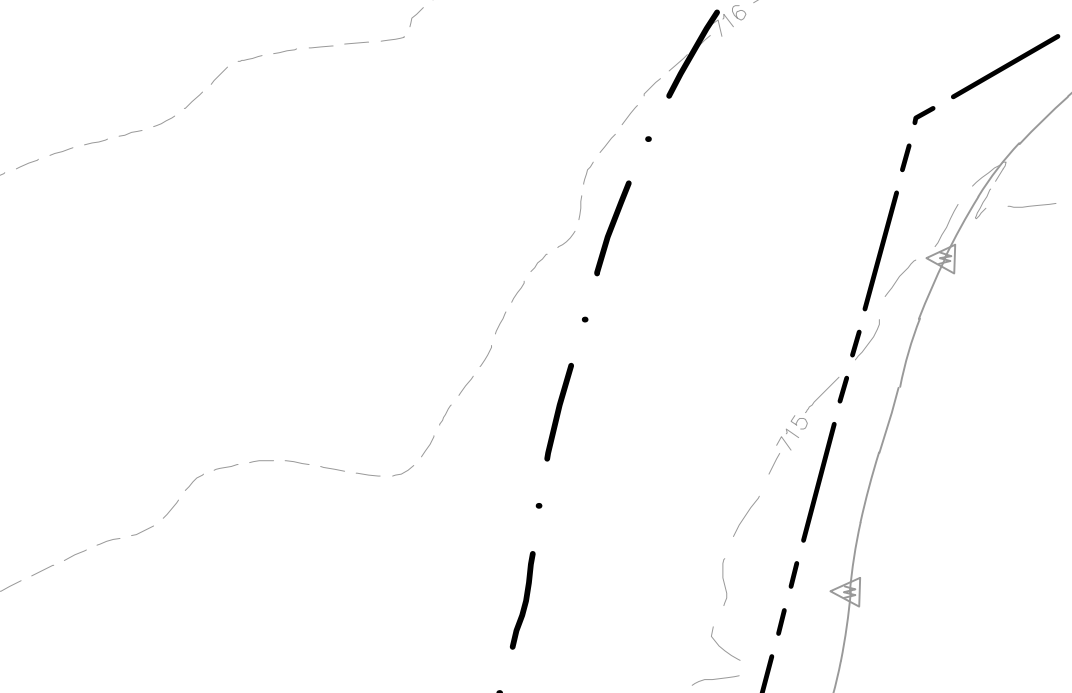
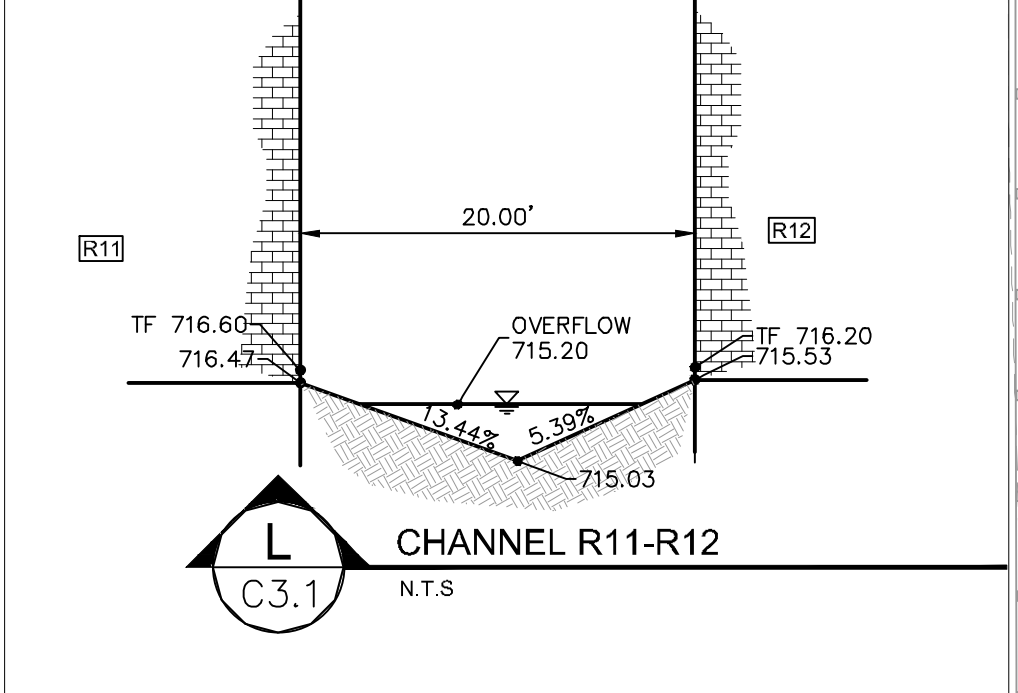
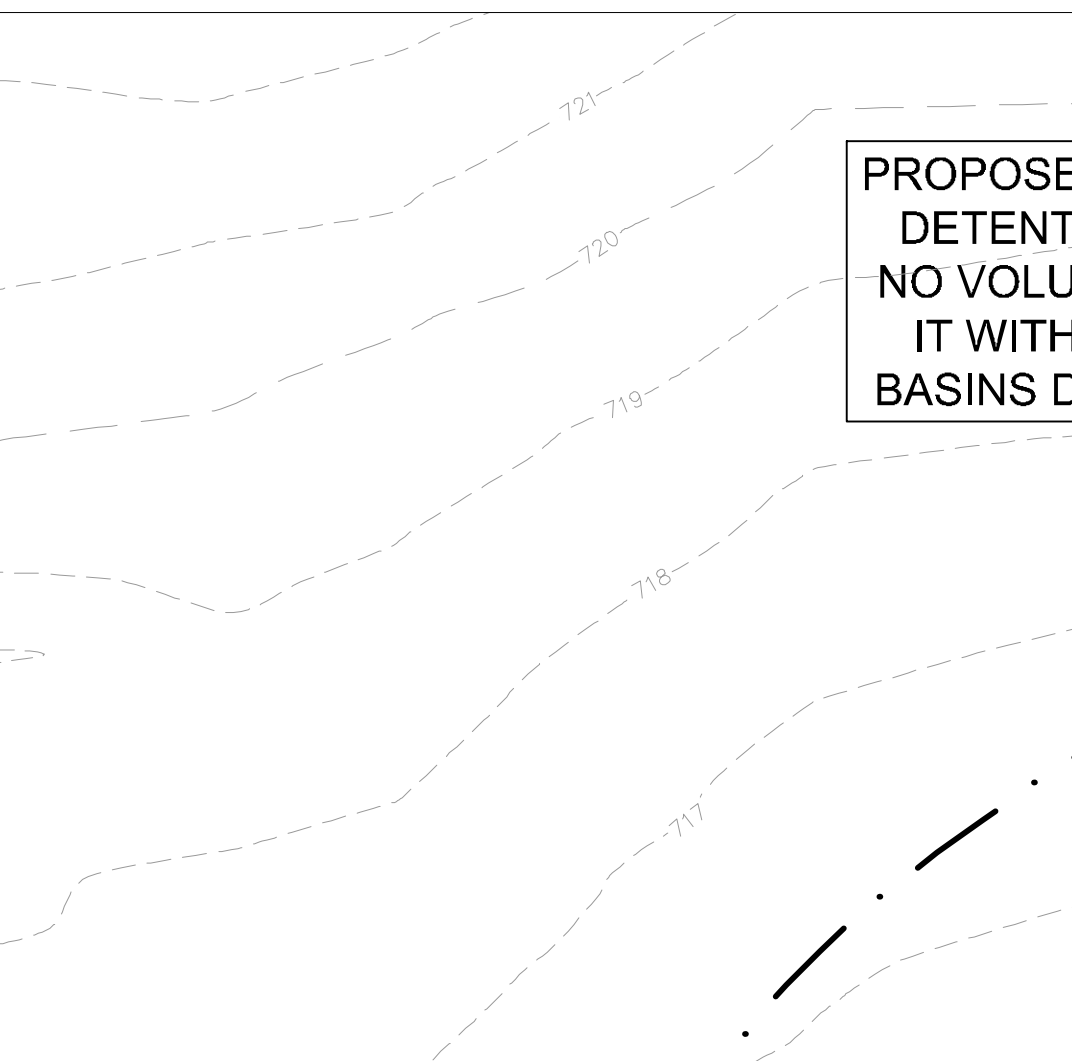
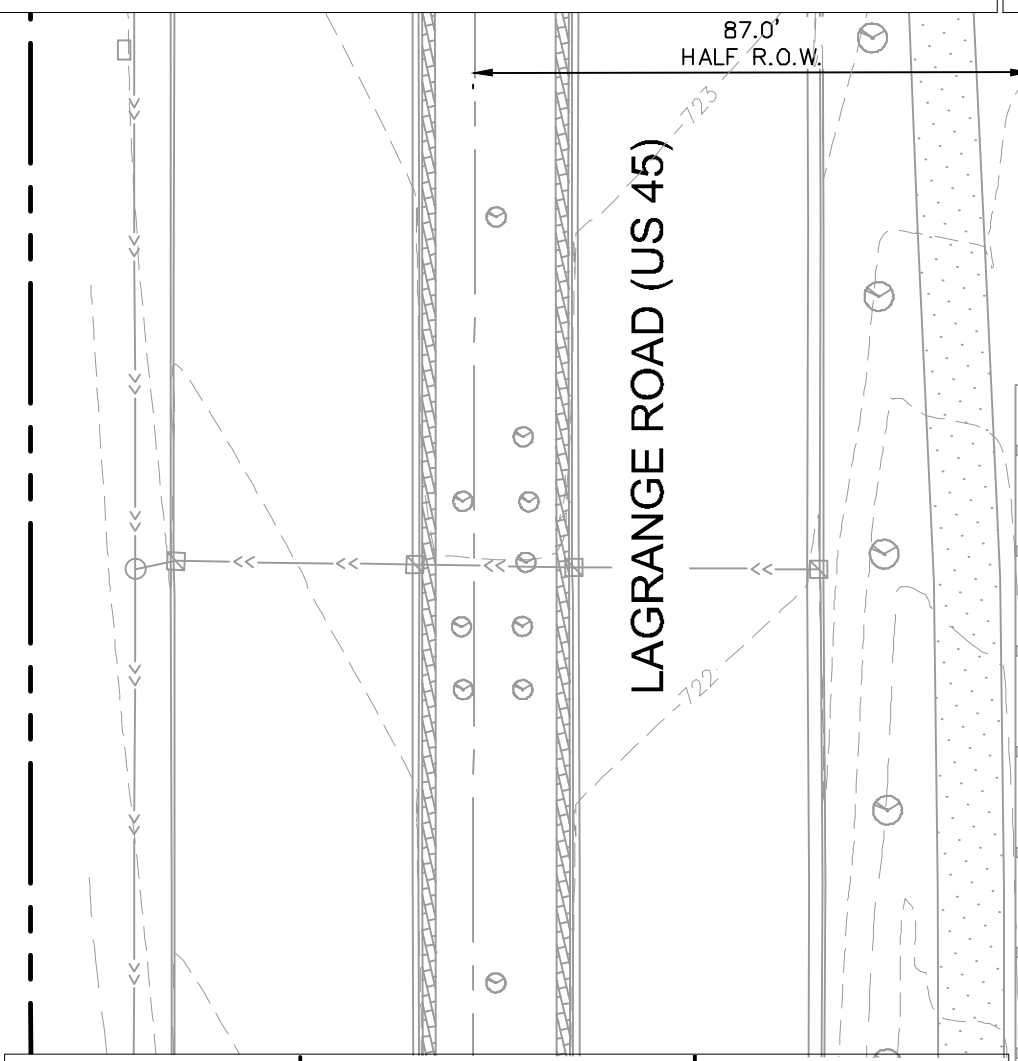
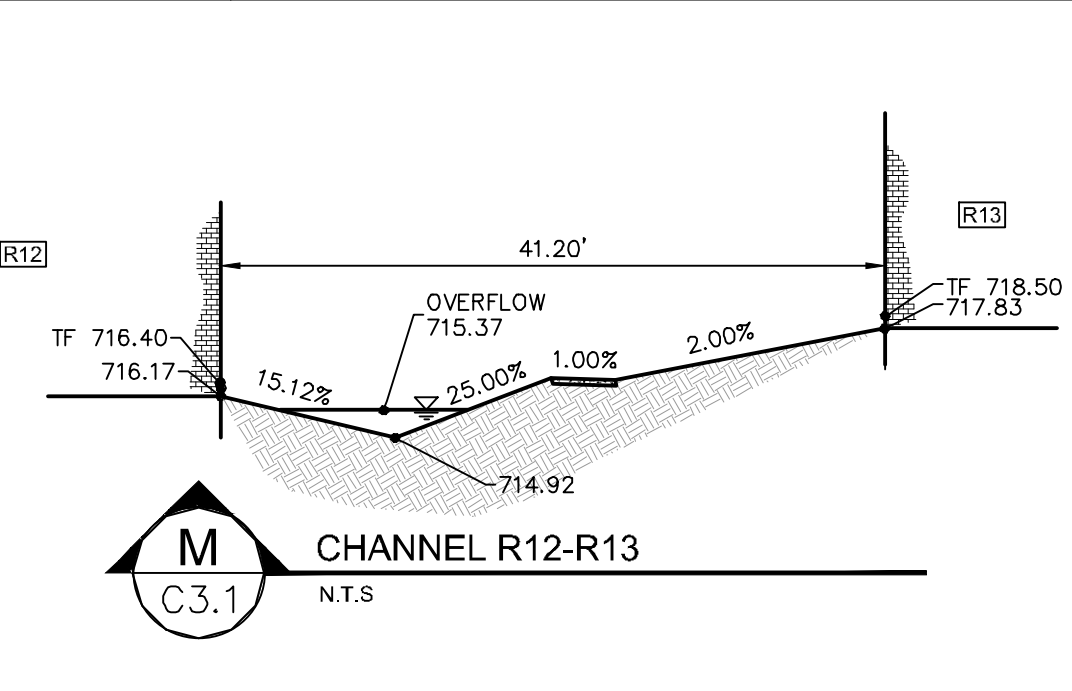
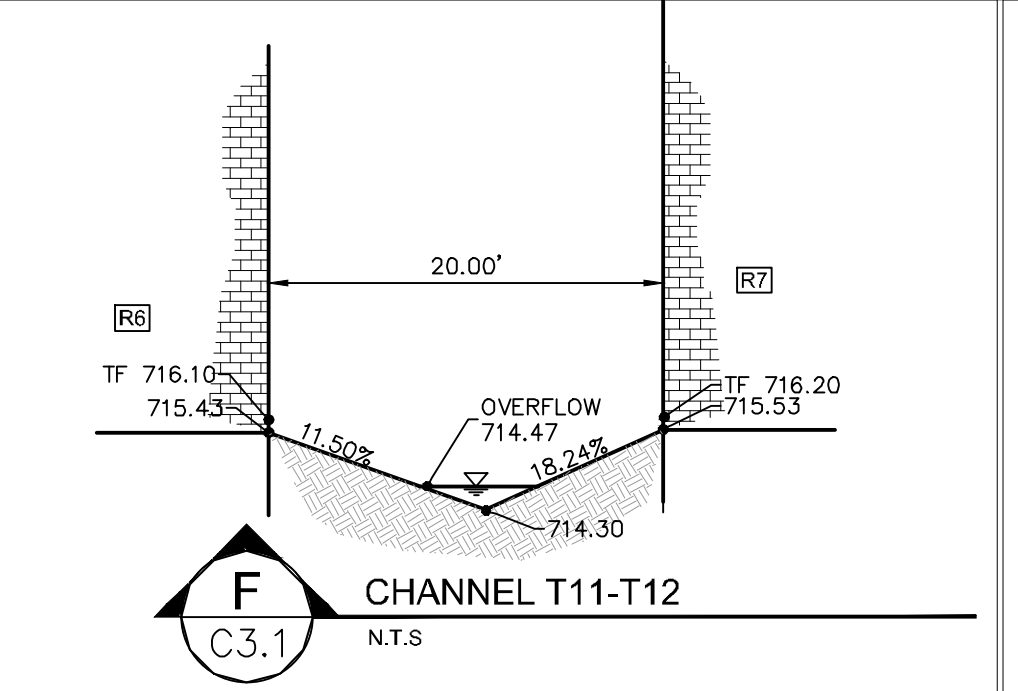
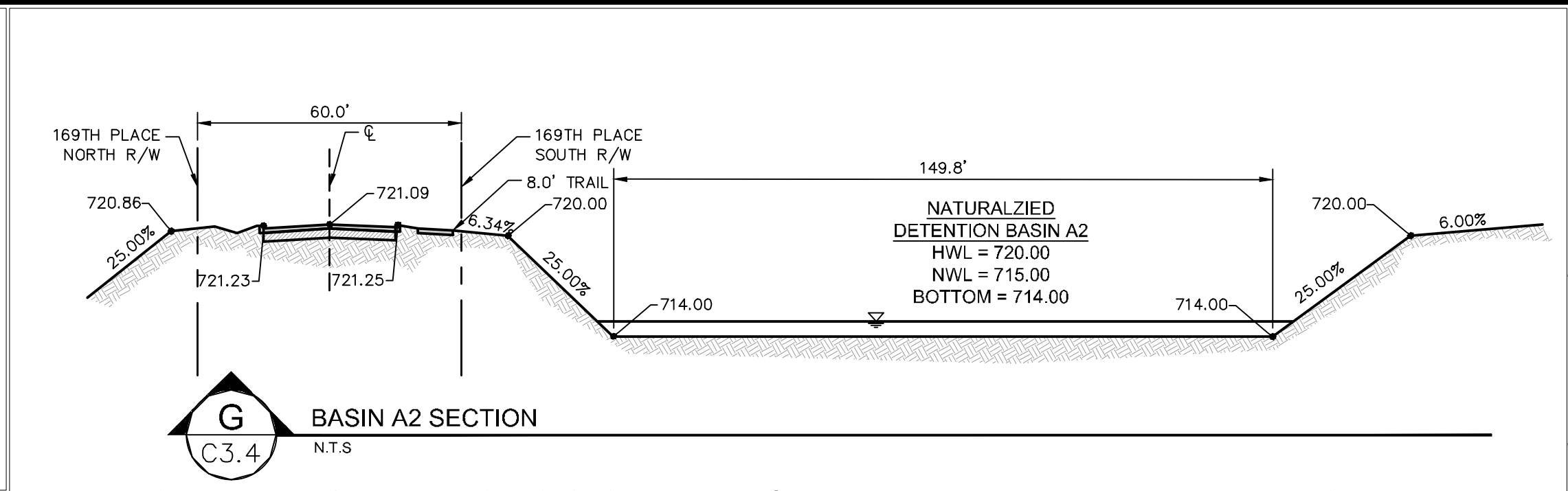
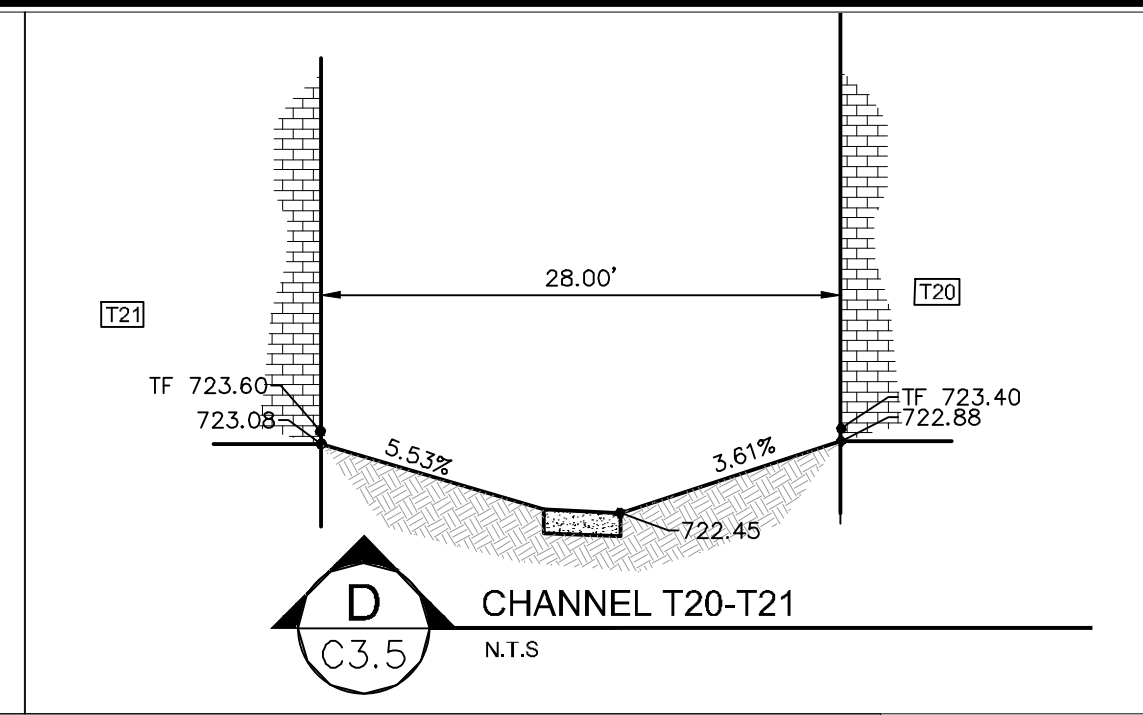
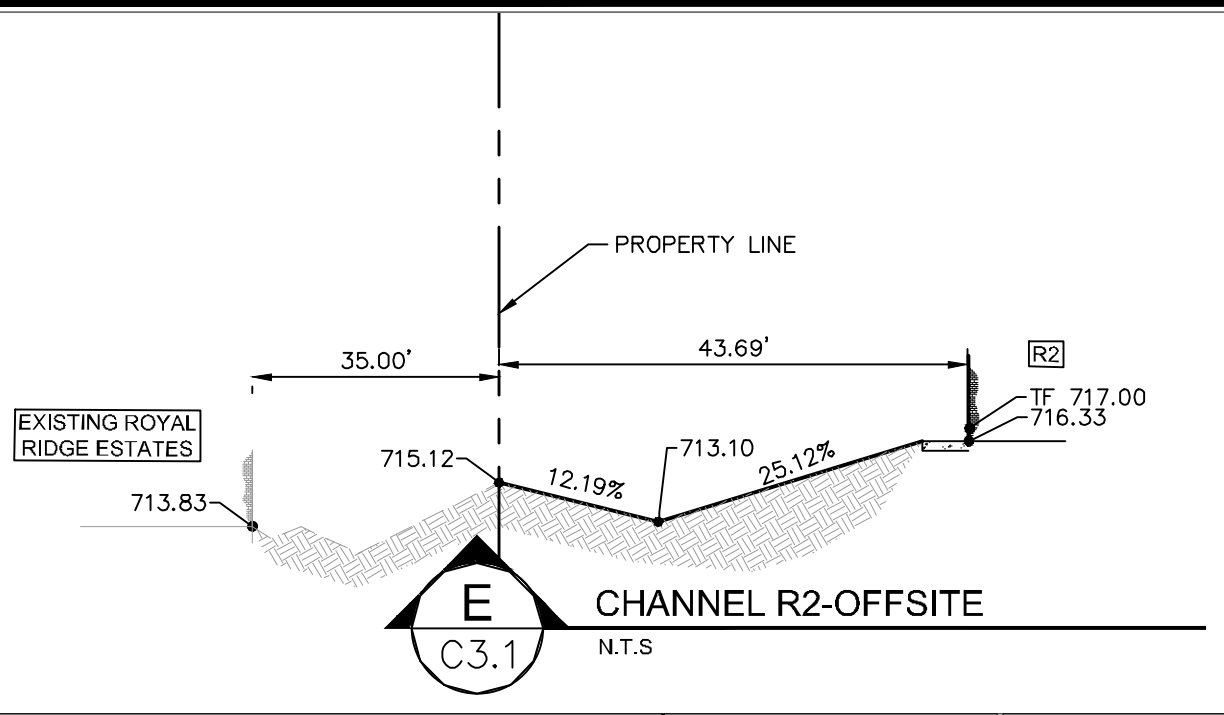
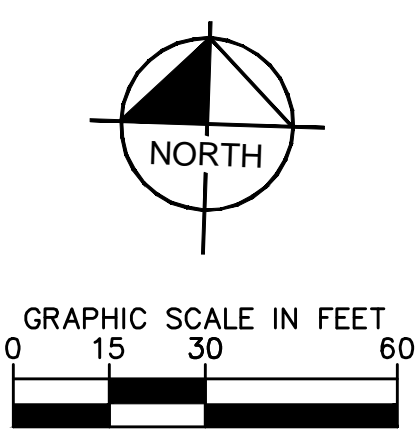
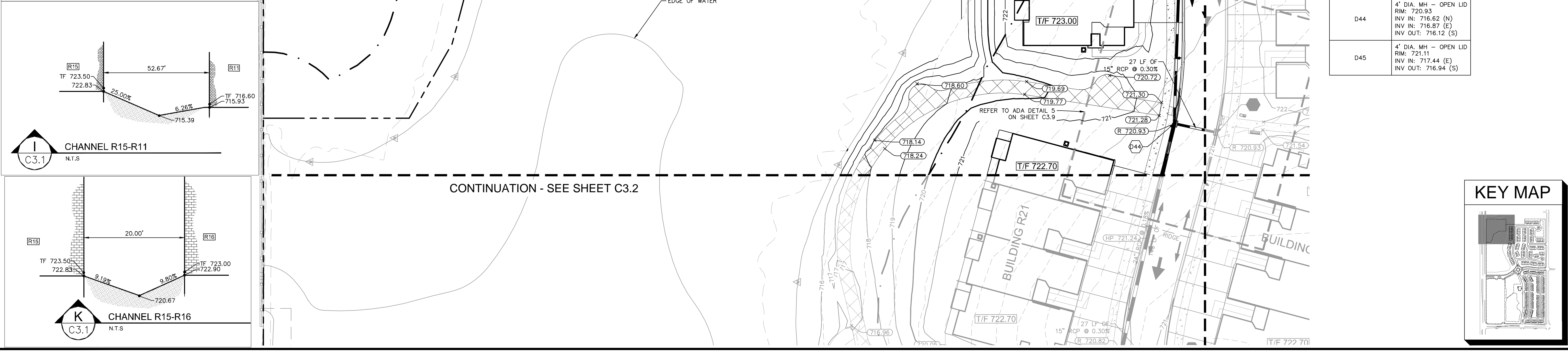


