

GENERAL NOTES:

1. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY REGULATIONS. ALL CONSTRUCTION SHALL BE COMPLETED FOLLOWING CURRENT CITY STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

2. CONTRACTOR WILL BE REQUIRED TO PROVIDE NOTICE TO UTILITY COMPANIES A MINIMUM OF SEVENTY-TWO (72) HOURS PRIOR TO ANY EXCAVATION, AS FOLLOWS:

KANSAS ONE CALL 1-800-344-7233
OR 1-316-687-2470

THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:

AT&T 1-800-246-8464
BLACK HILLS ENERGY 1-800-694-8989
CITY OF WICHITA WATER 1-316-268-4555
CITY OF WICHITA SEWER 1-316-268-4073
CITY OF WICHITA STORMWATER 1-316-268-4090
CITY OF WICHITA TRAFFIC 1-316-268-4034
COX COMMUNICATIONS 1-888-249-3530
KANSAS GAS SERVICE 1-888-482-4950
WESTAR ENERGY 1-800-544-4857

3. UTILITY SERVICE LINES, POLES, ETC. ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY IDENTIFY A UTILITY TO BE ADJUSTED BY ITS OWNER DURING CONSTRUCTION. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.

4. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS, IN THE OPINION OF THE ENGINEER, THAT WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WILL REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WILL REQUIRE ADDITIONAL ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.

5. TREES AND SHRUBS IN PUBLIC RIGHT-OF-WAY WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEERS APPROVAL. TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE.

6. THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY ADJUTING THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF TEN (10) DAYS NOTICE PRIOR TO START OF CONSTRUCTION.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY THE CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.

8. THE WATER DISTRIBUTION DIVISION SHALL FIELD LOCATE WATER VALVES ONE TIME DURING CONSTRUCTION WHEN REQUESTED BY THE CONTRACTOR. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PRESERVE SUCH FIELD LOCATIONS DURING THE CONSTRUCTION PROCESS. WATER VALVES, VALVE BOXES OR FIRE HYDRANTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY CONTRACTOR AT HIS OWN EXPENSE. VALVE BOXES AND WATER METERS WITHIN THE PROJECT LIMITS SHALL BE ADJUSTED TO MATCH FIELD GRADES.

9. THE CONTRACTOR SHALL NOTIFY THE CONSULTANT ENGINEER AND TOM MASON WITH THE CITY OF WICHITA AT 316-268-4574 WITH THE ANTICIPATED CONSTRUCTION START DATE AND NOTIFY THEM OF THE PROJECT COMPLETION. STAKING AND INSPECTION FOR THIS PROJECT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

10. IF TRAFFIC IS IMPACTED BY CONSTRUCTION, A TRAFFIC CONTROL PLAN MUST BE SUBMITTED AND APPROVED BY THE CITY TRAFFIC ENGINEER, BRIAN COON AT TRAFFIC@WICHITA.GOV BEFORE CONSTRUCTION CAN BEGIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL MEASURES TO FACILITATE CONSTRUCTION. ALL CONSTRUCTION ZONE MARKINGS AND SIGNAGE SHALL CONFORM TO THE LATEST VERSION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS PUBLISHED BY THE US DEPT. OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION. ALL COSTS ASSOCIATED WITH CONSTRUCTION MARKINGS AND SIGNAGE SHALL BE THE CONTRACTORS RESPONSIBILITY.

11. ALL ELEVATIONS SHOWN ARE NAVD 88.

12. ALL AREAS DISTURBED DURING CONSTRUCTION THAT WILL NOT BE UNDER PROPOSED PAVEMENT SHALL BE RESTORED TO MATCH EXISTING CONDITIONS.

13. ALL EXISTING PAVEMENT AND CURB AND GUTTER WITHIN THE CONSTRUCTION LIMITS SHALL BE SAW CUT, FULL DEPTH, TO THE LINES SHOWN ON THE PLANS, OR TO THE NEAREST JOINT, AND REMOVED, UNLESS OTHERWISE NOTED. IF REMOVAL LIMITS ARE WITHIN THREE (3) FEET OF A JOINT, REMOVE TO THE JOINT.

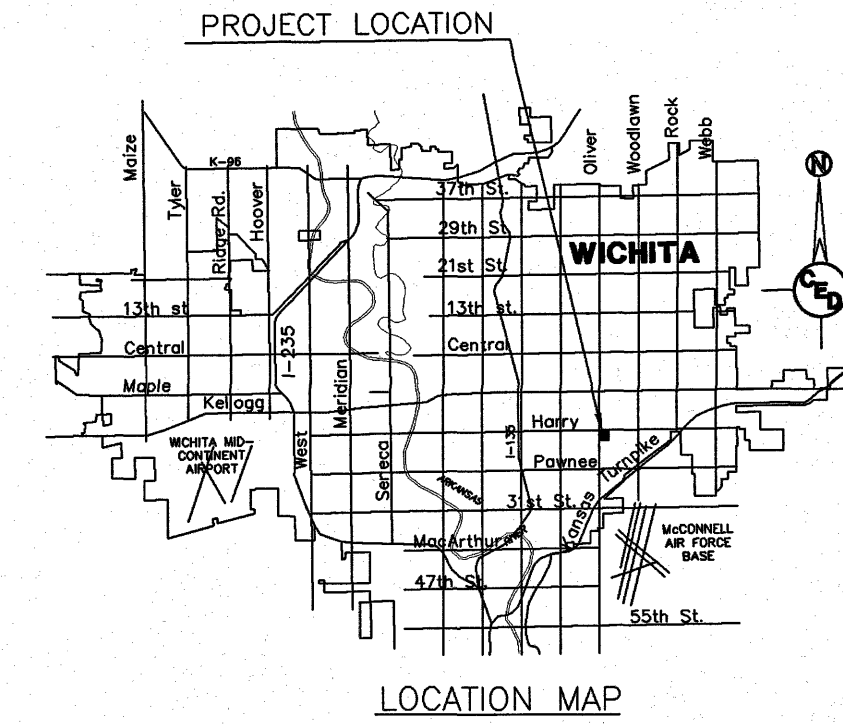
14. ALL TRAFFIC CONTROL DEVICES IN THE WORK ZONE (INCLUDING MARKINGS AND SIGNS) AND THEIR INSTALLATION AND MAINTENANCE SHALL COMPLY WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL TRAFFIC CONTROL DEVICES IN THE TRAVELED WAY OR CLEAR ZONE SHALL BE CRASHWORTHY (NCHRP REPORT 350 OR MASH COMPLIANT).
HTTP://SAFETY.FHWA.DOT.GOV/ROADWAY_DEPT/POLICY_GUIDE/ROAD_HARDWARE/

15. ALL CONSTRUCTION EQUIPMENT, INCLUDING VEHICLES, MATERIALS, AND DEBRIS, SHALL BE STORED OUTSIDE OF THE CLEAR ZONE. WHERE THIS CANNOT BE ACHIEVED THE CONTRACTOR SHALL PLACE APPROPRIATE SIGNS, OBJECT IDENTIFIERS, AND/OR BARRICADES IN COMPLIANCE WITH THE MUTCD.

16. EXCEPT WHEN REQUIRED FOR SAFETY, TRAFFIC CONTROL SHALL NOT BLOCK ANY LANES OR SIDEWALKS WHEN WORK IS NOT BEING PERFORMED.

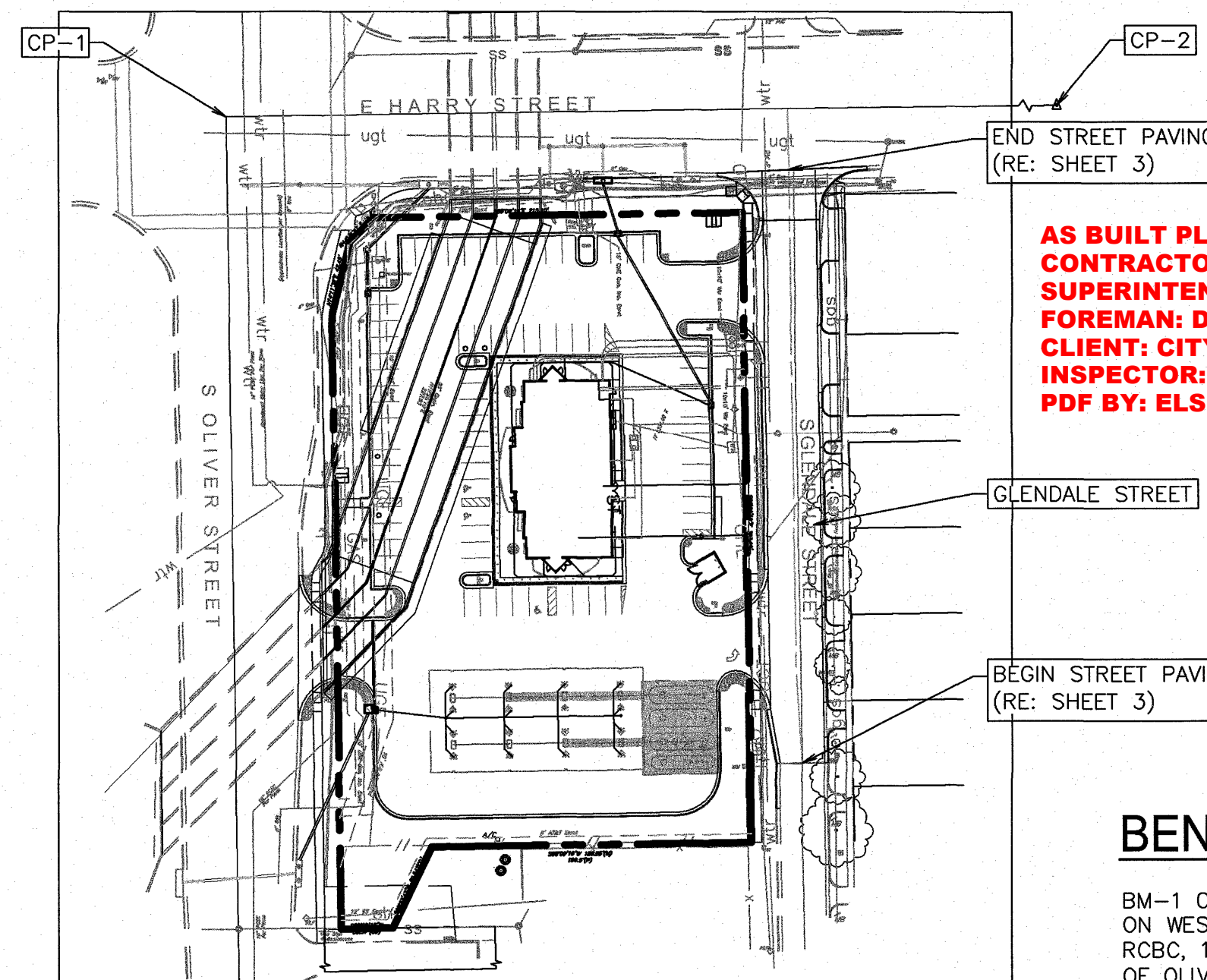
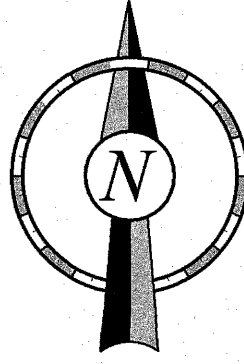
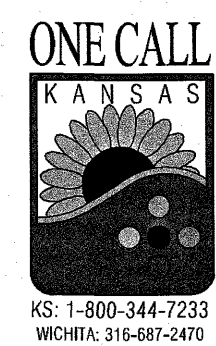
17. CONTRACTOR IS RESPONSIBLE FOR PROVIDING EROSION CONTROL AS NEEDED REGARDLESS OF WHAT THE CONSTRUCTION PLANS SHOW. EROSION CONTROL BMP DETAILS CAN BE FOUND AT
HTTP://WWW.WICHITA.GOV/GOVERNMENT/DEPARTMENTS/PWU/PAGES/REGULATIONS.ASPX

PAVING PRIVATE PROJECT PLANS FOR QUIKTRIP 329 GLENDALE STREET LOCATED EAST OF HARRY & OLIVER STREET INTERSECTION WICHITA, SEDGWICK COUNTY, KANSAS 0260 PPP (O.C.A. NO. 607879) GARY JANZEN, P.E., CITY ENGINEER JULY 2016



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8	CONCRETE PAVEMENT DETAILS 1
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CONTROL POINTS:

- CP-1
NW COR., NW 1/4, SEC. 36, T27S, R1E
1/2" PIPE FOUND
N. 78231.72
E. 65530.72
- CP-2
NE COR., NW 1/4, SEC. 36, T27S, R1E
1/2" PIPE FOUND
N. 78270.80
E. 68178.85
- CP-3
SW COR., NW 1/4, SEC. 36, T27S, R1E
1/2" PIPE FOUND W/ BAUGHMAN CAP
N. 75584.69
E. 65568.75

AS BUILT PLANS
CONTRACTOR: KANSAS PAVING
SUPERINTENDENT: JIMMY KING (RIVERSIDE GROUP)
FOREMAN: DANNY HUNTER
CLIENT: CITY OF WICHITA
INSPECTOR: JACOB MORRIS, SCHWAB-EATON, PA
PDF BY: ELS, 06/28/17

BENCHMARKS:

- BM-1 CITY OF WICHITA BENCHMARK DISC ON WEST END OF NORTH HEADWALL OF RCBC, 130' +/- EAST OF CENTERLINE OF OLIVER STREET.
ELEV.=1330.37 N.A.V.D. 88'
- BM 2 - 8" REBAR WITH ALUMINUM DISC CAP STAMPED MKEC LOCATED 6.2 FEET NORTH AND 4.2 FEET EAST OF THE NORTHEAST CORNER OF A TYPE 1 STREET INLET ON EAST SIDE OF OLIVER AVENUE, SAID INLET LYING 46 FEET NORTH NORTHWESTERLY FROM THE SOUTHWEST CORNER OF QUIKTRIP 21ST ADDITION.
ELEV.=1327.21 N.A.V.D. 88

MUNICIPAL CONTACT LIST:

CITY OF WICHITA

- OFFICE OF CENTRAL INSPECTION DEPARTMENT-PLANNING DIVISION
CITY HALL, 7TH FLOOR
455 N. MAIN
WICHITA, KS, 67202
TEL: (316) 268-4477
FAX: (316) 268-4663
CONTACT: PAUL HAYS
- OFFICE OF CENTRAL INSPECTION DEPARTMENT-INSPECTIONS DIVISION
CITY HALL, 7TH FLOOR
455 N. MAIN
WICHITA, KS, 67202
TEL: (316) 268-4460
FAX: (316) 268-4663
CONTACT: TOM STOLTZ(DIRECTOR)
- CITY OF WICHITA STORM WATER MANAGEMENT DEPARTMENT
CITY HALL, 8TH FLOOR
455 N. MAIN
WICHITA, KS, 67202
TEL: (316) 268-4498
CONTACT: JOE HICKLE, P.E.
- CITY FIRE DEPARTMENT
CITY HALL, 11TH FLOOR
455 N. MAIN
WICHITA, KS, 67202
TEL: (316) 268-4245
FAX: (316) 858-7706
CONTACT: CHIEF STUART BEVIS
- CITY OF WICHITA WATER & SEWER UTILITIES
CITY HALL, 8TH FLOOR
455 N. MAIN
WICHITA, KS, 67202
TEL: (316) 268-4505
CONTACT: REBECCA GREIF
ALT. CONTACT: GREG LOLLIEY
TEL: (316) 268-4334
- CITY TRAFFIC ENGINEER
CITY HALL, 7TH FLOOR
455 N. MAIN
WICHITA, KS, 67202
TEL: (316) 268-4448
FAX: (316) 268-4114
CONTACT: BRIAN COON, P.E.

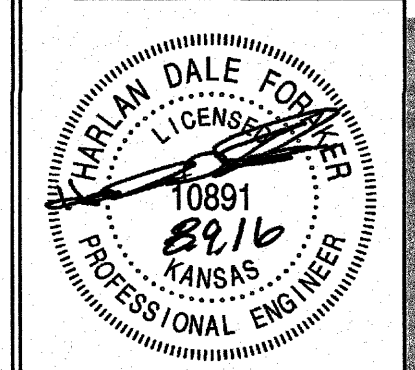
PRIVATE UTILITIES LIST: PROJECT CONTACT LIST:

- ELECTRIC COMPANY (WESTAR ENERGY)
TRANSMISSION - DAVID STEVENS
TEL: (785) 575-8170
DISTRIBUTION - LADONNA VANDERFORD
TEL: (316) 261-6490
- GAS COMPANY (KANSAS GAS SERVICE)
TEL: (316) 831-5664
- TELEPHONE COMPANY (AT&T)
TEL: (316) 268-2762
- CABLE COMPANY (COX COMMUNICATIONS)
TEL: (316) 260-7475
- SURVEYOR OF RECORD
MID-KANSAS ENGINEERING CONSULTANTS
BRIAN LINDEBAK
411 NORTH WEBB ROAD
WICHITA, KS, 67206
TEL: (316) 684-9600
FAX: (316) 684-5100
- ENGINEER OF RECORD
CERTIFIED ENGINEERING DESIGN, P.A.
HARLAN D. FORAKER, P.E.
1935 WEST MAPLE STREET
WICHITA, KS, 67213
TEL: (316) 262-8808
FAX: (316) 262-1669
- QT REAL ESTATE PROJECT MANAGER
QUIKTRIP CORPORATION
JESSICA CLAVAS
4705 S. 129TH EAST AVE.
TULSA, OK 74134
TEL: (918) 615-7804
- QT PROJECT MANAGER
QUIKTRIP CORPORATION
ASHLEY GOODRICH
4705 S. 129TH EAST AVE.
TULSA, OK 74134
TEL: (918) 615-7432

APPROVED AS NOTED
BY WICHITA PUBLIC WORKS
ENGINEERING DIVISION
Engineering *Rebecca Greif* 8/15/2016

NOTE TO CONTRACTORS
Inspection and testing for this project is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection to be in accordance with the City of Wichita standard construction engineering practices and certified by a Licensed Professional Engineer in the state of Kansas. No work shall be performed by the Contractor without such inspection nor shall any work be commenced without written authorization by City Engineering. All Construction and Materials shall comply with the current City of Wichita Specifications and Standards and Special Provisions. (on file and available at Wichita.gov).

An approved copy of these plans signed by City staff are required on-site.



PROJECT NO.: 20152242
CED
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QuikTrip No. 0329R
HARRY & OLIVER
WICHITA, KS



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VERSION: 001
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DRAWN BY:
REVIEWED BY:

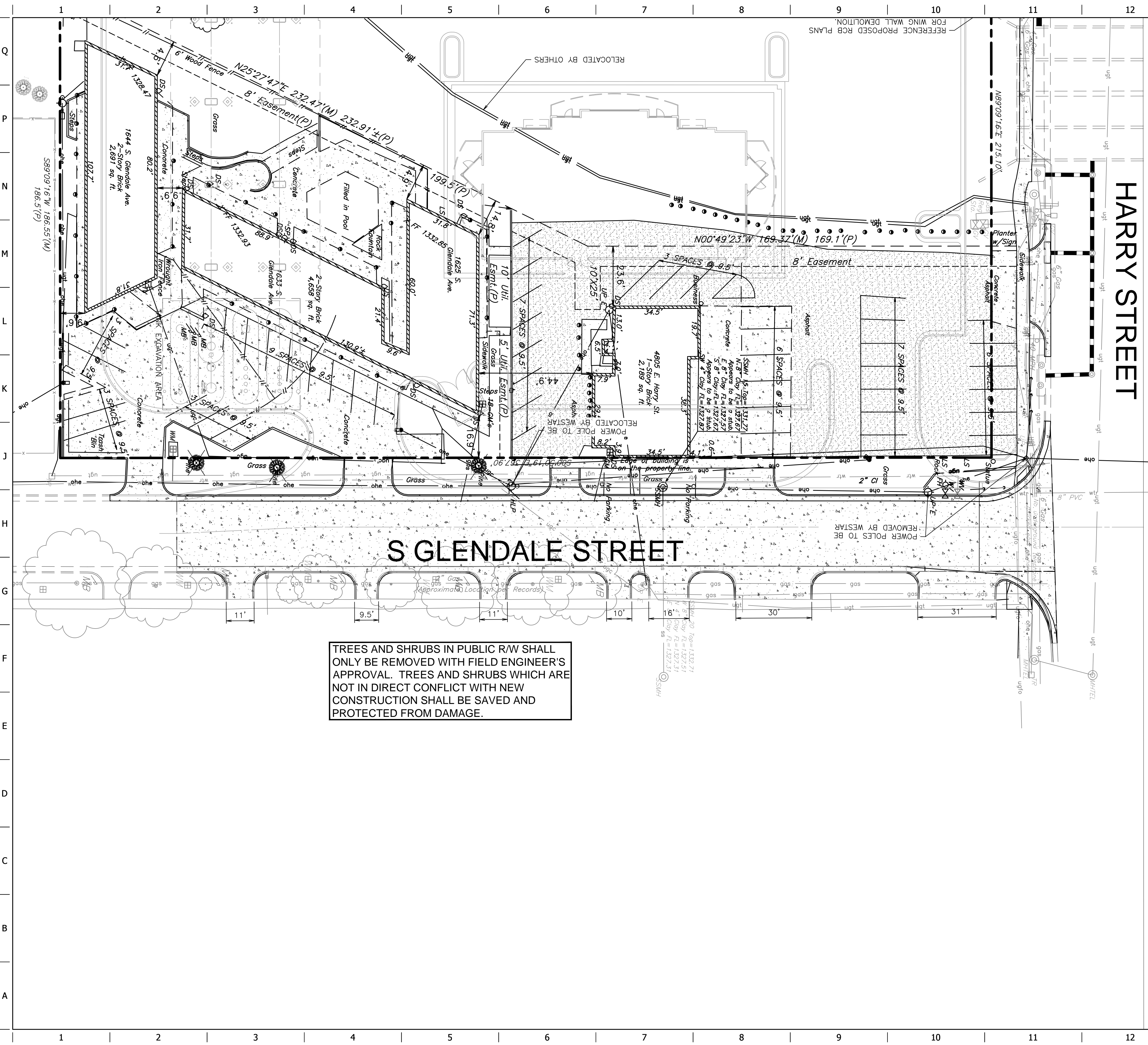
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COVER

SHEET NUMBER:
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EXISTING LEGEND (ITEMS TO BE REMOVED)

EXISTING UTILITIES

- ohe OVERHEAD ELECTRIC
- uge UNDERGROUND ELECTRIC
- at STORM SEWER LINE (<12")
- ss SANITARY SEWER
- oht OVERHEAD TELEPHONE LINE
- ugt UNDERGROUND TELEPHONE LINE
- wtr WATER LINE

EXISTING FEATURES

- Utility Pedestal/Riser
- Utility Pole
- Utility Pole w/Light
- Utility Pole w/Transformer
- Utility Manhole
- Utility Meter
- Guy Wire
- Light Pole
- Curb Inlet
- Area Inlet
- Junction Box
- Single Post Sign
- Multi-Post Sign/Billboard
- Deciduous Tree
- Evergreen Tree
- Bollard
- Curb Line
- Edge of Asphalt
- Edge of Concrete
- Fence
- Existing Structure
- Underground Storage Tank
- Concrete
- Asphalt

SURVEY LEGEND

EXISTING UTILITIES

- ohe OVERHEAD ELECTRIC
- uge UNDERGROUND ELECTRIC
- gas GAS LINE
- ss SANITARY SEWER LINE
- st STORM SEWER LINE (<12")
- st STORM SEWER LINE (>12")
- oht OVERHEAD TELEPHONE LINE
- ugt UNDERGROUND TELEPHONE LINE
- wtr WATER LINE

EXISTING FEATURES

- Utility Pedestal/Riser
- Utility Pole
- Utility Pole w/Light
- Utility Pole w/Transformer
- Utility Manhole
- Utility Meter
- Utility Valve
- Utility Clean Out
- Guy Wire
- Light Pole
- Architectural/Spot Light
- Fire Hydrant
- Curb Inlet
- Area Inlet
- Junction Box
- Single Post Sign
- Multi-Post Sign/Billboard
- Deciduous Tree
- Evergreen Tree
- Traffic Arrows
- Traffic Signal w/Mast Arm
- Traffic Signal
- Traffic Control Box
- Bollard
- Center Line
- Property R/W Line (QT NET)
- Section Line
- Curb Line
- Edge of Asphalt
- Edge of Concrete
- Existing Sidewalk
- Chain Link Fence
- Existing Structure

HAROLD DALE FORBES
 LICENSE NO. 10891
 8916
 KANSAS
 PROFESSIONAL ENGINEER

PROJECT NO.: 20152242

CEED
 CERTIFIED ENGINEERING DESIGN, P.A.
 1935 W. MAPLE STREET
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 PH: (316)262-8808
 FAX: (316)262-1669

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 HARRY & OLIVER
 WICHITA, KS

QT

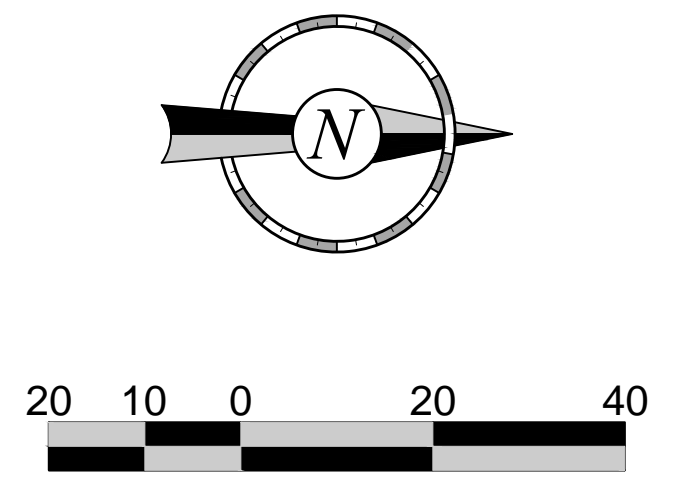
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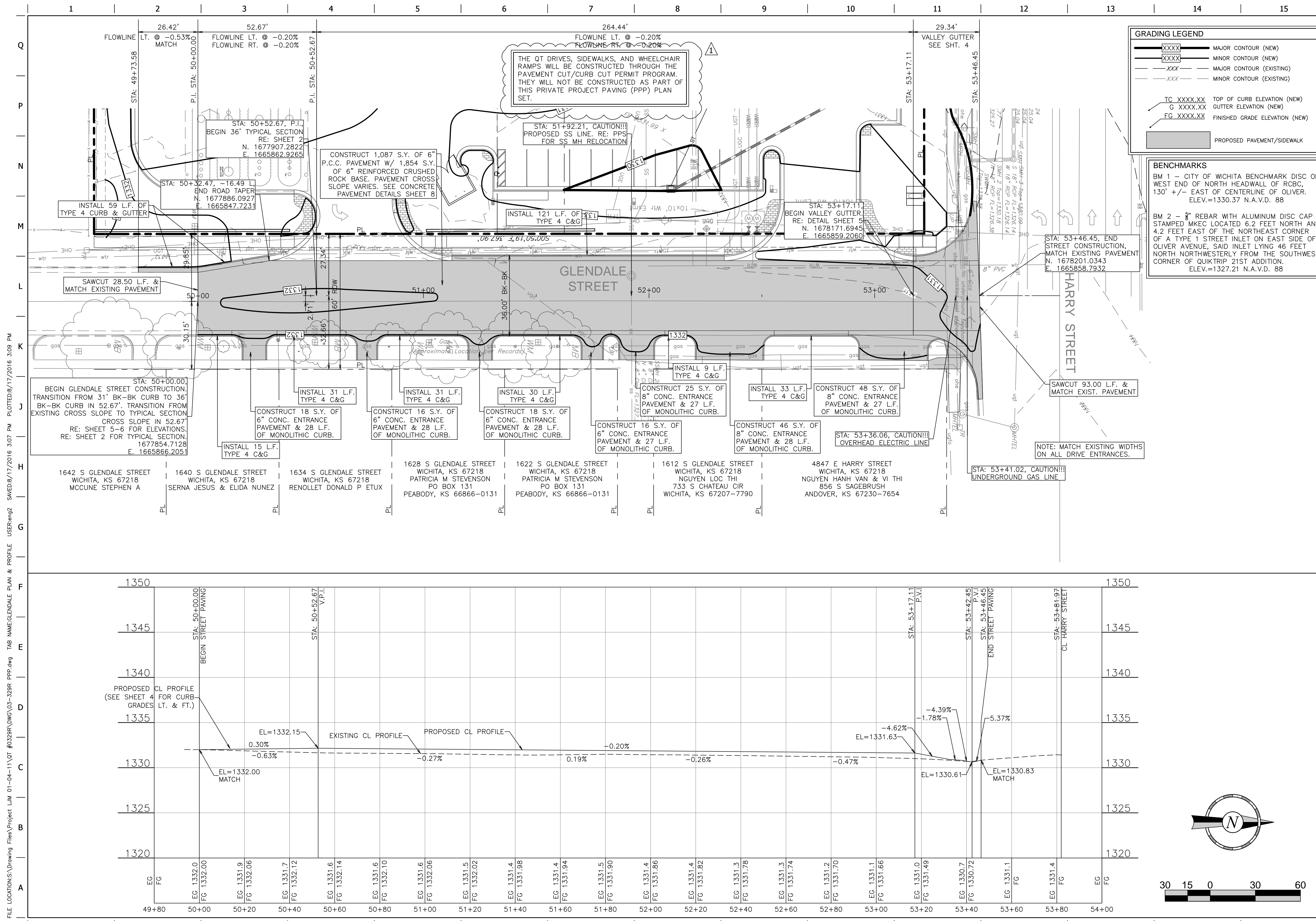
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SHEET NUMBER:
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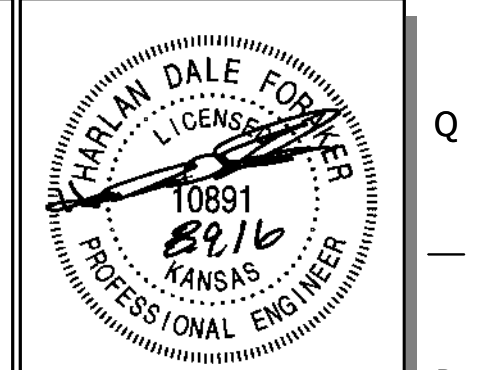
GRADING LEGEND

- XXXX MAJOR CONTOUR (NEW)
- XXXX MINOR CONTOUR (NEW)
- XXX MAJOR CONTOUR (EXISTING)
- XXX MINOR CONTOUR (EXISTING)
- TC XXXX.XX TOP OF CURB ELEVATION (NEW)
- G XXXX.XX GUTTER ELEVATION (NEW)
- FG XXXX.XX FINISHED GRADE ELEVATION (NEW)
- PROPOSED PAVEMENT/SIDEWALK

BENCHMARKS

BM 1 - CITY OF WICHITA BENCHMARK DISC ON WEST END OF NORTH HEADWALL OF RCBC, 130' +/- EAST OF CENTERLINE OF OLIVER. ELEV.=1330.37 N.A.V.D. 88

BM 2 - 8" REBAR WITH ALUMINUM DISC CAP STAMPED MKEC LOCATED 6.2 FEET NORTH AND 4.2 FEET EAST OF THE NORTHEAST CORNER OF A TYPE 1 STREET INLET ON EAST SIDE OF OLIVER AVENUE, SAID INLET LYING 46 FEET NORTH NORTHWESTERLY FROM THE SOUTHWEST CORNER OF QUIKTRIP 21ST ADDITION. ELEV.=1327.21 N.A.V.D. 88



