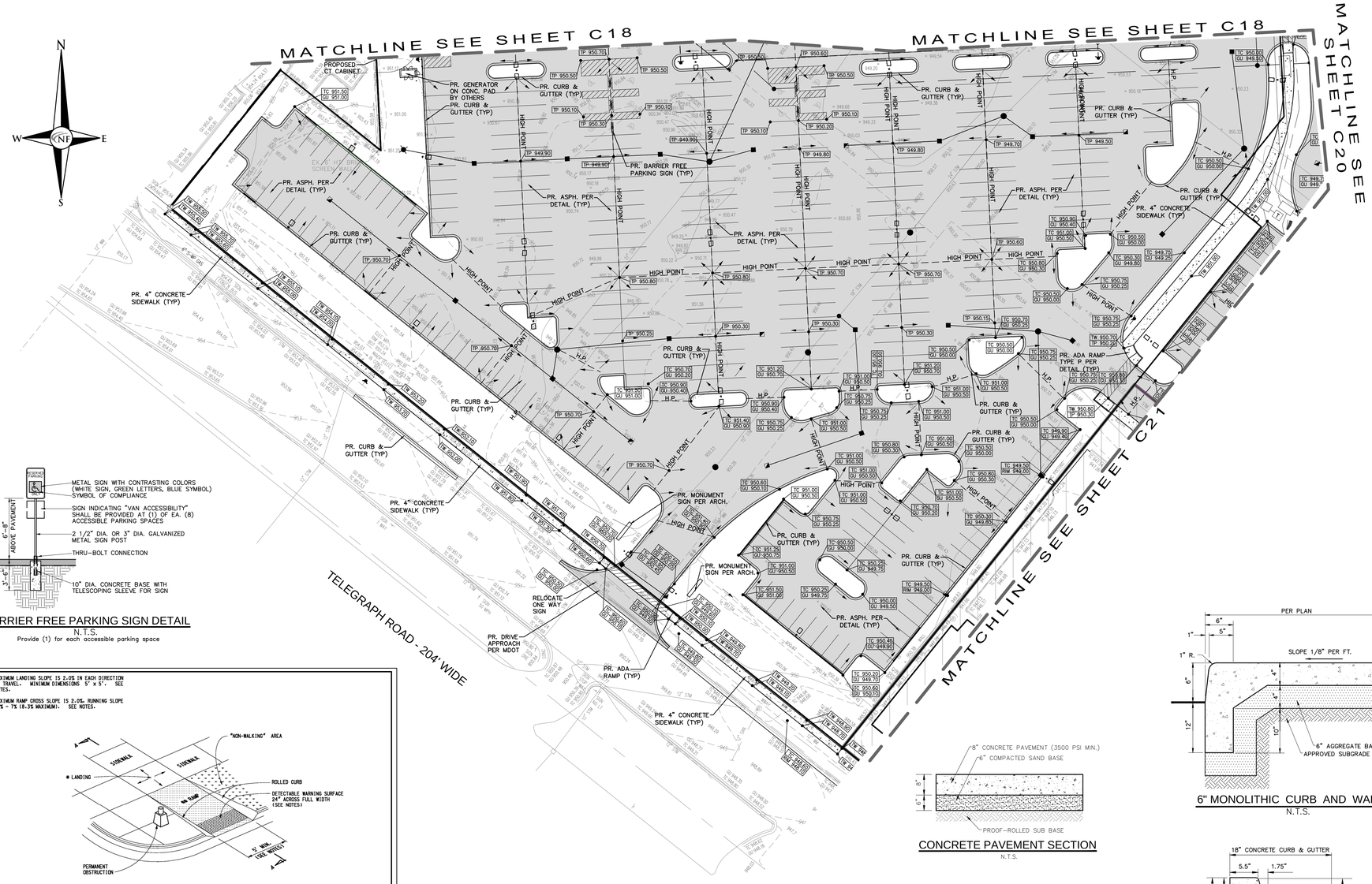


BARRIER FREE PARKING SIGN DETAIL

N.T.S.

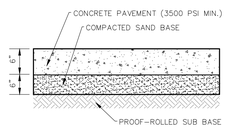
Provide (1) for each accessible parking space

6" MONOLITHIC CURB AND WALK

N.T.S.

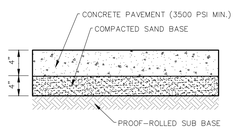
CONCRETE PAVEMENT SECTION

N.T.S.



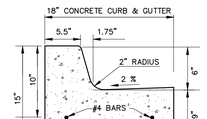
6" CONCRETE SECTION

N.T.S.



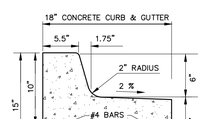
4" CONCRETE SECTION

N.T.S.