Drawing name: K:\GIS_LIEV\168626000_SR_Jacobson_Crand Park, IL\2 Design\CAD\PlanSheets\Final Engineering\C3.0 GRADING AND DRAINAGE PLAN.dwg C3.0 Feb 13, 2020 3:00pm by: Taylor Eichenbach
This document, together with the concepts and designs presented herein, is an instrument of service, and its use is limited to the specific purpose and client for which it was prepared. Release of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



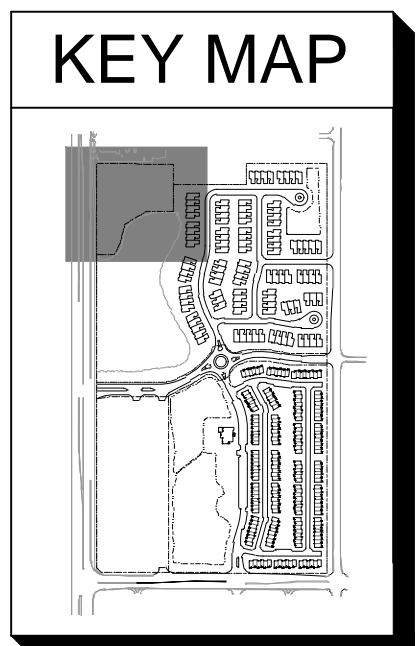
PROPOSED LOT 1 - WILL REQUIRE ITS OWN DETENTION AND RETENTION VOLUMES. NO VOLUMES HAVE BEEN PROVIDED FOR IT WITHIN THE PROPOSED DETENTION BASINS DEPICTED WITHIN THIS PLAN SET.



- ### GRADING NOTES
- ALL PAVEMENT SPOT GRADE ELEVATIONS AND RIM ELEVATIONS WITHIN OR ALONG CURB AND GUTTER REFER TO FLOW LINE ELEVATIONS UNLESS OTHERWISE NOTED.
 - ALL ELEVATIONS SHOWN DEPICT FINISHED GRADE UNLESS OTHERWISE NOTED. GENERAL CONTRACTOR TO COORDINATE WITH EXCAVATION, LANDSCAPE AND PAVING SUBCONTRACTORS REGARDING TOPSOIL THICKNESS FOR LANDSCAPE AREAS AND PAVEMENT SECTION THICKNESS FOR PAVED AREAS TO PROPERLY ENSURE ADEQUATE CUT TO ESTABLISH SUBGRADE ELEVATIONS.
 - NO EARTHEN SLOPE SHALL BE GREATER THAN 4:1, UNLESS OTHERWISE NOTED.
 - MAXIMUM SLOPE IN ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS.
 - MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 5% AND CROSS SLOPE SHALL NOT EXCEED 2% ON ALL SIDEWALKS AND ACCESSIBLE ROUTES.
 - MATCH EXISTING ELEVATIONS AT THE PROPERTY LIMITS.
 - ALL ONSITE CONCRETE SIDEWALK IS DESIGNED AT 1% CROSS SLOPE UNLESS OTHERWISE NOTED.

- ### GRADING LEGEND
- FL = FLOW LINE
 - TC = TOP OF CURB
 - ME = MATCH ELEVATION
 - TF = TOP OF FOUNDATION
 - R = RIM ELEVATION
 - FG = FINISHED GRADE
 - TS = TOP OF STAIRS
 - BS = BOTTOM OF STAIRS
 - XXX--- PROPOSED CONTOUR
 - - - - - EXISTING CONTOUR
 - RIDGE** RIDGE LINE
 - X/XXX% SLOPE AND FLOW DIRECTION
 - 100-YEAR OVERLAND OVERFLOW ROUTE
 - DETENTION BASIN 100-YEAR EMERGENCY OVERLAND OVERFLOW ROUTE
 - PROPOSED SWALE
 - PROPOSED RETAINING WALL
 - REVERSED PITCH CURB AND GUTTER
 - ACCESSIBLE ROUTE
 - RIP RAP (SEE DETAILS)
 - PROPOSED OPEN LID STORM STRUCTURE (PAVEMENT USE NEENAH R-2540) (GRASS USE NEENAH R-4340-B BEEHIVE)
 - PROPOSED CLOSED LID STORM STRUCTURE (PAVEMENT USE NEENAH R-1772) (GRASS USE NEENAH R-1786)
 - PROPOSED COMBINATION CURB INLET (B6.12 C&G USE NEENAH R-3281-A) (FOR MOUNTABLE CURB USE NEENAH R-2540 REFER TO DETAILS)
 - PROPOSED STORM SEWER LINE

STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
D44	4' DIA. MH - OPEN LID RIM: 720.93 INV IN: 716.62 (N) INV IN: 716.87 (E) INV OUT: 716.12 (S)
D45	4' DIA. MH - OPEN LID RIM: 721.11 INV IN: 717.44 (E) INV OUT: 716.94 (S)



Kimley»Horn
 © 2020 KIMLEY-HORN AND ASSOCIATES, INC.
 1001 WARRENVILLE ROAD, SUITE 350,
 Lisle, IL 60532-5450
 WWW.KIMLEY-HORN.COM

SR.JACOBSON
 CONSULTING ENGINEERS

ORLAND RIDGE GRADING AND DRAINAGE PLAN
 LAGRANGE ROAD & 171 ST STREET
 ORLAND PARK, IL 60487

REVISIONS	DATE	BY
NO.		

SCALE: AS NOTED
 DESIGNED BY: THE
 DRAWN BY: JDC
 CHECKED BY: WAW

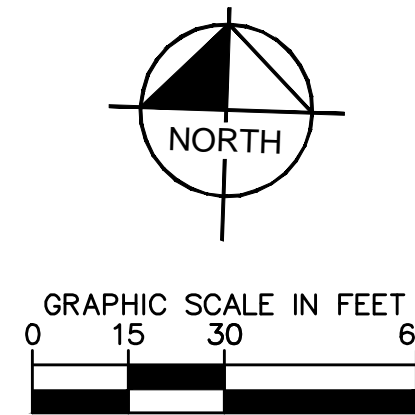
ORIGINAL ISSUE: 07/17/2019
 KHA PROJECT NO. 168626000
 SHEET NUMBER **C3.0**

GRADING NOTES

1. ALL PAVEMENT SPOT GRADE ELEVATIONS AND RIM ELEVATIONS WITHIN OR ALONG CURB AND GUTTER REFER TO FLOW LINE ELEVATIONS UNLESS OTHERWISE NOTED.
2. ALL ELEVATIONS SHOWN DEPICT FINISHED GRADE UNLESS OTHERWISE NOTED. GENERAL CONTRACTOR TO COORDINATE WITH EXCAVATION, LANDSCAPE AND PAVING SUBCONTRACTORS REGARDING TOPSOIL THICKNESS FOR LANDSCAPE AREAS AND PAVEMENT SECTION THICKNESS FOR PAVED AREAS TO PROPERLY ENSURE ADEQUATE CUT TO ESTABLISH SUBGRADE ELEVATIONS.
3. NO EARTHEN SLOPE SHALL BE GREATER THAN 4:1, UNLESS OTHERWISE NOTED.
4. MAXIMUM SLOPE IN ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS.
5. MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 5% AND CROSS SLOPE SHALL NOT EXCEED 2% ON ALL SIDEWALKS AND ACCESSIBLE ROUTES.
6. MATCH EXISTING ELEVATIONS AT THE PROPERTY LIMITS.
7. ALL ON-SITE CONCRETE SIDEWALK IS DESIGNED AT 1% CROSS SLOPE UNLESS OTHERWISE NOTED.

THE CONSTRUCTION OF BOTH NATURALIZED BASIN B AND NATURALIZED VOLUME CONTROL BASIN IS REQUIRED TO PROVIDE THE REQUIRED VOLUME CONTROL FOR THE CONSTRUCTION OF ANY AND ALL RANCH HOMES R1 THRU R14.

THE DETENTION POND VOLUMES PROVIDED WERE DETERMINED UPON THE USE OF THE VILLAGE OF ORLAND PARK LDC RELEASE RATES. POND RESTRICTORS HAVE BEEN OVERSIZED TO MAINTAIN HYDROLOGY OF DOWNSTREAM JURISDICTIONAL WETLAND. NO EXCESS VOLUME HAS BEEN PROVIDED WITHIN PONDS FOR USE BEYOND THE LIMITS OF THIS DEVELOPMENT. NO CHANGE TO OUTLET RESTRICTORS IS ALLOWED WITHOUT PRIOR APPROVAL OF THE VILLAGE.



Call Before You Dig
1-800-892-0123

GRADING LEGEND

- FL = FLOW LINE
 - TC = TOP OF CURB
 - ME = MATCH ELEVATION
 - TF = TOP OF FOUNDATION
 - R = RIM ELEVATION
 - FG = FINISHED GRADE
 - TS = TOP OF STAIRS
 - BS = BOTTOM OF STAIRS
- XXX--- PROPOSED CONTOUR
 - XXX--- EXISTING CONTOUR
 - XXX--- RIDGE LINE
 - XXX--- SLOPE AND FLOW DIRECTION
 - XXX--- 100-YEAR OVERLAND OVERFLOW ROUTE
 - XXX--- DETENTION BASIN 100-YEAR EMERGENCY OVERLAND OVERFLOW ROUTE
 - XXX--- PROPOSED SWALE
 - XXX--- PROPOSED RETAINING WALL
 - XXX--- REVERSED PITCH CURB AND GUTTER
 - XXX--- ACCESSIBLE ROUTE
 - XXX--- RIP RAP (SEE DETAILS)
 - XXX--- PROPOSED OPEN LID STORM STRUCTURE (PAVEMENT USE NEENAH R-2540) (GRASS USE NEENAH R-4340-B BEEHIVE)
 - XXX--- PROPOSED CLOSED LID STORM STRUCTURE (PAVEMENT USE NEENAH R-1772) (GRASS USE NEENAH R-1786)
 - XXX--- PROPOSED COMBINATION CURB INLET (88.12 C&G USE NEENAH R-3281-A) (FOR MOUNTABLE CURB USE NEENAH R-2540 REFER TO DETAILS)
 - XXX--- PROPOSED STORM SEWER LINE

STORM STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
D1	OUTLET CONTROL STRUCTURE RIM: 715.25 INV IN: 707.00 (S) INV IN: 707.00 (NE) INV OUT: 707.00 (E)
D1A	4" DIA. MH - OPEN LID RIM: 709.01 INV IN: 706.51 (W) INV IN: 706.44 (N) INV OUT: 706.45 (E)
D1B	4" DIA. MH - OPEN LID RIM: 709.06 INV OUT: 706.49 (S)
D5	24" NYLOPLAST DRAIN RIM: 714.50 INV IN: 708.18 (W) INV IN: 707.96 (SE)
D6	24" NYLOPLAST DRAIN RIM: 711.78 INV IN: 708.64 (W) INV IN: 708.44 (E)
D7	12" NYLOPLAST DRAIN RIM: 714.60 INV OUT: 710.25 (E)
D10	4" DIA. MH - OPEN LID RIM: 714.60 INV IN: 710.08 (W) INV IN: 710.08 (S) INV OUT: 710.08 (E)
D11	4" DIA. MH - OPEN LID RIM: 717.50 INV IN: 712.98 (S) INV OUT: 712.98 (E)
D12	2" INLET RIM: 717.50 INV OUT: 713.28 (N)
D14	2" INLET RIM: 714.60 INV OUT: 710.44 (N)
D16	4" DIA. MH - OPEN LID RIM: 714.05 INV IN: 706.39 (W) INV IN: 706.29 (E)
D17	4" DIA. MH - OPEN LID RIM: 714.05 INV IN: 706.85 (W) INV IN: 706.45 (E)
D18	4" DIA. MH - CLOSED LID RIM: 714.79 INV IN: 708.20 (W) INV IN: 706.91 (E)
D19	4" DIA. MH - OPEN LID RIM: 714.55 INV IN: 709.51 (N) INV IN: 709.11 (E) INV OUT: 709.11 (E)
D20	4" DIA. MH - OPEN LID RIM: 714.20 INV IN: 709.89 (S) INV IN: 709.39 (N) INV OUT: 709.39 (N)
D22	24" NYLOPLAST DRAIN RIM: 714.93 INV IN: 710.92 (S)

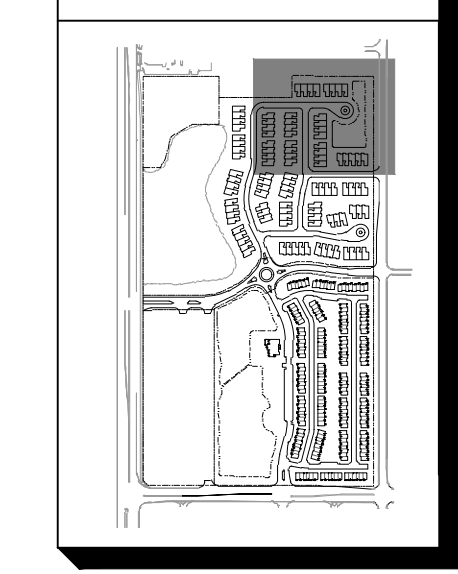
STORM STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
D24	4" DIA. MH - CLOSED LID RIM: 714.92 INV IN: 707.13 (S) INV IN: 707.13 (N)
D25	4" DIA. MH - OPEN LID RIM: 713.77 INV IN: 707.30 (S) INV IN: 707.30 (N)
D46	2" INLET RIM: 721.11 INV OUT: 717.53 (W)
D49	2" INLET RIM: 720.93 INV OUT: 716.95 (W)
XD1	CONNECT TO EX. MANHOLE WITH CORE AND BOOT CONNECTION RIM: 707.58 INV IN: 706.35 (W)

FES TABLE

STRUCTURE NAME:	DETAILS:
D3	12" FES INV OUT: 707.00 (N)
D4	15" FES INV IN: 707.00 (NW)
D8	12" FES INV IN: 709.15 (W)
D15	24" FES INV IN: 706.00 (W)
D23	24" FES INV IN: 707.00 (S)

KEY MAP



Kimley»Horn
2020 KIMLEY-HORN AND ASSOCIATES, INC.
1001 WAREVILLE ROAD, SUITE 350,
LISLE, IL 60532
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: TBE
DRAWN BY: JDC
CHECKED BY: WAW

REVISED PER VILLAGE/CCDOT COMMENTS
ADDENDUM 1 - LANDSCAPE
REVISED PER DOT COMMENTS
LANDSCAPE REV PER VILLAGE COMMENTS
LANDSCAPE PER VILLAGE/MWRD/CCDOT COM.
REVISED PER CCOT COMMENTS
REVISED PER VILLAGE/MWRD COMMENTS

DATE
02/14/20
02/06/20
02/05/20
07/09/20
12/20/19
11/21/19
10/15/19

BY
WAW
SKA
WAW
WAW
WAW
WAW
BY

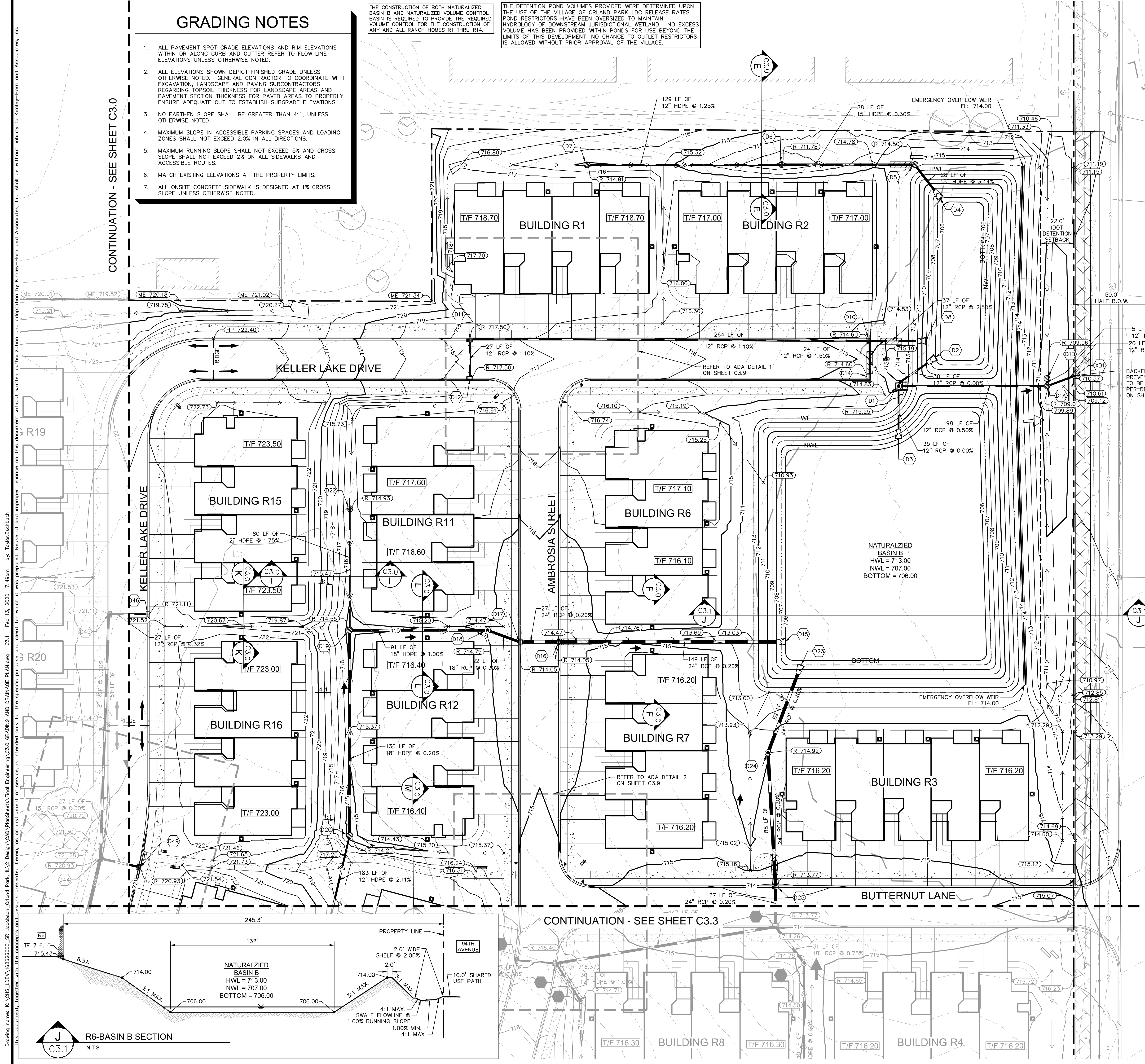
SR.JACOBSON

ORLAND RIDGE GRADING AND DRAINAGE PLAN

ORLAND RIDGE
LAGRANGE ROAD & 171 ST STREET
ORLAND PARK, IL 60487

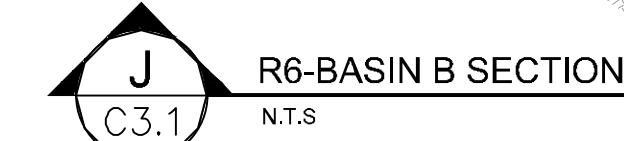
ORIGINAL ISSUE:
07/17/2019
KHA PROJECT NO.
168626000

