

*"McCormack is the most results-driven person I know.
Everyone can learn from this book."* Arnold Palmer

ACCESS FOR DUMMIES

Being Customer
Friendly WORKS!

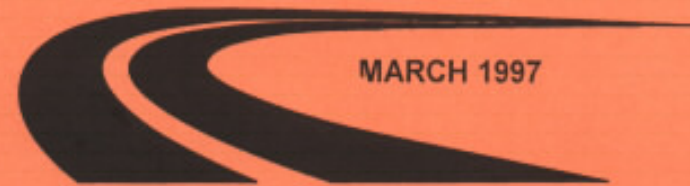
**A Reference
for the
Rest of Us!**

Mark H. McCormack
*Author of the #1 bestseller
What They Don't Teach You at
Harvard Business School*



**Office of
Access Design**

**New Jersey
State Highway Access
Management Code**



MARCH 1997

New Jersey Department of Transportation



* TOPICS *

- Office of Access Design
- Scheduled Activities
- Definitions
- Being Customer Friendly
- Designer's Requirements
- Access Appeal Process
- Questions & Answers

Office of Access Design

- NJDOT Capital Projects along **State Highways**
- Scoping Core Group member for Feasibility Assessment & Final Scope Development
- Designer of Access for In House designed projects
- Review/coordination of Access being designed by consultants
- Administration of property owner notification & appeals

Major Access Permits for Developers

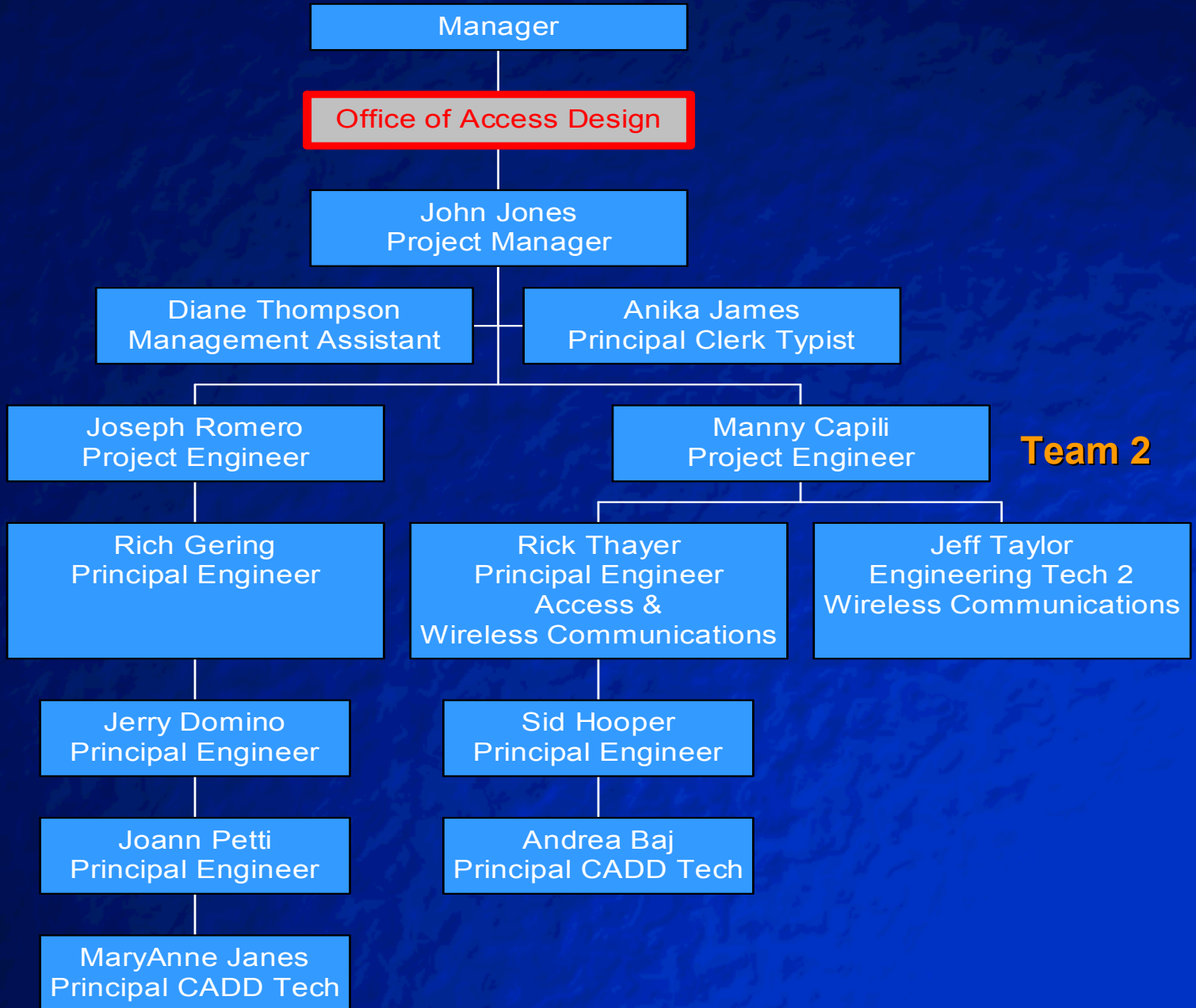
- Projects along **State Highways** being proposed by developers that require a MAJOR ACCESS PERMIT
- Review /coordination of Major Access Permit applications
- Appeals (Developer projects impacting driveways beyond developer's property)



Coordinating Projects & Permits

Team 1

Team 2



SCHEDULED ACTIVITIES

Access Plan & Access Cutouts

Beginning in *Feasibility Assessment (FA)* and continuing through *Final Scope Development (FSD)* the designer of record is responsible for an overall project access plan.

As a project progresses the available project information will also be refined. As such, an overall project access plan will also evolve.

Access Activities

By Pipeline

	Prel Des	Final Des
1150	PL-1 or 2	PL-3
1155	PL-1 or 2	PL-3
1240	PL-1 or 2	PL-3
2090	PL-1 or 2	PL-3
2095	PL-1 or 2	PL-3
2100		PL-1 or 2 or 3

Final Scope Development Activities

■ 1150 - Initiate Access Impacts

(1) coordination between BPSD (Group Manager), Designer, PM & OAD to identify access impacts (**existing access**) of various project schemes.

(2) OAD's initial review of consultants identification, recommendation and justification of any warranted "waivers".

(3) OAD attendance at Scoping Core Group meetings and any associated public information meeting.

(4) OAD will provide each designer with a copy of our "guidelines". *Included as a handout for this training.*

Final Scope Development Activities

■ 1155 - Prepare Access Plans

- (1) once a project's geometry/alignment has been defined, an overview plan will be prepared by the designer.
- (2) this plan will depict existing & proposed access for each property within the project limits.
- (3) OAD will coordinate with the designer regarding the requirements for the plan and the access code.

Final Scope Development Activities

■ 1240 - Conduct Access Review

- (1) OAD's review the designer's access plan for compliance with access code requirements.
- (2) OAD's coordination with BPSD, designer, PM to resolve any problems.
- (3) OAD attendance at Scoping Core Group meetings and any associated public information meeting.

Initial Design Development

■ 2090 - Prepare Access Cutouts

(1) OAD will coordinate with the designer regarding the requirements for this activity.

(2) OAD will verify there is consistency between the access developed during the scoping process and the initial design phase.

(3) For all “in house” designed projects, OAD is the designer for the access cutouts and will coordinate with Geometrics (Production Management) for required information.

(3) OAD attendance at all required meetings and any associated public information meeting.

Initial Design Development

■ 2095 - Review of Access Cutouts

(1) For all “consultant” designed projects, OAD will review the individual property access cutouts for consistency with our “guidelines”.

(2) OAD will meet with the designer and each PM’s to coordinate the completion of this activity.

(3) For **ALL REVOCATIONS OF ACCESS**, OAD will verify that the designer has analyzed and addressed the access code requirements for “**REASONABLE ALTERNATIVE ACCESS**”.

Initial Design Development

■ 2100 - Administration Mods & Revs

- (1) OAD will prepare property owner notification letters, attach cutouts and send by certified mail
- (2) If property owner appeals, schedule informal meeting
 - * Manager, MAP
 - * OAD (supervisor & case manager)
 - * DAG (as needed)
 - * ROW
 - * PM
 - * Designer (as needed)
 - * Property Owner (including reps - engineers & lawyers)
- (3) Hold informal meeting and address owner concerns
- (4) Prepare response to owner based on informal meeting
- (5) Address any subsequent correspondence or appeals

**Responsibility for
Access Design
for Capital Projects**

=

Office of Access Design

It is suggested that if any other NJDOT units are used as a resource for any potential access impacts, that YOU remember that it will be the Office of Access Design that will ultimately be administering the individual property notifications.

We would recommend that the Office of Access Design be included in all reviews.

DEFINITIONS

Definitions are like belts. The shorter they are, the more elastic they need to be. By stretching it, it can be made to fit almost anybody.

Classification of Departmental Access Activities

Revocation of Access

(N.J.A.C. 16:47-4.33d)

Modification of Access

(N.J.A.C. 16:47-4.33c)

Adjustment of Access

(N.J.A.C. 16:47-4.33b)

Revocation of Access

Revocation of Access

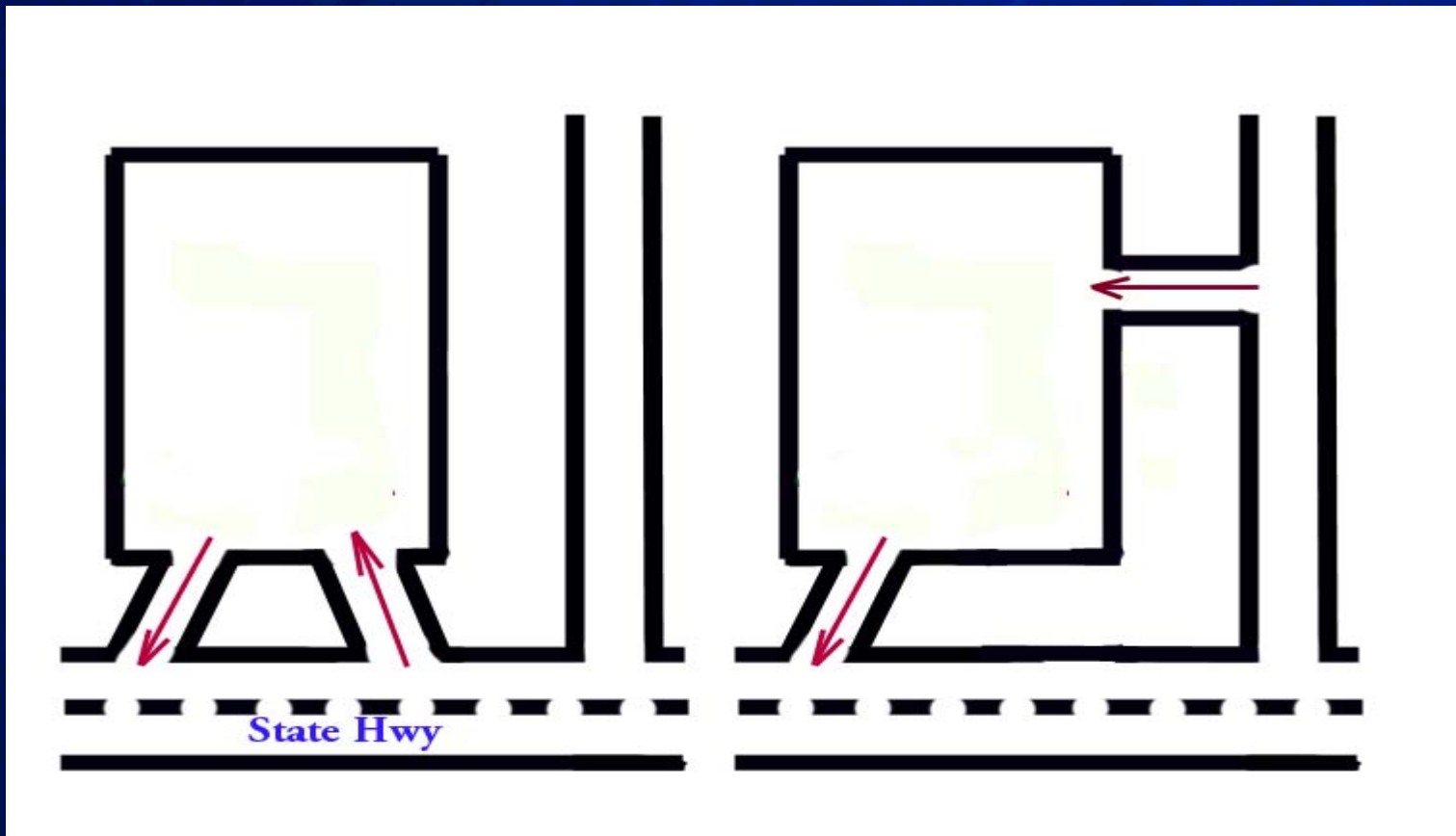
1. Eliminating DIRECT INGRESS
 2. Eliminating DIRECT EGRESS
 3. Eliminating DIRECT INGRESS and EGRESS
-

AND

Providing alternative access to a street, highway, easement, service road or common driveway other than the subject State highway

Revocation of Access

Example 1: Eliminating direct ingress

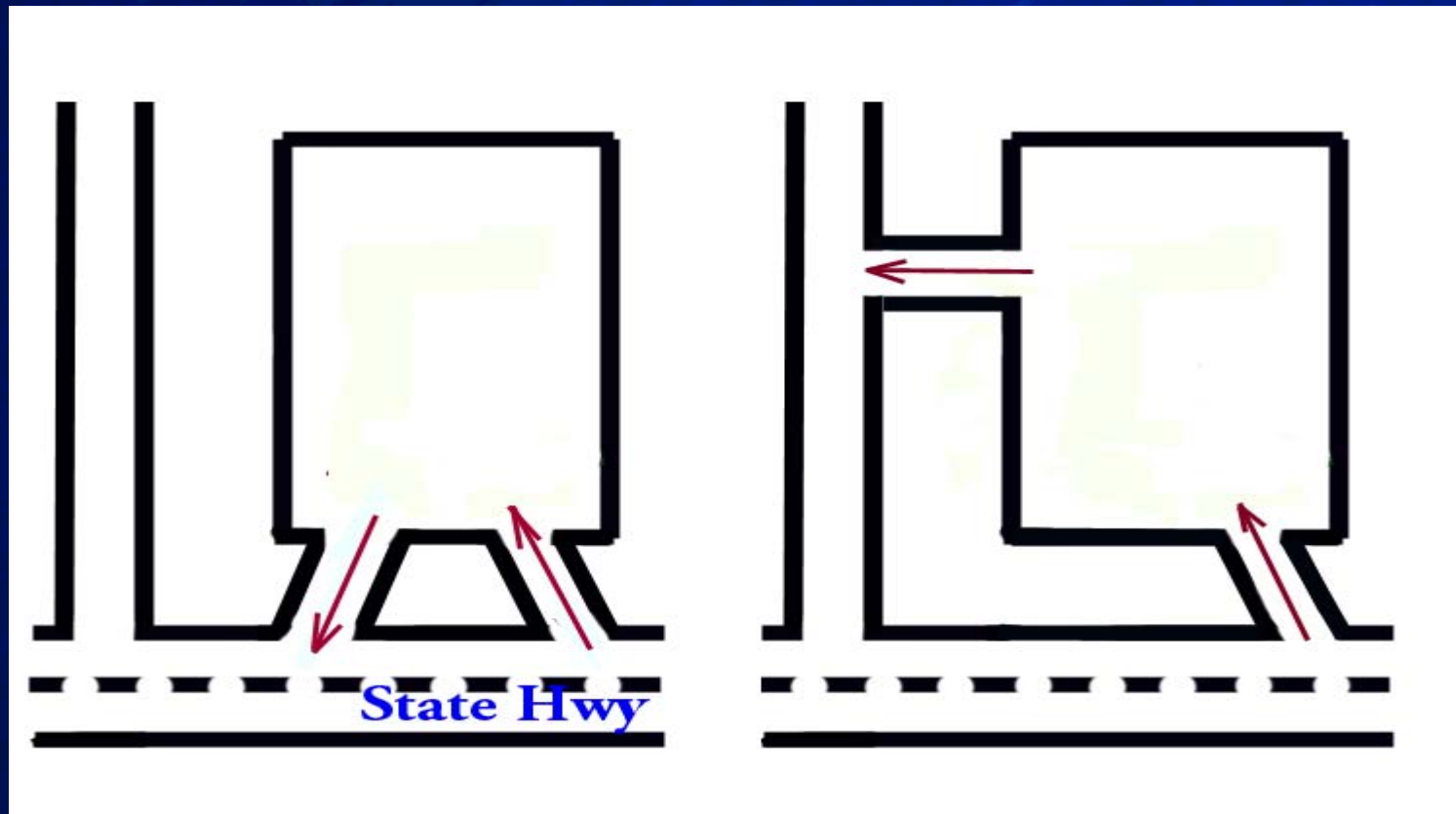


Before

After

Revocation of Access

Example 2: Eliminating direct egress

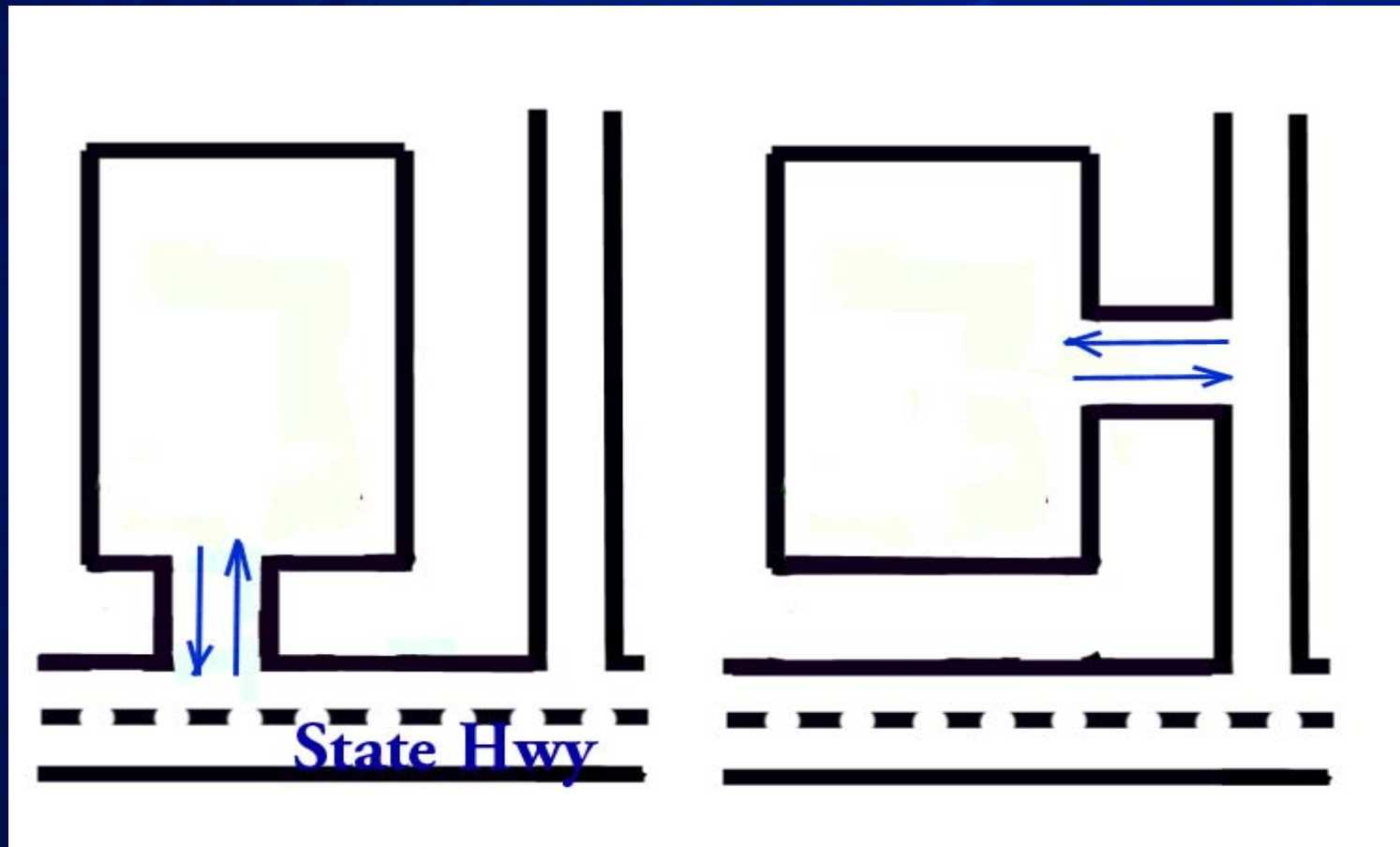


Before

After

Revocation of Access

Example 3: Eliminating direct ingress and egress



Before

After

REVOCACTION OF ACCESS

What is Reasonable
Alternative Access?