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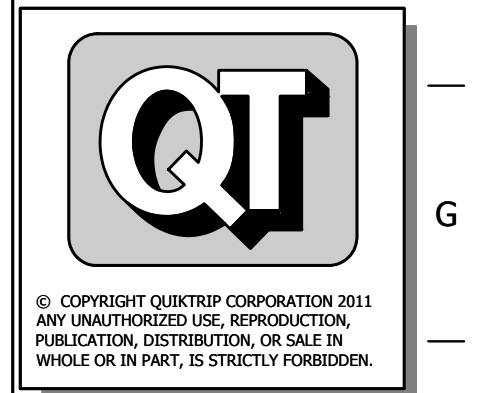
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WICHITA, KS



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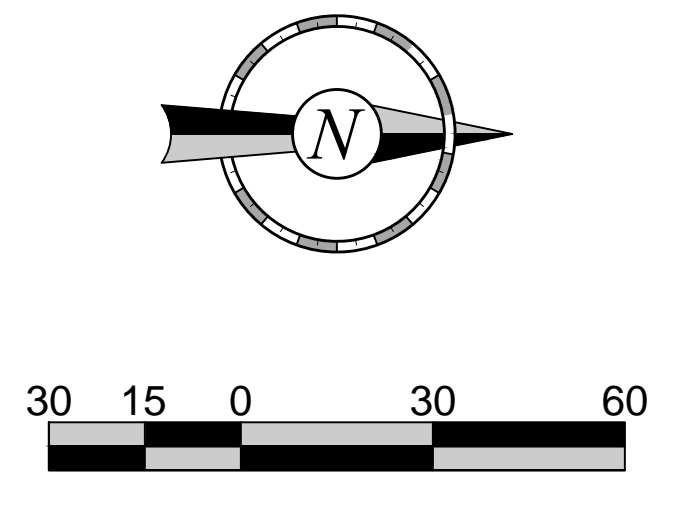
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GLENDALE PLAN & PROFILE

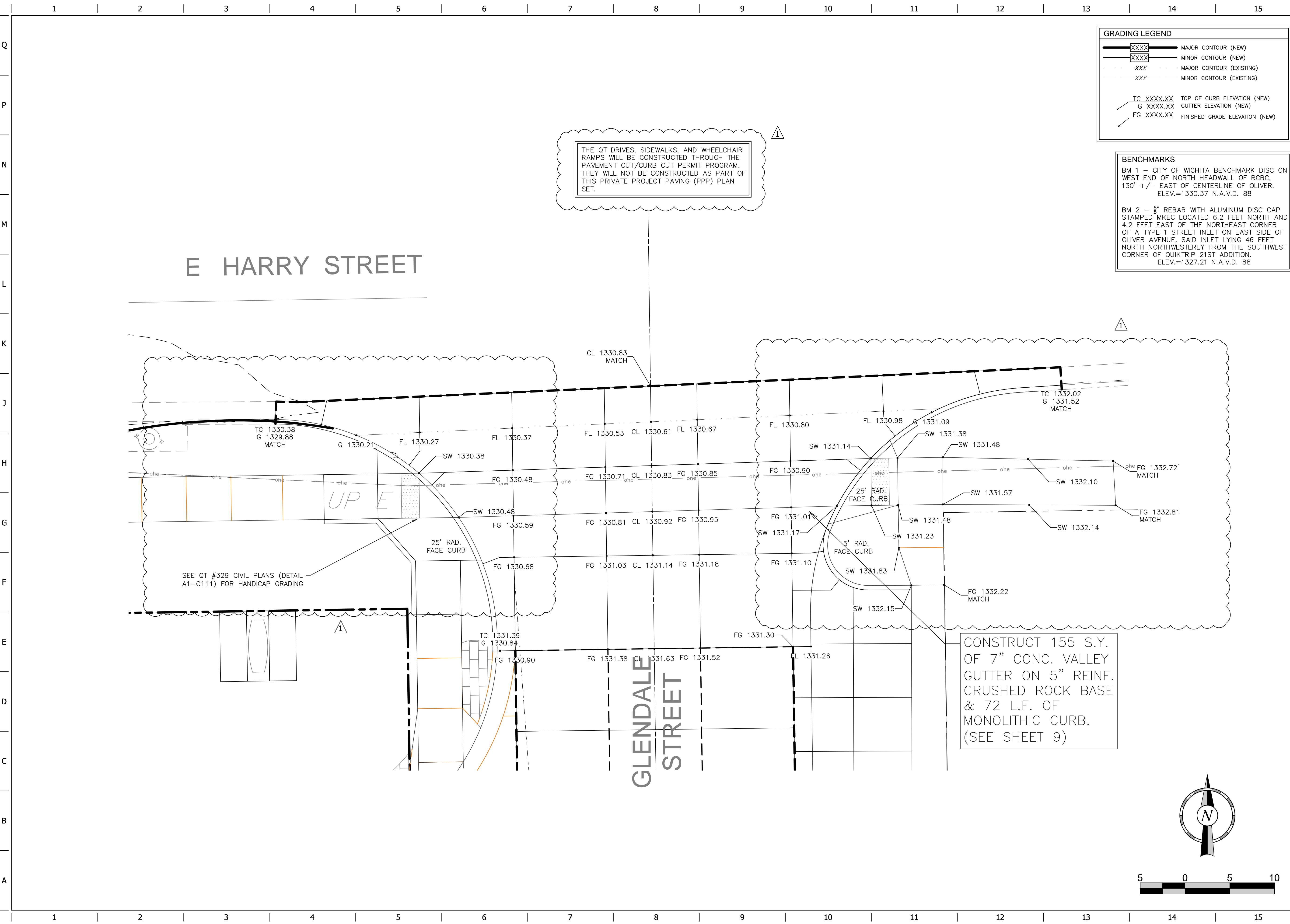
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BUILT TO PLAN

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THE QT DRIVES, SIDEWALKS, AND WHEELCHAIR RAMP WILL BE CONSTRUCTED THROUGH THE PAVEMENT CUT/CURB CUT PERMIT PROGRAM. THEY WILL NOT BE CONSTRUCTED AS PART OF THIS PRIVATE PROJECT PAVING (PPP) PLAN SET.

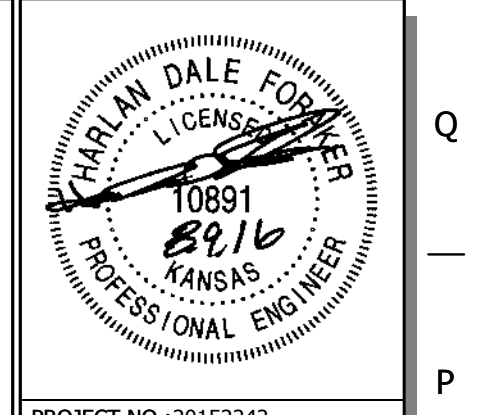
GRADING LEGEND

- XXX.XX MAJOR CONTOUR (NEW)
- XXXX.XX MINOR CONTOUR (NEW)
- XXX.XX MAJOR CONTOUR (EXISTING)
- XXXX.XX MINOR CONTOUR (EXISTING)
- TC XXXX.XX TOP OF CURB ELEVATION (NEW)
- G XXXX.XX GUTTER ELEVATION (NEW)
- FG XXXX.XX FINISHED GRADE ELEVATION (NEW)

BENCHMARKS

BM 1 - CITY OF WICHITA BENCHMARK DISC ON WEST END OF NORTH HEADWALL OF RCBC, 130' +/- EAST OF CENTERLINE OF OLIVER. ELEV.=1330.37 N.A.V.D. 88

BM 2 - 3" REBAR WITH ALUMINUM DISC CAP STAMPED MKEC LOCATED 6.2 FEET NORTH AND 4.2 FEET EAST OF THE NORTHEAST CORNER OF A TYPE 1 STREET INLET ON EAST SIDE OF OLIVER AVENUE, SAID INLET LYING 46 FEET NORTH NORTHWESTERLY FROM THE SOUTHWEST CORNER OF QUIKTRIP 21ST ADDITION. ELEV.=1327.21 N.A.V.D. 88



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FAX: (316)262-1669

QuikTrip No. 0329R
HARRY & OLIVER
WICHITA, KS

QT

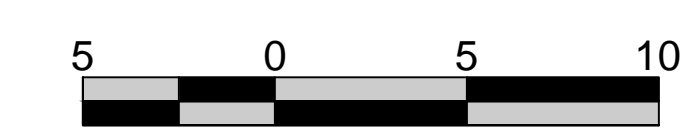
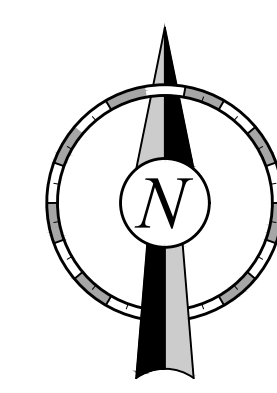
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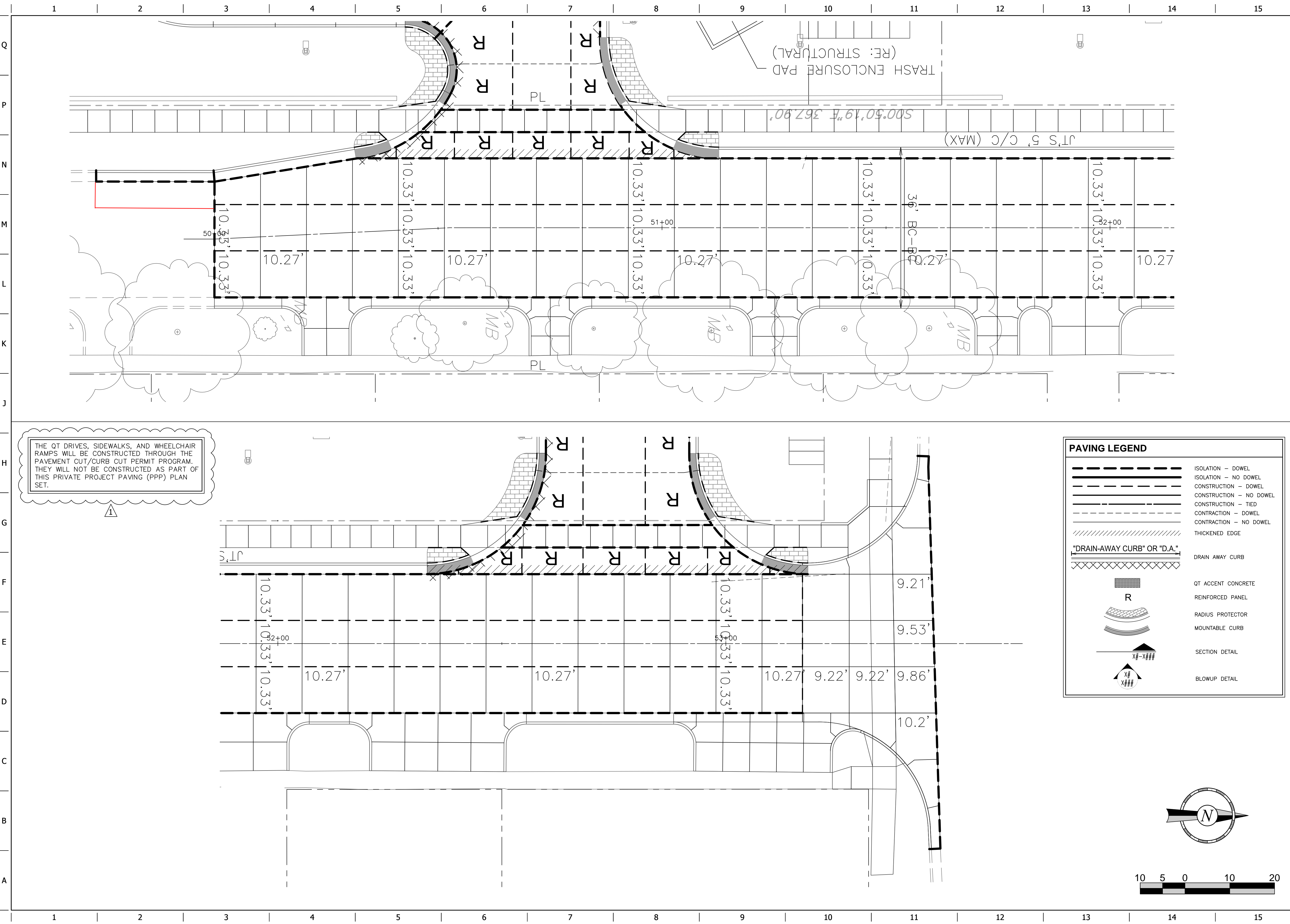
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GLENDALE VALLEY GUTTER GRADING PLAN

SHEET NUMBER:
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BUILT TO PLAN

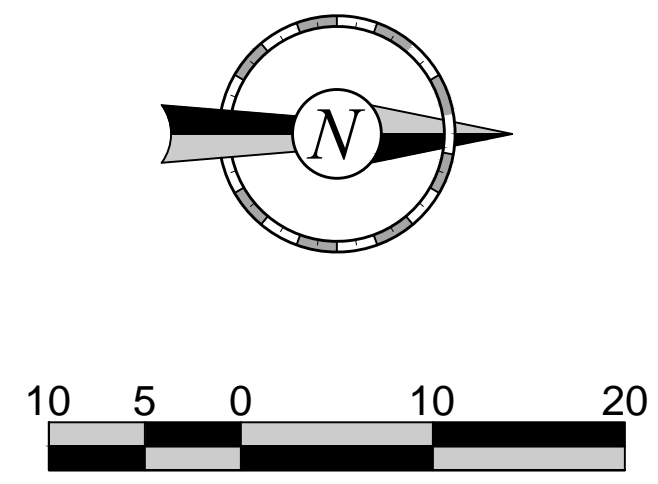
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THE QT DRIVES, SIDEWALKS, AND WHEELCHAIR RAMP WILL BE CONSTRUCTED THROUGH THE PAVEMENT CUT/CURB CUT PERMIT PROGRAM. THEY WILL NOT BE CONSTRUCTED AS PART OF THIS PRIVATE PROJECT PAVING (PPP) PLAN SET.

PAVING LEGEND

	ISOLATION - DOWEL
	ISOLATION - NO DOWEL
	CONSTRUCTION - DOWEL
	CONSTRUCTION - NO DOWEL
	CONSTRUCTION - TIED
	CONSTRUCTION - DOWEL
	CONSTRUCTION - NO DOWEL
	THICKENED EDGE
	"DRAIN-AWAY CURB" OR "D.A."
	DRAIN AWAY CURB
	QT ACCENT CONCRETE
	REINFORCED PANEL
	RADIUS PROTECTOR
	MOUNTABLE CURB
	SECTION DETAIL
	BLOWUP DETAIL



PROJECT NO.: 20152242

CERTIFIED ENGINEERING DESIGN, P.A.
 1935 W. MAPLE STREET
 WICHITA, KANSAS 67213
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 FAX: (316)262-1669

QuikTrip No. 0329R
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 WICHITA, KS

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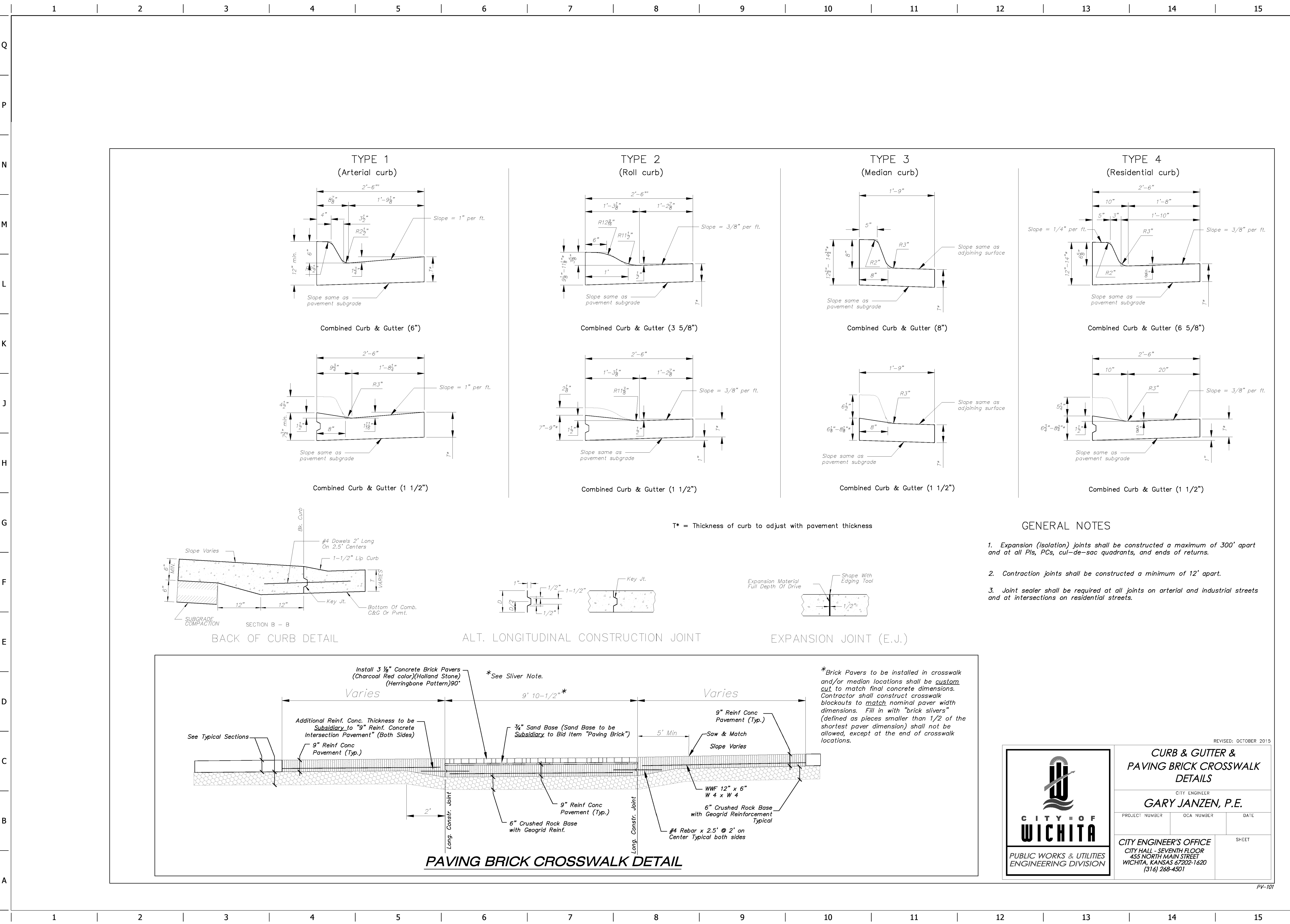
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GLENDALE PAVING PLAN

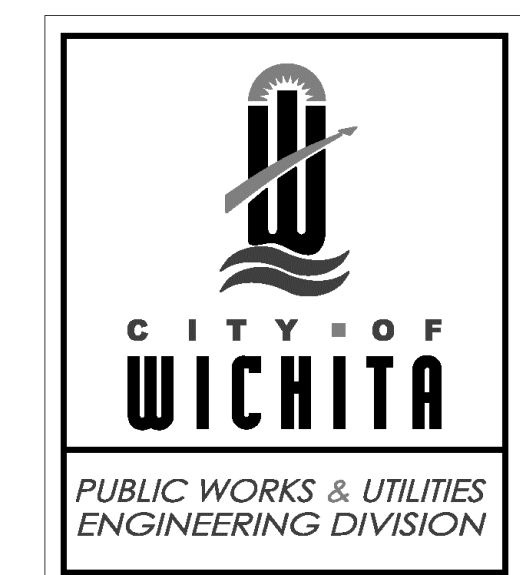
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BUILT TO PLAN

FILE LOCATION: \\Drawing Files\Project LHM 01-04-11\11\01_#0329R\DWG\03-0329R_PPP_EC_DETAILS.dwg USER:eng2 SAVDED:10/20/2016 9:20 AM PLOTTED:8/17/2016 3:11 PM



- GENERAL NOTES**
- Expansion (isolation) joints shall be constructed a maximum of 300' apart and at all PIS, PCs, cul-de-sac quadrants, and ends of returns.
 - Contraction joints shall be constructed a minimum of 12' apart.
 - Joint sealer shall be required at all joints on arterial and industrial streets and at intersections on residential streets.

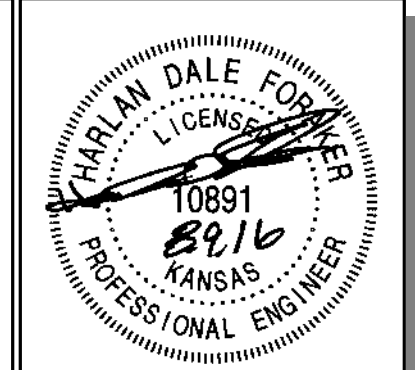


REVISED: OCTOBER 2015

CURB & GUTTER & PAVING BRICK CROSSWALK DETAILS

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
CITY ENGINEER'S OFFICE		
CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (314) 268-4501		
SHEET		SHEET



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REV	DATE	DESCRIPTION

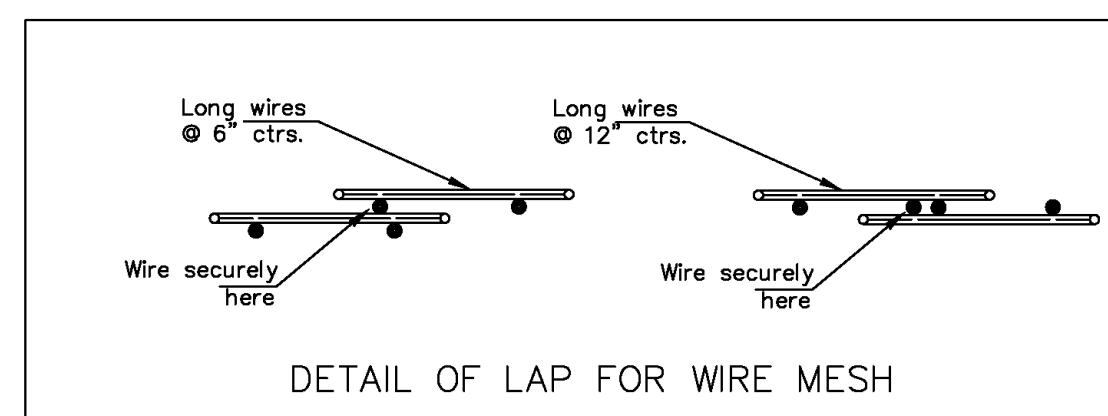
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CURB & GUTTER DETAILS

SHEET NUMBER:
7

ORIGINAL ISSUE DATE:

PV-101

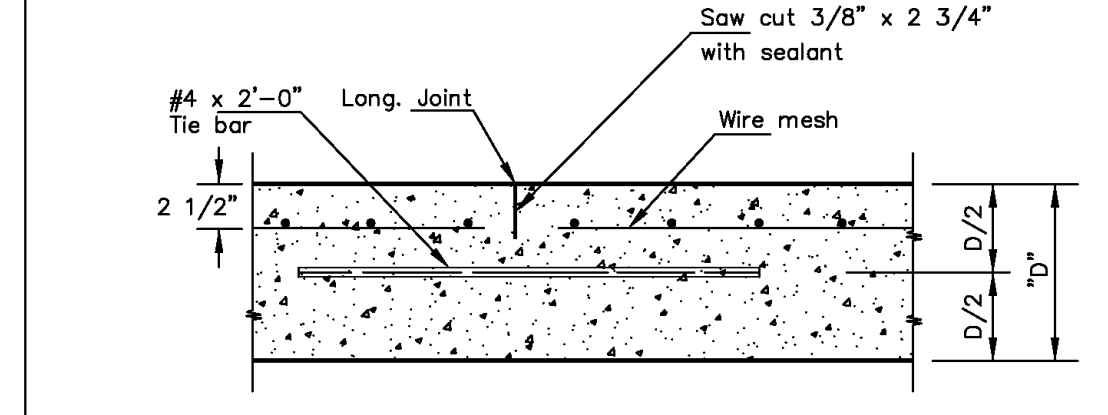
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DETAIL OF LAP FOR WIRE MESH

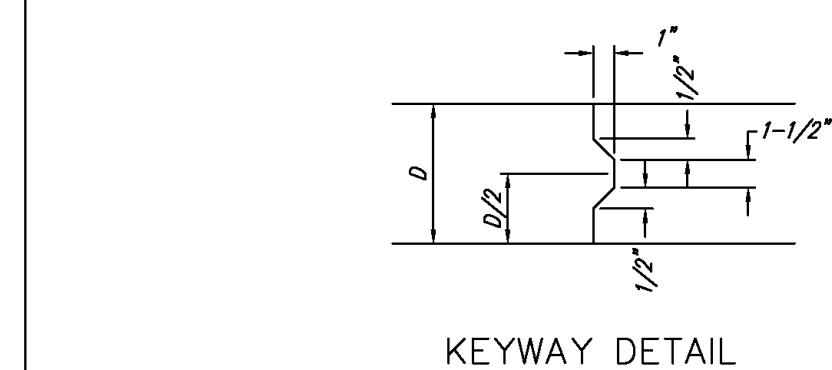
NOTE: The lap shall extend beyond the first transverse wire of each sheet.
The sheets shall be wired securely at the edges and at intervals not to exceed 2'-6" for the full width of the sheet. Approx. weight of wire mesh = 44 lbs. per 100 sq. ft.
Other methods for fastening the sheets of wire mesh at the laps may be used with the approval of the Engineer.

NOTE: CONTRACTION JOINTS AND EXPANSION JOINTS SHALL BE FORMED IN THE MONOLITHIC CURB AT ALL LOCATIONS WHERE SUCH JOINTS ARE PLACED IN THE PAVEMENT. ADDITIONAL CONTRACTION JOINTS SHALL BE CUT IN THE MONOLITHIC CURB IN UNIFORM LENGTHS NOT EXCEEDING TEN FOOT INTERVALS BETWEEN THOSE JOINTS WHICH COINCIDE WITH JOINTS IN THE PAVEMENT.

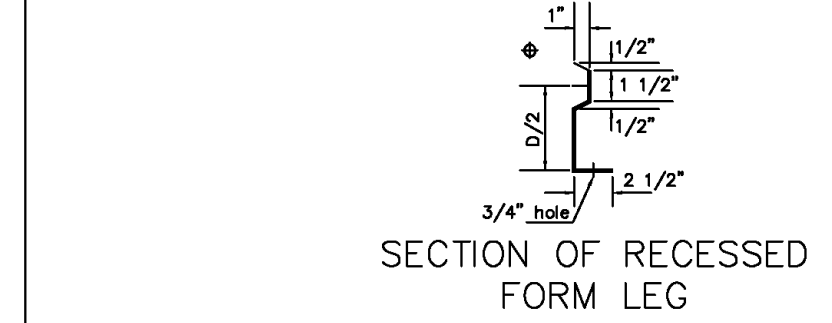


LONGITUDINAL JOINT & CONTRACTION JOINT DETAIL TRANSVERSE SECTION

NOTE: Longitudinal joint formed by sawing 2 3/4" deep and 3/8" wide and filled as specified in standard specifications.



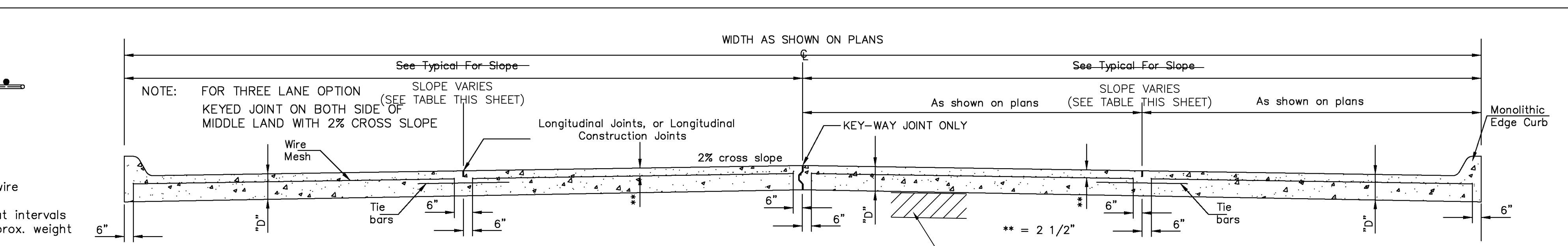
KEYWAY DETAIL



SECTION OF RECESSED FORM LEG

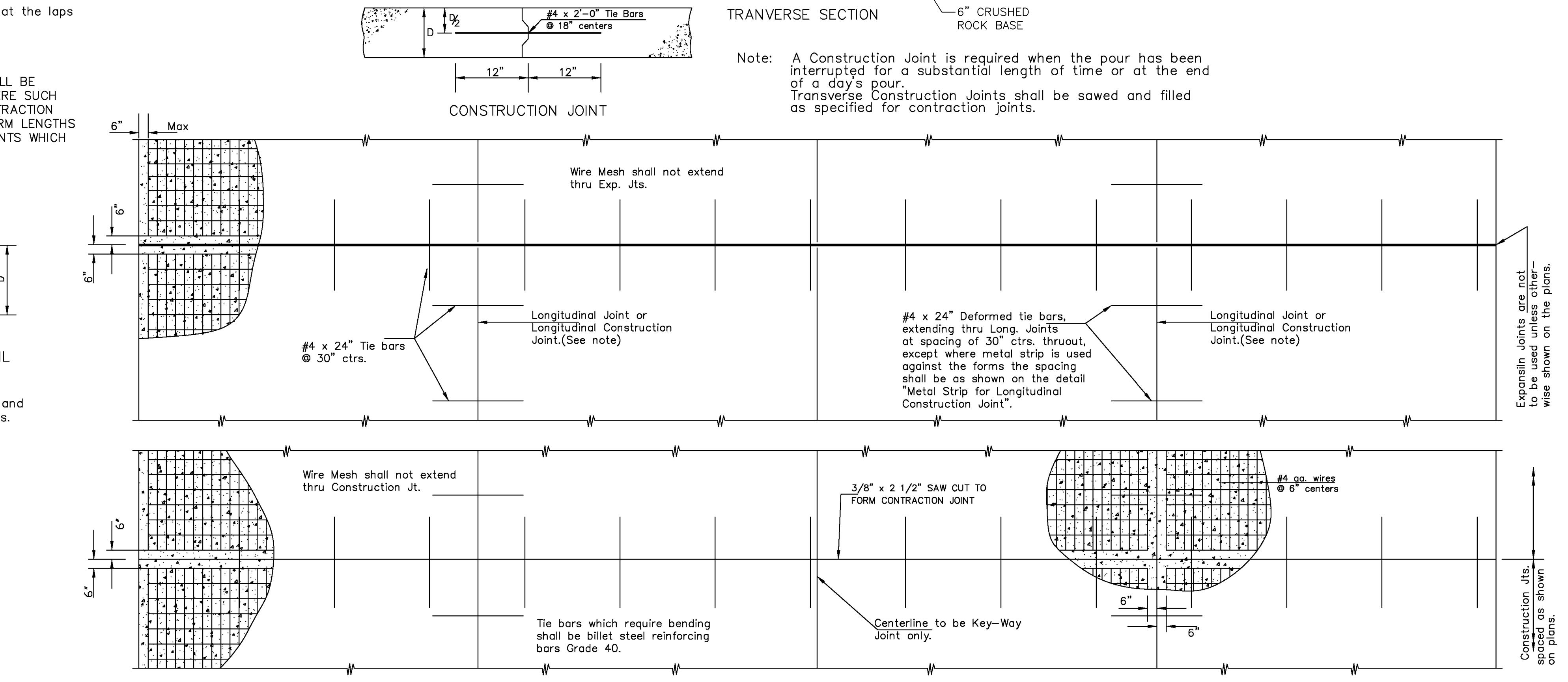
NOTE: RESIDENTIAL PAVEMENT 6" ON 6"
COMMERCIAL PAVEMENT 8" ON 6"

NOTE: EXPANSION JOINT MATERIAL MUST BE SECURELY HELD BY USING METAL STAKES, METAL PINS, OR BY OTHER APPROVED METHODS SO THAT WHEN THE PAVEMENT IS COMPLETED EXPANSION MATERIAL WILL BE PERPENDICULAR TO THE SURFACE OF THE COMPLETED PAVEMENT. CONCRETE SHALL BE HAND PLACED ON EACH SIDE OF THE EXPANSION JOINT MATERIAL IN A MANNER THAT WILL PRECLUDE DISPLACEMENT OF THE EXPANSION JOINT MATERIAL.