SHEET NUMBER
C3.1



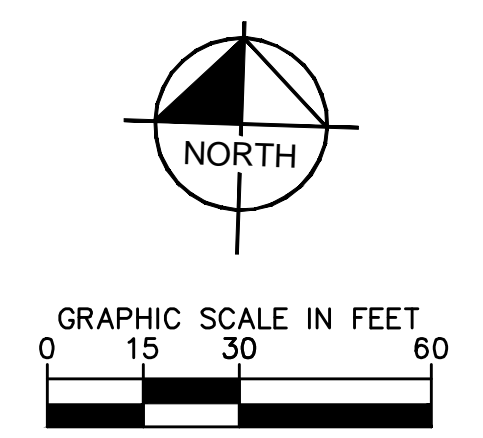
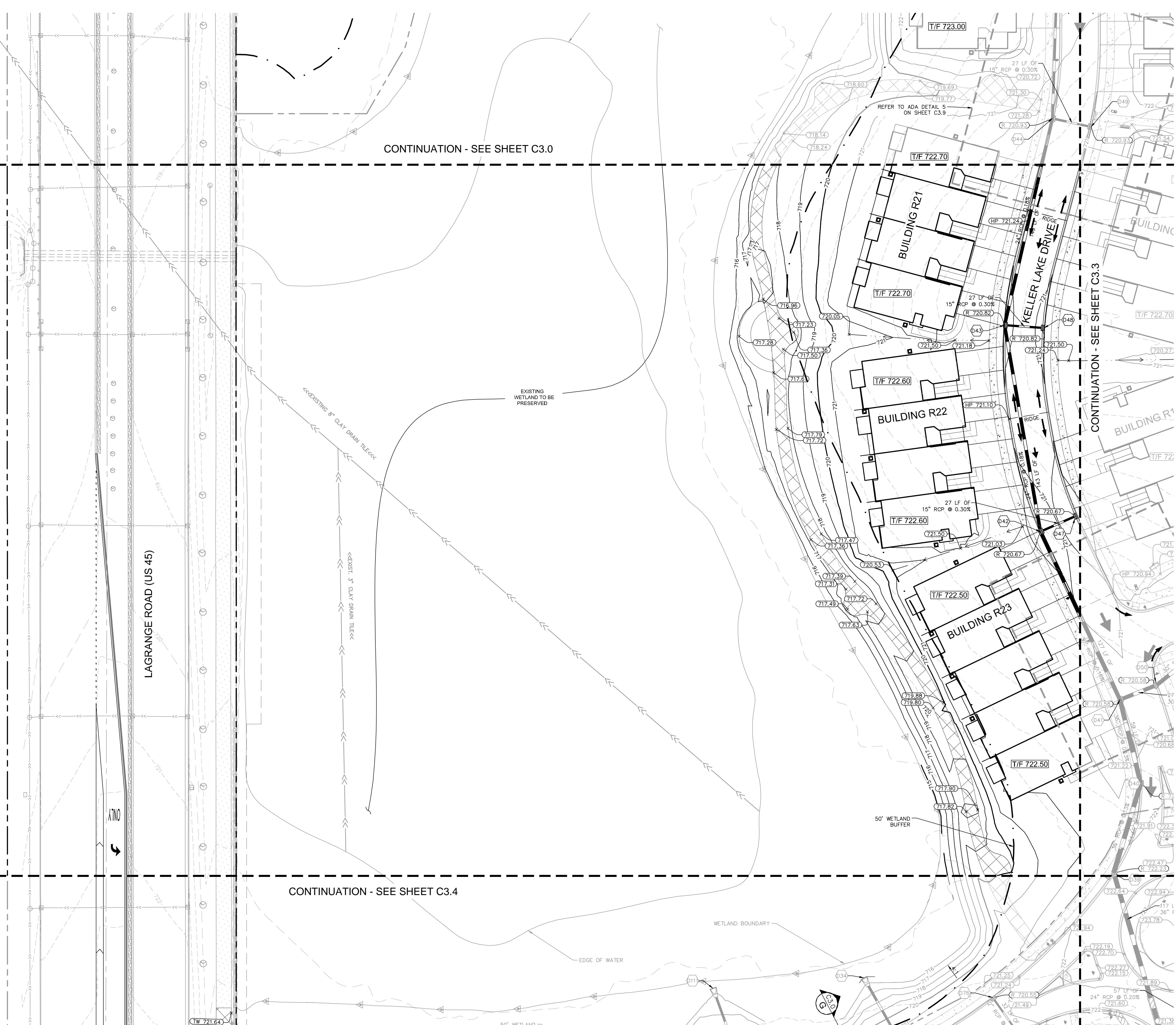
CONTINUATION - SEE SHEET C3.0

CONTINUATION - SEE SHEET C3.3



Drawing name: K:\CHS_DEVELOPMENT\168626000_SR_Jacobson_Orland Park, IL\2 Design\CAD\PlanSheets\Final Engineering\C3.0 GRADING AND DRAINAGE PLAN.dwg C3.1 Feb 13, 2020 7:49pm by: Taylor Eschbach
This document, together with the concepts and designs presented herein, is an instrument of service, intended only for the specific purpose and client for which it was prepared. Reuse of any part of this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Drawing name: K:\CHS_LDEV\168626000_SR_Jacobson_Crad Park_IL\2 Design\CAD\Plansheets\Final Engineering\C3.0 GRADING AND DRAINAGE PLAN.dwg C3.2 Feb 13, 2020 3:00pm by: TaylorEberbach
This document, together with the concepts and designs presented herein, is an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



Call Before You Dig
708
1-800-892-0123

GRADING NOTES

1. ALL PAVEMENT SPOT GRADE ELEVATIONS AND RIM ELEVATIONS WITHIN OR ALONG CURB AND GUTTER REFER TO FLOW LINE ELEVATIONS UNLESS OTHERWISE NOTED.
2. ALL ELEVATIONS SHOWN DEPICT FINISHED GRADE UNLESS OTHERWISE NOTED. GENERAL CONTRACTOR TO COORDINATE WITH EXCAVATION, LANDSCAPE AND PAVING SUBCONTRACTORS REGARDING TOPSOIL THICKNESS FOR LANDSCAPE AREAS AND PAVEMENT SECTION THICKNESS FOR PAVED AREAS TO PROPERLY ENSURE ADEQUATE CUT TO ESTABLISH SUBGRADE ELEVATIONS.
3. NO EARTHEN SLOPE SHALL BE GREATER THAN 4:1, UNLESS OTHERWISE NOTED.
4. MAXIMUM SLOPE IN ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS.
5. MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 5% AND CROSS SLOPE SHALL NOT EXCEED 2% ON ALL SIDEWALKS AND ACCESSIBLE ROUTES.
6. MATCH EXISTING ELEVATIONS AT THE PROPERTY LIMITS.
7. ALL ONSITE CONCRETE SIDEWALK IS DESIGNED AT 1% CROSS SLOPE UNLESS OTHERWISE NOTED.

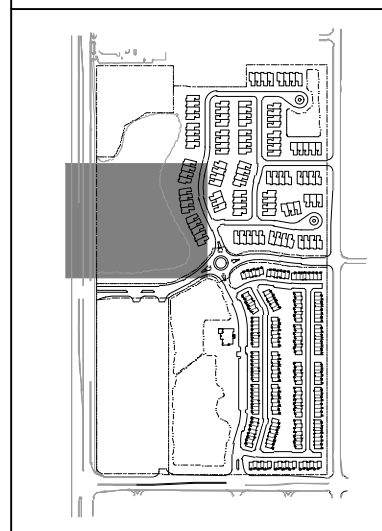
GRADING LEGEND

- FL = FLOW LINE
- TC = TOP OF CURB
- ME = MATCH ELEVATION
- TF = TOP OF FOUNDATION
- R = RIM ELEVATION
- FG = FINISHED GRADE
- TS = TOP OF STAIRS
- BS = BOTTOM OF STAIRS
- XXX---
- PROPOSED CONTOUR
- XXX-
- EXISTING CONTOUR
- RIDGE—
- RIDGE LINE
- X XXX X
- SLOPE AND FLOW DIRECTION
- ↑
- 100-YEAR OVERLAND OVERFLOW ROUTE
- ↙ ↘
- DETENTION BASIN 100-YEAR EMERGENCY OVERLAND OVERFLOW ROUTE
-
- PROPOSED SWALE
-
- PROPOSED RETAINING WALL
- V V V V—
- REVERSED PITCH CURB AND GUTTER
- AR—
- ACCESSIBLE ROUTE
- RIP RAP (SEE DETAILS)
-
- PROPOSED OPEN LID STORM STRUCTURE (PAVEMENT USE NEENAH R-2540) (GRASS USE NEENAH R-4340-B BEEHIVE)
-
- PROPOSED CLOSED LID STORM STRUCTURE (PAVEMENT USE NEENAH R-1772) (GRASS USE NEENAH R-1786)
-
- PROPOSED COMBINATION CURB INLET (86-12 C&G USE NEENAH R-3281-A) (FOR MOUNTABLE CURB USE NEENAH R-2540 REFER TO DETAILS)
-
- PROPOSED STORM SEWER LINE

STORM STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
D42	4' DIA. MH - OPEN LID RIM: 720.67 INV IN: 715.60 (N) INV IN: 716.35 (NE) INV OUT: 715.10 (SE)
D43	4' DIA. MH - OPEN LID RIM: 720.82 INV IN: 716.61 (E) INV IN: 715.86 (N) INV OUT: 715.86 (S)
D47	2' INLET RIM: 720.67 INV OUT: 716.43 (SW)
D48	2' INLET RIM: 720.82 INV OUT: 716.69 (W)

KEY MAP

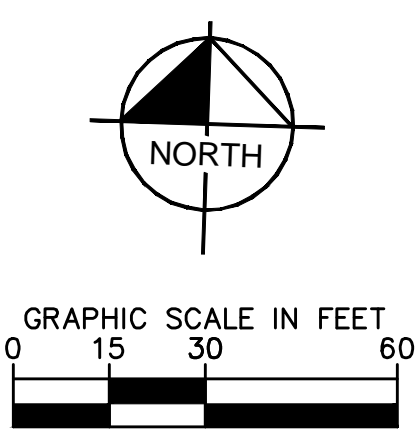


 <small>© 2020 KIMLEY-HORN AND ASSOCIATES, INC. 1001 WARRENVILLE ROAD, SUITE 350, Lisle, IL 60532 630.585.4550 WWW.KIMLEY-HORN.COM</small>	 <small>SR JACOBSON CONSULTING ENGINEERS</small>	ORLAND RIDGE GRADING AND DRAINAGE PLAN LAGRANGE ROAD & 171 ST STREET ORLAND PARK, IL 60487	ORIGINAL ISSUE: 07/17/2019 KHA PROJECT NO. 168626000 SHEET NUMBER C3.2
SCALE: AS NOTED DESIGNED BY: TFE DRAWN BY: JDC CHECKED BY: WAW	REVISED PER VILLAGE/CCDOT COMMENTS ADDENDUM 1 - LANDSCAPE REVISED PER DOT COMMENTS LANDSCAPE REV PER VILLAGE COMMENTS REVISED PER VILLAGE/MWRD/CCDOT COM. REVISED PER CCOT COMMENTS REVISED PER VILLAGE/MWRD COMMENTS	02/14/20 WAW 02/06/20 SKA 02/05/20 WAW 01/09/20 WAW 12/20/19 WAW 11/21/19 WAW 10/15/19 WAW	DATE REVISIONS BY



GRADING NOTES

- ALL PAVEMENT SPOT GRADE ELEVATIONS AND RIM ELEVATIONS WITHIN OR ALONG CURB AND GUTTER REFER TO FLOW LINE ELEVATIONS UNLESS OTHERWISE NOTED.
- ALL ELEVATIONS SHOWN DEPICT FINISHED GRADE UNLESS OTHERWISE NOTED. GENERAL CONTRACTOR TO COORDINATE WITH EXCAVATION, LANDSCAPE AND PAVING SUBCONTRACTORS REGARDING TOPSOIL THICKNESS FOR LANDSCAPE AREAS AND PAVEMENT SECTION THICKNESS FOR PAVED AREAS TO PROPERLY ENSURE ADEQUATE CUT TO ESTABLISH SUBGRADE ELEVATIONS.
- NO EARTHEN SLOPE SHALL BE GREATER THAN 4:1, UNLESS OTHERWISE NOTED.
- MAXIMUM SLOPE IN ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS.
- MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 5% AND CROSS SLOPE SHALL NOT EXCEED 2% ON ALL SIDEWALKS AND ACCESSIBLE ROUTES.
- MATCH EXISTING ELEVATIONS AT THE PROPERTY LIMITS.
- ALL ON-SITE CONCRETE SIDEWALK IS DESIGNED AT 1% CROSS SLOPE UNLESS OTHERWISE NOTED.



GRADING LEGEND

- FL = FLOW LINE
- TC = TOP OF CURB
- ME = MATCH ELEVATION
- TF = TOP OF FOUNDATION
- R = RIM ELEVATION
- FG = FINISHED GRADE
- TS = TOP OF STAIRS
- BS = BOTTOM OF STAIRS
- XXX--- PROPOSED CONTOUR
- - - - - EXISTING CONTOUR
- RIDGE LINE
- SLOPE AND FLOW DIRECTION
- 100-YEAR OVERLAND OVERFLOW ROUTE
- DETENTION BASIN 100-YEAR EMERGENCY OVERLAND OVERFLOW ROUTE
- PROPOSED SWALE
- PROPOSED RETAINING WALL
- REVERSED PITCH CURB AND GUTTER
- ACCESSIBLE ROUTE
- RIP RAP (SEE DETAILS)
- PROPOSED OPEN LID STORM STRUCTURE (PAVEMENT USE NEENAH R-2540) (GRASS USE NEENAH R-4340-B BEEHIVE)
- PROPOSED CLOSED LID STORM STRUCTURE (PAVEMENT USE NEENAH R-1772) (GRASS USE NEENAH R-1786)
- PROPOSED COMBINATION CURB INLET (B6.12 C&G USE NEENAH R-3281-A) (FOR MOUNTABLE CURB USE NEENAH R-2540 REFER TO DETAILS)
- PROPOSED STORM SEWER LINE

STORM STRUCTURE TABLE

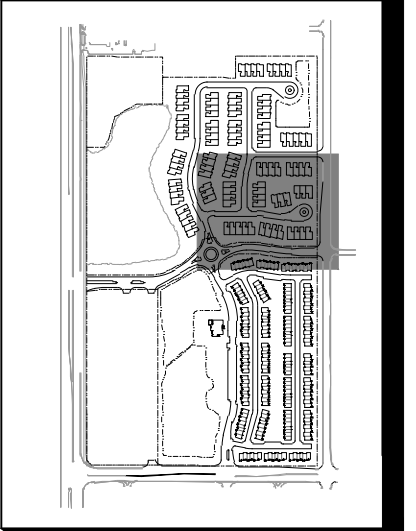
STRUCTURE NAME:	DETAILS:
D21	24" NYLOPLAST DRAIN RIM: 718.05 INV OUT: 713.75 (N)
D26	4" DIA. MH - OPEN LID RIM: 713.77 INV IN: 707.56 (W) INV OUT: 707.56 (N)
D27	4" DIA. MH - CLOSED LID RIM: 714.65 INV IN: 708.68 (S) INV OUT: 708.18 (NW)
D28	24" NYLOPLAST DRAIN RIM: 713.50 INV OUT: 709.34 (N)
D29	4" DIA. MH - OPEN LID RIM: 716.37 INV IN: 711.48 (W) INV OUT: 710.29 (SE)
D30	2" INLET RIM: 716.40 INV OUT: 712.29 (E)
D31	12" NYLOPLAST DRAIN RIM: 714.71 INV OUT: 710.59 (NW)
D39	4" DIA. MH - OPEN LID RIM: 722.23 INV IN: 714.21 (N) INV OUT: 714.21 (S)
D40	4" DIA. MH - OPEN LID RIM: 721.45 INV IN: 714.30 (N) INV OUT: 714.30 (S)
D41	5" DIA. MH - OPEN LID RIM: 720.58 INV IN: 714.87 (NE) INV IN: 714.87 (NW) INV OUT: 714.37 (S)
D50	4" DIA. MH - OPEN LID RIM: 720.58 INV IN: 714.91 (NE) INV OUT: 714.91 (SW)
D51	4" DIA. MH - OPEN LID RIM: 720.22 INV IN: 715.48 (E) INV IN: 715.48 (N) INV OUT: 714.98 (SW)
D52	4" DIA. MH - CLOSED LID RIM: 720.89 INV IN: 715.71 (E) INV IN: 716.21 (N) INV OUT: 715.71 (W)
D53	4" DIA. MH - OPEN LID RIM: 720.26 INV IN: 716.39 (N) INV IN: 716.39 (E) INV OUT: 715.89 (W)
D54	4" DIA. MH - OPEN LID RIM: 721.05 INV IN: 716.90 (S) INV OUT: 716.65 (W)
D55	2" INLET RIM: 721.13 INV OUT: 716.99 (N)

STORM STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
D56	4" DIA. MH - OPEN LID RIM: 720.22 INV IN: 716.52 (NE) INV OUT: 715.52 (S)
D57	12" NYLOPLAST DRAIN RIM: 719.46 INV OUT: 716.69 (SW)
D58	2" INLET RIM: 720.58 INV OUT: 716.30 (S)
D59	2" INLET RIM: 720.26 INV OUT: 716.44 (S)
D64	2" INLET RIM: 721.64 INV OUT: 717.47 (S)
D65	4" DIA. MH - OPEN LID RIM: 720.96 INV IN: 715.97 (N) INV OUT: 715.97 (S)
D66	12" NYLOPLAST DRAIN RIM: 719.77 INV IN: 716.51 (E) INV OUT: 716.01 (S)
D67	12" NYLOPLAST DRAIN RIM: 722.23 INV OUT: 716.77 (W)
D69	4" DIA. MH - OPEN LID RIM: 721.37 INV IN: 716.51 (N) INV OUT: 716.51 (S)
D70	12" NYLOPLAST DRAIN RIM: 720.00 INV IN: 716.58 (E) INV OUT: 716.58 (S)
D71	12" NYLOPLAST DRAIN RIM: 719.50 INV OUT: 716.84 (W)

THE DETENTION POND VOLUMES PROVIDED WERE DETERMINED UPON THE USE OF THE VILLAGE OF ORLAND PARK LDC RELEASE RATES. POND RESTRICTORS HAVE BEEN OVERSIZED TO MAINTAIN HYDROLOGY OF DOWNSTREAM JURISDICTIONAL WETLAND. NO EXCESS VOLUME HAS BEEN PROVIDED WITHIN POND FOR USE BEYOND THE LIMITS OF THIS DEVELOPMENT. NO CHANGE TO OUTLET RESTRICTORS IS ALLOWED WITHOUT PRIOR APPROVAL OF THE VILLAGE.

KEY MAP



Call Before You Dig
1-800-892-0123

REVISIONS

NO.	DATE	BY
02/14/20	WAW	
02/06/20	SKA	
02/05/20	WAW	
01/09/20	WAW	
12/20/19	WAW	
11/21/19	WAW	
10/15/19	WAW	

SCALE: AS NOTED

DESIGNED BY: THE

DRAWN BY: JDC

CHECKED BY: WAW

REVISED PER VILLAGE/CCDOT COMMENTS

ADDENDUM 1 - LANDSCAPE

REVISED PER DOT COMMENTS

LANDSCAPE REV PER VILLAGE COMMENTS

REVISED PER VILLAGE/MWRD/CCDOT COM.

REVISED PER CCODT COMMENTS

REVISED PER VILLAGE /MWRD COMMENTS

1000 WARENEVILLE ROAD, SUITE 350,
LISLE, IL 60532
WWW.KIMLEY-HORN.COM

Kimley-Horn

S.R. JACOBSON

ORLAND RIDGE GRADING AND DRAINAGE PLAN

LAGRANGE ROAD & 171 ST STREET
ORLAND PARK, IL 60487

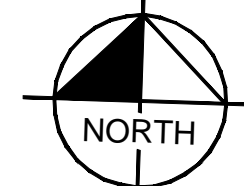
ORIGINAL ISSUE:
07/17/2019

KHA PROJECT NO.
168626000

SHEET NUMBER
C3.3

Drawing name: K:\GIS\DEV\168626000_SR_Jacobson_Orland Park, IL\2 Design\CAD\PlanSheets\Final Engineering\C3.0 GRADING AND DRAINAGE PLAN.dwg C3.4 Feb 13, 2020 3:00pm by: Taylor Eberbach
 This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

CONTINUATION - SEE SHEET C3.2


 GRAPHIC SCALE IN FEET
 0 15 30 60

Call Before You Dig
1-800-892-0123

GRADING NOTES

1. ALL PAVEMENT SPOT GRADE ELEVATIONS AND RIM ELEVATIONS WITHIN OR ALONG CURB AND GUTTER REFER TO FLOW LINE ELEVATIONS UNLESS OTHERWISE NOTED.
2. ALL ELEVATIONS SHOWN DEPICT FINISHED GRADE UNLESS OTHERWISE NOTED. GENERAL CONTRACTOR TO COORDINATE WITH EXCAVATION, LANDSCAPE AND PAVING SUBCONTRACTORS REGARDING TOPSOIL THICKNESS FOR LANDSCAPE AREAS AND PAVEMENT SECTION THICKNESS FOR PAVED AREAS TO PROPERLY ENSURE ADEQUATE CUT TO ESTABLISH SUBGRADE ELEVATIONS.
3. NO EARTHEN SLOPE SHALL BE GREATER THAN 4:1, UNLESS OTHERWISE NOTED.
4. MAXIMUM SLOPE IN ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS.
5. MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 5% AND CROSS SLOPE SHALL NOT EXCEED 2% ON ALL SIDEWALKS AND ACCESSIBLE ROUTES.
6. MATCH EXISTING ELEVATIONS AT THE PROPERTY LIMITS.
7. ALL ONSITE CONCRETE SIDEWALK IS DESIGNED AT 1% CROSS SLOPE UNLESS OTHERWISE NOTED.