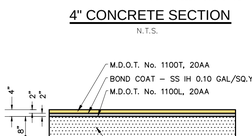
CONCRETE CURB DETAIL 'A'

N.T.S.



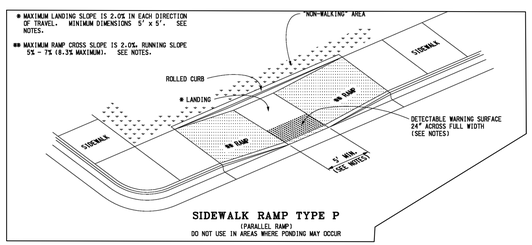
CONCRETE CURB DETAIL 'B'

N.T.S.



4" ASPHALT PAVING SECTION

PARKING & DRIVE



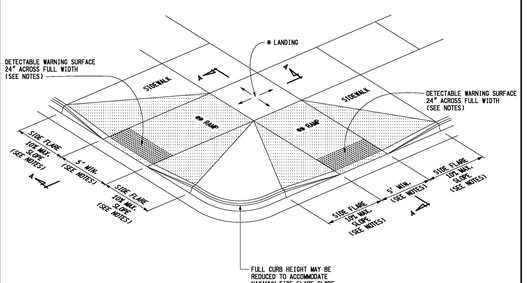
SIDEWALK RAMP TYPE R

(ROLLED SIDES)

SIDEWALK RAMP TYPE P

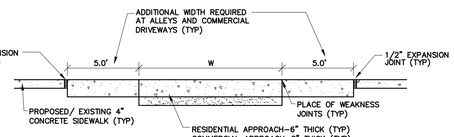
(PARALLEL RAMP)

DO NOT USE IN AREAS WHERE PONDING MAY OCCUR



SIDEWALK RAMP TYPE F

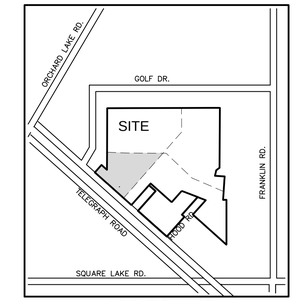
(FLARED SIDES, TWO RAMPS SHOWN)



COMMERCIAL CONCRETE SIDEWALK DETAIL

N.T.S.

MDOT Michigan Department of Transportation	DEPARTMENT DIRECTOR Kirk T. Steudle	MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF DEVELOPMENT STANDARD PLAN FOR	
PREPARED BY DESIGN DIVISION	APPROVED BY: DIRECTOR, BUREAU OF FIELD SERVICES	SIDEWALK RAMP AND DETECTABLE WARNING DETAILS	
DRAWN BY: B.L.T.	APPROVED BY: DIRECTOR, BUREAU OF DEVELOPMENT	3-15-2016 PLAN DATE	R-28-J
CHECKED BY: M.K.P.		F.H.W.A. APPROVAL	SHEET 1 OF 7



LOCATION MAP
N.T.S.

LEGEND

- EXISTING SANITARY SEWER (CLEAN-OUT, MANHOLE)
- EXISTING WATER MAIN (HYDRANT, GATE VALVE)
- EXISTING STORM SEWER (INLET, RYCB, MANHOLE, CB)
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- EXISTING OVERHEAD LINES (UTILITY POLE, GUY POLE, GUY WIRE, EXISTING LIGHT POLE, EXISTING SIGN)
- PR. SANITARY SEWER (C.O., MANHOLE)
- PROPOSED WATER MAIN (HYDRANT, GATE VALVE)
- PROPOSED STORM SEWER (INLET, RYCB, MANHOLE, CB)
- PR. SAND BACKFILL (COMPACT TO 95% MAX. DENSITY)
- UTILITY CROSSING (A)
- PR. TOP OF CURB ELEVATION (TC 600.00)
- PROPOSED GUTTER ELEVATION (GU 600.00)
- PR. TOP OF WALK ELEVATION (TW 600.00)
- PR. TOP OF PAVEMENT ELEV. (TP 600.00)
- PROPOSED FINISH GRADE (FG 600.00)
- PROPOSED CONTOUR (600)
- PROPOSED SWALE
- PR. DRAINAGE DIRECTION
- PROPOSED INLET FILTER
- DRAINAGE AREA LIMITS
- PROPOSED SILT FENCE
- LIMITS OF SOIL DISRUPTION

PAVING LEGEND

- PROPOSED CONCRETE PAVEMENT
- PROPOSED ASPHALT PAVEMENT

LEGEND

- LIMITS OF BLOOMFIELD TOWNSHIP

STORM WATER MANAGEMENT NOTE

FOR THE PROPOSED REDEVELOPMENT OF THIS SITE, THE EXISTING APPROVED DETENTION AND SEDIMENTATION CONTROL SYSTEMS WILL NOT BE AFFECTED. ALL DRAINAGE DISTRICT AREAS WILL BE MAINTAINED AND RUNOFF COEFFICIENTS WILL BE AT OR BELOW PREVIOUSLY APPROVED LEVELS. NO CHANGES ARE PROPOSED TO THE SEDIMENTATION CONTROL STRUCTURES OR OUTLET PIPES.