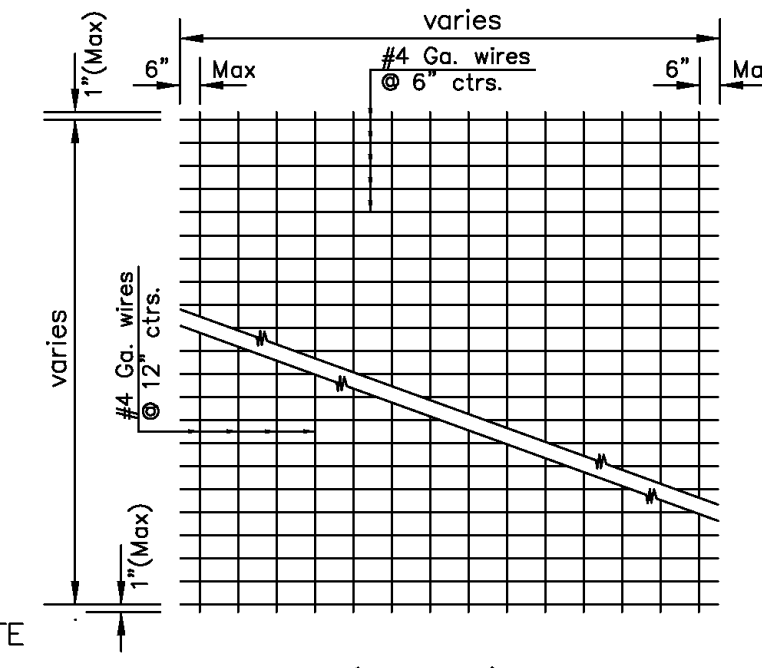


TRANVERSE SECTION

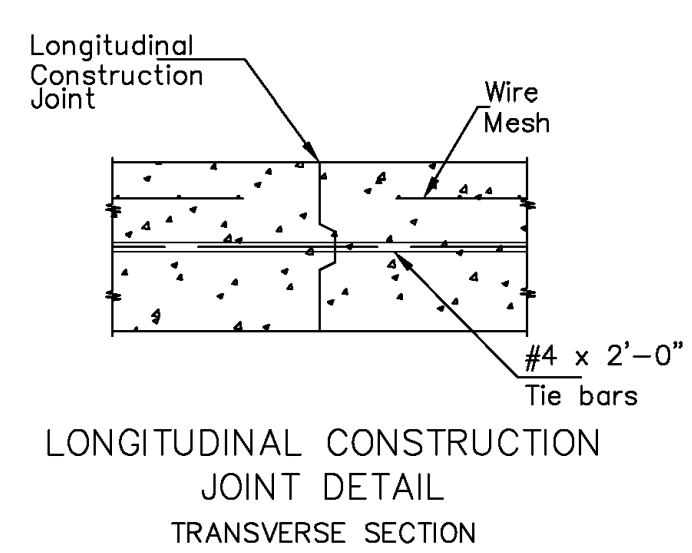
Note: A Construction Joint is required when the pour has been interrupted for a substantial length of time or at the end of a days pour.
Transverse Construction Joints shall be sawed and filled as specified for contraction joints.



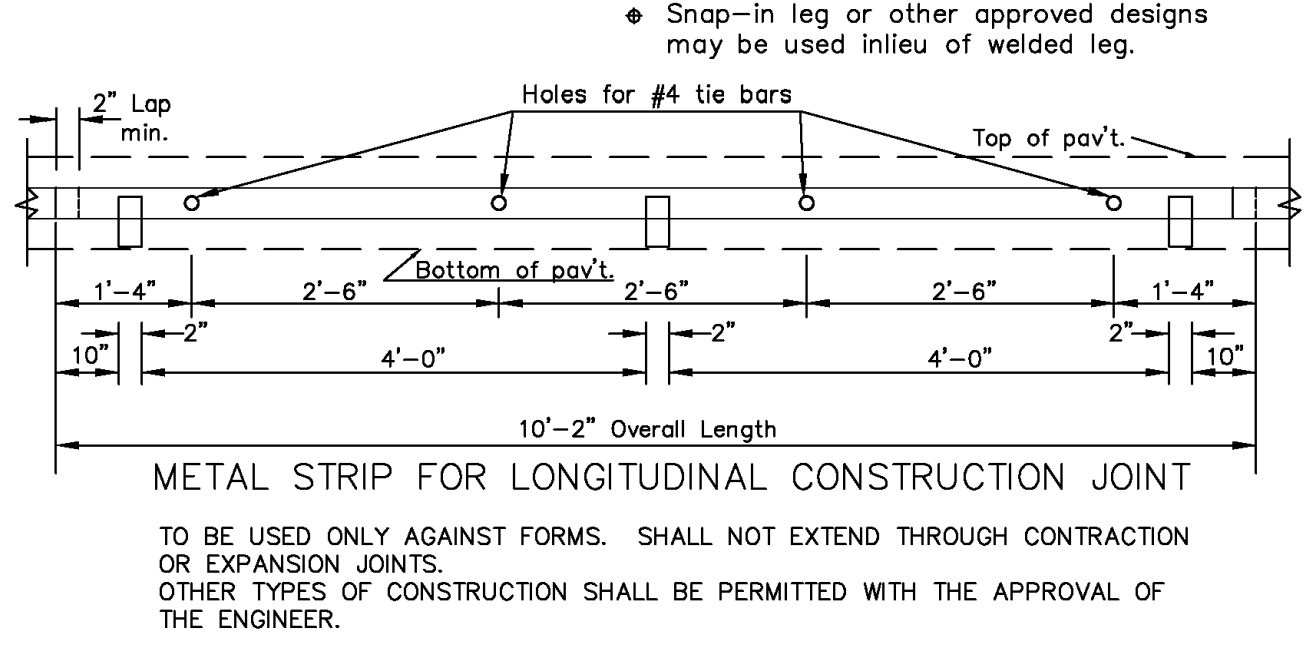
PLAN



TYPICAL SHEET OF WELDED WIRE MESH



LONGITUDINAL CONSTRUCTION JOINT DETAIL TRANSVERSE SECTION



METAL STRIP FOR LONGITUDINAL CONSTRUCTION JOINT



REVISED: DEC 2014

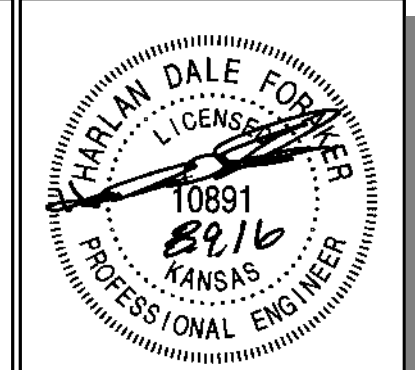
NON ARTERIAL CONCRETE PAVEMENT DETAIL

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE

CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

STREET NAME	"WL"	"M"	"WR"	"STATION"	CENTER LINE	ROW DIMENSION	MEDIAN DESCRIPTION	SLOPE	ROCK THICKNESS	PAVEMENT THICKNESS	COMMENTS
GLENDAL	13'-0"		13'-0"	50+00.00		60'		MATCH	6"	6"	
GLENDAL	15'-6"			50+52.67		60'		4.7%	6"	6"	
GLENDAL			15'-6"	50+52.67		60'		2.1%	6"	6"	



PROJECT NO.: 20152242

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1	8/9/16	ISSUE	CHANGES

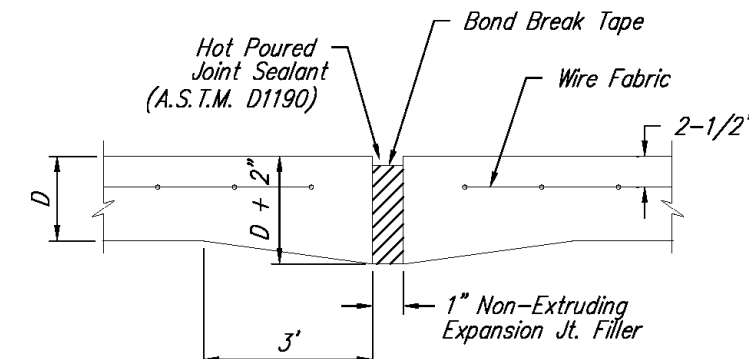
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CONCRETE PAVEMENT DETAILS 1

SHEET NUMBER:
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ORIGINAL ISSUE DATE:

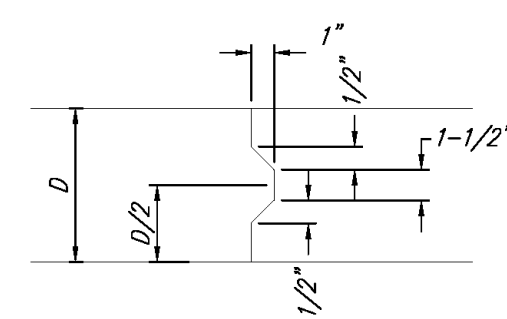
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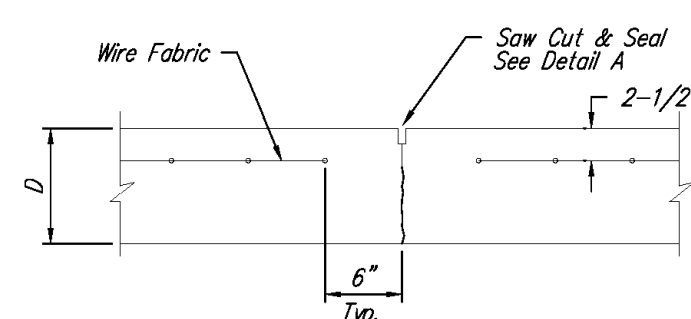


EXPANSION JOINT

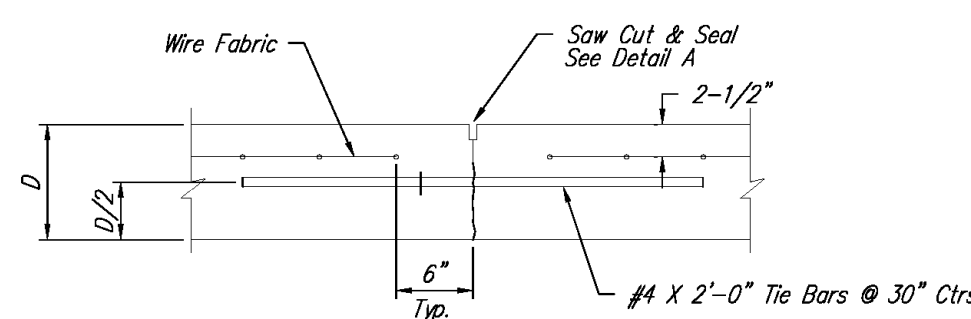
NOTE: Extra Thickness to be Subsidiary to Price of Square Yards Pavement



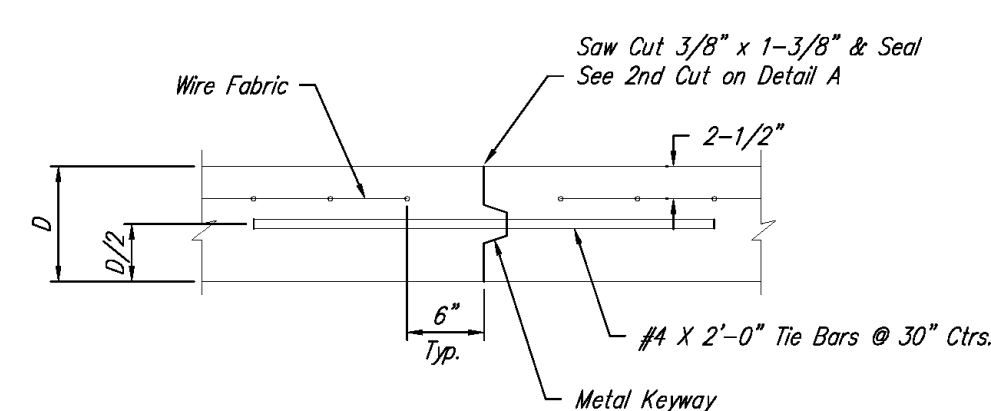
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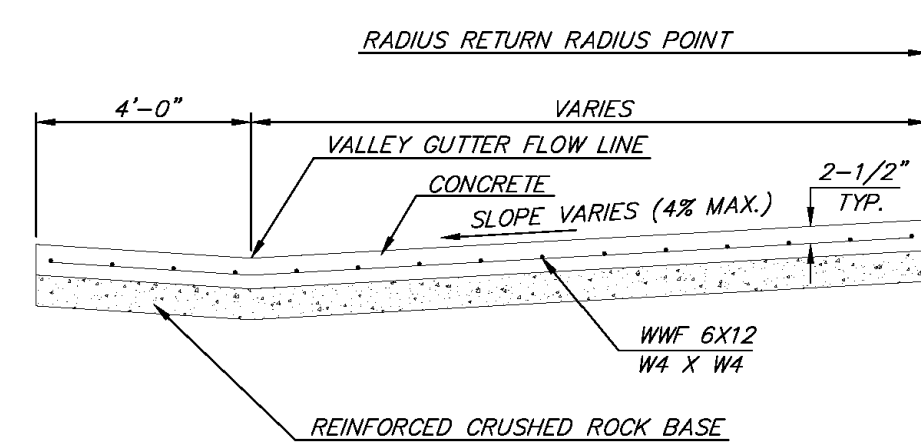
CONTRACTION JOINT DETAIL (C.J.)



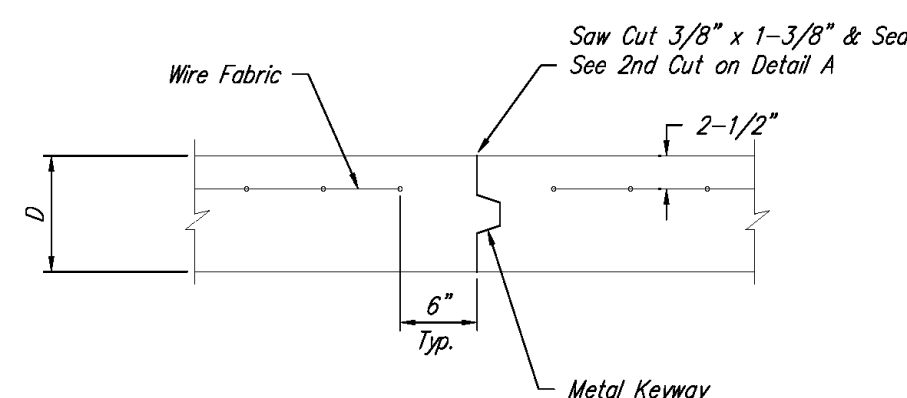
LONGITUDINAL JOINT DETAIL (L.J.)



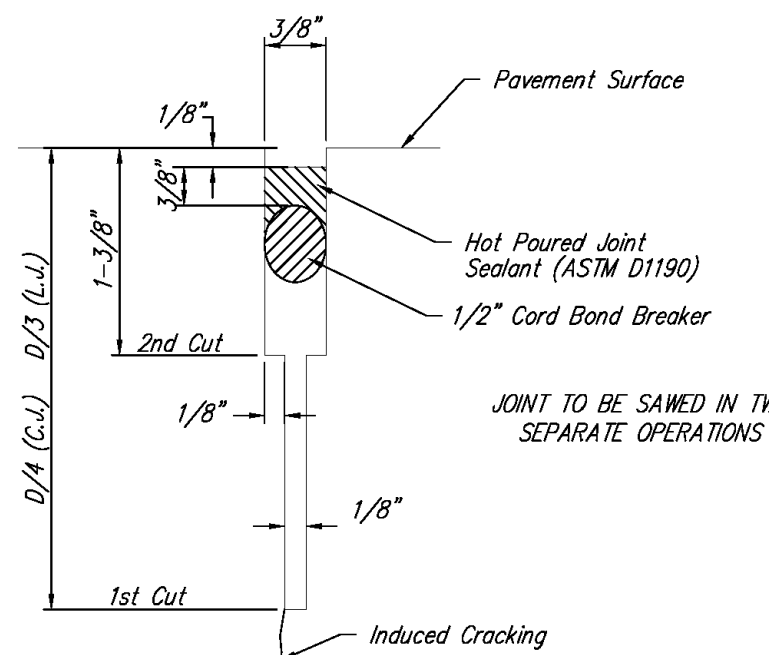
OPTIONAL LONGITUDINAL JOINT DETAIL (L.J.)



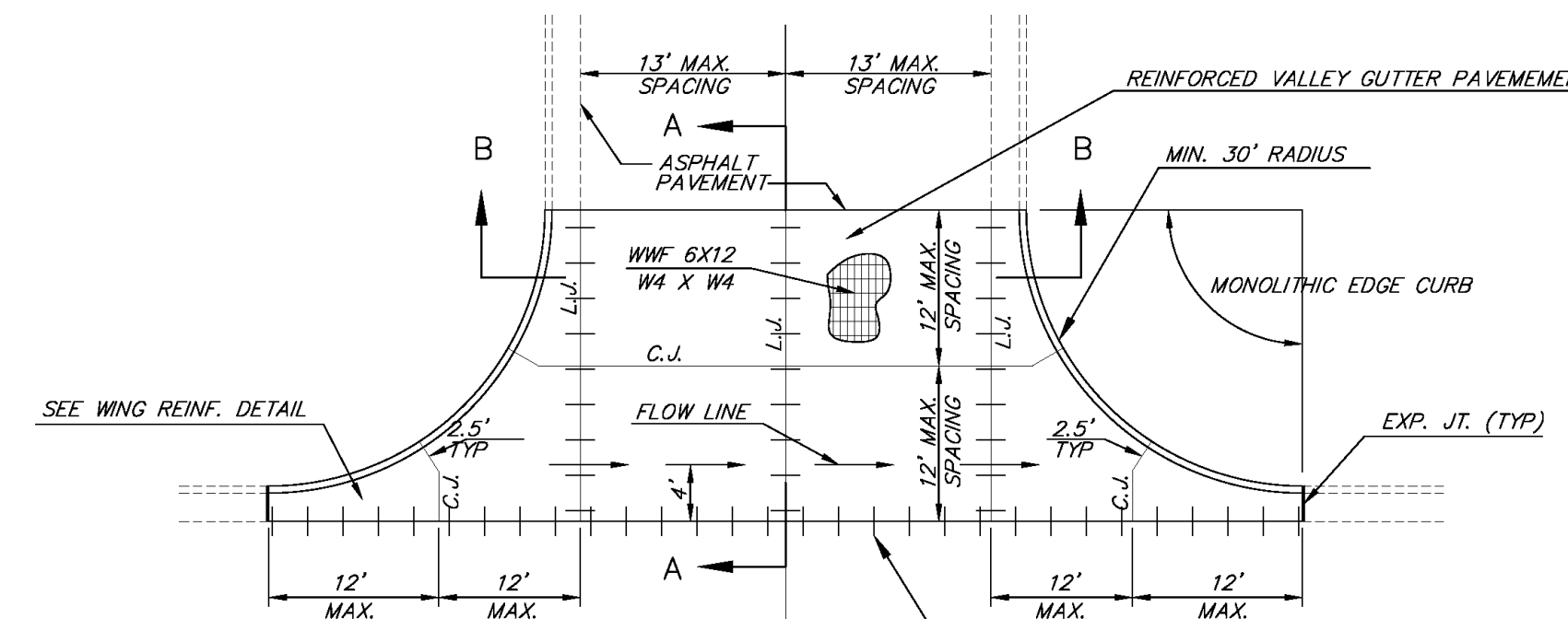
SECTION A-A



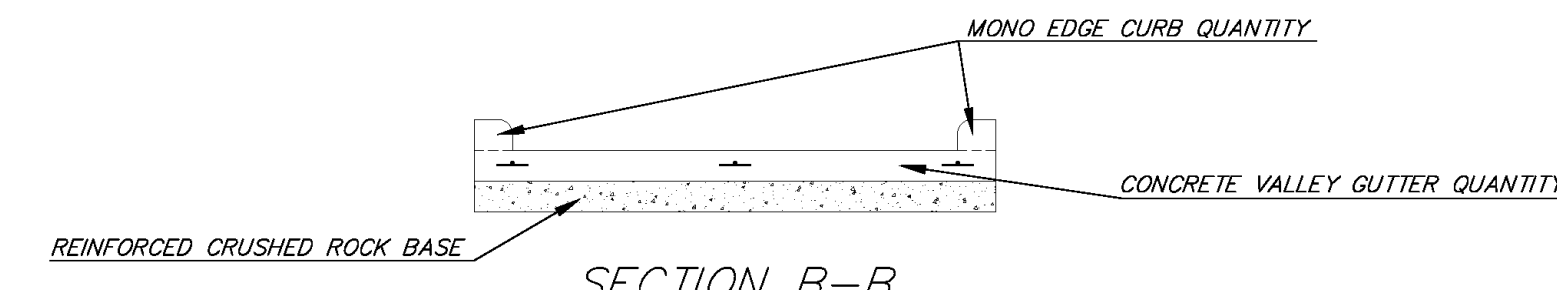
OPTIONAL CONTRACTION JOINT



SAW JOINT DETAIL (DETAIL A)

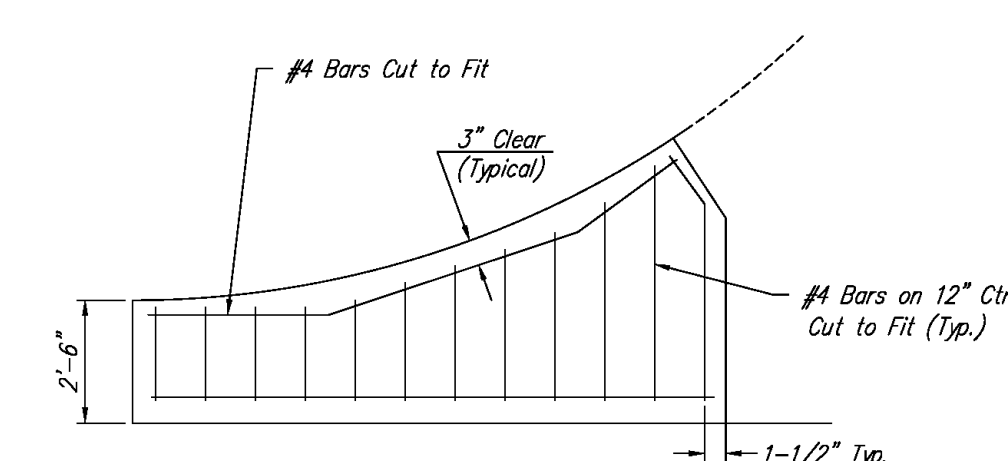


PLAN



SECTION B-B

REINFORCED VALLEY GUTTER DETAIL

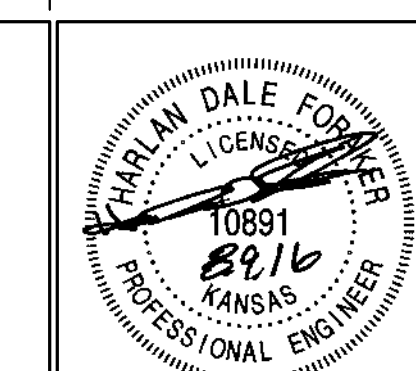


WING REINFORCING DETAIL



REVISED: NOVEMBER 2015

VALLEY GUTTER DETAILS		
CITY ENGINEER		
GARY JANZEN, P.E.		
PROJECT NUMBER	OCA NUMBER	DATE
CITY ENGINEER'S OFFICE		SHEET
CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		



PROJECT NO.: 20152242

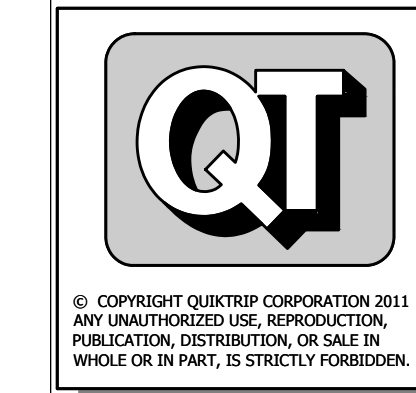
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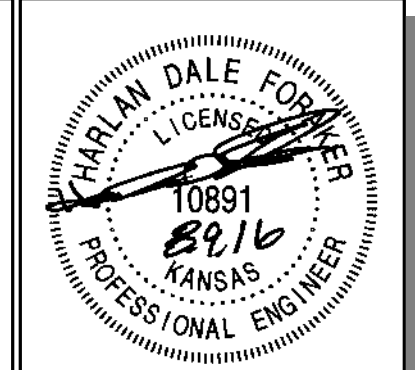
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VALLEY GUTTER DETAIL

SHEET NUMBER:
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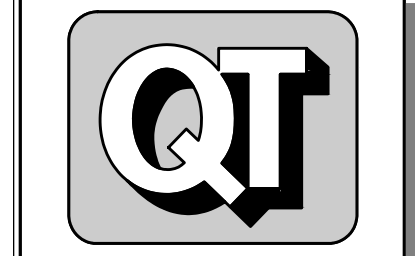
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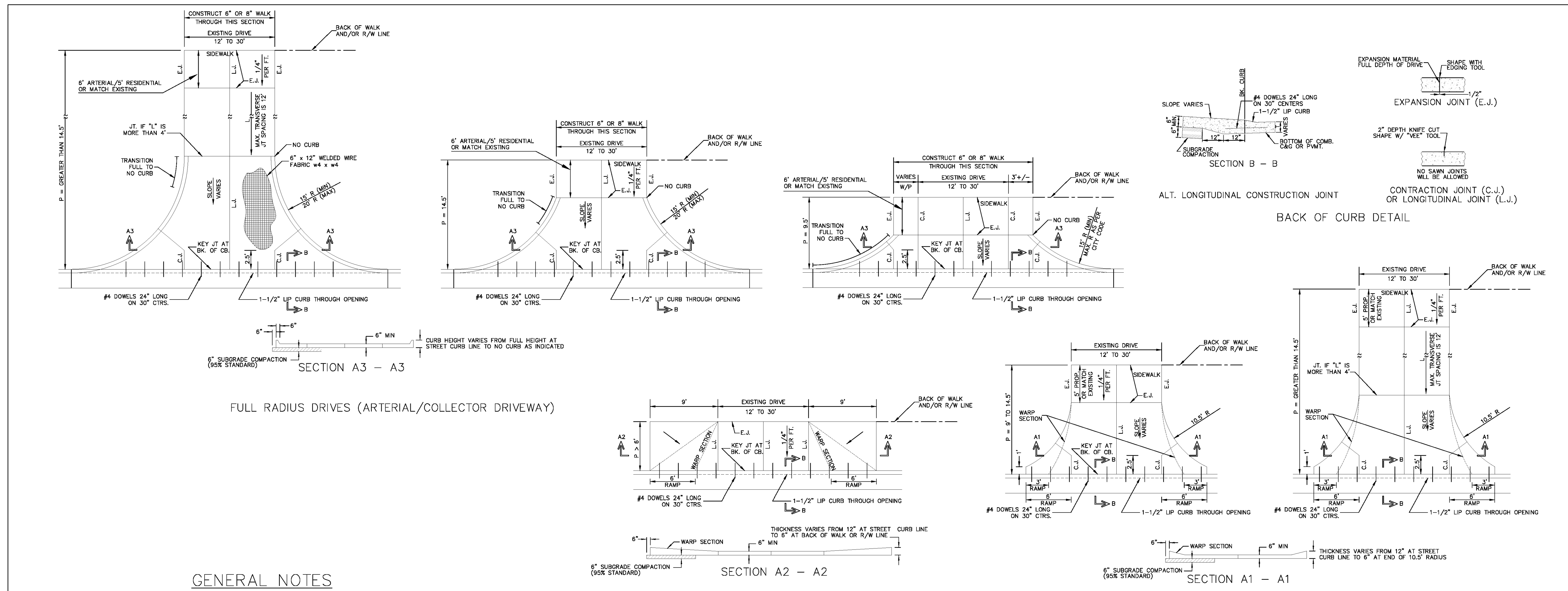
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REV	DATE	DESCRIPTION

SHEET TITLE:
 STANDARD DRIVE ENTRANCES

SHEET NUMBER:
 10

ORIGINAL ISSUE DATE:



GENERAL NOTES

- DRIVEWAY CONSTRUCTION DETAILED ON THIS SHEET IS FOR USE WITH FULL HEIGHT STREET CURBS AND IN AREAS WITHOUT FULL WALK CONSTRUCTION IN THE PARKING. SEE OTHER DETAIL SHEETS FOR DRIVEWAY CONSTRUCTION WITH ROLL CURB AND/OR FULL WALK.
- ONE LONGITUDINAL JOINT SHALL BE CONSTRUCTED ALONG THE CENTERLINE OF DRIVES HAVING A WIDTH DIMENSION OF 24' OR LESS. TWO LONGITUDINAL JOINTS SHALL BE CONSTRUCTED WITH EQUAL SPACINGS NOT TO EXCEED 10' FOR DRIVES WITH A WIDTH DIMENSION GREATER THAN 24'.
- DRIVEWAY WIDTH DENOTED AS WIDTH ON THE DETAIL DRAWINGS SHALL BE A MINIMUM OF 12' AND A MAXIMUM OF 30'. THE MAXIMUM OPENING FOR RADIUS TYPE DRIVES WITH CURBS THROUGH THE RADIUS SHALL NOT EXCEED 52' AT THE STREET CURB LINE.
- CONTRACTION JOINT SPACING IN THE DRIVEWAY WALK SECTION SHALL BE A MINIMUM OF 3' AND A MAXIMUM OF 6' AND ARE TO BE EQUALLY SPACED WITHIN THIS RANGE. WALK SECTION SHALL BE CONSTRUCTED TO THE SAME THICKNESS AS THE DRIVEWAY.
- ADDITIONAL THICKNESS OF DRIVE AS INDICATED IN THE DRAWINGS WILL NOT BE PAID FOR DIRECTLY AND THIS COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE DRIVEWAY CONSTRUCTION.
- ONE HALF INCH EXPANSION JOINTS SHALL BE INSTALLED WHEREVER DRIVE CONSTRUCTION ABUTS SIDEWALK. ONE HALF INCH EXPANSION JOINTS SHALL ALSO BE INSTALLED ALONG THE PROPERTY LINE AND/OR BACK OF WALK LINE WHEN DRIVE CONSTRUCTION ALONG THIS LINE ABUTS CONCRETE PARKING LOTS OR CONCRETE DRIVE EXTENSION.
- DRIVEWAYS ONLY ON RESIDENTIAL PROPERTIES ONLY CAN BE CONSTRUCTED WITH 6" IN THICKNESS AND CAN BE WITHOUT REINFORCEMENT.
- ALL DRIVEWAYS TO NONRESIDENTIAL PROPERTY SHALL BE A MINIMUM OF 8" IN THICKNESS AND SHALL HAVE REINFORCEMENT WITH 6"x12", W4xW4.