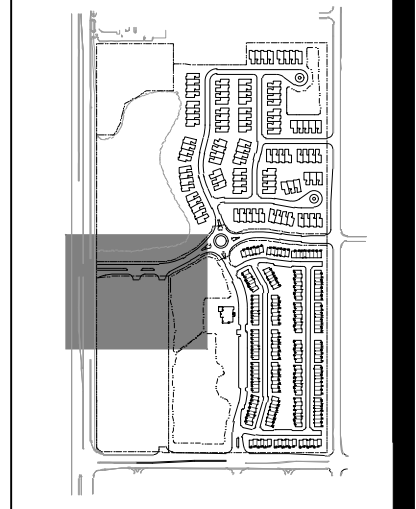
GRADING LEGEND

FL	=	FLOW LINE
TC	=	TOP OF CURB
ME	=	MATCH ELEVATION
TF	=	TOP OF FOUNDATION
R	=	RIM ELEVATION
FG	=	FINISHED GRADE
TS	=	TOP OF STAIRS
BS	=	BOTTOM OF STAIRS
---	---	PROPOSED CONTOUR
---	---	EXISTING CONTOUR
---	---	RIDGE LINE
X XXX		SLOPE AND FLOW DIRECTION
←		100-YEAR OVERLAND OVERFLOW ROUTE
←		DETENTION BASIN 100-YEAR EMERGENCY OVERLAND OVERFLOW ROUTE
---		PROPOSED SWALE
---		PROPOSED RETAINING WALL
---		REVERSED PITCH CURB AND GUTTER
AR		ACCESSIBLE ROUTE
○		RIP RAP (SEE DETAILS)
○		PROPOSED OPEN LID STORM STRUCTURE (PAVEMENT USE NEENAH R-2540) (GRASS USE NEENAH R-4340-B BEEHIVE)
○		PROPOSED CLOSED LID STORM STRUCTURE (PAVEMENT USE NEENAH R-1772) (GRASS USE NEENAH R-1786)
○		PROPOSED COMBINATION CURB INLET (66-12 C&G USE NEENAH R-3281-A) (FOR MOUNTABLE CURB USE NEENAH R-2540 REFER TO DETAILS)
---		PROPOSED STORM SEWER LINE

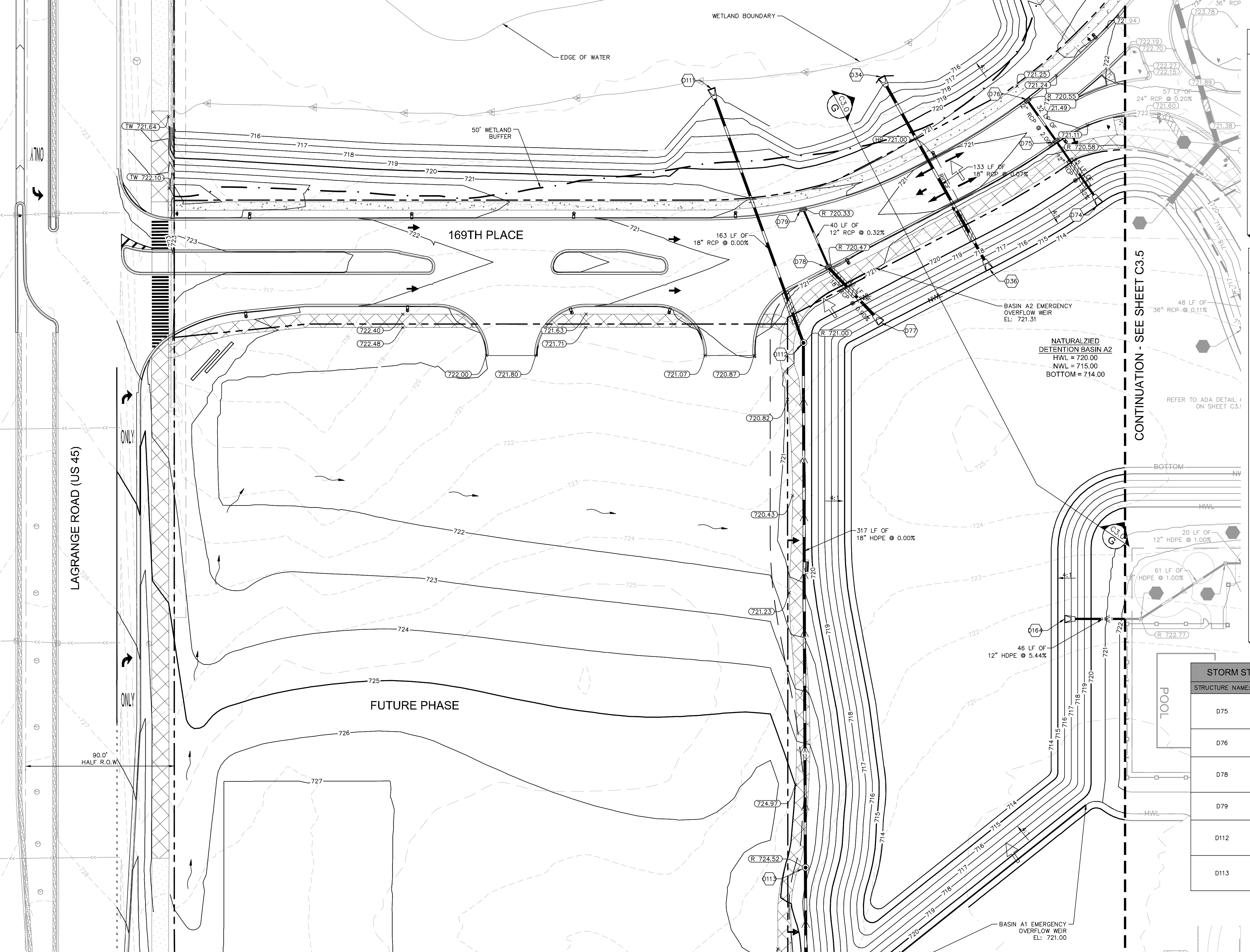
STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
D75	4' DIA. MH - OPEN LID RIM: 720.58 INV IN: 715.83 (NW) INV OUT: 715.83 (SE)
D76	2' INLET RIM: 720.55 INV OUT: 716.46 (SE)
D78	4' DIA. MH - OPEN LID RIM: 720.47 INV IN: 716.12 (NW) INV OUT: 715.63 (SE)
D79	2' INLET RIM: 720.33 INV OUT: 716.25 (SE)
D112	4' DIA. MH - CLOSED LID RIM: 721.00 INV IN: 715.00 (S) INV OUT: 715.00 (N)
D113	4' DIA. MH - CLOSED LID RIM: 724.52 INV IN: 715.00 (S) INV OUT: 715.00 (N)

FES TABLE	
STRUCTURE NAME:	DETAILS:
D34	18" FES INV IN: 714.90 (SE)
D36	18" FES INV OUT: 715.00 (NW)
D74	12" FES INV IN: 715.00 (NW)
D77	18" FES INV IN: 715.21 (NW)
D111	18" FES INV IN: 715.00 (S)
D164	12" FES INV IN: 716.00 (E)

KEY MAP




THE DETENTION POND VOLUMES PROVIDED WERE DETERMINED UPON THE USE OF THE VILLAGE OF ORLAND PARK LDC RELEASE RATES. POND RESTRICTORS HAVE BEEN OVERSIZED TO MAINTAIN HYDROLOGY OF DOWNSTREAM JURISDICTIONAL WETLAND. NO EXCESS VOLUME HAS BEEN PROVIDED WITHIN PONDS FOR USE BEYOND THE LIMITS OF THIS DEVELOPMENT. NO CHANGE TO OUTLET RESTRICTORS IS ALLOWED WITHOUT PRIOR APPROVAL OF THE VILLAGE.




CONTINUATION - SEE SHEET C3.6

SCALE:	AS NOTED	DESIGNED BY: TFE	DRAWN BY: JDC	CHECKED BY: WAW	REVISED PER VILLAGE/CCDOT COMMENTS	DATE	BY
					02/14/20	02/06/20	SKA
					02/05/20	07/09/20	WAW
					07/09/20	12/20/19	WAW
					11/21/19	11/21/19	WAW
					10/15/19		WAW
							BY



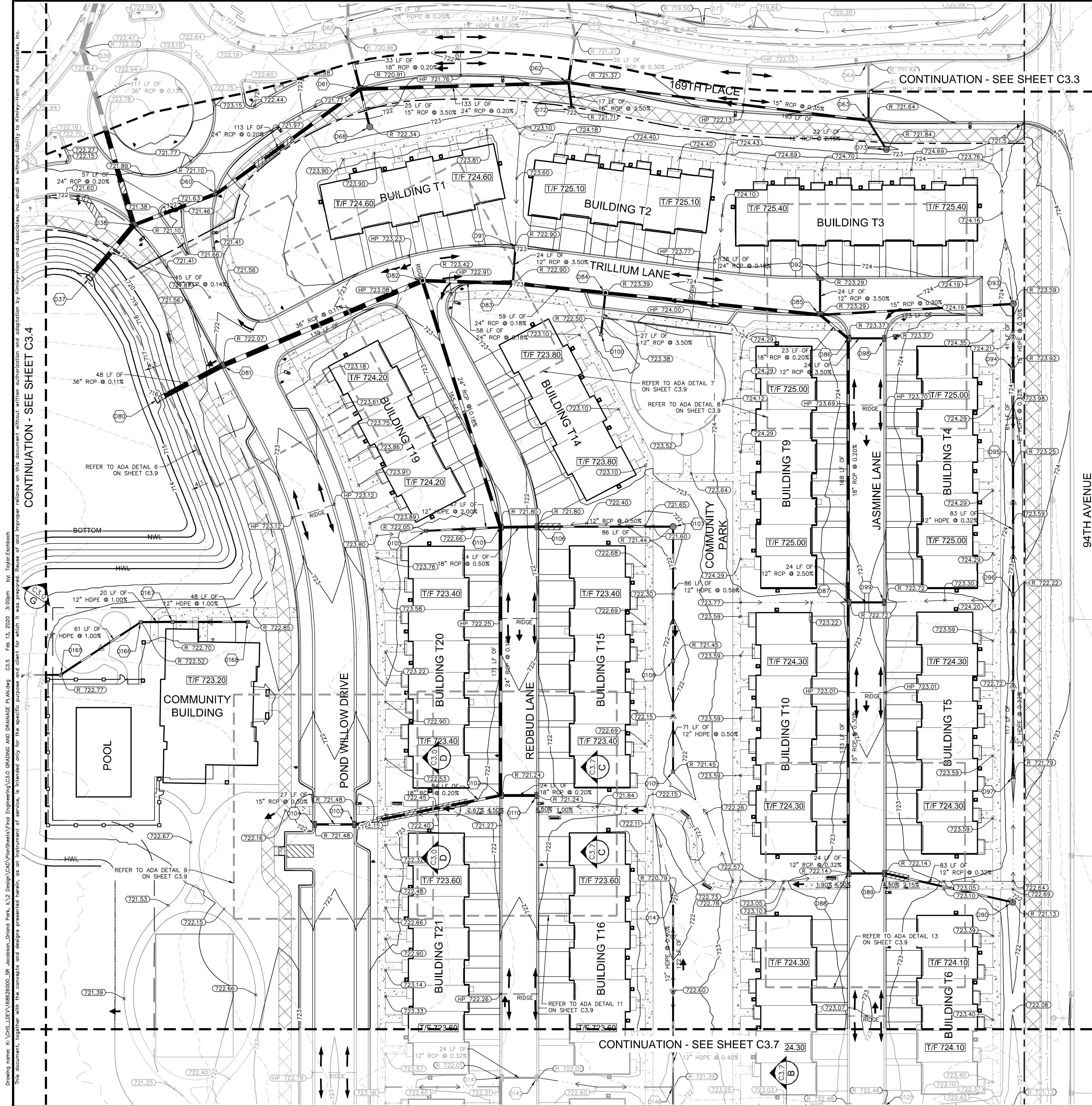
© 2020 KIMLEY-HORN AND ASSOCIATES, INC.
1001 WARRENVILLE ROAD, SUITE 350
Lisle, IL 60532-5650
WWW.KIMLEY-HORN.COM



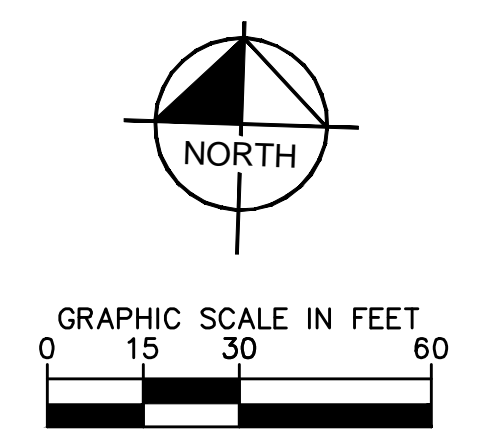
ORLAND RIDGE GRADING AND DRAINAGE PLAN

LAGRANGE ROAD & 171 ST STREET
ORLAND PARK, IL 60487

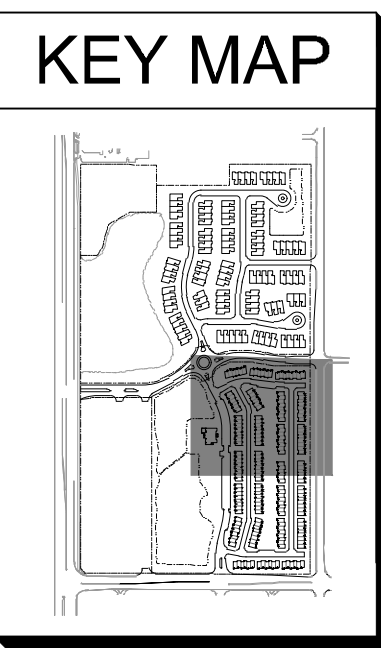
ORIGINAL ISSUE:	07/17/2019
KHA PROJECT NO.	168626000
SHEET NUMBER	C3.4



THE DETENTION POND VOLUMES PROVIDED WERE DETERMINED UPON THE USE OF THE VILLAGE OF ORLAND PARK LDC RELEASE RATES. POND RESTRICTORS HAVE BEEN OVERSIZED TO MAINTAIN HYDROLOGY OF DOWNSTREAM JURISDICTIONAL WETLAND. NO EXCESS VOLUME HAS BEEN PROVIDED WITHIN PONDS FOR USE BEYOND THE LIMITS OF THIS DEVELOPMENT. NO CHANGE TO OUTLET RESTRICTORS IS ALLOWED WITHOUT PRIOR APPROVAL OF THE VILLAGE.



Call Before You Dig
1-800-892-0123



GRADING NOTES

- ALL PAVEMENT SPOT GRADE ELEVATIONS AND RIM ELEVATIONS WITHIN OR ALONG CURB AND GUTTER REFER TO FLOW LINE ELEVATIONS UNLESS OTHERWISE NOTED.
- ALL ELEVATIONS SHOWN DEPICT FINISHED GRADE UNLESS OTHERWISE NOTED. GENERAL CONTRACTOR TO COORDINATE WITH EXCAVATION, LANDSCAPE AND PAVING SUBCONTRACTORS REGARDING TOPSOIL THICKNESS FOR LANDSCAPE AREAS AND PAVEMENT SECTION THICKNESS FOR PAVED AREAS TO PROPERLY ENSURE ADEQUATE CUT TO ESTABLISH SUBGRADE ELEVATIONS.
- NO EARTHEN SLOPE SHALL BE GREATER THAN 4:1, UNLESS OTHERWISE NOTED.
- MAXIMUM SLOPE IN ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS.
- MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 5% AND CROSS SLOPE SHALL NOT EXCEED 2% ON ALL SIDEWALKS AND ACCESSIBLE ROUTES.
- MATCH EXISTING ELEVATIONS AT THE PROPERTY LIMITS.
- ALL ONSITE CONCRETE SIDEWALK IS DESIGNED AT 1% CROSS SLOPE UNLESS OTHERWISE NOTED.

GRADING LEGEND

- FL = FLOW LINE
- TC = TOP OF CURB
- ME = MATCH ELEVATION
- TF = TOP OF FOUNDATION
- R = RIM ELEVATION
- FG = FINISHED GRADE
- TS = TOP OF STAIRS
- BS = BOTTOM OF STAIRS
- XXX--- PROPOSED CONTOUR
- XXX--- EXISTING CONTOUR
- RIDGE**
- SLOPE AND FLOW DIRECTION
- 100-YEAR OVERLAND OVERFLOW ROUTE
- DETENTION BASIN 100-YEAR EMERGENCY OVERLAND OVERFLOW ROUTE
- PROPOSED SWALE
- PROPOSED RETAINING WALL
- REVERSED PITCH CURB AND GUTTER
- ACCESSIBLE ROUTE
- RIP RAP (SEE DETAILS)
- PROPOSED OPEN LID STORM STRUCTURE (PAVEMENT USE NEENAH R-2540) (GRASS USE NEENAH R-4340-B BEEHIVE) (GRASS USE NEENAH R-1786)
- PROPOSED CLOSED LID STORM STRUCTURE (PAVEMENT USE NEENAH R-3281-A) (FOR MOUNTABLE CURB USE NEENAH R-2540 REFER TO DETAILS)
- PROPOSED COMBINATION CURB INLET (66.12 G&G USE NEENAH R-3281-A) (FOR MOUNTABLE CURB USE NEENAH R-2540 REFER TO DETAILS)
- PROPOSED STORM SEWER LINE

STORM STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
D38	5' DIA. MH - OPEN LID RIM: 721.10 INV IN: 715.06 (NE) INV IN: 714.06 (N) INV OUT: 714.06 (SW)
D60	4' DIA. MH - OPEN LID RIM: 721.10 INV IN: 715.18 (NE) INV OUT: 715.18 (SW)
D61	4' DIA. MH - OPEN LID RIM: 720.91 INV IN: 715.40 (E) INV IN: 715.90 (N) INV IN: 716.15 (S) INV OUT: 715.40 (SW)
D62	4' DIA. MH - OPEN LID RIM: 721.37 INV IN: 716.42 (E) INV IN: 716.42 (N) INV IN: 716.42 (S) INV OUT: 715.67 (W)
D63	4' DIA. MH - OPEN LID RIM: 721.64 INV IN: 717.34 (N) INV IN: 717.34 (SE) INV OUT: 717.09 (W)
D68	2' INLET RIM: 722.34 INV OUT: 717.02 (N)
D72	2' INLET RIM: 721.71 INV OUT: 717.01 (N)
D73	2' INLET RIM: 721.84 INV OUT: 717.81 (NW)
D81	4' DIA. MH - OPEN LID RIM: 722.07 INV IN: 715.05 (NE) INV OUT: 715.05 (SW)
D82	4' DIA. MH - CLOSED LID RIM: 723.42 INV IN: 716.20 (E) INV IN: 716.20 (S) INV OUT: 715.20 (SW)
D83	4' DIA. MH - OPEN LID RIM: 722.90 INV IN: 716.30 (E) INV IN: 717.30 (N) INV OUT: 716.30 (W)
D84	4' DIA. MH - CLOSED LID RIM: 723.39 INV IN: 716.41 (E) INV IN: 717.41 (S) INV OUT: 716.41 (W)
D85	4' DIA. MH - OPEN LID RIM: 723.29 INV IN: 717.16 (SE) INV IN: 717.41 (E) INV IN: 717.66 (N) INV OUT: 716.66 (W)
D86	4' DIA. MH - OPEN LID RIM: 723.37 INV IN: 717.20 (S) INV IN: 717.70 (E) INV OUT: 717.20 (NW)
D87	4' DIA. MH - OPEN LID RIM: 722.72 INV IN: 717.79 (S) INV IN: 718.04 (E) INV OUT: 717.54 (N)

STORM STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
D88	4' DIA. MH - OPEN LID RIM: 722.14 INV IN: 717.74 (W) INV IN: 718.56 (E) INV OUT: 717.49 (E)
D89	4' DIA. MH - OPEN LID RIM: 722.14 INV IN: 718.64 (E) INV OUT: 718.64 (W)
D90	2' INLET RIM: 722.13 INV OUT: 718.90 (W)
D91	2' INLET RIM: 722.90 INV OUT: 718.14 (S)
D92	2' INLET RIM: 723.29 INV OUT: 718.50 (S)
D93	4' DIA. MH - OPEN LID RIM: 721.45 INV IN: 717.78 (S) INV IN: 717.78 (W)
D94	12" NYLOPLAST DRAIN RIM: 723.92 INV IN: 717.78 (S) INV OUT: 717.78 (W)
D95	12" NYLOPLAST DRAIN RIM: 723.25 INV IN: 718.35 (S) INV OUT: 718.35 (N)
D96	4' DIA. MH - OPEN LID RIM: 722.22 INV IN: 718.61 (S) INV OUT: 718.61 (N)
D97	12" NYLOPLAST DRAIN RIM: 721.79 INV IN: 718.98 (N)
D98	2' INLET RIM: 723.37 INV OUT: 718.54 (W)
D99	2' INLET RIM: 722.72 INV OUT: 718.64 (W)
D100	12" NYLOPLAST DRAIN RIM: 722.50 INV IN: 718.35 (N)
D101	4' DIA. MH - OPEN LID RIM: 721.80 INV IN: 716.49 (S) INV IN: 717.00 (E) INV IN: 717.50 (W) INV OUT: 716.49 (N)
D102	4' DIA. MH - OPEN LID RIM: 721.24 INV IN: 717.30 (E) INV IN: 717.30 (W) INV OUT: 716.80 (N)

STORM STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
D103	4' DIA. MH - OPEN LID RIM: 721.48 INV IN: 717.74 (W) INV IN: 718.56 (E) INV OUT: 717.49 (E)
D104	2' INLET RIM: 721.48 INV OUT: 717.82 (E)
D105	12" NYLOPLAST DRAIN RIM: 722.05 INV OUT: 718.44 (E)
D106	4' DIA. MH - OPEN LID RIM: 721.80 INV IN: 717.62 (E) INV OUT: 717.12 (W)
D107	4' DIA. MH - OPEN LID RIM: 721.44 INV IN: 718.05 (S) INV IN: 718.05 (W)
D108	12" NYLOPLAST DRAIN RIM: 721.45 INV IN: 718.47 (S) INV IN: 718.47 (N)
D109	12" NYLOPLAST DRAIN RIM: 721.45 INV IN: 718.83 (N)
D110	2' INLET RIM: 721.24 INV OUT: 717.35 (W)
D114	12" NYLOPLAST DRAIN RIM: 720.79 INV OUT: 718.87 (S)
D165	12" NYLOPLAST DRAIN RIM: 722.77 INV IN: 718.51 (NE) INV IN: 718.50 (W)
D166	12" NYLOPLAST DRAIN RIM: 722.52 INV IN: 719.12 (E) INV OUT: 719.12 (SW)
D167	12" NYLOPLAST DRAIN RIM: 722.70 INV IN: 719.32 (E) INV OUT: 719.32 (W)
D168	12" NYLOPLAST DRAIN RIM: 722.85 INV OUT: 719.80 (W)

FES TABLE

STRUCTURE NAME:	DETAILS:
D37	36" FES INV IN: 714.00 (NE)
D80	36" FES INV IN: 715.00 (NE)

Kimley»Horn
 1001 WARRENVILLE ROAD, SUITE 350
 Lisle, IL 60532
 WWW.KIMLEY-HORN.COM

