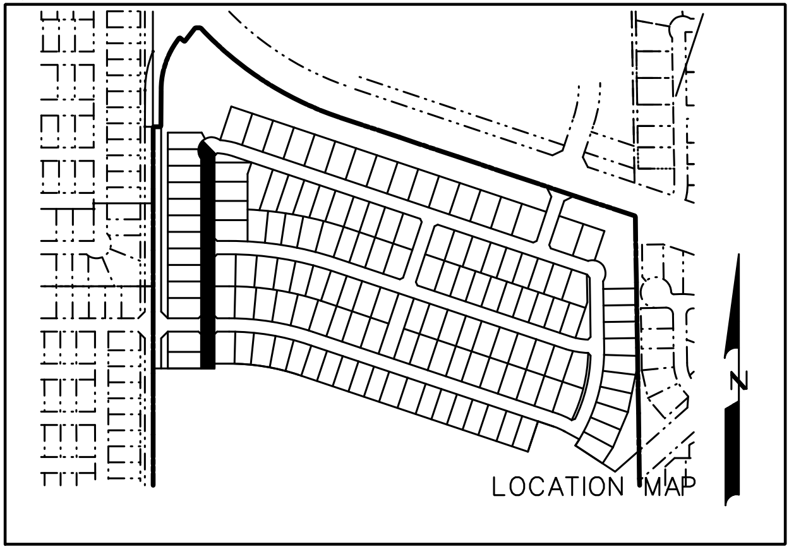
DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

FOREST CREEK DRIVE
(STA. 12+00 TO END)
RANDAS WAY

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	7




LOCATION MAP

PAVING NOTES:

1. Street pavement cement content to be no less than 6 sacks per cubic yard for machine placed and not less than 6.5 sacks per cubic for hand placed.
2. Sidewalk cement content of not less than 5.5 per cubic yard.
3. No sand allowed under pavement or sidewalks.
4. Minimum lime content shall be 6% of dry weight of material (at least 27 lbs.SY) compacted to 95% standard density.

NOTE:
ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

⸤- - -⸥ - SIDEWALK BY HOMEBUILDER
▭ - SIDEWALK BY DEVELOPER

ALL ADA RAMPS TO BE BUILT BY DEVELOPER.

RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)

WARREN L. CORWIN
57875

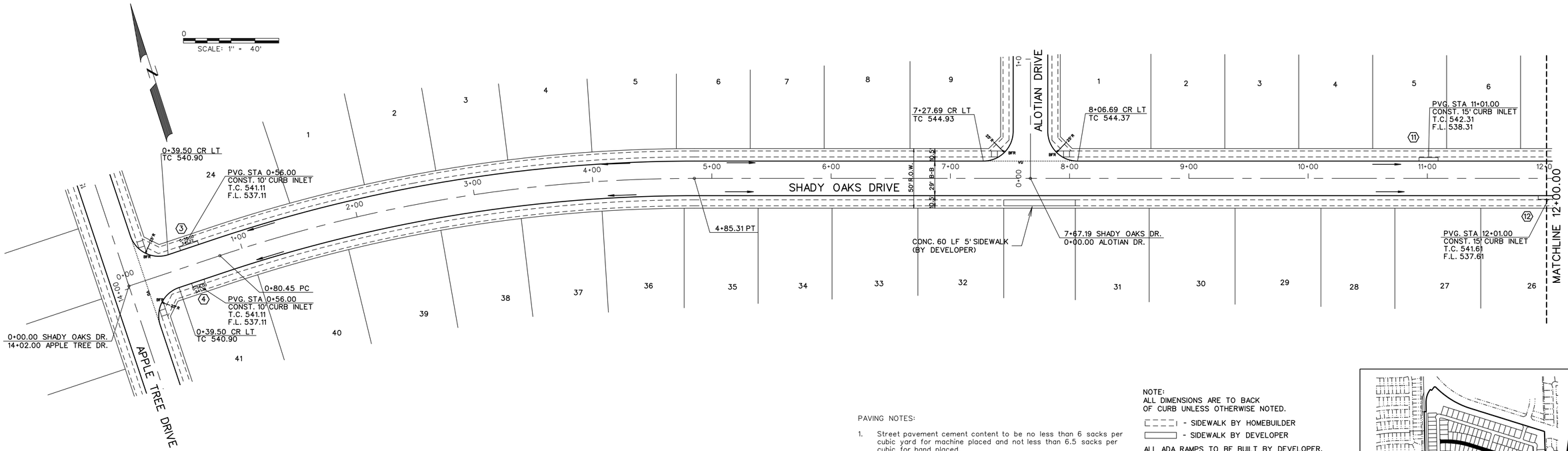
02/22/2023

CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM *5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

APPLE TREE DRIVE

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	8



PAVING NOTES:

1. Street pavement cement content to be no less than 6 sacks per cubic yard for machine placed and not less than 6.5 sacks per cubic for hand placed.
2. Sidewalk cement content of not less than 5.5 per cubic yard.
3. No sand allowed under pavement or sidewalks.
4. Minimum lime content shall be 6% of dry weight of material (at least 27 lbs.SY) compacted to 95% standard density.

NOTE:
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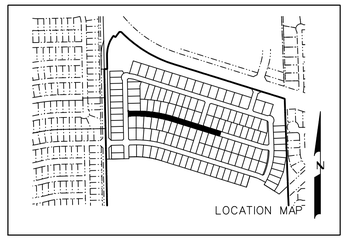
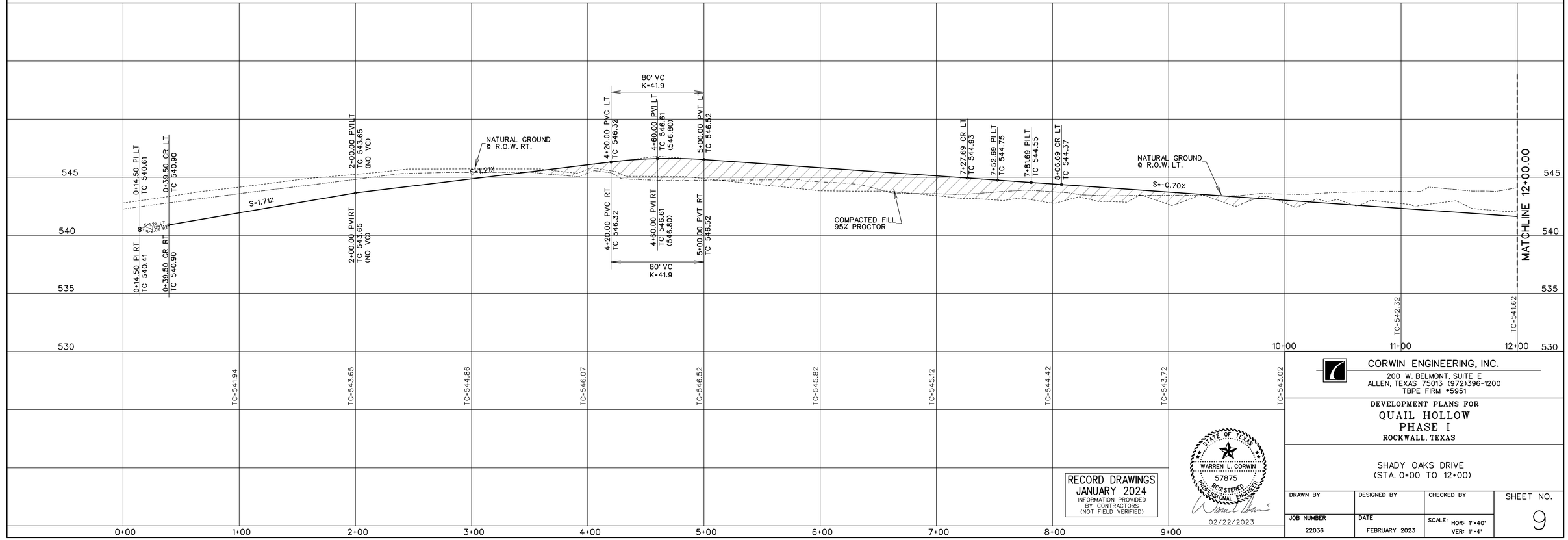
- SIDEWALK BY HOMEBUILDER
- SIDEWALK BY DEVELOPER

ALL ADA RAMPS TO BE BUILT BY DEVELOPER.





RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

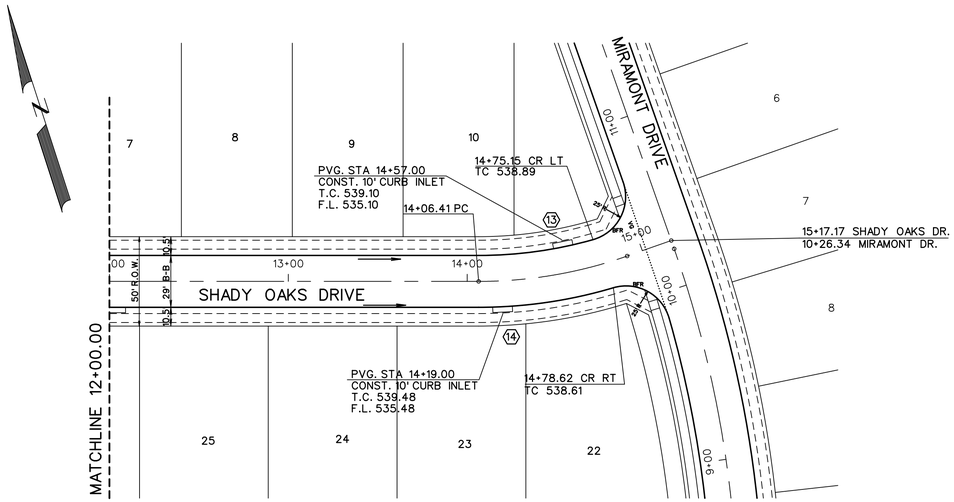
STATE OF TEXAS
WARREN L. CORWIN
57875
REGISTERED PROFESSIONAL ENGINEER
02/22/2023

CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

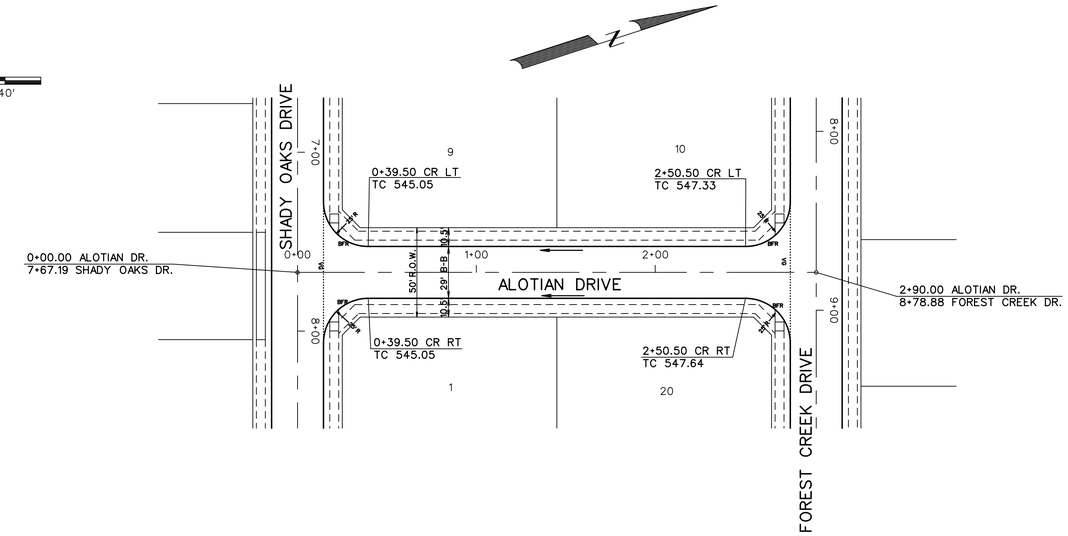
DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

SHADY OAKS DRIVE
(STA. 0+00 TO 12+00)

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	9



0
SCALE: 1" = 40'



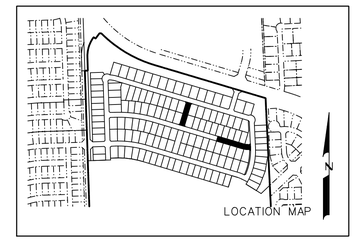
PAVING NOTES:

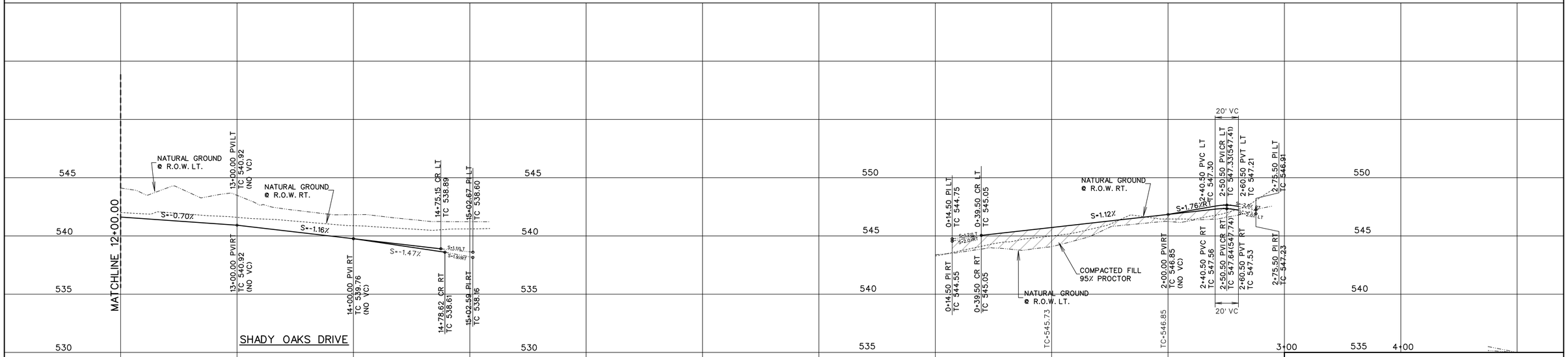
1. Street pavement cement content to be no less than 6 sacks per cubic yard for machine placed and not less than 6.5 sacks per cubic for hand placed.
2. Sidewalk cement content of not less than 5.5 per cubic yard.
3. No sand allowed under pavement or sidewalks.
4. Minimum lime content shall be 6% of dry weight of material (at least 27 lbs.SY) compacted to 95% standard density.

NOTE:
ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

- SIDEWALK BY HOMEBUILDER
- SIDEWALK BY DEVELOPER

ALL ADA RAMPS TO BE BUILT BY DEVELOPER.





RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

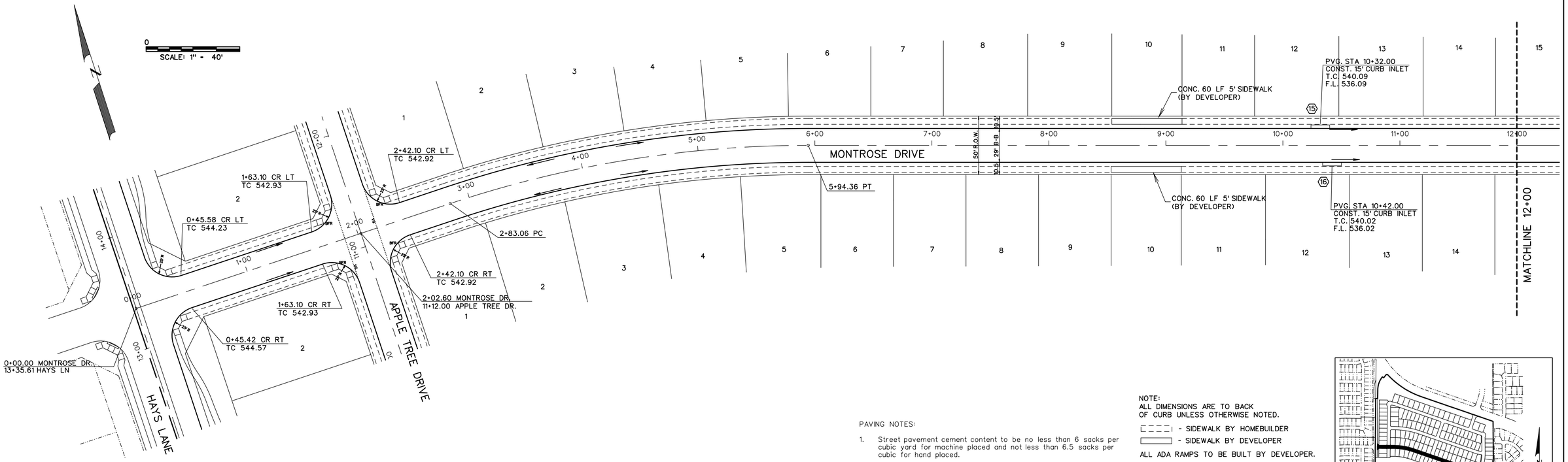
STATE OF TEXAS
WARREN L. CORWIN
57875
REGISTERED PROFESSIONAL ENGINEER
02/22/2023

CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

SHADY OAKS DRIVE
(STA. 12+00 TO END)
ALOTIAN DRIVE

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	10



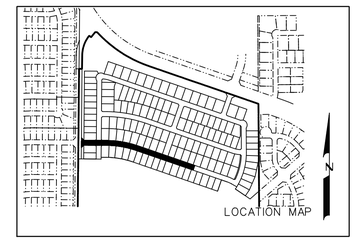
PAVING NOTES:

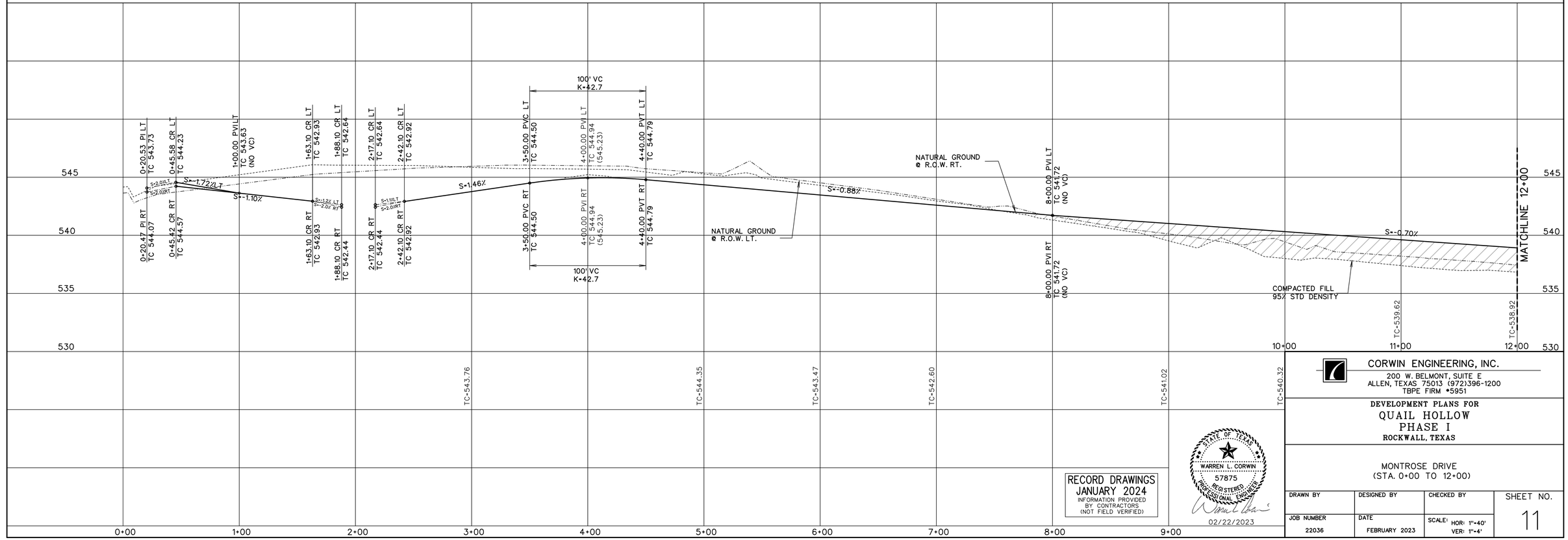
1. Street pavement cement content to be no less than 6 sacks per cubic yard for machine placed and not less than 6.5 sacks per cubic for hand placed.
2. Sidewalk cement content of not less than 5.5 per cubic yard.
3. No sand allowed under pavement or sidewalks.
4. Minimum lime content shall be 6% of dry weight of material (at least 27 lbs.SY) compacted to 95% standard density.

NOTE:
ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

- SIDEWALK BY HOMEBUILDER
- SIDEWALK BY DEVELOPER

ALL ADA RAMPS TO BE BUILT BY DEVELOPER.





RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

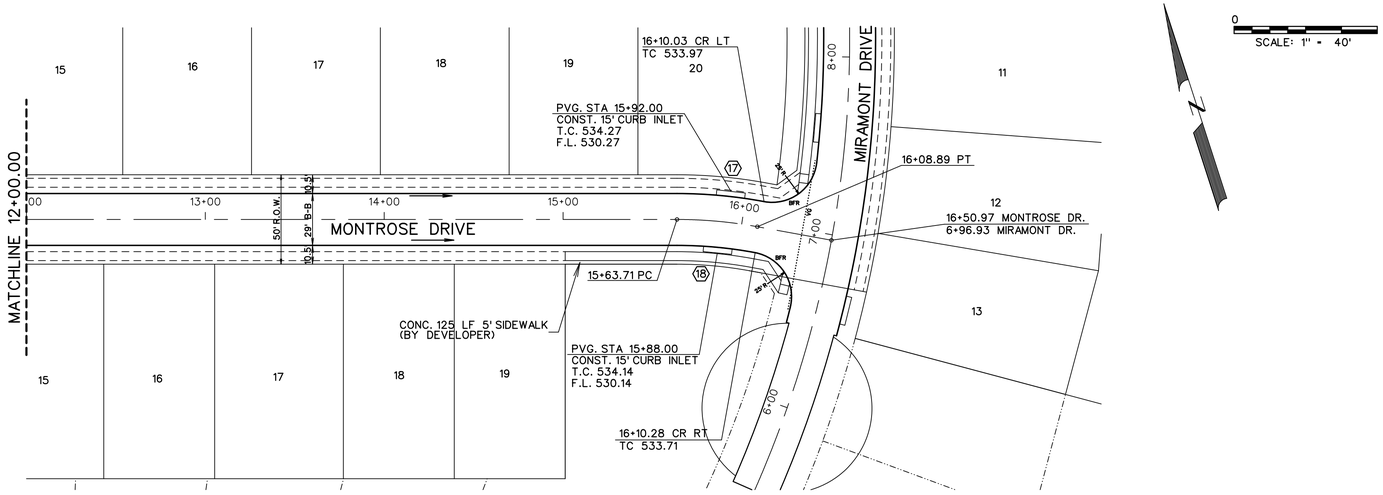
STATE OF TEXAS
WARREN L. CORWIN
57875
REGISTERED PROFESSIONAL ENGINEER
02/22/2023

CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

MONTROSE DRIVE
(STA. 0+00 TO 12+00)

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	11



PAVING NOTES:

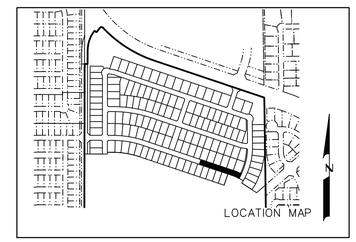
1. Street pavement cement content to be no less than 6 sacks per cubic yard for machine placed and not less than 6.5 sacks per cubic for hand placed.
2. Sidewalk cement content of not less than 5.5 per cubic yard.
3. No sand allowed under pavement or sidewalks.
4. Minimum lime content shall be 6% of dry weight of material (at least 27 lbs.SY) compacted to 95% standard density.

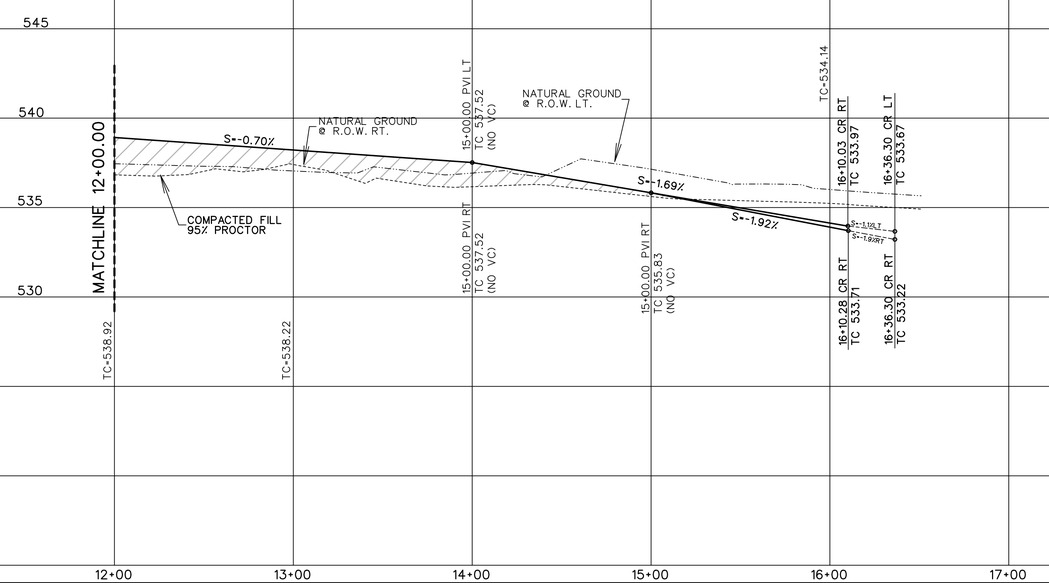
NOTE:
ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

- - - - - - - SIDEWALK BY HOMEBUILDER

_____ SIDEWALK BY DEVELOPER

ALL ADA RAMPS TO BE BUILT BY DEVELOPER.





RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

STATE OF TEXAS
WARREN L. CORWIN
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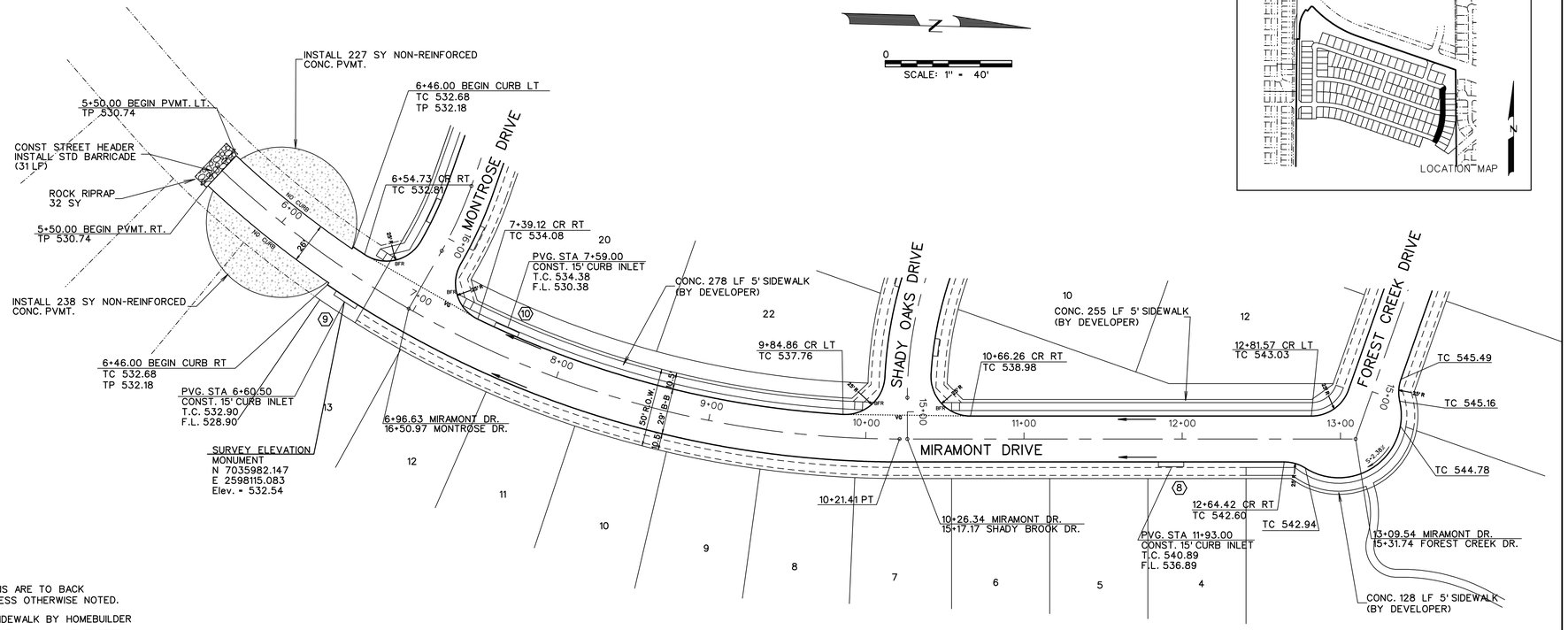
REGISTERED PROFESSIONAL ENGINEER
02/22/2023

CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

MONTROSE DRIVE
(STA. 12+00 TO END)

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	12



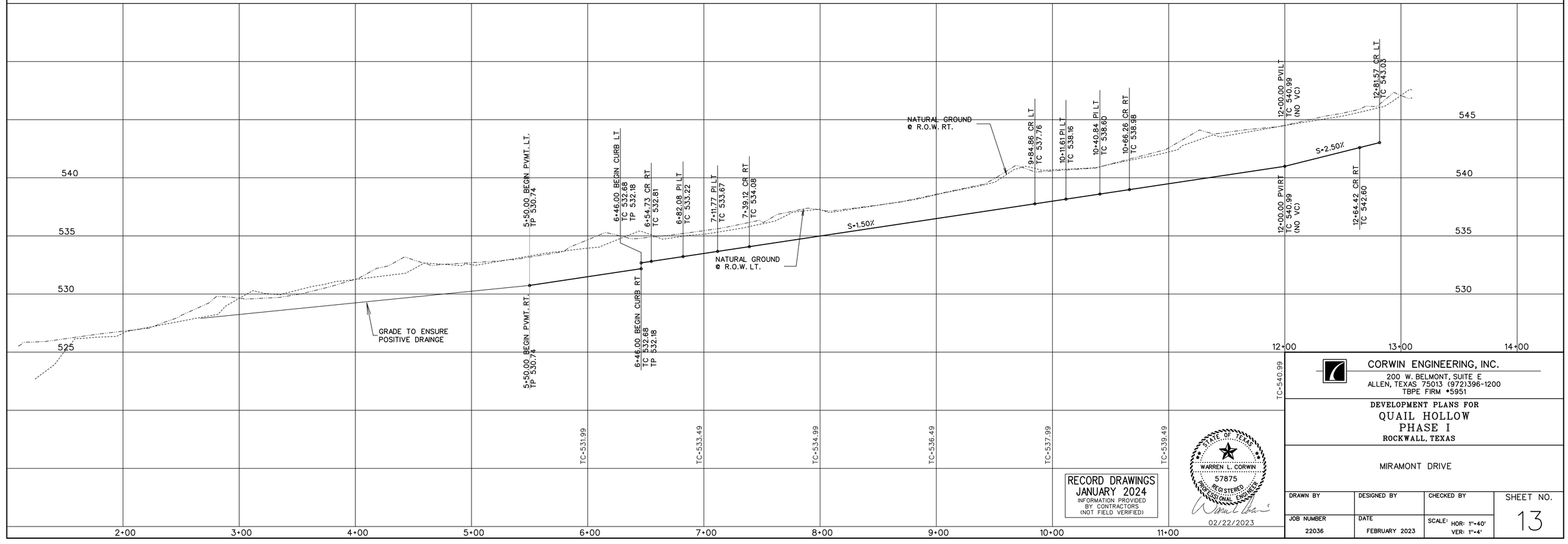
PAVING NOTES:

1. Street pavement cement content to be no less than 6 sacks per cubic yard for machine placed and not less than 6.5 sacks per cubic for hand placed.
2. Sidewalk cement content of not less than 5.5 per cubic yard.
3. No sand allowed under pavement or sidewalks.
4. Minimum lime content shall be 6% of dry weight of material (at least 27 lbs.SY) compacted to 95% standard density.

NOTE:
ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

- - - - - - - SIDEWALK BY HOMEBUILDER
_____ SIDEWALK BY DEVELOPER

ALL ADA RAMPS TO BE BUILT BY DEVELOPER.



RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

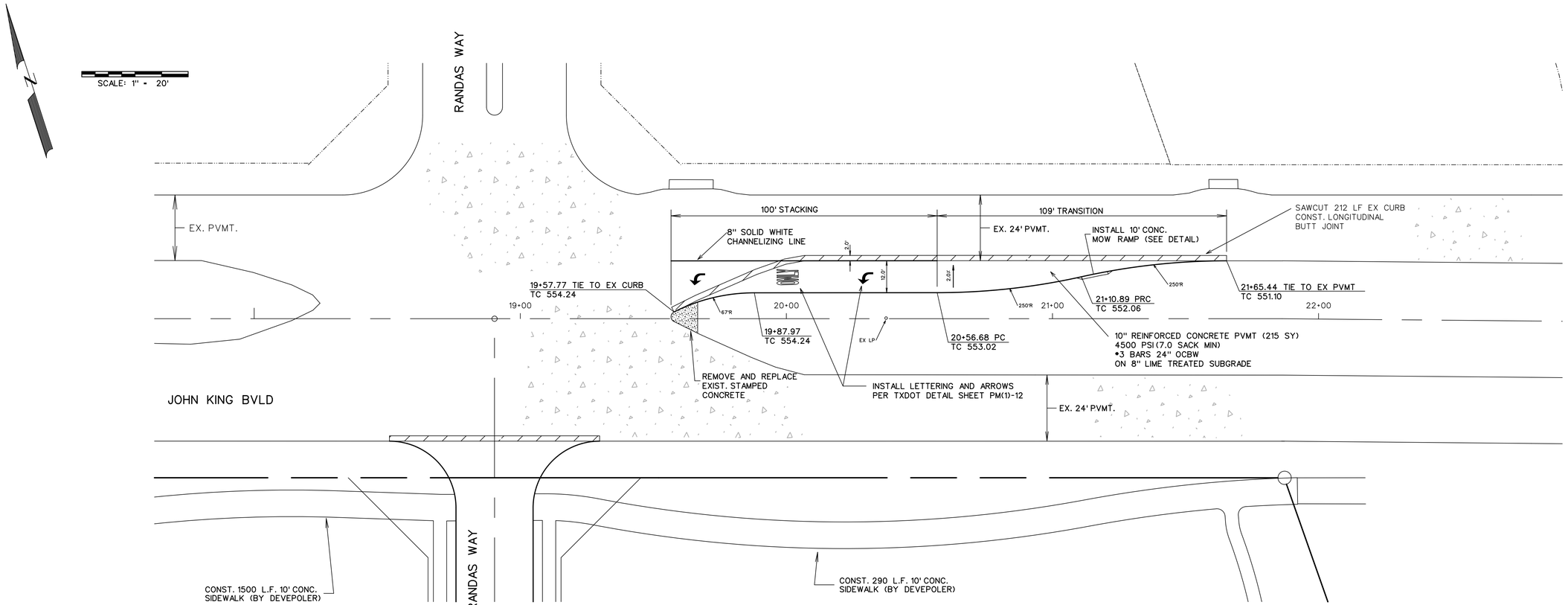
STATE OF TEXAS
WARREN L. CORWIN
57875
REGISTERED PROFESSIONAL ENGINEER
02/22/2023

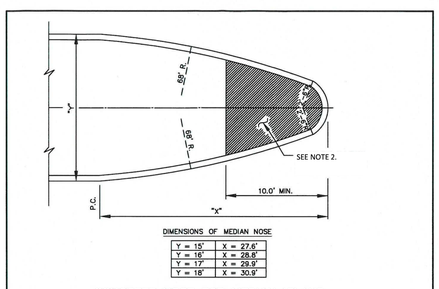
CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

MIRAMONT DRIVE

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	13



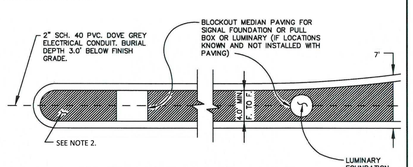


DIMENSIONS OF MEDIAN NOSE

Y = 15'	X = 27.6'
Y = 16'	X = 28.8'
Y = 17'	X = 29.9'
Y = 18'	X = 30.9'

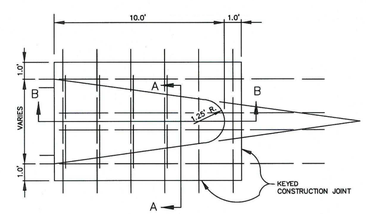
CONCRETE NOSE FOR MEDIAN ISLAND
N.T.S.

NOTES
1. LEFT TURN LANE SHALL HAVE A MOWER ACCESS RAMP.
2. MEDIAN PAVING TO BE CONSTRUCTED OF INEGRAL STAMPED & STAINED REINFORCED CONCRETE, COLOR AND PATTERN TO BE APPROVED BY THE CITY. CONCRETE TO BE MINIMUM SIX (6") INCH 3600PSI (6.5 SACK/CY) WITH #4 BARS ON 18" CENTERS.
3. STREET LIGHT POLE BASES IN MEDIAN ARE TO HAVE THIRTY-SIX (36") INCH BY THIRTY-SIX (36") INCH, FOUR (4") INCH THICK, 3000PSI REINFORCED CONCRETE MOW STRIP.

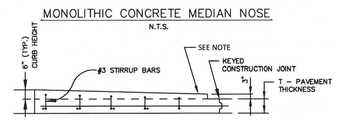


LEFT TURN LANE MEDIAN PAVEMENT
N.T.S.

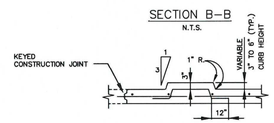
MEDIAN ISLAND PAVEMENT NOSE & LEFT TURN LANE	CITY OF ROCKWALL	STANDARD SPECIFICATION REFERENCE 305.3	
		DATE AUG. '19	STANDARD DRAWING NO. R-2130



MONOLITHIC CONCRETE MEDIAN NOSE
N.T.S.



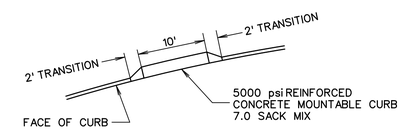
SECTION B–B
N.T.S.



SECTION A–A
N.T.S.

NOTE:
1. MEDIAN NOSE PAVEMENT STRENGTH SHALL MATCH THAT OF STREET PAVING.
2. MONOLITHIC NOSE REQUIRED WHEN LESS THAN 6.0' FACE TO FACE.
3. REINFORCEMENT BARS SHALL MATCH THOSE IN PAVEMENT.

MEDIAN ISLAND PAVEMENT MONOLITHIC CONCRETE NOSE	CITY OF ROCKWALL	STANDARD SPECIFICATION REFERENCE 305.3	
		DATE AUG. '19	STANDARD DRAWING NO. R-2140



MOW RAMP

RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

STATE OF TEXAS
WARREN L. CORWIN
57875
REGISTERED PROFESSIONAL ENGINEER
02/22/2023

CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

JOHN KING BOULEVARD
LEFT TURN LANE

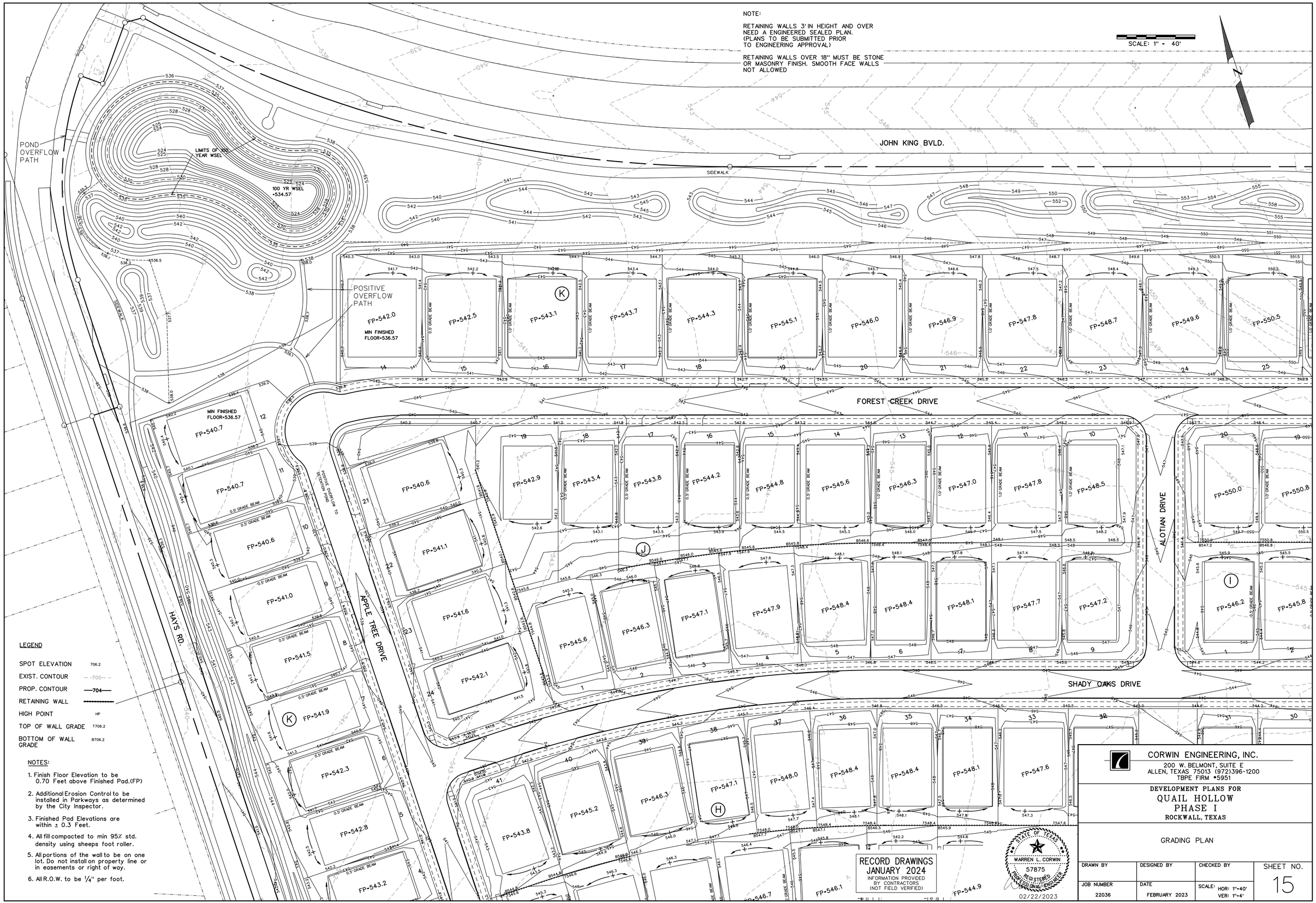
DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: 1"=20'	14

NOTE:

RETAINING WALLS 3' IN HEIGHT AND OVER NEED A ENGINEERED SEALED PLAN. (PLANS TO BE SUBMITTED PRIOR TO ENGINEERING APPROVAL)

RETAINING WALLS OVER 18" MUST BE STONE OR MASONRY FINISH. SMOOTH FACE WALLS NOT ALLOWED

SCALE: 1" = 40'



LEGEND

SPOT ELEVATION	706.2
EXIST. CONTOUR	700
PROP. CONTOUR	704
RETAINING WALL	
HIGH POINT	HP
TOP OF WALL GRADE	T706.2
BOTTOM OF WALL GRADE	B706.2

NOTES:

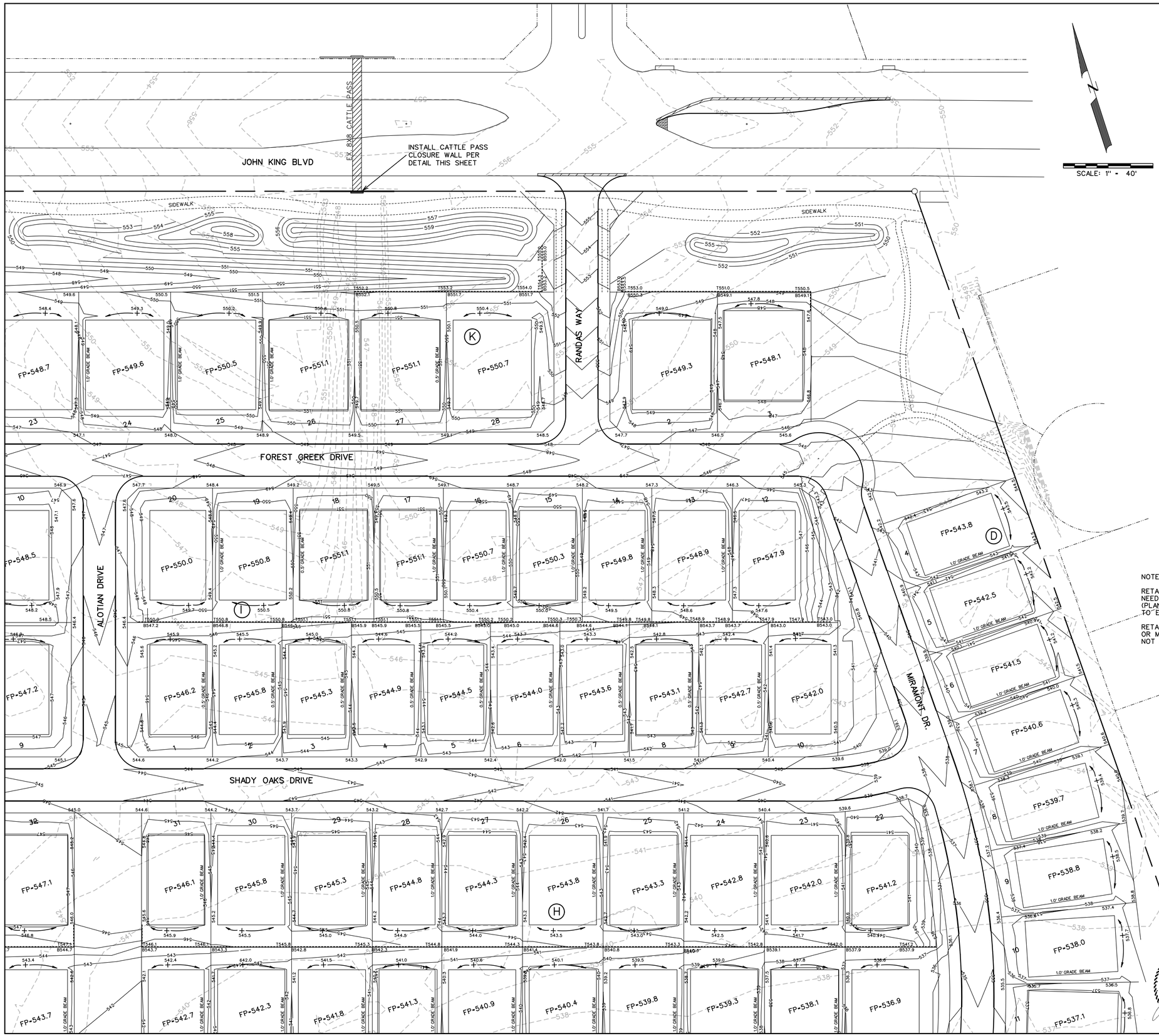
1. Finish Floor Elevation to be 0.70 Feet above Finished Pad.(FP)
2. Additional Erosion Control to be installed in Parkways as determined by the City Inspector.
3. Finished Pad Elevations are within ± 0.3 Feet.
4. All fill compacted to min 95% std. density using sheeps foot roller.
5. All portions of the wall to be on one lot. Do not install on property line or in easements or right of way.
6. All R.O.W. to be ¼" per foot.

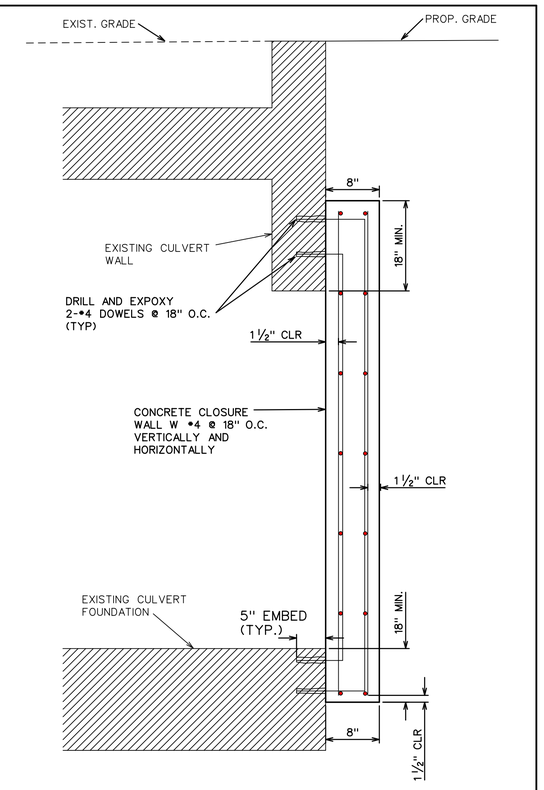
CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

GRADING PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	15





CATTLE PASS CLOSURE WALL

NOTE:

RETAINING WALLS 3' IN HEIGHT AND OVER NEED A ENGINEERED SEALED PLAN. (PLANS TO BE SUBMITTED PRIOR TO ENGINEERING APPROVAL)

RETAINING WALLS OVER 18" MUST BE STONE OR MASONRY FINISH. SMOOTH FACE WALLS NOT ALLOWED

LEGEND

SPOT ELEVATION	706.2
EXIST. CONTOUR	700
PROP. CONTOUR	704
RETAINING WALL	
HIGH POINT	HP
TOP OF WALL GRADE	T706.2
BOTTOM OF WALL GRADE	B706.2

NOTES:

1. Finish Floor Elevation to be 0.70 Feet above Finished Pad.(FP)
2. Additional Erosion Control to be installed in Parkways as determined by the City Inspector.
3. Finished Pad Elevations are within ± 0.3 Feet.
4. All fill compacted to min 95% std. density using sheeps foot roller.
5. All portions of the wall to be on one lot. Do not install on property line or in easements or right of way.
6. All R.O.W. to be 1/4" per foot.

RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

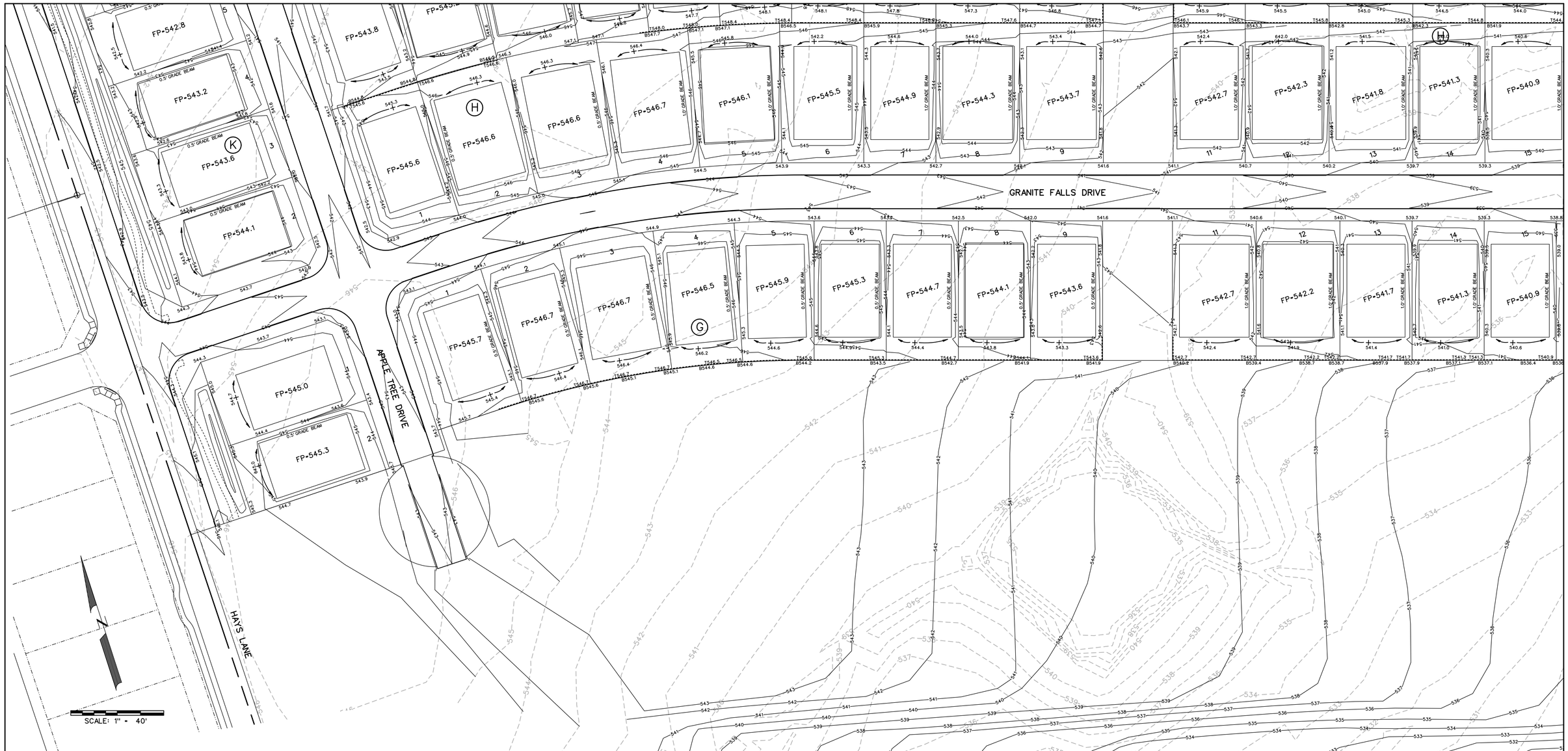
STATE OF TEXAS
WARREN L. CORWIN
57875
REGISTERED PROFESSIONAL ENGINEER
02/22/2023

CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

GRADING PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	16

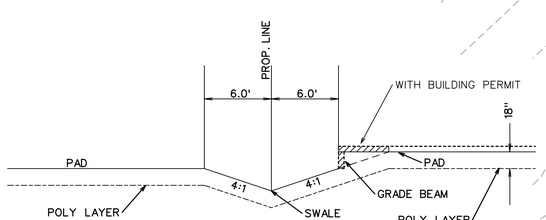


LEGEND

SPOT ELEVATION	706.2
EXIST. CONTOUR	— 700 —
PROP. CONTOUR	—704—
RETAINING WALL	----------
HIGH POINT	HP
TOP OF WALL GRADE	T706.2
BOTTOM OF WALL GRADE	B706.2

NOTES:

1. Finish Floor Elevation to be 0.70 Feet above Finished Pad.(FP)
2. Additional Erosion Control to be installed in Parkways as determined by the City Inspector.
3. Finished Pad Elevations are within ± 0.3 Feet.
4. All fill compacted to min 95% std. density using sheeps foot roller.
5. All portions of the wall to be on one lot. Do not install on property line or in easements or right of way.
6. All R.O.W. to be ¼" per foot.