Revocation of Access

Reasonable Alternative Access

- Commercial Property

Access onto any parallel or perpendicular **roadway*** which is of sufficient design to support commercial traffic and is convenient, direct and well marked

- Industrial Property

Access onto any improved **roadway*** which is of sufficient design to support necessary truck/employee access as required by the industry

- Residential/Agricultural Property

Access onto any improved public street or highway

* **street-highway-easement-service road-common driveway**

Revocation of Commercial Access

Reasonable Alternative Access Five Tests

1. Alternative access is provided via a parallel or perpendicular street, highway, easement, service road or common driveway
2. Of sufficient design to support commercial traffic to and from the business or use
3. Convenient
4. Direct
5. Well-marked means of reaching the site and returning to the State highway

See Next Slide for Legal Determinations

Reasonable Alternative Access Five Tests Legal Definitions Upheld at OAL Hearings

PERPENDICULAR = Any street that **intersects a highway**, **OR PARALLEL** = Any street that intersects a perpendicular street

SUFFICIENCY OF DESIGN =

Path can carry the **size & type** of traffic for commercial use

Capacity to handle anticipated volume of traffic (**as of the date of notice to owner**)

Pavement strength to handle the weight of anticipated traffic

Driveways must handle anticipated volume, size & type of vehicles

CONVENIENT = When Ingress & Egress

Fits with the site

Lines up with traffic circulation aisles

Serves loading areas, drive-ups windows, etc.

DIRECT = Relatively **straight & limited choices** along the path

WELL-MARKED =

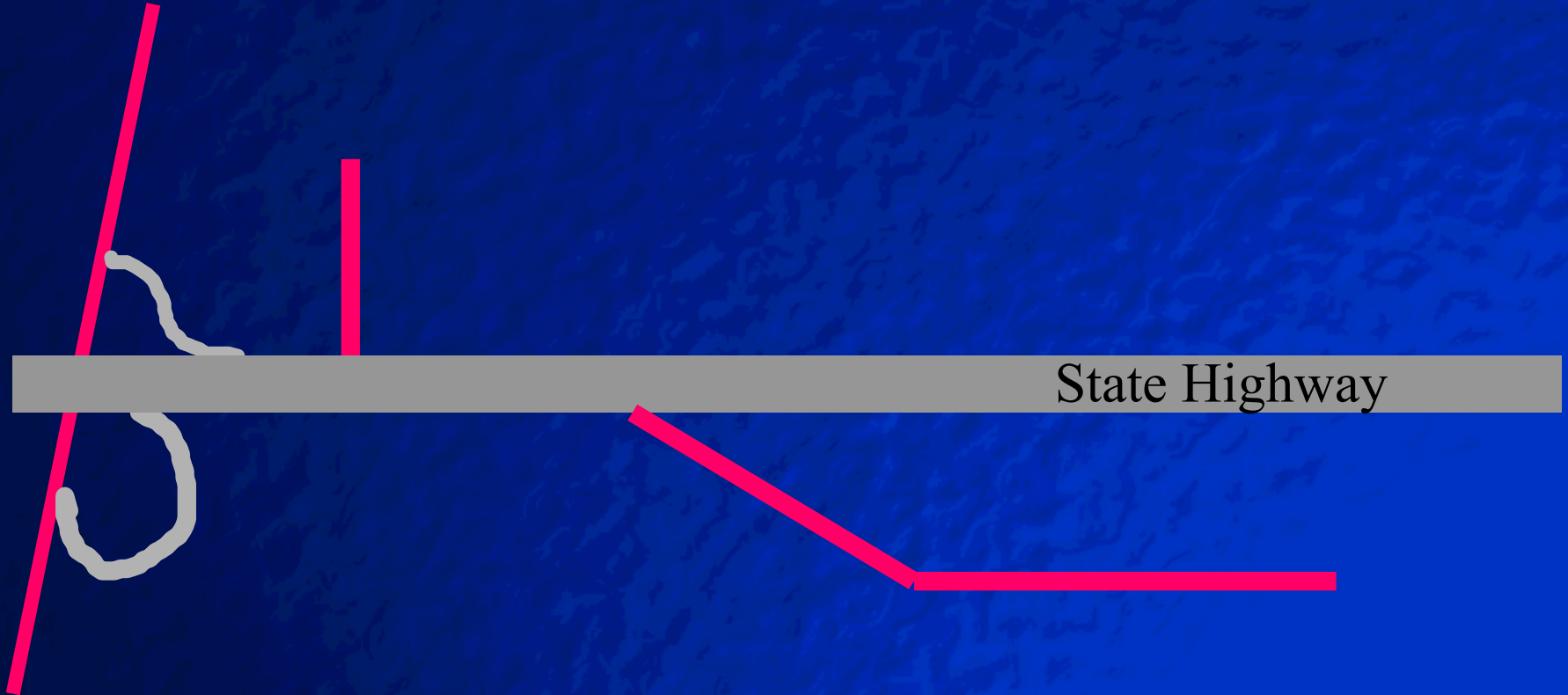
Signs provided to direct motorists from the **existing ingress to the alternative ingress** and **from the existing egress back to the highway**

Signs provided at each place **where a motorist will have to make a decision**

Revocation of Commercial Access Test 1A

Perpendicular Streets

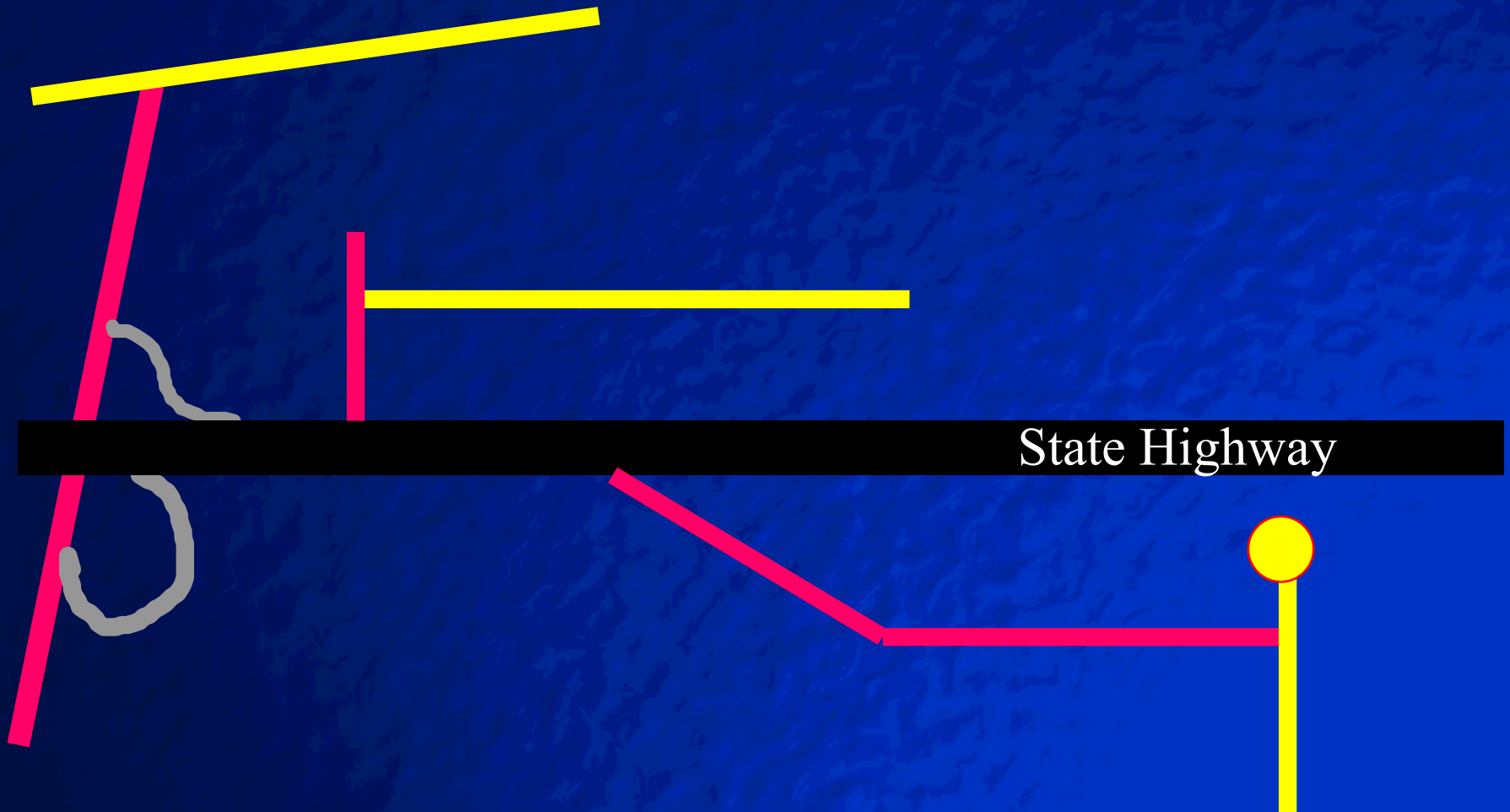
(Any street that intersects a highway)



Revocation of Commercial Access Test 1B

Parallel Streets

(Any street that intersects a perpendicular street)



Revocation of Commercial Access Test

2

Sufficiency of Design

- The path can carry the size and type of traffic for the commercial use
- Capacity to handle the anticipated volume of traffic, as of the date of the notice to the owner
- Pavement strength to handle the weight of the anticipated traffic
- Driveways must handle anticipated volume, size and type of vehicles

Revocation of Commercial Access Test

3

Convenient

Do the alternative ingress and egress:

- Fit with the site?
- Line up with traffic circulation aisles?
- Serve loading areas, drive-up windows, etc.?

Revocation of Commercial Access Test

4

Direct

- Relatively straight
- There are limited choices along the path

Revocation of Commercial Access Test

5

Well-marked

- Signs are provided to direct motorists from the existing ingress to the alternative ingress and from the existing egress back to the highway
- A sign will be provided at each place where a motorist will have to make a decision
- Signs:
 - 8 square feet
 - White message on blue or green background
 - Maintained for at least one year

Alternative Access Signing

Revocation of Commercial Access

Recommended Sign Placements

- Site is upstream or downstream of Alternative Access
- Highway is undivided or divided

Revocation of Commercial Access

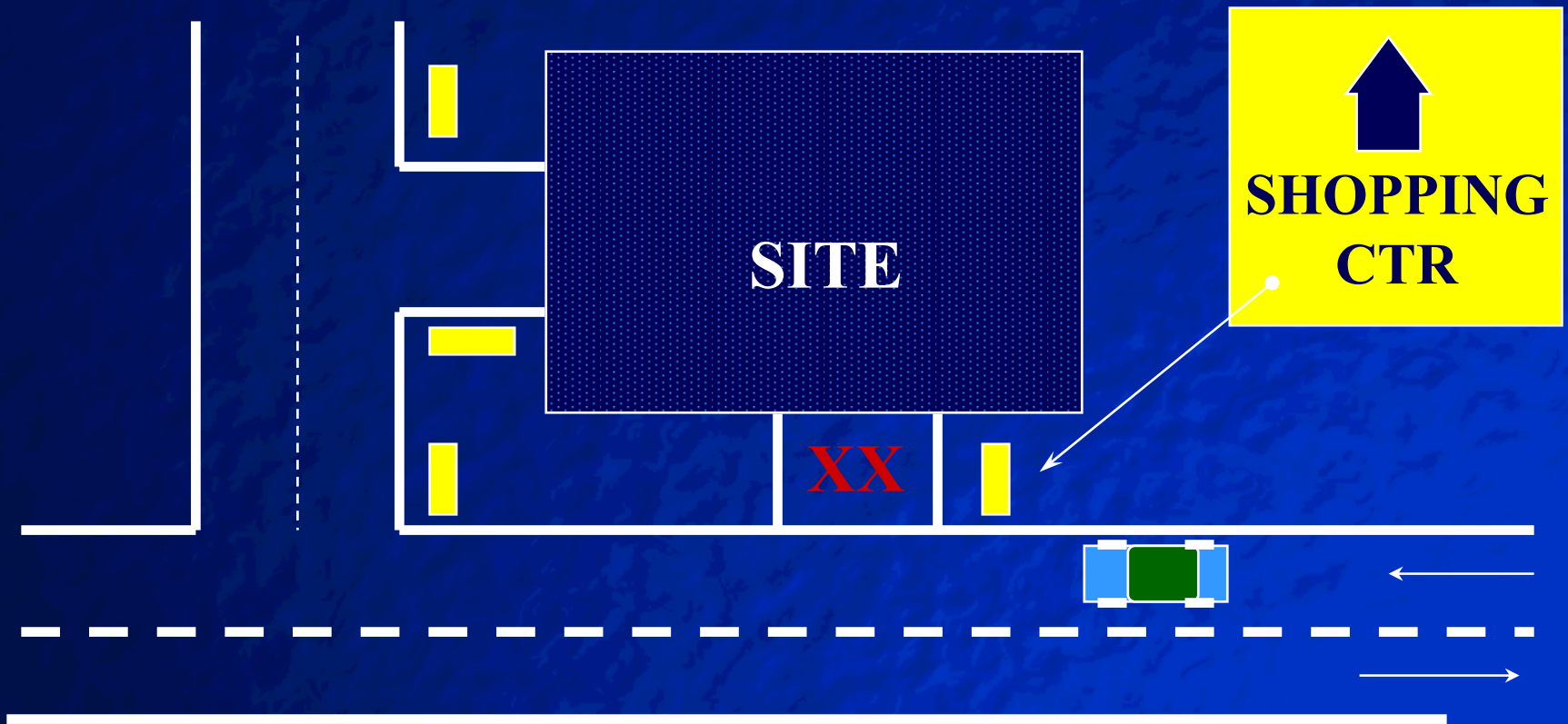
Recommended Sign Placements

- Site is upstream of Alternative Access
- Highway is undivided

Revocation of Commercial Access Test 5

Recommended Sign Placement

(Site is UPSTREAM of Alternative Access)

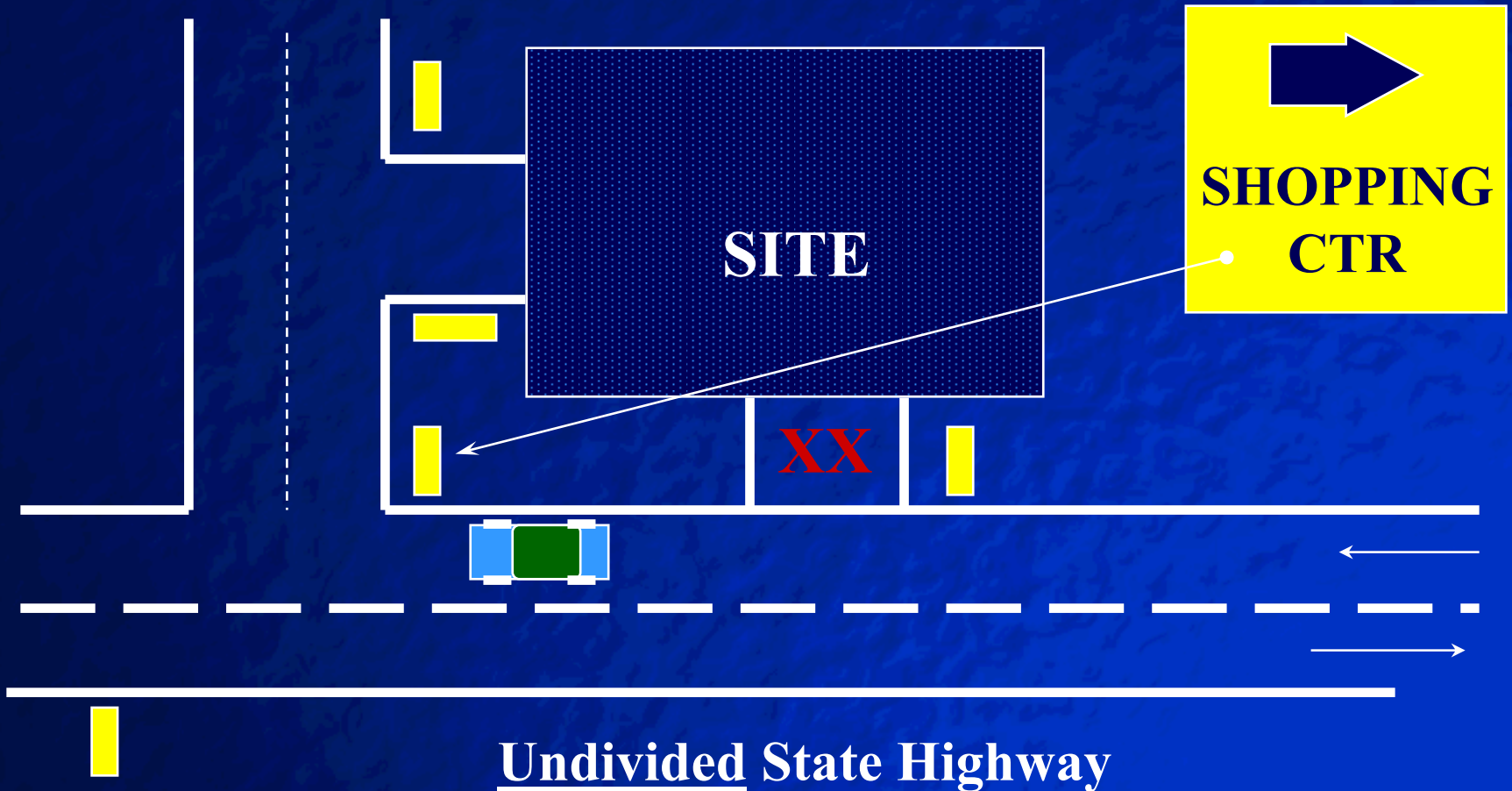


Undivided State Highway

Revocation of Commercial Access Test 5

Recommended Sign Placement

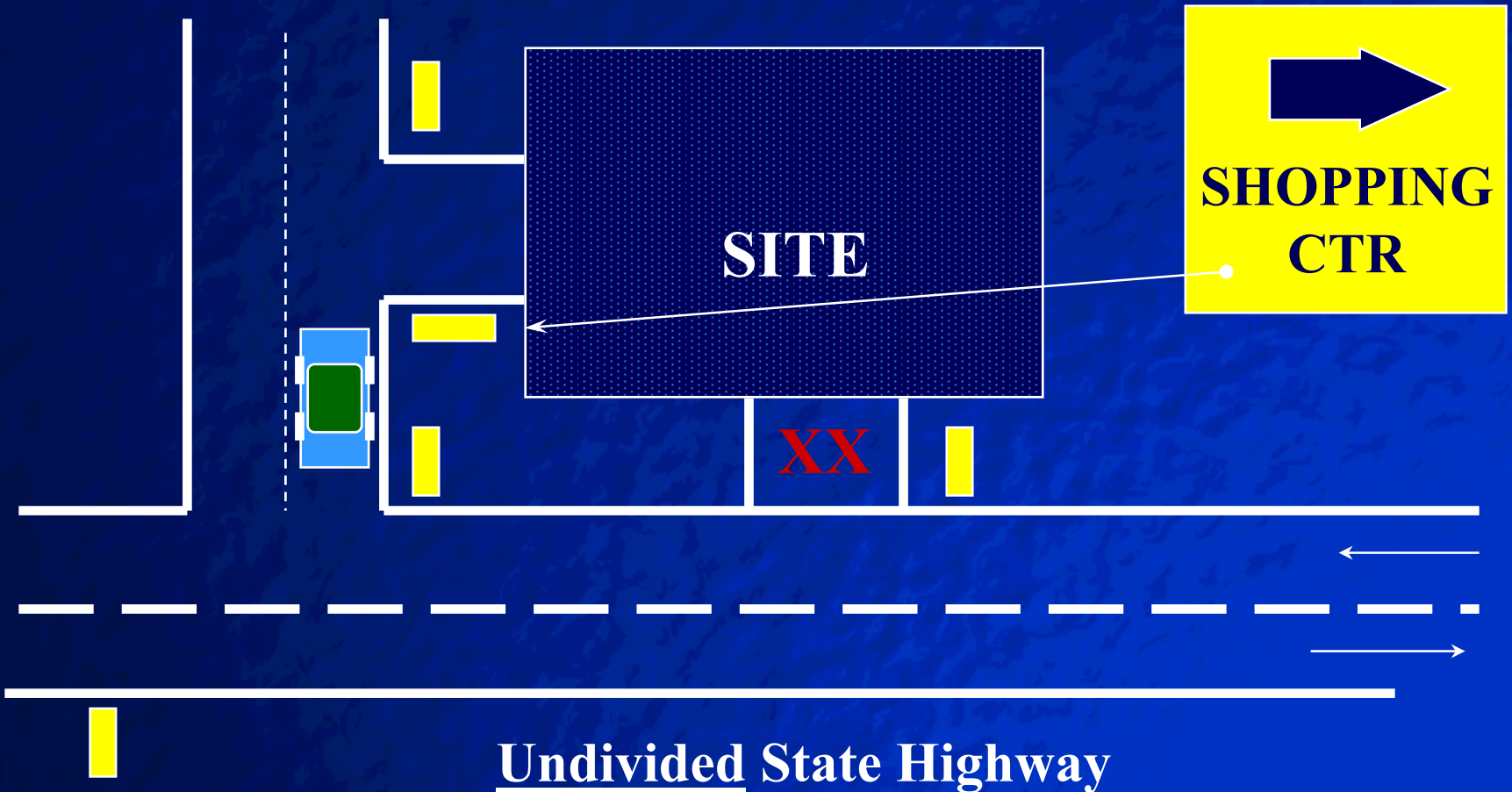
(Site is UPSTREAM of Alternative Access)