SIR JACOBSON
 1001 WARRENVILLE ROAD, SUITE 350
 Lisle, IL 60532
 WWW.SIRJACOBSON.COM

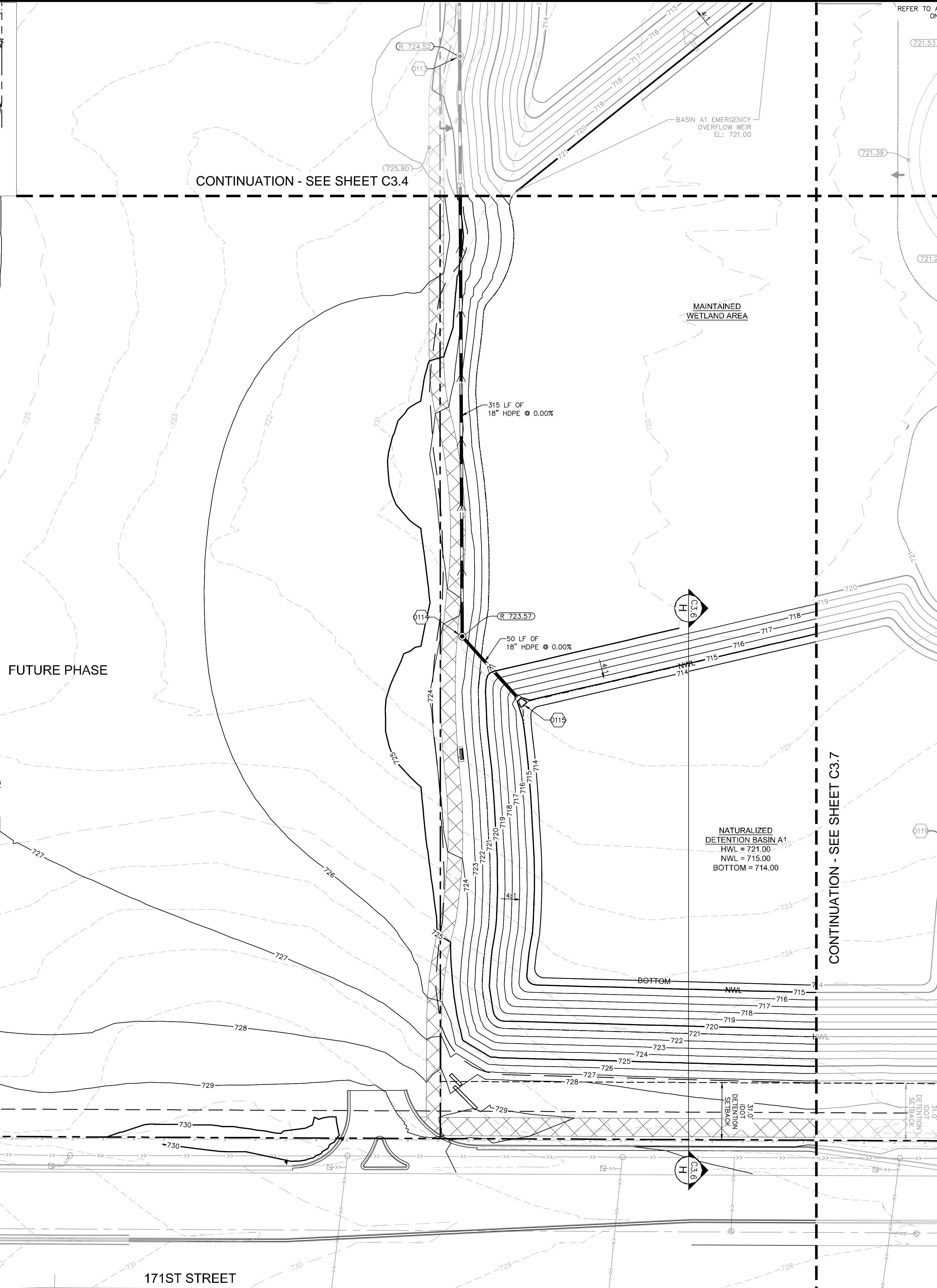
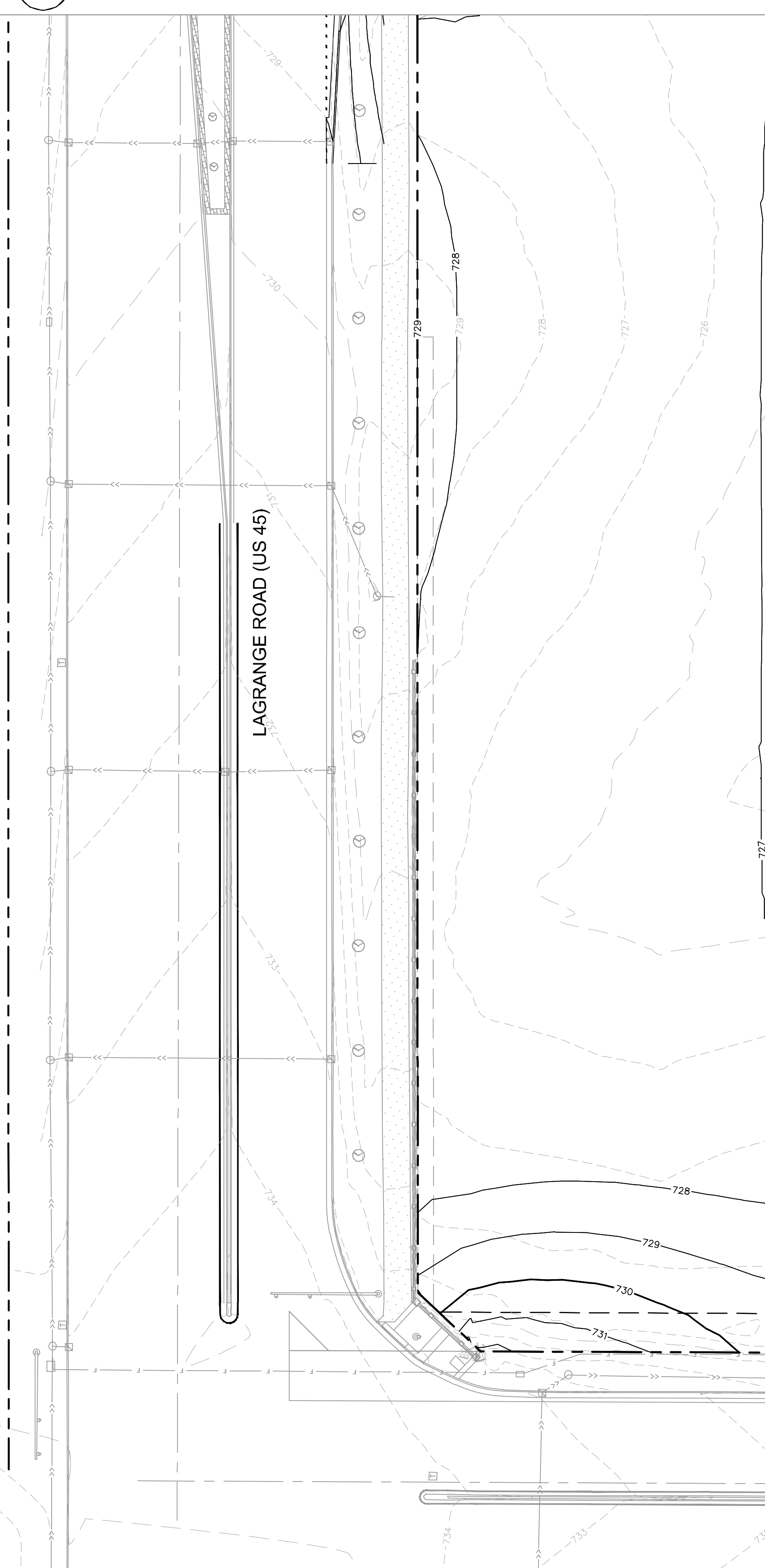
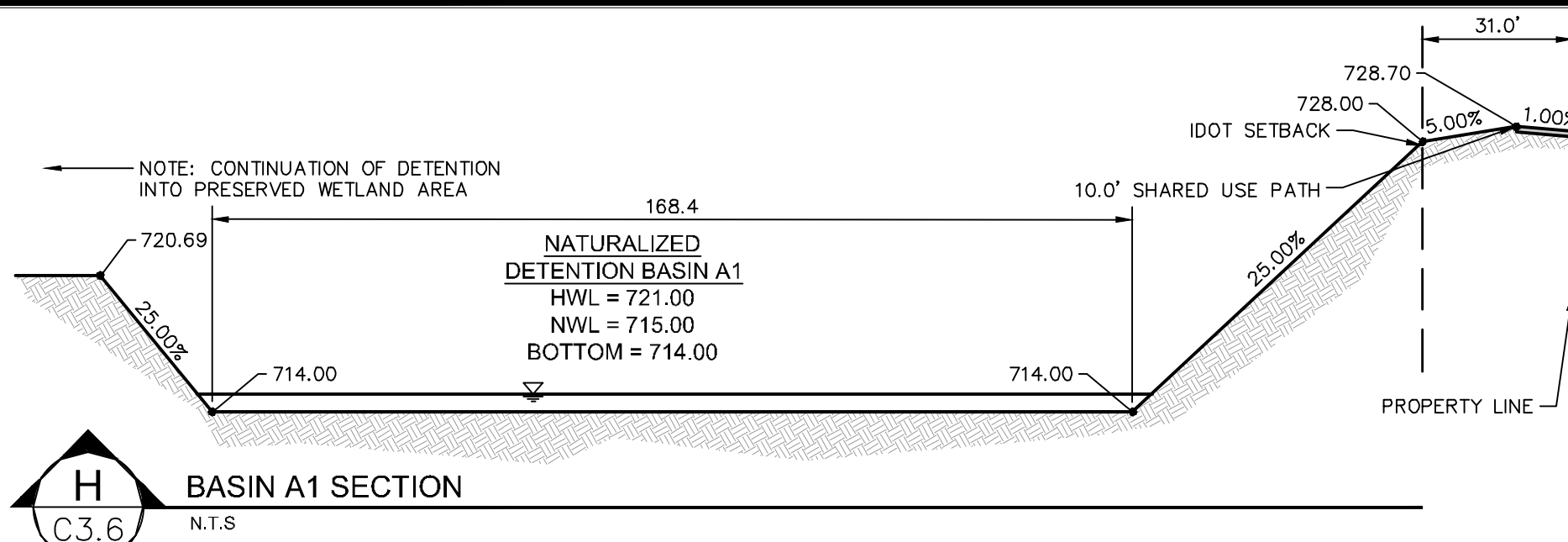
ORLAND RIDGE GRADING AND DRAINAGE PLAN
 LAGRANGE ROAD & 171 ST STREET
 ORLAND PARK, IL 60487

ORIGINAL ISSUE: 07/17/2019
 KHA PROJECT NO. 168626000
 SHEET NUMBER **C3.5**

SCALE:	AS NOTED	DESIGNED BY:	DRAWN BY:	CHECKED BY:	DATE
REVISED PER VILLAGE/CCDOT COMMENTS	02/14/20	WAW	WAW	WAW	BY
ADDENDUM 1 - LANDSCAPE	02/06/20	SKA	WAW	WAW	DATE
REVISED PER IDOT COMMENTS	02/05/20	WAW	WAW	WAW	
LANDSCAPE REV PER VILLAGE COMMENTS	01/09/20	WAW	WAW	WAW	
REVISED PER VILLAGE/MWRD/CCDOT COM.	12/20/19	WAW	WAW	WAW	
REVISED PER CCOT COMMENTS	11/21/19	WAW	WAW	WAW	
REVISED PER VILLAGE/MWRD COMMENTS	10/15/19	WAW	WAW	WAW	
REVISIONS					

Continuation - See Sheet C3.4 (left side)
 Continuation - See Sheet C3.7 (bottom center)
 Continuation - See Sheet C3.3 (top right)

Drawing name: K:\CHS_LIEV\16862600_SR_Jacobson_Crand Park, IL\2 Design\CAD\PlanSheets\Final Engineering\C3.6 GRADING AND DRAINAGE PLAN.dwg C3.6 Feb 13, 2020 3:00pm by: TaylorEberbach
 This document, together with the concepts and designs presented herein, is an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



REFER TO ADA ON SITE

Call Before You Dig
1-800-892-0123

- ### GRADING NOTES
- ALL PAVEMENT SPOT GRADE ELEVATIONS AND RIM ELEVATIONS WITHIN OR ALONG CURBS AND GUTTER REFER TO FLOW LINE ELEVATIONS UNLESS OTHERWISE NOTED.
 - ALL ELEVATIONS SHOWN DEPICT FINISHED GRADE UNLESS OTHERWISE NOTED. GENERAL CONTRACTOR TO COORDINATE WITH EXCAVATION, LANDSCAPE AND PAVING SUBCONTRACTORS REGARDING TOPSOIL THICKNESS FOR LANDSCAPE AREAS AND PAVEMENT SECTION THICKNESS FOR PAVED AREAS TO PROPERLY ENSURE ADEQUATE CUT TO ESTABLISH SUBGRADE ELEVATIONS.
 - NO EARTHEN SLOPE SHALL BE GREATER THAN 4:1, UNLESS OTHERWISE NOTED.
 - MAXIMUM SLOPE IN ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS.
 - MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 5% AND CROSS SLOPE SHALL NOT EXCEED 2% ON ALL SIDEWALKS AND ACCESSIBLE ROUTES.
 - MATCH EXISTING ELEVATIONS AT THE PROPERTY LIMITS.
 - ALL ONSITE CONCRETE SIDEWALK IS DESIGNED AT 1% CROSS SLOPE UNLESS OTHERWISE NOTED.

GRADING LEGEND

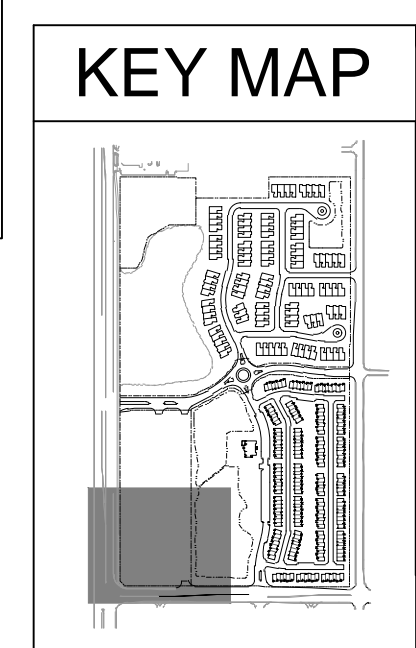
FL = FLOW LINE
 TC = TOP OF CURB
 ME = MATCH ELEVATION
 TF = TOP OF FOUNDATION
 R = RIM ELEVATION
 FG = FINISHED GRADE
 TS = TOP OF STAIRS
 BS = BOTTOM OF STAIRS

-XXX- PROPOSED CONTOUR
 -XXX- EXISTING CONTOUR
 -RIDGE- RIDGE LINE
 X.XXX SLOPE AND FLOW DIRECTION
 100-YEAR OVERLAND OVERFLOW ROUTE
 DETENTION BASIN 100-YEAR EMERGENCY OVERLAND OVERFLOW ROUTE
 PROPOSED SWALE
 PROPOSED RETAINING WALL
 REVERSED PITCH CURB AND GUTTER
 ACCESSIBLE ROUTE
 RIP RAP (SEE DETAILS)
 PROPOSED OPEN LID STORM STRUCTURE (PAVEMENT USE NEENAH R-2540) (GRASS USE NEENAH R-4340-B BEEHIVE)
 PROPOSED CLOSED LID STORM STRUCTURE (PAVEMENT USE NEENAH R-1772) (GRASS USE NEENAH R-1786)
 PROPOSED COMBINATION CURB INLET (86-12 C&G USE NEENAH R-3281-A) (FOR MOUNTABLE CURBS USE NEENAH R-2540 REFER TO DETAILS)
 PROPOSED STORM SEWER LINE

STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
D114	4" DIA. MH - CLOSED LID RIM: 723.57 INV IN: 715.00 (SE) INV OUT: 715.00 (N)

FES TABLE	
STRUCTURE NAME:	DETAILS:
D115	18" FES INV OUT: 715.00 (NW)

THE DETENTION POND VOLUMES PROVIDED WERE DETERMINED UPON THE USE OF THE VILLAGE OF ORLAND PARK LDC RELEASE RATES. POND RESTRICTORS HAVE BEEN OVERSIZED TO MAINTAIN HYDROLOGY OF DOWNSTREAM JURISDICTIONAL WETLAND. NO EXCESS VOLUME HAS BEEN PROVIDED WITHIN PONDS FOR USE BEYOND THE LIMITS OF THIS DEVELOPMENT. NO CHANGE TO OUTLET RESTRICTORS IS ALLOWED WITHOUT PRIOR APPROVAL OF THE VILLAGE.



WAW	02/14/20	REVISOR	REVISED PER VILLAGE/CCDOT COMMENTS
SKA	02/06/20	ADDENDUM 1 - LANDSCAPE	
WAW	02/05/20	REVISOR	REVISED PER IDOT COMMENTS
WAW	01/09/20	REVISOR	LANDSCAPE REV PER VILLAGE COMMENTS
WAW	12/20/19	REVISOR	LANDSCAPE PER VILLAGE/MWRD/CCDOT COM.
WAW	11/21/19	REVISOR	REVISED PER CCOT COMMENTS
WAW	10/15/19	REVISOR	REVISED PER VILLAGE/MWRD COMMENTS
BY	DATE	REVISIONS	

Kimley-Horn
 © 2020 KIMLEY-HORN AND ASSOCIATES, INC.
 1001 WARRENVILLE ROAD, SUITE 350,
 LISLE, IL 60532, P. 6560
 WWW.KIMLEY-HORN.COM

SR JACOBSON
 ARCHITECTS & ENGINEERS

ORLAND RIDGE GRADING AND DRAINAGE PLAN

LAGRANGE ROAD & 171ST STREET
ORLAND PARK, IL 60487

ORIGINAL ISSUE:
 07/17/2019
 KHA PROJECT NO.
 168626000
 SHEET NUMBER
C3.6

Drawing name: K:\CHS_DEVELOPMENT\16862600_SR_Jacobson_Crand Park_IL_V2 Design\CAD\Drawings\C3.8 ROUNDABOUT GRADING AND UTILITY PLAN.dwg C3.8 ROUNDABOUT GRADING AND UTILITY PLAN.dwg Feb 13, 2020 3:00pm by: Taylor.Eschbach
This document, together with the concepts and designs presented herein, is an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

UTILITY CROSSING LEGEND

X1	12" STORM 8" WATER	B/P = 715.20 T/P = 713.70
X2	8" SANITARY 8" WATER	B/P = 711.78 T/P = 710.28
X3	36" STORM 8" WATER	B/P = 714.77 T/P = 713.27
X4	24" STORM 8" WATER	B/P = 715.02 T/P = 713.52

NOTE: WHERE THERE IS LESS THAN 10 FT HORIZONTAL OR 18-IN VERTICAL SEPARATION BETWEEN A SEWER AND WATER MAIN, OR IF WATER MAIN CROSSES UNDER A SEWER, WATER MAIN QUALITY PIPE IS TO BE USED TO CONSTRUCT THE SEWER OR EITHER PIPE IS TO BE ENCASED. THE PROTECTION MUST EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE DISTANCE BETWEEN THE WATER MAIN AND SEWER IS AT LEAST 10 FT. ACCEPTABLE WATER MAIN QUALITY PIPE INCLUDES PVC SDR/WMO MEETING ASTM D2241 WITH JOINTS MEETING ASTM D3139 OR DUCTILE IRON PIPE. RCP STORM SEWER WITH FLEXIBLE GASKET JOINTS MEETING ASTM C361 OR ASTM C443 IS ALSO ACCEPTABLE AT CROSSINGS.

KEY NOTES

- CURB TRANSITION (B6.12 CONCRETE CURB AND GUTTER TO BARRIER CURB (SEE DETAILS))
- CURB TRANSITION (B6.12 CONCRETE CURB AND GUTTER TO B6.18 CONCRETE CURB AND GUTTER (SEE DETAILS))
- BARRIER CURB AND GUTTER (RESIDENTIAL, PER VILLAGE DETAILS)
- 6" LANDSCAPE CURB