REVISED: NOVEMBER 2015

STANDARD DRIVE ENTRANCES FULL HEIGHT CURB

CITY ENGINEER
GARY JANZEN, P.E.

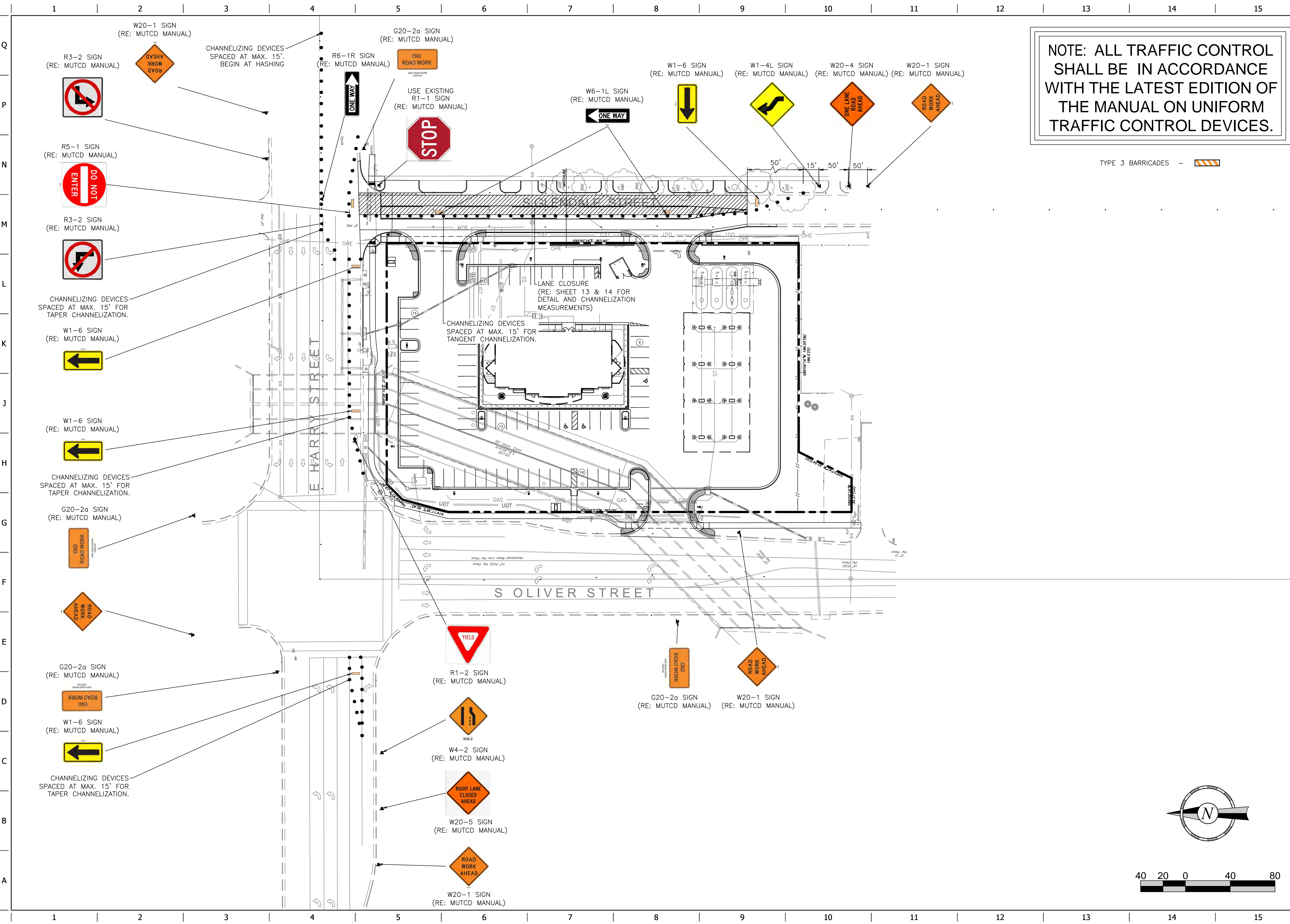
PROJECT NUMBER	OCA NUMBER	DATE
CITY ENGINEER'S OFFICE	SHEET	
CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		

CITY OF WICHITA
 PUBLIC WORKS & UTILITIES
 ENGINEERING DIVISION

PV-126

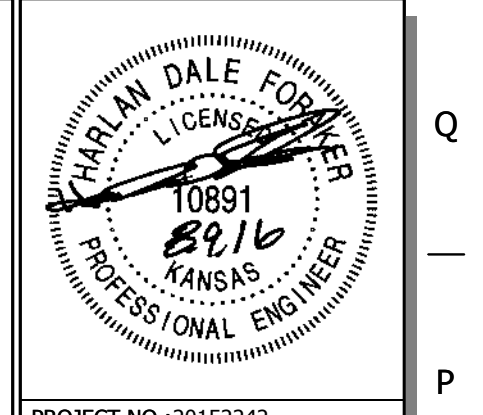
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NOTE: ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

TYPE 3 BARRICADES -



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 WICHITA, KS

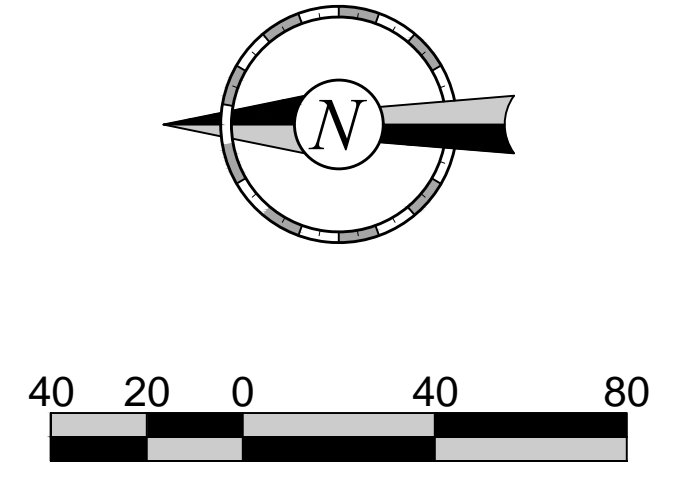


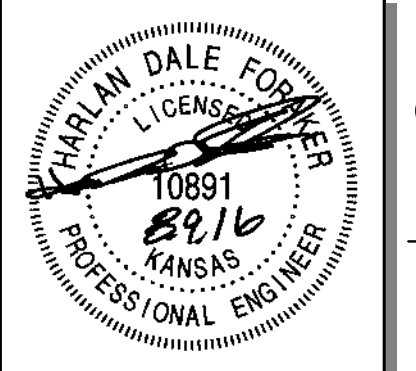
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 DIVISION:
 VERSION: 001
 DESIGNED BY:
 DRAWN BY:
 REVIEWED BY:

REV	DATE	DESCRIPTION	ORIGINAL ISSUE DATE:

SHEET TITLE:
 TRAFFIC CONTROL PLAN
 PHASE 2

SHEET NUMBER:
 12





PROJECT NO.: 20152242

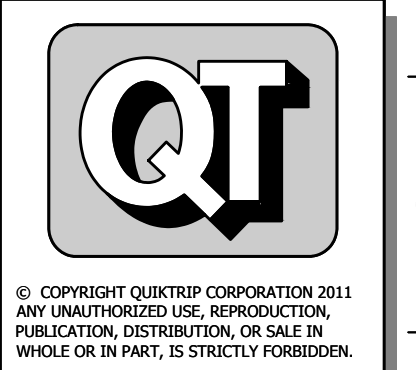
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VERSION: 001

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DRAWN BY:

REVIEWED BY:

REV	DATE	DESCRIPTION	BY	APP'D

SHEET TITLE:
TRAFFIC CONTROL DETAILS
1

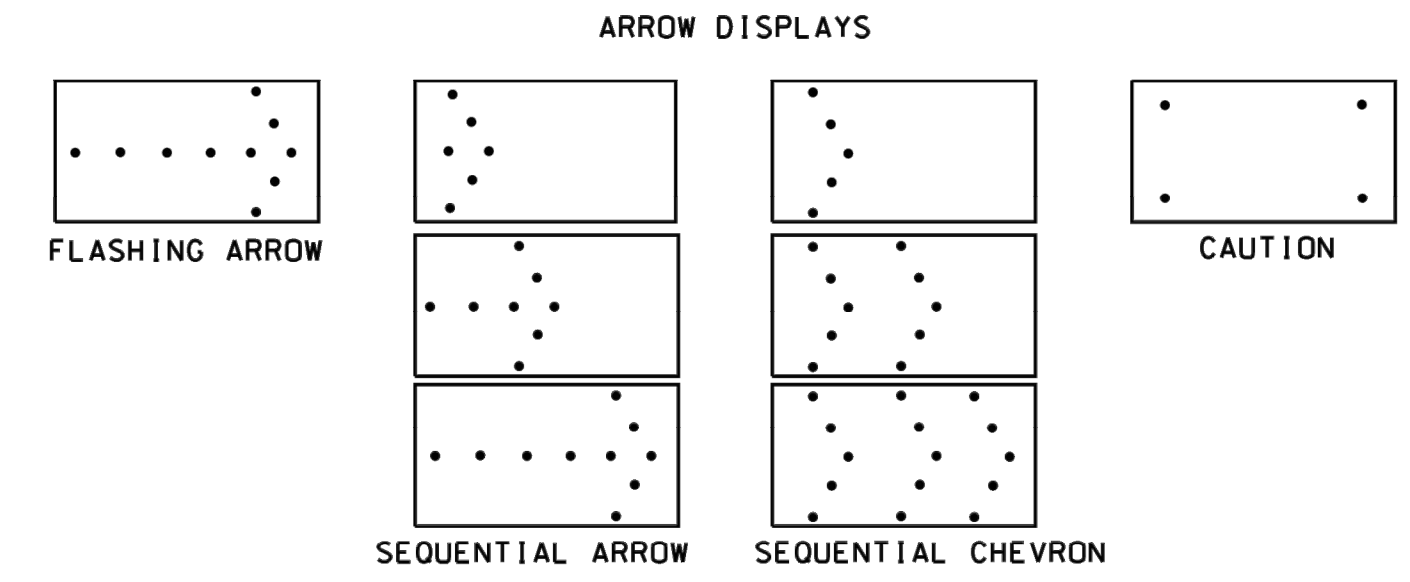
SHEET NUMBER:

13

- MUTCD COMPLIANCE:**
ALL TEMPORARY TRAFFIC CONTROL DEVICES AND THEIR INSTALLATION AND MAINTENANCE SHALL COMPLY WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS WHICH HAS BEEN ADOPTED BY THE SECRETARY OF TRANSPORTATION. WHENEVER THE TEMPORARY TRAFFIC CONTROL STANDARDS CONFLICT WITH THE MUTCD, THE STANDARDS SHALL GOVERN.
- DESIGN SPEED:**
THOSE ITEMS DELEGATED TO TEMPORARY TRAFFIC CONTROL SHOULD BE DESIGNED AND INSTALLED USING THE POSTED/LEGAL SPEED OF THE ROADWAY PRIOR TO WORK STARTING.
- CLEAR ZONE:**
ALL CONSTRUCTION EQUIPMENT (INCLUDING VEHICLES), MATERIALS, AND DEBRIS SHALL BE STORED OUT OF THE CLEAR ZONE. WHERE THIS CANNOT BE ACHIEVED, THE CONTRACTOR SHALL PLACE APPROPRIATE SIGNS, OBJECT IDENTIFIERS, AND/OR BARRICADES AS DESIGNATED BY THE ENGINEER. TEMPORARY TRAFFIC CONTROL DEVICES NEEDED FOR THIS CONDITION SHALL BE CONSIDERED SUBSIDIARY TO OTHER BID ITEMS.
- MINIMUM LANE WIDTHS:**
LANE WIDTHS SHALL BE A MINIMUM OF 11' (MEASURED BETWEEN CENTERLINES OF PAVEMENT MARKINGS) OR AS SHOWN ON THE PLANS, OR AS DIRECTED BY THE ENGINEER. A LANE WIDTH LESS THAN 11' MAY REQUIRE RESTRICTED ROADWAY WIDTH SIGNING.
- FLAGGER:**
A MINIMUM OF ONE FLAGGER SHALL BE STATIONED WITHIN EACH MULTI-LANE ROADWAY ACTIVITY AREA WHERE WORK IS IN A CLOSED LANE ADJACENT TO TRAFFIC AND NOT SEPARATED BY A CONCRETE SAFETY BARRIER SYSTEM.
- PAVEMENT MARKING:**
WHEN THE WORK WILL OCCUPY A LOCATION MORE THAN THREE DAYS, ALL CONFLICTING PAVEMENT MARKINGS SHALL BE REMOVED OR MASKED AND ALL TRANSITION TAPERS, CROSSOVERS, AND EDGE LINES ALONG CHANNELIZING DEVICES SHALL BE MARKED WITH SOLID 4" WIDE PAVEMENT MARKING.
- FIRST MODULE OF IBS:**
THE FIRST MODULE OF EACH INERTIAL BARRIER SYSTEM (IBS) SHALL HAVE A MINIMUM OF 250 FT. OF FLUORESCENT ORANGE ASTM TYPE IV SHEETING FACING TRAFFIC. EITHER A VERTICAL RECTANGLE OR DIAMOND SHAPE MAY BE USED.
- PEDESTRIAN / BICYCLE SAFETY:**
WORK ZONE SIGNS SHALL NOT INHIBIT PEDESTRIAN AND BICYCLE TRAFFIC ON SIDEWALKS OR OTHER AREAS DESIGNATED FOR PEDESTRIAN OR BICYCLE USE.
CONSIDERATION SHOULD BE MADE TO SEPARATE PEDESTRIAN AND BICYCLE MOVEMENTS FROM BOTH WORK SITE ACTIVITY AND VEHICULAR TRAFFIC. UNLESS A REASONABLE SAFE ROUTE THAT DOES NOT INVOLVE CROSSING THE ROADWAY CAN BE PROVIDED, PEDESTRIANS AND BICYCLISTS SHOULD BE APPROPRIATELY DIRECTED WITH ADVANCE SIGNING THAT ENCOURAGES THEM TO CROSS TO THE OPPOSITE SIDE OF THE ROADWAY. IN URBAN AND SUBURBAN AREAS WITH HIGH VEHICULAR TRAFFIC VOLUMES, THESE SIGNS SHOULD BE PLACED AT INTERSECTIONS (RATHER THAN MIDBLOCK LOCATIONS) SO THAT PEDESTRIANS AND BICYCLISTS ARE NOT CONFRONTED WITH MIDBLOCK WORK SITES THAT WILL INDUCE THEM TO ATTEMPT SKIRTING THE WORK SITE OR MAKING A MIDBLOCK CROSSING.
WHEN EXISTING PEDESTRIAN FACILITIES ARE DISRUPTED, CLOSED, OR RELOCATED, THE TEMPORARY FACILITIES SHALL BE DETECTABLE AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH THE FEATURES PRESENT IN THE EXISTING PEDESTRIAN FACILITY.
- CHANGED STOP CONDITIONS:**
ATTACH TWO FLAGS AND A RED TYPE "B" HIGH INTENSITY WARNING LIGHT TO ANY STOP SIGN THAT CREATES A NEW STOP CONDITION OR MOVES THE STOP CONDITION TO A NEW LOCATION. LEAVE FLAGS AND LIGHTS IN PLACE FOR AT LEAST THE FIRST 30 DAYS. INSTALL W3-1 (SYMBOLIC STOP AHEAD) SIGN IN ADVANCE OF STOP SIGN IF STOP SIGN IS NOT VISIBLE FOR A MINIMUM OF DISTANCE 'A' (SEE CHART ON TET10) OR IF STOP CONDITION IS MOVED TO LESS THAN DISTANCE 'A' FROM AN EXISTING STOP AHEAD SIGN.
- LUMP SUM BIDDING:**
WHEN TRAFFIC CONTROL IS BID LUMP SUM, ADDITIONAL DEVICES WILL BE PAID FOR AS EXTRA WORK.

- NIGHTTIME LIGHTING:**
WHEN NIGHTTIME WORK IS REQUIRED, FLOODLIGHTS SHOULD BE USED TO ILLUMINATE FLAGGER STATIONS, EQUIPMENT CROSSINGS, AND OTHER AREAS WHERE EXISTING LIGHTING IS NOT ADEQUATE FOR THE WORK TO BE PERFORMED SAFELY.
IN NO CASE SHALL FLOODLIGHTS BE PERMITTED TO CREATE A DISABLING GLARE FOR THE DRIVER. THE ADEQUACY OF THE FLOODLIGHT PLACEMENT AND ELIMINATION OF POTENTIAL GLARE SHOULD BE CHECKED BY DRIVING THROUGH THE PROJECT.
- NCHRP REPORT 350 CRASHWORTHY REQUIREMENTS:**
TRAFFIC CONTROL DEVICES SHALL MEET THE EVALUATION CRITERIA IN NCHRP REPORT 350 AS SUPPLEMENTED BY FHWA MEMORANDUM "IDENTIFYING ACCEPTABLE HIGHWAY SAFETY FEATURES," DATED JULY 25, 1997. AVAILABLE ON THE INTERNET AT http://safety.fhwa.dot.gov/roadway_dept/road_hardware/nchrp_350.htm
ANY DEVICE NOT ADDRESSED BY THE TE STANDARDS MAY BE APPROVED ON A CASE BY CASE BASIS BY THE ENGINEER. THE DEVICE SHALL BE ACCOMPANIED BY AND INSTALLED ACCORDING TO NCHRP REPORT 350.
THE CONTRACTOR SHALL:
1) PROVIDE TO THE ENGINEER A COPY OF THE MANUFACTURER'S SELF-CERTIFICATION THAT ANY CATEGORY 1 (i.e. - PLASTIC CONICAL DELINEATORS, TUBULAR MARKERS, DRUMS WITHOUT ATTACHMENTS) AND CATEGORY 2 (i.e. - PORTABLE SIGN STANDS (WITH SIGNS), TYPE II AND III BARRICADES, AND VERTICAL PANELS) DEVICES USED ON THE PROJECT ARE NCHRP REPORT 350 COMPLIANT.
2) PROVIDE TO THE ENGINEER A COPY OF THE ENTIRE FHWA NCHRP REPORT 350 ACCEPTANCE LETTER (WZ-xxx) FOR ANY CATEGORY 2 DEVICE (i.e. - PORTABLE SIGN STANDS (WITH SIGNS), TYPE II AND III BARRICADES, AND VERTICAL PANELS) USED ON THE PROJECT. WORK ZONE FHWA NCHRP REPORT 350 ACCEPTANCE LETTERS (WZ-xxx) ARE AVAILABLE ON THE INTERNET AT: http://safety.fhwa.dot.gov/roadway_dept/road_hardware/listing.cfm?code=workzone
3) CERTIFY THAT THE TRUCK MOUNTED ATTENUATORS (TMA'S) (WHICH ARE DEFINED AS CATEGORY 3 DEVICES BY THE FHWA MEMORANDUM) WERE PURCHASED PRIOR TO OCTOBER 1, 1998, AND INCLUDE A COPY OF THE ENTIRE FHWA ACCEPTANCE LETTER STATING THAT THE TMA'S ARE NCHRP REPORT 230 COMPLIANT; OR IF THE DEVICES WERE PURCHASED AFTER OCTOBER 1, 1998, INCLUDE A COPY OF THE ENTIRE FHWA'S ACCEPTANCE LETTER STATING THAT THE TMA'S ARE NCHRP REPORT 350 COMPLIANT.
ALL CATEGORY 1 & 2 DEVICES SHALL BE NCHRP REPORT 350 COMPLIANT. TMA'S, PURCHASED PRIOR TO OCTOBER 1, 1998, MAY BE USED UNTIL THE END OF THEIR SERVICEABLE LIVES.
- TYPE "A" LOW INTENSITY WARNING LIGHTS:**
A TYPE "A" LOW INTENSITY WARNING LIGHT IS AN L.E.D. BI-DIRECTIONAL FLASHING WORK ZONE WARNING LIGHT.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS				



ARROW DISPLAY ELEMENTS SHALL BE CAPABLE OF A MINIMUM 50 PERCENT DIMMING FROM THEIR FULL-RATED LAMP VOLTAGE. FULL LAMP VOLTAGE SHOULD BE USED DURING THE DAY AND DIMMED MODE SHALL BE USED AT NIGHT. FOR SHOULDER WORK, ROADSIDE WORK NEAR THE SHOULDER, BLOCKING THE SHOULDER, OR FOR TEMPORARY CLOSING ONE LANE ON A TWO-LANE, TWO-WAY ROADWAY, AN ARROW PANEL SHALL BE USED ONLY IN THE CAUTION MODE.

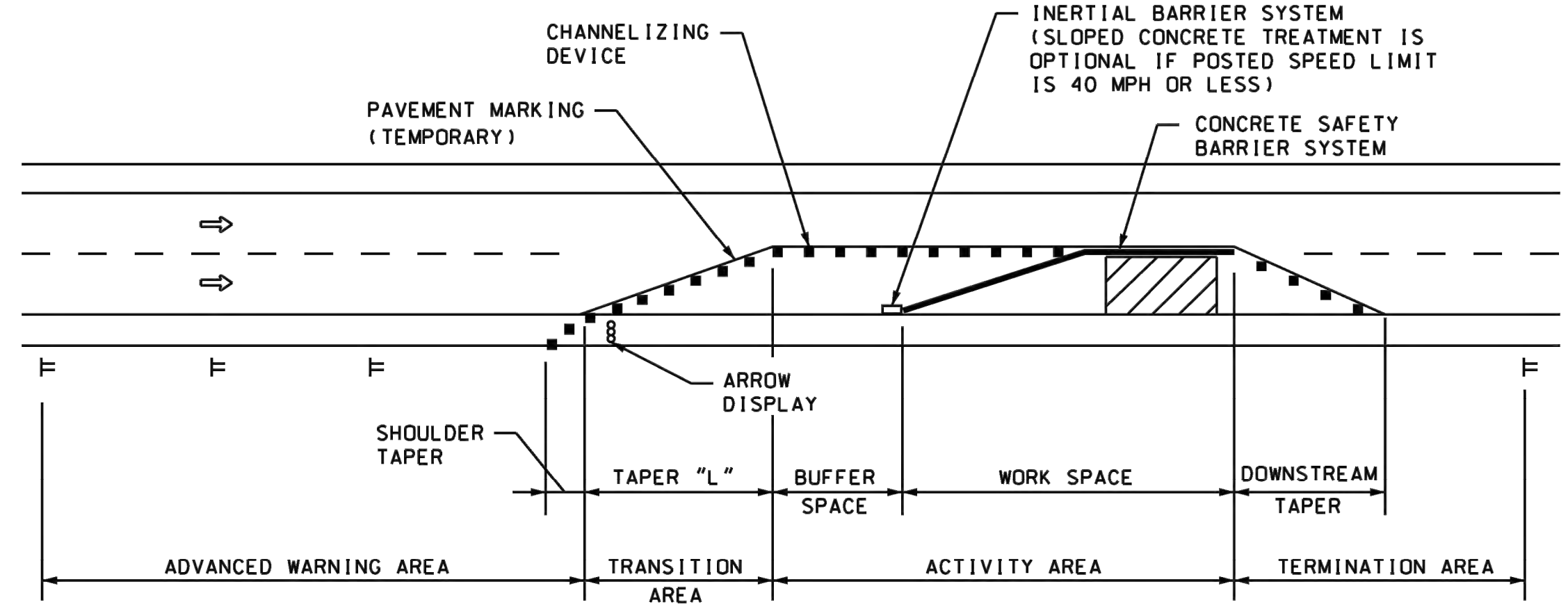
BUFFER SPACE

SPEED (MPH) *	20	25	30	35	40	45	50	55	60	65	70
LENGTH (ft)	115	155	200	250	305	360	425	495	570	645	730

NEITHER WORK ACTIVITY NOR STORAGE OF EQUIPMENT, VEHICLES, OR MATERIAL SHOULD OCCUR IN THE BUFFER SPACE. WHEN A PROTECTION VEHICLE IS PLACED IN ADVANCE OF THE WORK SPACE, ONLY THE SPACE UPSTREAM OF THE VEHICLE CONSTITUTES THE BUFFER SPACE.

* POSTED SPEED PRIOR TO WORK STARTING

IF TEMPORARY CONCRETE SAFETY BARRIER SYSTEM IS USED TO SEPARATE APPROACHING TRAFFIC FROM THE WORK SPACE, THE BARRIER SYSTEM SHALL BE CONSIDERED PART OF THE ACTIVITY AREA. A FULL LANE WIDTH SHOULD BE AVAILABLE THROUGHOUT THE LENGTH OF THE BUFFER SPACE. SEE TYPICAL WORK ZONE COMPONENTS.



NOTE:
REFER TO STD. TET02 FOR TAPER "L" FORMULA.

NO.	DATE	REVISIONS	BY	APP'D
3	4-20-09	REVISED NOTE 7	J.M.	A.A.A.
2	8-8-07	ADD NOTE 15, REVISE NOTE 8 & WZ COMPONENTS	M.B.	A.A.A.
1	12-29-05	MODIFIED BUFFER SPACE TABLE	M.B.	A.A.A.

KANSAS DEPARTMENT OF TRANSPORTATION

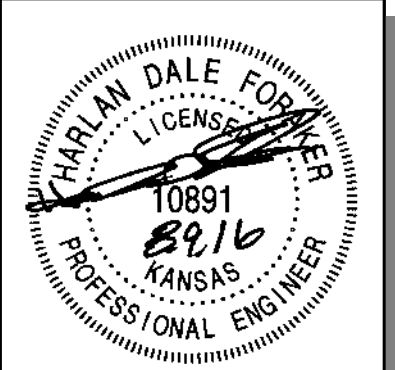
GENERAL TRAFFIC CONTROL

TE700

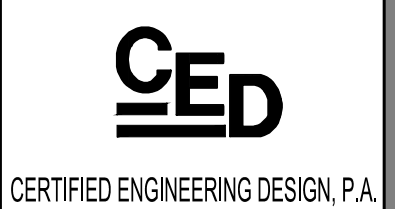
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Plot File: souse/names/0329R/0329R TC DETAILS.dwg
Plot Date: 8/17/2016 3:14 PM



PROJECT NO.: 20152242



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WICHITA, KS



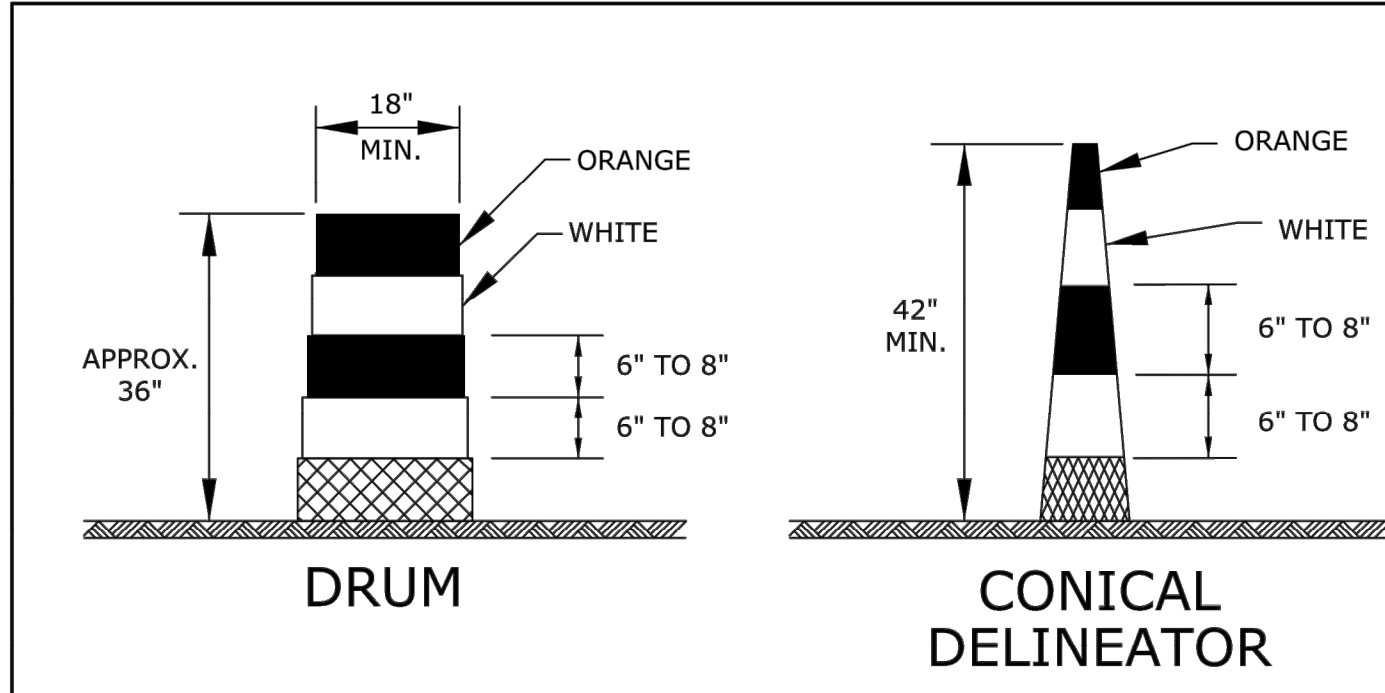
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DRAWN BY:
REVIEWED BY:

REV	DATE	DESCRIPTION	ORIGINAL ISSUE DATE:

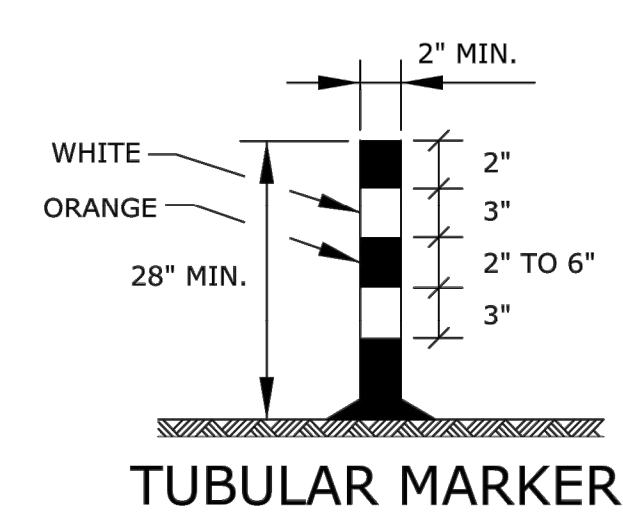
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TRAFFIC CONTROL DETAILS
2

SHEET NUMBER:
14



DRUMS AND CONICAL DELINEATORS SHALL HAVE AT LEAST TWO ORANGE AND TWO WHITE 6" TO 8" WIDE RETROREFLECTIVE STRIPES. ADDITIONAL STRIPES MAY BE NON-RETROREFLECTIVE. IF THERE ARE NON-RETROREFLECTIVE SPACES BETWEEN ADJACENT STRIPES, THEY SHALL BE NO MORE THAN 3" WIDE.