Revocation of Commercial Access Test 5

Recommended Sign Placement

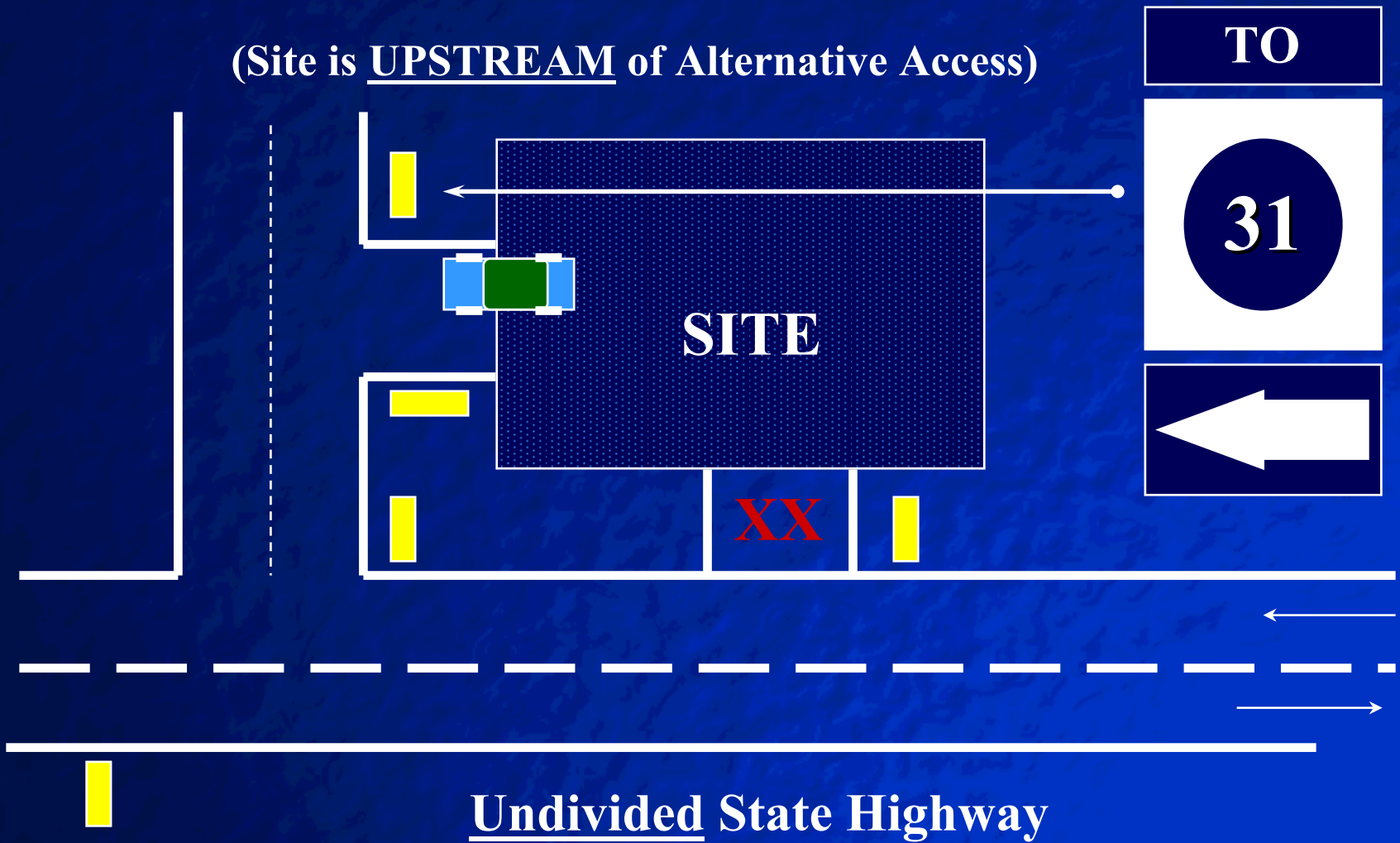
(Site is UPSTREAM of Alternative Access)



Revocation of Commercial Access Test 5

Recommended Sign Placement

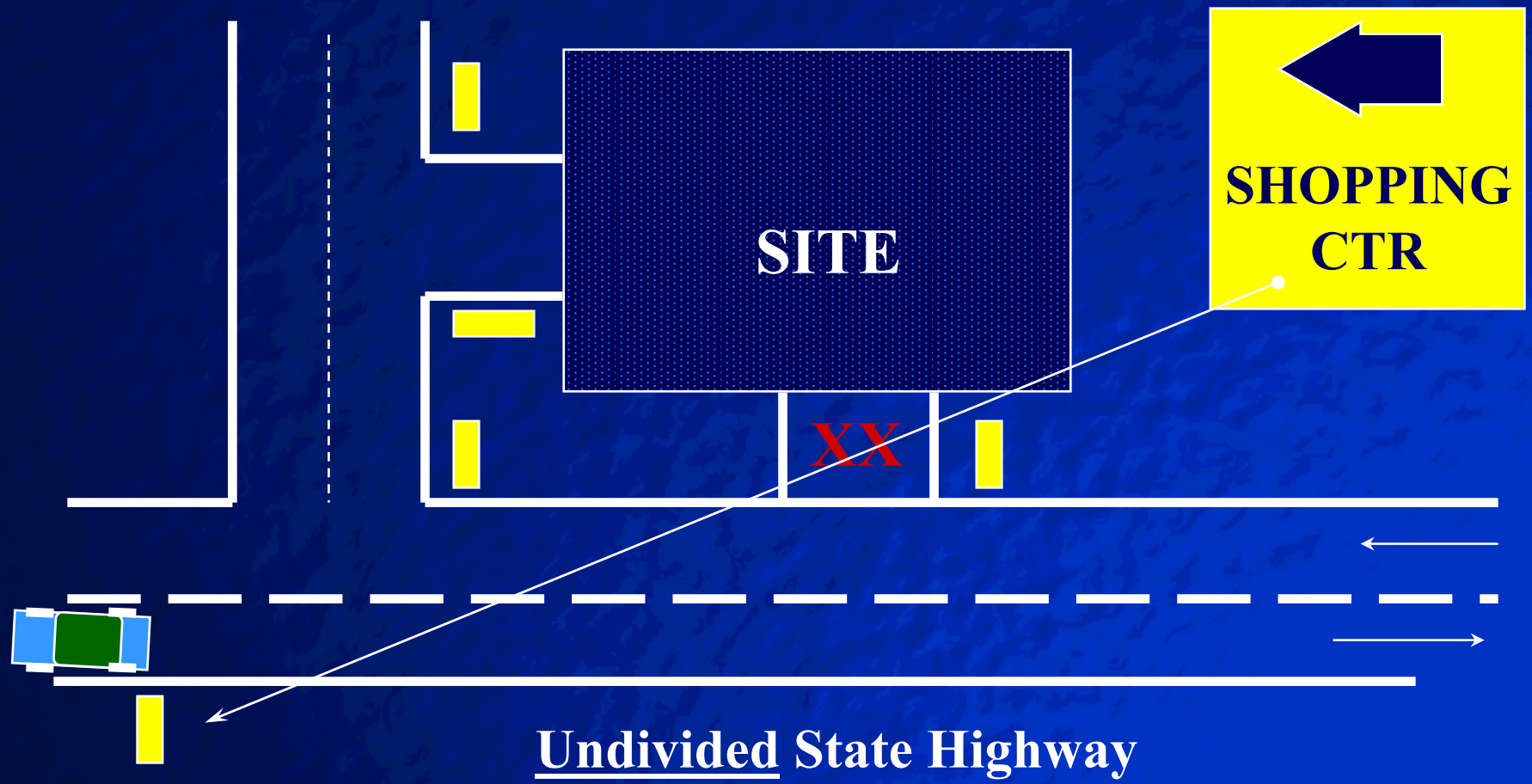
(Site is UPSTREAM of Alternative Access)



Revocation of Commercial Access Test 5

Recommended Sign Placement

(Site is UPSTREAM of Alternative Access)



Undivided State Highway

Revocation of Commercial Access

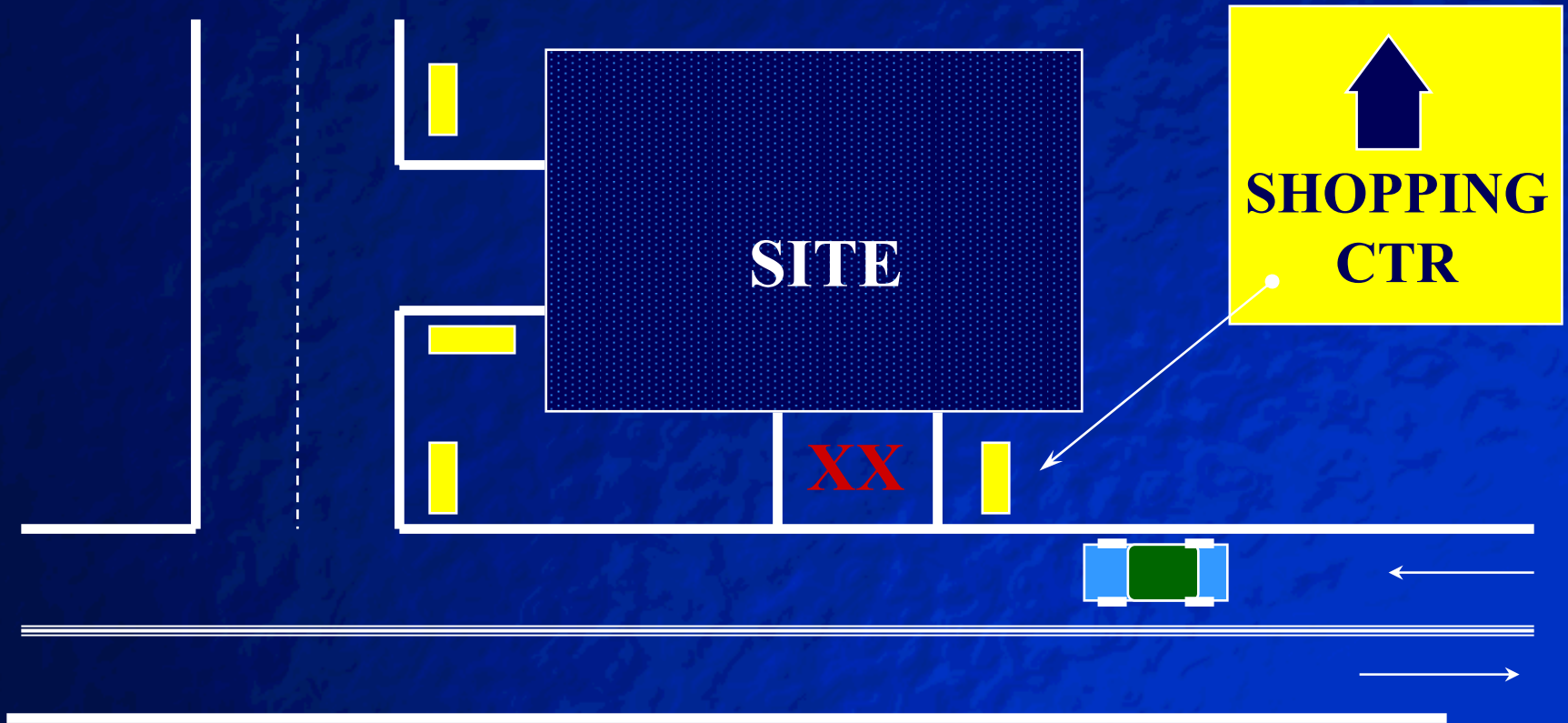
Recommended Sign Placements

- Site is upstream of Alternative Access
- Highway is divided

Revocation of Commercial Access Test 5

Recommended Sign Placement

(Site is UPSTREAM of Alternative Access)

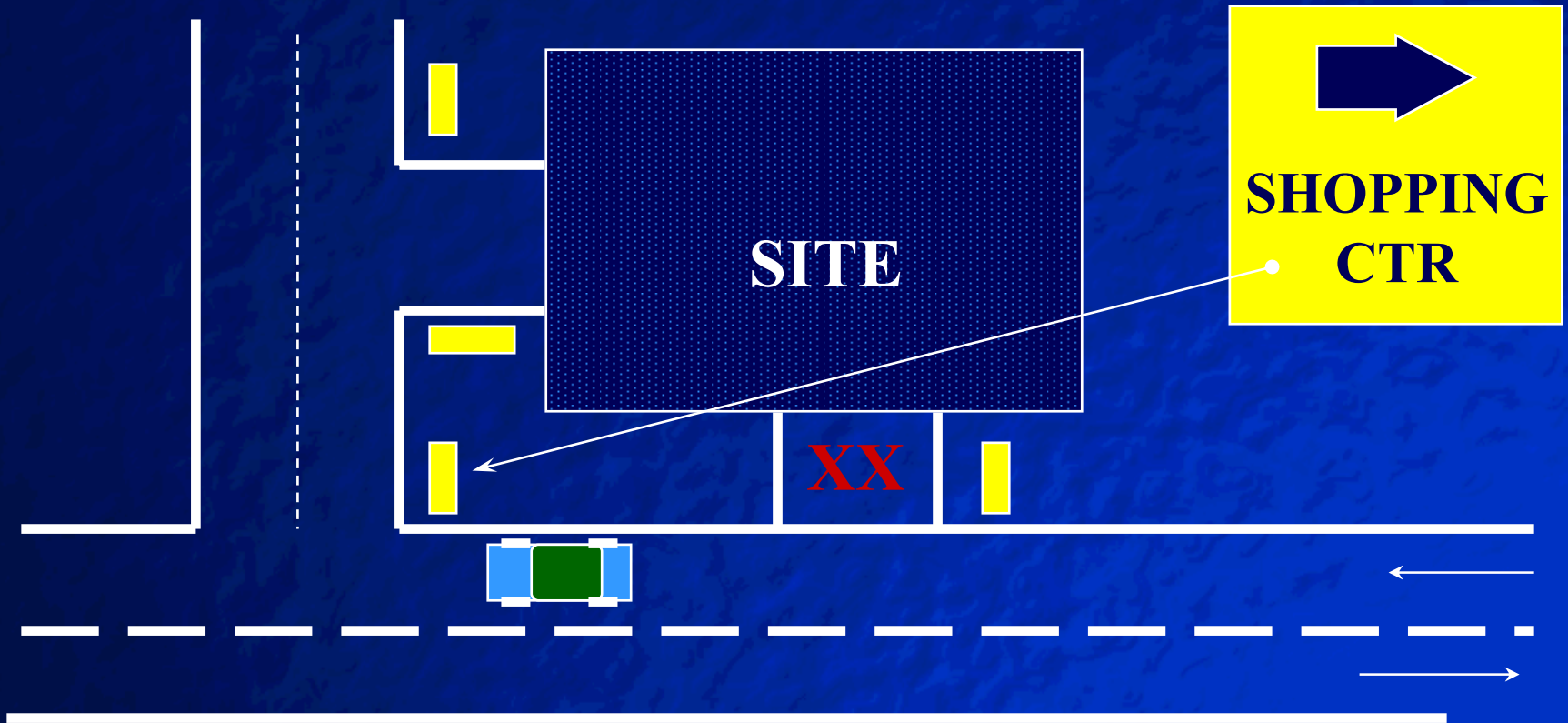


Divided State Highway

Revocation of Commercial Access Test 5

Recommended Sign Placement

(Site is UPSTREAM of Alternative Access)

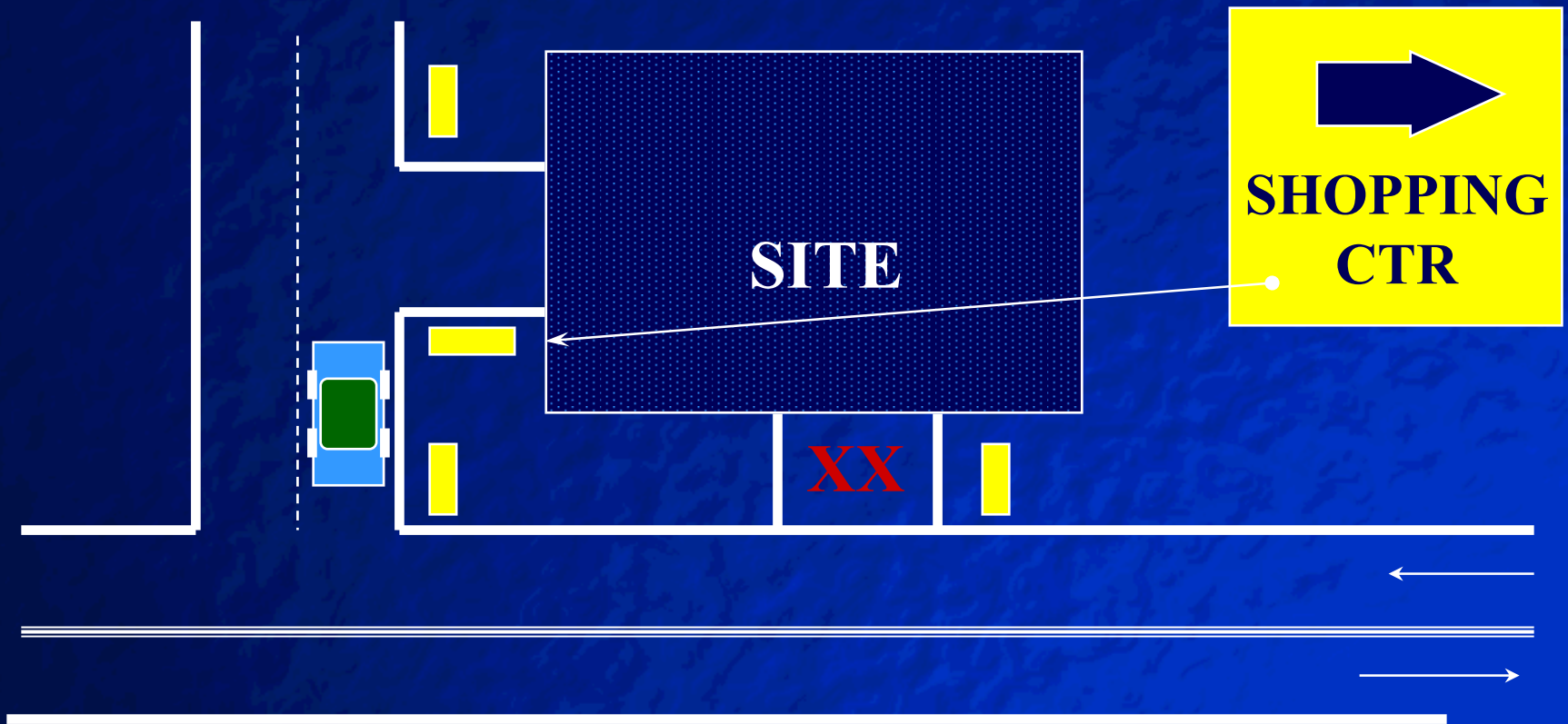


Divided State Highway

Revocation of Commercial Access Test 5

Recommended Sign Placement

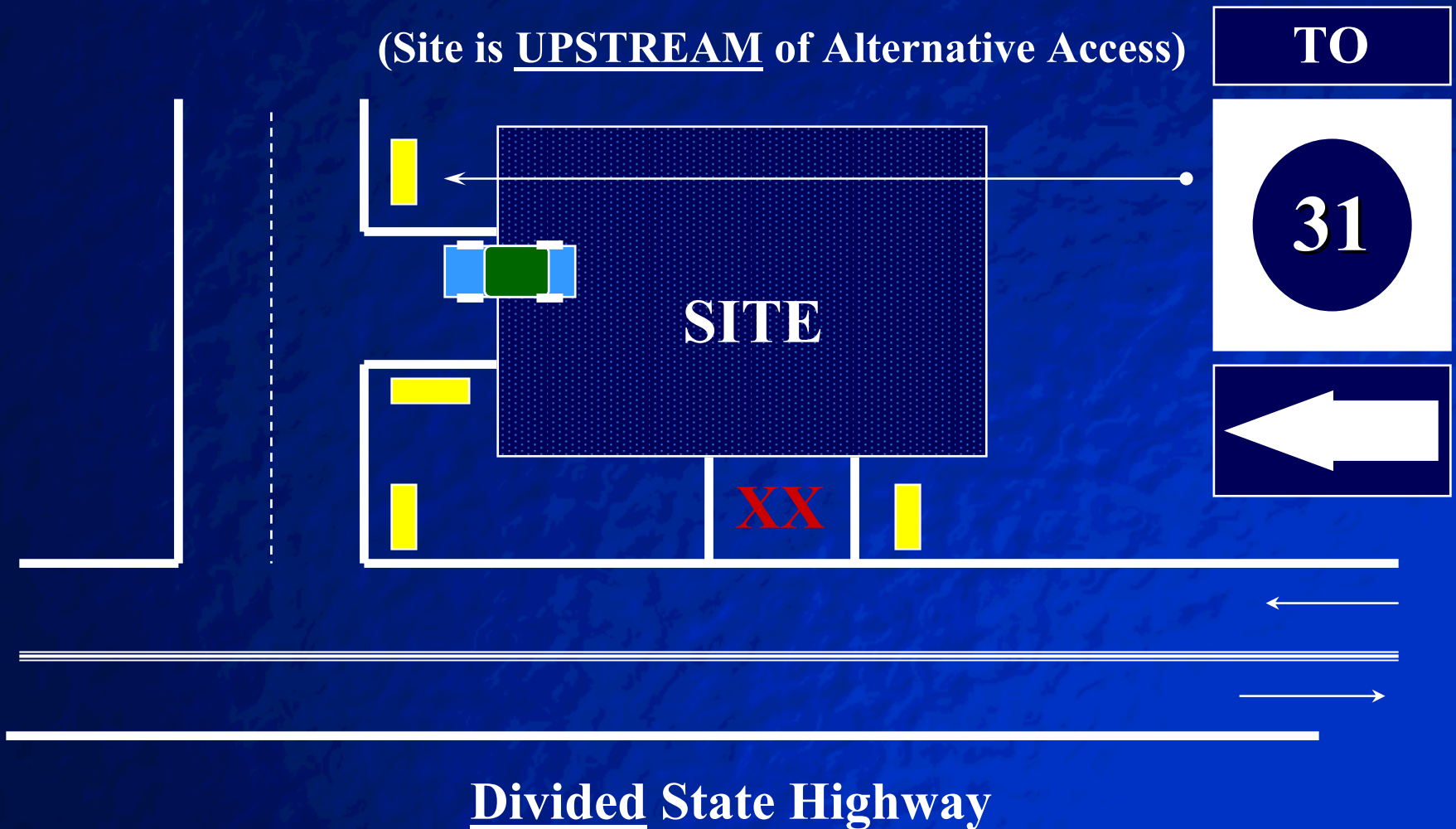
(Site is UPSTREAM of Alternative Access)