GRADE BEAM

NOTE:

RETAINING WALLS 3' IN HEIGHT AND OVER NEED A ENGINEERED SEALED PLAN. (PLANS TO BE SUBMITTED PRIOR TO ENGINEERING APPROVAL)

RETAINING WALLS OVER 18" MUST BE STONE OR MASONRY FINISH. SMOOTH FACE WALLS NOT ALLOWED

RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

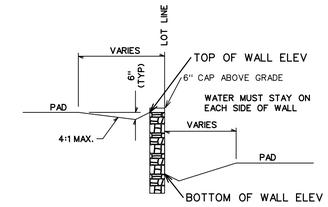
STATE OF TEXAS
WARREN L. CORWIN
57875
REGISTERED PROFESSIONAL ENGINEER
02/22/2023

CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

GRADING PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	17



TYPICAL SIDEYARD RETAINING WALL

N.T.S.

NOTE:

T760.0 - GRADE SHOWN AT WALL TOP

B756.0 - GRADE SHOWN AT WALL BOTTOM

WALL CAP SHALL BE 6" ABOVE SHOWN WALL TOP.

NOTE:

RETAINING WALLS 3' IN HEIGHT AND OVER NEED A ENGINEERED SEALED PLAN. (PLANS TO BE SUBMITTED PRIOR TO ENGINEERING APPROVAL)

RETAINING WALLS OVER 18" MUST BE STONE OR MASONRY FINISH. SMOOTH FACE WALLS NOT ALLOWED

LEGEND

SPOT ELEVATION	706.2
EXIST. CONTOUR	700
PROP. CONTOUR	704
RETAINING WALL	
HIGH POINT	HP
TOP OF WALL GRADE	T706.2
BOTTOM OF WALL GRADE	B706.2

NOTES:

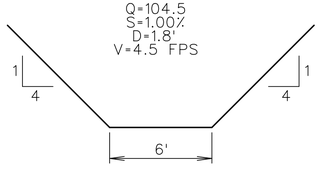
1. Finish Floor Elevation to be 0.70 Feet above Finished Pad.(FP)
2. Additional Erosion Control to be installed in Parkways as determined by the City Inspector.
3. Finished Pad Elevations are within ± 0.3 Feet.
4. All fill compacted to min 95% std. density using sheeps foot roller.
5. All portions of the wall to be on one lot. Do not install on property line or in easements or right of way.
6. All R.O.W. to be ¼" per foot.

SCALE: 1" = 40'

⊗ DRIVEWAY LOCATION SO MAXIMUM 14% SLOPE OR UNDER IS MAINTAINED, OR AS TO AVOID INLET OR MIN. DISTANCE FROM INTER-SECTION
(DRIVEWAY MAY BE PLACED AT ALTERNATE LOCATION WITH USE OF A DROP GARAGE AS LONG AS MAXIMUM SLOPE IS 14% OR UNDER)

NOTE:

PROVIDE POSITIVE DRAINAGE ABOVE ALL OFFSITE PROPOSED SANITARY SEWER MANHOLES. (TYP)



SECTION 'A-A'

N.T.S.

RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS
(NOT FIELD VERIFIED)

STATE OF TEXAS
WARREN L. CORWIN
57875
REGISTERED PROFESSIONAL ENGINEER
02/22/2023

CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

GRADING PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	18

SCALE: 1" = 40'

LEGEND

SPOT ELEVATION	706.2
EXIST. CONTOUR	700
PROP. CONTOUR	704
RETAINING WALL	
HIGH POINT	HP
TOP OF WALL GRADE	T706.2
BOTTOM OF WALL GRADE	B706.2

NOTES:

1. Finish Floor Elevation to be 0.70 Feet above Finished Pad.(FP)
2. Additional Erosion Control to be installed in Parkways as determined by the City Inspector.
3. Finished Pad Elevations are within ± 0.3 Feet.
4. All fill compacted to min 95% std. density using sheeps foot roller.
5. All portions of the wall to be on one lot. Do not install on property line or in easements or right of way.
6. All R.O.W. to be 1/4" per foot.

NOTE:

PROVIDE POSITIVE DRAINAGE
ABOVE ALL OFFSITE PROPOSED
SANITARY SEWER MANHOLES. (TYP)

RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)

STATE OF TEXAS
WARREN L. CORWIN
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02/22/2023

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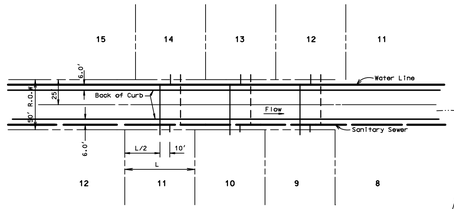
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

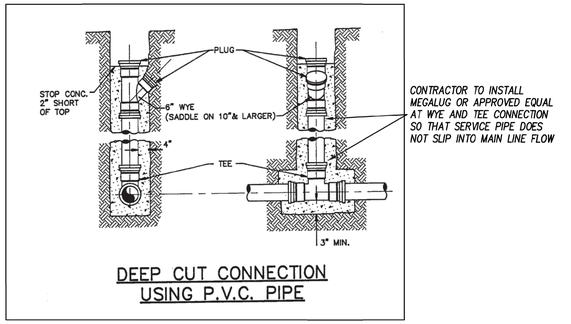
GRADING PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	18B



TYPICAL WATER & SEWER SERVICE LAYOUT

N.T.S.

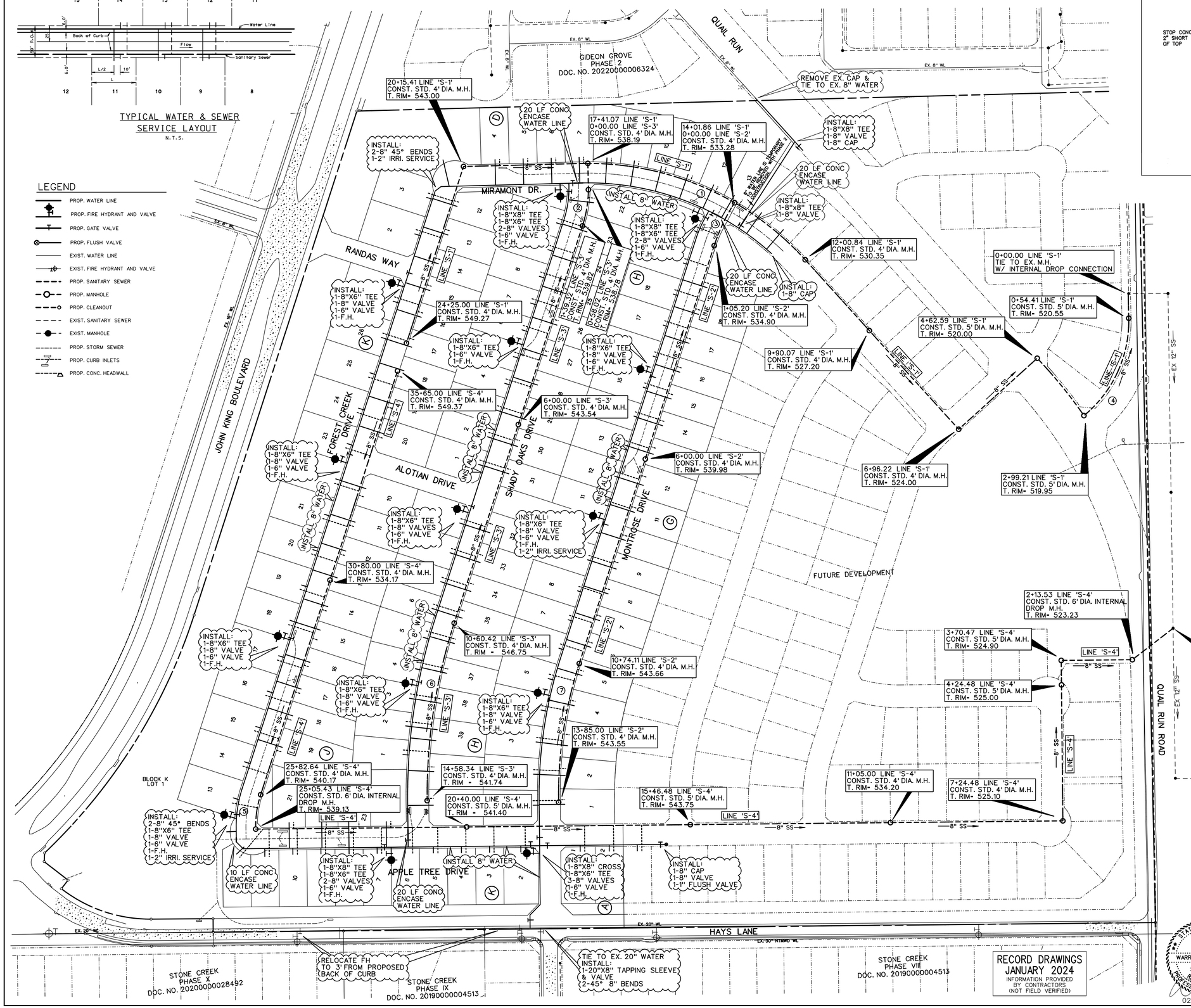


DEEP CUT CONNECTION USING P.V.C. PIPE

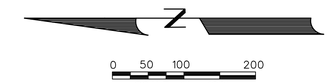
LOTS 1-2 BLK A, LOTS 23-24 BLK J &LOTS 2-8 BLK K SHALL HAVE DEEP SERVICE CONNECTION

LEGEND

- PROP. WATER LINE
- PROP. FIRE HYDRANT AND VALVE
- PROP. GATE VALVE
- PROP. FLUSH VALVE
- EXIST. WATER LINE
- EXIST. FIRE HYDRANT AND VALVE
- PROP. SANITARY SEWER
- PROP. MANHOLE
- PROP. CLEANOUT
- EXIST. SANITARY SEWER
- EXIST. MANHOLE
- PROP. STORM SEWER
- PROP. CURB INLETS
- PROP. CONC. HEADWALL



RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)



CURVE TABLE

CURVE NO.	DELTA	RADIUS	LENGTH	TANGENT
1.	49°20'48"	646.50'	556.80'	296.99'
2.	19°11'16"	271.50'	81.31'	45.37'
3.	15°04'09"	400.00'	105.20'	52.91'
4.	51°56'53"	270.00'	244.80'	131.54'
5.	19°21'40"	228.50'	77.21'	38.98'
6.	18°29'00"	1233.50'	397.92'	200.70'
7.	18°52'46"	943.50'	310.89'	156.87'

NOTE:

ALL WATER LINES TO BE CLASS 200 PIPE DR-14 C-900.

ALL SANITARY SEWER PIPE TO BE SDR 35 FOR 5-10' DEEP AND SDR 26 FOR 10' AND GREATER.

INSTALL BLUE "EMS" DISK ON WATER LINE AT EVERY 250' AND CHANGE IN DIRECTION, VALVE, AND SERVICE.

INSTALL GREEN "EMS" DISK ON SANITARY SEWER LINE EVERY 250' AND AT EVERY CHANGE IN DIRECTION, MANHOLE, CLEANOUT, AND SERVICE.

ALL MANHOLES TO BE RAVEN EPOXY LINED AND SEALED OR APPROVED EQUAL. TO BE SPARK AND PRESSURE TESTED.

MANHOLES THAT ARE BEING TIED INTO WILL BE RAVEN LINED OR APPROVED EQUAL.

METER ON BLOCK K, LOT 1, SHALL SERVE IRRIGATION SYSTEM AND DETENTON POND

SERVICE SCHEDULE		
TYPE	SIZE	NO.
SANITARY	4"	141
WATER	1"	143
IRRIGATION	1"	3

NOTE:

PROVIDE POSITIVE DRAINAGE ABOVE ALL OFFSITE PROPOSED SANITARY SEWER MANHOLES. (TYP)

STATE OF TEXAS
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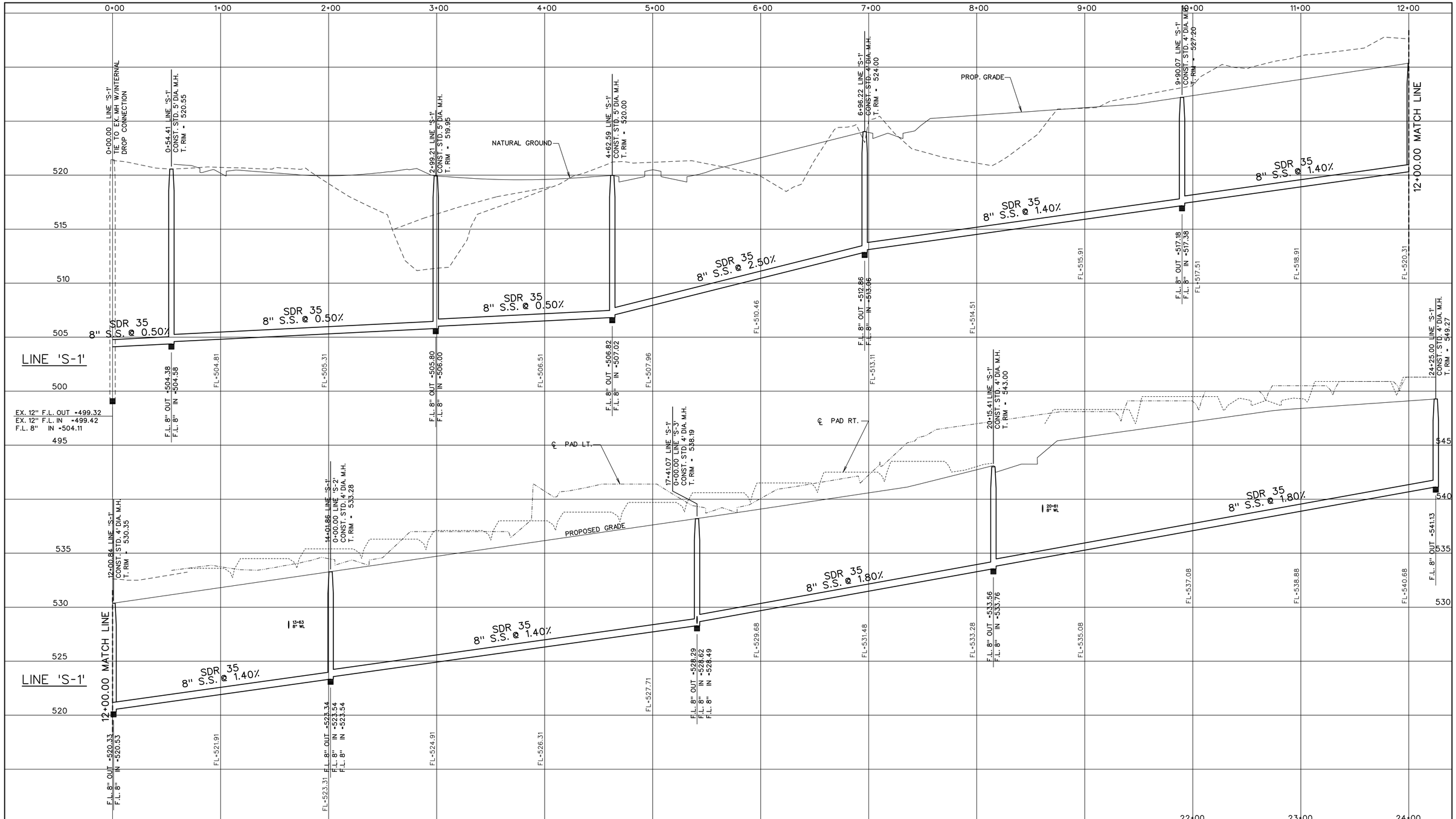
DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

WATER AND SANITARY SEWER PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: 1"=100'	19



RECORD DRAWINGS
JANUARY 2024
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STATE OF TEXAS
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02/22/2023

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DEVELOPMENT PLANS FOR
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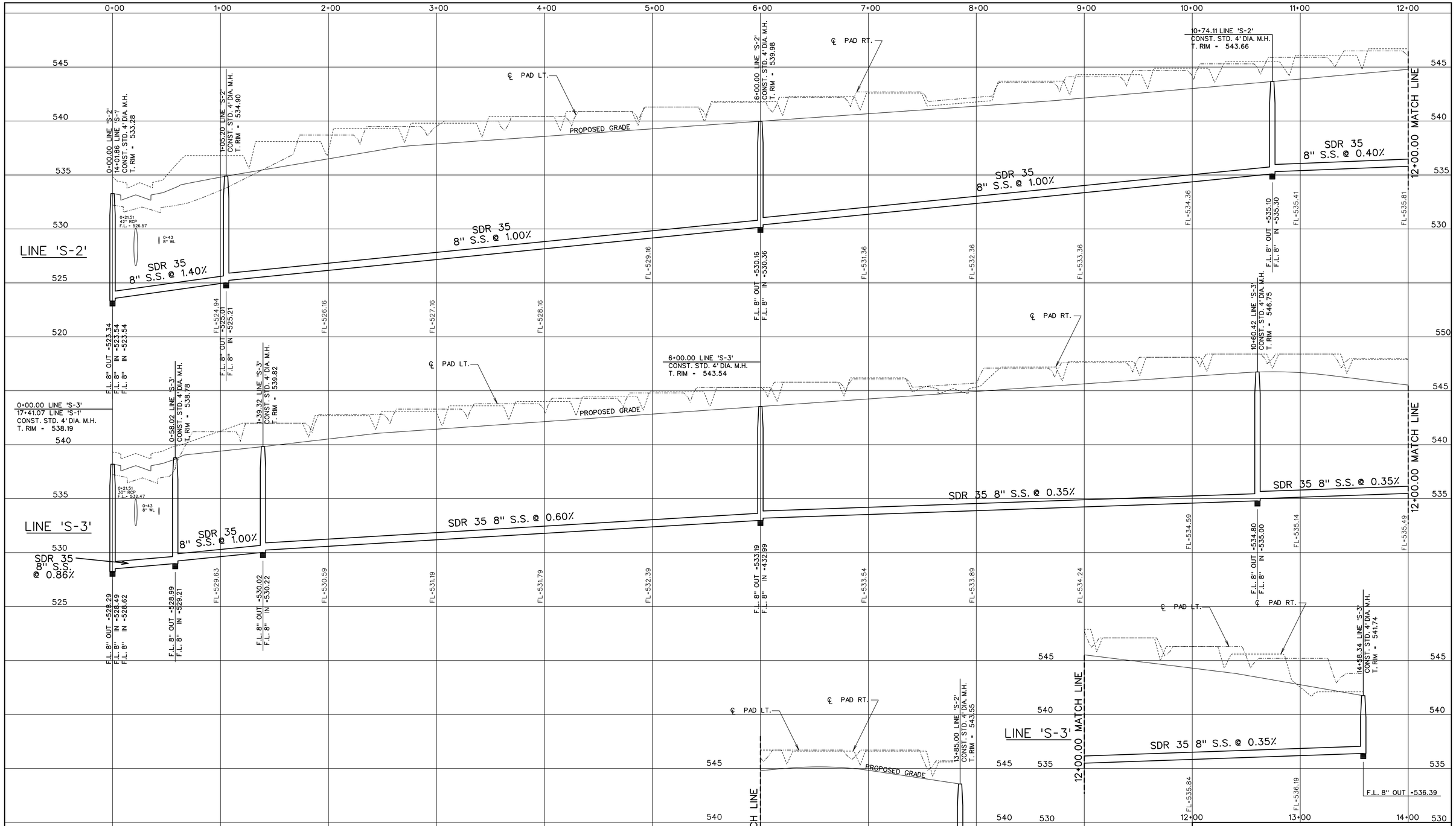
PHASE I
ROCKWALL, TEXAS

SANITARY SEWER PROFILES

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	20



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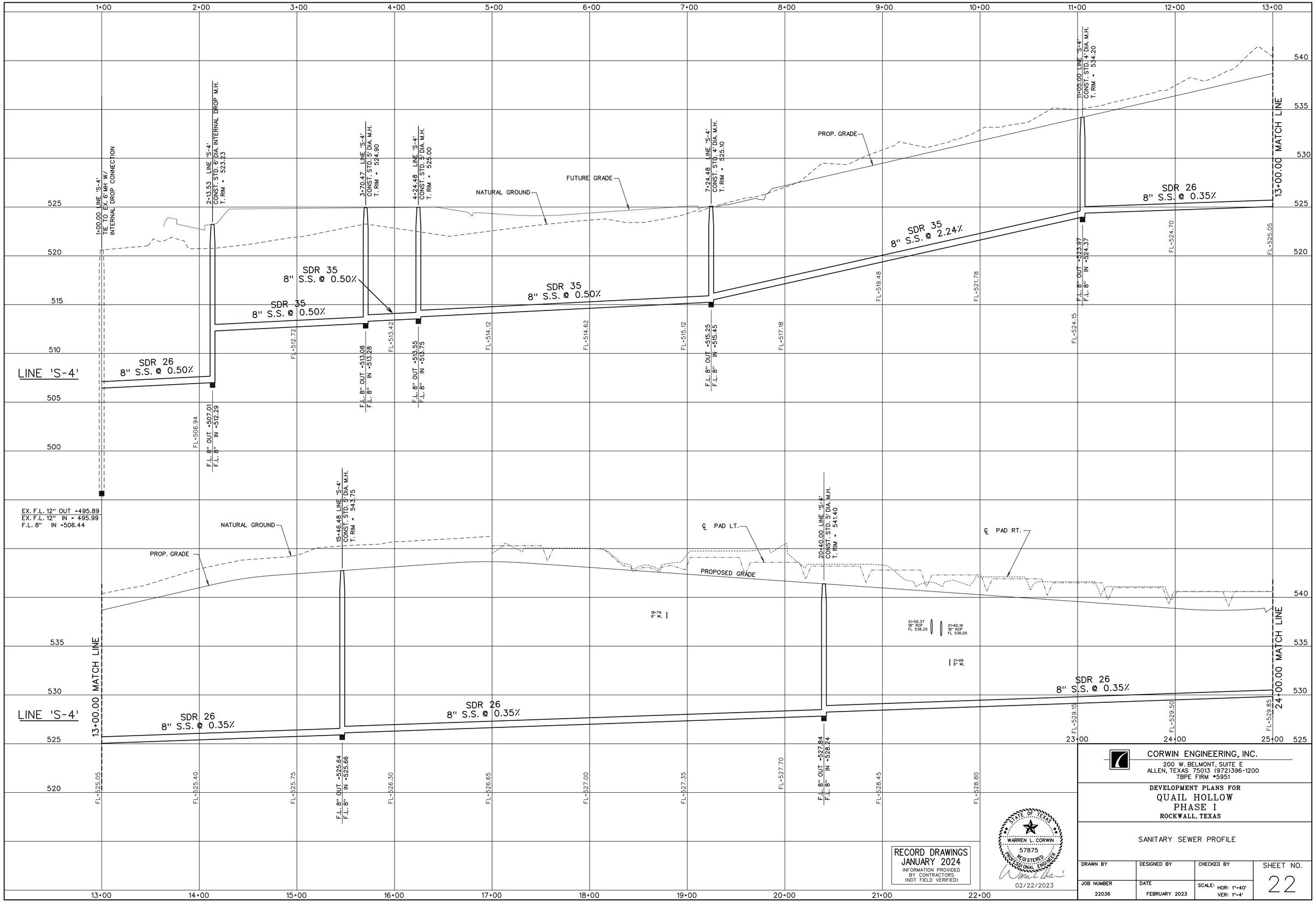
SANITARY SEWER PROFILES

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	21



RECORD DRAWINGS
JANUARY 2024
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STATE OF TEXAS
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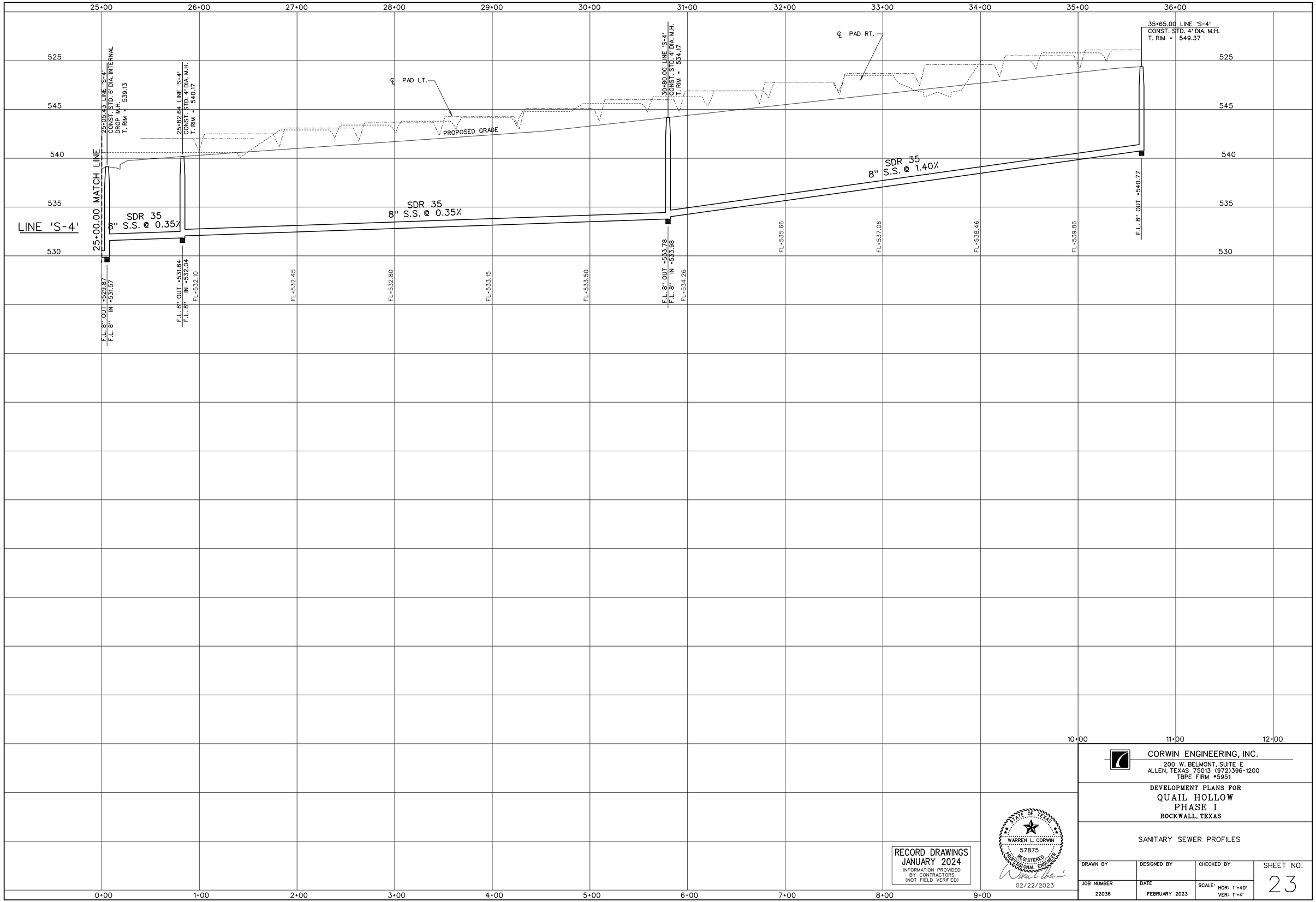
DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