ALL RETROREFLECTIVE STRIPES ON DRUMS SHALL BE ASTM TYPE III SHEETING. THE WHITE STRIPES ON CONICAL DELINEATORS SHALL BE ASTM TYPE III SHEETING. ORANGE STRIPES ON ALL CONICAL DELINEATORS SHALL BE FLUORESCENT ORANGE ASTM TYPE IV SHEETING.



TAPER FORMULAS:

$L = WS$ FOR SPEEDS OF 45 MPH OR MORE

$L = WS^2/60$ FOR SPEEDS OF 40 MPH OR LESS

WHERE: L = MINIMUM LENGTH OF TAPER IN FEET
S = NUMERICAL VALUE OF POSTED SPEED
W = WIDTH OF OFFSET IN FEET

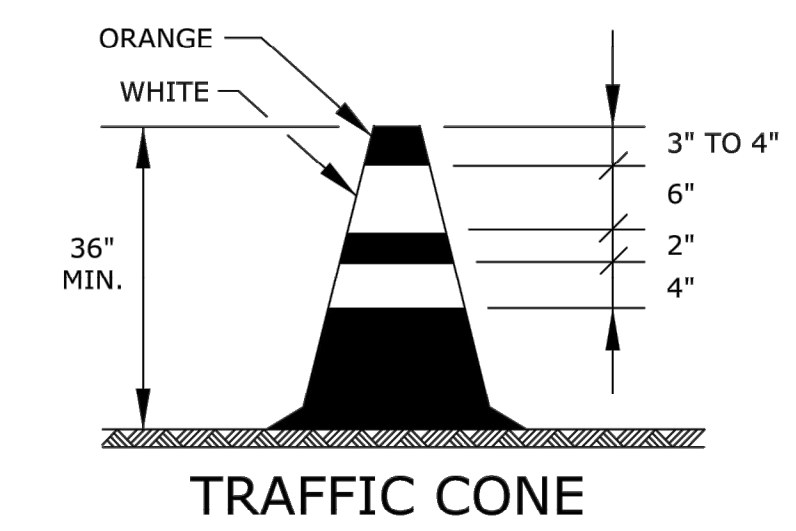
CHANNELIZER PLACEMENT:

(A) THE SPACING BETWEEN DEVICES IN TRANSITION AREA (TAPER) SHOULD NOT EXCEED A DISTANCE IN FEET EQUAL TO 1/2 THE POSTED SPEED LIMIT IN MPH PRIOR TO WORK STARTING.

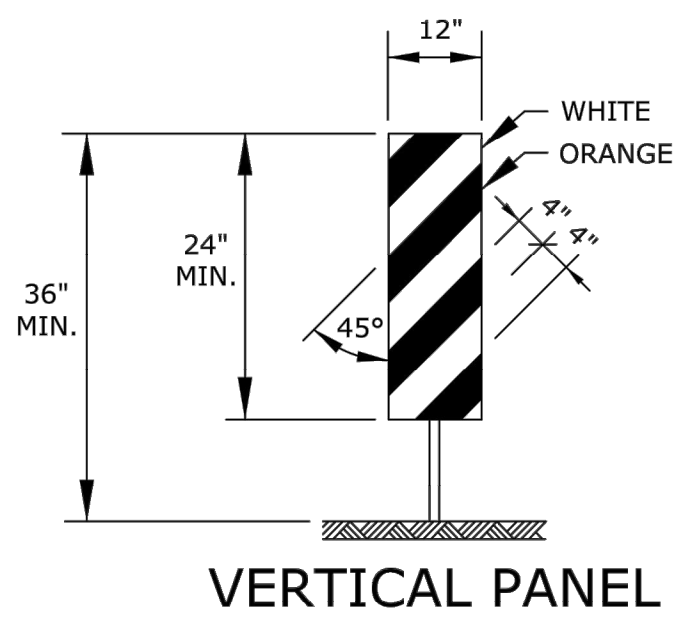
(B) THE SPACING BETWEEN DEVICES IN THE ADVANCED WARNING AREA AND THE ACTIVITY AREA SHOULD NOT EXCEED A DISTANCE IN FEET EQUAL TO TWO TIMES THE POSTED SPEED LIMIT IN MPH PRIOR TO WORK STARTING.

(C) CHANNELIZING DEVICES SHALL BE PLACED FOR OPTIMUM VISIBILITY, NORMALLY AT RIGHT ANGLES TO THE TRAFFIC FLOW.

(D) CHANNELIZING DEVICES PLACED ALONG SHOULDER EDGES OR IN DROPOFFS SHALL HAVE A MINIMUM OF 24" FROM THE TOP OF THE CHANNELIZING DEVICE TO THE TOP OF THE PAVEMENT.



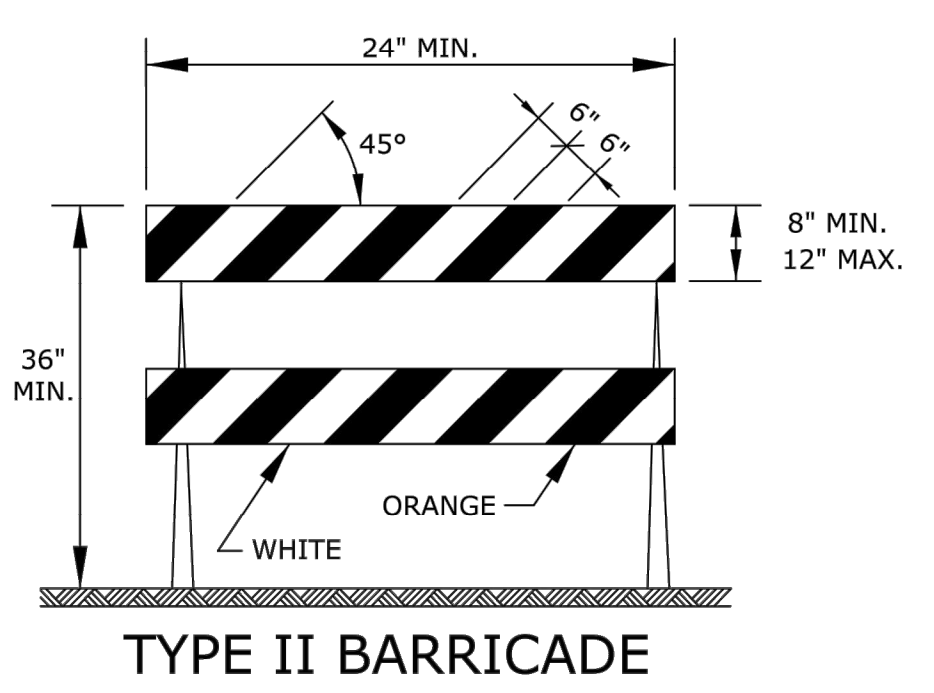
TRAFFIC CONES MAY BE USED AS CHANNELIZING DEVICES FOR DAYTIME OPERATIONS ONLY. THEY WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE SUBSIDIARY TO OTHER TRAFFIC CONTROL BID ITEMS. THE ENGINEER MAY REQUIRE THAT TRAFFIC CONES BE SUPPLEMENTED BY OTHER TRAFFIC CONTROL DEVICES IN CERTAIN SITUATIONS.



THE ENTIRE AREA OF VERTICAL PANELS, BOTH FRONT AND BACK, SHALL HAVE ASTM TYPE III SHEETING. THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.

ITEM	LOCATION	CHANNELIZING DEVICES								
		CROSS-OVERS	SHOULDER DIVERSIONS	TANGENTS	TAPERS	RAMPS	HEAD TO HEAD	OBJECT IDENTIFIER	LEAD IN DEVICES	GORES
PORTABLE	DRUMS	YES	YES	YES	YES	YES	(1)	YES	YES	YES
	CONICAL DELINEATORS	YES	YES	YES	YES	YES	(1)	YES	YES	YES
	VERTICAL PANELS	(2)	(2)	(2)	(2)	(2)	(1,2)	YES	(2)	(2)
	DIRECTION INDICATOR BARRICADE	NO	NO	NO	YES	NO	NO	NO	NO	NO
	TYPE II BARRICADE	(2)	(2)	(2)	(2)	NO	NO	YES	NO	NO
FIXED	TUBULAR MARKERS	(3)	(3)	(3)	NO	(3)	YES	NO	YES	YES
	VERTICAL PANELS	(3)	(3)	(3)	(3)	(3)	YES	(2,3)	(2)	

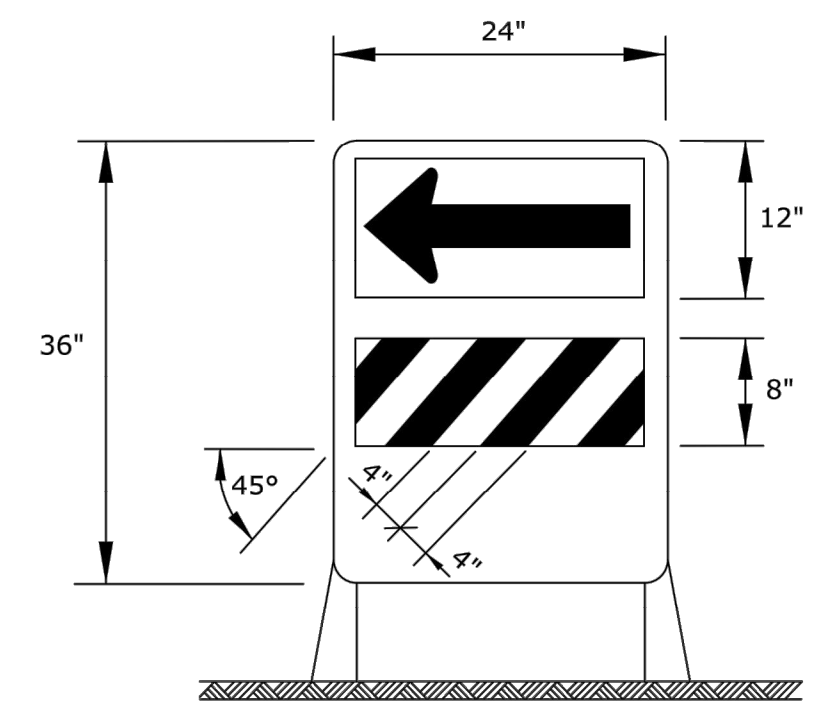
- NOT ALLOWED ON CENTERLINE DELINEATION ALONG FREEWAYS OR EXPRESSWAYS.
- THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.
- MAY BE USED UPON THE APPROVAL OF THE ENGINEER.



FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED.

THE ENTIRE AREA OF BARRICADE RAILS, BOTH FRONT AND BACK, SHALL BE ASTM TYPE III SHEETING.

THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



THE ARROW PANEL SHALL BE BLACK ON FLUORESCENT ORANGE ASTM TYPE IV SHEETING. THE STRIPES SHALL BE ORANGE AND WHITE ASTM TYPE III SHEETING SLOPING DOWNWARD IN THE DIRECTION TRAFFIC IS TO PASS.

THE DIRECTION INDICATOR BARRICADE SHALL BE USED IN SERIES TO DIRECT THE MOTORIST INTO THE INTENDED LANE OF TRAVEL.

THE ARROW PANEL SHOULD NOT BE VISIBLE TO OPPOSING TRAFFIC.

3	10/16/12	Added Lead In Devices Into Matrix Table	JJ.M.	K.P.
2	10/4/11	Added Dimension To Tubular Marker Detail	JJ.M.	K.P.
1	4/20/09	Channelizer Placement & Traffic Cone Detail	JJ.M.	J.A.A.
NO.	DATE	REVISIONS	BY	APP'D

KANSAS DEPARTMENT OF TRANSPORTATION
CHANNELIZING DEVICES

TE702

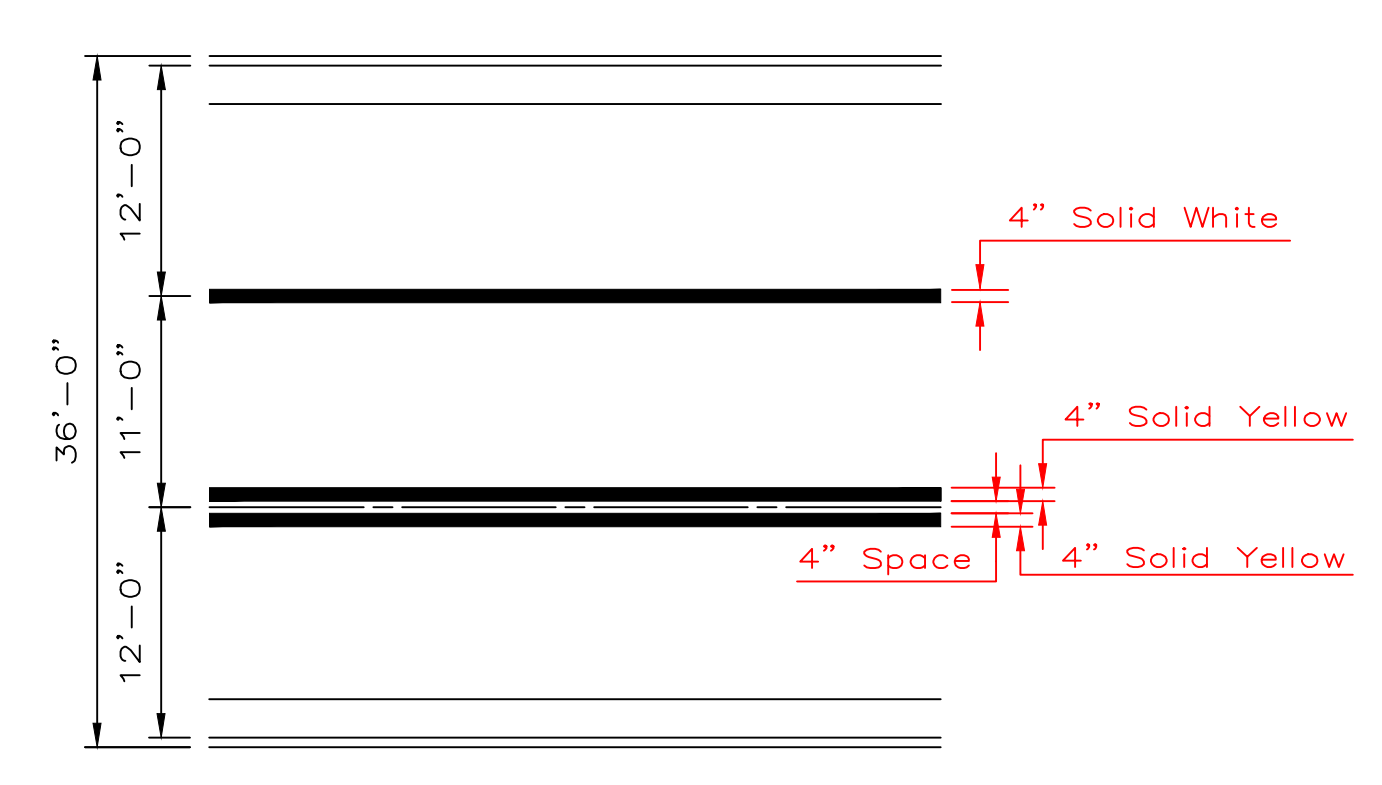
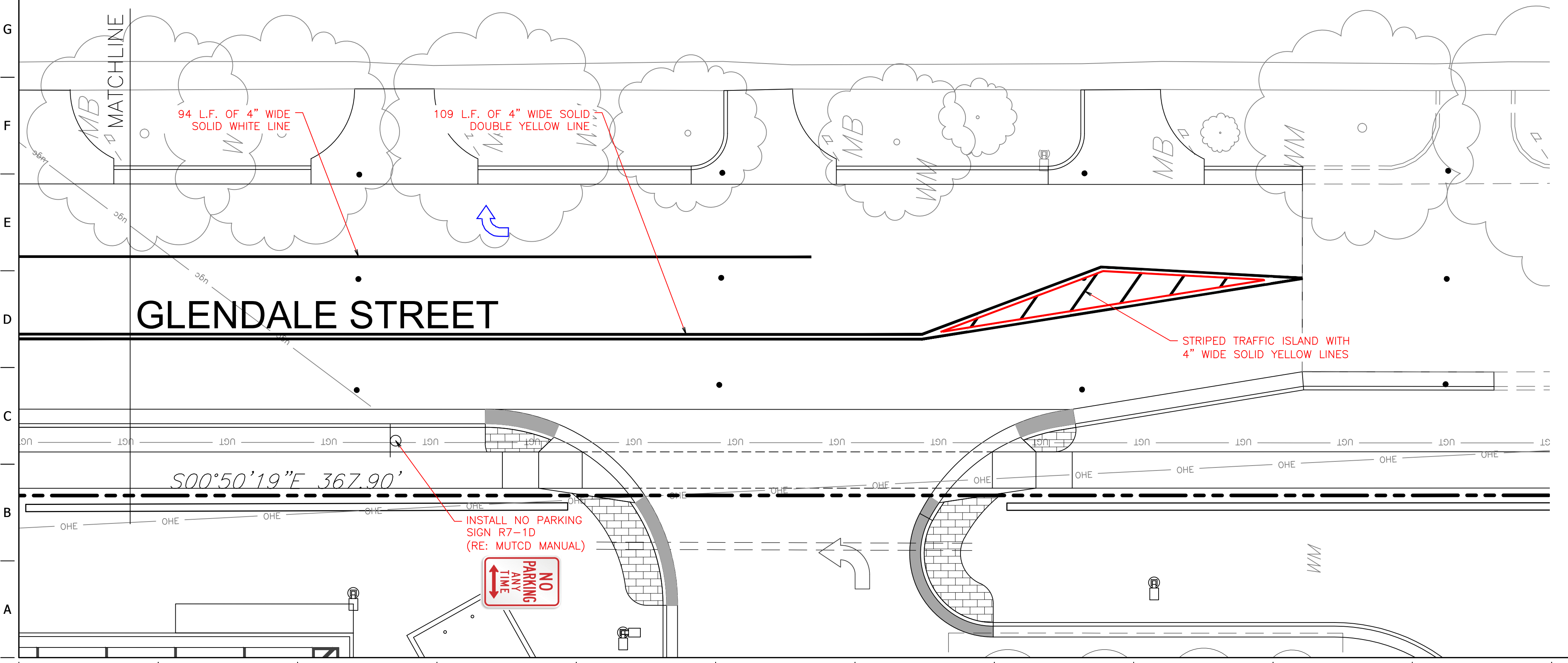
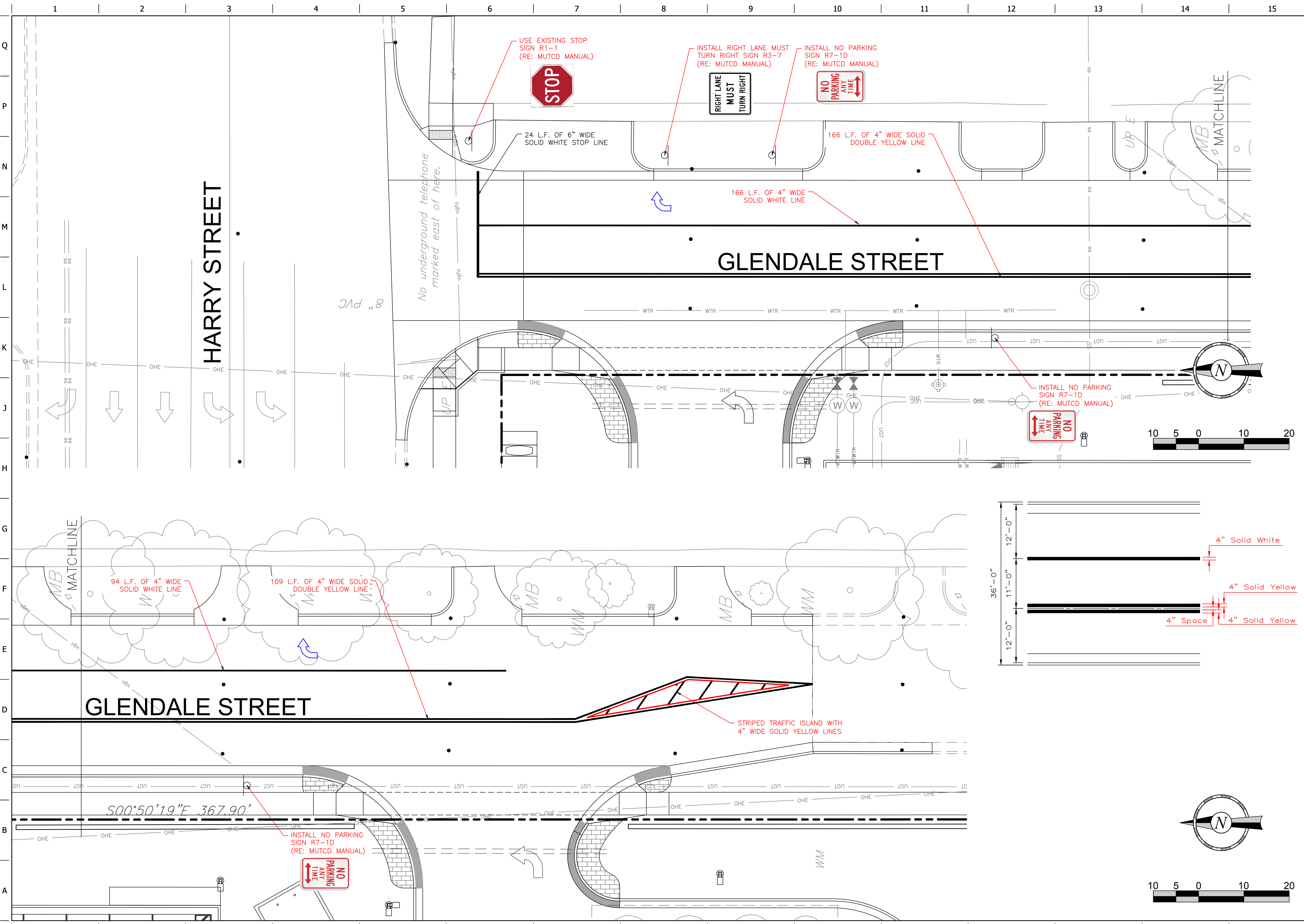
DESIGNED	L.E.R.	DESIGNED	B.A.J.	QUANTITIES	TRACED
DESIGN CK.	DETAIL CK.	DESIGN CK.	QUAN. CK.	TRACE CK.	

KDOT Graphics Certified 10-23-2012 Sh. No. XXX

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File: te702.dgn
Plotted: 24-OCT-2012 07:53
Traffic

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QUICKTRIP
PROFESSIONAL ENGINEER
10891
2016
KANSAS

PROJECT NO.: 20152242

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CERTIFIED ENGINEERING DESIGN, P.A.
1935 W. MAPLE STREET
WICHITA, KANSAS 67213
PH: (316)262-8808
FAX: (316)262-1669

QuikTrip No. 0329R
HARRY & OLIVER
WICHITA, KS

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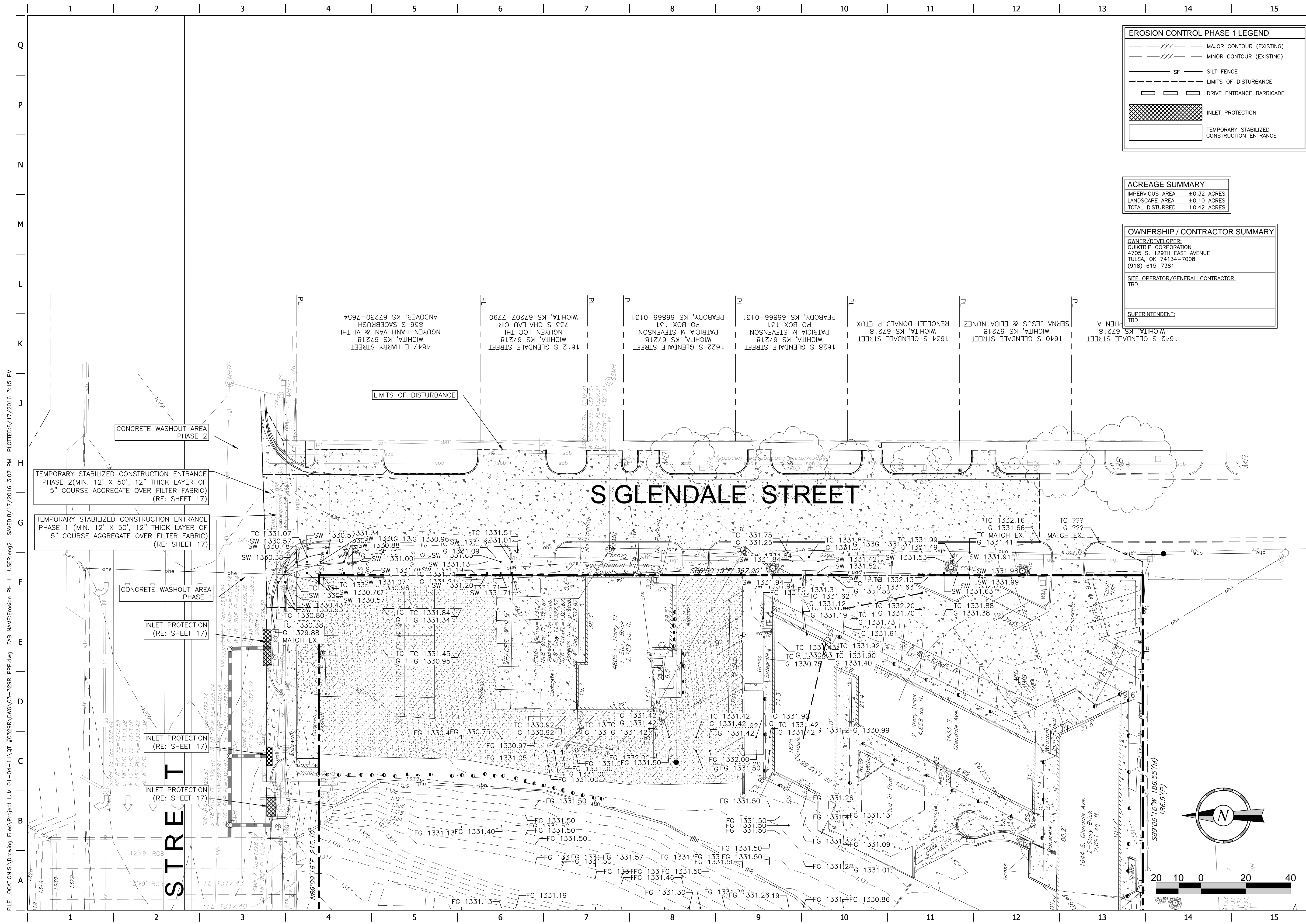
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DIVISION:
VERSION: 001
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DRAWN BY:
REVIEWED BY:

REV	DATE	DESCRIPTION	ORIGINAL ISSUE DATE:

SHEET TITLE:
PAVEMENT MARKING PLAN

SHEET NUMBER:
15

BUILT TO PLAN



EROSION CONTROL PHASE 1 LEGEND

- XXX --- MAJOR CONTOUR (EXISTING)
- XXX --- MINOR CONTOUR (EXISTING)
- SF --- SILT FENCE
- --- LIMITS OF DISTURBANCE
- --- DRIVE ENTRANCE BARRICADE
- [Hatched Box] INLET PROTECTION
- [Stippled Box] TEMPORARY STABILIZED CONSTRUCTION ENTRANCE

ACREAGE SUMMARY

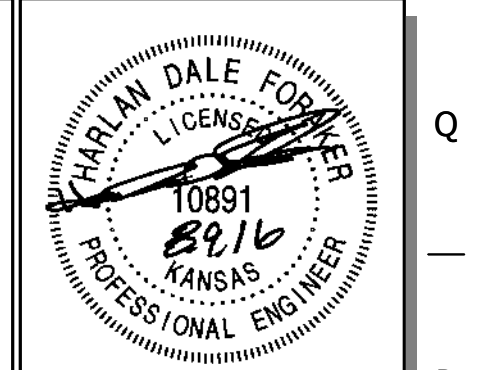
IMPERVIOUS AREA	±0.32 ACRES
LANDSCAPE AREA	±0.10 ACRES
TOTAL DISTURBED	±0.42 ACRES

OWNERSHIP / CONTRACTOR SUMMARY

OWNER/DEVELOPER:
 QUIKTRIP CORPORATION
 4705 S. 129TH EAST AVENUE
 TULSA, OK 74134-7008
 (918) 615-7381

SITE OPERATOR/GENERAL CONTRACTOR:
 TBD

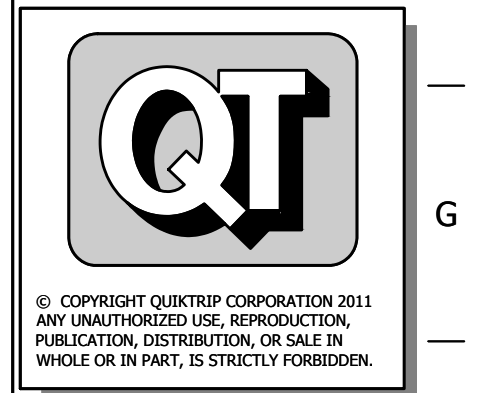
SUPERINTENDENT:
 TBD



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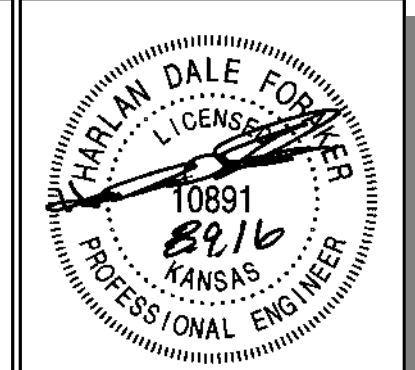
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 EROSION CONTROL PLAN

SHEET NUMBER:
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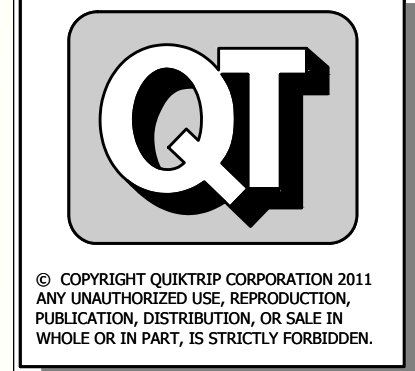
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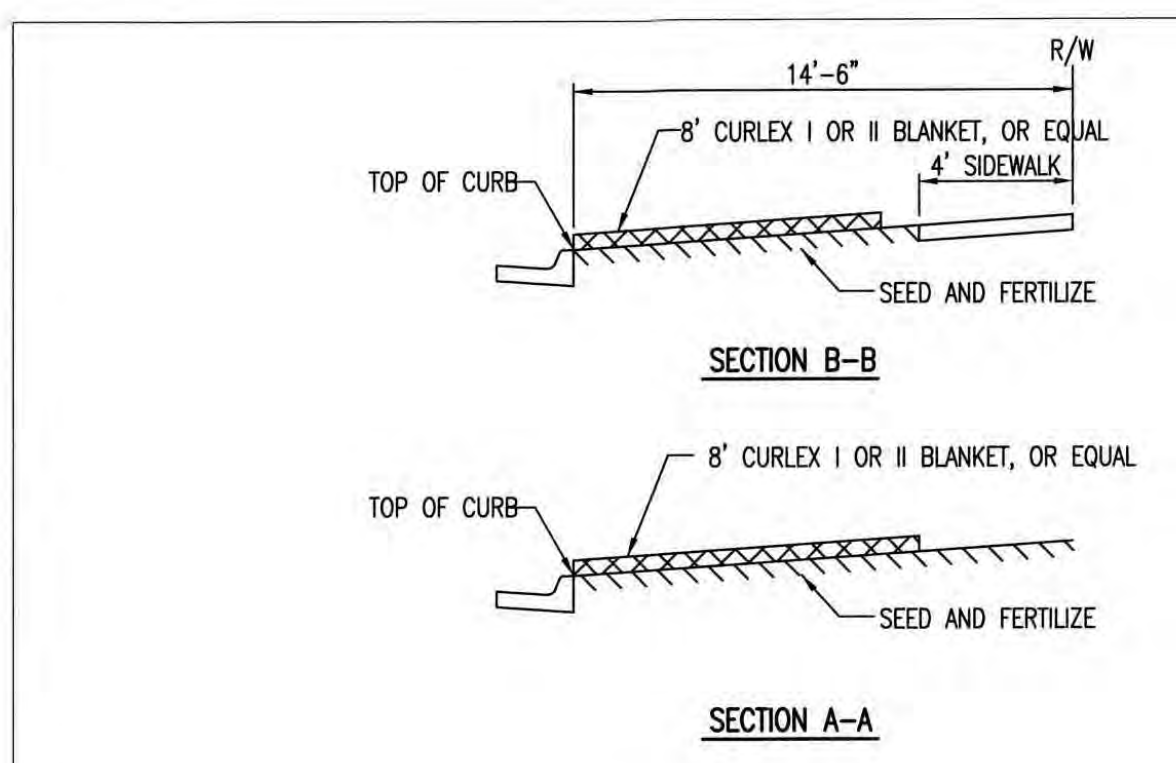