Divided State Highway

Revocation of Commercial Access Test 5

Recommended Sign Placement



Revocation of Commercial Access

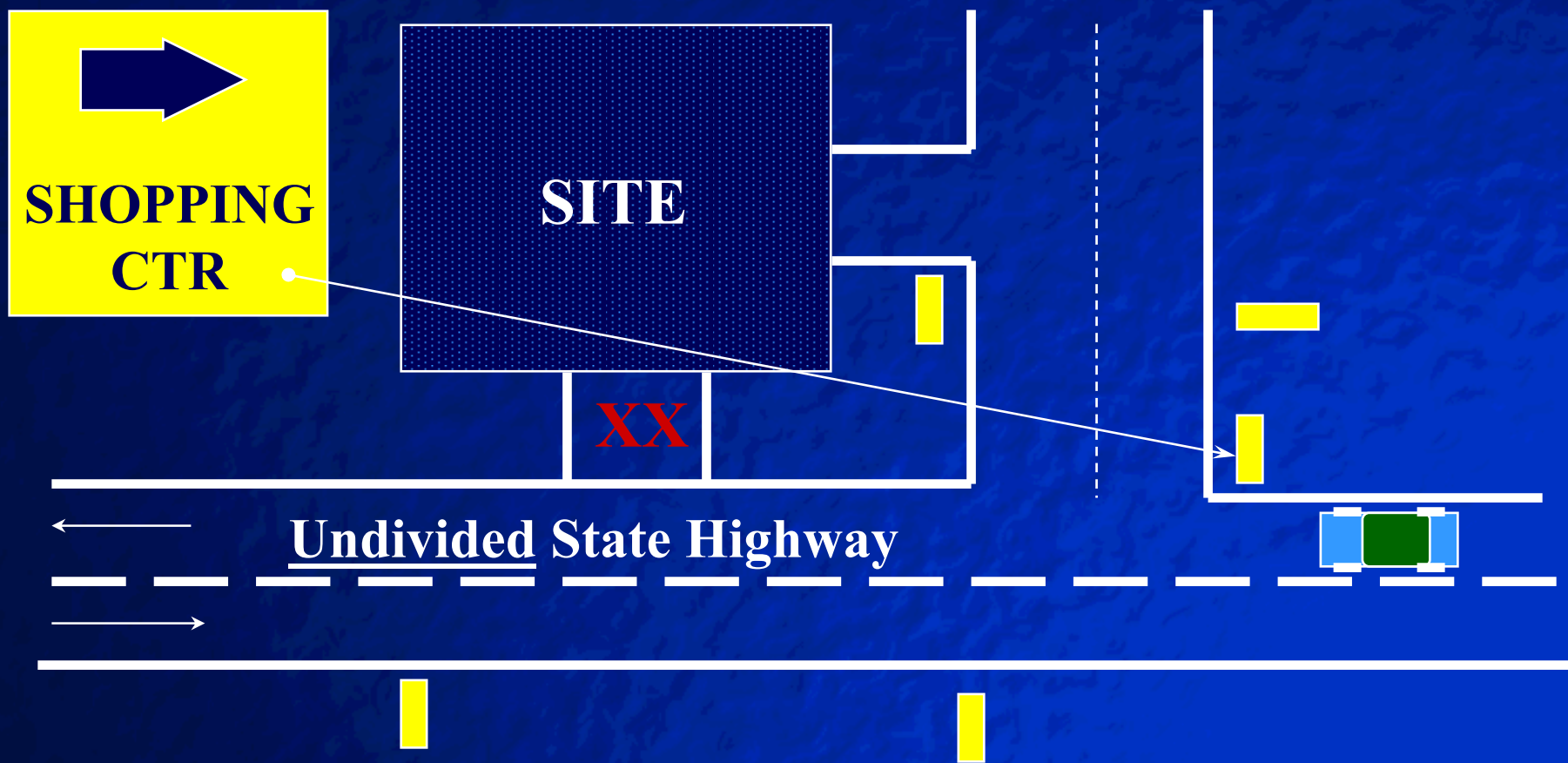
Recommended Sign Placements

- Site is downstream of Alternative Access
- Highway is undivided

Revocation of Commercial Access Test 5

Recommended Sign Placement

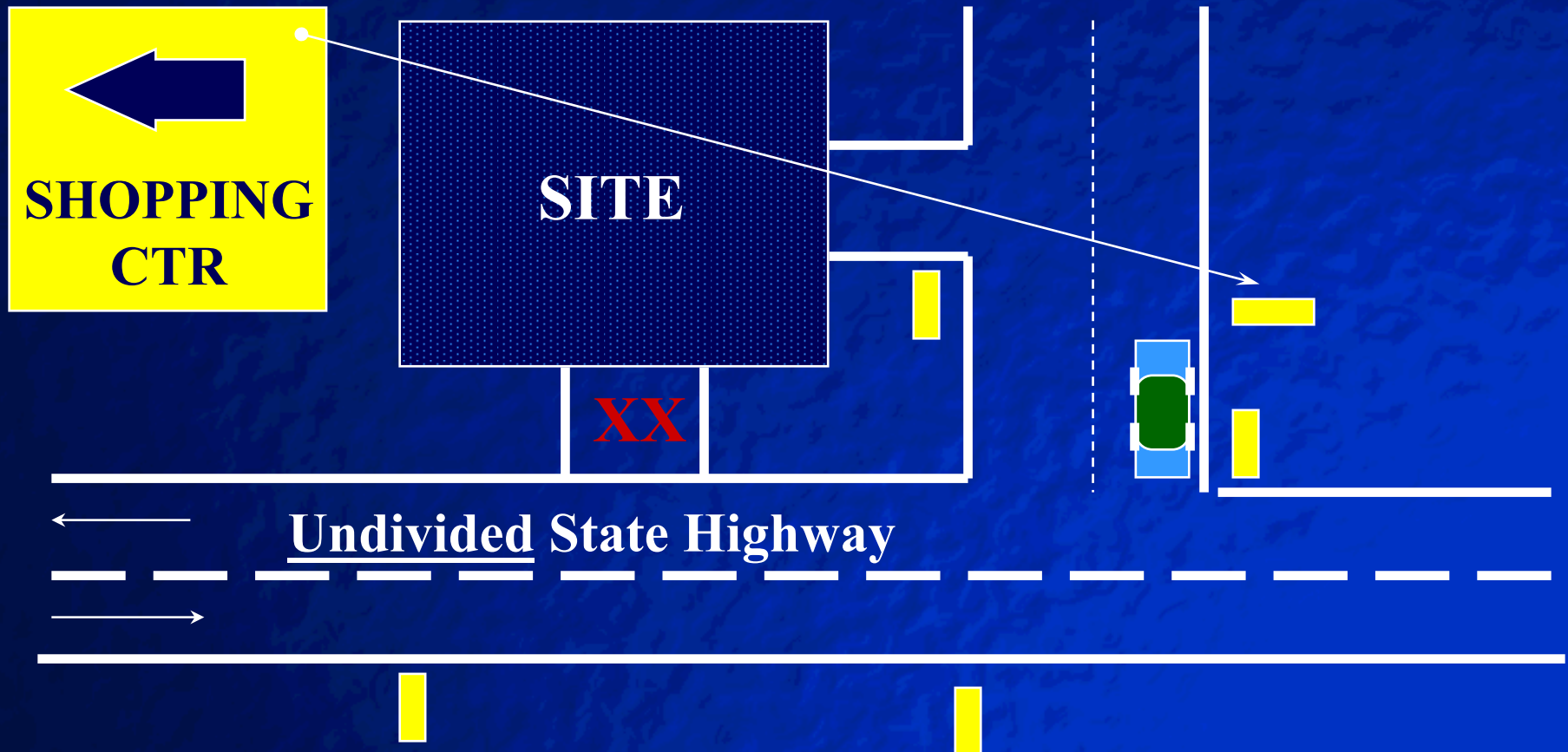
(Site is DOWNSTREAM of Alternative Access)



Revocation of Commercial Access Test 5

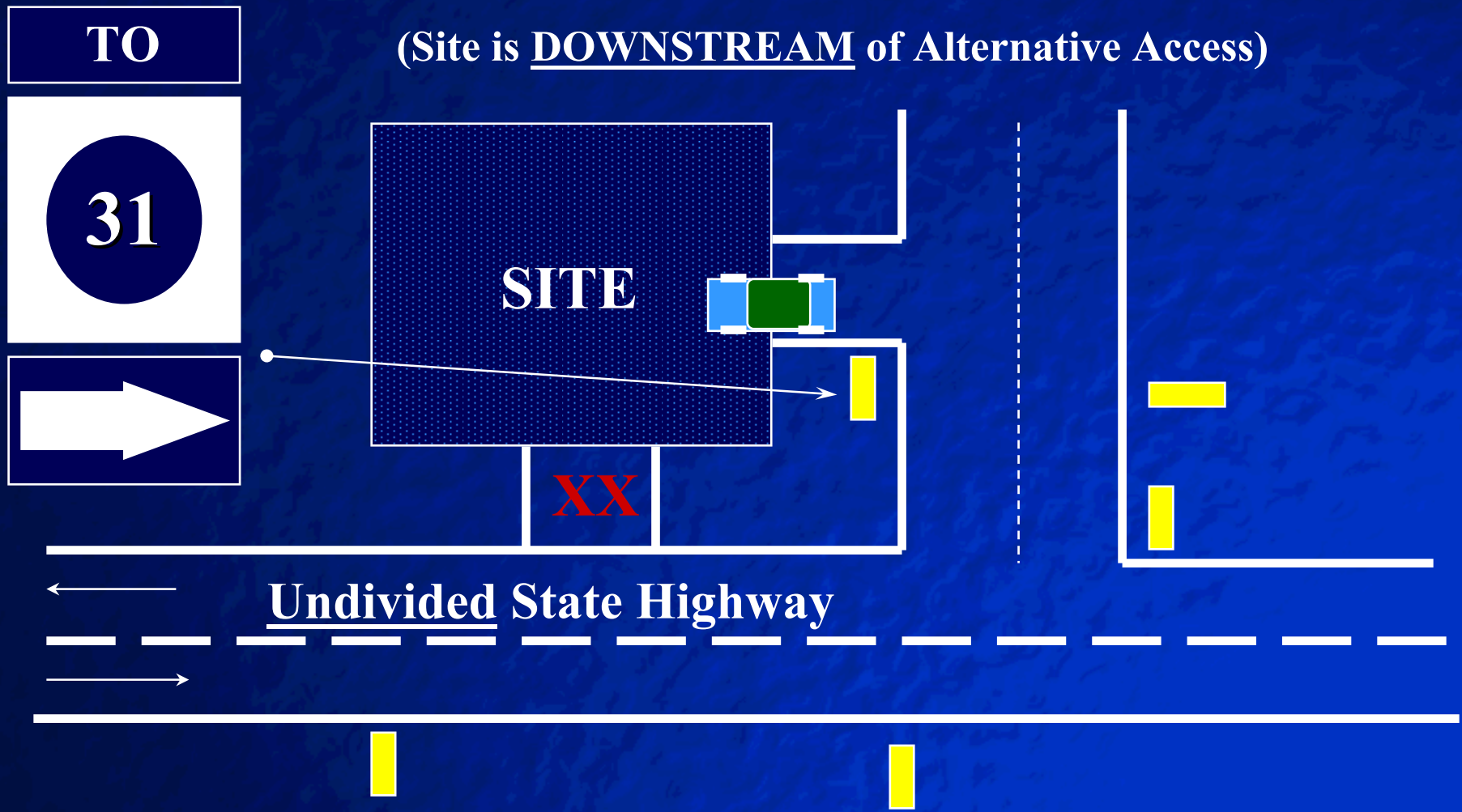
Recommended Sign Placement

(Site is DOWNSTREAM of Alternative Access)



Revocation of Commercial Access Test 5

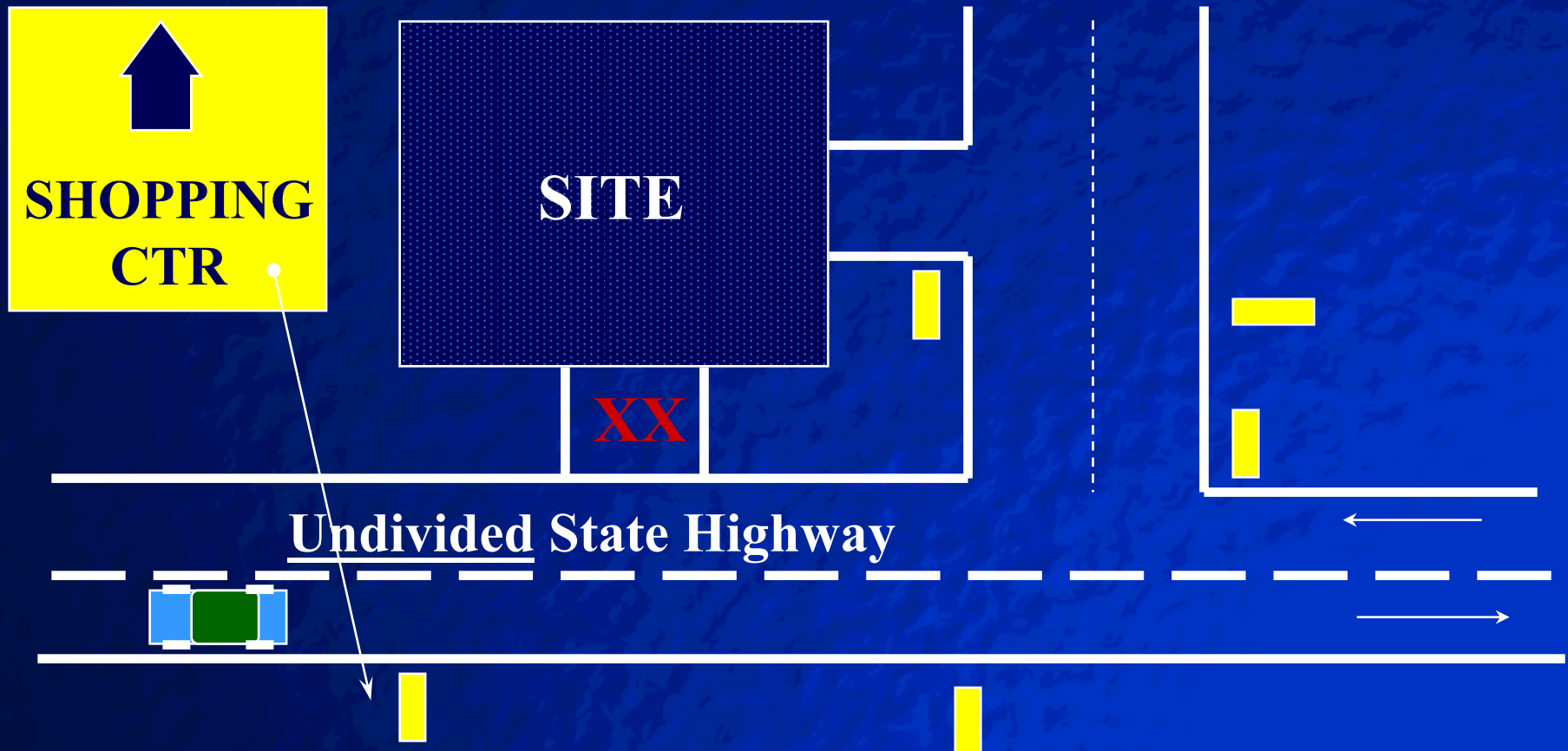
Recommended Sign Placement



Revocation of Commercial Access Test 5

Recommended Sign Placement

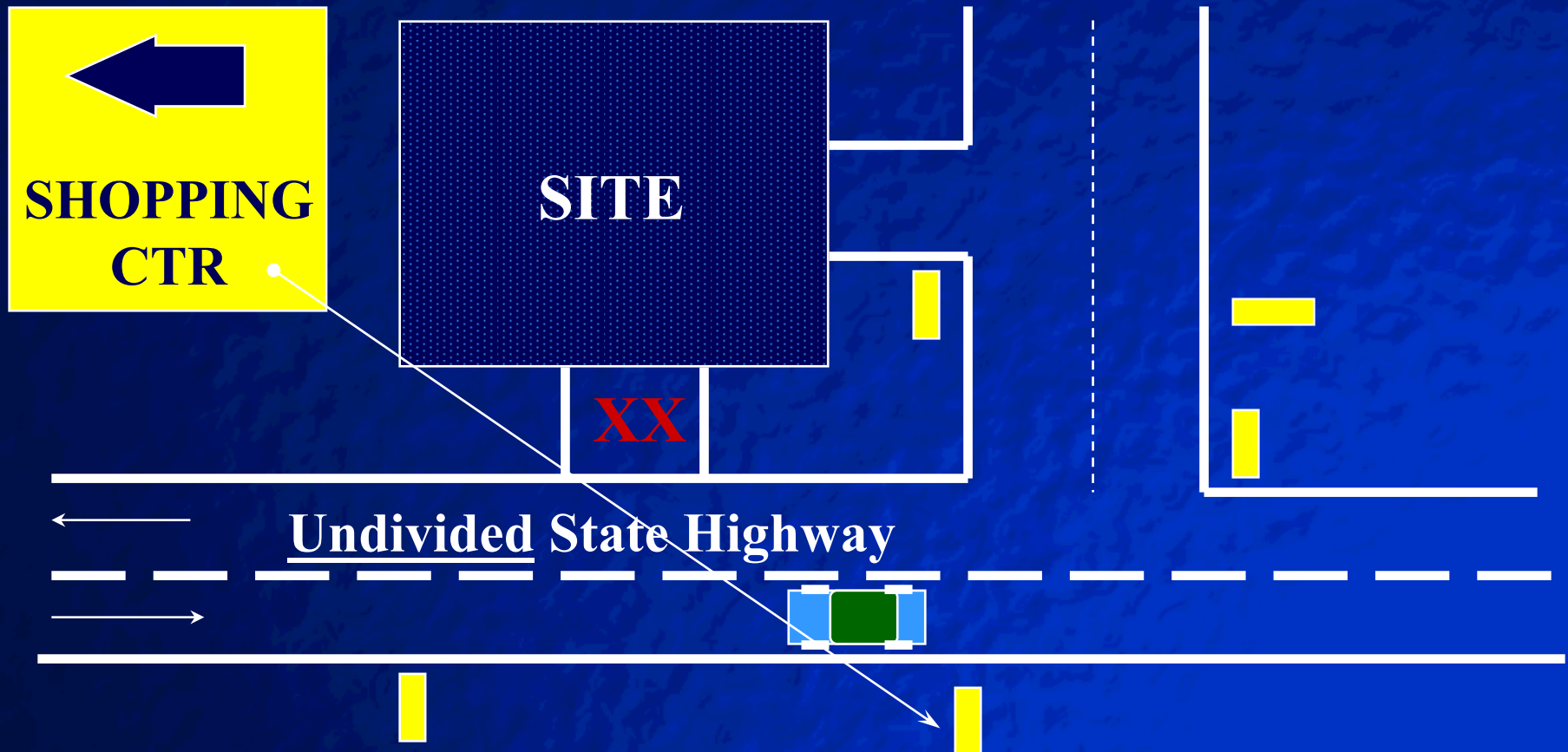
(Site is DOWNSTREAM of Alternative Access)



Revocation of Commercial Access Test 5

Recommended Sign Placement

(Site is DOWNSTREAM of Alternative Access)



Revocation of Commercial Access

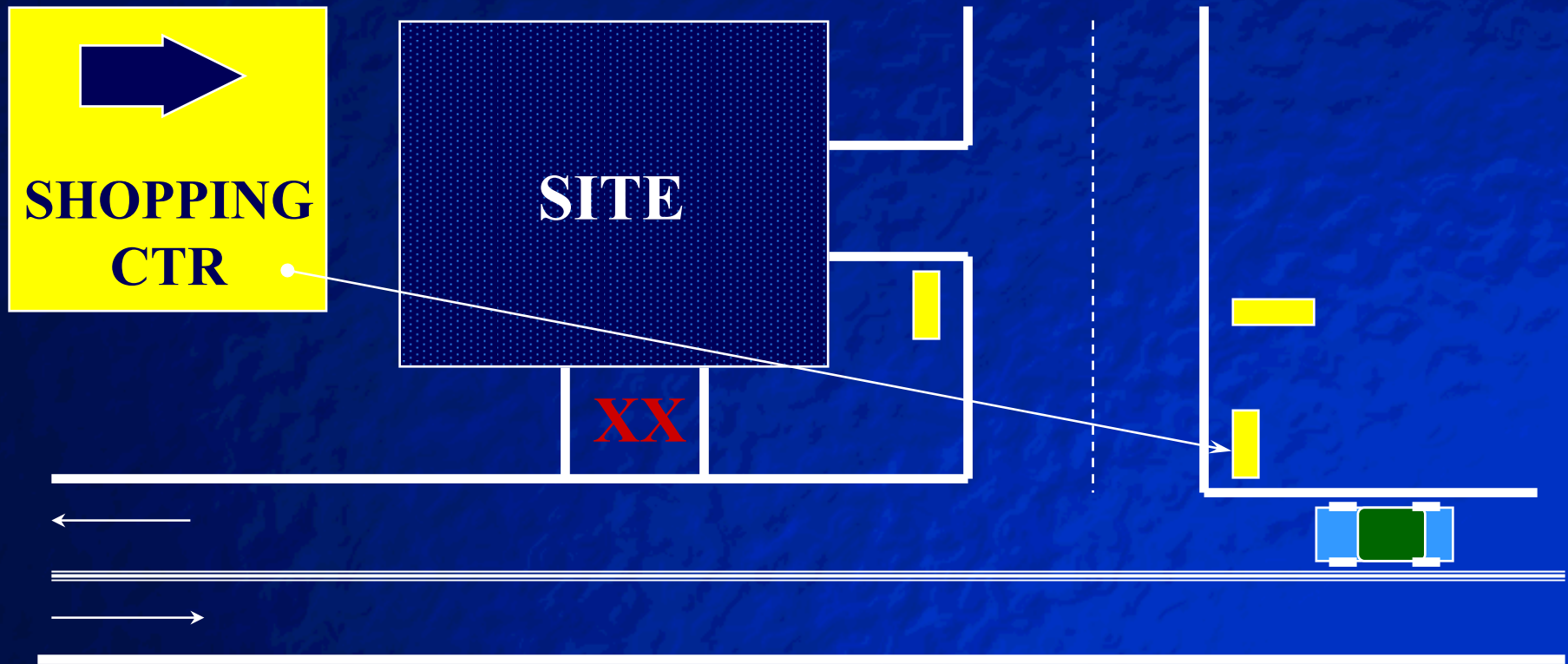
Recommended Sign Placements

- Site is downstream of Alternative Access
- Highway is divided

Revocation of Commercial Access Test 5

Recommended Sign Placement

(Site is DOWNSTREAM of Alternative Access)