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

Call Before You Dig
TRUE
1-800-892-0123

SCALE:	AS NOTED	DESIGNED BY THE	DRAWN BY:	JDC	REVISIONS
SCALE:	AS NOTED	DESIGNED BY THE	DRAWN BY:	JDC	CHECKED BY: WAW

Kimley»Horn

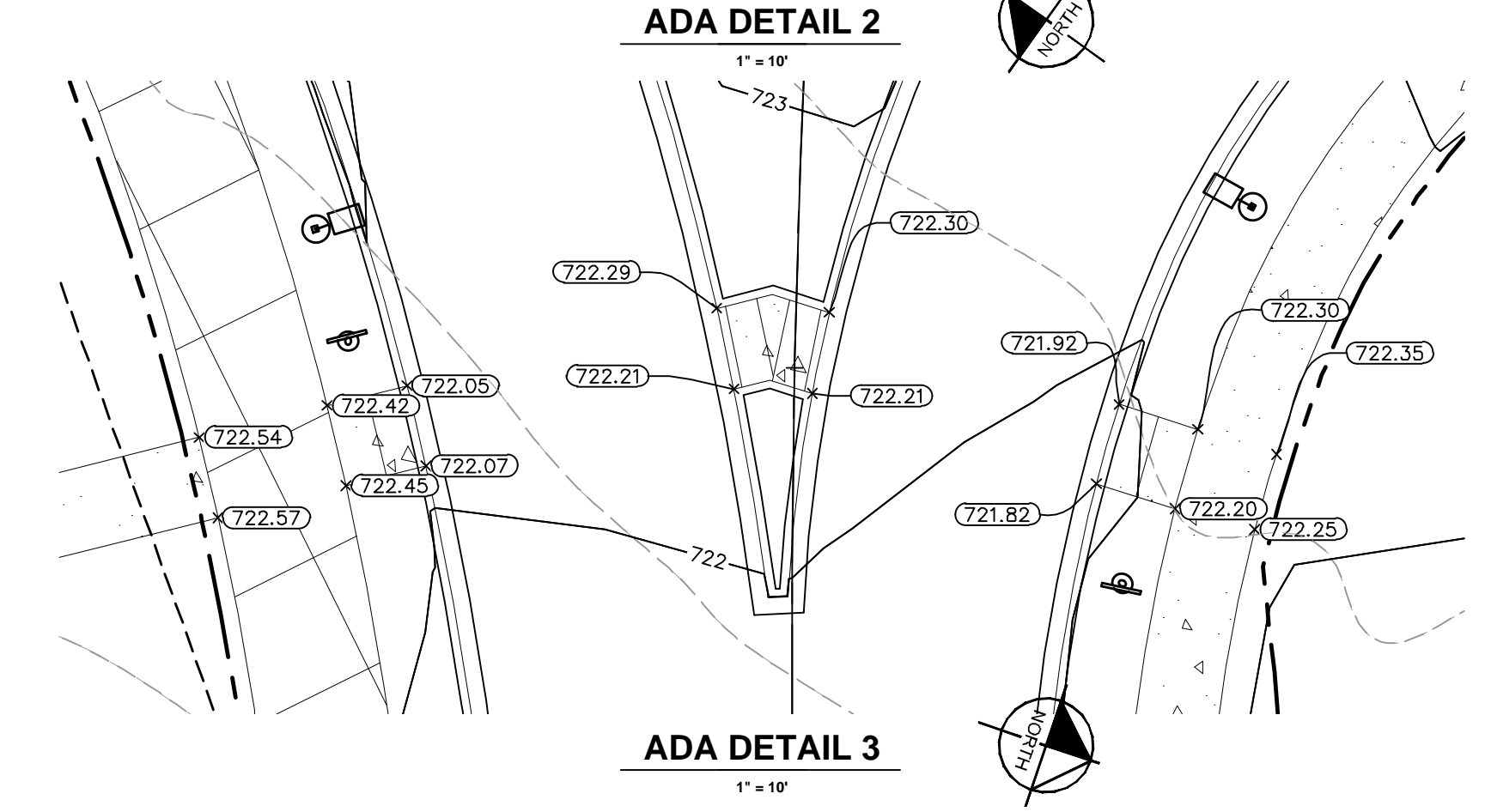
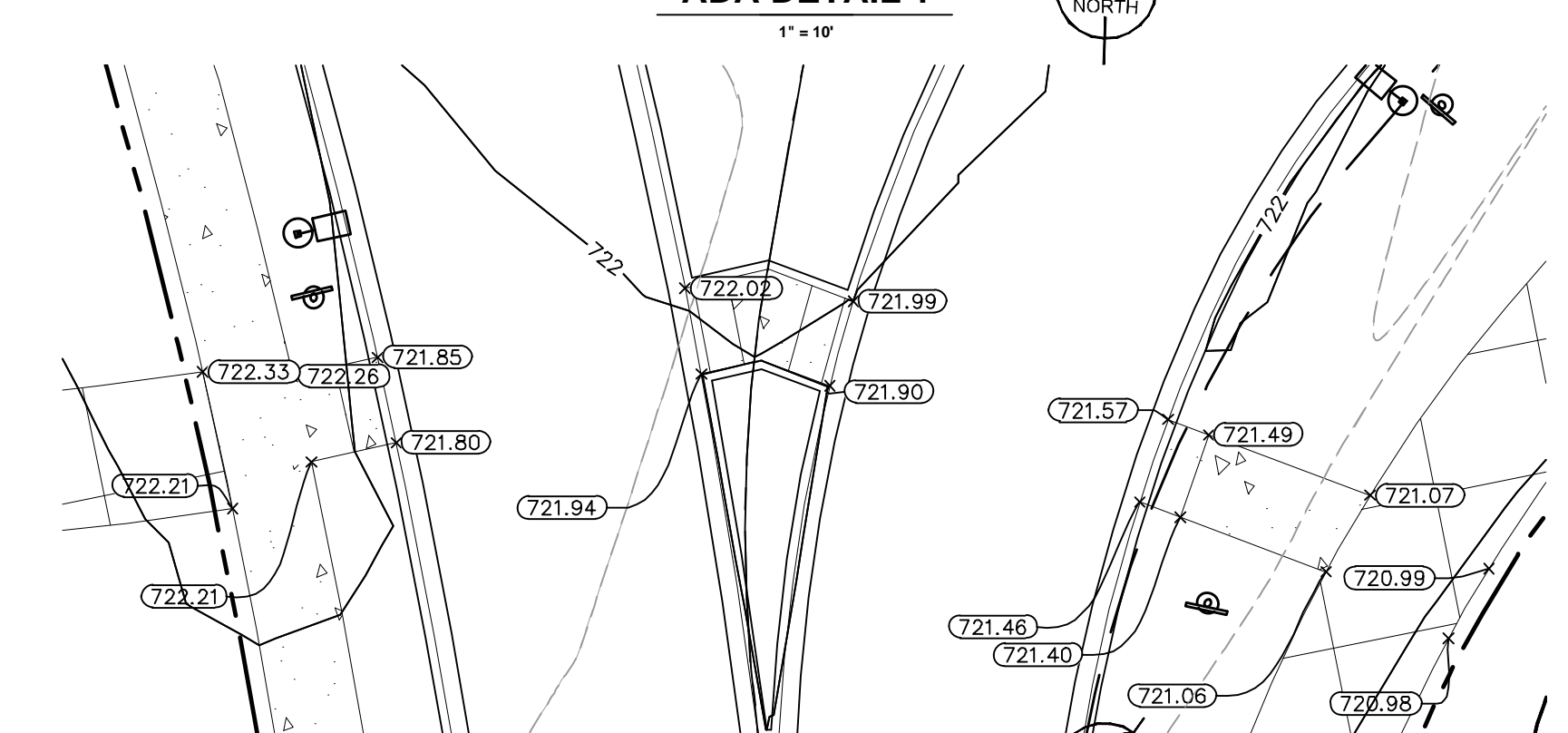
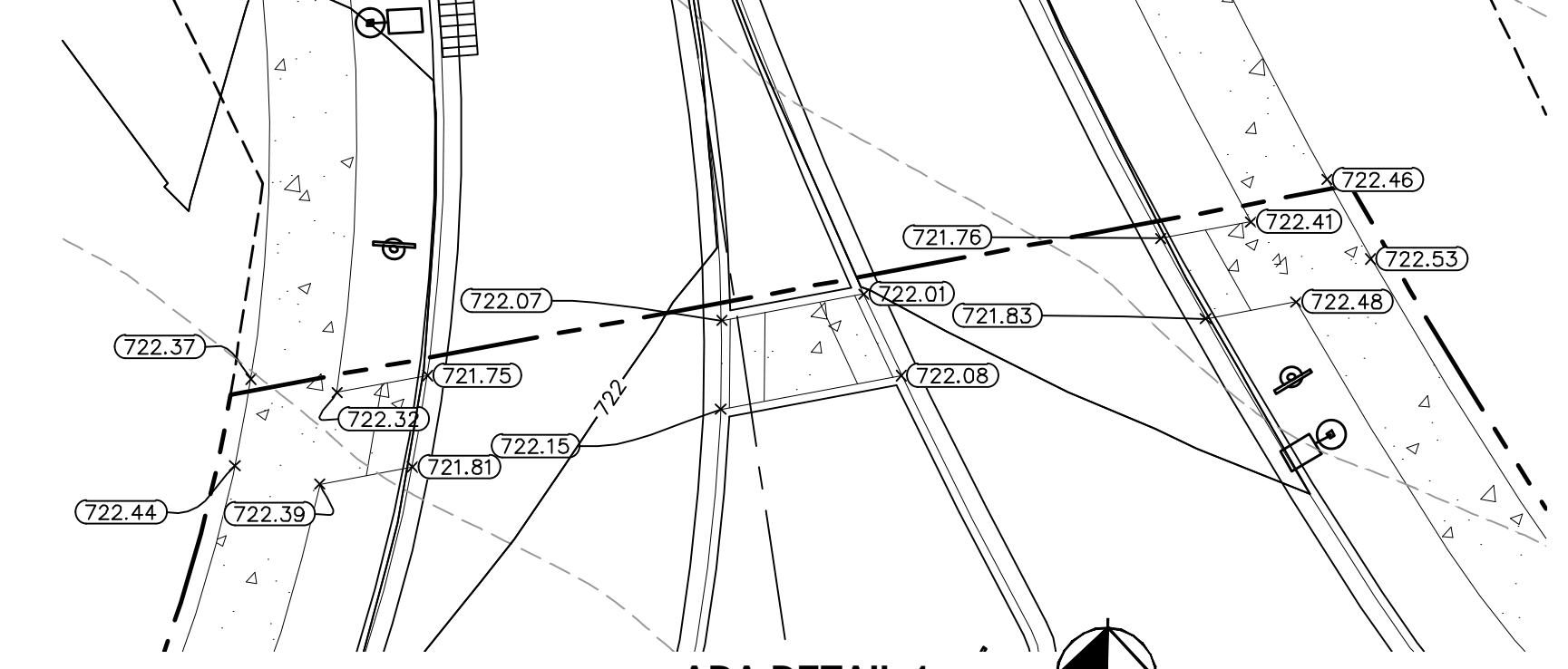
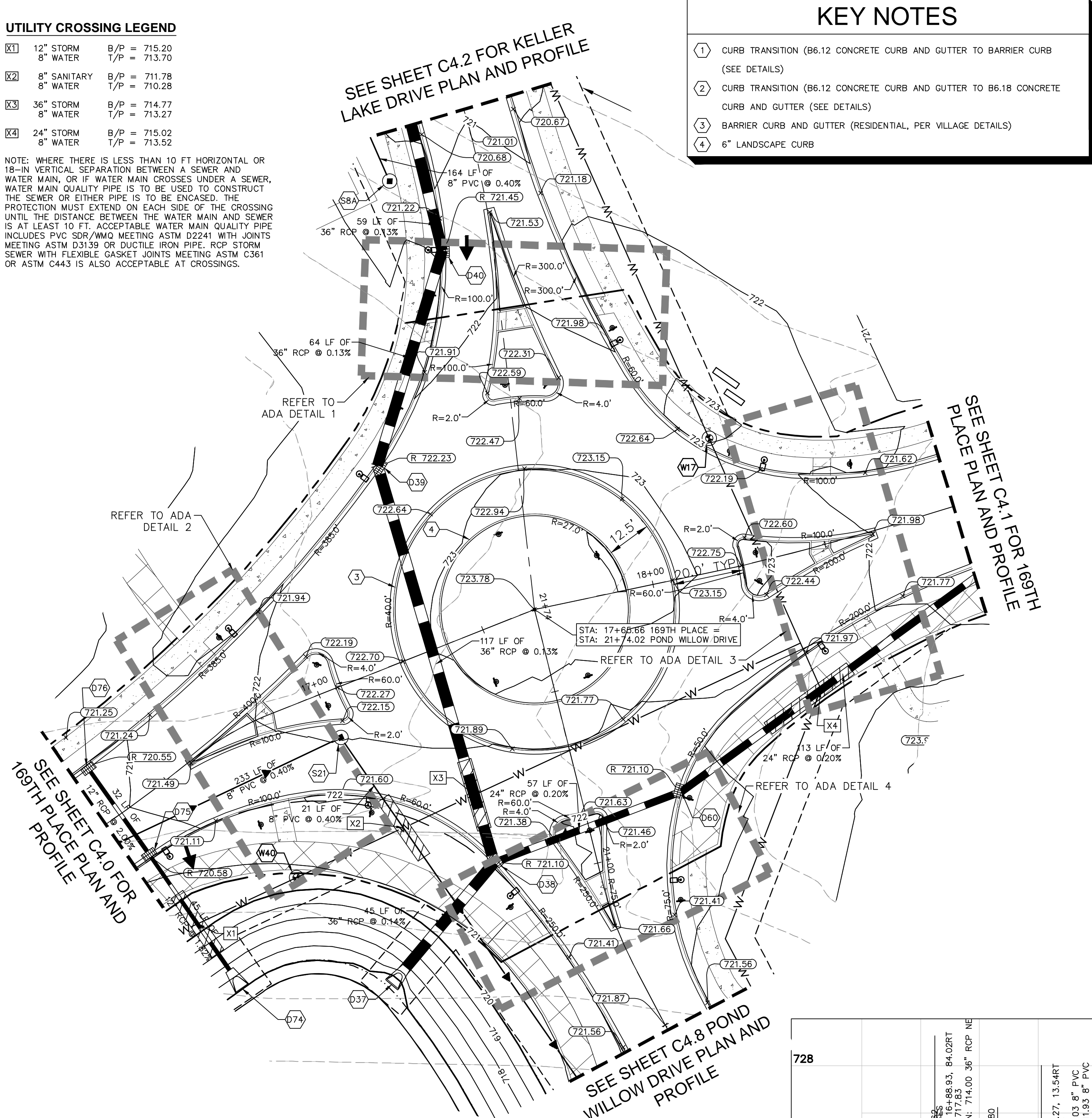
© 2020 KIMLEY-HORN AND ASSOCIATES, INC.
1001 WARRENVILLE ROAD, SUITE 350,
LISLE, IL 60532
WWW.KIMLEY-HORN.COM

SIR JACOBSON

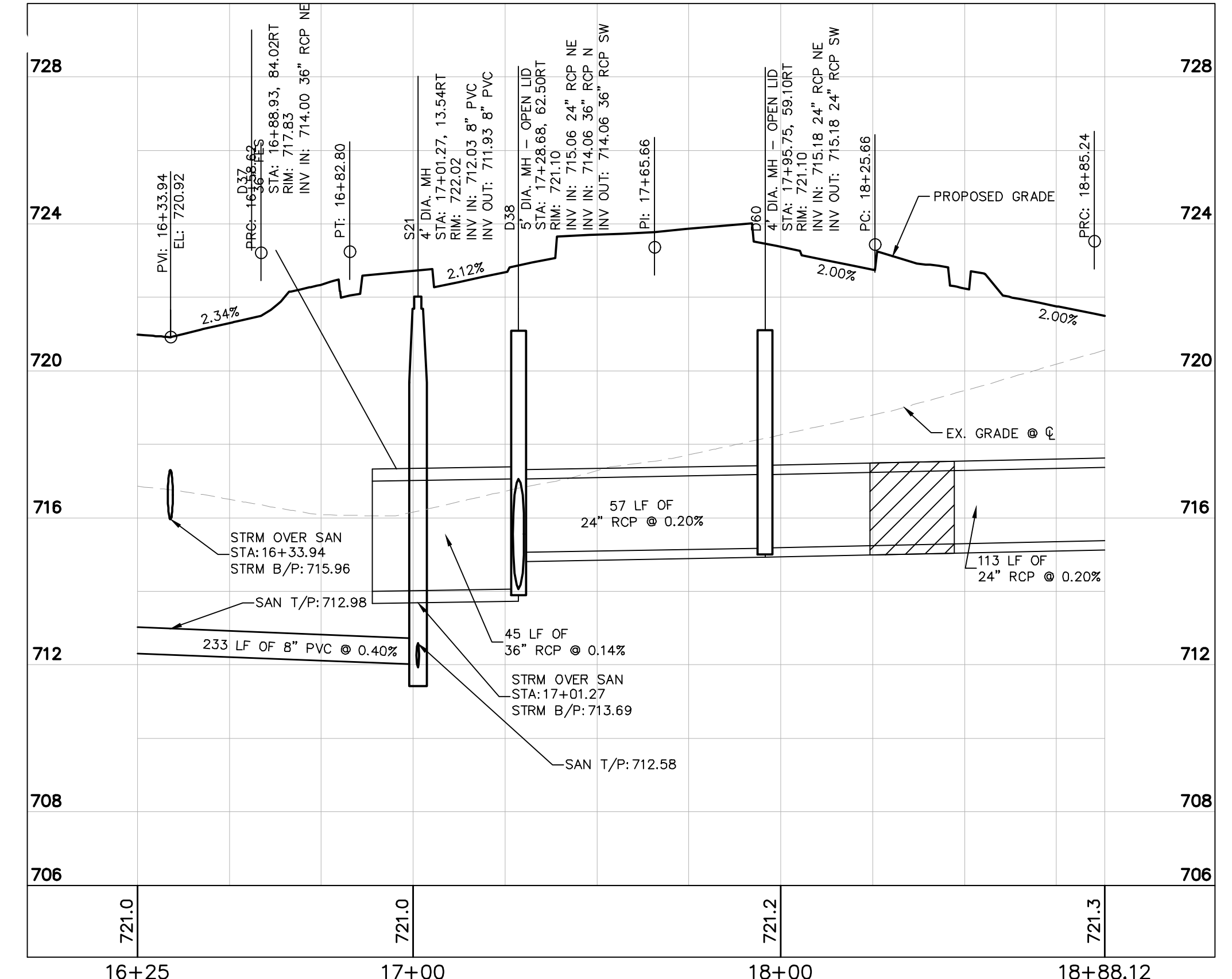
ROUNDABOUT GRADING AND UTILITY PLAN

ORLAND RIDGE
LAGRANGE ROAD & 171 ST STREET
ORLAND PARK, IL 60487

ORIGINAL ISSUE:
07/17/2019
KHA PROJECT NO.
168626000
SHEET NUMBER
C3.8



ROUNDABOUT PROFILE
1" = 30' HORIZONTAL
1" = 3' VERTICAL



LEGEND

- STANDARD PITCH CONCRETE CURB AND GUTTER
- REVERSE PITCH CONCRETE CURB AND GUTTER
- ***** DENOTES ADA RAMP. CONTRACTOR TO INSTALL SPECIAL DEPRESSED CURB FOR RAMP CONSTRUCTION
- CONCRETE SIDEWALK (SEE GRADING PLANS FOR DETAILED ELEVATIONS)
- ASPHALT TRAIL (SEE GRADING PLANS FOR DETAILED ELEVATIONS)
- GRANULAR TRENCH BACKFILL (SEE DETAILS)
- SEWER PIPE WITHIN 10' OF WATERMAIN HORIZONTAL OR 18" VERTICAL DISTANCE TO BE PROTECTED PER UTILITY CROSSING LEGEND NOTE.

WATER STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
W17	8" VALVE IN VAULT FG ELEV: 723.03
W40	8" VALVE IN VAULT FG ELEV: 703.55

FES TABLE

STRUCTURE NAME:	DETAILS:
D37	36" FES INV IN: 714.00 (NE)
D74	12" FES INV IN: 715.00 (NW)

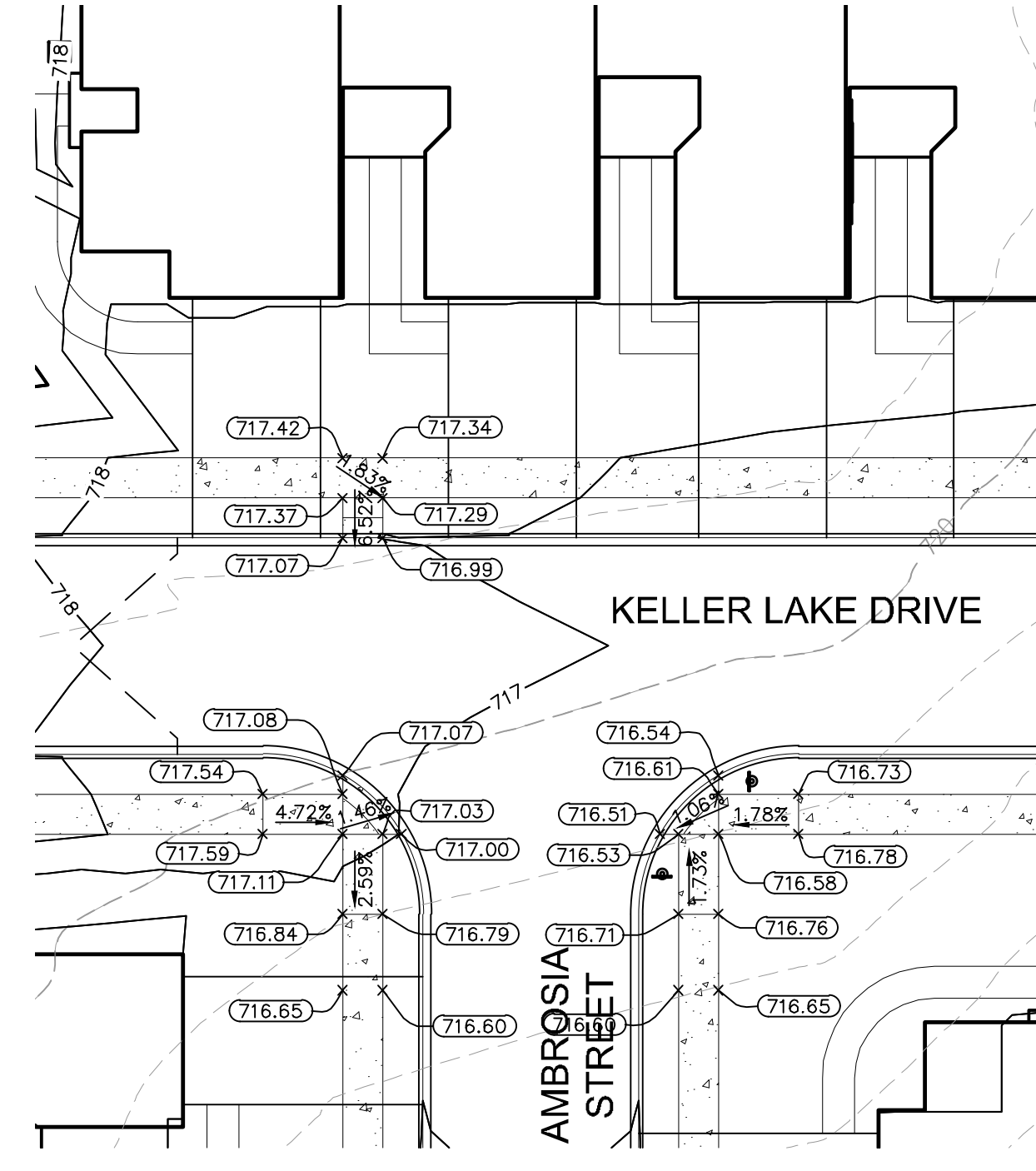
STORM STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
D38	5' DIA. MH - OPEN LID RIM: 721.10 INV IN: 715.06 (NE) INV IN: 714.06 (N) INV OUT: 714.06 (SW)
D39	4' DIA. MH - OPEN LID RIM: 722.23 INV IN: 714.21 (N) INV OUT: 714.21 (S)
D40	4' DIA. MH - OPEN LID RIM: 721.44 INV IN: 714.30 (N) INV OUT: 714.30 (S)
D60	4' DIA. MH - OPEN LID RIM: 721.10 INV IN: 715.18 (NE) INV OUT: 715.18 (SW)
D75	4' DIA. MH - OPEN LID RIM: 720.58 INV IN: 715.83 (NW) INV OUT: 715.83 (SE)
D76	2' INLET RIM: 720.55 INV OUT: 716.46 (SE)

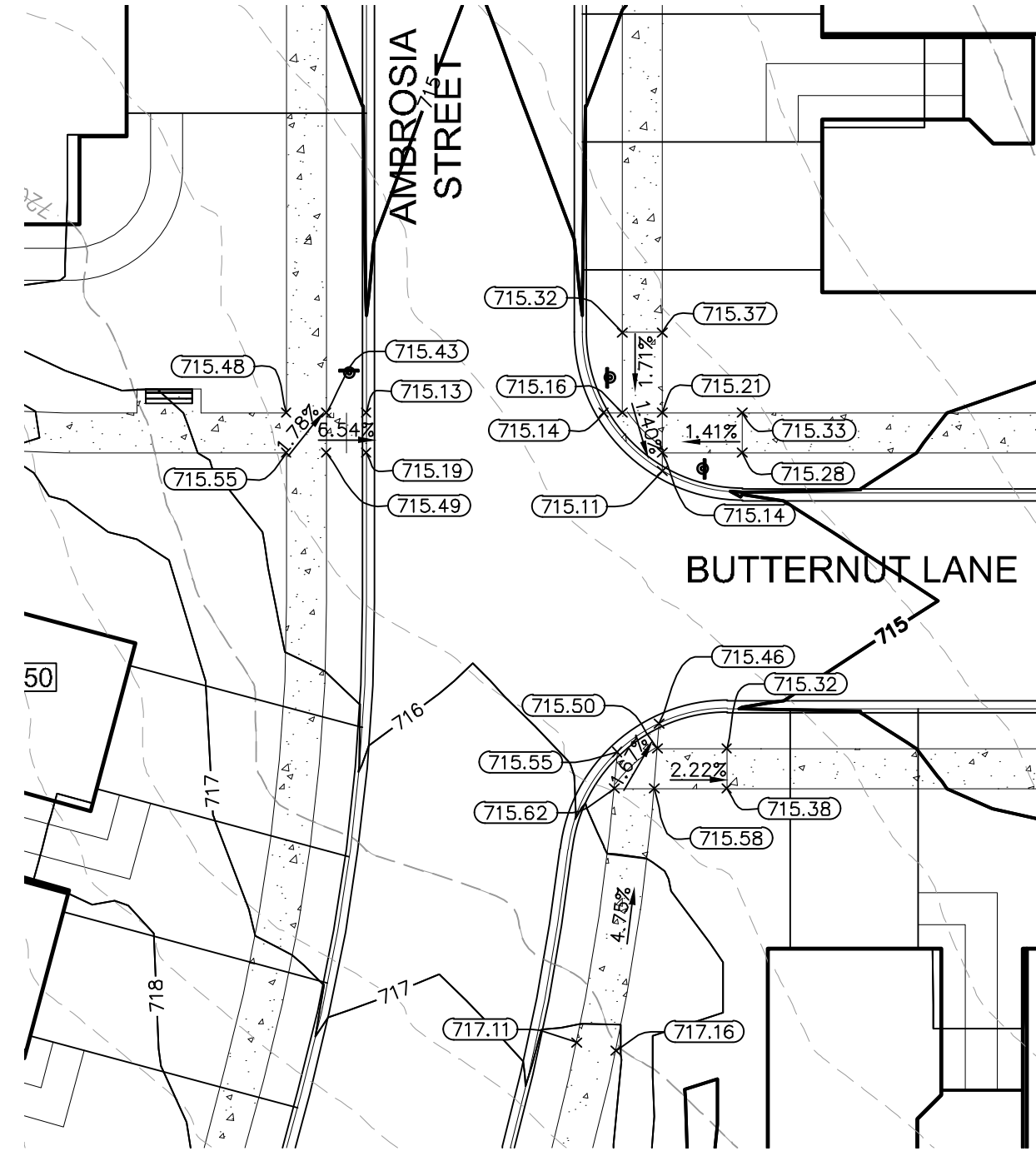
SANITARY STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
S8A	4' DIA. MH RIM: 721.42 INV OUT: 712.75 (NW)
S21	4' DIA. MH RIM: 722.02 INV IN: 712.03 (SW) INV OUT: 711.93 (SE)

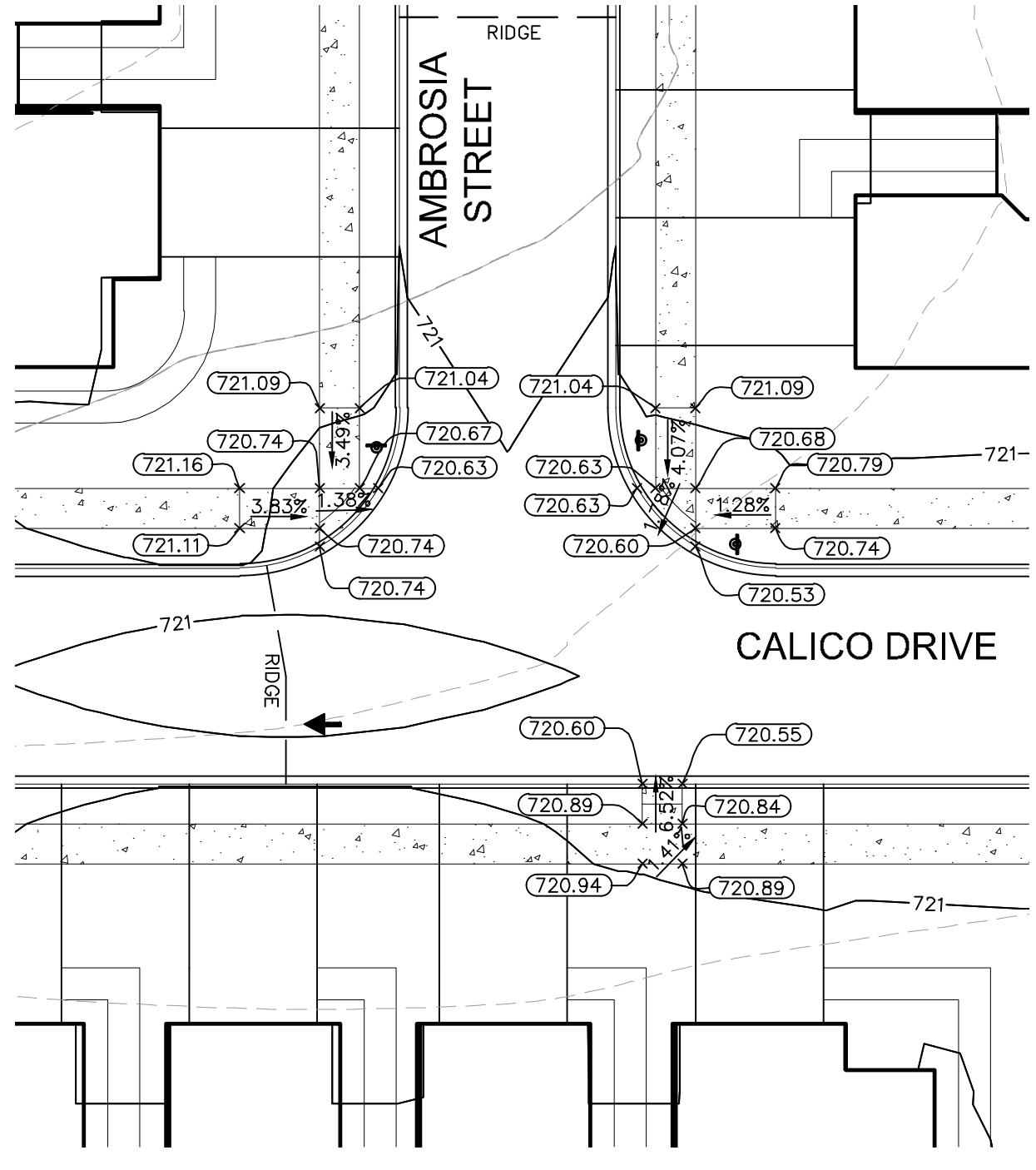
Drawing name: K:\CHS_LIEV\16862600_SR_Jacobson_Orland Ridge_IL_V2_Design\CAD\PlinSheets\Final Engineering\C3.9 ADA GRADING DETAILS.dwg - C3.9 Feb 13, 2020 3:00pm by: Taylor-Eschbach
 This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