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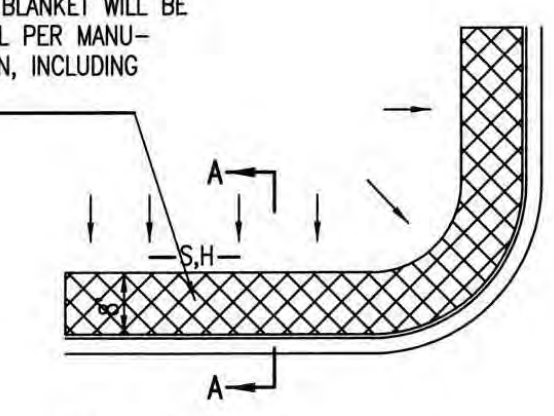
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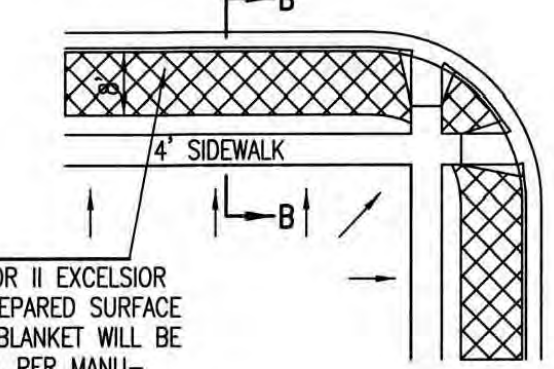
SHEET NUMBER:
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INSTALL 8" WIDE CURLEX I OR II EXCELSIOR BLANKET, OR EQUAL, ON PREPARED SURFACE BACK OF CURB. EDGE OF BLANKET WILL BE AT BACK OF CURB. INSTALL PER MANUFACTURERS RECOMMENDATION, INCLUDING STAPLES. (SEE DETAIL)

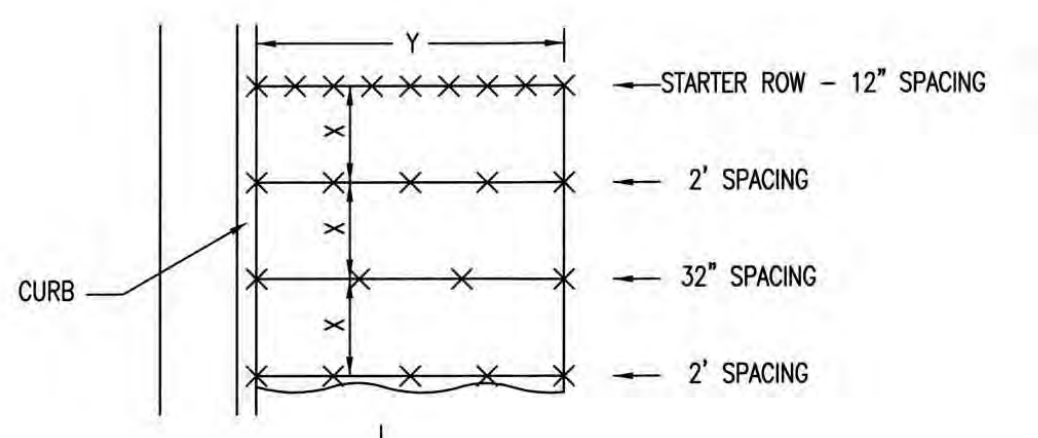


INSTALL 8" WIDE CURLEX I OR II EXCELSIOR BLANKET, OR EQUAL, ON PREPARED SURFACE BACK OF CURB. EDGE OF BLANKET WILL BE AT BACK OF CURB. INSTALL PER MANUFACTURERS RECOMMENDATION, INCLUDING STAPLES. (SEE DETAIL)



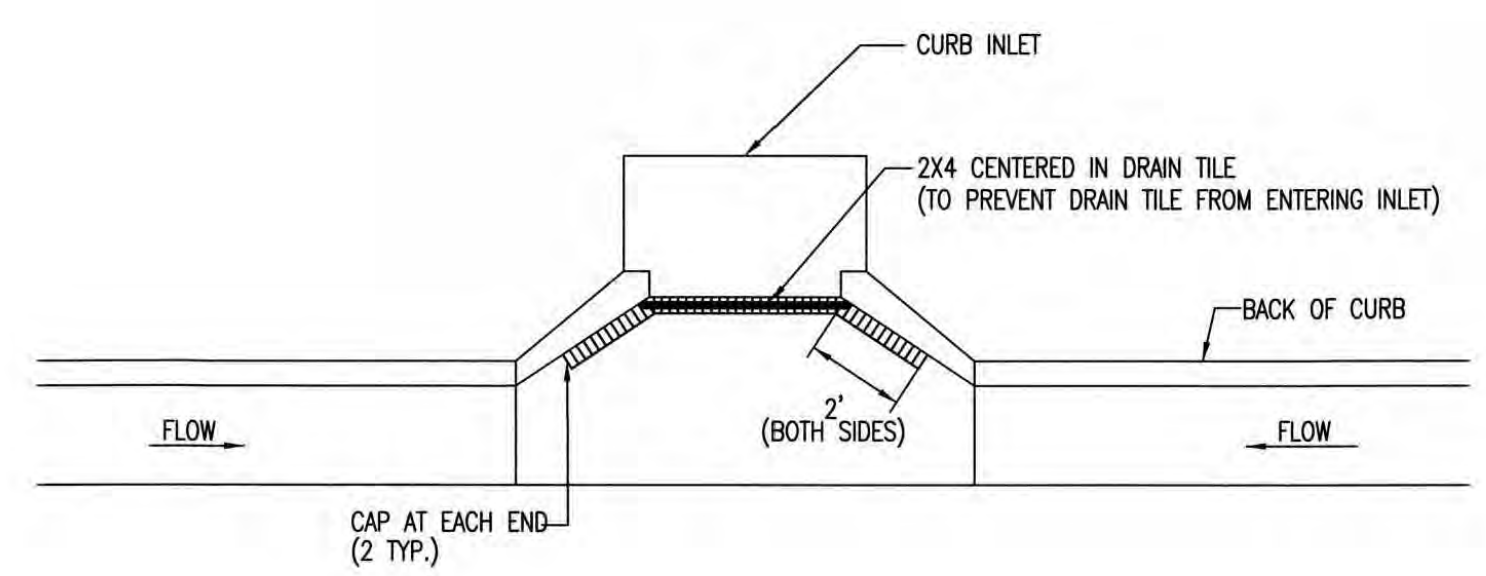
- GENERAL NOTES**
- EXCELSIOR MAT TO BE INSTALLED WHEN SOD IS NOT SPECIFIED ON PROJECT.
 - EXCELSIOR BLANKET TO BE INSTALLED OVER SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
 - AFTER INSTALLATION OF EXCELSIOR BLANKET, AT LOCATIONS WHERE CONCENTRATED FLOW CARRIES SEDIMENT OVER THE CURB AND INTO THE GUTTER, SUPPLEMENTAL EROSION CONTROL DEVICES WILL BE INSTALLED BY THE CONTRACTOR AS NEEDED, TO FIX THE PROBLEM.

BACK OF CURB PROTECTION DETAIL



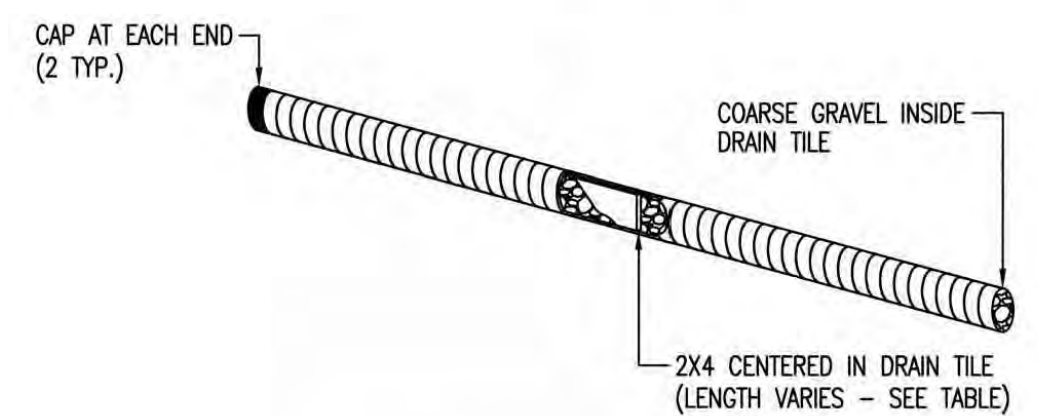
NOTES: USE 6" SEAM OVERLAP
 (X & Y = RECOMMENDED BY MANUFACTURE)

DETAILS FOR APPROVED EROSION CONTROL MAT

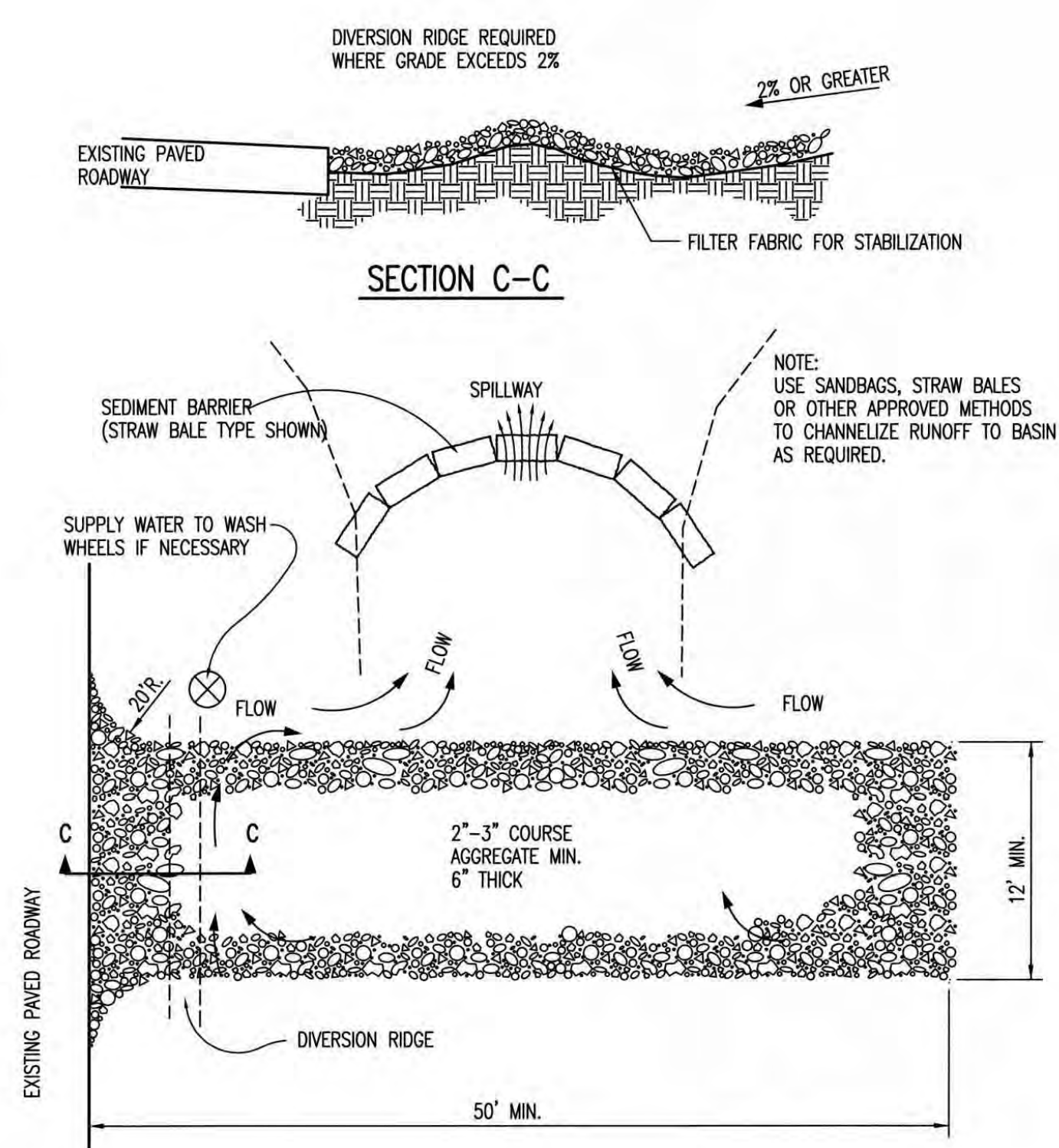


NOTE: PLACE 4" PERFORATED PVC PIPE, FILLED WITH 1/2"-1" DIA. GRAVEL, IN FRONT OF CURB INLET AS SHOWN.

2X4 LENGTH	INLET TYPE	INLET OPENING
5'-6"	1-A	5'-0"
10'-6"	1-A	10'-0"
15'-6"	1-A	15'-0"



CURB INLET PROTECTION
 4" PERFORATED PIPE W/ GRAVEL



GENERAL NOTES

- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
- WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN, AS SHOWN ABOVE.
- DRIVE ENTRANCES ONTO RESIDENTIAL LOTS WILL NOT BE REQUIRED TO HAVE THE SEDIMENT BARRIER SHOWN, BUT WHEEL WASHING MAY BE REQUIRED IF STABILIZED ENTRANCE IS NOT SUFFICIENT TO KEEP MUD FROM BEING TRACKED ONTO ADJACENT STREET. ENTRANCE SHALL EXTEND FROM BACK OF CURB TO DWELLING.



CITY OF WICHITA
 PUBLIC WORKS & UTILITIES
 ENGINEERING DIVISION

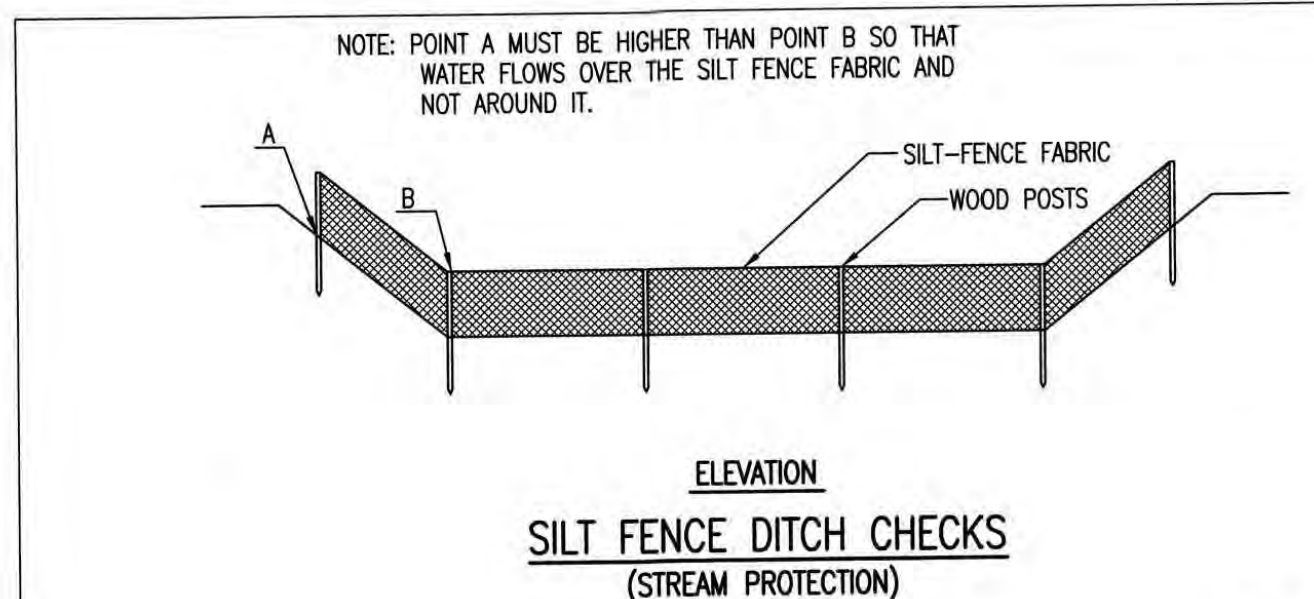
BACK OF CURB PROTECTION,
 CURB INLET PROTECTION AND
 CONSTRUCTION ENTRANCE

CITY ENGINEER
GARY JANZEN, P.E.
 PROJECT NUMBER: OCA NUMBER: DATE:
 CITY ENGINEER'S OFFICE
 CITY HALL - SEVENTH FLOOR
 455 NORTH MAIN STREET
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SW-501

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FILE LOCATION: \\Drawing Files\Project LHM_01-04-11\VTI_#0329R\DWG\03-0329R_PPP_EC_DETAILS.dwg TBI NAME: EROSION CONTROL DETAILS 2 USER: ring2 DATE: 10/10/2016 9:20 AM PLOTTED: 06/17/2016 3:16 PM



SILT FENCE DITCH CHECKS (STREAM PROTECTION)

MATERIAL SPECIFICATION:

SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION. THE POSTS USED TO SUPPORT THE SILT FENCE FABRIC SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4" LONG. SILT FENCE FABRIC SHOULD BE ATTACHED TO THE WOODEN POSTS WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

PLACEMENT:

PLACE SILT FENCE IN DITCHES WHERE IT IS UNLIKELY THAT IT WILL BE OVERTOPPED. WATER SHOULD FLOW THROUGH A SILT FENCE DITCH CHECK, NOT OVER IT. SILT FENCE DITCH CHECKS OFTEN FAIL WHEN OVERTOPPED. SILT FENCE DITCH CHECKS SHOULD BE PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH. THE SILT FENCE SHOULD EXTEND FAR ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE FENCE IS HIGHER THAN THE TOP OF THE LOW POINT OF THE FENCE. THIS PREVENTS WATER FROM FLOWING AROUND THE CHECK. SILT FENCE DITCH CHECKS SHOULD NOT BE PLACED IN DITCHES WHERE HIGH FLOWS ARE EXPECTED. ROCK CHECKS SHOULD BE USED INSTEAD. SILT FENCE SHOULD BE PLACED IN DITCHES WITH SLOPES OF 6% OR LESS. FOR SLOPES STEEPER THAN 6%, ROCK CHECKS SHOULD BE USED.

THE FOLLOWING TABLE PROVIDES CHECK SPACING FOR A GIVEN DITCH GRADE:

DITCH CHECK DITCH GRADE (%)	SPACING CHECK SPACING (FEET)
0.5	200
1.0	200
2.0	100
3.0	65
4.0	50
5.0	40
6.0	30

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH PERPENDICULAR TO THE DITCH FLOWLINE THAT IS AT LEAST 12" DEEP BY 6" WIDE. EXTEND THE TRENCH IN A STRAIGHT LINE ALONG THE ENTIRE LENGTH OF THE PROPOSED DITCH CHECK. PLACE THE SOIL ON THE UPSTREAM SIDE OF THE TRENCH FOR LATER USE. ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC ON THE DOWNSTREAM SIDE OF THE TRENCH. PLACE THE EDGE OF THE FABRIC IN THE TRENCH STARTING AT THE TOP UPSTREAM EDGE OF THE TRENCH. LINE TWO SIDES OF THE TRENCH WITH THE FABRIC AS SHOWN ON DETAIL. BACKFILL OVER THE FABRIC IN THE TRENCH WITH THE EXCAVATED SOIL AND COMPACT. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT FENCE FABRIC SHOULD REMAIN EXPOSED. LAY THE EXPOSED SILT FENCE ON THE UPSTREAM SIDE OF THE TRENCH TO CLEAR AN AREA FOR DRIVING IN THE POSTS. JUST DOWNSTREAM OF THE TRENCH, DRIVE POSTS INTO THE GROUND TO A DEPTH OF AT LEAST 24". PLACE POSTS NO MORE THAN 4' APART. ATTACH THE SILT FENCE TO THE ANCHORED POST WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

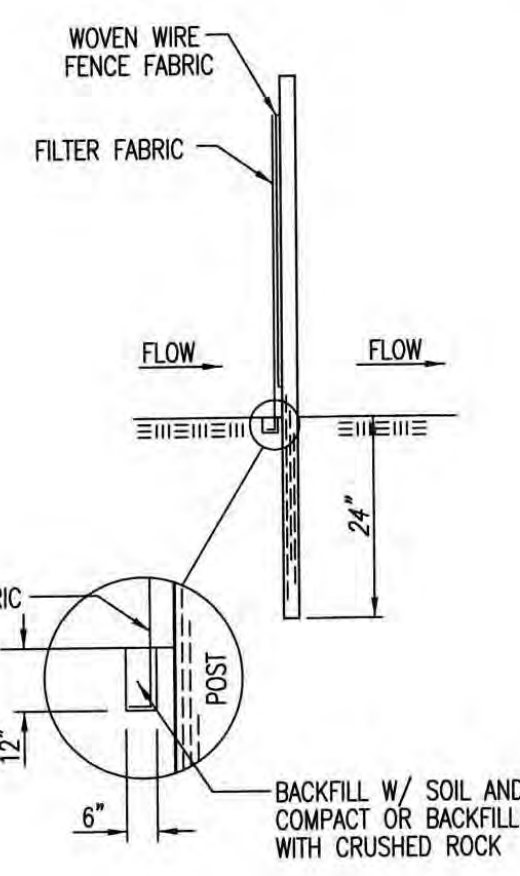
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

WATER SHOULD FLOW THROUGH A SILT FENCE DITCH CHECK—NOT OVER IT. PLACE SILT FENCE IN DITCHES WHERE IT IS UNLIKELY THAT IT WILL BE OVERTOPPED. SILT FENCE INSTALLATIONS QUICKLY DETERIORATE WHEN WATER OVERTOPS THEM. DO NOT PLACE SILT FENCE POSTS ON THE UPSTREAM SIDE OF THE SILT FENCE FABRIC. IN THIS CONFIGURATION, THE FORCE OF THE WATER IS NOT RESTRICTED BY THE POSTS, BUT ONLY BY THE STAPLES (WIRE, ZIP TIES, NAILS, ETC.). THE SILT FENCE WILL RIP AND FAIL. DO NOT PLACE A SILT FENCE DITCH CHECK DIRECTLY IN FRONT OF A CULVERT OUTLET. IT WILL NOT STAND UP TO THE CONCENTRATED FLOW. DO NOT PLACE SILT FENCE DITCH CHECKS IN DITCHES THAT WILL LIKELY EXPERIENCE HIGH FLOWS. THEY WILL NOT STAND UP TO CONCENTRATED FLOW. FOLLOW PRESCRIBED DITCH CHECK SPACING GUIDELINES. IF SPACING GUIDELINES ARE EXCEEDED, EROSION WILL OCCUR BETWEEN THE DITCH CHECKS. DO NOT ALLOW WATER TO FLOW AROUND THE DITCH CHECK. MAKE SURE THAT THE DITCH CHECK IS LONG ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE FENCE IS HIGHER THAN THE LOW POINT ON THE TOP OF THE FENCE. DO NOT PLACE SILT FENCE DITCH CHECKS IN CHANNELS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE CHECK IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT.

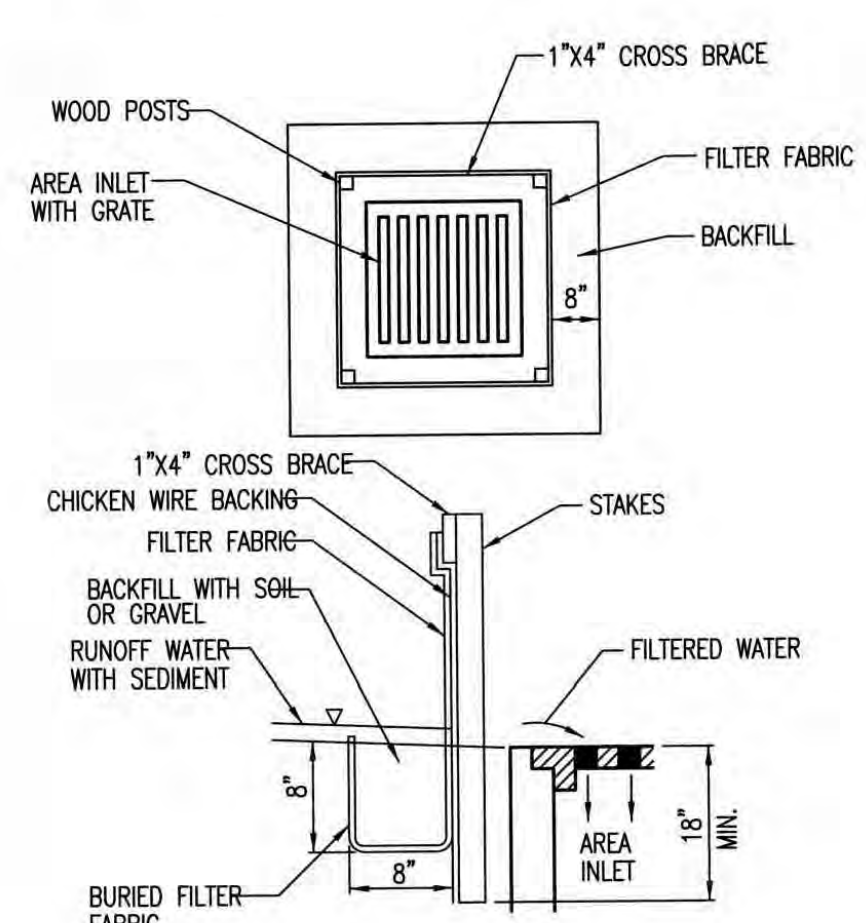
INSPECTION AND MAINTENANCE:

SILT FENCE DITCH CHECKS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- DOES WATER FLOW AROUND THE DITCH CHECK?
- DOES WATER FLOW UNDER THE DITCH CHECK?
- DOES THE SILT FENCE SAG EXCESSIVELY?
- HAS THE SILT FENCE TORN OR BECOME DETACHED FROM THE POSTS?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE DITCH CHECK?



ANCHOR TRENCH DETAIL



SILT FENCE BARRIERS FOR AREA INLETS (INLET PROTECTION)

MATERIAL SPECIFICATION:

SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION. THE WIRE OR POLYMERIC MESH BACKING USED TO HELP SUPPORT THE SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION. THE POSTS USED TO SUPPORT THE SILT FENCE FABRIC SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4" LONG. THE MATERIAL USED TO FRAME THE TOPS OF THE POSTS SHOULD BE 1" BY 4" BOARDS. SILT FENCE FABRIC AND SUPPORT BACKING SHOULD BE ATTACHED TO THE WOODEN POSTS AND FRAME WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

PLACEMENT:

PLACE A SILT FENCE DROP INLET BARRIER IN A LOCATION WHERE IT IS UNLIKELY TO BE OVERTOPPED. WATER SHOULD FLOW THROUGH SILT FENCE, NOT OVER IT. SILT FENCE BARRIERS FOR AREA INLETS OFTEN FAIL WHEN REPEATEDLY OVERTOPPED. WHEN USED AS A BARRIER FOR AREA INLETS, SILT FENCE FABRIC AND POSTS MUST BE SUPPORTED AT THE TOP BY A WOODEN FRAME. WHEN A SILT FENCE BARRIER FOR AREA INLETS IS LOCATED NEAR AN INLET THAT HAS STEEP APPROACH SLOPES, THE STORAGE CAPACITY BEHIND THE BARRIER IS DRASTICALLY REDUCED. TIMELY REMOVAL OF SEDIMENT MUST OCCUR FOR A BARRIER TO OPERATE PROPERLY IN THIS LOCATION.

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH AROUND THE PERIMETER OF THE AREA INLET THAT IS AT LEAST 8" DEEP BY 8" WIDE. DRIVE POSTS TO A DEPTH OF AT LEAST 18" AROUND THE PERIMETER OF THE AREA INLET. THE DISTANCE BETWEEN POSTS SHOULD BE 4' OR LESS. IF THE DISTANCE BETWEEN TWO ADJACENT CORNER POSTS IS MORE THAN 4', ADD ANOTHER POST(S) BETWEEN THEM. CONNECT THE TOPS OF ALL THE POSTS WITH A WOODEN FRAME MADE OF 1" BY 4" BOARDS. USE NAILS OR SCREWS FOR FASTENING. ATTACH THE WIRE OR POLYMERIC-MESH BACKING TO THE OUTSIDE OF THE POST/FRAME STRUCTURE WITH STAPLES, WIRE, ZIP TIES, OR NAILS. ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC LONG ENOUGH TO WRAP AROUND THE PERIMETER OF THE AREA INLET. ADD MORE LENGTH FOR OVERLAPPING THE FABRIC JOINT. PLACE THE EDGE OF THE FABRIC IN THE TRENCH, STARTING AT THE OUTSIDE EDGE OF THE TRENCH. LINE ALL THREE SIDES OF THE TRENCH WITH THE FABRIC. BACKFILL OVER THE FABRIC IN THE TRENCH WITH THE EXCAVATED SOIL AND COMPACT. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT FENCE FABRIC SHOULD REMAIN EXPOSED. ATTACH THE SILT FENCE TO THE OUTSIDE OF THE POST/FRAME STRUCTURE WITH STAPLES, WIRE, ZIP TIES, OR NAILS. THE JOINT SHOULD BE OVERLAPPED TO THE NEXT POST.

NOTE: WHEN A SILT FENCE BARRIER FOR AREA INLET IS PLACED IN A SHALLOW MEDIAN DITCH, MAKE SURE THAT THE TOP OF THE BARRIER IS NOT HIGHER THAN THE PAVED ROAD. IN THIS CONFIGURATION, WATER MAY SPREAD ONTO THE ROADWAY CAUSING A HAZARDOUS CONDITION.