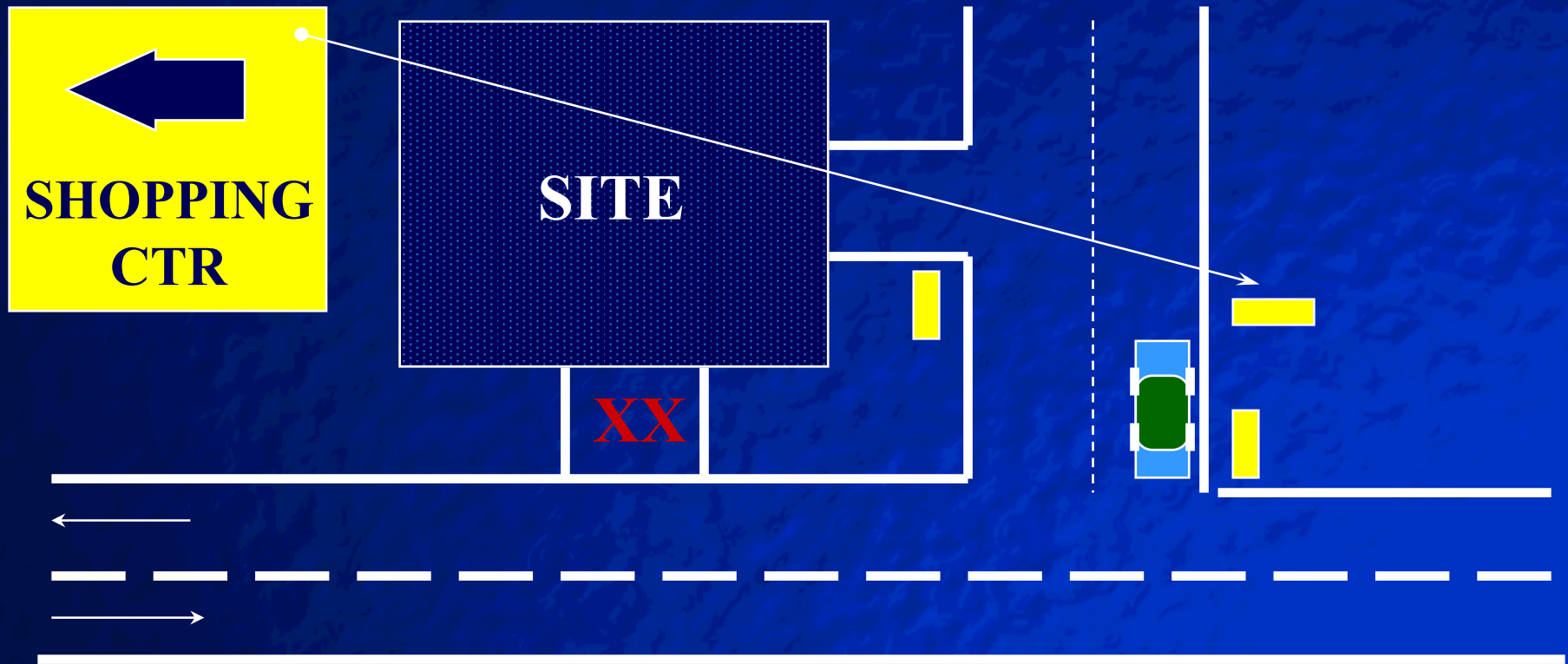


Divided State Highway

Revocation of Commercial Access Test 5

Recommended Sign Placement

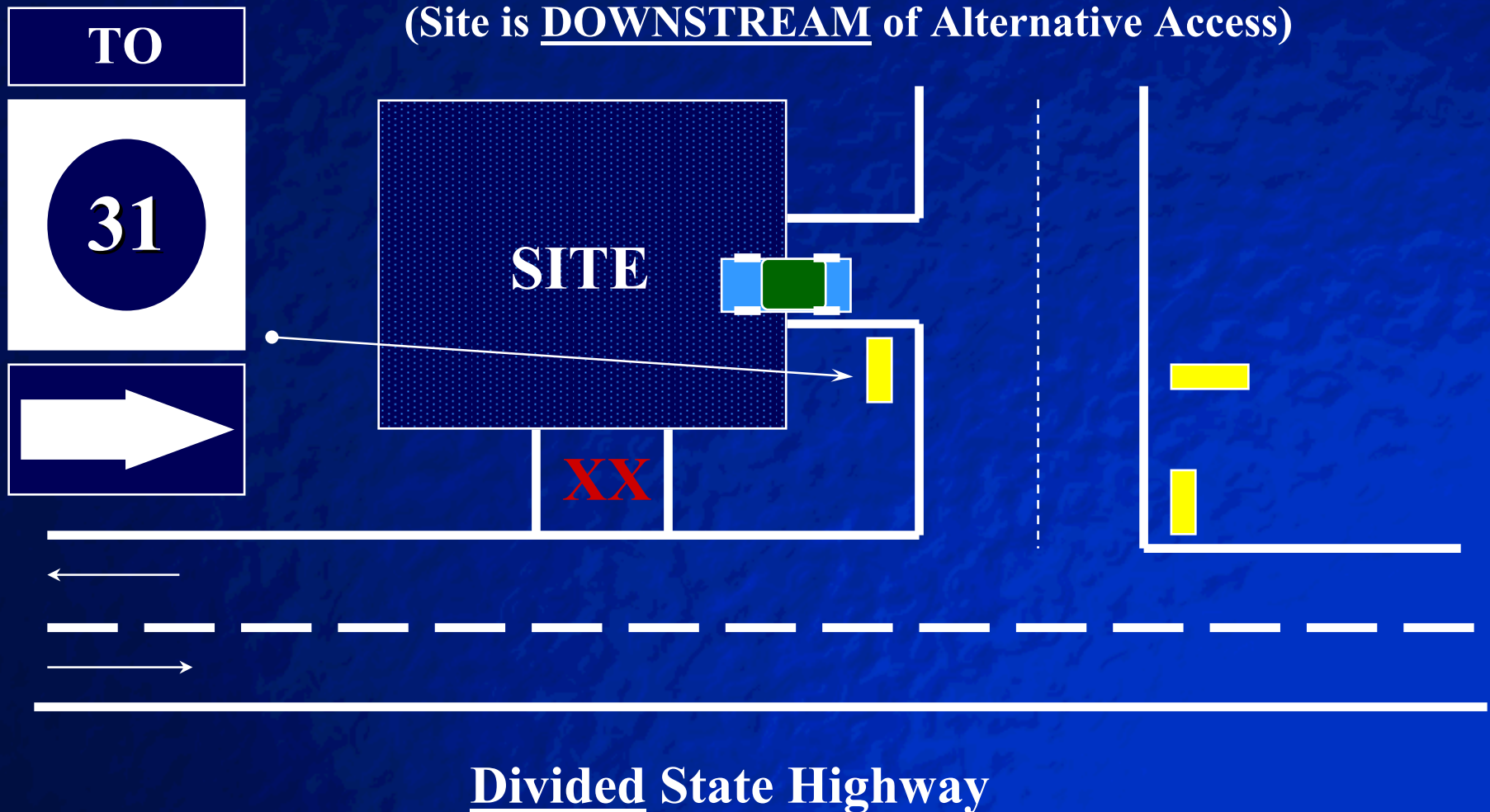
(Site is DOWNSTREAM of Alternative Access)



Divided State Highway

Revocation of Commercial Access Test 5

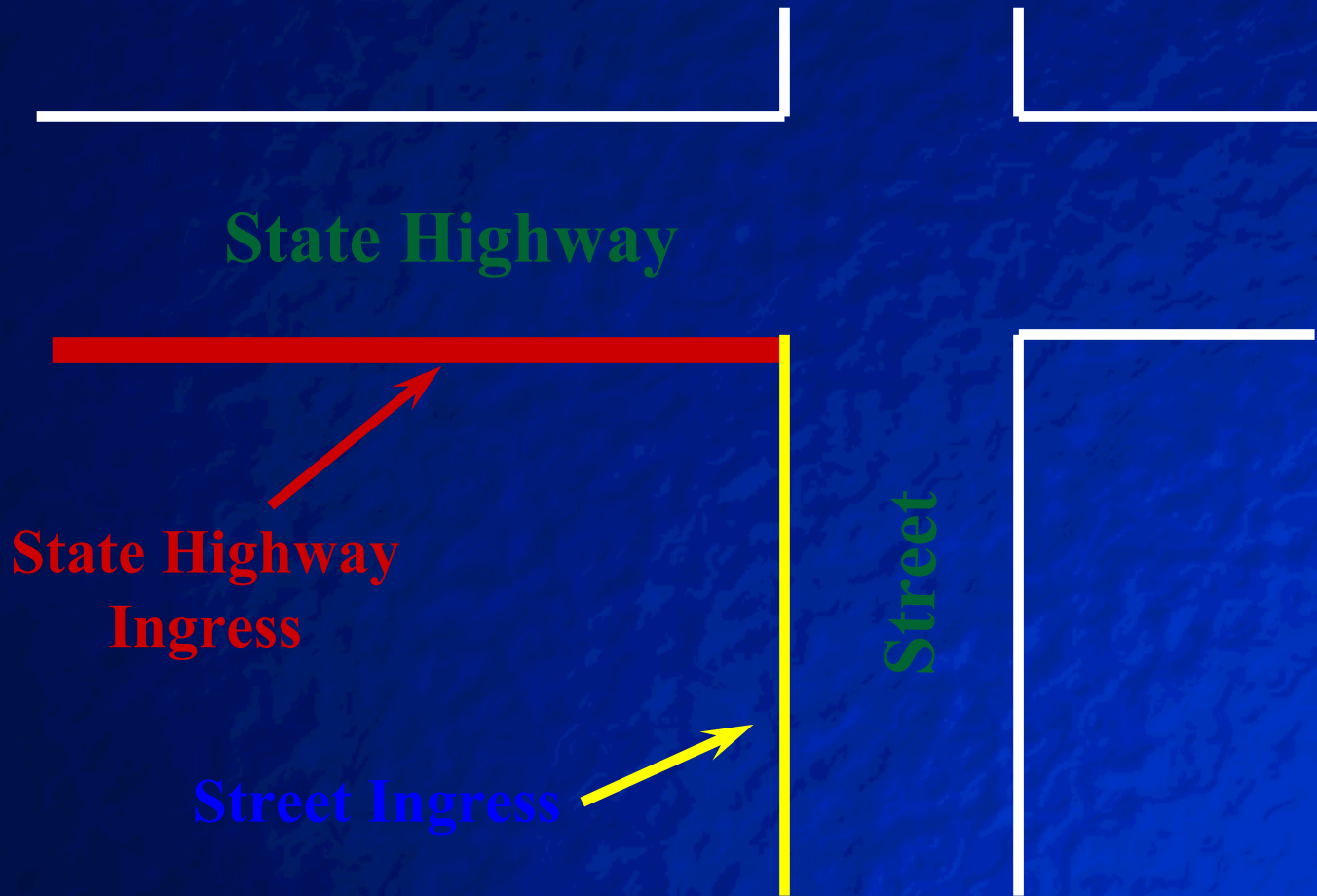
Recommended Sign Placement



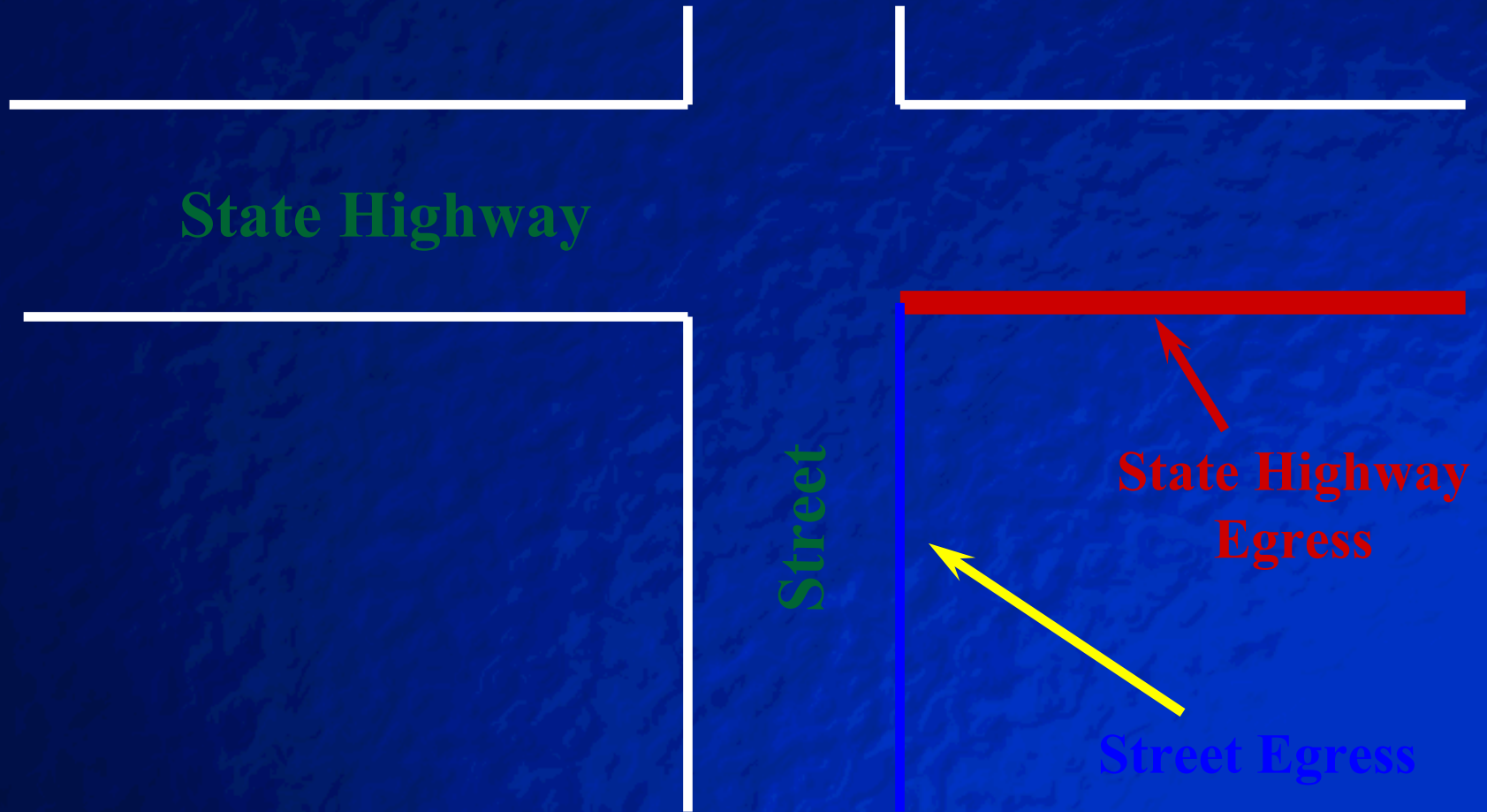
Where is Existing Access?

- Access
 - Ingress
 - Egress
- Road
 - State highway
 - Non-State highway
- Intersection
 - Street
 - Jughandle (Forward and Reverse)
 - Interchange