GENERAL PAVING NOTES

PAVEMENT SHALL BE OF THE TYPE, THICKNESS AND CROSS SECTION AS INDICATED ON THE PLANS AND AS FOLLOWS:

CONCRETE: PORTLAND CEMENT TYPE IA (AIR–ENTRAINED) WITH A MINIMUM CEMENT CONTENT OF SIX SACKS PER CUBIC YARD, MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI AND A SLUMP OF 1 1/2 TO 3 INCHES.

ASPHALT: BASE COURSE – MDOT BITUMINOUS MIXTURE NO. 1100L, 20AA; SURFACE COURSE – MDOT BITUMINOUS MIXTURE NO. 1100T, 20AA; ASPHALT CEMENT PENETRATION GRADE 85–100, BOND COAT – MDOT SS–1H EMULSION AT 0.10 GALLON PER SQUARE YARD; MAXIMUM 2 INCH LIFT.

PAVEMENT BASE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT. EXISTING SUB–BASE SHALL BE PROOF–ROLLED IN THE PRESENCE OF THE ENGINEER TO DETERMINE STABILITY.

ALL CONCRETE PAVEMENT, DRIVEWAYS, CURB & GUTTER, ETC., SHALL BE SPRAY CURED WITH WHITE MEMBRANE CURING COMPOUND IMMEDIATELY FOLLOWING FINISHING OPERATION.

ALL CONCRETE PAVEMENT JOINTS SHALL BE FILLED WITH HOT POURED RUBBERIZED ASPHALT JOINT SEALING COMPOUND IMMEDIATELY AFTER SAWCUT OPERATION. FEDERAL SPECIFICATION SS–S164.

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY AND THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, CURRENT EDITION.

ALL TOP OF CURB ELEVATIONS, AS SHOWN ON THE PLANS, ARE CALCULATED FOR A 6" CONCRETE CURB UNLESS OTHERWISE NOTED.

ALL SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1993, SHALL BE INSTALLED AS INDICATED ON THE PLANS.

CONSTRUCTION OF A NEW OR RECONSTRUCTED DRIVE APPROACH CONNECTING TO AN EXISTING STATE OR COUNTY ROADWAY SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE AGENCY HAVING JURISDICTION OVER SAID ROADWAY.

FOR ANY WORK WITHIN THE PUBLIC RIGHT–OF–WAY, THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND LIKEWISE ARRANGE FOR ALL INSPECTION.

EXISTING TOPSOIL, VEGETATION AND ORGANIC MATERIALS SHALL BE STRIPPED AND REMOVED FROM PROPOSED PAVEMENT AREA PRIOR TO PLACEMENT OF BASE MATERIALS.

EXPANSION JOINTS SHOULD BE INSTALLED AT THE END OF ALL INTERSECTION RADII.

SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1973, SHALL BE INSTALLED AS SHOWN AT ALL STREET INTERSECTIONS AND AT ALL BARRIER FREE PARKING AREAS AS INDICATED ON THE PLANS.

ALL PAVEMENT AREAS SHALL BE PROOF–ROLLED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF BASE MATERIALS AND PAVING MATERIALS.

FILL AREAS SHALL BE MACHINE COMPACTED IN UNIFORM LIFTS NOT EXCEEDING 9 INCHES THICK TO 98% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT.

NF ENGINEERS

CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257

SEAL

STATE OF MICHIGAN — PATRICK J. WILLIAMS — ENGINEER NO. 24031 — LICENSED PROFESSIONAL

PROJECT

Village at Bloomfield

CLIENT

REDICO
One Towne Square,
Suite 1600
Southfield, MI 48076

Contact:
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Phone: (248) 784-6486

PROJECT LOCATION

Part of the W. 1/2 of Section 5, T. 2N., R. 10E., and part of the NE 1/4 of Section 6, T. 2N., R. 10E., Bloomfield Township, The City of Pontiac and Bloomfield Township (conditionally transferred to The City of Pontiac) Oakland County, Michigan

SHEET

Menard's Paving and Grading Plan

Know what's below Call before you dig.

DATE	ISSUED / REVISED
05-12-17	Bids / Permits

DRAWN BY: A. Wiseman
DESIGNED BY: A. Wiseman
APPROVED BY: P. Williams
DATE: April 3, 2017
SCALE: 1" = 40'

40 20 0 20 40 60

NFE JOB NO. A116-21

SHEET NO. C-19