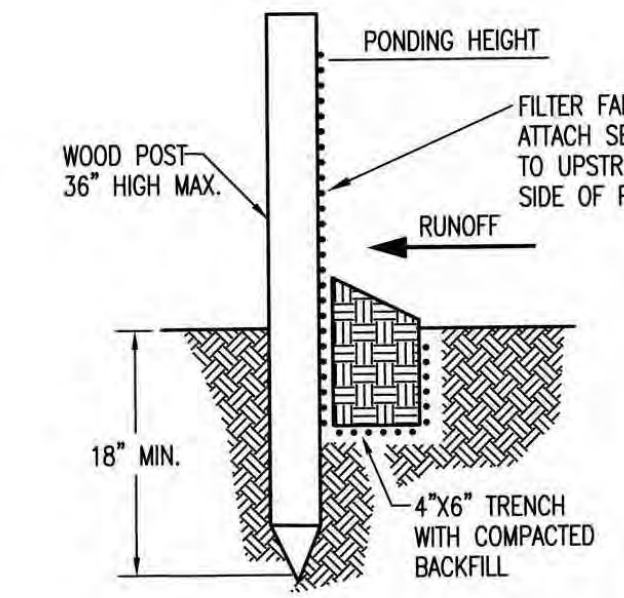
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

WATER SHOULD FLOW THROUGH A SILT FENCE BARRIER FOR AREA INLET—NOT OVER IT. PLACE A SILT FENCE BARRIER FOR AREA INLET IN A LOCATION WHERE IT IS UNLIKELY TO BE OVERTOPPED. SILT FENCE BARRIERS FOR AREA INLETS OFTEN FAIL WHEN REPEATEDLY OVERTOPPED. DO NOT PLACE POSTS ON THE OUTSIDE OF THE SILT FENCE BARRIER FOR AREA INLET. IN THIS CONFIGURATION, THE FORCE OF THE WATER IS NOT RESTRICTED BY THE POSTS, BUT ONLY BY THE STAPLES (WIRE, ZIP TIES, NAILS, ETC.). THE SILT FENCE WILL RIP AND FAIL. DO NOT INSTALL SILT FENCE BARRIER FOR AREA INLETS WITHOUT FRAMING THE TOP OF THE POSTS. THE CORNER POSTS AROUND AREA INLETS ARE STRESSED IN TWO DIRECTIONS WHEREAS A NORMAL SILT FENCE IS ONLY STRESSED IN ONE DIRECTION. THIS ADDED STRESS REQUIRES MORE SUPPORT.

INSPECTION AND MAINTENANCE:

SILT FENCE BARRIER FOR AREA INLETS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- DOES WATER FLOW UNDER THE SILT FENCE?
- DOES THE SILT FENCE SAG EXCESSIVELY?
- HAS THE SILT FENCE TORN OR BECOME DETACHED FROM THE POSTS?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE AREA INLET BARRIER?



SILT FENCE BARRIERS

MATERIAL SPECIFICATION:

SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION. THE POSTS USED TO SUPPORT THE SILT FENCE FABRIC SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4" LONG. SILT FENCE FABRIC SHOULD BE ATTACHED TO THE WOODEN POSTS WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

PLACEMENT:

A SLOPE BARRIER SHOULD BE USED AT THE TOE OF A SLOPE WHEN A DITCH DOES NOT EXIST. THE SLOPE BARRIER SHOULD BE PLACED ON NEARLY LEVEL GROUND 5' TO 10' AWAY FROM THE TOE OF A SLOPE. THE BARRIER IS PLACED AWAY FROM THE TOE OF THE SLOPE TO PROVIDE ADEQUATE STORAGE FOR SETTLING OUT SEDIMENT. WHEN PRACTICABLE, SILT FENCE SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. SILT FENCE SLOPE BARRIERS CAN ALSO BE PLACED ALONG RIGHT-OF-WAY FENCE LINES TO KEEP SEDIMENT FROM CROSSING ONTO ADJACENT PROPERTY. WHEN PLACED IN THIS MANNER, THE SLOPE BARRIER WILL NOT LIKELY FOLLOW CONTOURS.

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH THE LENGTH OF THE PLANNED SLOPE BARRIER THAT IS 6" DEEP BY 4" WIDE. MAKE SURE THAT THE TRENCH IS EXCAVATED ALONG A SINGLE CONTOUR. WHEN PRACTICABLE, SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. PLACE THE SOIL ON THE UPSLOPE SIDE OF THE TRENCH FOR LATER USE. ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC ON THE DOWNSLOPE SIDE OF THE TRENCH. PLACE THE EDGE OF THE FABRIC IN THE TRENCH STARTING AT THE TOP UPSLOPE EDGE. LINE ALL THREE SIDES OF THE TRENCH WITH THE FABRIC. BACKFILL OVER THE FABRIC IN THE TRENCH WITH THE EXCAVATED SOIL AND COMPACT. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT-FENCE FABRIC SHOULD REMAIN EXPOSED. LAY THE EXPOSED SILT FENCE UPSLOPE OF THE TRENCH TO CLEAR AN AREA FOR DRIVING IN THE POSTS. JUST DOWNSLOPE OF THE TRENCH, DRIVE POSTS INTO THE GROUND TO A DEPTH OF AT LEAST 18". PLACE POSTS NO MORE THAN 4' APART. ATTACH THE SILT FENCE TO THE ANCHORED POST WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

WHEN PRACTICABLE, DO NOT PLACE SILT FENCE SLOPE BARRIERS ACROSS CONTOURS. SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. WHEN THE FLOW CONCENTRATES, IT OVERTOPS THE BARRIER AND THE SILT FENCE SLOPE BARRIER QUICKLY DETERIORATES. DO NOT PLACE SILT-FENCE POSTS ON THE UPSLOPE SIDE OF THE SILT FENCE FABRIC. IN THIS CONFIGURATION, THE FORCE OF THE WATER IS NOT RESTRICTED BY THE POSTS, BUT ONLY BY THE STAPLES (WIRE, ZIP TIES, NAILS, ETC.). THE SILT FENCE WILL RIP AND FAIL. DO NOT PLACE SILT FENCE SLOPE BARRIERS IN AREAS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE BARRIER IS NOT SUFFICIENTLY ANCHORED, IT WILL WASH OUT. SILT FENCE SLOPE BARRIERS MUST BE DUG INTO THE GROUND—SILT FENCE AT GROUND LEVEL DOES NOT WORK BECAUSE WATER WILL FLOW UNDERNEATH.

INSPECTION AND MAINTENANCE:

SILT FENCE SLOPE BARRIERS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

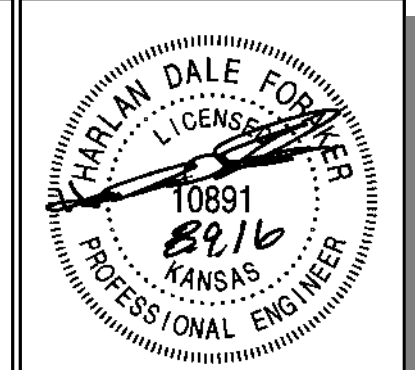
- ARE THERE ANY POINTS ALONG THE SLOPE BARRIER WHERE WATER IS CONCENTRATING?
- DOES WATER FLOW UNDER THE SLOPE BARRIER?
- DO THE SILT FENCES SAG EXCESSIVELY?
- HAS THE SILT FENCE TORN OR BECOME DETACHED FROM THE POSTS?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE SLOPE BARRIER?

REVISION DATE: MAY 2013

SILT FENCE DITCH CHECK AND BARRIER DETAILS

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET



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HARRY & OLIVER
WICHITA, KS

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DRAWN BY:
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REV	DATE	DESCRIPTION

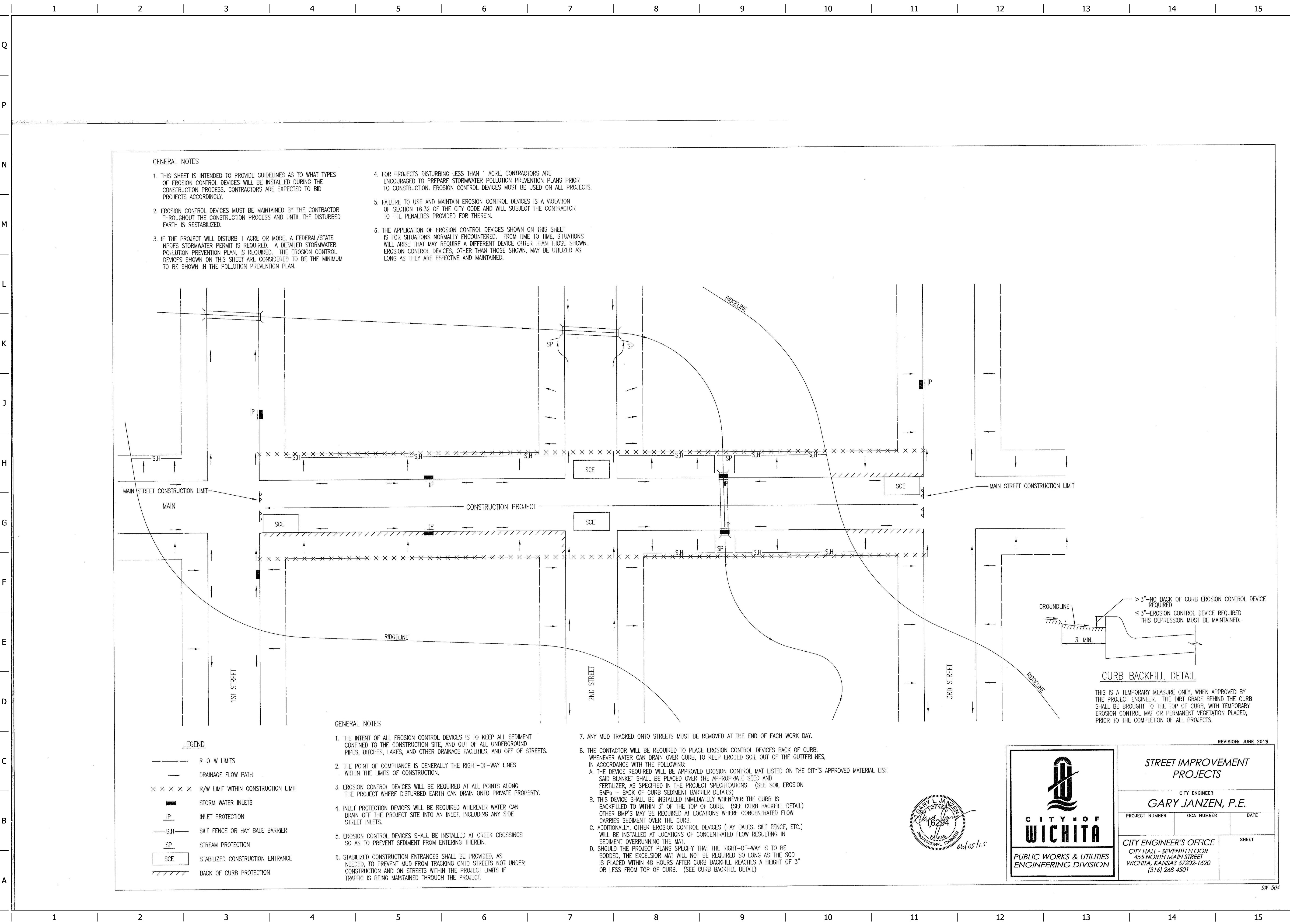
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SHEET TITLE:
EROSION CONTROL DETAILS
2

SHEET NUMBER:
18

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GENERAL NOTES

1. THIS SHEET IS INTENDED TO PROVIDE GUIDELINES AS TO WHAT TYPES OF EROSION CONTROL DEVICES WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS. CONTRACTORS ARE EXPECTED TO BID PROJECTS ACCORDINGLY.
2. EROSION CONTROL DEVICES MUST BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PROCESS AND UNTIL THE DISTURBED EARTH IS RESTABILIZED.
3. IF THE PROJECT WILL DISTURB 1 ACRE OR MORE, A FEDERAL/STATE NPDES STORMWATER PERMIT IS REQUIRED. A DETAILED STORMWATER POLLUTION PREVENTION PLAN, IS REQUIRED. THE EROSION CONTROL DEVICES SHOWN ON THIS SHEET ARE CONSIDERED TO BE THE MINIMUM TO BE SHOWN IN THE POLLUTION PREVENTION PLAN.

4. FOR PROJECTS DISTURBING LESS THAN 1 ACRE, CONTRACTORS ARE ENCOURAGED TO PREPARE STORMWATER POLLUTION PREVENTION PLANS PRIOR TO CONSTRUCTION. EROSION CONTROL DEVICES MUST BE USED ON ALL PROJECTS.
5. FAILURE TO USE AND MAINTAIN EROSION CONTROL DEVICES IS A VIOLATION OF SECTION 16.32 OF THE CITY CODE AND WILL SUBJECT THE CONTRACTOR TO THE PENALTIES PROVIDED FOR THEREIN.
6. THE APPLICATION OF EROSION CONTROL DEVICES SHOWN ON THIS SHEET IS FOR SITUATIONS NORMALLY ENCOUNTERED. FROM TIME TO TIME, SITUATIONS WILL ARISE THAT MAY REQUIRE A DIFFERENT DEVICE OTHER THAN THOSE SHOWN. EROSION CONTROL DEVICES, OTHER THAN THOSE SHOWN, MAY BE UTILIZED AS LONG AS THEY ARE EFFECTIVE AND MAINTAINED.

LEGEND

- R-O-W LIMITS
- DRAINAGE FLOW PATH
- × × × × R/W LIMIT WITHIN CONSTRUCTION LIMIT
- STORM WATER INLETS
- IP INLET PROTECTION
- S.H. SILT FENCE OR HAY BALE BARRIER
- S.P. STREAM PROTECTION
- SCE STABILIZED CONSTRUCTION ENTRANCE
- /// BACK OF CURB PROTECTION

GENERAL NOTES

1. THE INTENT OF ALL EROSION CONTROL DEVICES IS TO KEEP ALL SEDIMENT CONFINED TO THE CONSTRUCTION SITE, AND OUT OF ALL UNDERGROUND PIPES, DITCHES, LAKES, AND OTHER DRAINAGE FACILITIES, AND OFF OF STREETS.
2. THE POINT OF COMPLIANCE IS GENERALLY THE RIGHT-OF-WAY LIMITS WITHIN THE LIMITS OF CONSTRUCTION.
3. EROSION CONTROL DEVICES WILL BE REQUIRED AT ALL POINTS ALONG THE PROJECT WHERE DISTURBED EARTH CAN DRAIN ONTO PRIVATE PROPERTY.
4. INLET PROTECTION DEVICES WILL BE REQUIRED WHEREVER WATER CAN DRAIN OFF THE PROJECT SITE INTO AN INLET, INCLUDING ANY SIDE STREET INLETS.
5. EROSION CONTROL DEVICES SHALL BE INSTALLED AT CREEK CROSSINGS SO AS TO PREVENT SEDIMENT FROM ENTERING THEREIN.
6. STABILIZED CONSTRUCTION ENTRANCES SHALL BE PROVIDED, AS NEEDED, TO PREVENT MUD FROM TRACKING ONTO STREETS NOT UNDER CONSTRUCTION AND ON STREETS WITHIN THE PROJECT LIMITS IF TRAFFIC IS BEING MAINTAINED THROUGH THE PROJECT.

7. ANY MUD TRACKED ONTO STREETS MUST BE REMOVED AT THE END OF EACH WORK DAY.
8. THE CONTRACTOR WILL BE REQUIRED TO PLACE EROSION CONTROL DEVICES BACK OF CURB, WHENEVER WATER CAN DRAIN OVER CURB, TO KEEP ERODED SOIL OUT OF THE GUTTERLINES, IN ACCORDANCE WITH THE FOLLOWING:
 - A. THE DEVICE REQUIRED WILL BE APPROVED EROSION CONTROL MAT LISTED ON THE CITY'S APPROVED MATERIAL LIST. SAID BLANKET SHALL BE PLACED OVER THE APPROPRIATE SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS. (SEE SOIL EROSION BMPs - BACK OF CURB SEDIMENT BARRIER DETAILS)
 - B. THIS DEVICE SHALL BE INSTALLED IMMEDIATELY WHENEVER THE CURB IS BACKFILLED TO WITHIN 3" OF THE TOP OF CURB. (SEE CURB BACKFILL DETAIL)
 - C. ADDITIONALLY, OTHER EROSION CONTROL DEVICES (HAY BALES, SILT FENCE, ETC.) WILL BE INSTALLED AT LOCATIONS OF CONCENTRATED FLOW RESULTING IN SEDIMENT OVERRUNNING THE MAT.
 - D. SHOULD THE PROJECT PLANS SPECIFY THAT THE RIGHT-OF-WAY IS TO BE SODDED, THE EXCELSIOR MAT WILL NOT BE REQUIRED SO LONG AS THE SOD IS PLACED WITHIN 48 HOURS AFTER CURB BACKFILL REACHES A HEIGHT OF 3" OR LESS FROM TOP OF CURB. (SEE CURB BACKFILL DETAIL)

CITY OF WICHITA

PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

REVISION: JUNE 2015

STREET IMPROVEMENT PROJECTS

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE

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GARY L. JANZEN
LICENSED PROFESSIONAL ENGINEER
KANSAS
16284
06/05/15

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QuikTrip No. 0329R

HARRY & OLIVER
WICHITA, KS

QT

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REVIEWED BY:

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EROSION CONTROL DETAILS

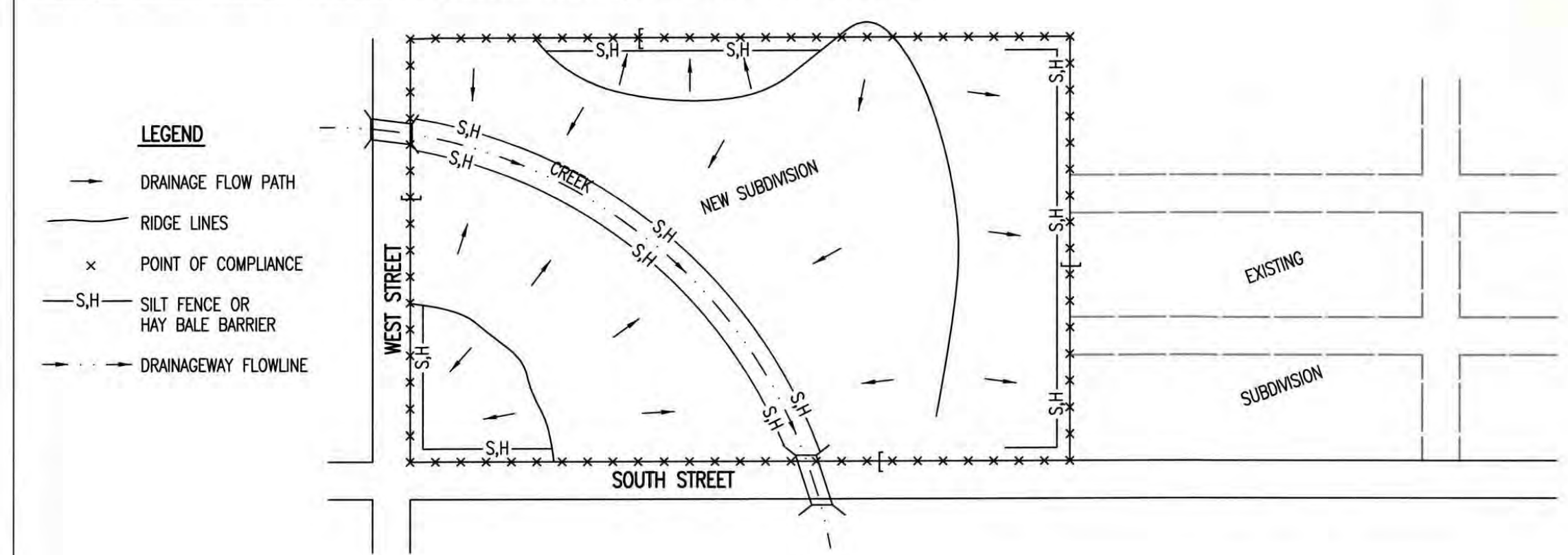
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ORIGINAL ISSUE DATE:

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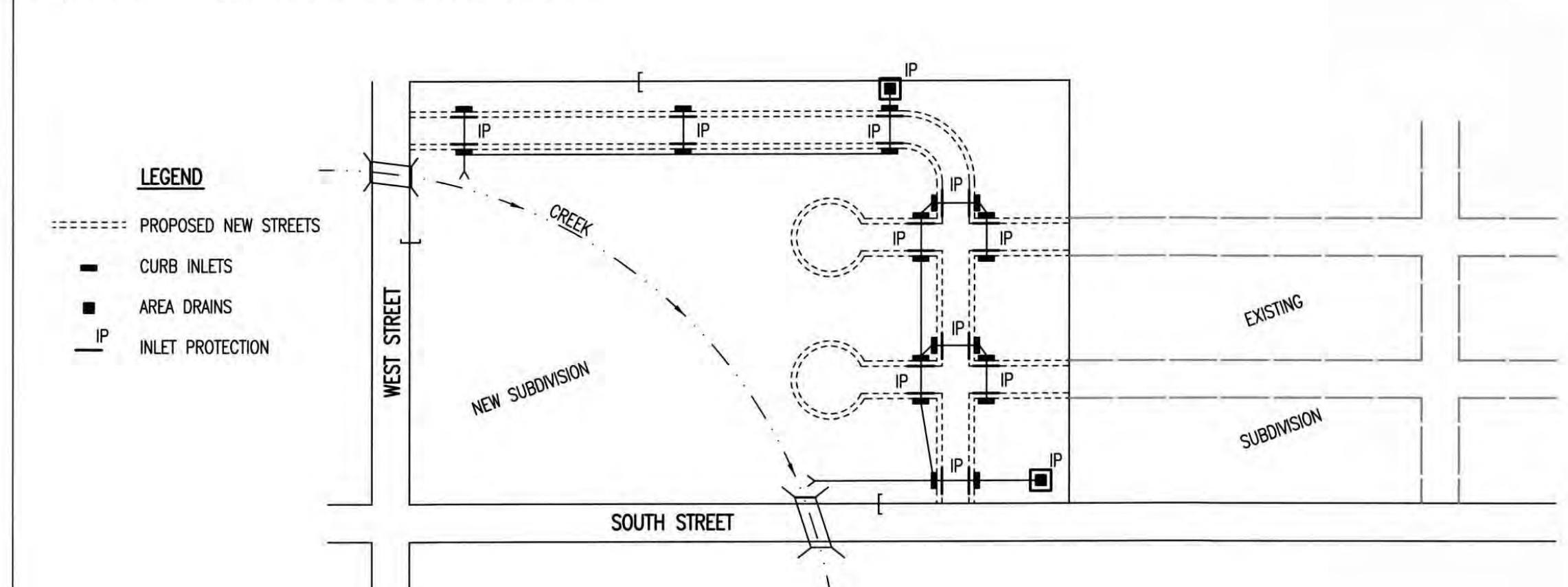
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PHASE 1 - INITIAL EARTHWORK AND UTILITIES (EXCEPT STORM SEWER)



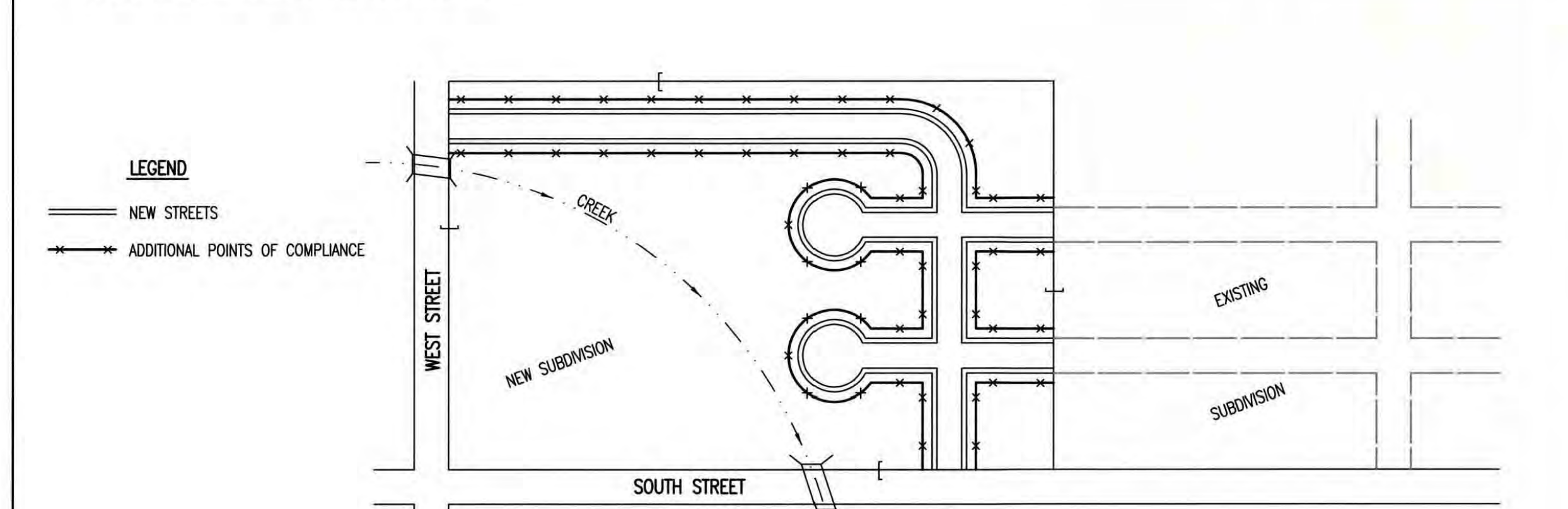
- LEGEND**
- DRAINAGE FLOW PATH
 - RIDGE LINES
 - x POINT OF COMPLIANCE
 - S.H. SILT FENCE OR HAY BALE BARRIER
 - DRAINAGEWAY FLOWLINE
- DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, THE POINTS OF COMPLIANCE ARE THE PERIMETER BOUNDARIES AND ANY DRAINAGE WAYS OR STORM SEWERS DRAINING THROUGH OR FROM THE SITE. SHOULD LAKES BE CONSTRUCTED WITHIN THE SUBDIVISION THAT WILL DISCHARGE DURING STORMS, THEY ARE ALSO A POINT OF COMPLIANCE.
 - HAY BALES OR SILT FENCE MUST BE CONSTRUCTED ALONG THE PROPERTY LINE WHERE ON SITE WATER CAN DRAIN OFF THE PROPERTY. THESE EROSION CONTROL DEVICES WILL ALSO BE INSTALLED ALONG ANY DRAINAGE DITCH OR LAKE THAT CAN DISCHARGE.
 - SHOULD SILT OR SEDIMENT ENTER THE DITCHES OR STREETS ON THE ADJACENT BOUNDARY STREETS, APPROPRIATE EROSION CONTROL DEVICES WILL BE PLACED WITHIN THE SUBDIVISION TO PREVENT THIS.
 - ANY MUD TRACKED ONTO ADJACENT STREETS WILL BE REMOVED WITHIN 48 HOURS OR BY FRIDAY AT 6:00 PM, WHICHEVER IS EARLIER.
 - CONTRACTORS WORKING WITHIN THE SITE WILL NOT BE REQUIRED TO USE INDIVIDUAL EROSION CONTROL DEVICES AS LONG AS THOSE SPECIFIED ABOVE ARE IN PLACE AND EFFECTIVE. CONTRACTORS WORKING ON THE BOUNDARY LINE STREETS OR ON ADJACENT PROPERTIES TO EXTEND UTILITIES ARE EXPECTED TO USE EROSION CONTROL DEVICES AT THEIR WORK LOCATIONS, AS NEEDED.
 - UTILIZE STABILIZED CONSTRUCTION ENTRANCE AT ENTRANCE AND EXIT ONTO ANY EXISTING PUBLIC STREETS.
 - IF THE INITIAL EARTH WORK AND UTILITIES ARE DONE AS PART OF A PUBLIC IMPROVEMENT PROJECT, THESE EROSION CONTROL DEVICES WILL BE INSTALLED BY THE CONTRACTOR AS SPECIFIED IN THE INDIVIDUAL PROJECT CONTRACTS. THE CONTRACTOR WILL MAINTAIN THE DEVICES UNTIL COMPLETION OF THE CONTRACT, AT WHICH TIME THE DEVELOPER WILL ASSUME MAINTENANCE RESPONSIBILITIES. IF THESE CONTRACTS ARE NOT PUBLIC IMPROVEMENT PROJECTS, THE DEVELOPER WILL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THESE DEVICES.
 - WITHIN 14 DAYS OF COMPLETION OF EARTHWORK ACTIVITIES IN ANY GIVEN AREA, THAT AREA SHALL BE TEMPORARILY OR PERMANENTLY SEEDED AND MULCHED.

PHASE 2 - INSTALLATION OF STORM SEWER



- LEGEND**
- PROPOSED NEW STREETS
 - CURB INLETS
 - AREA DRAINS
 - IP INLET PROTECTION
- DURING THIS PHASE OF SUBDIVISION DEVELOPMENT, ALL EROSION CONTROL DEVICES REQUIRED IN PHASE 1 SHALL REMAIN IN PLACE AND BE MAINTAINED.
 - AS NEW STORM SEWERS, WITH INLETS, ARE INSTALLED, THE STORM SEWERS MUST NOW BE PROTECTED SO ALL NEW INLETS BECOME POINTS OF COMPLIANCE.
 - AREA DRAINS - AS SOON AS WATER CAN FLOW INTO THESE DRAINS, HAY BALE OR SILT FENCE PROTECTION WILL BE INSTALLED AROUND THEM.
 - CURB OPENING INLETS - AS SOON AS WATER CAN FLOW INTO THESE DRAINS, INLET PROTECTION DEVICES MUST BE INSTALLED. IF WATER CANNOT FLOW INTO CURB INLETS UNTIL STREET CONSTRUCTION IS COMPLETE, THEN STREET CONTRACTOR WILL INSTALL INLET PROTECTION. SEE PHASE 3 - STREET CONSTRUCTION.
 - THE STORM SEWER CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING THESE DEVICES.
 - THE SUBDIVISION DEVELOPER WILL MAINTAIN THESE EROSION CONTROL DEVICES ONCE INSTALLED.
 - ALL DISTURBED GROUND WILL BE FINAL GRADED AND TEMPORARILY OR PERMANENTLY SEEDED WITHIN 14 DAYS IF COMPLETION OF WORK IN ANY GIVEN PART OF THE SUBDIVISION.
 - ONCE ALL DISTURBED GROUND DRAINING TO AN INLET HAS BEEN RE-STABILIZED WITH GRASS OR SOD, THE SUBDIVISION DEVELOPER WILL BE RESPONSIBLE FOR PERMANENTLY REMOVING THE INLET PROTECTION.