Street Intersection Ingress



Street Intersection Egress



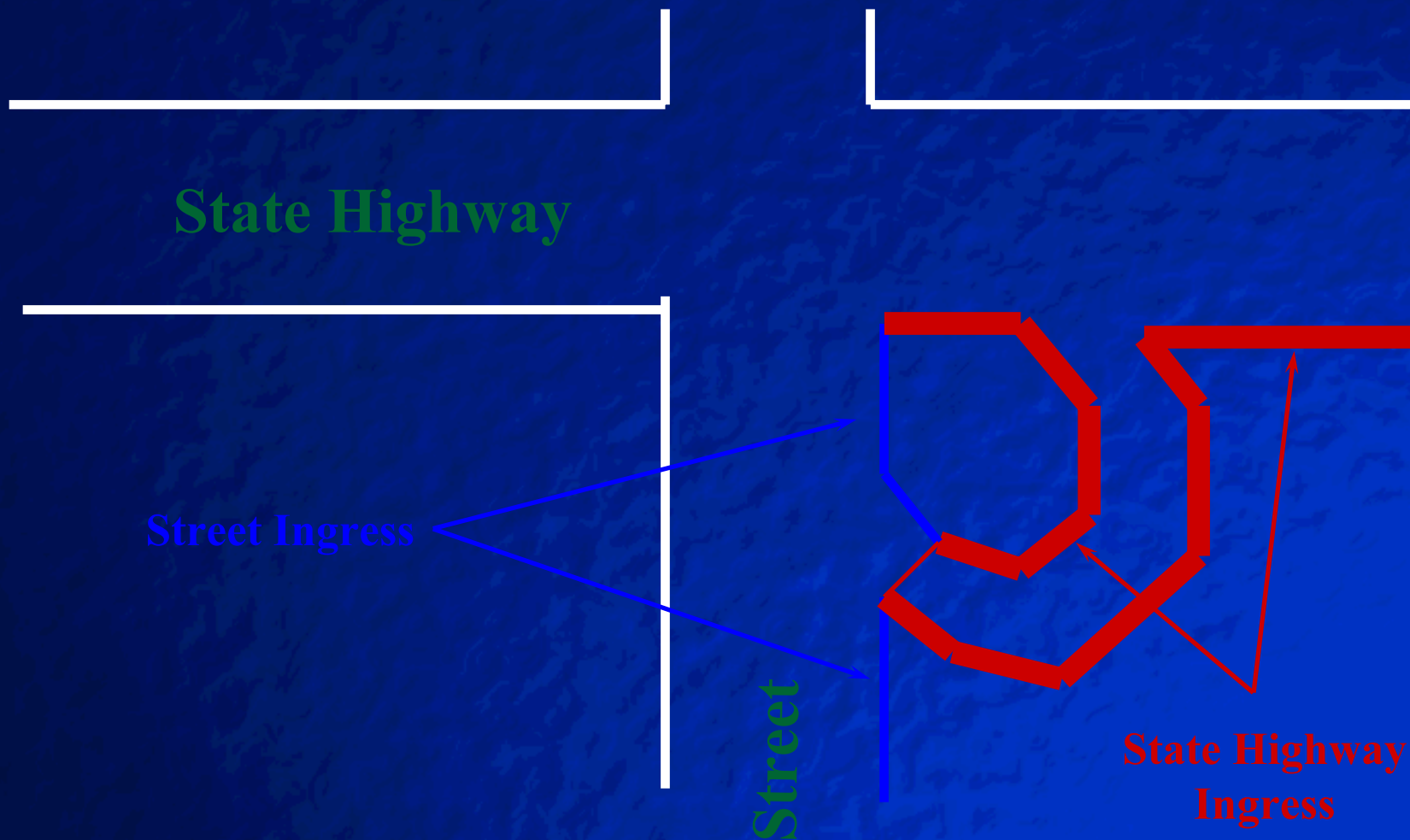
Forward Jughandle Ingress



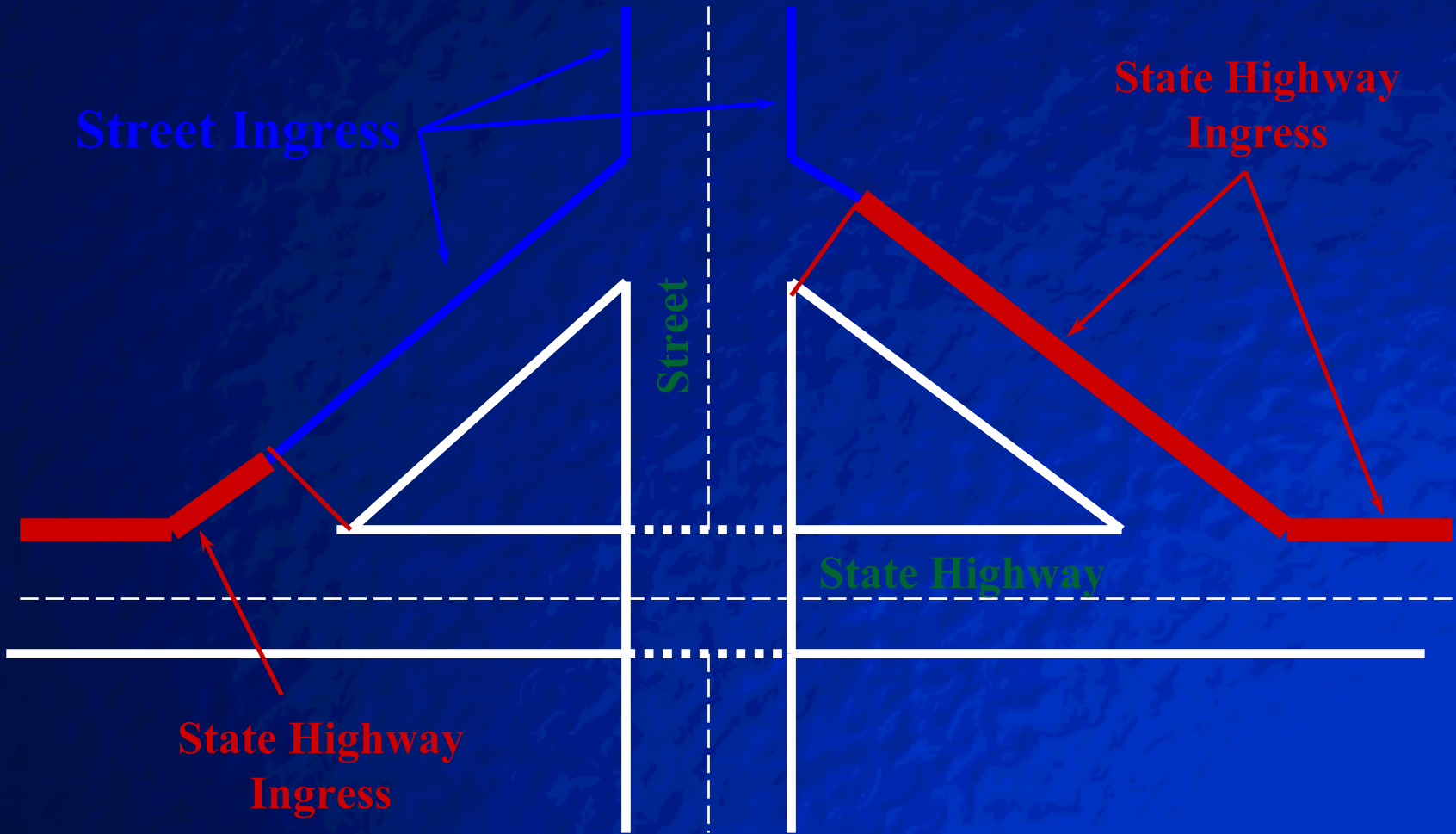
Forward Jughandle Egress



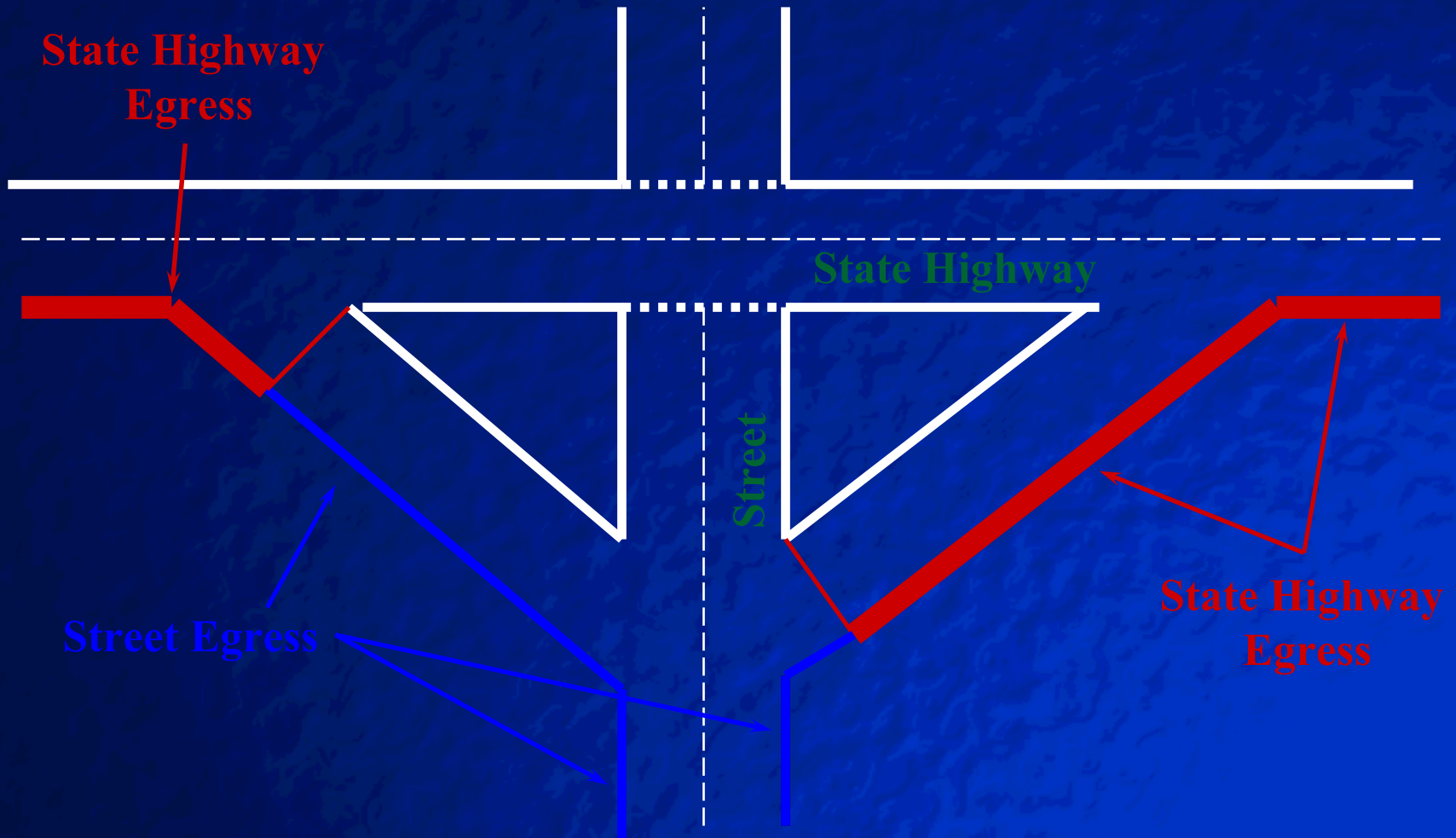
Reverse Jughandle Ingress



Interchange Ingress



Interchange Egress



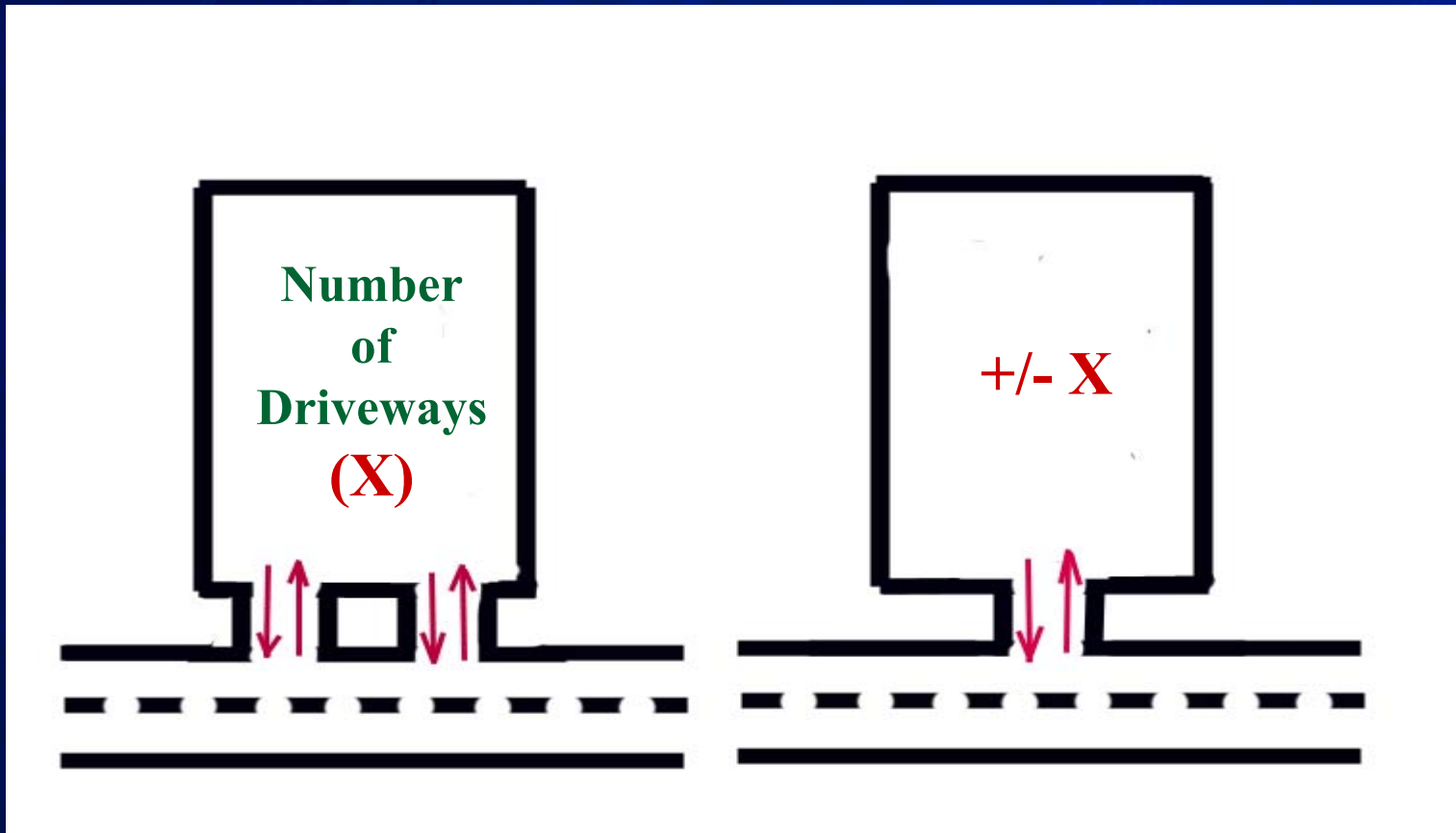
Modifications

Modification of Access

1. Changing the NUMBER of access points
2. Changing the WIDTH of an access point by MORE than 5 feet (1.5 meters)
3. Changing the LOCATION of an access point by MORE than 10 feet (3 meters)

Modification of Access

Example 1: Changing number of driveways

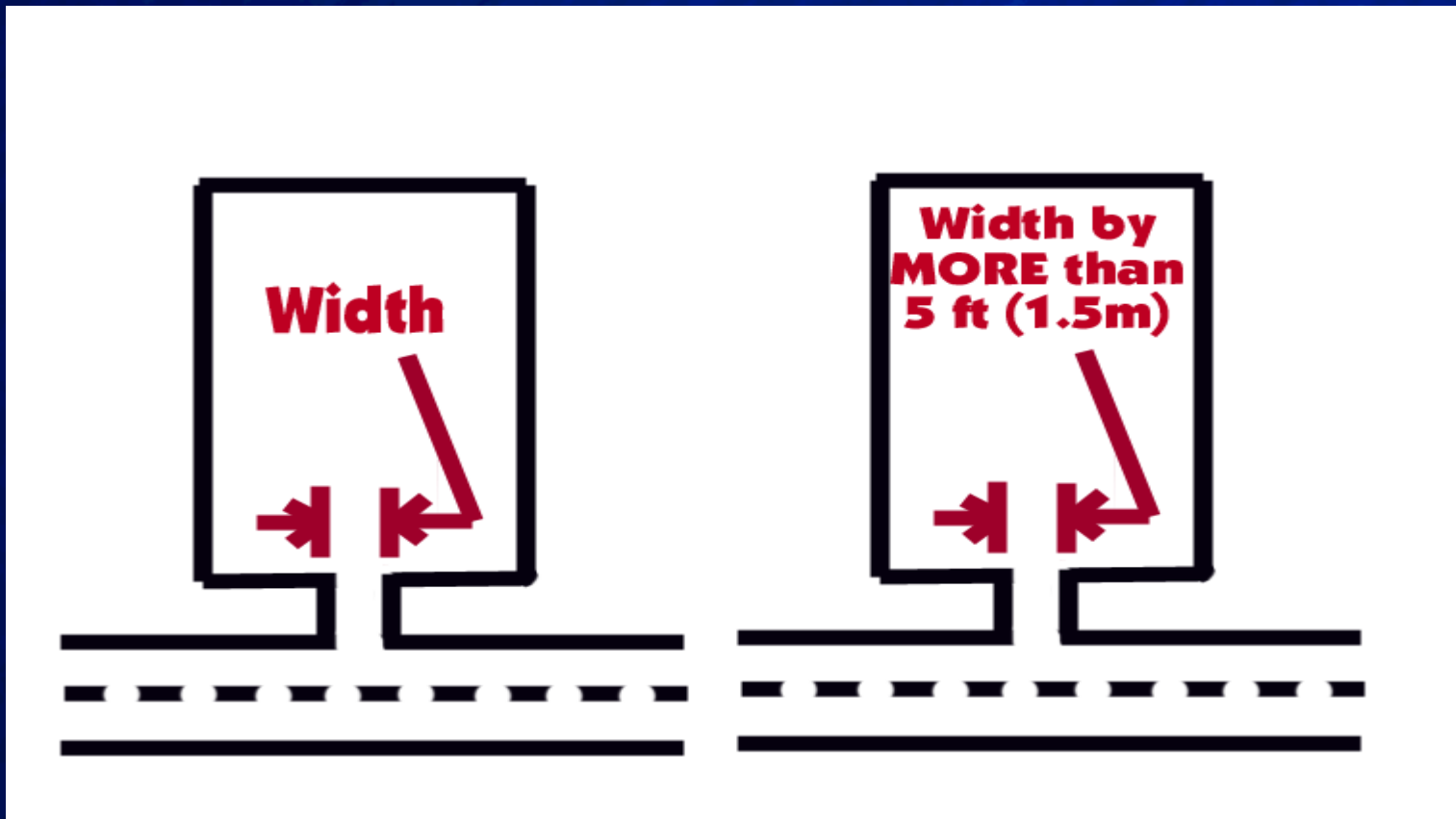


Before

After

Modification of Access

Example 2: Changing width by more than 5 feet

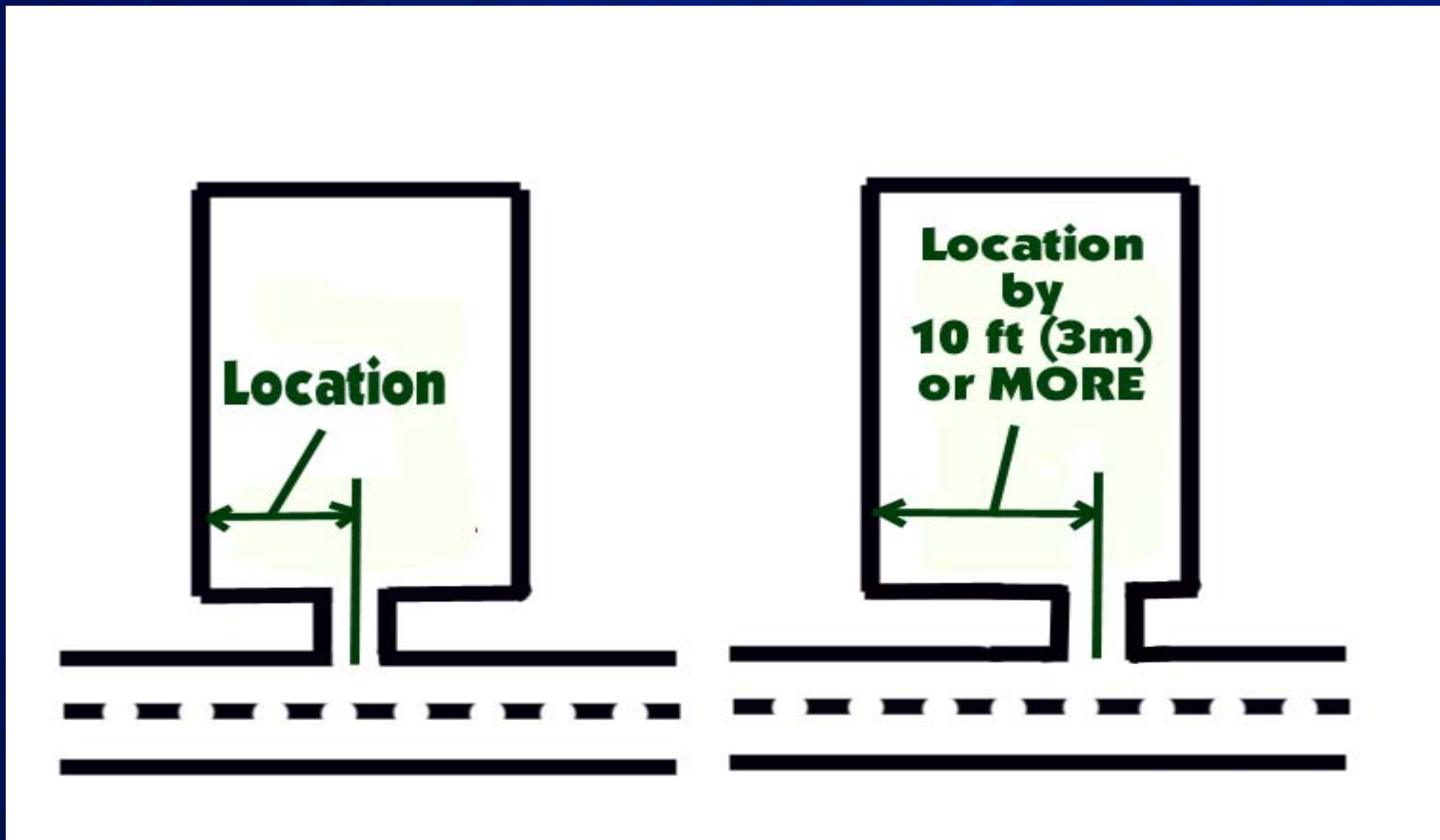


Before

After

Modification of Access

Example 3: Changing location by more than 10 feet



Before

After

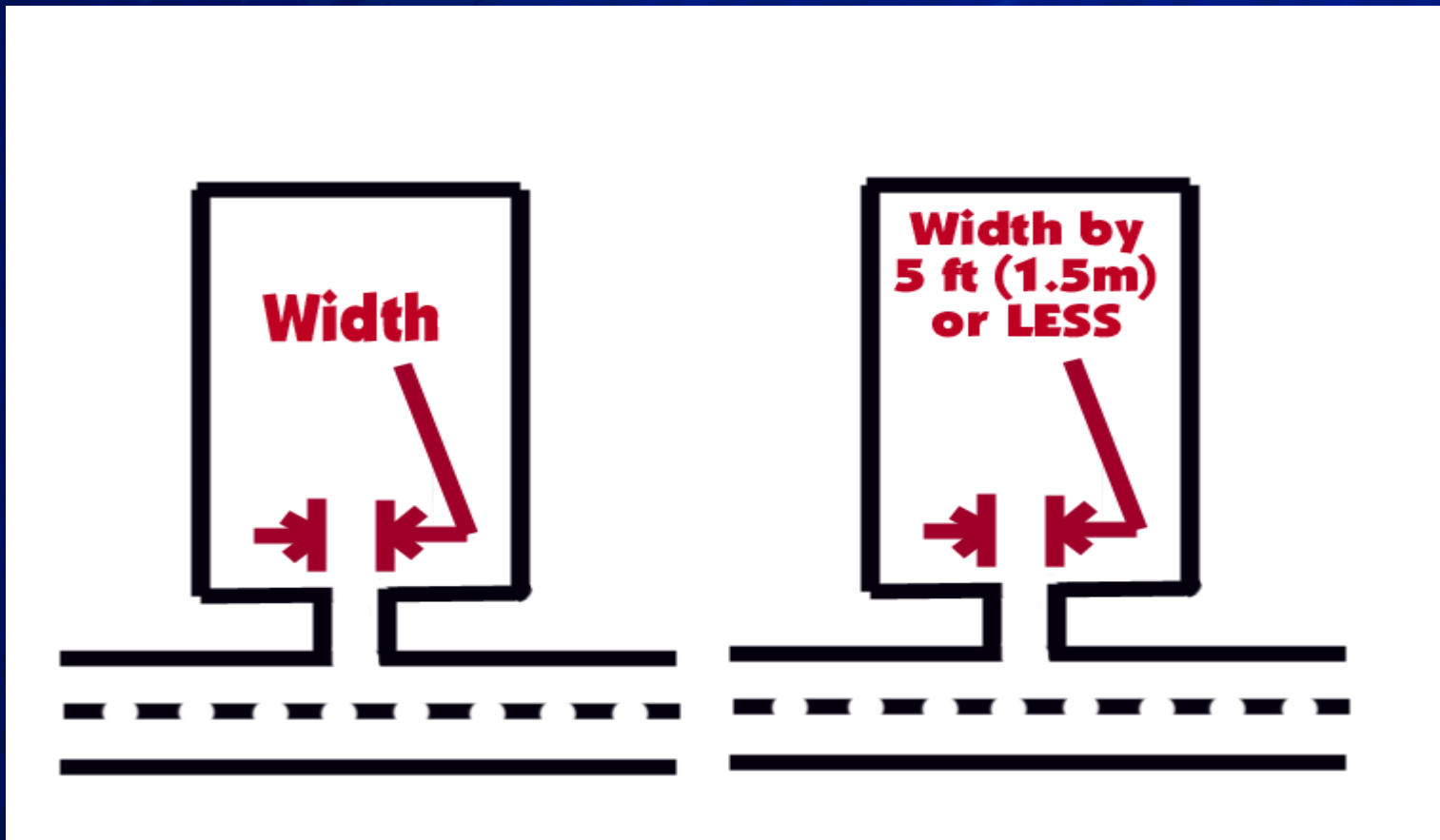
Adjustments

Adjustment of Access

1. Changing WIDTH of an access point by 5 feet (1.5 meters) or LESS
2. Changing the LOCATION of an access point by 10 feet (3 meters) or LESS
3. Moving an access point away from the centerline of the highway