SANITARY SEWER PROFILE

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	22



RECORD DRAWINGS
JANUARY 2024
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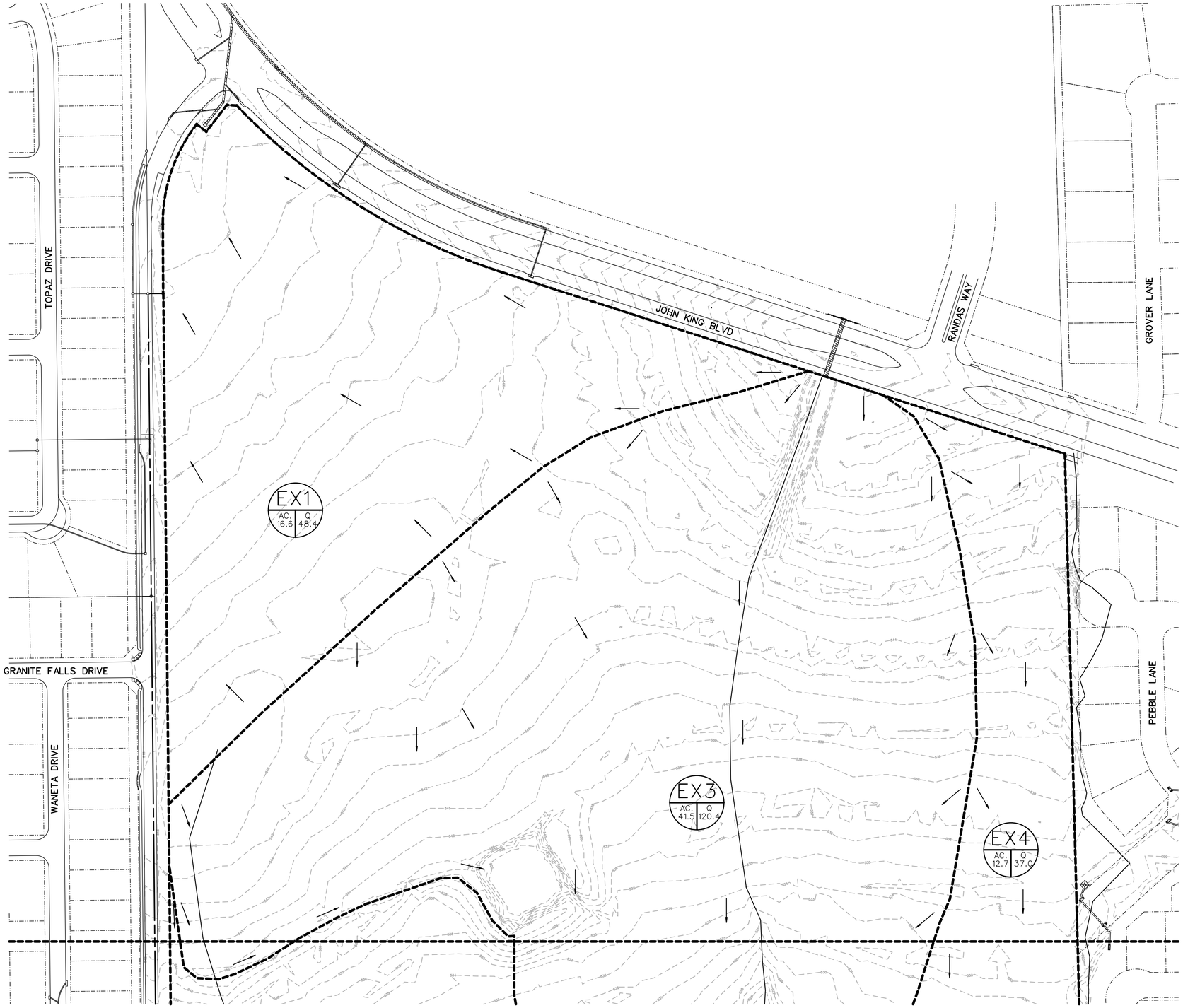
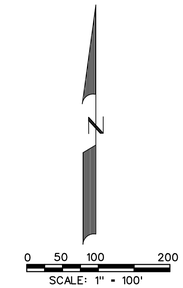
DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

SANITARY SEWER PROFILES

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	23





EXISTING CONDITIONS RUNOFF COMPUTATIONS

Area #	Area (sf)	Area (acres)	Runoff Coefficient	CA	Tc (min)	I(100) (in/hr)	Q(100) (cfs)	Drains To:
EX1	725126	16.6	0.35	5.83	20	8.30	48.4	Ex. Inlet @ Hays & John King
EX2	586049	13.5	0.35	4.71	20	8.30	39.1	Ex. 24" RCP in Quail Run
EX3	1805927	41.5	0.35	14.51	20	8.30	120.4	Ex. 36" RCP in Quail Run
EX4	554878	12.74	0.35	4.46	20	8.30	37.0	Ex. 12" RCP in Quail Run

LEGEND

- PROP. STORM SEWER
- PROP. CURB INLETS
- PROP. CONC. HEADWALL
- EXIST. STORM SEWER
- DRAINAGE AREA DIVIDE
- FLOW ARROW
- AC. / Q — DRAINAGE AREA NO.

RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

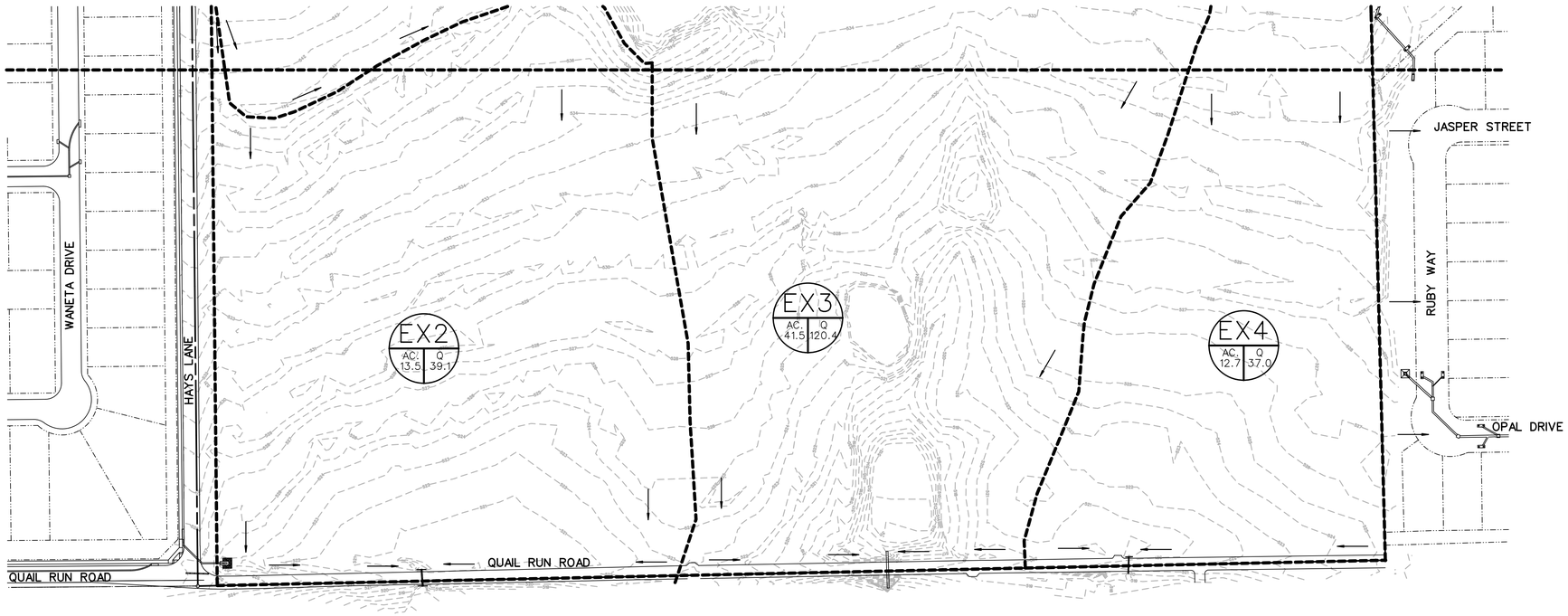
STATE OF TEXAS
BRANDON DAVIDSON
87682
REGISTERED PROFESSIONAL ENGINEER
02/22/2023

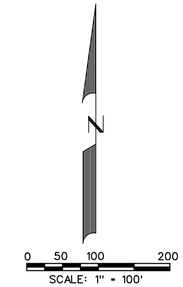
CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

PRE-PROJECT CONDITIONS
DRAINAGE AREA MAP
SHEET 1 OF 2

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	24





EXISTING CONDITIONS RUNOFF COMPUTATIONS

Area #	Area (sf)	Area (acres)	Runoff Coefficient	CA	Tc (min)	I(100) (in/hr)	Q(100) (cfs)	Drains To:
EX1	725126	16.6	0.35	5.83	20	8.30	48.4	Ex. Inlet @ Hays & John King
EX2	586049	13.5	0.35	4.71	20	8.30	39.1	Ex. 24" RCP in Quail Run
EX3	1805927	41.5	0.35	14.51	20	8.30	120.4	Ex. 36" RCP in Quail Run
EX4	554878	12.74	0.35	4.46	20	8.30	37.0	Ex. 12" RCP in Quail Run

LEGEND

- PROP. STORM SEWER
- PROP. CURB INLETS
- PROP. CONC. HEADWALL
- EXIST. STORM SEWER
- DRAINAGE AREA DIVIDE
- FLOW ARROW
- AC. / Q — DRAINAGE AREA NO.

RECORD DRAWINGS
JANUARY 2024
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DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

PRE-PROJECT CONDITIONS
DRAINAGE AREA MAP
SHEET 2 OF 2

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	25

N

0 50 100 200
SCALE: 1" = 100'

RUNOFF COMPUTATIONS

Area #	Area (sf)	Area (acres)	Runoff Coefficient	CA	Tc (min)	I(100) (in/hr)	Q(100) (cfs)	Drains To:
1	98036	2.25	0.50	1.13	10	9.80	11.0	Inlet 1
2	97380	2.24	0.50	1.12	10	9.80	11.0	Inlet 2
3	56216	1.29	0.50	0.65	10	9.80	6.3	Inlet 3
4	55907	1.28	0.50	0.64	10	9.80	6.3	Inlet 4
5	147682	3.39	0.50	1.70	10	9.80	16.6	Inlet 5
6	96015	2.20	0.50	1.10	10	9.80	10.8	Inlet 6
7	99412	2.28	0.50	1.14	10	9.80	11.2	Inlet 7
8	134741	3.09	0.50	1.55	10	9.80	15.2	Inlet 8
9	86597	1.99	0.50	0.99	10	9.80	9.7	Inlet 9
10	96540	2.22	0.50	1.11	10	9.80	10.9	Inlet 10
11	104169	2.39	0.50	1.20	10	9.80	11.7	Inlet 11
12	105770	2.43	0.50	1.21	10	9.80	11.9	Inlet 12
13	49827	1.14	0.50	0.57	10	9.80	5.6	Inlet 13
14	32590	0.75	0.50	0.37	10	9.80	3.7	Inlet 14
15	106200	2.44	0.50	1.22	10	9.80	11.9	Inlet 15
16	92780	2.13	0.50	1.06	10	9.80	10.4	Inlet 16
17	79680	1.83	0.50	0.91	10	9.80	9.0	Inlet 17
18	67783	1.56	0.50	0.78	10	9.80	7.6	Inlet 18
19A	22756	0.52	0.90	0.47	10	9.80	4.6	Inlet 19
19B	12208	0.28	0.50	0.14	10	9.80	1.4	Inlet 19
20A	8703	0.20	0.90	0.18	10	9.80	1.8	Inlet 20
20B	6035	0.14	0.50	0.07	10	9.80	0.7	Inlet 20
21	175258	4.02	0.50	2.01	10	9.80	19.7	Detention Pond
22	39350	0.90	0.50	0.45	10	9.80	4.4	Hays&John King
23	227251	5.22	0.50	2.61	10	9.80	25.6	Future
24	63288	1.45	0.90	1.31	10	9.80	12.8	Future
25	28295	0.65	0.90	0.58	10	9.80	5.7	Future
26	1528630	35.1	0.50	17.55	10	9.80	172.0	Future
27	27944	0.64	0.50	0.32	10	9.80	3.1	Ex. 12" RCP in Quail Run

Area 19 Weighted C

	area	area		
	sf	acres	c	ca
19a	22756	0.52	0.90	0.47
19b	12208	0.28	0.50	0.14
	34964	0.80	0.76	0.61

Area 20 Weighted C

	area	area		
	sf	acres	c	ca
20A	8703	0.20	0.90	0.18
20B	6035	0.14	0.50	0.07
	14738	0.34	0.74	0.25

LEGEND

- PROP. STORM SEWER
- PROP. CURB INLETS
- PROP. CONC. HEADWALL
- EXIST. STORM SEWER
- DRAINAGE AREA DIVIDE
- FLOW ARROW
- AC. / Q — DRAINAGE AREA NO.

RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

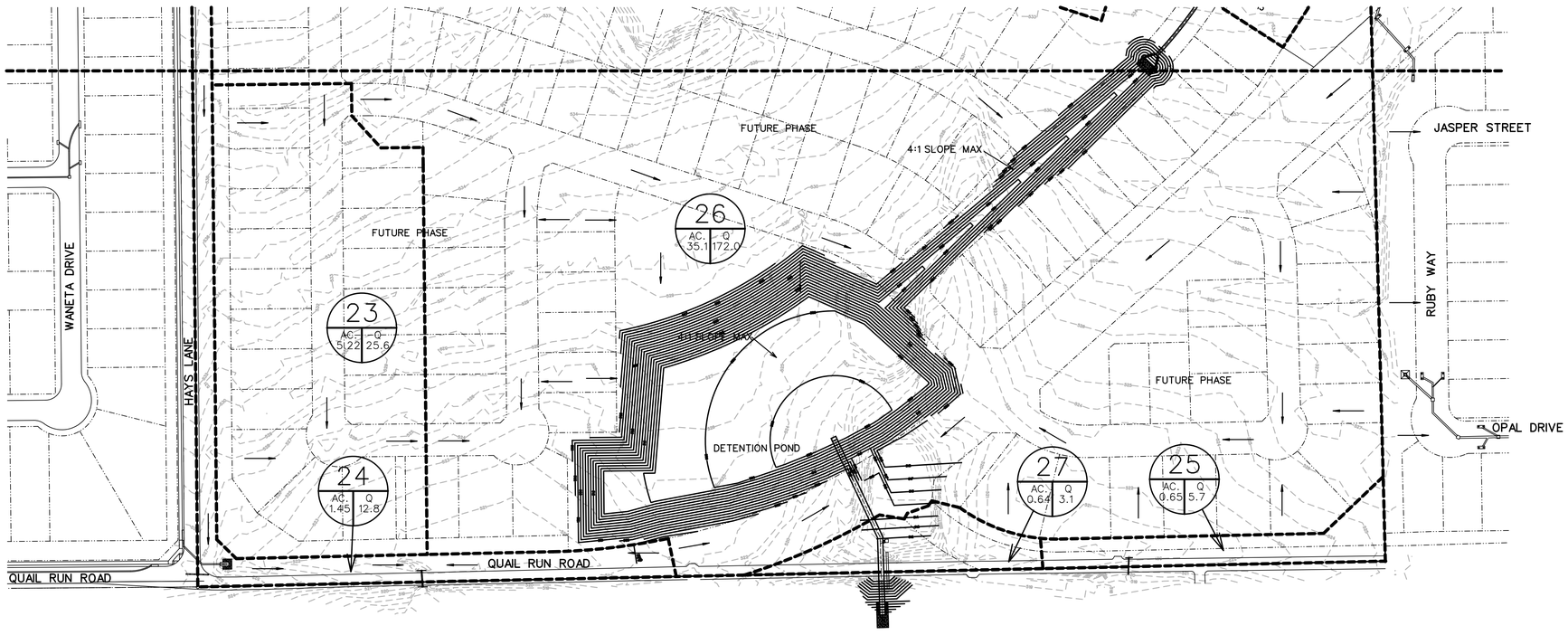
STATE OF TEXAS
BRANDON DAVIDSON
87682
REGISTERED PROFESSIONAL ENGINEER
02/22/2023

CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW PHASE I
ROCKWALL, TEXAS

POST-PROJECT CONDITIONS DRAINAGE AREA MAP
SHEET 1 OF 2

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	26



N

0 50 100 200
SCALE: 1" = 100'

RUNOFF COMPUTATIONS

Area #	Area (sf)	Area (acres)	Runoff Coefficient	CA	Tc (min)	I(100) (in/hr)	Q(100) (cfs)	Drains To:
1	98036	2.25	0.50	1.13	10	9.80	11.0	Inlet 1
2	97380	2.24	0.50	1.12	10	9.80	11.0	Inlet 2
3	56216	1.29	0.50	0.65	10	9.80	6.3	Inlet 3
4	55907	1.28	0.50	0.64	10	9.80	6.3	Inlet 4
5	147682	3.39	0.50	1.70	10	9.80	16.6	Inlet 5
6	96015	2.20	0.50	1.10	10	9.80	10.8	Inlet 6
7	99412	2.28	0.50	1.14	10	9.80	11.2	Inlet 7
8	134741	3.09	0.50	1.55	10	9.80	15.2	Inlet 8
9	86597	1.99	0.50	0.99	10	9.80	9.7	Inlet 9
10	96540	2.22	0.50	1.11	10	9.80	10.9	Inlet 10
11	104189	2.39	0.50	1.20	10	9.80	11.7	Inlet 11
12	105770	2.43	0.50	1.21	10	9.80	11.9	Inlet 12
13	49827	1.14	0.50	0.57	10	9.80	5.6	Inlet 13
14	32590	0.75	0.50	0.37	10	9.80	3.7	Inlet 14
15	106200	2.44	0.50	1.22	10	9.80	11.9	Inlet 15
16	92780	2.13	0.50	1.06	10	9.80	10.4	Inlet 16
17	79680	1.83	0.50	0.91	10	9.80	9.0	Inlet 17
18	67783	1.56	0.50	0.78	10	9.80	7.6	Inlet 18
19A	22756	0.52	0.90	0.47	10	9.80	4.6	Inlet 19
19B	12208	0.28	0.50	0.14	10	9.80	1.4	Inlet 19
20A	8703	0.20	0.90	0.18	10	9.80	1.8	Inlet 20
20B	6035	0.14	0.50	0.07	10	9.80	0.7	Inlet 20
21	175258	4.02	0.50	2.01	10	9.80	19.7	Detention Pond
22	39350	0.90	0.50	0.45	10	9.80	4.4	Hays&John King
23	227251	5.22	0.50	2.61	10	9.80	25.6	Future
24	63288	1.45	0.90	1.31	10	9.80	12.8	Future
25	28295	0.65	0.90	0.58	10	9.80	5.7	Future
26	1528630	35.1	0.50	17.55	10	9.80	172.0	Future
27	27944	0.64	0.50	0.32	10	9.80	3.1	Ex. 12" RCP in Quail Run

LEGEND

- PROP. STORM SEWER
- PROP. CURB INLETS
- PROP. CONC. HEADWALL
- EXIST. STORM SEWER
- DRAINAGE AREA DIVIDE
- FLOW ARROW
- AC. / Q — DRAINAGE AREA NO.

RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

STATE OF TEXAS
BRANDON DAVIDSON
87682
REGISTERED PROFESSIONAL ENGINEER
02/22/2023

CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

POST-PROJECT CONDITIONS
DRAINAGE AREA MAP
SHEET 2 OF 2

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	27

STORM SEWER CALCULATIONS

SYSTEM ID	Conduit Properties									Conduit Properties						Incremental Drainage Area				Accum-ulated C*A	Up-stream T_C	Design Storm Freq.	Intensity I	Runoff Q	Conduit Capacity Q_C	Partial Flow	Velocity V	Time in Conduit	Friction Slope S_f	Friction Headloss	HGL		V1/2g (U/S)	V2/2g	Junctions	Coeff. K_J	Velocity Headloss	Design HGL	Top of Curb Elevation	HGL Depth Below T/C
	Collection Point Station		Length	# of Barrels	Pipe Size	Box		Type	Area	Wetted Perimeter P_W	Hydraulic Radius	Manning's n	Flowline Elevation		Slope	Inlet ID	Area	Runoff Coeff. C	Incre-mental C*A																Type					
	Up-stream	Down-stream				Span	Rise						Up-stream	Down-stream																	Up-stream	Down-stream								
			(ft)		(inches)	(ft)	(ft)		(ft^2)	(ft)	(ft)				(ft/ft)		(acres)				(min)	(yr)	(in/hr)	(cfs)	(cfs)	(Yes/No)	(ft/s)	(min)	(ft/ft)	(ft)	(ft)	(ft)	(ft)	(ft)			(ft)	(ft)		(ft)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)
Line D1	6+36.63	5+90.30	46.33	1	18			RCP	1.7672	4.7124	0.375	0.013	537.11	536.25	0.0250	4	1.28	0.50	0.64	0.64	10.00	100	9.80	6.3	16.6	Yes	3.6	0.22	0.0036	0.17	537.68	536.86		0.20	Inlet	1.25	0.25	537.93	541.11	3.18
	5+90.30	4+22.09	168.21	1	24			RCP	3.1416	6.2832	0.500	0.013	535.53	534.69	0.0050	D1A	1.29	0.50	0.65	1.29	10.22	100	9.77	12.6	16.0	Yes	4.0	0.70	0.0031	0.52	536.86	536.02	0.20	0.25	60° Wye	0.35	0.18	536.86	541.11	4.25
	4+22.09	2+92.09	130.00	1	30			RCP	4.9088	7.854	0.625	0.013	534.19	533.54	0.0050	D1B	2.28	0.50	1.14	2.43	10.92	100	9.66	23.5	29.0	Yes	4.8	0.45	0.0033	0.42	535.89	535.38	0.25	0.35	60° Wye	0.35	0.27	536.02	539.33	3.31
	2+92.09	2+19.49	72.60	1	48			RCP	12.5664	12.5664	1.000	0.013	532.04	531.89	0.0020	D1C,D1D	5.60	0.50	2.80	5.23	11.37	100	9.59	50.1	64.2	Yes	4.0	0.30	0.0012	0.09	535.38	535.33	0.35	0.25	60° Wye	0.35	0.12	535.38	538.54	3.16
	2+19.49	1+45.61	73.88	1	54			RCP	15.9044	14.1372	1.125	0.013	530.74	530.75	0.0020	D2	4.49	0.50	2.24	7.47	11.67	100	9.55	71.3	87.9	Yes	4.5	0.27	0.0013	0.10	535.15	535.06	0.25	0.31	MH	0.55	0.17	535.33	539.12	3.79
	1+45.61	0+18.00	127.61	1	54			RCP	15.9044	14.1372	1.125	0.013	530.75	530.50	0.0020	D3	1.14	0.78	0.89	8.36	11.95	100	9.51	79.5	87.9	Yes	5.0	0.43	0.0016	0.21	534.78	534.57	0.31	0.39	60° Wye	0.35	0.28	535.06	538.40	3.34
Lat D1A	0+37.40	0+00.00	37.40	1	18			RCP	1.7672	4.7124	0.375	0.013	537.11	535.76	0.0361	3	1.29	0.50	0.65	0.65	10.00	100	9.80	6.3	20.0	Yes	3.6	0.17	0.0036	0.13	537.63	537.04	0.00	0.20	Inlet	1.25	0.25	537.88	541.11	3.23
																											4.0				536.86	536.86	0.20	0.25	60° Wye	0.35	0.18	537.04		
Lat D1B	0+16.74	0+00.00	16.74	1	24			RCP	3.1416	6.2832	0.500	0.013	535.33	534.42	0.0544	7	2.28	0.50	1.14	1.14	10.00	100	9.80	11.2	52.8	Yes	3.6	0.08	0.0024	0.04	536.18	536.18	0.00	0.20	Inlet	1.25	0.25	536.43	539.33	2.90
																											4.8				535.89	535.89	0.20	0.35	60° Wye	0.35	0.29	536.18		
Lat D1C	0+16.74	0+00.00	16.74	1	24			RCP	3.1416	6.2832	0.500	0.013	534.54	533.03	0.0902	5	3.39	0.50	1.70	1.70	10.00	100	9.80	16.6	67.9	Yes	5.3	0.05	0.0054	0.09	535.56	535.48	0.00	0.43	Inlet	1.25	0.54	536.11	538.54	2.43
																											4.0				535.38	535.38	0.43	0.25	60° Wye	0.35	0.10	535.48		
Lat D1D	0+16.74	0+00.00	16.74	1	24			RCP	3.1416	6.2832	0.500	0.013	534.54	533.03	0.0902	6	2.20	0.50	1.10	1.10	10.00	100	9.80	10.8	67.9	Yes	3.4	0.08	0.0023	0.04	535.60	535.56	0.00	0.18	Inlet	1.25	0.23	535.83	538.54	2.71
																											4.0				535.38	535.38	0.18	0.25	60° Wye	0.35	0.18	535.56		
Line D2	4+61.49	3+62.63	98.86	1	24			RCP	3.1416	6.2832	0.500	0.013	538.56	536.56	0.0070	1	2.25	0.50	1.13	1.13	10.00	100	9.80	11.0	18.9	Yes	3.5	0.47	0.0024	0.23	539.21	538.16	0.00	0.19	Inlet	1.25	0.24	539.45	542.56	3.11
	3+62.63	0+00.00	362.63	1	30			RCP	4.9088	7.854	0.625	0.013	536.53	534.00	0.0070	D2A	2.24	0.50	1.12	2.24	10.47	100	9.73	21.8	34.3	Yes	4.4	1.36	0.0028	1.02	538.00	535.45	0.19	0.31	60° Wye	0.35	0.24	538.16	541.90	3.74
																											4.5				535.15	535.15	0.31	0.31	MH	0.55	0.17	535.45		
Lat D2A	0+16.74	0+00.00	16.74	1	24			RCP	3.1416	6.2832	0.500	0.013	537.90	536.79	0.0663	2	2.24	0.50	1.12	1.12	10.00	100	9.80	11.0	58.3	Yes	3.5	0.08	0.0023	0.04	538.49	538.24	0.00	0.19	Inlet	1.25	0.24	538.73	541.90	3.17
																											4.4				538.00	538.00	0.19	0.31	60° Wye	0.35	0.24	538.24		
Line D3	4+07.69	1+40.07	267.62	1	18			RCP	1.7672	4.7124	0.375	0.013	535.95	534.10	0.0050	19	0.80	0.80	0.64	0.64	10.00	100	9.80	6.3	7.4	Yes	3.6	1.25	0.0036	0.96	536.66	535.37	0.00	0.20	Inlet	1.25	0.25	536.91	539.72	2.81
	1+40.07	0+00.00	140.07	1	24			RCP	3.1416	6.2832	0.500	0.013	533.60	531.87	0.0050	D3A	0.34	0.74	0.25	0.89	11.25	100	9.61	8.6	16.0	Yes	2.7	0.85	0.0014	0.20	535.33	535.13	0.20	0.12	60° Wye	0.35	0.05	535.37	538.23	2.86
																											5.0				534.78	534.78	0.12	0.39	60° Wye	0.35	0.35	535.13		
Lat D3A	0+57.82	0+00.00	57.82	1	18			RCP	1.7672	4.7124	0.375	0.013	534.23	533.83	0.0069	20	0.34	0.74	0.25	0.25	10.00	100	9.80	2.4	8.7	Yes	1.4	0.70	0.0005	0.03	535.46	535.43	0.00	0.03	Inlet	1.25	0.04	535.50	538.23	2.73
																											2.7				535.33	535.33	0.03	0.12	60° Wye	0.35	0.11	535.43		
Line D4	6+58.49	4+96.34	162.15	1	18			RCP	1.7672	4.7124	0.375	0.013	536.89	533.80	0.0150	8	2.31	0.50	1.15	1.15	10.00	100	9.80	11.3	12.9	Yes	6.4	0.42	0.0115	1.87	537.09	535.22	0.00	0.63	Inlet	1.25	0.63	537.72	540.89	3.17
	4+96.34	2+20.35	275.99	1	30			RCP	4.9088	7.854	0.625	0.013	532.80	528.69	0.0150	D5	6.71	0.50	3.36	4.51	10.42	100	9.74	43.9	50.2	Yes	8.9	0.51	0.0114	3.14	534.33	531.19	0.63	1.24	MH	0.55	0.89	535.22	538.38	3.16
	2+20.35	1+66.93	53.42	1	36			RCP	7.0686	9.4248	0.750	0.013	528.16	527.36	0.0150	D4A	2.22	0.50	1.11	5.62	10.94	100	9.66	54.3	81.7	Yes	7.7	0.12	0.0066	0.35	530.71	530.35	1.24	0.91	60° Wye	0.35	0.48	531.19	534.38	3.19
	1+66.93	1+22.37	44.56	1	42			RCP	9.6212	10.9956	0.875	0.013	526.86	526.22	0.0150	D6	7.95	0.50	3.98	9.59	11.05	100	9.64	92.5	123.2	Yes	9.6	0.08	0.0084	0.37	529.42	529.05	0.91	1.44	MH	0.55	0.93	530.35	533.44	3.09
	1+22.37	0+00.00	122.37	1	48			RCP	12.5664	12.5664	1.000	0.013	525.69	523.85	0.0150	D4B	2.40	0.50	1.20	10.79	11.13	100	9.63	103.9	175.9	Yes	8.3	0.25	0.0052	0.64	528.49	527.85	1.44	1.06	60° Wye	0.35	0.56	529.05	532.90	3.85
Lat D4A	0+16.88	0+00.00	16.88	1	18			RCP	1.7672	4.7124	0.375	0.013	530.38	528.91	0.0871	10	2.22	0.50	1.11	1.11	10.00	100	9.80	10.9	31.0	No	6.1	0.05	0.0106	0.18	531.59	531.41	0.00	0.59	Inlet	1.25	0.59	532.18	534.38	2.20
																											7.7				530.71	530.71	0.59	0.91	60° Wye	0.35	0.71	531.41		
Lat D4B	0+16.67	0+00.00	16.67	1	18			RCP	1.7672	4.7124	0.375	0.013	528.90	526.94	0.1176	9	2.40	0.50	1.20	1.20	10.00	100	9.80	11.7	36.0	No	6.6	0.04	0.0124	0.21	529.52	529.31	0.00	0.69	Inlet	1.25	0.69	530.20	532.90	2.70
																											8.3				528.49	528.49	0.69	1.06	60° Wye	0.35	0.82	529.31		
Line D5	4+11.66	3+07.80	103.86	1	24			RCP	3.1416	6.2832	0.500	0.013	538.31	535.47	0.0070	11	2.39	0.50	1.20	1.20	10.00	100	9.80	11.7	18.9	No	3.7	0.46	0.0027	0.28	537.79	537.51	0.00	0.22	Inlet	1.25	0.22	538.01	541.52	3.51
	3+07.80	0+90.37	217.43	1	30			RCP	4.9088	7.854	0.625	0.013	534.95	533.43	0.0070	D5A	2.43	0.50	1.21	2.41	10.46	100	9.73	23.4	34.3	No	4.8	0.76	0.0033	0.71	537.24	536.53	0.22	0.35	60° Wye	0.35	0.28	537.51	540.81	3.30
	0+90.37	0+51.14	39.23	1	30			RCP	4.9088	7.854	0.625	0.013	533.43	533.16	0.0070	D5B	0.75	0.50	0.37	2.78	11.22	100	9.62	26.8	34.3	No	5.5	0.12	0.0042	0.17	536.19	536.02	0.35	0.46	60° Wye	0.35	0.34	536.53	539.22	2.69
	0+51.14	0+00.00	51.14	1	30			RCP	4.9088	7.854	0.625	0.013	533.16	532.80	0.0070	D5C	1.14	0.50	0.57	3.36	11.34	100	9.60	32.2	34.3	No	6.6	0.13	0.0061	0.31	535.52	535.20	0.46	0.67	60° Wye	0.35	0.51	536.02	539.02	3.00
																											8.9				534.33	534.33	0.67	1.24	MH	0.55	0.87	535.20		
Lat D5A	0+16.74	0+00.00	16.74	1	24			RCP	3.1416	6.2832	0.500	0.013	537.61	535.20	0.1440	12	2.43	0.50	1.21	1.21	10.00	100	9.80	11.9	85.8	No	3.8	0.07	0.0028	0.05	537.56	537.51	0.00	0.22	Inlet	1.25	0.22	537.78	540.81	3.03
																											4.8				537.24	537.24	0.22	0.35	60° Wye	0.35	0.28	537.51		
Lat D5B	0+16.57	0+00.00	16.57	1	18			RCP	1.7672	4.7124	0.375	0.013	535.49	533.93	0.0941	14	0.75	0.50	0.37	0.37	10.00	100	9.80	3.7	32.2	No	2.1	0.13	0.0012	0.02	536.65	536.63	0.00	0.07	Inlet	1.25	0.07	536.72	539.22	2.50
																											5.5				536.19	536.19	0.07	0.46	60° Wye	0.35	0.44	536.63		
Lat D5C	0+16.94	0+00.00	16.94	1	18			RCP	1.7672	4.7124	0.375	0.013	535.10	533.65	0.0850	13	1.14	0.50	0.57	0.57	10.00	100	9.80	5.6	30.6	No	3.2	0.09	0.0028	0.05	536.18	536.13	0.00	0.16	Inlet	1.25	0.16	536.34	539.02	2.68
																											6.6				535.52	535.52	0.16	0.67	60° Wye	0.35	0.61	536.13		
Line D6	6+14.46	5+88.01	26.45	1	24			RCP	3.1416	6.2832	0.500	0.013	536.10	534.50	0.0682	15	2.44	0.50	1.22	1.22	10.00	100	9.80	11.9	59.1	Yes	3.8	0.12	0.0028	0.07	536.71	535.44	0.00	0.22	Inlet	1.25	0.22	536.93	538.90	1.97
	5+88.01	0+51.23	536.78	1	30			RCP	4.9088	7.854	0.625	0.013	533.98	528.63	0.0070	D6A	2.13	0.50	1.06	2.28	10.12	100	9.78	22.3	34.3	No	4.6	1.97	0.0030	1.58	535.44	531.38	0.22	0.32	60° Wye	1.00	0.10	535.44	538.83	3.39
	0+51.23	0+00.00	51.23	1	30			RCP	4.9088	7.854	0.625	0.013	528.63	527.86	0.0150	D6B,D6C	3.39	0.50	1.69	3.98	12.08	100	9.49	37.7	50.2	No	7.7	0.11	0.0084	0.43	530.78	530.35	0.32	0.92	60° Wye	1.00	0.60	531.38	534.10	2.72
																											9.6				529.42	529.42	0.92	1.44	MH	0.55	0.93	530.35		
Lat D6A	0+28.11	0+00.00	28.11	1	18			RCP	1.7672	4.7124	0.375	0.013	536.03	533.65	0.0847	16	2.13	0.50	1.06	1.06	10.00	100	9.80	10.4	30.6	Yes	5.9	0.08	0.0098	0.28	535.51	535.57	0.00	0.54	Inlet	1.25	0.54	536.05	538.83	2.78
																											4.6				535.44	535.44	0.54	0.32	60° Wye	0.35	0.13	535.57		
Lat D6B	0+16.43	0+00.00	16.43	1	18			RCP	1.7672	4.7124	0.375	0.013	530.24	528.82	0.0889	17	1.83	0.50	0.91	0.91	10.00	100	9.80	9.0	31.3	No	5.1	0.05	0.0072	0.12	531.68	531.56	0.00	0.40	Inlet	1.25	0.40	532.08	534.24	2.16
																											7.7				530.78	530.78	0.40	0.92	60° Wye	0.35	0.78	531.56		
Lat D6C	0+17.09	0+00.00	17.09	1	18			RCP	1.7672	4.7124	0.375	0.013	530.10	528.82	0.0772	18	1.56	0.50	0.78	0.78	10.00	100	9.80	7.6	29.2	No	4.3	0.07	0.0052	0.09	531.69	531.60	0.00	0.29	Inlet	1.25	0.29	531.98	534.10	2.12
																											7.7				530.78	530.78	0.29	0.92	60° Wye	0.35	0.82	531.60		
Line D7	0+45.55	0+00.00	45.55	1	36			RCP	7.0686	9.4248	0.750	0.013	530.50	530.00	0.0110	Pond								38.9	70.0	Yes	5.5	0.14	0.0034	0.15	533.15	533.00	0.00	0.47	Inlet	1.25	0.47	533.63	N/A	
Line D8	3+05.35	1+39.94	165.41	1		8	4	RCP	31.1100	0	1.390	0.013	507.00	506.05	0.0058	Pond								179.8	337.3	No	5.8	0.48	0.0016	0.27	512.42	512.15	0.00	0.52	Inlet	1.25	0.52	512.94	N/A	
	1+39.94	1+29.96	9.98	1		8	4	RCP	31.1100	0	1.390	0.013	506.05	505.99	0.0058	Bend	0.00	0.50	0.00	0.00	10.00	100	9.80	179.8	337.3	No	5.8	0.03	0.0016	0.02	511.76	511.74	0.52	0.52	Bend	0.25	0.39	512.15		
	1+29.96	0+20.00	109.96	1		8	4	RCP	31.1100	0	1.390	0.013	505.99	505.35	0.0058	27	0.64	0.50	0.32	0.32	10.00	100	9.80	182.9	337.3	No	5.9	0.31	0.0017	0.19	511.39	511.20	0.52	0.54	60° Wye	0.35	0.36	511.74		

INLET CALCULATIONS

Inlet ID	Location				Design Freq	Area Runoff						Upstream Bypass C*A	Total Gutter Flow Q_a	Gutter Flow								Gutter Flow				Max Allow Flow based on Ponding $Q_{max\,Gutter}$	Inlets Capacity						Inlets Capacity					Inlet By-pass			Remarks
	Street	Station	Offset			C	Area ID	Time of Concentration Tc	Intensity I	Area A	Runoff Q			Thoroughfare Type	On-Grade/ Sag	Manning's n	Long Slope S	Crown Type	Cross Slope S_X	Depression		Depth of Gutter Flow		Ponding Width/ Spread			Depressed Gutter Section		Section Beyond Depression		Conveyance		Ratio of Depression flow to Total Flow E_0	Equivelent Cross-slope, S_e	Inlet Length		Inlet Capacity Q_C	Flow $Q_{by\,pass}$	C*A	To Inlet ID	
																				Depth a	Width W	(allow) y_{allow}	(actual) y_{actual}	(allow) T_{allow}	(actual) T_{actual}		Area A_W	Wetted Perimeter P_W	Area A_0	Wetted Perimeter P_0	Depression Section Kw	Section Beyond Depression K_0			Required $L_{Req'd}$	Actual L_{actual}					
					(yr)			(min)	(in/hr)	(acres)	(cfs)	(cfs)	(cfs)				(ft/ft)		(ft/ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(cfs)	(ft^2)	(ft)	(ft^2)	(ft)	(cfs)	(cfs)		(ft/ft)	(ft)	(ft)	(cfs)	(cfs)			
(1)	(2)	(3)	(4)		(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)
1	Forest Creek	4+66.00	15.50	LT	100	0.50	1	10	9.8	2.25	11.0		11.0	Local	On Grade	0.0175	0.70%	6" Rooftop	3.57%	0.5	2	0.5	0.49	14	13.6	11.8	1.40	2.08	2.41	11.61	91.42	71.68	0.56	0.18	11.93	15	19.0	0.0	0.00		
2	Forest Creek	3+71.00	15.50	RT	100	0.50	2	10	9.8	2.24	11.0		11.0	Local	On Grade	0.0175	0.70%	6" Rooftop	3.57%	0.5	2	0.5	0.44	14	12.5	11.8	1.32	2.08	1.95	10.46	82.60	54.16	0.60	0.19	11.48	15	20.7	0.0	0.00		
3	Shady Oaks	0+56.00	15.50	LT	100	0.50	3	10	9.8	1.29	6.3		6.32	Local	On Grade	0.0175	1.21%	6" Rooftop	3.57%	0.5	2	0.5	0.36	14	10.0	15.5	1.14	2.08	1.14	7.97	64.93	26.29	0.71	0.21	9.90	10	6.5	0.0	0.00		
4	Shady Oaks	0+56.00	15.50	RT	100	0.50	4	10	9.8	1.28	6.3		6.29	Local	On Grade	0.0175	1.21%	6" Rooftop	3.57%	0.5	2	0.5	0.36	14	10.0	15.5	1.14	2.08	1.13	7.95	64.79	26.11	0.71	0.21	9.87	10	6.5	0.0	0.00		
5	Apple Tree	17+00.00	15.50	RT	100	0.50	5	10	9.8	3.39	16.6		16.6	Local	Sag	0.0175	0.70%	6" Rooftop	3.57%	0.5	2	0.5	0.50	14	13.96	23.6	1.43	2.08	2.56	11.96	94.15	77.58	0.55	0.17	16.84	20	19.2	0.0	0.00		
6	Apple Tree	17+00.00	15.50	LT	100	0.50	6	10	9.8	2.20	10.8		10.8	Local	Sag	0.0175	0.70%	6" Rooftop	3.57%	0.5	2	0.5	0.48	14	13.51	23.6	1.39	2.08	2.37	11.51	90.60	69.95	0.56	0.18	9.68	15	15.1	0.0	0.00		
7	Apple Tree	15+70.00	15.50	LT	100	0.50	7	10	9.8	2.28	11.2		11.2	Local	On Grade	0.0175	0.70%	6" Rooftop	3.57%	0.5	2	0.5	0.49	14	13.7	11.8	1.41	2.08	2.44	11.69	91.97	72.86	0.56	0.18	12.03	15	18.9	0.0	0.00		
8	Miramont	11+93.00	15.50	RT	100	0.50	8	10	9.8	3.09	15.2		15.2	Local	On Grade	0.0175	1.50%	6" Rooftop	3.57%	0.5	2	0.5	0.47	14	13.30	17.3	1.38	2.08	2.28	11.30	88.96	66.56	0.57	0.18	16.97	15	11.3	3.9	0.39	9	
9	Miramont	6+60.50	15.50	RT	100	0.50	9	10	9.8	1.99	9.7	0.39	13.6	Local	On Grade	0.0175	1.50%	6" Rooftop	3.57%	0.5	2	0.5	0.46	14	12.77	17.3	1.34	2.08	2.07	10.77	84.93	58.56	0.59	0.18	13.87	15	11.7	1.9	0.19		
10	Miramont	7+59.00	15.50	LT	100	0.50	10	10	9.8	2.22	10.9		10.9	Local	On Grade	0.0175	1.50%	6" Rooftop	3.57%	0.5	2	0.5	0.42	14	11.73	17.3	1.27	2.08	1.69	9.73	77.28	44.75	0.63	0.19	14.04	15	12.7	0.0	0.00		
11	Shady Oaks	11+01.00	15.50	LT	100	0.50	11	10	9.8	2.39	11.7		11.7	Local	On Grade	0.0175	0.70%	6" Rooftop	3.57%	0.5	2	0.5	0.50	14	13.93	11.8	1.42	2.08	2.54	11.93	93.86	76.95	0.55	0.17	12.35	15	18.6	0.0	0.00		
12	Shady Oaks	12+01.00	15.50	RT	100	0.50	12	10	9.8	2.43	11.9		11.9	Local	On Grade	0.0175	0.70%	6" Rooftop	3.57%	0.5	2	0.5	0.50	14	14.01	11.8	1.43	2.08	2.57	12.01	94.49	78.33	0.55	0.17	12.46	15	18.5	0.0	0.00		
13	Shady Oaks	14+57.00	15.50	LT	100	0.50	13	10	9.8	1.14	5.6		5.6	Local	On Grade	0.0175	0.70%	6" Rooftop	3.57%	0.5	2	0.5	0.38	14	10.56	11.8	1.18	2.08	1.31	8.56	68.96	31.79	0.68	0.21	8.15	10	9.1	0.0	0.00		
14	Shady Oaks	14+19.00	15.50	RT	100	0.50	14	10	9.8	0.75	3.7		3.7	Local	On Grade	0.0175	1.04%	6" Rooftop	3.57%	0.5	2	0.5	0.30	14	8.36	14.4	1.03	2.08	0.72	6.36	54.39	14.41	0.79	0.23	7.14	10	8.2	0.0	0.00		
15	Montrose	10+32.00	15.50	LT	100	0.50	15	10	9.8	2.44	11.9		11.9	Local	On Grade	0.0175	0.70%	6" Rooftop	3.57%	0.5	2	0.5	0.50	14	14.03	11.8	1.43	2.08	2.58	12.03	94.66	78.70	0.55	0.17	12.49	15	18.5	0.0	0.00		
16	Montrose	10+42.00	15.50	RT	100	0.50	16	10	9.8	2.13	10.4		10.4	Local	On Grade	0.0175	0.70%	6" Rooftop	3.57%	0.5	2	0.5	0.48	14	13.34	11.8	1.38	2.08	2.29	11.34	89.27	67.18	0.57	0.18	11.56	15	19.4	0.0	0.00		
17	Montrose	15+92.00	15.50	LT	100	0.50	17	10	9.8	1.83	9.0		9.0	Local	On Grade	0.0175	1.50%	6" Rooftop	3.57%	0.5	2	0.5	0.39	14	10.92	17.3	1.21	2.08	1.42	8.92	71.45	35.44	0.67	0.20	12.62	15	13.5	0.0	0.00		
18	Montrose	15+88.00	15.50	RT	100	0.50	18	10	9.8	1.56	7.6		7.6	Local	On Grade	0.0175	1.73%	6" Rooftop	3.57%	0.5	2	0.5	0.36	14	10.01	18.6	1.14	2.08	1.14	8.01	65.14	26.57	0.71	0.21	11.94	15	13.1	0.0	0.00		
19	Hays	18+20.00	15.50	RT	100	0.76	19	10	9.8	0.80	6.0		6.0	Local	On Grade	0.0175	0.59%	6" Rooftop	2.50%	0.5	2	0.5	0.35	14	13.97	6.0	1.15	2.07	1.79	11.97	65.74	42.83	0.61	0.18	3.75	10	11.1	0.0	0.00		
20	Hays	21+10.00	15.50	RT	100	0.74	20	10	9.8	0.34	2.4		2.4	Local	On Grade	0.0175	0.59%	6" Rooftop	2.50%	0.5	2	0.5	0.25	14	9.98	6.0	0.95	2.07	0.80	7.98	47.85	14.54	0.77	0.22	5.31	10	11.0	0.0	0.00		

RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)

STATE OF TEXAS
BRANDON DAVIDSON
87682
REGISTERED PROFESSIONAL ENGINEER
02/22/2023

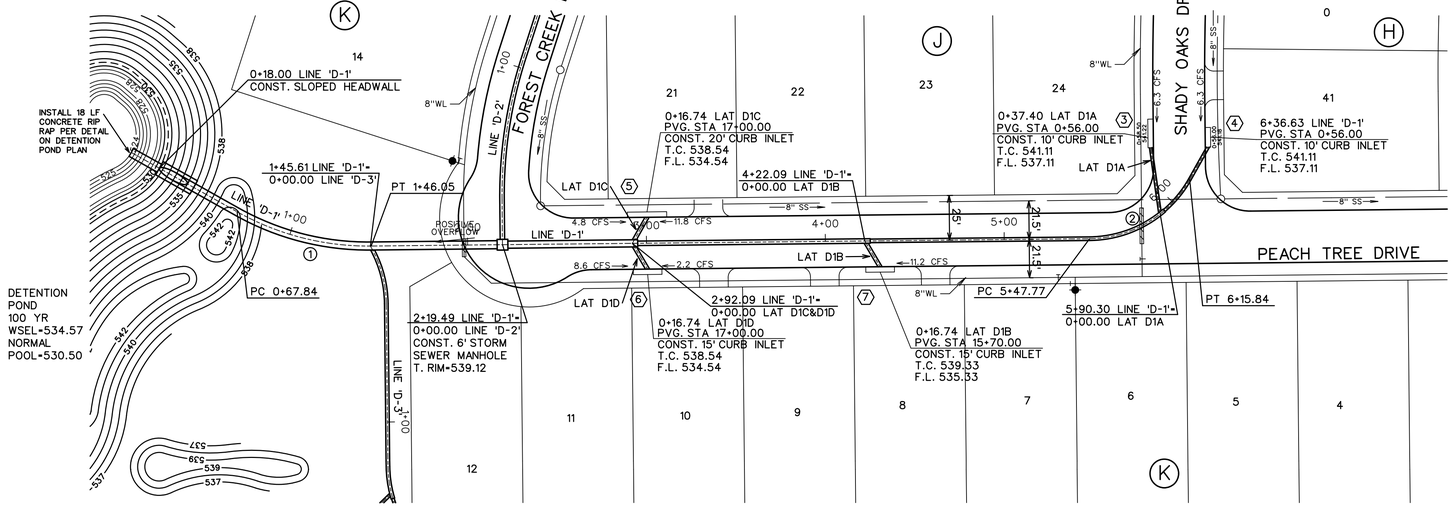
CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

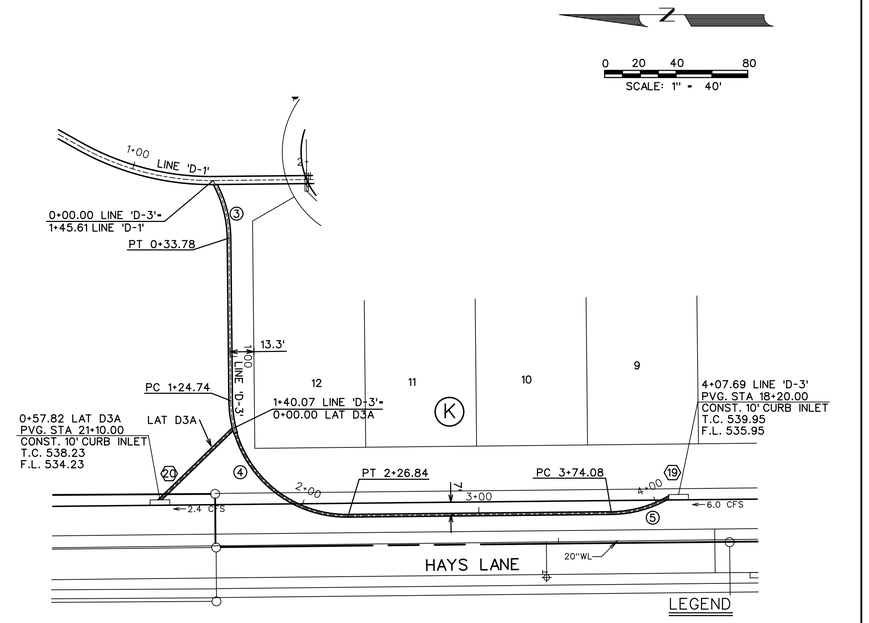
DRAINAGE CALCULATIONS

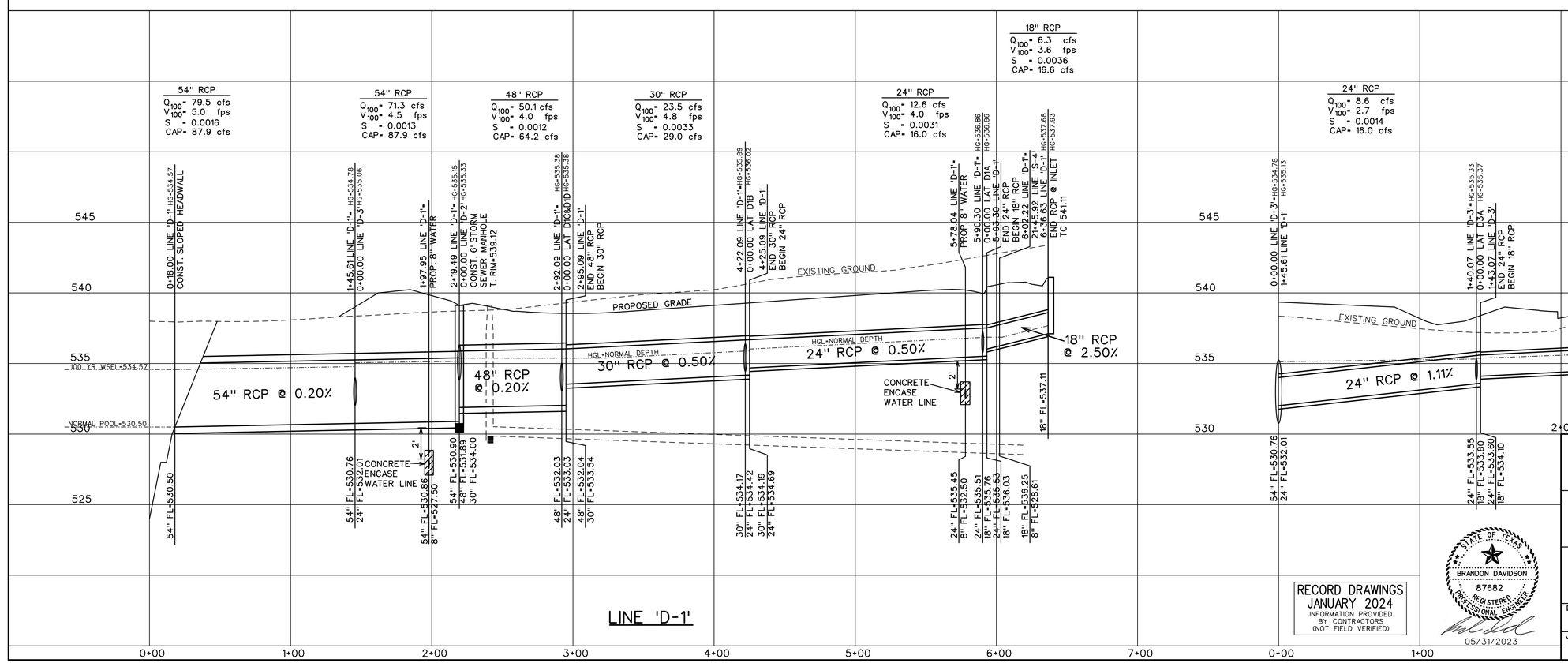
DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	28