PHASE 3 - STREET CONSTRUCTION

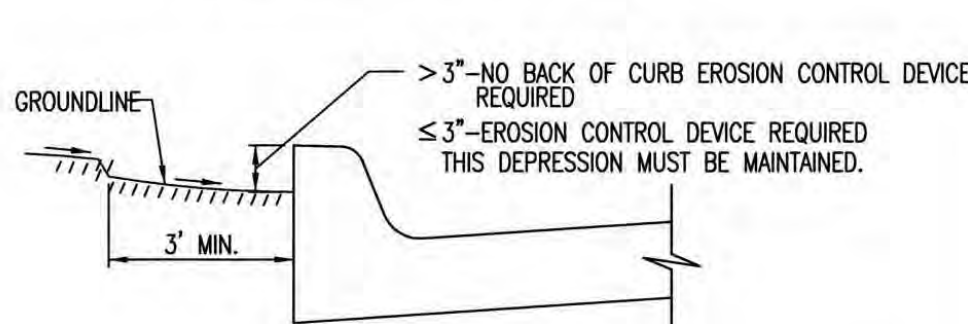


- LEGEND**
- NEW STREETS
 - x ADDITIONAL POINTS OF COMPLIANCE
- DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, NEW STREETS ARE INSTALLED. ALL EROSION CONTROL DEVICES INSTALLED DURING PHASE 1 AND 2 MUST STILL BE MAINTAINED. THE POINT OF COMPLIANCE NOW SHIFTS TO THE BACK OF CURB ALONG EACH STREET.
 - CURB OPENING INLET PROTECTION:
 - A. SUMP AREAS - INLET PROTECTION SHALL BE PROVIDED WHEN STREET SUBGRADE WORK IS COMPLETED.
 - B. NON-SUMP LOCATIONS - PROVIDE INLET PROTECTION AS SOON AS BASE COURSE ASPHALT IS INSTALLED, BEFORE THE SURFACE COURSE LIFT.
 - EROSION CONTROL DEVICES WILL BE REQUIRED BACK OF CURB WHEREVER WATER CAN FLOW OVER THE CURB AND THE CURB HAS BEEN BACKFILLED TO WITHIN 3" OR LESS OF THE TOP OF CURB (SEE CURB BACKFILL DETAIL). FOR CURBS NOT YET ENTIRELY BACKFILLED (3" OR MORE BELOW TOP OF CURB), ADDITIONAL DEVICES WILL BE REQUIRED AT POINTS WHERE WATER BREAKS OVER CURB WHICH COULD RESULT IN THE PLACEMENT OF SEDIMENT IN THE GUTTER.
 - SEE DETAIL SHEET FOR BACK OF CURB PROTECTION.
 - THE BACK OF CURB PROTECTION SPECIFIED ON THIS PLAN MAY HAVE TO BE SUPPLEMENTED WITH HAY BALE OR SILT FENCE EROSION CONTROL DEVICES AT LOCATIONS WHERE CONCENTRATED FLOW RESULTS IN SEDIMENT BEING CARRIED OVER THE EXCELSIOR MATS.
 - THE STREET CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING BACK OF CURB EROSION CONTROL DEVICES.
 - THE INDIVIDUAL LOT OWNERS WILL BE RESPONSIBLE FOR MAINTAINING THE BACK OF CURB EROSION CONTROL DEVICES IN FRONT OF THEIR LOTS UNTIL SUCH TIME AS ADJACENT DISTURBED EARTH IS STABILIZED WITH GRASS OR SOD.

GENERAL NOTES

- THE INTENT OF ALL EROSION CONTROL DEVICES IS TO PREVENT ERODED SOIL FROM ENTERING DITCHES, STORM SEWERS, LAKES, STREETS OR ANY OTHER DRAINAGE FEATURE.
- THIS SHEET IS INTENDED TO PROVIDE GUIDELINES AS TO WHAT TYPE OF EROSION CONTROL DEVICES WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS. CONTRACTORS ARE EXPECTED TO BID PROJECTS ACCORDINGLY.
- EROSION CONTROL DEVICES SHALL BE MAINTAINED DURING THE CONSTRUCTION PROCESS TO REMAIN EFFECTIVE. MAINTENANCE SHALL BE AS INDICATED ON SOIL EROSION BMP'S DETAIL SHEETS.
- PERSONS DESTROYING EROSION CONTROL DEVICES SHALL BE RESPONSIBLE FOR IMMEDIATELY REPAIRING THEM OR INSTALLING SUITABLE REPLACEMENT DEVICES.
- THE DEVELOPMENT OF ANY SUBDIVISION THAT DISTURBS 1 ACRE OR MORE WILL REQUIRE A FEDERAL/STATE NPDES STORMWATER PERMIT. THE PREPARATION OF A STORMWATER POLLUTION PREVENTION PLAN IS REQUIRED. EROSION CONTROL DEVICES ARE REQUIRED. THE DETAILS SHOWN ON THIS SHEET ARE THE MINIMUM STANDARDS TO BE SHOWN ON POLLUTION PREVENTION PLANS.
- FOR SUBDIVISIONS SMALLER THAN 1 ACRE, SOIL EROSION DEVICES ARE REQUIRED. ALSO, DEVELOPERS AND CONTRACTORS ARE ENCOURAGED TO DEVELOP POLLUTION PREVENTION PLANS FOR EACH PROJECT PRIOR TO CONSTRUCTION.
- FAILURE TO USE AND MAINTAIN SOIL EROSION DEVICES IS A VIOLATION OF SECTION 16.32 OF THE CITY CODE AND WILL SUBJECT THE SUBDIVISION DEVELOPER AND CONTRACTORS TO THE PENALTIES PROVIDED THEREIN.
- THE APPLICATION OF EROSION CONTROL DEVICES SHOWN ON THIS SHEET IS FOR SITUATIONS NORMALLY ENCOUNTERED. FROM TIME TO TIME, SITUATIONS WILL ARISE THAT MAY REQUIRE DEVICES OTHER THAN THAT SHOWN. EROSION CONTROL DEVICES, OTHER THAN THOSE SHOWN, MAY BE UTILIZED SO LONG AS THEY ARE EFFECTIVE AND MAINTAINED.
- A STABILIZED EARTH SURFACE IS DEFINED AS ONE THAT IS HARD SURFACED WITH CONCRETE, ASPHALT, OR THE LIKE, OR ONE ON WHICH 70% OF THE GRASS HAS GERMINATED ON THE ENTIRE SURFACE.

SEE DETAIL SHEET FOR BACK OF CURB PROTECTION DETAIL



CURB BACKFILL DETAIL (STREET CONSTRUCTION ONLY)

THIS IS A TEMPORARY MEASURE ONLY, WHEN APPROVED BY THE PROJECT ENGINEER. THE DIRT GRADE BEHIND THE CURB SHALL BE BROUGHT TO THE TOP OF CURB, WITH TEMPORARY EROSION CONTROL MAT OR PERMANENT VEGETATION PLACED, PRIOR TO THE COMPLETION OF ALL PROJECTS.

REVISION DATE: MAY 2013

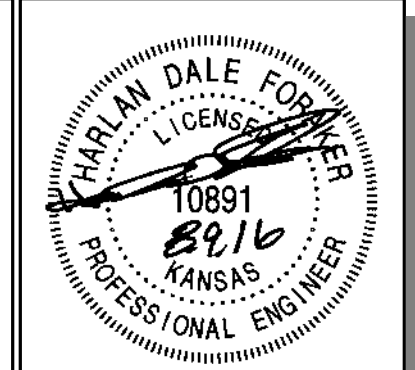
SUBDIVISION DEVELOPMENT PROCESS

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE

CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
453 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

SHEET



PROJECT NO.: 20152242

CEED

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QuikTrip No. 0329R

HARRY & OLIVER
WICHITA, KS



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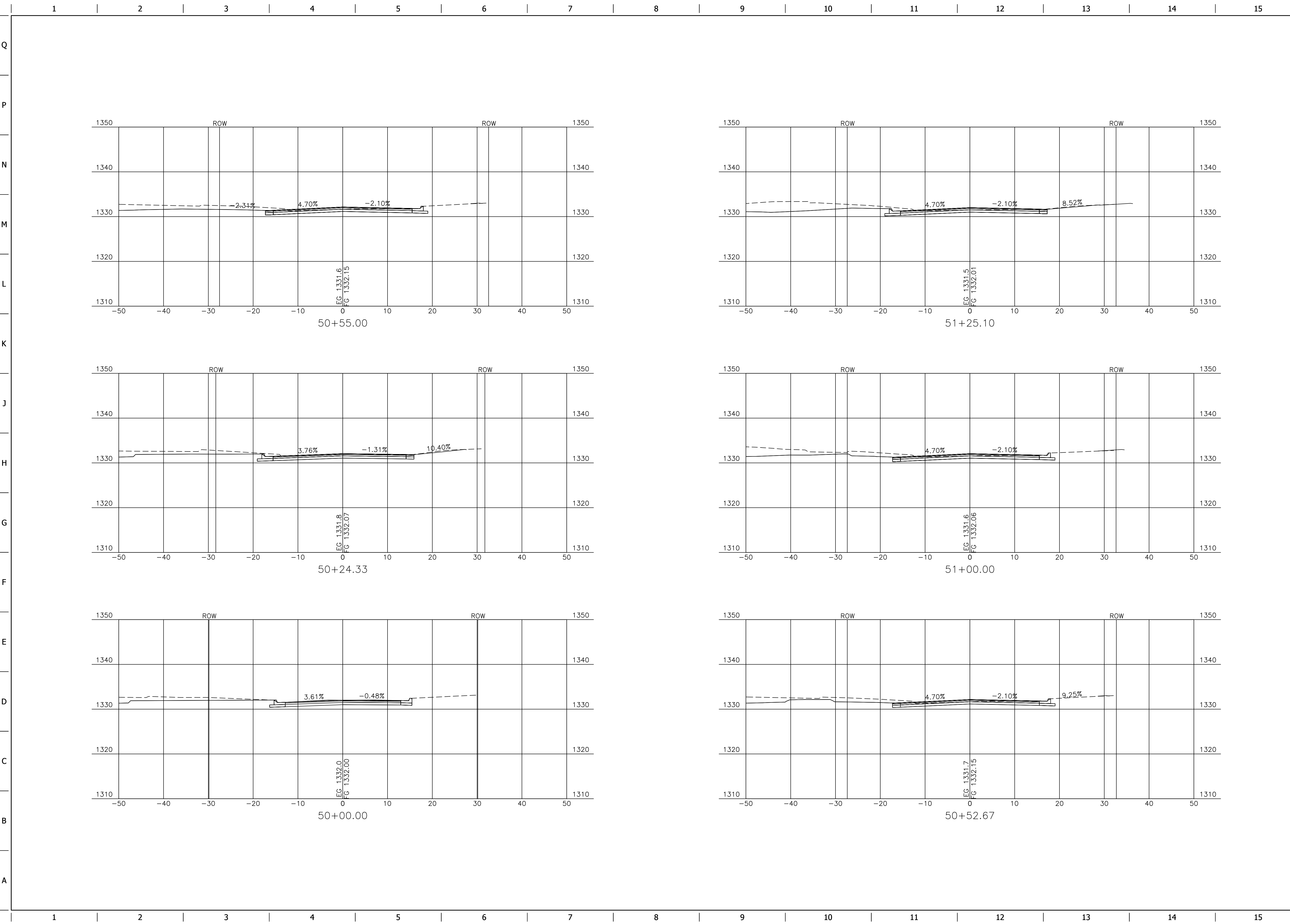
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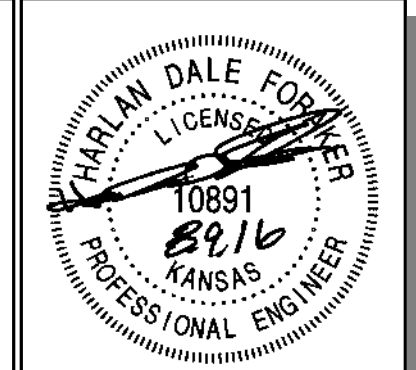
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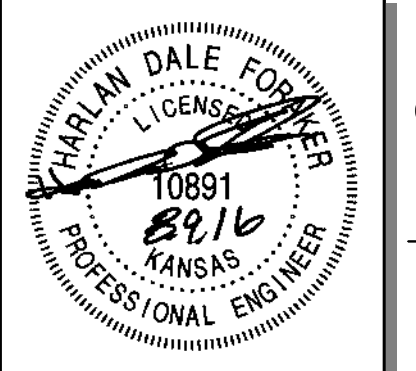
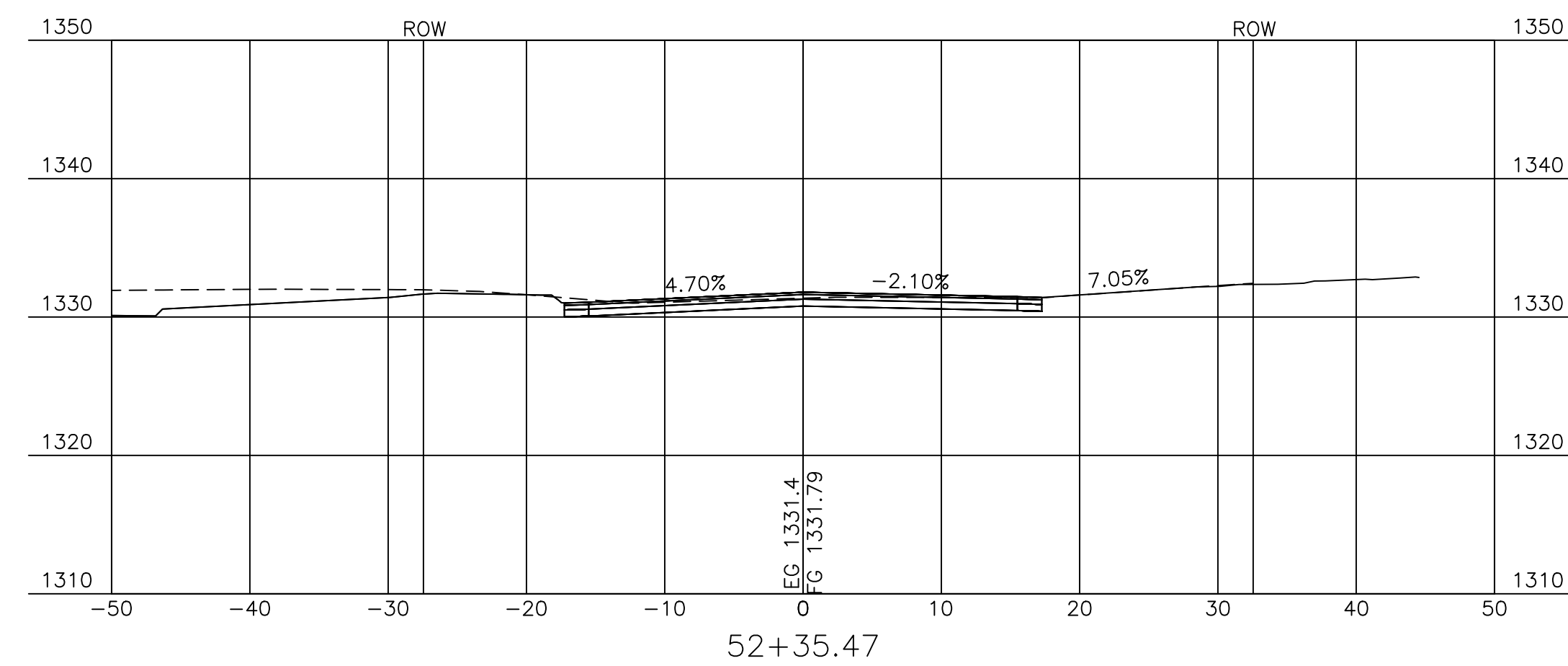
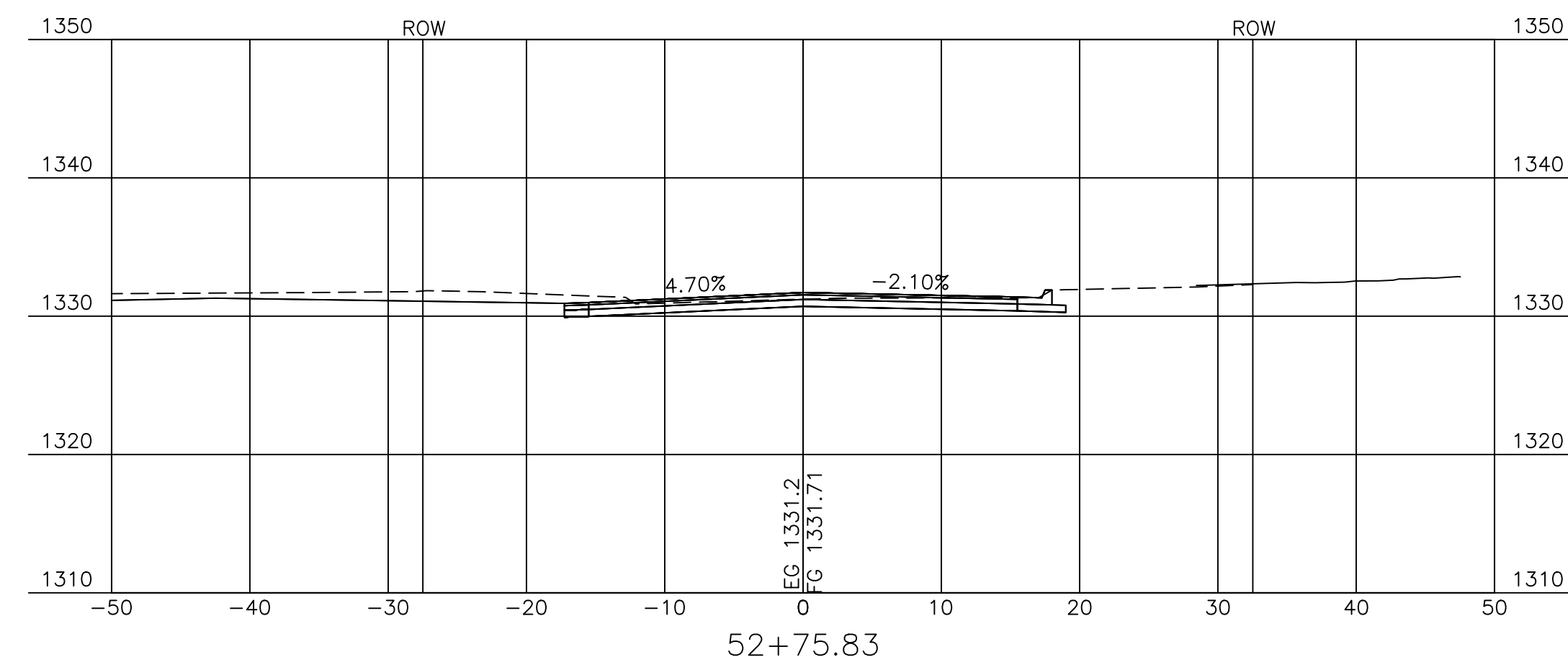
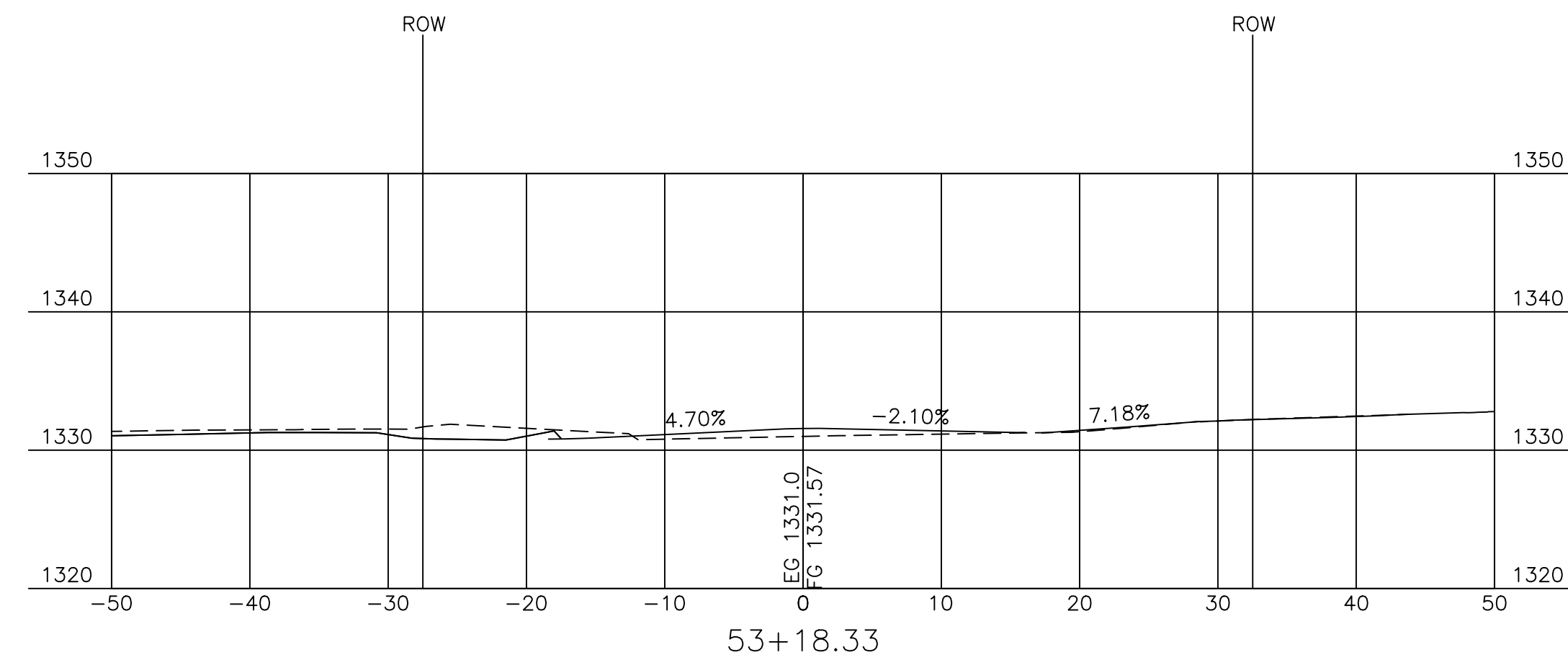
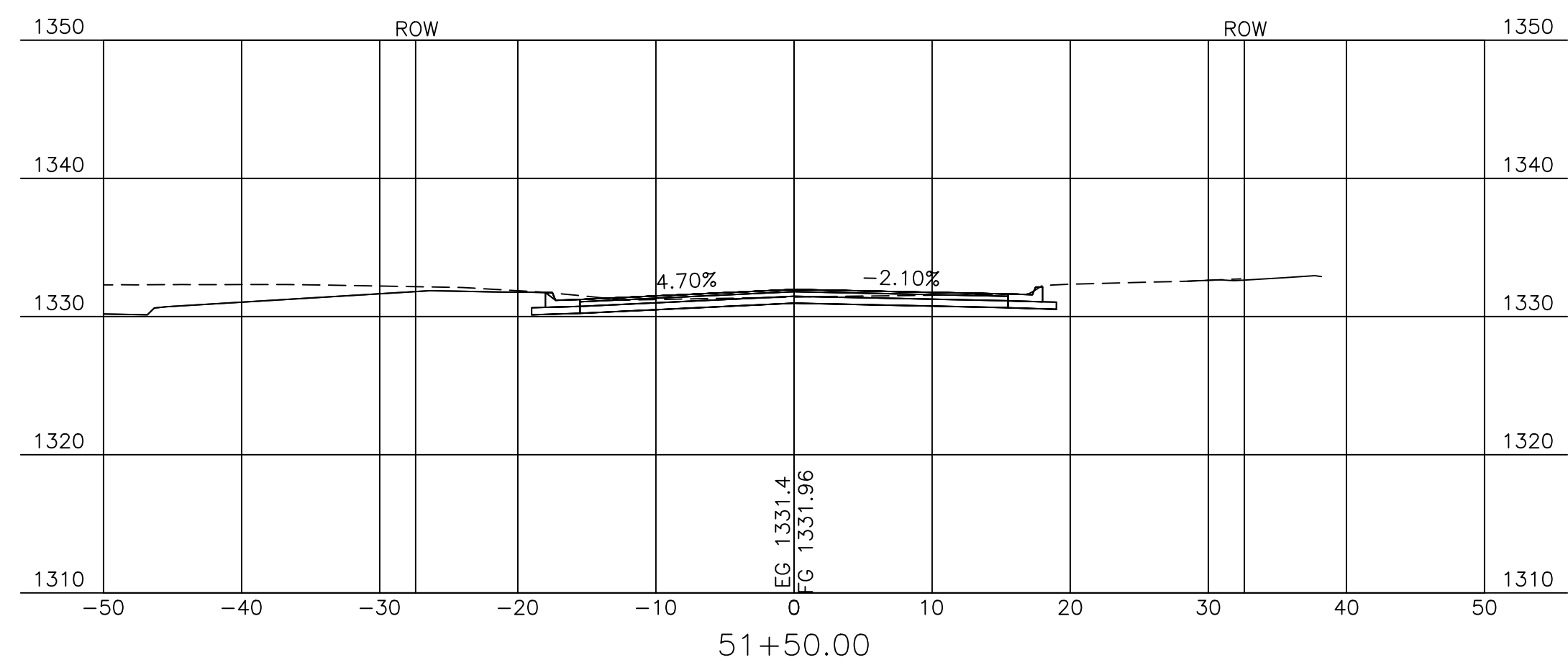
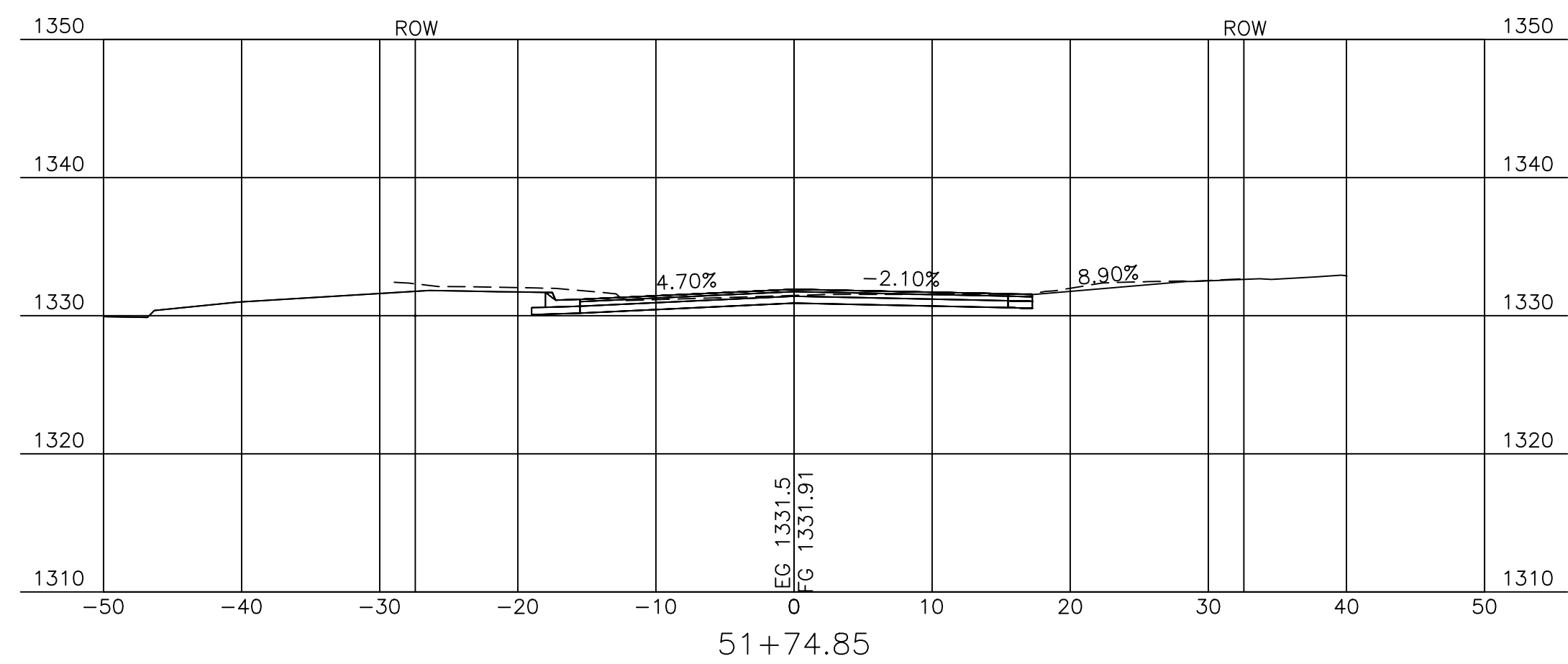
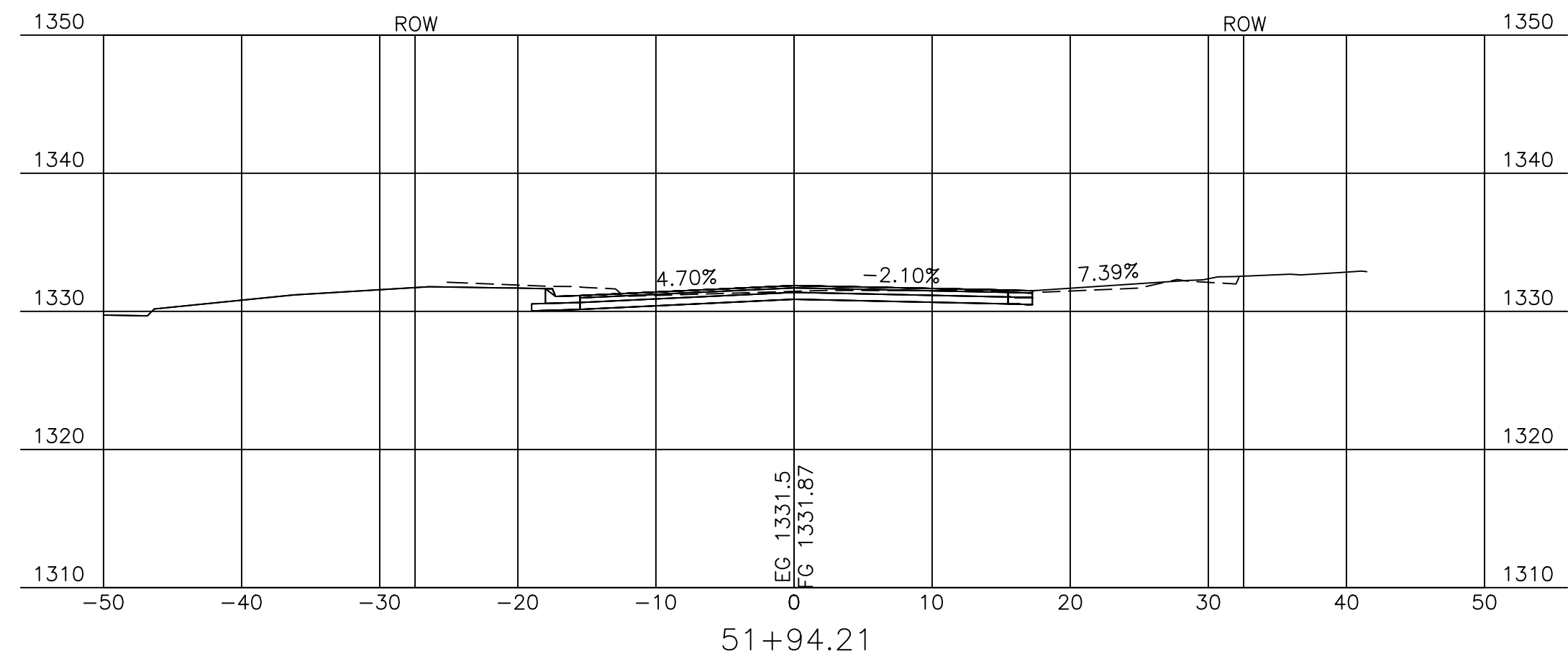
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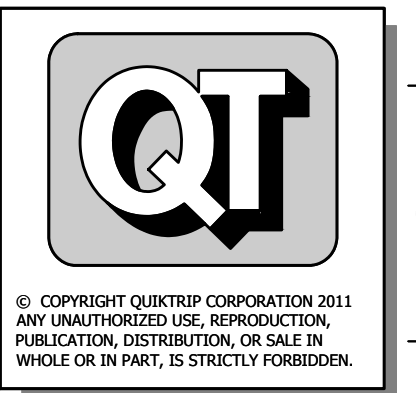
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