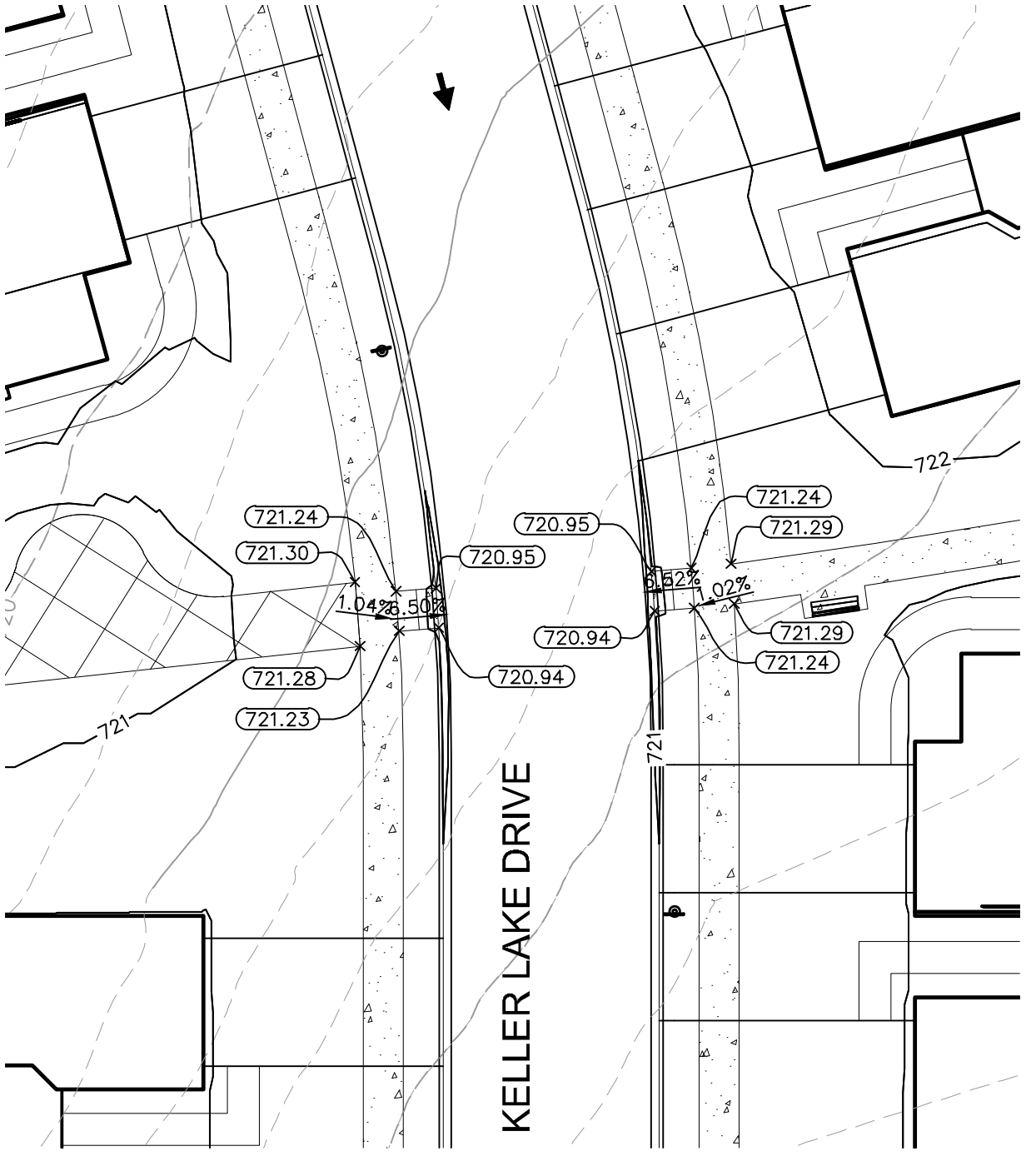
ADA DETAIL 1
1" = 20'



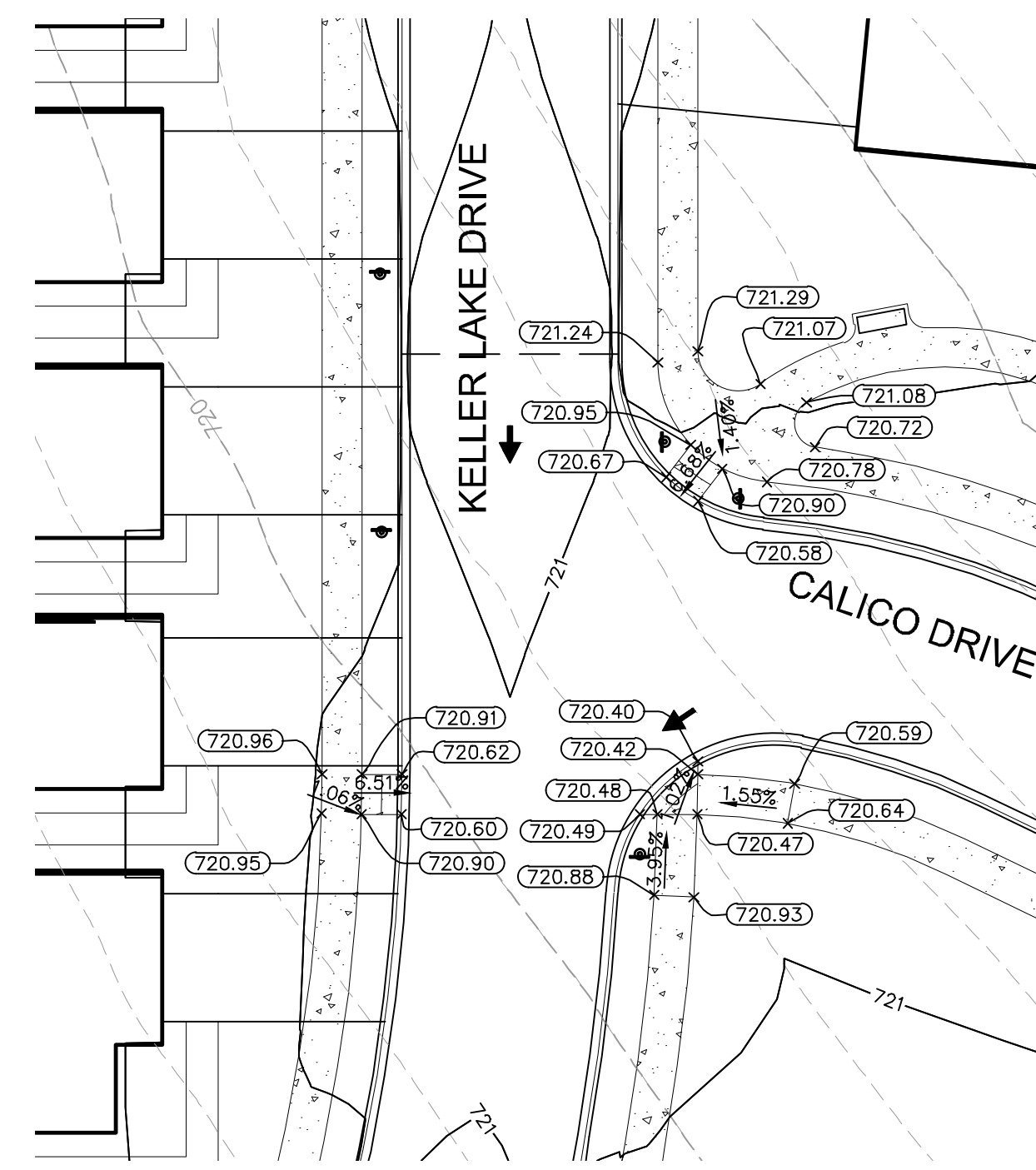
ADA DETAIL 2
1" = 20'



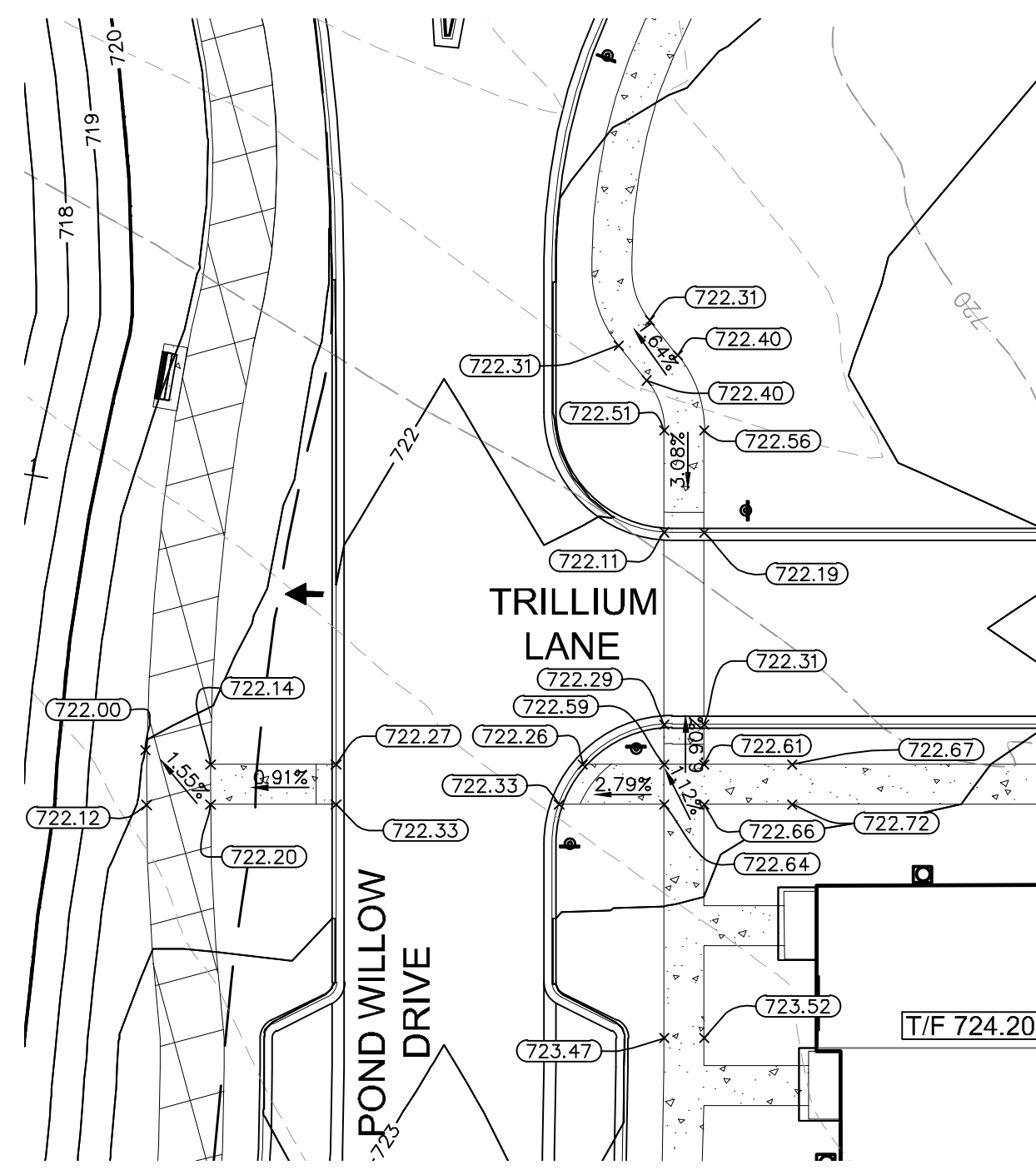
ADA DETAIL 3
1" = 20'



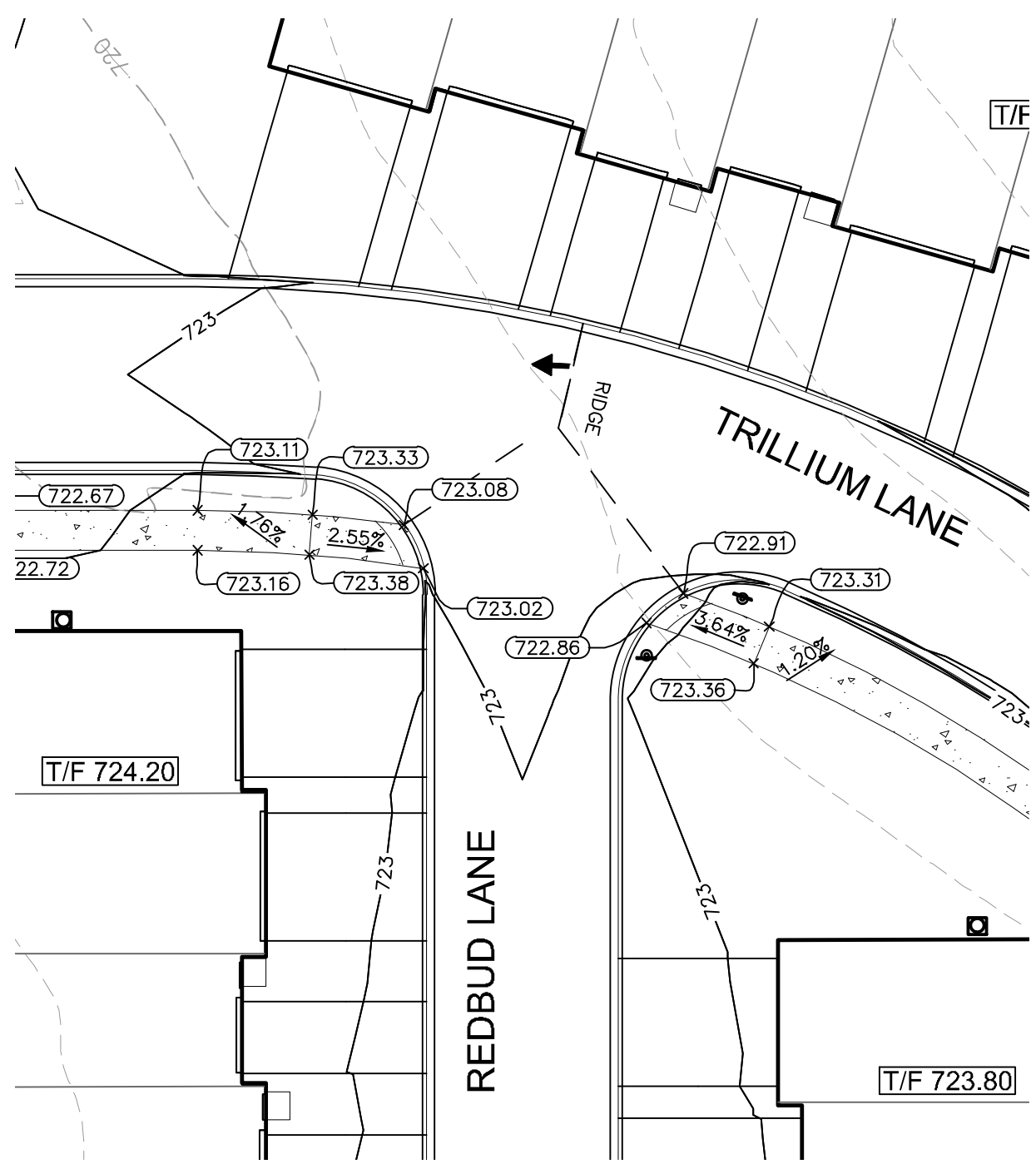
ADA DETAIL 4
1" = 20'



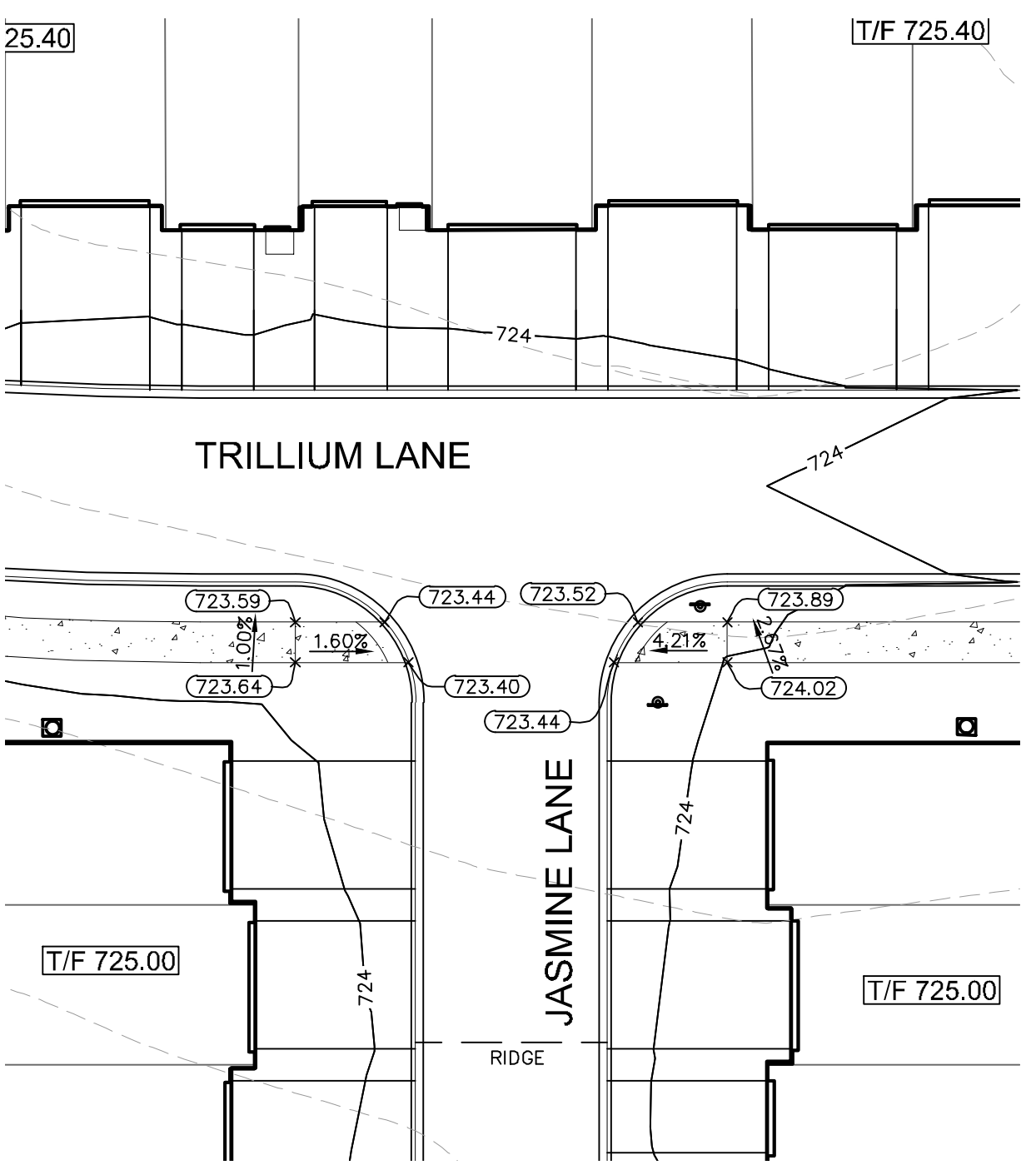
ADA DETAIL 5
1" = 20'



ADA DETAIL 6
1" = 20'



ADA DETAIL 7
1" = 20'



ADA DETAIL 8
1" = 20'



NO.	REVISIONS	DATE	BY
1	REVISED PER VILLAGE/CCDOT COMMENTS	02/14/20	WAW
2	ADDENDUM 1 - LANDSCAPE	02/06/20	SKA
3	REVISED PER IDOT COMMENTS	02/05/20	WAW
4	LANDSCAPE REV PER VILLAGE COMMENTS	01/09/20	WAW
5	LANDSCAPE PER VILLAGE/MWRD/CCDOT COM.	12/20/19	WAW
6	REVISED PER CCOT COMMENTS	11/21/19	WAW
7	REVISED PER VILLAGE/MWRD COMMENTS	10/15/19	WAW

Kimley»Horn
 © 2020 KIMLEY-HORN AND ASSOCIATES, INC.
 1001 WARRENVILLE ROAD, SUITE 350,
 Lisle, IL 60532-5450
 WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
 DESIGNED BY: TFE
 DRAWN BY: JDC
 CHECKED BY: WAW