Adjustment of Access

Example 1: Changing width by 5 feet or Less

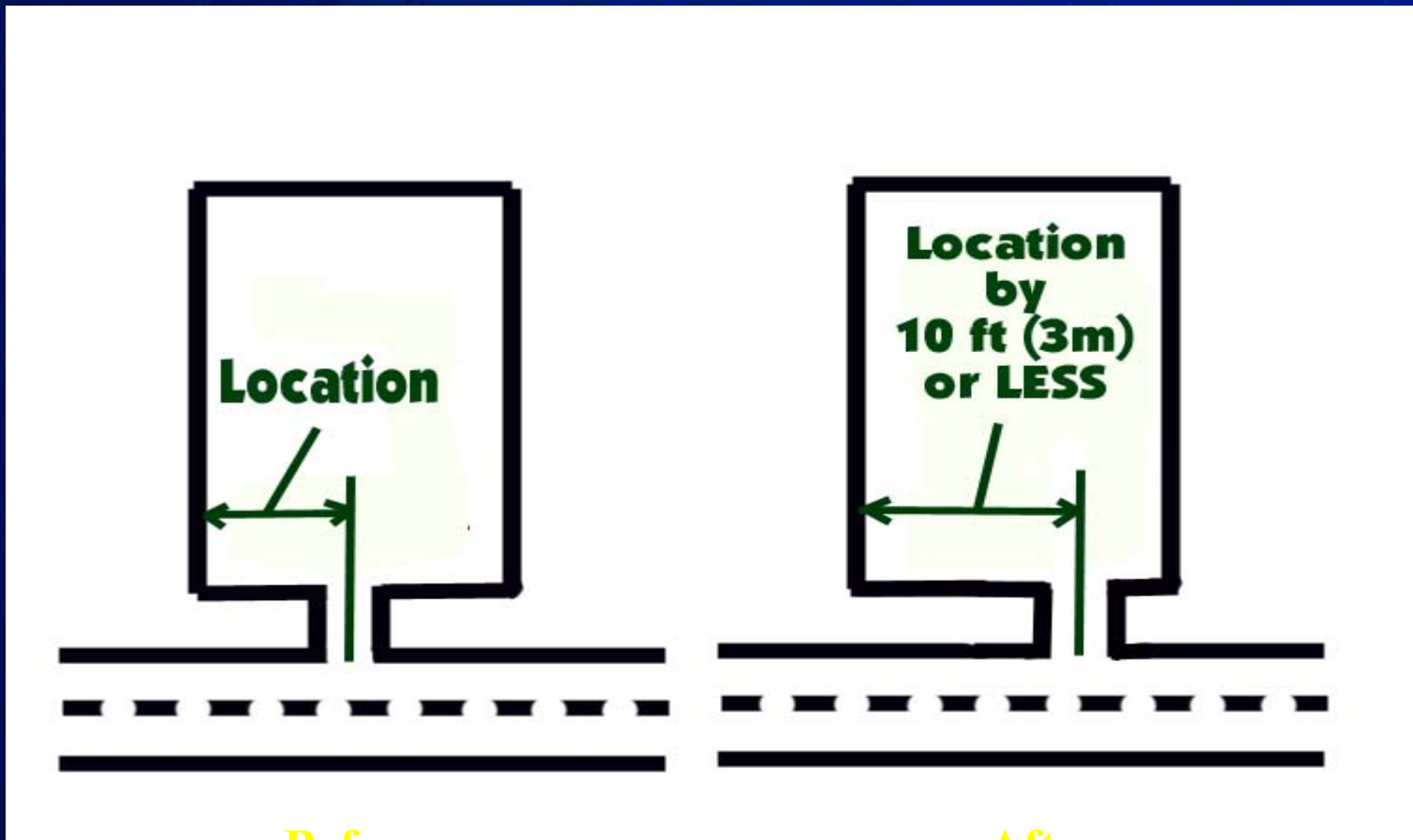


Before

After

Adjustment of Access

Example 2: Changing location by 10 feet or Less

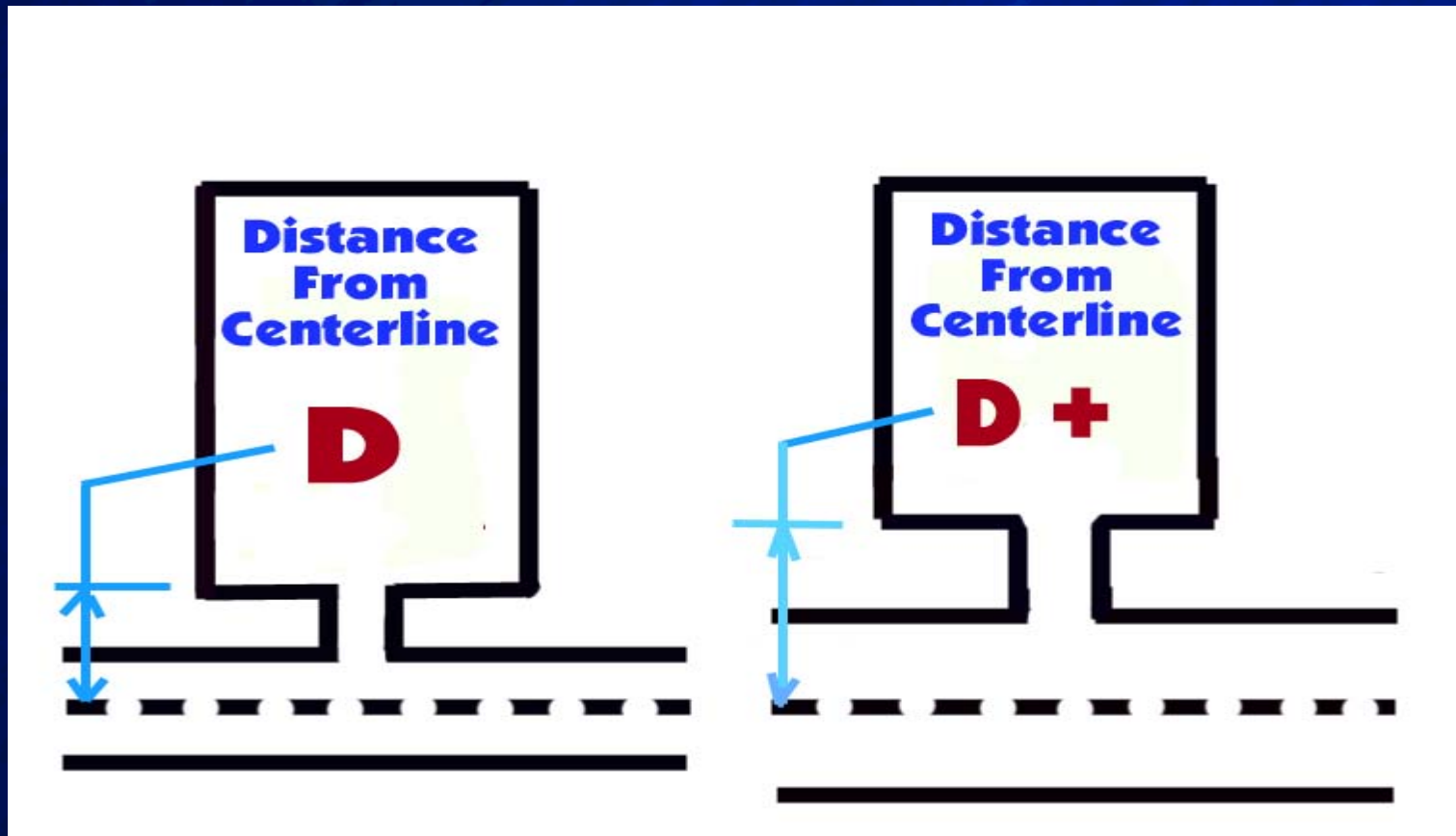


Before

After

Adjustment of Access

Example 3: Moving away from the Centerline



Before

After

COMMON DRIVEWAY PROBLEMS

What are the most common problems?

- **Too many existing driveways**
- **Driveways too close to intersections**
- **Owner has invaded the right of way**
- **Owner wants betterments**

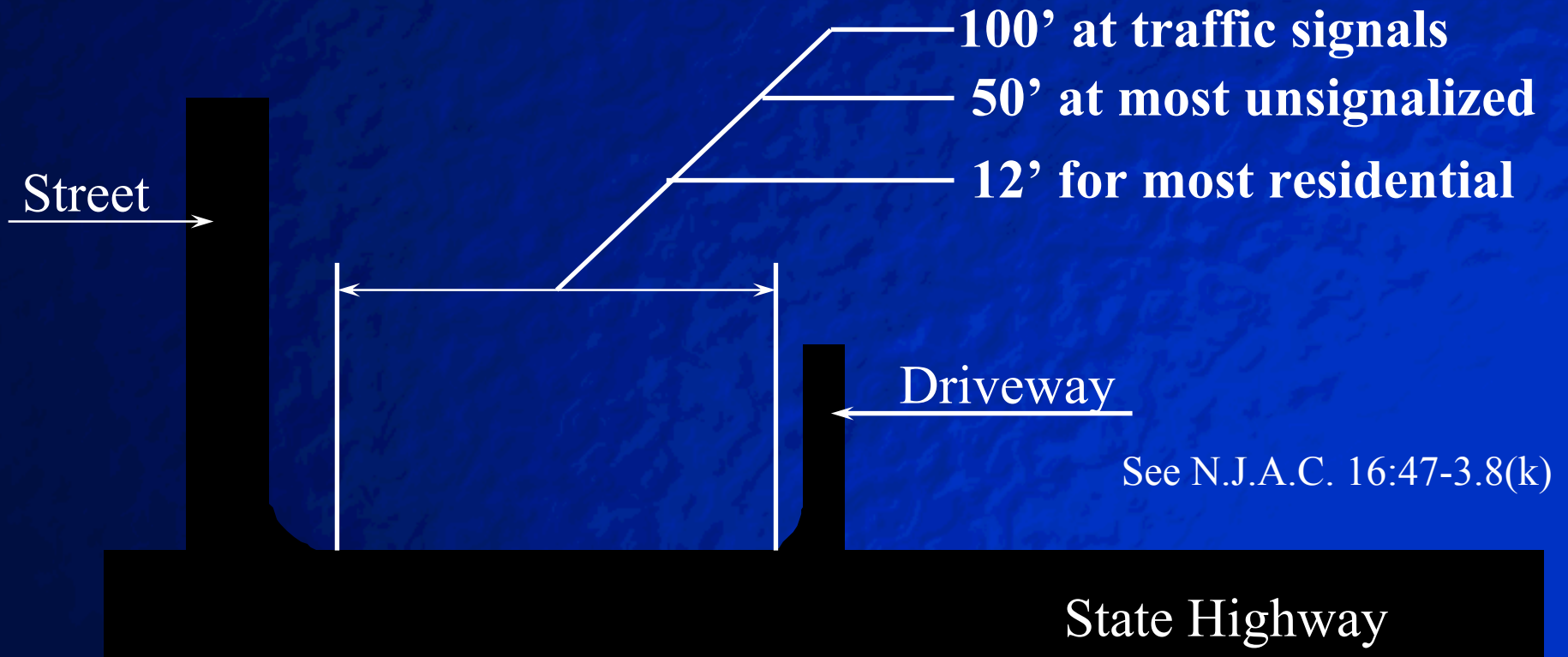
What are the most common problems?

- **Too many existing driveways**

Refer to Modification of Access

What are the most common problems?

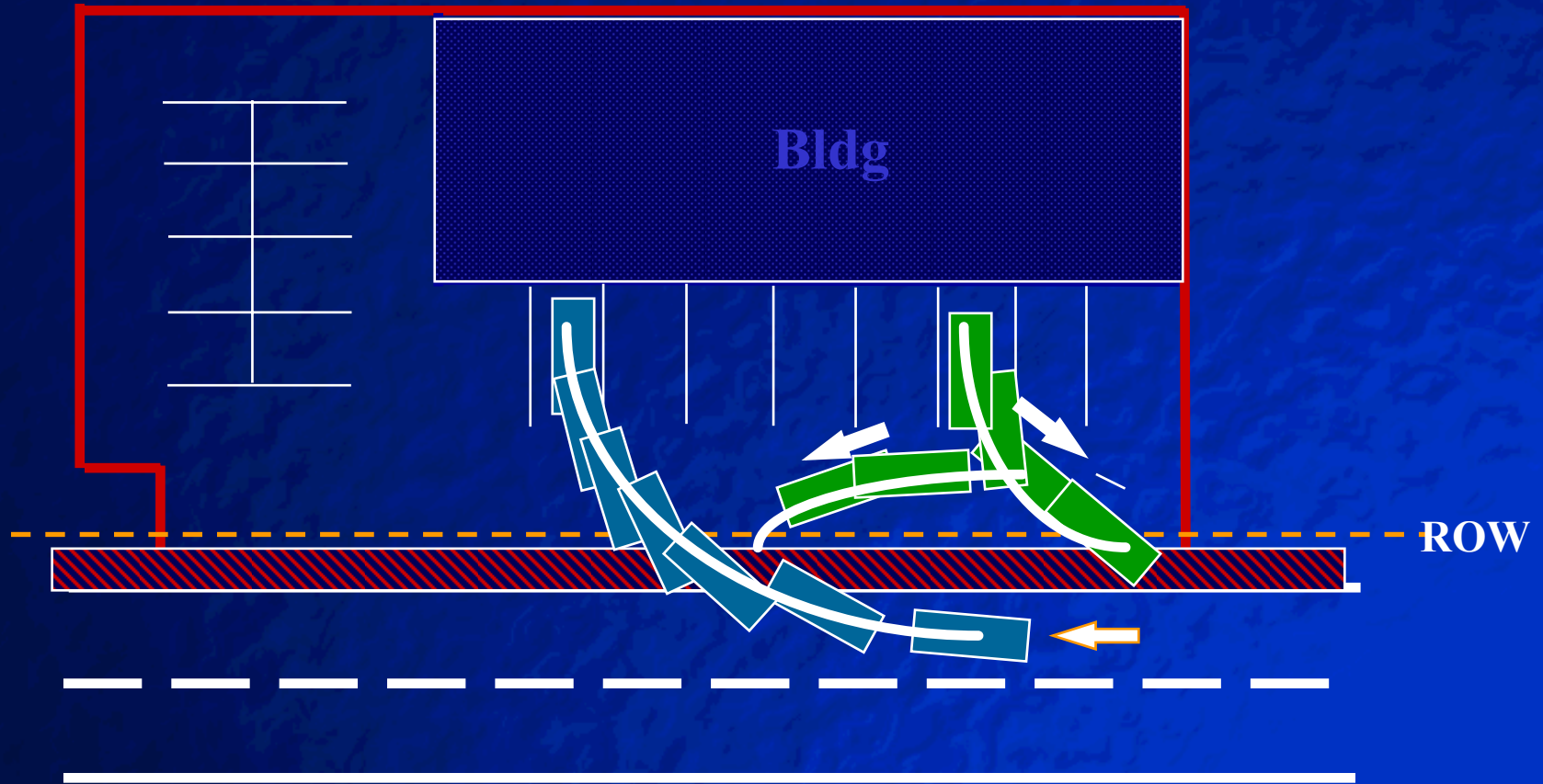
■ Driveways too close to intersections



What are the most common problems?

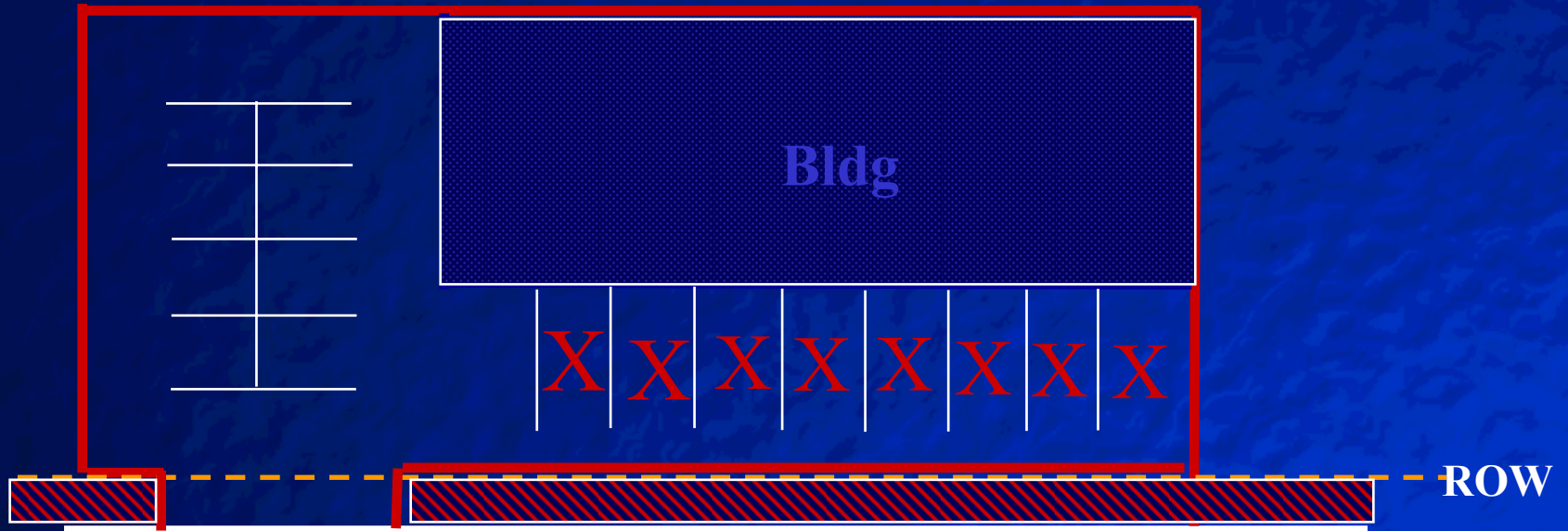
- **Owner has invaded the right of way**

Reclaiming ROW



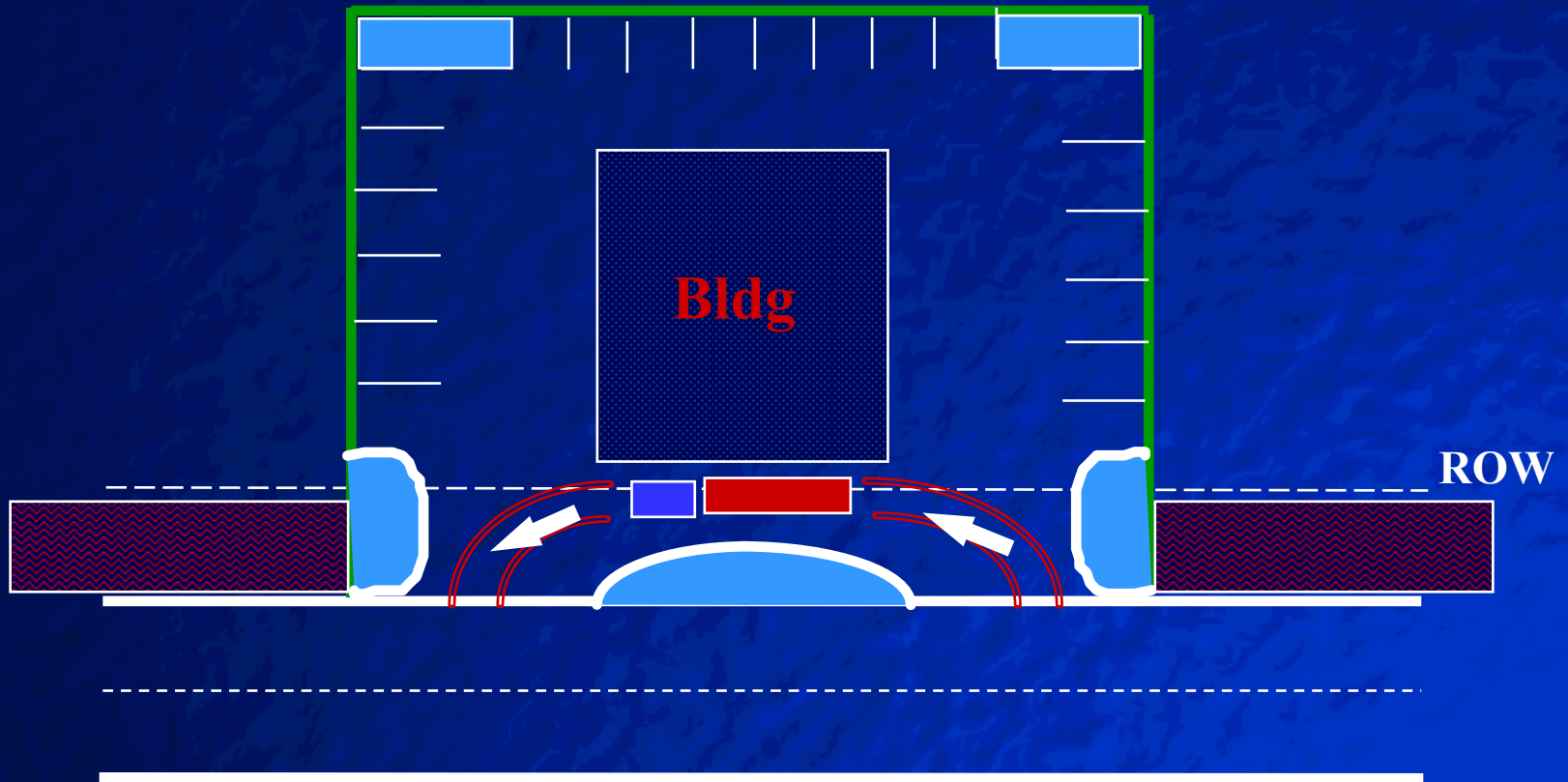
Before

Reclaiming ROW



After

Reclaiming ROW



Before

Reclaiming ROW



After

What are the most common problems?