STORM SEWER CURVE DATA					
CURVE NO.	1	2	3	4	5
Δ	29° 52'19"	60° 00'00"	29° 46'43"	90° 00'20"	29° 37'50"
R	150.00'	65.00'	65.00'	65.00'	65.00'
T	40.01'	37.53'	17.28'	65.01'	17.19'
L	78.20'	68.07'	33.78'	102.11'	33.62'



LINE 'D-1'





CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

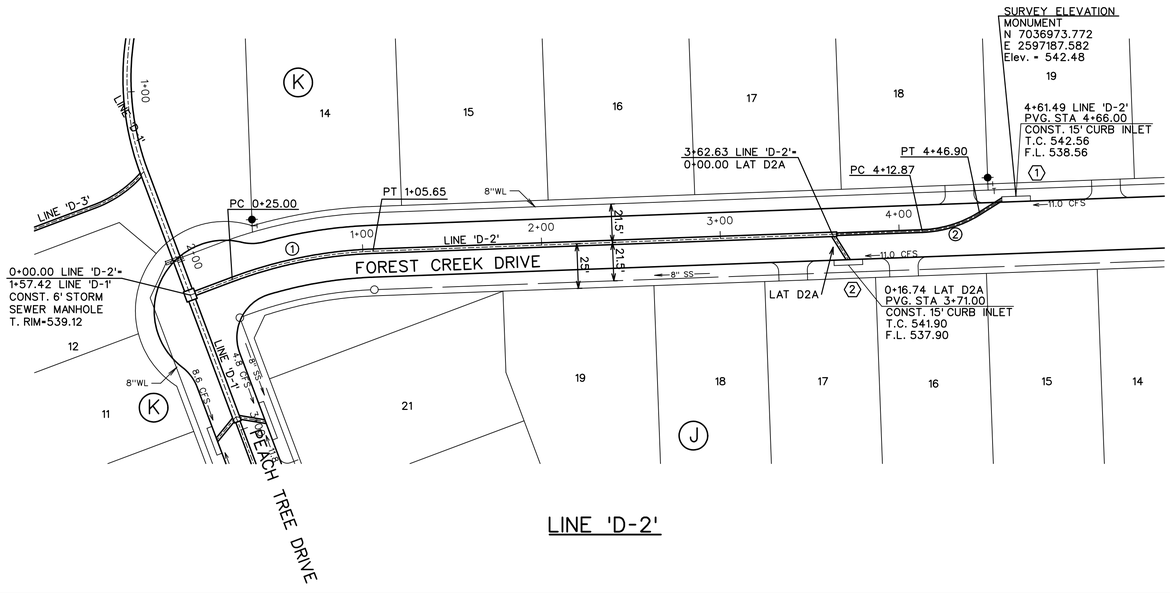
STORM SEWER PLAN AND PROFILE
LINES 'D-1' AND 'D-3'

RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

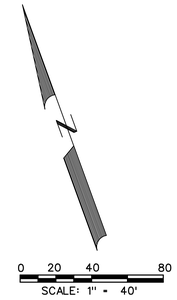
STATE OF TEXAS
BRANDON DAVIDSON
87682
REGISTERED PROFESSIONAL ENGINEER
05/31/2023

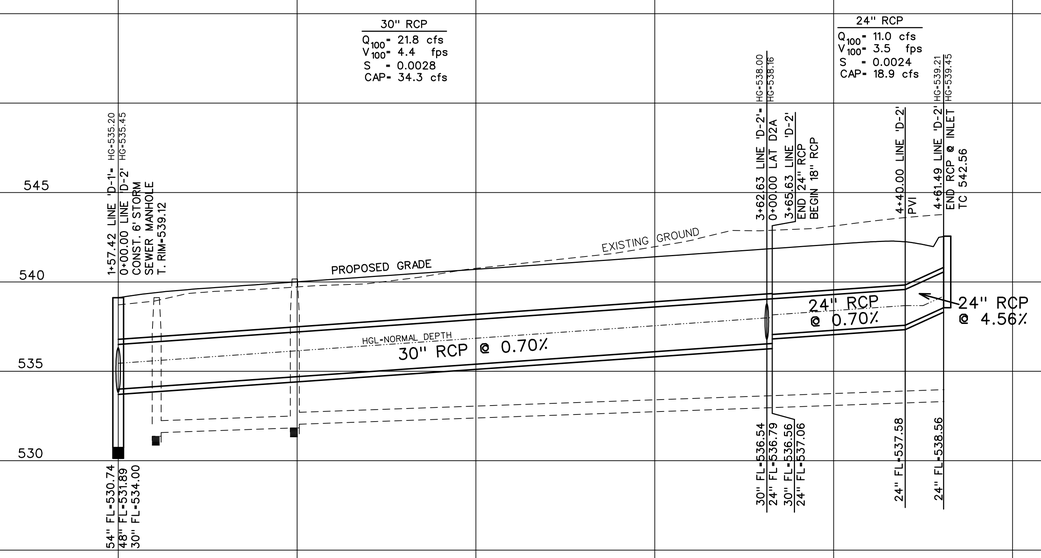
DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	29

STORM SEWER CURVE DATA		
CURVE NO.	1	2
Δ	18° 29'00"	30° 00'00"
R	250.00'	65.00'
T	40.68'	17.42'
L	80.65'	34.03'



LINE 'D-2'





LINE 'D-2'

RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

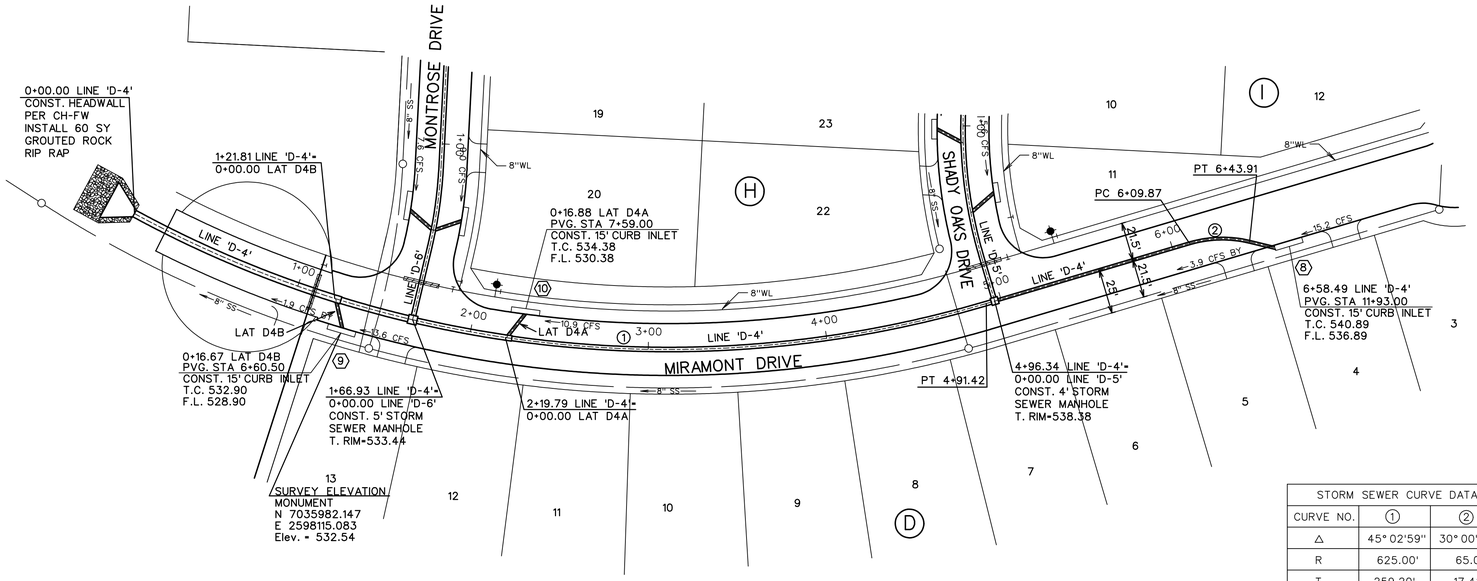
STATE OF TEXAS
BRANDON DAVIDSON
87682
REGISTERED PROFESSIONAL ENGINEER
05/31/2023

CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

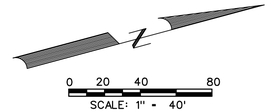
DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

STORM SEWER PLAN AND PROFILE
LINE 'D-2'

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	30



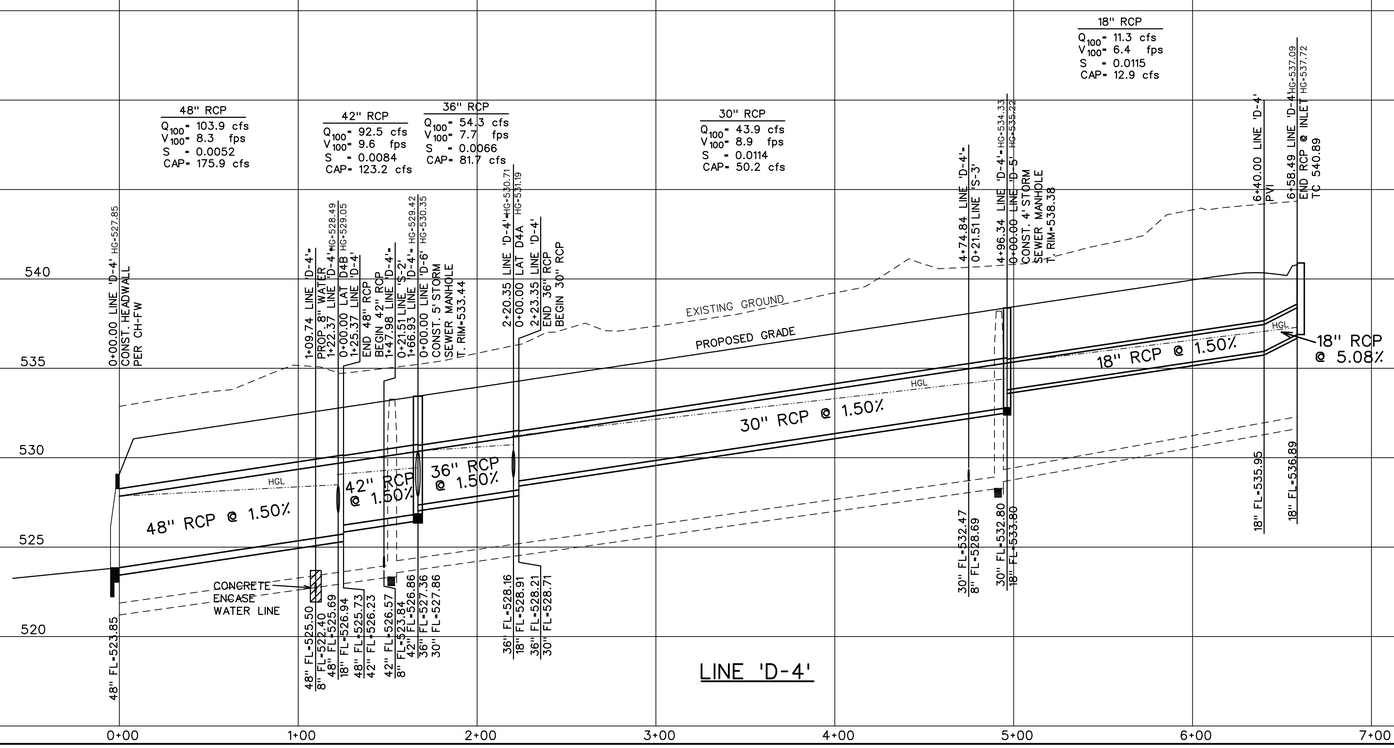
LINE 'D-4'



STORM SEWER CURVE DATA		
CURVE NO.	1	2
Δ	45° 02'59"	30° 00'00"
R	625.00'	65.00'
T	259.20'	17.42'
L	491.42'	34.03'

LEGEND

- (B) - BLOCK LABEL
- (19) - INLET NUMBER
- (1) - CURVE NUMBER
- SANITARY SEWER
- WATER
- PROPOSED STORM SEWER
- EXISTING STORM SEWER



LINE 'D-4'

RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

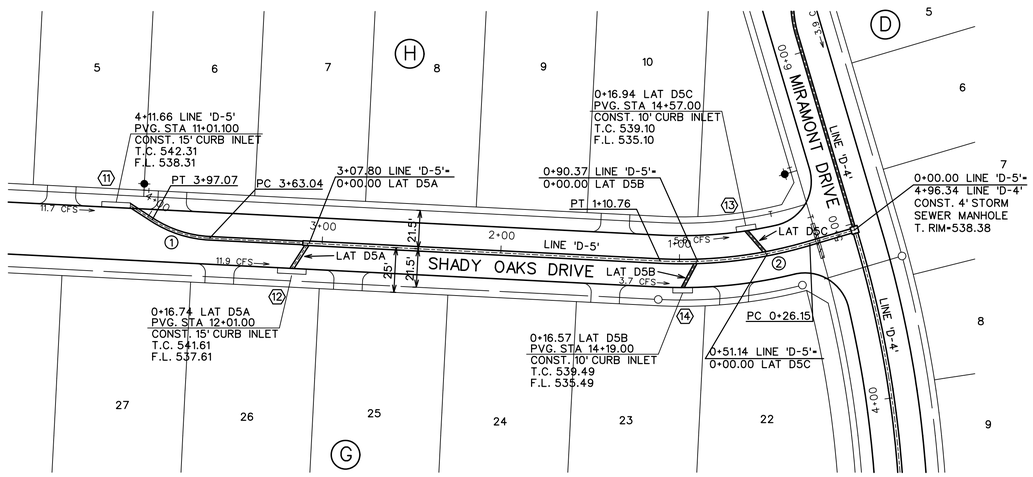
STATE OF TEXAS
BRANDON DAVIDSON
87682
REGISTERED PROFESSIONAL ENGINEER
05/31/2023

CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

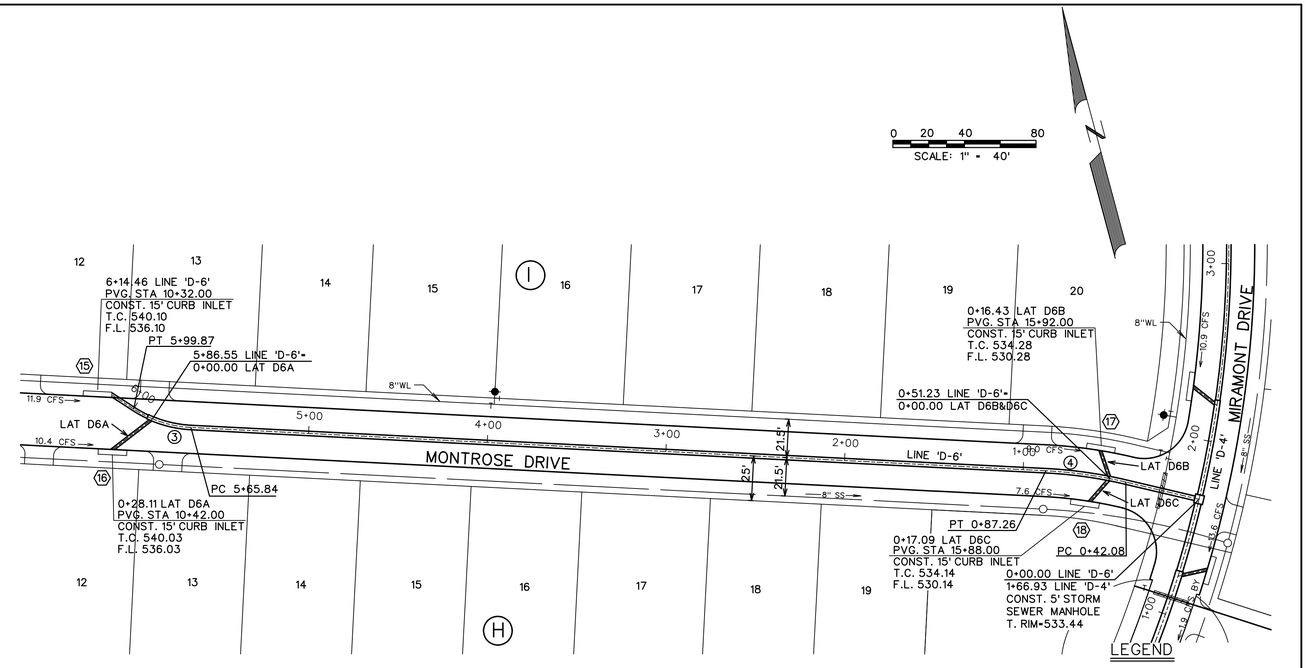
DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

STORM SEWER PLAN AND PROFILE
LINE 'D-4'

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	31



LINE 'D-5'



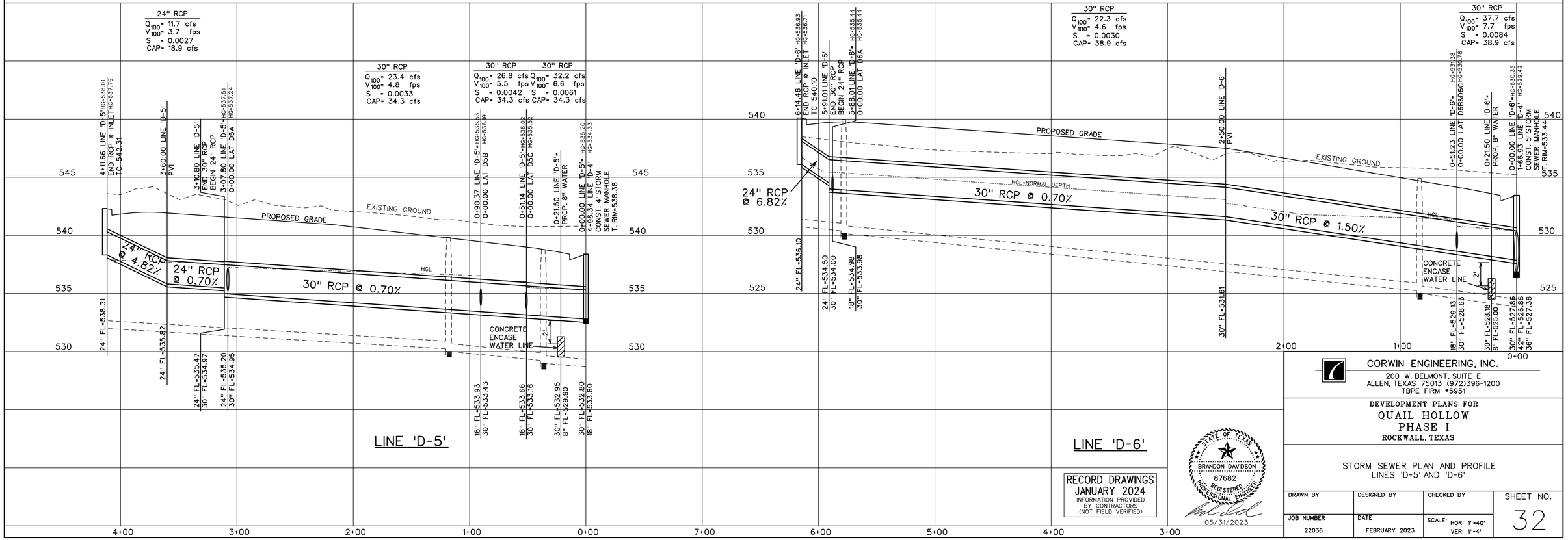
LINE 'D-6'

	STORM SEWER CURVE DATA			
CURVE NO.	1	2	3	4
Δ	30° 00'00"	19° 23'29"	30° 00'00"	10° 21'19"
R	65.00'	250.00'	65.00'	250.00'
T	17.42'	42.71'	17.42'	22.65'
L	34.03'	84.61'	34.03'	45.18'

24" RCP
Q_{100}= 11.9 cfs
V_{100}= 3.8 fps
S = 0.0028
CAP= 50.1 cfs

LEGEND

- B - BLOCK LABEL
- 19 - INLET NUMBER
- 1 - CURVE NUMBER
- SANITARY SEWER
- WATER
- PROPOSED STORM SEWER
- EXISTING STORM SEWER



RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

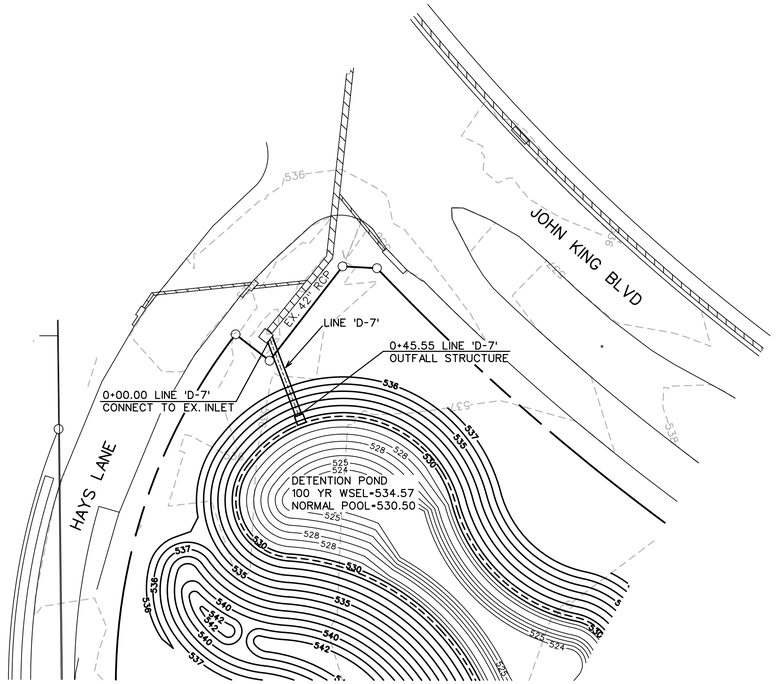
STATE OF TEXAS
BRANDON DAVIDSON
87682
REGISTERED PROFESSIONAL ENGINEER
05/31/2023

CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

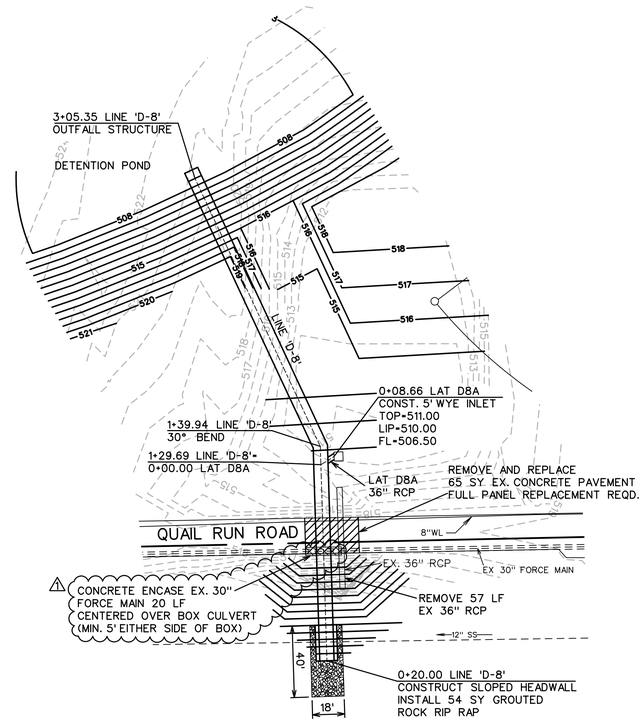
DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

STORM SEWER PLAN AND PROFILE
LINES 'D-5' AND 'D-6'

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	32



LINE 'D-7'



LINE 'D-8'

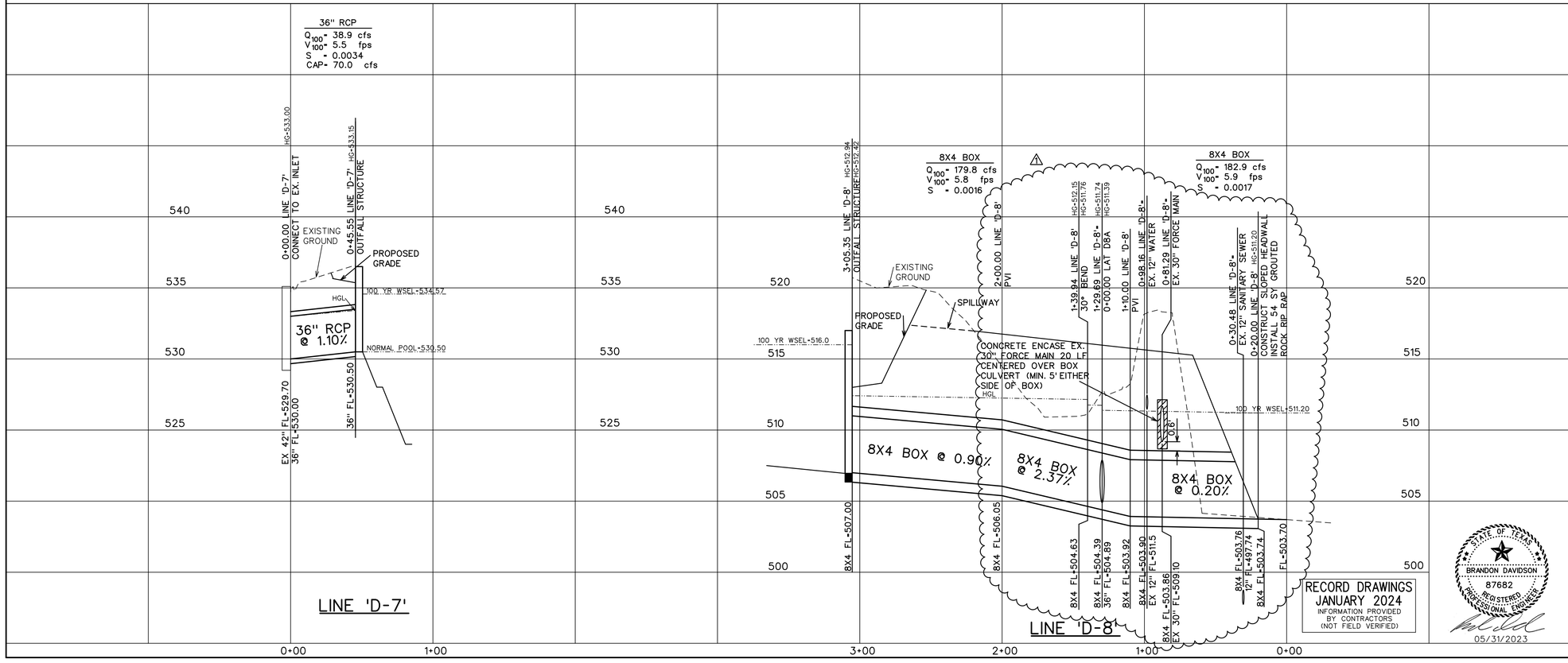
N

0

SCALE: 1" = '