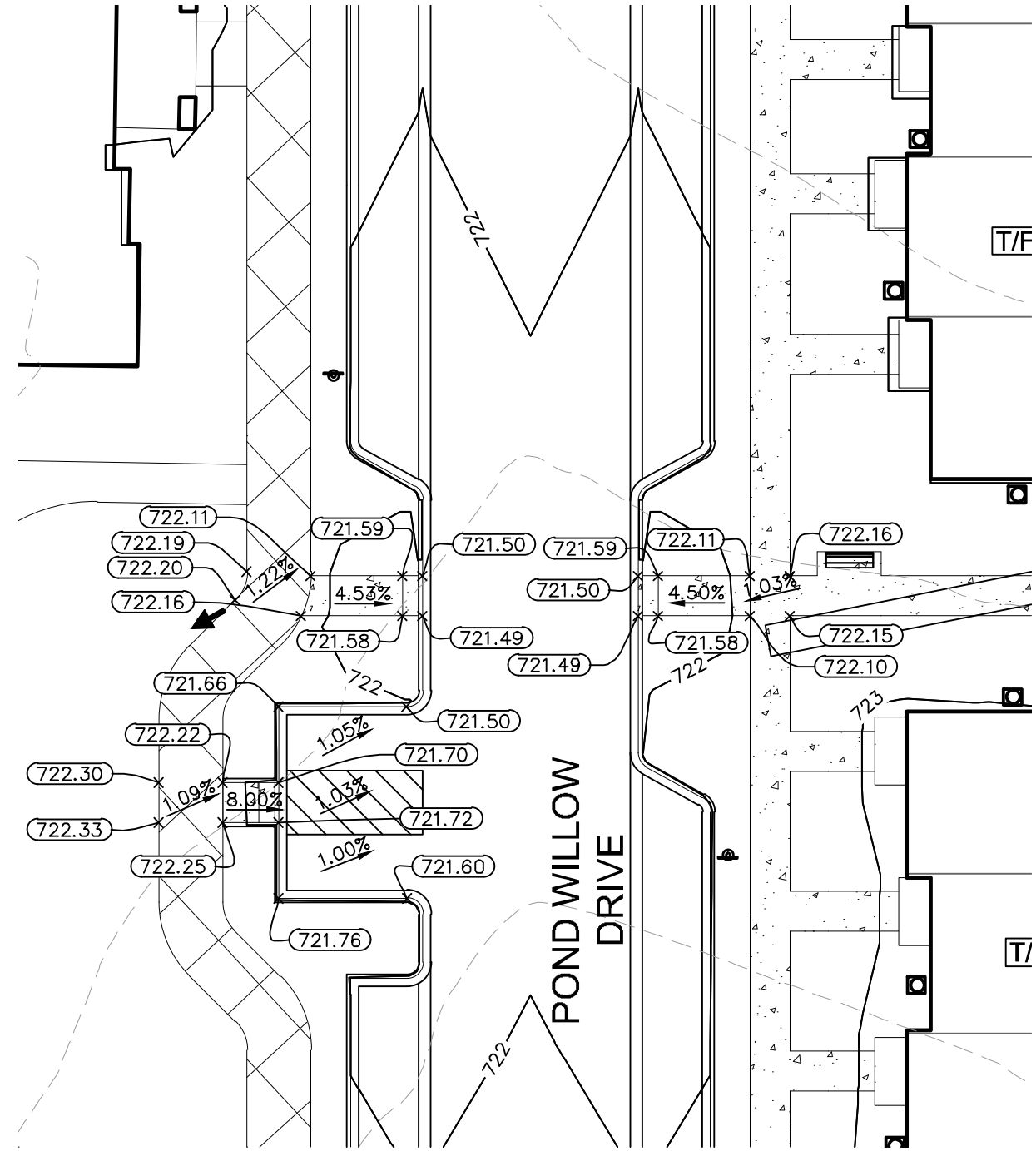
ADA GRADING DETAILS

ORLAND RIDGE
 LAGRANGE ROAD & 171 ST STREET
 ORLAND PARK, IL 60487

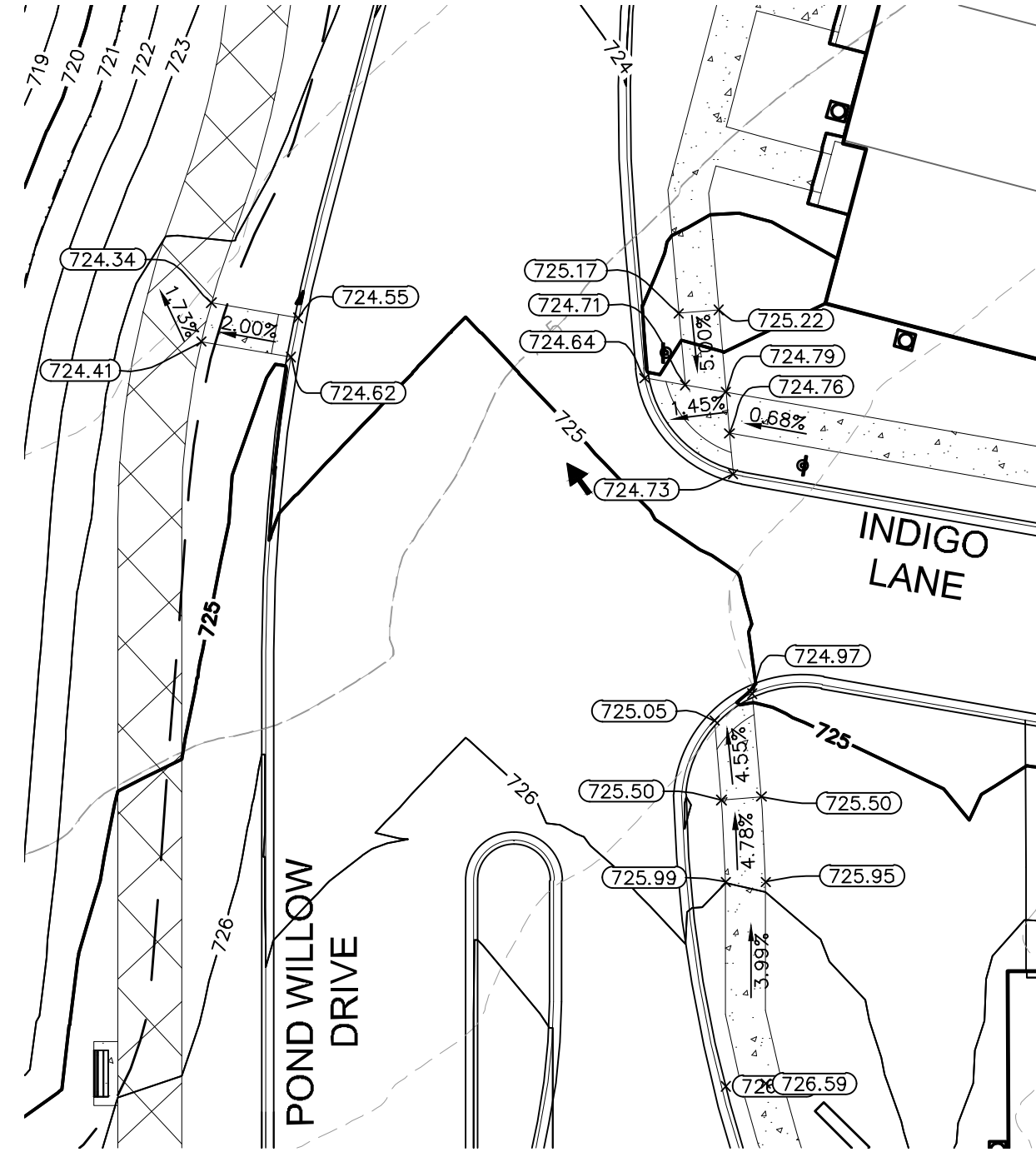
ORIGINAL ISSUE:
 07/17/2019
 KHA PROJECT NO.
 168626000
 SHEET NUMBER

C3.9

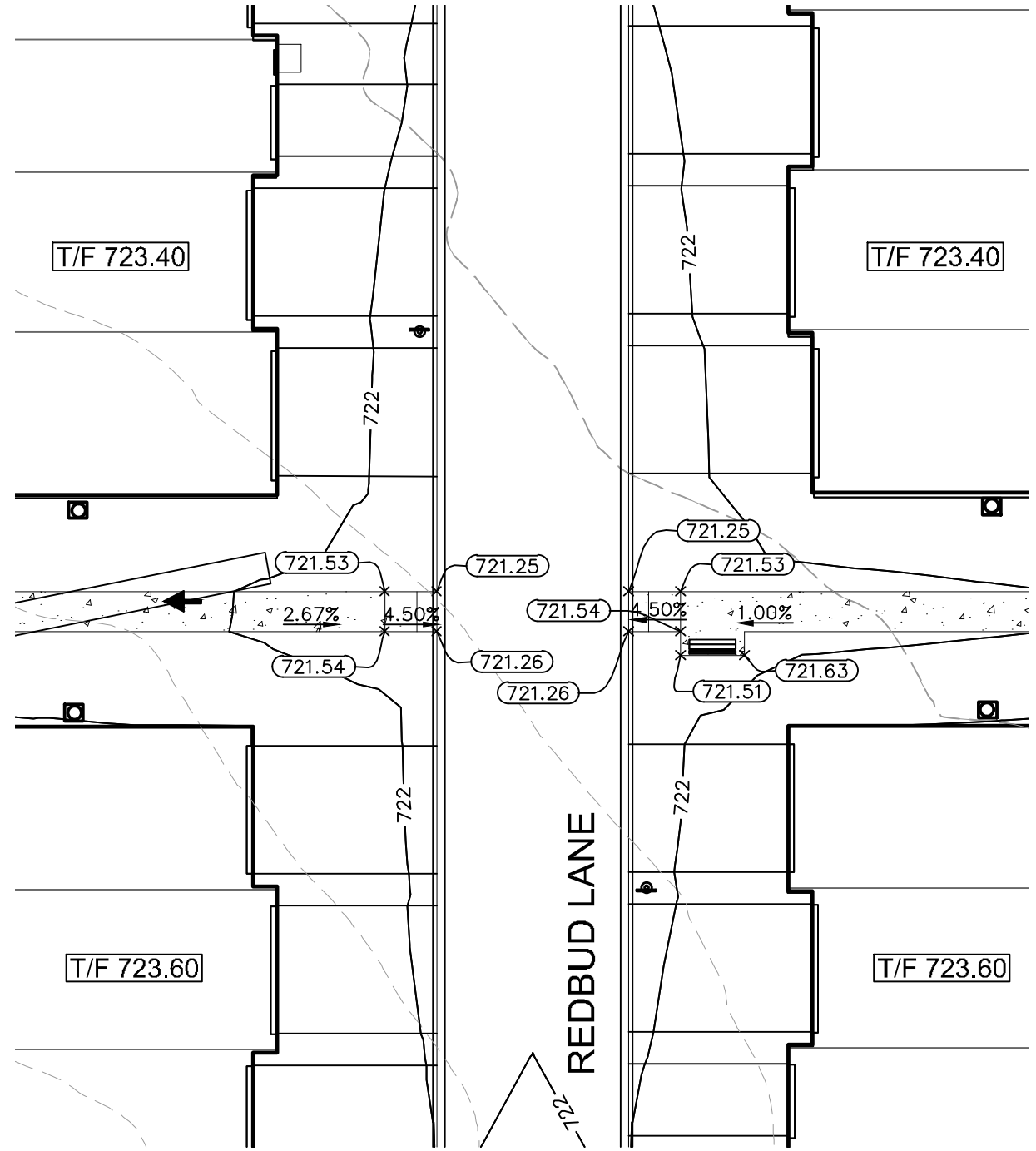
Drawing name: K:\CHS_DEV\16862600_SR_Jacobson_Orland Park, IL\2 Design\CAD\PlanSheets\Final Engineering\C3.10 ADA GRADING DETAILS.dwg C3.10 Feb 13, 2020 3:00pm by: TaylorEichboch
 This document, together with the concepts and designs presented herein, is an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



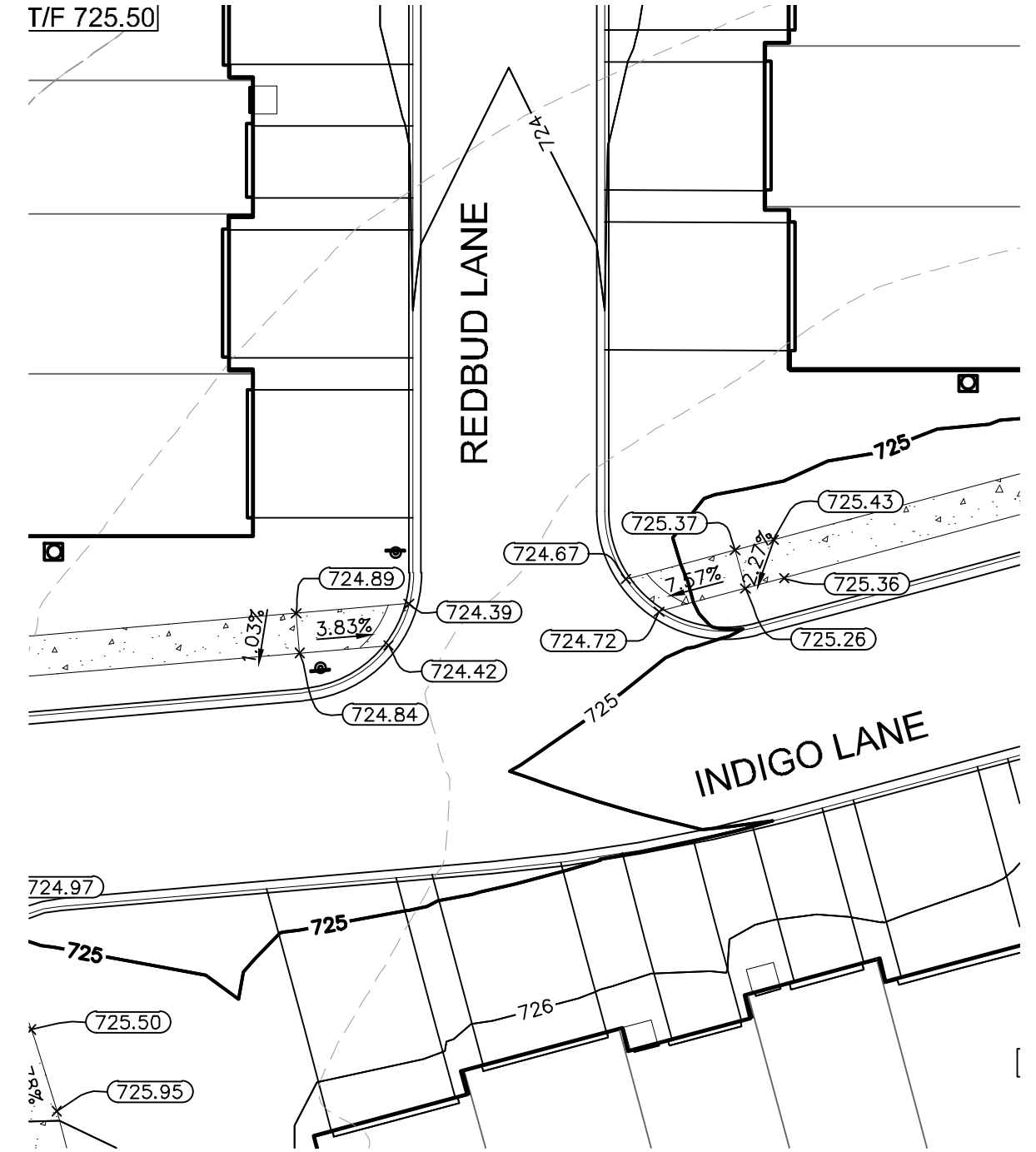
ADA DETAIL 9
1" = 20'



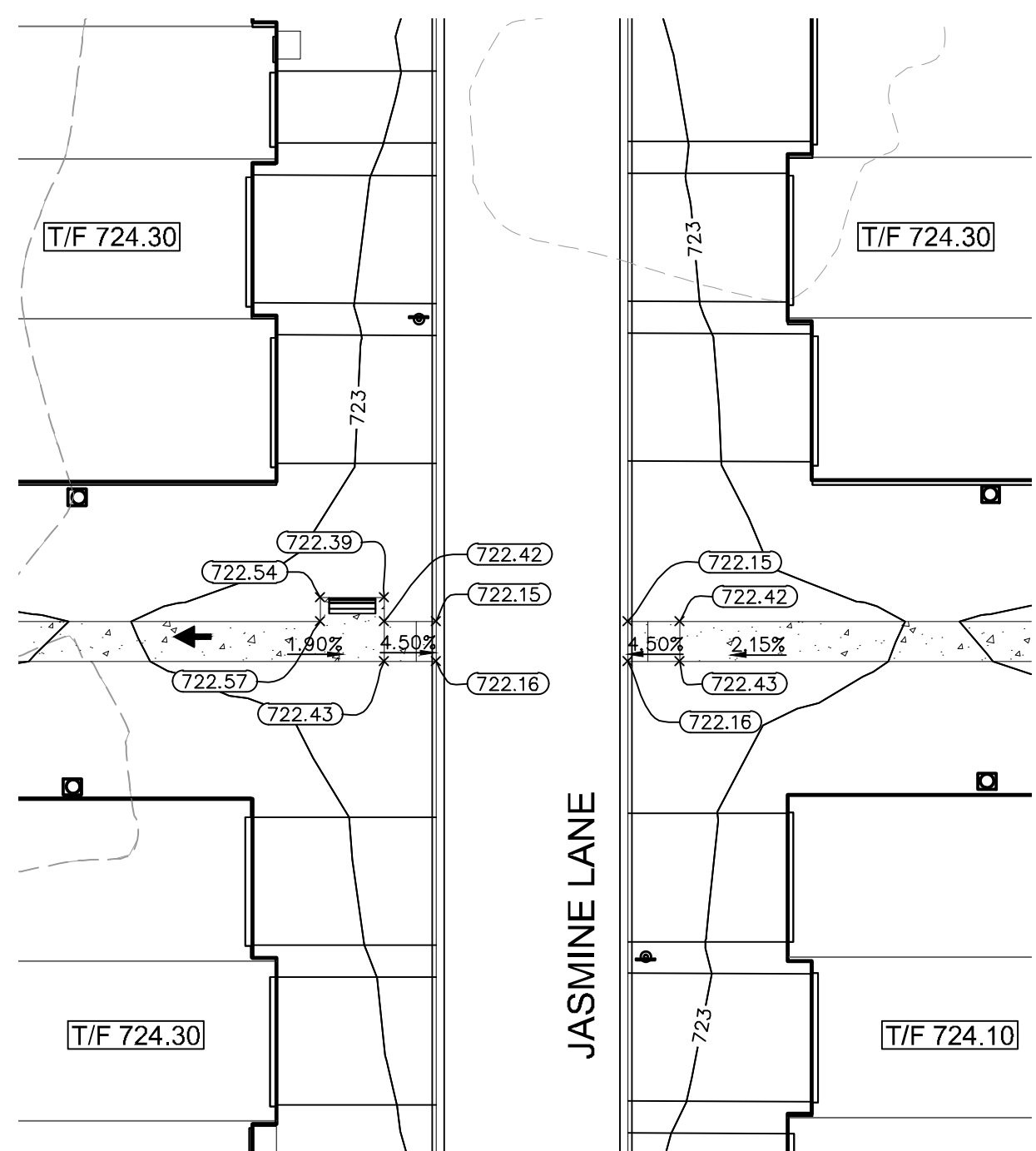
ADA DETAIL 10
1" = 20'



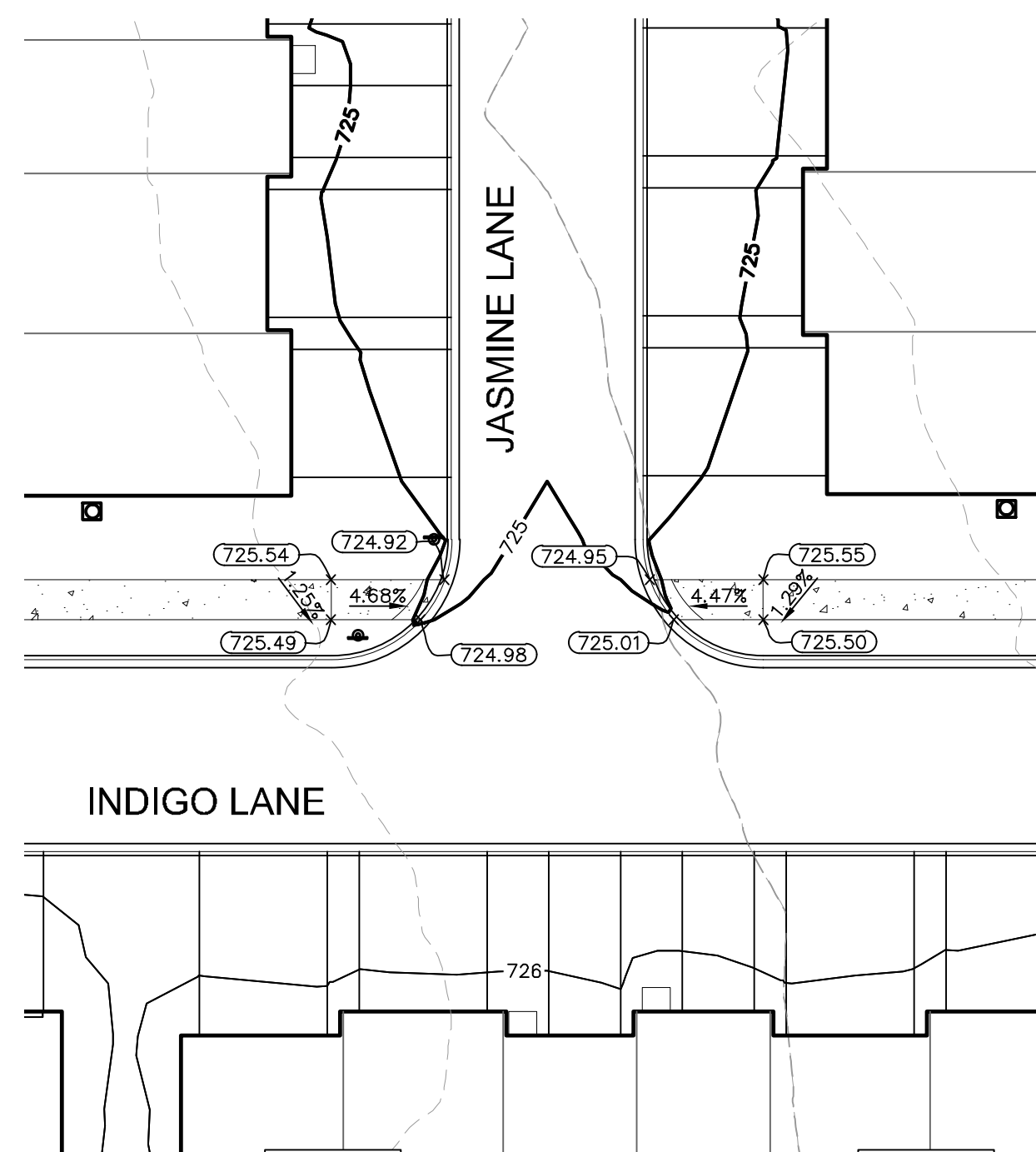
ADA DETAIL 11
1" = 20'



ADA DETAIL 12
1" = 20'



ADA DETAIL 13
1" = 20'



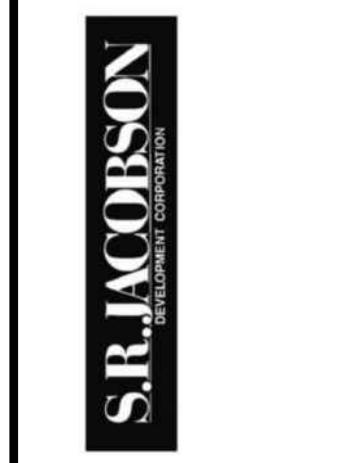
ADA DETAIL 14
1" = 20'



NO.	REVISIONS	DATE	BY
1	REVISED PER VILLAGE/CCDOT COMMENTS	02/14/20	WAW
2	ADDENDUM 1 - LANDSCAPE	02/06/20	SKA
3	REVISED PER IDOT COMMENTS	02/05/20	WAW
4	LANDSCAPE REV PER VILLAGE COMMENTS	01/09/20	WAW
5	LANDSCAPE PER VILLAGE/MWRD/CCDOT COM.	12/20/19	WAW
6	REVISED PER CCOT COMMENTS	11/21/19	WAW
7	REVISED PER VILLAGE/MWRD COMMENTS	10/15/19	WAW

Kimley»Horn
 © 2020 KIMLEY-HORN AND ASSOCIATES, INC.
 1001 WARRENVILLE ROAD, SUITE 350,
 Lisle, IL 60532, P: 630.585.6500
 WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
 DESIGNED BY: TFE
 DRAWN BY: JDC
 CHECKED BY: WAW



ADA GRADING DETAILS

ORLAND RIDGE
 LAGRANGE ROAD & 171 ST STREET
 ORLAND PARK, IL 60487

ORIGINAL ISSUE:
 07/17/2019
 KHA PROJECT NO.
 168626000

SHEET NUMBER
C3.10