■ Owner wants betterments

- One driveway before - Two driveways after
- Ingress only before - Ingress and egress after

*Being
Customer
Friendly*

CUSTOMER FRIENDLY

(effective 1/6/00, Commissioner merged OAD into MAP with a goal of improving the organizational structure with a focus on being customer friendly)

In order to be customer friendly and meet context sensitive design goals OAD staff attempts to balance requirements of the Access Code & the Roadway Design Manual against the objectives of the project.

New Designs

Example of a context sensitive design element without a corresponding NJ Access Code requirement.

Roundabouts and Access Management

Bruce W. Robinson

Principal Investigator

Roundabouts: An Informational Guide

<http://www.tfhr.gov/safety/00068.htm>

Kittelson & Associates, Inc.

Portland, Oregon USA

Access Management

- What to do with driveways?
- Three typical cases
 - Driveways entering roundabout
 - Driveways near roundabout
 - Mid-block driveways between roundabouts

Access Management

- What to do with driveways?
- Three typical cases
 - Driveways entering roundabout
 - Driveways near roundabout
 - Mid-block driveways between roundabouts

Driveways Entering Roundabout

- Generally should be avoided
- High-volume driveways should be designed as a regular approach



Driveways Near Roundabout

- In general, same principles as for driveways near signalized intersections *
- Should not locate driveways between pedestrian crossing and yield line
- Driveways blocked by splitter island restricted to right-in/right-out

*

NJ Access Code would = 100 ft from PT

Mid-block Driveways Between Roundabouts

- Ability to provide full access dependent on several factors:
 - Capacity for minor movements
 - Need for and ability to provide left-turn storage between splitter island and driveway
- Can provide U-turns at roundabouts

Designer's Requirements

Designer's Requirements

Beginning in *Feasibility Assessment (FA)* and continuing through *Final Scope Development (FSD)* the designer of record is responsible for an overall project access plan.

Additionally, the designer is responsible for reviewing *ALL EXISTING DRIVEWAYS* to determine if they are in conformance with the access code.

Designer's Requirements

If the existing driveways are in conformance with the access code, then no changes should be proposed.

If the existing driveways are NOT in conformance with the access code, then the design shall evaluate revising the existing driveway based on TWO VIEWPOINTS.

Designer's Requirements

Viewpoint 1:

As DOT's designer “*what would be required to bring the existing driveway into conformance by adherence to the access code*”.

Viewpoint #2:

As the hypothetical property owner's site engineer “*would the owner be agreeable to solutions identified in viewpoint #1*”.

Designer's Requirements

If viewpoint #2, is **NOT** compatible with viewpoint #1, then the designer should propose a scheme for access that would likely be acceptable to the owner, keeping in mind the objectives of the access code. It will be the designer's responsibility to propose any waivers, including recommendations to OAD. Ultimately, OAD & the PM will decide on a final access solution.

Designer's Requirements

If viewpoint #1 & viewpoint #2 *are reasonably similar*, then the solutions from viewpoint #1 should be progressed.

Designer's Requirements

If the proposed solution will result in a **REVOCATION** of access, then the designer shall evaluate & document if the alternative access is reasonable or unreasonable.

OAD will evaluate the designer's documentation and agree with the findings of reasonableness **BEFORE** a revocation of access notification letter is sent.

Access Cutouts

Preparation of Access Cutouts

Following the establishment of the project's geometry the designer will prepare detailed access cutouts that will be used for property owner notification, based on:

- ROW Lines (Existing & Proposed)
- Property Lines (Existing & Proposed)
- Slope Lines (Existing & Proposed)
- Denial of Access Lines (Existing & Proposed)
- Traffic Striping (Existing & Proposed)
- Driveways(Existing & Proposed with limits of paving)
- Drainage & Sign Structures (Existing & Proposed)
- Guiderail (Existing & Proposed)
- Block #, Lot #, Zoning & Existing Land Use
- Existing Topography
- Existing On-Site Parking, circulation & Loading Areas

Cutout Content Requirements

- Size (sufficient to show entire property)
- Owner's Name & Address
- Legend:
 - Scale of Plan
 - Title Block



- Proposed ROW Line Block
- No Abbreviations
- Alternative access route & signing plan (revs only)
- Existing Driveway (**RED**)
- Existing Driveway To Be Removed (**Purple**)
- Proposed Driveway (**Blue**)
- Topsoil and Seeded Area (**Green**)
- Date of Plan (mm/dd/yy)
- 12 Copies (minimum)

Preparation of Access Cutouts

■ Consultant

- Prepare markups on the base plan
- Submit markups to OAD for review
- Prepare individual cutouts (Revocations, Modifications, Adjustments, Changes showing entire property)
- Revs require a plan showing alternative access route and signing plan

■ Office of Access Design

- Review submitted markups
- Arrange meeting with Project Manager and Consultant to discuss alternatives for lots with unique or difficult access
- Review submitted cutouts for conformity with Access Code and content requirements

Sufficiency of Access

Design Vehicles

- Passenger cars
- Single unit trucks (UPS, Fedex, etc.)
- Fuel delivery vehicles - WB 15 (Gas Stations)
- Tractor trailers
 - WB 15
 - WB 19

Things to Consider

- Identify the vehicles that use the site
- Establish the *before* travel paths
 - Getting to and from the site
 - Circulating on the site
- Establish the *after* travel paths
 - Analyze getting to and from the site
 - Analyze circulating on the site

Sufficiency of Driveway Design

Date of road traffic volumes = Date of initial access notice

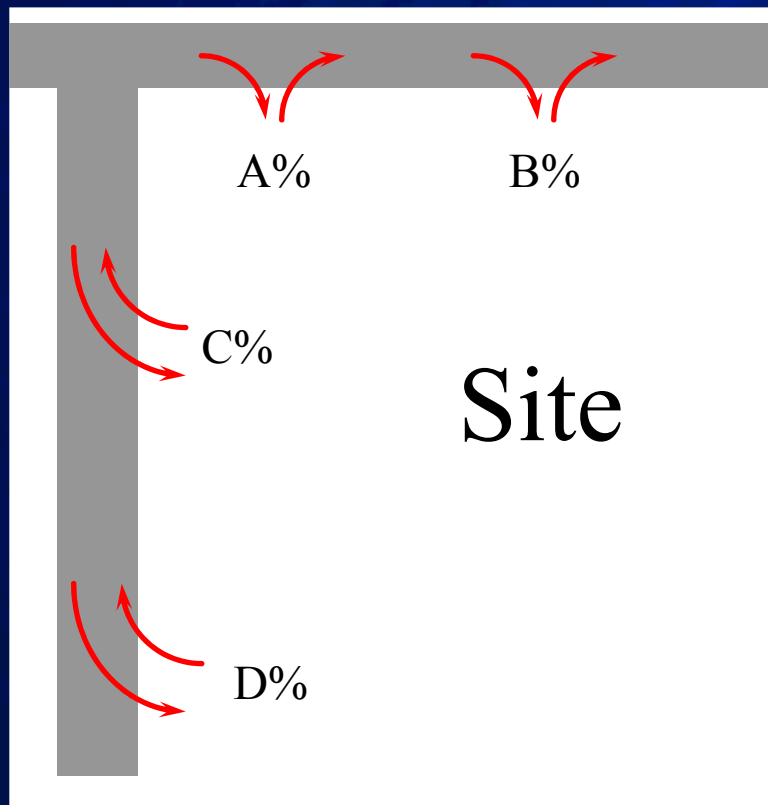
Site trip generation = ITE rates for size and type of land use

Site trip distribution = Based on traffic counts or assumptions

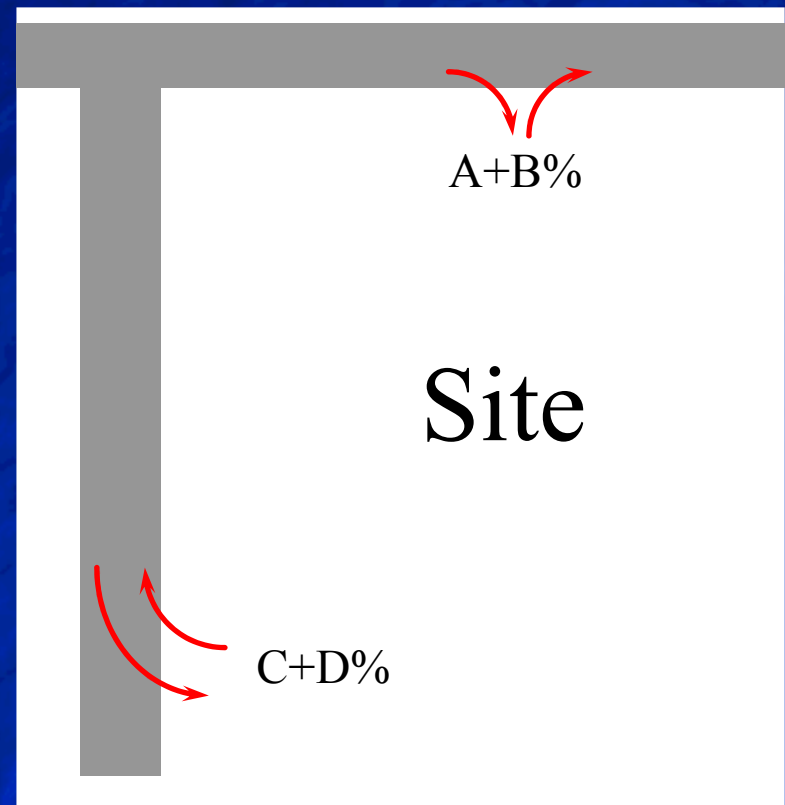
Hours to analyze = PM and Saturday for shopping, AM and PM for most other land uses

Driveway LOS standard = A-E >> 45 seconds Urban, 30 seconds Rural

F >> no worse than no-build



Before



After

Sufficiency of Design Traffic Engineering Issues (Revocations)

- **Ability of alternative access roadways to handle traffic**
- **Ability of alternative access driveways to handle traffic**

Sufficiency of Design Analysis Before Submitting Revocation Plan

- Project traffic conditions to date of revocation notice
- Traffic for existing roads
 - DOT may have counts
 - Designer may have counts
- Site traffic
 - Use ITE trip generation rates; or
 - Use trip generation from Appendix E1

Sufficiency of Design

Analysis Before Submitting Revocation Plan

- Traffic counts may be needed to establish distribution for sites with multiple driveways
- Use Highway Capacity Manual analyses for
 - Signalized and unsignalized intersections
 - Merges and diverges, etc.
- Present results in tables

Access Appeal Process

Appeal Process

- Department Notification of Access Impacts
- **Adjustments** (appeal process NOT required)
 - Department may offer an unofficial appeal opportunity same as a modification
- **Modifications** (appeal process required)
 - informal hearing with Manager,
 - informal hearing with Director, Design Services
- **Revocations** (appeal process required)
 - informal hearing with Manager
 - formal hearing with Administrative Law Judge

Timeframes Modification Appeal Process

	<u>STEP</u> <u>DAYS</u>
■ Owner requests informal meeting with Manager MAP	30
■ Informal meeting scheduled	5
■ Informal meeting held	30
■ Manager MAP responds to owner	30
■ Owner accepts or appeals decision to Director Design Services	40
■ Director schedules hearing	5
■ Director holds hearing	30
■ Director makes Final Agency Determination	30
	<u>Total</u> <u>200</u>

Timeframes Revocation Appeal Process

	<u>STEP</u> <u>DAYS</u>
■ Owner requests informal meeting with Manager MAP	30
■ Informal meeting scheduled	5
■ Informal meeting held	30
■ Manager MAP responds to owner	30
■ Owner accepts or appeals decision to OAL	40
■ Manager Major Access Permits requests OAL hearing	15
■ OAL holds hearing	120
■ OAL Judge makes recommendation to Commissioner	75
■ Commissioner makes Final Agency Determination	45
	<u>Total</u> 390

Does Being Customer Friendly Work?

Since January 6, 2000:

- ✘ Less than 10 modifications have been appealed to Director of Design Services.
- ✘ TWO revocations of access have been appealed to OAL.
- ✘ Access appeal process has become participatory by including ROW, PM's & designers.
- ✘ Access decisions based on Departmental teamwork.
- ✘ Savings to project schedules & costs.
- ✘ Allows access to be concluded faster which allows ROW process to begin sooner.

We've carefully thought out all the access

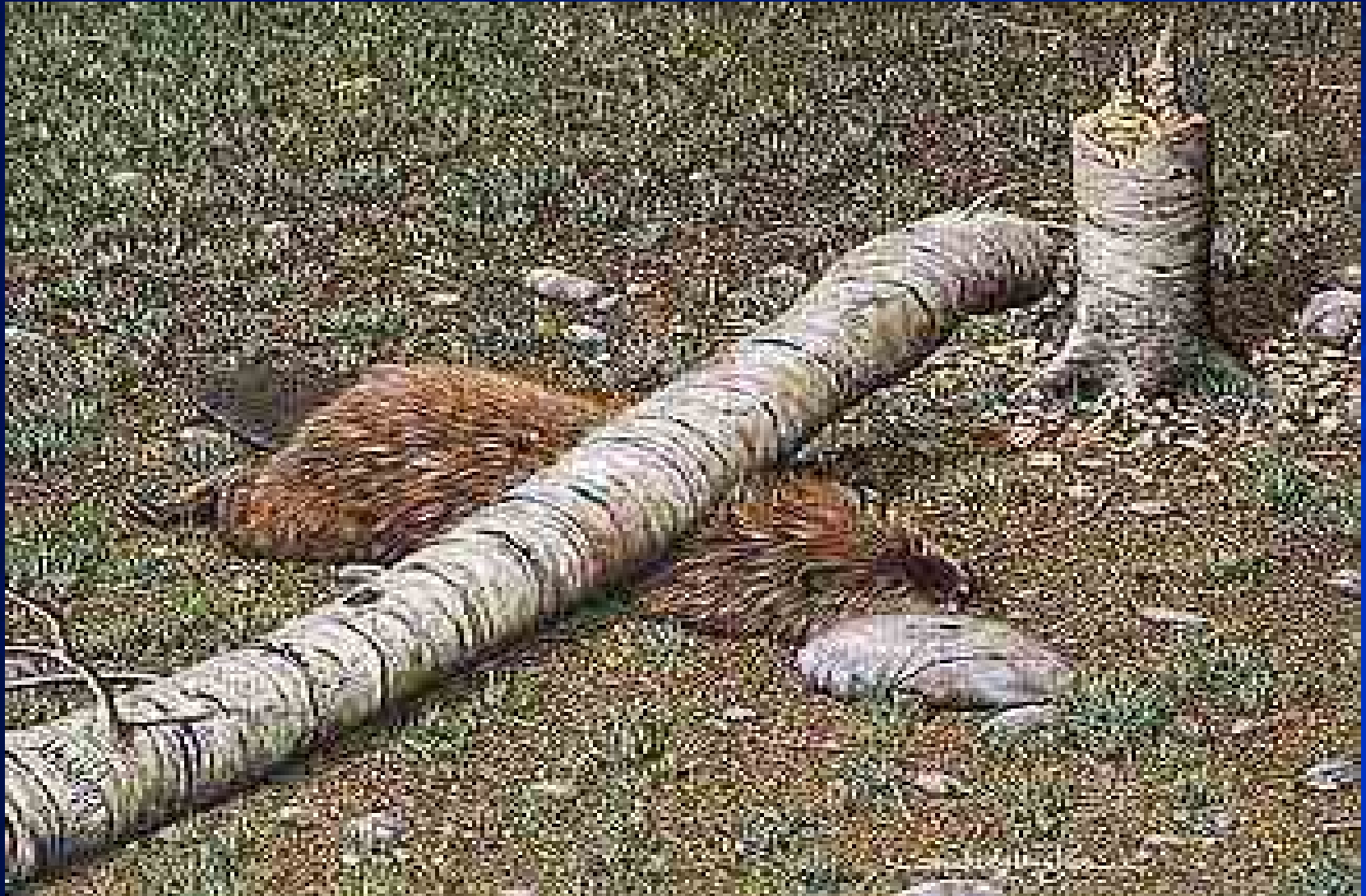
We've used the access code a thousand times.

The access process comes naturally to us.

We know what we're doing, its what we've been trained to do.

*Nothing could possibly go wrong, **RIGHT ?***

Think Again - **always** expect the unexpected!





*Questions
&
Answers*

ACCESS TEST QUESTION 1

How many Departmental Access Classifications are defined in the NJ State Highway Access Management Code?

Correct answer is three (3), an adjustment, modification or revocation.

ACCESS TEST QUESTION 2

After receipt of a notification letter, how many days does a property owner have to appeal the Department's proposed access?

Correct answer is thirty 30 days. Officially, only modifications and revocations can be appealed. For adjustments, notification letters will not be sent to a property owner if ROW is being acquired. If ROW is not being acquired, then the department will notify a property owner of the access impacts as a courtesy and if requested a meeting may be held.

ACCESS TEST QUESTION 3

Which type of access impacts “require” the Department to offer an appeal process?

- Adjustments and Modifications
- Modifications and Revocations
- Adjustments, Modifications and Revocations
- Revocations

Correct answer is modifications and revocations only. There is no requirement to offer or to hold a meeting for an adjustment.

ACCESS TEST QUESTION 4

Which type of access impacts can be appealed to a non-NJDOT agency?

- Adjustments and Modifications
- Modifications and Revocations
- Adjustments, Modifications and Revocations
- Revocations

Correct answer a revocation: the department shall provide the lot owner with written notice of the owner's right to request a hearing in accordance with the provisions of the administrative procedure act, N.J.S.A. 52:14b-1 et seq., And the uniform administrative procedure rules, N.J.A.C. 1:1. An appeal to the office of administrative law, follows the property owners appeal to the department.

ACCESS TEST QUESTION 5

A revocation of access is limited to the elimination of:

- Direct Egress
- Direct Ingress
- Direct Egress and Ingress
- All the above

Correct answer is ALL THE ABOVE: A revocation of access is restricted to eliminating direct ingress, egress, or ingress and egress and providing access to a street, highway, easement, service road or common driveway other than the subject State highway.

ACCESS TEST QUESTION 6

For a revocation of access, how many types of actual lot zoning and actual land usage is considered for determining reasonable alternative access?

Correct answer is three (3) commercial, industrial, residential or agricultural. For a lot that is used for purposes more intense than it is zoned for, the existing use shall be used to classify which revocation standards apply. Prior to revocation, the department shall determine that the lot has reasonable access to the general system of streets and highways in the state, other than its state highway access, and that:

(continued)

ACCESS TEST QUESTION 6

For a lot zoned or used for commercial purposes, has access onto any parallel or perpendicular street, highway, easement, service road, or common driveway, which is of sufficient design to support commercial traffic to the site, and is situated so that motorists will have a convenient, direct, and well-marked means of reaching the site and returning to the state highway. Commercial purposes include, but are not limited to, wholesale facilities, retail facilities, service establishments, office buildings, research buildings, and residential parcels of at least 25 acres and at least four residential units per acre;

(continued)

ACCESS TEST QUESTION 6

For a lot zoned or used for industrial purposes, has access onto any improved public street, highway, access road, or easement across an industrial access road, which is of sufficient design to support necessary truck and employee access as required by the industry; and

3. For a lot zoned or used for residential or agricultural purposes (except as provided in i. Above), has access onto any improved public street or highway.

ACCESS TEST QUESTION 7

How many TESTS must be evaluated in determining if reasonable alternative access has been met, as defined by the Access Code?

Correct answer is: **depends on the zoning**

Commercial property = five tests

Industrial property = one test

Residential = one test

Agricultural = one test

ACCESS TEST QUESTION 8

A MODIFICATION of access is limited to changing the:

- a. number of access points
- b. width of an access point by more than 5 feet
- c. grade of the access point by more than 5 percent
- d. location of the access point by more than 10 feet

CORRECT ANSWER IS “a-b-d”. A modification of access is restricted to changing the **number** of access points, changing the **width** of an access point by more than five feet (1.5 meters), or changing the **location** of an access point by more than 10 feet (3 meters).

ACCESS TEST QUESTION 9

An ADJUSTMENT of access is limited to changing the:

- a. number of access points
- b. width of an access point by 5 feet or less
- c. moving the access point away from the centerline
- d. location of the access point by 10 feet or less

CORRECT ANSWER IS “b-c-d”. An adjustment of access is restricted to changing the **width** of an access point by five feet (1.5 meters) or less, changing the **location** of an access point by 10 feet (3 meters) or less, **moving an access point away from the centerline** of the highway, such as when the highway is widened, or changing the elevation or profile of an access point.

THE END

*The Office of Access Design
hopes that this training was helpful.*