LEGEND

- (B) - BLOCK LABEL
- (19) - INLET NUMBER
- (1) - CURVE NUMBER
- —○— - SANITARY SEWER
- WATER
- PROPOSED STORM SEWER
- EXISTING STORM SEWER



RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

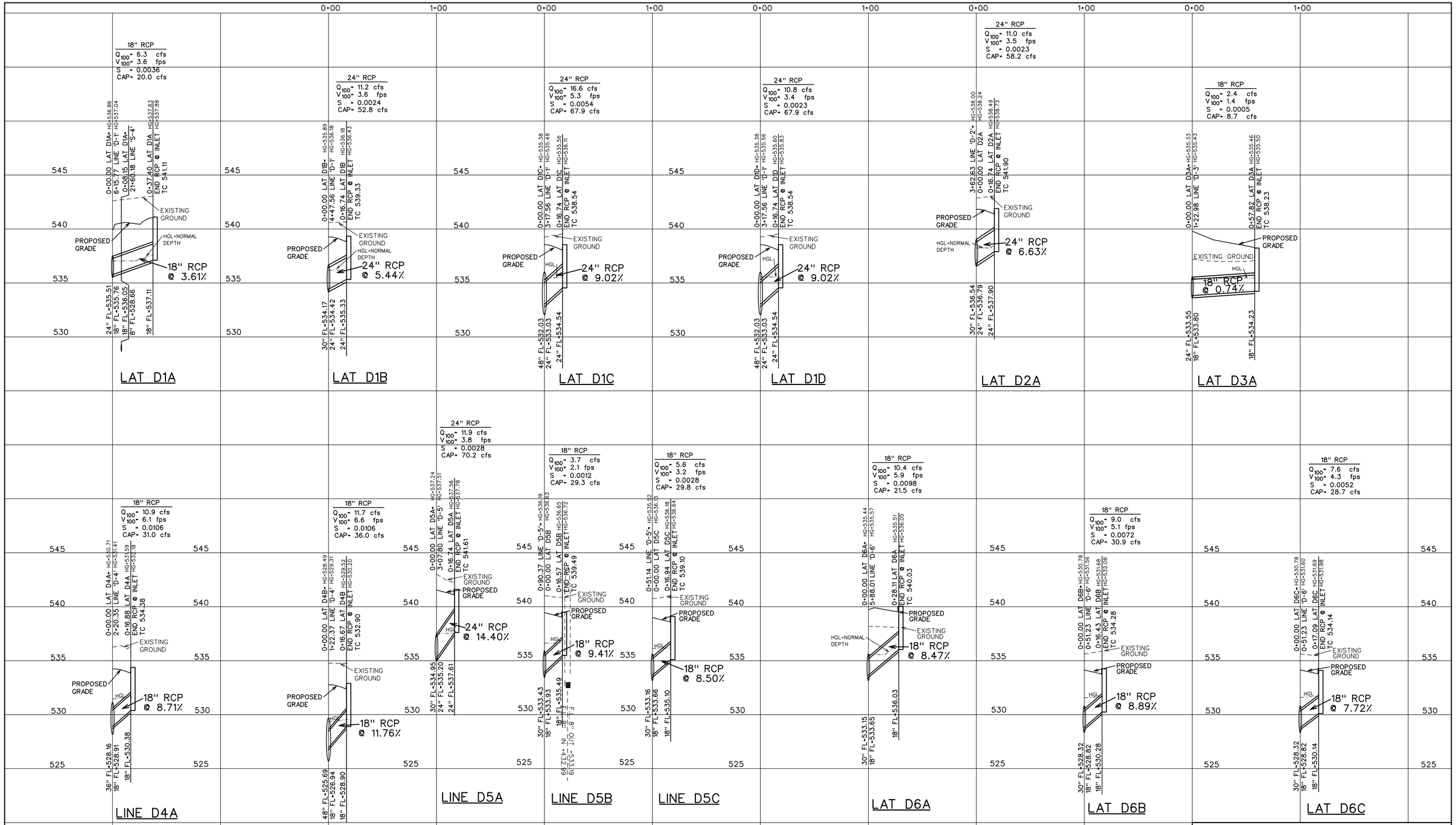
STATE OF TEXAS
BRANDON DAVIDSON
87682
REGISTERED PROFESSIONAL ENGINEER
05/31/2023

CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

STORM SEWER PLAN AND PROFILES
LINES 'D-7' AND 'D-8'

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	33



RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

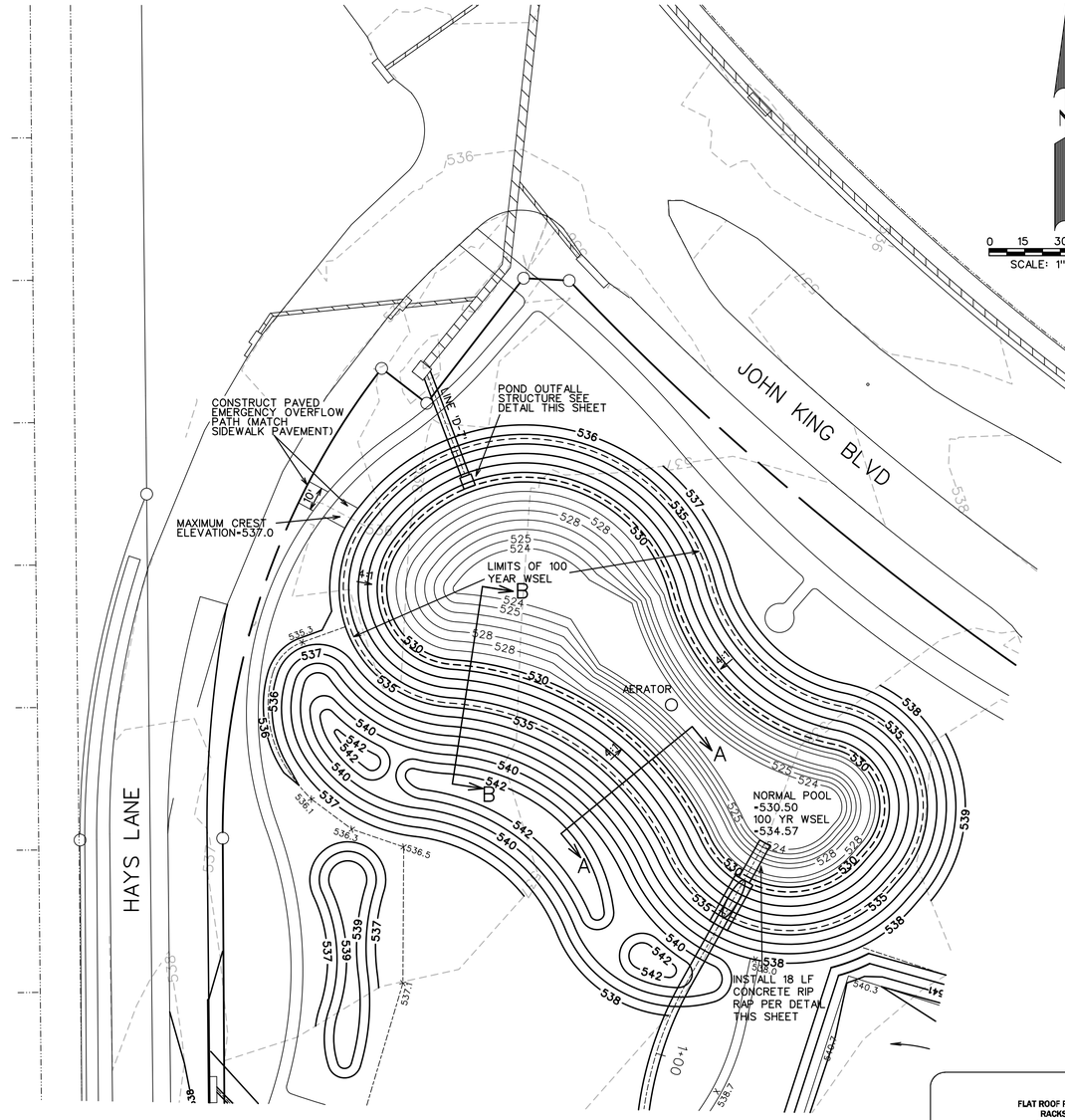
STATE OF TEXAS
BRANDON DAVIDSON
87682
REGISTERED PROFESSIONAL ENGINEER
02/22/2023

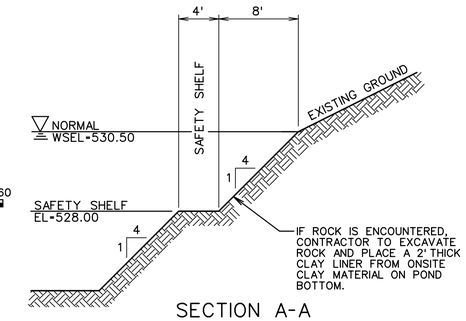
CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

STORM SEWER PROFILES

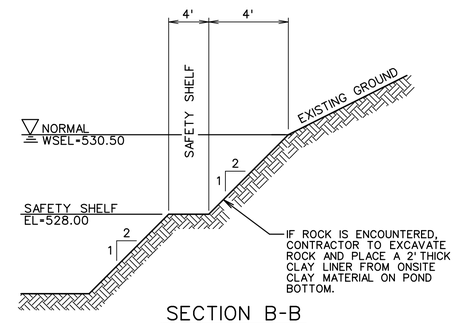
DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: HOR: 1"=40' VER: 1"=4'	34





SECTION A-A

N.T.S.



SECTION B-B

N.T.S.

Northwest Detention Pond
5-Year Storm
Pre-Project Runoff Calculations

	Area #	Area (sf)	Area (acres)	Runoff Coefficient	Tc - Existing (min)	Rainfall Intensity (in/hr)	Q - Undeveloped (cfs)
Existing Runoff	EX1	725126	16.65	0.35	20	4.9	28.5
Bypass	22	39350	0.90	0.50	10	6.1	2.8
						Allowed Release=	**25.8**

Post-Project Runoff Calculations

Area #	Area (sf)	Area (acres)	Runoff Coefficient	Tc - Existing (min)	Rainfall Intensity (in/hr)	Q - Post Development (cfs)	Difference between Pre and Post Development Conditions
1-7,19-21	875608	20.10	0.50	10	6.1	61.3	
						61.3	**35.5**

10-Year Storm
Pre-Project Runoff Calculations

	Area #	Area (sf)	Area (acres)	Runoff Coefficient	Tc - Existing (min)	Rainfall Intensity (in/hr)	Q - Undeveloped (cfs)
Existing Runoff	EX1	725126	16.65	0.35	20	5.9	34.4
Bypass	22	39350	0.90	0.50	10	7.1	3.2
						Allowed Release=	**31.2**

Post-Project Runoff Calculations

Area #	Area (sf)	Area (acres)	Runoff Coefficient	Tc - Existing (min)	Rainfall Intensity (in/hr)	Q - Post Development (cfs)	Difference between Pre and Post Development Conditions
1-7,19-21	875608	20.10	0.50	10	7.1	71.4	
						71.4	**40.2**

25-Year Storm
Pre-Project Runoff Calculations

	Area #	Area (sf)	Area (acres)	Runoff Coefficient	Tc - Existing (min)	Rainfall Intensity (in/hr)	Q - Undeveloped (cfs)
Existing Runoff	EX1	725126	16.65	0.35	20	6.6	38.5
Bypass	22	39350	0.90	0.50	10	8.3	3.7
						Allowed Release=	**34.7**

Post-Project Runoff Calculations

Area #	Area (sf)	Area (acres)	Runoff Coefficient	Tc - Existing (min)	Rainfall Intensity (in/hr)	Q - Post Development (cfs)	Difference between Pre and Post Development Conditions
1-7,19-21	875608	20.10	0.50	10	8.3	83.4	
						83.4	**48.7**

100-Year Storm
Pre-Project Runoff Calculations

	Area #	Area (sf)	Area (acres)	Runoff Coefficient	Tc - Existing (min)	Rainfall Intensity (in/hr)	Q - Undeveloped (cfs)
Existing Runoff	EX1	725126	16.65	0.35	20	8.3	48.4
Bypass	22	39350	0.90	0.50	10	9.8	4.4
						Allowed Release=	**43.9**

Post-Project Runoff Calculations

Area #	Area (sf)	Area (acres)	Runoff Coefficient	Tc - Existing (min)	Rainfall Intensity (in/hr)	Q - Post Development (cfs)	Difference between Pre and Post Development Conditions
1-7,19-21	875608	20.10	0.50	10	9.8	98.5	
						98.5	**54.6**

DETENTION STORAGE CALCULATIONS - 5 Year

Storm Duration	Outflow Duration	Area (AC.)	Future "C"	Future "KF"	Future "CA"	Rainfall intensity	Inflow (cfs)	Inflow Volume (cubic ft.)	Outflow Volume (cubic ft.)	Volume (cubic ft.)	Volume (acre-ft.)	Outflow (cfs)
10	20	20.10	0.50	1.00	10.05	6.10	61.3	36785	14092	**22693**	**0.52**	23.5
20	30	20.10	0.50	1.00	10.05	4.90	49.2	59098	21138	**37959**	**0.87**	23.5
30	40	20.10	0.50	1.00	10.05	4.10	41.2	74173	28184	**45989**	**1.06**	23.5
40	50	20.10	0.50	1.00	10.05	3.40	34.2	82013	35230	**46783**	**1.07**	23.5
50	60	20.10	0.50	1.00	10.05	2.80	28.1	84425	42276	**42149**	**0.97**	23.5
60	70	20.10	0.50	1.00	10.05	2.60	26.1	94074	49322	**44751**	**1.03**	23.5
70	80	20.10	0.50	1.00	10.05	2.40	24.1	101310	56369	**44941**	**1.03**	23.5
80	90	20.10	0.50	1.00	10.05	2.30	23.1	110959	63415	**47544**	**1.09**	23.5
90	100	20.10	0.50	1.00	10.05	2.10	21.1	113974	70461	**43513**	**1.00**	23.5
100	110	20.10	0.50	1.00	10.05	1.90	19.1	114577	77507	**37070**	**0.85**	23.5
110	120	20.10	0.50	1.00	10.05	1.80	18.1	119401	84553	**34848**	**0.80**	23.5

Maximum Storage Required= **47544** cf

DETENTION STORAGE CALCULATIONS - 10 Year

Storm Duration	Outflow Duration	Area (AC.)	Future "C"	Future "KF"	Future "CA"	Rainfall intensity	Inflow (cfs)	Inflow Volume (cubic ft.)	Outflow Volume (cubic ft.)	Volume (cubic ft.)	Volume (acre-ft.)	Outflow (cfs)
10	20	20.10	0.50	1.00	10.05	7.10	71.4	42816	16159	**26656**	**0.61**	26.9
20	30	20.10	0.50	1.00	10.05	5.90	59.3	71158	24239	**46919**	**1.08**	26.9
30	40	20.10	0.50	1.00	10.05	4.80	48.2	86837	32319	**54519**	**1.25**	26.9
40	50	20.10	0.50	1.00	10.05	4.00	40.2	96486	40398	**56088**	**1.29**	26.9
50	60	20.10	0.50	1.00	10.05	3.50	35.2	105531	48478	**57053**	**1.31**	26.9
60	70	20.10	0.50	1.00	10.05	3.00	30.2	108546	56558	**51989**	**1.19**	26.9
70	80	20.10	0.50	1.00	10.05	2.80	28.1	118195	64637	**53558**	**1.23**	26.9
80	90	20.10	0.50	1.00	10.05	2.60	26.1	125431	72717	**52715**	**1.21**	26.9
90	100	20.10	0.50	1.00	10.05	2.50	25.1	135683	80796	**54887**	**1.26**	26.9
100	110	20.10	0.50	1.00	10.05	2.40	24.1	144729	88876	**55853**	**1.28**	26.9
110	120	20.10	0.50	1.00	10.05	2.30	23.1	152568	96956	**55612**	**1.28**	26.9

Maximum Storage Required= **57053** cf

DETENTION STORAGE CALCULATIONS - 25 Year

Storm Duration	Outflow Duration	Area (AC.)	Future "C"	Future "KF"	Future "CA"	Rainfall intensity	Inflow (cfs)	Inflow Volume (cubic ft.)	Outflow Volume (cubic ft.)	Volume (cubic ft.)	Volume (acre-ft.)	Outflow (cfs)
10	20	20.10	0.50	1.00	10.05	8.30	83.4	50052	17947	**32105**	**0.74**	29.9
20	30	20.10	0.50	1.00	10.05	6.60	66.3	79601	26920	**52680**	**1.21**	29.9
30	40	20.10	0.50	1.00	10.05	5.50	55.3	99501	35894	**63607**	**1.46**	29.9
40	50	20.10	0.50	1.00	10.05	4.60	46.2	110959	44867	**66091**	**1.52**	29.9
50	60	20.10	0.50	1.00	10.05	4.00	40.2	120607	53841	**66766**	**1.53**	29.9
60	70	20.10	0.50	1.00	10.05	3.50	35.2	126538	62814	**63823**	**1.47**	29.9
70	80	20.10	0.50	1.00	10.05	3.30	33.2	139301	71788	**67513**	**1.55**	29.9
80	90	20.10	0.50	1.00	10.05	3.10	31.2	149553	80761	**68792**	**1.58**	29.9
90	100	20.10	0.50	1.00	10.05	2.90	29.1	157392	89735	**67658**	**1.55**	29.9
100	110	20.10	0.50	1.00	10.05	2.70	27.1	162820	98708	**64111**	**1.47**	29.9
110	120	20.10	0.50	1.00	10.05	2.50	25.1	165835	107682	**58153**	**1.34**	29.9

Maximum Storage Required= **68792** cf

DETENTION STORAGE CALCULATIONS - 100 Year

Storm Duration	Outflow Duration	Area (AC.)	Future "C"	Future "KF"	Future "CA"	Rainfall intensity	Inflow (cfs)	Inflow Volume (cubic ft.)	Outflow Volume (cubic ft.)	Volume (cubic ft.)	Volume (acre-ft.)	Outflow (cfs)
10	20	20.10	0.50	1.00	10.05	9.80	98.5	59098	23368	**35729**	**0.82**	38.9
20	30	20.10	0.50	1.00	10.05	8.30	83.4	100104	35052	**65052**	**1.49**	38.9
30	40	20.10	0.50	1.00	10.05	6.90	69.3	124828	46736	**78092**	**1.79**	38.9
40	50	20.10	0.50	1.00	10.05	5.80	58.3	139904	58421	**81484**	**1.87**	38.9
50	60	20.10	0.50	1.00	10.05	5.00	50.3	150759	70105	**80654**	**1.85**	38.9
60	70	20.10	0.50	1.00	10.05	4.50	45.2	162820	81789	**81031**	**1.86**	38.9
70	80	20.10	0.50	1.00	10.05	4.00	40.2	168850	93473	**75377**	**1.73**	38.9
80	90	20.10	0.50	1.00	10.05	3.70	37.2	178499	105157	**73342**	**1.68**	38.9
90	100	20.10	0.50	1.00	10.05	3.50	35.2	189556	116841	**73115**	**1.68**	38.9
100	110	20.10	0.50	1.00	10.05	3.40	34.2	205032	128525	**76507**	**1.76**	38.9
110	120	20.10	0.50	1.00	10.05	3.20	32.2	212269	140209	**72059**	**1.65**	38.9

Maximum Storage Required= **81484** cf

Stage-Discharge Table

Opening #1 - 4.5' w x 1' h opening — Opening #2 Weir - 5' Long @ 534

Stage	Tailwater	Orifice 1 H	Orifice 1 Area	Orifice 1 Discharge	Weir Length	Weir Depth of Flow Over Weir	Weir Discharge	Total Discharge	Allowable Discharge	Above (Below)	
530.50	530.50	0	0	0				0.0			
531.00	530.97	0.02	4.50	2.7				2.7			
532.00	531.58	0.42	4.50	14.0				14.0			
533.00	531.90	1.10	4.50	22.7				22.7			
533.08	531.90	1.18	4.50	23.5				**23.5**	**25.8**	**(2.3)**	**5-year**
533.56	532.01	1.54	4.50	26.9				**26.9**	**31.2**	**(4.2)**	**10-year**
534.00	532.05	1.95	4.50	30.3	**5.0**	**0.00**	**0.0**	**30.3**			
534.01	532.10	1.90	4.50	29.9	**5.0**	**0.00**	**0.0**	**29.9**	**34.7**	**(4.8)**	**25-year**
534.57	532.43	2.14	4.50	31.7	**5.0**	**0.57**	**7.2**	**38.9**	**43.9**	**(5.0)**	**100-year**
535.00	532.53	2.47	4.50	34.1	**5.0**	**1.00**	**16.7**	**50.7**			
536.00	534.00	2.00	4.50	30.6	**5.0**	**2.00**	**47.1**	**77.7**			

Elevation Calculations

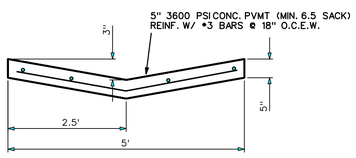
Event	Maximum Release Rate	Storage Requirement	Occurs at Elevation
5-year	23.5	47544	533.08
10-year	26.9	57053	533.56
25-year	29.9	68792	534.01
100-year	38.9	81484	534.57

Orifice Equation: C*A*(2*G*H)^0.5
C-Coefficient of Discharge=0.6
A - Area of opening
G - Gravitational Acceleration=32.2 ft/s^2
H - Depth of Water to Center of Opening

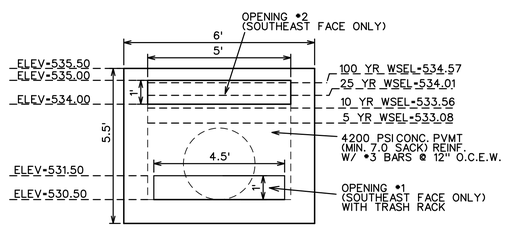
Weir Equation: C*H(3/2)*L
C - Weir Coefficient=3.33
H - Depth of Flow over Weir
L - Length of Weir

Elevation-Storage Table

Elevation	Volume (cf)
530.5	0
531	7909
532	25554
533	45712
534	68483
535	93969
536	122269



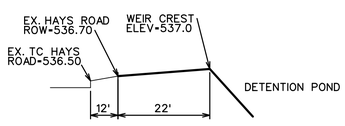
CONCRETE RIP RAP



SOUTHEAST FACE

SPECIAL INLET OPENINGS DETAIL

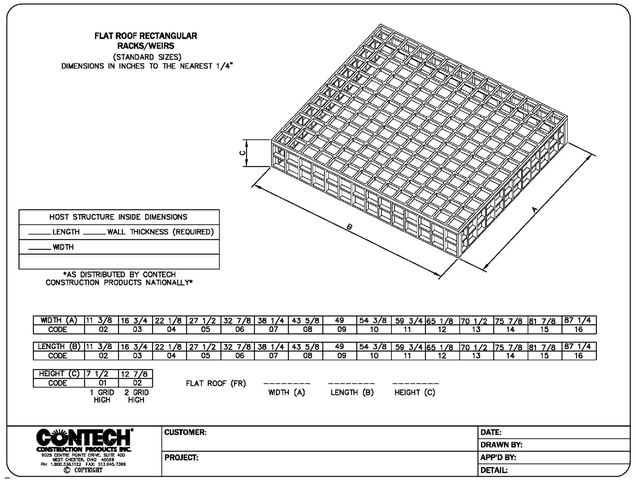
N.T.S.



POSITIVE OVERFLOW PROFILE

N.T.S.

EMERGENCY OVERFLOW SPILLWAY ASSUMING LOWER OUTLET IS COMPLETELY CLOGGED
Q_{100}= 43.9 cfs
WIDTH OF WIER=10'
WEIR CREST ELEV=537.00
DEPTH OF FLOW OVER WEIR=1.2'
WSEL=538.2'



NOTE:
NO PAVING TO BE INSTALLED UNTIL THE DETENTION SYSTEM IS CONSTRUCTED AND FULLY FUNCTIONING ALONG WITH THE BOTTOM AND SIDES OF THE DETENTION POND TO HAVE EITHER SOD OR ANCHORED SEEDED CURLEX INSTALLED.

RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

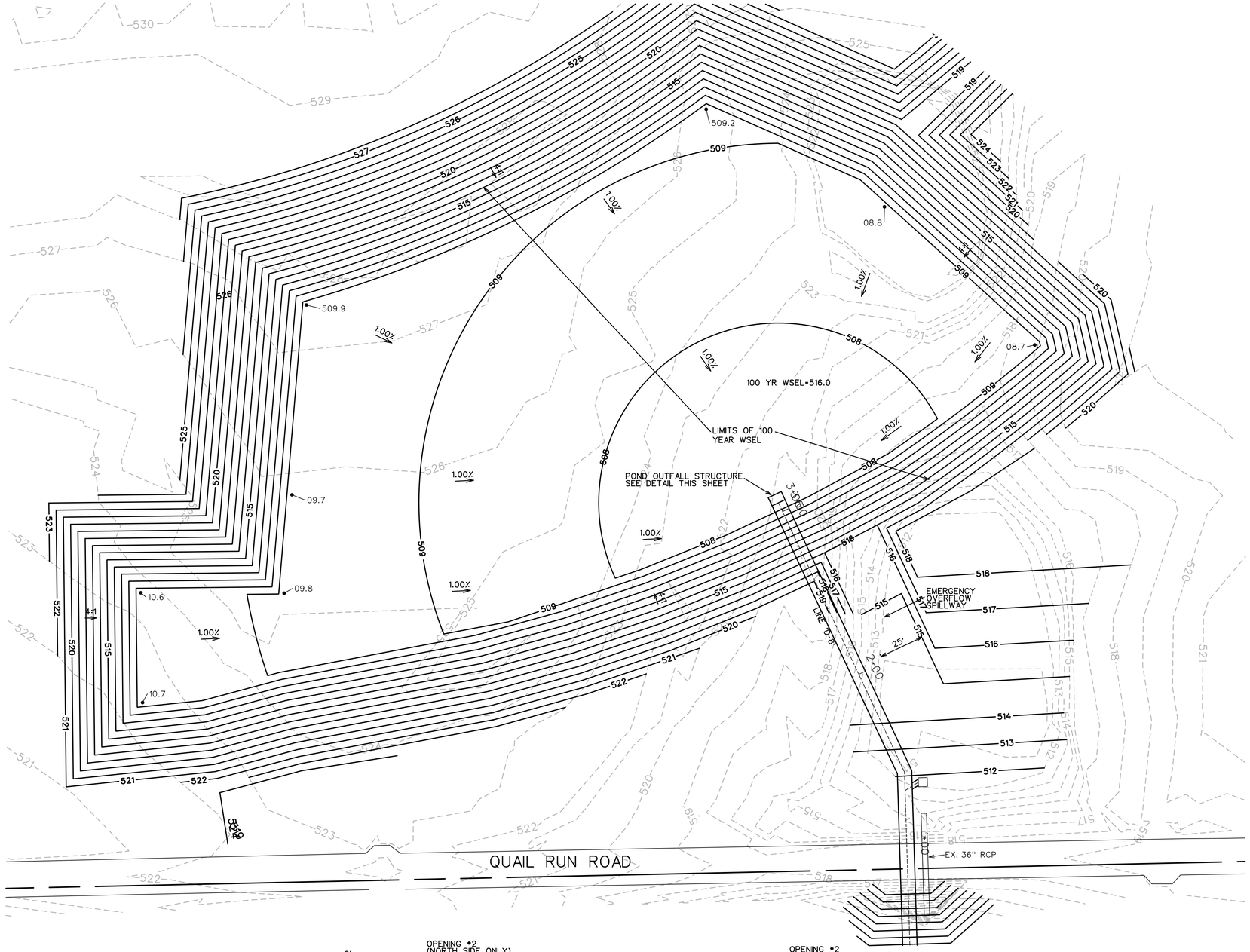
STATE OF TEXAS
BRANDON DAVIDSON
87682
REGISTERED PROFESSIONAL ENGINEER
02/22/2023

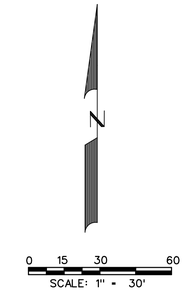
CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

NORTHWEST RETENTION/DETENTION POND PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: 1"=30'	35

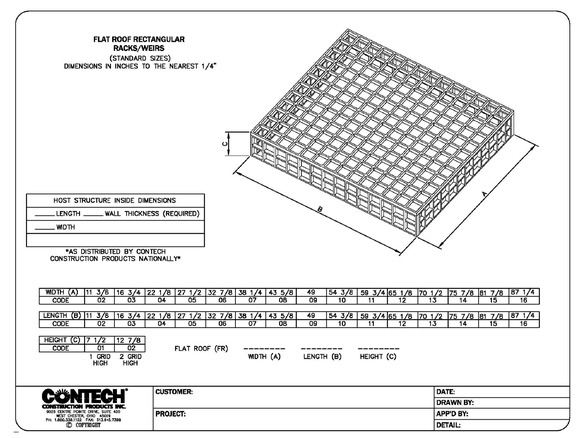


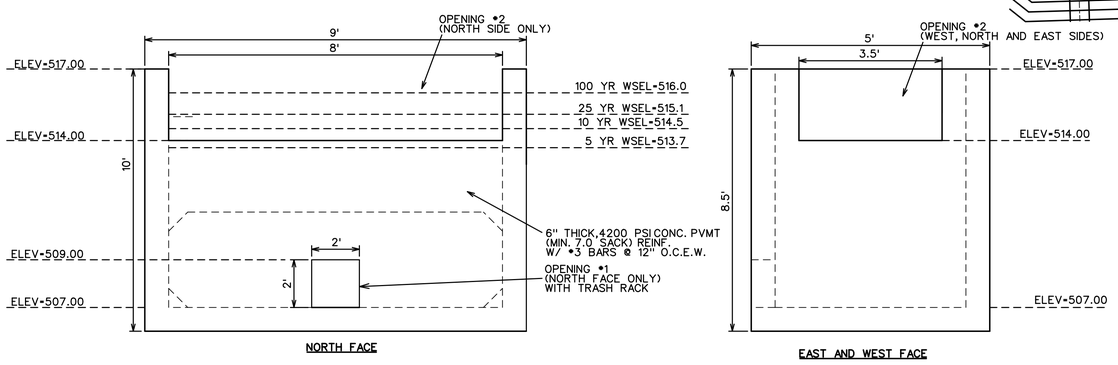


NOTE:
NO PAVING TO BE INSTALLED UNTIL THE DETENTION SYSTEM IS CONSTRUCTED AND FULLY FUNCTIONING ALONG WITH THE BOTTOM AND SIDES OF THE DETENTION POND TO HAVE EITHER SOD OR ANCHORED SEEDED CURLEX INSTALLED.

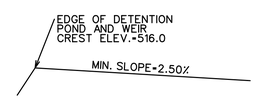
ELEVATION-STORAGE TABLE

Elevation	Storage (CF)	Storage (AC-FT)
507	0	0.00
508	8059	0.18
509	44962	1.03
510	114214	2.62
511	199407	4.58
512	291733	6.70
513	389628	8.94
514	493210	11.32
515	602596	13.83
516	717904	16.48
517	839251	19.27





SPECIAL INLET OPENINGS DETAIL
N.T.S.



POSITIVE OVERFLOW PROFILE
N.T.S.

EMERGENCY OVERFLOW SPILLWAY ASSUMING LOWER OUTLET IS COMPLETELY CLOGGED

Q_{100}= 182.9 cfs

WIDTH OF WIER=25'
WEIR CREST ELEV=516.00
DEPTH OF FLOW OVER WEIR=1.69'
WSEL=517.69'

RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

STATE OF TEXAS
BRANDON DAVIDSON
87682
REGISTERED PROFESSIONAL ENGINEER
02/22/2023

CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

SOUTH DETENTION POND PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: 1"=30'	36

NORTH SEDIMENT BASIN CALCULATIONS

N.T.S.

VOLUME REQUIRED = 3600 CF/ACRE
= 20.1 ACRES * 3600 CF/ACRE = 72,360 CF REQUIRED
VOLUME PROVIDED = 72,360 CF AT 534.61 ELEVATION

OUTFLOW= AREA * I(2) * C
= 20.1 * 3.6 * 0.50 = 36.1 CFS

30" PIPE CAPACITY WITH 3' HEAD = 40.9 CFS

DEWATERING ORIFICE = 12" DIAMETER WITH AVERAGE H=2.0'
AVERAGE OUTFLOW=5.3 CFS
TIME TO DRAIN 72,360 CF = 3.8 HOURS

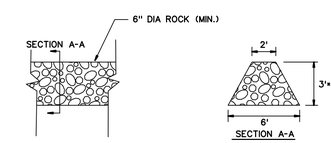
SCALE: 1" = 100'

LEGEND

SILT FENCE (BEFORE CONSTRUCTION)

INLET PROTECTION

ROCK CHECK DAM



ROCK DAM

N.T.S.

*ROCK DAM SHALL NOT BE BUILT IN SUCH A MANNER THAT RUNOFF IS DIRECTED ONTO THE STREET PAVEMENT BEFORE IT GOES OVER THE TOP OF THE ROCK DAM

RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS
(NOT FIELD VERIFIED)

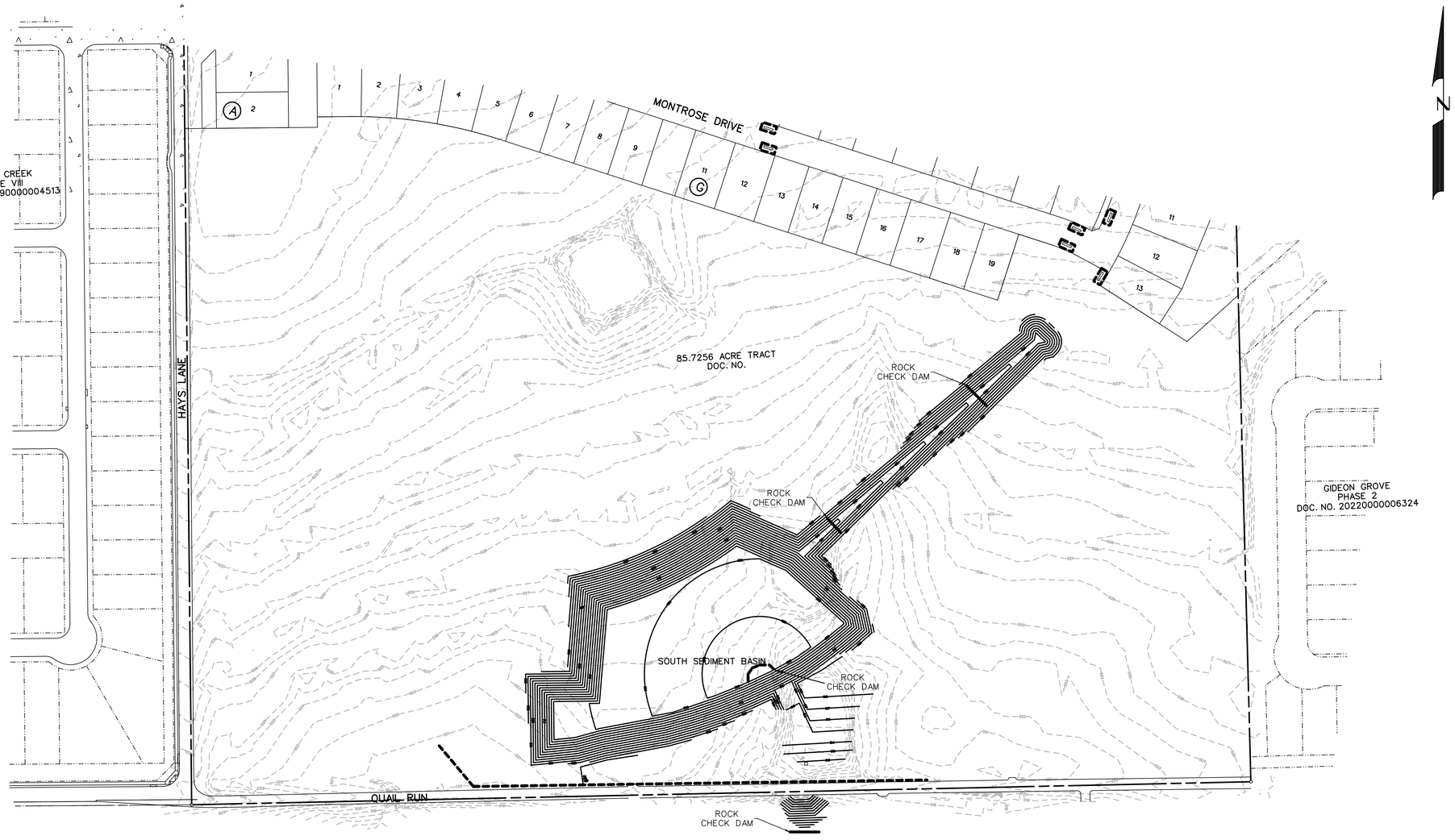
STATE OF TEXAS
WARREN L. CORWIN
57875
REGISTERED PROFESSIONAL ENGINEER
02/22/2023

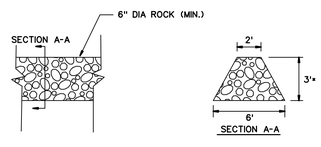
CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

EROSION CONTROL PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: 1"=100'	37

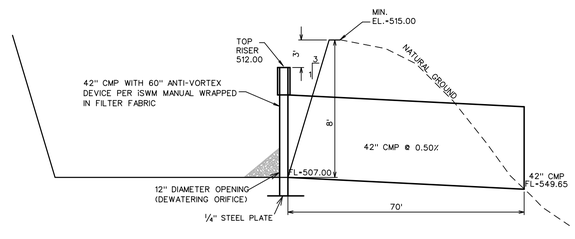




ROCK DAM

N.T.S.

*ROCK DAM SHALL NOT BE BUILT IN SUCH A MANNER THAT RUNOFF IS DIRECTED ONTO THE STREET PAVEMENT BEFORE IT GOES OVER THE TOP OF THE ROCK DAM



SOUTH SEDIMENT BASIN CALCULATIONS

N.T.S.

VOLUME REQUIRED = 3600 CF/ACRE
= 22.1 ACRES * 3600 CF/ACRE = 79,560 CF REQUIRED
VOLUME PROVIDED = 79,560 CF AT 510.03 ELEVATION

OUTFLOW= AREA * I(2) * C
= 20.1 * 3.6 * 0.50 = 36.1 CFS

42" PIPE CAPACITY WITH 3' HEAD = 71.2 CFS

DEWATERING ORIFICE = 12" DIAMETER WITH AVERAGE H=3.0'
AVERAGE OUTFLOW=6.6 CFS
TIME TO DRAIN 79,560 CF = 3.4 HOURS

RECORD DRAWINGS
JANUARY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

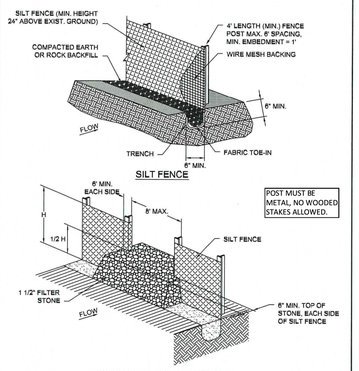
STATE OF TEXAS
WARREN L. CORWIN
57875
REGISTERED PROFESSIONAL ENGINEER
02/22/2023

CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

EROSION CONTROL PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: 1"=100'	38



SILT FENCE	CITY OF ROCKWALL	STANDARD SPECIFICATION REFERENCE 202.5 *	
		DATE Mar. 2018	STANDARD DRAWING NO. R-1020A

*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. *Public Works Construction Standards North Central Texas, Fifth Edition.*

SILT FENCE GENERAL NOTES:

1. POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF ONE FOOT.

2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (e.g. PAVEMENT), WEIGHT FABRIC FLAP WITH ROCK ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.

3. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.

4. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH SUPPORT POST OR TO WIRE BACKING, WHICH IN TURN IS ATTACHED TO THE FENCE POST. THERE SHALL BE A 3 FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.

5. INSPECTION SHALL BE AS SPECIFIED IN THE SWPPP. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.

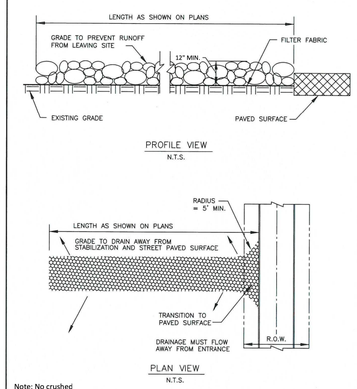
6. SILT FENCE SHALL BE REMOVED WHEN FINAL STABILIZATION IS ACHIEVED OR ANOTHER EROSION OR SEDIMENT CONTROL DEVICE IS EMPLOYED.

7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF HALF THE HEIGHT OF THE FENCE. THE SILT SHALL BE DISPOSED OF AT AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.

8. FILTER STONE SHALL BE WRAPPED IN FILTER FABRIC AND BURIED SIX (6") INCHES MINIMUM.

SILT FENCE	CITY OF ROCKWALL	STANDARD SPECIFICATION REFERENCE 202.5 *	
		DATE Mar. 2018	STANDARD DRAWING NO. R-1020B

*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. *Public Works Construction Standards North Central Texas, Fifth Edition.*



Note: No crushed concrete or recycled concrete allowed.

STABILIZED CONSTRUCTION ENTRANCE	CITY OF ROCKWALL	STANDARD SPECIFICATION REFERENCE 202.11 *	
		DATE Mar. 2018	STANDARD DRAWING NO. R-1070A

*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. *Public Works Construction Standards North Central Texas, Fifth Edition.*

STABILIZED CONSTRUCTION ENTRANCE GENERAL NOTES:

1. STONE SHALL BE 4 TO 6 INCH DIAMETER COARSE AGGREGATE.

2. MINIMUM LENGTH SHALL BE 50 FEET AND WIDITH SHALL BE 20 FEET.

3. THE THICKNESS SHALL NOT BE LESS THAN 12 INCHES.

4. THE WIDTH SHALL BE NO LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.

5. WHEN NECESSARY, VEHICLES SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WITH DRAINAGE FLOWING AWAY FROM BOTH THE STREET AND THE STABILIZED ENTRANCE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.

6. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PAVED SURFACES. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PAVED SURFACES MUST BE REMOVED IMMEDIATELY.

7. THE ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

8. PREVENT SHORTCUTTING OF THE FULL LENGTH OF THE CONSTRUCTION ENTRANCE BY INSTALLING BARRIERS AS NECESSARY.

9. INSPECTION SHALL BE AS SPECIFIED IN THE SWPPP.

10. NO CRUSHED OR RECYCLED CONCRETE ALLOWED.

STABILIZED CONSTRUCTION ENTRANCE	CITY OF ROCKWALL	STANDARD SPECIFICATION REFERENCE 202.11 *	
		DATE Mar. 2018	STANDARD DRAWING NO. R-1070B

*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. *Public Works Construction Standards North Central Texas, Fifth Edition.*

CONSTRUCTION SEQUENCE

1. GRADING CONTRACTOR TO INSTALL TEMPORARY STABILIZED ENTRANCE.
2. INSTALL SILT FENCE AS SHOWN, (TS-600 POLY FELT) PER C.O.G. SPECIFICATIONS.
3. PERFORM GRADING AND UTILITY CONSTRUCTION.
4. AFTER THE INLET BOTTOMS ARE CONSTRUCTED, THE INLETS SHALL BE FILLED WITH STONE AND COVERED WITH A FILTER FABRIC (TS-600 POLY FELT OR EQUIVALENT) BY UTILITY CONTRACTOR.
5. PRIOR TO CITY RELEASING PAVING, SOD OR SEEDED CURLEX SHALL BE INSTALLED ON SIDES AND BOTTOM OF ALL DETENTION PONDS.
6. AFTER PAVING AND COMPLETION OF INLETS, INLET FILTERS SHALL BE INSTALLED IN ALL INLETS AND MAINTAINED UNTIL RE-VEGETATION HAS BEEN COMPLETED BY PAVING CONTRACTOR.
7. SILT FENCE SHALL REMAIN IN PLACE UNTIL RE-VEGETATION HAS BEEN COMPLETED.
8. PAVING CONTRACTOR SHALL REMOVE TEMPORARY STABILIZED ENTRANCE.
9. PRIOR TO CITY ACCEPTANCE THE PAVING CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ANY MUD OR SILT WHICH COLLECTS ON THE EXISTING AND NEW PAVEMENT.
10. PRIOR TO CITY ACCEPTANCE 75-80% OF ALL DISTURBED AREA SHALL HAVE A MIN. 1" TALL GRASS ESTABLISHED
11. 75-80% OF ALL DISTURBED AREA TO HAVE 1" HIGH GRASS ESTABLISHED PRIOR TO ENGINEERING ACCEPTANCE.
12. ALL BAR DITCHES TO BE ANCHORED, SEEDED & CURLEXED PRIOR TO ACCEPTANCE OF GRASS ISN'T ESTABLISHED.

ROCK CHECK DAM GENERAL NOTES:

1. STONE SHALL BE WELL GRADED WITH SIZE RANGE FROM 1½ TO 3½ INCHES IN DIAMETER DEPENDING ON EXPECTED FLOWS.

2. THE CHECK DAM SHALL BE INSPECTED AS SPECIFIED IN THE SWPPP AND SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.

3. WHEN SILT REACHES A DEPTH EQUAL TO ONE-THIRD OF THE HEIGHT OF THE CHECK DAM OR ONE FOOT, WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF PROPERLY.

4. WHEN THE SITE HAS ACHIEVED FINAL STABILIZATION OR ANOTHER EROSION OR SEDIMENT CONTROL DEVICE IS EMPLOYED, THE CHECK DAM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

5. FILTER STONE SHALL BE WRAPPED IN APPROPRIATE SIZED WIRE MESH TO CONTAIN STONE AND BURIED SIX (6") INCHES MINIMUM.

ROCK CHECK DAM	CITY OF ROCKWALL	STANDARD SPECIFICATION REFERENCE 202.9 *	
		DATE Mar. 2018	STANDARD DRAWING NO. R-1060B

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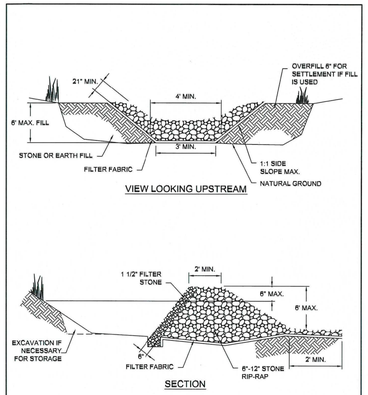

NOTE: FILTER STONE SHALL BE WRAPPED IN APPROPRIATE SIZED WIRE MESH TO CONTAIN STONE.

STONE OUTLET SEDIMENT TRAP	CITY OF ROCKWALL	STANDARD SPECIFICATION REFERENCE 202.12 *	
		DATE Mar. 2018	STANDARD DRAWING NO. R-1090

*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. *Public Works Construction Standards North Central Texas, Fifth Edition.*

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JANUARY 2024
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PHASE I
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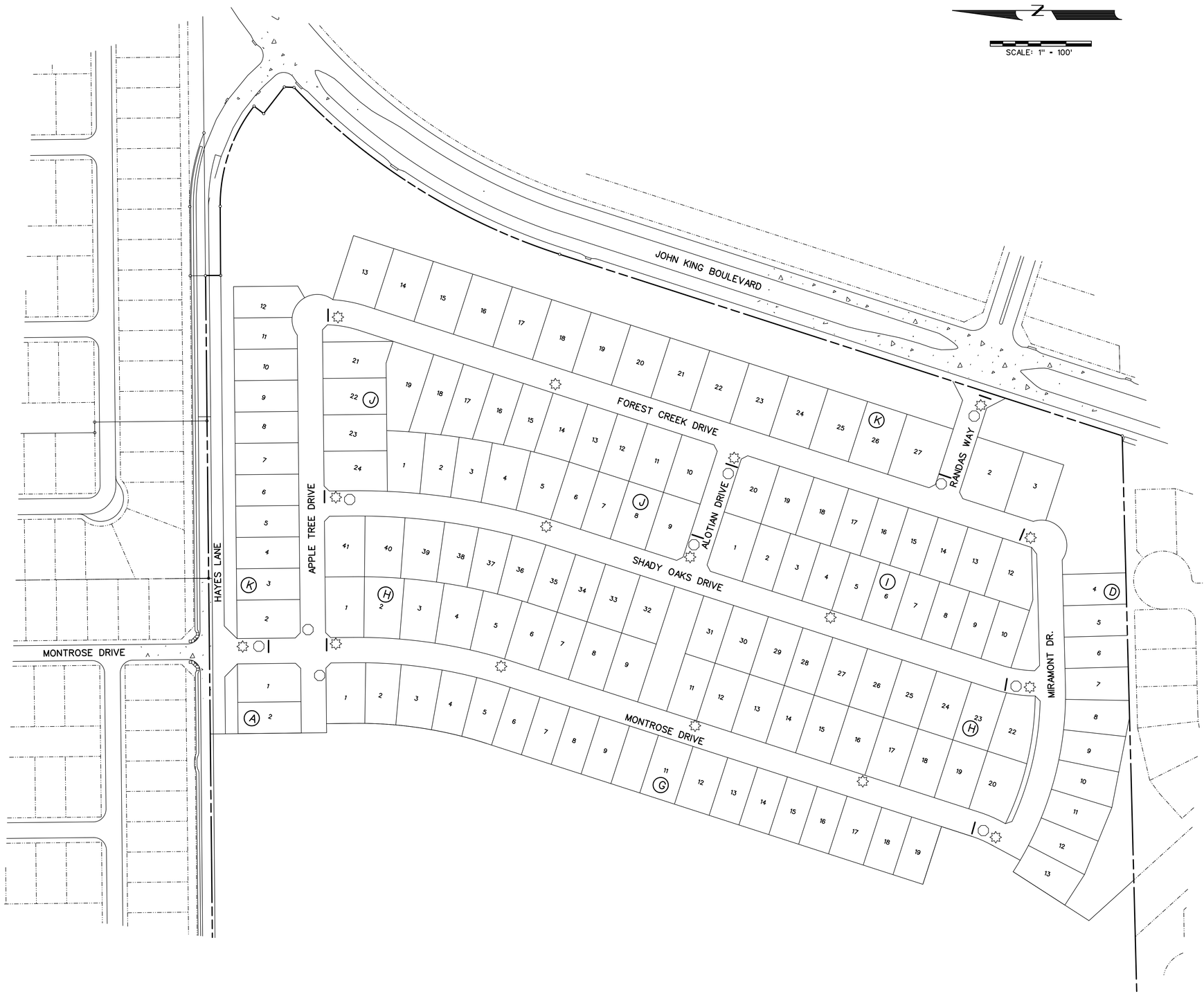
EROSION CONTROL PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: 1"=100'	39



The developer shall arrange for the installation of all pavement striping, regulatory, warning and guide signs, including posts, as shown on the plans or as directed by the City. Street name signs shall be installed at each intersection. Examples of regulatory, warning, information and guide signs are as follows:

-Regulatory signs shall include, but are not limited to, STOP, ALL-WAY, YIELD, KEEP RIGHT and speed limit signs.

-Warning signs shall include, but are not limited to, DEAD END, NO OUTLET, DIVIDED ROAD, DIP, and PAVEMENT ENDS.

-Guide signals shall include, but are not limited to, street name signs, DETOUR, direction arrow and advance arrow.

Regulatory signs should be used only where justified by engineering judgment or study. All signage plans shall be reviewed and approved by the City of Rockwall Engineering Department and be designed in accordance with the principles described in the current TMUTCD,

-A detailed street and regulatory signage plan is to be submitted to the City of Rockwall Engineering Department. All signs shall be shown in the engineering plans for review and approval. The signage plan shall be shown on a separate signage & pavement marking layout sheet or as a part of the plan & profile sheet. The plan shall identify the specific sign designation, size and location for each sign. Sign standards shall also be included in the engineering plans.

-All signage installed shall comply with the current" Texas Manual on Uniform Traffic Control Devices" and the" Standard Highway Sign Designs for Texas." The sign layout drawings shall show the color and dimensions of all sign face legend components including background color, legend color, borders, symbols, letter size and style.

-The developer shall be responsible for furnishing and installing all regulatory signage, warning signage and street name signage along with all necessary sign mounts in accordance with the approved engineering plans. A sample production sign shall be submitted to the Traffic Signs & Pavement Markings Supervisor for review and approval. The sample shall be directed to the City of Rockwall Service Center located at 1600 Airport Road, Rockwall Texas 75087. The sample sign must be submitted at least 10 days prior to the scheduled installation date.

-For a street with a cul-de-sac end, a standard W 14-2a shall be mounted over the street name blade, if the cul-de-sac is not clearly visible from the adjoining roadway, or is located in excess of 400 linear feet from the adjoining roadway.

-Sign posts shall be 2⅜ O.D. galvanized steel tube sign post with a galvanized finish.

-Sign clamps and brackets shall be high strength aluminum.

-Any decorative sign poles and fixtures installed shall be maintained by the HOA.

All developments shall be provided with streetlights. In general, lights should be located at street intersections and at intervals no greater than four hundred (400) feet apart. Streetlights should be the equivalent of 175-watt mercury vapor fixtures on minor residential streets. All collector and arterial, or commercial streets shall have sodium vapor fixtures with a minimum wattage of 250 or 400 watts as directed by the City. In some instances, the City may require greater wattage.

LEGEND
- STREET LIGHT
- STOP SIGN
- STREET NAME BLADE

RECORD DRAWINGS
JANUARY 2024
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TBPE FIRM #5951

DEVELOPMENT PLANS FOR
QUAIL HOLLOW
PHASE I
ROCKWALL, TEXAS

SIGN AND LIGHT PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER 22036	DATE FEBRUARY 2023	SCALE: 1"=100'	40